

AGENDA
UNION COUNTY BOARD OF COMMISSIONERS
Regular Meeting
Monday, August 6, 2007
7:00 P.M.
Board Room, First Floor
Union County Government Center
500 North Main Street
Monroe, North Carolina

www.co.union.nc.us

5:00 p.m. - Closed Session

1. **Opening of Meeting**
 - a. Invocation - Reverend Chris Edwards, Grace Baptist Church of South Charlotte
 - b. Pledge of Allegiance

2. **Planning Department - Public Hearing**
Rezoning Petition #001092, Linda R. & Harry J. Kelly - R-40 (Residential) to B-2 (Community Business) Containing 1.518 Acres
ACTION REQUESTED: Conduct public hearing

3. **Public Hearing - Solid Waste Management Plan of 2006-2016**
ACTION REQUESTED: Conduct public hearing

4. **Informal Comments**

5. **Additions, Deletions and/or Adoption of Agenda**
ACTION REQUESTED: Adoption of Agenda

6. **Consent Agenda**
ACTION REQUESTED: Approve items listed on the Consent Agenda

7. **Presentation of Piedmont Behavioral Healthcare (PBH) Annual Audit and Local Business Plan**
ACTION REQUESTED: Receive information

8. **Union County Public Schools**
 - a. Presentation by UCPS Officials Regarding Board of Education's Action in Connection with the Cuthbertson Road School Site
ACTION REQUESTED: Receive presentation
 - b. Capital Project Ordinance (CPO) 83 which Provides Funds for the Construction of Middle and High Schools "C" to be Located on the Cuthbertson Road Property
ACTION REQUESTED: Adopt CPO 83

9. **Presentation by South Piedmont Community College (SPCC) on Advanced Machining Center and Request to Reprogram Existing Capital Improvement Program (CIP) Funds for Facility Modifications**
ACTION REQUESTED: Approve Reprogramming of Existing CIP Funds

10. **Tax Administrator**
 - a. Annual Settlement
ACTION REQUESTED: Approve Settlement
 - b. Tax Charge to Tax Administrator for FY 2007-2008
ACTION REQUESTED: Issue Order of Collection Tax Charge to Tax Administrator

11. **Health Department**
 - a. Request for Commissioner Representative to Serve on the Indigent Health Care Committee
ACTION REQUESTED: Appoint a Member of the Board of Commissioners to serve on committee

12. **Resolution Supporting War/Bond Stamp for Veterans**
ACTION REQUESTED: Adopt resolution

13. **Public Works Department**
 - a. Wastewater Flow Alternatives
ACTION REQUESTED: Provide direction to staff
 - b. Solid Waste Management Plan
ACTION REQUESTED: Adopt Resolution Accepting and Endorsing the Solid Waste Management Plan of 2006-2016 for Union County
 - c. Weddington Elevated Storage Tank
ACTION REQUESTED: Accept as information and project update

14. **Register of Deeds**
 - a. Compensation of Register of Deeds
ACTION REQUESTED: Consider adjustment to the compensation established for the position
 - b. Additional Deputy Register of Deeds I Position Request
ACTION REQUESTED: Consider request for additional Deputy Register of Deeds I Position

15. **Fire Services**
 - a. Recommendation from the Fire Commission Regarding Class 9E Certification
ACTION REQUESTED: Direct staff to proceed with pursuing Class 9E Fire Districts as recommended by the Fire Commission

16. **School General Obligation Bonds**
ACTION REQUESTED: a) Adopt Resolution Providing for the Issuance of Variable Rate General Obligation Bonds; and b) Adopt Resolution Providing for the Issuance of \$90,000,000 General Obligation School Bonds, Series 2007D

17. **Announcement of Vacancies on Boards and Committees**
 - a. Juvenile Crime Prevention Council (JCPC) - 11 Vacancies
 - 1) District Attorney or Designee; 2) Substance Abuse Professional; 3) Two persons under the age of 18; 4) Juvenile Defense Attorney; 5) Member of the Business Community; 6) Representative of United Way or other non-profit; and 7) County Commissioner Appointees
 - b. Nursing Home Advisory Committee (3 Vacancies)
ACTION REQUESTED: Announce vacancies

18. **Interim Manager's Comments**

19. **Commissioners' Comments**

CONSENT AGENDA
August 6, 2007

1. **Minutes**
ACTION REQUESTED: Approve minutes

2. **Contracts Over \$5,000 and Related Budget Amendment**
 - a. Netsmart Technologies - Patient scheduling, accounting, etc., software maintenance agreement
 - b. Union County Public Schools - Memorandum of Agreement for School health services
 - c. Union Smart Start (Revenue/reimbursement) - contracts for the following programs: 1) Smart Start Health Check; 2) Smart Start Breastfeeding; 3) Smart Start Smiles; and 4) Smart Start Early Intervention Liaison
 - d. Union County Drug Treatment Court - Memorandum of agreement to provide health expertise to drug court
 - e. Town of Indian Trail - Revenue contract amendment to add an additional Contract Deputy position (Sergeant) and Budget Amendment #3
 - f. Watch Systems, LLC - Sex Offender Registration and Notification Program
 - g. N. C. State Highway Patrol - Memorandum of Understanding regarding VIPER (Voice Interoperability Plan for Emergency Responders)
 - h. R. R. Bowker - Web Subscription
 - i. Greg Williams - Indemnification for Union County regarding easement/encroachment
 - j. HDR Engineering, Inc. of the Carolinas - Water Distribution System Water Quality Action Plan - Task Order #38
 - k. HDR Engineering, Inc. of the Carolinas - Storm Water Plan Review and FEMA Review On-Call; Task Order #36, Amendment #1
 - l. CEO, Inc. - Stormwater Engineering Recruitment Agreement**ACTION REQUESTED:** Authorize the Interim County Manager to approve contracts listed as a-k and adopt Budget Amendment #3 in association with Contract #e with the Town of Indian Trail

3. **Infrastructure Management Group, Inc. Utility Performance Improvement Program**
ACTION REQUESTED: Increase the Interim County Manager's authorization to approve an agreement with Infrastructure Management Group, Inc. to an amount not to exceed \$185,000; said increase attributable to the implementation of a re-engineered planning and permitting business process

4. **Property Management Services Review Team Appointments (from July 2, 2007, meeting)**
ACTION REQUESTED: Accept Interim County Manager's Review Team Appointment Recommendations: Finance Director, Internal Auditor, General Services Director, and representatives of principal use Departments as designed by the Sheriff for the Sheriff's Office, the Director of Social Services, and the Library Director

5. **911 Emergency Communications**
 - a. Assign Pay Grade 64 to the Position Classification of Addressing Coordinator
 - b. Revise the Pay Grade Assignment for Position Classification of E-911 Data Base Supervisor from Pay Grade 63 to Pay Grade 65
ACTION REQUESTED: a) Approve the assignment of Pay Grade 64 to the position classification of Addressing Coordinator; and b) Approve the revision of the Pay Grade assignment for the position classification of E-911 Data Base Supervisor from Pay Grade 63 to Pay Grade 65

6. **Disposal of Surplus Well Lot Located on Yamasee Road in Waxhaw**
ACTION REQUESTED: Adopt Resolution Authorizing Upset Bid Process

7. **Homeland Security - Radio Project Grant Opportunity**
ACTION REQUESTED: Authorize the County Manager to submit grant application for a federal grant in the approximate amount of \$3.3 million to assist with infrastructure costs of the new radio system (Grant requires an equal match by the County which, if awarded, will be paid with the monies that would be spent on the construction of the radio system. If the grant were awarded, it would reduce the overall cost of the project by the amount, if any, which may be received from the grant.)

8. **Public Works Department**
 - a. Mill Grove Road Water Main Improvements
ACTION REQUESTED: a) Accept bids; b) award the bid to the lowest responsive, responsible bidder, State Utility Contractors, Inc. in the amount of \$297,765.11; and c) authorize the Interim County Manager to approve a contract with State Utility Contractors, Inc. in the amount of \$297,765.11

9. **General Services**
 - a. Government Center, Phase V, Renovations - Bid Award Recommendation
ACTION REQUESTED: a) Accept bids; b) award bid to the lowest responsive, responsible bidder, Godfrey Construction Co., in the amount of \$227,800; and c) authorize the Interim County Manager to approve a contract with Godfrey Construction Co. in the amount of \$227,800

10. **Tax Administrator**
 - a. Second Motor Vehicle Billing in the grand total amount of \$1,176,196.05
ACTION REQUESTED: Approve
 - b. Twelfth Motor Vehicle Release Register for the Period of June 1, 2007 - June 30, 2007 in the Net Grand Total Amount of \$24,980.05-
ACTION REQUESTED: Approve
 - c. Twelfth Motor Vehicle Refund Register for the Period of June 1, 2007 - June 30, 2007 in the Net Grand Total Amount of \$2,321.86-
ACTION REQUESTED: Approve
 - d. Departmental Monthly Report for June 30, 2007
ACTION REQUESTED: Approve
 - e. Releases for July 2007 in the Total Amount of \$7,851.29
ACTION REQUESTED: Approve
 - f. First Motor Vehicle Release Register for the Period of July 1, 2007 - July 31, 2007 in the Net Grand Total of \$17,838.38-
ACTION REQUESTED: Approve

- g. First Motor Vehicle Refund Register for the Period of July 1, 2007 - July 31, 2007 in the Net Grand Total of \$2,005.06-
ACTION REQUESTED: Approve

- 11. **Finance Department**
 - a. Motor Vehicle Tax Refund Overpayments for June 2007 in the Amount of \$4,704.32
ACTION REQUESTED: Approve
 - b. Corrected June 2007 Releases Showing a Corrected Grand Total for All Years of \$32,813.57 for a Decrease of \$757.79 from the \$33,571.36 Reported and Approved
ACTION REQUESTED: Approve corrected total
 - c. Approval to Write Off Bad Checks
ACTION REQUESTED: Approve the write off of checks totaling \$353.10 (The Finance, Health, Library, and Personnel Departments have tried to collect these funds by phone calls and letters)

- 12. **Health Department**
 - a. Budget Amendment #2 to the Health-WIC Budget Accepting \$1,892 in Mini Grant Funds from State
ACTION REQUESTED: Adopt Budget Amendment #2

- 13. **Register of Deeds**
 - a. Refund of Excise Stamps:
 - 1. Jarvis Law Group PLLC in the Amount of \$752 for Overpayment on Excise Tax
 - 2. Iredell County Register of Deeds (Requested by Tenika Rudisell Hall) in the Amount of \$4,046 for Excise Stamp on Deed Filed in Union County and Should have been Filed in Iredell County
ACTION REQUESTED: Approve refunds

- 14. **Planning Department**
 - a. Restructure Planning Department and Zoning Administration
ACTION REQUESTED: 1) Approve the redistribution of responsibilities and duties of the Land Use Administrator by the following actions: a) Add to the County's Classification and Pay Plan: Planner, Pay Grade 66 and Zoning Investigator, Pay Grade 62; 2) Approve the Position Reclassification and FTE Transfer of the Current "Land Use Administrator" Classification, Pay Grade 71 (1 FTE in Inspections Department allocation) to a Planner Classification, Pay Grade 66 (1 FTE in the Planning Department Allocation); and 3) Approve the addition of a Zoning Investigator (.5 FTE) to the Inspections Department position allocation (No New funding allocation is required - reallocation of resources)

- 15. **Community Transportation Improvement Plan**
ACTION REQUESTED: Adopt Community Transportation Improvement Plan

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INFORMATION ONLY

NO ACTION REQUIRED

1. Personnel Report for June 2007
2. Personnel Report for July 2007
3. Department of Inspections' Monthly Report for June 2007

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OFFICE OF THE COMMISSIONERS AND MANAGER

500 N. Main St., Room 921 • Monroe, NC 28112 • Phone (704) 283-3810 • Fax (704) 282-0121

PUBLIC NOTICE

NOTICE IS HEREBY GIVEN that the Union County Board of Commissioners will hold a special meeting on Monday, August 6, 2007, at 5:00 p.m. in the Conference Room, located on the first floor behind the new Commissioners' Board Room in the Union County Government Center, 500 North Main Street, Monroe, North Carolina, for the purpose of going into closed session to consult with an attorney in order to preserve the attorney-client privilege pursuant to G.S. § 143-318.11(a)(3).

Kevin Pressley, Chairman
Union County Board of Commissioners

PUBLIC NOTICE
 NOTICE IS HEREBY GIVEN that the Union County Board of Commissioners will on Monday, August 6, 2007, at 7:05 p.m. in the Commissioners' Board Room, Room 118, First Floor, Union County Government Center, 500 North Main Street, Monroe, North Carolina, conduct a public hearing to receive comments from the public on the amendments and petitions set forth below:
 Petition #001092, LINDA R. & HARRY J. KELLY, requesting rezoning classification from R-40 (Residential) to B-2 (Community Business) containing 1.518 acres, being on Tax Map #06-183-007, located on N.C. Hwy 18 just south of Ennis Road and being within Sandy Ridge Township.
 The proposed amendments may later undergo, without further notice, substantial changes resulting from objections, debate, and discussions at the hearing.
 The full text and/or supporting documents relative to the proposed amendments are available for inspection and study at the Union County Planning Department located at 407 North Main Street, Room #149, Monroe, NC from 8:00 a.m. to 5:00 p.m. Monday through Friday. Anyone having any questions on the above petition or amendments may contact the Planning Department at 704-283-3565.
 Any person requesting a sign language interpreter, please call (704) 225-8554 and make a request at least 96 hours in advance. Any other special assistance needed by an individual due to a disability under the Americans with Disabilities Act should call (704) 225-8554 and make a request at least 96 hours in advance.
 Lynn G. West
 Clerk to the Board
 July 24 and 31, 2007

NORTH CAROLINA,
 UNION COUNTY.

AFFIDAVIT OF PUBLICATION

Before the undersigned, a Notary Public of said County and State, duly commissioned, qualified, and authorized by law to administer oaths,

personally appeared **Pat Deese**

who being first duly sworn, deposes and says: that he is

Principal Clerk engaged in the publication of a newspaper known as **The Enquirer-Journal**, published, issued, and entered as second class mail in the City of Monroe in said County and State; that he is authorized to make this affidavit and sworn statement; that the notice or other legal advertisement, a true copy of which is attached hereto, was published in **The Enquirer-Journal** on the following dates:

July 24, 31 2007

and that the said newspaper in which such notice, paper, document, or legal advertisement was published was, at the time of each and every such publication, a newspaper meeting all the requirements and qualifications of Section 1-597 of the General Statutes of North Carolina and was a qualified newspaper within the meaning of Section 1-597 of the General Statutes of North Carolina.

This *31st* day of *July* 2007
Pat Deese

Sworn to and subscribed before me, this *31st* day of *July* 2007

Bob P. Catz Notary Public

My Commission expires: **May 11, 2008**

Inches: *6 1/4*
 MONROE, N.C. *July 31* 2007

M **U. C. Bd. Of Commissioners**
500 North Main St., Room 921
Monroe, NC 28112

ACCOUNT #: *02100167*
 COST: \$ *121.88*

—IN ACCOUNT WITH—

The Enquirer-Journal

P.O. Box 5040
 500 W. Jefferson St.
 Monroe, N.C. 28111-5040

Important Legal Document, Please Retain

RECEIVED JUN 14 2007

STATE OF NORTH CAROLINA
COUNTY OF UNION

PETITION FOR AMENDMENT OF THE LAND USE ORDINANCE
OF THE COUNTY OF UNION

In the matter of Linda R. Kelly and husband, Harry J. Kelly
NOW COMES Linda R. Kelly and husband, Harry J. Kelly, applicant, whose
present address is P. O. Box 473007, Charlotte, NC 28247,
who respectfully petitions and shows as follows:

- 1. That the applicant is the (owner , legal representative____, or other concerned parties____), of a certain tract or parcel of land located in Union County, North Carolina, being more particularly described as follows: (Where proposed amendment is for changes in the written text of the ordinance, explain below.)

Said property containing 1.518 acres with Tax Parcel Number: 06-183-007

- 2. That said property above described is presently zoned R-40 and the undersigned applicant desires and does hereby request that said property be rezoned to B-2.
- 3. The proposed zoning amendment would require a change in the Zoning Map: Yes No____
- 4. The properties adjoining the above-described property are as follows: (Adjoining property shall be construed to mean and include property on the opposite side of any street, road or highway from the property seeking to be rezoned.) If more than three adjoining property owners, please attach to this petition a separate list with full names and addresses.

Property Owner's Name	Address
<u>See Attached</u>	_____
_____	_____
_____	_____

- 5. If the answer to Number 3 is Yes: An application for rezoning shall be accompanied by a survey and legal description of the property to be rezoned if the applicant is seeking to have rezoned less than an entire lot or tract or if the Planning Director determines that such information is otherwise necessary to provide sufficient public notice of the area required for rezoning.
- 6. That the applicant attaches hereto a check payable to Union County in the sum of \$ 288,50.

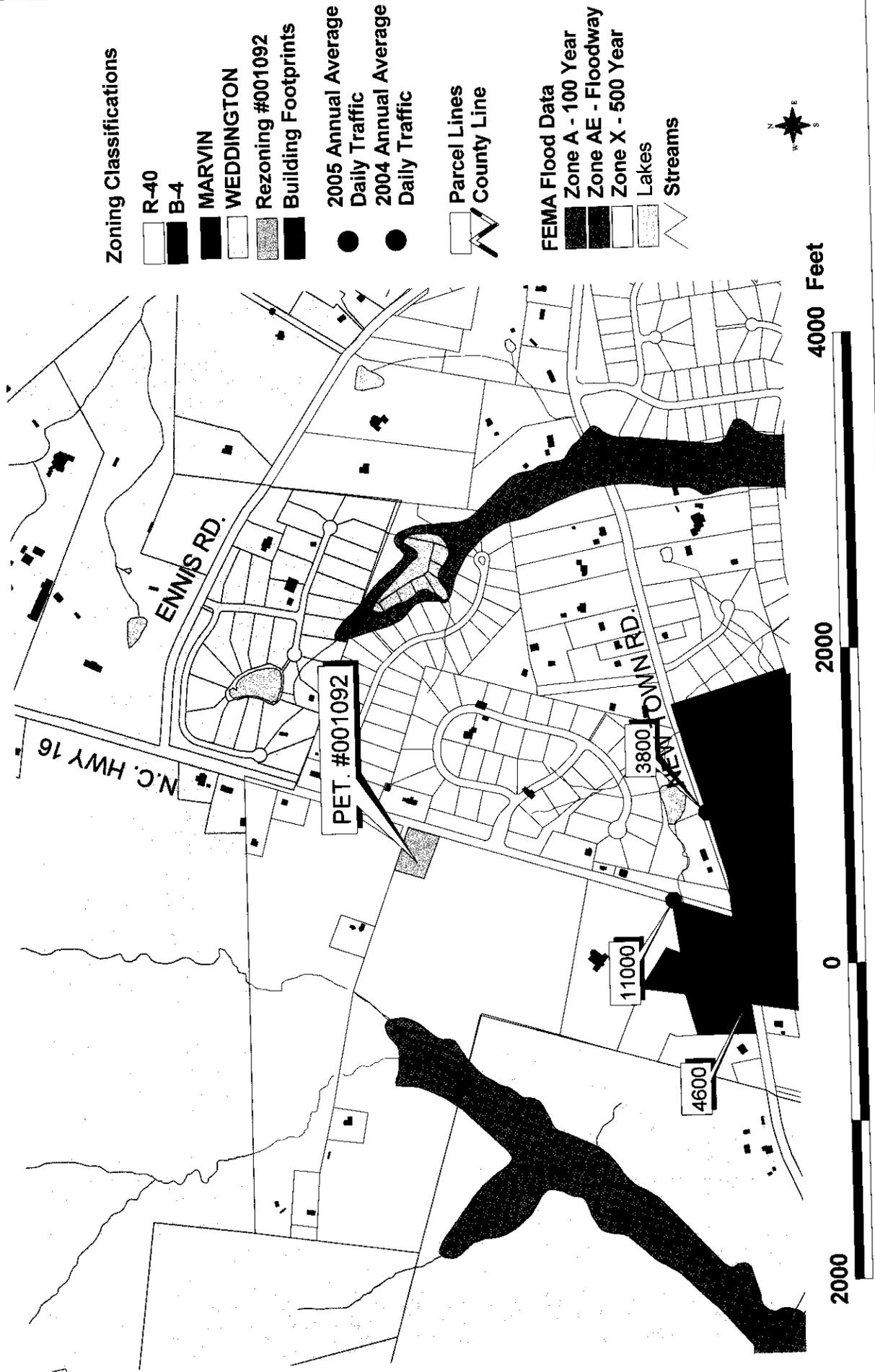
WHEREFORE, the undersigned applicant respectfully requests that the above-described property be rezoned from R-40 to B-2 at the earliest possible date.

Respectfully submitted, this 14th day of June, 2007.

NAME: (Signature): Linda R. Kelly
Name (Please print.): LINDA R. KELLY
Address: 1402 PROVIDENCE RD. SOUTH
WAYHAW NC 28173
Contact Numbers: Home (704) 843-5301 Business: (704) 581-7756

REZONING NOTICE

Petition #001092 R-40 to B-2
Linda & Harry Kelly
(approx. 1.518 acres)
Tax Parcel 6-183-007



The following is from the Planning Board meeting held on Tuesday, July 10, 2007:

ITEM NUMBER FIVE

Rezoning Petition #001092, LINDA R. & HARRY J. KELLY, requesting rezoning classification from R-40 (Residential) to B-2 (Community Business) containing 1.518 acres, being on Tax Map #06-183-007, located on N.C. Hwy 16 just south of Ennis Road and being within Sandy Ridge Township.

Roger Horton, Senior Planner, presented to the Planning Board a map indicating the vicinity of the proposed rezoning.

At this time, citizens were allowed to speak in favor or against the proposed rezoning.

Joe McCollum, Attorney for the Petitioners Linda & Harry Kelly. Mr. & Mrs. Kelly were available to answer questions from the Planning Board.

- Spoke in favor of the rezoning petition.
- Property at present time is a non-conforming use.
- The Kelly's reside at the proposed rezoning area and operate a paving company from this site; heavy equipment is kept on the lot.
- Offers have been made to buy the property but those that want to buy it want the property as commercial property.
- The petitioners have requested the property be rezoned to B-2 (Community Business), allowing for a smaller scale of commercial use in rural areas where there is high traffic.
- County water is available; sewer is not available.
- Mr. & Mrs. Kelly have owned the property for 10 years.

Gene Davis representing Gene Davis Realty Company.

- Plans property for landowners and buyers.
- Plans for the proposed property includes a "convenience" type retail such as, "On The Run"; this would include gasoline pumps, car wash, a convenience store.
- The only entrances on Hwy. 16 are entrances to subdivisions.

John Robicsek

- Family owns the farm to the left and behind the proposed property (300 acres).
- Land has been farmed for 40 years.
- Future plans include developing the land but no plans have been made at this time.
- Main concern is that the proposed property is in the middle of farmland; does not want just one piece of property to be rezoned to commercial and the rest be residential.

Roger Horton noted that the Planning Board would soon be working on the future Union County Land Use Plan and may want to take into consideration properties, such as the one mentioned, when considering rezoning and see if it coincides with the Land Use Plan.

Roger Horton gave the following recommendations:

FAVORABLE CHARACTERISTICS OF PETITION

- 1. The site is located on a major thoroughfare.

UNFAVORABLE CHARACTERISTICS OF PETITION

- 1. The Union County Land Use Plan projects future land use to be low density residential (0-1 du/acre).
- 2. Union County sewer is not available.
- 3. The predominant land use in this area is residential.

STAFF RECOMMENDATION: UNFAVORABLE

Favorable to rezone:	15
Unfavorable to rezone:	205

Don Kerr noted that he was uncomfortable with everything being favorable for residential and big business. He noted that this property may not have sewer availability now but will in the future.

Motion was made by Don Kerr to approve the proposed rezoning from R-40 to B-2. Motion died for lack of a second. Andy Williams made a motion to deny the motion on the floor. An amendment motion was made by Andy Williams to take staff recommendations of UNFAVORABLE characteristics to the current Land Use Plan, deny the proposed application and forward to the Board of County Commissioners as an UNFAVORABLE recommendation. Richard Simpson seconded this motion. The vote was 7 to 2.

**UNION COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT

Meeting Date: August 6, 2007

Action Agenda Item No. 3413b
(Central Admin. use only)

SUBJECT: Solid Waste Management Plan

DEPARTMENT: Public Works **PUBLIC HEARING:** Yes

ATTACHMENT(S):
Resolution Accepting and Endorsing
The Solid Waste Management Plan of
2006 -2016 for Union County

INFORMATION CONTACT:
Christie Putnam

TELEPHONE NUMBERS:
704 296-4212

DEPARTMENT'S RECOMMENDED ACTION: Adopt Resolution as drafted.

BACKGROUND: N.C.G.S. 130A-309.09A(b) requires 3-year updates to the Plan. The Plan has been made available for a 1-month period on the County's web page for review by the citizens of Union County, the Board of Commissioners and the Public Works Advisory Board.

FINANCIAL IMPACT: Anticipated costs are accounted for in the annual operating budget.

Legal Dept. Comments if applicable: _____

Finance Dept. Comments if applicable: _____

Manager Recommendation: _____

NORTH CAROLINA,
UNION COUNTY.

AFFIDAVIT OF PUBLICATION

NOTICE OF PUBLIC HEARING FOR THE UNION COUNTY SOLID WASTE MANAGEMENT PLAN
Notice is hereby given that the Union County Board of Commissioners will hold a public hearing on Monday, August 6, 2007, at 7:00 p.m. in the Board Room, First Floor, Union County Government Center, 500 North Main Street, regarding Union County's Solid Waste Management Plan (SWMP) as required by G.S. 130A-309.09A(b). At this hearing, the Board will receive comments on the proposed SWMP update, a copy of which will be available for public review beginning July 19, 2007 on the County's website at www.co.union.nc.us and at the Union County Public Works Department located in Suite 500, Union County Government Center, 500 North Main Street, Monroe, North Carolina. Please contact Mr. Mark Tye, Assistant Public Works Director at (704) 296-4210 for additional information concerning either this Public Notice or the proposed SWMP update. Any person requesting a sign language interpreter, please call (704) 225-8554 and make a request at least 96 hours in advance. Any other special assistance needed by an individual due to a disability under the Americans with Disabilities Act should call (704) 283-9810 and make a request at least 96 hours in advance.
Lynn G. West
Clerk to the Board of Commissioners
July 20, 2007

Before the undersigned, a Notary Public of said County and State, duly commissioned, qualified, and authorized by law to administer oaths,

personally appeared **Pat Deese**

who being first duly sworn, deposes and says: that he is

Principal Clerk engaged in the publication of a newspaper known as **The Enquirer-Journal**, published, issued, and entered as second class mail in the City of **Monroe** in said County and State; that he is authorized to make this affidavit and sworn statement; that the notice or other legal advertisement, a true copy of which is attached hereto, was published in **The Enquirer-Journal** on the following dates:

..... **July 20, 2007**

and that the said newspaper in which such notice, paper, document, or legal advertisement was published was, at the time of each and every such publication, a newspaper meeting all the requirements and qualifications of Section 1-597 of the General Statutes of North Carolina and was a qualified newspaper within the meaning of Section I-597 of the General Statutes of North Carolina.

This **20th** day of **July** 2007
Pat Deese

Sworn to and subscribed before me, this **20** day of **July** 2007
Buck P. Catz

My Commission expires: **May 11, 2008**

Inches: **5 1/2**
MONROE, N.C. **July 20** 2007

M **U. C. Bd. Of Commissioners**
500 North Main St., Room 921
Monroe, NC 28112

ACCOUNT #: **02100167**
COST: \$ **53.66**

—IN ACCOUNT WITH—
The Enquirer-Journal
P.O. Box 5040
500 W. Jefferson St.
Monroe, N.C. 28111-5040

Important Legal Document, Please Retain

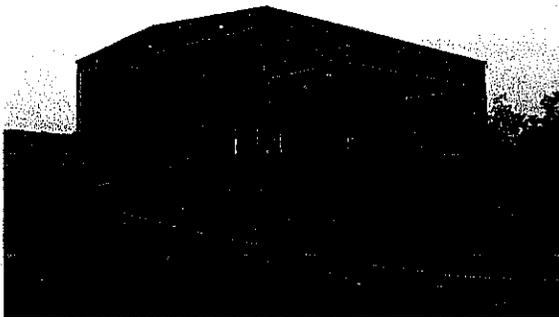
Solid Waste Management Plan

Union County, North Carolina
July 1, 2006 to July 2016

AGENDA ITEM

3 & 13b

MEETING DATE 8-6-07



Prepared for



Union County Public Works
400 North Church Street
Monroe, NC 28111

Prepared by



9751 Southern Pine Blvd
Charlotte, NC 28273

June 30, 2006 Update

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APPENDIX

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2	Public Meeting Advertisement and Minutes of Public Meeting
3	Map of Union County Planning Area and Map of Regional Municipal Solid Waste Landfills
4	Waste Characterization Chart
5	Waste Reduction Goal Sheet
6	Planning Elements Sheets
7	Contact Information for Federal, State, and Local Officials, Local LCID and C&D Landfills, and Waste Reduction/Recycling Assistance Organizations and Programs
8	List of Available Recyclers and Processors Including Contact Information
9	North Carolina Disaster Debris Management Guidelines and Forms
10	FEMA Debris Management Guide



EXECUTIVE SUMMARY

In 1997, a Solid Waste Management Plan (SWMP) was prepared in accordance with N.C. General Statute 130A-309A (b), the Solid Waste Management Act of 1996. The first and second three-year updates to the SWMP were prepared in 2000 and 2003, respectively. This plan is the third three-year update to the ten-year SWMP. The updated plan was prepared to meet the solid waste needs and protect public health and the environment for Union County.

The following bulleted items outline the changes or highlights of the Union County's SWMP. Details of these changes or highlights can be found in the subsequent sections.

- Research diverting broken concrete and concrete masonry block from construction and demolition waste brought to the County's Construction and Demolition (C&D) Landfill for disposal. The broken concrete and masonry block would be processed by a private company to be used as an aggregate in construction projects. This diversion of concrete material provides a use for material that would otherwise be landfilled, which extends the life of the County's C&D landfill.
- The County has a per capita waste disposal rate of 1.11 tons. The County has reduced its per capita yearly waste disposal rate by 12.6 percent from the 1998-1999 yearly per capita waste disposal rate of 1.27. In the 2003 updated Solid Waste Management Plan, the County had set a 10 percent waste reduction goal from the 1998-1999 yearly per capita waste disposal rate of 1.27. Based on the 12.6 percent reduction, the County has exceeded its 10 percent reduction goal.
- The County has set a waste reduction goal of 25 percent by year 2012-2013 and 29 percent by year 2015-2016 from the 1998-1999 yearly per capita waste disposal rate of 1.27 tons. The 25 percent and 29 percent reduction equates to a per capita waste disposal of 0.95 tons and 0.90 tons, respectively



- The County will implement a response plan to address a mass mortality of poultry within Union County. The plan will include actions and responses by the County, public health officials, and local poultry industry in the storage, removal, and disposal of chicken and/or turkey carcasses. Upon completion of the plan it will be implemented as an attachment to the Solid Waste Management Plan.
- The County continues to operate six Satellite Collection Centers and a Transfer Station for collection of solid waste and recyclable/reusable items for transportation to a regional landfill or material recovering facility for disposal or recycling/reuse. A majority of the incorporated municipalities within Union County contract with private haulers for curbside pickup of solid waste and recyclables including transportation to the County's Transfer Station or directly to a regional landfill.
- The County Construction and Demolition (C&D) Landfill located on Austin Chaney Road is a major disposal site for C&D waste generated within Union County. The County continues to operate its C&D Landfill for disposal of C&D waste. C&D waste generated within Union County during the 2004-2005 year (except 1 ton of waste) was disposed of within the two C&D Landfills located within Union County (i.e. Union County C&D Landfill and Griffin Farms C&D Landfill).



SECTION 1

INTRODUCTION

In 1997, a Solid Waste Management Plan (SWMP) was prepared for a 10-year planning period in accordance with North Carolina General Statute 130A-309A(b) and the Solid Waste Management Act of 1996 for the purpose of meeting solid waste needs and protecting public health and the environment. The SWMP is mandated to be updated every three years. Updates to the Union County's SWMP were completed in year 2000 and 2003. This updated SWMP is the mandatory three-year update to the ten-year plan.

This SWMP is for the Union County Solid Waste Planning Area (UCSWPA), which is Union County. The Plan describes how solid waste from various sources in Union County will be managed for a ten-year planning period. This 2006 update to the ten-year plan will extend the solid waste management planning period for the County to 2016. The City of Monroe has chosen to adopt a stand-alone SWMP. The following incorporated municipalities were considered when developing this plan:

- Fairview
- Hemby Bridge
- Indian Trail
- Lake Park
- Marshville
- Marvin
- Mineral Springs
- Stallings
- Unionville
- Waxhaw
- Weddington
- Wesley Chapel
- Wingate

Union County's long range vision is to continue providing a comprehensive solid waste management program. This program will continue to provide disposal capacity, solid waste collection services or easily accessible areas for disposal, and solid waste reduction programs to all members of the community. The vision includes the elimination of improper disposal of solid waste and expanded solid waste reduction opportunities that are convenient for residents. The vision is for a county that understands the environmental benefits of solid waste reduction and proper solid waste disposal. The County foresees some financial expenditures, but intends to



keep them at a reasonable level. This vision is translated into five long-range planning goals listed below:

1.1 Planning Area Goals

- To protect public health and the environment.
- To provide everyone in the community with solid waste disposal capacity, solid waste collection services or reasonably accessible disposal facilities, and solid waste reduction opportunities.
- To maximize the efficiency and cost-effectiveness of the solid waste program.
- To meet the established local waste reduction goals.
- To decrease solid waste disposal through waste reuse and recycling.



SECTION 2

GEOGRAPHIC AND SOLID WASTE STREAM EVALUATION

2.1 Geographic Area

The County's population distribution is shown in Table 2.1 below.

TABLE 2.1 POPULATION ESTIMATES (July 2005 Figures)	
MUNICIPALITIES & COUNTY	POPULATION
Fairview ⁽¹⁾	3,917
Hemby Bridge ⁽¹⁾	1,632
Indian Trail ⁽¹⁾	16,764
Lake Park ⁽¹⁾	2,679
Marshville ⁽¹⁾	2,664
Marvin ⁽¹⁾	1,709
Mineral Springs ⁽¹⁾	1,613
Monroe ⁽¹⁾	31,234
Stallings ⁽¹⁾	9,163
Union County (unincorporated areas) ⁽¹⁾	56,208
Unionville ⁽¹⁾	6,258
Waxhaw ⁽¹⁾	3,298
Weddington ⁽¹⁾	8,006
Wesley Chapel ⁽¹⁾	3,923
Wingate ⁽¹⁾	2,779
TOTAL: Union County Population⁽¹⁾	151,847

(1) Population figures from Office of State Planning.

Union County is projected to have a population of 185,847 in July of 2010 (FY 2010-2011) and 213,229 in July of 2015 (FY 2015-2016). The population projections were obtained from the North Carolina Office of State Planning.



The municipalities of Indian Trail, Marshville, Monroe, Stallings, Waxhaw, Wingate, and Lake Park Village offer solid waste services to their citizens through contractual agreements with private haulers. The rest of the Union County Solid Waste Planning Area (UCSWPA) residences have the following options:

- use an existing Satellite Collection Center
- use the existing County Transfer Station
- contract with private solid waste haulers individually

Solid waste and recyclable items collected at the six Satellite Collection Centers are transported by the County to the Union County Transfer Station located on Austin Chaney Road. Solid Waste collected at the Transfer Station is transported and disposed of at the Chambers Development Municipal Solid Waste Landfill located in Anson County along State Highway 74 and/or BFI's Charlotte Motor Speedway (CMS) Landfill located in Cabarrus County. Recyclable items collected at the Transfer Station are transported to the Uwharrie Environmental Materials Recycling Facility located in Montgomery County. The County accepts Construction and Demolition (C&D) waste, yard waste, wood pallets, white goods, non-ferrous metals, animal carcasses, tires, waste oil, transmission fluid, antifreeze, and batteries at the County's C&D Landfill Facility. The C&D waste is disposed of in the County owned and operated C&D Landfill located on top of the closed Union County Municipal Solid Waste Landfill on Austin Chaney Road. The yard waste and wood pallets are chipped and ground at the C&D landfill facility and transported offsite by a private company. White goods, non-ferrous metals, animal carcasses, tires, waste oil, transmission fluid, antifreeze, and batteries collected are transported off-site by private haulers for recycling or reuse.

Union County residents can transport and dispose of household hazardous waste at Mecklenburg County's Hickory Grove or Foxhole Recycling Centers, under an agreement between Union County and Mecklenburg County. For locations of the Satellite Collection Centers, Union County Transfer Station, Union County C&D Landfill, Chambers Development Municipal Solid Waste Landfill, BFI's CMS Landfill, and Uwharrie



Environmental Materials Recycling Facility, and Mecklenburg County's Hickory Grove and Foxhole Recycling Centers see Figures No. 1 and 2 in Appendix 3.

2.2 Solid Waste Stream Evaluation

In this plan, the following definitions apply:

Residential solid waste - solid waste generated by households (individual and multiple family dwellings).

Non-residential solid waste - solid waste generated from commercial, industrial, and Institutional activities.

Commercial solid waste - solid waste generated by commercial enterprises (offices, stores, retail and wholesale outlets, office buildings, markets, theaters, hospitals (non-infectious solid waste) and other commercial enterprises that would generate solid wastes.

Industrial solid waste - solid waste, which is similar in physical, chemical and biological characteristics to commercial and residential solid waste, are non-hazardous, and non-process related and would normally be generated by offices, warehouses, cafeterias and shipping activities in industrial operations.

Institutional solid waste - solid waste generated by social, charitable and educational activities.

Municipal solid waste (MSW) - solid waste resulting from the operation of residential, commercial, industrial, governmental, or institutional establishments that would normally be collected, processed, and disposed of through a public or private solid waste management service.

Construction and demolition (C&D) waste - waste generated from construction activities or demolition activities, where the waste has been separated from non-residential waste and disposed of separately.

Land clearing and inert debris (LCID) - waste that includes land clearing waste (stumps, trees, limbs, brush, grass, and other naturally occurring vegetative material), concrete, brick, concrete block, uncontaminated soil, gravel and rock, untreated and unpainted wood, and yard trash (solid waste resulting from landscaping and yard maintenance such as brush, grass, tree limbs, and similar vegetative material).

Non-Recycled waste landfilled from recycling facility - items sent to a recycling facility that are unable to be recycled or reused and are landfilled.



Recyclable or reusable Items - items that include aluminum cans, steel cans, spiral cans, glass, PET No. 1 or HDPE No. 2 plastic containers, corrugated cardboard, paper products, motor oil, transmission fluid, antifreeze, white goods, non-ferrous metals, batteries, tires, yard waste, and wood pallets.

From July 1, 2004 to June 30, 2005, Union County and its municipalities disposed of approximately 168,381 tons of solid waste (ref. County Waste Disposal Report for year 2004 to 2005, North Carolina Solid Waste Section). The solid waste disposed of includes residential and non-residential solid waste, C&D waste, and non-recycled waste landfilled from a recycling facility. Non-residential solid waste includes waste generated from commercial, institutional, and industrial operations. The waste disposed by sector for the Union County Solid Waste Planning Area (UCSWPA) between July 1, 2004 and June 30, 2005 is shown in Table 2.2. The tonnages of waste disposed in Table 2.2 are based on recorded amounts in the County's Fiscal Year Solid Waste Management Annual Report and County C&D Landfill/Transfer Station records.

TABLE 2.2
TOTAL SOLID WASTE DISPOSAL BY SECTOR FOR UCSWPA
 (July 1, 2004 to June 30, 2005)

TYPE OF WASTE		TONS OF WASTE	PERCENTAGE OF WASTE STREAM
Residential		73,877 ⁽¹⁾⁽²⁾	43.9% ⁽¹⁾⁽²⁾
Non-Residential	Commercial/Institutional	26,764 ⁽¹⁾⁽²⁾	15.9% ⁽¹⁾⁽²⁾
	Industrial	22,693 ⁽¹⁾⁽²⁾	13.5% ⁽¹⁾⁽²⁾
Total Residential and Non-Residential		123,334	73.3%
Construction and Demolition		41,943 ⁽¹⁾	24.9% ⁽¹⁾
Non-Recycled from Recycling Facility		3,104 ⁽¹⁾	1.8% ⁽¹⁾
TOTAL		168,381	100%

(1) Source: County's Waste Disposal Report for Fiscal Year July 1, 2004 to June 30, 2005, North Carolina Solid Waste Section and County C&D Landfill and Transfer Station Records.
 (2) Percentages of Residential, Commercial/Institutional, and Industrial solid waste were interpolated from the County Transfer Station records and applied to total Residential and Non-Residential solid waste generated within the UCSWPA.



Union County operates six Satellite Collection Centers throughout the County where residences can dispose of bagged residential solid waste and recyclable items (i.e. paper products, metal cans, corrugated cardboard, glass, plastic, motor oil, and transmission fluid). The waste and recyclables collected at the Satellite Collection Centers are transported to the Union County Transfer Station. The County tracks the amount of residential solid waste and recyclables collected at each of the six Satellite Collection Centers. From July 1, 2004 to June 30, 2005, the County collected 6,586 tons of residential solid waste and 1,578 tons of recyclables from the Satellite Collection Centers. The amount of residential solid waste and recyclables collected at each of Satellite Collection Centers from July 1, 2004 to June 30, 2005 are shown in Table 2.3.

TABLE 2.3
RESIDENTIAL SOLID WASTE AND RECYCLABLES COLLECTED AT
THE SIX SATELLITE COLLECTION CENTERS
(July 1, 2004 to June 30, 2005)

SATELLITE COLLECTION CENTER	TONS OF SOLID WASTE	TONS OF RECYCLABLE ITEMS
Armfield	703	246
New Salem	494	128
Parkwood	2,095	399
Piedmont School	1,390	280
Sun Valley	1,292	398
White Store	612	127
TOTAL	6,586	1,578

Source: Waste and recyclable items tonnages were obtained from Union County records.

The County tracks the amount of solid waste and recyclable items collected and transported from the County Transfer Station and the amount of waste disposed of in the County C&D Landfill through the use of onsite scales. The trucks hauling waste or recyclables entering the Transfer Station facility or C&D Landfill are weighed full upon entry and weighed empty as they leave to obtain the waste and recyclables hauled. From



July 1, 2004 to June 30, 2005, the amount of Residential and Non-Residential Municipal Solid Waste collected and transported from the Union County Transfer Station was 68,568 tons. The total amount of recyclable items collected and transported from the Transfer Station for the same time period was 7,812 tons. The amount of C&D material disposed in the Union County C&D Landfill was 20,277 tons between July 1, 2004 and June 30, 2005. The solid waste and recyclables collected at the Transfer Station and C&D Landfill from July 1, 2004 to June 30, 2005 are shown in Table 2.4.



TABLE 2.4
WASTE AND RECYCLABLE/REUSABLE ITEMS COLLECTED
AT THE TRANSFER STATION/C&D LANDFILL
(July 1, 2004 to June 30, 2005)

WASTE OR RECYCLABLE ITEM		TONS OF WASTE	TONS OF RECYCLABLE OR REUSABLE ITEMS
Municipal Solid Waste	Residential	41,062	0
	Commercial/Institutional	14,888	0
	Industrial	12,618	0
C&D Waste		20,277	0
Yard Waste		0	688
Oil and Transmission Fluid		0	77 (20,644 gallons)
White Goods		0	859
Tires		0	2,017
Wood Pallets		0	140
Animal Carcasses		2,600	0
Batteries		0	676
Paper		0	2,071
Corrugated Cardboard		0	373
Steel		0	412
Aluminum		0	137
Plastic		0	295
Glass		0	67
TOTAL		91,445	7,812

Source: The waste and recyclable/reusable items tonnages were obtained from Union County records.

Between June 1, 2004 and June 30, 2005, residences and businesses within the County disposed of 21,664 tons of C&D waste at the Griffin Farms C&D Landfill located within Union County and 1 ton of C&D waste at the BFI-Lake Norman C&D Landfill (ref. County Waste Disposal Report for year 2004-2005, North Carolina Solid Waste Section). With only one ton of C&D waste being transported and disposed of out of the County, the



County C&D Landfill is a major disposal site for C&D waste generated within Union County with over 20,000 tons accepted for disposal.

Land clearing and inert debris (LCID) and yard waste is accepted at the Union County C&D Landfill either for disposal in the landfill or for reuse. LCID and yard waste meeting certain criteria is accepted at the Union County C&D landfill for reuse. The LCID and yard waste accepted for reuse are trees, grass clippings, leaves, limbs, natural vegetation, and Christmas trees. All other LCID can be disposed of in the C&D Landfill. Another option for residence and businesses is disposal of LCID and yard waste at two privately owned and permitted LCID Landfills in Union County named A.C. Stump Dump and Griffin Farms C&D Landfill.



SECTION 3

LOCAL SOLID WASTE REDUCTION GOALS

For calculating waste reduction values and projected disposal rates for the SWMP, the July 1, 1998 to June 30, 1999 yearly solid waste disposal will be used as the Union County's Solid Waste Planning Area (UCSWPA) baseline year. During the 1998-1999 baseline year, UCSWPA disposed of approximately 140,246 tons of solid waste and had a population of approximately 110,100, producing a disposal rate of 1.27 tons per capita (See Table 3.1 on the following page). Between July 1, 2001 and June 30, 2002, UCSWPA disposed of approximately 229,358 tons of solid waste with a population of about 132,676, producing a disposal rate of 1.73 tons per capita.

Between July 1, 2004 and June 30, 2005, UCSWPA disposed of approximately 168,381 tons of solid waste with a population of approximately 151,847, producing a disposal rate of 1.11 tons per capita. During the same 2004-2005 period 7,812 tons of recyclable or reusable items were removed from the UCSWPA waste disposal stream. This accounts for 4.4 percent of the residential, non-residential, and C&D waste generated within the UCSWPA. Comparing the UCSWPA's 1998-1999 baseline year waste disposal rate of 1.27 tons per capita and the 2004-2005 yearly waste disposal rate of 1.11 tons per capita, the disposal rate has reduced by approximately 12.6 percent. The County had set a 10 percent waste reduction goal for the 2005-2006 yearly waste disposal per capita rate in the 2003 updated Solid Waste Management Plan. Based on the 12.6 percent reduction in the waste disposal per capita rate between years 1998-1999 and 2004-2005 the UCSWPA has exceeded its 10 percent reduction goal.



TABLE 3.1
COUNTY YEARLY SOLID WASTE DISPOSAL AND POPULATION

YEAR (July 1 to June 30)	POPULATION	SOLID WASTE DISPOSAL (TONS)	PER CAPITA DISPOSAL RATE (TONS)
1998-1999 (UCSWPA Baseline Year)	110,110 ⁽¹⁾	140,246	1.27
2001-2002	132,676 ⁽¹⁾	229,358	1.73
2004-2005	151,847 ⁽¹⁾	168,381	1.11

(1) Source: Population figures from North Carolina Office of State Planning.

The County's Solid Waste Management Plan previous goal of 25 percent per capita solid waste reduction for the 2012-2013 year has remained the same and has established a 29 percent waste reduction goal for year 2015-2016. These percent reductions are based on the 1998-1999 yearly per capita waste disposal rate of 1.27. Based on the County's 1998-1999 yearly waste disposal rate of 1.27 tons per capita or a total of 140,246 tons of waste, Union County's goal of 25 and 29-percent waste reduction equates to a disposal rate of 0.95 tons per capita by year 2012-2013 and 0.90 tons per capita by year 2015-2016 (see Table 3.2).

To achieve the disposal rate of 0.95 by year 2012-2013 and 0.90 by year 2015-2016, the County will have to divert 0.16 tons and an additional 0.05 tons of waste per capita from their current waste disposal stream. This equates to, 32,292 tons of future annual solid waste being diverted from landfills by year 2012-2013 and an additional 13,704 tons of waste by year 2015-2016 for a total of 45,996 tons of waste diverted by year 2015-2016. These waste diversion values are based on year 2004-2005 waste disposal of 168,381 tons, disposal rate of 1.11 tons per capita, and population projections from North Carolina Office of State Planning (see Table 3.3).



TABLE 3.2
 FIVE AND TEN YEAR SOLID WASTE AND POPULATION PROJECTIONS
 WITH TARGETED SOLID WASTE REDUCTION GOALS
 (Based on UCSWPA 1998-1999 Baseline Year Disposal Rate of 1.27)

YEAR (July 1 to June 30)	PROJECTED POPULATION	PROJECTED SOLID WASTE DISPOSAL TONNAGES (BASED ON 1998- 1999 DISPOSAL RATE OF 1.27)	SOLID WASTE DISPOSAL WITH PROJECTED REDUCTION GOAL (TONS)	PER CAPITA DISPOSAL RATE (TONS)
2012-2013	201,823 ⁽¹⁾	256,315	191,732	0.95
2015-2016	219,028 ⁽¹⁾	278,166	197,125	0.90

(1) Source: Population figures from North Carolina Office of State Planning.

TABLE 3.3
 FIVE AND TEN YEAR SOLID WASTE AND POPULATION PROJECTIONS
 WITH TARGETED SOLID WASTE REDUCTION GOALS
 (Based on 2004-2005 UCSWPA Disposal Rate of 1.11)

YEAR (July 1 to June 30)	PROJECTED POPULATION	PROJECTED SOLID WASTE DISPOSAL (BASED ON 2004- 2005 DISPOSAL RATE OF 1.11)	SOLID WASTE DISPOSAL WITH PROJECTED REDUCTION GOAL	PER CAPITA DISPOSAL RATE (TONS)
2012-2013	201,823 ⁽¹⁾	224,024	191,732	0.95
2015-2016	219,028 ⁽¹⁾	243,121	197,125	0.90

(1) Source: Population figures from North Carolina Office of State Planning.



SECTION 4

MEETING THE SOLID WASTE REDUCTION GOALS

This Solid Waste Management Plan is designed to aid in reducing Union County's solid waste landfill disposal through the diversion of recyclable and/or reusable materials from the disposal waste stream. As part of this plan, Union County has established a 2012-2013 and 2015-2016 yearly waste reduction goal of 25 percent and 29 percent, respectively. These reductions are based on 1998-1999 yearly solid waste disposal of 140,246 tons and per capita disposal rate of 1.27 tons. The 25 percent and 29 percent waste reduction goals correlates to a 2012-2013 yearly waste disposal of 191,732 tons and 2015-2016 yearly waste disposal of 197,125 tons.

In order to reduce solid waste disposal, Union County will target waste generated from residences, non-residences, construction and demolition, and land clearing. Reducing residential and non-residential waste will primarily be done through educating the public on recycling and/or reuse of waste materials. Reduction in landfilling construction and demolition (C&D) debris will be done through the diversion C&D debris from the landfill to be used as a reusable material for construction projects. Reduction in disposal of land clearing debris will be done through the education of public concerning mulching and composting and diversion of land clearing debris from disposal in the C&D Landfill to mulching and composting operations. An approximation of the reductions of waste by sector is shown in Table 4.1 and Table 4.2. Table 4.1 estimates the waste reductions by sector as it relates to County solid waste disposal between July 1, 1998 and June 30, 1999 (UCSWPA Baseline Year). Table 4.2 estimates the waste reductions by sector as it relates to County solid waste disposal between July 1, 2004 and June 30, 2005. The percentages of waste reduction, by method, as outlined in Tables 4.1 and 4.2 are estimates only. More detailed descriptions of specific waste reduction activities planned for the County appear in Section 6.0 and 7.0 of this plan.



TABLE 4.1
SOLID WASTE REDUCTION BY SECTOR
Year 2012-2013 and Year 2015-2016
(Reductions Based on Year 1998-1999 UCSWPA Baseline Year Waste Disposal)

WASTE TYPE	TARGETED TONS TO REDUCE BY YEAR 2012-2013 (25% REDUCTION)	TARGETED TONS TO REDUCE BY YEAR 2015-2016 (29% REDUCTION)
Residential	48,502	60,862
Non-Residential		
Construction and Demolition	16,081	20,179
GOAL	64,583	81,041

Source: Used projected solid waste disposal of 256,315 tons in year 2012-2013 and 278,166 tons in year 2015-2016 from Table 3.2. Percentages of disposal by sector from Table 2.2.

TABLE 4.2
SOLID WASTE REDUCTION BY SECTOR
Year 2012-2013 and Year 2015-2016
(Reductions Based on Year 2004-2005 Waste Disposal)

WASTE TYPE	TARGETED TONS TO REDUCE BY YEAR 2012-2013 (25% REDUCTION)	TARGETED TONS TO REDUCE BY YEAR 2015-2016 (29% REDUCTION)
Residential	24,251	34,543
Non-Residential		
Construction and Demolition	8,041	11,453
GOAL	32,292	45,996

Source: Used projected solid waste disposal of 224,024 tons in year 2012-2013 and 243,121 tons in year 2015-2016 from Table 3.3. Percentages of disposal by sector from Table 2.2.



SECTION 5
PLAN APPROVAL

Union County developed this updated 10-year Solid Waste Management Plan to address how the County anticipates the Solid Waste Management Program progressing through the 10-year planning period.

A draft of the Solid Waste Management Plan was made available to the public in the Public Library, at the Public Works Office, and on the Union County Public Works website (<http://ucpw.co.union.nc.us>). A public hearing was conducted on _____ in the Board Room, ninth floor, Union County Government Center, 500 N. Main St., Monroe to address any public comments or suggestions to the draft Solid Waste Management Plan. The hearing was announced in the Enquirer Journal newspaper dated _____. Public hearing minutes and a copy of the public hearing advertisement are presented in Appendix 2. After the public hearing, a final Solid Waste Management Plan was presented to the County Commissioners for approval through a resolution. The Union County Board of Commissioners approved the resolution on _____. The resolution is presented in Appendix 1.



SECTION 6

SOLID WASTE MANAGEMENT METHODS: ASSESSMENT OF PROGRAMS AND DESCRIPTION OF INTENDED ACTIONS

Each solid waste management method is described below. Each section contains an assessment of the current program and a summary of intended actions.

6.1 Collection of Solid Waste

Current Program: Currently, the municipalities of Indian Trail, Marshville, Stallings, Wingate, Waxhaw, and Lake Park Village hire private haulers for waste and recycling pick-up for their citizens. The remaining residents of Union County have the following disposal options:

- Deposit their waste and recyclables at one of the six Satellite Collection Centers located throughout the County (New Salem, Piedmont, Sun Valley, Parkwood, Amfield, and White Store)
- Deposit their waste and recyclables at the Union County Transfer Station/C&D Landfill.
- Employ the services of private haulers.

The Satellite Collection Centers and Transfer Station are fenced, access-controlled sites and are well lighted. The Satellite Collection Centers are open on Tuesday, Thursday and Saturday from 7 a.m. to 7 p.m. (except during County holidays). The Transfer Station is open Monday thru Friday 7 a.m. to 4 p.m. and Saturday 8 a.m. to 12 p.m. (except during County holidays). Figure No. 1 in Appendix 3 shows the location of the Satellite Collection Centers and the County Transfer Station/C&D Landfill.

Residential solid waste is the only waste accepted at each of the Satellite Collection Centers. Each satellite collection center also has containers for recycling newspaper, inserts, phone books, magazines, catalogs, aluminum and steel cans, spiral cans, glass, plastics, cardboard, motor oil, and transmission fluid. In addition, the County Transfer



Station collects anti-freeze, white goods, non-ferrous metals, automobile batteries and tires (removed from the rim) for recycling. The County currently transports the recyclables, excluding motor oil, transmission fluid, white goods, automobile batteries, and tires to Uwharrie Environmental Materials Recovery Facility (see Figure 2 in Appendix 3 for location). The amount of recyclables collected and transported to Uwharrie Environmental between July 1, 2004 to June 30, 2005 was approximately 4,167 tons (Reference: County's Landfill Activity Report, July 1, 2004 through June 30, 2005, North Carolina Solid Waste Section).

All the municipal solid waste (MSW) and recyclables collected at the County Satellite Collection Centers are transported to the County Transfer Station by the County. A large portion of the MSW and recyclables collected by the private haulers throughout the county are brought to the County Transfer Station. The exception to this is the solid waste and recyclables collected by haulers and transported directly to the Chambers Development MSW Landfill located in Anson County, North Carolina (52,315 tons), BFI Charlotte Motor Speedway (CMS) Landfill located in Concord, North Carolina (2,213 tons), Palmetto Landfill located in Spartanburg County, SC (2 tons), Uwharrie Environmental Regional Landfill (191 tons), and Mecklenburg County Landfill (45 tons) in the 2004-2005 year. (Reference: County Waste Disposal Report for Union County, July 1, 2004 to June 30, 2005, North Carolina Solid Waste Section).

Intended Actions: The County will continue to use the Satellite Collection Centers and Transfer Station to collect solid waste and recyclables. The use of private haulers by the residential and non-residential sectors will also continue.

6.2 Disposal of Solid Waste

Current Program: Union County has a contractual agreement for disposal of solid waste with the Chambers Development MSW Landfill located between Polkton and Wadesboro along U.S. Highway 74 in Anson County. Between July 1, 2004 and June 30, 2005, the



amount of municipal solid waste that was transported from the County Transfer Station to Chambers Development MSW Landfill was approximately 68,568 tons.

As stated in Section 6.1, an additional 54,766 tons of solid waste was generated in Union County and transported by private haulers to Chambers Development MSW Landfill to be landfilled. In addition to this waste that was generated in Union County, 2 tons was landfilled at the Palmetto Landfill in South Carolina, 2,213 tons of waste was landfilled at BFI's CMS Landfill in Concord, North Carolina, 45 tons of MSW was landfilled at the Mecklenburg County Landfill, and 191 tons was landfilled at the Uwharrie Environmental Regional Landfill.

Between July 1, 2004 to June 30, 2005, Union County Construction and Demolition (C&D) Landfill accepted approximately 20,277 tons of C&D waste. Griffin Farms C&D Landfill located in Union County, accepted 21,664 tons of Union County generated C&D waste and BFI's Lake Norman Landfill accepted 1 ton of Union County generated C&D waste.

The total waste generation for UCSWPA between July 1, 2004 and June 30, 2005 was calculated to be approximately 168,381 tons. Of this amount, approximately 41,943 tons was C&D waste (24.9%) and 123,334 tons (73.3%) was municipal solid waste and 3,104 tons (1.8%) was non-recycled waste from recycling facilities.

Intended Actions: At this time, Union County plans to continue collecting MSW at the Transfer Station and hauling it to the Chambers Development MSW Landfill. Union County has determined that the most effective method of managing the Union County Solid Waste Program is to transport municipal solid waste to one of the regional landfills that surrounds Union County. Figure 2 in Appendix 3 shows the location of the regional landfills mentioned above.

Approximately 50 percent of the construction and demolition waste originating within the County is now being handled by the Union County C&D Landfill. The other 50 percent of



C&D waste is being accepted by Griffin Farms C&D Landfill. It is foreseen that C&D waste will continue to be handled in this manner. Griffin Farms C&D Landfill and the A.C. Stump Dump also accept natural land clearing debris.

6.3 Transfer of Solid Waste Outside Geographic Area

Current Program: See Sections 6.1 and 6.2 of this plan.

Intended Actions: See Sections 6.1 and 6.2 of this plan.

6.4 Source Reduction

Current Program: The County has implemented a Pay-As-You-Throw program as a form of source reduction. Through this program, the haulers and the public are charged for the waste they dispose of at the Satellite Collection Centers and County Transfer Station. A \$40 per ton credit is given for recyclables brought to the Transfer Station by solid waste haulers.

A "Curtail-Your-Junk-Mail" program has been implemented. To stop junkmail, Union County residents can contact:

Mail Preference Service
Direct Marketing Association
P.O. Box 643
Carmel, NY 10512

More information about the Curtail-Your-Junk-Mail program can be found at the following web site: www.p2pays.org.

Intended Actions: Union County will continue to educate the public of the "Curtail-Your-Junk-Mail" program through the internet and brochures distributed at the Satellite Collection Centers and Transfer Station. The community and school source reduction educational programs are outlined in Section 7.0 of this plan.



6.5 Recycling and Reuse

6.5.1 Recycling

Current Program: A residential recycling program targets the recovery of the following recyclable materials: newspapers, inserts, magazines, catalogs, phone books, plastics, aluminum and steel cans, clear, brown and green glass bottles and jars, cardboard, motor oil, and transmission fluid from all residents within the County. This program is made available through six Satellite Collection Centers located throughout the County (Armfield, New Salem, Parkwood, Piedmont, Sun Valley, and White Store) and at the County Transfer Station/C&D Landfill (See Figure No. 1 in Appendix 3 for locations). In addition, the County Transfer Station/C&D Landfill collects spiral cans, non-ferrous metals, automobile batteries, white goods, tires, antifreeze, yard waste, and wood pallets for recycling. Curbside recycling is available in the municipalities of Indian Trail, Stallings, and Lake Park Village via private waste pick-up that is set up by the municipalities. The Town of Marshville has a trailer located within the town where the citizens may drop off their recyclables. In addition, private haulers provide recycling at the curbside for various other county residences. Between July 1, 2004 and June 30, 2005, the County recovered roughly 103 pounds per capita or 7,812 tons of recyclable or reusable items from its disposal waste stream and landfilled 168,381 tons of its residential and non-residential solid waste. Based on these numbers, Union County recycled about 4.4 percent of its residential and non-residential solid waste. The recyclable materials are currently transported to the Uwharrie Environmentally Regulated Landfill. Used motor oil, transmission fluid, white goods, wooden pallets, and automobile batteries are all considered special wastes and are collected at the County Transfer Station for the purpose of recycling them. The above recycling and waste amounts were obtained from Union County.



Brochures describing how, what, and where to recycle have been created and distributed to the public. Proper recycling tips on how, what, and where to recycle are available on the County web site: (www.ucpw.co.union.nc.us/recycling.htm)

Private waste haulers are given a \$40 per ton credit for recyclables at the County Transfer Station to encourage recycling.

Intended Actions: Recyclable materials (cardboard, paper, plastic, glass, steel, and aluminum cans, etc.) will continue to be accepted free of charge at the Transfer Station and Satellite Collection Centers. Commercial haulers will continue to receive the "credit" for recyclable material they deposit at the Transfer Station. It is foreseen that the public will see that it costs them more to throw away recyclables, thus encouraging them to separate out their recyclables. This is a form of a Pay-As-You-Throw Program.

The Satellite Collection Centers' employees will provide instruction on proper recycling to the public. It is assumed that residents who currently use the solid waste and recycling collection centers will continue to recycle paper, plastics, metals, glass, etc. In addition, the school and community education programs are planned to increase recycling participation (see Section 7.0 of this plan).

Research into potential new recycling markets may prove to be viable to reducing residential and non-residential solid waste. Markets for textile cones, plastics, plastic film wrap, wood pallets, corrugated cardboard and gypsum board have a potential to reduce consistently disposed of solid wastes. The County will also research the possibility of expanding its recycling program to include electronics and oil filters.

Where curbside recycling programs are available through the private waste hauling companies, small businesses may be added to existing residential routes without a change in equipment or staff. Expansion of curbside programs into single or multi-material recycling from local larger businesses and industries is also planned. These two curbside additions can substantially increase the amount of recyclables collected.



There are numerous groups and documents that can be used and implemented for recycling. A list of the groups and documents are available in Appendix 8.

6.5.2 Reuse

Current Program: There is a program in Elementary and Middle Schools in Union County where students watch videos on the importance of recycling, conserving natural resources, and littering. The students are informed about specific materials recycled in Union County. Goody bags with pencils (made from recycled denim), stickers, etc. are distributed to the students. Landfill and Transfer Station tours are given to educate the students about what happens to municipal solid waste, construction and demolition waste, and recycled material.

Intended Actions: The County will attempt to divert broken concrete and concrete masonry block from the construction and demolition waste brought to the County C&D Landfill for disposal. The broken concrete and concrete masonry block would be processed by a private company to be used as an aggregate in construction projects. Currently, wooden pallets are the only items separated out of the C&D waste. It is proposed these pallets be given to entities that have a need or use for such pallets. Such markets or recipients must first be found by the County. Assistance in doing so can be found in Appendix 7, which lists names of waste reduction assistance organizations. Lists of material exchange markets and companies are found in Appendix 8

6.6 Composting and Mulching

6.6.1 Composting

Current Program: Brochures are available at the County's six Satellite Collection Centers and Transfer Station that contain instructions on proper back-yard composting.



Intended Actions: To encourage composting by residences and businesses, the County will hold composting educational programs at the local farmers market in conjunction with the Masters Garden Club.

6.6.2 Mulching

Current Program: The County currently accepts yard waste and wood pallets at the Union County C&D Landfill for \$30 per ton. Also, the County sponsors a "Christmas tree" program in which the County accepts Christmas trees at the County C&D Landfill. All of this vegetative waste and wood pallets are ground up, as needed, into mulch. This work is contracted out to a mobile contractor. This mulch is then transported away by a private company to be used as boiler fuel.

In addition, minimal amount of land clearing and inert debris (LCID), mainly stumps, is disposed at a privately owned and permitted LCID Landfill in Union County named "A.C. Stump Dump" and a privately owned and permitted C&D Landfill in Union County named Griffin Farms (See Figure 2 in Appendix 3 for location and Appendix 7 for contact information).

Intended Actions: Yard waste and wood pallets will continue to be accepted at the Union County C&D Landfill. The current operation of grinding yard waste and wood pallets for use as boiler fuel will continue until a more economical way is presented in dealing with this material.

6.7 Incineration with Energy Recovery

Current Program: Incineration with energy recovery is not part of the County's current program. The County considers it an inappropriate waste management option due to the local waste flow and capital/operating costs.



Intended Actions: No intended actions are needed at this time.

6.8 Incineration without Energy Recovery

Current Program: Incineration is not part of the County's current program. The County considers it an inappropriate waste management option due to the local waste flow and capital/operating costs.

Intended Actions: No intended actions are needed at this time.



SECTION 7

EDUCATION, SPECIAL WASTES, ILLEGAL DISPOSAL, AND PURCHASING: ASSESSMENT OF PROGRAMS AND DESCRIPTION OF INTENDED ACTIONS

7.1 Community and School Education

7.1.1 Community Education

Current Programs: Union County currently distributes recycling brochures to residents at the six Satellite Collection Centers and Transfer Station.

Intended Actions: The County will initiate a public education flyer program to promote awareness about recycling of household hazardous waste, waste tire, white goods, etc. Also, the Recycling Coordinator may give educational presentations to civic and school groups periodically throughout the year. Additional education will be provided through various methods of communication. One such method will be the County's Public Works Internet Site (www.ucpw.co.union.nc.us/recycling.htm). Currently this internet site provides descriptions on what and where to recycle. This site can be updated to include more information, such as instructions on composting, the benefits of recycling, and a more detailed synopsis of recycling lead-acid batteries, used motor oil, and used transmission fluid. Other possible methods of communicating with the community include radio, television, and newspaper advertisements. County mailed bill inserts can also be sent out to educate the public on waste reduction methods. One such insert may include brochures produced by the County describing drop-off locations for recyclable items, recyclable materials accepted, and how to prepare these materials for recycling (e.g., wash and remove lids) along with the benefits of recycling.

Additional Educational Methods:

- Hold a composting education program at the local farmers market in conjunction with the Master Garden Club.



- Booths set up at local street festivals and other special events to promote waste reduction to the community at least once per year.

7.1.2 School Education

Current Programs: Classroom programs have been held to educate students on the benefits of waste reduction and proper waste management.

Intended Actions: Increase school educational programs for waste reduction and proper waste disposal to a minimum of two schools per month, focusing year around school scheduling during the summer months. Schools will be encouraged to participate in the State Adopt-A-Highway program. Elementary Schools will be given copies of education videos that address pollution, solid waste disposal and methods of solid waste reduction. The Recycling Coordinator will assist teachers in obtaining other educational materials from the North Carolina Division of Environmental Assistance and Pollution Prevention and the North Carolina Office of Environmental Education (See Appendix 7 for contact information). In addition, teachers will be given information about the Annual Environmental Educators Conference sponsored by the North Carolina Office of Environmental Education.

7.2 Special Waste Management

7.2.1 Tires

Current Program: Tires are accepted at the Union County Transfer Station. Tires are loaded in a trailer that is hauled by U.S. Tire, when full. U.S. Tire reuses the tires for multiple purposes.

Intended Actions: Enhance waste tire recycling program by bringing in State personnel to audit County's waste tire program and to visit all major waste tire



generators at a minimum of once quarterly (four times per year). Establish appropriate fee for waste tires that are not eligible for free disposal.

7.2.2 White Goods

Current Program: White goods and scrap metal are collected at the Union County Transfer Station free of charge to the public. Stateline Scrap Metal removes the CFC (chloroflourocarbon) and other gases from appliances. The appliances are then hauled off for recycling by Stateline Scrap Metal. Stateline Scrap Metal pays Union County by the ton for the scrap metal and white goods. Prices vary with the market.

Intended Actions: Continue recycling program for white goods and scrap metal at the County's Transfer Station.

7.2.3 Lead-acid Batteries

Current Program: Union County encourages the public to return used lead-acid batteries to where they originally bought them, but lead-acid batteries are still accepted at the Union County Transfer Station free of charge to the public. Interstate Batteries picks these batteries up free of charge.

Intended Actions: Continue recycling program for automobile lead-acid batteries at the County's Transfer Station. The County will also continue having Interstate Batteries pick the batteries up from the Union County Transfer Station free of charge. Also research the possibility of generating revenue from the recycling of batteries.

7.2.4 Electronics

Current Program: The County currently does not have a recycle program for electronics.



Intended Actions: Investigate the possibility of starting an electronics recycling program for the County.

7.2.5 Used Motor Oil and Transmission Fluid

Current Program: Union County currently collects used motor oil and transmission fluid at all Satellite Collection Centers and the Union County Transfer Station. Diversified Recycling empties the used oil and transmission fluid tanks for free. Union County currently receives \$0.10 per gallon of used oil recycled from Diversified Recycling.

Intended Actions: Investigate the possibility of collecting and recycling used oil filters. Also, investigate increasing the price per gallon of oil recycled paid to the County by Diversified Recycling or another company. The current program will also be continued.

7.2.6 Household Hazardous Waste

Current Program: Union County has a contract with Mecklenburg County to accept Household Hazardous Waste at Mecklenburg's Foxhole Recycling Center Monday - Friday 7:00 a.m. to 4:00 p.m. and Saturday 7:00 a.m. to 3:00 p.m. or the Hickory Grove Recycling Center Tuesday - Saturday 7:00 a.m. to 3:00 p.m. A building is also provided at the County C&D Landfill for collection of pesticide containers for disposal through the North Carolina Department of Agriculture Pesticide Container Recycling Program.

Intended Actions: Continue Pesticide Container Recycling Program in conjunction with the NC Department of Agriculture. Also, continue contract with Mecklenburg County for acceptance of Household Hazardous Waste.



7.2.7 Construction and Demolition Waste

Current Program: Construction and Demolition (C&D) waste is currently being disposed of in the County's C&D Landfill.

Intended Actions: Research in the reuse of concrete material normally disposed of in the C&D Landfill as aggregate in construction projects through a local company.

7.3 Summary of Intended Actions

The intended actions described in Section 7.0 are listed chronologically in Table 7.1.



TABLE 7.1
INTENDED ACTIONS IMPLEMENTATION SCHEDULE

FISCAL YEAR	PROGRAM
Current and Continues	Continue Pesticide Container Recycling Program in conjunction with the NC Department of Agriculture. Continue contract with Mecklenburg County for acceptance of Household Hazardous Waste.
Current and Continues	Initiate a public education flyer program to promote awareness about household hazard waste, scrap tire program, white goods, etc.
2006-2007	Research used battery collection to see if economically feasible.
2006-2007	Research in the reuse of concrete waste as aggregate in construction projects through a local company.
2006-2007	Enhance waste tire recycling program by bringing in state personnel to audit County's waste tire program and to visit all major used tire generators at a minimum of once quarterly (four times per year).
2006-2007	Increase school program education by visiting a minimum of two schools per month and focusing year round school scheduling during the summer months.
2007-2008	Have an information booth at festivals and street events at least once per year.
2007-2008	Hold a composting education program at the local farmers market in conjunction with the Master Garden Club.
2009-2010	Research recycling electronics.
2009-2010	Research recycling of used oil filters.

Source: Union County staff.



SECTION 8

DISASTER DEBRIS MANAGEMENT

It is intended that Union County implement the following actions and responses in clearance, removal, storage, and disposal of debris generated from a disaster. All actions and responses to disaster debris shall be coordinated by the County Homeland Security Office and/or County Emergency Management. State and Federal disaster debris planning and management guidance documentation should be consulted in the event of a disaster. State Department of Environment and Natural Resources Division of Waste Management regulations, forms, and guidelines for collection, processing, storage, and disposal of debris from a disaster is provided in Appendix 9 of this plan. FEMA has developed a Debris Management Guide to provide guidance in the clearance, removal, storage, and disposal of debris and is provided in Appendix 10 of this plan.

8.1 Projections of Disaster Debris Generation

8.1.1 Possible Types of Disasters

- Hurricane
- Flood
- Ice and/or Snow Storm
- Tornado

8.1.2 Kinds of Waste Generated:

- Vegetative Debris (i.e., trees, stumps, brush, and leaf and yard waste)
- Aggregate Debris (i.e., asphalt pavement and concrete)
- Construction and Demolition Debris (i.e., materials that result from the destruction of homes, commercial and non-commercial buildings, and other structures)
- Household Hazardous Waste (i.e., latex paint, etc.)



8.2 Capacity Planning

It is estimated that any influx of additional Municipal Solid Waste will be able to be handled by local regional landfills.

Based on the amount of Construction and Demolition (C&D) waste produced, including vegetative debris, aggregate debris, and normal C&D debris, the permitted capacity of Union County's C&D Landfill would be exceeded. Alternate methods of debris diversion besides landfilling are thus needed and are discussed in the following sections.

8.3 Staging and Transportation

Temporary staging site locations have been predetermined, planned, and developed by the County to handle large volumes of debris waste according to the proper North Carolina Solid Waste Management Regulations. Permission for any temporary transfer facilities proposed to be set up at closed municipal solid waste landfills will be properly applied for through the North Carolina Division of Waste Management Solid Waste Section (See Appendix 7 for contacts). Closure or re-approval of the temporary debris management sites shall be accomplished within 6 months of receiving the last load of debris. Operations and closure of these sites shall be done in accordance with North Carolina Division of Waste Management Disaster Clean Up Emergency Guidelines (See Appendix 9).

The Union County Public Works Department currently has five (5) sites that have been identified as being disaster debris reduction and temporary storage sites. These sites are as follows:

1. Union County Public Works Department Operations Center located off Goldmine Road in Monroe. Approximately 50 acres are available.
2. Cane Creek Park (County owned) off Harkey Road in Waxhaw. Approximately 10 acres are available.



3. Lanes Creek Volunteer Fire Department at Highway 601 and Lansford Road in the south-eastern portion of Union County. Approximately 2 acres are available.
4. Union County Landfill off of Austin Chaney Road in Wingate. Approximately 25 acres are available.

The above sites can be seen on Figure No. 1 found in Appendix 3.

The following are types of staging areas needed depending on the severity of the disaster and the amount of debris produced. All of these sites will be planned ahead of time in order to be ready for when they are needed in the event of a disaster.

8.3.1 Vegetative/Land Clearing Debris Staging Area

The preferred method of managing vegetative and land clearing storm debris is "chipping/grinding" for use in landscape mulch, compost preparation, and industrial boiler fuel. The sections of *North Carolina Division of Waste Management's Disaster Clean Up Emergency Guidelines Vegetative/Land Clearing Debris Staging Area Siting & Operational Guidelines* pertaining to Chipping/Grinding Sites shall be used and considered "minimum standards" in selecting a site (See Appendix 9). In addition, the local North Carolina Division of Waste Management regional staff (See Appendix 7 for contact information) shall be consulted to evaluate potential sites and to revisit sites used in the past to see if site conditions have changed or if the surrounding areas have changed significantly to alter the use for the site.

An alternative method of managing vegetative and land clearing storm debris is the use of an "air curtain burner" with the resulting ash being land applied as a liming agent or incorporated into a finished compost product. The section of *North Carolina Division of Waste Management's Disaster Clean Up Emergency Guidelines: Vegetative/Land Clearing Debris Staging Area & Siting Operational Guidelines* pertaining to Air Curtain Burner Sites shall be used and considered "minimum standards" in selecting a site (See Appendix 9). In addition, the local North Carolina Division of Waste Management and Division of Air Quality regional



staff (See Appendix 7 for contact information) shall be consulted to evaluate the surrounding areas and to reevaluate any potential sites used in the past when selecting the site for the staging area(s). North Carolina Air Quality Rules Sections 2D .1900 shall be followed and a Burn Permit from the North Carolina Division of Forest Resources (See Appendix 7 for contact information) is required for open burning. The vegetative debris shall be picked up and transported from the staging areas by storm debris contractors. A list of such contractors is found in Appendix 7.

8.3.2 Construction and Demolition (C&D) Debris Sites

A C&D Debris Site may be purely for the staging and transferring of C&D waste that is to be transported to a C&D landfill. Unsuitable materials, such as household garbage, white goods, household hazardous waste, and asbestos containing materials shall be screened out at this site. The section of *North Carolina Division of Waste Management's Disaster Clean Up Emergency Guidelines Construction and Demolition Debris Sites: Staging/Transferring, Processing/Recycling, Siting and Operational Guidelines* pertaining to C&D Staging/Transferring Sites shall be used and considered "minimum standards" in selecting a site for use (See Appendix 9). In addition, the local North Carolina Solid Waste Section regional staff (See Appendix 7 for contact information) shall be consulted to evaluate potential sites and to revisit sites used in the past to see if site conditions have changed or if the surrounding areas have changed significantly to alter the use for the site.

A C&D Debris Site may also be used for C&D treatment and processing/recycling. C&D waste will be screened, treated, and processed in order to recycle as much of the C&D waste, decreasing the amount that would be landfilled. The section of *North Carolina Division of Waste Management's Disaster Clean Up Emergency Guidelines Construction and Demolition Debris Sites: Staging/Transferring, Processing/Recycling, Siting and Operational Guidelines* pertaining to C&D Treatment & Processing/Recycling Sites will be used and considered "minimum standards" in selecting a site for use (See Appendix 9). In addition, management of



C&D debris and source separated materials to be recycled shall be in accordance with Solid Waste Management Regulation 15A NCAC 13B, Section .0301 that deals with the Application Requirements for Treatment and Processing Facilities.

8.3.3 Temporary Transfer Station Site for Managing Municipal Solid Waste (MSW)

In the event that direct hauling of MSW to a regional landfill would be impractical, or transferring MSW from remote locations to County facilities would alleviate truck congestion at the landfill facility and minimize inefficiencies in the cleanup efforts, a Temporary Transfer Station Site(s) will be set up. Unsuitable materials, such as white goods and asbestos containing materials will be screened out. *The North Carolina Division of Waste Management's Disaster Clean Up Emergency Guidelines Temporary Transfer Station Site for Managing MSW Waste: Siting and Operational Guidelines* will be used and considered "minimum standards" in selecting a site for use (See Appendix 9). In addition, the local North Carolina Division of Waste Management regional staff (See Appendix 7 for contact information) will be consulted to evaluate potential sites and to revisit sites used in the past to see if site conditions have changed or if the surrounding areas have changed significantly to alter the use for the site.

8.3.4 Household Hazardous Waste Temporary Collection Events

In the event of a high increase in Household Hazardous Waste due to a disaster, temporary facilities for handling these wastes will be set up. *The North Carolina Division of Waste Management's Disaster Clean Up Emergency Guidelines Household Hazardous Waste Temporary Collection Events* will be used and considered "minimum standards" in selecting such a site (See Appendix 9) and Union County will choose a household hazardous waste contractor to set up such a collection event. Names of contractors are available through the North Carolina Division of Waste Management Solid Waste Section (919-715-3605). The contractor will assist in selecting a site that is easily accessible, accommodates the contractor's equipment, and accommodates traffic. Union County shall contact the



North Carolina Division of Waste Management Solid Waste Section (See Appendix 7 for contact information) to obtain a temporary identification number that is required for all hazardous waste disposal and recycling facilities as a condition of waste acceptance.

8.4 Debris Diversion

In order to reduce the amount of debris waste, the following management options will be followed. Plans to initiate these management options will be made ahead of time in order to be ready for when they are needed in the event of a disaster.

8.4.1 Vegetative Debris

Vegetative debris such as trees, stumps, brush, and leaf and yard waste make up the largest portion of the debris produced during tornadoes, hurricanes, and other natural disasters. This vegetative debris can be collected, stockpiled (See Section 8.3.1), and processed to the specifications of mulch or boiler fuel product. This work may be contracted out. A list of contractors and directories of markets for wood waste are found in Appendix 8. Additional vegetative recycling markets can be attained through the assistance of the Division of Pollution Prevention and Environmental Assistance (DPPEA) of the North Carolina Department of Environment and Natural Resources (NCDENR) and its directory of markets for recyclable materials (See Appendix 7 for contact information).

8.4.2 Aggregate Debris

Large amounts of aggregate debris such as asphalt pavement and concrete may result from the destruction of roadways during natural disasters. Any such materials may be collected, stockpiled, and processed to the specifications for road base aggregate or solid fill material. Aggregate recycling market directories are found in Appendix 8. Additional markets may be attained through the assistance of the Division of



Pollution Prevention and Environmental Assistance (DPPEA) of the North Carolina Department of Environment and Natural Resources (NCDENR) and its directory of markets for recyclable materials (See Appendix 7 for contact information).

8.4.3 Construction and Demolition Debris

Construction and demolition (C&D) material that results from the destruction of homes, commercial and non-commercial buildings, and other structures is another large component of disaster debris, which is subject to the North Carolina Department of Health and Human Services: Division of Public Health Asbestos Guidelines (See Appendix 7 for contact information). Such materials produced from these sources include wood, aggregates, metals, gypsum, plastics, and other miscellaneous items. These materials will be managed by the Union County C&D Landfill and, if needed, at temporary C&D processing sites (See Section 8.3.2). Recycling options that may be used include mixed C&D processing, material reuse, and the deconstruction of houses for the intention of re-using the resulting building materials. Several mixed construction and demolition debris processing facilities exist in North Carolina. See Appendix 8 for a listing of such facilities and for directories of markets for recycled salvaged building materials and deconstruction services. Additional assistance in finding such markets and other markets for C&D recycling may be attained through the Division of Pollution Prevention and Environmental Assistance (DPPEA) of the North Carolina Department of Environment and Natural Resources (NCDENR) and its directory of markets for recyclable materials (See Appendix 7 for contact information).



8.5 Local Coordination

8.5.1 Lead Disaster Debris Management Team

The Union County Homeland Security Office and/or County Emergency Management in conjunction with the Public Works Department will take the lead in managing disaster debris. The Public Works Department will be responsible for the establishment of diversion programs, removing or temporarily storing disaster related debris, and coordinating the enforcement and permitting of solid waste facilities and operations. The Union County Homeland Security Office and/or County Emergency Management (See Appendix 7 for contact information) will be the debris manager and will establish a debris team to facilitate the debris management program.

8.5.2 Local Debris Management Assistance

The County Recycling Coordinator, who is part of the Public Works Department (See Appendix 7 for contact information), shall assist in finding and setting up recycling markets for the various types of disaster debris. County law enforcement (i.e. County Sheriff - see Appendix 7) will assist in enforcing proper temporary solid waste facility operations. Local municipalities will coordinate with the County to assist in its debris management efforts where applicable.

Temporary labor sources will be identified to handle any increased need for waste removal. Advance plans to acquire equipment and supplies needed to implement the debris management plan will be made and ready when needed.

Any assistance that will not be provided by the State or other local governments will be bid out as an emergency contract. Such services in the emergency contract will include debris collection, storage, sorting, processing, marketing, and disposal.



8.5.3 County Homeland Security Office/Emergency Management Department

The Union County Homeland Security Office/Emergency Management Department (See Appendix 7 for contact information) shall be consulted in all plans for managing the disaster debris. The Emergency Management Department shall give any assistance possible in the County's disaster debris management efforts, including obtaining any State or Federal reimbursement funding available for disaster debris management.

8.5.4 Additional Local Contacts

- County Manager (See Appendix 7 for contact information)
- County Commissioner (See Appendix 7 for contact information)
- Finance Director (See Appendix 7 for contact information)

8.5.5 State and Federal Government

The North Carolina Division of Waste Management, Solid Waste Section (See Appendix 7 for contact information) will be consulted for assistance in the County's debris management efforts. Advice on collection methods, recycling markets, and other items will be utilized. Any applicable Federal and State guidelines and regulations pertaining to debris removal will be followed. Any applicable disaster funding (i.e. FEMA - see Appendix 7) shall be applied for through the proper channels.

8.5.6 Communication Strategy

A communication strategy for government officials to tell the community when, where, and how waste collection will resume, as well as providing special instructions on how the reporting and sorting of disaster debris should be done and



how the collection of disaster debris will be implemented. This may be done through television, newspaper, and radio.



SECTION 9

MASS POULTRY MORTALITY RESPONSE PLAN

It is intended that Union County implement a response plan in conjunction with the local poultry industry and public health officials to respond to mass poultry mortality within Union County. The plan will include actions and responses by the County, public health officials, and local poultry industry in the storage, removal, and disposal of chicken and/or turkey carcasses. Severe weather events or infectious disease have the potential to cause large numbers of poultry mortalities within Union County. The Mass Poultry Mortality Response Plan is currently being developed and upon completion will be implemented as an attachment to the Solid Waste Management Plan.



SECTION 10

SOLID WASTE COSTS AND FINANCING METHODS

Union County operates a solid waste program via six Satellite Collection Centers, municipality contracted private waste pick-up, and a Transfer Station. Municipal solid waste (MSW) is collected at the six Satellite Collection Centers and a majority of the municipalities transport waste to the Union County Transfer Station. Municipal solid waste is then picked up at the County Transfer Station and hauled to the Chambers Development MSW Landfill and/or BFI's Charlotte Motor Speedway Landfill. Recyclables are also collected at the six Satellite Collection Centers and transported to the County Transfer Station. Recyclables are then picked up at the County Transfer Station and transported to Uwharrie Materials Recovery Facility.

Six municipalities within the County handle their own solid waste collection programs. The Towns of Indian Trail and Stallings and Lake Park Village contract their programs with Action Garbage and the Town of Marshville contract their program with Allied Waste. The remaining municipalities either did not provide solid waste programs or were unavailable for inquiry.

The remaining residents in the other incorporated and unincorporated portions of the County take their waste to County Satellite Collection Centers or hire private haulers. Commercial solid waste (non-residential) is contracted to private haulers.

The following sections pertaining to the four municipal programs contain as much information as could be attained through voluntary interviews with the municipalities. Information is lacking in some sections due to poor or incomplete responses from some of the municipalities.

It should be noted that all the information below was obtained from Union County and the individual municipalities.



10.1 Union County

10.1.1 Union County Description

Union County operates a Transfer Station, a C&D Landfill, and six solid waste Satellite Collection Centers. Solid waste is picked up by the County at the Satellite Collection Centers and hauled to the Union County Transfer Station. Each satellite collection site has separate bins for waste and recyclable items.

The total operating cost for the County-operated solid waste program between July 1, 2004 and June 30, 2005 (year 2004-2005) was \$3,004,000. The budget included cost for the operation of the Satellite Collection Centers; operation of the landfill; associated costs for solid waste collection and disposal; the waste reduction programs; recycling/re-use and mulching.

The tipping fee for Municipal Solid Waste (MSW) deposited at the Union County Transfer Station is \$38 per ton. The tipping fee for Construction and Demolition (C&D) Waste is \$24 per ton and Yard Waste and Wood Pallets is \$30 per ton. The tipping fees charged are for both the general public and commercial haulers. Solid Waste collected at the Satellite Collection Centers fees is at \$0.25 per bag.

10.2 Town of Indian Trail

10.2.1 Town of Indian Trail Description

The Town of Indian Trail contracts with Action Garbage for curbside residential collection of municipal solid waste (MSW) and recyclables, but not yard waste. All of this waste is disposed of at the Union County Transfer Station. The town had approximately 7,130 households that were serviced per month for a total of 85,560 households in year 2004-2005. These homes disposed of approximately 10,291 tons of MSW and 835 tons of recyclables during the same time period. This computes



out to be a yearly waste disposal rate of 1.44 tons per household and a yearly recycling rate of 0.12 tons per household. The approximate cost of the collection and disposal charged to Indian Trail for these services was \$14.10 per household per month plus the disposal fee of \$38 per ton at the Union County Transfer Station. Indian Trail did receive the recycling credit of \$40 per ton given by Union County, which was deducted from their bill from Action Garbage.

Indian Trails' solid waste program costs and revenues are summarized for the 2004-2005 year in Table 10.1 below. These totals are derived from the following information:

- Indian Trail was charged \$14.10 per household for MSW and recycling pick-up in year 2004-2005 by Action Garbage.
- Indian Trail residences are charged a \$5.00 per house annual fee for waste collection.
- A disposal fee of \$38 per ton at the Union County Transfer Station.
- The recycling credit of \$40 per ton was given by Union County.

TABLE 10.1
TOWN OF INDIAN TRAIL SOLID WASTE PROGRAM APPROXIMATED COSTS
(July 1, 2004 to June 30, 2005)

	COST PER HOUSEHOLD PER MONTH	COST PER TON	TOTAL NUMBER OF TONS OR HOUSEHOLDS SERVICED	TOTALS
COLLECTION FEE	\$14.10		85,560	\$1,206,396
DISPOSAL FEE		\$38.00	10,291	\$391,058
RECYCLING CREDIT		(\$40.00)	835	(\$33,400)
INDIAN TRAIL HOUSE CHARGE	(\$5.00)		85,560	(\$427,800)
TOTAL				\$1,136,254



10.2.2 Town of Indian Trail Assessment

Indian Trail finances a portion of their solid waste program, which costs roughly \$1,564,054 in the 2004-2005 year, through a \$5 per household charge. The remaining costs in the 2004-2005 year, which were about \$1,136,254, are recovered through taxes.

10.3 Town of Marshville

10.3.1 Town of Marshville Description

The Town of Marshville contracts with Allied Waste for curbside residential collection of municipal solid waste (MSW), yard waste and white goods, but not recyclables. Allied Waste transports the waste directly to Chambers Development MSW Landfill for disposal. The citizens bring their recyclables into town to a trailer that is used as a recycling drop-off site. Newspapers, cardboard, magazines, glass, plastic, and aluminum cans are collected. These recyclables are brought to the Union County Transfer Station. The town had approximately 830 households per month that were serviced for a total of 9,960 households in year 2004-2005. These homes disposed of approximately 1,484 tons of waste during the same time period. This computes out to be a yearly waste disposal rate of 1.79 tons per household. The approximate cost of the collection and disposal charged to Marshville for these services was \$12.00 per household per month.

Marshville's solid waste program costs and revenues are summarized for the 2004-2005 year in Table 10.2. These totals are derived from the following information:

- Marshville was charged \$12.00 per household for waste pick-up in year 2004-2005 by Allied Waste.



TABLE 10.2
TOWN OF MARSHVILLE SOLID WASTE PROGRAM APPROXIMATED COSTS
(July 1, 2004 to June 30, 2005)

	COST PER HOUSEHOLD PER MONTH	TOTAL NUMBER OF HOUSEHOLDS SERVICED	TOTALS
COLLECTION FEE	\$12.00	9,960	\$119,520
TOTAL			\$119,520

10.3.2 Town of Marshville Assessment

The Town of Marshville recovers the costs of their waste management program by billing the citizens each month for waste service with their water and sewer bills. The yearly cost of curbside pick-up of residential MSW costs Marshville approximately \$119,520.

10.4 Town of Stallings

10.4.1 Town of Stallings Description

The Town of Stallings contracts with Action Garbage for curbside residential collection of municipal solid waste (MSW) and recyclables, but not yard waste. All of this MSW is disposed of at the Union County Transfer Station. The town had approximately 3,957 households per month that were serviced for a total of 47,484 households in year 2004-2005. These homes disposed of approximately 3,894 tons of MSW and 375 tons of recyclables during the same time period. This computes out to be a yearly waste disposal rate of 0.98 tons per household and a yearly recycling rate of 0.09 tons per household. The approximate cost of the collection and disposal charged to Stallings for these services was \$12.48 per household per month plus the disposal fee of \$38 per ton at the Union County Transfer Station.



Stallings did receive the recycling credit of \$40 per ton given by Union County, which was deducted from their bill from Action Garbage.

Stallings solid waste program costs and revenues are summarized for the 2004-2005 year in Table 10.3 below. These totals are derived from the following information:

- Stallings was charged \$12.48 per household for waste and recycling pick-up in year 2004-2005 by Action Garbage.
- A disposal fee of \$38 per ton was charged at the Union County Transfer Station.
- The recycling credit of \$40 per ton was given by Union County.

TABLE 10.3
TOWN OF STALLINGS SOLID WASTE PROGRAM APPROXIMATED COSTS
(July 1, 2004 to June 30, 2005)

	COST PER HOUSEHOLD PER MONTH	COST PER TON	TOTAL NUMBER OF TONS OR HOUSEHOLDS SERVICED	TOTALS
COLLECTION FEE	\$12.48		47,484	\$592,600
DISPOSAL FEE		\$38.00	3,894	\$147,972
RECYCLING CREDIT		(\$40.00)	375	(\$15,000)
TOTAL				\$725,572

10.4.2 Town of Stallings Assessment

The Town of Stallings recovers the costs of their waste management program through property taxes. The yearly cost of curbside pick-up for residential MSW and recyclables costs Stallings approximately \$725,572.



10.5 Lake Park Village

10.5.1 Lake Park Village Description

Lake Park Village contracts with Action Garbage for curbside residential collection of municipal solid waste (MSW) and recyclables, but not yard waste. All of the waste is disposed of at the Union County Transfer Station. The village had approximately 1,130 households per month that were serviced for a total of 13,560 households in year 2004-2005. These homes disposed of approximately 743 tons of MSW and 78 tons of recyclables during the same time period. This computes out to be a yearly waste disposal rate of 0.66 tons per household and a yearly recycling rate of 0.07 tons per household. The approximate cost of the collection and disposal charged to Lake Park Village for these services was \$16.34 per household per month plus the disposal fee of \$38 per ton at the Union County Transfer Station.

Lake Park Village solid waste program costs and revenues are summarized for the 2004-2005 year in Table 10.4 below. These totals are derived from the following information:

- Lake Park Village was charged \$16.34 per household for waste and recycling pick-up in year 2004-2005 by Action Garbage.
- A disposal fee of \$38 per ton was charged at the Union County Transfer Station.



TABLE 10.4
LAKE PARK VILLAGE SOLID WASTE PROGRAM APPROXIMATED COSTS
 (July 1, 2004 to June 30, 2005)

	COST PER HOUSEHOLD PER MONTH	COST PER TON	TOTAL NUMBER OF TONS OR HOUSEHOLDS SERVICED	TOTALS
COLLECTION FEE	\$16.34		13,560	\$221,570
DISPOSAL FEE		\$38.00	743	\$28,234
TOTAL				\$249,804

10.5.2 Town of Lake Park Village

The yearly cost of curbside pick-up of residential MSW and recyclables costs Lake Park Village approximately \$249,804.



SECTION 11
**FACILITIES AND RESOURCES AVAILABLE THROUGH
PRIVATE ENTERPRISE**

The Union County Solid Waste Planning Area (UCSWPA) may consider the use of privately operated facilities and resources in its development of the next three-year plan update. At this time, municipal solid waste disposal and recycling in Union County is provided by the County through its Transfer Station and six Satellite Collection Centers and any waste collection available is performed by private enterprise. Some municipal solid waste and recyclables are collected via private hauling companies within the County, but transported and disposed of outside of Union County. Thus, in the UCSWPA, a combination of publicly and privately operated programs exists at this time.



APPENDIX 1

**RESOLUTION TO APPROVE THE COUNTY
SOLID WASTE MANAGEMENT PLAN**



**RESOLUTION ACCEPTING AND ENDORSING THE SOILD WASTE
MANAGEMENT PLAN OF 2006 FOR UNION COUNTY**

WHEREAS, it is a priority of this community to protect human health and the environment through safe and effective management of municipal solid waste;

WHEREAS, the reduction of the amount and toxicity of the local waste stream is a goal of this community;

WHEREAS, equitable and efficient delivery of solid waste management services is an essential characteristic of the local solid waste management system;

WHEREAS, it is a goal of the community to maintain and improve its physical appearance and to reduce the adverse effects of illegal disposal and littering;

WHEREAS, Union County recognizes its role in the encouragement of recycling markets by purchasing recycled products;

WHEREAS, involvement and education of the citizenry is critical to the establishment of an effective local solid waste program;

WHEREAS, the State of North Carolina has placed planning responsibility on local government for the management of solid waste;

WHEREAS, NC General Statute 130A-309.09A(b) requires each unit of local government, either individually or in cooperation with other units of local government, to update the Ten Year Comprehensive Solid Waste Management Plan at least every three years;

WHEREAS, the Union County Solid Waste Management Department and Citizens Solid Waste Advisory Council have undertaken and completed a long-range planning effort to evaluate the appropriate technologies and strategies available to manage solid waste effectively;

NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BOARD OF *UNION COUNTY*:

That Union County's 2006 Ten Year Comprehensive Solid Waste Management Plan is accepted and endorsed and placed on file with Clerk to the Board on this day,.....2006.

APPENDIX 2

PUBLIC MEETING ADVERTISEMENT AND MINUTES OF PUBLIC MEETING



APPENDIX 3

MAP OF UNION COUNTY PLANNING AREA AND MAP OF REGIONAL MUNICIPAL SOLID WASTE LANDFILLS



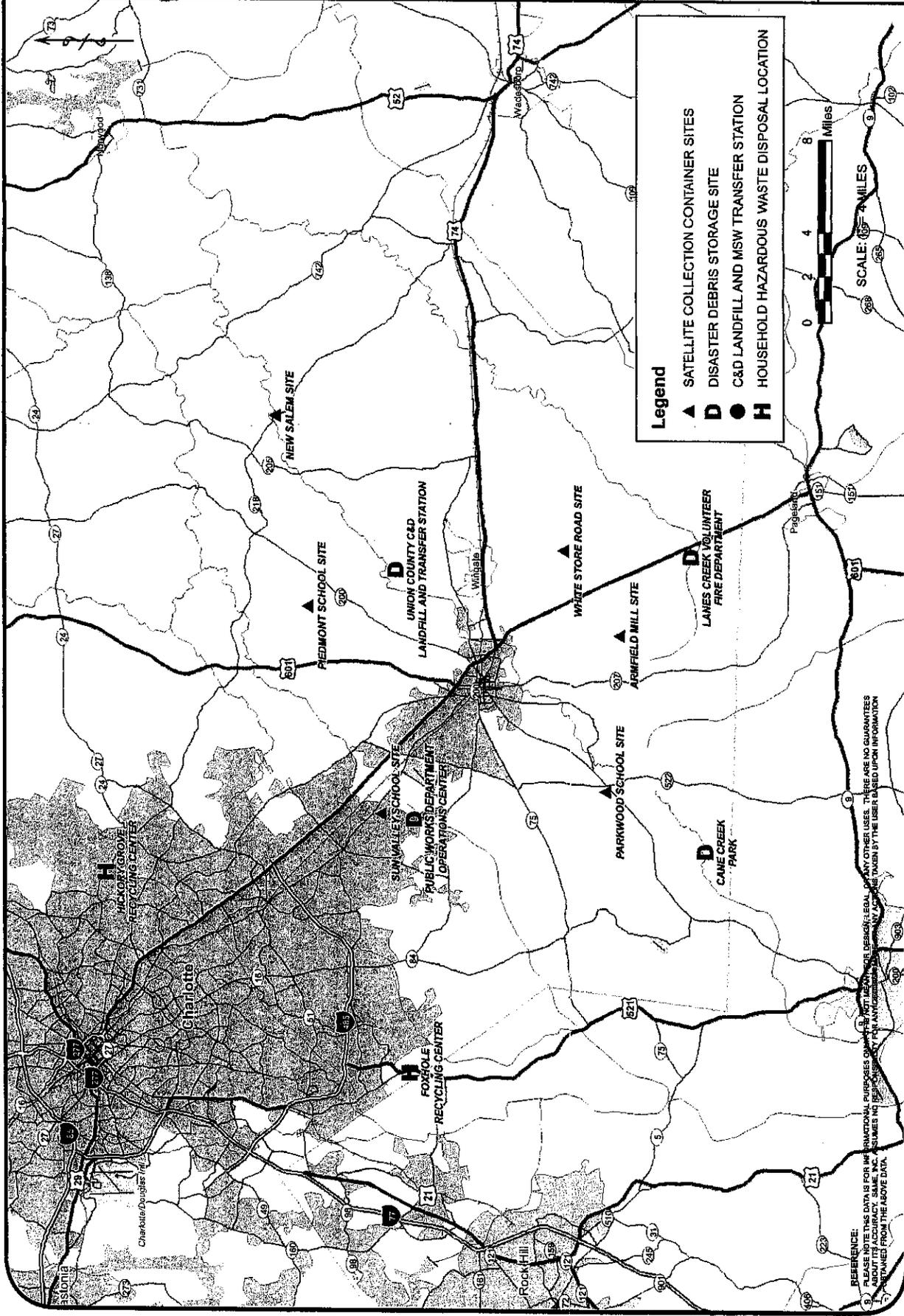
DATE: 06-05-06
 DRAWN BY: DMG
 CHECKED BY: ADG

SCALE: 1" = 4 MILES
 PROJECT NO.: 1356-06-269



COUNTY WASTE DISPOSAL AND RECYCLING FACILITIES
 SOLID WASTE MANAGEMENT PLAN
 UNION COUNTY, NORTH CAROLINA

FIGURE NO. **1**



Legend

- ▲ SATELLITE COLLECTION CONTAINER SITES
- DISASTER DEBRIS STORAGE SITE
- C&D LANDFILL AND MSW TRANSFER STATION
- ⬡ HOUSEHOLD HAZARDOUS WASTE DISPOSAL LOCATION

REFERENCE:
 8. NOT BE USED FOR DESIGN OR LEGAL PURPOSES. THERE ARE NO WARRANTIES OR GUARANTEES OF ANY KIND, INCLUDING ACCURACY, MADE BY THE USER BASED UPON INFORMATION PROVIDED BY THE ABOVE DATA.

APPENDIX 4

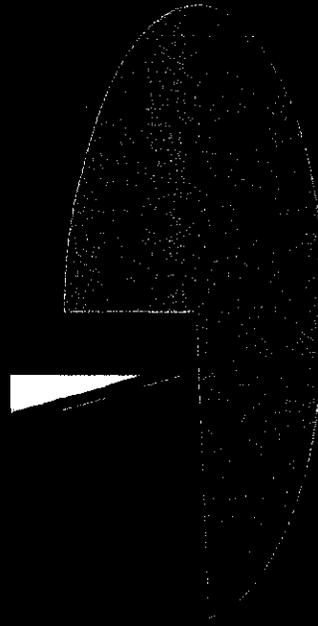
WASTE CHARACTERIZATION CHART



WASTE CHARACTERIZATION CHART

NON-RECYCLED
WASTE FROM
RECYCLING
FACILITY
2%

CONSTRUCTION
AND DEMOLITION
WASTE
25%



RESIDENTIAL
AND NON-
RESIDENTIAL
SOLID WASTE
73%

APPENDIX 5

WASTE REDUCTION GOAL SHEET



WASTE REDUCTION GOAL SHEET

N.C. LOCAL GOVERNMENT TEN YEAR SOLID WASTE MANAGEMENT PLAN

Local government name Union County

Previously established FY 2012-2013 waste reduction goal 25 %

After considering your government's current and projected solid waste activities, resources, population and economic growth, will the FY 2012-2013 waste reduction goal change?

Yes No

If yes, what is the revised FY 2012-2013 waste reduction goal? _____ %

Establish a new FY 2015-2016 waste reduction goal 29 %

WASTE REDUCTION CALCULATIONS

To provide 10 years of solid waste management planning, as per General Statute 130A-309.09A(b), waste reduction goals are updated. Use the following chart to determine the tonnages needed to manage, without landfilling, to meet waste reduction goals for FY 2015-2016.

CALCULATIONS	FY 2012-2013	FY 2015-2016
1. Baseline year per capita disposal rate (FY 1998-1999, See Note 1)	1.27	1.27
2. Percent waste reduction goal	25%	29%
3. Targeted per capita disposal rate (Subtract line 2 from 1.0 and multiply result by line 1)	0.95	0.90
4. Estimated population for July 2013 and July 2016 (Available at http://demog.state.nc.us/ under the link: County Projected Annual Populations, 2010-2019)	201,823	219,028
5. Projected tonnage for disposal at baseline disposal rate (Multiply line 1 by line 4)	256,315	278,166
6. Targeted annual tonnage for disposal (Multiply line 3 by line 4)	191,732	197,125
7. Targeted annual tonnage to reduce (Subtract line 6 from line 5)	64,583	81,041

APPENDIX 6

PLANNING ELEMENTS SHEETS



PLANNING ELEMENTS
NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN
PLANNING YEARS 2006-2009

Element Description: *Illegal Disposal/Litter Prevention, Recycling and Reuse, Education with Community, and Disposal Reduction*

COMPLETED ACTIONS	INCOMPLETE ACTIONS		NEW/REVISED ACTIONS		
	KEY ACTIONS	WHY INCOMPLETE?	KEY ACTIONS	DATE DUE	ESTIMATED TONS DIVERTED IN 10 th YEAR
			Initiate a public education flyer program to promote awareness about household hazard waste, scrap tire program, white goods, etc.	January 2007	
			Research used battery collection to see if economically feasible.	February 2007	
			Research recycling electronics.	July 2009	
			Research recycling of used oil filters.	October 2009	

PLANNING ELEMENTS
NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN
PLANNING YEARS 2006-2009

Element Description: *Recycling and Reuse, Disposal Reduction, and Collection*

COMPLETED ACTIONS	INCOMPLETE ACTIONS		NEW/REVISED ACTIONS		
	KEY ACTIONS	WHY INCOMPLETE?	KEY ACTIONS	DATE DUE	ESTIMATED TONS DIVERTED IN 10 th YEAR
			<p>Enhance used tire recycling program by bringing in state personnel to audit County's scrap tire program and to visit all major used tire generators at a minimum of once quarterly.</p> <p>Research in the reuse of concrete debris as aggregate in construction projects through a local company</p>	<p>July 2006</p> <p>August 2006</p>	

PLANNING ELEMENTS
NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN
PLANNING YEARS 2006-2009

Element Description: *Education with community and through schools*

COMPLETED ACTIONS		INCOMPLETE ACTIONS		NEW/REVISED ACTIONS		ESTIMATED TONS DIVERTED IN 10 th YEAR
KEY ACTIONS	KEY ACTIONS	WHY INCOMPLETE?	KEY ACTIONS	DATE DUE	KEY ACTIONS	
			<p>Increase school program education by visiting a minimum of two schools per month and focusing year round school scheduling during the summer months.</p> <p>Have an information booth at festivals and street events at least once per year.</p> <p>Hold a composting education program at the local farmers market in conjunction with the Master Garden Club.</p>	<p>August 2006</p> <p>September 2007</p> <p>March 2008</p>		

PLANNING ELEMENTS
NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN
PLANNING YEARS 2006-2009

Element Description: *Special Waste Disposal*

COMPLETED ACTIONS	INCOMPLETE ACTIONS		NEW/REVISED ACTIONS		
	KEY ACTIONS	WHY INCOMPLETE?	KEY ACTIONS	DATE DUE	ESTIMATED TONS DIVERTED IN 10 th YEAR
			Continue pesticide disposal program in conjunction with Department of Agriculture	Current/Continuous	

PLANNING ELEMENTS
NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN
PLANNING YEARS 2006-2009

Element Description: *Illegal Disposal/Litter Prevention, Recycling and Reuse, and Collection*

COMPLETED ACTIONS	INCOMPLETE ACTIONS		NEW/REVISED ACTIONS		
	KEY ACTIONS	WHY INCOMPLETE?	KEY ACTIONS	DATE DUE	ESTIMATED TONS DIVERTED IN 10 th YEAR
			Establish an appropriate fee for scrap tires that are not eligible for free disposal.	July 2007	

PLANNING ELEMENTS
NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN
PLANNING YEARS 2006-2009

Element Description: *Disposal*

COMPLETED ACTIONS	INCOMPLETE ACTIONS		NEW/REVISED ACTIONS		
	KEY ACTIONS	WHY INCOMPLETE?	KEY ACTIONS	DATE DUE	ESTIMATED TONS DIVERTED IN 10 th YEAR
			Explore possibility of permitting borrow area for future construction and demolition landfill soil cover.	January 2008	

PLANNING ELEMENTS
NC LOCAL GOVERNMENT 10 YEAR SOLID WASTE MANAGEMENT PLAN
PLANNING YEARS 2006-2009

Element Description: *Recycling and Reuse and Disposal*

COMPLETED ACTIONS	INCOMPLETE ACTIONS		NEW/REVISED ACTIONS		
	KEY ACTIONS	WHY INCOMPLETE?	KEY ACTIONS	DATE DUE	ESTIMATED TONS DIVERTED IN 10 th YEAR
			<p>Research the possibility of generating revenue from recycled corrugate cardboard, paper, plastic, aluminum, steel, and glass</p>	January 2008	

APPENDIX 7

CONTACT INFORMATION FOR FEDERAL, STATE, AND LOCAL OFFICIALS, LOCAL LCID AND C&D LANDFILLS, AND WASTE REDUCTION/RECYCLING ASSISTANCE ORGANIZATIONS AND PROGRAMS



CONTACT INFORMATION

FEDERAL CONTACTS

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)

Federal Level

500 C Street
SW Washington, D.C. 20472
Phone: (202) 566-1600

Regional Level

Region IV
3003 Chamblee Tucker Road
Atlanta, GA 30341
Phone: (770) 220-5200
Fax: (770) 220-5230
Phone: (800) 858-0368

State

Division of Emergency Management
4713 Mail Service Center
Raleigh, NC 27699
Phone: (919) 733-3867
Fax: (919) 733-5406

STATE OF NORTH CAROLINA CONTACTS

NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES: DIVISION OF AIR QUALITY

State

1641 Mail Service Center
Raleigh, NC 27699-1641
Phone: (919) 733-3340

Local

Mooresville Regional Office
Michael Landis, Regional Supervisor
610 East Center Avenue, Suite 301
Mooresville, NC 28115
Phone: (704) 663-1699
Fax: (704) 663-7579
Email: michael.landis@ncmail.net

NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES: DIVISION OF FOREST RESOURCES

State

1616 Mail Service Center
Raleigh, NC 27699-1616
Phone: (919) 733-2162
Fax: (919) 715-4350

Regional Level

District 12 Headquarters
District Forester
1933 Mountain Island Highway
Mount Holly, NC 28120
Phone: (704) 827-7576
Fax: (704) 827-4345
Email: dfr.d12opsrm@ncmail.net

Local - Burn Permit

Andy Cranfill, County Ranger
3230-C Presson Road
Monroe, NC 28112
Phone: (704) 233-1437
Fax: (704) 233-1467
Email: union.dfr@ncmail.net

*NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES:
DIVISION OF POLLUTION PREVENTION AND ENVIRONMENTAL ASSISTANCE
(DIRECTORY OF MARKETS FOR RECYCLABLE MATERIALS, GENERAL ASSISTANCE)*

Gary Hunt, Division Director
Phone: (919) 715-6508
DPPEA
1639 Mail Service Center
Raleigh, NC 27699-1639
Phone: (919) 715-6500 (800) 763-0136
Fax: (919) 715-6794

*NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES:
DIVISION OF WASTE MANAGEMENT - SOLID WASTE SECTION*

<u>State</u>	<u>Local</u>
Division of Waste Management 1646 Mail Service Center Raleigh, NC 27699-1646 Phone: (919) 715-3605	Mooresville Regional Office 610 East Center Avenue, Suite 301 Mooresville, NC 28115 Phone: (704) 663-1699 Fax: (704) 663-6040 Teresa Bradford Waste Management Specialist Email: teresa.bradford@ncmail.net Anthony Foster Waste Management Specialist Email: anthony.foster@ncmail.net

*NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES:
NORTH CAROLINA OFFICE OF ENVIRONMENTAL EDUCATION*

Lisa Tolley, Division Director
1609 Mail Service Center
Raleigh, NC 27699-1609
Phone: (919) 733-0711
Fax: (919) 733-1616
Email: lisatolley@ncmail.net
Internet: www.eenorthcarolina.org

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

<u>State</u>	<u>Local</u>
1500 Mail Service Center Raleigh, NC 27699 Phone: (877) 368-4968 Phone: (919) 733-2520 Fax: (919) 733-9150	Scott Cole 130 South Sutherland Street Monroe, NC 28112 Phone: (704) 289-1397 Fax: (704) 292-1800 Email: scole@dot.state.nc.us

*NORTH CAROLINA DEPARTMENT OF HEALTH AND HUMAN SERVICE:
DIVISION OF PUBLIC HEALTH*

Leah Devlin, Division Director
1931 Mail Service Center
Raleigh, NC 27699-1931
Phone: (919) 707-5000
Fax: (919) 870-4829

UNION COUNTY CONTACTS

UNION COUNTY BOARD OF COMMISSIONERS

Kevin Pressley, Chairman
Allan Baucom, Vice Chairman
Roger Lane, Parker Mills, Lanny Openshaw
Lynn West, CMC - Clerk to the Board of Commissioners

UNION COUNTY COOPERATIVE EXTENSION

Jerry Simpson, Director
3230-D Presson Road
Monroe, NC 28112
Phone: (704) 283-3801
Fax: (704) 283-3734

UNION COUNTY EMERGENCY MANAGEMENT

500 N. Main Street, Suite 419
Monroe, NC 28112
Phone: (704) 283-3536 (704) 283-3575
Fax: (704) 289-4369

UNION COUNTY FINANCE

Kai Nelson, Director
500 N. Main Street, Suite 901
Monroe, NC 28112
Phone: (704) 283-3813
Fax: (704) 225-0664

UNION COUNTY MANAGER

Mike Shalti
500 N. Main Street, Room 925
Monroe, NC 28112
Phone: (704) 283-3810
Fax: (704) 282-0121

UNION COUNTY PUBLIC SCHOOLS

500 North Main Street, Suite 700
Monroe, NC 28112
Phone: (704) 283-3733 (704) 283-3654
Fax: (704) 289-1536

UNION COUNTY PUBLIC WORKS

Christie Putman, Interim Director
Mark Tye, Assistant Director
400 North Church Street
Monroe, NC 28110
Phone: (704) 233-9289
Vickey Vanzile, Recycling Coordinator
Phone: (704) 233-9289
Frances Cote, Solid Waste Superintendent
Phone: (704) 233-5334

UNION COUNTY SHERIFF'S OFFICE

Eddie Cathey, Sheriff
3344 Presson Road
Monroe, NC 28112
Phone: (704) 283-3789

LOCAL LCID AND C&D LANDFILL SITES

A.C. STUMP DUMP

Permitted LCID Facility
Archie Cook, Facility Contact
3109 Plyer Mill Road
Monroe, NC 28112
Phone: (704) 283-4547

GRIFFIN FARMS C&D LANDFILL

Permitted C&D Landfill
Richard S. Griffin, Facility Contact
3322 Old Camden Road
Monroe, NC 28110
Phone: (704) 289-2595
Fax: (704) 291-2108

STORM DEBRIS CONTRACTOR

BOGGS PAVING INC.

1613 West Roosevelt Boulevard
Monroe, NC 28110
Phone: (704) 289-8482
Fax: (704) 282-1126

ABOUT RUBBISH & REMOVAL

108 Shady Bluff
Indian Trail, NC 28079
Phone: (704) 821-7988 (704) 309-6552
Fax: (810) 852-3389

THE LINDA CONSTRUCTION CO., INC.

1803-A North Tryon Street
Charlotte, NC 28206
Phone: (704) 333-7120 (704) 333-7986
Fax: (704) 333-7092

REPUBLIC SERVICES OF NC

1220 Commerce Street S.W., Suite A
Conover, NC 28613
Phone: (828) 464-2414 (866) 473-7778
Fax: (828) 464-6922

STORM RECONSTRUCTION SERVICES, INC.

1609 Veterans Memorial Parkway
Tuscaloosa, Al 35404
Phone: (205) 556-0049 (866) 556-0049
Fax: (205) 469-2038

WASTE REDUCTION/RECYCLING ASSISTANCE ORGANIZATIONS & PROGRAMS

WASTEWISE

Jeff Tumarkin, Contact
WasteWise Program (5606W)
US Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460
Phone: (800) EPA-WISE (372-9473)
Fax: (703) 308-8686
Email: ww@erg.com
Internet: www.epa.gov/wastewise/

REUSE DEVELOPMENT ORGANIZATION, INC.

C/O The Loading Dock
2 North Kresson Street
Baltimore, MD 21224
Phone: (410) 588-3625
Fax: (410) 558-1888
Email: info@redo.org
Internet: www.redo.org

NATIONAL RECYCLING COALITION, INC.

1325 G. Street, N.W., Suite 1025
Washington, DC 20005
Phone: (202) 347-0450
Fax: (202) 347-0449
Internet: www.nrc-recycle.org

INFORM, INC.

120 Wall Street, 14th Floor
New York, NY 10005-4001
Phone: (212) 361-2400
Fax: (212) 361-2412
Internet: www.informinc.org

*NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES:
OFFICE OF WASTE REDUCTION*

Post Office Box 27687
Raleigh, NC 27687
Phone: (919) 571-4100
Internet: <http://es.epa.gov/techinfo/facts/wstminnc.html>

CAROLINA RECYCLING ASSOCIATION

274 Pittsboro Elementary School Road, Suite 6
Post Office Box 1578
Pittsboro, NC 27312
Phone: (919) 545-9058
Fax: (919) 545-9060
Internet: www.cra-recycle.org

*NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES:
DIVISION OF POLLUTION PREVENTION AND ENVIRONMENTAL ASSISTANCE:
NORTH CAROLINA WASTE TRADER*

1639 Mail Service Center
Raleigh, NC 27699-1639
Phone: (919) 715-6500 (800) 763-0136
Internet: www.ncwastetrader.org

APPENDIX 8

**LIST OF AVAILABLE RECYCLERS AND
PROCESSORS INCLUDING CONTACT
INFORMATION**



AVAILABLE PROCESSORS/MARKETS	
Alba Polymers	
AMERICAN RECYCLING	
Amty Metals Intl. LLC	
ANTRON RECLAMATION PROGRAM	
Atlantic Scrap and Processing	
BAKERY FEEDS/GRIFFIN INDUSTRIES	
Belmont Wiping Cloth Company, Inc	
Bollag International Corporation	
Bowers Fibers Inc.	
Carustar (Carolina Paperboard)	
Charlotte Steel Drum Corporation	
Chemical Specialties	
Clement Industries	
Computer IG	
Consolidated Alloys, Inc	
Custom Crushing	
Custom Pallet & Crating	
Custom Polymers	
East Coast Container Corp.	
Edwards Custom Sawmilling and Lumber	
Engineered Resins Company	
Enterprise Rendering Co.	
ENVIROPLAST INC.	
Exide Battery Corporation	
Ferguson Supply and Box	
First Alliance Logistics Management	
FOL's, Inc	
Friendship Helping Ministries	
Gamble Pallet	
GENOVE US LTD	
Gladden Tire Disposal	
Habitat Re-Store	
HAZ Mat Transportation and Disposal, Inc.	
Heritage-Crystal Clean, LLC	
Heritage Environmental Services	
Highway 49 C&D Landfill	
IFCO Systems	
Iron Mountain Confidential Destruction	
KEMP SERVICES INC.	
Keeter Dixon Pearre	
MAR's Recycling and Shredding, Inc.	
Maslo Company	
McGraw, Inc.	
McManus and Son Drum Company	
Mecklenburg County Recycling, Inc.	

MATERIAL

Rayon	
Restaurant Grease	
Rubber Inner Tubes	
Salvaged Building Materials	
Scrap Lumber	
Scrap Machinery	
Sheeting Material	
Silver	
Six - Pack Rings	
Spent Plastic Blast Media	
Stainless Steel	
Steel -- Scrap Metal	
Steel Drums	
Still Bottoms	
Stretch Wrap -- HDPE	
Stretch Wrap -- LDPE	
Stretch Wrap -- LLDPE	
Synthetic Staple Fiber	
Tantalum	
Teflon	
Telecommunications Equipment	
Televisions	
Textile Clippings	
Textile Cones -- Paper	
Textile Cones -- Plastic	

NOTES:
1. Recycling venues in Union County are bold and capitalized.
2. All information taken from <http://www.p2pays.org/DMRM/start.aspx>

AVAILABLE PROCESSORS/MARKETS	
MATERIAL	METAL RECYCLING SERVICES, INC.
Concrete & Brick	Millanco
Cooking Oil	Millennium Metals
Copper	Neal's Pallet Co., Inc.
Corrosive Liquid	Newco Fibre Company
Corrugated Cardboard	Old American Salvage
Cotton	Paper Stock Dealers, Inc.
Dead Farm Animals	Parts Cleaning Technologies
Deconstruction Services	Planet Recycling, Inc.
Diesel	Plyer Paper Stock Company, Inc.
Drywall (Gypsum)	Pollution Prevention Engineering
Electric Motors	Polymer Recovery Corporation
Electronic Equipment and Scrap	Polymer Recovery Corporation
Electroplating-Aluminum Hydroxide Sludge	Pratt Industries
Electroplating - Chrome Containing Waste	PRO-phx Inc.
Electroplating - Copper Hydroxide Sludge	Recycled Rides
Electroplating - Nickel Containing Waste	Regal Asset Recovery
Electroplating - Tin Bearing Sludge	Republic Waste Services
Electroplating - Zinc Hydroxide Sludge	ReuseComp
Enzymes	RJ Brewer Grinding Services
	RSM Company
	Safety-Kleen
	Scanlec Distribution Inc.
	Shredding Solutions
	Simpson Wood Products, Inc.
	Simputer (USA)
	Southern Metals Company, Inc.
	Southern Resources, Inc.
	Starnes Pallet Service
	Syncof Plastics
	TIRE DISPOSAL AND RECYCLING SERVICE
	TWC Inc
	UNION GYPSUM
	United Scrap, Inc
	Upside Down Turtle
	U.S. Filter Recovery Services
	US GreenFiber
	US Recycling
	U.S. Tire Recycling, L.P.
	Wallace Farm, LLC
	West Drum Company
	Westinghouse Materials
	Weyerhaeuser Recycling
	Winston Container Co Inc
	Wise Recycling Company, LLC

NOTES:
1. Recycling venues in Union County are bold and capitalized.
2. All information taken from <http://www.p2pays.org/DMRM/start.aspx>

MATERIAL	AVAILABLE PROCESSORS/MARKETS											
	1	2	3	4	5	6	7	8	9	10	11	12
Wood Waste -- Pallets												
Wood Waste -- Sawdust and Bark												
Wool												
X-Ray Film												
Yard Waste												
Zinc												
Zinc Oxide												
METAL RECYCLING SERVICES, INC.												
Milanco												
Millennium Metals												
Neal's Pallet Co., Inc.	X											
Newco Fibre Company												
Old American Salvage												
Paper Stock Dealers, Inc.												
Parts Cleaning Technologies												
Planet Recycling, Inc.												
Plyer Paper Stock Company, Inc.												
Pollution Prevention Engineering												
Polymer Recovery Corporation												
POLYREPS												
Pratt Industries												
PRO-phx Inc.												
Recycled Rides												
Regal Asset Recovery												
Republic Waste Services												
ReusComp												
RJ Brewer Grinding Services												
RSM Company												
Safety-Kleen												
Scantec Distribution Inc.												
Shredding Solutions												
Simpson Wood Products, Inc.	X											
Simputer (USA)												
Southern Metals Company, Inc.												
Southern Resources, Inc.												
Starnes Pallet Service	X											
Syncot Plastics												
TIRE DISPOSAL AND RECYCLING SERVICE												
TWC Inc												
UNION GYPSUM												
United Scrap, Inc.												
Upside Down Turtle												
U.S. Filter Recovery Services												
US GreenFiber												
US Recycling												
U.S. Tire Recycling, L.P.												
Wallace Farm, LLC	X											
West Drum Company												
Westinghouse Materials												
Weyerhaeuser Recycling												
Winston Container Co Inc												
Wise Recycling Company, LLC												

- NOTES:
1. Recycling venues in Union County are bold and capitalized.
 2. All information taken from <http://www.p2pays.org/DMRM/start.aspx>

PROCESSOR NAME	PHYSICAL ADDRESS	MAILING ADDRESS	CONTACT PERSON	EMAIL	FAX NUMBER	PHONE NUMBER
Alba Polymers	1200 Kingscross Drive Charlotte, NC 28211	same	Bryan Crutcher	bpcruti1@bellsouth.net		(704) 366-4114
AMERICAN RECYCLING	1128 Waynewood Drive Waxhaw, NC 28173	same	Bruce Spazziani	b.spazziani@sarc-rlc.com	(704) 243-0619	(704) 843-0519
Amity Metals Intl. LLC	2915 Providence Rd Charlotte, NC 28211	same	Brian Imbrey	brian@amitymetals.com	(704) 364-8607	(704) 364-2970
ANTRON RECLAMATION PROGRAM	3206 Strawberry Road Matthews, NC 28104	same	Joe McLaughlin	joseph.l.mcclaudhlin@invisia.com	(704) 841-3692	(704) 608-8678
Atlantic Scrap and Processing	419 Alamo Avenue Charlotte, NC 282061909	same	John Deschenas	jdeschenas@atlantiscrap.com	(704) 342-3638	(704) 375-6937
BAKERY FEEDS/GRIFFIN INDUSTRIES	5805 Highway 74 East Marshville, NC 28103	same	Rick Chapman		(704) 624-9143	(704) 624-9140
Belmont Wiping Cloth Company, Inc	429 Belmont Ave. Charlotte, NC 28235	PO Box 35471 Charlotte, NC 28235	R. Daniel Sellers, III		(704) 376-6117	(704) 376-7082
Bollog International Corporation	5824 OIT Road Charlotte, NC 28217	P.O. Box 99 Charlotte, NC 281260099	Mitchel Bollag	bollica@bollognet.com	(704) 596-8478	(704) 566-2952
Bowers Fibers Inc.	4001 Yancy Road Charlotte, NC 28231	P.O. Box 31234 Charlotte, NC 28231	John Braxton	john@bowersfibers.com	(704) 522-7210	(704) 523-5323
Caraustar (Carolina Paperboard)	443 S. Gardner Ave. Charlotte, NC 28286	P.O. Box 666305 Charlotte, NC 282666305	Jason Garrison	jason.garrison@caraustar.com	(704) 376-8210	(704) 376-7474
Charlotte Steel Drum Corporation	2900 West Trade Street Charlotte, NC 282083251	2810 West Trade Street Charlotte, NC 282083251	Dan Bartley		(704) 392-5486	(704) 392-5386x3
Chemical Specialties	200 E. Woodlawn Road, Suite 250 Charlotte, NC 28217	same	David Fowle	davef@chemspec.com	(704) 527-8232	(704) 522-0825
Clement Industries	2415 Winterbrooks Drive Matthews, NC 28105	same	Jeff Henderson	hendersonj@reclamation.com	(704) 849-0785	(800) 841-5808
Computer IG	1500 N Graham Street Charlotte, NC 28206	same	Brett Rhinehardt	Brett@computerIG.com	(704) 376-1112	(704) 376-1116
Consolidated Alloys, Inc	2214 N. Graham St Charlotte, NC 28206	same	Ross Galhings	rossgal1@aol.com	(704) 358-1903	(704) 376-9004
Custom Crushing	18200 Westmoreland Rd. Cornelius, NC 28031	same	Charlie Ange	CustomCrushing@yahoo.com	(704) 987-0750	(704) 781-2882
Custom Pallet & Crating	5104 N. Graham St. Charlotte, NC 282694629	same	Doug Reiner	info@custompallet.net	(704) 921-1200	(704) 921-1100
Custom Polymers	700 Tuckaseegee Road Charlotte, NC 28208	PO Box 220328 Charlotte, NC 28222	John Callhoun	john@custompolymers.com	(704) 372-1606	(704) 332-6070
East Coast Container Corp.	3212 Campus Ridge Rd. Matthews, NC 28105	P.O. Box 1217 Matthews, NC 281061217	James Cooper	ecc@carroll@alltel.net	(704) 821-4854	(704) 821-7635
Edwards Custom Sawmilling and Lumber	107 Huntersridge Rd Huntersville, NC 28078	same	Kyle Edwards	kedwards@esawmillinc.com		(704) 875-8801
Engineered Resins Company	1011 Woodward Avenue Charlotte, NC 28206	same	Peter Sutton	psutton@engineeredresins.com	(704) 358-9880	(704) 358-6700
Enterprise Rendering Co.	28821 Balthem Ch. Rd. Oakboro, NC 28128	same	Carroll Braun, Jr.		(704) 465-2222	(704) 465-3018
ENVIROPLAST INC	2501 Ashcraft Monroe, NC 28110	same	Rejan Arsenault	rejan@enviroplast.com	(514) 352-9177	(514) 352-6060
Exida Battery Corporation	648-G Griffin Road Charlotte, NC 28217	same	Bryant Smith		(704) 521-9164	(704) 521-9225
Ferguson Supply and Box	4227 North Graham Street Charlotte, NC 28206	same	Chip Ferguson	chferguson@fergusonbox.com	(704) 597-5623	(704) 597-0310
First Alliance Logistics Management	200 East Woodlawn Suite 250 Charlotte, NC 28217	same	Jarrett Carroll	jarrettcarroll@firstalliance.com	(704) 822-7219	(704) 822-0233
FOIL's, Inc	2283 Highway 49 Harrisburg, NC 28075	P.O. Box 286 Harrisburg, NC 280750286	Mike Torrence		(704) 455-5150	(704) 455-5134
Friendship Helping Ministries	3925 Morris Field Dr. Charlotte, NC 28208	same	Thomas Sharts	tdsharts@yahoo.com		(704) 687-0072

NOTES:

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PROCESSOR NAME	PHYSICAL ADDRESS	MAILING ADDRESS	CONTACT PERSON	EMAIL	FAX NUMBER	PHONE NUMBER
Gamble Pallet	701 Johnson Road Charlotte, NC 28206	same	John Gamble	gamble@bellsouth.net	(704) 375-8892	(704) 375-9301
GENWAVE US LTD	100 Plyler Rd Indian Trail, NC 28079	P.O. Box 310 Indian Trail, NC 280790310	Andrew Robertson	arobertson@qvw.com	(704) 821-6589	(704) 821-7628
Gladden Tire Disposal	2829 Rozzells Ferry Road Charlotte, NC 282089236	same	Mike Gladden			(704) 392-7838
Habitat Re-Store	3326 Wilkinson Blvd Charlotte, NC 282085632	same	Joe Muse	jmuse@charlottarestore.org	(704) 392-3236	(704) 392-4495
HAZ Mat Transportation and Disposal, Inc.	221 Dailton Av Charlotte, NC 28206	PO Box 37392 Charlotte, NC 28237	Jack Holder		(704) 375-7183	(704) 332-8600
Heritage-Crystal Clean, LLC	2115 Duravent Street Charlotte, NC 28203	2250 Point Blvd Elgin, IL 60123	Don Laney	Don.Laney@CrystalClean.Com	(704) 376-9630	(704) 376-9636
Heritage Environmental Services	4132 Pompano Road Charlotte, NC 28216	same	Joe Opalkiewicz	jo.opalkiewicz@heritage-enviro.com		(704) 391-4600
Highway 49 C&D Landfill	2105 Spectrail Ct. Concord, NC 28025	same	Ron Gilkerson	Ron.G@griffinbrothers.com	(704) 455-1563	(704) 455-1561
IFCO Systems	4101 S - I-85 Services Road Charlotte, NC 28208	PO Box 668051 Charlotte, NC 28266	Brad Blackburn		(704) 391-2230	(704) 391-2227
Iron Mountain Confidential Destruction	3007 Asbury Ave Charlotte, NC 28206	same	Jeff Walker	jeff_walker@ironmountain.com	(704) 372-9907	(704) 372-1231
Kentel Dixon Pearre	6924 Orr Rd. Charlotte, NC 28213	P.O. Box 99 Newell, NC 28126	Karl Dixon, Jr.	kdixon@boltonet.com	(704) 372-8804	(704) 372-8900
KEMP SERVICES INC	225 Garrison Road Indian Trail, NC 28079	PO Box 173 Mathews, NC 28106	John Kemp	JohnKemp@carolina.rr.com	(704) 847-0444	(704) 847-4444
MAIR's Recycling and Shredding, Inc.	2425 Radcliff Lane Charlotte, NC 28262	P.O. Box 561121 Charlotte, NC 28266	Marvin Stallworth	ms114w@marssrecyclingandshredding.com	(704) 549-8409	(704) 549-8409
Masio Company	1200-B Tar Heel Rd Charlotte, NC 282081627	same	Donna Wallace	dwallace@masiocompany.com	(704) 398-9824	(704) 398-9885
McGraw, Inc.	11205 Reames Road Charlotte, NC 28269	same	John McGraw		(704) 588-6868	(704) 588-6869
McManus and Son Drum Company	5631 Racine Avenue Charlotte, NC 28269	PO Box 26037 Charlotte, NC 28221	Mark McManus	mcmmanusdrumco@bellsouth.net		(704) 588-2224
Mecklenburg County Recycling, Inc.	1007 Ambler Drive Charlotte, NC 282061901	same	James Richardson	james.richardson@cassella.com	(704) 588-1877	(704) 588-8595
METAL RECYCLING SERVICES INC	1306 Coakley Street Monroe, NC 28110	same	Jason Homer	jasonhomer@metalrecycling-services.com	(704) 238-0755	(704) 283-4455
Milanco	635F Pressley Road Charlotte, NC 28220	P.O. Box 12323 Charlotte, NC 282202323	Loren G. Hutchinson	esall@milanco.com	(704) 525-6196	(900) 951-0180
Millennium Metals	242-B Ann St Concord, NC 28027	PO Box 6065 Concord, NC 28027	Stuart Hausman	millenniummetals@aol.com	(704) 723-9626	(704) 723-9626
Naaf's Pallet Co., Inc.	6908 Wilkinson Blvd Charlotte, NC 282148061	same	Neal Sparrow	ncp9808@bellsouth.net	(704) 399-6313	(704) 393-6568
Newcoo Fibre Company	430 E. 36th Street Charlotte, NC 28225	P.O. Box 5585 Charlotte, NC 28225	Susan Weir	info@newcoofibre.com	(704) 332-2425	(704) 333-0751
Old American Salvage	7714 Matthews - Mint Hill Road Charlotte, NC 28227	same	Robert Campbell	oldamer@oldsalvage@yahoo.com		(704) 578-7485
Paper Stock Dealers, Inc.	3901 Barringer Drive Charlotte, NC 28217	same	Kenny King	kennking@sonoco.com	(704) 525-8729	(704) 525-8728
Parts Cleaning Technologies	3114 Cullman Ave Charlotte, NC 282062743	same	Bob Benson	bbenson@partscleaning.net	(704) 347-3711	(704) 372-9280
Planet Recycling, Inc.	PO Box 3483 Matthews, NC 28106	same	Nancy Couture	nync@msn.com	(704) 846-6613	(704) 849-6363
Plyler Paper Stock Company, Inc.	800 Gasco Street Charlotte, NC 282084342	same	Rita Plyler	rplyler@aol.com	(704) 372-0122	(704) 372-8787
Pollution Prevention Engineering	5104 N. I-85 Services Rd., Suite 14 Charlotte, NC 28206	P.O. Box 9056 Charlotte, NC 28299	Eric Wu		(704) 538-0107	(704) 536-8321

NOTES:

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PROCESSOR NAME	PHYSICAL ADDRESS	MAILING ADDRESS	CONTACT PERSON	E-MAIL	FAX NUMBER	PHONE NUMBER
Polymer Recovery Corporation	1127 Tarnhall Road Charlotte, NC 28208	529 Queens Road Charlotte, NC 28202	Doug Noznesky	dougn@lammanhastics.com	(704) 943-0677	(704) 779-8395
POLYREPS	2501 Ashcraft Ave. Monroe, NC 28110	same	Jeff Mitchell	recycling@polyreps.com	(704) 843-7660	(704) 238-9949
Prait Industries	4205 N Graham St Charlotte, NC 28205	same	Sissy Myers	visychar@bellsouth.net	(704) 332-3905	(704) 332-3900
PRO-phx Inc.	16722 One Norman Blvd #220 Ste 166 Cornelius, NC 28031	same	Gwen Wagner	WagTeez2@aol.com	(704) 987-9682	(704) 987-9686
Recycled Rides	1201 West Morehead Charlotte, NC 28208	830 Rubens Road Concord, NC 28027	Shawn Horton		(704) 788-1661	(330) 554-9692
Regal Asset Recovery	12777 A East Independence Blvd Matthews, NC 28105	same	Bruce Sciotto		(704) 882-3939	(704) 882-3933
Republic Waste Services	5516 Rozelliss Ferry Road Charlotte, NC 28214	same	Frank Rocco	franco@repsrvc.com	(704) 398-4181	(704) 398-4196
ReuseComp	330 Baldwin Ave Charlotte, NC 28204	same	Joseph Cordiati	cordiacomp@bellsouth.net		(704) 334-3330
RJ Brewer Grinding Services	3733 Kidd Lane Charlotte, NC 282165722	same	Ron Brewer		(704) 393-8701	(704) 399-5500
RSM Company	811 Pressley Road Charlotte, NC 28231	P.O. Box 31605 Charlotte, NC 282311605	Marcia Hundley	mhundley@suncosupply.com	(704) 525-8368	(704) 525-6851
Safety-Kleen	2320 Yarkin Ave Charlotte, NC 28205	P.O. Box 5407 Charlotte, NC 282255407	Tom Peery	tompeery@safety-kleen.com	(704) 376-4631	(704) 375-0068
Scantec Distribution Inc.	2233-A Interstate North Dr. Charlotte, NC 28206	same	Hilary Buskey	hilary@scantec.net	(704) 598-3347	(704) 598-3373
Shredding Solutions	7715 Taymouth Charlotte, NC 28269	P.O. Box 480488 Charlotte, NC 28269	Doug Thompson	linestredgarman@aol.com	(704) 948-1681	(704) 875-6785
Simpson Wood Products, Inc.	524 Alando Avenue Charlotte, NC 282051912	same	Melvin Simpson		(704) 358-4807	(704) 374-1850
Simputer (USA)	6630 East Harris Blvd, Suite J Charlotte, NC 28215	same	Roger Deora	simputer@bellsouth.net		(704) 535-4774
Southern Metals Company, Inc.	2200 Donald Ross Road Charlotte, NC 28208	same	Robert Heibeln	sometals@bellsouth.net	(704) 394-3163	(704) 394-3161
Southern Resources, Inc	3826 Raleigh St Charlotte, NC 28206	P.O. Box 220685 Charlotte, NC 28222	Elisa Waldman	ElisaW@SouthernResources.com	(704) 376-1934	(704) 342-1696ext 104
Starnes Pallet Service	4000 N-F-85 Service Rd. Charlotte, NC 28206	PO Box 5371 Charlotte, NC 28299	Tommy Starnes Jr.	brad@starnespallet.com	(704) 596-2288	(800) 820-2218
Syncoat Plastics	10870-B Reames Rd. Charlotte, NC 28269	same	Darren Bing	DB0091@aol.com	(704) 596-2501	(704) 967-0010
TIRE DISPOSAL & RECYCLING SERVICE	5414 Waxhaw-Marvin Road Waxhaw, NC 281738849	PO BOX 987 Waxhaw, NC 281730987	George R. Dalton	attiredisposal@aol.com	(704) 843-2903	(704) 843-4643
TWC Inc	2128 Eastway Drive Charlotte, NC 28205	PO Box 9056 Charlotte, NC 28298	William Tung	william@aatplus.com	(704) 596-0107	(704) 596-8321
UNION GYPSUM	7323 Old Gold Mine Rd Marshville, NC 28103	PO Box 276 Marshville, NC 281030276	Steve Davis	uniongypsium@aif.net	(704) 624-2806	(704) 624-2077
United Scrap, Inc	3600 Primrose Avenue Charlotte, NC 28208	PO Box 666647 Charlotte, NC 28266	Buddy Fisher		(704) 398-2603	(704) 399-6318
Upside Down Turtle	6008-A Old Pineville Road Charlotte, NC 28217	P.O. Box 11411 Charlotte, NC 282201411	Janet Tourielbit	janet@mindspring.com	(704) 334-0985	(704) 333-9405
U.S. Filter Recovery Services	2115 Speedrail Ct Concord, NC 28025	same	Neil Danzinger	neild@usfilter.com	(704) 455-4878	(888) 749-8344
US GreenFiber	1007 Amble Drive Charlotte, NC 28206	same	Bob Young	bob.young@us-af.com	(704) 509-6542	(704) 509-5151
US Recycling	344 Springhill Farm Road Charlotte, NC 28210	1118 Shop Road Columbia, SC 29201	Mary Brooke Waddell	mwb@uslasrinc.com	(803) 454-0611	(888) 628-3639
U.S. Tire Recycling, L.P.	6322 Poplar Tent Road Concord, NC 28027	same	Scott Fowler	ustire@vnet.net	(704) 784-4716	(704) 784-1210

NOTES:

1. Recycling requests in Union County are bold and capitalized.
2. All information taken from <http://www.p2pays.org/DNR/M/stant.asp>

PROCESSOR NAME	PHYSICAL ADDRESS	MAILING ADDRESS	CONTACT PERSON	EMAIL	FAX NUMBER	PHONE NUMBER
Wallace Farm, LLC	14401 Eastfield Road Huntersville, NC 28078	same	Johnny Wallace	wallfarm@bellsouth.net	(704) 875-2394	(704) 875-2975
West Drum Company	3949 Gold Hill Road Concord, NC 28025	same	Mary E. West		(704) 786-8759	(704) 786-3446
Westinghouse Materials	1625 East Westinghouse Blvd. Charlotte, NC 28273	PO Box 241 689 Charlotte, NC 28224	Mike Bishop	mike@blugematerials.com		(704) 821-2426
Weyerhaeuser Recycling	201 East 28th Street Charlotte, NC 28206	same	Paige Denton	paige.denton@weyerhaeuser.com	(704) 334-6020	(704) 334-5222
Winston Container Co Inc	1 Winston Container Road Charlotte, NC 28208	PO BOX 686065 Charlotte, NC 282669065	John Scarborough	winstoncontainer@yahoo.com	(704) 394-0178	(704) 394-0176
Wise Recycling Company, LLC	2001 Wilkinson Blvd. Charlotte, NC 282085645	same	John Stewart	stewart@wiserecycling.com	(704) 388-3013	(704) 343-9387

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APPENDIX 9

**NORTH CAROLINA DISASTER DEBRIS
MANAGEMENT GUIDELINES AND FORMS**





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Guidance

- [Waste Staging/Storage Area Site Evaluation Sheet \(Acrobat PDF File\)](#)
- [Vegetative/Land Clearing Debris Staging Area: Siting and Operational Guidelines](#)
- [Construction and Demolition Debris Sites: Siting and Operational Guidelines](#)
- [Municipal Solid Waste \(Household Garbage\): Temporary Transfer Site](#)
- [Household Hazardous Waste Management: Temporary Collection Center](#)
- [FEMA Debris Management Guide](#)
- [Local Government Debris Management](#)
- [Local/County Emergency Management Departments](#)

Where to look for Applicable Regulations

Vegetative/Land Clearing Waste

Processing

N.C. Solid Waste Management Rules Sections .0300-.0302, .0560-.0566

Composting

N.C. Solid Waste Management Rules Sections .1400-.1409

Landfilling

N.C. Solid Waste Management Rules Sections .0560-.0566

Open Burning

N.C. Air Quality Rules Sections .1900-.1906

Construction and Demolition Waste

Processing

N.C. Solid Waste Management Rules Sections .0300-.0302, .0500-.0505

Landfilling

N.C. Solid Waste Management Rules Sections .0500-.0505

Municipal Solid Waste

Temporary Transferring

N.C. Solid Waste Management Rules Section .0400

Landfilling

N.C. Solid Waste Management Rules Sections .1600-.1680

Household Hazardous Waste

Collection Center

N.C. Solid Waste Management Proposed Rules

Contacts

- [Local Emergency Management Contacts](#)
- [Division of Waste Management Solid Waste Section Contact Map](#)

The DENR Customer Service Center is officially open for business and ready to receive your calls about hurricane problems like contaminated wells, flooded homes, floating propane tanks, etc. and your normal calls about the status of permits, spills mud in the creek, etc.

Contact 1-877-NC-ENR-4-U or 1-877-623-6748 or visit www.envhelp.org.

NC DENR - Division of Waste Management 401 Oberlin Road - Suite 150, Raleigh, NC 27605 (919) 508-8400 E-mail Us



Division of Waste Management - Solid Waste Section
Emergency Site Selection Evaluation Sheet
 Disaster Debris

Site Name _____ Contact _____

Site Location _____ Telephone # _____

County/City _____ UTM Coord. NAD27 _____ E/ _____ N

Address/Directions _____ WGS84 _____ E/ _____ N

Approx. Size of Site: _____ Acres(s)

Intended Use of Site:

- staging/storage for removal
- staging/storage for chipping
- staging/storage for burning

Comments _____

Type of Waste:

- Vegetative Debris
- Demolition Debris

Comments _____

Buffers Required (the following must be clearly delineated with flagging, survey stakes, etc.):

- 100 feet from property boundaries and on-site structures
- 100 feet from residences, private wells (vegetative debris only), and septic tank systems
- 100 feet from surface waters
- 250 feet from potable wells (demolition debris)
- 300 feet from grinding operations to residence and business properties, publicly owned roads or properties

Comments _____

Buffers Have Met DAQ Requirements YES / NO

Flood Plain or Flood Prone Areas (comments) _____

Wetlands (comments) _____

Erosion Control (comments) _____

Access, Site Security (comments) _____

Safety Issues - Power Lines, Traffic (comments) _____

Coordination with the Division of Air Quality YES / NO / NA (comments) _____

Coordination with Land Quality Section (comments) _____

Coordination with State Historic Preservation Office (SHPO)/Office of State Archaeology YES/ NO
(comments) _____

Coordination with Natural Heritage Program (endangered species) YES/ NO
(comments) _____

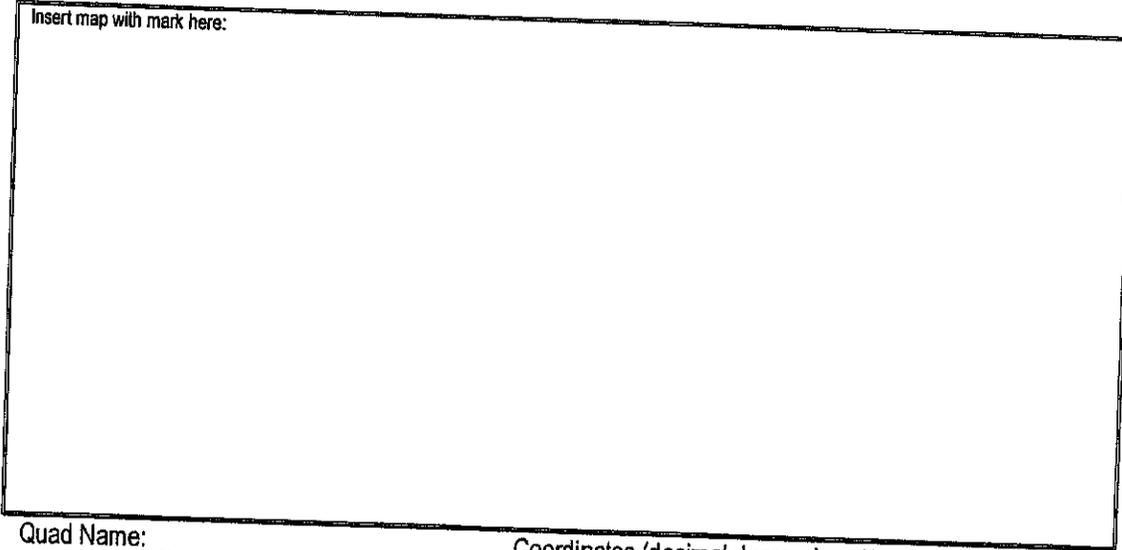
General Comments _____

Date _____

Solid Waste Section Representative _____

Attach Site Plan or draw plan on this page.

Insert map with mark here:



Quad Name: _____ Coordinates (decimal degrees): N / W
Scale: _____ Comments: _____

DIVISION OF WASTE MANAGEMENT

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DISASTER CLEAN UP EMERGENCY GUIDELINES VEGETATIVE/LAND CLEARING DEBRIS STAGING AREA SITING & OPERATIONAL GUIDELINES

The Solid Waste Regional staff shall be contacted to approve selected temporary sites for debris storage, staging and processing.

These guidelines apply only to sites for staging or burning vegetative storm debris (yard waste, trees, limbs, stumps, branches, and untreated or unpainted wood). Arrangements should be made to screen out unsuitable materials.

The two methods of managing vegetative and land clearing storm debris is "chipping/grinding" for use in landscape mulch, compost preparation, and industrial boiler fuel or using an "air curtain burner (ACB)", with the resulting ash being land applied as a liming agent or incorporated into a finished compost product, as needed.

CHIPPING/GRINDING SITES

Grinding wood debris for use as mulch, compost bulking agent, or industrial boiler fuel is encouraged *if feasible* as a method of management. To produce a wood chip that is suitable for mulch or fuel, **chip size and absence of contaminants are critical**. Debris must be separated prior to grinding, and only tree waste and untreated and unpainted lumber shall be included in the chipping.

Locating sites for chipping/grinding of vegetative and land clearing debris can be accomplished by contacting the Regional Solid Waste Section staff for evaluating potential sites and to revisit sites at future dates to see if site conditions have changed or if the surrounding areas have changed significantly to alter the use of the site. The following guidelines are presented in locating a site for "chipping/grinding" and are considered "minimum standards" for selecting a site for use.

1. Sites should be located outside of identifiable or known floodplain and flood prone areas; consult the Flood Insurance Rate Map for the location in your county to verify these areas. Due to heavy rains associated with hurricanes and saturated conditions that result, flooding may occur more frequently than normally expected.
2. Storage areas for incoming debris and processed material should be at a minimum 100 feet from all surface waters of the state. "Waters of the state" includes but is not limited to small creeks, streams, watercourses, ditches that maintain seasonal groundwater levels, ponds, wetlands, etc.
3. Storage areas for incoming debris and processed material shall be at least 100 feet from the site property boundaries and on-site buildings/structures. Management of processed material shall be in accordance with "GUIDELINES FOR REDUCING THE POTENTIAL FOR SPONTANEOUS COMBUSTION IN COMPOST/MULCH PILES".
4. Storage areas for incoming debris shall be located at least 100 feet from residential dwellings, commercial or public structures, potable water supply wells, and septic tanks with leach fields.
5. Sites that have identified wetlands should be avoided, if possible. If wetlands exist or wetland features appear at a potential site, verification by the local Corps of Engineers office or Division of Water Quality Regional Office will be necessary to delineate areas of concern. Once areas are delineated, the areas shall be flagged and a 100-foot buffer shall be maintained for all activities on-going at the site.
6. The Division of Land Resources, Land Quality Section should be contacted for assistance on good erosion control measures and permitting guidance.

7. Sites bisected by overhead power transmission lines need careful consideration due to large dump body trucks/trailers used to haul debris. All underground utilities need to be identified due to the potential for site disturbance by truck/equipment traffic and possible site grading.
8. Sites shall have an attendant(s) during operating hours to minimize the acceptance of unapproved materials and to provide directions to haulers and private citizens bringing in debris.
9. Sites should be secure after operating hours to prevent unauthorized access to the site. Temporary measures to limit access to the site could be the use of trucks or equipment to block entry. Gates, cables, or swing pipes should be installed as soon as possible for permanent access control, if a site is to be used longer than two weeks. Sites should have adequate access that prohibits traffic from backing onto public right-of-ways or blocking primary and/or secondary roads to the site.
10. When possible, signs should be installed to inform haulers and the general public on types of waste accepted, hours of operation, and who to contact in case of an after hours emergency.
11. Grinding of clean wood waste such as pallets and segregated non-painted/non-treated dimensional lumber is allowed.
12. Final written approval is required from the Solid Waste Section to consider any debris management site to be closed. Closure of staging and processing sites shall be within six (6) months of receiving waste. If site operations will be necessary beyond this time frame, permitting of the site by the Solid Waste Section may be required. If conditions at the site become injurious to public health and the environment, then the site shall be closed until conditions are corrected or permanently closed. Closure of sites shall be in accordance with "DISASTER DEBRIS CLEAN UP GUIDELINES, CLOSURE AND RESTORATION OF TEMPORARY DEBRIS MANAGEMENT SITES".
13. Contact the Department of Pollution Prevention and Environmental Assistance, at 919-715-6500, for a list of contractors/suppliers of tub grinders and for a list of outlets for mulch/wood chips to be used as a boiler fuel.

AIR CURTAIN BURNER SITES

Locating sites that are intended for air curtain burning (ACB) operations is a coordinated effort between the Solid Waste Section and Division of Air Quality regional office staff for evaluating the surrounding areas and to reevaluate potential sites used in the past. The following guidelines are presented for selecting an ACB site and operational requirements once a site is in use:

1. Contact the local fire marshall or fire department for input into site selection in order to minimize the potential for fire hazards, other potential problems related to fire fighting that could be presented by the location of the site, and to ensure that adequate fire protection resources area available in the event of an emergency.
2. The requirements for ACB device(s), in accordance with Air Quality rules, 15A NCAC 2D .1900 to .1906, require the following buffers: a minimum of 500 feet from the ACB device to homes, dwellings and other structures and 250 feet from roadways. Contact the Regional office of Air Quality for updates or changes to their requirements.
3. Sites should be located outside of identifiable or known floodplain and flood prone areas; consult the Flood Insurance Rate Map for the location in your county to verify these areas. Due to heavy rains associated with natural disasters and saturated conditions that result, flooding may occur more frequently than normally expected. If ACB pit devices are utilized, a minimum two-foot separation to the seasonal high water table is recommended. A larger buffer to the seasonal high water table may be necessary due to on-site soil conditions and topography.
4. Storage areas for incoming debris should be at a minimum 100 feet from all surface waters of the state. "Waters of the state" includes but is not limited to small creeks, streams, watercourses, ditches that maintain seasonal groundwater levels, ponds, wetlands, etc.
5. Storage areas for incoming debris shall be located at least 100 feet from property boundaries and on-site buildings/structures.
6. Air Curtain Burners in use should be located at least 200 feet from on-site storage areas for incoming debris, on-site dwellings and other structures, potable water supply wells, and septic tanks and leaching fields.

7. Only untreated and unpainted lumber and tree debris may be burned
8. Wood ash stored on-site shall be located at least 200 feet from storage areas for incoming debris, processed mulch or tub grinders (if a grinding site and ACB site are located on the same property). Wood ash shall be wetted prior to removal from the ACB device or earth pit and placed in storage. If the wood ash is to be stored prior to removal from the site, then rewetting may be necessary to minimize airborne emissions.
9. Wood ash to be land applied on site or off site shall be managed in accordance with "GUIDELINES FOR THE LAND APPLICATION OF WOOD ASH FROM STORM DEBRIS BURN SITES" and it shall be incorporated into the soil by the end of the operational day or sooner if the wood ash becomes dry and airborne.
10. Sites that have identified wetlands should be avoided, if possible. If wetlands exist or wetland features appear at a potential site, verification by the local Corps of Engineers office or Division of Water Quality Regional Office will be necessary to delineate areas of concern. Once areas are delineated, the areas shall be flagged, and a 100-foot buffer shall be maintained for all activities on-going at the site.
11. The Division of Land Resources, Land Quality Section should be contacted for assistance on good erosion control measures and permitting guidance.
12. Sites bisected by overhead power transmission lines need careful consideration due to large dump body trucks/trailers used to haul debris and the intense heat generated by the ACB device. Underground utilities need to be identified prior to digging pits for using the ACB device.
13. Provisions should be made to prevent unauthorized access to facilities when not open for use. As a temporary measure, access can be secured by blocking drives or entrances with trucks or other equipment when the facilities are closed. Gates, cables, or other more standard types of access control should be installed as soon as possible.
14. When possible, post signs with operating hours and information about what types of clean up waste may be accepted. Also include information as to whether only commercial haulers or the general public may deposit waste.
15. Closure of air curtain burner sites shall be within six (6) months of receiving waste. If site operations will be necessary beyond this time frame, permitting of the site by the Solid Waste Section may be required. If conditions at the site become injurious to public health and the environment, then the site shall be closed until conditions are corrected or permanently closed. Closure of sites shall be in accordance with "DISASTER DEBRIS CLEAN UP GUIDELINES, CLOSURE AND RESTORATION OF TEMPORARY DEBRIS MANAGEMENT SITES".

Sites shall be managed and monitored in accordance with the Solid Waste Management Rules and to prevent threats to the environment or public health.

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DISASTER CLEAN UP EMERGENCY GUIDELINES CONSTRUCTION AND DEMOLITION DEBRIS SITES: STAGING/TRANSFERRING, PROCESSING/RECYCLING, SITING AND OPERATIONAL GUIDELINES

When local governments are preparing temporary facilities for handling debris resulting from the cleanup efforts due to hurricane damage, the following guidelines should be considered when establishing staging/transfer sites for Construction & Demolition (C&D) and C&D recycling treatment and processing facilities.

The Solid Waste Section Regional staff should be contacted to assist in selecting an appropriate site(s) for staging/transfer areas.

These guidelines apply only to sites for staging/transferring C&D storm debris (roof shingles/roofing materials, carpet, insulation, wallboard, treated and painted lumber, etc.). Arrangements should be made to screen out unsuitable materials, such as household garbage, white goods, asbestos containing materials (ACM's), and household hazardous waste.

STAGING/TRANSFERRING SITES

Locating sites for staging/transferring C&D waste can be accomplished by contacting the Regional Solid Waste Section staff for evaluating potential sites and to revisit sites used in the past to see if site conditions have changed or if the surrounding areas have changed significantly to alter the use of the site. The following guidelines are presented in locating a site for "staging/transferring" and are considered "minimum standards" for selecting a site for use:

1. Sites should be located outside of identifiable or known floodplain and flood prone areas; consult the Flood Insurance Rate Map for the location in your county to verify these areas. Due to heavy rains associated with hurricanes and saturated conditions that result, flooding may occur more frequently than normally expected.
2. Hauler unloading areas for incoming C&D debris material should be at a minimum 100 feet from all surface waters of the state. "Waters of the state" includes but is not limited to small creeks, streams, watercourses, ditches that maintain seasonal groundwater levels, ponds, wetlands, etc.
3. Storage areas for incoming C&D debris shall be at least 100 feet from the site property boundaries, on-site buildings/structures, and septic tanks with leach fields or at least 250 feet from off-site residential dwellings, commercial or public structures, and potable water supply wells, whichever is greater.
4. Materials separated from incoming C&D debris (white goods, scrap metal, etc.) shall be at least 100 feet from site property lines. Other non-transferable C&D wastes (household garbage, larger containers of liquid, household hazardous waste shall be placed in containers and transported to the appropriate facilities as soon as possible.
5. Sites that have identified wetlands should be avoided, if possible. If wetlands exist or wetland features appear at a potential site; verification by the local Corps of Engineers office or Division of Water Quality Regional Office will be necessary to delineate areas of concern. Once areas are delineated, the areas shall be flagged and a 100-foot buffer shall be maintained for all activities on-going at the site.
6. The Division of Land Resources, Land Quality Section, should be contacted for assistance on good erosion control measures and permitting guidance.
7. Sites bisected by overhead power transmission lines need careful consideration due to large dump body

- trucks/trailers used to haul debris, and underground utilities need to be identified due to the potential for site disturbance by truck/equipment traffic and possible site grading.
8. Sites shall have an attendant(s) during operating hours to minimize the acceptance of unapproved materials and to provide directions to haulers and private citizens bringing in debris.
 9. Sites should be secure after operating hours to prevent unauthorized access to the site. Temporary measures to limit access to the site could be the use of trucks or equipment to block entry. Gates, cables, or swing pipes should be installed as soon as possible for permanent access control, if a site is to be used longer than two weeks.
 10. When possible, signs should be installed to inform haulers and the general public on types of waste accepted, hours of operation, and who to contact in case of after hours emergency.
 11. Final written approval is required from the Solid Waste Section to consider any debris management site to be closed. Closure of processing/recycling sites shall be within six (6) months of receiving waste. If site operations will be necessary beyond this time frame, permitting of the site by the Solid Waste Section may be required. If conditions at the site become injurious to public health and the environment, then the site shall be closed until conditions are corrected or permanently closed. Closure of sites shall be in accordance with "DISASTER DEBRIS CLEAN UP GUIDELINES, CLOSURE AND RESTORATION OF TEMPORARY DEBRIS MANAGEMENT SITES".

C&D TREATMENT & PROCESSING/RECYCLING SITES

Management of C&D debris and source separated materials to be recycled shall be in accordance with permit conditions and operational requirements of permitted C&D Processing/Recycling Facilities and the following additional conditions:

1. Contact the Health Hazards Control Branch for information on managing asbestos containing materials (ACM's) or materials that are considered regulated asbestos containing materials.
2. Contact the Division of Pollution Prevention and Environmental Assistance at 919-715-6500 for an up to date copy of "DIRECTORY OF MARKETS FOR RECYCLABLE MATERIALS" and a listing of suppliers/contractors with tub grinders, maulers, and other processing equipment for the recycling of C&D waste.
3. Sites should be located outside of identifiable or known floodplain and flood prone areas; consult the Flood Insurance Rate Map for the location in your county to verify these areas. Due to heavy rains associated with natural disasters and saturated conditions that result, flooding may occur more frequently than normally expected.
4. Storage areas for incoming debris should be at a minimum 100 feet from all surface waters of the state. "Waters of the state" includes but is not limited to small creeks, streams, watercourses, ditches that maintain seasonal groundwater levels, ponds, wetlands, etc..
5. Storage areas for incoming debris shall be located at least 100 feet from property boundaries and on-site buildings/structures.
6. Sites that have identified wetlands should be avoided, if possible. If wetlands exist or wetland features appear at a potential site, verification by the local Corps of Engineers office or Division of Water Quality Regional Office will be necessary to delineate areas of concern. Once areas are delineated, the areas shall be flagged and a 100-foot buffer shall be maintained for all activities on-going at the site.
7. Storage areas for incoming C&D debris shall be at least 100 feet from the site property boundaries, on-site buildings/structures, and septic tanks with leach fields or at least 250 feet from off-site residential dwellings, commercial or public structures, and potable water supply wells, whichever is greater.
8. The Division of Land Resources, Land Quality Section should be contacted for assistance on good erosion control measures and permitting guidance.
9. Sites bisected by overhead power transmission lines need careful consideration due to large dump body

trucks/trailers used to haul debris and the intense heat generated by the ACB device. Underground utilities need to be identified prior to digging pits for using the ACB device.

10. Provisions should be made to prevent unauthorized access to facilities when not open for use. As a temporary measure, access can be secured by blocking drives or entrances with trucks or other equipment when the facilities are closed. Gates, cables, or other more standard types of access control should be installed as soon as possible.
11. When possible, post signs with operating hours and information about what types of clean up waste may be accepted. Also include information as to whether only commercial haulers or the general public may deposit waste.

Final written approval is required from the Solid Waste Section to consider any debris management site to be closed. Closure of processing/recycling sites shall be within one (1) year of receiving waste. If site operations will be necessary beyond this time frame, permitting of the site by the Solid Waste Section may be required. If conditions at the site become injurious to public health and the environment, then the site shall be closed until conditions are corrected or permanently closed. Closure of sites shall be in accordance with "DISASTER DEBRIS CLEANUP GUIDELINES, CLOSURE AND RESTORATION OF TEMPORARY DEBRIS MANAGEMENT SITES".

Sites shall be managed and monitored in accordance with the Solid Waste Management Rules and to prevent threats to the environment or public health.

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DISASTER CLEAN UP EMERGENCY GUIDELINES TEMPORARY TRANSFER STATION SITE FOR MANAGING MSW WASTE: SITING AND OPERATIONAL GUIDELINES

When local governments are preparing temporary facilities for handling MSW (typically household garbage and commercial/industrial waste) resulting from the cleanup efforts due to hurricane damage, the following guidelines should be considered when establishing a temporary transfer station site.

These guidelines apply to temporary transfer stations transferring MSW to a regional landfill, where direct hauling would be impractical, or transferring MSW from remote locations to county facilities to alleviate truck congestion at the landfill facility and minimize inefficiencies with cleanup efforts. Arrangements should be made to screen out unsuitable materials, such as white goods and asbestos containing materials (ACM's).

TEMPORARY TRANSFER STATION SITES

Locating temporary transfer stations for managing MSW can be accomplished by contacting the Regional Solid Waste Section staff for evaluating potential sites and to revisit sites used in the past to see if site conditions have changed or if the surrounding areas have changed significantly to alter the use of the site. The following guidelines are presented in locating a site for temporary transfer station" and are considered "minimum standards" for selecting a site for use:

1. It is preferred that the temporary transfer station be located at a closed county MSW landfill, if the waste will be transferred to a regional landfill, if transferring of waste is to take place longer than thirty (30) days.
2. Design features for a temporary transfer station will include at a minimum:
 - A. Concrete, asphalt or crushed aggregate base coarse (ABC stone or equivalent) for the tip floor;
 - B. "Jersey barriers" to contain waste tipped on the floor, with screening to minimize blowing paper and debris.
3. Waste delivered to the temporary transfer station shall be placed in transfer trailers at the end of the working day, and all windblown/scattered debris shall be picked up at the end of the day.
4. Sites, if located at a closed county landfill or another location within the county, should be located outside of identifiable or known floodplain and flood prone areas; consult the Flood Insurance Rate Map for the location in your county to verify these areas. Due to heavy rains associated with hurricanes and saturated conditions that result, flooding may occur more frequently than normally expected.
5. Sites shall have an attendant(s) during operating hours to minimize the acceptance of unapproved materials and to provide directions to haulers and private citizens bringing in debris.
6. Hauler unloading areas for incoming MSW should be at a minimum 100 feet from all surface waters of the state. AWaters of the state" includes but is not limited to small creeks, streams, watercourses, ditches that maintain seasonal groundwater levels, ponds, wetlands, etc.
7. Storage areas, for loaded transfer trailers to be hauled to a regional landfill, shall be at least 50 feet from the site property boundaries, on-site buildings/structures, and septic tanks with leach fields or at least 250 feet from off-site residential dwellings, commercial or public structures, and potable water supply wells, whichever is greater.

8. Materials separated from incoming MSW (white goods, scrap metal, etc.) shall be at least 50 feet from site property lines. Other non-transferable MSW (C&D, large containers of liquid) shall be placed in containers and transported to the appropriate facilities as soon as possible.
 9. Sites that have identified wetlands should be avoided, if possible. If wetlands exist or wetland features appear at a potential site, verification by the local Corps of Engineers office or Division of Water Quality Regional Office will be necessary to delineate areas of concern. Once areas are delineated, the areas shall be flagged and a 100-foot buffer shall be maintained for all activities on-going at the site.
 10. The Division of Land Resources, Land Quality Section, should be contacted for assistance on good erosion control measures and permitting guidance.
 11. Sites bisected by overhead power transmission lines need careful consideration due to large dump body trucks/trailers used to haul debris, and underground utilities need to be identified due to the potential for site disturbance by truck/equipment traffic and possible site grading.
 12. Sites should be secure after operating hours to prevent unauthorized access to the site. Temporary measures to limit access to the site could be the use of trucks or equipment to block entry. Gates, cables, or swing pipes should be installed as soon as possible for permanent access control, if a site is to be used longer than two weeks.
 13. When possible, signs should be installed to inform haulers and the general public on types of waste accepted, hours of operation, and who to contact in case of after hours emergency.
 14. Final written approval is required from the Solid Waste Section to consider any debris management site to be closed. Closure of temporary transfer station sites shall be within six (6) months of receiving waste. If site operations will be necessary beyond this time frame, permitting of the site by the Solid Waste Section may be required. If conditions at the site become injurious to public health and the environment, then the site shall be closed until conditions are corrected or permanently closed.
- Sites shall be managed and monitored in accordance with the Solid Waste Management Rules and to prevent threats to the environment or public health.

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DISASTER CLEAN UP EMERGENCY GUIDELINES HOUSEHOLD HAZARDOUS WASTE TEMPORARY COLLECTION EVENTS

When local governments are preparing temporary facilities for handling household hazardous waste (HHW) resulting from cleanup efforts due to disaster damage, the following guidelines should be considered.

The local government should choose an HHW contractor to set up a collection event. The contractor should be able to assist in selecting a site that is easily accessible, accommodates the contractor's equipment, and accommodates traffic. Centrally located events are usually set up at a park, fairgrounds, or local government facility parking lot. The local government may choose a milk-run type collection at sites across the county. In this case the HHW contractor collects HHW for a certain time period at one site and then moves on to the next. The Section will work with local government in every way possible to establish the type of collection that fits the particular situation.

In order to hold a collection event, the local government should contact the Solid Waste Section to obtain a temporary identification number. This number is required at all hazardous waste disposal and recycling facilities as a condition of waste acceptance. A form for requesting the identification number is attached. Keep in mind that contractors normally keep these forms on hand and, if requested, will obtain the number for the client.

Please contact the Division of Waste Management, Solid Waste Section at (919) 508-8400 for a list of household hazardous waste collection contractor.

APPENDIX 10

FEMA DEBRIS MANAGEMENT GUIDE



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FOREWORD

Each year, local officials from hundreds of communities are faced with the task of removing debris caused by natural disasters. In the past 20 years alone, over 700 major disasters have been declared by the President to facilitate Federal assistance to communities struck by hurricanes, tornadoes, floods, earthquakes, wild fires and other natural disasters.

In some cases, debris clearance, removal and disposal actions can be accomplished quickly using community resources augmented by assistance from neighboring communities, State agencies and contractor resources. In many other cases, however, the damage and debris are so extensive that a comprehensive debris clearance, removal and disposal management plan is required to efficiently and effectively control the operations.

We have developed this document to provide guidance to community leaders in planning, mobilizing, organizing and controlling a large-scale debris clearance, removal and disposal operation. Although this manual has been developed for large-scale debris clearance, removal and disposal operations, portions of all chapters can be utilized on smaller operations. The chapters are arranged to enable the reader to progress in a logical manner from one planning element to another. It is recommended that the chapters be read consecutively because information presented in one chapter will be helpful in understanding materials presented in subsequent chapters. The guide does not address the removal or disposal of material and products from institutional, commercial, recreational, industrial or agricultural sources that contain certain chemicals as defined by the Environmental Protection Agency to be toxic, flammable, corrosive or reactive.

We encourage local officials to review their community's vulnerability to a disaster and to consider how to manage a large-scale debris clearance, removal and disposal operation should the need arise. Your State Emergency Management Agency and the Federal Emergency Management Agency (FEMA) Regional Office may provide additional technical assistance in your area.

ACRONYMS USED IN THIS DOCUMENT

C&D	Construction and Demolition
DMTF	Debris Management Task Force
DOT	Department of Transportation
DPW	Department of Public Works
DRM	Disaster Recovery Manager
EOC	Emergency Operations Center
EPA	Environmental Protection Agency
ER	Emergency Relief
ESF	Emergency Support Function
FCO	Federal Coordinating Officer
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FRP	Federal Response Plan
GAR	Governor's Authorized Representative
GIS	Geographic Information System
HHW	Household Hazardous Waste
PA	Public Assistance
PIO	Public Information Officer
SCO	State Coordinating Officer
SHPO	State Historic Preservation Office
SWM	Department of Solid Waste Management
TDSR	Temporary Debris Storage and Reduction
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture

TERMS USED IN THIS DOCUMENT

Chipping. Reducing wood related material by mechanical means into small pieces to be used as mulch or fuel. Chipping and mulching are often used interchangeably.

Debris. Scattered items and materials either broken, destroyed, or displaced by a natural disaster. Example: trees, construction and demolition material, personal property.

Debris Clearance. Clearing the major road arteries by pushing debris to the roadside to accommodate emergency traffic.

Debris Removal. Picking up debris and taking it to a temporary storage site or permanent landfill.

Debris Disposal. Placing mixed debris and/or residue from volume reduction operations into an approved landfill.

Department of Public Works (DPW). Department typically responsible for clearing debris from the roads and rights-of-way.

Department of Solid Waste Management (SWM). Department responsible for managing and overseeing the collection and disposal of garbage, trash and disaster related debris.

Federal Response Plan. A plan developed to facilitate the delivery of all types of Federal response assistance to States following a disaster. It outlines the planning assumptions, policies, concept of operations, organizational structures and specific assignments and agencies in providing Federal response assistance to supplement the State, tribal and local response efforts.

Force Account Labor. State, tribal or local government employees engaged in debris removal activities.

Garbage. Waste that is regularly picked up by the Department of Solid Waste Management. Example: food, plastics, wrapping, papers.

Hazardous Waste. Material and products from institutional, commercial, recreational, industrial and agricultural sources that contain certain chemicals with one or more the following characteristics, as defined by the Environmental Protection Agency: 1) Toxic, 2) Flammable, 3) Corrosive; and/or 4) Reactive.

Household Hazardous Waste (HHW). Used or leftover contents of consumer products that contain chemicals with one or more of the following characteristics, as defined by the Environmental Protection Agency: 1) Toxic, 2) Flammable, 3) Corrosive and/or 4) Reactive. Examples of household hazardous waste include small quantities of normal household cleaning and maintenance products, latex and oil based paint, cleaning solvents, gasoline, oils, swimming pool chemicals, pesticides, propane gas cylinders.

Hot Spots. Illegal dump sites that may pose health and safety threats.

Mutual Aid Agreement. An understanding between communities and States obligating assistance during a disaster.

Recycling. The recovery and reuse of metals, soils and construction materials that may have a residual monetary value.

Rights-of-Way. The portions of land over which a facility, such as highways, railroads, or power lines are built. Includes land on both sides of the highway up to the private property line.

Scale/Weigh Station. A scale used to weigh trucks as they enter and leave a landfill. The difference in weight determines the tonnage dumped and a tipping fee is charged accordingly.

Storage Site. A location where debris is temporarily stored until it is reduced in volume and/or taken to a permanent landfill.

Sweeps. The number of times a contractor passes through a community to collect all disaster-related debris from the rights-of-way. Usually limited to three passes through the community.

Tipping Fee. A fee based on weight or volume of debris dumped that is charged by landfills or other waste management facilities to cover their operating and maintenance costs.

Trash. Non-disaster related yard waste, white metals, or household furnishings placed on the curbside for pickup by local solid waste management personnel. A resident must call for pick-up. Not synonymous with garbage.

United States Army Corps of Engineers (USACE). A component of the U.S. Army that is responsible for constructing and maintaining all military bases and other government-owned and controlled entities. The USACE may be used by FEMA when direct Federal assistance, issued through a mission assignment, is needed.

White Metals. Household appliances, such as refrigerators, freezers, stoves, washers and dryers.

Chapter 1

LOCAL, TRIBAL, STATE AND FEDERAL DISASTER RESPONSE ACTIONS

This chapter provides an overview of local, tribal, State and Federal disaster response actions available following a debris-generating natural disaster.

Detailed information on the declaration process and eligibility criteria is contained in the Public Assistance Guide, FEMA 322.

Natural Disasters

Hurricanes. The damaging forces of hurricanes and tropical storms include high-velocity winds (up to 150 miles per hour or higher in gusts), storm surge and wave action. The most severe damage frequently occurs in the shorelands adjacent to the ocean. The resultant debris consists primarily of trees; construction materials from damaged or destroyed structures, personal property and sediment. Although the greatest concentration of debris will be located along the shoreline, flooding and tornadoes spawned by hurricanes can cause damage and leave extensive amounts of natural and manmade debris far inland.

Tornadoes. Damage from tornadoes is caused by high-velocity rotating winds. The severity of the damage depends on the velocity of the tornado funnel and the length of time the funnel is on the ground. Tornado debris consists primarily of trees, construction materials from damaged or destroyed structures and personal property. Damage is generally confined to a narrow

path, which can be up to ½ mile wide and from 100 yards to several miles long.

Floods. Damage to structures from flooding is caused either by inundation or high velocity water flow. Structural damage is usually limited to the floodway and the floodplain area immediately adjacent to the river. Heavy structural damage may result from high velocity waters in mountainous areas or failure of a flood control project, such as a dam or levee. Flood debris consists of sediment, wreckage, personal belongings and sometimes hazardous materials deposited on public and private property. Additionally, heavy rains and floods may produce landslides; in such cases, debris consists primarily of soil, gravel, rock and some construction materials.

Earthquakes. Damage to structures is caused by shockwaves and earth movements along fault lines. Secondary damage, such as fires and explosions, may result from the disruption of utility systems. Debris consists of building materials, personal property and sediment caused by landslides.

Wildfires. Debris from wildfires consists of burned out structures, cars and/or other metal objects, ash and charred wood waste. Large-scale loss of ground cover may lead to mudslides, resulting in clogged drainage structures and possible damage to homes and bridges.

Ice Storms or Snowstorms. Debris from ice storms or snowstorms will consist of significant amounts of woody debris from broken tree limbs and branches.

Local Disaster Response Actions

Local government is the first to respond to a disaster. Response efforts are first directed to activities that protect lives, public health and safety, such as evacuations, sheltering, fire fighting, utility restoration and clearing roads of debris. These response efforts may be accomplished with local force account labor and equipment, contractors, volunteers and assistance from adjacent communities.

A community should have an Emergency Operation Plan and a Debris Management Plan that identifies key staff members and their responsibilities for managing and controlling debris clearing, removal and disposal operations. This staff should be immediately activated whenever a natural disaster occurs. Staff members should document the critical decisions made in response to the disaster and provide the debris manager and local, tribal, State and Federal officials with a clear plan of action. The debris clearing, removal and disposal operations may extend for weeks or months and insufficient documentation of the evolving plan could cause confusion and inefficiency.

Damage assessments should be conducted to identify necessary lifesaving actions, assess the magnitude of damage and determine if additional resources are needed from other local governments and the State. The format for the damage assessment report should be in accordance with the local, tribal or State Emergency Operation Plan.

The Debris Management Plan should divide the community into sectors to assess the extent of debris. Sector boundaries can be determined based on the following criteria:

- Type of debris (structural, trees, sediment and mixed).
- Location of debris.
- Volume of debris (large versus small).
- Land use (residential, business, agricultural).
- Location of existing and potential temporary storage and volume reduction sites.
- Location of existing and potential permanent disposal sites (public and/or private landfills).

The damage assessment team should then investigate the damaged areas by sector to record the extent of damage and to identify specific assistance requirements. Damage assessment teams should also estimate the amount and composition of debris observed in each sector and annotate the locations on community maps.

The debris staff should initiate actions to assess the availability of local, tribal, State, Federal and other resources to provide immediate and long-term assistance. Experience has shown that resources will not be used effectively unless work assignments and cleanup priorities are coordinated and controlled by the designated debris manager. The designated local debris manager should have total responsibility and authority for managing the debris cleanup operation. The following are examples of local, State, Federal and other resources available for cleanup activities:

Local Government. Most local governments maintain equipment, such as trucks, rubber tire loaders, graders, chippers, chain saws, small cranes, dozers and backhoes with experienced operators who can be used to open roads and remove debris. Temporary hires may be added to

provide additional labor and equipment operators for 24-hour-a-day operations, if needed. The principal advantage to using local government force account equipment and operators is their lower cost and flexibility in assignment. This equipment generally represents the only resources the community can immediately commit to an emergency debris clearance and cleanup operation.

Mutual Aid Agreements. A Mutual Aid Agreement is an agreement among neighboring communities (and possibly States) to provide assistance to one another in time of need. The operators and equipment of neighboring communities can be used to quickly augment local force account resources and have many of the same advantages.

State Agencies. The National Guard, State Department of Transportation (DOT) and State Department of Natural Resources have equipment and personnel that may provide limited assistance on a short-term basis. The State DOT is normally responsible for debris clearance and removal on State roads. This assistance may be obtained by contacting the State Emergency Management organization.

Volunteers. Historically volunteers have played a significant role in large-scale debris removal operations. Volunteer organizations can assist private property owners or provide financial assistance in the removal of debris from private property. Additionally, community organizations, such as civic clubs, student groups and neighborhood organizations have proven to be a tremendous community resource in past disasters. To provide for maximum utilization of these resources, community leaders should be prepared to organize volunteer groups and keep the debris management staff informed of their

activities. Communities should document the number of volunteers, the type of work performed and the hours worked. Sponsoring organizations should ensure that personnel are properly equipped and that common sense safety precautions are followed.

Federal Agencies. The U.S. Army Corps of Engineers (USACE) may be able to respond for up to 10 days without a Presidential Declaration. Additionally, the Federal Highway Administration (FHWA) may provide grant assistance to State governments for debris clearing, removal and repair of roads on the designated Federal Aid System.

Contractors. Labor and equipment for debris clearance, removal and disposal should be available from local contractors. Following a major disaster, emergency contracts can be executed to augment local force account resources.

Immediately following a disaster, engineering personnel on the debris management staff should explore alternative courses of action and update the existing Debris Management Plan based on the initial damage assessment, available resources and any new information. The updated plan can be hand-written initially and later converted to a more formal document.

Maps of the affected area should be annotated to identify damaged sectors, locations of key facilities and disposal sites and distributed with the updated Debris Management Plan. Information should also be entered into a Geographic Information System (GIS) database, if available.

State Disaster Response Actions

When the response efforts appear to be beyond the capability of local government, the State normally provides the next level of assistance by declaring a State of Emergency. The State Emergency Management Organization typically evaluates the disaster situation and provides advice to the Governor on the availability of State resources that could assist local efforts. State resources may consist of the DOT, the Health Department, the Department of Natural Resources and the National Guard. These State resources can assist local government in its immediate response efforts, including debris clearance, removal and disposal activities.

Federal Disaster Response Actions

The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended, was enacted into law in 1988. It is the centerpiece of the Federal Disaster Relief Programs that are managed by the Federal Emergency Management Agency (FEMA).

When a disaster occurs and a locality has responded to the best of its ability but is or will be overwhelmed by the magnitude of the damage, it turns to the State for help. The Governor, after examining the situation, may direct that the State's Emergency Plan be executed. If it is evident that the situation is or will be beyond the capabilities of local, tribal and State resources, the Governor may request that the President declare that an emergency or major disaster exists in the State under the authority of the Stafford Act.

While the request is being processed, local, tribal and State government officials should

not delay in taking actions to respond to and start recovery from the disaster. Such actions should not be dependent upon whether there will be Federal assistance. Commensurate with the supplemental nature of Stafford Act assistance, the Federal share of eligible recovery expenses for declared disasters is normally limited to 75% of eligible costs.

Disaster Declaration Process

The request for a declaration must come from the Governor or Acting Governor. Before sending a formal request letter to the President, the Governor should request that FEMA conduct a joint preliminary damage assessment (PDA) with the State to verify actual damages and estimate the amount of supplemental assistance that may be needed. After this assessment is complete and if the Governor believes that Federal assistance is necessary, the Governor sends the request letter to the President, through the Regional Director of the appropriate FEMA Region. The request is reviewed by the Regional Director and forwarded with a recommendation to the Director of FEMA who, in turn, makes a recommendation to the President. The President makes the decision whether or not to declare a major disaster or emergency. After the initial declaration, the person designated by the Governor as the Governor's Authorized Representative (GAR) may make requests for additional areas to be eligible for assistance or for additional types of assistance as deemed necessary.

After a declaration is made, FEMA will designate the area eligible for assistance and the types of assistance available. With the

declaration, a Federal Coordinating Officer (FCO) is appointed who is responsible for coordinating all Federal disaster assistance programs administered by FEMA, other Federal departments and agencies and voluntary organizations. At the same time, the Regional Director or one of his/her staff will be appointed as the Disaster Recovery Manager (DRM), who is responsible for managing the FEMA assistance programs. The same person most often holds these two titles (FCO and DRM). Similarly, the State Coordinating Officer (SCO) and the GAR are generally the same person.

Federal Response Plan

The Federal Response Plan (FRP) is implemented to coordinate the overall delivery of Federal assistance to disaster victims. The plan is organized functionally by Emergency Support Functions (ESFs). Each ESF is composed of a lead or primary agency and supporting agencies grouped together to deliver specific services and resources. Delivery of assistance under the plan is flexible to best meet the unique needs of each disaster. Under the Federal Response Plan, emergency assistance is provided either by Federal agencies under their own authorities, or under reimbursable mission assignments from FEMA.

FEMA Debris Mission Response Actions

In catastrophic disasters, FEMA can provide direct Federal assistance to support local, tribal and State governments in performing some of the activities related to debris clearance, removal and disposal. The response capabilities of the local, tribal and State governments must be clearly exceeded before this level of assistance can be provided. The work that can be performed under this authority is limited to emergency

work and debris removal under Sections 402 (4), 403 and 407 of the Stafford Act. The assistance will be subject to the cost-sharing provisions as specified in the FEMA-State Agreement. The grantee will reimburse FEMA for the appropriate non-Federal share of the cost of the work, including any administrative costs of the performing Federal agency.

Following a Presidential Declaration, FEMA may elect to use its mission assignment authority to have the USACE contract for and manage debris clearance, removal and disposal operations. The debris and removal mission assignment is coordinated by Emergency Support Function #3 (ESF #3), Engineering and Public Works liaison officer.

An ESF #3 liaison officer should work directly with the FEMA debris staff to coordinate policy and guidance necessary to accomplish response and recovery missions assigned to the USACE by FEMA.

The ESF #3 liaison officer should meet regularly with FEMA and as needed with appropriate, local, tribal and State government officials to collect and coordinate information necessary to accomplish the assigned mission. The ESF#3 liaison officer should assemble information and provide tasks to the USACE staff for necessary action and ensure that contract scope requirements are accurate and timely. An ESF #3 officer is FEMA's direct liaison responsible for coordinating assigned missions. Daily assessments are made and reported to FEMA and others, as required, via coordination meetings and memoranda.

ESF #10, Hazardous Materials liaison officer should also be included in all debris planning to coordinate the cleanup, transportation and disposal of hazardous materials.

FEMA Debris Eligibility Criteria

FEMA Public Assistance (PA) funds may be used for debris clearance, removal and disposal operations. Debris that may be eligible for clearance, removal and disposal includes trees, sand and gravel, building wreckage, vehicles and personal property. The debris must be a direct result of the declared event, must occur within the designated disaster area and must be the responsibility of the applicant at the time of the disaster. Debris removal may be eligible when it:

- Eliminates immediate threats to lives, public health and safety;
- Eliminates immediate threats of significant damage to improved public or private property; and/or
- Ensures economic recovery of the affected areas to the benefit of the community-at-large.

Debris Removal from Public Property. In general, debris that is on public property must be removed to allow continued safe operation of governmental functions and, therefore, is eligible under one of the first two criteria. However, not all public property clearance is necessarily eligible. Debris that is blocking streets and highways is a threat to public health and safety because it blocks passage of emergency vehicles or it blocks access to emergency facilities such as hospitals. Debris in a stream or flood channel may cause flooding from a future storm. If such flooding would cause an immediate threat of damage to improved property, removal of the debris

only to the extent necessary to protect against an event that could reasonably be expected to occur within five years may be eligible. On the other hand, removal of fallen trees in a forested or wilderness area is not normally eligible.

Debris Removal from Private Property.

Debris on private property is treated somewhat differently. Debris removal from private property is the responsibility of the individual property owner, aided by insurance settlements and assistance from volunteer agencies. Most insurance policies, such as, homeowner, fire and extended coverage policies, have specific coverage for debris removal and demolition of heavily damaged structures. FEMA assistance is not available to reimburse private property owners for the cost of removing debris from their property; however, an eligible local, tribal or State government may pick up and dispose of disaster-related debris placed at the curb by those private individuals. Generally the extent and duration of this type of work is carefully controlled. FEMA, State, tribal and local officials will agree on a time frame during which pick-up from the curb will be eligible for PA funding.

If the debris on private business and residential property is so widespread that public health, safety, or the economic recovery of the community is threatened, the actual removal of debris from the private property may be eligible. In such situations, the work normally must be done or be contracted for by an eligible applicant.

See Chapter 6 for further information on removal of debris from private property.

Debris Removal from Drainage

Structures. Debris removal from certain drainage structures may have to meet the following criteria:

Reservoirs. Removal of disaster-related debris from reservoirs may be eligible if evidence is provided to FEMA that the reservoirs were regularly cleaned prior to the disaster and the pre-disaster level can be established. In addition, removal of debris that poses an immediate threat of clogging or damaging intake or adjacent structures may be eligible.

Natural Streams. Debris removal from natural streams normally is not eligible for assistance. Only debris that causes a threat to lives or public health and safety or damage to improved property from an event that could be reasonably expected to occur within five years is eligible. Any work in natural streams must also be closely reviewed and monitored to minimize undesirable environmental effects. This type of work will often require a Clean Water Act Section 404 permit from the USACE. The Natural Resources Conservation Service also has the authority to clear streams of debris.

Engineered Channels and Debris Basins. Debris removal from engineered channels, lined or unlined and debris basins may be eligible. Knowing the pre-disaster level of debris in the channel or basin is required in determining the amount of disaster-related debris. Such facilities must also have had a regular schedule of debris removal to be eligible for clearance.

Debris Removal from Roads and Highways. Debris may be removed from roads and highways, including the travel lanes and shoulders, roadside ditches and drainage structures and the maintained right-

of-way. Clearance from Federal-aid roads and highways follows these criteria except when the Emergency Relief (ER) program of the FHWA is activated. For highways being repaired by the ER program of FHWA, the debris is removed as part of that work. Even when the ER program is activated for an area, FHWA assistance is granted only for portions of the road actually damaged by the disaster. Debris on undamaged sections of highway may be eligible for FEMA assistance.

Debris Removal from Recreational and Wilderness Areas. The removal of debris from public parks and recreational areas used by the public is eligible when it affects public health or safety or proper utilization of such facilities.

Hazardous trees within a naturalized area of public parks or golf courses that are unstable and leaning into the areas used by the public are eligible for removal only, not replacement. Normally, trees requiring removal are flush cut at the ground. Hazardous limbs are also eligible for removal. Hazardous limbs are defined as limbs greater than two inches in diameter that are still hanging in the tree and are threatening a public-use area, such as a trail, sidewalk, road, or golf cart path.

Generally, stump removal is not considered eligible for reimbursement, except if the stump itself is determined to be a hazard, as when the tree has been uprooted. When eligible, stump removal is accomplished by the least expensive means.

A tree with more than 50% of the tree crown destroyed or damaged, a split trunk, or broken branches that expose the heartwood, or a tree that has been felled or

uprooted is eligible for removal, especially if it is in a location approximate to or within public-use areas. If the applicant chooses to attempt to save a tree that has any of the conditions described above that justify its removal, the expense is the applicant's.

Removal of debris that does not pose a health or safety threat in wilderness or forested areas of these facilities is not eligible for FEMA reimbursement.

FEMA Building Demolition Criteria

FEMA Public Assistance (PA) funds may be used for demolition and removal of resulting debris under the authority of Section 403, Essential Assistance, of the Stafford Act. This section allows for the demolition of unsafe structures that pose an immediate threat to life, property, or public health and safety.

Health and Safety. The primary responsibility for demolition of unsafe structures lies with the owner. Most insurance policies have a clause that provides payment for demolishing houses damaged beyond repair. The applicant must certify that no insurance exists that would pay for the demolition, the owner is not capable of paying for such work and there is no opportunity to recoup the cost from the owner. If permission for demolition is not provided, the applicant must follow legal condemnation. The applicant must obtain right of entry and hold harmless agreements prior to start of the work. The ownership of the property remains in the hands of the original owner.

All properties must be reviewed in accordance with environmental, historic and other Federal laws being provided for the demolition. The State should provide each

applicant with a demolition checklist that must be completed and returned by the applicant prior to any actual demolition of the property.

The checklist should contain a list of items with which the applicant must comply prior to demolition. These items include verification that the applicant has obtained right of entry and hold harmless agreements and investigated insurance coverage and liens. The applicant will also be provided forms pertaining to historic preservation, environmental, hazardous materials and wetland/floodplain requirements. The applicant must sign and return these forms indicating he/she has read them and understands that it is his/her responsibility to ensure full compliance with all local, tribal, State and Federal rules and regulations.

The applicant must provide FEMA with a copy of the bid specifications, final property list and bid results prior to demolition. FEMA reviews the bid specifications to ensure that the specifications contain the proper scope of eligible work.

Once all necessary information has been received and reviewed, FEMA will notify the State that they have no objection to the applicant's proceeding with the demolition of the properties identified in the demolition bid. The State provides the applicant with written authorization to proceed with the demolition project.

Eligible work under health and safety demolition is limited to the demolition and removal of structures that may represent an immediate threat to public health and safety. An inspection team may inspect each facility to make a determination on the

structural integrity of the unit and review the reports of the applicant's building inspector.

Structures that are in danger of collapse, thus representing an immediate threat to life and safety, are documented and recommended as eligible for demolition.

Other eligible project descriptions under the health and safety category may include cleaning septic systems, backfilling basements, capping wells, clearing debris and any other actions to mitigate an immediate threat to public health and safety.

Items such as slabs on grade, driveways, fences and structurally sound buildings normally are not eligible for demolition under the public health and safety category because they do not represent an immediate threat to public health and safety.

At the completion of the project, the State notifies FEMA that the applicant's demolition has been completed. A joint FEMA/State team inspects the applicant's demolition sites to ensure full compliance with the project description identified in the report form.

Eligible costs may include any cost incurred by the applicant to complete the demolition project. Costs for monitoring and managing demolition and removal activities are eligible costs. Necessary costs of requesting, obtaining and administering the grant assistance, however, are covered by the Subgrantee Administrative Allowance and are not identified separately as eligible costs.

See the Public Assistance Guide, FEMA 322 for more information on the Subgrantee Administrative Allowance.

Archaeological sites or historic structures listed on the National Register of Historic Places or potentially eligible must be reviewed by the State Historic Preservation Officer (SHPO) prior to any demolition. Information and forms outlining the necessary step-by-step procedures to obtain SHPO approval should be provided to the applicant by the State. It is the applicant's responsibility to obtain SHPO approval before demolishing any possible historic structures or performing ground disturbing activities. Costs associated with the applicant's obtaining SHPO clearance may be eligible.

Each structure must be inspected for hazardous materials, such as asbestos or lead-based paint, prior to actual demolition of the structure. Normally, a representative of the applicant, such as a building inspector or fire marshal, will conduct a preliminary inspection of each structure. If hazardous materials are determined to exist in the structure, the applicant should contract with a certified asbestos or lead-based paint inspector. If the inspection report indicates the presence of asbestos material or lead-based paint, a certified abatement contractor must remove the material prior to demolition. Costs associated with asbestos and lead-based paint inspections, asbestos abatement and third party air monitoring may be eligible.

Attractive Nuisance. Private structures that are found to be structurally sound but require extensive repair are normally not eligible for demolition. The primary responsibility for securing the structures until repairs are completed lies with the owners. The applicant must certify that the structure is a health and safety threat to the public if the owners have no insurance or are not capable of paying for such work.

The applicant must obtain rights of entry and hold harmless agreements prior to start of the work.

Eligible work under this category is limited to securing the perimeter of the structure to prevent entrance into the structure and may include fencing, where necessary. FEMA can provide funding for materials (plywood or fencing) and labor as part of the project description to secure the structures from access. This funding meets the required need to protect life and safety.

Health Hazard. The project description on the report may include the cost of cleaning or removing items such as household hazardous waste (HHW), debris, food, chemical hazardous waste, freezers and refrigerators that may contain freon and other items that may represent a health hazard.

The applicant must certify that no insurance exists that would pay for such work, the owner is not capable of paying for such work and there is no opportunity to recoup the cost from the owner. The applicant must obtain rights of entry and hold harmless agreements prior to start of the work.

Chapter 2

PRE-DISASTER PLANNING

Major natural disasters can generate enormous volumes of debris in short periods of time. Debris clearance, removal and disposal operations must be implemented quickly to expedite recovery operations and to protect public health and safety of the local population. However, the speed of initial debris clearance, removal and disposal operations depends upon the depth of pre-disaster planning by local, tribal and State Emergency Managers.

This chapter discusses four important pre-disaster planning actions:

- 1. Identifying potential types and amounts of debris.*
- 2. Identifying temporary debris storage and reduction sites.*
- 3. Developing a Debris Management Plan.*
- 4. Negotiating Mutual Aid Agreements.*

Identifying Potential Types and Amounts of Debris

Before selecting temporary debris storage and reduction sites, it is necessary to identify the areas that may be subject to widespread devastation (such as parks, tree-lined streets, orchards, groves, nurseries, mobile home parks and residential, commercial and industrial areas) and the types and amounts of resultant debris. The types and amounts of debris can be forecast on a land-use basis (such as rural, urban, industrial, or mixed use) and by examining historic records. For example, if an area has not been affected by a major storm for a long period of time, a dense tree canopy may have developed,

which will result in a large amount of vegetative debris following a major storm.

In addition, the U.S. Army Corps of Engineers (USACE) Emergency Management staff has developed a modeling methodology designed to forecast potential amounts of hurricane-generated debris using actual data from Hurricanes Frederic, Hugo and Andrew. The estimated quantities produced by the model have a predicted accuracy of $\pm 30\%$. The primary factor used by the model is the number of households in a developed urban/suburban area. The other factors are cubic yards of debris generated per household, vegetative cover, commercial density and precipitation.

See Appendix A for a detailed discussion and example of the USACE Debris Estimating Model.

Identifying Temporary Debris Storage and Reduction Sites

All activities associated with massive debris clearance, removal and ultimate disposal operations depend upon the availability of suitable temporary debris storage and reduction sites. Identifying these potential sites before a major natural disaster will expedite debris removal and subsequent volume reduction and disposal actions. The designated debris manager and staff should work closely with other local, tribal and State officials to develop and maintain current listings of potential debris storage and reduction sites in areas prone to natural disasters. Pre-disaster site selection teams should include local officials who are familiar with the area. The teams should also consult and coordinate with local

residents, conservation agencies and environmental groups, if possible, to help identify potential problems.

Considerations for evaluating potential temporary debris storage and reduction sites include the following:

- Use public lands first to avoid costly leases. Pre-designated sites should be on public property and consist of between 50-100 acres, depending on anticipated needs. Consider the locations with respect to noise, traffic and the environment. Use private land only if public sites are unavailable.
- When selecting public or private sites consider pre-existing conditions that will have to be restored upon site closeout. Have attorneys review leases for private land to avoid extensive damage claims upon site closeout.
- The required size of the site will depend on the expected volume of debris to be collected and planned volume reduction methods. As a general rule, larger sites mean fewer sites and, hence, easier site closeout. However, larger sites may create logistical problems.
- Environmentally sensitive areas (such as wetlands, areas with endangered animal and plant species, critical habitats, well fields and surface water supplies and historic/archaeological sites) should be avoided. However, if use of such areas is unavoidable, procedures for temporary waivers should be developed.

Consult and coordinate with local residents, conservation agencies, environmental groups and agencies and the State Historic Preservation Office (SHPO).

- Public acceptability is largely dependent upon the activities planned for the site. Smoke from burning, around-the-clock light and noise from equipment

operation, dust and traffic are tolerated early in the disaster, but may have to be curtailed later. Whenever possible, avoid locating near residential areas, schools, churches, hospitals and other such sensitive areas. Notify citizens early about planned site activities and possible ramifications.

- Look for sites with good ingress/egress to accommodate heavy truck traffic.
- Consider adjusting traffic signals to accommodate projected truck traffic on critical haul routes.
- Identify nearby landfills and determine their present debris capacity and logistical capabilities. Also include any State-to-State or county-to-county agreements.
- Identify recycling possibilities, such as timber agreements, mulch and chip disposal in the agriculture community and fuel sources for incinerators or heating. Recycling success will depend on the types of debris and the local recycling environment.
- Review local, tribal and State ordinances on such items as tarps and tailgates on trucks, traffic control, truck priority, curfew, defining roadway rights-of-way and load limits. Coordinate with responsible agencies to develop waiver procedures to expedite emergency operations.
- Clearly show critical routes and priorities for clearing debris on local maps. Target emergency routes for local, tribal, State or Federal clearance efforts. GIS should be used as an efficient mapping tool, if available.

The following questions will help to identify and prioritize appropriate sites based on local requirements and conditions.

Potential Site Ownership.

- Are public lands available?
- Are private land lease terms long enough?
- Are private land lease terms automatically renewable?
- Does the private land lease include a landscape restoration agreement?

Potential Site Size.

- Is the site large enough to accommodate the planned debris storage and/or reduction methods?
- Will the site configuration allow for an efficient layout?

Potential Site Location.

- Does site have good ingress/egress?
- Does site have good transportation arteries?
- Does site have open, flat topography?
- Does site have wetlands? If unavoidable, require the contractor to flag the area and establish buffers and/or sediment barriers.
- Does site have public water supplies, including well fields and surface waters?
- Does site have threatened and endangered animal and plant species?
- Does site have threatened and endangered species' critical habitats?
- Does site have rare ecosystems?
- Does site have historic sites?
- Does site have archaeological sites?
- Does site have sensitive surrounding land use, such as residential, school and church?

Developing a Debris Management Plan

Local, tribal and State Emergency Managers should have a Debris Management Plan that defines the roles of essential personnel and agencies necessary to execute debris clearance, removal and disposal operations. The following is a suggested format for a debris management plan:

Mission. Identify how debris management activities will be facilitated and coordinated. Include local situations and assumptions.

Organization. Define who has the overall responsibility for managing the debris clearance, removal and disposal operations and supporting agencies/staff.

Concept of Operations. Detail how the responsible agency/designated individual will manage and coordinate the debris clearance, removal and disposal operation. Include the following:

- Contracts and cooperative agreements.
- Temporary and permanent site selection criteria.
- Debris removal priorities.
- Debris classification.

Responsibilities. Detail specific responsibilities for each department involved with debris clearance, removal and disposal operations. These departments might include General Services, Environmental Quality, Emergency Services, Solid Waste Management, Public Works, Transportation and Forestry/Natural Resources.

Normal Operations. List routine actions necessary to develop or update the debris management plan.

Increased Readiness. Identify pre-disaster actions, if a potential disaster is threatening the local area. Designate the Debris Staff Manager.

Response. Identify how the plan will be activated and implemented.

Recovery. Identify who has responsibility for monitoring debris removal contracts and updating the plan as required.

Legal Authority. Identify state, tribal and local authorities, limitations, statutes, ordinances and regulations. Examples include:

- Condemnations
- Indemnification
- Procurement
- Environmental
- Logistical Requirements

Recommended Appendices.

- Debris classification.
- Location and status of temporary storage sites.
- Location and status of landfills.
- Maps showing locations of removal sectors and temporary storage sites.
- Site closure and restoration guidance.

See Appendix B for an example of a Debris Management Plan Outline.

See Appendix C for an example of a Local Debris Management Plan Strategy.

Mutual Aid Agreements

Mutual aid agreements should be negotiated and in place prior to a disaster. Mutual aid providers normally consist of local and county Departments of Public Works from around the State. These departments usually offer their assistance in the form of equipment and personnel.

The mutual aid agreement should outline the responsibilities of each party, including the types of costs that will be reimbursed. To ensure that mutual aid providers adhere to the agreements, the designated debris manager should assign coordinators to monitor each provider. The coordinators should be responsible for tracking the type of work performed and type of equipment used by each mutual aid provider.

To be eligible for FEMA assistance, reimbursement by the receiving party must not be conditioned on receipt of FEMA assistance.

See Appendix D for an example of a Mutual Aid Agreement.

Chapter 3

DEBRIS MANAGEMENT STAFF ORGANIZATION AND RESPONSIBILITIES

This chapter provides guidelines for debris management staff organization and defines the key responsibilities involved in pre- and post-disaster planning and information management.

Debris Management Staff Organization

The size and composition of a staff organized to deal with debris clearance, removal and disposal issues will depend on the magnitude of the disaster and the size of the community. A pre-disaster debris planning staff may be quite small; however, following a major disaster, additional staff members may be required. The local, tribal or State debris staff should be comprised of full-time personnel supplemented with personnel from other staffs and agencies. It is essential that prospective staff members have as much training as possible and interface with other agencies responsible for debris clearance, removal and disposal activities, such as the National Guard, State Department of Transportation (DOT), State Police, Federal Emergency Management Agency (FEMA) and the U.S. Army Corps of Engineers (USACE), prior to any anticipated disaster.

The staff should be comprised of personnel to perform the following functions:

Administration. Housekeeping supplies, equipment, funding and accounting.

Contracting and Procurement. Bidding requirements, advertisements for bids, instructions to bidders and contract development.

Legal. Contract review, rights of entry permits, community liability, indemnification, condemnation of buildings, land acquisition for temporary staging and reduction sites, site closure/restoration and insurance.

Operations. Supervision of government and contract resources and overall project management.

Engineering. Detailed damage assessments, identification of project tasks, assignments of tasks, preparation of cost estimates, scopes of work and specifications for debris contracts.

Public Information. Coordination of press releases, maintenance of contacts with local organizations, individuals, the media and drafting of public notices for debris clearance, removal and disposal operations.

General Debris Staff Responsibilities

Key personnel should be alerted before the disaster, if possible and deployed either before or immediately after the disaster. If possible, they should remain part of the debris management staff throughout the disaster cleanup to maintain continuity during the debris clearance, removal and disposal operations. The staff should develop disposal plans either in advance or concurrently with the removal efforts.

Failure to address debris disposal requirements early may lead to complex problems later.

The designated debris manager and debris management staff should be responsible for coordinating all removal and disposal activities. The staff will need to coordinate closely with all local, tribal, State and Federal agencies responsible for disaster response and recovery operations. They may also need to contract removal and disposal services and develop requests for additional assistance from FEMA. They must be prepared to react to evolving needs and available technologies. The staff must be able to assess debris based on:

- Quantities and types.
- Rural, urban and/or agricultural locations.
- Number of private homes, mobile homes, public facilities and commercial establishments damaged or destroyed.
- Miles of roads affected, categorized by type, such as rural, urban and/or expressways.
- Quantity and types of household hazardous wastes.

The designated debris manager and debris staff should be prepared to take the following actions:

- Develop a reliable initial assessment of the disaster's magnitude. This will enable decision-makers to assess human and material requirements for responding to the debris disposal situation.
- Coordinate with local procurement agencies to establish a contracted work force capable of expeditiously removing the debris.
- Identify the need to consult with an environmental or historic preservation specialist to assure that legal requirements in these areas are met.

- Evaluate damaged utility systems, structurally unstable buildings, other heavily damaged public facilities and determine if they should be expeditiously repaired, deactivated, barricaded or removed. Activities involving these facilities should be closely coordinated with their owners and/or operators. Demolition of unsafe structures that constitute a public health and safety threat may be deferred if access to the area can be controlled.
- Develop an independent team using local, tribal and State personnel to monitor the debris removal activities. This will allow the designated debris manager and debris staff to obtain accurate information about the progress of the debris removal operation. The field inspection team becomes the debris manager's "eyes and ears" in the field. The cost for personnel to monitor debris removal activities is reimbursable.
- Conduct daily update briefings with key debris managers and other officials. Ensure that all debris clearance, removal and disposal actions are reviewed and approved by the local or tribal debris manager.
- Ensure that a debris staff representative attend all briefings to resolve any coordination problems between State and Federal debris removal efforts and local debris removal and disposal efforts.
- Coordinate with local, tribal and State DOT and law enforcement authorities to ensure that traffic control measures expedite debris removal activities.
- Develop a traffic control plan. Traffic control devices should not be allowed to return to normal operations until all

debris operations have been completed. Debris clearance and removal activities must be given priority at every major intersection to ensure efficient and timely debris operations.

- Establish and maintain direct coordination with other local, tribal and State officials and their staffs with regard to priorities and areas of responsibility.

Finally, the debris staff must be able to inform the public in understandable terms of the magnitude of the disaster and about actions the public must take.

Engineering Staff Responsibilities

The debris management staff should have access to qualified engineering expertise to assess the full scope of the debris clearance, removal and disposal effort. The community may wish to hire a local engineering firm if the community's internal engineering staff is heavily involved with the repair and replacement of publicly owned facilities damaged by the disaster. The engineering organization will need the following personnel:

- Inspectors to inventory the type and amount of debris within the disaster area.
- Engineers to plan the work for maximum efficiency and to develop the government debris clearance, removal and disposal cost estimate.
- Contract specialists and draftspersons to prepare contract scopes of work and/or specifications.

Engineering personnel perform tasks such as the following:

- Define the project scope, if the community elects to contract the debris clearance, removal and disposal effort.

This is done by specifically defining the disaster area in which work is to be contracted and by developing a quantitative and qualitative estimate of the debris to be removed and disposed of for that area.

- Determine if the existing landfills have sufficient capacity for the expected volume of debris from the preliminary damage assessment.
- Consider using pre-identified temporary storage sites for reducing the volume of debris by incinerating, grinding and/or recycling to reduce the impact on landfill sites.
- If sufficient landfill capacity is not available, identify alternative landfill sites.

The engineering staff might be required to develop scopes of work and specifications if local contractors are used for debris clearing, removal and disposal operations. The following factors should be considered because they will affect overall contract costs:

- **Truck Size.** Smaller trucks require more trips for a given volume of debris, which increases the driver's time, fuel cost, maintenance and depreciation cost.
- **Length of Haul.** The longer the haul, the greater time required to reach the disposal site, which increases costs for labor and equipment.
- **Traffic Conditions.** Hauling over heavily traveled streets and roads also increases labor and equipment costs.
- **Roadway Conditions.** Poor roadway conditions, such as potholes, unpaved surfaces and deteriorated pavement,

increase maintenance costs as well as operational costs.

- **Temporary/Permanent Site Access.** Single lane unpaved access roads increase cost because of delays caused by restrictions for allowing loaded and empty trucks to pass. In addition, poor weather conditions may make the access road impassable.

Once the above factors are considered, the limits of the disaster area can be clearly defined. For debris contracting and debris management purposes, the boundaries of the disaster area should be delineated on a map. The map should identify the work area or areas to be included in the contract. If multiple contracts are used, this element of contract preparation is extremely important to ensure that the contractors remain in their assigned work areas. The establishment of the work area is also important to identify key items, such as ingress and egress routes to the debris removal area, location of utilities and distance to temporary staging and reduction sites or permanent landfill sites.

A quantitative estimate is extremely important to clearly identify to contractors the scope of work they are being asked to perform. This estimate will also assist in preparing project cost data.

Quantity estimates, or "takeoffs," should be made in the units that are going to be used in establishing contract line-item prices. Units should be selected based on the method that will be used to verify pay quantities for work under the contract. For debris removal, units are normally "cubic yards," "tons," or "each." Therefore, if a contractor is to be paid for the volume of material removed from a work site by approximate measurement of that volume, the unit should be cubic yards. If it is more convenient to

pay the contractor by weighing the trucks used to haul the material to a disposal site, the units should be by weight (tons). If the contractor is to be paid by the number of items removed from the project site (i.e., trees, damaged vehicles, etc.), the unit should be established as "each."

Because it is difficult in most debris operations to estimate the weight of material to be removed, the general rule is to use volume and number measurements. An estimate of length, width and height of the material can approximate the volume of debris in question. The amount of material to be removed and the accuracy desired in the estimate will determine the procedures used for this volume measurement. For a large-scale disaster, marking the area on a scaled map and approximating an average height can derive an approximate quantity estimate. When developing quantity estimates, inspectors should be instructed to note the type and location of the debris.

The next step is to develop unit cost data after the quantity, location and type of the debris within the disaster area has been established. Several sources exist that may assist in determining the proper unit price to be used once the project scope has been defined and contract type selected. Many nationally published cost data reports do not take into account the abnormal conditions encountered by contractors in debris operations. They also do not account for the increase in cost due to a disaster or emergency situation. The following sources should be able to provide current cost data necessary to develop the unit price estimate:

- Area engineering and construction firms.

- Local Street or Public Works Departments.
- State DOT and State Department of Forestry.

The development of a government estimated unit price includes many variables. Factors that influence the unit price are the type of debris, method of removal, distance to the disposal site, routes to the disposal site, permitting requirements and work-site limitations.

The damage assessment report should provide the engineering staff with information that addresses all items to be included in the government cost estimate. These items will include the actual work that may be required to accomplish the specific tasks.

The individuals performing the government cost estimate should put themselves in the place of the contractor who is being asked to submit a price for the work. This is very important in a disaster situation, where there might be a considerable variety of factors affecting the contractor's pricing. After the cost estimate is prepared, the scope of the project can be defined and the type of contract selected.

The engineering staff should have an understanding of FEMA debris eligibility criteria and be aware that FEMA will only reimburse "reasonable costs" associated with debris clearance, removal and disposal actions. Moreover, plans must include a means to monitor the contractor's activities and certify the accuracy of the amount of debris handled.

See Chapter 5 for additional information on contracting procedures.

Public Information Management

Public Information Specialist. A full-time public information specialist should be assigned to the debris management staff. This specialist should be responsible for coordination with other public information agencies to keep the public informed on all debris removal activities and schedules. Immediately after a disaster and continually throughout the removal and disposal operation, this person should arrange public notification of all ongoing and planned debris clearance, removal and disposal activities. Notification should include information bulletins, hotline responses, public service announcements for radio and television, handbills, door hangers and newspaper notices in the language(s) prevalent in the affected communities. Provision should be made to compensate for disruption of normal means of mass communication caused by power outages following a major natural disaster.

Public Participation. Public notices should emphasize actions that the public can perform to expedite the cleanup process, such as the following:

- Separating flammable and nonflammable debris.
- Segregating household hazardous waste.
- Placing debris at the curbside.
- Keeping debris piles away from fire hydrants and valves.
- Reporting locations of illegal dump sites or incidents of illegal dumping.
- Segregating recyclable materials.

Important Debris Removal Activities. The public should be kept informed of the following debris removal activities and regulations:

- Debris pick-up schedules.
- Disposal methods and ongoing actions to comply with State and Environmental Protection Agency regulations.
- Disposal procedures for self-help and independent contractors.
- Restrictions and penalties for creating illegal dumps.

Questions from the Public. The information specialist should develop a means of responding to debris removal questions from the press and local residents. Questions that might be asked include the following:

- What is the pick-up system?
- What is the schedule of pick-up in my area?
- Who will pick-up and how can I contact the operator?
- Should I separate the different debris materials and how?
- How do I handle household hazardous waste?
- What if I am elderly or infirm?

Chapter 4

DEVELOPING A DEBRIS CLEARANCE, REMOVAL AND DISPOSAL STRATEGY

In a few hours or even minutes, major natural disasters can generate large amounts of debris. The debris may be equally heavy in urban and rural areas, depending on the magnitude of tree blow-down and associated structural damage to homes, businesses, utilities and signs. Debris clearance must begin immediately to protect public health and safety. Debris clearance, removal and disposal activities are a visible sign of action that helps restore a sense of normalcy to a stunned community.

This chapter discusses how to develop a large-scale debris clearance, removal management strategy by dividing the operation into two phases. Phase I consists of clearing the debris that hinders immediate life saving actions and that poses an immediate threat to public health and safety. Phase II consists of removing and disposing the debris that hinders the orderly recovery of the community and poses less immediate threats to health and safety. The entities responsible for implementing the strategy should be identified in advance.

Phase I: Emergency Roadway Debris Clearance

The designated debris manager and staff should identify in advance which routes are essential to emergency operations. This will allow them to direct local efforts and to target areas for possible State/Federal assistance.

The designated debris manager and staff should be aware of local, tribal and State agencies' capabilities to provide service for emergency roadway debris clearance. Available resources should include the following:

- Municipal force account workers and equipment.
- Local, tribal and State Department of Transportation (DOT) workers and equipment.
- National Guard.
- Local contractors hired by local and tribal governments.

The Department of Public Works (DPW) should be responsible for debris clearance activities. The DPW has the necessary personnel, equipment and contracting experience.

A few days before a foreseeable disaster, the DPW portion of the debris management plan should be put into effect. The DPW should disperse vehicles throughout the area to minimize the risk of vehicle damage. Anticipated supplies and equipment necessary to complete the work should be purchased or rented. A strategy should be developed to clear all designated emergency roads using all available local force account labor and equipment, military personnel, mutual aid providers and local contractors.

Following a disaster, the top priority is to clear major arterial roads, including roads leading to health care facilities. The DPW should organize participants based on personnel and equipment and assign each of them responsibility for certain roadways. At

least one lane should be cleared on each arterial, major and secondary road as soon as possible. Available public property should be identified for use as temporary storage areas, with preference to locations that would be less expensive to restore, such as open fields and parks.

Debris may include tree blow-down and broken limbs; yard trash such as outdoor furniture and trash cans; utility poles, power, telephone and cable television lines, transformers and other electrical devices; building debris, such as roofs, sheds, block walls and chimneys; and personal property, such as clothing, appliances, boats, cars, trucks and trailers.

In Phase I, roadway debris is quickly moved to the side of the road to provide access into devastated areas. No attempt is made to remove or dispose of the debris, only to provide clear access routes to allow for:

- Movement of emergency vehicles.
- Law enforcement.
- Resumption of critical services.
- Damage assessment of critical public facilities and utilities.

The requirements for government services increase dramatically following a major natural disaster. Therefore, after emergency access has been provided to hospitals and police and fire stations, the next priority is to open access to other critical community facilities, such as schools, municipal buildings, water treatment plants, wastewater treatment plants, power generation units, airports and seaports.

The difficulty of assessing the amounts and types of debris to be removed from key routes slows the deployment of the right mix of equipment and labor, especially when contracting for additional resources. Moreover, local equipment and labor

capabilities could be limited. Therefore, communities should be prepared to execute Time and Material (Equipment Rental) contracts during Phase I operations. They allow the flexibility to respond to local hot spots at a reasonable cost. Time and Material contracts for services should be very limited in scope and duration. For example, a local construction company may be awarded a Time and Material contract as a stop-gap measure to clear debris from the right-of-way by pushing it to the roadway shoulders until larger regional contractors are mobilized under unit price contracts.

See Chapter 5 for additional information on contracting procedures.

Phase II: Debris Removal and Disposal Responsibilities

The Department of Solid Waste Management (SWM) should be responsible for coordinating all debris removal and disposal activities to include normal garbage pickup. These actions should be closely coordinated with the DPW to ensure a smooth transition.

The initial roadside piles of debris created during Phase I will become the dumping locations for additional yard waste and other storm-generated debris. Therefore, a private contractor may be required to perform the final disposal of all disaster-related debris from the rights-of-way or storage and reduction sites. The contract should cover hauling and disposal of debris at an approved landfill. If local contractors are used, the area should be divided into definable sectors for control purposes and bids solicited based on the sectors and the

estimated cubic yards of debris in each. Contractors are then responsible for hauling debris from the public rights-of-way to assigned temporary storage areas or approved landfills.

SWM should issue and monitor local government debris disposal contracts to ensure that public funds are properly accounted for and that contractors perform according to contract requirements.

Debris Issues Requiring Close Coordination

The designated debris manager and debris staff will be faced with a monumental task of coordinating removal of debris that represents a significant health and safety hazard to the community. There will be requests from residents who want to start putting their lives and property in order. Expedient removal of debris from in front of residents' homes becomes a high priority because it is a positive sign that recovery actions are underway and expedites the replacement of key utilities located along public rights-of-way.

The following issues will require close coordination when removing debris from public rights-of-way:

Curbside Separation. Good curbside separation is critical in the early stages of cleanup. However, even when the homeowner takes time to separate flammable, nonflammable and other hazardous debris, many contractors place everything into the truck or push the curbside debris to a cul-de-sac or an intersection and load it there. Therefore, contractor performance should be closely monitored, with emphasis being placed on curbside sorting. This monitoring will pay

dividends in the long run because good sorting will make the final disposal much faster and cheaper.

Monitoring Contractor Activities. To ensure that contract haulers are in compliance with their contract, the DPW/SWM should use their own personnel or hire a local engineering consulting firm to serve as contract monitors.

The monitors should be responsible for initial load tickets where trucks are loaded and verifying the estimated amount of debris hauled at the temporary storage area or landfill. DPW/SWM officials should provide overall supervision.

The contractor must provide a notarized listing of the measured bed size in cubic yards and license plate number of all trucks to be used to move debris upon award of the contract.

Once a truck is loaded with debris at the work site, the site monitor should fill out a load ticket, which usually consists of one white original copy and two carbon copies (yellow and pink). The load tickets issued by the monitors are the basis for debris contractor payment.

Each ticket should include the following information:

- Preprinted ticket number.
- Contract number.
- Prime Contractor's name.
- Date.
- Truck number.
- Truck capacity in cubic yards.
- Load size, either cubic yards or tons.
- Truck driver's name.

- Debris classification.
 - Burnable
 - Non-burnable
 - Mixed
 - Other
- Zone/Sector.
- Dumpsite location.
- Loading time (from work site).
- Dumping time (at disposal site).
- Loading site monitor.
- Dumping site monitor.

See Appendix F for a sample load ticket.

The load ticket copies should be processed in the following manner:

White copy. The pickup site monitor should fill in the date, truck number, contractor and departure time and sign the ticket. The pickup site monitor should keep the white copy and give the other two copies to the driver.

Yellow copy. Upon arrival at the disposal facility, the driver should give both the yellow and pink tickets to the disposal site monitor. The disposal site monitor should fill out the arrival time, estimate the amount of material on the truck in cubic yards and sign the ticket. The disposal site monitor keeps the yellow ticket.

Pink copy. This copy should be returned to the driver, who then provides it to the contractor.

At the end of each day, the white and yellow copies should be submitted to DPW or SWM personnel, who should match and compare the tickets. These procedures can be modified to meet local requirements.

The Federal Emergency Management Agency (FEMA) will reimburse only reasonable costs. Therefore, it is essential that the community be responsible for monitoring debris clearance, removal and disposal activity and be prepared to certify the accuracy of the amounts of debris hauled.

Special Monitoring Issues. The issues described below highlight the need for local DPW/SWM officials to closely monitor large contracted debris clearance, removal and disposal activities. The issues focus on some of the problems associated with major debris disposal contracts and justifies the need to monitor activities at local temporary storage and reduction sites and at final disposal landfill sites. Many of the questionable actions can be attributed to human error or they may be deliberate attempts to defraud the Federal government. In either case, it is essential that DPW/SWM contracting officials work closely with FEMA to ensure that contractor's perform the services required and that the services are performed at a reasonable cost.

Site delays. Delays in moving debris and traffic problems on adjacent highways can be caused by the need to establish initial tare weights for each truck going across the landfill site's scale. Tare weights should be established using other scales, if available, before debris hauling begins.

Overweight or unsafe trucks. State DOT enforcement officers should be available to issue fines for overweight vehicles and/or obvious safety hazards.

Tipping fees. Vehicles other than those under contract to the DPW, SWM and USACE should be required to pay the

normal tipping fee at the landfill. Commercial containerized haulers should not be allowed to dump for free because they normally include the tipping fee as part of their overall costs.

Excessively wet debris. Local site monitors should monitor temporary storage area loading sites to ensure that contractors do not add excessive amounts of water to debris prior to loading. This practice will add unnecessary weight to the load, resulting in overpayment based on weight. Minimal amounts of water may be necessary to keep down dust.

Excessive dirt and sand. Local site monitors should monitor storage area loading sites to ensure that contractors do not add excessive amounts of non-debris-related dirt and sand. Excavating dirt and sand from a site will add unnecessary weight to the load, resulting in overpayment based on weight and will add to the cost of site restoration. Some minimal dirt pickup is unavoidable.

Chapter 5

CONTRACTING PROCEDURES

This chapter highlights the procedures necessary to contract additional private debris clearance, removal and disposal resources and services. Contracting for labor and equipment may be necessary if the magnitude of the emergency debris clearance, removal and disposal operation is beyond the capabilities of local force account resources, State resources, mutual aid agreements and volunteer labor and equipment. The designated debris manager and staff should be familiar with contracting procedures, as they will be required to define specific debris removal tasks and recommend specific contract types based on the magnitude of the debris clearance, removal and disposal operation and the site clearance and restoration requirements.

Contracting Office Responsibilities

The local contracting office should have key personnel available to develop, process and administer debris clearance, removal and disposal contracts. The responsibilities entail the following actions:

- Determine the type and method of contracting needed to satisfy specific debris clearance, removal and disposal requirements of an unusual and compelling urgency.
- Solicit bids, evaluate offers, award contracts and issue notices to proceed with all contract assignments.
- Supervise the full acquisition process for service and supply contracts and the oversight of contract actions to ensure conformance to regulatory requirements.

- Coordinate with the Department of Public Works and Department of Solid Waste Management staffs.
- The contracting office must take care to avoid the solicitation of assistance from the general public and giving the impression that compensation will be provided for such assistance. Such instances would be considered by FEMA as a request for volunteer resources and treated in that manner. In addition, there are a number of other issues involved with such a solicitation, including licensing, bonding, insurance, the potential for the communities to incur liability in the event of injury or death, supervision and certification of work done.

Contracting Procedures for Immediate Response (Phase I)

Most State procurement regulations allow for abbreviated contract procedures when the Governor declares a State of Emergency. In emergency situations, communities normally solicit bids for equipment and labor by using public service announcements on radio, television and newspapers, as well as by directly soliciting local contractors in the area.

Although normally not an ideal alternative, the Time-and-Material (Equipment Rental) contract is an acceptable method of contracting during Phase I. Under this type of contract, the contractor is paid on the basis of time spent in accomplishing a particular task. The contract should be set on an hourly basis for the equipment and operator because Phase I debris operations involve primarily equipment usage. Work

orders should be issued for a particular piece of equipment and operator for a set number of hours. To ensure competitive bidding, hourly rates should be solicited from several contractors. Additionally, for simplicity, bid requests should specify that the hourly rate includes the operator, fuel, maintenance and repair. This will greatly simplify bookkeeping, auditing and monitoring of the work.

A Time-and-Material contract should clearly state that:

- The price for the equipment applies only when the equipment is operating.
- The hourly rate includes the operator, fuel, maintenance and repair.
- The community reserves the right to terminate the contract at its convenience.
- The community does not guarantee a minimum number of hours.
- The contract has either a dollar ceiling or a not-to-exceed number of hours clause.

Time-and-Material contracts should be limited to a maximum of 70 hours of actual emergency debris clearance work and should be used only after all available local, tribal and State government equipment has been committed. **Time-and-Material contracts for debris clearing, hauling and/or disposal should be terminated once the designated not-to-exceed number of hours is reached.** On occasion, Time-and-Material contracts may be extended for a short period when absolutely necessary, for example, until appropriate Unit Price contracts have been prepared and executed.

Supervision of Time-and-Material contracts is extremely important. Work inspection reports should be prepared each day. These reports should clearly state the amount of work accomplished that day in quantitative terms, such as the number of cubic yards of

debris hauled, the type and number of trucks used and the number of hours worked.

Load tickets may be used if debris is being hauled based on cubic yards under a Time-and-Material contract as a way of checking contractor efficiency.

DPW inspection personnel should verify certification of work performed and copies of the inspection reports should be furnished to the contractor to expedite the submittal of invoices for payment.

See Appendix E for an example Scope of Work for an Equipment Leasing Contract.

Table 5-1 summarizes the key elements of a Time-and-Material contract.

Time-and-Material (Equipment Rental) Contract
Summary
<ul style="list-style-type: none"> • Extremely flexible, not scope-dependent. • Wide range of uses. • Great for emergency "hot spots" and early debris rights-of-way clearance. • Should not exceed 70 hours of actual emergency debris clearance work. • Contractor must be directed as to what work to perform. • Requires full-time contract monitors. • Requires documentation of actual hours worked by equipment and operators. • Requires competitive bids or negotiate reasonable hourly rates for equipment and operators. • Specify equipment as generically as possible to encourage competition. • Need trained contract monitors to document actual equipment usage.

Table 5-1 Time-and-Material (Equipment Rental) Contract Summary

44 Code of Federal Regulations 13.36 discusses good contract administrative procedures, the importance of competition, methods of procurement and some basic contract provisions.

Contracting Procedures for Recovery Operations (Phase II)

It should become readily apparent during Phase I whether the magnitude of the debris clearance, removal and disposal operation is within the capabilities of local force account, mutual aid agreements, State and limited contract resources. If it is determined that the situation is beyond the capabilities of existing resources, immediate action must be taken to develop an organization to administer and manage Phase II recovery operations using contractors. The Department of Solid Waste Management is normally designated to administer and manage Phase II contracting actions.

The primary factors influencing Phase II recovery operations are the composition and volume of debris, the size of the area of debris concentration, the location of temporary storage and volume reduction sites, the location of public or private landfill disposal sites, the need for private property debris removal and requirement for site closure and restoration.

Unit Price and Lump Sum Contracts

Unit Price and Lump Sum contracts are recommended after the immediate response phase.

Cost plus percentage-of-cost contracts and contingency contracts are not eligible for FEMA reimbursement and should not be used.

A contract proposal should always be structured to encourage prompt performance of the work; however, the proposal should not, by its requirements, place heavy or unusual risk factors on the contractor. Such risk will be reflected in higher bids.

Unit Price Contract. The unit price contract uses construction units and prices for these units to develop line item costs and total contract cost. *The unit price contract is used when the scope of work is difficult to define and is based on estimated quantities.* It should be noted that the total "bottom line" of the contract could increase or decrease depending upon the accuracy of the final unit quantity. For this reason, it is as important to properly estimate units as it is to estimate unit cost. Change orders to adjust the estimated bid quantity to that quantity actually removed may be issued during or at the end of the contract.

The advantage of the unit price contract is that the scope of work can be easily increased or decreased, because unit pricing for the work accomplished is established at the time of the bidding process. The contract also provides line items for the contractor to list all charges associated with the work, thereby taking the guesswork out of the contractor's bidding procedure. The units used in the unit price contracts should be as accurately estimated as possible; otherwise, the final amount of the contract could be significantly different from the contract bid received at the bid opening. An example of a unit price contract line item is shown in Table 5-2.

Item	Quantity	Unit	Description	Unit Price	Price
1	150	CY	Remove sandbar at site 3	\$1.00	\$150.00

Table 5-2 Example of a Unit Price Contract Bid Item

See Appendix F for an example Scope of Work for a Unit Price Contract.

Table 5-3 summarizes the key elements of a unit price contract based on cubic yards.

Unit Price Contracts - Cubic Yard - Summary
<ul style="list-style-type: none"> • Flexible; intervention will not change contract conditions. • Accurate account of actual quantities removed. • Wide range of competition because of simplicity of contract. • Low contractor risk. • Full-time trained contract monitors required. • Possibility of contractor fraud if loading and dumping is not closely monitored. • Segregation of debris will complicate contract. • Trucks must be measured and numbered. • All truckloads must be documented using a pre-numbered load ticket. • Load tickets are the verification of the estimated quantity of debris in cubic yards or tons deposited at the dumping site.

Table 5-3 Unit Price Contract Summary - Cubic Yard

Unit Price Contract Verification. Proper and efficient management of a temporary storage and reduction site or landfill disposal site is essential with unit price contracts because the site becomes the focal point for quantity verification for payment.

Well-organized and managed inspection stations should be established near the

entrance of the site. When the contract unit of measurement is based on weight, provisions should be made for weighing trucks as they enter the site. If the contract unit of measurement is cubic yards, inspection stands should be built for the inspection of loaded trucks.

Payment under a unit price contract is normally made on the basis of load tickets. The following procedures should be followed when using load tickets:

- Load tickets should be treated as accounting forms.
- A work site supervisor should examine all contract trucks leaving a designated contract area and record the following information on the load ticket:

Each ticket should include the following information:

- Preprinted ticket number.
- Contract number.
- Prime Contractor's name.
- Date.
- Truck number.
- Truck capacity in cubic yards.
- Load size, either cubic yards or tons.
- Truck driver's name.
- Debris classification.
 - Burnable
 - Non-burnable
 - Mixed
 - Other
- Zone/Sector.
- Dumpsite location.
- Loading time (from work site).
- Dumping time (at disposal site).
- Loading site monitor.
- Dumping site monitor.

- To expedite filling out the form, all contract trucks should have the contractor's name or initials, the truck number and the measured capacity of the truck, as determined by a government representative, clearly visible on both sides of the vehicle.
- The work site monitors should retain one copy of the form, which is returned to the operations office and give two copies to the truck driver after completing the initial information.
- The temporary storage and reduction site or disposal site monitor should estimate the volume of debris and note arrival time and volume in cubic yards on the load ticket. The truck driver should keep one copy and the site monitor should keep the other. The site monitor's copy should be returned to the operations office to be matched against the work site inspector's copy for pay verification. The truck driver's copy is the basis of contract billings.
- All monitors should read and become familiar with the technical provisions of the contract and should conscientiously estimate each load hauled by the contractor. Improper estimates can lead to large and unnecessary government expenditures. If loads are not properly loaded or compacted, monitors should reduce the rated volume of the truck accordingly. Monitors should always be fair and consistent in dealing with contractor personnel.
- A government staff member should be designated as the temporary storage and reduction site and/or disposal site manager. The site manager should serve as the overall supervisor of the site inspection operation and should coordinate dumping efforts with the temporary site/landfill owners or operators. The site manager should also serve as the initial arbitrator for

differences in opinion between the government representative and the contractor's representative regarding the estimated loads for payment.

Lump Sum Contract. The lump sum contract establishes a total contract price by a one-item bid from the contractor. It is understood in a lump sum contract that the price for the work is fixed, unless the scope of work changes; therefore, the bottom line of the contract is not in question, as it is with the unit price contract.

The main disadvantage of the lump sum contract occurs if the scope of work is not well defined. In that case, the quantity estimate and the definition of the scope of work become the responsibility of the contractor bidding the project. Experience has shown that the contractor passes this burden back to the government in the form of contingencies, which are incorporated into the bid price. *Therefore, the lump sum contract should be used only when the scope of work is clearly defined and the areas of work can be specifically quantified.*

The lump sum contract is:

- Easy to monitor when the scope of work is well defined.
- Easy to determine when a contractor has completed all work.
- Easy to establish the cost of the work at the time of bid opening.

An example of a lump sum contract line item is shown in Table 5-4.

Item	Quantity	Unit	Description	Price
1	1	Lump Sum	Demolish and remove structure	\$10,000

Table 5-4 Example of a Lump Sum Contract Bid Item

Tables 5-5 and 5-6 summarize the key elements of a lump sum contract for debris removal based on the Area Method and on the Pass Method, respectively.

Lump Sum Contracts - Area Method -	
Summary	
<ul style="list-style-type: none"> • Minimum labor required for monitoring. • Contractor shoulders most of the risk. • Quantities do not need to be documented (as they are in a unit price contract). • Must have a clear, definable scope of work that can be quantitatively measured by the contractor. • Often difficult to quantify what debris will be brought to the right-of-way for removal. • High probability of claims if debris estimates are difficult to estimate and require speculation. • Use only when the Scope of Work is clearly definable. 	

Table 5-5 Lump Sum Contract Summary - Area Method

Area Method Example. Once all debris within a well-defined geographic area has been placed at the curbside a scope of work can be written that requires the contractor to conduct a one-time pass to remove all debris from the curbside and deposit it at the local landfill for a fixed fee.

Lump Sum Contracts - Pass Method -	
Summary	
<ul style="list-style-type: none"> • Minimum labor required for monitoring. • Defines scope better than area method and decreases the risk of claims caused by quantity speculation. • Quantities do not need to be documented (as they are in a unit price contract). • Must have accurate, up-to-date plans and information on all roads that will be included in the "pass" scope of work. • Public must cooperate in the removal process. • Contracting agency must be successful in communicating with the public in the removal area. • Provide three to four passes, depending on the magnitude of the disaster. • Solicit a price for each pass and a total job price. • Clearly define any debris segregation requirements, road locations, time intervals between passes and required time frame to complete each pass. • Use only when the Scope of Work is clearly definable. 	

Table 5-6 Lump Sum Contract Summary - Pass Method

Pass Method Example. Debris will be placed at the curbside as homeowners repair their homes over a 3-week period. The scope of work requires the contractor to conduct a minimum of three passes throughout the community during the 3-week period (one pass per week) and deposit the debris at the local landfill for a fixed fee.

Contract Monitoring Responsibilities

The designated debris manager should assign a debris staff member to work directly with other local officials in developing and monitoring debris clearance, removal and disposal contracts. The following should be considered when developing and monitoring local debris removal and disposal contracts:

- Existing landfill capacities.
- Tipping fees.
- Scalehouse operations.
- Private commercial haulers.
- Law enforcement.
- Ingress/egress to site.
- Site logistics.
- Truck weight restrictions.
- Highway and bridge weight restrictions.
- Household hazardous waste.
- Hazardous and toxic waste.
- Mixed debris.
- Construction and demolition debris.
- Ash.
- Traffic control.
- Illegal dumping.
- Environmental issues.
- Site closure/restoration requirements.

Contract Administration. This term is generally used to encompass all of the activities that should take place after a contract is awarded and work commences. Contract administration ensures that the contract is performed as agreed.

Monitoring Performance. Continuous monitoring of all activities of a contractor promotes satisfactory performance. In evaluating a contractor's performance, primary interest is in the progress toward completion of the services called for and the financial status of the contract. It is important that the contract provide for

submission of reports and payment estimates to aid in evaluating the contractor's progress. In lieu of progress reports, frequent visits to the job sites can be a productive method of monitoring performance.

Contract Modification. During the administration of the contract, modifications may be necessary to provide contractual coverage for situations that develop after the contract is awarded. All modifications should be in writing to protect the interests of both parties. The contract should contain a clause that permits the Contracting Officer to make changes unilaterally within the scope of the contract, subject to an equitable adjustment of the contract price.

Inspection. Local governments should maintain an inspection and control system under their own supervision to ensure that the work being performed complies with the terms of the contract. In addition to load ticketing, the inspection and control process should consider the following factors:

- Bond requirements.
- Insurance requirements.
- Rights-of-way and indemnification.
- Mobilization of proper equipment.
- Posting of permits.
- Contractor personnel safety standards.
- General public safety standards.
- Completion schedules.
- Clearance procedures.
- Demobilization procedures.
- Site closure/restoration procedures.

Acceptance and Payment. Final inspection and the method of interim and final payments are part of the general

conditions of the contract. The following should be set forth in the original specification or other contract documents:

- Parts of or all of the work should be accepted only after verification through the inspection process that the work was performed in accordance with the standards stipulated in the contract.
- If the contract period is less than one calendar month, normal payment should be made in one total sum. In the event the authorized work tenure exceeds a period of one month, provisions can be made to make progress payments to the contractor at least monthly.

Closing Out Contracts. A contract is complete when all of the services or items called for have been delivered or performed and accepted. The contract is not administratively complete, however, until all actions taken in compliance with the contract have been properly documented and final payment has been made.

Chapter 6

SPECIAL DEMOLITION AND DEBRIS REMOVAL SITUATIONS

This chapter provides guidance on private property demolition and removal of debris from mobile home parks and marinas that may present a health and safety hazard.

Private Property Demolition and Debris Removal

Private Property Demolition. Although flood insurance policies do not provide coverage for debris removal, most homeowner, fire and extended coverage insurance policies have specific coverage for debris removal from private property and for demolition of heavily damaged structures.

Demolishing or securing remaining structures that threaten the health and safety of adjacent residents should be the responsibility of the owner or local government; however, experience has shown that unsafe structures will remain because of lack of insurance, absentee landlords, or understaffed and under-equipped local governments. Consequently, ensuring the demolition of these structures may become the responsibility of the local designated debris manager and staff, which requires complete cooperation of numerous local, tribal and State government officials and may require resources from any or all of the following:

- Tax office.
- Local law and/or code enforcement agencies.
- State Historic Preservation Office.

- Environmental contractors qualified to remove asbestos and lead-based paint.
- Field teams to photograph and document the sites before and after demolition.

Health and safety program requirements contained in 29 CFR should be adhered to with respect to hazardous waste. When removing any suspected hazardous waste workers should only work in well-ventilated areas, wear chemical protective clothing and evacuate the area if a chemical odor is noticed.

Communities in disaster-prone areas should have copies of required ordinances as part of their local emergency management plan. The ordinances should be activated when a State of Emergency is declared, eliminating any unnecessary waiting period. All of these actions should be accomplished prior to a disaster.

Demolition of private property will present significant coordination problems. The checklist shown below identifies key tasks that local officials should perform before the structure is approved for demolition. To expedite the overall effort, many of the tasks should be conducted concurrently.

Private Property Documentation Checklist.

- Obtain copies of all ordinances that authorize the community to condemn privately owned structures. The authority to condemn privately owned structures might be different from the authority for the demolition of publicly owned structures.

- Coordinate use of adjacent lands, easements and rights-of-way necessary for accomplishing the approved work.
- Implement laws that reduce the time it takes to go from condemnation to demolition.
- Obtain copies of all applicable permits required for demolition of subject structure(s).
- Document the age of the structure to determine if eligible or on the National Registration of Historic Places with the SHPO.
- Obtain copies of pertinent temporary well-capping standards.
- Obtain executed right-of-entry and hold harmless agreements that have been signed by the owner and by renter, if rented. Right-of-entry should indicate any known intent by owner to rebuild to ensure foundation and utilities are not damaged. If these agreements are not executed, document reason(s).

See Appendix G for a Right-of-Entry Agreement example.

- Use radio, public meetings and newspaper ads to give notice to property owners and their renters to remove personal property in advance of demolition.
- Document name of owner on the title, the complete address and legal description of the property and the source of this information. Document name of renter, if available.
- Ensure property will be vacated by demolition date.
- Provide written notice to property owners that clearly and completely describe the structures designated for demolition. Additionally, provide a

list that identifies related structures, trees, shrubs, fences and other items to remain on the respective property.

- Notify mortgagor of record.
- Provide the property owner the opportunity to participate in the decision on whether the property can be repaired.
- Determine the existence and amount of insurance on the property prior to demolition.
- Specify procedures to determine when cleanup of a property is completed.

Private Property Inspection Checklist.

- Coordinate all pertinent site inspections with local, tribal, State and Federal inspection team(s). Identify asbestos and lead-based paint materials prior to demolition.
- Notify the owner and/or renter of all site inspections.
- Verify that all personal property has been removed from private structure(s).
- Immediately prior to demolition, verify that the building is unoccupied.
- Ensure that the property is properly posted.
- Obtain a clear, concise and accurate property description and demolition verification.
- Include a Public Health official on the demolition inspection team.
- Evaluate the structural integrity of the building and also demonstrate "imminent and impending peril" to public health and safety caused by the structure.

- Make arrangements to remove and transport all asbestos and lead-based paint materials to a permitted facility prior to building demolition.
- Obtain photographs of the property and verify the address. Provide additional photographs of the property taken immediately prior to and following demolition.

Private Property Utilities Checklist.

- Locate, mark, turn off and disconnect all water and sewer lines.
- Locate, mark, turn off and disconnect electrical, telephone and cable television services.
- Locate, mark, turn off and disconnect gas service.

Private Property Debris Removal Checklist. The following actions will require close coordination when removing debris from demolished buildings on private property:

- Ensure that buildings have been properly condemned according to local ordinances.
- Ensure that right-of-entry and hold harmless agreements are properly executed.
- Ensure that local officials remove any legal residents or squatters from the building before demolition and debris removal begins.
- Ensure that buildings identified for demolition are properly inspected to verify that they are unsafe, cannot be repaired and present a hazard to the community.
- Ensure that the inspection team includes a structural engineer and a hazardous materials specialist. Any household hazardous waste, such as paints, oils, cleaning supplies and

pesticides that are found should be removed prior to demolition. Houses that contain asbestos or lead-based paint should be demolished and debris removed according to current environmental regulations under a separate contract.

- Local code enforcement officers should accompany the contractor to ensure that they do not tear down the wrong house. The responsibility is on the community to identify the correct structure.
- Demolition work and debris removal should be coordinated with utility companies to ensure that all services are turned off.

Mobile Home Park Debris Removal

Post-Disaster Requirements. Hurricanes and tornadoes can cause severe damage to mobile homes and create extensive amounts of mixed debris confined to relatively small areas. The following are examples that comprise mixed debris:

- Tree blow-down.
- Out buildings.
- Screened porches.
- Mobile home frames.
- Personal property, such as clothing, food and furniture.
- Appliances, such as stoves, refrigerators, washers and dryers.
- Household cleaners and paints.
- Propane and oxygen tanks.
- Gasoline, oil and lubricants.
- Automobiles, trucks and boats.
- Bicycles and lawn mowers.
- Utility hookups.

Local mobile home parks should be surveyed and arrangements should be made with park owners for local, tribal or State agencies or contractors to clear the parks of debris. The local designated debris manager and staff will need to closely coordinate the cleanup activities and enforce condemnation procedures. Legal, health and safety concerns will have an important impact on the debris removal activities.

Planning Issues. Prior to a major natural disaster, local officials should do the following:

- Develop generic scopes of work for debris removal.
- Identify sites suitable for temporary storage of mobile home debris.
- Prioritize mobile home parks for debris removal.
- Develop a set of procedures to be followed that will combine debris removal activities and utility repair/replacement at mobile home parks into a single operation.

Documentation Checklist. Local officials should provide the following documentation:

- Copies of the local ordinance authorizing condemnation of mobile home parks. Condemnation for health issues is associated with prolonged exposure of trailer contents to the natural elements.
- A copy of the local government resolution with appropriate recitals required to support adoption or enactment of ordinances to condemn, demolish and remove mobile home park contents.
- Maps showing easements and rights-of-way access to the property.
- Documentation signed by the mobile home park owner and mobile home owner that holds the local, tribal,

State or Federal government free from liability for damage caused by the requested work and indemnifies the local, tribal, State or Federal government against any claims arising from such work.

- Documents allowing right-of-entry to the mobile home parks.
- Notice to individual mobile home owners to remove items of personal property in accordance with local ordinances.
- Documentation providing the names of mobile home parks and of mobile home park owners, complete addresses and legal descriptions of the properties and limits, if any, of debris clearance to occur within the parks. Additional materials should include plats of the mobile home parks and any information about existing utilities.
- Standards for capping all utilities.
- All applicable permits necessary for any demolition work in the mobile home park.

Inspection Prior to Debris Removal.

Local officials should perform the following actions:

- Ensure that the mobile home park will be vacated prior to the removal of any debris from the site.
- Describe clearly and completely the extent of debris removal required within the mobile home park. Specify any structures, other than mobile homes, that are to be removed.
- Locate and estimate amount of household hazardous waste within the park and ensure that appropriate

procedures are established for separation and removal of such materials prior to debris removal. Household hazardous waste typically found on-site includes cleaning supplies, propane tanks, paint cans, paint thinners, pesticides, refrigerators and freezers. A qualified environmental contractor should be hired to ensure proper removal and disposal of asbestos, lead-based paint and other commercial, agricultural or industrial hazardous waste.

- Conduct initial inspections of the mobile home park with representatives from the local government, public health office, building and zoning office, real estate office and other State and Federal officials.
- Ensure that the contract scope of work reflects findings of the field inspection.
- Ensure that the mobile homes are unoccupied.
- Ensure that the property is posted in accordance with local regulations and that mobile home owners have removed their personal property.
- To avoid subsequent disputes, ensure that any agreement made with the mobile home park owner is in writing.
- Obtain photographic documentation of mobile home sites prior to commencement of work.
- Have organic and perishable materials removed from the site.

Mobile Home Park Utilities. Local officials should accomplish the following actions:

- Consider whether using heavy equipment will cause further damage to existing utilities.

- Be responsible for turning off utility services, such as water, telephone, electricity, natural gas and propane gas.
- Flag septic tank locations prior to debris removal. Special care must be given to protect septic tanks during debris removal operations.

Debris Removal Contracts. Contracts should include provisions for the following:

- Provide that all private automobiles are stored in a specific location within the park to be retrieved later by the owners.
- Provide salvage rights to the contractor for materials remaining on-site at the time of debris removal where beneficial to the government.
- Require flagging of existing utilities prior to debris removal.
- Use rubber tire vehicles and backhoe with grapple attachments to protect existing utilities.
- Require the contractor to phase debris removal operations to allow utility repair and or replacement to begin immediately after an area has been cleared.

Navigation Hazard Removal

Coordination. Damage to publicly owned marinas caused by a major natural disaster can include abandoned sunken boats and other debris that may impede navigation. The designated debris manager and staff should coordinate with the U.S. Coast Guard, State Marine Patrol, local government agencies, legal counsel, contractors specializing in marine salvage operations, commercial divers and certified surveyors to ensure that navigation hazards are removed safely and efficiently.

Navigation Hazard Removal Checklist.

The following checklist should be used to ensure that all aspects of removing navigation hazards are considered.

- Coordinate with U.S. Coast Guard, State Marine Patrol, local government agencies and legal counsel.
- Inspect marinas to locate debris:
 - Visually by helicopter or boat.
 - Via side-scan sonar.
 - Via diving.
- Use Global Positioning System survey methods or some type of flotation marker to pinpoint location of sunken debris.
- Keep a log that reflects an accurate count of debris items with corresponding locations.
- Record the vessel registration number and photograph the wreckage.
- Provide notification by certified letter to private owners of impending vessel removal. This should be performed in accordance with legal constraints.
- Provide the owner an opportunity to remove the vessel prior to local, tribal, State or Federal government initiation of debris removal.
- Provide public notice in local newspapers.
- Generate scopes of work based on items to be removed.
- Maintain flexibility to allow for problems caused by tidal conditions. Problems can also occur as a result of wreckage removal by others prior to issuance of contract notice to proceed. Flexibility in contract execution can be achieved by issuing an equipment rental type contract.

Fixed price contracts with each piece of debris indicated as a line item are not recommended because of the possibility of change orders.

- Incorporate in the contract appropriate regulatory concerns and/or applicable State laws.
- Maintain continuous communication with local, tribal and State authorities.
 - Continually verify the number and location of sunken vessels and ensure that accurate records are maintained.
 - Require that a bill of sale or a vessel registration be presented to the local government representative on-site if an individual claims a vessel during removal operations.
 - Ensure that contracts and the cleanup schedule incorporate tidal constraints. Debris located in shallow areas may be inaccessible to contractor equipment during low tide.

Chapter 7

TEMPORARY DEBRIS STORAGE SITE OPERATIONS AND VOLUME REDUCTION METHODS

The preparation and operation of a temporary debris storage and reduction site are usually left to the contractor. However, the designated debris manager and debris staff should understand how a temporary debris storage and reduction site is set up and operated. This information will be extremely valuable in developing ultimate disposal plans, keeping local government officials and the public informed on debris clearance, removal and disposal operations and ensuring compliance with various regulations. This chapter provides guidelines on temporary site operations, the handling of household hazardous waste and the volume reduction methods of incineration, chipping, grinding and recycling.

Temporary Debris Storage Site

Site Preparation. The topography and soil/substrate conditions should be evaluated to determine best site layout. When planning site preparation, think of ways to make site closure and restoration easier. For example, if the local soils are very thin, the topsoil can be scraped to bedrock and stockpiled in perimeter berms. Upon site closeout, the uncontaminated soil can be respread to preserve the integrity of the tillable soils.

Site Operations. Lined temporary storage areas should be established for ash,

household hazardous waste, fuels and other materials that may contaminate soils and groundwater. Plastic liners should be placed under stationary equipment such as generators and mobile lighting plants. These actions should be included as a requirement in the contract scope of work.

See Appendix H for an example Scope of Work for a Site Management for Debris Reduction Contract.

If the site is also an equipment storage area, fueling and equipment repair should be monitored to prevent and mitigate spills of petroleum products and hydraulic fluids. Include clauses in the contract to require immediate cleanup by the contractor.

Be aware of and lessen the effects of operations that might irritate occupants of neighboring areas. Establishment of a buffer zone can abate concerns over smoke, dust, noise and traffic.

Consider on-site traffic patterns and segregate materials based on planned volume reduction methods.

Operations that modify the landscape, such as substrate compaction and over excavation of soils when loading debris for final disposal, will adversely affect landscape restoration.

Debris removal and disposal should be viewed as a multi-staged operation with continuous volume reduction. There should be no significant accumulation of debris at temporary storage sites. Instead, debris should be constantly flowing to incinerators and grinders, or recycled with the residue

and mixed construction and demolition materials going to a landfill.

Baseline Data Collection. Private land and public land used as debris storage and reduction sites should be returned to its original condition following site closeout. Baseline data are essential to document the condition of the land before it is used as a debris storage and reduction site. As soon as a site is selected, the designated debris manager and staff should work closely with local, tribal and State officials to develop baseline data. The following actions should be taken to develop baseline data on all selected sites:

Videotape and Photograph the site.

Thoroughly videotape and/or photograph (ground or aerial) each site before any activities begin and periodically update video and photographic documentation to track site evolution.

Document Physical Features. Notations about existing structures, fences, culverts, irrigation systems and landscaping can help evaluate possible damage claims made later.

Sample Soil and Water. Random soil samples can be easily collected prior to volume reduction activities. More time-consuming groundwater sampling can be done soon after operations commence. Household hazardous waste, ash and fuel storage areas should be sampled prior to site setup. Advance planning with community and State environmental agencies can establish requirements, chain of custody, acceptable collection methods, certified laboratories and test parameters. If in-house assets are not available, consider establishing an off-the-shelf contract with an environmental consulting firm that can respond rapidly.

Sketch Site Operation Layout. Periodically map or sketch activity locations so that areas of concern can be pinpointed later for additional sampling.

Document Quality Assurance Issues.

Document contractor operations that will have a bearing on site closeout, such as petroleum spills at fueling sites, hydraulic fluid spills at equipment breakdowns, contractor installation of water wells for stock pile cooling or dust control, discovery of household hazardous waste in debris and details on any commercial, agricultural or industrial hazardous and toxic waste storage and disposal.

Plan Environmental Remediation. Final restoration of the landscape must be acceptable to the landowner. Therefore, plan the landscape restoration as early as possible, preferably incorporating a basic plan in the lease. Come to an agreement with the landowner prior to occupancy to establish reasonable expectations of site conditions upon site closeout.

Baseline Data Checklist. The following is a suggested baseline data checklist:

Before activities begin.

- Take ground or aerial video/photographs.
- Note important features, such as structures, fences, culverts and landscaping.
- Check with the State Historic Preservation Officer to determine if any structures identified are listed on or eligible for the National Register of Historic Places.
- Take random soil samples.

- Take water samples from existing wells.
- Check the site for volatile organic compounds.

After activities begin.

- Establish groundwater monitoring wells.
- Take groundwater samples.
- Take spot soil samples at household hazardous waste, ash and fuel storage areas.

Progressive updates.

- Update videos and photographs.
- Update maps and sketches of site layout.
- Update quality assurance reports and fuel spill reports.

Household Hazardous Waste

Pre-Disaster Planning. The designated debris manager and staff should be aware of the effects that household hazardous waste can have on the overall debris clearance, removal and disposal mission. Pre-disaster planning should include having professional hazardous waste response teams assigned ahead of time to provide assistance in identifying and disposing of household hazardous waste.

Household hazardous waste generated by a natural disaster may consist of common household cleaning supplies, pesticides, motor oil, lubricants, transmission and brake fluid, gasoline, anti-freeze, paints, propane tanks, oxygen bottles and batteries. Household hazardous waste may become mixed with other debris, requiring close

attention throughout the debris clearance, removal and disposal process.

The designated debris manager and staff should implement the following pre-disaster planning actions:

- Assign trained hazardous waste response teams to collect, sort, store and dispose of excessive quantities of household hazardous waste.
- Have emergency hazardous waste contracts in place or prepare generic scopes of work that can be fine-tuned with minimal effort for removal and disposal of accumulated household hazardous waste.
- Coordinate with local, tribal, State and Federal regulatory agencies concerning possible regulatory waivers and other emergency response requirements.

Removal and Disposal Operations.

Household hazardous waste items should be segregated at curbside or brought to a designated drop-off site. Specially trained field technicians can identify dangerous product constituents, segregate incompatible chemicals and properly store or pack the waste for transportation to a facility specially permitted to accept hazardous waste. The following actions are required to ensure that household hazardous waste items are removed and disposed of safely:

- Where possible, separate household hazardous waste from other debris before removal. Arrange for salvageable household hazardous waste materials to be collected and segregated based on their intended use.
- Properly trained environmental contractors or emergency response personnel should remove industrial, commercial or agricultural hazardous and toxic waste.

- Maintain contact with regulatory agencies to ensure cleanup actions meet local, tribal, State and Federal regulations.
- Complete household hazardous waste identification and segregation before any demolition work begins.
- Qualified environmental contractors should remove any questionable debris that may be contaminated by household or commercial hazardous waste.
- Regular demolition contractors can remove uncontaminated debris.

Special Handling at Temporary Storage Sites. A separate storage area for household hazardous waste materials, contaminated soils and contaminated debris should be established at each site. The household hazardous waste storage site should be lined with an impermeable material and bermed to prevent contamination of the groundwater and surrounding area. Household hazardous waste materials should be removed from the temporary storage area and disposed of by a qualified environmental contractor in accordance with local, tribal, State and Federal regulations.

Commercial, Agricultural and Industrial Hazardous and Toxic Waste

Removal and disposal of large quantities of commercial, agricultural and industrial hazardous and toxic waste, such as asbestos, lead-based paint, pesticides, or fertilizers, may require the use of professional hazardous and toxic waste contractors. A contractor's inspection team should do the following:

- Establish contacts with local, tribal, State and Federal regulatory agencies.
- Interview tenants and building owners.

- Assess sites to document potential commercial or agricultural hazardous and toxic waste problems.
- Search buildings to establish potential hazards, such as asbestos, lead-based paint and underground tanks.
- Prioritize problems based on risk to human health and safety.

Volume Reduction Methods

Volume Reduction by Incineration. There are several incineration methods available for volume reduction. Each method should be considered in developing a volume reduction strategy.

Uncontrolled Open-Air Incineration. The least desirable method of volume reduction is uncontrolled open-air incineration because it lacks any type of environmental control. However, in the haste to make progress, local officials and/or independent landowners may employ this method early in a disaster. Uncontrolled open-air incineration should be closely monitored to ensure that only clean, woody debris is incinerated.

Controlled Open-Air Incineration. Controlled open-air incineration is a cost-effective method for reducing clean, woody debris in rural areas. Incineration of clean woody debris presents little environmental damage and the local agricultural community can use the resulting ash as a soil additive. Local agricultural extension personnel should be consulted to determine if the resulting ash can be recycled as a soil additive. The controlled open-air incineration option should be terminated if mixed debris enters the waste stream.

Air Curtain Pit Incineration. Air curtain pit incineration offers an effective means to expedite the volume reduction process while substantially reducing the environmental concerns caused by open-air incineration. The air curtain incineration method uses a pit constructed by digging below grade or building above grade (if a high water table exists) and a blower unit. The blower unit and pit comprise an engineered system that must be precisely configured to function properly.

The blower units deliver air at predetermined velocities and capacities. The blower unit must have adequate air velocity to provide a "curtain effect" to hold smoke in and to feed air to the fire below. A nozzle 20 feet long will provide air at a velocity of over 120 miles per hour and will deliver over 20,000 cubic feet of air per minute to the fire. The air traps smoke and small particles and recirculates them to enhance combustion, which reaches over 2,500 degrees Fahrenheit. Manufacturers claim that combustion rates of approximately 25 tons per hour are achievable while still meeting emission standards.

Specifications and statements of work should be developed to expedite the proper use of the system. Before awarding a contract, the designated debris manager and staff need to ensure that the contractors are knowledgeable about air curtain pit incinerator design and operating procedures.

See Appendix H, Figures 1, 2 and 3 for air curtain site setup and pit specifications.

Following are recommendations and warnings to assist the designated debris

manager and debris staff in planning for air curtain pit incineration operations:

- Be aware that there are no industrial standards for air curtain pit incinerator operations. The set-up has to be customized using the information provided by the manufacturer and should consider such specifications as minimum blower air velocity, pit construction configuration, pit materials, ash handling, acceptable smoke levels and air monitoring requirements.
- Pits must be constructed out of a highly compacted material that will hold its shape.
- The water table elevation governs whether the pit is constructed above or below grade.
- Controls should be implemented to prevent contamination of the ground water. An acceptable solution is to use compacted limestone fill placed over an impervious clay layer.
- Planners should take the initiative in keeping the public informed. Local officials, environmental groups and local residents should be thoroughly briefed on the incineration means being used, how the systems work, environmental standards, health issues and the risk associated with each type of incineration. A proactive public information strategy should be included in any operation that uses incineration as a primary means of volume reduction.

Portable Air Curtain Incinerators.

Portable incinerators use the same methods as air curtain pit incinerator systems. The only difference is that portable incinerators use a pre-manufactured pit in lieu of an on-site constructed earth/limestone pit. Portable air curtain incinerators are the most efficient incineration systems available

because the pre-manufactured pit is engineered to precise dimensions to complement the blower system. The pre-manufactured pit requires little or no maintenance as compared to earth or limestone constructed pits, which are susceptible to erosion. Portable air curtain units are ideal for areas with high water tables and sandy soils and areas where smoke opacity must be kept to a minimum.

Environmental Controls. The following are recommended environmental controls for all incineration methods:

- A setback of at least 100 feet should be maintained between the debris piles and the incineration area. Keep at least 1,000 feet between the incineration area and the nearest building. Contractors should use fencing and warning signs to keep the public away from the incineration area.
- The fire should be extinguished approximately two hours before anticipated removal of the ash mound. The ash mound should be removed when it reaches 2 feet below the lip of the incineration pit.
- The incineration pit should be either constructed above ground or below ground so that it is less than 8 feet wide and between 9 and 14 feet deep.
- The incineration pits should be constructed with limestone and reinforced with earth anchors or wire mesh to support the weight of the loaders. There should be a 1 foot impervious layer of clay or limestone on the bottom of the pit to seal the ash from the aquifer.
- The ends of the pits should be sealed with dirt or ash to a height of 4 feet.
- A 12 inch dirt seal should be placed on the lip of the incineration pit area to seal the blower nozzle. The nozzle should be 3 to 6 inches from the end of the pit.
- There should be 1 foot high nonflammable warning stops along the edge of the pit's length to prevent the loader from damaging the lip of the incineration pit.
- To prevent explosions, hazardous or contaminated flammable material should not be placed in the pit.
- The airflow should hit the wall of the pit approximately 2 feet below the top edge of the pit opposite the blower and the debris should not break the path of the airflow except during dumping.
- The pit should be no longer than the length of the blower system and should be loaded uniformly along its length.
- Check with appropriate State agencies for State specific requirements.

Smoke. Smoke generated by any of the above incineration methods is often interpreted by the general public as having an environmental impact. Therefore, it is important to also address smoke as part of the air monitoring guidelines. The visual measure of smoke emitted by a burning source is referred to as its "opacity." For disaster situations, the recommended opacity requirements should be set at 15% for 50 minutes out of an hour, not to exceed 40% for the remaining 10 minutes. This allows for additional debris that may be put into the incinerator during that hour. A 30-minute start-up time with a maximum of 40% opacity should be allowed.

Volume Reduction by Grinding and Chipping. Hurricanes, tornadoes and ice storms may present the opportunity to employ large-scale grinding and chipping operations as part of the overall debris volume reduction strategy. Hurricanes can

blow away scarce topsoil in the agricultural areas and cause extensive tree damage and blow-down. This two-fold loss, combined with local climatic conditions, may present an opportunity to reduce clean, woody debris into suitable mulch that can be used to replenish the topsoil and retain soil moisture.

The economic feasibility of grinding and chipping woody debris must be studied carefully. The cost of chipping and grinding is basically equal to that of incineration; however, there are significant differences in volume reduction. Incineration, for example, reduces the volume approximately 95%, leaving only an ash residue for disposal. Chipping and grinding reduces the volume on a 4-to-1 ratio (4 cubic yards is reduced to 1 cubic yard) or by 75%. For chipping and grinding to be feasible, the 25% of volume remaining must have some benefit or use. The ability to use the recycled wood chips as mulch for agricultural purposes or as fuel for industrial heating or in a cogeneration plant helps to tip the economic scale toward chipping and grinding. Because of shallow topsoil conditions in some locations, mulch is a desirable product. In other locations, however, the mulch may become nothing more than a landfill product. The designated debris manager and staff should work closely with local environmental and agricultural groups to determine if there is a market for mulch.

There are numerous makes and models of grinders and chippers on the market. When contracting, the most important item to specify is the size of the mulch. If the grinding operation is strictly for volume reduction, size is not important; however, mulch to be used for agricultural purposes

must be of a certain size and virtually free of paper, plastic and dirt.

Grinders are ideal for use at debris storage and reduction sites because of their high volume reduction capacity. However, there is a need for a large area to hold the resulting mulch. Ingress and egress to the site is also an important consideration. Finally, properly locating the grinders is critical for noise and safety considerations.

The following specifications should provide a mulch product that is suitable for agricultural purposes:

- The average size of wood chips produced should not exceed 4 inches in length and ½ inch in diameter.
- Production output should average 100 to 150 cubic yards per hour when debris is moderately contaminated with plastic and dirt and feeding operations are slow and 200 to 250 cubic yards per hour for relatively clean debris. Note that this is not machine capability; this is contractor output or performance capability.
- Chips or mulch should be stored in piles no higher than 15 feet and located so as not to hinder hauling operations.
- Contaminants are all materials other than wood products and should be held to 10% or less for the mulch to be acceptable.
- Plastics should be eliminated completely. To help eliminate contaminants, root rake loaders should be used to feed or crowd materials to the chipper or grinder. Bucket-loaders tend to scoop up earth, causing excessive wear to the grinder or chipper. Hand laborers should remove contaminants prior to feeding the grinders. Shaker screens should be used when processing stumps with root balls or when large amounts of soil are present

in the woody debris. The separated soil can also be recycled back to the agricultural community.

Brush chippers are ideal for use in residential areas, orchards, or groves. The damaged and uprooted trees present significant problems if they are pushed to the right-of-way to wait for eventual pick-up and transport to storage and reduction sites. In addition, the use of on-site chippers allows the material to be used as mulch in the area where it is chipped, thereby saving the cost of transporting it.

Volume Reduction by Recycling.

Recycling should be considered early in the debris clearance, removal and disposal operation because it may present an opportunity to reduce the overall cost of the operation. Metals, wood and soils are prime candidates for recycling.

Hurricanes and earthquakes may present opportunities to contract large-scale recycling operations and achieve an economic return from some of the prime contractors who exercise their initiative to segregate and recycle debris as it arrives at the storage and reduction sites.

Specialized contractors should be available to bid on disposal of debris by recycling, if it is well sorted. Contracts and monitoring procedures should be developed to ensure that the recycling contractors comply with local, tribal, State and Federal environmental regulations.

Residue that cannot be recycled, such as cloth, plastic, mattresses, rugs and trash, should be shredded to reduce volume before being sent to a landfill for final disposal.

The following materials are suitable for recycling:

Metals. Hurricanes and tornadoes can cause extensive damage to mobile homes, sun porches and green houses. Most of the non-ferrous and ferrous metals are suitable for recycling. Metal maulers and shredders can be used to shred trailer frames, trailer parts, appliances and other metal items. Ferrous and non-ferrous metals are separated using an electromagnet and then sold to metal recycling firms.

Soil. Cleanup operations using large pieces of equipment pick up large amounts of soil. The soil is transported to the temporary storage and reduction sites, where it is combined with other organic materials that will decompose over time. Large amounts of soil can be recovered if the material is put through some type of screen or shaker system. This procedure can produce significant amounts of soil that can either be sold or recycled back into the agricultural community. It is more expensive to transport and pay tipping fees at local landfills than to sort out the heavy dirt before moving the material. Shakers can be used to remove dirt from mixed debris. The dirt can be stored on-site, used as landfill cover material or sold to the agricultural community.

In agricultural areas where chemical fertilizers are used heavily, recovered soil may be too contaminated for use on residential or existing agricultural land. Monitoring and testing the soil may be necessary to ensure that it is not contaminated with chemicals. If the soil is not suitable for any agricultural use and is a risk to the public health, it may be used as cover material at a landfill.

Construction Materials. Construction and demolition waste is material generated in the demolition of disaster damaged structures and facilities. This waste stream includes concrete, asphalt, gypsum, wood waste, glass, red clay bricks, clay roofing tile and asphalt roofing tile. Much of this material can be recycled, if recycling contractors are readily available.

Wood. Clean, woody debris can be ground, chipped, shredded, or removed by timber operations or pulpwood cutters.

Chapter 8

TEMPORARY DEBRIS STORAGE AND REDUCTION SITE ENVIRONMENTAL CONSIDERATIONS

Debris clearance, removal and disposal activities can have significant environmental ramifications. The temporary storage and reduction sites must be set up, operated and closed out properly to minimize environmental harm. This chapter provides guidelines for air quality monitoring and site closeout procedures, including ash, soil and groundwater testing.

Air Quality Monitoring

Following a major natural disaster, emphasis is on rapid debris removal from the public rights-of-way. This results in debris coming into a temporary storage site faster than it can be reduced and ultimately disposed of. As a result, organic matter in debris piles begins to decompose and may create toxic or volatile vapors. Incineration operations may also produce pollutants that impact the air quality of the area. Air quality must be monitored to ensure compliance with local, tribal, State and Federal environmental regulations.

Air quality monitoring should be instituted at all debris storage and reduction sites to check for volatile organic vapors of a petrochemical origin and airborne pollutants caused by incineration operations.

Actions should be taken by the temporary debris storage and reduction site operators to keep pollutants at or below acceptable local, tribal, State and Federal environmental standards. Testing procedures should include readings for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, lead and particulate matter smaller than 2.5 microns.

Flame- and photo-ionization detectors should be used to detect volatile organic vapors. The flame-ionization detector is used to establish parts-per-million at the debris pile. If readings are above acceptable standards, the photo-ionization detector should be used to verify the initial readings.

Incineration site readings should be taken at the edge of the incineration pit and approximately 150 feet away. Scattered locations should be established and checked periodically. Wind direction, temperature and any other pertinent meteorological information should be recorded.

Coordinate with the appropriate local, tribal, State and Federal environmental agency responsible for implementing the Quality Assurance Sampling Plan.

The following situations may negatively affect the air quality at a temporary storage and reduction site:

- The incineration pit is not properly constructed.
- The incineration pit has degraded to the point where key specifications are no longer met.
- A poorly trained operator improperly feeds the pits.
- The material is not properly segregated.

- Prolonged rains may accelerate the decomposition process, thereby causing the emission of volatile organic gases.

Site Closeout Procedures

Each temporary debris storage and reduction site will eventually be emptied of all material and restored to its previous condition and use. The contractor must assure the designated debris manager and staff that all sites are properly restored. Local, tribal, State and Federal government monitors should verify this. Site restoration will go smoothly if baseline data were properly collected and site operation procedures were followed.

Closeout Steps. The key to timely closeout of the sites is the efficient advance scheduling of activities for multiple sites. The basic closeout steps are:

- Remove all debris from the site.
- Conduct an environmental audit or assessment.
- Develop a restoration plan.
- Submit the plan for review and approval by the appropriate environmental agency.
- Execute the plan.
- Get acceptance from the landowner.
- Terminate lease payments.

Potential Problems.

- The length and terms of private property leases can create suspense dates that become very costly to meet and difficult to manage.
- Differences between local, tribal, State and Federal government environmental regulations may cause problems.

- Failure to collect baseline data can result in fraudulent claims for damage to nonexistent structures or the land itself. Videotape recordings and/or photographs should be taken prior to opening a site to prevent fraudulent claims. Background soil and water samples should also be taken before site activities begin to compare with closeout soil and water samples.

Planning Requirements. The following planning requirements should be implemented to closeout a temporary storage and reduction site:

- Coordinate with local, tribal and State officials responsible for construction, real estate, contracting, project management and legal counseling regarding requirements and support for implementation of a site restoration plan.
- Establish a testing and monitoring program for air, ash, soil and groundwater.
- Ensure that the contractors are required to remove all residual debris from temporary sites to approved landfills prior to closure.
- Reference appropriate and applicable environmental regulations.
- Prioritize site closures.
- Schedule closeout activities.
- Develop cost estimates.
- Develop decision criteria for certifying satisfactory closure based on limited baseline information.
- Develop administrative procedures and contractual arrangements for site closeout.
- Designate approving authority to review and evaluate contractor closure activities and progress.

- Retain staff during the closure phase to develop site-specific restoration actions.

Temporary Site Closure Checklist. The following is a recommended temporary site closure checklist. Narrative responses may be required along with other closure documents.

- Site number and location.
- Date closure complete.
- Household hazardous waste removed.
- Contractor equipment and temporary structures removed.
- Contractor petroleum spills cleaned.
- Ash piles removed.
- Comparison of baseline information to conditions after the contractor has vacated the temporary site.
- Appendices.
 - Closure documents.
 - Contracting status reports.
 - Contract.
 - Testing results.
 - Correspondence.
 - Narrative responses.

Ash, Soil and Groundwater Testing

Ash, soil and groundwater need to be tested to determine that no long-term environmental contamination is left on the site. High levels of site activity may require additional testing and contaminated material may need to be disposed of in an approved landfill.

Ash Testing. All ash piles should be tested using the Toxicity Characteristic Leaching Procedure. One composite sample from each separate ash pile should be analyzed. A minimum of ten samples taken from different strata within the pile is appropriate

to develop the composite sample. If unacceptable contamination is not found, ash may be placed in a Class I landfill. If unacceptable levels of contamination are detected, the material should be further evaluated, if appropriate and placed in a hazardous material landfill, as appropriate.

Soil Testing. After the stockpiles are removed from the site, soils should be tested for the presence of volatile hydrocarbon contamination. Samples should be taken immediately below the surface, if it is determined that the contractor spilled hazardous materials, such as oil or diesel fuel, on the site.

The entire incineration site should be inspected for any areas of discoloration, odor, or obvious problems. Such areas should be identified and restored, as necessary.

Groundwater Testing. Runoff from the incineration sites and other debris stockpiled within storage areas have the potential to contaminate the aquifer. Although the probability of contamination is low, consideration should be given to placing ground water monitoring wells around the perimeter of the site, if it is adjacent to an important aquifer. Groundwater should be tested to determine the probable effects of rainfall leaching through either the ash areas or the stockpile areas and be compared to generally accepted water quality standards.

APPENDIX A
USACE HURRICANE DEBRIS ESTIMATING MODEL

U.S. Army Corps of Engineers
Hurricane Debris Estimating Model

Background

- The U.S. Army Corps of Engineers (USACE) Emergency Management staff has developed a modeling methodology designed to forecast potential amounts of hurricane generated debris.
- Based on actual data from Hurricanes Frederic, Hugo and Andrew.
- The estimated quantities produced by the model have a predicted accuracy of $\pm 30\%$.
- The primary factor used by the model is the number of households in a developed urban/suburban area.
- Other factors utilized are:
 - Cubic yards of debris generated per household per storm category.
 - Vegetative cover.
 - Commercial density.
 - Precipitation.
- Household debris includes damage to the house, contents and surrounding shrubs/trees.
- Vegetative cover includes all trees and shrubbery located along public rights-of-way, parks and residential areas.
- Commercial density includes debris generated by damage to businesses and industrial facilities.
- Private contractors will remove the majority of commercial related debris; however, disposal/reduction space is still required.
- Very wet storms will cause ground saturation, increasing tree fall.

Initial Planning Data

- For planning purposes, the worst case scenario should be used for the subject area.
- The most accurate process is to determine the defined areas by using Doppler Radar (National Weather Service Broadcasts) and Geographical Information Systems (GIS).
- Doppler radar will define the storm's intensity and the exact track of the eye of the storm in relation to the affected area.
- Track the storm and plot the eye path and 5-mile wide bands out from the eye to define areas and estimate wind speeds.
- The wind speed of the eye wall normally determines the reported storm category with the outward or 5-mile bands being a lesser category.

APPENDIX A USACE HURRICANE DEBRIS ESTIMATING MODEL

- Track the storm inland until the wind speeds dissipate below hurricane strength.
- Divide outlined areas by storm category.
- Enter coordinates into a GIS database to determine areas and demographic information, such as:
 - Population.
 - Schools.
 - Businesses.

STEP 1—ESTIMATING DEBRIS QUANTITIES

The formula used in this model will generate debris quantity as an absolute value based on a known/estimated population or a debris quantity per square mile based upon population density per square mile.

- Determine population (P) in the affected area.
- For example, 1990 census data for Harrison County, MS, is 165,500.
- $P = 165,500$.
- The assumption of 3 persons per household (H) is used for this model.
- Known/estimated population (P) for a jurisdiction may be used to determine a value for H or $H=P/3$.

Example

A category 4 storm passes through Harrison County, MS. The area is primarily single family dwellings with some apartment complexes, schools, and shopping centers. Vegetation characteristic is heavy because of the proliferation of residential landscape shrubbery and trees throughout the area. The storm is very wet, with rain before and continuing for a few days after the hurricane.

Formula: $Q = H(C)(V)(B)(S)$

$$H = P/3 = 165,500/3 = 55,167 \quad (3 \text{ persons/household})$$

$$C = 50 \quad (\text{Factor for a Category 4 storm})$$

$$V = 1.5 \quad (\text{Multiplier for heavy vegetation})$$

$$B = 1.3 \quad (\text{Multiplier for heavy commercial due to schools/stores/apartments})$$

$$S = 1.3 \quad (\text{Multiplier for wet storm event})$$

Then $Q = 55,167 \times 50 \times 1.5 \times 1.3 \times 1.3 = 6,992,374$ cubic yards of debris or 7 million cy

APPENDIX A USACE HURRICANE DEBRIS ESTIMATING MODEL

The Model Formula: $Q = H(C)(V)(B)(S)$ where:

Q is the quantity of debris in cubic yards.

H is the number of households.

C is the storm category factor in cubic yards.

V is the vegetation characteristic multiplier.

B is the commercial/business/industrial use multiplier.

S is the storm precipitation characteristic multiplier.

C is the storm category factor as shown below. It expresses debris quantity in cubic yards (cy) per household by hurricane category and includes the house and its contents, and land foliage.

HURRICANE CATEGORY	VALUE OF "C" FACTOR
1	2 cy
2	8 cy
3	26 cy
✓4	✓50 cy
5	80 cy

V is the vegetation multiplier as shown below. It acts to increase the quantity of debris by adding vegetation, including shrubbery and trees, on public rights-of-way.

VEGETATIVE COVER	VALUE OF "V" MULTIPLIER
LIGHT	1.1
MEDIUM	1.3
✓HEAVY	✓1.5

B is the multiplier that takes into account areas that are not solely single-family residential, but includes small retail stores, schools, apartments, shopping centers, and light industrial/manufacturing facilities. Built into this multiplier is the offsetting commercial insurance requirement for owner/operator salvage operations.

COMMERCIAL DENSITY	VALUE OF "B" MULTIPLIER
LIGHT	1.0
MEDIUM	1.2
✓HEAVY	✓1.3

APPENDIX A USACE HURRICANE DEBRIS ESTIMATING MODEL

S is the precipitation multiplier that takes into account either a "wet" or "dry" storm event. A "wet" storm for category 3 or greater storms will generate more vegetative debris due to the uprooting of complete trees.

PRECIPITATION CHARACTERISTIC	VALUE OF "S" MULTIPLIER
NONE TO LIGHT	1.0
✓MEDIUM TO HEAVY	✓1.3

NOTE: Steps 2 and 3 of this model can also be applied to other debris generating events once an estimated quantity of debris is established.

STEP 2—DEBRIS STORAGE SITE REQUIREMENTS

- Estimate debris pile stack height of 10-feet.
- 60% usage of land area to provide for roads, safety buffers, burn pits and household hazardous waste areas.

1 acre (ac) = 4,840 square yards (sy)
 10 foot stack height = 3.33 yards(y)
 total volume per acre = 4,840 sy/ac x 3.33 y = 16,117 cy/ac

- From the example above, the acreage required for debris reduction sites is:

$7,000,000 / 16,117 \text{ cy/ac} = 434 \text{ acres}$ (required for debris storage only, no buffers, etc.)

- To provide for roads and buffers, the acreage must be increased by a factor of 1.66.

$434 \text{ ac} \times 1.66 = 720 \text{ acres}$ or, since one square mile (sm) = 640 acres $720\text{ac}/640\text{as/sm}=1.12 \text{ sm.}$

- If you assume a 100 acre storage site can be cycled every 45 to 60 days or one time during the recovery period, then $720/2 = 360 \text{ ac}$ or four 100 acre sites would be required.
- The number of sites varies with:
 - Size.
 - Distance from source.
 - Speed of reduction (mixed debris is slower than clean woody debris).
 - Removal urgency.
- The USACE commonly removes approximately 70% of the total volume generated with local governments, volunteer groups, and private individuals removing the remainder.

If 7 million cy were estimated, the USACE would estimate removing approximately 4.9 million cy of debris.

**APPENDIX A
USACE HURRICANE DEBRIS ESTIMATING MODEL**

STEP 3—CATEGORIES OF DEBRIS

Debris removed will consist of two broad categories:

- Clean wood debris.
- Construction and demolition (C&D) debris.
- The clean debris will come early in the removal process as residents and local governments clear yards and rights-of-way.
- The debris removal mission can be facilitated if debris is segregated as much as possible at the origin along the right-of-way, according to type.
- The public should be informed regarding debris segregation as soon as possible after the storm.
- Time periods should be set for removal, the first 7-10 days clean woody debris only, then followed by other debris, with the metals segregated from non-metals.
- Most common hurricane-generated debris will consist of the following:
 - 30% Clean woody debris
 - 70% Mixed C&D
- Of the 70% mixed C&D:
 - 42% Burnable but requires sorting
 - 5% Soil
 - 15% Metals
 - 38% Landfilled
- Based upon the above, 7,000,000 cy of debris would break down as follows:
 - 2,100,000 cy Clean woody debris
 - 4,900,000 cy Mixed C&D
- Of the 4,900,000 cy of mixed C&D, 2,058,000 cy is burnable but requires sorting, 245,000 cy is soil, 735,000 cy is metals, and 1,862,000 cy is landfilled.
- Burning will produce about 95% volume reduction.
- Chipping and grinding reduce the debris volume on a 4-to-1 ratio (4 cy is reduced to 1 cy) or by 75%.
- The rate of burning is basically equal to the rate of chipping/grinding, about 200 cy/hr. However, chipping requires on-site storage and disposal of the chips/mulch.

APPENDIX B DEBRIS MANAGEMENT PLAN OUTLINE EXAMPLE

The following outline can be used to develop a Debris Management Plan.

DEBRIS MANAGEMENT PLAN

PURPOSE

- To provide policies and guidance to _____ for the removal and disposition of debris caused by a major disaster.
- To facilitate and coordinate the management of debris following a disaster in order to mitigate against any potential threat to the lives, health, safety, and welfare of the impacted citizens, expedite recovery efforts in the impacted area, and address any threat of significant damage to improved public or private property.

SITUATION AND ASSUMPTIONS

SITUATION

- Natural and manmade disasters precipitate a variety of debris that include, but are not limited to, such things as trees, sand, gravel, building construction material, vehicles, personal property, and hazardous materials.
- The quantity and type of debris generated from any particular disaster will be a function of the location and kind of event experienced, as well as its magnitude, duration, and intensity.
- The quantity and type of debris generated, its location, and the size of the area over which it is dispersed will have a direct impact on the type of collection and disposal methods utilized to address the debris problem, associated costs incurred, and how quickly the problem can be addressed.
- In a major or catastrophic disaster, many state agencies and local governments will have difficulty in locating staff, equipment, and funds to devote to debris removal, in the short-term as well as long-term.

ASSUMPTIONS

- A natural disaster that requires the removal of debris from public or private lands and waters could occur at any time.
- The amount of debris resulting from an event or disaster could exceed the local government's ability to dispose of it.
- If the natural disaster requires, the Governor would declare a state of emergency that authorizes the use of State resources to assist in the removal and disposal of debris. In the event Federal resources are required, the Governor would request through FEMA a Presidential Disaster Declaration.
- Private contractors will play a significant role in the debris removal, collection, reduction and disposal process.
- The debris management program implemented by the local government will be based on the waste management approach of reduction, reuse, reclamation, resource recovery, incineration and landfilling.

APPENDIX B DEBRIS MANAGEMENT PLAN OUTLINE EXAMPLE

CONCEPT OF OPERATIONS

Emergency Operations Center Activation

- Define how the County Emergency Management Agency will activate the Emergency Operations Center (EOC).
- Define who will make up the Debris Management Task Force (DMTF) and their specific duties and responsibilities.
- The EOC Director or his designated representative in conjunction with the DMTF will determine the extent of damage and resulting debris and issue appropriate directives to implement this annex.
- Create an appendix that contains a listing of key points of contact.

Estimating the Type and Amount of Debris

- Designate public works department personnel to determine the estimated amount of debris generated as soon as possible.
- Define the estimating methods to be used. One method to estimate debris is to conduct a drive-through "windshield" damage assessment and estimate the amount of debris visually. Another method is an aerial assessment by flying over the area using State Police and/or National Guard helicopters and Civil Air Patrol reconnaissance flights. The damaged area can be assessed either visually or using aerial photography. Once the area has been assessed actions can be taken to implement Phase I debris clearing procedures and institute requests for additional State or Federal assistance.

Site Selection Priorities

- Determine the number of Temporary Debris Storage and Reduction (TDSR) sites and location of these sites for the collection and processing of debris.
- Prioritize which sites will be opened based on the amount of debris estimated.

First Priority: Pre-determined TDSR sites

Second Priority: Public property within the damaged area

Last Priority: Private property

APPENDIX B DEBRIS MANAGEMENT PLAN OUTLINE EXAMPLE

Pre-Designated TDSR sites

- Pre-identified TDSR sites should be identified on county maps.
- Either Solid Waste Authority or Public Works should maintain detailed information pertaining to each of these sites. Designate which agency has responsibility.
- Detailed information should include exact location, size, available ingress and egress routes and results of an environmental assessment and initial data samples.
- Baseline data should include videotapes, photographs, documentation of physical and biological features, and soil and water samplings.
- The list of TDSR sites should be reviewed annually and updated as necessary as part of the normal maintenance plan.

TDSR Site Preparation.

- Identify the preparatory actions that need to be accomplished after a pre-designated TDSR site has been selected.
- Develop a Memorandum of Understanding or a Memorandum of Agreement if required.
- Identify who would be responsible for updating the initial base line data and develop an operation layout to include ingress and egress routes.

Existing Landfills.

- Identify location of county and private landfills.
- Identify any restrictions, limitations or tipping fees.

DEBRIS REMOVAL

General

- Hurricanes and other natural disasters can generate unprecedented amounts of debris in a few hours or a few minutes. The debris may be equally heavy in both urban and rural areas depending on the magnitude of the tree blow-down and associated structural damage such as homes, businesses, utilities and signs. This section provides guidelines on debris removal issues, including emergency roadway clearance, public rights-of-way removal, mobile home park removal, private property removal, navigation hazard removal, and Household Hazardous Waste (HHW) removal.
- Debris removal, regardless of source, becomes a high priority following a disaster. Debris management strategy for a large-scale debris removal operation divides the operation into two phases.
- Phase I consists of the clearance of the debris that hinders immediate life saving actions being taken within the disaster area and the clearance of that debris which poses an immediate threat to public health and safety.
- Phase II operations consist of the removal and disposal of that debris which is determined necessary to ensure the orderly recovery of the community and to eliminate less immediate threats to public health and safety.

APPENDIX B DEBRIS MANAGEMENT PLAN OUTLINE EXAMPLE

Emergency Roadway Debris Removal (Phase I)

- Identify critical routes that are essential to emergency operations.
- Define how efforts will be prioritized between local agencies.
- Identifying areas that State and Federal assistance can target.
- Define what actions take place during Phase I.
- Example: Roadway debris removal involves the opening of arterial roads and collector streets by moving debris to the shoulders of the road. There is no attempt to physically remove or dispose of the debris, only to clear key access routes to expedite the:
 - Movement of emergency vehicles,
 - Law enforcement,
 - Resumption of critical services and,
 - Assessment of damage to key public facilities and utilities such as schools, hospitals, government buildings, and municipal owned utilities.
- Define the type of debris that may be encountered such as tree blow-down and broken limbs; yard trash such as outdoor furniture, trash cans, utility poles, power, telephone and cable TV lines, transformers and other electrical devices; building debris such as roofs, sheds and signs; and personal property such as clothing, appliances, boats, cars, trucks and trailers.
- Define the priority to open access to other critical community facilities, such as municipal buildings, water treatment plants, wastewater treatment plants, power generation units, and airports.
- The requirement for government services will be increased drastically following a major natural disaster. Develop procedures to determine the damage done to utility systems. Activities involving these facilities should be closely coordinated with their owners and/or operators.

Local, Tribal, State and Federal Assistance

- Identify local, tribal, State and Federal government assets that may be available such as:
 - Municipal workers and equipment
 - Local and State Department of Transportation (DOT) workers and equipment
 - National Guard
 - Local contractors
 - U.S. Department of Agriculture (USDA) Forest Service chain saw crews
 - Local U.S. Army Corps of Engineers (USACE) workers and equipment

Supervision and Special Considerations

- Immediate debris clearing (Phase I) actions should be supervised by local public works or DOT personnel using all available resources. Requests for additional assistance and resources should be made to the State Emergency Operations Center (EOC). Requests for Federal assistance will be requested through the State Coordinating Officer (SCO) to the FEMA Federal Coordinating Officer (FCO).
- Special crews equipped with chain saws may be required to cut up downed trees. This activity is hazardous, and common sense safety considerations are necessary to reduce the chance of injury and possible loss of life. When live electric lines are involved, work crews should coordinate with local utility companies to have power lines deenergized for safety reasons.

APPENDIX B DEBRIS MANAGEMENT PLAN OUTLINE EXAMPLE

- Front-end loaders and dozers should be equipped with protective cabs. Driveway cutouts, fire hydrants, valves, and stormwater inlets should be left unobstructed. All personnel should wear protective gear, such as hard hats, gloves, goggles, and safety shoes.
- The USDA Forest Service and other State and Federal land management agencies are equipped for fast responses to tornadoes, and hurricanes. Assistance would be requested through the State SCO to the FCO according to standard procedures.

Public Rights-of-Way Debris Removal and Disposal (Phase II)

- Debris is simply pushed to the shoulders of the roadway during the emergency opening (Phase I) of key routes. There is little time or concern for sorting debris at that time. The objective is to provide for the safe movement of emergency and support vehicles into and out of the disaster area. As removal operations progress, the initial roadside piles of debris become the dumping location for additional yard waste and other storm-generated debris, such as construction material, personal property, trash, white metals such as refrigerators, washers, dryers and hot water heaters, roofing and even household, commercial, and agricultural chemicals.
- Define how the DMTF will coordinate debris removal operations.
- Define how local and State government force account employees will transition from Phase I to Phase II operations.
- Determine if Mutual Aid agreements exist.
- Determine if local contractors will be needed to assist in Phase II operations.
- Determine if additional State and/or Federal assistance will be required.
- Develop local field inspection teams. The teams become the “eyes and ears” for the DMTF.
- Coordinate through local agencies to establish a contracted work force capable of expeditious removal of the debris.
- Develop an independent team using the local and State personnel to monitor the removal activities. This team becomes the debris manager’s “eyes and ears” in the field.
- Conduct daily update briefings with key debris managers. Ensure that all major debris removal and disposal actions are reviewed and approved by the local debris manager.
- Ensure that a representative of the DMTF attends all briefings to resolve any coordination problems between State and Federal debris removal efforts and local debris removal and disposal efforts.
- Coordinate with local, tribal and State DOT and law enforcement authorities to ensure that traffic control measures expedite debris removal activities.
- Establish a proactive information management plan. Emphasis should be placed on actions that the public can perform to expedite the cleanup process, such as separating burnable and nonburnable debris; segregating HHW; placing debris at the curbside; keeping debris piles away from fire hydrants and valves, reporting locations of illegal dump sites or incidents of illegal dumping; and segregating recyclable materials.

APPENDIX B DEBRIS MANAGEMENT PLAN OUTLINE EXAMPLE

- The public should be kept informed of debris pick-up schedules, disposal methods and ongoing actions to comply with State and Federal Environmental Protection Agency (EPA) regulations, disposal procedures for self-help and independent contractors, and restrictions and penalties for creating illegal dumps. The Public Information Officer (PIO) should be prepared to respond to questions pertaining to debris removal from the press and local residents. The following questions are likely to be asked:
 - *What is the pick-up system?*
 - *When will the contractor be in my area?*
 - *Who are the contractors and how can I contact them?*
 - *Should I separate the different debris materials and how?*
 - *How do I handle Household Hazardous Waste?*
 - *What if I am elderly?*

Private Property Debris Removal

- Dangerous structures should be the responsibility of the owner or local government to demolish to protect the health and safety of adjacent residents. However, experience has shown that unsafe structures will remain because of the lack of insurance, absentee landlords, or under-staffed and under-equipped local governments. Consequently, demolition of these structures may become the responsibility of DMTF.
- Develop procedures to ensure complete cooperation with numerous local and State government officials to include the following: real estate offices, local law and/or code enforcement agencies, State historic preservation office, qualified contractors to remove HHW, asbestos, lead-based paint, and field teams to photograph the sites before and after demolition.
- Include a copy of Demolition of Private Property checklist
- Include copies of sample ordinances that can be activated when a "state of emergency" is implemented, eliminating any unnecessary waiting period.
- The most significant building demolition problem will be that local governments do not have proper ordinances in effect to handle emergency condemnation procedures. Moreover, structures will be misidentified or have people or belongings in them when the demolition crews arrive necessitating removal by local law enforcement. Close coordination is essential, and it is recommended that at least one FEMA staff person be on site to work directly with the local government staff to ensure that all required legal actions are taken.

Household Hazardous Wastes Removal

- HHW may be generated as a result of a major natural disaster. HHW may consist of common household chemicals, propane tanks, oxygen bottles, batteries, and industrial and agricultural chemicals. These items will be mixed into the debris stream and will require close attention throughout the debris removal and disposal process.
- Consider HHW response teams be assigned and respond ahead of any removal efforts. Consider preparing draft emergency contracts with generic scopes of work. Coordinate with regulatory agencies concerning possible regulatory waivers and other emergency response requirements.
- Arrange for salvageable hazardous materials to be collected and segregated based on their intended use. Properly trained personnel or emergency response HHW contractors should accomplish removal of hazardous waste. Coordinate with regulatory agencies to ensure cleanup actions meet local, tribal, State, and Federal regulations.

APPENDIX B DEBRIS MANAGEMENT PLAN OUTLINE EXAMPLE

- Complete HHW identification and segregation before building demolition begins. Qualified contractors should remove HHW debris. Regular demolition contractors can remove uncontaminated debris.
- A separate staging area for HHW materials, contaminated soils, and contaminated debris should be established at each TDSR site. The staging area should be lined with an impermeable material and bermed to prevent contamination of the groundwater and surrounding area. Materials should be removed and disposed of using qualified HHW personnel/contractors in accordance with local, tribal, State and Federal regulations.

TEMPORARY DEBRIS STORAGE AND REDUCTION SITES

- Once the debris is removed from the damaged area, it will be taken to temporary debris storage and reduction sites.
- Removal and disposal actions should be handled at the lowest level possible based on the magnitude of the event. It follows the normal chain of responsibility, i.e., local level, county level, State level, and when resources are exceeded at each level of responsibility, Federal assistance may be requested according to established procedures. Because of the limited debris removal and reduction resources, the establishment and operation of TDSR sites are generally accomplished by contracts.
- Emphasis is placed on local government responsibilities for developing debris disposal contracts. Local, tribal, county and/or State governments may be responsible for developing and implementing these contracts for debris removal and disposal under most disaster conditions.
- The DMTF should review all debris disposal contracts. There should be a formal means to monitor contractor performance to ensure that funds are being used wisely.
- **Site Preparation.** The topography and soil conditions should be evaluated to determine best site layout. Consider ways to make remediation and restoration easier when planning site preparation.
- **Site Operations.** Site preparation and operation are usually left up to the contractor, but guidance can help avoid problems with the ultimate closeout.
- Establish lined temporary storage areas for ash, HHW, fuels, and other materials that can contaminate soils, groundwater and surface water. Set up plastic liners, when possible, under stationary equipment such as generators and mobile lighting plants. Include this as a requirement of the contract scope of work.
- If the site is also an equipment staging area, monitor fueling and equipment repair to prevent and mitigate spills such as petroleum products and hydraulic fluids. Include clauses in contract scope of work to require immediate cleanup by the contractor.
- Be aware of and mitigate things that will irritate the neighbors such as:
 - smoke** - proper construction and operation of incineration pits. Don't overload air curtains.
 - dust** - employ water trucks.
 - noise** - construct perimeter berms.
 - traffic** - proper layout of ingress and egress procedures to help traffic flow.

APPENDIX B DEBRIS MANAGEMENT PLAN OUTLINE EXAMPLE

DEBRIS REDUCTION METHODS

Volume Reduction by Incineration

- There are several incineration methods available including **uncontrolled open incineration, controlled open incineration, air curtain pit incineration, and refractor lined pit incineration**. The DMTF should consider each incineration method before selection and implementation as part of the overall volume reduction strategy.
- **Uncontrolled Open Incineration:** Uncontrolled open incineration is the least desirable method of volume reduction because it lacks environmental control. However, in the haste to make progress, the Department of Natural Resources may issue waivers to allow this method of reduction early in a disaster.
- **Controlled Open Incineration:** Controlled open incineration is a cost-effective method for reducing clean woody debris in rural areas. This option must be terminated if mixed debris such as treated lumber, poles, nails, bolts, tin and aluminum sheeting enters the waste flow. Clean woody tree debris presents little environmental damage and the resulting ash can be used as a soil additive by the local agricultural community. Department of Agriculture and county agricultural extension personnel should be consulted to determine if and how the resulting ash can be recycled as a soil additive. Responsible agencies and telephone numbers should be provided.
- **Air Curtain Pit Incineration:** Air curtain pit incineration offers an effective means to expedite the volume reduction process by substantially reducing the environmental concerns caused by open incineration. Specifications and statements of work should be developed to expedite the proper use of the systems, because experience has shown that many contractors and subcontractors are not fully knowledgeable of the system operating parameters.
- **Refractor Lined Pit Incineration:** Pre-manufactured refractory lined pit burners are an alternative to air curtain open pit incineration. The units can be erected on site in a minimal amount of time. Some are portable and others must be built in-place. The units are especially suited for locations with high water tables, sandy soil, or where materials are not available to build above ground pits. The engineered features designed into the units allow for a reduction rate of approximately 95 % with a minimum of air pollution. The air curtain traps smoke and small particles and recirculates them to enhance combustion that reaches over 2,500 degrees Fahrenheit. Manufacturers claim that combustion rates of about 25 tons per hour are achievable while still meeting emission standards.
- Local officials, environmental groups, and local citizens should be thoroughly briefed on the type of incineration method being used, how the systems work, environmental standards, health issues, and the risk associated with each type of incineration. PIOs should take the initiative to keep the public informed. A proactive public information strategy to include press releases and media broadcasts should be included in any operation that envisions incineration as a primary means of volume reduction.

APPENDIX B DEBRIS MANAGEMENT PLAN OUTLINE EXAMPLE

Environmental Controls

Environmental controls are essential for all incineration methods, and the following should be considered:

- A setback of at least 1,000 feet should be maintained between the debris piles and the incineration area. Keep at least 1,000 feet between the incineration area and the nearest building. Contractors should use fencing and warning signs to keep the public away from the incineration area.
- The fire should be extinguished approximately two hours before anticipated removal of the ash mound. The ash mound should be removed when it reaches 2 feet below the lip of the incineration pit.
- The incineration area should be placed in an above ground or below ground pit that is no wider than 8 feet and between 9 and 14 feet deep.
- The incineration pits should be constructed with limestone and reinforced with earth anchors or wire mesh to support the weight of the loaders. There should be a 1-foot impervious layer of clay or limestone on the bottom of the pit to seal the ash from the aquifer.
- The ends of the pits should be sealed with dirt or ash to a height of 4 feet.
- A 12-inch dirt seal should be placed on the lip of the incineration pit area to seal the blower nozzle. The nozzle should be 3 to 6 inches from the end of the pit.
- There should be 1-foot high, unburnable warning stops along the edge of the pit's length to prevent the loader from damaging the lip of the incineration pit.
- Hazardous or contaminated ignitable material should not be placed in the pit. This is to prevent contained explosions.
- The airflow should hit the wall of the pit about 2 feet below the top edge of the pit, and the debris should not break the path of the airflow except during dumping.
- The pit should be no longer than the length of the blower system, and the pit should be loaded uniformly along the length.

Volume Reduction by Grinding and Chipping

- Hurricanes and tornadoes may present the opportunity to employ large-scale grinding and chipping operations as part of the overall debris volume reduction strategy. Hurricanes can blow away scarce topsoil in the agricultural areas and cause extensive tree damage and blow-down. This two-fold loss, combined with local climatic conditions, may present an excellent opportunity to reduce clean woody debris into suitable mulch that can be used to replenish the topsoil and retain soil moisture.
- Grinding and chipping woody debris is a viable reduction method. Although more expensive than incineration, grinding and chipping is more environmentally friendly, and the resulting product, mulch, can be recycled. In some locations the mulch will be a desirable product because of shallow topsoil conditions. In other locations it may become a landfill product.
- Grinding and chipping woody debris reduces the large amounts of tree blow-down. Chipping operations are suitable in urban areas where streets are narrow or in groves of trees where it is cheaper to reduce the woody vegetation to mulch than to move it to a central grinding site and then returning it to the affected area. This reduces the costs associated with double handling.

APPENDIX B DEBRIS MANAGEMENT PLAN OUTLINE EXAMPLE

- The DMTF should work closely with local environmental and agricultural groups to determine if there is a market for mulch. Another source for disposal of ground woody debris may be as an alternative fuel for industrial heating or for use in a cogeneration plant.
- There are numerous makes and models of grinders and chippers on the market. When contracting, the most important item to specify is the size of the mulch. If the grinding operation is strictly for volume reduction, size is not important. However, mulch to be used for agricultural purposes must be of a certain size and be virtually free of paper, plastic and dirt.
- The average size of wood chips produced should not exceed 4 inches in length and ½ inch in diameter. Production output should average 100 to 150 cubic yards per hour when debris is moderately contaminated, which slows feeding operations, and 200 to 250 cubic yards per hour for relatively clean debris. Note that this is not machine capability; this is contractor output or performance capability.
- Contaminants are all materials other than wood products and should be held to 10% or less for the mulch to be acceptable. Plastics are a big problem and should be eliminated completely. To help eliminate contaminants, root rake loaders should be used to feed or crowd materials to the grapplers. Bucket-loaders tend to scoop up earth, which is a contaminant and causes excessive wear on the grinder or chipper. Hand laborers should remove contaminants prior to feeding the grinders. Shaker screens should be used when processing stumps with root balls or when large amounts of soil are present in the woody debris.
- Chippers are ideal for use in residential areas, orchards, or groves. The number of damaged and uprooted trees presents significant problems if they are pushed to the rights-of-way for eventual pick-up and transport to staging and reduction sites. The costs associated with chipping are reasonable because the material does not need to be transported twice.
- Grinders are ideal for use at debris staging and reduction sites because of their high volume reduction capacity. Locating the grinders is critical from a noise and safety point-of-view. Moreover, there is a need for a large area to hold the woody debris and an area to hold the resulting mulch. Ingress and egress to the site is also an important consideration.

Volume Reduction by Recycling

- Recycling reduces mixed debris volume before it is hauled to a landfill. Recycling is attractive and strongly supported by _____ because there may be an economic value to the recovered material if it can be sorted and sold. A portable Materials Recovery Facility could be set up at the site. Metals, wood, and soils are prime candidates for recycling. The major drawback is the potential environmental impact of the recycling operation. In areas where there is a large usage of chemical agricultural fertilizer, the recovered soil may be too contaminated for use on residential or existing agricultural land.
- Hurricanes may present opportunities to contract out large-scale recycling operations and to achieve an economic return from some of the prime contractors who exercise their initiative to segregate and recycle debris as it arrives at the staging and reduction sites. Recycling has significant drawbacks if contracts are not properly written and closely monitored.

APPENDIX B DEBRIS MANAGEMENT PLAN OUTLINE EXAMPLE

- Specialized contractors should be available to bid on disposal of debris by recycling, if it is well sorted. Contracts and monitoring procedures should be developed to ensure that the recyclers comply with local, tribal, State and Federal environmental regulations.
- Recycling should be considered early in the debris removal and disposal operation because it may present an opportunity to reduce the overall cost of the operation. The following materials are suitable for recycling.
- **Metals.** Hurricanes and tornadoes may cause extensive damage to mobile homes, sun porches, and green houses. Most of the metals are non-ferrous and suitable for recycling. Trailer frames and other ferrous metals are also suitable for recycling. Metals can be separated using an electromagnet. Metals that have been processed for recycling can be sold to metal recycling firms.
- **Soil.** Cleanup operations using large pieces of equipment pick up large amounts of soil. The soil is transported to the staging and reduction sites where it is combined with other organic materials that will decompose over time. Large amounts of soil can be recovered if the material is put through some type of screen or shaker system. This procedure can produce significant amounts of soil that can either be sold or recycled back into the agricultural community. This soil could also be used at local landfills for cover. It is more expensive to transport and pay tipping fees at local landfills than to sort out the heavy dirt before moving the material. Monitoring and testing of the soil may be necessary to ensure that it is not contaminated with chemicals.
- **Wood.** Woody debris can be either ground or chipped into mulch.
- **Construction Material.** Concrete block and other building materials can be ground and used for other purposes if there is a ready market. Construction materials and wood can also be shred to reduce volume. This construction material could also be used at local landfills for cover.
- **Residue Material.** Residue material that cannot be recycled, such as cloth, rugs, and trash, can be sent to a landfill for final disposal.

TDSR SITE CLOSE-OUT PROCEDURES

- Each TDSR site will eventually be emptied of all material and be restored to its previous condition and use. The contractor should be required to remove and dispose of all mixed debris, construction and demolition (C&D) debris, and debris residue to approved landfills. Quality assurance inspectors should monitor all closeout and disposal activities to ensure that contractors complied with contract specifications. Additional measures will be necessary to meet local, tribal, State and Federal environmental requirements because of the nature of the staging and reduction operation.
- The contractor must assure the DMTF that all sites are properly remediated. There will be significant costs associated with this operation as well as close scrutiny by the local press and environmental groups. Site remediation will go smoothly if baseline data collection and site operation procedures are followed.
- The basic close-out steps are to remove all debris from the site; conduct an environmental audit or assessment; develop a remediation or restoration plan approved by the appropriate environmental agency; execute the plan; get acceptance from the landowner; and terminate lease payments, if applicable. The key to timely closeout of the mission is the efficient scheduling of the above activities for multiple sites. Therefore, critical path scheduling of all the activities as far in advance as possible will minimize down time between steps.
- **Environmental Restoration.** Stockpiled debris will be a mix of woody vegetation, construction material, household items, and yard waste. HHW and medical wastes should be segregated and removed prior to stockpiling. Activities at the debris disposal sites will include anyone or a combination of the following activities: stockpiling, sorting, recycling, incineration, grinding, and

APPENDIX B DEBRIS MANAGEMENT PLAN OUTLINE EXAMPLE

chipping. Incineration is done in air curtain pits and generally only woody debris is incinerated; however, the efficiency of the incineration and the quality of incineration material is highly variable. Contamination may occur from petroleum spills at staging and reduction sites or runoff from the debris piles, incineration sites, and ash piles.

- **Site Remediation.** During the debris removal process and after the material has been removed from each of the debris sites, environmental monitoring will be needed to close each of the sites. This is to ensure that no long-term environmental contamination is left on the site. The monitoring should be done on three different media: ash, soil, and groundwater.
- The monitoring of the ash should consist of chemical testing to determine the suitability of the material for landfilling.
- Monitoring of the soils should be by portable methods to determine if any of the soils are contaminated by volatile hydrocarbons. The contractors may do this if it is determined that hazardous material, such as oil or diesel fuel was spilled on the site. This phase of the monitoring should be done after the stockpiles are removed from the site.
- The monitoring of the groundwater should be done on selected sites to determine the probable effects of rainfall leaching through either the ash areas or the stockpile areas.
- Consider the following requirements to closeout a temporary staging and reduction site(s).
 - Coordinate with local and State officials responsible for construction, real estate, contracting, project management, and legal counsel regarding requirements and support for implementation of a site remediation plan.
 - Establish a testing and monitoring program. The contractor should be responsible for environmental restoration of both public and leased sites. Contractors will also be required to remove all debris from sites for final disposal at landfills prior to closure.
 - Reference appropriate and applicable environmental regulations.
 - Prioritize site closures.
 - Schedule closeout activities.
 - Determine separate protocols for air, water and soil testing.
 - Develop cost estimates.
 - Develop decision criteria for certifying satisfactory closure based on limited baseline information.
 - Develop administrative procedures and contractual arrangements for closure phase.
 - Inform local, tribal and State environmental agencies regarding acceptability of program and established requirements.
 - Designate approving authority to review and evaluate contractor closure activities and progress.
 - Retain staff during closure phase to develop site-specific remediation for sites, as needed, based on information obtained from the closure checklist.

ORGANIZATION AND RESPONSIBILITIES

Local Government Agencies and Departments

- Identify each government agency or department that has debris clearing, removal or disposal actions.
- Define their responsibilities in detail.

Supporting Agencies

- Identify each government agency or department that has debris clearing, removal or disposal actions.
- Define their responsibilities in detail.

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ADMINISTRATION AND LOGISTICS

- All agencies will document personnel and material resources used to comply with this annex. Documentation will be used to support any Federal assistance that may be requested or required.
- Requests for support and/or assistance will be upchanneled from the local level to the county level EOC and then to the State EOC. Requests for Federal assistance will be made by the State EOC through established procedures, as outlined in the Federal Response Plan.
- All agencies will ensure 24-hour staffing capability during implementation of this annex, if the emergency or disaster requires.
- Define who will be responsible to initiate an annual update of this annex. It will be the responsibility of each tasked agency to update its respective portion of the annex and ensure any limitations and shortfalls are identified and documented, and work-around procedures developed, if necessary.

AUTHORITIES AND REFERENCES

- Develop a listing of authorities and references identified in this annex.

APPENDICES

- Develop a listing of appropriate appendices that support this annex.

APPENDIX C LOCAL DEBRIS MANAGEMENT PLAN STRATEGY

The City of Virginia Beach, VA, developed this local Debris Management Plan Strategy

The Virginia Beach Plan for Hurricane Response Preparedness and Pre-positioned Contracts for Disaster Response and Recovery

Introduction

The City of Virginia Beach, Virginia, is a mid-Atlantic coastal community located within the Atlantic storm track. As such, the City faces the potentially devastating effects of severe nor'easters and hurricanes as its most likely natural disaster event. The City covers 250 square miles of urban, suburban and rural land located along the southeastern shore of Virginia at the mouth of the Chesapeake Bay. The City is home to 430,000 citizens.

The City of Virginia Beach has experienced only one storm event in the past 20 years that has generated any measure of debris. Hurricane Gloria passed by Virginia Beach in 1985 with wind speeds of 85 miles per hour. The eye of the storm did not make landfall in the City, staying 60 miles offshore. Rainfall averaged 5 to 6 inches across the region. The resultant debris generated consisted almost entirely of unprocessed tree canopy and shrub vegetation or clean woody debris. This debris was located throughout the City with concentrations in heavily wooded neighborhoods, as expected. There was little, if any, damage to structures.

The City responded by assigning employees and equipment from several departments to remove and dispose of debris. Approximately 350 employees and their normally used equipment were able to remove approximately 28,000 cubic yards of debris that citizens brought to the edge of the right-of-way in front of their homes. Debris removal operations were completed within ten days following the storm. The normally assigned duties of these crews were suspended during cleanup operations. All debris was disposed of at the City landfill.

The Department of Public Works has now developed a debris management program for the volumes and types of debris expected to be generated by natural disasters, such as hurricanes and severe Nor'easter. In addition to managing the removal of storm generated debris, the Department must also be prepared to conduct debris estimation and damage assessments, with particular emphasis on rapid response, and to make those temporary repairs and permanent restoration of the infrastructure that provide lifeline support. Contracts to support these needs are included in the program as well. This program is founded upon the concept of strategic pre-positioning of resources necessary for the conduct of timely and coordinated actions as are expected to be required.

This plan is purposely written in general terms in recognition of each possible event's individual type, location, and severity of damage. It is designed for response to minor storm events as well as the all-hands-required major hurricane.

Hurricanes begin to generate large volumes of debris when wind speeds exceed local building code requirements. This is generally in the range of 100 to 110 miles per hour (mph). This coincides with the wind speed recognized as the point of demarcation (110 mph) between Category 2 and Category 3 (Saffir-Simpson Scale) hurricanes. Wind speeds below 110 mph generally cause damage primarily to shrubbery and tree foliage, with some trees blown down. Unanchored mobile homes and poorly constructed signs are

APPENDIX C LOCAL DEBRIS MANAGEMENT PLAN STRATEGY

damaged. No major damage is caused to buildings. Minor volumes (relatively speaking) of debris are generated.

When wind speeds exceed 110 mph, foliage is torn from trees, large trees are blown down, and structural damage to virtually every building in the path of the storm begins to be seen. Further destruction of buildings continues as wind speeds escalate. Large volumes of debris, of every type, are generated.

For Department of Public Works response and recovery operations planning purposes, nor-easters, unless severe, and Category 1 and minor to moderate Category 2 hurricanes are deemed to be minor storm events and expected only to generate minor volumes of clean woody debris. Major storm events that are expected to generate large volumes of debris include severe nor-easters and strong Category 2 and above hurricanes. Presented herein are the pre-storm postures, and post-storm response actions, which the Department will execute for minor storm events and major storm events.

Hurricane Generated Debris Volume Estimates

For the sole purpose of design reference for the disaster debris management program, the U.S. Army Corps of Engineers Storm Generated Debris Model was utilized to approximate volumes of debris associated with the various categories of hurricane and their associated wind speeds. The results of the model shown below assume each storm strikes the City with equal intensity and severity of damage across the entire geographic boundary.

	Total Debris Volume	Clean Woody (30%)	Burnable C&D (30%)	Soil (2%)	Metals (10%)	Landfill (28%)
Category 1 74 - 95 MPH						
Dry	0.52					
Wet	0.67					
Category 2 96 - 110 MPH						
Dry	2.06					
Wet	2.68					
Category 3 111 - 130 MPH						
Dry	6.71	2.01	2.01	0.14	0.67	1.88
Wet	8.72	2.62	2.62	0.17	0.87	2.44
Category 4 131 - 155 MPH						
Dry	12.90	3.87	3.87	0.26	1.29	3.61
Wet	16.77	5.03	5.03	0.33	1.68	4.70
Category 5 greater than 155 MPH						
Dry	20.64	6.19	6.19	0.42	2.06	5.78
Wet	26.83	8.05	8.05	0.54	2.68	7.51

All debris volume approximations are in millions of cubic yards.

The percentages of the total debris volume that each type of debris listed is expected to comprise are historical in nature and taken directly from the U. S. Army Corps of Engineers Storm Generated Debris

APPENDIX C LOCAL DEBRIS MANAGEMENT PLAN STRATEGY

Model. This model is noted to have plus or minus 30% accuracy. There is no breakdown of quantities estimated for total debris volumes for Category 1 and Category 2 hurricanes. These storms historically only generate clean woody debris. These debris volume approximations are provided for general reference only and are not intended to obligate the City in any way.

Design Storm

For the sole purpose of design reference for the disaster debris management program, the Department of Public Works / Operations Group has selected a Category 4 AWet hurricane as the design storm. The volume of debris expected to be generated by this storm making landfall with equal intensity all across the City is 16.77 million cubic yards. This estimated debris volume was selected only for use in determining the land area requirements for Temporary Debris Storage and Reduction (TDSR) sites, explained in more detail later.

Minor Storm Events

Nor'easters, Category 1 and Minor to Moderate Category 2 Hurricanes
Wind Speeds to 100 - 110 mph

For those Nor'easters and Category 1 and minor to moderate Category 2 hurricanes with wind speeds forecast between 74 and approximately 100-110 miles per hour, significant damage is limited to trees and vegetation and mobile homes. Most structures will have only minor door and window damage. No major damage to buildings is expected with wind speeds in this range. Some streets will be blocked with fallen trees and canopy vegetation.

The City will respond to these minor storm events by assigning as many as 600 employees and their normally used equipment from several departments to the task. Normally assigned duties of these crews will be suspended during cleanup operations. It is expected that City crews can remove and dispose of approximately 50,000 cubic yards of clean woody debris within a two to three week period. Crews will be placed on alert and be prepared to respond as planned immediately following the event. The Department of Public Works / Operations Group will coordinate debris removal operations, with assistance from the Department of Public Utilities Operations and Maintenance Division and the Department of General Services Landscape Services Division. Disposal of debris will be at the City landfill. Public Works will contract with a local tree service or clearing and grubbing firm to reduce this debris through chipping, grinding, or mulching at sites to be selected, dependent upon local volume concentrations. Mulch will be made available for free pick up by citizens to reduce the impact of disposal on the City landfill.

City crews will respond from their normal place of work during daylight hours. Debris removal operations will be confined to normal workdays, with Saturday collection as local conditions may dictate. Citizens will be advised of the collection schedules via pre-arranged public service announcements made through local newspaper, television, and radio media. Temporary drop-off sites for citizen delivery of clean woody debris will be established at appropriate sites across the City for several weeks following the event. These sites will operate with evening and weekend hours in support of citizen cleanup and delivery.

APPENDIX C LOCAL DEBRIS MANAGEMENT PLAN STRATEGY

For volumes of debris estimated between 50,000 cubic yards and approximately 500,000 cubic yards, the assistance of contractors engaged by Public Works in the annual maintenance and construction of the infrastructure would be called upon (herein after referred to as Annual Maintenance Construction Contracts). The Department of Public Works currently operates approximately fifteen such contracts each year. These contracts are designed for annual infrastructure maintenance activities and include specific provisions for the suspension of currently assigned work and for the contractor resources to be brought to the aid of the City in time of emergency or disaster response. Nearly all of these contractors are locally based. Reduction and disposal operations, similar to those noted above, will take place.

It is envisioned that as much as 500,000 cubic yards of debris may be effectively managed by City crews and Annual Maintenance Construction Contract resources. Cleanup operations may take one month to six weeks to complete, with citizens advised to bring debris to the edge of the right-of-way in front of their homes for collection.

Major Storm Events

Severe Nor'easters, and strong Category 2 and above Hurricanes
Wind speeds above 100 - 110 mph

As a strong Category 2 or greater hurricane, with wind speeds forecast in excess of 100 mph, approaches the City, the benefits of strategic pre-positioning of City crews and equipment and implementation of disaster response contracts will be realized.

City crews will move to pre-position in each Hurricane Damage Control Zone at neighborhood recreation centers, the basement of the judicial center, and the Public Works / Operations Group command center beginning at least 24 hours in advance of landfall of the storm. City crews will be allowed time to secure their homes, make all necessary preparations for their families (to include moving them to City shelters close to the pre-positioning sites) and report to their respective pre-positioning site with all personal supplies necessary for three to five days time. Each pre-positioning site is designed to become an independent operation engaged in the emergency clearing of debris from primary highways immediately following the storm. City disaster response personnel will be fed at a school nearby each pre-positioning site, through advance coordination with the Virginia Beach Public Schools.

The City of Virginia Beach has been divided into four (4) distinct Hurricane Damage Control Zones. Zone boundaries are marked by readily identifiable geographic features, such as waterways and six and eight lane highways, that are expected to survive even the Category 4 hurricane design storm conditions. Each Damage Control Zone has two Zone Captains assigned to facilitate 24 hour per day, 7 day per week clearing operations. Each Zone Captain will be independently responsible for all assignments within his/her Zone. Each Zone is subdivided into Sections for debris removal operations performance monitoring purposes.

These crews will immediately begin to clear a minimum of one lane of traffic in each direction on all primary roadways in the City. The first priority of roads to be cleared are those primary streets and highways that provide for evacuation and/or access to hospitals, shelters, police, fire and rescue stations, and other facilities providing vital public services. The second priority of streets and highways to be cleared of debris are those that provide access to components of the public and private utility systems that are vital to the restoration of essential utility services, such as electrical power stations and substations, municipal potable water and sanitary sewer pumping stations, and communications stations and towers. The third priority of roadways to be cleared is collector streets and other major highways. Next in order of priority are all residential streets and access ways.

APPENDIX C LOCAL DEBRIS MANAGEMENT PLAN STRATEGY

No debris is intended to be removed during these initial emergency road-clearing operations. Rather, debris is to be pushed to the side of the roadway that will allow for a minimum of one lane of traffic in each direction and not create conflict with future utility restoration efforts by others.

In addition to the pre-positioned City crews and equipment, the Department of Public Works will issue notices to proceed to each of the Time and Material Contracts for Debris Clearing that it holds with local area contractors for disaster response. These contracts are executed and in place and bring the full complement, as available, of each of these contractors to the emergency road clearing operations.

Each of these contractors engaged via the Time and Material Contracts for Debris Clearing has been given an initial route for clearing and is directed to respond with all due haste and personnel and equipment available. This pre-positioning of initial assignments is designed for immediate response upon mobilization by the contractor, without need for further coordination following the disaster event, a time during which normal lines of communication are expected to be severely disrupted. Department of Public Works contract inspection staff have also been made aware of these initial route assignments for performance monitoring purposes. This ability to respond rapidly is an acknowledgment of the life safety mission involved at this stage of disaster response. Each contractor has been directed to report to a particular Damage Control Zone Captain at a specific City pre-positioning site upon completion of the initial assignment for further tasking as directed. These contractor resources will continue to support City crews in the emergency clearing of debris from the roadways for a period of 100 hours, or until released from duty by the City.

Each local contractor holding the Time and Material Contract for Debris Clearing will also serve as a general contractor, or hiring hall, for all those other contractors that will come to assist the City in this effort. This will help to ensure that City staff will have only a manageable number of contracts to administer throughout the disaster response period. This contract is re-issued each spring to the same group of contractors, allowing for updating of numbers of equipment and personnel and unit costs.

The resources available to the City via the Public Works Annual Maintenance Construction Contracts may also be called upon to support emergency road clearing operations. No attempt to schedule assignments for these contract resources has been made at this time.

Also pre-positioning at the selected sites across the City will be Damage Assessment Teams comprised of the engineering division staff from the Departments of Public Works, Planning and Public Utilities. These staffs have been trained in conducting debris estimation and damage assessments and will be equipped with all-necessary maps and forms. Rapid assessment of the damage is critical to supporting requests for disaster declarations from both the Governor and the President of the United States, as is expected to occur when responding to major storm events.

Additional damage assessment and debris estimating teams are available from the local architect/engineering community via the Engineering and Related Services Agreement for Emergency Operations Damage and Repair Assessment, and Emergency Recovery Engineering Services, explained in more detail later. The Department of Public Works is responsible for damage assessment and debris estimation training and for distributing all necessary maps and forms to these firms.

As lines of communication are restored during response actions, coordination of all field activities will be managed by the Public Works command center and relayed to the City Emergency Operations Center (EOC).

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As the major storm event approaches the City, the Department of Public Works will be in contact with the contractor firm holding the executed and in-place Disaster Debris Removal, Reduction, Recycling and Disposal Contract to advise them of impending conditions. This contract is designed to remove and lawfully dispose of all natural disaster generated debris, except hazardous and industrial materials. Debris removal will be limited to City streets, roads and other rights-of-way, all City of Virginia Beach municipal and public school properties, and any other municipal facility or site as may be directed, and includes all private residence and property debris brought to the edge of the right-of-way by citizens. The contractor is responsible for determining the method and manner of all debris removal and lawful disposal operations. Disposal of debris shall be in any lawful site neither owned nor operated by the City of Virginia Beach nor the regional waste authority, Southeastern Public Service Authority. The contractor is also responsible for the lawful disposal of all debris reduction by-products that their operations may generate. Upon notice to proceed, the contractor shall mobilize such personnel and equipment as necessary to conduct all debris removal, reduction, recycling, and lawful disposal operations as were presented to and reviewed by the Department of Public Works at the time of contractor selection. This contract has a base period of five years with annual recertification. Five, one-year extensions to the base period of the contract are available.

The general concept of disaster debris removal operations developed by the City includes multiple, scheduled passes of each site, location or right-of-way directed. This manner of debris removal allows citizens the opportunity to return to their properties and subsequently bring all debris to the edge of the right-of-way for City contractor removal, as property restoration progresses.

In researching disaster debris management programs, the economy of clean woody debris disposal afforded through local temporary storage and reduction was noted. In recognition of this economy, the City has pre-designated five sites totaling 209 acres for the sole purpose of the temporary storage and reduction of clean woody debris (this does not include the reduction of the 30% of total debris volume expected to be burnable construction and demolition materials). These sites are known as Temporary Debris Storage and Reduction (TDSR) sites. No other debris operations are authorized on these sites. Should the debris removal contractor choose to establish and operate these sites, they will be made available at no cost. Should the debris removal contractor select to operate any debris removal operation sites other than those pre-designated by the City, the contractor shall make all arrangements.

Two of the five TDSRS are located on property owned by the Federal Government at the Naval Air Station Oceana. Clean woody debris reduction operations are restricted to chipping, grinding, or mulching on these sites. No burning of debris is authorized. Should the Disaster Debris Removal, Reduction, Recycling and Disposal contractor choose to operate these sites, all that clean woody debris originating on the Air Station property and delivered to the TDSRS by the Navy will be accepted for processing and disposal. A Memorandum of Understanding (MOU) and a Real Estate License Agreement have been negotiated and executed between the Naval Air Station and the City of Virginia Beach for this purpose.

Two additional City-owned sites are also located in close proximity to the Air Station and have similar restrictions on reduction operations authorized. The fifth site is an abandoned airfield in the rural southern section of the City. Burning operations are authorized on this site.

As these sites were identified and investigated for disaster debris operational use, block diagrams of expected use configuration were prepared. These plans, along with the overall debris management program, were presented to and reviewed by the Commonwealth of Virginia Department of Environmental Quality. As a result of this advance coordination, all of the environmental concerns were identified and addressed and permit requirements established. This will ensure continuous operation, without interruption, upon site activation. Established baseline and closure environmental testing requirements and a general operation

APPENDIX C LOCAL DEBRIS MANAGEMENT PLAN STRATEGY

plan for the TDSRS are included in the Disaster Debris Removal, Reduction, Recycling and Disposal Contract.

If established and operated, the pre-designated TDSRS will be open to City contractor vehicles and private citizen delivery of clean woody debris only.

The City encourages the recycling of any and all disaster debris possible. The debris removal contractor is responsible for establishing any such arrangements. Any monies that may be generated from any disaster debris recycling activities or other lawful disposal operations remain with the contractor.

Any hazardous and industrial materials encountered by the debris removal contractor are to be set aside at the point of collection for removal and disposal by the Hazardous and Industrial Materials Cleanup and Disposal Contract. This is an annual services agreement, currently with a base period of four years, which is executed and in place for daily operation, and contains specific provisions for natural disaster response and recovery operations. This contract provides for the conduct of multiple, scheduled passes of every City street, road, and other rights-of-way, all City of Virginia Beach municipal and public school properties, any other municipal facility or site as may be directed, and includes all private residence and property debris which may be hazardous or industrial in nature and is brought to the edge of the right-of-way by citizens. The schedule of passes conducted under this contract will be coordinated with the schedule of passes established under the Disaster Debris Removal, Reduction, Recycling and Disposal Contract. In addition, should the debris removal contractor choose to establish and operate the pre-designated TDSRS, the Hazardous and Industrial Materials Cleanup and Disposal Contract will provide daily collection of any materials incidentally delivered during debris removal operations.

The final contract package developed by the Department of Public Works in support of natural disaster response and recovery operations is the Engineering and Related Services Agreement for Emergency Operations Damage and Repair Assessment, and Emergency Recovery Engineering Services. This contract, offered to and accepted from all firms in the local architectural/engineering community, contains two parts. Part I of the contract is designed to provide a trained cadre of additional personnel and equipment, beyond those of City staff, to assist in the conduct of initial, preliminary, and joint damage inspections and repair assessments. The principal purpose for this contract being executed and in place prior to the disaster event is the need for rapid collection of damage assessment information and restoration cost estimates. The information gathered will be used to support City requests for Gubernatorial and Presidential disaster declarations. With review of the contracts submitted, particular firms can be pre-assigned to inspect that part of the infrastructure where the firm's specialty lies. Again, the advantage of pre-positioning this contract is the immediate response, upon mobilization, of all available resources without need for further coordination nor communication following the disaster event. Part I of this contract is designed for 100 hours use, or until released by the City.

Part II of the engineering services contract is the standard annual services agreement utilized by the Department of Public Works. It is designed to immediately bring the full range of professional and non-professional services of each architectural/engineering firm to the aid of the City in the preparation of Project Worksheets (as required by the Federal Emergency Management Agency), the mitigation study, design, specification and plan preparation of the temporary repairs to, and permanent restoration of all elements of the infrastructure. These services may also include the management and inspection of the Time and Material Contract for Debris Clearing, the Debris Removal, Reduction, Recycling and Disposal Contract, the Hazardous and Industrial Materials Cleanup and Disposal Contract, and the Annual Maintenance Construction Contracts.

APPENDIX C LOCAL DEBRIS MANAGEMENT PLAN STRATEGY

This disaster response and recovery program is designed to provide those resources known to be necessary for timely and coordinated response and recovery actions following a natural disaster event which generates large volumes of debris and creates damage to the infrastructure. In addition, Federal regulations governing the reimbursement of disaster response and recovery costs were investigated for compliance. It is through this program, and the five (5) contract packages noted, that the City of Virginia Beach Department of Public Works plans to execute a timely and coordinated response and recovery.

Rapid and coordinated responses to natural disaster events are critical to the restoration of lifeline systems serving any community. Pre-positioned staff and contract resources stand in direct support of this mission. This plan presents general concepts of operations, with details included only where available. It is extremely important for both the City and its contractors to recognize the contingencies of planning necessary in any natural disaster response and recovery program. Ongoing dialogue with contract resources aids in this awareness.

The Department of Public Works is not normally viewed as a first response unit to emergencies. However, when conditions escalate to disaster proportions, it is the mobility of the responding units that differentiates between success and failure, and saves lives. It is at this point in time that Public Works does in fact become the first responder to the needs of its citizens.

The Department of Public Works stands ready to serve the citizens of the City of Virginia Beach.

**APPENDIX D
MUTUAL AID AGREEMENT EXAMPLE**

INTERGOVERNMENTAL EMERGENCY MUTUAL AID AGREEMENT

STATE OF _____
CITY / COUNTY _____

WHEREAS, (State Name) law authorizes local governments to contract with each other to provide services, and

WHEREAS, (State Name) law and state policy also provides for certain reimbursements or financial aid to local government for certain natural disasters or emergency conditions declared by the Governor, and

WHEREAS, the (City or County Name) finds it to be in its best interest to have such mutual aid agreements with other local governmental bodies in the state and region,

NOW, THEREFORE, in consideration of the above recitals and the covenants contained herein, the parties hereto agree as follows:

1. The (City or County Name) hereby agrees to provide through its Director of Public Works such mutual aid as may be requested by a governmental unit, which has emergency conditions of a natural disaster as defined by (State Name) law. The aid rendered shall be to the extent of available personnel and equipment not required for minimum needs of the (City or County Name). The judgment of the Director of Public Works or his designee shall be final as to the personnel and equipment so available.
2. Personnel dispatched to aid another jurisdiction shall remain employees of the (City or County Name), but shall work under the supervision of the Director of Public Works of the requesting jurisdiction. The (City or County Name) retains the right to withdraw any and all aid rendered upon direction of the Director of Public Works.
3. The Director of Public Works will provide a list of hourly rates and equipment costs, and hours worked for all such aid rendered to the requesting jurisdiction for all actual costs, and the requesting jurisdiction agrees to compensate such claim for costs incurred as expeditiously as possible.
4. The (City or County Name) will maintain workers compensation coverage for its employees and liability coverage for its vehicles and equipment. Any uninsured or extraordinary expenses may be a part of claimed costs for reimbursement. The requesting jurisdiction agrees to maintain adequate liability insurance under state law and to hold harmless and indemnify the (City or County Name) for any and all claims occurring while its personnel and equipment are working under the direction of the Director of Public Works of the requesting jurisdiction. These indemnities shall include attorney's fees and costs that may arise from providing aid pursuant to this agreement.
5. The purpose of these recitals is to insure that the (City or County Name) is reimbursed all costs and assumes no additional liabilities as a result of this agreement. Neither party to this agreement shall be liable, for its failure to refusal to render aid pursuant to this agreement. The Director of Public Works shall in his sole discretion determine the manner which such emergency aid may be used. (or his/her designee in charge of operations)

IN WITNESS WHEREOF, this Agreement has been duly executed by the parties subscribed below and is binding upon the _____ and the requesting jurisdiction.

Date signed _____ CITY / COUNTY OF _____ by: _____

Date signed _____ REQUESTING JURISDICTION _____ by: _____

**APPENDIX E
SCOPE OF WORK EXAMPLE
EQUIPMENT LEASING FOR CLEARING OF DEBRIS**

Note: This scope of work example may be downloaded from the U.S. Army Corps of Engineer's Internet site at: <ftp://ftp.sam.usace.army.mil/pub/op/opr/scopes>

**SCOPE OF WORK
FOR
EQUIPMENT LEASING FOR CLEARING OF DEBRIS
RELATED TO
[NAME/NATURE OF DISASTER]
AT, IN, OR NEAR
[LOCATION OF RECOVERY EFFORTS]**

1. GENERAL.

1.1 The purpose of this contract is to provide debris clearing and removal response assistance to [LOCATION; I.E. "North Carolina counties" or "Mobile and Baldwin Counties in Alabama"] which have been declared disaster areas by the President because of the effects of [NAME OF DISASTER].

2. SERVICES.

2.1. The Contractor shall provide specified equipment, with operators and laborers, for debris removal. The contractor shall provide all labor and materials necessary to fully operate and maintain (including fuel, oil, grease and repairs) the following:

[INSERT QUANTITY AND DESCRIPTION FROM EQUIPMENT PICK LIST]

2.2. The Contractor shall provide the crews for [INITIAL TIME; I.E. "two weeks" or "not to exceed either time or dollar amount"] with a Government option to extend for up to an additional [EXTENSION TIME; I.E. "one week"].

2.3. All hourly equipment rates include the cost of the operator, supervision, maintenance, fuel, repairs, overhead, profit, insurance, and any other costs associated with the equipment and personnel.

2.4. All hourly manpower rates include the cost of protective clothing (to include hard-hats and steel-toed boots), fringe benefits, hand tools, supervision, transportation and any other costs.

2.5. The work shall consist of clearing and removing any and all "eligible" debris (see section 3.0 for a definition of eligible debris) as directed by the Contracting Officer's Representative (COR). Work will include: 1) loading the debris, 2) hauling the debris to an approved dumpsite, and 3) dumping the debris at the dumpsite. Ineligible debris will not be loaded, hauled, or dumped under this contract. This work will involve primarily clearing the right-of-way (ROW) of streets and roads.

2.6. The Contractor shall not move from one designated work area to another designated work area without prior approval from the COR.

APPENDIX E
SCOPE OF WORK EXAMPLE
EQUIPMENT LEASING FOR CLEARING OF DEBRIS

- 2.7. The Contractor shall conduct the work so as not to interfere with the disaster response and recovery activities of Federal, State, tribal and local governments or agencies, or of any public utilities.
- 2.8. The Contractor shall comply with local, tribal, State and Federal Safety and Health Requirements.

3. DEBRIS CLASSIFICATION

- 3.1. **Eligible Debris.** Debris that is within the scope of this contract falls under three possible classifications: Burnable, Non-Burnable, and Recyclable. Debris that is classified as Household Hazardous Waste (HHW) is not to be transported by this contract.
- 3.2. **Burnable Debris.** Burnable debris includes all biodegradable matter except that included in the following definitions of other categories of debris. It includes, but is not limited to, damaged and disturbed trees; bushes and shrubs; broken, partially broken and severed tree limbs; tree stumps with base cut measurements less than 2 feet; untreated structural timber; untreated wood products; and brush.
- 3.3. **Non-Burnable Debris.** Non-burnable debris includes, but is not limited to, treated timber; plastic; glass; rubber products; metal products; dry wall cloth items; non-wood building materials; carpeting; recyclable debris including metal products (i.e. mobile trailer parts, household appliances (white metal), and similar items), or uncontaminated soil.
- 3.4. **Household Hazardous Waste (HHW).** Household hazardous wastes, such as petroleum products, paint products, etc., and known or suspected hazardous materials, such as asbestos, lead-based paint, or electrical transformers shall be removed by others. Coordination for hazardous debris removal is the responsibility of the Government.

4. DUMPSITES

- 4.1. The Contractor shall use only debris dumpsites designated and approved by the COR.
- 4.2. The dumpsite operator shall direct all dumping operations. The Contractor shall cooperate with the dumpsite operator to facilitate effective dumping operations.

5. PERFORMANCE SCHEDULE

- 5.1. The Contractor shall commence mobilization immediately upon award of the contract and designation of work areas by the COR and will commence debris removal operations within 24 hours of Notice to Proceed.
- 5.2. The Contractor shall work during daylight hours for [INSERT] hours per day, [INSERT] days per week.

APPENDIX E
SCOPE OF WORK EXAMPLE
EQUIPMENT LEASING FOR CLEARING OF DEBRIS

6. EQUIPMENT

- 6.1. All trucks and other equipment must be in compliance with all applicable Federal, State, tribal and local rules and regulations. Any truck used to haul debris must be capable of rapidly dumping its load without the assistance of other equipment; be equipped with a tailgate that will effectively contain the debris during transport and permit the truck to be filled to capacity; and measured and marked for its load capacity. Sideboards or other extensions to the bed are allowable, provided they meet all applicable rules and regulations, cover the front and both sides, and are constructed in a manner to withstand severe operating conditions. The sideboards are to be constructed of 2" by 6" boards or greater and not to extend more than 2 feet above the metal bedsides. The Contracting Officer's representative must approve all requests for extensions. Equipment will be inspected prior to its use by the Contractor using applicable U.S. Army Corps of Engineers forms. The forms will be provided to the Government after completion.
- 6.2. Trucks and other heavy equipment designated for use under this contract shall be equipped with two signs, one attached to each side. A total of [QUANTITY] signs will be provided by the Government and are to be returned to the Government prior to issuance of final payment. A fee of \$[AMOUNT] will be assessed against the final payment for each lost sign.
- 6.3. Prior to commencing debris removal operations, the Contractor shall present to the Government's representative all trucks or trailers that will be used for hauling debris for the purpose of determining hauling capacity. Hauling capacity, in cubic yards, will be recorded and marked on each truck or trailer. Each truck or trailer will also be numbered for identification. The government reserves the right to re-measure trucks and trailers at any time during the contract and to use re-measurements as the basis for calculating loads for payment purposes.
- 6.4. Trucks or equipment that are designated for use under this contract shall not be used for any other work during the working hours of this contract. The Contractor shall not solicit work from private citizens or others to be performed in the designated work area during the period of this contract. Under no circumstances will the Contractor mix debris hauled for others with debris hauled under this contract.

7. REPORTING

- 7.1. The Contractor shall submit a report to the COR by close of business each day of the term of the contract. Each report shall contain, at a minimum, the following information:

Contractor's Name.
Contract Number.
Daily and cumulative hours for each piece of equipment.
Daily and cumulative hours for personnel, by position.

8. OTHER CONSIDERATIONS

- 8.1. The Contractor shall supervise and direct the work, using qualified labor and proper equipment for all tasks. Safety of the Contractor's personnel and equipment is the responsibility of the Contractor. Additionally, the Contractor shall pay for all materials, personnel, taxes and fees necessary to perform under the terms of this contract.

APPENDIX E
SCOPE OF WORK EXAMPLE
EQUIPMENT LEASING FOR CLEARING OF DEBRIS

8.2. The Contractor must be duly licensed in accordance with the state's statutory requirements to perform the work. The Contractor shall obtain all permits necessary to complete the work. The Contractor shall be responsible for determining what permits are necessary to perform under the contract. Copies of all permits shall be submitted to the COR prior to issuance of a notice to proceed.

8.3. The Contractor shall be responsible for taking corrective action for any notices of violations issued as a result of the Contractors or any subcontractors actions or operations during the performance of this contract. Corrections for any such violations shall be at no additional cost to the Government.

8.4. The Contractor shall be responsible for control of pedestrian and vehicular traffic in the work area. The Contractor shall provide all flag persons, signs, equipment and other devices necessary to meet Federal, State, tribal and local requirements. The traffic control personnel and equipment shall be in addition to the personnel and equipment required in other parts of this contract. At a minimum, one flag person should be posted at each approach to the work area.

9. PAYMENT.

9.1. The Contractor will be entitled to invoice for 60% of the mobilization and demobilization line item after all equipment is delivered to the designated work site. The remaining 40% will be due after all equipment is removed from the work site, all vehicle signs have been returned to the government, and the contractor has submitted a proper invoice.

9.2. Payment for work completed will be based on verified hours worked from the daily operational report. Equipment down time resulting from equipment failure, routine maintenance and fueling that exceeds fifteen (15) minutes of a work hour will be considered unacceptable work and non-payment for one half of that hour and the number of work hours will be reduced to exclude the down time (the minimum reduction shall be one-half hour).

9.3. All payments made under this contract will be in accordance with PAYMENTS clauses located in other sections of this contract.

10. OPTIONS

10.1 The option items listed in Schedule B (the bid Schedule) are for the purpose of extending this contract for 7 days at a time. These options will be exercised at the discretion of the Government in accordance with the OPTION TO EXTEND SERVICES clause located elsewhere in this contract.

11. ATTACHMENTS.

- 11.1 Daily Report Format
- 11.2 Sample Bidding Schedule
- 11.3 Operations Report
- 11.4 Equipment Pick List

**APPENDIX E
SCOPE OF WORK EXAMPLE
EQUIPMENT LEASING FOR CLEARING OF DEBRIS**

DAILY REPORT					
CONTRACTOR: CONTRACT NO. :				DATE OF REPORT:	
Truck No.	Capacity	Burn site trips	C.Y. Totals	Landfill trips	C.Y. Totals
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
DAILY GRAND TOTALS			C.Y.		C.Y.

**APPENDIX E
SCOPE OF WORK EXAMPLE
EQUIPMENT LEASING FOR CLEARING OF DEBRIS**

BIDDING SCHEDULE					
ITEM	DESCRIPTION	HOURS	U/I	U/P	AMOUNT
001	Mobilize Equipment/Demobilize Equipment	JOB			
002	One (1) Truck, Dump, 16-20 cy capacity, with Operator	140.00			
003	One (1) Truck, Dump, 16-20 cy capacity, with Operator	140.00			
004	One (1) Truck, Dump, 16-20 cy capacity, with Operator	140.00			
005	One (1) Truck, Dump, 16-20 cy capacity, with Operator	140.00			
006	One (1) Truck, Dump, 16-20 cy capacity, with Operator	140.00			
007	One (1) Truck, Dump, 16-20 cy capacity, with Operator	140.00			
008	One (1) Truck, Dump, 16-20 cy capacity, with Operator	140.00			
009	One (1) Truck, Dump, 16-20 cy capacity, with Operator	140.00			
010	One (1) Truck, Dump, 16-20 cy capacity, with Operator	140.00			
011	One (1) Truck, Dump, 16-20 cy capacity, with Operator	140.00			
012	One (1) Truck, Dump, 16-20 cy capacity, with Operator	140.00			
013	One (1) Truck, Dump, 16-20 cy capacity, with Operator	140.00			
014	One (1) Loader, Front-end, 3-5 cy capacity, with Operator	140.00			
015	One (1) Loader, Front-end, 3-5 cy capacity, with Operator	140.00			
016	One (1) Knuckleboom, 10 ton lifting capacity, with Operator	140.00			
017	Four (4) Laborers with Chainsaws, 16" min bar, traffic flags, and misc. small tools (axes, shovels, safety equip.)	140.00			
018	One (1) Truck, Pickup, ½-1 Ton, with crew foreman, and cellular phone.	140.00			
019	One (1) Track Hoe, 2-3 yd ³ bucket with operator	100.00			
020	One (1) Low Bed Equipment Trailer , 20 Ton capacity, and Tractor Truck with operator	70.00			
		TOTAL			

**APPENDIX E
SCOPE OF WORK EXAMPLE
EQUIPMENT LEASING FOR CLEARING OF DEBRIS**

BIDDING SCHEDULE					
ITEM	DESCRIPTION	HOURS	U/I	U/P	AMOUNT
FIRST OPTION PERIOD					
021	One (1) Truck, Dump, 16-20 cy capacity, with Operator	70.00			
022	One (1) Truck, Dump, 16-20 cy capacity, with Operator	70.00			
023	One (1) Truck, Dump, 16-20 cy capacity, with Operator	70.00			
024	One (1) Truck, Dump, 16-20 cy capacity, with Operator	70.00			
025	One (1) Truck, Dump, 16-20 cy capacity, with Operator	70.00			
026	One (1) Truck, Dump, 16-20 cy capacity, with Operator	70.00			
027	One (1) Truck, Dump, 16-20 cy capacity, with Operator	70.00			
028	One (1) Truck, Dump, 16-20 cy capacity, with Operator	70.00			
029	One (1) Truck, Dump, 16-20 cy capacity, with Operator	70.00			
030	One (1) Truck, Dump, 16-20 cy capacity, with Operator	70.00			
031	One (1) Truck, Dump, 16-20 cy capacity, with Operator	70.00			
032	One (1) Truck, Dump, 16-20 cy capacity, with Operator	70.00			
033	One (1) Loader, Front-end, 3-5 cy capacity, with Operator	70.00			
034	One (1) Loader, Front-end, 3-5 cy capacity, with Operator	70.00			
035	One (1) Knuckleboom, 10 ton lifting capacity, with Operator	70.00			
036	Four (4) Laborers with Chainsaws, 16" min bar, traffic flags, and misc. small tools (axes, shovels, safety equip.)	70.00			
037	One (1) Truck, Pickup, 1/2 -1 Ton, with crew foreman, and cellular phone.	70.00			
038	One (1) Track Hoe, 2-3 yd ³ bucket, with operator	50.00			
039	One (1) Low Bed Equipment Trailer, 20 Ton capacity, and Tractor Truck, with operator	35.00			
		TOTAL			

**APPENDIX E
SCOPE OF WORK EXAMPLE
EQUIPMENT LEASING FOR CLEARING OF DEBRIS**

OPERATIONAL REPORT

CONTRACT NO.

EQUIPMENT	TOTAL HOURS WORKED THIS DAY	TOTAL HOURS IDLE THIS DAY
DUMP TRUCK #		
F.E. LOADER#		
F.E. LOADER#		
DOZER #		
TRACK HOE #		
KNUCKLEBOOM #		
KNUCKLEBOOM #		
KNUCKLEBOOM #		
PICKUP TRUCK #		
LABOR CREW #		

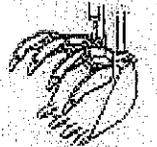
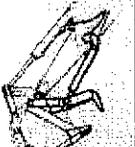
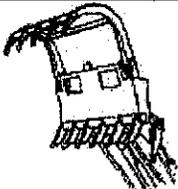
**APPENDIX E
SCOPE OF WORK EXAMPLE
EQUIPMENT LEASING FOR CLEARING OF DEBRIS**

EQUIPMENT PICK LIST

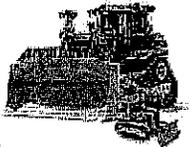
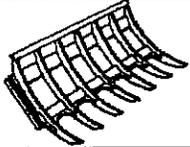
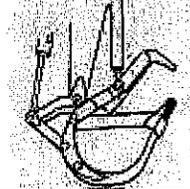
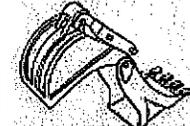


ITEM	PICTURE	DESCRIPTION	LIKE
1.		Truck, Pickup, .5/.75 Ton, with Operator	Ford F-150
2.		Truck, Dump, 6-8 cy capacity, with Operator	
3.		Truck, Dump, 16-20 cy capacity, with Operator	GMC C-Series Trucks
4.		Truck, Dump, 25-30 cy capacity, with Operator	
5.		Excavator, Hydraulic, 1-2 cy bucket, 128 Net Hp, with Operator	CAT 320 CASE 9030B
6.		Excavator, Hydraulic, 2-3 cy bucket, 168 Net Hp, with Operator	CAT 325
7.		Excavator, Hydraulic, 3-5 cy bucket , 286 Net Hp, with Operator	CAT 350
8.		Knuckleboom, 10 ton lifting capacity, with Operator	Barko 160A
9.		Attachment, Grapple, hydraulically operated clam-type bucket with 360-degree rotation, for use in demolition, and clearing	

**APPENDIX E
SCOPE OF WORK EXAMPLE
EQUIPMENT LEASING FOR CLEARING OF DEBRIS**

10.		Attachment, Grapple, thumb, a demolition or trash grapple. Can be used with the standard excavator bucket. Thumb section can be stiff arm mounted or controlled with a hydraulic cylinder.	
11.		Attachment, Clamp, Bucket	
12.		Loader, tracked, 1-2 cy blade capacity, with Operator	CAT 933
13.		Loader, tracked, 2-3 cy blade capacity, with Operator	CAT 953
14.		Loader, tracked, 3-5 cy blade capacity, with Operator	CAT 973
15.		Loader, Front-end, wheeled, 3-5 cy capacity, with Operator	CASE 821B CAT 938F
16.		Loader, Front-end, 3-5 cy capacity, with Operator	CAT 960F
17.		Loader, Front-end, 3-5 cy capacity, with Operator	CAT 970F CASE 921B
18.		Rake, Loader with top clamp	
19.		Attachment, Loader Rake, mounts in place of the bucket on 4-wheel drive or crawler loaders. Loads debris at truck height. Long curved teeth for maximum load capacity. Bucket cylinder controls positions for digging depth or transporting.	
20.		Grader, Motor, 12-foot blade, 130-140 net Hp	CAT 12H Champion 710 Series IV
21.		Dozer, tracked, 1-2 cy Blade Capacity, with Operator	CAT D5
22.		Dozer, tracked, 2-3 cy Blade Capacity, with Operator	CAT D7G

**APPENDIX E
SCOPE OF WORK EXAMPLE
EQUIPMENT LEASING FOR CLEARING OF DEBRIS**

23.		Dozer, tracked, 22'6" Blade length, 405 Net Hp, with Operator	Caterpillar D9R
24.		Rake, Clearing and Stacking, Dozer mounted; lighter-weight construction. Curved teeth lift and stack trees and debris while sifting out dirt.	
25.		Chainsaw, not less than 20" bar, with Operator	
26.		Chainsaw, Gas engine, not less than 14" bar, with Operator	
27.		Backhoe, with loader, 1 cy bucket, with Operator	CASE 4-390
28.		Backhoe, with loader, 1.5 cy bucket, with Operator.	JCB 217 4WD
29.		Attachment, Thumb	
30.		Attachment, Clamshell bucket	
31.		Skidder,	
32.		Loader, Mini, Width of vehicle not to exceed 6 feet, for use in restricted maneuver area.	Bobcat 553 JCB 165
33.		Burner, Air Curtain, fully self-contained system that includes a power plant, hydraulic drive system blower fan and fuel tank. A diesel injection system and/or a propane ignition system are offered as light-up options.	Air Burners, Inc. Model "S"

**APPENDIX E
SCOPE OF WORK EXAMPLE
EQUIPMENT LEASING FOR CLEARING OF DEBRIS**

34.		<p>Burner, Air Curtain, mobile unit, 6 cylinder diesel engine, minimum 89 HP (66 kW), full enclosure; burn container 4" (102 mm) thick walls; refractory panels filled with thermal ceramic material.</p> <p>Instrument panel, tachometer, hour meter, ampere meter, key switch, oil pressure and water temperature gauges, with safety shutdown feature and adjustable locking throttle, minimum 15,500 cfm (439 m³/min).</p> <p>Centrifugal fan, air output approx. 165 MPH (266 km/h) at fan, 110 MPH (177 km/h) at air spouts.</p> <p>Manifold minimum 1/8" (3.2 mm) steel, solid-weld assembly; air vents inject air at 20-degree angle to maintain proper air curtain. Length: 35' (10.70 m); 2 sections: 15' (4.60 m) each; T-section at 5' (1.50 m).</p> <p>Weight approx. 7,200 lbs. (3,266 kg). 50 gallons (189 liter) minimum fuel tank capacity. Air quality meets or exceeds applicable US-EPA regulations.</p>	Air Burners, Inc. Mobile System Model "T- 359"
35.		Grinder, Tub, with 300-400 Hp engine, 8 ft diameter tub	Portec Model 20900
36.		Laborer, with hand tools (i.e. shovels, axes, rakes, traffic-control flags, etc)	

**APPENDIX F
SCOPE OF WORK EXAMPLE
UNIT PRICE CONTRACT FOR DEBRIS REMOVAL**

Note: This scope of work example may be downloaded from the U.S. Army Corps of Engineer's Internet site at: <ftp://ftp.sam.usace.army.mil/pub/op/opr/scopes>

**SCOPE OF WORK
FOR
UNIT PRICE CONTRACT FOR DEBRIS REMOVAL
RELATED TO
[NAME/NATURE OF DISASTER]
AT, IN, OR NEAR
[LOCATION OF RECOVERY EFFORTS]**

1.0 GENERAL

1.1 The purpose of this contract is to provide debris clearing and removal response assistance to [LOCATION; i.e. "North Carolina counties" or "Mobile and Baldwin Counties in Alabama"] which have been declared disaster areas by the President because of the effects of [NAME OF DISASTER].

2.0 SERVICES

2.1 The Contractor shall provide for debris removal from the area(s) outlined on the attached maps, and described as: [DESCRIPTION OF WORK AREA].

2.2 The debris shall be taken to the dumpsite(s) indicated on the attached maps, located at [LOCATION (S) OF DUMPSITE(S)].

2.3 The total amount of debris to be removed under this contract is estimated to be [QUANTITY].

2.4 The work shall consist of clearing and removing any and all "eligible" debris (see section 4.0 for a definition of eligible debris) primarily from the public right-of-way (ROW) of streets and roads, as directed by the Contracting Officer's Representative (COR). Work will include 1) examining debris to determine whether or not debris is eligible, burnable or non burnable, 2) loading the debris, 3) hauling the debris to an approved dumpsite or landfill, and 4) dumping the debris at the dumpsite or landfill. Ineligible debris will not be loaded, hauled, or dumped under this contract. Burnable debris will be loaded separately from non-burnable debris. Mixed loading of burnable and non-burnable will be kept to a minimum. The COR will determine the appropriate dumpsite for mixed loads.

2.5 Debris removal shall include all eligible debris found on the ROW within the area designated by the COR. The COR may specify any eligible debris within the ROW which should not be removed, or which should be removed at a later time. The Contractor shall make as many passes through the designated area as required by the COR. The Contractor shall not move from one designated work area to another designated work area without prior approval from the COR. Any eligible debris, such as fallen trees, which extends onto the ROW from private property shall be cut at the point where it enters the ROW, and that part of the debris which lies within the ROW shall be removed. The Contractor shall not enter onto private property during the performance of this contract.

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2.6 The Contractor shall conduct the work so as not to interfere with the disaster response and recovery activities of Federal, State, tribal and local governments or agencies, or of any public utilities.

2.7 The government reserves the right to inspect the site, verify quantities, and review operations at any time.

2.8 All work shall be accomplished in a safe manner in accordance with EM 385-1-1.

3.0 LOAD TICKETS

3.1 "Load tickets" will be used for recording volumes of debris removal. (See Enclosure)

3.2 Each ticket will contain the following information:

Ticket Number
Contract Number
Date
Contractor Name
Site Departure Time
Dump Arrival Time
Debris Classification
Debris Quantity

3.3 [SELECT ONLY ONE OF THE FOLLOWING PARAGRAPHS, AND DELETE THE OTHERS]

Load tickets will be issued by a COR prior to departure from the loading site. The COR will keep one copy of the ticket, and give three copies to the vehicle operator. Upon arrival at the dumpsite, the vehicle operator will give the three copies to the COR at the dumpsite, the COR will validate, retain one copy and give two copies to driver for the Contractor's records, (one copy for the sub-contractor and one copy for the prime contractor).

Load tickets will be issued by a COR prior to departure from the loading site. The COR will keep one copy of the ticket, and give two copies to the vehicle operator for the Contractor's records.

Load tickets will be issued by a COR to a vehicle operator upon arrival at the dumpsite. The COR will keep one copy of the ticket, and give two copies to the vehicle operator for the Contractor's records.

4.0 DEBRIS CLASSIFICATION

4.1 **Eligible Debris.** Debris that is within the scope of this contract falls under three possible classifications: Burnable, Non-Burnable, and Recyclable. Debris that is classified as Household Hazardous Waste (HHW) is not to be transported by this contract.

4.2 **Burnable Debris.** Burnable debris includes all biodegradable matter except that included in the following definitions of other categories of debris. It includes, but is not limited to, damaged and disturbed trees; bushes and shrubs; broken, partially broken and severed tree limbs; untreated structural timber; untreated wood products; and brush.

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- 4.3 **Non-Burnable Debris.** Non-burnable debris includes, but is not limited to, treated timber; plastic; glass; rubber products; metal products; dry wall; cloth items; non-wood building materials; metal products (i.e. Mobile Trailer parts, Household appliances (White Metal), and similar items), or uncontaminated soil; roofing materials; and carpeting.
- 4.4 **Household Hazardous Waste (HHW).** Household hazardous wastes, such as petroleum products, paint products, etc., and known or suspected hazardous materials, such as asbestos, lead-based paint, or electrical transformers shall be removed by others. Coordination for hazardous debris removal is the responsibility of the Government.
- 4.5 **Stumps.** Tree stumps located within the ROW with are one-half or more of the root ball exposed will be removed. Tree stumps with base cut diameter measurements less than or equal to 24 inches (measured 24 inches up from where the tree originally exited the ground) will be considered to be burnable debris and removed of with the same methods used for other burnable debris. Tree stumps larger than 24 inches in diameter will be removed of as burnable and paid for in accordance to the MEASURMENT and PAYMENT paragraphs in this contract.

5.0 DUMPSITES

- 5.1 The Contractor shall use only debris dumpsites designated in Section 2.2, unless otherwise approved by the COR. The Contractor shall haul non-burnable debris to the site designated for non-burnable debris and burnable debris to the burn sire designated.
- 5.2 The dumpsite operator shall direct all dumping operations. The Contractor shall cooperate with the dumpsite operator to faciiitate effective dumping operations.
- 5.3 The Government makes no representations regarding the turn-around time at the dumpsites.

6.0 PERFORMANCE SCHEDULE

- 6.1 The Contractor shall commence performance on [DATE].
- 6.2 The Contractor shall, with the CORs direction, provide a work with plan showing where operations will begin and which streets/roads will be cleared on a 2, 7, 14 day projection. The plan will be updated every 2 days.
- 6.3 Maximum allowable time for completion will be [ENTER] calendar days, unless the Government initiates additions or deletions to the contract by written change orders. Subsequent changes in completion time will be equitably negotiated by both parties pursuant to applicable State and Federal law. Liquidated damages shall be assessed at \$[AMOUNT] per calendar day for any time over the maximum allowable time established by the contract.

7.0 EQUIPMENT

- 7.1 All trucks and other equipment must be in compliance with all applicable Federal, State, tribal and local rules and regulations. Any truck used to haul debris must be capable of rapidly dumping its load without the assistance of other equipment; be equipped with a tailgate that will effectively contain the debris during transport and permit the truck to be filled to capacity; and measured and marked for its load capacity.

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Sideboards or other extensions to the bed are allowable provided they meet all applicable rules and regulations, cover the front and both sides, and are constructed in a manner to withstand severe operating conditions. The sideboards are to be constructed of 2" by 6" boards or greater and not to extend more than two feet above the metal bedsides. The Contracting Officer's representative must approve all requests for extensions. Equipment will be inspected prior to its use by the Contractor using applicable U.S. Army Corps of Engineers forms. The forms will be provided to the Government after completion.

7.2 Trucks and other heavy equipment designated for use under this contract shall be equipped with two signs; one attached to each side. The U.S. Army Corps of Engineers will furnish these signs to the Contractor. The signs remain the property of the United States Government, and will be returned to the U.S. Corps of Engineers at the conclusion of the contract.

7.3 Prior to commencing debris removal operations, the Contractor shall present to the Government's representative all trucks or trailers that will be used for hauling debris, for the purpose of determining hauling capacity. The hauling capacity will be based on the interior dimensions of the truck's metal dump bed. Hauling capacity, in cubic yards, will be recorded and marked on each truck or trailer with permanent markings. Each truck or trailer will also be numbered for identification with a permanent marking.

7.4 Trucks or equipment which are designated for use under this contract shall not be used for any other work during the working hours of this contract. The Contractor shall not solicit work from private citizens or others to be performed in the designated work area during the period of this contract. Under no circumstances will the Contractor mix debris hauled for others with debris hauled under this contract.

7.5 Equipment used under this contract shall be rubber tired and sized properly to fit loading conditions. Excessive size equipment (6 CY and up) and non-rubber tired equipment must be approved by the COR.

8.0 REPORTING

8.1 The Contractor shall submit a report to the COR during each day of the term of the contract. Each report shall contain, at a minimum, the following information:

- Contractor's Name
- Contract Number
- Crew
- Location of work
- Day of Report
- Daily and cumulative totals of debris removed, by category

8.2 Discrepancies between the daily report and the corresponding load tickets will be reconciled no later than the following day.

9.0 OTHER CONSIDERATIONS

9.1 The Contractor shall supervise and direct the work, using skillful labor and proper equipment for all tasks. Safety of the Contractor's personnel and equipment is the responsibility of the Contractor. Additionally, the Contractor shall pay for all materials, personnel, taxes, and fees necessary to perform under the terms of this contract.

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9.2 The Contractor must be duly licensed in accordance with the state's statutory requirements to perform the work. The Contractor shall obtain all permits necessary to complete the work. The Contractor shall be responsible for determining what permits are necessary to perform under the contract. Copies of all permits shall be submitted to the COR.

9.3 The Contractor shall be responsible for taking corrective action in response to any notices of violations issued as a result of the Contractors or any subcontractors actions or operations during the performance of this contract. Corrections for any such violations shall be at no additional cost to the Government.

9.4 The Contractor shall be responsible for control of pedestrian and vehicular traffic in the work area. The Contractor shall provide all flag persons, signs, equipment, and other devices necessary to meet Federal, State, tribal and local requirements. The traffic control personnel and equipment shall be in addition to the personnel and equipment required in other parts of this contract. At a minimum, one flag person should be posted at each approach to the work area. Work shall be accomplished in a safe manner in accordance with EM 385-1-1.

10.0 MEASUREMENT

10.1 Measurement for burnable debris removed will be by the cubic yard as predetermined through truck bed measurement. Trucks with less than full capacities will be adjusted down by visual inspection by the COR. Measurement will be documented by load tickets.

10.2 Measurement for non-burnable debris removed will be by the cubic yard as predetermined through truck bed measurement. Trucks with less than full capacities will be adjusted down by visual inspection by the COR. Load tickets will document measurement

10.3 Measurement for payment of stumps removed with 25 to 36 inch diameters base cuts (measured 24 inches up from where the tree originally exited the ground) shall be per stump.

10.4 Measurement for payment of stumps removed with 37 to 48 inch diameter basecuts (measured 24 inches up from where the tree originally exited the ground) shall be per stump.

10.5 Measurement for payment of stumps removed with 49 inch and larger diameter basecuts (measured 24 inches up from where the tree originally exited the ground) shall be per stump.

10.6 Measurement for mobilization and demobilization will be by the job.

11.0 PAYMENT

11.1 Payment for the removal of burnable debris (including stumps 24 inches and smaller) to include all cost associated with loading, hauling and dumping will be paid for under the contract bid item for **Burnable Debris**.

11.2 Payment for the removal of non-burnable debris to include all cost associated with loading, hauling and dumping will be paid for under the contract bid item for **Non-burnable Debris**.

11.3 Payment for the removal of stumps, 25 inches and larger, to include all cost associated with loading, hauling and dumping will be paid for under the contract bid item for the appropriate size category for **Stumps**.

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11.4 Payment for mobilization and demobilization will be paid for under the contract bid item for Mobilization and Demobilization.

11.5 Payment for work completed may be invoiced on a bi-weekly basis. Invoices will be based on verified quantities from the daily operational reports and valid load tickets.

11.6 The Contractor will be entitled to invoice for 60% of the mobilization and demobilization line item after all equipment is delivered to the designated work site. The remaining 40% will be due after all equipment is removed from the work site, all vehicle signs have been returned to the government, and receipt of a proper invoice.

11.7 All payments made under this contract will be in accordance with PAYMENTS clauses located in other sections of this contract

12.0 OTHER CONTRACTS

12.1 Other contracts may have been issued.

12.2 The Government reserves right to issue other contracts or direct other contractors to work within the area included in this contract.

13.0 ENCLOSURES/ATTACHMENTS

13.1 Bidding Schedule

13.2 Daily Report

13.3 Load Ticket

**APPENDIX F
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UNIT PRICE CONTRACT FOR DEBRIS REMOVAL**

BIDDING SCHEDULE

ITEM	QTY	DESCRIPTION	UNITS	UNIT PRICE	AMOUNT
001.	1	Mobilization and Demobilization	Lump Sum		
002.	xxx	Removal of Burnable Debris	Cubic Yard		
003.	xxx	Removal of Non-Burnable Debris	Cubic Yard		
004.	xxx	Removal of Stumps - 26 to 36 inch	Each		
005.	xxx	Removal of Stumps - 37 to 48 inch	Each		
006.	xxx	Removal of Stumps - 49 inch and larger	Each		

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DAILY REPORT					
CONTRACTOR: CONTRACT NO. :				DATE OF REPORT:	
Truck No.	Capacity	Burn site trips	C.Y. Totals	Landfill trips	C.Y. Totals
1					
2					
3					
4					
5					
6					
7					
8					
	Daily Totals				

DAILY REPORT				
CONTRACTOR:			DATE OF REPORT:	
Processing Site	Stumps 26-36 in.	Stumps 36-48 in.	Stumps > 49"	
1				
2				
3				
4				
5				
6				
7				
8				
9				
	DAILY TOTALS			

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Sample Debris Load Ticket

LOAD TICKET		
TICKET NUMBER:		00001
CONTRACT NUMBER:		
PRIME CONTRACTOR'S NAME:		
DATE:		
DEBRIS QUANTITY		
Truck No:	Capacity (CY):	
Load Size : Cubic Yards _____		
or Tons _____		
Truck Driver:		
DEBRIS CLASSIFICATION		
	Burnable	
	Non-Burnable	
	Mixed	
	Other	
LOCATION		
Zone/Section	Dumpsite	
	Time	Contract Monitor
Loading		
Dumping		

**APPENDIX G
RIGHT OF ENTRY AGREEMENT EXAMPLE**

I/We _____, the owner(s) of the property
commonly identified as _____,
_____, (street)
_____, State of _____
(city/town) _____ (county)

do hereby grant and give freely and without coercion, the right of access and entry to said property in the
County/City of _____, its agencies, contractors, and
subcontractors thereof, for the purpose of removing and clearing any or all storm-generated debris of
whatever nature from the above described property.

It is fully understood that this permit is not an obligation to perform debris clearance. The undersigned
agrees and warrants to hold harmless the City/County of _____, State of
_____, its agencies, contractors, and subcontractors, for damage of any type, whatsoever,
either to the above described property or persons situated thereon and hereby release, discharge, and
waive any action, either legal or equitable that might arise out of any activities on the above described
property. The property owner(s) will mark any storm damaged sewer lines, water lines, and other utility
lines located on the described property.

I/We (have _____, have not _____) (will _____, will not _____) received any compensation for debris
removal from any other source including Small Business Administration (SBA), National Resource
Conservation Service (NRCS), private insurance, individual and family grant program or any other public
assistance program. I will report for this property any insurance settlements to me or my family for debris
removal that has been performed at government expense. For the considerations and purposes set forth
herein, I set my hand this _____ day of _____, 19__.

Witness

Owner

Owner

Telephone No. and Address

**APPENDIX H
SCOPE OF WORK EXAMPLE
SITE MANAGEMENT FOR DEBRIS REDUCTION**

Note: This scope of work example may be downloaded from the U.S. Army Corps of Engineer's Internet site at: <ftp://ftp.sam.usace.army.mil/pub/op/opr/scopes>

**SCOPE OF WORK
FOR
SITE MANAGEMENT FOR DEBRIS REDUCTION
RELATED TO
[NAME/NATURE OF DISASTER]
AT, IN, OR NEAR
[LOCATION OF RECOVERY EFFORTS]**

1.0 GENERAL

1.1 The purpose of this contract is to provide site management and reduction of debris generated as a result of [NAME OF DISASTER] in [DISASTER LOCATION; I.E. "North Carolina counties" or "Mobile and Baldwin Counties in Alabama"] which have been declared disaster areas by the President because of the effects of [NAME OF DISASTER].

1.2 The Contractor shall manage and operate the debris reduction site located at [SITE LOCATION]. The site is approximately [SIZE] acres in total area. An outline of the site location is shown in the attached map.

1.3 Contractor shall provide all management, supervision, labor, machines, tools and equipment necessary to accept, process, reduce, incinerate and dispose of disaster related debris. The debris to be processed consists primarily of burnable debris, with variable amounts of non-burnable included. Segregation of debris into various categories will be required.

1.4 Reduction of burnable debris shall be through air curtain incineration. [INCLUDE OR DELETE NEXT TWO SENTENCES] Reduction of burnable debris may also be accomplished through chipping/grinding. Reduction by this means, however, 1) must be at the same rate as indicated for incineration, and 2) disposal of the chips/mulch would be the responsibility of the Contractor, and 3) shall be done at no increased cost to the Government.

2.0 SERVICES

2.1 Contractor will establish lined temporary storage areas for ash, household hazardous waste, fuels and other materials that can contaminate soils, runoff or groundwater. Contractor shall set up plastic liners under stationary equipment such as generators and mobile lighting plants unless otherwise directed by the Contracting Officer's Representative (COR).

2.2 Contractor shall be responsible for establishing site layout.

2.3 Contractor will be responsible for traffic control, dust control, erosion control, fire protection, on-site roadway maintenance, and safety measures. The Contractor shall comply with local, tribal, State and Federal safety and health requirements.

2.4 Contractor shall manage the site to accept debris collected under other contracts. Contractor shall direct traffic entering and leaving the site, and shall direct dumping operations at the site.

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SCOPE OF WORK EXAMPLE
SITE MANAGEMENT FOR DEBRIS REDUCTION**

- 2.5 Contractor shall be responsible for sorting and stockpiling of debris at the site. Debris shall be segregated into 1) burnable debris, 2) non-burnable debris, 3) household hazardous waste, and 4) ash residue. Further segregation of non-burnable debris, such as recyclable material or durable goods may be necessary. Debris classifications are defined in Section 3.0.
- 2.6 Contractor shall be responsible for disposal of non-burnable debris and ash residue. Non burnable debris and ash shall be hauled to [NAME OF SITE OR LANDFILL, *NOTE: SITE MUST HAVE SCALES.*] for disposal. [SELECT ONE OF THE FOLLOWING SENTENCES] Tipping fees will be [PRICE PER TON] and will be the responsibility of the contractor for payment. [OR] Tipping fees will be the responsibility of the government. Removal of household hazardous waste from the reduction site, including loading of household hazardous waste at the site, will be performed under a separate contract.
- 2.7 Upon completion of the debris reduction process, the Contractor will clear the site of all debris (excluding household hazardous waste) and restore the site to the satisfaction of the COR.
- 2.8 The Contractor shall conduct the work so as not to interfere with the disaster response and recovery activities of Federal, State, tribal and local governments or agencies, or of any public utilities.

3.0 DEBRIS CLASSIFICATION

- 3.1 **Eligible Debris.** Debris that is within the scope of this contract falls under three possible classifications Burnable, Non-Burnable and Household Hazardous Waste.
- 3.2 **Burnable Debris.** Burnable debris includes all biodegradable matter except that included in the following definitions of other categories of debris. It includes, but is not limited to, damaged and disturbed trees; bushes and shrubs; broken, partially broken and severed tree limbs; untreated structural timber; untreated wood products and brush.
- 3.3 **Non-Burnable Debris.** Non-burnable debris includes, but is not limited to, treated timber; plastic; glass; rubber products; metal products; dry wall; cloth items; non-wood building materials and carpeting. Some non-burnable debris is recyclable. Recyclable debris includes metal products (i.e. Mobile Trailer parts, Household appliances (White Metal), and similar items), or uncontaminated soil.
- 3.4 **Household Hazardous Waste (HHW).** Household hazardous wastes, such as petroleum products, paint products, etc., and known or suspected hazardous materials, such as asbestos, lead-based paint, or electrical transformers shall be removed by others. Coordination for hazardous debris removal is the responsibility of the Government. Known or suspected HHW that mistakenly enter the waste stream shall be placed in an appropriate storage area for removal by others.
- 3.5 **Stumps.** Tree stumps with base cut measurements less than 2 feet in diameter will be disposed of with the same methods used for other burnable debris. Tree stumps larger than 2 feet in diameter will be disposed of by either splitting and burning, or chipping/grinding. The method will be at the discretion of the Contractor.
- 3.6 **Ash.** Ash is the residue produced by incineration of the burnable debris. When handling ash, it will be required to "wet down" the ash to prevent dust problems.

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SITE MANAGEMENT FOR DEBRIS REDUCTION**

- 3.7 **Chips/Mulch.** Chips and mulch are the end product of chipping or grinding wood products. Proper disposal of chips and mulch is to find environmentally friendly (non-landfill disposal) use for the material.

4.0 PERFORMANCE SCHEDULE

- 4.1 Immediately following Bid Opening, the apparent low bidder will meet with the COR to discuss matters of judgment, safety, quality control, coordination, payment, record keeping, and reporting.
- 4.2 **Schedule.** The Contractor shall begin preparation for mobilization immediately after Notice to Proceed and be fully operational within [HOURS] hours after Notice to Proceed.
- 4.3 **Production.** The Contractor is required to process a minimum of [RATE] ,[*NOTE: MOST INCENERATORS BURN 150 TO 180 CY PER HOUR, ALLOW 4 HOURS DOWN TIME FOR SERVICE/ASH REMOVAL PER 24 HOURS*] cubic yards of debris per calendar day. The minimum required reduction/disposal rate shall be achieved no later than the second calendar day after receipt of Notice to Proceed. This minimum production rate is increased to [INCREASED RATE] in the event that the Government exercises the option for additional reduction capacity. Liquidated damages shall be assessed at \$[AMOUNT] per calendar day for any day in which the minimum processing rate is not met, unless non-compliance is due to insufficient debris amounts being delivered to the site.
- 4.4 **Completion.** All work, including site restoration prior to close-out, shall be completed within [DAYS] calendar days after receiving notice from the COR that the last load of debris has been delivered, unless the Government initiates additions or deletions to the contract by written change orders. Subsequent changes in completion time will be equitably negotiated by both parties pursuant to applicable State and Federal law. Liquidated damages shall be assessed at \$[AMOUNT] per calendar day for any time over the maximum allowable time established above.

5.0 EQUIPMENT

- 5.1 The Contractor shall provide all equipment necessary to prepare the site, stockpile the debris, feed the air curtain incinerator(s), remove ash from the incinerator(s), load and haul for disposal all non-burnable debris and ash residue, and any other equipment which may be necessary for the performance of this contract. The Contractor shall comply with local, tribal, State and Federal safety and health requirements.
- 5.2 All equipment must be in compliance with all applicable Federal, State, tribal and local rules and regulations. All equipment and operator qualifications will meet the requirements of local, tribal, State and Federal safety and health requirements. The Contractor using the applicable inspection forms will inspect equipment prior to its use. The completed forms will be provided to the Government.
- 5.3 Prior to commencing debris reduction and disposal operations, the Contractor shall present to the Contracting Officer or his representative, the COR, for approval, a detailed description of all equipment to be used for debris handling, sorting, processing, incinerating, loading and hauling, stating brand name, model and horsepower,(including all air curtain incinerators).

**APPENDIX H
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5.4 Equipment which is designated for use under this contract shall not be used for any other work during the working hours of this contract. The Contractor shall not solicit work from private citizens or others to be performed in the designated work area during the period of this contract. Under no circumstances will the Contractor mix debris hauled or processed for others with debris hauled or processed under this contract.

5.5 Reduction of burnable debris may be by either air curtain pit burning or portable air curtain incinerators. Section 6.0 specifies requirements for air curtain pit burning. Section 7.0 specifies requirements for portable air curtain incinerators.

[DELETE NEXT SECTION IF CHIPPING/GRINDING/MULCHING NOT ALLOWED IN CONTRACT]

5.6 Reduction of burnable wood debris may also be accomplished by chipping and grinding, provided the processing rate given in Section 4.3 can be maintained. Section 8.0 specifies requirements for chipping and grinding procedures.

6.0 AIR-CURTAIN PIT BURNING

[SELECT ONE OF THE NEXT TWO PARAGRAPHS AND DELETE THE OTHER, DEPENDENT UPON WHETHER THE PIT IS TO BE CONSTRUCTED ABOVE GROUND OR DUG DOWN, BASED ON WATER TABLE]

[BELOW-GRADE PIT; LOW WATER TABLE]

6.1 The air curtain pit burning method incorporates an earthen pit, constructed by digging below grade, and a blower. The blower and pit make up an engineered system that must be precisely configured to properly function. The blower must have adequate air velocity to provide a "curtain effect" to hold smoke in and to feed air to the fire below. The pit configuration must have a precise width, depth and length to compliment the blower. The composition and operation of the air curtain pit incinerator(s) shall conform generally to the drawings in Figures 1, 2, and 3 of this scope of work.

[ABOVE-GRADE PIT; HIGH WATER TABLE]

6.1 The air-curtain pit burning method incorporates an earthen pit, constructed by building above grade, and a blower. The blower and pit make up an engineered system that must be precisely configured to properly function. The blower must have adequate air velocity to provide a "curtain effect" to hold smoke in and to feed air to the fire below. The pit configuration must have a precise width, depth and length to compliment the blower. The composition and operation of the air-curtain pit incinerator(s) shall conform generally to the drawings in Figures 1, 2, and 3 of this scope of work.

6.2 Minimum required air velocity measured at the nozzle is 8,800 ft/min (100 mph). Minimum airflow rate measured at the nozzle is 900 cubic feet per min per linear foot of pit length. (As an example, a 20-ft long pit would require a blower with a nozzle velocity of 8,800 ft/min and nozzle output rate of 18,000 cfm. This example is intended for explanation purposes only, and does not imply a recommended pit length for actual operations.)

6.3 The pit should be a maximum of 8 feet wide, and should be from 12 to 20 feet deep. The actual pit dimensions should be such that the system functions properly.

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- 6.4 Pits must be constructed out of a highly compactible material that will hold its shape and support the weight of the loading equipment. There shall be an impervious layer of clay or limestone on the bottom of the pit to provide a barrier for ground water protection. This layer shall be a minimum of 1 foot thick and be repaired as necessary after each ash removal operation.
- 6.5 There is to be a minimum distance of 100 feet between the burn area and the nearest debris piles. There is to be a minimum distance of 1,000 feet between the burn area and the nearest building. Contractors are responsible for assuring that the public and workers are kept a safe distance from the burn site.
- 6.6 The burn will be extinguished at least 2 hours before removal of the ash mound. Wetting of the ash will be necessary to reduce dust while removing ash.
- 6.7 The burn pits must be made of limestone or other highly compactable material and be capable of supporting the wheel weight of the loading equipment. There should be an impervious layer of clay or limestone on the bottom of the pit to attempt to seal the ash from the aquifer. This impervious layer should be at least 1 foot thick, and should be repaired or replaced if scraped by bulldozers, excavators, or other equipment.
- 6.8 The ends of the pits must be sealed with dirt ash or other material to a height of 4 feet.
- 6.9 A 12 inch dirt seal must be placed on the lip of the burn pit area to seal the blower nozzle. The nozzle should be 3 to 6 inches from the edge of the pit.
- 6.10 There should be 1 foot high warning stops running the length of the pits to alert equipment operators when they are close to the pit. The warning stops should be constructed of fireproof material.
- 6.11 No hazardous or contained-ignitable material is to be dumped into the pit.
- 6.12 The air flow should hit the wall of the pit at about 2 feet below the edge of the pit and the debris should not break the path of the air flow, except during dumping.
- 6.13 The length of the pit should be no longer than the length of the blower system, and the pit should be loaded uniformly along the length.
- 6.14 The contractor is responsible for ensuring that the public is protected from the burn operation. Signs, fences, and other measures can be used depending on site conditions.
- 6.15 Emissions must meet State and Federal standards for burning operations.
- 6.16 The Contractor shall be responsible for dust control while handling ash materials.

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7.0 PORTABLE AIR CURTAIN INCINERATORS

7.1 Portable incinerators use the same principles as air curtain pit systems. The primary difference being portable incinerators utilize a pre-manufactured pit in lieu of an on-site constructed earth or limestone pit. The pits are engineered to precise dimensions to compliment the blower systems. The composition and operation of the air curtain pit incinerator(s) shall conform generally to the drawings in Figures 1 and 2 of this scope of work.

7.2 Minimum required air velocity measured at the nozzle is 8,800 ft/min (100 mph). Minimum airflow rate measured at the nozzle is 900 cubic feet per min (cfm) per linear foot of pit length. (As an example, a 20-ft long pit would require a blower with a nozzle velocity of 8,800 ft/min and nozzle output rate of 18,000 cfm. This example is intended for explanation purposes only, and does not imply a recommended pit length for actual operations.)

7.3 There is to be a minimum distance of 100 feet between the portable incinerator and the nearest debris piles. There is to be a minimum distance of 1,000 feet between the portable incinerator and the nearest building. Contractors must assure that the public and workers are kept a safe distance from the incinerator.

7.4 The burn will be extinguished at least 2 hours before removal of the ash.

7.5 There should be 1 foot high warning stops running the length of the pits to alert equipment operators when they are close to the pit. The warning stops should be constructed of fireproof material.

7.6 No hazardous or contained-ignitable material is to be dumped into the pit.

7.7 The contractor is responsible for ensuring that the public is protected from the burn operation. Signs, fences, and other measures can be used depending on site conditions.

7.8 Emissions must meet State and Federal standards for burning operations.

7.9 The Contractor shall be responsible for dust control while handling ash materials.

[DELETE ENTIRE NEXT SECTION IF CHIPPING/GRINDING NOT ALLOWED; IF THIS SECTION IS DELETED, REMAINING SECTION NEED TO BE RE-NUMBERED]]

8.0 CHIPPING AND GRINDING

8.1 If the Contractor chooses to use chipping/grinding as a method of debris reduction, it is the Contractor's responsibility to acceptably dispose of the chips or mulch, at no additional cost to the Government. Because the volume reduction achieved by chipping/grinding is not as great as the volume reduction achieved by incineration, disposal of the chips or mulch in a landfill is not an acceptable means of disposal. For disposal, the chips or mulch must be put to some benefit or use. The Contractor may provide or sell the chips or mulch to be recycled for use in agricultural mulch, fuel or wood products.

8.2 The average chip size produced will be dependent on the needs of the end user, but typically should not exceed 4 inches in length and ½ inch in diameter.

**APPENDIX H
SCOPE OF WORK EXAMPLE
SITE MANAGEMENT FOR DEBRIS REDUCTION**

8.3 Contamination: Contaminates are all materials other than wood products. Contaminates must be held to 10% or less for the chips or mulch to be acceptable. Plastics should be eliminated completely. To help eliminate contaminants, root rake loaders should be used to feed or crowd material to the chipper/grinder. Bucket loaders tend to scoop up earth, which is a contaminate. The use of hand laborers must be utilized to pull out contaminants prior to feeding the chipper/grinders. The more contaminants, the more numerous the laborers. Shaker screens are required when processing stumps with root balls or when large amounts of soil are present in the vegetative debris.

8.4 Storage: Chips/mulch should be stored in piles no higher than 15 feet, and meet all State and local laws.

9.0 REPORTING

9.1 The Contractor shall submit a report to the COR no later than [TIME] each day. Each report shall contain, at a minimum, the following information:

- a) Contractor's Name.
- b) Contract Number.
- c) Daily and cumulative totals of debris processed, to include method(s) of processing and disposal location(s).
- d) Daily estimate of Household Hazardous Waste (HHW) debris segregated, and cumulative amount of HHW placed in the designated holding area.
- e) Any problems encountered or anticipated.

10.0 SITE CONSIDERATIONS

10.1 Site Plan. The Contractor will provide a site operations plan for review and approval by the COR prior to beginning work. At a minimum, the plan will address the following:

- a) Access to site
- b) Site management, to include point-of-contact, organizational chart, etc.
- c) Traffic control procedures
- d) Site security
- e) Site safety
- f) Site layout/segregation plan
- g) Hazardous waste materials plan
- h) Environmental mitigation plan, including considerations for smoke, dust, noise, traffic, buffer zones, storm water runoff archeology, historic preservation, wetlands, endangered species as appropriate.

10.2 Site Preparation. The Contractor shall be responsible for preparing the site(s) to accept the debris. This preparation shall include clearing, erosion control, grading, construction and maintenance of haul roads and entrances. The Contractor shall provide utility clearances and

APPENDIX H
SCOPE OF WORK EXAMPLE
SITE MANAGEMENT FOR DEBRIS REDUCTION

sanitation facilities, if needed. The Contractor shall protect existing structures at the sites and repair any damage caused by his operations at no additional cost to the Government.

10.3 Site Security. The Contractor shall be responsible for installing site security measures and maintaining security for his operations at the site.

10.4 Fire Protection. The Contractor shall manage the site to minimize the risk of fire.

10.5 Ash Containment Area. The Contractor shall be responsible for the storage, removal and containment of ash from all burning operations. The containment area will be "wetted down" periodically under this contract to prevent particles from becoming airborne.

10.6 Inspection Tower. The contractor shall construct an inspection tower. The tower shall be constructed using pressure treated wood. The floor elevation of the tower shall be 10 foot above the existing ground elevation. The floor area shall be 8' by 8', constructed of 2"x 8" joists, 16" O.C. with 3/4" plywood supported by four 6" x 6" posts. The perimeter of the floor area shall be protected by a 4 foot high wall constructed of 2" x 4" studs and 1/2" inch plywood. The floor area shall be covered with a corrugated tin roof. The roof shall provide a minimum of 6'-6" of headroom below the support beams. Wooden steps shall provide access with a handrail.

10.7 Traffic Control. The Contractor shall be responsible for control of pedestrian and vehicular traffic in the work area. Contractor shall provide all flag persons, signs, equipment and other devices necessary to meet Federal, State, tribal and local requirements. The traffic control personnel and equipment shall be in addition to the personnel and equipment required in other parts of this contract. As a minimum, one flag person shall be posted at each entrance to direct traffic to the site.

10.8 Site Closure. The Contractor shall be responsible for the closure of the debris site within [INSERT] calendar days of receiving the last load of disaster-related debris. This closure shall include removal of site equipment, debris, and all remnants from the processing operation (such as temporary toilets, observation towers, security fence, etc.), and grading the site, and restoring the site to pre-work conditions. The site will be restored in accordance with all State, tribal and local requirements. The Contractor is responsible for the proper disposal of non-burnable debris, ash, and wood chips. Disposal of the HTW debris is not the responsibility of the Contractor under this contract. The Contractor shall receive approval from the COR as to the final acceptance of a site closure. Final payment shall be released to the Contractor upon acceptance by the Contracting Officer.

11.0 HOUSEHOLD HAZARDOUS WASTE (HHW) ISSUES

11.1 The Contractor will be required to construct a containment area at the reduction site. This containment area will consist of a earthen berm with a non-permeable soil liner. The HHW containment area must be covered at all times with a non-permeable cover.

11.2 Any material found that is classified as HHW shall be reported immediately to the designated COR. This material shall be segregated from the remaining debris using a method that will allow the remaining non-HHW debris to be processed. All HHW debris will be moved and placed in the designated HHW containment area.

11.3 Disposal of the HHW debris will be by separate contract.

**APPENDIX H
SCOPE OF WORK EXAMPLE
SITE MANAGEMENT FOR DEBRIS REDUCTION**

12.0 CONTRACTOR HHW SPILLS

12.1 The Contractor shall be responsible for reporting to the COR and cleaning up all HHW spills caused by the Contractor's operations at no additional cost to the Government.

12.2 Immediate containment actions shall be taken as necessary to minimize effect of any spill or leak. Cleanup shall be in accordance with applicable Federal, State, tribal and local laws and regulations.

12.3 Spills other than on the site shall be reported to the National Response Center, and the Contracting Officer immediately following discovery. A written follow-up shall be submitted to the COR not later than 7 days after the initial report. The written report shall be in narrative form, and as a minimum shall include the following:

- a. Description of the material spilled (including identity, quantity, manifest number, etc.).
- b. Determination as to whether or not the amount spilled is EPA/State reportable, and when and to whom it was reported.
- c. Exact time and location of spill, including description of the area involved.
- d. Receiving stream or waters.
- e. Cause of incident and equipment and personnel involved.
- f. Injuries or property damage.
- g. Duration of discharge.
- h. Containment procedures initiated.
- i. Summary of all communications the Contractor has had with press, agencies, or Government officials other than COR.
- j. Description of cleanup procedures employed or to be employed at the site, including disposal location of spill residue.

13.0 OTHER CONSIDERATIONS

13.1 The Contractor shall supervise and direct the work, using qualified labor and proper equipment for all tasks. Safety of the Contractor's personnel and equipment is the responsibility of the contractor. Additionally, the Contractor shall pay for all materials, personnel, taxes, and fees necessary to perform under the terms of this contract.

13.2 The Contractor must be duly licensed in accordance with the State's statutory and regulatory requirements to perform the work. The Contractor shall obtain all permits necessary to complete the work. The Contractor shall be responsible for determining what permits are necessary to perform under the contract. Copies of all permits shall be submitted to the COR.

**APPENDIX H
SCOPE OF WORK EXAMPLE
SITE MANAGEMENT FOR DEBRIS REDUCTION**

13.3 The Contractor shall be responsible for correcting any notices of violations issued as a result of the Contractors or any subcontractors actions or operations during the performance of this contract. Corrections for any such violations shall be at no additional cost to the Government.

14.0 MEASUREMENTS

14.1 Measurements of debris processed are based upon **Cubic Yard** measurements of debris delivered to the site.

14.2 Measurement of non-burnable debris and ash is based upon **Ton** measurements measured at the landfill or final disposal site.

14.3 All efforts required in mobilization, site set-up, site closeout and demobilization shall be considered as a total **Job**.

15.0 PAYMENT

15.1 Payment for all debris sorted, segregated, processed, reduced and disposed by burning will be made at the unit price per cubic yard.

15.2 Payment for managing and operating the debris sites; furnishing plant, material, labor, tools and equipment necessary to process/reduce/dispose of debris; and providing for traffic control, dust control, erosion control, inspection tower, lighting, ash containment, fire protection, permits, environmental monitoring, and safety measures; are all incorporated in the bidder's unit price for burning.

15.3 Payment for loading and hauling non-burnable debris to the final disposal site will be by the ton.

15.4 The Contractor will be entitled to invoice for mobilization after all equipment is delivered to and operational at the work site. Demobilization cost will be due after all equipment is removed from the work site. Payment for mobilization and demobilization will be per job.

15.5 Payment for site preparation and site closure will be per job.

APPENDIX H
SCOPE OF WORK EXAMPLE
SITE MANAGEMENT FOR DEBRIS REDUCTION

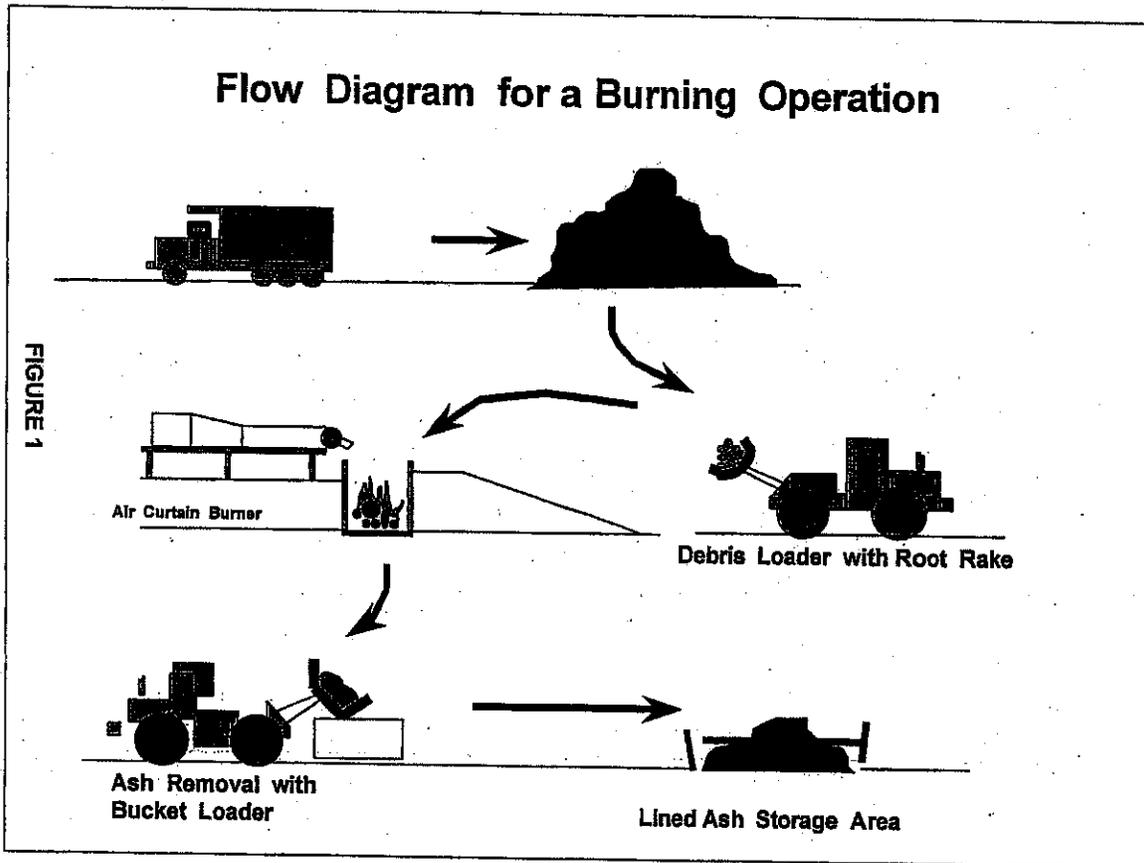


Figure 1

**APPENDIX H
SCOPE OF WORK EXAMPLE
SITE MANAGEMENT FOR DEBRIS REDUCTION**

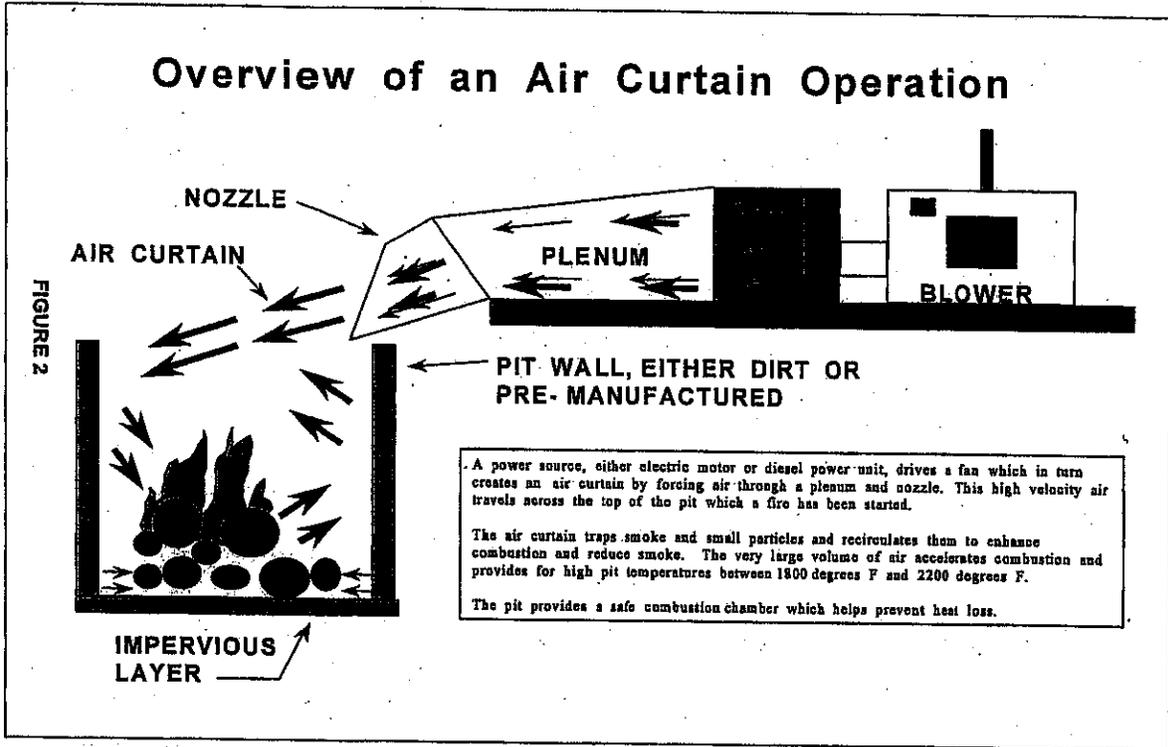


Figure 2

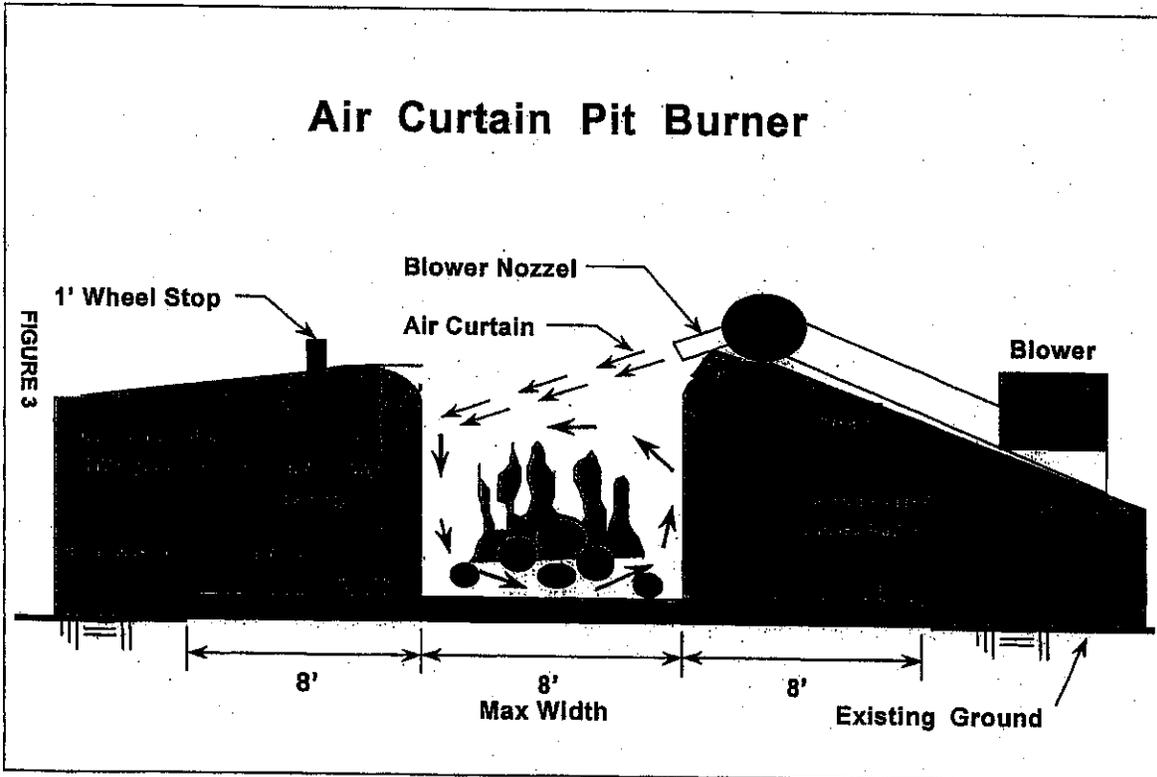


Figure 3

**APPENDIX H
SCOPE OF WORK EXAMPLE
SITE MANAGEMENT FOR DEBRIS REDUCTION**

BIDDING SCHEDULE

CONTRACT NO. _____

ITEM	DESCRIPTION	QUANTITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
1.	Mobilization.	1	Job	XXX	\$
2.	Reduction of Burnable Debris through the Air Curtain Incineration.		CY	\$	\$
3.	Disposal of Non- Burnable Debris and Ash.		Ton	\$	\$
4.	Site Preparation and Site Closure.	1	Job	XXX	\$

[DELETE THE NEXT BID ITEM IF CHIPPING & GRINDING IS NOT ALLOWED IN THE CONTRACT.]

5.	Reduction of Burnable Debris by Chipping and Grinding.		CY	\$	\$
6.	Reduction of Stumps greater than 24" in diameter, but less than 36" in diameter.		Stump	\$	\$
7.	Reduction of Stumps 36" in diameter, but less than 48" in diameter.		Stump	\$	\$
8.	Reduction of Stumps 48" in diameter or greater.		Stump	\$	\$
9.	Demobilization.	1	Job	XXX	\$



"Lisa Harkey"
<LisaH@pamh.com>
05/08/2007 02:54 PM

To <West@co.union.nc.us>
cc
bcc
Subject FW: Presenting at County Commissioners Meeting

AGENDA ITEM
7
MEETING DATE 8/6/07

Hi Lynn, I am resending this e-mail. Please let me know when you receive. Thanks!

From: Lisa Harkey
Sent: Wednesday, May 02, 2007 11:10 AM
To: 'West@co.union.nc.us'
Subject: Presenting at County Commissioners Meeting

Hi Lynn, Pam Shipman and Renee Snipes would like to come to the June 18 meeting to present the PBH Annual Audit Report and the PBH Local Business Plan. I am attaching the information that they will be presenting. Please confirm that they can be added to the agenda. Thanks!!

Lisa Harkey
PBH
Executive Assistant to
Dan Coughlin, Area Director/CEO
Pam Shipman, Deputy Area Director
Phone: 704-721-7005



Financials 2006 (final).pdf PBH LBP State Final.doc

**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND
SUBSTANCE ABUSE AUTHORITY**

**FINANCIAL STATEMENTS
AND SUPPLEMENTARY INFORMATION**

YEAR ENDED JUNE 30, 2006

**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
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**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
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CPAs, Consultants & Advisors
www.larsonallen.com

INDEPENDENT AUDITORS' REPORT

To the Area Board of Directors
Piedmont Area Mental Health, Developmental
Disabilities and Substance Abuse Authority
Concord, North Carolina

We have audited the accompanying financial statements of the governmental activities and the major fund of Piedmont Area Mental Health, Developmental Disabilities and Substance Abuse Authority (the "Authority"), as of and for the year ended June 30, 2006, which collectively comprise the Authority's basic financial statements as listed in the preceding Table of Contents. These financial statements are the responsibility of the Authority's management. Our responsibility is to express an opinion on these basic financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the basic financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities and the major fund of the Authority as of June 30, 2006, and the respective changes in financial position, where appropriate, thereof and the respective budgetary comparison for the general fund for the year then ended in conformity with accounting principles generally accepted in the United States of America.

In accordance with *Government Auditing Standards*, we have also issued our report dated August 25, 2006 on our consideration of the Authority's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be considered in assessing the results of our audit.

Management's Discussion and Analysis is not a required part of the basic financial statements but is supplementary information required by the Governmental Accounting Standards Board. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the required supplementary information. However, we did not audit this information and express no opinion thereon.

Our audit was performed for the purpose of forming an opinion on the financial statements that collectively comprise the basic financial statements of the Authority. The accompanying schedule of expenditures of Federal and State awards, as required by U.S. Office of Management and Budget Circular A-133, *Audits of States, Local Governments, and Non-Profit Organizations* and the State Single Audit Implementation Act, is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated, in all material respects, in relation to the basic financial statements taken as a whole.

Larson, Allen, Weishair & Co., LLP

LARSON, ALLEN, WEISHAIR & CO., LLP

Charlotte, North Carolina
August 25, 2006

Management's Discussion and Analysis

**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
MANAGEMENT'S DISCUSSION AND ANALYSIS
JUNE 30, 2006**

Overview of the Financial Statements

As Management of Piedmont Area Mental Health, Developmental Disabilities and Substance Abuse Authority (the "Authority"), we offer readers of the Authority's financial statements this narrative overview and analysis of the financial activities of the Authority for the fiscal year ended June 30, 2006. We encourage readers to read the information presented here in conjunction with additional information that we have furnished in the Authority's financial statements, which follow this narrative.

Required Financial Statements

The Authority's financial statements report information of the Authority using accounting methods similar to those used by private-sector health care organizations. These statements offer short-term and long-term financial information about its activities.

The Authority's basic financial statements consist of three components: 1) government-wide financial statements, 2) fund financial statements, and 3) notes to the financial statements. The basic financial statements present two different views of the Authority through the use of government-wide statements and fund financial statements. In addition to the basic financial statements, this report contains other supplemental information that will enhance the reader's understanding of the financial condition of the Authority.

The government-wide financial statements are designed to provide the reader with a broad overview of the Authority's finances similar in format to a financial statement of a private-sector business. The government-wide statements provide short-term and long-term information about the Authority's financial status as a whole.

The two government-wide statements report the Authority's net assets and how they have changed. Net assets are the difference between the Authority's total assets and total liabilities. Measuring net assets is one way to gauge the Authority's financial condition.

The fund financial statements provide a more detailed look at the Authority's most significant activities. A fund is a grouping of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. Piedmont Area Mental Health, Developmental Disabilities and Substance Abuse Authority, like all other governmental entities in North Carolina, uses fund accounting to ensure and reflect compliance (or non-compliance) with finance-related legal requirements, such as the General Statutes or the Authority's budget ordinance. The Authority has one governmental fund, the general fund.

The notes to the financial statements provide additional information that is essential to a full understanding of the data provided in the government-wide and fund financial statements.

**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
MANAGEMENT'S DISCUSSION AND ANALYSIS
JUNE 30, 2006**

Financial Analysis of the Authority

The Statement of Net Assets and the Statement of Activities report the net assets of the Authority and the changes in them. The Authority's net assets – the difference between assets and liabilities - are a way to measure financial health or financial position. Over time, increases or decreases in the Authority's net assets are one indicator of whether its financial health is improving or deteriorating. However, one will need to consider other non-financial factors such as changes in economic conditions, population growth, and new or changed governmental legislation.

Statement of Net Assets

A summary of the Authority's Statements of Net Assets at June 30, 2006 and 2005 is presented in Table A-1.

**Table A-1
Condensed Statements of Net Assets
June 30, 2006 and 2005**

	2006	2005
Current Assets		
Capital Assets	\$ 41,732,197	\$ 32,406,040
Total Assets	44,871,413	35,703,251
Current Liabilities		
Long-Term Liabilities	12,257,780	11,598,469
Total Liabilities	12,976,773	12,606,569
Net Assets		
Invested in Capital Assets, Net of Related Debt	2,868,387	2,875,745
Restricted - Medicaid Risk Reserve	2,356,371	437,124
Unrestricted Net Assets	26,669,882	19,783,813
Total Net Assets	\$ 31,894,640	\$ 23,096,682
Total Liabilities and Net Assets	\$ 44,871,413	\$ 35,703,251

The net assets of the Authority increased to \$31,892,640 during 2006, a \$8,795,958 increase from 2005, primarily due to favorable operations and because there was a full year of income under the Medicaid Waiver award that began April 1, 2005.

**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
MANAGEMENT'S DISCUSSION AND ANALYSIS
JUNE 30, 2006**

Statement of Activities

While the Statement of Net Assets shows the change in net assets, the Statements of Activities provides answers to the nature and source of these changes.

**Table A-2
Condensed Statements of Changes in Net Assets
Years Ended June 30, 2006 and 2005**

	2006	2005
Revenues		
Program Revenues		
Charges for Services	\$ 95,321,197	\$ 45,818,551
Operating Grants and Contributions	36,369,211	37,240,336
General Revenues		
County Revenue	2,721,924	2,651,724
Interest Income	1,030,717	210,492
Gain on Disposal of Capital Assets	13,362	10,605
Total Revenues	135,456,411	85,931,708
Expenses		
Local Management Entity Administration	10,885,536	9,558,704
Contracted Services	108,745,934	62,991,565
Case Management	6,261,553	7,600,150
Substance Abuse-Residential	153,702	189,539
Property Management	611,728	798,740
Total Expenses	126,658,453	81,138,698
Changes in Net Assets	8,797,958	4,793,010
Net Assets - Beginning	23,096,682	18,303,672
Net Assets - Ending	\$ 31,894,640	\$ 23,096,682

The Authority's operating revenues increased by 58.6% in 2006. Service fees increased by 108.0% due to Medicaid capitation waiver revenues. The Authority's operating expenses in 2006 increased approximately 56.1%. On April 1, 2005, the Authority was awarded a waiver from Medicaid related to capitation payments which increased Medicaid revenues. During the 2006 fiscal year, this additional waiver income contributed significantly towards favorable operations.

The Authority has made application with the State and Center for Medicare and Medicaid Services to add B-3 supplemental services to the Authority's service plan. The B-3 service data will be used in calculating future capitation rates.

**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
MANAGEMENT'S DISCUSSION AND ANALYSIS
JUNE 30, 2006**

Budgetary Analysis

Over the course of the year, the Authority revised the budget several times primarily due to increases in Medicaid revenue due to the waivers that were obtained as part of mental health reform.

Capital Assets and Debt Administration

At June 30, 2006 and 2005, the Authority had invested \$3,139,216 and \$3,297,211, respectively, in capital assets, net of accumulated depreciation, as shown in Table A-3.

**Table A-3
Capital Assets
June 30, 2006 and 2005**

	<u>2006</u>	<u>2005</u>
Land		
Vehicles and Other Equipment	\$ 224,497	\$ 224,497
Leasehold Improvements	624,361	685,451
Buildings	353,091	386,609
Total Capital Assets	<u>1,937,267</u>	<u>2,000,654</u>
	<u>\$ 3,139,216</u>	<u>\$ 3,297,211</u>

At June 30, 2006 and 2005, the Authority had \$270,829 and \$421,466 outstanding debt associated with these capital assets, respectively.

Financial Analysis of the Authority's Funds

As noted earlier, the Authority uses fund accounting to ensure and demonstrate compliance with finance-related legal requirements.

The focus of the Authority's governmental fund is to provide information on near-term inflows, outflows, and balances of useable resources. Such information is useful in assessing the Authority's operating activity. Specifically, unreserved fund balance can be a useful measure of a government's net resources available for spending at the end of the fiscal year.

The general fund is the chief operating fund of the Authority. At the end of the 2006 fiscal year, unreserved and undesignated fund balance of the General Fund was \$14,030,670 while the total fund balance was \$29,633,836. As a measure of the general fund's liquidity, it may be useful to compare both the unreserved fund balance and the total fund balance to total expenditures. Unreserved and undesignated fund balance represents 11.1% of total General Fund expenditures, while total fund balance represents 23.4% of that same amount at June 30, 2006.

At June 30, 2006 the governmental fund of the Authority reported a combined fund balance of \$29,633,836; an increase of 54.0% over 2005. The primary reason for this increase is favorable results of operations which included a full year of capitation payments under the Medicaid waiver.

**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
MANAGEMENT'S DISCUSSION AND ANALYSIS
JUNE 30, 2006**

Economic and Other Factors

A number of economic factors currently affect the financial and operational performance of health care entities and the Authority including the following:

Medicaid Waiver

The most significant event during the fiscal year related to the Medicaid waiver award for capitated funding which began on April 1, 2005. During the year ended June 30, 2006 the Authority received those payments for the full year.

Finance Contact

The Authority's financial statements are designed to present users with a general overview of the Authority's finances and to demonstrate the Authority's accountability. If you have any questions about the report or need additional financial information, please contact the Finance Director, Piedmont Area Mental Health, Developmental Disabilities and Substance Abuse Authority, 245 Le Phillip Court, Concord, North Carolina, 28025.

Basic Financial Statements

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**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
STATEMENT OF NET ASSETS
JUNE 30, 2006**

ASSETS	
Cash and Cash Equivalents	
Due from Other Governments	\$ 35,885,756
Accounts Receivable, Net of Allowance for Uncollectible Accounts and Contractual Allowances	84,226
Prepaid Expenses	5,165,083
Cash Restricted for Health Care Payments	537,941
Land	59,191
Other Capital Assets (Net of Accumulated Depreciation):	224,497
Vehicles and Other Equipment	
Leasehold Improvements	624,361
Buildings	353,091
Total Assets	1,937,267
	<u>44,871,413</u>
LIABILITIES	
Current Liabilities:	
Accounts Payable and Other Current Liabilities	
Notes Payable - Current Portion	12,098,361
	159,419
Long-Term Liabilities:	
Notes Payable - Net of Current Portion	
Due in More Than One Year - Compensated Absences	111,410
Total Liabilities	607,583
	<u>12,976,773</u>
NET ASSETS	
Invested in Capital Assets, Net of Related Debt	
Restricted - Medicaid Risk Reserve	2,868,387
Unrestricted	2,356,371
	26,669,882
	<u>\$ 31,894,640</u>

See accompanying Notes to Financial Statements.

**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
STATEMENT OF ACTIVITIES
YEAR ENDED JUNE 30, 2006**

<u>FUNCTIONS/PROGRAMS</u>	<u>Expenses</u>	<u>Charges for Services</u>	<u>Operating Grants and Contributions</u>	<u>Net Expenses and Change in Net Assets</u>
Governmental Activities:				
Client Services:				
Local Management Entity Administration	\$ 10,885,536	\$ 9,315,296	\$ 3,350,675	\$ 1,780,435
Contracted Services	108,745,934	85,713,755	33,018,536	9,986,357
Case Management	6,261,553	-	-	(6,261,553)
Operations/Direct Services	153,702	1,347	-	(152,355)
Property Management	611,728	290,799	-	(320,929)
Total Governmental Activities	<u>\$ 126,658,453</u>	<u>\$ 95,321,197</u>	<u>\$ 36,369,211</u>	5,031,955
General Revenues:				
Interest Income				1,030,717
Gain on Sale of Capital Assets				13,362
County Revenues				<u>2,721,924</u>
Total General Revenues				<u>3,766,003</u>
Change in Net Assets				8,797,958
Net Assets - Beginning				23,096,682
Net Assets - Ending				<u>\$ 31,894,640</u>

See accompanying Notes to Financial Statements.

**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
BALANCE SHEET – GOVERNMENTAL FUND
JUNE 30, 2006**

ASSETS

Cash and Cash Equivalents	\$ 35,885,756
Due from Other Governments	84,226
Accounts Receivable, Net of Allowance for Uncollectible Accounts and Contractual Allowances	5,165,083
Prepaid Expenses	537,941
Cash Restricted for Health Care Payments	59,191
Total Assets	<u><u>\$ 41,732,197</u></u>

LIABILITIES

Accounts Payable and Other Current Liabilities	\$ 12,098,361
Total Liabilities	<u><u>12,098,361</u></u>

FUND BALANCES

Reserved for:	
By State Statute	
Prepaid Expenses	5,249,309
Restricted Medicaid Risk Reserve	537,941
Unreserved:	2,356,371
Board Designated Specifically for Expanded Medicaid Services	
Board Designated-Other	6,000,000
Unrestricted	1,459,545
Total Fund Balances	<u><u>14,030,670</u></u>
Total Liabilities and Fund Balances	<u><u>\$ 41,732,197</u></u>

Amounts Reported in the Statement of Net Assets are Different Because:

Fund Balance	\$ 29,633,836
Capital Assets Used in Governmental Activities are not Financial Resources and therefore, are not Reported in the Funds	3,139,216
Liability for Compensated Absences is not Due and Payable in the Current Period and therefore, is not Reported in the Fund	(607,583)
Notes Payable is not due and Payable in the Current Period and therefore, is not Reported in the Fund	<u>(270,829)</u>
	<u><u>\$ 31,894,640</u></u>

See accompanying Notes to Financial Statements.

**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCES --
GOVERNMENTAL FUND
BUDGET AND ACTUAL
YEAR ENDED JUNE 30, 2006**

	Original Budget	Final Budget	Actual	Variance Favorable (Unfavorable)
REVENUES				
Intergovernmental:				
County				
State	\$ 2,651,924	\$ 2,721,924	\$ 2,721,924	\$ -
Federal	36,440,333	35,088,277	34,849,511	(238,766)
Medicaid	-	1,572,287	1,519,700	(52,587)
Other Income	91,686,135	96,508,353	96,167,878	(340,475)
Total Revenues	<u>760,139</u>	<u>1,951,927</u>	<u>1,917,656</u>	<u>(34,271)</u>
	<u>131,538,531</u>	<u>137,842,768</u>	<u>137,176,669</u>	<u>(666,099)</u>
EXPENDITURES				
Personnel	13,925,220	13,175,961	12,437,892	738,069
Professional Services	727,432	1,726,303	1,693,442	32,861
Contracts	111,299,986	115,216,983	108,745,934	6,471,049
Property Expense	41,424	127,300	105,274	22,026
Rental of Buildings	331,520	486,396	486,396	-
Capital Outlay	140,000	276,650	110,432	166,218
Other Expenses	4,902,254	6,692,480	3,028,718	3,663,762
Total Expenditures	<u>131,367,836</u>	<u>137,702,073</u>	<u>126,608,088</u>	<u>11,093,985</u>
Revenues Over Expenditures Before Other Financing Sources	170,695	140,695	10,568,581	10,427,886
Other Financing Sources (Uses):				
Appropriated Fund Balance	-	30,000	-	30,000
Debt Service Payments	(170,695)	(170,695)	(170,695)	-
Total Other Financing Sources (Uses):	<u>(170,695)</u>	<u>(140,695)</u>	<u>(170,695)</u>	<u>30,000</u>
Change in Fund Balance	<u>\$ -</u>	<u>\$ -</u>	<u>10,397,886</u>	<u>\$ 10,397,886</u>
Fund Balance - Beginning			19,235,950	
Fund Balance - Ending			<u>\$ 29,633,836</u>	

Notes to Financial Statements.

**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
RECONCILIATION OF THE STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN
FUND BALANCES – GOVERNMENTAL FUND – TO THE STATEMENT OF ACTIVITIES
YEAR ENDED JUNE 30, 2006**

Net Changes in Fund Balances - Total Governmental Funds	\$ 10,397,886
Governmental funds report capital outlays as expenditures. However, in the Statement of Activities the cost of those assets is allocated over their estimated useful lives and reported as depreciation expense. This is the amount by which depreciation exceeded capital outlay in the current period.	(157,995)
Revenues in the statement of activities that do not require current financial resources are not reported as revenues in the funds.	(1,722,258)
Some expenses in the statement of activities that do not require current financial resources are not reported as expenses in the funds.	280,325
Change in Net Assets	<u>\$ 8,797,958</u>

See accompanying Notes to Financial Statements.

**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2006**

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The accounting policies of Piedmont Area Mental Health, Developmental Disabilities and Substance Abuse Authority (the "Authority") conform to generally accepted accounting principles in the United States of America as applicable to governments. The following is a summary of the more significant accounting policies:

A. Reporting Entity

The Authority is an area authority designated by and functioning under the control of the North Carolina Department of Health and Human Services to provide mental health, developmental disabilities and substance abuse services in Cabarrus, Stanly, Union, Rowan, and Davidson Counties. The services, as a Local Management Entity, include reviewing and evaluating the area needs and programs in mental health, mental impairment, mental retardation, alcoholism, drug dependency and related fields, and developing jointly with the North Carolina Department of Health and Human Services, Division of Mental Health, Developmental Disabilities, and Substance Abuse Services, an annual plan for the effective development, use and control of state and local facilities and resources in a comprehensive program of mental health service for the residents of the area. The Authority is governed by a 20-member board of directors. The Authority is an area authority empowered by Chapter 122C of the North Carolina General Statutes with the responsibility to oversee and control all activities related to mental health, developmental disabilities, and substance abuse services in its target area. As required by generally accepted accounting principles, these financial statements present all accounts of the Authority.

B. Basis of Presentation, Basis of Accounting

Basis of Presentation, Measurement Focus – Basis of Accounting

Government-wide Statements. The statement of net assets and the statement of activities display information about the primary government (the Authority). These statements include the financial activities of the overall government, except for fiduciary activities. Eliminations have been made to minimize the double counting of internal activities. These statements distinguish between the *governmental* and *business-type activities* of the Authority. Governmental activities generally are financed through patient charges, third-party reimbursements, intergovernmental revenues, and other non-exchange transactions. Business-type activities are financed in whole or in part by fees charged to external parties. The Authority does not have any business-type activities.

The statement of activities presents a comparison between direct expenses and program revenues for each function of the Authority's governmental activities. Direct expenses are those that are specifically associated with a program or function and, therefore, are clearly identifiable to a particular function. Indirect expense allocations that have been made in the funds have been reversed for the statement of activities. Program revenues include: a) fees and charges paid by the recipients of goods or services offered by the programs, and b) grants and contributions that are restricted to meeting the operational or capital requirements of a particular program. Revenues that are not classified as program revenues are presented as general revenues.

**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2006**

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Fund Financial Statements. The fund financial statements provide information about the Authority's funds. Separate statements for each fund category – *governmental* – are presented. The emphasis of fund financial statements is on major governmental funds, displayed in a separate column. There are no remaining governmental funds that were aggregated and reported as non-major funds.

The Authority reports the following major governmental fund:

General Fund. This is the Authority's primary operating fund. It accounts for all financial resources of the general government.

Measurement Focus, Basis of Accounting

In accordance with North Carolina General Statutes, all funds of the Authority are maintained during the year using the modified accrual basis of accounting.

Government-wide Financial Statements. The government-wide financial statements are reported using the economic resources measurement focus. The government-wide financial statements are reported using the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded at the time liabilities are incurred, regardless of when the related cash flows take place. Non-exchange transactions, in which the Authority gives (or receives) value without directly receiving (or giving) equal value in exchange, include grants, entitlements, and donations. On an accrual basis, revenue from grants, entitlements, and donations is recognized in the fiscal year in which all eligibility requirements have been satisfied.

Amounts reported as program revenues include: 1) charges to customers or applicants for goods, services, or privileges provided, 2) operating grants and contributions, and 3) capital grants and contributions, including special assessments. Internally dedicated resources are reported as general revenues rather than as program revenues.

Governmental Fund Financial Statements. Governmental funds are reported using the current financial resources measurement focus and the modified accrual basis of accounting. Under this method, revenues are recognized when measurable and available. Expenditures are recorded when the related fund liability is incurred, except for principal and interest on general long-term debt, claims and judgments, and compensated absences, which are recognized as expenditures to the extent they have matured. General capital asset acquisitions are reported as expenditures in governmental funds.

**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2006**

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Proceeds of general long-term debt and acquisitions under capital leases are reported as other financing sources.

The Authority considers all revenues available if they are collected within sixty (60) days after year-end.

Intergovernmental revenues are not susceptible to accrual because generally they are not measurable until received in cash. Expenditure-driven grants are recognized as revenue when the qualifying expenditures have been incurred and all other grant requirements have been satisfied.

C. Budgetary Data

The Authority's budgets are adopted as required by the North Carolina General Statutes. An annual budget is adopted for the General Fund. All annual appropriations lapse at the fiscal year-end. All budgets are prepared using the modified accrual basis of accounting. Expenditures may not legally exceed appropriations at the functional level for all annually budgeted funds and at the object level for the multi-year funds. Amendments are required for any revisions that alter total expenditures of any fund or that change functional appropriations by more than \$5,000. The governing board must approve all amendments. During the year, several amendments to the original budget were necessary as required by state law primarily when funding changes are approved. The budget ordinance must be adopted by July 1 of the fiscal year or the governing board must adopt an interim budget that covers that time until the annual ordinance can be adopted.

D. Assets, Liabilities, and Fund Equity

1. Deposits and Investments

All deposits of the Authority are made in board-designated official depositories and are secured as required by G.S. 159-31. The Authority may designate, as an official depository, any bank or savings association whose principal office is located in North Carolina. Also, the Authority may establish time deposit accounts such as NOW and SuperNOW accounts, money market accounts, and certificates of deposit.

State law [G.S. 159-30(c)] authorizes the Authority to invest in obligations of the United States or obligations fully guaranteed both as to principal and interest by the United States; obligations of the State of North Carolina; bonds and notes of any North Carolina local government or public authority; obligations of certain non-guaranteed federal agencies; certain high quality issues of commercial paper and bankers' acceptances and the North Carolina Capital Management Trust (NCCMT).

**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2006**

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

The Authority's investments with a maturity of more than one (1) year at acquisition and non-money market investments are carried at fair value as determined by quoted market prices. The securities of the NCCMT Cash Portfolio, an SEC-registered (2a-7) money market mutual fund, are valued at fair value, which is the NCCMT's share price. Money market investments that have a remaining maturity at the time of purchase of one year or less are reported at amortized cost.

2. Cash and Cash Equivalents

All cash and investments are essentially demand deposits and are considered cash and cash equivalents. The Authority considers demand deposits and investments purchased with an original maturity of three (3) months or less, which are not limited as to use, to be cash and cash equivalents.

3. Allowances for Doubtful Accounts

All receivables that historically experience uncollectible accounts are shown net of an allowance for doubtful accounts. This amount is estimated by analyzing the percentage of receivables that were written off in prior years and evaluating current information related to the collectibility of individual receivables.

4. Prepaid Items

Certain payments to vendors reflect costs applicable to future accounting periods and are recorded as prepaid items in both government-wide and fund financial statements.

5. Capital Assets

Purchased or constructed capital assets are reported at cost or estimated historical cost. Donated capital assets are recorded at their estimated fair value at the date of donation. Minimum capitalization costs are as follows: leasehold improvements, equipment, and vehicles, \$5,000. The cost of normal maintenance and repairs that do not add to the value of the asset or materially extend assets' lives are not capitalized.

Capital assets of the Authority are depreciated on a straight-line basis over the following estimated useful lives:

	Years
Vehicles and Other Equipment	5-15
Leasehold Improvements	5-15
Buildings	10-30

6. Long-Term Obligations

In the government-wide financial statements, long-term obligations are reported as liabilities in the applicable governmental activities statement of net assets.

**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2006**

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

7. Compensated Absences

The vacation policies of the Authority provide for the accumulation of up to thirty (30) days earned vacation leave with such leave being fully vested when earned. For the Authority's government-wide fund, an expense and a liability for compensated absences and the salary-related payments are recorded as the leave is earned.

The sick leave policy of the Authority provides for an unlimited accumulation of earned sick leave. Sick leave does not vest, but any accumulated sick leave up to 20 days will be paid to employees retiring at age 55 or older with at least 15 years of service. The current portion of accumulated sick leave is not considered material; therefore, no expenditure or liability has been reported in the governmental funds.

8. Net Assets/Fund Balances

Net Assets

Net assets in government-wide financial statements are classified as invested in capital assets, net of related debt; restricted; and unrestricted. Restricted net assets represent constraints on resources that are either externally imposed by creditors, grantors, contributors, or laws or regulations of other governments or imposed by law through state statute.

Fund Balances

In the governmental fund financial statements, reservations or restrictions of fund balance represent amounts that are not appropriable or are legally segregated for a specific purpose. Designations of fund balance represent tentative management plans that are subject to change.

State law [G.S. 159-13(b)(16)] restricts the appropriation of fund balance to an amount not to exceed the sum of cash and investments minus the sum of liabilities, encumbrances and deferred revenues arising from cash receipts as those amounts stand at the close of the fiscal year preceding the budget year.

The governmental fund types classify fund balances as follows:

Reserved

Reserved by State statute – portion of fund balance, in addition to the reserve for encumbrances, which is not available for appropriation under State law [G.S. 159-8(a)]. This amount is usually comprised of accounts receivable that is not off-set by deferred revenues.

Reserved for prepaid expenses – portion of fund balance not available for appropriation as a result of expenses' payments paid in advance to be charged to future operating periods.

**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2006**

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Restricted – Medicaid Risk Reserve

Restricted net assets are those reported because of a constraint placed on its use by the contractual agreement between the Authority and the North Carolina Department of Health and Human Services Division of Medical Assistance. The agreement requires that the Authority deposit two percent of the monthly capitation payments until a maximum total of fifteen percent of the annualized total contract is achieved.

Unreserved

Designated for subsequent year's expenditures – portion of total fund balance available for appropriation that has been designated for the adopted 2006-2007 budget ordinance.

Unreserved and designated - other – portion of unreserved fund balance designated by management for a specified purpose.

Unreserved and designated specifically for expanded Medicaid services – the Authority has made application with the State of North Carolina and the Center for Medicare and Medicaid Services to add B-3 supplemental services to the Authority's service plan.

Undesignated – portion of total fund balance available for appropriation that is uncommitted at year-end.

NOTE 2 DETAIL NOTES ON ALL FUNDS

A. Assets

1. Deposits

All of the Authority's deposits are either insured or collateralized by using one of two methods. Under the Dedicated Method, all deposits exceeding the federal depository insurance coverage level are collateralized with securities held by the Authority in its name. Under the Pooling Method, which is a collateral pool, all uninsured deposits are collateralized with securities held by the State Treasurer's agent in the name of the State Treasurer. Since the State Treasurer is acting in a fiduciary capacity for the Authority, these deposits are considered to be held by their agents in the entity's name. The amount of the pledged collateral is based on an approved averaging method for non-interest bearing deposits and the actual current balance for interest-bearing deposits. Depositories using the Pooling Method report to the State Treasurer the adequacy of their pooled collateral covering uninsured deposits. The State Treasurer does not confirm this information with the Authority or with the escrow agent. Because of the inability to measure the exact amount of collateral pledged for the Authority under the Pooling Method, the potential exists for undercollateralization, and this risk may increase in periods of high cash flows. However, the State Treasurer of North Carolina enforces strict standards of financial stability for each depository that collateralizes public deposits under the Pooling Method.

**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2006**

NOTE 2 DETAIL NOTES ON ALL FUNDS (CONTINUED)

A. Assets (continued)

1. Deposits (continued)

At June 30, 2005, the Authority's deposits had a carrying amount of \$3,290,046 and a bank balance of \$3,798,902. Of the bank balance, \$100,000 was covered by federal depository insurance; \$3,698,902 in interest bearing deposits were covered by collateral held under the Pooling Method.

At June 30, 2006, the Authority had cash on hand of \$850.

2. Investments

At June 30, 2006, the Authority's investments of \$32,654,051 consisted solely of deposits in the NC Capital Management Trust Cash Portfolio, an SEC-registered (2a-7) money market mutual fund.

Interest Rate Risk: The Center has no policy on interest rate risk.

Credit Risk: The Center's investment in the NC Capital Management Trust Cash Portfolio carried a credit rating of AAAM by Standard & Poor's as of June 30, 2006.

Custodial Credit Risk: The Center has no policy on custodial credit risk.

The Authority's investments in the North Carolina Capital Management Trust are exempt from risk categorization because the Authority does not own any identifiable securities in these mutual funds.

3. Receivables

Receivables at the government-wide level at June 30, 2006, were as follows:

	Fees	Governments	Total
Governmental Activities:			
General	\$ 7,960,768	\$ 84,226	\$ 8,044,994
Total Receivables	7,960,768	84,226	8,044,994
Less Allowance for Doubtful Accounts and Contractual Adjustments	(2,795,685)	-	(2,795,685)
Total-Governmental Activities	\$ 5,165,083	\$ 84,226	\$ 5,249,309

The Authority's accounts receivable are presented net of the allowance for uncollectible accounts and contractual adjustments of \$2,795,685.

**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2006**

NOTE 2 DETAIL NOTES ON ALL FUNDS (CONTINUED)

4. Capital Assets

Capital asset activity for the year ended June 30, 2006, was as follows:

	Beginning Balances	Reclasses	Increases	Decreases	Ending Balances
Governmental Activities:					
Capital Assets Not Being Depreciated:					
Land	\$ 224,497	\$ -	\$ -	\$ -	\$ 224,497
Total Capital Assets Not Being Depreciated	<u>224,497</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>224,497</u>
Capital Assets Being Depreciated:					
Vehicles and Other Equipment	3,867,960	-	93,944	488,774	3,473,130
Leasehold Improvements	692,569	-	40,458	-	733,027
Buildings	2,732,093	-	-	-	2,732,093
Total Capital Assets Being Depreciated	<u>7,292,622</u>	<u>-</u>	<u>134,402</u>	<u>488,774</u>	<u>6,938,250</u>
Less Accumulated Depreciation for:					
Vehicles and Other Equipment	3,182,509	-	155,034	488,774	2,848,769
Leasehold Improvements	305,960	-	73,976	-	379,936
Buildings	731,439	-	63,387	-	794,826
Total Accumulated Depreciation	<u>4,219,908</u>	<u>-</u>	<u>292,397</u>	<u>488,774</u>	<u>4,023,531</u>
Governmental Activity, Capital Assets, Net	<u>\$ 3,297,211</u>	<u>\$ -</u>	<u>\$ (157,995)</u>	<u>\$ -</u>	<u>\$ 3,139,216</u>

Primary Government

Depreciation expense for the year ending June 30, 2006 was charged to functions/programs of the primary government as follows:

LME Administration	<u>\$ 292,397</u>
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B. Liabilities

1. Payables

Payables at the government-wide level at June 30, 2006, were as follows:

	Vendors	Salaries and Benefits	Liability for Claims Incurred, but not Reported	Liability for Self Insurance Plan	Total
Governmental Activities:					
General	\$ 5,497,884	\$ 132,583	\$ 6,408,703	\$ 59,191	\$ 12,098,361
Total Governmental Activities	<u>\$ 5,497,884</u>	<u>\$ 132,583</u>	<u>\$ 6,408,703</u>	<u>\$ 59,191</u>	<u>\$ 12,098,361</u>

**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2006**

NOTE 2 DETAIL NOTES ON ALL FUNDS (CONTINUED)

2. Pension Plan Obligations

a. Retirement Plan

Plan Description. The Authority has a defined contribution retirement plan covering all eligible employees working at least 1,000 hours per year administered through Cigna Life Insurance Company. The plan provides retirement and disability benefits to plan members and beneficiaries. Additional information on the plan may be obtained by writing to Cigna Life Insurance Company, 680 Town Clock Plaza, Dubuque, IA 52001, or by calling (319) 557-6827.

Funding Policy. The plan is optional and contributory by the employees. The Authority matches employee contributions dollar-for-dollar up to three percent of compensation. The Authority may elect to contribute additional amounts on behalf of eligible employees based on compensation and years of service. The Authority's contributions to the plan for the years ended June 30, 2006, 2005, and 2004, were \$439,706, \$432,123, and \$698,013, respectively. The contributions made by the Authority equaled the required contributions for each year.

3. Other Post-Employment Benefits

Under the Consolidated Omnibus Budget Reconciliation Act (COBRA), the Authority makes health care benefits available to eligible former employees and eligible dependents. Certain requirements are outlined by the federal government for this coverage. The premium plus 2% administrative fee is paid-in-full monthly by the insured. This program is offered for a duration of 18 months after the employee's termination date. There is no associated cost to the Authority under this program, and there are only 5 participants as of June 30, 2006.

4. Risk Management

The Authority is exposed to various risks of losses related to torts: malpractice; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The Authority carries commercial insurance to cover substantially all risks of loss. There have been no significant reductions in insurance coverage from the previous year and settled claims have not exceeded coverage in any of the past three fiscal years.

5. Contingent Liabilities

At June 30, 2006, the Authority was a defendant to various lawsuits. In the opinion of the Authority's management, the ultimate effect of these legal matters will not have a material adverse effect on the Authority's financial position.

**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2006**

NOTE 2 DETAIL NOTES ON ALL FUNDS (CONTINUED)

6. Long-Term Obligations

As of June 30, 2006, the governmental long-term debt of the financial reporting entity consisted of the following:

Installment Note Payable, First Charter National Bank, Payable in Monthly Installments of \$14,225 at an Annual Interest Rate of 5.83%, Collateralized by the Real Estate and Building:	
Current Portion	\$ 159,419
Non-Current Portion	111,410
Total Notes Payable	<u>\$ 270,829</u>
Accrued Compensated Absences:	
Non-Current Portion	<u>\$ 607,583</u>

The annual debt service requirements to maturity, including principal and interest, on the installment note payable subsequent to June 30, 2006 are as follows:

<u>Year Ending</u>	<u>Principal</u>	<u>Interest</u>
2007	\$ 159,419	\$ 11,281
2008	111,410	2,442
	<u>\$ 270,829</u>	<u>\$ 13,723</u>

Interest expense on the note payable was \$20,057 during 2006.

Long-Term Obligation Activity

The following is a summary of changes in the Authority's long-term obligations for the fiscal year ended June 30, 2006:

	<u>Balance, July 1, 2005</u>	<u>Net Increase (Decrease)</u>	<u>Balance, June 30, 2006</u>	<u>Amounts Due Within One Year</u>
Governmental Activities:				
Notes Payable	\$ 421,466	\$ (150,637)	\$ 270,829	\$ 159,419
Compensated Absences	737,271	(129,688)	607,583	-
Total General Long-Term Debt	<u>\$ 1,158,737</u>	<u>\$ (280,325)</u>	<u>\$ 878,412</u>	<u>\$ 159,419</u>

Compensated absences typically have been liquidated in the general fund and are accounted for on a LIFO basis, assuming that employees are taking leave-time as it is earned.

**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2006**

NOTE 3 SUMMARY DISCLOSURES OF SIGNIFICANT COMMITMENTS AND CONTINGENCIES

Noncancellable Operating Leases

The Authority leases certain operating facilities under noncancellable operating leases. Seven of the leases for facilities are renewable at the option of the Authority. One of these leases contains an option to purchase at any time during the lease term. Future lease payments due under these leases subsequent to June 30, 2006 are as follows:

<u>Year Ending June 30,</u>	<u>Amount</u>
2007	\$ 588,567
2008	169,919
	<u>\$ 758,486</u>

Total rent expense for all operating leases amounted to \$486,395 for the year ended June 30, 2006.

Federal and State-Assisted Programs

The Authority has received proceeds from several federal and state grants. Periodic audits of these grants are required and certain costs may be questioned as not being appropriate expenditures under the grant agreements. Such audits could result in the refund of grant monies to the grantor agencies. Management believes that any required refunds will be immaterial. No provision has been made in the accompanying financial statements for the refund of grant monies.

Self-Funded Health Insurance

The Authority had a self-funded group health care plan which was discontinued in January, 2006. Provisions for expected future payments had been accrued based on the Authority's experience and included amounts for claims filed and claims incurred but not reported. The Authority is insured for excessive and unexpected health claims and is liable for claims not to exceed \$60,000 for each employee per plan year and an aggregate amount of \$1,500,000 per plan year, whichever is reached first. The Authority has accrued a liability of \$59,191 as of June 30, 2006, for estimated health plan claims that have not been settled at the end of the fiscal year.

**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
SCHEDULE OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCES –
GOVERNMENTAL FUND
BUDGET AND ACTUAL
YEAR ENDED JUNE 30, 2006**

	<u>Final Budget</u>	<u>Actual</u>	Variance Favorable (Unfavorable)
REVENUES			
Intergovernmental:			
County	\$ 2,721,924	\$ 2,721,924	\$ -
State & Federal	36,660,564	36,369,211	(291,353)
Medicaid	96,508,353	96,167,878	(340,475)
Other Income	1,951,927	1,917,656	(34,271)
Total Revenues	<u>137,842,768</u>	<u>137,176,669</u>	<u>(666,099)</u>
EXPENDITURES			
Local Management Entity Administration:			
Personnel	7,604,461	7,033,746	570,715
Professional Services	1,615,803	1,489,634	126,169
Capital Outlay	260,100	95,535	164,565
Other Expense	5,711,775	2,236,313	3,475,462
	<u>15,192,139</u>	<u>10,855,228</u>	<u>4,336,911</u>
Operations/Direct Services:			
Personnel	-	29,606	(29,606)
Professional Services	-	106,846	(106,846)
Other Expense	-	17,251	(17,251)
	<u>-</u>	<u>153,703</u>	<u>(153,703)</u>
Provider Contracts:			
Contract Expenditures	115,216,983	108,745,934	6,471,049
	<u>115,216,983</u>	<u>108,745,934</u>	<u>6,471,049</u>

(continued)

**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
SCHEDULE OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCES --
GOVERNMENTAL FUND
BUDGET AND ACTUAL
YEAR ENDED JUNE 30, 2006**

	<u>Final Budget</u>	<u>Actual</u>	<u>Variance Favorable (Unfavorable)</u>
EXPENDITURES (continued)			
Case Management/CPSS:			
Personnel	\$ 5,571,500	\$ 5,374,540	\$ 196,960
Professional Services	110,500	96,962	13,538
Capital Outlay	16,550	14,897	1,653
Other Expense	980,705	775,154	205,551
	<u>6,679,255</u>	<u>6,261,553</u>	<u>417,702</u>
Property Management:			
Property Expense	127,300	105,274	22,026
Rental of Buildings	486,396	486,396	-
	<u>613,696</u>	<u>591,670</u>	<u>22,026</u>
Total Expenditures	<u>137,702,073</u>	<u>126,608,088</u>	<u>11,093,985</u>
Revenues Over Expenditures Before Other Financing Sources	140,695	10,568,581	10,427,886
Other Financing Sources (Uses):			
Appropriated Fund Balance	30,000	-	30,000
Debt Service Payments	(170,695)	(170,695)	-
Total Other Financing Sources (Uses):	<u>(140,695)</u>	<u>(170,695)</u>	<u>30,000</u>
Revenues Over Expenditures	<u>\$ -</u>	<u>10,397,886</u>	<u>\$ 10,397,886</u>
Fund Balance - Beginning		<u>19,235,950</u>	
Fund Balance - End		<u>\$ 29,633,836</u>	

Compliance Section

LarsonAllenSM

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Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

To the Area Board of Directors
Piedmont Area Mental Health, Developmental Disabilities
and Substance Abuse Authority
Concord, North Carolina

We have audited the financial statements of Piedmont Area Mental Health, Developmental Disabilities and Substance Abuse Authority ("the Authority"), as of and for the year ended June 30, 2006, which collectively comprise the Authority's basic financial statements and have issued our report therein dated August 25, 2006. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered the Authority's internal control over financial reporting in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements and not to provide assurance on the internal control over financial reporting. Our consideration of the internal control over financial reporting would not necessarily disclose all matters in the internal control that might be material weaknesses. A material weakness is a reportable condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements caused by error or fraud in amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. We noted no matters involving the internal control over financial reporting and its operation that we consider to be material weaknesses.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Authority's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed one instance of noncompliance that is required to be reported under *Government Auditing Standards* and which is described in the accompanying schedule of findings and questioned costs as Finding 2006-1.

This report is intended solely for the information and use of management, others within the Authority, members of the Board of Directors, and Federal and State awarding agencies and pass-through entities and is not intended to be and should not be used by anyone other than these specified parties.

Larson, Allen, Weishaar & Co., LLP
LARSON, ALLEN, WEISHAIR & CO., LLP

Charlotte, North Carolina
August 25, 2006

LarsonAllenSM

Larson, Allen, Weishair & Co., LLP

CPAs, Consultants & Advisors
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Report on Compliance with Requirements Applicable to Each Major Federal Program and Internal Control over Compliance in Accordance with OMB Circular A-133 and the State Single Audit Implementation Act

To the Area Board of Directors
Piedmont Area Mental Health, Developmental Disabilities
and Substance Abuse Authority
Concord, North Carolina

Compliance

We have audited the compliance of Piedmont Area Mental Health, Developmental Disabilities and Substance Abuse Authority ("the Authority"), with the types of compliance requirements described in the U.S. Office of Management and Budget (OMB) Circular A-133 Compliance Supplement and the Audit Manual for Governmental Auditors in North Carolina, issued by the Local Government Commission, that are applicable to each of its major federal programs for the year ended June 30, 2006. The Authority's major federal programs are identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs. Compliance with the requirements of laws, regulations, contracts and grants applicable to each of its major federal programs is the responsibility of the Authority's management. Our responsibility is to express an opinion on the Authority's compliance based on our audit.

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and OMB Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations, and the State Single Audit Implementation Act. Those standards, OMB Circular A-133, and the State Single Audit Implementation Act require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about the Authority's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion. Our audit does not provide a legal determination on the Authority's compliance with those requirements.

In our opinion, the Authority complied, in all material respects, with the requirements referred to above that are applicable to each of its major federal programs for the year ended June 30, 2006. However, the results of our auditing procedures disclosed one instance of noncompliance with those requirements, which is required to be reported in accordance with OMB Circular A-133 and which is described in the accompanying schedule of findings and questioned costs as Finding 2006-1.

Internal Control Over Compliance

The management of the Authority is responsible for establishing and maintaining effective internal control over compliance with requirements of laws, regulations, contracts and grants applicable to federal programs. In planning and performing our audit, we considered the Authority's internal control over compliance with requirements that could have a direct and material effect on a major federal program in order to determine our auditing procedures for the purpose of expressing our opinion on compliance and to test and report on internal control over compliance in accordance with OMB Circular A-133 and the State Single Audit Implementation Act.

Our consideration of the internal control over compliance would not necessarily disclose all matters in the internal control that might be a material weakness. A material weakness is a condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that noncompliance with applicable requirements of laws, regulations, contracts and grants that would be material in relation to a major federal program being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. We noted no matters involving the internal control over compliance and its operation that we consider to be material weaknesses.

This report is intended solely for the information and use of management, others within the Authority, members of the Board of Directors, and Federal and State awarding agencies and pass-through entities and is not intended to be and should not be used by anyone other than these specified parties.

Larson, Allen, Weishair & Co., LLP
LARSON, ALLEN, WEISHAIR & CO., LLP

Charlotte, North Carolina
August 25, 2006

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Larson, Allen, Weishair & Co., LLP

CPAs, Consultants & Advisors
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Report on Compliance with Requirements Applicable to Each Major State Program and Internal Control over Compliance in Accordance with Applicable Sections of OMB Circular A-133 and the State Single Audit Implementation Act

To the Area Board of Directors
Piedmont Area Mental Health, Developmental Disabilities
and Substance Abuse Authority
Concord, North Carolina

Compliance

We have audited the compliance of Piedmont Area Mental Health, Developmental Disabilities and Substance Abuse Authority ("the Authority"), with the types of compliance requirements described in the Audit Manual for Governmental Auditors in North Carolina, issued by the Local Government Commission, that are applicable to each of its major State programs for the year ended June 30, 2006. The Authority's major State programs are identified in the summary of auditors' results section of the accompanying schedule of findings and questioned costs. Compliance with the requirements of laws, regulations, contracts and grants applicable to each of its major State programs is the responsibility of the Authority's management. Our responsibility is to express an opinion on the Authority's compliance based on our audit.

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; applicable sections of OMB Circular A-133 as described in the Audit Manual for Governmental Auditors in North Carolina, and the State Single Audit Implementation Act. Those standards, applicable sections of OMB Circular A-133, and the State Single Audit Implementation Act require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major State program occurred. An audit includes examining, on a test basis, evidence about the Authority's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion. Our audit does not provide a legal determination on the Authority's compliance with those requirements.

In our opinion, the Authority complied, in all material respects, with the requirements referred to above that are applicable to each of its major State programs for the year ended June 30, 2006. However, the results of our auditing procedures disclosed one instance of noncompliance with those requirements, which is required to be reported in accordance with OMB Circular A-133 and which is described in the accompanying schedule of findings and questioned costs as Finding 2006-1.

Internal Control Over Compliance

The management of the Authority is responsible for establishing and maintaining effective internal control over compliance with requirements of laws, regulations, contracts and grants applicable to State programs. In planning and performing our audit, we considered the Authority's internal control over compliance with requirements that could have a direct and material effect on a major State program in order to determine our auditing procedures for the purpose of expressing our opinion on compliance and to test and report on internal control over compliance in accordance with applicable sections of OMB Circular A-133 and the State Single Audit Implementation Act.

A material weakness is a condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that noncompliance with applicable requirements of laws, regulations, contracts and grants that would be material in relation to a major State program being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. Our consideration of the internal control over compliance would not necessarily disclose all matters in the internal control that might be reportable conditions and, accordingly, would not necessarily disclose all reportable conditions that are also considered to be material weaknesses. We noted no matters involving the internal control over compliance and its operation that we consider to be material weaknesses.

This report is intended solely for the information and use of management, others within the Authority, members of the Board of Directors, and State awarding agencies and pass-through entities and is not intended to be and should not be used by anyone other than these specified parties.

Larson, Allen, Weishair & Co., LLP

LARSON, ALLEN, WEISHAIR & CO., LLP

Charlotte, North Carolina
August 25, 2006

**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
SCHEDULE OF FINDINGS AND QUESTIONED COSTS
JUNE 30, 2006**

Section I – Summary of Auditors’ Results

Financial Statements

Type of auditors’ report issued: Unqualified

Internal control over financial reporting:

- Material weakness(es) identified? yes no
- Reportable condition(s) identified that are not considered to be material weaknesses? yes no

Noncompliance material to financial statements noted? yes no

Federal Awards

Internal control over major federal programs:

- Material weakness(es) identified? yes no
- Reportable condition(s) identified that are not considered to be material weaknesses? yes no

Noncompliance material to financial statements noted? yes no

Type of auditors’ report issued on compliance for major federal programs: Unqualified.

Any audit findings disclosed that are required to be reported in accordance with Section 510(a) of Circular A-133? yes no

Identification of major federal programs:

<u>CFDA Numbers</u>	Names of Federal Program or Cluster
93.959	Block Grant for Prevention and Treatment of Substance Abuse
93.958	Block Grant for Mental Health Services

The above programs are tested as part of a state identified unit cost cluster.

Dollar threshold used to distinguish between Type A and Type B Programs \$ 300,000

Auditee qualified as low-risk auditee? yes no

(continued)

Cause: Training

Management's Response: This missing documentation related to services performed by a provider that was unaware of the required documentation standards. A corrective plan of action that included training was required of the provider.

Name of Contact Person: Renee Snipes, Finance Officer

Corrective Action: A corrective action plan was required of the contract provider that requires training and monitoring by quality review staff.

Proposed Completion Date: February 1, 2007

Summary Schedule of Prior Year Audit Findings

Finding 2005-1

Condition: Out of 40 Medicaid patient charts tested, 1 was missing a service plan with a date of service.

Recommendation: We recommended ongoing training and review of patient files for complete documentation.

Current Status: While management instituted continued training for all staff and also has an internal audit function to review medical records, isolated errors in documentation continue at the contract provider level. While these errors appear to be related to human error and also appear to be isolated occurrences, the Authority provides ongoing training and monitoring to minimize errors in patient files.

**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
SCHEDULE OF EXPENDITURES OF FEDERAL AND STATE AWARDS
JUNE 30, 2006**

		<u>Federal Expenditures</u>	<u>State Expenditures</u>
Federal Awards			
<u>U.S. Department of Housing and Urban Development</u>			
Shelter Plus Care Program	14.238	\$ 55,539	\$ -
Total U.S. Department of Housing and Urban Development		55,539	-
 <u>U.S. Department of Health and Human Services</u>			
<u>Substance Abuse and Mental Health Service Administration</u>			
Passed-through the N.C. Dept. of Health and Human Services:			
Division of Mental Health, Developmental Disabilities and Substance Abuse Services:			
Perinatal and Maternal Substance Abuse Initiative	93.959	39,618	-
SVCS to IV Drug Users	93.959	51,483	-
<u>Mental Health Cluster</u>			
Block Grant for Community Mental Health Services	93.958	472,983	-
Social Service Block Grant	93.667	10,398	-
- Other		-	21,723
Total Mental Health Cluster		483,381	21,723
 <u>Substance Abuse Services Cluster</u>			
Block Grant for Prevention and Treatment of Substance Abuse	93.959	474,176	-
Total Substance Abuse Services Cluster		474,176	-
Total U.S. Department of Health and Human Services		1,048,658	21,723
Total Federal Awards and State Matches		1,104,197	21,723
 State Awards			
N. C. Department of Health and Human Services			
Division of Mental Health, Developmental Disabilities and Substance Abuse Services:			
General Program Services		-	32,267,408
Multidisciplinary Evaluation		-	2,200
Total Division of Mental Health, Developmental Disabilities and Substance Abuse Services:		-	32,269,608
Total State Awards		-	32,291,331
Total Federal and State Awards		\$ 1,104,197	\$ 32,291,331

**PIEDMONT AREA MENTAL HEALTH,
DEVELOPMENTAL DISABILITIES AND SUBSTANCE ABUSE AUTHORITY
NOTE TO SCHEDULE OF EXPENDITURES OF FEDERAL AND STATE AWARDS
YEAR ENDED JUNE 30, 2006**

Basis of Presentation

The preceding schedule of expenditures of federal and state awards includes the federal and state grant activity of Piedmont Area Mental Health, Developmental Disabilities and Substance Abuse Authority and is presented on the modified accrual basis of accounting. The information in this schedule is presented in accordance with the requirements of OMB Circular A-133, *Audits of States, Local Governments, and Non-Profit Organizations*. Therefore, some amounts presented in this schedule may differ from amounts presented in, or used in the preparation of the general purpose financial statements.

PBH Local Business Plan 2007

Executive Summary

PBH is not the same organization it was four years ago. It has been completely redesigned, totally reengineered.

March 2003 Snapshot:

- Piedmont Behavioral Healthcare had 650 employees.
- Piedmont Behavioral Healthcare directly operated more than 50% of the services that were available to consumers.
- Piedmont Behavioral Healthcare offered outpatient services through only one community mental health center in each county (no consumer choice).
- We covered only four counties, with a population of 450,000.
- We were organized into disability and management department silos (DD, Mental Health, Substance Abuse, Finance, Human Resources, etc).
- We had no community alternatives to state psychiatric hospitalization.
- Openly declared consumers were not employed in key staff and executive positions.
- We did not have a Medical Director.

March 2007 Snapshot:

- We are now PBH, and we are a certified Local Management Entity (LME) per General Statute 122 C.
- We have just over 100 LME staff (not including case management).
- The only "service" we operate is case management for Developmental Disabilities.
- We are organized by function: Access, Utilization Management, Quality Management, Network Operations, Office of Medical Affairs, etc.
- We have a new management system that supports our new role: Because most plans and decisions are not limited to single functions or departments, we have developed an extensive system of Cross Functional Teams which bring together key resources from each department to plan and solve problems.
- We are composed of five counties with 670,000 general population.
- We have single stream state funding.
- We have two Medicaid Waivers, a managed care waiver for Mental Health and Substance Abuse, and a home and community based waiver for Developmental Disabilities.
- We manage state psychiatric inpatient funding and have developed alternatives to psychiatric hospitalization; we have plans to continue to expand these resources and serve people needing inpatient care locally whenever possible.
- We have consumers employed at high levels within the organization; we have an Office of Consumer Affairs staffed by an experienced Consumer Leader.
- We have an office of Medical Affairs, with a Medical Director and an Assistant Medical Director.
- We have a Call Center that can assist consumers 24 hours per day, 365 days per year.
- We have providers that are actively involved in operational forums for our organization.
- We have a Consumer Family Advisory Committee that involves consumers and family members at the highest levels of PBH management, including the PBH Board of Directors.
- Although we do not have offices in the counties any more, we have maintained and strengthened our community partnerships through our county level Advisory Councils and participation in an even wider array of community forums than we did as an Area Program.

We have reengineered ourselves, "built the airplane" so to speak, "while we were flying it"! This *has not* been easy. We have weathered a storm of chaos and instability that wreaked havoc across North Carolina, and while we have not been insulated from its effects, we have been able to keep on course.

Our accomplishments over the past four years include:

1. We maintained Continuity of Care for 20,000 consumers during divestment of services in 2003 and 2004.
2. We have developed a 501c-3 agency that is operating successfully over five counties and provides essential safety net services to the citizens of our counties. This report includes an in depth assessment of DAYMARK Recovery Services in the context of this system transformation.
3. We have developed other providers of community mental health services so that consumers have a choice of DAYMARK Recovery Services or at least one other provider in each county. These new providers are small, but are continuing to grow. We have a wide range of choices of providers for consumers for most all services.
4. We successfully divested over \$30 million dollars in directly operated services for both PBH and the former Davidson County Area Mental Health Program.
5. PBH supported the development of a strong and independent Consumer Family Advisory Committee that has taken a leadership role in advocating for the needs of consumers across Cabarrus, Davidson, Rowan, Stanly and Union counties.
6. We have developed numerous forums for communication, collaboration and stakeholder involvement in system planning and management including:
 - a. The PBH Consumer Family Advisory Committee
 - b. The PBH Network Advisory Council (for PBH Providers)
 - c. Five county level Advisory Councils
 - d. A Global Continuous Quality Improvement Committee that involves consumers, providers and PBH staff
 - e. A Clinical Advisory Committee that oversees clinical interventions and best practices in service delivery
7. We have a strong focus on the development of affordable housing for people with disabilities and put together a Regional Housing Continuum of Care that was successful in obtaining HUD funding grants the first year of operations.
8. We have become electronic! Over 98% of our claims for services from providers are submitted electronically and we can pay providers with electronic fund transfers, provide electronic remittance advices. We have automated numerous administrative functions, which results in greater efficiency and better management of public resources.
9. We have conducted extensive and ongoing outreach to the community. We have sponsored a major Person Centered Planning Conference for consumers and families to heighten awareness of Recovery and Empowerment. Additionally, we hosted a Cultural Competency Conference that brought in national experts to speak on the importance of culture in the recovery and independence of people with disabilities.
10. We have successfully managed the growth of Medicaid for Mental Health, Developmental Disabilities and Substance Abuse Services within our counties, not by denying care to consumers, but through the development of a highly organized system of services which we operate using managed care strategies.

Most importantly, we have developed the capacity, competence, and infrastructure to achieve the goals outlined in our Local Business Plan for 2007-2010.

Executive Summary: Expressions of Appreciation

Through the development of our 2007 Local Business Plan, we have taken the time to conduct the self assessment delineated in this document. The improvements we have identified follow in our Goals for 2007-2010. We are grateful to the members of our PBH Local Business Plan Oversight Committee for their time, insight, and support of our efforts. We appreciate the sincere feedback that we have received from our stakeholders and pledge to use it to improve ourselves as well as services to consumers and families.

Our providers are our front line. Our achievements would be largely incomplete without the competence, commitment and perseverance that they have brought to our table.

We also want to thank Carmen Hooker Odom, the Secretary of the Department of Health and Human Services for this opportunity and for believing we could be successful; without her support, we would not have had this chance. The Division of Medical Assistance and the Division of Mental Health, Developmental Disabilities and Substance Abuse Services have provided key resources to make this Demonstration possible. They have been wonderful collaborators and their support has played an essential role in our success to date.

PBH has enjoyed the unfailing confidence of a Board of Directors that was willing to be on the "cutting edge". No doubt, this endeavor was a calculated risk. The Leadership and Staff at PBH are grateful for and continually strengthened by this support.

Our Local Elected Officials and Legislative Delegation have been hopeful, understanding when there were problems, and always there cheering us on. One of our goals was to demonstrate how public policy can be implemented on a local/regional level. As elected representatives of the citizens of our counties, their role is to set the direction, establish the public policy. Our part has been to carry it out. We are proud of the role that we have played in this continuum of government and we believe that we have been largely successful in achieving the vision that was established in the System Reform Legislation of 2001.

The PBH Demonstration March 1, 2007

Multi-county Area Programs are political subdivisions of the State of North Carolina established and operating in accordance with NC General Statute 122C (G.S. 122C-116). The Secretary of the North Carolina Department of Health and Human Services is charged with the administration and enforcement of General Statute 122C (G.S.-112.1), which specifies the legal responsibilities, and authority of Area Programs regarding the provision of community services (G.S. 122C-117). General Statute 122C also specifies the role and responsibilities of county governments in determining the governance structure and developing Boards of Directors to manage Area Programs. The State Plan requires Area Programs to be certified as Local Management Entities through State approval of the Local Business Plan (G.S. 122C-115.2).

Piedmont was certified by the Department of Health and Human Services as an LME, effective July 1, 2003. We subsequently divested of all directly operated services, with the exception of case management and focused our efforts on developing the requisite competencies of a public sector Managed Care Organization. These competencies include the capacity to manage financial risk for defined population(s), the management of defined benefit plans and all of the normal functions of a Managed Care Organization, i.e. network development, provider relations, rate setting, access to care, enrollee services, care coordination, authorization of services, utilization management, claims adjudication and payment, management of medical/loss ratio, quality improvement targets, and meeting established performance indicators.

PBH serves Cabarrus, Davidson Stanly, Rowan and Union Counties, counties surrounding and to the northeast of Charlotte, the largest city in North Carolina. Piedmont is in an area of very rapid population growth and currently has a population of 670,000, making Piedmont the third largest LME in the state, and the largest multi-county LME.

The PBH Vision

The PBH Demonstration was envisioned as a model of a community system that would illustrate how the public policy goals of the 2001 System Reform Legislation could be implemented. Our 2003 Local Business Plan contained a detailed plan to transform our local system from a static provider driven model, to a system customized by consumer and family priorities, capable of making continual adjustments to meet the changing needs and choices of persons with behavioral health conditions and/or developmental disabilities. One of the major objectives of the Demonstration is the alignment of financial incentives with our values, public policy, best practices in care and the achievement of positive consumer outcomes.

Goals

Our goals are to address the needs of targeted populations as well as the community as a whole, and provide comprehensive, efficient, cost effective services, that are responsive to the needs of individuals. The PBH Demonstration delivers services more efficiently through a highly organized clinical design and a provider network that has the competency required to deliver quality evidence based practices. Over the past three and a half years, the goal of PBH has been to serve as a catalyst to initiate and manage changes in the services system to ensure implementation of evidence based and best practice services and supports. This has been achieved through a strong collaborative relationship with a provider network that shares our goals. Community-based and consumer-directed care rather than facility-based care is utilized to the greatest extent possible to accomplish these goals.

Demonstration Design

The State of North Carolina has provided tremendous support for the Piedmont demonstration. Under the direction of the NC Department of Health and Human Services, combined 1915(b) and 1915(c) waivers were developed and approved by the Center for Medicare and Medicaid Services. Under section 1915(b) States can request that the regulations governing comparability of services, state wideness and freedom of choice be waived in order to operate a managed care program where freedom of choice of providers is restricted to providers approved and designated by the Managed Care Organization (PBH) and in only certain counties of the state (the PBH catchment area). Section 1915(c) allows states to request that regulations dealing with comparability of services, state wideness, and community income and resource rules be waived so that individuals who qualify for Medicaid-funded institutional care (ICF-MR) can be cared for in the community through home and community based services.

The two waiver authorities have been approved and both have cost neutrality and cost effectiveness requirements. 1915(b) waivers are approved for two-year periods. 1915(c) waivers are approved for three years, initially, and must be renewed every five years thereafter. 1915(b) waivers must be cost effective in that service provision is based on historical utilization and adjusted for changes in trend; actual per capita expenditures cannot exceed these projections. 1915(c) waivers require that the average cost of care of all Medicaid services for persons participating in the waiver be no more than the average cost of care if the person were living in an ICF-MR. The renewal for the 1915 (b) waiver was submitted in December 2006 for the next waiver period which begins on April 1, 2007. The 1915 (c) is due for renewal in April, 2008.

Management of state resources and federal block grants, including state psychiatric hospital and Alcohol and Drug Treatment Center funds by Piedmont began July 1, 2003, under a Memorandum of Agreement between the North Carolina Department of Health and Human Services and the Piedmont LME. This involves consolidation of state funding into a single payment stream. All State Psychiatric Hospital, Developmental Center, and Alcohol and Drug Treatment Center dollars are included in the prepayment arrangement. PBH has the flexibility to develop alternatives to institutional care with this funding.

The Financial Model

The model developed by PBH includes strategies to re-deploy existing dollars more efficiently and effectively, blending as many funding sources as possible under a single financial manager including categorical dollars, starting with Medicaid and state funding. Re-engineering the system away from high-cost and institutional use, to a community-based system involves the authority to manage the full continuum of care. The PBH LME serves as the payer of all claims and provides "encounter" data to the State system as a stand-behind reporting and shadow claims system (*not* as a billing function). Our strategy is to develop a funding model that identifies the best ways to support this systems change and, at the same time, enable federal, state and local payers to contain their overall costs, while we achieve reimbursement and benefits management flexibility.

The Piedmont Cardinal Health Plan (1915 (b) Medicaid Waiver) and the Innovations Waiver, (1915-c Medicaid Waiver) are especially important in redirecting services into more efficient, best practice models of intervention. Capitation supports the type of creative flexibility necessary in a consumer driven system of care. Re-direction of Medicaid resources for adults with developmental disabilities and mental health and substance abuse problems through a waiver allows for flexibility for supportive services in less restrictive settings and development of more consumer directed options that reduce reliance on high cost, poor outcome, and facility-based services.

PBH saved \$4 million in Medicaid dollars the first year of waiver operations, not through denial of care, but through effective service management strategies. 95% of authorizations have historically been approved; the 5% denial rate includes authorizations denied for administrative errors. Per our contract with the Division of Medical Assistance, this savings was placed in a reinvestment account. PBH through the NC Division of Medical Assistance applied to the Centers for Medicare and Medicaid for authority to use the savings to provide an array of best practice services that are not in the North Carolina Medicaid Plan. This authority was granted in January 2007. With the availability of lower cost alternative services that are specifically designed to support consumers in community settings, PBH will be able to more effectively redirect consumers away from institutional care.

A Self Managed System

A self-managed system relies on educated providers who understand and operate in tandem with PBH Clinical Objectives. Ideally, this is a system where the structure, requirements and expectations are so well known, that extensive management and intervention are not required. Providers are involved in the management of the system with the LME, and share in strategies to meet performance objectives, review of the system performance, and problem solving. Providers participate with PBH through the PBH Provider council, the Clinical Advisory Committee and the Global Continuous Quality Improvement Committee. Provider participation in the ongoing operations of the PBH system is critical in developing strategies that will be effective in achieving our goals. Our joint purpose purpose is to assure easy access, appropriate, high quality services for consumers, and the elimination of ineffective and poor outcome services and practices.

New services and supports have been developed (Medicaid Alternative Services – B-3 authority) based on evidence based practices which support achievement of positive outcomes for people with needs in the areas of behavioral health and developmental disabilities. These alternatives will provide the tools needed to reduce and redirect reliance on high cost institutional and facility care and offer a greater range of community services. PBH hopes to receive approval to begin to offer these services on April 1, 2007.

Current Status

PBH is just completing the third year of operating with single stream State Funding, and its second year in the management of the 1915(b) (c) Medicaid Waivers. The past four years have been characterized by instability and fragmentation of services statewide. PBH has been able to minimize this effect in the PBH counties, though we have not been insulated from its influence. Certainly our providers, most of which provide services in other parts of the state, have been significantly affected. Our focus since July 2003 has been on developing our management capacity, maintaining access to care and continuity of services for consumers, and reducing the destabilizing effects of divestment and privatization, while growing a healthy network of providers. We believe that we have effectively accomplished these modest goals. We also believe that our local system is "settling down" and that conditions are now emerging that will provide us the opportunity to achieve the goals described in the 2007 Local Business Plan.

Management Tools Unique to the PBH Demonstration

<p>Organized Service Continuum</p>	<p>Services organized according to level of care needed by consumer (basic, basic augmented, enhanced)</p> <p>Utilization Management criteria determined by PBH; criteria for levels of care and amount of service guide authorization determinations.</p> <p>Clinical Pathways provide guidance to providers in the delivery of services in accordance with best practice and evidenced based practices.</p> <p>Authorization of services based on consumer need not funding source</p>	<p>Authorization and utilization review split between LME's and Value Options. Each uses different criteria for determining need for services.</p>	<p>Minimizes random access and utilization of services</p> <p>Supports providers in understanding authorization decisions and assists them in requesting more appropriate levels of care.</p> <p>PBH providers are aware of preferred treatment methods and have guidance in preparation of treatment plans.</p> <p>Consumer service plans are integrated; not based on funding streams</p>
<p>Network Management: available tools</p>	<p>Right to determine the number of providers; ability to match needs for services with provider recruitment and enrollment.</p> <p>Right to set provider enrollment and competency standards.</p>	<p>LME endorsement, state enrollment.</p> <p>LME's can determine network of state service providers.</p>	<p>Management of market share to balance both consumer choice and provider health.</p> <p>Prevents the phenomenon of provider driven service utilization that is characteristic of large provider</p>

	<p>Right to terminate providers from network.</p> <p>PBH ability to monitor both state and Medicaid Claims by provider is used to identify provider billing patterns that require further evaluation or technical assistance.</p>		<p>networks that are unmanaged</p> <p>Control over quality and competency of individual providers.</p> <p>Incentivizes Providers to work with the LME</p> <p>Oversight for Provider billing.</p>
<p>Business Operations: (direct enrollment of providers, payment of claims, etc)</p>	<p>Direct enrollment of providers.</p> <p>Weekly claims processing and payment.</p> <p>In-house customized Information System designed to support PBH managed care functionality. Capable of expanding and continually adjusting to changing conditions.</p>	<p>State enrollment process; LME endorsement only</p>	<p>No delays in getting provider numbers for staff.</p> <p>PBH can adjust business processes and information system functionality to address provider concerns.</p> <p>Improved cash flow for providers.</p> <p>Simplified billing system because no provider interface with IPRS billing system.</p>
<p>Care Coordination for State and Medicaid services</p>	<p>Care coordination for both Medicaid and state consumers.</p>	<p>State services only</p>	<p>Integrated service management across funding streams.</p> <p>Access to claims history allows LME to identify high cost consumers and intervene with the consumer and/or the provider to ensure access to the "right service in the right amount at the right time".</p>
<p>Case Management</p>	<p>PBH has retained case management for developmental disabilities.</p> <p>PBH has limited case management (provided through community support) because we have limited enrollment for Community Support to only three providers.</p> <p>PBH has clearly defined desired outcomes for Community Support that are regularly discussed with the designated providers.</p>	<p>Provider based</p>	<p>Case management activities can be more easily monitored and providers requiring training or technical assistance can be more easily identified.</p> <p>PBH has a Community Support Steering Committee with monthly meetings to provide technical assistance and to address problems in the implementation of the service model.</p> <p>Because the number of providers is limited, providers have enough market share to support the necessary clinical infrastructure needed for effective service</p>

Component	PBH Activities	Other Key Players	Implementation
			Easier for the community at large because of the limited number of providers that are enrolled for case management.

PBH Local Business Plan 2007 Plan Development Process

PBH asked representatives from our stakeholders to participate in an Oversight Committee. The purpose of the Oversight Committee was to guide PBH in the assessment process required for the development of the 2007 Local Business Plan. This Committee met regularly from November through early February. The Committee determined performance areas and documents that they wanted to review as part of this evaluative process. Additionally PBH staff collected feedback from consumers, providers, advocacy organizations as well as committees that are part of the PBH Operational System (including the CFAC, County Advisory Committees, and Network Providers). All information was reviewed by the Oversight Committee, and from their study of PBH and stakeholder feedback, they developed priorities and recommendations for the PBH Board of Directors. The PBH Board of Directors reviewed and approved this information. Subsequently the recommendations were used to prepare the PBH Local Business Plan for 2007.

Oversight Committee Members:

- Ann Medlin, Chair of the PBH CFAC
- Catherine Lambeth, Director Davidson County DSS
- Cindy Oakes, Director Southern Piedmont Community Care Plan
- David Bullins, President of NAMI Cabarrus
- Dawn Allen, President of the PBH Provider Council
- Jack Burke, PBH Board of Directors
- Mary Ann Raspberry, Union Partnership for Children
- Myron Prescott, Stanly Regional Medical Center
- Paul Brown, Chief Kannapolis Police Department
- Roy Young, Director Union County Department of Social Services
- Lou Adkins, Salisbury Community Development Corporation, Rowan Advisory Committee

Governance and Administrative

The Mission, Vision and Values adopted by the PBH Board of Directors in February 2007 are as follows:

Mission:

Our mission is to establish and maintain a System of Care for people in need of treatment for Mental Health, Developmental Disabilities, and Substance Abuse conditions who live in Cabarrus, Davidson, Rowan, Stanly and Union Counties. This System will reflect the uniqueness of our local communities and be shaped by the choices of consumers and their families. It will be capable of making continual adjustments and improvements over time so that it can meet the changing needs and priorities of consumers. We value the

contribution of all stakeholders, and our actions will be based on the principles of respect, collaboration, fairness, shared responsibility, and mutual accountability.

Vision:

PBH will strive to offer hope to individuals needing help for mental illness, developmental disabilities, addictions and substance abuse conditions. *PBH is creating solutions, one person at a time.*

Values:

1. The PBH System of Care will be based on values of Recovery, Self Determination, Person Centered Planning and Consumer/Family driven services.
2. Consumers and families will be empowered to set their own priorities, take reasonable risks, participate in system management, and to personalize the system through their choices of services and providers.
3. The distribution of limited public resources will be appropriate, accountable, efficient and effective, with priority given to individuals with the greatest disabilities.
4. Treatment and services should consist of evidenced based and effective practices that result in real life outcomes for people with disabilities.
5. We will promote community acceptance and inclusion of people with disabilities, ensure the accommodation of cultural values in services and supports, and serve people in their local communities whenever possible.
6. PBH will develop and continually monitor strategies to effectively provide information to consumers and their communities on how to access services and supports, including emergency care for individuals experiencing crises related to their disabilities.
7. A program of quality management will focus on health and safety, protection of rights, achievement of individual outcomes, and respect for the racial, cultural and ethnic identities of the people we serve. We will strive to both monitor and continually improve our System of Care.
8. Providers are our partners and provide both clinical interventions and support services that are essential for the achievement of positive individual and system outcomes. PBH providers share accountability for the effective use of public resources, and will employ strategies which support empowerment, self determination and the recovery of individual consumers.
9. PBH is committed to collaborative partnerships that include consumers, community stakeholders, providers, elected officials, and other governmental agencies in all aspects of our role as Regional Systems Manager.
10. As a Systems Manager, PBH strives to be open, responsive, and transparent in the execution of our responsibilities. We recognize that self evaluation is essential in measuring our performance against our Mission and Values, and that there will always be the need for continual improvements.

Governance and Administration: Current Operations

Board of Directors and the CEO

The PBH Board of Directors is composed of 20 members, four (4) from each participating county. One member from each county is an elected County Commissioner. Current membership is as follows:

pbh

**PBH Board Members
FY 2006-2007**

Cabarrus County

Bob Carruth
Cabarrus County Commissioner
186 Scenic Dr. NE
Concord, NC 28025
(H) 704-795-1818
(W) 704-784-2250 Cell: 704-425-1096
Fax: 704-707-3898
rcarruth@carolina.rr.com
Robert.Carruth@wvusau.com
Term Expiring: Ex-Officio

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(C) 704-490-1893
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Davidson County

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Davidson County Commissioner
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Term Expiring: 6/30/2007

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Term Expiring: 6/30/2007

Gayle Whitehead
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Rowan County

Arnold S. Chamberlain
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Rita Foil 704-836-0361 (Clerk)
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Vacant
Term Expiring: 6/30/2009

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Stanly County

Mr. Lindsey Dunevant
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Stanly Cty Partnership
for Children
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Union County

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Term Expiring: Ex-Officio

Nancy Randall - Vice-Chair
9807 Tallwood Drive
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The PBH Board of Directors has evaluated its composition in light of the recent Legislative Changes to Area Board Composition and identified the need to add a second member with financial expertise and a primary consumer. A second member with financial expertise will join the Board in April, 2006, and PBH will work to identify a primary consumer when the next vacancy occurs. PBH Board of Director by-laws are under revision to reflect the legislative

changes. Additionally, the Consumer Family Advisory Committee, which was established and previously functioned as a sub-committee of the Area Board, has become a self governing and independent committee.

The PBH Board of Directors operates in accordance with the Carver Model of Board Governance. The Board acknowledges that it acts as trustee for those it represents. In a public authority model of governance, the Board is trustee for consumers, their families, taxpayers, and local government. The PBH Board speaks with one voice and strives to make decisions that are in the best interests of all consumers from the PBH counties. The Board governs PBH through the development of policy, outcomes and limitations. Together these comprise the framework under which the CEO must operate. The Board's role therefore is to set goals and boundaries and not to prescribe how these will be accomplished. The CEO is held accountable for the performance of the organization and for carrying out the policies of the Board. The means by which the CEO achieves the Board determined outcomes are limited only by the Board's policy limitations. The PBH Board of Directors evaluates the CEO annually, in June of each year.

The CEO has the freedom to operate within the boundaries established by the Board (through policy, outcomes and limitations). This flexibility has proven to be especially critical in the environment of rapid change under which all LMEs have had to function over the past five years because the CEO can make adjustments and decisions quickly if needed. This agility is similar to how business is conducted in the private sector, and has been instrumental in the success of the PBH Demonstration Project. The CEO is the Board's only employee, and hires and supervises all other staff.

Stakeholder Collaboration

In its first Local Business Plan, PBH outlined a plan for ongoing engagement of its consumers, family members, advocates, providers, and community agencies. This involved the establishment of a number of operational committees that brought PBH staff, consumers/family members, providers and stakeholders together to address problems and concerns, provide important feedback to PBH around its performance, and to assist in pro-active planning.

Community Advisory Councils: The Community Advisory Councils were established at the county level in order to ensure that the unique needs and concerns of each county were highly visible to the PBH LME. These Councils have been meeting for nearly three years. Membership is open to all stakeholders in the community and generally includes the following:

1. DSS
2. School System
3. Juvenile Justice
4. Partnership for Children
5. Law Enforcement
6. Advocacy Organizations
7. Comprehensive Community Provider Representation
8. Consumer Family Advisory Committee Representation

Initially the Community Advisory Council meetings focused on system reform in general and its impact on the PBH counties specifically. The divestment of PBH services and the statewide changes had significant impacts on county agencies and how they did business. The normal channels of communication and interaction were seriously interrupted. These forums served a critical purpose in helping PBH understand problems the community was experiencing, and to provide information to facilitate adjustment to the evolving systems.

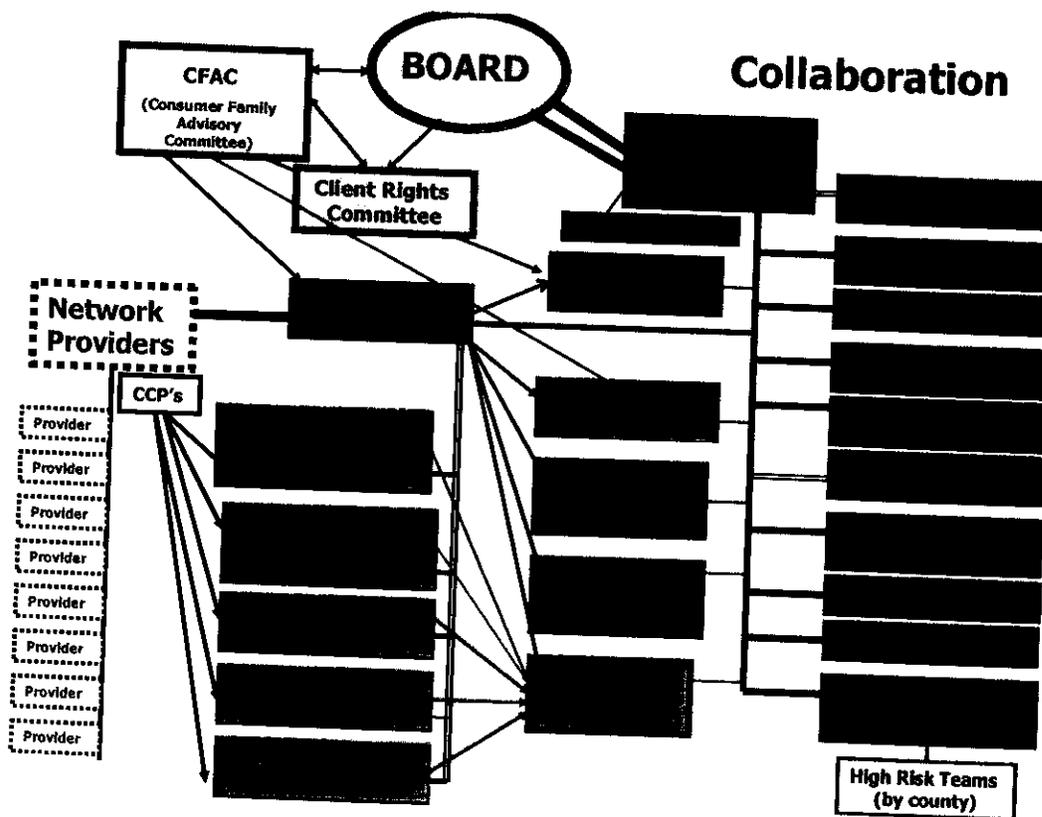
The Local Business Plan Steering Committee found that these groups were essential during the past three years in supporting this transition. The LBP Steering Committee determined that the system is now past this stage and recommended changes to the Community Advisory Councils as follows:

1. Include representation from the PBH Network Council
2. The Committees should become self governing, with Council members leading the agendas, and PBH providing support
3. Develop an Area Advisory Council, with representative from each of the counties. (this was planned in the 2003 LBP, but was not implemented).

PBH Operational Committees

Attached is a description of the PBH Operational Committees. The use of these forums, where PBH, consumers, family members, providers and the community come together to exchange ideas, address problems, and for collaborative planning has been a resounding success. For PBH, this has been a way for us to "keep our feet on the ground" and understand the impact of our activities. For the members of these teams, it has been an opportunity to understand and assist with the requirements and challenges that PBH has faced in its role as regional systems manager. These groups will continue to operate and it is expected that they will continue to grow in their collective ability to impact PBH operations and management in an extremely positive manner.

Below is a depiction of the network of community collaborative forums sponsored by PBH.



PBH Consumer Family Advisory Committee Local Business Plan 2007

The first PBH Consumer Family Advisory Committee operated during the development of the Local Business Plan that was developed during 2002. The ongoing committee began meeting in May of 2003. The Consumer/Family Advisory Committee (CFAC) membership consists of Consumers and family members of Consumers who receive Mental Health, Substance Abuse and Developmental Disabilities services.

Mission Statement: The Consumer/Family Advisory Committee represents and advocates for all Consumers and families within the scope of PBH. Our mission is to ensure that Consumers receive quality services.

Vision Statement: The Consumer/Family Advisory Committee envisions a partnership with PBH, ensuring the voices of Consumers and their families are heard, forming the basis of decisions made by PBH to effect positive change and to establish and follow best practices.

The purpose of the CFAC is to ensure that consumers are involved in both oversight, planning and operational committees of PBH. This is accomplished through:

- Member in common with the PBH Board of Directors
- CFAC representation on PBH Operational Committees:
- Network Council
- Global Continuous Quality Improvement Committee
- Regional Housing Continuum of Care
- County Advisory Committee meetings
- Special task forces such as the Crisis Planning Task Force
- Clinical Advisory Committee

The PBH CFAC is self governing and operates under its own by-laws. It has been a strong voice at PBH and in the community. Members are very active, and are responsible for CFAC initiatives. Most CFAC initiatives are developed in collaboration with various PBH staff. PBH has enjoyed a strong and mutually supportive relationship with its CFAC. Staff from across PBH departments have worked with the CFAC on various initiatives and committees. This ongoing interaction has resulted in important involvement from consumers and family members across the PBH LME and interaction with staff from across PBH is instructive for both staff and CFAC members.

The PBH CFAC is preparing to sponsor its second Person Centered Planning Conference. The first conference was held in October 2005 and was an overwhelming success. The second conference is scheduled for March 22-23, 2007. The conference has been much anticipated, and widespread participation is expected.

In the future, the CFAC will become more involved in monitoring activities, and will develop an annual monitoring calendar. Monitoring activities identified include the progress of the 2007 Local Business Plan, Financial expenditures of the LME, Quality Activities, Service Utilization. The CFAC is concerned about gaps in services, underserved consumers, people that are waiting for services, and plans to become involved in working with the LME to address these needs.

Membership as of March 1, 2007 includes the following: *Ann Medlin, Chair, Bart Kean, Vice-Chair, Dawn Bierschbach, Beverly Morrow, Jeff Euto, John Hufton, Vernon Worrell, Ted Thomas, Mary Sechler, Linda Mercado, Melanie Frick, Andrea Stevens, Lemar Underwood.*

PBH Administration

The PBH LME Administrative Unit consists of the following:

Governance and Administration	Office of the CEO
Business and Information Management	Finance Department Information Systems Department Human Resources
Provider Relations and Development	Network Operations
Customer Service/Consumer Affairs	Office of Consumer Affairs Quality Management Community Relations
Service Management	Utilization/Clinical Management Access Medical Affairs
Quality Management	Quality Management

PBH Executive Administration

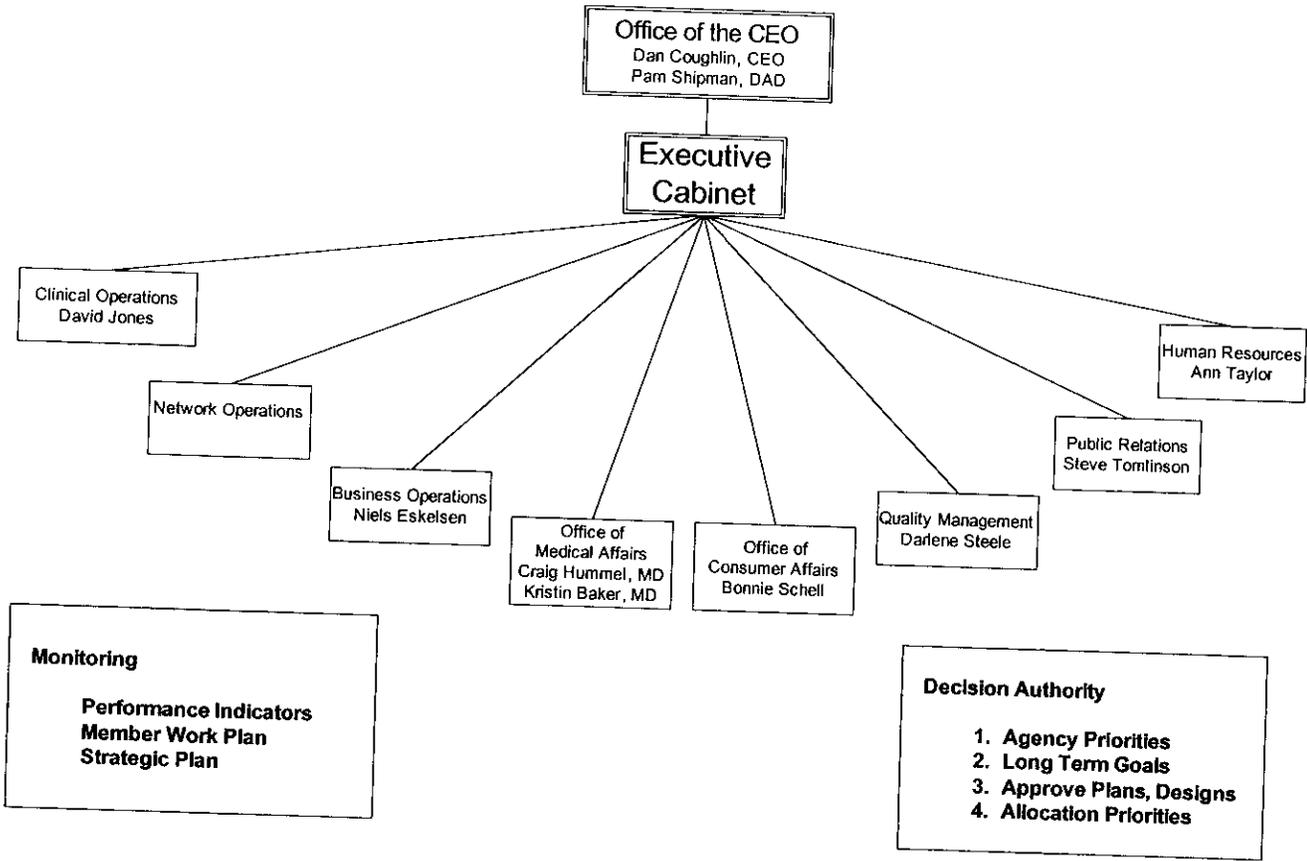
The following reflects the organizational structure that has been developed as the result of the PBH transition from an Area Program to a Local Management Entity.

Executive

Office of the CEO: Responsible for the overall management of PBH, including short and long term planning as well as the development of strong working relationships with local and state partners including local public agencies, provider agencies, public officials, elected officials, advocacy organizations as well as state and regional staff. Executive Management includes management of operations, performance outcomes, and direction of financial resources to achieve desired outcomes. The Executive Management unit is charged with directing and supporting PBH Management and Staff in achieving agency goals and objectives.

Office of the CEO
Dan Coughlin, Area Director Pam Shipman, Deputy Area Director

PBH Executive Cabinet 3/28/2007



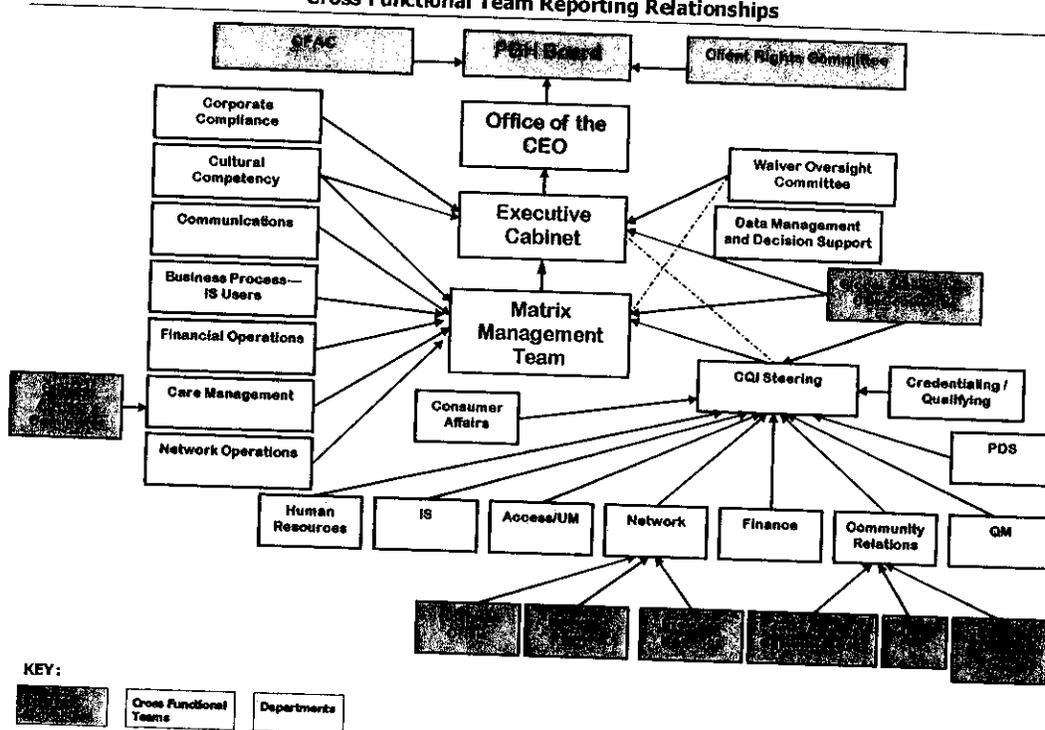
Matrix Management and Cross Functional Teams

Cross Functional Teams are teams composed of staff from across the departments, and bring together expertise from across the agency. The functions of the Cross Functional Teams include the development of cross agency processes, focusing on deliverables and smooth "hand-offs" from department to department. The Cross Functional Teams identify problems, develop solutions and are responsible for monitoring performance indicators.

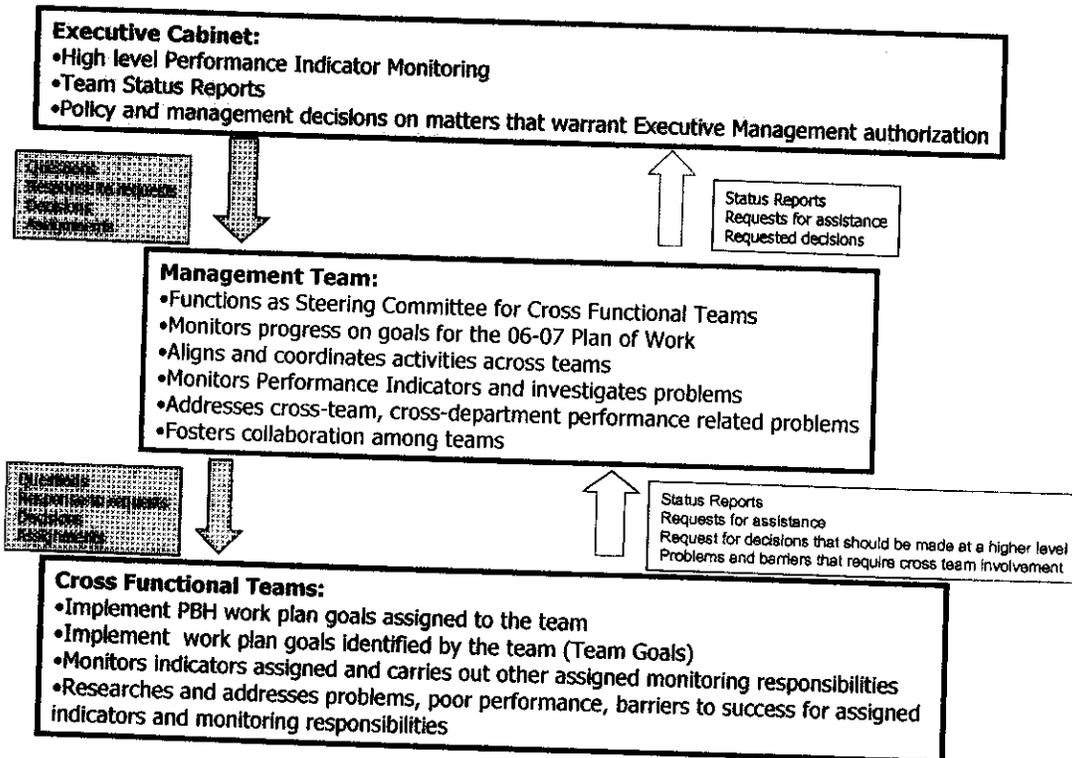
- PBH Cross Functional Teams**
- Business Process and IS Users * Data Management and Decision Support * Financial Operations * Care Management * Waiver Oversight * Communications * Corporate Compliance * Credentialing * CQI Steering * Network Operations * Cultural Competency**

The departments and teams work together in an interactive process through which operations are performed, results monitored, and improvement strategies are developed and implemented when necessary.

CQI Internal / External Committee Structure and Cross Functional Team Reporting Relationships



Information on performance, problems, and progress on assigned goals is exchanged between the Executive Cabinet, the Matrix Management Team, and the Cross Functional Teams.



Cross Functional teams are assigned goals from the PBH Annual Plan of Work and are responsible for identified deliverables. Teams are also assigned Performance Indicators that they must monitor and develop improvement strategies if performance is below identified thresholds.

Executive Cabinet Cross Functional Team: This team is the highest level team and is responsible for the overall health and performance of the agency, as well as agency achievement of goals delineated in the strategic plan. It's functions include the following:

Review and monitoring Functions:

1. Review of identified performance indicators against targets
 - a. financial,
 - b. quality
 - c. access
 - d. service utilization
 - e. corporate compliance
2. Member work plan reporting: progress, barriers, needs
3. Monitor implementation of strategic plan

Forum for discussion/resolution and development of policy:

1. Area Director update
2. State and Local political updates and issues
3. Critical Issues (Hot Topics)
4. Member issues and concerns

The Executive Cabinet considers requests from Matrix Management Team, Corporate Compliance Team, or Cultural Competency Team for review and resolution of issues.

Executive Cabinet Decision Authority includes: Agency priorities; Long term goals and strategies; Approval of annual plan of work; Approvals of Plans: (Clinical Management Plan, Corporate Compliance Plan, Network Development Plan, Risk Management Plan, Cultural Competency Plan, Quality Improvement Plan); Final approval on allocation of financial resources (agency budget); Issues not resolved at a lower level.

Matrix Management Cross Functional team: This team, along with the Operations Oversight Team are the teams responsible for management and coordination of agency operations. The Operations Oversight Team is a small executive team that conducts planning and review of major operational issues, and functions as background support for the Matrix Management Cross Functional Team. Together these teams are responsible for:

Communication, Review and monitoring functions:

1. Review of identified performance indicators against targets
 - a. Research indicators which are falling below minimum thresholds
 - b. Identify problems or obstacles
 - c. Implement plans of correction for performance problems
2. Cross Functional Team Reporting
 - a. Workplans for each team: progress, barriers, needs
 - b. Indicators monitored by the team
 - c. Key decisions made at the team level
 - d. Problems Identified
3. Department reports
 - a. Workplans: progress, barriers, needs
 - b. Indicator monitoring
 - c. Key decisions made at the department level
 - d. Problems identified

Forum for Collaboration, Discussion, Planning, Decision Making and Development/Approval of Operational Procedures:

1. Discussion of critical issues

2. Issues identified by MT members that are brought for information, discussion, resolution.
3. Operational planning to develop strategies to address the strategic plan, work plan of the MT, external requirements, or critical issues.
4. Issues requiring action (decisions, plans to address) that cannot be determined at the department or Cross-Functional team level.
5. Operational procedures that are needed to document and ensure consistency of implementation. (procedures proposed by Departments and Cross Functional Teams, or by MT members)

Governance and Administration: Strategic Objectives

Objectives	Target Date for Completion	Responsible	Partners and Stakeholders
<p>Improvement Area: Efficiency of Operations Objective: Complete development of process maps for all agency functions; identify areas for improvement and develop maps and document processes that support the identified efficiencies.</p>	9-1-07	PBH Executive Cabinet	PBH staff
<p>Major Initiative: Standardization of PBH Operations with Managed Care Entities Objective: Attain NCQA accreditation</p>	1-1-09	PBH Executive Cabinet	PBH Board, DMA, DMH
<p>Improvement Area: Increase collaboration with Community Care Network of NC Objective: Achieve structured and regular collaboration in Care Management Activities between PBH Care/Case Managers and CCNC RN Case Managers for all five PBH counties (and three CCNC local networks)</p>	6-30-09	Office of the CEO (lead responsibility)	Primary Care Physicians, Health Departments, Departments of Social Services, Community Hospitals
<p>Area of Improvement: Achieve compliance with new statutes specifying Board Member composition as new members are appointed.</p>	6-30-09	PBH Board of Directors County Commissioners	PBH Consumers

Governance and Administration: Resource Allocation

PBH is limited to a 9.5% administrative overhead as follows:

9.5% of Budgeted Funds:	
Medicaid B waiver:	\$ 7,037,600
Medicaid C waiver:	2,652,400
State:	3,491,242
Federal:	<u>138,187</u>
	\$13,316,681

Other Revenue:	
Misc:	\$ 21,800
Conference:	30,000
Housing:	2,000
Interest:	2,000,000
Fund Balance:	<u>640,500</u>
	\$2,694,300
Risk Reserve:	\$1,920,000

The Area Administration Cost Center is budgeted \$6,169,289. This budget includes numerous area wide expenses such as interest payments, advertising, printing, lease expenses, etc. It includes the following FTE's:

- 1 CEO
- 1 Deputy Area Director
- 3.6 Archive Records Staff
- 1.2 Maintenance
- 1 Director of Administration (Executive responsible for Finance and Information Systems)
- .5 Medical Director (the other 1.5 of Medical Directors is budgeted in Utilization/Clinical Management)
- 4.6 Support Staff

Governance and Administration: Business Rules

Enhance	Inhibit	Result if changed
	Requirement for state approval of PBH provider contracts prevents negotiation of contract provisions with providers. This is a problem because PBH contracts with a much wider array of providers than other LME's. These include a multitude of Medicaid Providers including Hospitals, ICF-MR Providers, Independent Practitioners, Innovations Providers. We are also unable to customize the contracts to the type of services that we are purchasing.	<p>Contracts could be more effectively negotiated.</p> <p>Quick turn around on requested or negotiated changes; state approval would not delay implementation.</p> <p>More effective representation of requirements related to type of service. (There is a great difference between an inpatient service and an outpatient service.)</p>

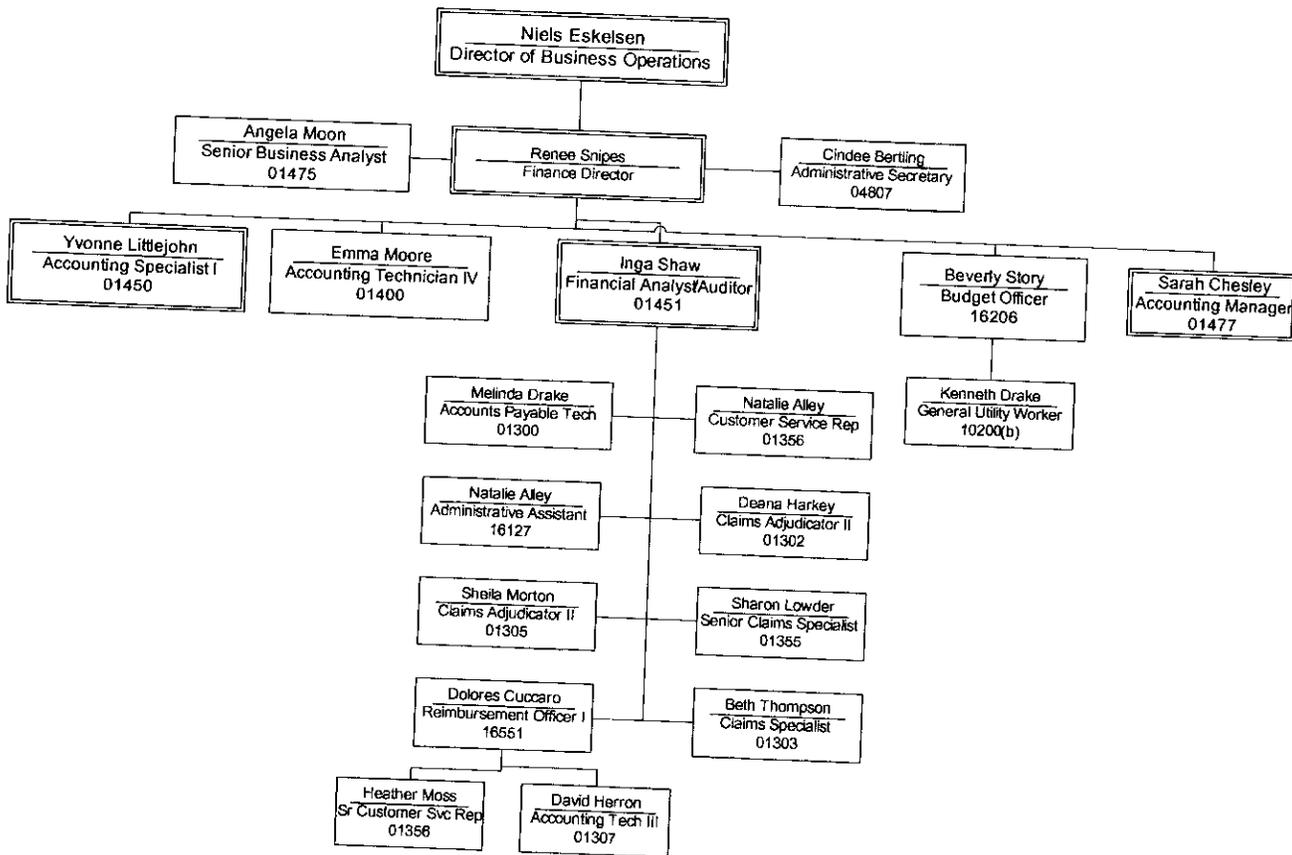
Business and Information Management

Mission: The Departments and Teams that conduct business and information management for PBH are committed to the efficient and effective implementation of business processes that support PBH in providing Quality Services for consumers.

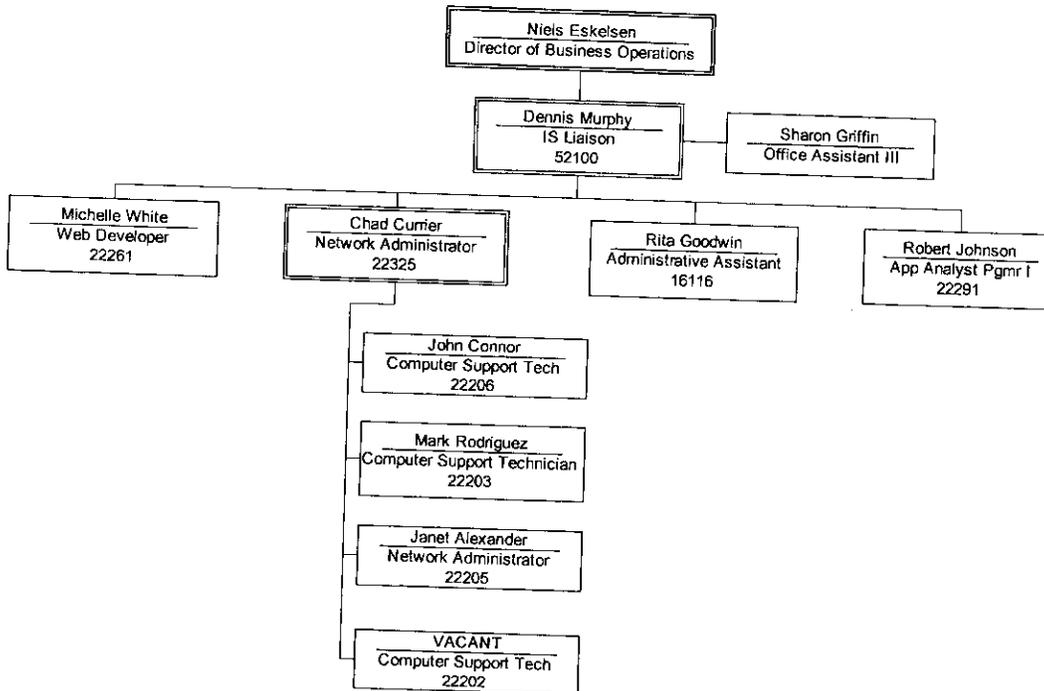
Business and Information Management: Current Operations

The following departments perform functions identified with Business and Information Management:

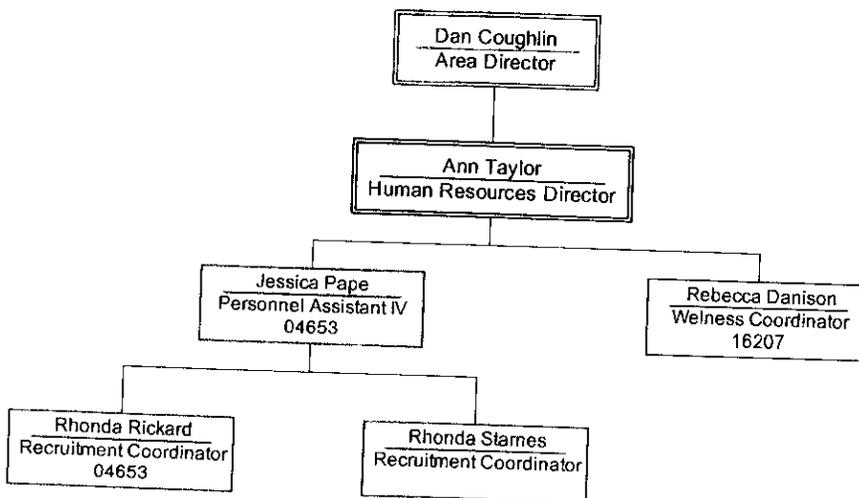
Finance: The Finance Department manages the financial resources of PBH. This is inclusive of allocation of resources, financial accountability, financial authorizations, availability of funds, claims processing and payment. The Finance Department is responsible for ensuring compliance with General Statute 159 and other general accounting requirements. The Finance Department supports providers through training and through Customer Service representatives.



Information Systems: The Information Systems Department maintains industry software, as well as in-house custom software that is uniquely designed to support the operations of PBH, including connectivity to providers and state agencies. The Department is responsible for the management of hardware, software and connectivity functions. The Information Systems department is responsible for maintaining critical software for state reporting, submissions of claims and shadow claims, authorization tracking and encumbrance data, care management and clinical system functions, CQI data on targets and quality indicators, management of demographics, utilization patterns and penetration data, and numerous other data as defined in the Local Business Plan. The information system is fully HIPAA compliant and secure.



Human Resources: This department is responsible for classification and compensation, employee relations, coordination and management of benefit plans, the preparation and processing of payroll, and files all related reports for the LME. The Human Resources unit also ensures compliance with General Statute 126 and all State and Federal regulations regarding personnel management.



Business and Information Management: Strategic Objectives

Objectives	Target Date for Completion	Responsible	Partners and Stakeholders
<p>Improvement Area: PBH to become fully operational as a data driven organization.</p> <p><u>Objective:</u> PBH will utilize a real time (current information) data driven process for monitoring performance and making strategic adjustments in operational strategies.</p>	<p>07-08: Risk Management Indicators are supported by reports and risk thresholds</p> <p>08-09: Aggregate data is available for system quality indicators that can be used for both PBH Internal Improvement Measurements and Provider Performance Measurements</p> <p>09-10: Individual Consumer Outcomes data is available as information that can be used to assess system and individual provider abilities to improve life for consumers</p>	<p>Data Management and Decision Support Team</p>	<p>Consumers and Families</p> <p>CFAC</p> <p>Providers</p>
<p>Area of Improvement: Develop parameters for the evaluation of provider payment rates and establish process to revise rates when indicated.</p> <p><u>Objective:</u> PBH will identify methodology for rate evaluation such as benchmarking, cost modeling, or retrospective cost analysis.</p>	<p>07-08 Develop Process and adjust rates for key services including Psychiatry</p> <p>08-09 Develop process for systematic review of rates</p>	<p>PBH Finance Department</p> <p>Financial Operations Cross Functional Team</p>	<p>Providers</p> <p>Provider Council: Business Operations SubCommittee</p>
<p>Area of Improvement: Evaluate web based billing system to identify provider friendly improvements.</p> <p><u>Objective:</u> Identify provider priorities, evaluate feasibility of changes, and implement strategies to enhance billing process.</p>	<p>07-08 Develop Business Operations SubCommittee of the Provider Council.</p> <p>Identify priorities, evaluate and develop workplan with timeframes.</p>	<p>PBH Business Process Cross Functional Team</p>	<p>Providers</p>
<p>Area of Improvement: Improve HIPAA billing process and performance of the 837-I transaction.</p>	<p>07-08 or sooner</p>	<p>PBH Business Process Cross Functional Team</p>	<p>Hospitals, ICF-MR Providers</p>

Objectives	Target Date for Completion	Responsible	Partners and Stakeholders
Objective: Identify performance problems and develop plan to address.			
Area of Improvement: Streamline contracting process and develop contracts customized for type of service. Objective: Develop contract prototypes and obtain DHHS approval. NOTE: Individual customization will be limited by state statutes requiring DHHS approval of contract formats. This goal may not be fully attainable.	Obtain DHHS approval prior to May 1, 2007. 07-08 Implement more customized contracts for type of service.	Network Department	Providers
Area of Improvement: Improve reporting outcomes to DMH; work with DMA to provide encounter data when they are able to receive this information. Objective: Continue collaborative activities to resolve differences between PBH reporting and DMH system expectations.	07-08 or sooner	Information Systems Department	DMH

Business and Information Management: Resource Allocation

Finance and Claims:

Budgeted: \$1,394,013.

1	Finance Director
1	Budget Officer
1	Accounting Manager
5	Accounting Specialists
2	Administrative
1	Reimbursement Manager
1	Reimbursement Officer
6	Claims adjudicators
1	Customer Services Rep

PBH processes and pays approximately \$10 million dollars in claims each month.

Information Systems:

Budgeted: \$1,628,486

1	Department Manager/business analyst
1	Systems Administrator
1	Web Developer
1	Software developer
1	Applications/Analyst/programmer
4	Computer Support Technicians
2	Administrative/helpdesk/trainers

PBH also contracts for additional expertise in software development and maintenance.

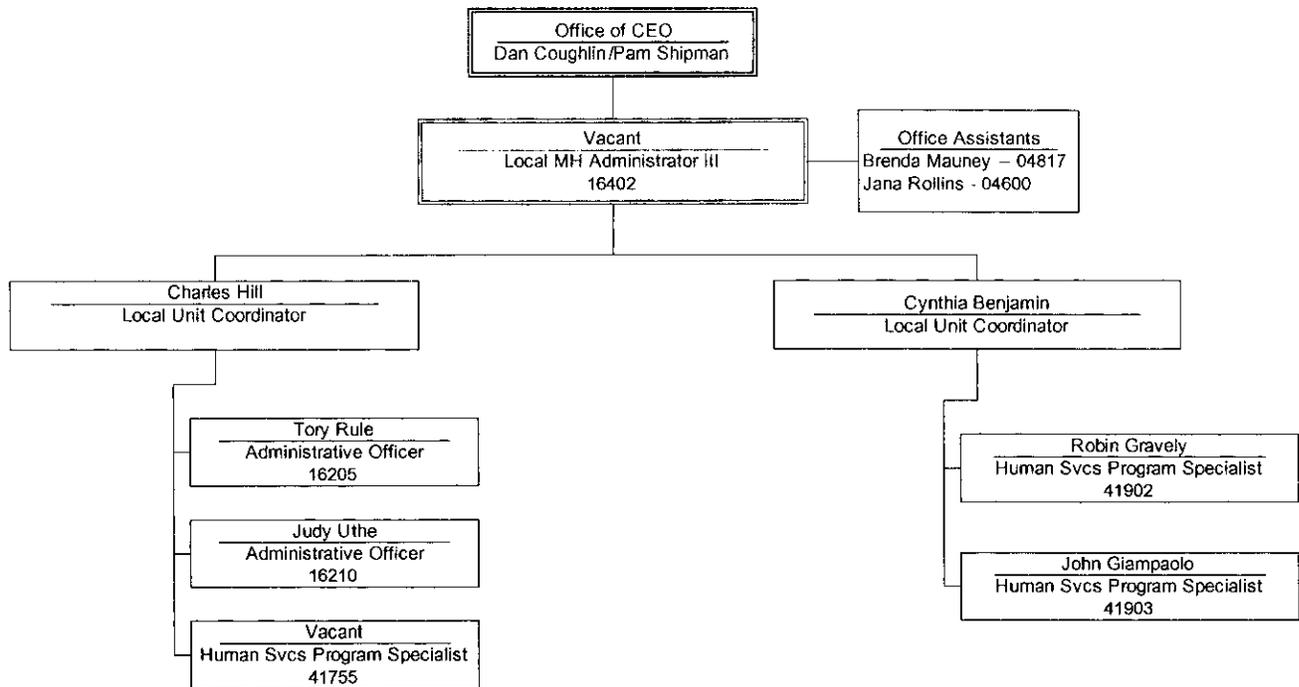
Business and Information Management: Business Rules

Enhance	Inhibit	Result if changed
Waiver on IPRS reporting is a significant relief to PBH providers. The process is not designed for LME's as payors for multiple services to a large provider network.		Significant barriers to efficiency would result if PBH were required to report under the IPRS system. This would result in increased administrative costs for PBH and our providers.
	Demographics required by federal block grants creates a burden on providers due to extensive data elements.	Efficiency at the provider level; efficiency for PBH because there would be fewer provider errors in enrollment data.

Provider Relations and Development

Mission: Our mission is to develop and maintain collaborative partnerships with providers that share our respect for consumers as individuals *first*, always strive to provide quality services, consistently employ best practices in care and treatment, and that are committed to efficient use of public resources.

Network Operations Department: The Network Operations Department is responsible for the development of the provider network to meet the needs of consumers, and ensuring that the network has the scope and size to ensure access to care and choice of providers. The department works with providers individually and at large in order to develop and promote best practices in service delivery. The department is responsible for the development of new services and the recruitment of providers with the qualifications needed to meet the service needs of consumers and families. The Network Operations Department supports providers through regular communication with the Provider Council, as well as regular meetings of the network as a whole.



The following table describes the functions of the teams within the Network Operations Department.

Director of Network Management	Network Coordinator for Data Analysis and Decision Support	Area Coordinator for Provider Relations	Development Team (members report to the Director Network Management)
Overall management of PBH provider network operations. Establish appropriate operational procedures. Responsible for performance indicators and goals from the Annual Plan of Work.	This team is responsible for collecting and maintaining information about the PBH Provider Network that is used to provide management and monitoring information. This unit is responsible for written materials such as contract formats, and the provider manual. The unit develops reports and monitors performance data, and ensures that Department staff have appropriate information.	This team is responsible for support and customer service for Individual providers in the PBH Network. The unit enrolls providers, develops contracts, and monitors compliance with the business requirements of contracts. The unit is responsible for collaborative activities with and among providers in order to achieve the goals of the Network Development Plan.	The Development Team consists of subject matter experts responsible for bringing on line and supporting new service models and practices. Team will collaborate with Provider Relations Managers and other departments in planning implementation of services. Initial team: Substance Abuse Mental Health (primary consumer) System of Care
Planning and Development: Oversight for annual capacity study and network assessment; coordinate development and implementation of the Network Development Plan; RFP and provider selection process; implementation for new service models.	Annual network capacity and adequacy assessment of provider network (type and adequacy) to meet the needs of Enrollees	Supervise Provider Relations Managers	Ongoing support for newly implemented service models: MST, Community Support, new CCP's, SA continuum, system of care
	Provider Demographics: Maintenance of continually up to date listing of providers by type, location, services provided, clinical specialties, cultural specialization, providers not accepting new referrals, and quality performance data (obtain performance data from QM)	Develop annually a provider training needs assessment process and coordinate development of annual training plan	Procurement: Management of RFP process

<p>Director of Network Management</p>	<p>Network Coordinator for Data Analysis and Decision Support</p> <p>This team is responsible for collecting and maintaining information about the PBH Provider Network that is used to provide management and monitoring information. This unit is responsible for written materials such as contract formats, and the provider manual. The unit develops reports and monitors performance data, and ensures that Department staff have appropriate information.</p>	<p>Area Coordinator for Provider Relations</p> <p>This team is responsible for support and customer service for individual providers in the PBH Network. The unit enrolls providers, develops contracts, and monitors compliance with the business requirements of contracts. The unit is responsible for collaborative activities with and among providers in order to achieve the goals of the Network Development Plan.</p>	<p>Development Team (members report to the Director Network Management)</p> <p>The Development Team consists of subject matter experts responsible for bringing on line and supporting new service models and practices. Team will collaborate with Provider Relations Managers and other departments in planning implementation of services.</p> <p>Initial team: Substance Abuse Mental Health (primary consumer) System of Care</p>
<p>Chair Network Operations Team: cross agency monitoring of indicators and problem solving activities.</p>	<p>Manage credentialing process for independent practitioners</p>	<p>Coordinate provider training calendar</p>	<p>Develop implementation timelines, coordinate activities, assist in solving problems, and ensure services come on line according to schedule</p>
<p>Provider Relations and Customer Service: establish partnership with providers to ensure healthy network providing quality services.</p>	<p>Provider manual</p>	<p>Training orientation of providers: coordinate clinical training (with QM, UM, IS, Finance), provide operational training</p>	<p>Monitor service implementation; assist in problem solving, work with Access/UM to facilitate appropriate referrals of consumers. Transition to Provider Relations manager when appropriate.</p>
<p>Oversight for contract development and execution; directly involved in contract negotiation for new services and/or providers as indicated. Collaboration with Finance to establish rates (through Financial Operations Team)</p>	<p>Development of contract formats</p>	<p>Development of Routine contracts and amendments for additional services; MOA's</p>	
<p>Manage/coordinate network communications</p>	<p>Plan and conduct provider satisfaction survey</p>	<p>Monitor for contract compliance including maintenance of required insurance, and special contract requirements such as specific substance abuse requirements that cannot be tracked through enrollment and encounter reporting.</p>	
	<p>Represent PBH in county and regional disaster planning activities; coordinate provider participation as needed</p>	<p>Recruitment: new providers to address new service needs and gaps in the network</p>	
	<p>Coordination of NCQA activities for Network Operations</p>	<p>Oversee technical assistance and customer service functions of Provider Relations Managers. Provide ongoing support for providers through identified Liaisons for each provider (Personal Banker model); Liaison facilitates needed support for individual providers from QM, IS, Finance, etc. Single point of contact for Providers.</p>	
		<p>Enroll /endorse providers into network</p>	

Director of Network Management	Network Coordinator for Data Analysis and Decision Support This team is responsible for collecting and maintaining information about the PBH Provider Network that is used to provide management and monitoring information. This unit is responsible for written materials such as contract formats, and the provider manual. The unit develops reports and monitors performance data, and ensures that Department staff have appropriate information.	Area Coordinator for Provider Relations This team is responsible for support and customer service for individual providers in the PBH Network. The unit enrolls providers, develops contracts, and monitors compliance with the business requirements of contracts. The unit is responsible for collaborative activities with and among providers in order to achieve the goals of the Network Development Plan.	Development Team (members report to the Director Network Management) The Development Team consists of subject matter experts responsible for bringing on line and supporting new service models and practices. Team will collaborate with Provider Relations Managers and other departments in planning implementation of services. Initial team: Substance Abuse Mental Health (primary consumer) System of Care
		Development and support of Network Council	
		Assist in obtaining or providing provider mediation as requested	

Network Operations Cross Functional Team: This team has responsibilities for Planning and Evaluation as well as for training and monitoring of assigned performance indicators. The following summarizes the responsibilities of this team:

1. Review of annual Network Capacity Study against Clinical Management Plan to identify services for which new or additional providers are needed
2. Develop Network Development Plan to address system service needs and how the provider network needs to be configured in order to meet these needs (such as Crisis Continuum, Substance Abuse continuum, Child Service Continuum).
3. Develop priorities for service development based on #1 and # 2.
4. Based on priorities set in the Care Management and Network Development Plans, the Housing Subcommittee will plan for development of residential service options.
5. Develop plans for new or expansion of services, i.e. specific services and best practice models (such as MST, Home Builders, etc)
6. Determine the need for RFI's/RFP's for new or additional service providers
7. Determine provider education and training needs
8. Determine and oversee development of the Provider Manual
9. Implement Training Survey
10. Conduct ad hoc provider trainings and meetings to resolve problems and address questions; maintain global training calendar.
11. Review information and recommendations from Care Management Team on utilization; determine relationship to Network provider capacity and performance; provider training and education needs.
12. Review Provider performance data and monitoring reports. (provider demographics, geographic availability of services, etc)
13. Review summary report of provider grievances (by type, provider, service, etc)

PBH Provider Network Council:

This committee is focused on the needs of Network Providers. Members include LME staff, providers and consumers/family members; stakeholders in the provider network system that meet together for the purposes of

communication and collaboration. The Network Council evaluates the performance and service capacity of the network and evaluates need for improvements. The Network Council focuses on business aspects of operations (not clinical and consumer care—these are addressed in the Global CQI Committee and the Clinical Advisory Committee). Elected Network Provider members represent providers. It is one of the major forums for input into LME operations. Based on Provider feedback during the 2007 Local Business planning process, PBH will request that the Provider Council develop a sub-committee that is focused on business issues. This sub-committee will assist PBH in addressing the improvement areas noted below.

The Mission and Core Values of the PBH Provider Council are as follows:

The mission of the Piedmont Behavioral Healthcare Provider Network is founded in a set of core values. Network Providers embrace the core values, which serve as the foundation of the Provider Network.

Integrity: Provide accurate and truthful representation.

Competence: Honor responsibilities to achieve and maintain the highest level of professional competence for members and those in their employ.

Professional Conduct: Promote the dignity and autonomy of the profession, maintain harmonious inter-professional and intra-professional relationships, and accept the profession's self-imposed standards. All professional relationships should be directed to improving the quality of life of the individuals who receive supports from the member agency.

Individual Value, Dignity, and Diversity: Provide supports and services that promote respect and dignity of each individual supported.

Social Justice: Assure that the right of individuals and those who make decisions regarding services to them have complete and accurate information on which to make choices.

Social Capital: Network Providers support the importance of Social Capital in each individual supported.

Partnership: Network Providers will work together in partnership to develop and achieve an individual's desired outcomes.

**Provider Relations and Development
Strategic Objectives**

Objectives	Target Date for Completion	Responsible	Partners and Stakeholders
<p>Area of Improvement: Improve clinical competency of providers in provision of community services.</p> <p>Objective: Develop strategies in collaboration with providers to improve clinical oversight of community service provision.</p>	<p>6-30-08 Plan for Improvement; identify outcomes</p> <p>6-30-09 Plan implemented</p> <p>6-30-10 Measure outcomes</p>	<p>Network Operations Department</p>	<p>Consumers</p> <p>Advocacy organizations</p>
<p>Area of Improvement: Increase quality of Person Centered Plans.</p> <p>Objective: Person Centered Plans reflect the unique needs and preferences of the person as well as disability related treatment and habilitation goals.</p>	<p>6-30-08 Process to measure quality of person centered plans is developed</p> <p>6-30-09 Training completed, sampling of</p>	<p>Network Operations Department</p> <p>Quality Management Department</p>	<p>Consumers</p> <p>Families</p> <p>Providers</p> <p>Advocates</p>

Objectives	Target Date for Completion	Responsible	Partners and Stakeholders
	<p>plans for improved quality</p> <p>6-30-10 Evaluate effectiveness of training in terms of improved quality of plans</p>		
<p>Area of Improvement: reduce provider staff turnover rates.</p> <p><u>Objective:</u> Work with the PBH Provider Council to identify strategies to reduce staff turnover rates.</p>	<p>6-30-08 Plan developed</p> <p>6-30-09 Plan fully implemented</p> <p>6-30-10 Measure for improvements</p>	<p>Network Operations Department</p> <p>Quality Management Department</p>	<p>Consumers</p> <p>Families</p> <p>Providers</p>
<p>Area of Improvement: Increase access to psychiatric services: adult and child</p> <p><u>Objective:</u> Develop and implement the revised model of the Comprehensive Community Providers to improve choice and access to psychiatric care.</p> <p>Implement telemedicine to increase access to psychiatric care.</p>	<p>6-30-08 Initial implementation of new CCP model; baseline measurement of capacity. Implement tele-psychiatry in CCP providers.</p> <p>6-30-09 Measure utilization of psychiatry by provider; evaluate satisfaction</p> <p>6-30-10 Continue to measure utilization and satisfaction</p>	<p>Network Operations Department</p> <p>Quality Management Department</p>	<p>Consumers</p> <p>Families</p> <p>Community agencies such as DSS, Schools, Primary Care Providers</p>
<p>Area of Improvement: the rate of out of home placement for children is decreased; community and home based options are increased especially response to crisis.</p> <p><u>Objective:</u> Continue efforts to develop a community based system of care for children, including crisis response services in order to decrease out of home placement for children.</p>	<p>6-30-07 Crisis respite services have been implemented. Children have increased access to child psychiatry.</p> <p>6-30-10 Rates of residential placement for children have decreased by at least 10%.</p>	<p>Network Operations</p> <p>Care Management Team</p>	<p>Children</p> <p>Families</p> <p>Community agencies</p>
<p>Area of Improvement: reduce utilization of state facilities including Psychiatric Hospitals and Developmental Centers.</p>	<p>1-1-08 Updated Olmstead Plan</p> <p>1-1-10 Evaluate</p>	<p>Waiver Management Cross Functional Team</p>	<p>Network Operations Department</p>

Objectives	Target Date for Completion	Responsible	Partners and Stakeholders
<p>Objective: Develop Olmstead plans for MH and DD consumers to ensure movement of consumers to the community and adequacy of community system of care to meet their needs.</p>	<p>whether goals have been met</p>		<p>Utilization Management Dept. Care Management CFT Consumers and families CFAC PBH Providers</p>
<p>Area of Improvement: Enhance viability of Comprehensive Community Providers, including DAYMARK Recovery Services; ensure ongoing viability and financial stability; thus improving their ability to function as clinical homes for consumers with MH-SA disabilities.</p> <p><u>Objective:</u> Implementation of CCP Model as redesigned; expand roles and responsibilities of CCPs as the Clinical Home for consumers in their care.</p>	<p>6-30-08 Implementation of new CCP model is completed. 6-30-09 Monitor performance, billing, and financial viability of providers. Measure identified consumer outcomes. 6-30-10 Evaluate model against identified goals and desired outcomes.</p>	<p>Network Operations Department Care Management Team Financial Operations Team Quality Management Department</p>	<p>Consumers CCP providers Community at large due to increased access and improved care</p>
<p>Area of Improvement/Major Initiative: Improve access and quality of crisis intervention services</p> <p><u>Objective:</u> Develop a Crisis Continuum as per the PBH Crisis System Development Plan. The plan will address:</p> <ul style="list-style-type: none"> • DD crisis response and alternative to hospitalization • Child crisis continuum including crisis respite • Substance abusers in crisis and dually diagnosed consumers • Determine community hospital capacity needed • Increase facility based crisis capacity for adults • Monitor outcomes and efficiency of mobile crisis program 	<p>6-30-07 Plan has been fully implemented and evaluation of identified objectives and desired outcomes has been completed.</p>	<p>Network Operations Department Care Management Team</p>	<p>Consumers Families Community agencies Hospitals PBH providers Law Enforcement</p>

Objectives	Target Date for Completion	Responsible	Partners and Stakeholders
<ul style="list-style-type: none"> CIT training available for local law enforcement agencies. 			
<p>Area of Improvement/Major Initiative: PBH does not have an adequate array of services for substance abuse treatment; develop and implement a plan to improve services.</p> <p><u>Objective:</u> develop and implement plan that addresses</p> <ul style="list-style-type: none"> Resources for detoxification Dually diagnosed Continuum of treatment options as per ASAM levels Specific services for adolescents <p>The plan will specify priorities for service development and a timeline for implementation. Goals and desired outcomes will be delineated.</p>	<p>6-30-10 Plan has been implemented and goals and outcomes measured.</p>	<p>Network Operations</p>	<p>Consumers Families Community Agencies Law Enforcement Community Hospitals Primary Care practices School systems</p>
<p>Area of Improvement: PBH has not engaged in focused activities to meet the MH-SA treatment needs of the criminal justice population; there is a need for increased collaboration with agencies serving these populations.</p> <p><u>Objective:</u> Develop and implement a Criminal Justice/Juvenile Justice outreach plan</p> <ul style="list-style-type: none"> Address sub-population of sex offenders and needed services Collaboration with the courts, Department of Social Services and other coordinating agencies 	<p>6-30-08 Plan is developed</p> <p>6-30-09 Plan has been implemented</p> <p>6-30-10 Evaluation of goals and outcomes.</p>	<p>Network Operations Community Relations</p>	<p>Consumers Community at large Law Enforcement Courts and related monitoring and support agencies</p>
<p>Area of Improvement: Affordable housing for people with disabilities is essential for recovery and independence; there is not adequate housing for people with disabilities in the PBH counties.</p>	<p>6-30-09 Housing Plan fully implemented</p>	<p>Community Relations Network Operations</p>	<p>Consumers and families Advocates Community partners in</p>

Objectives	Target Date for Completion	Responsible	Partners and Stakeholders
Objective: Continue efforts to develop housing resources through the Piedmont Regional Continuum of Care. Implement PBH Housing Plan.			housing development including providers, housing authorities and others

Provider Relations and Development Resource Allocation

The PBH Network Operations cost center is budgeted at \$ 832,732. It includes the following fte's:

1	Director
2	Local Unit Coordinators
3	Provider Relations Managers
1	Mental Health Program Specialist
1	Substance Abuse Program Specialist
1	System of Care Program Specialist
1	Administrative Officer
1	Data Analyst
2.4	Administrative Support

Business Rules

Enhance	Inhibit	Result if Changed
	Provider Contracts: same as under Business and Information Systems	

Customer Service/Consumer Affairs

Mission: Our mission is to spread respect, recognize the value and contributions, and support the interdependence, empowerment and recovery of people with disabilities.

Current Operations

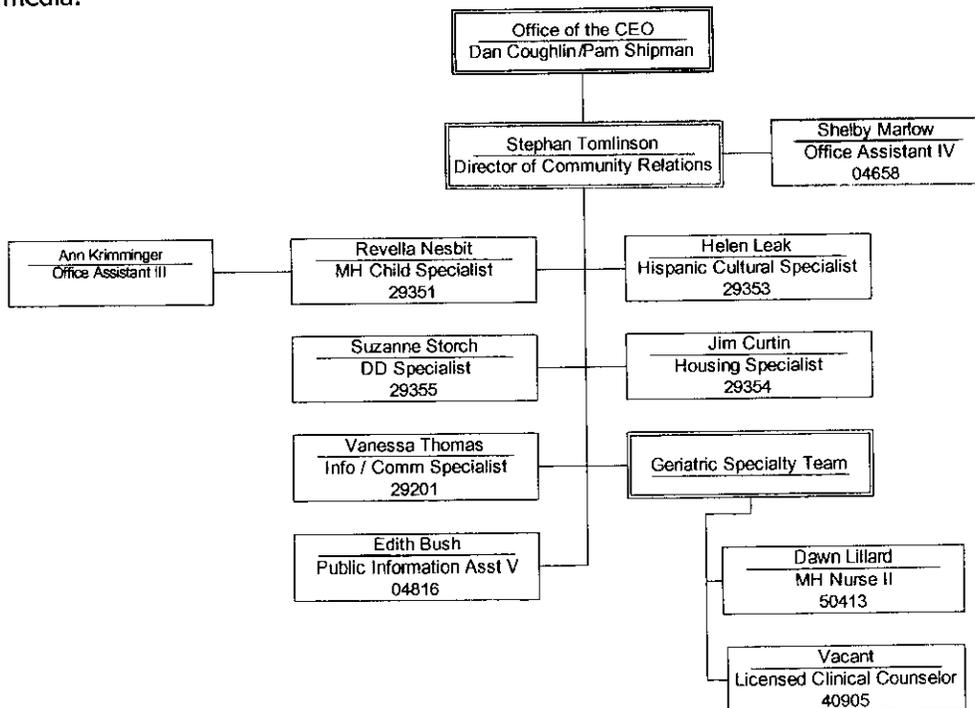
Office of Consumer Affairs: The office of Consumer Affairs is staffed by openly declared consumers, works to develop and identify consumer leaders, and encourages consumer led initiatives. The Office provides scholarships for consumers to attend state and national conferences to promote empowerment through education. The staff of the

Office of Consumer Affairs serve in an ombudsman role and advocate for individuals, and assist consumers as requested with appeals and grievances. The Director is involved in activities that promote and support the empowerment of consumers. This department supports the Client Rights Committee and participates in projects with the PBH Consumer Family Advisory Committee, including the PBH Person Centered Conference.

Quality Management Department: PBH has an extensive system for the management of complaints and grievances. Complaints and grievances are well documented when they are received, and assigned by the Quality Management Department to various PBH staff or departments for resolution. The Quality Management Department ensures that complaints and grievances are resolved, and monitors the time it takes to resolve each one. Complaint data is reported to the State, as well as to the PBH Client Rights Committee, the PBH CQI Steering Committee, PBH Management, and the PBH Board of Directors.

The Quality Management Department also monitors reports of incidents received from providers. Each incident is reviewed and recorded into the PBH incident data base. If more information is needed, a Quality Management staff contacts the provider, or if indicated, PBH conducts an investigation to evaluate the incident and to assure consumer health and safety. If the health and safety of the consumer are at risk, PBH makes immediate reports to local and state agencies, and takes action to remove the consumer from the situation. PBH has standard reports that evaluate incidents by severity as well as by type (abuse, deaths, neglect, exploitation, rights violations). This information is reviewed by the PBH CQI Steering Committee, the PBH Client Rights Committee and PBH Clinical Management.

Community Relations: The department is responsible for the development of local community relationships as well as collaboration with local organizations, public agencies and advocacy groups. These relationships are essential for the array of community activities and services that support individuals with disabilities within each local community. The focus is on activities at the county level, recognizing that the infrastructure and systems in each county are unique. The department coordinates communication with key stakeholders and supports county level Community Advisory Councils and the Consumer Family Advisory Committee. The unit conducts outreach and education activities in the community regarding MH-DD-SA issues, as well as focused activities on the special mental health needs of the geriatric population. The unit is responsible for the development of materials and information for consumers, families and the public at large; materials must be consumer friendly, responsive to cultural issues and available in a variety of media.



Customer Service/Consumer Affairs Strategic Objectives

Objectives	Target Date for Completion	Responsible	Partners and Stakeholders
<p>Area of Improvement: Increase cultural competency across the PBH network, including activities inclusive of the Hispanic Population.</p> <p><u>Objective:</u> Over the next three years, fully implement the PBH Cultural Competency Plans, the Latino Outreach Plan, and Title VI compliance plan.</p>	<p>6-30-10 Implementation is completed as well as follow up evaluation of progress and changes to the system as a result of these initiatives.</p>	<p>Community Relations Department</p>	<p>Minority populations living within the PBH counties.</p> <p>Community Agencies such as Departments of Social Services</p> <p>Provider agencies.</p>
<p>Major Initiative: Develop an Education and Outreach plan that engages schools and other public service agencies to address the special needs of children with behavioral-emotional-developmental problems.</p> <p><u>Objective:</u> Engage stakeholders and develop a three year plan of outreach and education.</p>	<p>6-30-08 Plan Completed 6-30-09 Plan implemented 6-30-10 Evaluation of the plan</p>	<p>Community Relations Department</p>	<p>Local Public agencies serving children</p> <p>Children and families</p> <p>PBH providers serving children</p>
<p>Major Initiative: Strengthen Consumer Empowerment</p> <p><u>Objective:</u> Develop plan to increase engagement in activities and initiatives that promote recovery and empowerment including educational activities, recovery awareness training, crisis plans and advance directives, etc.</p>	<p>7-1-07 Evaluation of goals and objectives is completed 1-1-08 Plan developed, begin implementation 1-1-10 Implementation completed</p>	<p>Office of Consumer Affairs Community Relations</p>	<p>CFAC</p> <p>Consumers living in the PBH area.</p> <p>PBH providers</p>
<p>Major Initiative: Increase education and informal supports for families and caregivers of people with mental illness.</p> <p><u>Objective:</u> Develop plan to increase education, outreach and support for families and caregivers.</p>	<p>1-1-08 Plan Completed, begin implementation 6-30-09 Implementation completed; identified unmet needs and revise plan as needed</p>	<p>Community Relations Office of Consumer Affairs</p>	<p>NAMI</p> <p>Consumers and Family Members</p> <p>PBH Providers</p>

Customer Service/Consumer Affairs Resource Allocation

Budgets and staffing for the Offices of Consumer Affairs and Community Relations are delineated below. The Quality Management Department is represented in Section 6 of this document.

Office of Consumer Affairs:

- 1 Director
- 1 Consumer Affairs Coordinator

Budget: \$178,817. This budget includes funds for the Person Centered Planning Conference, expenses for the CFAC (to be separated next fiscal year), scholarship fund for consumers, and Client Rights Committee expenses.

Community Relations Department:

1	Director
5	Coordinators including: Housing Specialist, Latino Outreach Coordinator, Child MH Expertise, Cultural Competency Coordinator, Consumer Specialist, DD focused specialist
3	Geriatric Specialty Team
2	Administrative Support staff
1	Public Information Specialist

Budget: \$978,370. This budget includes funds for the Cultural Competency Conference as well as consultation in the areas of Cultural Competency. The budget also includes funds for advertising: PBH includes announcements about its Access and Emergency System in various newspapers and publications across the area. Also included in the budget are costs related to the development and printing of educational materials.

Customer Service/Consumer Affairs Rules that Enhance or Inhibit Efficiency or Effectiveness

NONE IDENTIFIED

Enhance	Inhibit	Result if changed

Service Management

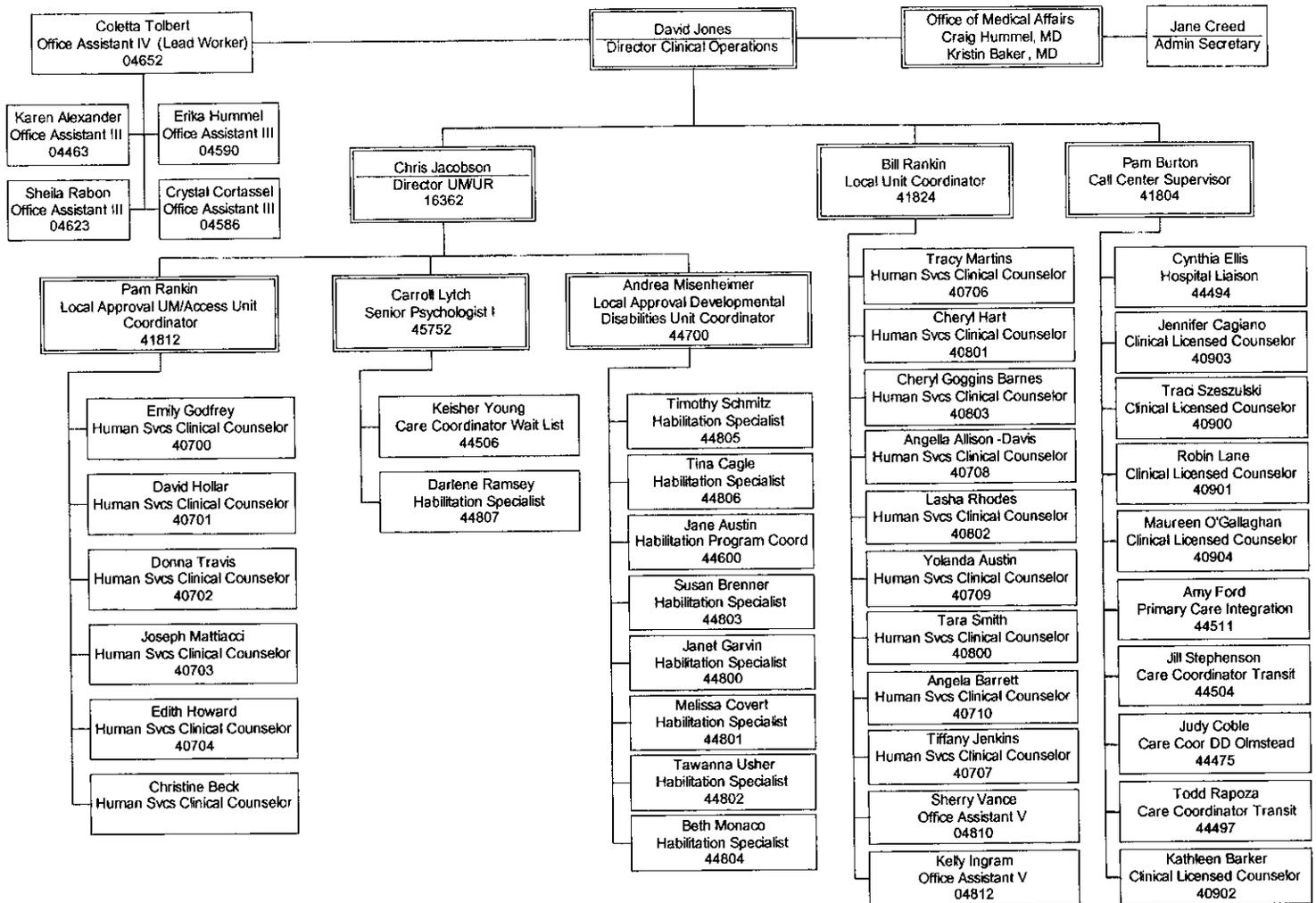
Mission: Our mission is to ensure that people accessing the PBH System of Care are linked to care that is clinically appropriate and meets both the urgency and nature of their conditions.

Service Management Current Operations

Office of Medical Affairs: Piedmont's Medical Director is the Chief Medical Officer for the Piedmont LME. The Office consists of both a Medical Director and Assistant Medical Director. Both are board certified psychiatrists. The Office of Medical Affairs is responsible for the overall clinical management of services to consumers, including authorization of services, and utilization management. Other activities include collaboration with PBH network providers, medical providers in the community, and State and community hospitals.

Utilization and Clinical Management: The Clinical Management Department manages the LME Access system, including a call center, authorization and care management system, utilization management functions, and crisis response network. The unit defines review gates, completes concurrent and retrospective reviews, and responds to appeals. Additionally, the unit researches utilization trends, identifies areas for further study and reviews, and develops Clinical Pathways and written protocols. Care Managers provide clinical review, support and follow up to ensure consumers receive the care that they need. This unit supports the Clinical Advisory Committee. The Office of Medical Affairs is involved in all aspects of the operation of this unit.

Access: The Access Department is responsible for the operation of a 24 hour call center. The call center is responsible for both telephonic and face to face screening, triage and referral of consumers requesting services. The call center includes Qualified and Licensed Professionals that respond to telephone calls. The nature of calls is informational, or for screening/enrollment, and in response to crisis and emergencies. The Access department also has an Outreach Team of qualified and Licensed Professionals (STR: Screening Triage Referral) that work in the community to assist consumers in accessing the system, and responding when telephonic care management is not enough. This team also includes specialists that coordinate developmental disability, substance abuse and psychiatric hospital facility discharges.



Care Management Cross Functional Team: The Care Management Team has oversight for the management of consumer care including access to and utilization of both clinical and support services. These services are measured against identified utilization targets. Additionally the team reviews utilization, demographics and penetration overall, and by identified target populations and specific disability groups. The team oversees the appropriateness of services to meet the treatment, care, health, and safety needs of consumers. The team will develop the Clinical Design Plan and provide an annual report on its implementation. The Plan will identify clinical direction and strategies to move utilization to best practice services. The team will also establish performance targets for access to care. The Care Management Team will also:

1. Research and identify evidenced based practices
2. Work with the Clinical Advisory Committee
3. Establish clinical protocols related to treatment of specific conditions
4. Identify need for education and training of providers on clinical protocols

The Care Management Team will also monitor the following Indicators:

1. Timeliness of access to Care
2. Consumer demographics
3. Service encounter data, penetration, and utilization patterns
4. Under and over utilization
5. Service completion rates
6. Identify outliers, and high-end system users; determine whether Care Management was provided as needed

7. Analysis of demographics as related to utilization and diagnosis
8. Review performance on Utilization Management Plan indicators
9. Monitor outcomes of Utilization Review activities
10. Authorizations and denials of care

Objectives	Target Date for Completion	Responsible	Partners and Stakeholders
<p>Area of Improvement: DD waiting list management.</p> <p><u>Objective:</u> Improve capacity to collect and expeditiously provide information on people waiting for services by service type, age, disability, and other key factors.</p>	9-1-07	PBH Access Unit of the Utilization and Clinical Management Department	Consumers Providers Case Managers PBH Administration
<p>Area of Improvement: Develop "clearinghouse" capacity for tracking and management of program openings in provider services and key generic services such as housing.</p> <p><u>Objective:</u> Design system for reporting and disseminating information to consumers, providers and others about specific program capacity (such as bed availability).</p>	<p>6-30-08 design system</p> <p>6-30-09 System implemented</p> <p>6-30-10 Evaluate system adequacy</p>	PBH Access Unit of the Utilization and Clinical Management Department	Consumers Providers Case Managers PBH Administration Community agencies such as DSS, Advocacy organizations
<p>Area of Improvement: Authorization of long term care has followed a short term care model and is not efficient; burdensome for providers.</p> <p><u>Objective:</u> Work with Business Operations Sub-Committee of the Provider Council to evaluate problems and identify mutually agreeable solutions.</p>	1-1-08 complete	Utilization Management Department	PBH Provider Council Network Department Finance Department Information Systems Department
<p>Area of Improvement: Improve standard authorization process; make this more efficient and provider friendly.</p> <p><u>Objective:</u> Work with Business Operations Sub-Committee of the Provider Council to evaluate problems and identify mutually agreeable solutions.</p>	1-1-08 Complete	Utilization Management Department	PBH Provider Council Network Department Finance Department Information Systems Department
<p>Area of Improvement: Focus of UM activities should be on utilization review (concurrent and retrospective).</p>	<p>7-1-07 UM plan reflects changes</p> <p>6-30-08 Evaluate progress; revise plan as</p>	Utilization Management Department	Medical Affairs

Objectives	Target Date for Completion	Responsible	Partners and Stakeholders
Objective: Improve capacity to effectively manage care for more efficient use of management resources. Develop Care Management per Barbara Mauer Care Coordination model.	needed 6-30-09 Evaluate progress; revise plan as needed.		

Service Management Resource Allocation

The Budgeted Expenses for the Utilization Management Department are \$2,838,245. This includes the Call Center, the Screening/Triage/Referral Team, the Utilization Management Department, and most of the cost of the Office of Medical Affairs.

Staffing:

FTE	Position Type
.5	Medical Director (other .5 is budgeted in Administration)
1	Assistant Medical Director
1	Department Director
1	Program Administrator
11	Licensed Clinical Staff
3	Non-licensed counselors
1	Care Coordinator
2	Program Coordinators
1	Habilitation Program Supervisor
1	Habilitation Program Coordinator
8	Habilitation Specialists
1	Senior Psychologist
1	Data Manager
7	Administrative Support
1	STR Team Coordinator
6	Licensed Clinical Staff
3	Care Coordinators

Service Management Business Rules

Enhance	Inhibit	Impact of change
	State format for MH-SA PCP is cumbersome and problematic; not designed for MH-SA needs.	Plans would be easier to develop, and take less time. Plan needs more flexibility. More effective use of provider clinical staff time.
	Enrollment process is slow and laborious due to extensive data elements and reliance on providers for this information. This results in gaps in information, incomplete and conflicting data.	Reduction in the number of elements would improve accuracy of data.
	Timeframe to response to emergencies should change to 2 hours, consistent with the rest of the state. Measurement of timeframes needs further definition to address whether this is from the time of the call, etc.	Improved data consistency across LME's.
	Timeliness to Care. Ensure measurement parameters are well defined to ensure consistency across LME's.	Data would be comparable
	Counting number of consumers served. The parameters for measuring this need to be specified; whether this is unique persons per year or if a person is counted more than once if there is more than 1 episode.	Consistency of data across LME's

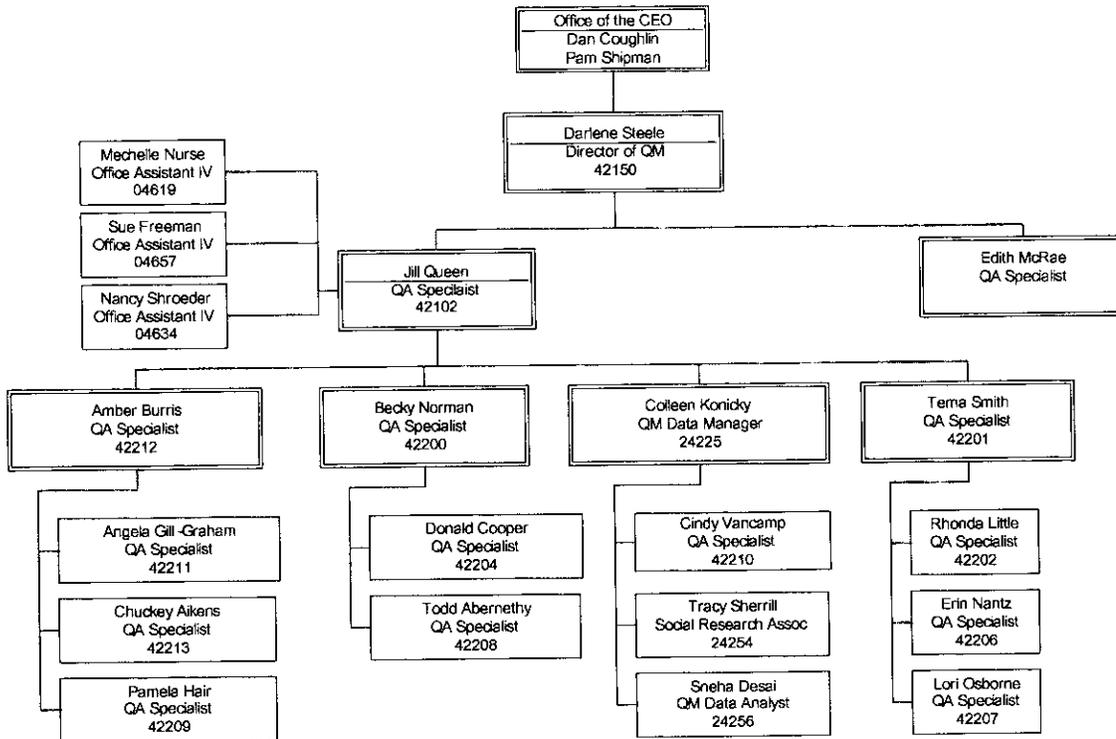
Quality Management

Mission: We have the responsibility for the design, development and management of a quality system that is both proactive and reactive in response to the needs of the people we serve. We strive to protect the rights of people that cannot protect themselves, to assist those who need our support, and to enhance the lives of the people with disabilities who depend on publicly funded services and supports.

Quality Management Current Operations

Quality Management: The Quality Management Department has oversight for quality management both internally at PBH and throughout the provider network. The department supports a Global Continuous Quality Improvement system that includes all network providers. The Quality Management unit provides training to the provider network

on standards, requirements, quality improvement, indicators and targets, client rights, advocacy and protections, health and safety and other critical areas of performance. The department tracks, evaluates and investigates all incidents. The Quality Management Department also implements a system of review, monitoring and investigation that includes the participation of consumers and family members.



The CQI Steering Cross Functional Team: The Continuous Quality Improvement (CQI) Steering Committee has the responsibility for management and oversight of the PBH system of care, including internal operations as well as the Provider Network. The CQI Steering Committee conducts routine performance monitoring, and addresses problems and identified barriers. The CQI Steering committee will develop the PBH Quality Improvement Plan. The Committee will identify Performance Improvement Projects (PIP's) and submit for approval to state agencies. This cross-functional team will also have the following monitoring responsibilities:

1. Monitor performance for trends, patterns, and adverse effects; determine need for further study and CQI actions to address problems.
2. Provider performance indicators and outcomes
3. Monitor progress and performance on PIP's
4. Monitor PBH Quality Improvement Plans
5. Monitor department QI teams and activities
6. Monitor use of coercive interventions
7. Track and monitor agency wide performance on internal quality indicators Monitor Network Provider Quality Improvement Plan and indicators
8. Oversee the reporting of DMA/DMH performance indicators and monitor performance against identified targets

Development of Plans:

1. Develop agency Quality Improvement Plan
 2. Develop Performance Improvement Projects (PIP)
- Implement satisfaction surveys (consumer, and use information to inform improvement plans.

Global CQI Committee:

The Global CQI Committee includes Network Providers, consumers and family members and LME staff. It is a place where all stakeholders come together to meet the challenge of continuous quality improvement in the PBH Provider Network. The Committee is responsible for addressing issues that relate to consumer services and outcomes as well as the protection of rights, health and safety of consumers. The Committee is responsible for development of Global Quality Improvement Plan for the Network and for monitoring performance, identifying barriers, and developing solutions.

**Quality Management
Strategic Objectives**

Objectives	Target Date for Completion	Responsible	Partners and Stakeholders
<p>Area of Improvement: The PBH Quality Management Department should monitor both internal and external quality.</p> <p><u>Objective:</u> The Quality Management Department will assume monitoring of internal quality indicators.</p>	1-1-07 begin	Quality Management Department	All PBH Departments
<p>Area of Improvement: Performance Improvement Projects have been identified and are ongoing.</p>	Ongoing	Quality Management Department	All PBH Departments PBH Providers
<p>Major Initiative: Implement Provider Performance Profile System</p>	Ongoing	Quality Management Department	Global CQI Committee
<p>Major Initiative: Develop and implement system to measure individual consumer outcomes</p>	1-1-08 Plan developed, begin to implement 6-30-10 Measure results	Quality Management Department	Waiver Oversight committee Care Management Team CQI Steering Global CQI Committee
<p>Major Initiative: implement the CMS Quality Framework for the Innovations Waiver</p>	7-1-07 Begin gap analysis; develop plan to address	Waiver Oversight Quality Management	DMA HSRI

Quality Management Resource Allocation

Budgeted Expenses are: \$1,267,097

Quality Management Staff:

1	Director
3	Data Managers
12	QA specialists
3	Administrative Support Staff
2	Quality Assurance Coordinators

Quality Management Business Rules

Enhance	Inhibit	Impact of Change
	Lack of guidance from state regarding sharing of consumer information with the CCNC network, leaves LME's and local CCNC agencies to sort this out. This results in inconsistencies across the state; and perhaps unnecessary barriers.	Collaboration with CCNC would be more effective.
	The requirement to submit TOPPS on all consumers at such frequent intervals is burdensome on providers and not statistically necessary for outcomes measurement.	Statistical samples would provide effective data and would be less of a burden on providers.

**UNION COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT

Meeting Date: August 6, 2007

Action Agenda Item No. 8

(Central Admin. use only)

SUBJECT: Cuthberston School Site and Construction Funding for Middle/High School "C"

DEPARTMENT: Finance
UCPS

PUBLIC HEARING: No

ATTACHMENT(S):

Capital Project Ordinance Amendment
83

Minutes of July 24, 2006 Commission
meeting

Agenda abstract for November 6,
2006 Commission meeting

INFORMATION CONTACT:

Dr. Davis
Don Hughes
Kai Nelson

TELEPHONE NUMBERS:

704.283.3647
704.296.5960
704.292.2522

DEPARTMENT'S RECOMMENDED ACTION: A) Receive Presentation from UCPS officials regarding BOE's action in connection with th Cuthbertson Road School Site B) Adopt Capital Project Amendment 83 which provides construction project funding for Middle/High School C

BACKGROUND: UCPS officials will be present at the BOCC August 6 meeting to brief the Commission regarding recent BOE actions taken in connection with the use of this site. Attached to this agenda package is information previously provided to the BOCC regarding County expectations and conditions regarding the site's use.

County funding provided to this site was based on middle/high school "C" and 2 of the 5 elementary schools contained in the 2007-2011 CIP being located at the site.

Construction bids for middle/high school "C" have been received and award made by the BOE subject to appropriation funding provided by the Commission. The 2006 CIP includes \$79.7 million in total project costs for "C", exclusive of land. Current project costs are estimated at \$74 million, exclusive of contingencies. The size, complexity, time duration of construction and unanticipated regulatory decisions will undoubtedly impact the current estimated project cost.

The construction schedule for "C" is fairly "tight". In order to ensure that the middle and high school is open to accept new students in August 2009, is recommended that the Commission provide the construction funding for "C" at the August 6 meeting and gain comfort that it is

maintaining maximum flexibility with regard to the site's use - either as a 4 school site or a 3 school site that utilizes the site efficiently for the middle/high school and 2 elementary schools and maximizes the use of the balance of the property ... to include disposal. Those decisions can be made in the coming months when the 2008-2012 UCPS is formally received and reviewed by the Commission.

FINANCIAL IMPACT: Included in the CIP 2006 - debt service incorporated in the current tax rate structure

Legal Dept. Comments if applicable: _____

Finance Dept. Comments if applicable: _____

Manager Recommendation: _____

CAPITAL PROJECT ORDINANCE AMENDMENT

BUDGET School Bond Fund - 55
 FISCAL YEAR FY 2007-2008

REQUESTED BY Kai Nelson
 DATE August 5, 2007

PROJECT SOURCES

Source Description and Code	Project To Date	Requested Amendment	Revised Project
G.O. Bond Proceeds	383,406,819	67,428,885	450,835,704
All Other Revenue	1,363,308	-	1,363,308

PROJECT USES

Project Description and Code	Project To Date	Requested Amendment	Revised Project
New Middle School "C" (115C-429b project allocation)	18,115,015	26,971,554	45,086,569
New High School "C" (115C-429b project allocation)	1,643,273	40,457,331	42,100,604
All Other School Projects	365,011,839	-	365,011,839

384,770,127 67,428,885 452,199,012

384,770,127 67,428,885 452,199,012

EXPLANATION: Funding request submitted by UCPS for Middle School/HS "C" pursuant to 115C-429b.

DATE: _____

APPROVED BY: _____
 Bd of Comm/County Manager
 Lynn West/Clerk to the Board

FOR FINANCE POSTING PURPOSES ONLY

PROJECT SOURCES

Source Description and Code	Project To Date	Requested Amendment	Revised Project
G.O. Bond Proceeds 55491100-4710-530	383,406,819	67,428,885	450,835,704

PROJECT USES

Project Description and Code	Project To Date	Requested Amendment	Revised Project
New Middle School "C" (115C-429b project allocation) 55559200-5586-557	18,115,015	26,971,554	45,086,569
New High School "C" (115C-429b project allocation) 55559200-5586-558	1,643,273	40,457,331	42,100,604

383,406,819 67,428,885 450,835,704

19,758,288 67,428,885 87,187,173

Prepared By dhc
 Posted By _____
 Date _____

Number CPO - 83

July 24, 2006

WILSON COUNTY PUBLIC SCHOOLS:

a. Approve Purchase Price of 211 Acres Located Off Cuthbertson Road for Future School Construction

Chairman Lane moved approval of the purchase price of 211 acres off Cuthbertson Road for future school construction at a price of \$70,000 per acre, a total of \$14,770,000 and the adoption of Capital Project Ordinance (CPO) #55.

Chairman Lane recognized Dr. Davis to address the Board in regards to this request.

Dr. Davis stated that this site is being considered for middle and high schools "C." He said that this property requires that the Board of Education enter into the condemnation process. Dr. Davis said that he had provided the County Manager with copies of documentation showing the negotiations that have taken place with the land broker and the due diligence that had been performed on this matter. He said that he had also provided copies of the correspondence that the schools have had with the owner, but they still have not reached the point of having a willing seller in this situation.

Dr. Davis pointed out that the \$14,770,000 purchase price does not include the land broker's fee and stated that he would be presenting before the Board at a later time with that information. He said that it is crucial that the school system begin site design work on this project so that middle school and high school "C" could open in the fall of 2009. He stated that the schools anticipate with the amount of acreage that two elementary schools could be placed on the property.

Commissioner Rushing asked if the landowner is still unwilling to sell the property. Dr. Davis responded that this was correct.

Commissioner Rushing asked if there were other properties in the area where the schools could approach the owners to try to find a willing seller. Dr. Davis responded that the schools have looked at other properties but not in that area. He said that this particular property was ideal for the location of the middle school and high school "C" as well as at least one elementary school. He stated that the other properties that have been considered are far removed from this area and present certain challenges that would not make them good locations for a school.

Mr. Shalati stated that it is his understanding that this property would have four or more schools located on it which served as the basis of his recommendation to the Board for approval of the purchase price. He stressed that he would not recommend approving 211 acres if four schools would not be located thereon.

Dr. Davis responded that it is the schools' intent to construct four schools on the property. **Mr. Shalati stated that he needs a commitment to be included on the record because this property is costing a lot, and he wanted to make sure the Board was approving the purchase price of land for four schools.**

Dr. Davis responded that the school system knows that four schools would fit on the property, and it is the schools' intent to construct four schools on the property. Mr. Shalati reiterated that his recommendation was that there would be four schools located on the property. Dr. Davis stated that acquiring the 211 acres would place the schools in a very good position for the foreseeable future. He said that in terms of the schools' needs, as they relate to the projects in the upcoming bond, he did not believe they would need more than one or two sites to have the property required through 2010.

In response to a question by Vice Chairman Sexton and the County Manager, Dr. Davis stated that the schools would be looking at placing two elementary schools, one middle, and one high school on the 211 acres. **He said that it could change but the schools are committed to constructing four schools on the property.**

Discussion ensued regarding why the landowner objected to selling the property. Dr. Davis said that he thought the property had been in the landowner's family for a number of years. Don Hughes, Director of Facilities, Planning and Construction for the schools, stated that there are no other properties in that area that the schools are aware of that they could seek acquisition of except the property that has been subdivided by developers.

Commissioner Rushing referred to excerpts from the correspondence with the landowner contained in the agenda package, which indicated that the landowner was a forester who harvested trees on the property from time to time and also runs cattle on the property. He stated that the correspondence further indicated that the owner and his mother decided together that they did not want to sell the property. Commissioner Rushing questioned if the landowner had been approached about selling a portion of the property before the schools talked with him about having use of the land or getting a commitment from him that over the years as the schools developed the land, that they could purchase it.

Mr. Hughes responded that the landowner had been approached about selling less acreage, and he had stated that he did not want to sell. He explained that the whole tract is over 700 acres, and the schools were only asking to purchase that part of the tract along Thbertson Road. He said they had talked about two different sizes of acreage and at the end of the conversation, the owner still seemed interested in selling. Further, he said that there is no evidence of any fencing on the property and the aerial photographs show the land being used for cattle. Mr. Hughes stated neither do the aerial photographs of the area show evidence of a tree farm. He said that the landowner does not live on the property.

Commissioner Pressley stated that he had been involved in these negotiations, and they had worked several days with the landowner. He said that they had met most of the wishes of the landowner except for the timeframe. He stated that they had looked at the possibility of a 150-acre land donation by the owner to the schools. Commissioner Pressley said that the last conversation that he had with the landowner including the deadline that had been imposed on him, the owner had said "you'll have to condemn the land before the condemnation process begins, that the landowner will come back to the schools with some type of agreement." Commissioner Pressley said that he had suggested to the school board during a meeting that he was involved in with the schools the possibility of naming rights for the landowner as a means of trying to preserve his family heritage.

Dr. Davis stated that he understood the comments by both Commissioner Rushing and Commissioner Pressley about people's feelings attached to their land. He said that the schools do not enjoy the condemnation process, but there are very few choices for school locations particularly in the area of the County where schools are needed desperately. He assured that if any point in time the landowner should decide he wanted to become a willing seller and negotiate a donation or partial donation of land, the schools would be more than willing to enter into discussions with him. He noted that this applied in any situation where condemnation was involved for school construction.

Commissioner Pressley said that he wanted the Board to know that the landowner's wishes were that the property not be divided, but he wanted it to be used for a park area or a school site where it could be a heritage to his family. He said that it was not a money issue but he wanted the property to be used for a purpose to preserve his family heritage. He stated that it was a time sensitive issue and one where they had not been able to reach an agreement within the timeframe.

Commissioner Stone stated that he appreciated the comments that have been made tonight about this matter. He noted that on August 25, 2006, when the new school year begins, there will be over 6,000 students attending classes in mobile units and that is why it is necessary that schools be constructed.

Dr. Davis commented that he has seen the projections from the Department of Public Instruction (DPI) that indicate that in the coming year Union County will be the sixth largest school district of 115 districts in the entire state. He said that these projections placed Union County behind "the big five" districts which include Wake, Charlotte-Mecklenburg, Guilford, Forsyth, and Cumberland.

Commissioner Rushing asked with this amount of acreage, would there be a potential that some of the property could be used as parkland for possibly a western district park to include ball fields. He said that if this land were used for school construction, the schools could be constructed around the edge of the property and the middle of the property could be used for a large western district park. He asked Dr. Davis if the schools would be open to these discussions.

Dr. Davis responded that he believed that the Board of Education would be open to exploring that possibility. He said that the schools are very interested in partnering with parks and recreation, and he stated that this is an issue that the schools would be looking very closely to try and develop a comprehensive agreement countywide where facilities can be shared and the community would be able to benefit from the use of the facilities to a greater extent than they currently are able to do.

Mr. Shalati stated that the County staff would explore the possibility of a joint use or shared use with the schools. He noted that there are some floodplain areas that would not be used for construction. He said that he would commit to the Board that the County staff will work with the school staff to explore the possibility of a park, but it would not be a district park because district parks require approximately 150 acres. He further stated that he was not going to spend money for parks when the priority is schools. Shalati said if there was a parcel of land that could be optimized for parks in partnership with the schools, that would be his recommendation. He stated that the County staff would explore the possibility of a park as extensively as possible with the school staff in order to make the most use of the land.

Mr. Shalati asked for clarification if the motion included that there would be four schools constructed on the property. Chairman Lane responded that was a part of the motion.

Following the discussion, the motion was passed unanimously.

**UNION COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT

Meeting Date: November 6, 2006

Action Agenda Item No. 9a
(Central Admin. use only)

SUBJECT: School Land Acquisition

DEPARTMENT: Finance

PUBLIC HEARING: No

ATTACHMENT(S):
Correspondence from UCPS
Superintendent dated:

September 26, 2006
October 23, 2006

Capital Project Ordinance Amendment
Number 62

INFORMATION CONTACT:

Dr. Davis
Kai Nelson

TELEPHONE NUMBERS:

704.3283.3647
704.292.2522

DEPARTMENT'S RECOMMENDED ACTION: Adopt CPO #62 which provides:

- 1.) \$17,000,000 for the acquisition, including all closing costs, of approximately 210 acres of real property at \$80,000 per acre located on Cuthbertson Road; said property to be the location of at least four schools
- 2.) \$220,000 for the condemnation settlement in connection with the 19+ acre site constituting a portion of the Marvin Ridge Middle/High School site (initial deposit was \$1.382 million with a proposed settlement of \$1.6 million)
- 3.) \$460,000 for the acquisition, including closing costs, of approximately 7.5 acres of real property adjacent to Parkwood High School
- 4.) \$100,000 for a real estate acquisition option on Cox road; said property to be the location of a future elementary school site (land banking)

BACKGROUND: The BOCC at their July 24 meeting approved funding for the acquisition/condemnation of the Cuthbertson site at \$70,000 per acre. Both parties, UCPS and the property owner, have continued negotiations. Based on updated appraisals, the UCPS and the owner, have agreed to purchase contract for \$80,000 per acre. The UCPS intends to place middle/high school "C" at this location. The CIP contains funds for this acquisition of real property for 5 additional elementary schools (beyond those currently under construction). Funding is available in the CIP based on 2 of the 5 elementary schools in the 2007-2011 locating at this site.

The other budget actions provide the funding for the BOE to settle the condemnation associated with a portion of the real property constituting Marvin Ridge Middle/High School, the purchase of property at Parkwood to facilitate improved traffic parking, circulation and future additions and

option funds for land banking.

FINANCIAL IMPACT: The requested actions are in conformance with the approved Capital Improvement Plan 2007-2011.

Legal Dept. Comments if applicable: _____

Finance Dept. Comments if applicable: _____

Manager Recommendation: _____



UNION COUNTY PUBLIC SCHOOLS

500 North Main Street, Suite 700 • Monroe, North Carolina 28112 - 4786
704/283-3733 Or 704/283-3654 Fax: 704/289-1536

Dr. Ed Davis
Superintendent

Phil Martin, Chairman
L. Dean Arp, Vice Chairman

John Collins John H. Crowder
Monica Frank Dr. Sharon Gallagher
Linda Isner Carolyn J. Lowder Kim Rogers

TO: Mike Shalati
FROM: Ed Davis *ZED*
RE: Land Issues
Date: October 23, 2006

As we spoke on October 17th, Union County Public Schools is making the following request:

- Cox Road Property: Union County Public Schools is requesting funds for an option based on the appraised value and negotiated amount by the Union County Public Schools Board of Education. Kai Nelson has approved providing the appropriate funds to the Facilities, Planning, and Construction Department for an appraisal for this property.
- Parkwood: Union County Public Schools is requesting \$450,000 plus closing costs to purchase 7.5 acres adjacent to Parkwood High School. An appraisal by T. B Harris is forthcoming. Attached are letters justifying asking price prepared by Rob Morrison for Mr. Stephen Melton. Purchasing the additional acreage allows for better traffic flow for Parkwood Middle and High School, for additional parking for Parkwood High School, and for possible additions at Parkwood High School
- Cuthbertson: Union County Public Schools is requesting \$16,980,000 (which includes the \$200,000 fee for our Land Broker) plus closing costs to allow the school system to pay the agreed amount of \$80,000 per acre. The commissioners previously approved \$14,770,000 for the purchase of this property through condemnation based on an appraised value of \$70,000 per acre. As promised to commissioners, Union County Public Schools has continued to negotiate with Mr. Bill Lewis, the owner of this property. He is now willing to sell for \$80,000 per acre. Attached is a letter from T. B. Harris explaining the calculation of appreciation in land value since June 2006. The determination for the acceptability of Mr. Lewis' asking price is on page 18-19 of the June appraisal provided by T.B. Harris. Union County Public Schools Attorney, Koy Dawkins, recommended to the staff and to the Union County Public School Board of Education that we accept the \$80,000 per acre for 209 ³/₄ acre parcel owned by Mr. Lewis and that we not provide a counteroffer. His recommendation was based on the fact that any counteroffer would void the initial offer by Mr. Lewis. The Board of Education approved the purchase price of \$80,000 for this property.
- Lusky Property (Marvin Ridge Middle/High School): As you requested, attached is a memo from Koy Dawkins verifying that Union County Public Schools would not owe Weddington Properties, LLC (77.604 acres) any additional money as part of any negotiated amount for the Mel Graham property. These two properties combine to make-up the current Marvin Ridge Middle/High School.

Thank you for your consideration in these matters.



UNION COUNTY PUBLIC SCHOOLS

500 North Main Street, Suite 700 • Monroe, North Carolina 28112 - 4786
704/283-3733 Or 704/283-3654 Fax: 704/289-1536

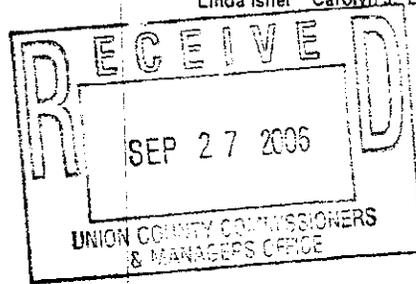
Dr. Ed Davis
Superintendent

Phil Martin, Chairman
L. Dean Arp, Vice Chairman

John Collins John H. Crowder
Monica Frank Dr. Sharon Gallagher
Linda Isner Carolyn J. Lowder Kim Rogers

MEMORANDUM

TO: Mike Shalati
FROM: Ed Davis *ZED*
SUBJECT: Union County Board of Education vs. North States Associates (Mel Graham)
DATE: September 26, 2006



As we have discussed, Judge Bill Helms is mediating the condemnation lawsuit involving the 19+ acres associated with Marvin Ridge Middle School/High School. The Board of Education made a deposit of \$1.382 million in the condemnation case. This was based on purchase price of the adjoining Lusky property which was \$70,500 per acre. Mr. Graham's initial offer was \$2.6 million.

I shared two appraisals with you on September 25th. One was from November 2004 and the other from June 2005. The 2004 appraisal valued the property at \$1,059,000 and the 2005 appraisal valued the property at \$1,961,000. Judge Helms has stated his belief that Mr. Graham will accept \$1.6 million as payment to resolve this matter.

I am requesting that you provide feedback regarding this matter so I may advise Mr. Dawkins on how to proceed. Thank you for your attention to this matter. I look forward to hearing from you in the near future.

kdr

1,600,000 settlement
(1,382,000) initial deposit

218,000 KDR

CAPITAL PROJECT ORDINANCE AMENDMENT

BUDGET School Bond Fund - 55
 FISCAL YEAR FY 2006-2007

REQUESTED BY Kai Nelson
 DATE November 6, 2006

PROJECT SOURCES

Source Description and Code	Project To Date	Requested Amendment	Revised Project
G.O. Bond Proceeds	354,939,497	3,010,000	357,949,497
All Other Revenue	1,363,308	-	1,363,308
	<u>356,302,805</u>	<u>3,010,000</u>	<u>359,312,805</u>

PROJECT USES

Project Description and Code	Project To Date	Requested Amendment	Revised Project
New Middle School C (115C-429b project allocation)	14,770,000	2,230,000	17,000,000
Land Banking (115C-429b project allocation)	6,500	560,000	566,500
Marvin Ridge "MIDDLE SCHOOL B" (115C-429b project allocation)	29,863,390	88,000	29,951,390
Marvin Ridge "HIGH SCHOOL B" (115C-429b project allocation)	39,108,594	132,000	39,240,594
All Other School Projects	272,554,321	-	272,554,321
	<u>356,302,805</u>	<u>3,010,000</u>	<u>359,312,805</u>

EXPLANATION: Additional funding for land costs associated with projects listed above pursuant to 115C-429b.

DATE: _____

APPROVED BY: _____
 Bd of Comm/County Manager
 Lynn West/Clerk to the Board

FOR FINANCE POSTING PURPOSES ONLY

PROJECT SOURCES

Source Description and Code	Project To Date	Requested Amendment	Revised Project
G.O. Bond Proceeds 55491100-4710-530	354,939,497	3,010,000	357,949,497
	<u>354,939,497</u>	<u>3,010,000</u>	<u>357,949,497</u>

PROJECT USES

Project Description and Code	Project To Date	Requested Amendment	Revised Project
New Middle School C (115C-429b project allocation) 55559200-5570-557	14,770,000	2,230,000	17,000,000
Land Banking (115C-429b project allocation) 55559200-5570-549	6,500	560,000	566,500
Marvin Ridge "MIDDLE SCHOOL B" (115C-429b project allocation) 55559200-5586-528	29,863,390	88,000	29,951,390
Marvin Ridge "HIGH SCHOOL B" (115C-429b project allocation) 55559200-5586-529	39,108,594	132,000	39,240,594
	<u>83,748,484</u>	<u>3,010,000</u>	<u>86,758,484</u>

Prepared By dhc
 Posted By _____
 Date _____

Number CPO - 62

Name	<i>Land Acquisition</i>	Project Number	34A
-------------	-------------------------	-----------------------	-----

Description System-wide purchase of right-of-ways, easements, and land for expanding existing sites. Also includes purchase of land for Elementary Schools H-N, MS/HS "C" & "D" and the Transportation Facility. These estimates are based on historical data.

Description Growth

Year	All Prior Periods	Current	1 2006-07	2 2007-08	3 2008-09	4 2009-10	5 2010-2011	CIP Sub-Total	6 2011-12	C
Costs										
	-	5,496,000	27,330,000	-	-	-	-	32,826,000	-	3
Construction	-	-	-	-	-	-	-	-	-	-
Technology	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Costs	-	5,496,000	27,330,000	-	-	-	-	32,826,000	-	3

Remaining Budget Impact	-
--------------------------------	---

County Public Schools
 Project Request FY2007-2011

Name	Land Acquisition	Project Number	34A
------	------------------	----------------	-----

	Current	2006-07	2007-08	2008-09	2009-10	2010-2011
- Stallings		J 1,590,000.00				
co-location		K 2,340,000.00				
		L 2,880,000.00				
rtson		MS/HS C 12,380,000.00				
G Add'l	1,566,000.00	Transp 1,260,000.00				
H	1,965,000.00	M 2,940,000.00				
I	1,965,000.00	N 2,940,000.00				
		MS/HS D 1,000,000.00				
	5,496,000.00	27,330,000.00				
		General -				
		27,330,000.00				32,826,000.00

) either

12380 C
 2880 L
 2940 Mon N

 18200
 17000 purchased of C
 all in

**UNION COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT

Meeting Date: August 6, 2007

Action Agenda Item No. 9

(Central Admin. use only)

SUBJECT: SPCC Advanced Machining Center

DEPARTMENT: Finance
SPCC

PUBLIC HEARING: No

ATTACHMENT(S):
Correspondence from SPCC

INFORMATION CONTACT:

Dr. McKay
Kai Nelson

TELEPHONE NUMBERS:

704.290.5100
704.292.2522

DEPARTMENT'S RECOMMENDED ACTION: Approve re-programming of CIP funds for the renovation of facilities to accommodate the Advanced Machining Center

BACKGROUND: Several recent corporate expansion announcements (Turbomeca, Charlotte Pipe) were accompanied with commitments to provide pre-employment training through South Piedmont Community College. Through the State, SPCC has secured \$250K for equipment and training resources and another \$60K for facility renovations. The facility renovations are expected to cost approximately \$220K (leaving a shortfall of \$160K) with \$70K for water and sewer infrastructure. The infrastructure is being size to accommodate the new facilities planned in the County's CIP.

The County has provided funds in the 2007 CIP for programming of the new facilities and the purchase of the mobiles discussed during the budget. SPCC is proposing that \$160K be re-programmed to address the more urgent need of providing a trained workforce for our new business partners. The re-programming is not anticipated to have a material impact on SPCC's planning efforts.

FINANCIAL IMPACT: Funds available in the 2007 CIP

Legal Dept. Comments if applicable: _____



SOUTH PIEDMONT COMMUNITY COLLEGE

Monroe • Polkton • Wadesboro • www.spcc.edu

July 31, 2007

Mr. Kevin Pressley, Chairman
Board of Commissioners
Union County
500 N. Main St., Room 925
Monroe, NC 28112

Dear Chairman Pressley:

We at South Piedmont Community College are most appreciative of the public and financial support provided by the Union County Commissioners since our founding in 1999. Your recent approval of planning funds for new facilities and the CIP for those facilities is a major commitment to the college. These funds are vital for us to provide the training needed for economic development in Union County.

Included in the CIP approved this spring were new state-of-the-art facilities for industrial training including machining, industrial maintenance, electricity, electronics, and safety. As planned, the training will be available in 2010.

The recent announcement of a major new manufacturing plant in Union County has resulted in a need for reprogramming some of the planning funds. The Turbomeca plant and its pre-employment training needs will require SPCC to provide a comprehensive machining program over the next three years. The company's employment projections show 131 jobs which will require machine training. High level CNC machine training will be needed for 90 of these jobs. The projections do not include the possible addition of jobs in any future expansion.

Through grants and the state's New and Expanding Industry Training program, we have secured funds for the equipment (the equipment will belong to the college), personnel, and partial upfits needed to any facility. The partial upfits are expected to cost \$60,000 for electrical, ventilation and/or air supply requirements.

We have evaluated various alternatives and believe the best solution to provide a facility is to upfit a 3,100 square foot storage facility on our campus. In addition to the amount from the state, we need \$160,000 to provide water and sewage, insulation, and some renovation. We are requesting the reprogramming of this amount from our approved planning funds.

In addition to providing an immediate training facility, the installation of water and sewer lines will be sized so they can be used for the new facilities currently being planned. This cost is \$75,000 or approximately one-half of the funds requested. This will result in a direct cost savings for this project. Also, with the addition of facilities in 2010, we will be able to use this converted space as a much needed maintenance facility for the college.

Your approval of the request will allow us to meet the training requirements of Union County's most important economic development project.

Sincerely,



John R. McKay, Ed.D.
President

Return Address:

Old Charlotte Highway Campus
4209 Old Charlotte Highway
Monroe, NC 28110
704-290-5100 • FAX 704-290-5250

Other Locations:

L. L. Polk Campus
Post Office Box 126
Polkton, NC 28135-0126
704-272-5300 • FAX 704-272-5350

Lockhart-Taylor Center
514 North Washington Street
Wadesboro, NC 28170
704-272-5300 • FAX 704-272-5475

**UNION COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT

Meeting Date: 8/6/07

Action Agenda Item No. 10a
(Central Admin. use only)

SUBJECT: Tax Collector's Annual Settlement

DEPARTMENT: Tax Collector

PUBLIC HEARING: No

ATTACHMENT(S):

Preliminary Report Outlining
Settlement; Current Real/Personal
Property Settlement, Current MV Tax
Settlement, Delinquent Real/Personal
Property Settlement, Delinquent, MV
Tax Settlement, PDF Reports of all
outstanding tax balances

INFORMATION CONTACT:

John Petoskey
Vann Harrell

TELEPHONE NUMBERS:

704-283-3748
704-283-3591

DEPARTMENT'S RECOMMENDED ACTION: Approve settlement as presented

BACKGROUND: NCGS 105-373

FINANCIAL IMPACT: N/A

Legal Dept. Comments if applicable: _____

Finance Dept. Comments if applicable: _____

Manager Recommendation: _____



UNION COUNTY
Office of the Tax Administrator
Collections Division
407 N. Main Street
P.O. Box 38
Monroe, NC 28111-0038

704-283-3848
704-283-3897 Fax

PRELIMINARY REPORT FOR FISCAL YEAR 2006-2007

TO: Union County Board of Commissioners

FROM: John C. Petoskey, Tax Administrator
Vann Harrell, Assistant Collector of Revenue

CC: Richard Black, County Manager
Kai Nelson, Finance Director

RE: Annual Settlement

DATE: July 26, 2007

In accordance with N.C.G.S 105-373(a)(1), I respectfully submit the following Report:

Attached to this Report are discs containing (1) a list of the persons owning real property whose taxes for 2006 remain unpaid along with the principal amount owed by each person, (2) a list of the persons not owning real property whose personal property taxes for 2006 remain unpaid along with the principal amount owed by each taxpayer, (3) a list of unpaid 2006 registered motor vehicle taxes, (4) a list of persons with unpaid delinquent real and personal property taxes, and (5) a list of persons with unpaid delinquent registered motor vehicle taxes.

We respectfully request that this list of personal property owners be declared insolvent under the guidelines of N.C.G.S 105-373(a)(2) and allowed as a credit to the Collector in this settlement. However, these accounts will remain in the hands of the Collector for further collection activities pursuant to the North Carolina General Statutes.

In compliance with N.C.G.S. 105-373(a)(3), attached hereto is a report entitled "Settlement for Current Real Estate and Personal Property Taxes for Fiscal Year 2006-2007" dated July 13, 2007 setting forth my full settlement for all real and personal property taxes in my hands for collection for the fiscal year 2006-2007.

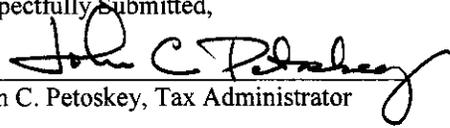
In compliance with N.C.G.S. 105-373(a)(4)(b), attached hereto is a report entitled "Fiscal year 2006-2007 Settlement for Delinquent Real and Personal Property Taxes for Tax Years 1996-2005" dated July 13, 2007 setting forth my full settlement for all delinquent real and personal property taxes collected during the fiscal year 2006-2007.

In compliance with N.C.G.S 105-373(a)(3), attached hereto is a report entitled "Settlement for Current Motor Vehicle Taxes for Fiscal Year 2006-2007" dated July 13, 2007 setting forth my full settlement for all registered motor vehicle taxes in my hands for collection for the fiscal year 2006-2007.

In compliance with N.C.G.S. 105-373(a)(4)(b), attached hereto is a report entitled "Fiscal year 2006-2007 Settlement for Delinquent Registered Motor Vehicle Taxes for Tax Years 2003-2005" dated July 13, 2007 setting forth my full settlement for all delinquent registered motor vehicle taxes collected during the fiscal year 2006-2007

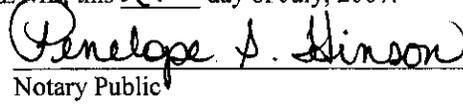
Further, I hereby certify that I have made diligent efforts to collect the taxes due from the persons listed in such a manner that is reasonably necessary as prescribed and allowed by law.

Respectfully Submitted,



John C. Petoskey, Tax Administrator

SWORN TO AND SUBSCRIBED BEFORE ME, this 26 day of July, 2007.



Notary Public

My Commission expires:
November 4, 2007





UNION COUNTY
Office of the Tax Administrator
Collections Division
407 N. Main Street
P.O. Box 38
Monroe, NC 28111-0038

704-283-3848
704-283-3897 Fax

**SETTLEMENT FOR CURRENT REAL AND PERSONAL PROPERTY TAXES
FOR FISCAL YEAR 2006-2007**

TO: Union County Board of Commissioners
FROM: John C. Petoskey, Tax Administrator
Vann Harrell, Assistant Collector of Revenue
CC: Richard Black, County Manager
Kai Nelson, Finance Director
DATE: July 26, 2007

CHARGES TO TAX COLLECTOR

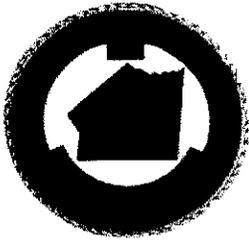
- | | | |
|----|--|-----------------|
| 1. | Total amount of all taxes, fire fees, & late list penalties
Placed in the Tax Collector's hands for collection for
The year: | \$96,815,836.17 |
| 2. | All interest, costs, and fees collected by the Tax Collector | \$ 214,625.81 |

TOTAL: **\$97,030,461.98**

CREDITS TO TAX COLLECTOR

- | | | |
|----|---|-----------------|
| 1. | All sums deposited by the Tax Collector to the credit
Of the taxing unit or received for by the proper official: | \$94,640,518.57 |
| 2. | Releases allowed by the governing body: | \$ 712,238.81 |
| 3. | The principal amount of taxes constituting liens
Against real property: | \$ 1,202,589.24 |
| 4. | The principal amount of taxes determined to be
Insolvent and to be allowed as credits to the Tax
Collector by the governing body: | \$ 471,230.85 |
| 5. | Small under/over payments write-off (<\$1.00): | \$ 129.90 |
| 6. | \$5.00 minimum bill write-offs: | \$ 3,754.61 |

TOTAL: **\$97,030,461.98**



UNION COUNTY
Office of the Tax Administrator
Collections Division
407 N. Main Street
P.O. Box 38
Monroe, NC 28111-0038

704-283-3848
704-283-3897 Fax

**SETTLEMENT FOR CURRENT REGISTERED MOTOR VEHICLE TAXES
FOR FISCAL YEAR 2006-2007**

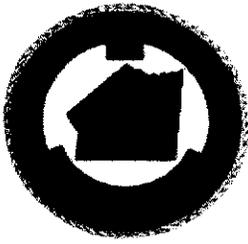
TO: Union County Board of Commissioners
FROM: John C. Petoskey, Tax Administrator
Vann Harrell, Assistant Collector of Revenue
CC: Richard Black, County Manager
Kai Nelson, Finance Director
DATE: July 26, 2007

CHARGES TO TAX COLLECTOR

1.	Total amount of all taxes placed in the Tax Collector's hands for collection for the year:	\$10,552,882.78
2.	All interest, costs, and fees collected by the Tax Collector	\$ 140,644.56
TOTAL:		<u>\$10,693,527.34</u>

CREDITS TO TAX COLLECTOR

1.	All sums deposited by the Tax Collector to the credit Of the taxing unit or receipted for by the proper official:	\$ 9,536,614.18
2.	Release and refunds allowed by governing body:	\$ 250,571.74
3.	Reimbursements approved by the governing body:	\$ (45,217.46)
4.	\$1.00 over and under adjustments:	\$ (310.10)
5.	The principal amount of registered motor vehicle Taxes outstanding:	\$ 951,868.98
TOTAL:		<u>\$10,693,527.34</u>



UNION COUNTY
Office of the Tax Administrator
Collections Division
407 N. Main Street
P.O. Box 38
Monroe, NC 28111-0038

704-283-3848
704-283-3897 Fax

FISCAL YEAR 2006-2007
SETTLEMENT FOR DELINQUENT REAL AND PERSONAL PROPERTY
TAXES FOR YEARS 1996 - 2005

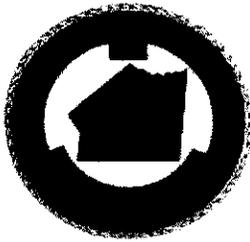
TO: Union County Board of Commissioners
FROM: John C. Petoskey, Tax Administrator
Vann Harrell, Assistant Collector of Revenue
CC: Richard Black, County Manager
Kai Nelson, Finance Director
DATE: July 26, 2007

CHARGES TO TAX COLLECTOR

1.	Total amount of delinquent taxes placed in the Tax Collector's hands for collection for this year:	\$ 2,857,963.93
2.	All interest, costs, and fees collected by the Tax Collector	\$ 107,456.36
TOTAL:		<u>\$ 2,965,420.29</u>

CREDITS TO TAX COLLECTOR

1.	All sums deposited by the Tax Collector to the credit Of the taxing unit or receipted for by the proper official:	\$ 1,697,404.82
2.	Releases allowed by the governing body:	\$ 49,428.78
3.	Write-offs allowed by governing body:	\$ 12.70
4.	The principal amount of taxes constituting liens Against real and personal property:	\$ 1,218,573.99
TOTAL:		<u>\$ 2,965,420.29</u>



UNION COUNTY
Office of the Tax Administrator
Collections Division
 407 N. Main Street
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 Monroe, NC 28111-0038

704-283-3848
 704-283-3897 Fax

**FY 06-07 Breakdown of Settlement for Delinquent Real and Personal Property
 Taxes for Tax Years 1996-2005**

Charges to the Collector					
	Beginning Balance	Levy Added	Supplementals		Total Balance
2005	\$ 1,362,506.32	\$219,410.72	\$ -		\$ 1,581,917.04
2004	\$ 418,949.23	\$205,171.60	\$ -		\$ 624,120.83
2003	\$ 226,668.51	\$ 36,263.38	\$ -		\$ 262,931.89
2002	\$ 138,341.96	\$ 1,273.80	\$ -		\$ 139,615.76
2001	\$ 83,954.97	\$ -	\$ -		\$ 83,954.97
2000	\$ 51,969.81	\$ -	\$ -		\$ 51,969.81
1999	\$ 44,593.21	\$ -	\$ -		\$ 44,593.21
1998	\$ 32,298.27	\$ -	\$ -		\$ 32,298.27
1997	\$ 20,642.15	\$ -	\$ -		\$ 20,642.15
1996	\$ 15,920.00	\$ -	\$ -		\$ 15,920.00
Totals	\$ 2,395,844.43	\$462,119.50	\$ -		\$ 2,857,963.93

Credits to the Collector						
	Sums Deposited	Releases	Write-offs		Balance of credits to Collector	Principal amount outstanding
2005	\$ 1,074,454.75	\$ 27,516.59	\$ 4.90		\$ 1,101,976.24	\$ 479,940.80
2004	\$ 361,002.73	\$ 15,175.38	\$ 1.97		\$ 376,180.08	\$ 247,940.75
2003	\$ 98,634.68	\$ 5,153.69	\$ 2.36		\$ 103,790.73	\$ 159,141.16
2002	\$ 34,319.54	\$ 822.48	\$ 2.30		\$ 35,144.32	\$ 104,471.44
2001	\$ 11,167.14	\$ 48.14	\$ 0.45		\$ 11,715.73	\$ 72,239.24
2000	\$ 3,179.09	\$ 96.53	\$ 0.72		\$ 3,276.34	\$ 48,693.47
1999	\$ 2,885.88	\$ 115.97	\$ -		\$ 3,001.85	\$ 41,591.36
1998	\$ 2,719.64	\$ -	\$ -		\$ 2,719.64	\$ 29,578.63
1997	\$ 1,129.93	\$ -	\$ -		\$ 1,129.93	\$ 19,512.22
1996	\$ 455.08	\$ -	\$ -		\$ 455.08	\$ 15,464.92
Totals	\$ 1,589,948.46	\$ 49,428.78	\$ 12.70		\$ 1,639,389.94	\$1,218,573.99

* The dollar amounts shown are not reflective of interest amount shown collected on previous page



UNION COUNTY
Office of the Tax Administrator
Collections Division
407 N. Main Street
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Monroe, NC 28111-0038

704-283-3848
704-283-3897 Fax

FISCAL YEAR 2006-2007
SETTLEMENT FOR DELINQUENT MOTOR VEHICLE TAXES
FOR YEARS 2003-2005

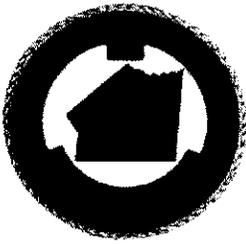
TO: Union County Board of Commissioners
FROM: John C. Petoskey, Tax Administrator
Vann Harrell, Assistant Collector of Revenue
CC: Richard Black, County Manager
Kai Nelson, Finance Director
DATE: July 26, 2007

CHARGES TO TAX COLLECTOR

1.	Total amount of delinquent taxes placed in the Tax Collector's hands for collection for this year:	\$ 1,058,750.19
2.	All interest, costs, and fees collected by the Tax Collector	\$ 132,542.33
	TOTAL:	<u>\$ 1,191,292.52</u>

CREDITS TO TAX COLLECTOR

1.	All sums deposited by the Tax Collector to the credit Of the taxing unit or receipted for by the proper official:	\$ 921,601.29
2.	Releases allowed by the governing body:	\$ 35,400.01
3.	Write-offs allowed by governing body:	\$ 64,706.06
4.	Reimbursements approved by governing body:	\$ (28,845.81)
5.	\$1.00 over and under adjustments:	\$ (53.04)
6.	The principal amount of delinquent motor vehicle taxes outstanding	\$ 198,484.01
	TOTAL:	<u>\$ 1,191,292.52</u>



UNION COUNTY
Office of the Tax Administrator
Collections Division
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 Monroe, NC 28111-0038

704-283-3848
 704-283-3897 Fax

**FY 06-07 Breakdown of Settlement for Delinquent Motor Vehicle Taxes
 for Tax Years 2003-2005**

Charges to the Collector					
	Beginning Balance	Levy Added	Supplementals	Total Balance	
2005	\$ 881,002.27	\$ -	\$ -	\$ 881,002.27	
2004	\$ 100,417.37	\$ -	\$ -	\$ 100,417.37	
2003	\$ 77,330.55	\$ -	\$ -	\$ 77,330.55	
Totals	\$ 1,058,750.19	\$ -	\$ -	\$ 1,058,750.19	

Credits to the Collector					
	Sums Deposited	Total Net Releases, Refunds, Adjustments, and Reimbursements	Writeoffs	Balance of credits to Collector	Principal amount outstanding
2005	\$ 745,997.67	\$ 6,095.01	\$ -	\$ 752,092.68	\$ 128,909.59
2004	\$ 30,554.40	\$ 288.55	\$ -	\$ 30,842.95	\$ 69,574.42
2003	\$ 12,506.89	\$ 117.60	\$ 64,706.06	\$ 77,330.55	\$ -
Totals	\$ 789,058.96	\$ 6,501.16	\$ 64,706.06	\$ 860,266.18	\$ 198,484.01

* The dollar amounts shown are not reflective of interest amount shown collected on previous page

**UNION COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT

Meeting Date: August 6, 2007

Action Agenda Item No. 106
(Central Admin. use only)

SUBJECT: Order of Collections for 2007 taxes

DEPARTMENT: Tax Administration

PUBLIC HEARING: No

ATTACHMENT(S):
Order of Collection

INFORMATION CONTACT:
John Petoskey

TELEPHONE NUMBERS:

DEPARTMENT'S RECOMMENDED ACTION: Adopt order of Collection

BACKGROUND: NCGS 105-321 requires the governing board of each taxing unit to issue an order of collection to tax collectors at the time the receipts are delivered to them. This order constitutes the collector's authority to enter upon the collections of taxes and to exercise the various powers incident to the collection process. The order gives rise to a specific lien on the real estate listed on the books, plus the power to levy upon or attach any of the taxpayer's personal property.

Failure to issue the order of collection may invalidate the tax collector's remedies for enforced collection.

The order of collection for the County real and personal property taxes in the amount of \$109.9 million is approximately 65/100ths of 1% greater than the estimate included in the FY2008 budget. The order of collection does not include public service companies or motor vehicles. Those property classifications are either billed monthly or based on information provided separately by the North Carolina Department of Revenue.

FINANCIAL IMPACT: Not Applicable

Legal Dept. Comments if applicable: _____

Manager Recommendation: _____

**ORDER OF COLLECTION
TAX CHARGE FOR FISCAL YEAR 2007 – 2008**

STATE OF NORTH CAROLINA
COUNTY OF UNION

TO: John C. Petoskey, Tax Administrator for the County of Union

You are hereby authorized, empowered, and commanded to collect the taxes set forth in the 2007 tax records as filed in the Office of Tax Administrator, and in the tax receipts delivered to the Tax Administrator's Office in August 2007, in the amounts and from the taxpayers likewise therein set forth. Such taxes are hereby declared to be first lien on all real property of the respective taxpayers in Union County, Hemby Bridge Fire Protection District, Stallings Volunteer Fire Protection District, Springs Fire District, Waxhaw Fire District, and Wesley Chapel Fire District. You are further authorized, empowered, and commanded to collect the 2007 taxes charged and assessed as provided for by law for adjustments, changes, and additions to the tax records and tax receipts delivered to you which are made in accordance with law.

This Order shall be a full and sufficient authority to direct, require, and enable you to levy on and sell any real or personal property and attach wages and/or other funds of such taxpayers, for and on account thereof, in accordance with the law.

The Tax Charge will be adjusted monthly according to releases, discoveries, and motor vehicle billings.

Witness my hand and official seal this 6th day of August 2007.

Kevin Pressley, Chairman
Union County Board of Commissioners

Attest:

Lynn G. West, County Clerk

Accepted:

John C. Petoskey, Tax Administrator

TAX CHARGE

Union County	\$109,903,049.88
Late List Penalty	\$ 79,911.31
County School Special Tax District	\$ -
Late List Penalty	\$ -
Monroe School Special Tax District	\$ -
Late List Penalty	\$ -
Hemby Bridge Fire Tax District	\$ 581,793.97
Late List Penalty	\$ 378.14
Stallings Tax District	\$ 386,584.37
Late List Penalty	\$ 326.87
Wesley Chapel Tax District	\$ 607,486.60
Late List Penalty	\$ 104.98
Waxhaw Fire Tax District	\$ 537,477.18
Late List Penalty	\$ 277.95
Springs Fire Tax District	\$ 217,082.08
Late List Penalty	\$ 160.26
Fire Fees	\$ 1,157,158.74
TOTAL	\$113,471,792.33

UNIT: UNION COUNTY

YEAR	2007	TAX SCROLL
PARCEL NUMBER	TAXPAYER - NAME	
PROPERTY TYPE	ADDRESS	
TOWNSHIP	PROPERTY DESCRIPTION	
DEED REFERENCE		
ACREAGE		

Print Date: 7/23/2007

County Scroll

Union County

TAX SCROLL	Page 1
COUNTY TAX	COUNTY LL
SCHOOL TAX	SCHOOL LL
FIRE TAX	FIRE LL
FIRE FEE	TOTAL CHARGE
FIRE BASIS	

PROPERTY CLASS TAX SET UNITS	ROUTING NUMBER TAX BILL NUMBER ACCOUNT NUMBER DEFERRED VALUE LENDER	NET ASSESSED VALUE EXEMPT VALUE SENIOR CITIZEN VALUE DISABLED VALUE HISTORIC VALUE LATE LIST VALUE	COUNTY TAX SCHOOL TAX FIRE TAX FIRE FEE FIRE BASIS	COUNTY LL SCHOOL LL FIRE LL TOTAL CHARGE
Total number of Tax Receipts:		102,639		
Total Number of Real Estate		87,630		
Total Number of Personal Properties		15,009		
Total Real Estate Value:		14,381,706.091		
Total Personal Value:		1,077,642.020		
Total Late List Value:		112,376,219		
Total Taxable Value:		15,459,348,111		
Total Fire Fee Basis:		131,827,962.00		
Total Senior Citizen Value:		44,132,249		
Total Disabled Value:		0.00		
Total Historic Value:		3,284,070		
Total Deferred Value:		806,224,680		
Total of all Exempted Properties:		867,982,479		
Total County Tax:		109,903,049.88		
Total School Tax:		0.00		
Total Fire Tax:		2,330,423.71		
Total Fire Fee:		1,157,158.74		
Total County Late List Tax:		79,911.31		
Total School Late List Tax:		0.00		
Total Fire Late List Tax:		1,248.20		
Total Charges:		113,471,791.84		

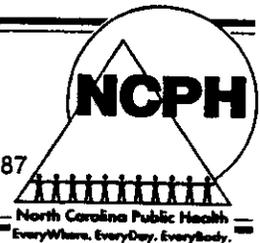
UNIT: UNION COUNTY

Grand Totals:



Union County Health Department

1224 W. Roosevelt Blvd. • Monroe, NC 28110 • Phone (704) 296-4800 • Fax (704) 296-4887



June 27, 2007

MEMORANDUM

To: Kevin Pressley, Chairman
Union County Board of Commissioners

From: Jenny Kirksey *J. Kirksey*
Health Director

Subject: Request for Commissioner Representative

AGENDA ITEM

11a

MEETING DATE 8/6/07

The Indigent Health Care Committee has requested that a County Commissioner become a part of this committee and attend its meetings.

The committee is comprised of representatives from various health and community agencies (e.g. CMC-Union, Presbyterian Hospital, Health Department, Community Health Services, United Way, etc.) with its purpose being to develop and implement a solution to the County's problem of no resources for health care for individuals who have no health insurance. Funding has been obtained for a study to be conducted to clearly define the specifics of the problem, identify resources to address the issues, and examine models in other communities and recommend a model for our community.

It is important to have a Commissioner on the committee because it is a huge problem in the County, solutions to the problem include funding issues, and County Government will be an integral part of addressing the issue in a manner that is best suited to the uniqueness of the County.

*The next meeting of the committee will be July 24th at 8:00 a.m. at the United Way office.

Would you please share this request with the Commissioners and ask that one become a member of this committee? Thanks you for your consideration of this very important request.

RESOLUTION (PROCLAMATION)

**BY THE UNION COUNTY BOARD OF COMMISSIONERS
FOR
VETERAN GOVERNMENT BOND AND STAMP PROGRAM**

THAT WHEREAS, the nation is blessed with men and women who voluntarily swear an oath to defend the Constitution of the United States of America against all enemies, foreign and domestic

THAT WHEREAS, these men and women make great personal sacrifices in the name of our Constitution thereby ensuring the perpetuation of our individual liberties

THAT WHEREAS, these same men and women voluntarily make great personal sacrifices to carry democracy and extend the freedoms we enjoy to the underprivileged of the world,

THAT WHEREAS, some of these men and women will incur great personal hardships and catastrophic injury in the performance of their duties

THAT WHEREAS, we feel duty bound to honor, support, and provide relief to these warriors, and their families

NOW, THEREFORE, THE UNION COUNTY BOARD OF COMMISSIONERS does hereby resolve (proclaim)

Its total and unequivocal support of an initiative implementing a new government bond and stamp program, the proceeds from which shall be used exclusively for those warriors and their families who have born the brunt of preserving our freedoms and extending those freedoms throughout the world.

**UNION COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT

Meeting Date: 8/6/2007

Action Agenda Item No. 13a
(Central Admin. use only)

SUBJECT: Wasterwater Flow Alternatives

DEPARTMENT: Public Works

PUBLIC HEARING: No

ATTACHMENT(S):
Technical Memorandum

INFORMATION CONTACT:
Christie Putnam

TELEPHONE NUMBERS:
704-296-4212

DEPARTMENT'S RECOMMENDED ACTION: Provide direction to staff

BACKGROUND: Due to the states decision not to permit additional discharge at the 12 Mile Creek facility and the outstanding demand for sewer treatment capacity, Public Works has identified alternatives to maximize the availability of the County's remaining treatment capacity through our contract with Charlotte-Mecklenburg Utilities. These alternatives are summarized in the attached memo. The Public Works Advisory Committee recommended option 5. If the Board chooses to move forward with any of these alternatives, the next step is to contract with an engineer to perform the detailed analysis and design of the chosen option.

FINANCIAL IMPACT: To be determined, this is not in our currently approved Capitol Improvements Program.

Legal Dept. Comments if applicable: _____

Finance Dept. Comments if applicable: _____

Manager Recommendation: _____



Memorandum

To: *Christie L. Putnam, P.E.*
Director of Public Works, Union County

From: *Laurin B. Kennedy, P.E.*
Project Manager, CDM

Date: *April 4, 2007*

Subject: *Alternative Wastewater Flow Evaluation*

The Crooked Creek Wastewater Treatment Plant (WWTP) has a permitted capacity of 1.9 million gallons per day (mgd). This WWTP serves the North Crooked Creek basin in Union County, which includes portions of the towns of Stallings, Indian Trail, Hemby Bridge, and Lake Park. Because of the growth rate within the Crooked Creek service area, this WWTP is nearing its capacity. As a result, sewer permits for new development are not being issued by Union County for the Crooked Creek WWTP service area, which impacts development especially within the Highway 74 corridor.

The purpose of this memorandum is to evaluate options for diverting flow from the Crooked Creek sewer service area to the Six Mile Creek basin in order to create capacity at the Crooked Creek WWTP. Charlotte-Mecklenburg Utilities (CMU) owns and operates the Six Mile Creek interceptor sewer, which discharges to the McAlpine Creek Water Reclamation Facility. Union County currently has a flow allocation of 3 mgd within this interceptor. The following options were evaluated:

- Option 1 - Brookhaven Pump Station (PS): Conveyance of existing Brookhaven PS flows to the Six Mile Creek Interceptor through a new force main.
- Option 2 - South Fork PS: Permanently reactivate the existing South Fork PS and convey all flows to the Price Mill Creek Interceptor which flows to the Twelve Mile Creek WWTP.
- Option 3 - Hawfield Lane PS: Installation of a new pump station adjacent to the inactive Hawfield Lane PS and conveyance of flows to Six Mile Creek Interceptor through a new force main.

- Option 4 – Forest Park Gravity Sewer: Construct a 21-inch gravity sewer to convey all flows from Forest Park PS service area to Poplin Road PS and pump excess flows to Twelve Mile Creek WWTP.
- Option 5 - Twelve Mile Creek PS: Installation of new pump station at the Twelve Mile Creek WWTP to pump flows to the Six Mile Creek Interceptor through the existing Millbridge/Tarkill force main

Wastewater flow pumped by the Poplin Road PS is currently divided between the Crooked Creek WWTP and the Twelve Mile Creek WWTP service area. Options 1, 2 and 5 involve sending a larger percentage of the Poplin Road PS flow to the Twelve Mile Creek WWTP, thereby decreasing the amount of Poplin Road PS flow to the Crooked Creek WWTP. At this time, there is no method for measuring the current flow split between the Crooked Creek WWTP and Twelve Mile Creek WWTP; therefore, it has been assumed that 500,000 gpd is currently being pumped to the Crooked Creek WWTP. Union County is in the process of installing flow meters before and after the Poplin Road force main discharge location so that the actual flow split can be determined.

The average daily flow that could be diverted from the Crooked Creek WWTP service area was estimated for each option. In addition, planning level estimates of construction, land acquisition, and engineering costs were determined. All pump station and force main sizing was based on permitted flows, not current average daily flows. A detailed hydraulic analysis has not been performed for each option; therefore, pump station costs could change once the total dynamic head for each pump station is determined. In addition, operation and maintenance costs are not included in this evaluation. Each option is described in detail below and summarized in Table 1. The attached Figure also illustrates the location and route of each option.

Option 1 - Brookhaven Pump Station

Option 1 involves construction of a force main with sufficient capacity to convey wastewater from the Brookhaven PS to CMU's Six Mile Creek Interceptor. Currently, the Brookhaven PS pumps 302,000 gallons per day (gpd) to the Davis Mine Creek trunk sewer, which flows to the Twelve Mile Creek WWTP via the East Fork Twelve Mile Creek trunk sewer. By constructing a force main to deliver wastewater to the Six Mile Creek basin, less flow will be sent to the Twelve Mile Creek WWTP. As a result, a larger portion of the wastewater being discharged to the Crooked Creek WWTP from the Poplin Road PS can be routed to the Twelve Mile Creek WWTP instead, providing approximately 302,000 gpd of available capacity at the Crooked Creek WWTP. An advantage of this option is the Brookhaven PS has 662,620 gpd of daily permitted flow, so as the Brookhaven PS receives future flows, it would be sent to the Six Mile Creek basin instead of the Twelve Mile Creek WWTP.

Table 1
Summary of Options to WWTP Flows

Option	Average Daily Flow (gpd)	Permitted Flow (gpd)	Initial Flow Diverted From 12-Mile Creek WWTP (gpd)	Initial Flow Diverted from Crooked Creek WWTP (gpd)	Total Cost
1 – Brookhaven PS	302,000	662,620	302,000	302,000	\$1,160,000
2 – South Fork Pump Station	No data	440,000		440,000 ¹	\$0
3 – Hawfield Lane PS (3.2 mgd)	1,900,000	3,200,000	1,400,000 ³	500,000 ²	\$4,330,000
3a – Hawfield Lane PS (3.6 mgd including South Fork PS flow)	2,340,000	3,640,000	1,400,000 ³	940,000 ^{1,2}	\$4,850,000
4 – Forest Park Gravity Sewer	236,000	272,730		236,000	\$1,900,000
5 – Twelve Mile Creek PS (1.0 mgd for Poplin Rd PS flow)			350,000 ³	500,000 ²	\$620,000
5a – Twelve Mile Creek PS (0.5 mgd for South Fork PS flow)				440,000 ¹	\$370,000
5b – Twelve Mile Creek PS (0.3 mgd for Forest Park basin flow)				236,000	\$250,000

¹ Actual flows are not known; 440,000 gpd is the permitted flow to the South Fork PS.

² Assuming 500,000 gpd currently conveyed to Crooked Creek WWTP from Poplin Rd PS.

³ Assuming 350,000 gpd currently conveyed to 12 Mile Creek WWTP from Poplin Road PS.

Approximately 2.8 miles (14,700 linear feet) of force main is recommended for Option 1. The permitted flow of 662,620 gpd for the Brookhaven Pump Station would indicate that an 8-inch diameter force main would be adequate. However, the firm pumping capacity of the Brookhaven PS is 960 gpm, which requires a 10-inch diameter force main to maintain the velocity in the force main below 5 feet per second. Therefore, a 10-inch diameter force main is recommended. The total estimated cost of installing 14,700 linear feet of 10-inch force main is \$1,160,000, including \$880,000 for construction, \$130,000 for engineering, and \$150,000 for land acquisition. Since the hydraulic conditions were not evaluated, it was assumed that the existing pumps in the Brookhaven PS can pump effectively to the Six Mile Creek interceptor.

Option 2 - South Fork Pump Station

Currently, wastewater flow from the Upper South Fork Crooked Creek (South Fork) basin flows by gravity to the Crooked Creek WWTP; however, there is an existing pump station, the South

Fork PS, which is capable of pumping flows from this basin to the Twelve Mile Creek WWTP sewer system. The South Fork PS is not being used at this time, but it is still operational. Option 2 involves permanently reactivating the South Fork PS to pump all South Fork basin flows to the Upper Price Mill Creek trunk sewer and ultimately the Twelve Mile Creek WWTP. Data was not available on the actual flow from the South Fork basin; therefore, the permitted wastewater flow of 440,000 gpd was used for this evaluation. Since the Twelve Mile Creek WWTP is currently at capacity, a new pump station is suggested at the Twelve Mile Creek WWTP to divert excess South Fork PS flow to the Six Mile Creek interceptor before it is introduced to the Twelve Mile Creek WWTP. This pump station will be presented under Option 5a. In the event that the Twelve Mile Creek WWTP can accommodate the additional 440,000 gpd, this option can occur at no additional capital cost. Union County will, however, incur annual operation and maintenance costs associated with this option. Since Option 2 involves adding flow into the Price Mill Creek and East Fork Twelve Mile Creek trunk sewers, a parallel trunk sewer might need to be constructed earlier than anticipated in these areas to handle the additional flows.

Option 3 - Hawfield Lane Pump Station

Near the location of the abandoned Hawfield Lane PS, flows from the Poplin Road PS, Upper Price Mill Creek trunk sewer, Davis Mine Creek trunk sewer, and the existing Brookhaven PS converge. If all of the Poplin Road PS flow is sent to the Hawfield Lane PS instead of sending a portion to the Crooked Creek WWTP, then the total permitted wastewater flow is approximately 3.2 million gallons per day (mgd). In order to divert this flow to the Six Mile Creek interceptor, a new pump station is recommended adjacent to the inactive Hawfield Lane PS. The current average daily flows can only be estimated since data is not available for the Upper Price Mill Creek and Davis Mine trunk sewers. As mentioned above, Union County is in the process of installing flow meters in this area. For the purpose of this evaluation, an average daily flow of 1.9 mgd is assumed (302,000 gpd from Brookhaven PS, 850,000 gpd from Poplin Road PS, and 750,000 gpd from Davis Mine and Upper Price Mill Creek trunk sewers). As a result, up to 500,000 gpd can currently be diverted from the Crooked Creek WWTP to the Six Mile Creek interceptor since it is assumed that this is the average amount of flow being pumped to Crooked Creek WWTP by the Poplin Road PS.

In order to convey flows from the Hawfield Lane PS to the Six Mile Creek interceptor, approximately 5.6 miles (29,400 linear feet) of 12-inch force main is recommended. In addition, a 3.2 MGD pump station would be needed to accommodate the permitted flows from the Brookhaven PS, the Upper Price Mill Creek trunk sewer, the Davis Mine Creek trunk sewer and Poplin Road PS. The estimated cost to install 29,400 linear feet of 12-inch force main is \$2,830,000, including \$2,200,000 for construction, \$300,000 for land acquisition, and \$330,000 for engineering. The cost of constructing a 3.2-mgd pump station is estimated to be \$1,500,000, which includes \$1,000,000 for construction, \$300,000 for a 30 percent contingency, and \$200,000 for engineering. The total estimated cost for Option 2 is \$4,330,000.

Option 3a - Hawfield Lane Pump Station and South Fork Pump Station

A modification to Option 3 can be made in order to divert more wastewater from the Crooked Creek WWTP to the Six Mile Creek interceptor. This option involves combining Option 2 with Option 3 so that the South Fork basin flow is conveyed to the Hawfield Lane PS. A 14-inch diameter force main is recommended in order to accommodate the additional flow from the South Fork PS. Option 3a increases the amount of flow diverted from the Crooked Creek WWTP when compared to Option 3 by an additional 440,000 gpd. Data was not available on the actual flow from the South Fork basin; therefore, the permitted flow of 440,000 gpd was again used for this evaluation. As a result, the total average daily flow for the Hawfield Lane PS was assumed to be 2.3 mgd (440,000 gpd from South Fork PS, 302,000 gpd from Brookhaven PS, 850,000 gpd from Poplin Road PS, and 750,000 gpd from Davis Mine and Price Mill Creek trunk sewers assumed). Out of this average flow, up to 940,000 gpd can be diverted from the Crooked Creek WWTP to the Six Mile Creek interceptor. This flow consists of the 500,000 gpd from the Poplin Road PS and 440,000 gpd from the South Fork PS, which are all currently being sent to the Crooked Creek WWTP.

The recommended capacity of the Hawfield Lane PS for Option 3a is 3.6 MGD. The estimated cost of constructing 29,400 linear feet of 14-inch force main is \$3,180,000, including \$2,500,000 for construction, \$300,000 for land acquisition, and \$380,000 for engineering. The estimated cost for a 3.6 MGD pump station is \$1,670,000, which includes \$1,110,000 for construction, \$340,000 for a 30 percent contingency, and \$220,000 for engineering. The total estimated cost for Option 3a is \$4,850,000.

Option 4 - Forest Park Gravity Sewer

The Forest Park PS currently pumps wastewater to the Crooked Creek WWTP through a force main that discharges into a trunk sewer that flows into the South Fork Crooked Creek trunk sewer. The 2005 Wastewater Master Plan recommends the construction of a 21-inch diameter gravity sewer to eliminate the Forest Park PS, transferring all Forest Park basin flows to the Poplin Road PS service area. The average daily flow of the Forest Park PS is approximately 236,000 gpd, while the permitted flow is 272,730 gpd. The 236,000 gpd could immediately be diverted from the Crooked Creek WWTP to the Poplin Road PS upon completion of construction. The additional Poplin Road PS flow can then be pumped to the Twelve Mile Creek WWTP sewer system. If it is determined that the Twelve Mile Creek WWTP cannot accommodate this additional flow, then a new pump station is recommended at the Twelve Mile Creek WWTP to convey the excess Forest Park basin flow to the Six Mile Creek interceptor before it is introduced to the Twelve Mile Creek WWTP. This pump station will be presented under Option 5b.

The estimated length of 21-inch gravity sewer is approximately 1.2 miles (6,500 linear feet), with an associated cost of \$1,900,000, including \$1,600,000 for construction, \$240,000 for engineering, and \$60,000 for land acquisition. Option 4 involves adding flow into the Price Mill Creek and East Fork Twelve Mile Creek trunk sewers; therefore, a parallel trunk sewer might need to be constructed earlier than anticipated in these areas to handle the additional flows.

Option 5 - Twelve Mile Creek Pump Station

Option 5 entails constructing a new pump station at the Twelve Mile Creek WWTP in order to pump excess flows discharged to the Twelve Mile Creek WWTP to the Six Mile Creek interceptor. Excess flows would result if additional Poplin Road PS flows were diverted from the Crooked Creek WWTP to the Twelve Mile Creek sewer system. The average daily flow of the Poplin Road PS recorded from 9/01/2006 through 2/28/2007 was 850,000 gpd; 500,000 gpd of this flow is assumed to be currently pumped to the Crooked Creek WWTP, while the remaining 350,000 gpd is being sent to the Twelve Mile Creek WWTP sewer system. If all of the 850,000 gpd of Poplin Road PS flow is pumped to the Twelve Mile Creek WWTP sewer system, then an additional 500,000 gpd of wastewater would be discharged into this sewer system and ultimately conveyed to the Twelve Mile Creek WWTP. Out of the current total Poplin Road PS flow, 500,000 gpd represents 59 percent of this flow. The Poplin Road PS is permitted for 1.67 mgd, and 59 percent of 1.67 mgd is approximately 0.99 mgd. It is therefore recommended that the proposed pump station at the Twelve Mile Creek WWTP be sized for at least 1 mgd in order to accommodate future permitted Poplin Road PS flows. The existing 16-inch diameter force main from the Millbridge PS to the Six Mile Creek interceptor can be used to convey flows from the proposed pump station to the Six Mile Creek interceptor. Based on the current Millbridge PS and Tarkill PS combined average daily flow 120,000 gpd, the existing 16-inch force main has the capacity to accommodate the additional 1 mgd contributed by the proposed Twelve Mile Creek PS. As wastewater flows increase to the Millbridge and Tarkill PSs, the capacity of the existing 16-inch diameter force main will need to be addressed.

The estimated cost for a 1.0 mgd pump station is \$620,000, which includes \$420,000 for construction, \$120,000 for a 30 percent contingency, and \$80,000 for engineering. The construction cost includes a \$20,000 allowance for connection of the proposed pump station to the existing force main.

Option 5a - Twelve Mile Creek Pump Station and South Fork Pump Station

In conjunction with Option 5, Option 5a consists of permanently activating the South Fork PS and constructing a new pump station at the Twelve Mile Creek WWTP in order to divert the 440,000 gpd of excess South Fork basin flow to the Six Mile Creek interceptor. A new 0.5 mgd pump station is recommended at the Twelve Mile Creek WWTP, which will pump through the existing Millbridge/Tarkill 16-inch diameter force main as described in Option 5. The estimated cost for constructing a 0.5 mgd pump station is \$370,000, which includes \$250,000 for

construction, \$70,000 for a 30 percent contingency, and \$50,000 for engineering. The construction cost includes a \$20,000 allowance for connection of the proposed pump station to the existing force main.

Option 5b Twelve Mile Creek Pump Station and Forest Park Gravity Sewer

In conjunction with Option 4, Option 5b consists of routing the Forest Park basin flows to the Twelve Mile Creek WWTP through the Poplin Road PS, which results in the need for a new pump station at the Twelve Mile Creek WWTP in order to divert the 236,000 gpd of excess Forest Park basin flow to the Six Mile Creek interceptor. A new 0.3 mgd pump station is recommended at the Twelve Mile Creek WWTP, which will pump through the existing Millbridge/Tarkill 16-inch diameter force main as described in Option 5. Option 5b would initially allow 236,000 gpd to be diverted from the Crooked Creek WWTP. The estimated cost for constructing a 0.3 mgd pump station is \$250,000, which includes \$170,000 for construction, \$50,000 for a 30 percent contingency, and \$30,000 for engineering. The construction cost includes a \$20,000 allowance for connection of the proposed pump station to the existing force main.

**UNION COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT
Meeting Date: August 6, 2007

Action Agenda Item No. 3d/3b
(Central Admin. use only)

SUBJECT: Solid Waste Management Plan _____

DEPARTMENT: Public Works **PUBLIC HEARING:** Yes

ATTACHMENT(S): Resolution Accepting and Endorsing
The Solid Waste Management Plan of
2006 -2016 for Union County

INFORMATION CONTACT: Christie Putnam

TELEPHONE NUMBERS: _____
704 296-4212

DEPARTMENT'S RECOMMENDED ACTION: Adopt Resolution as drafted.

BACKGROUND: N.C.G.S. 130A-309.09A(b) requires 3-year updates to the Plan. The Plan has been made available for a 1-month period on the County's web page for review by the citizens of Union County, the Board of Commissioners and the Public Works Advisory Board.

FINANCIAL IMPACT: Anticipated costs are accounted for in the annual operating budget.

Legal Dept. Comments if applicable: _____

Finance Dept. Comments if applicable: _____

Manager Recommendation: _____

**RESOLUTION ACCEPTING AND ENDORSING THE SOLID WASTE
MANAGEMENT PLAN OF 2006 - 2016 FOR UNION COUNTY**

WHEREAS, it is a priority of this community to protect human health and the environment through safe and effective management of municipal solid waste;

WHEREAS, the reduction of the amount and toxicity of the local waste stream is a goal of this community;

WHEREAS, equitable and efficient delivery of solid waste management services is an essential characteristic of the local solid waste management system;

WHEREAS, it is a goal of the community to maintain and improve its physical appearance and to reduce the adverse effects of illegal disposal and littering;

WHEREAS, Union County recognizes its role in the encouragement of recycling markets by purchasing recycled products;

WHEREAS, involvement and education of the citizenry is critical to the establishment of an effective local solid waste program;

WHEREAS, the State of North Carolina has placed planning responsibility on local government for the management of solid waste;

WHEREAS, N.C.G.S. 130A-309.09A(b) requires each unit of local government, either individually or in cooperation with other units of local government, to update the Ten Year Comprehensive Solid Waste Management Plan at least every three years;

WHEREAS, the Union County Public Works Department has undertaken and completed a long-range planning effort to evaluate the appropriate technologies and strategies available to manage solid waste effectively;

NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BOARD OF *UNION COUNTY*:

That Union County's 2006 – 2016, Ten Year Comprehensive Solid Waste Management Plan, is accepted and endorsed and placed on file with Clerk to the Board on this day,.....2007.

**UNION COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT
Meeting Date: August 6, 2007

Action Agenda Item No. 13c
(Central Admin. use only)

SUBJECT: Weddington Elevated Storage Tank

DEPARTMENT: Public Works **PUBLIC HEARING:** No

ATTACHMENT(S): Site Evaluation Memo **INFORMATION CONTACT:** Christie Putnam

TELEPHONE NUMBERS:
704-296-4212

DEPARTMENT'S RECOMMENDED ACTION: Accept as information and project update

BACKGROUND: This project was identified in the 2005 Water Master Plan Update. The project involves the construction of a 1,500,000 gallon elevated storage tank to enhance the ability of the County's water distribution system to maintain water pressure during peak summer demands and meet fire flow demands when required. The Site Evaluation Memorandum was presented to the Advisory Board with a recommendation to pursue acquisition of site 1A (next to site 1) or site 4.

FINANCIAL IMPACT:

Legal Dept. Comments if applicable: _____

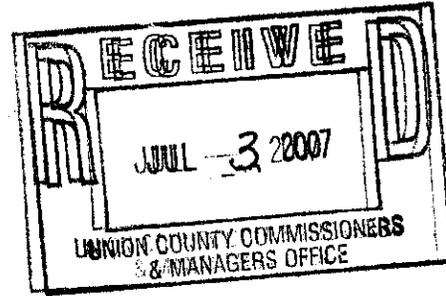
Finance Dept. Comments if applicable: _____

Manager Recommendation: _____

FIRST PRESBYTERIAN CHURCH

For Christ in the Heart of Charlotte

June 28, 2007



Mr. Charles O'Cain
Union County Public Works Department
400 N. Church Street
Monroe, NC 28112

Re: Weddington Water Tower

Dear Mr. O'Cain:

As Co-Chairman of the Presbytery of Charlotte New Church Development Commission, I am writing to express the strong opposition to a proposed one million gallon water tower on the property the Presbytery of Charlotte recently purchased for a new church. I know that Jim Gambrell of our Commission discussed this issue with you on June 21st, and this letter is to confirm our position.

The Presbytery of Charlotte (P.C.U.S.A.) purchased the subject tract of land at the corner of Providence Road and Old Mill Road for the express purpose of establishing a new church. We spent over seven years searching for the perfect site before we were able to purchase this new property. We paid a high price for this site because of its specific location and presence on Providence Road at Rea Road. Our long-range plan was to purchase 12 to 15 acres, so this property is already on the small end of our acceptable range. To lose use of even one acre would make the site marginal. To lose 3.5 acres would render the site useless for our plans. A primary reason for selecting this site is the ability to erect a significant structure on the crest of the highest elevation. To have a 150 ft. water tower overshadowing our building would completely destroy that plan. To have the tower behind our site on the property adjacent to ours on Old Mill Road would have the same overshadowing effect so we are opposed to putting it there, also.

We are aware that the property immediately across Providence Road from our site is being held as an investment, with no imminent development plans, and portions of that property have higher elevations than the highest point on our site. Also, it seems that a more appropriate site would be just to the north of our property, across Old Mill Road and hidden in the trees. That location would be more appealing to the community as a whole. Elevations in that area are similar to those on our site.

While we understand that the Weddington area needs a water tower to alleviate supply shortages, we are confident that you can find a more appropriate location for this tower, especially once you understand the devastating effect it would have on this new church that will be a major part of this community for many years to come.

Thank you for your understanding. Please contact me or Jim Gambrell if you have any questions. We would like to be kept aware of your progress as you seek a location for this water tower.

Sincerely,



Rev. Dr. William P. Wood
Senior Minister
Co-Chairman, New Church Development Commission
Presbytery of Charlotte (U.S.A.)

WPW/clh

cc: Rev. Sam Roberson, Presbytery of Charlotte
Mr. Jess Hite, President of Presbytery Council
Mr. Pender McElroy, James, McElroy & Diehl
Mr. Jim Gambrell, Presbytery New Church Commission
Mr. Dick Black, Interim County Manager, Union County

To: Union County – Scott Huneycutt, PE	
From: Michael Benchich, PE	Project: Weddington Elevated Water Storage Tank
CC:	
Date: July 30, 2007	Job No: 00240-53016-018

1.0 Background and Purpose

The 2005 Union County Water System Master Plan (Master Plan) projects rapid growth within the County over the next several years. Numerous infrastructure improvement projects are recommended by the Master Plan to help the County's water system keep pace with the pending development.

One such project identified is the construction of a 1.5-million gallon (MG) elevated water storage tank. It was recommended in the Master Plan that this tank be located in the vicinity of Providence Road and Old Mill Road in order to enhance the water system's ability to maintain water pressure during peak summer demands and fire flow requirements in the growing Marvin-Weddington area. Construction of the new tank will allow for the separation of the current service area into two distinct hydraulic zones, the Weddington service area and the Stallings service area. This separation offers better matching of demand with supply and improved tank turnover rates which is necessary to maintain good water quality in the distribution system. The new tank's water level will be controlled by the existing Waxhaw-Marvin pumping station.

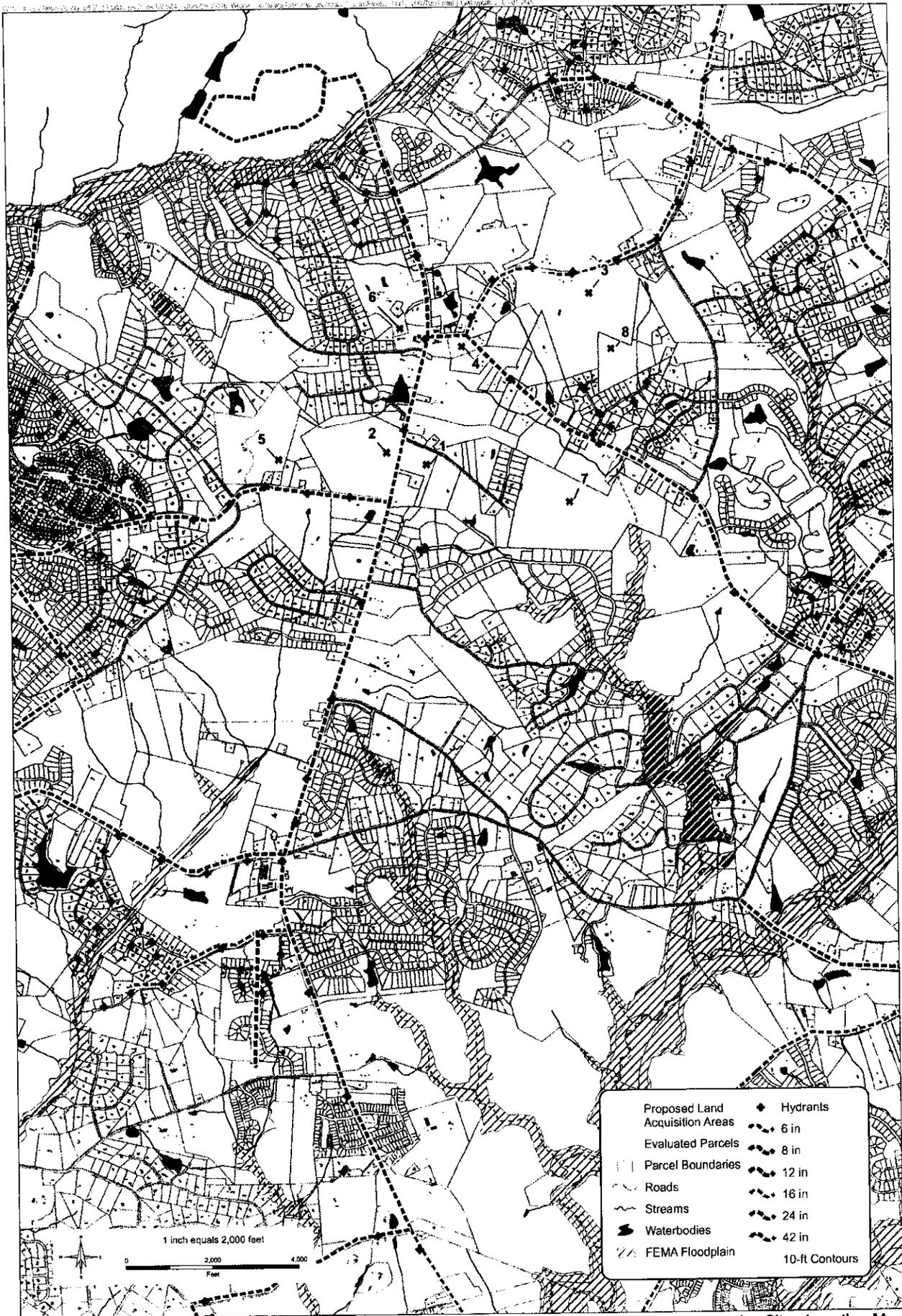
The purpose of this technical memorandum is to identify and evaluate alternative sites for the new water storage tank. The preferred site is recommended based on the evaluation below.

2.0 Methodology for Alternative Site Selection

The search for candidate sites began with the development of an area map using information obtained from the County's GIS database. The map displayed parcel and right-of-way boundaries, topography, water transmission system infrastructure, and aerial photographic imagery. The search was guided by the factors described below.

- **Surrounding Environment** – The County desires to locate the new tank where the tank's impact on the surrounding's aesthetics is minimized.
- **Acreage** – The property should be sufficiently large to provide a Contractor with adequate space for construction and allow sufficient space for the County to maintain the tank. Generally, approximately two to three acres is adequate for this purpose; however, the amount of the land area to be acquired is likely to be determined by factors unique to each parcel evaluated.
- **Accessibility** – Access to the site is important for both construction and operations purposes. Additionally, proximity to an adequately sized water main will affect a potential site's feasibility.
- **Elevation and Topography** – Given that the high water level for the tank needs to be fixed at an elevation of 853 feet, properties higher in elevation would require a shorter tank and incur less construction cost. Only properties with ground elevations exceeding 700 feet were considered in this evaluation.
- **Costs** – All the factors above impact the overall construction and land acquisition costs.

The initial evaluation yielded eight sites and these sites are illustrated in Figure 1. The sites are generally located in the northern portion of the overall evaluation area. The topography is more favorable (i.e., ground elevations greater than 700 feet) in the north and residential development is generally heavier in the southern portion. Additionally, the southeastern area contains an airport runway, which was deliberately avoided. Of these seven sites, five were selected for further evaluation. Site 7 was eliminated because of relatively low topography, poor site access, and substantial construction requirements to connect to the water system. Site 8 was eliminated because of proximity to a developed neighborhood, as well as lack of adequate access and waterline infrastructure. An economic analysis was conducted to compare the remaining five alternative sites.



Proposed Land Acquisition Areas	◆ Hydrants
Evaluated Parcels	● 6 in
Parcel Boundaries	● 8 in
Roads	● 12 in
Streams	● 16 in
Waterbodies	● 24 in
FEMA Floodplain	● 42 in
	10-ft Contours

1 inch equals 2,000 feet
 0 2,000 4,000
 Feet

Alternative Sites Location Map
 Figure 1

3.0 Alternative Site Descriptions

The six alternative sites each have unique advantages and disadvantages. The following subsections briefly describe each site and relevant characteristics associated with each site.

3.1 Site 1

Site 1 (Figure A-1) is a 13.8-acre parcel (ID 06153013A) located at the intersection of Providence Road and Old Mill Road. Much of the property exceeds 720 feet in elevation. Since land along Providence Road is likely to be expensive, and given that the most elevated portion of the property is toward the back of the lot, consideration was given to purchasing only a portion of this property along with an adjoining portion of the 17.0-acre property to the east (ID 06153009). However, in a desire to streamline land acquisition efforts, this idea was discarded in favor of purchasing 3.61 acres of the original parcel (ID 06153013A). This site would be accessed from Old Mill Road. Approximately 1,100 feet of 24-inch water main would be constructed along Old Mill Road from Providence Road to the tank. Recent land purchases in the area suggest that the value of land near Providence Road is approximately \$100,000/acre. The land acquisition cost is therefore estimated at \$361,000.

3.2 Site 2

Site 2 (Figure A-2) is an 81.1-acre parcel (ID 06150001) on the west side of Providence Road between Old Mill Road and Marvin-Weddington Road. A hill top near the roadway exceeds 730 feet in elevation. It is easily accessed from Providence Road and a 24-inch water main running along Providence Road adjacent to the property would allow an ideal connection to the water system. It is anticipated that a 2.88-acre portion of the parcel would need to be purchased. Recent County land purchases in the area suggest that the value of land near Providence Road is approximately \$100,000/acre. The land acquisition cost is therefore estimated at \$288,000.

3.3 Site 3

Site 3 (Figure A-3) is a 138.3-acre parcel (ID 06123011) located on the south side of Weddington-Matthews Road between NC Hwy 84 (Weddington Road) and Cox Road. Many portions of this property exceed 720 feet in elevation. The site can be easily accessed from Weddington-Matthews Road. Unlike the other sites considered, a tank located at Site 3 would connect into the 16-inch water main that runs along Weddington-Matthews Road and not a 24-inch main. This scenario was modeled using Union County's Water System WaterCAD[®] Model to determine if it was feasible to connect to the 16-inch main and still provide adequate pressure and flow to meet current and future conditions in the service area. This analysis considered peak hydraulic conditions for 2010, 2015 and 2025. The results of this model analysis revealed that connecting to the existing 16-inch water main will provide adequate flow and pressure to the service area. Fire flow scenarios during 2025 peak demands were also considered in this model evaluation. The results for the nodes surrounding the tank location were similar with slightly higher residual pressures predicted for the 24-inch transmission main. Only three nodes yielded fire flows less than 1,500 gpm with a residual pressure of 20 psi for the 16-inch main versus two nodes for the 24-inch main. For either scenario, only one node yielded a fire flow of less than 1,000 gpm with the 24-inch main providing a 15% increase in fire flow at this location. However, in order to make consistent comparisons to other alternatives, it was assumed that approximately 4,000 feet of 24-inch line would be constructed along Weddington-Matthews Road from Weddington Road to the tank. It was anticipated that a 4.32 acre portion of the property would need to be purchased. The \$50,000/acre land value estimated from GIS information and recent County land purchases suggests that the land acquisition cost for this site would be \$216,000.

3.4 Site 4

Site 4 (Figure A-4) is a 5.5-acre parcel (ID 06150074) located in the wooded area on the south side of Weddington Road where Weddington-Matthews Road meets Weddington Road. Most of the property is above 700 feet in elevation. The site is easily accessed from Weddington Road and the 24-inch water main along Weddington Road would allow for an ideal connection to the water system. Given the parcel's geometry, it is anticipated that all 5.46 acres would need to be purchased. Using assessment data from the County GIS and recent land purchase values, the land value was estimated at \$100,000/acre or \$546,000 for the entire parcel.

3.5 Site 5

Site 5 (Figure A-5) is a 68.1-acre parcel (ID 06177008) on Rea Road approximately 2,000 feet west of Providence Road. The County has already purchased this land for the purpose of constructing a new school (School G). Therefore, no land acquisition costs would be associated with this site. The tank would be located in the southeastern corner of the property, where the ground elevation varies between 700 – 710 feet. Access to the tank would be from Rea Road at the proposed school entrance. Approximately 3,000 feet of 24-inch water main would be installed to connect the tank to the 24-inch water main located at the intersection of Rea Road and Providence Road. It should also be noted that locating the tank on this property will require coordination with school planners to ensure that spatial conflicts do not arise.

3.6 Site 6

Site 6 (Figure A-6) is a 48.0-acre parcel (ID06150045A) on Providence Road just north of Weddington Road. The property owner has expressed interest in selling to the County approximately 2.7 acres of land in the southern most portion, northwest of the Weddington United Methodist Church. However, the land may be subject to rules which would prohibit large above-ground structures such as an elevated storage tank. Regardless, this analysis will treat the site as a viable option. The ground elevation at the proposed tank location is 716 feet. Access to the property would be from a 900 square-foot easement (300 ft x 30 ft) on the western property line of the Weddington United Methodist Church. Approximately 1,200 feet of new 24-inch water main would be installed along Weddington Church Road from Providence Road, north along the easement, and to the proposed tank site. Using assessment data from the County GIS and recent land purchase values, the land value was estimated at \$100,000/acre or \$270,000. The permanent easement purchase, based on 50% of the property's \$422,080 tax value, would cost nearly \$5,500. Total land acquisition costs for this alternative are therefore \$275,500.

4.0 Economic Analysis

An economic analysis of the alternative sites was completed with a focus on three main elements of the project cost:

- **Water Main Construction** – The proposed tank will need to connect to a water main. Sites with no adjoining access to sufficiently sized water main will require construction of a new water main to reach the site. For all sites, this was assumed to be a 24-inch water main.
- **Storage Tank Elevation** – The proposed tank will be constructed so that the high water level is 853 feet. Each site has a different ground elevation and therefore will require a different tank height to meet the design hydraulic grade line elevation. The height of the tank will impact the tank cost.
- **Land Acquisition** – The alternative sites are located on properties with varying value. In addition, the land area requirements described in Section 3.0 for each alternative site vary depending on what portion of the parcel meets the elevation requirement and the proximity of this area to a public road and the existing water transmission system.

The values assigned for each site's cost elements are presented in Table 1.

Site	24-inch Water Main Construction (LF)	Land Value	Tank Height (VF)
1	1,100	\$ 361,000	125
2	300	\$ 288,000	125
3	4,000	\$ 216,000	131
4	250	\$ 546,000	141
5	3,800	\$ -	143
6	1,200	\$ 275,500	137

The five sites were compared using a "net difference" cost comparison. In this method, Site 1 is used as a "base" site. For all remaining alternative sites, the cost of each element was compared to the corresponding "base" cost for Site 1. In this way, the relative cost difference between any alternative site and Site 1 could be calculated. Table 2 on the following page presents the results of this economic analysis.

Table 2 - Economic Analysis Results

Cost Difference Items	Quantity Difference	Unit	Unit Cost	Cost Difference
<i>Site 1 (Base)</i>				
Water Main Construction	1100	LF	\$245	\$269,500
Storage Tank Elevation	1	LS	\$2,250,000	\$2,250,000
Land Acquisition	1	LS	\$361,000	\$361,000
BASE COST				\$2,880,500
<i>Site 2</i>				
Water Main Construction	-800	LF	\$245	(\$196,000)
Storage Tank Elevation	0	VF	\$4,000	\$0
Land Acquisition	1	LS	(\$73,000)	(\$73,000)
NET DIFFERENCE				(\$269,000)
<i>Site 3</i>				
Water Main Construction	2900	LF	\$245	\$710,500
Storage Tank Elevation	6	VF	\$4,000	\$24,000
Land Acquisition	1	LS	(\$145,000)	(\$145,000)
NET DIFFERENCE				\$589,500
<i>Site 4</i>				
Water Main Construction	-850	LF	\$245	(\$208,250)
Storage Tank Elevation	16	VF	\$4,000	\$64,000
Land Acquisition	1	LS	185,000	\$185,000
NET DIFFERENCE				\$40,750
<i>Site 5</i>				
Water Main Construction	2,700	LF	\$245	\$661,500
Storage Tank Elevation	18	VF	\$4,000	\$72,000
Land Acquisition	1	LS	(\$361,000)	(\$361,000)
NET DIFFERENCE				\$372,500
<i>Site 6</i>				
Water Main Construction	100	LF	\$245	\$24,500
Storage Tank Elevation	12	VF	\$4,000	\$48,000
Land Acquisition	1	LS	(\$85,500)	(\$85,500)
NET DIFFERENCE				(\$13,000)

5.0 Site Selection

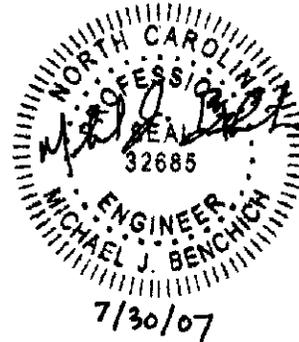
Considering the economic analysis results above as well as other site attributes, the preferential ranking of sites is as follows:

1. Site 2
2. Site 6
3. Site 1
4. Site 4
5. Site 5
6. Site 3

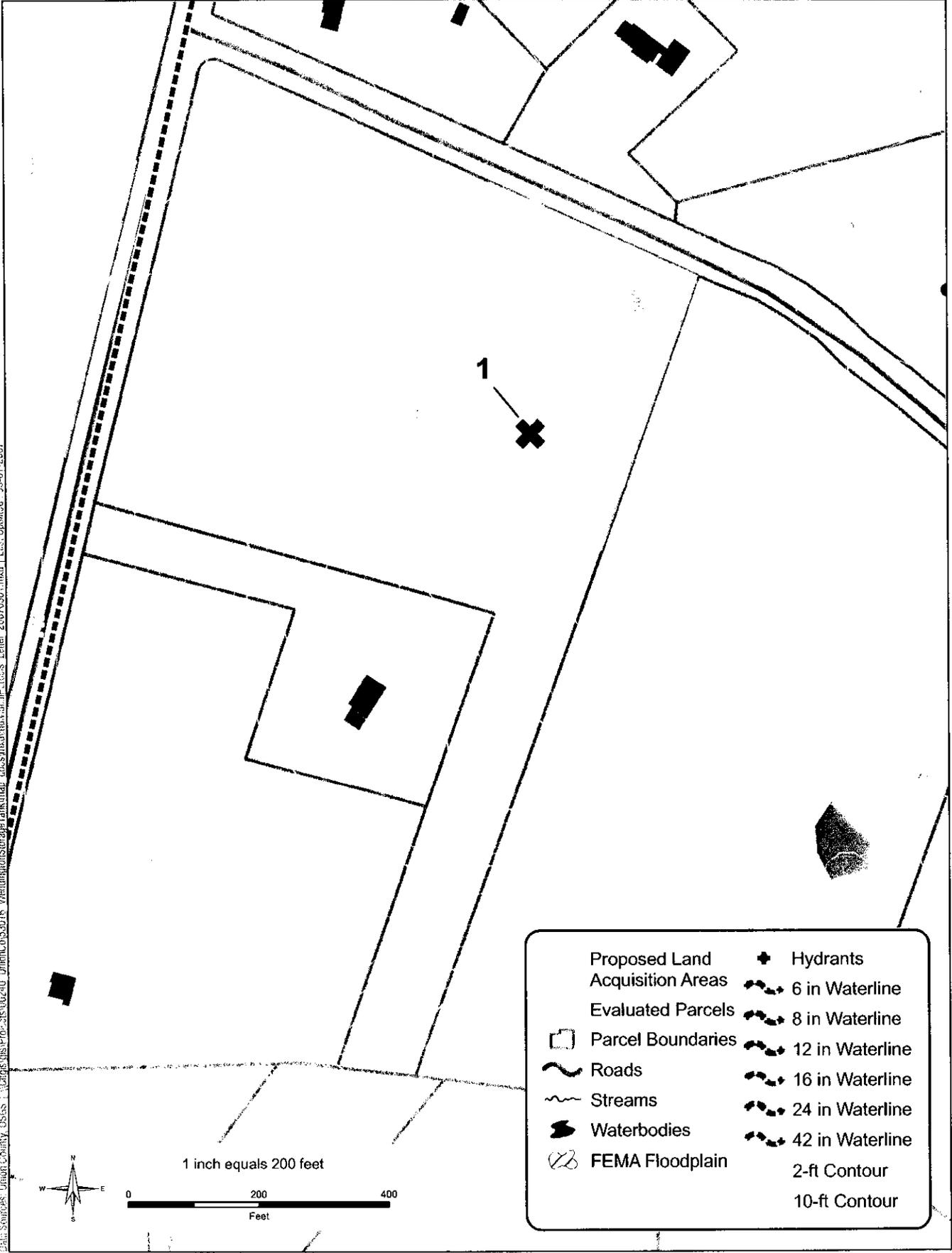
Site 2 is recommended as the optimal storage tank site because:

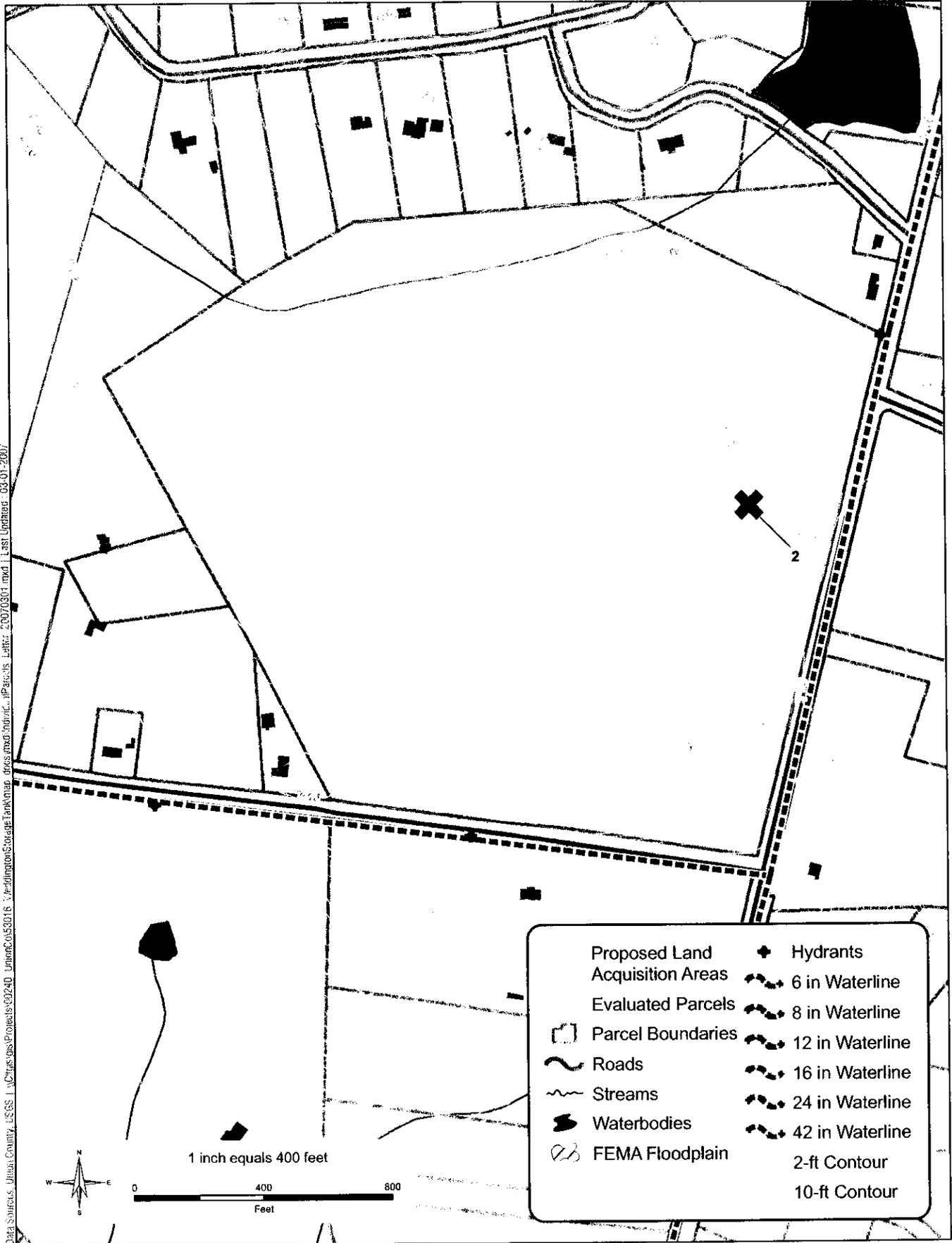
- It is the least cost alternative.
- It contains the highest elevation of all sites considered.
- It can be easily accessed from Providence Road.
- It can easily connect to the 24-inch water main along Providence Road.
- The surrounding area contains little to no development or dwellings.
- An existing nearby stream can make an excellent receptor of emergency tank draining.
- It's near the location proposed in the Master Plan.

The recommendation assumes that the portion of land desired can be acquired for the cost anticipated in this analysis. Site 4 could become cost competitive with Sites 1, 6, and 2 if a joint use and cost sharing of the property could be negotiated with the Town of Weddington. It is recommended that the County initiate discussions with property owners of Sites 1 and 2 regarding purchase of their property. The County should also consider entering into discussions with the Town of Weddington regarding the purchase of Site 4. Even though the County owns Site 5, the additional cost associated with constructing 3,800 feet of water main results in this alternative being less cost effective than the other four alternatives. Restrictions to the use of Site 6 may entirely eliminate it from consideration despite its favorable ranking in this analysis. Other options should be pursued before further evaluating Site 6.



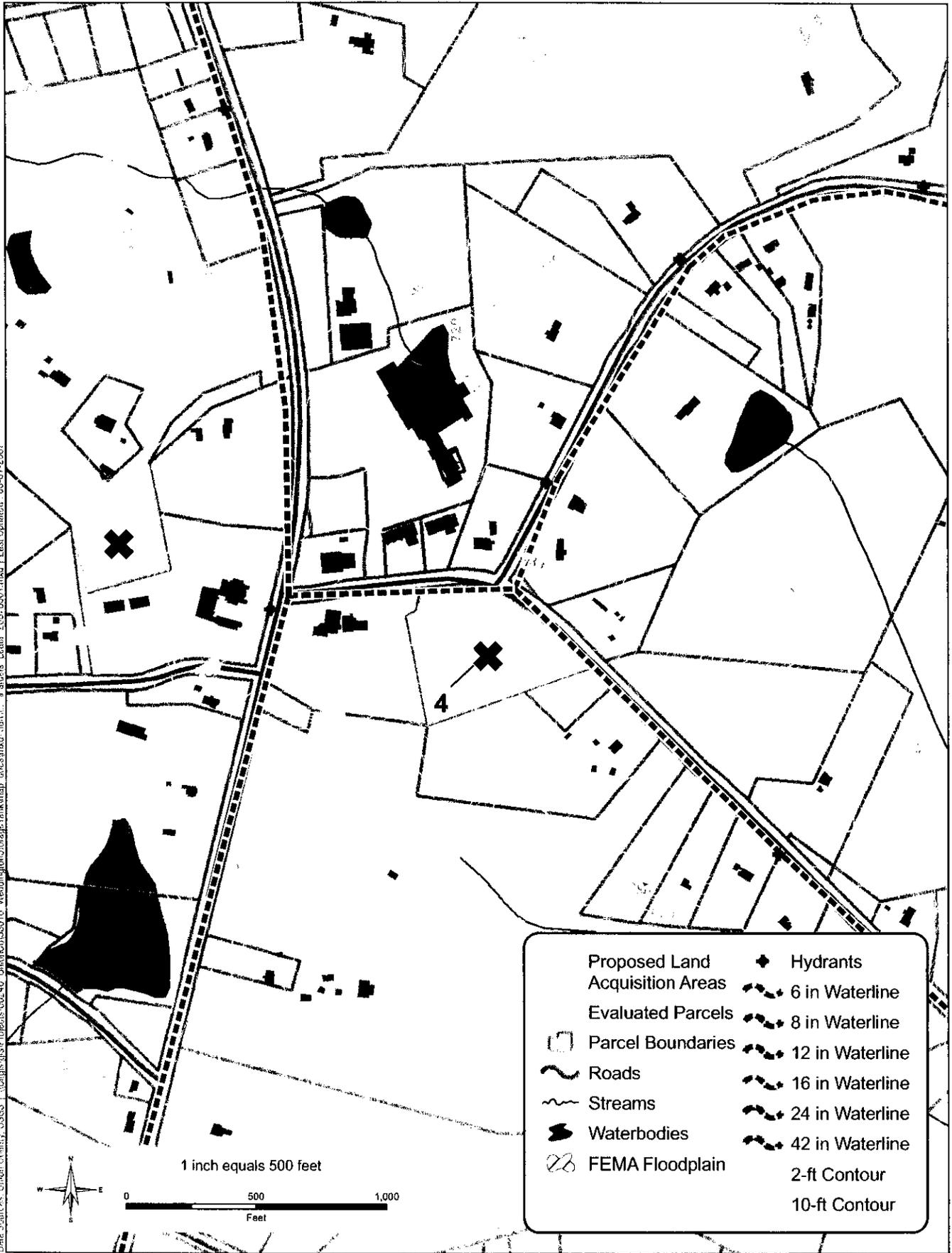
Data Sources: Union County, USGS, C:\GIS\Map\Projects\06240_Union\0624016_WeddingtonStorageTank\Map_docs\main\atx\atx.dwg, Letter 20070001.mxd | Last Updated: 03-01-2007



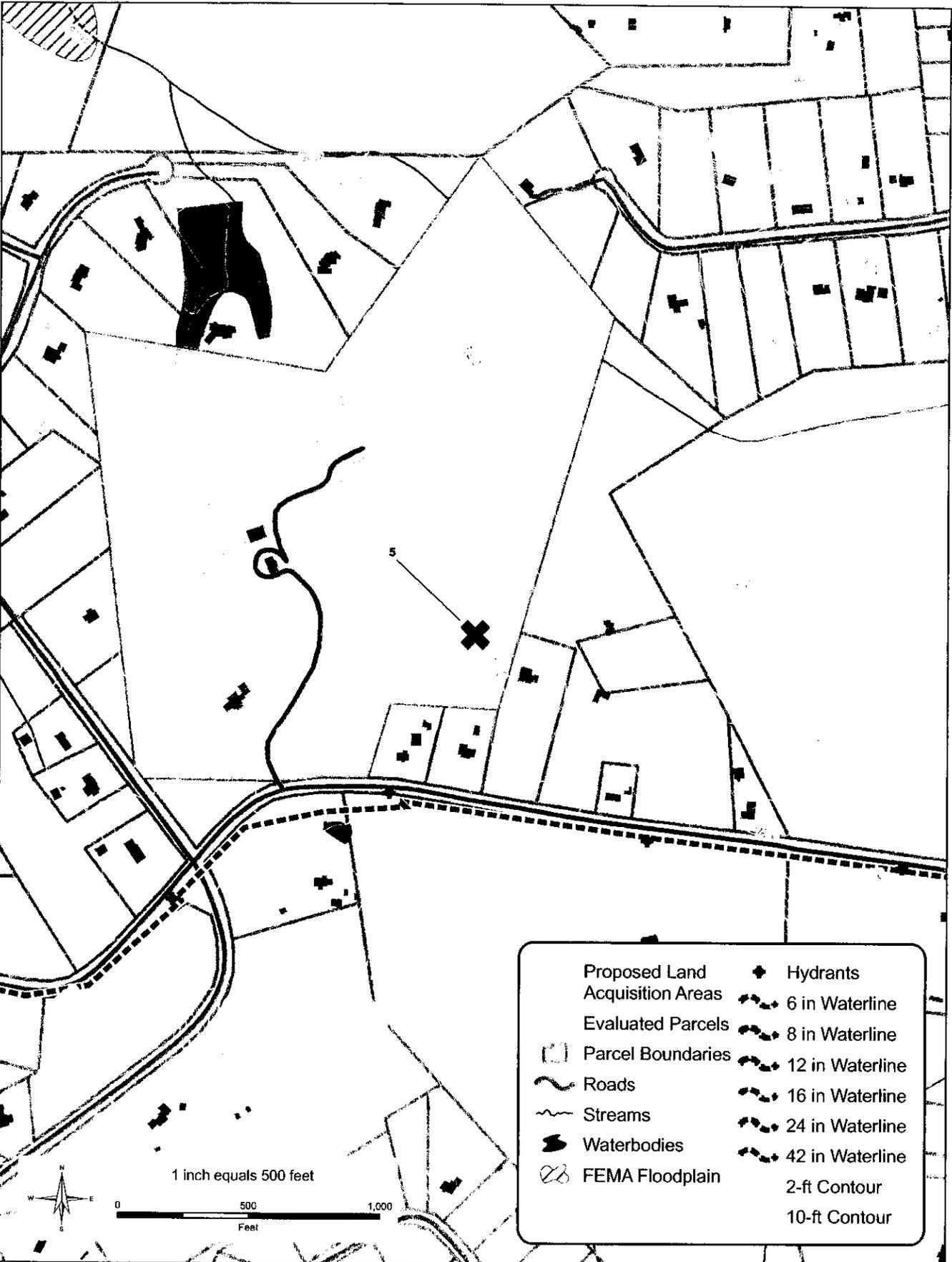


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Data Sources: Union County, USGS | \c:\p\gis\p\emphs\00240\unbr\CA\5376\WeddingtonStorageTank\map_gcs\map\mxd\Parcel_Letter_20070901.mxd | Last Updated: 03-01-2007

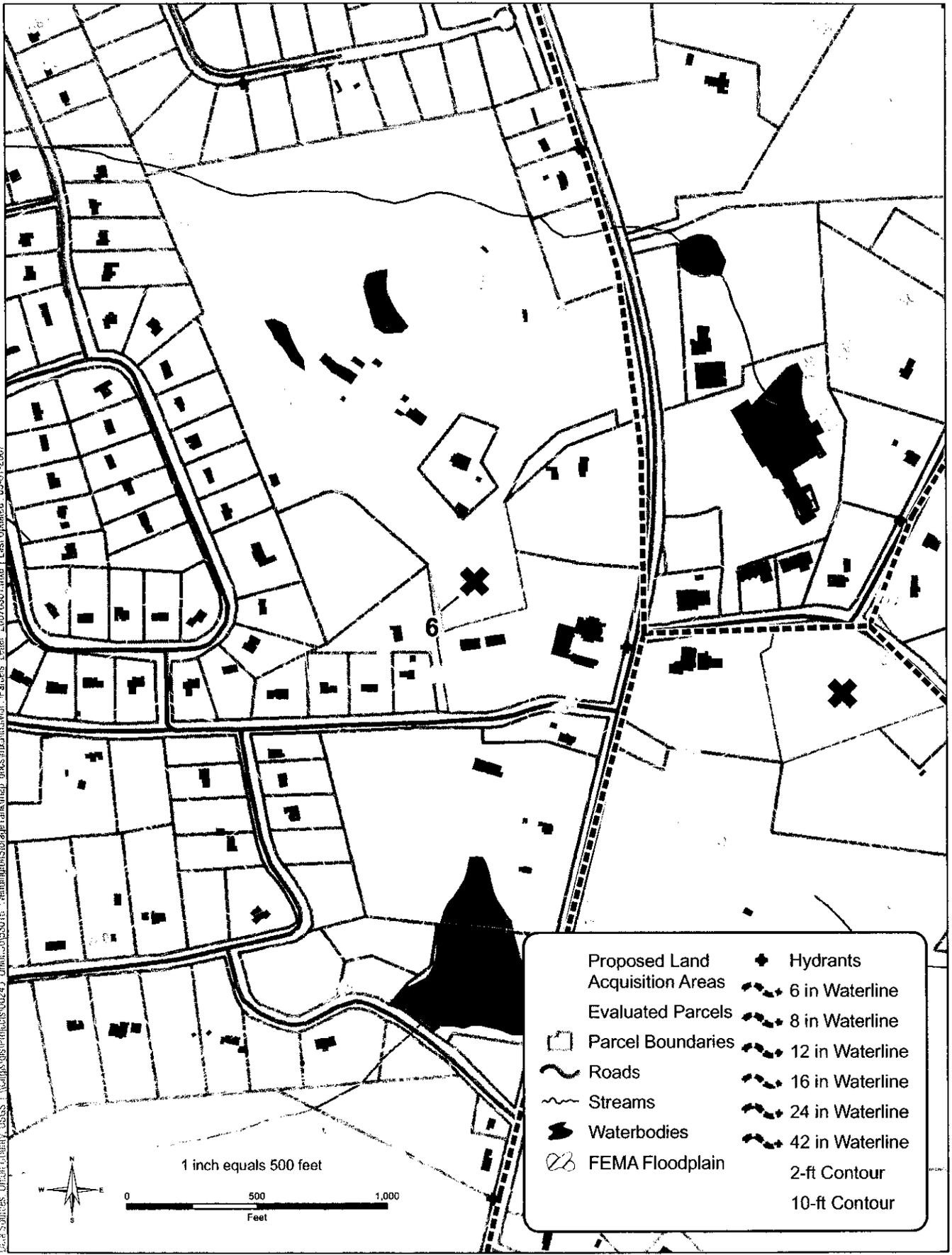


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Proposed Land Acquisition Areas	◆ Hydrants
Evaluated Parcels	⋯ 6 in Waterline
Parcel Boundaries	⋯ 8 in Waterline
Roads	⋯ 12 in Waterline
Streams	⋯ 16 in Waterline
Waterbodies	⋯ 24 in Waterline
FEMA Floodplain	⋯ 42 in Waterline
	2-ft Contour
	10-ft Contour

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Proposed Land Acquisition Areas	◆ Hydrants
Evaluated Parcels	⋯ 6 in Waterline
Parcel Boundaries	⋯ 8 in Waterline
Roads	⋯ 12 in Waterline
Streams	⋯ 16 in Waterline
Waterbodies	⋯ 24 in Waterline
FEMA Floodplain	⋯ 42 in Waterline
	○ 2-ft Contour
	○ 10-ft Contour

**NOTICE OF PUBLIC HEARING
FOR THE
UNION COUNTY SOLID WASTE MANAGEMENT PLAN**

Notice is hereby given that the Union County Board of Commissioners will hold a public hearing on Monday, August 6, 2007, at 7 p.m. in the Board Room, First Floor, Union County Government Center, 500 North Main Street, regarding Union County's Solid Waste Management Plan (SWMP) as required by G.S. 130A-309.09A(b). At this hearing, the Board will receive comments on the proposed SWMP update, a copy of which will be available for public review beginning July 19, 2007 on the County's website at www.co.union.nc.us and at the Union County Public Works Department located in Suite 500, Union County Government Center, 500 North Main Street, Monroe, North Carolina. Please contact Mark Tye, Assistant Public Works Director at 704-296-4210 for additional information concerning either this Public Notice or the proposed SWMP update.

Any person requesting a sign language interpreter, please call 704-225-8554 and make a request at least 96 hours in advance. Any other special assistance needed by an individual due to a disability under the Americans with Disabilities Act should call 704-283-3810 and make a request at least 96 hours in advance.

Lynn G. West
Clerk to the Board of Commissioners
Publish on: Friday, July 20, 2007

UNION COUNTY
BOARD OF COMMISSIONERS

ACTION AGENDA ITEM ABSTRACT
Meeting Date: August 6, 2007

Action Agenda Item No. 14a
(Central Admin. use only)

SUBJECT: Set Compensation for Register of Deeds

DEPARTMENT: Register of Deeds

PUBLIC HEARING: No

ATTACHMENT(S):
ROD Memo and documents
Salary Survey: IOG 1/1/07

INFORMATION CONTACT:
Crystal Crump
Mark Watson

TELEPHONE NUMBERS:
704-283-3794
704-283-3869

DEPARTMENT'S RECOMMENDED ACTION: The Register of Deeds is requesting the Commission's consideration of an adjustment to the compensation set for the position. (see attachment)

Current Annual Compensation: \$65,972
Requested Annual Compensation: \$70,000

BACKGROUND: The Board of County Commissioner is authorized to make adjustments to the compensation of an elected County Official under NCGS § 153A 92 as follows:

Compensation.

(a) Subject to the limitations set forth in subsection (b) of this section, the board of commissioners shall fix or approve the schedule of pay, expense allowances, and other compensation of all county officers and employees, whether elected or appointed, and may adopt position classification plans.

The current compensation of the Register of Deeds ranks 17th in the State when compared to her peers.(see attachment)

FINANCIAL IMPACT: \$4,082 in compensation and approximately \$784 in associated benefits for a total of \$4,866. No new funding appropriation required for the 2007-08 Budget.

Legal Dept. Comments if applicable:

Finance Dept. Comments if applicable:

Manager Recommendation:

Register of Deeds

IOG Survey 1/1/07

Top 25

County	Avg.
1 Cumberland	102,255
2 Wake	98,718
3 Durham	98,000
4 Buncombe	97,830
5 Mecklenburg	93,702
6 Guilford	93,121
7 Forsyth	83,782
8 Orange	78,817
9 Moore	76,154
10 Dare	73,815
11 Johnston	69,381
12 Nash	69,354
13 Chatham	69,000
14 Wilson	68,844
15 Randolph	68,299
16 Iredell	68,224
17 Union	65,972
18 Harnett	65,888
19 Edgecombe	63,376
20 Catawba	63,000
21 Cleveland	62,958
22 Columbus	62,502
23 Halifax	62,354
24 Rowan	60,298
25 Rockingham	59,874

Updated
7/25/07

Memo

To: Board of County Commissioners
From: Crystal D. Crump
Date: July 26, 2007
Re: Salary Adjustment

I am requesting a salary adjustment based on the reclassification established in the office shortly after I took office in 2004. At that time, I worked with Mark Watson who helped me establish a job description and statement for each position in the office, as well as reclassify and adjust compensation for all employees in the office. This adjustment was based on years of service and certification accomplishments by various employees who had never been recognized. This was a long process and very much overdue. At the same time, we began to look at my compensation and I had indicated that I was in the process of working on several different certifications and felt that there was no justification or purpose in doing so at that time.

Since that time, I have completed the NC Register of Deeds School which certified me as a Deputy Register of Deeds. In January 2006, I completed a certification program which enabled me to become a certified Register of Deeds. This was accomplished by completing numerous other short courses and seminars. A letter from the Certification Board was forwarded to the Union County Manager stating this accomplishment.

Shortly after that time an Advanced Register of Deeds course was offered to only certified Register of Deeds who wanted a more broad scope and not just the duties of the Register of Deeds, i.e., management responsibilities, understanding budgets as a whole, information technology issues, values and ethics, performance measurements and other related material. This course was offered in two different sessions over a period of several months. There was also an exam at the end with a set passing grade. In April 2007, I received my certification for completing the Advanced Register of Deeds Program.

In looking at the employee's certification allotment on each level, I have concluded that the following compensation to be justified. I have allocated the same adjustment to myself as I would any employee who would complete any levels of the certification process.

Thank you for your consideration.



The UNIVERSITY of NORTH CAROLINA at CHAPEL HILL
SCHOOL OF GOVERNMENT

Institute of Government

Master of Public Administration Program

DATE: December 9, 2004
TO: Crystal Crump
FROM: Carolyn Boggs
SUBJECT: Test results

Thank you for attending the School for Registers of Deeds held November 30 – December 1, 2004. You received a score of 82 on your exam.

If you plan to apply for certification to the North Carolina Register of Deeds Association, a score of 70 or above is required. A copy of this letter and your certificate is required with your application.

If you have any questions call me or e-mail me.

Carolyn Sands Boggs
Program Coordinator
Institute of Government
UNC-Chapel Hill
CB# 3330 Knapp Building
Chapel Hill, NC 27514
919-966-4157
boggs@iogmail.iog.unc.edu

919-966-2706 fax



UNC
SCHOOL OF GOVERNMENT

INSTITUTE OF GOVERNMENT

Crystal D. Crump

having completed satisfactorily the course of instruction in

Effective Supervisory Management Program

is awarded this certificate

this 7th day of October, Two Thousand and Five

Michael Smith

Dean & Director, Institute of Government

Willow Jacobson

Faculty, Institute of Government

North Carolina Association of Registers of Deeds



This Certifies That

HONORABLE CRYSTAL CRUMP
HAS SUCCESSFULLY COMPLETED A SEMINAR/WORKSHOP/CONFERENCE HELD

AT RALEIGH, NORTH RALEIGH HILTON
CITY OR COUNTY FACILITY

ON MARCH 13 THROUGH MARCH 15, 20 05

SPONSORED BY THE N.C. ASSOCIATION OF REGISTERS OF DEEDS.
ATTENDANCE EARNS THE FOLLOWING CREDITS
TOWARD CERTIFICATION OR CONTINUING EDUCATION.

TITLE OF COURSE(S): LEGISLATIVE/EDUCATIONAL CONFERENCE

THIS COURSE CARRIES 6 CONTINUING EDUCATION HOURS.

THIS COURSE COUNTS AS 1 DAY(S) TOWARD CERTIFICATION.

THIS CERTIFICATE PREPARED BY THE
EDUCATION COMMITTEE OF THE N.C.
ASSOCIATION OF REGISTERS OF DEEDS, 2004

Kimberly S. Hargrave
REGISTER OF DEEDS

HARNETT
COUNTY

North Carolina Association of Registers of Deeds



This Certifies That

HONORABLE CRYSTAL GRUMP
HAS SUCCESSFULLY COMPLETED A SEMINAR/WORKSHOP/CONFERENCE HELD

AT RALEIGH, ALBERT COATES
CITY OR COUNTY FACILITY

ON OCTOBER 20 THROUGH OCTOBER 20, 20 05
SPONSORED BY THE N.C. ASSOCIATION OF REGISTERS OF DEEDS.
ATTENDANCE EARNS THE FOLLOWING CREDITS
TOWARD CERTIFICATION OR CONTINUING EDUCATION.

TITLE OF COURSE(S): DISASTER PLANNING AND PROTECTION FOR RECORDS

THIS COURSE CARRIES 5 CONTINUING EDUCATION HOURS.

THIS COURSE COUNTS AS 1 DAY(S) TOWARD CERTIFICATION.

THIS CERTIFICATE PREPARED BY THE
EDUCATION COMMITTEE OF THE N.C.
ASSOCIATION OF REGISTERS OF DEEDS, 2004

Kimberly S. Hargrave
REGISTER OF DEEDS

HARNETT
COUNTY

North Carolina Association of Registers of Deeds



This Certifies That

CRYSTAL CRUMP
HAS SUCCESSFULLY COMPLETED A SEMINAR/WORKSHOP/CONFERENCE HELD

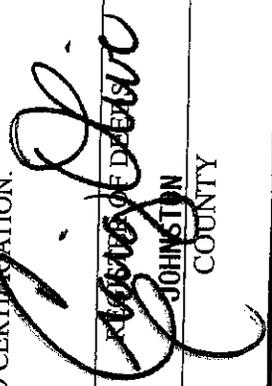
AT JOHNSTON CITY OR COUNTY JOHNSTON MEDICAL MALL FACILITY

ON APRIL 11 THROUGH _____, 2006

SPONSORED BY THE N.C. ASSOCIATION OF REGISTERS OF DEEDS.
ATTENDANCE EARNS THE FOLLOWING CREDITS
TOWARD CERTIFICATION OR CONTINUING EDUCATION.

TITLE OF COURSE(S): VITAL RECORDS, SEVEN THINGS THAT CONFUSE US,
HANDLING COMMON PROBLEMS, GUIDELINES FOR DIFFICULT INSTRUMENTS
THIS COURSE CARRIES 5 CONTINUING EDUCATION HOURS.

THIS COURSE COUNTS AS 1 DAY(S) TOWARD CERTIFICATION.


REGISTERS OF DEEDS
JOHNSTON
COUNTY

THIS CERTIFICATE PREPARED BY THE
EDUCATION COMMITTEE OF THE N.C.
ASSOCIATION OF REGISTERS OF DEEDS, 2004

Council On Education In Management Certificate of Completion

This is to certify that

Crystal Crump

has successfully completed the seminar
**Advanced Strategies in Employee Relations: HR Best Practices for
Managing Your Most Problematic Employees and Reducing Workplace
Conflict**

Conducted 4/21/05 and has completed 1 continuing education hour(s)

HR professionals: This program has been approved by HRCI for 1.5 Hour(s) and can be applied toward PHR and SPHR recertification.

Other: The continuing education hours earned at this event may be applied toward other professional designations and continuing education programs.





INSTITUTE OF GOVERNMENT

Crystal D. Crump

having attended the course of instruction in

Special Topics Seminar for Register of Deeds

is awarded this certificate

this 8th day of February, Two Thousand and Six

Michael Smith

Dean & Director, Institute of Government

Crystal D. Crump

Faculty, Institute of Government

The
**EMPLOYERS
ASSOCIATION**

3020 West Arrowood Rd.
Charlotte, NC 28273

COMPUTER TRAINING
U N L I M I T E D
AN EDUCATIONAL DIVISION of
THE EMPLOYERS ASSOCIATION

3020 West Arrowood Rd.
Charlotte, NC 28273

This certificate is awarded to

Crystal Crump

for successful completion of 8 hours

MS Excel 2003 Level 1

November 14, 2006

presented by

Computer Training Unlimited

NC CPA CPE Sponsor Number 960009

Wanda Woodlief

Wanda Woodlief
Computer Administration Manager

Kenny L. Colbert

Kenny Colbert
President

**NORTH CAROLINA ASSOCIATION OF
REGISTERS OF DEEDS**

Board of Certification



January 5, 2006

Mr. Mike Shalati

Union County Manager
500 N. Main Street, Room 925
Monroe, NC 28112

RE: The Honorable Crystal Crump
Union County Register of Deeds

Dear Mr. Shalati:

I am pleased to inform you that the Honorable Crystal Crump has successfully completed the certification program for Registers of Deeds through the North Carolina Association of Registers of Deeds (NCARD). Mrs. Crump is now a certified Register of Deeds.

In order to attain certification Mrs. Crump had to successfully complete the School for Registers of Deeds at the NC School of Government and numerous other short courses and seminars relevant to the workings and functions of the Register of Deeds Office. Additionally, she also had to undergo day to day on the job training. The citizens of Union County should take great pride in the fact that they have such highly qualified individuals as Mrs. Crump serving them.

Thank you for your time and should you have any questions about the NCARD certification program, please feel free to call on me at anytime.

Sincerely,

Davis H. Binson, Chairman

Duplin County Register of Deeds

Post Office Box 970

Kenansville, NC 28349

Cc: The Honorable Crystal Crump

THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
SCHOOL OF GOVERNMENT

AWARDS THIS CERTIFICATE TO

Crystal D Crump
Register of Deeds, Union County

FOR SUCCESSFULLY COMPLETING

Advanced Register of Deeds Program

April 23rd, 2007



UNC
SCHOOL OF GOVERNMENT

FACULTY MEMBER, SCHOOL OF GOVERNMENT
UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

DEAN, SCHOOL OF GOVERNMENT
UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

**UNION COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT

Meeting Date: August 6, 2007

Action Agenda Item No. 46
(Central Admin. use only)

SUBJECT: Deputy Register of Deeds I

DEPARTMENT: Register of Deeds

PUBLIC HEARING: No

ATTACHMENT(S):

Correspondence from Register of Deeds dated July 27, 2007

Agenda Abstract from May 7 with regard to Overhire Position

Register of Deeds Page from FY2008 Budget Book

Chart of Register of Deeds transaction activity

Chart of Inspection Permits

INFORMATION CONTACT:

Crystal Crump
Kai Nelson

TELEPHONE NUMBERS:

704.283.3797
704.292.2522

DEPARTMENT'S RECOMMENDED ACTION: Consideration of request from Register of Deeds regarding additional full-time Deputy Register of Deeds I position

BACKGROUND: The Register of Deeds has requested an increase in the Office's FTE from 12.5 to 13.5. Her justification and rationale is attached.

In May 2007, the BOCC approved an overhire position pending the return to full staffing levels or the establishment of the FY2008 position budget authorization. The agenda abstract in connection with that request is attached.

The budget recommendation included an increase from in the position allocation authorization from 12.5 full-time equivalents (FTE) to 13.5. The adopted budget did not include an increase in the Office's FTE; leaving the authorized FTE at FY2007 levels.

I have attached two charts to assist the Commission in evaluating the request.

FINANCIAL IMPACT: Annual cost of \$35,351 with FY08 coming from contingency

Legal Dept. Comments if applicable: _____

Memo

To: Board of County Commissioners
From: Crystal D. Crump, Register of Deeds
Date: July 27, 2007
Re: New Position Request

The attached agenda item is a request for a new position in the office of the Register of Deeds. In May 2007, I requested a position for a part time employee to become full time. I had funds available and it was approved. This brought the office count up to 13 employees. I had at that time one employee who was on disability since January 2007 and had another employee out that had surgery and was leaning toward a disability situation. I had to do what I could at that time to help keep the office functional, since summer was arriving along with vacations, etc. I had asked during the budget proposal one more person, with a count of 14 employees in the office. Somehow during the budget process, not only was my count of 14 employees cut, but also the count of 13 was cut to 12 employees. Shortly after that time, the employee on disability was approved and therefore is no longer with us. My count today is 12 employees. I am back where I started before I asked for the position in May 2007 to help relieve some of the issues facing the office.

Please remember, that this count includes the Register of Deeds also. This is unfair and cannot be accounted for because of meetings to attend, administrative duties to fulfill and various other matters that would not allow me to be in any department day after day, all day long.

This position is needed, as stated in the budget process earlier, because of the volume of documents being recorded. This is just for recording and not assisting customers in obtaining various copies of their deeds, easements, plats, etc. Also there is a process of handling these documents, indexing these documents and someone checking them for errors. This is where the liability plays a major role and affects our office and the County. This also does not account for the high demand of customer service in Vital Records. This part of the office assists individuals in obtaining copies of their birth certificates, death certificates, notary oaths, and marriage licenses. The procedure of obtaining copies of birth certificates is not as simple as you think. Sometimes the individual is unnamed, incorrect spelling of name or something else is incorrect on the birth certificate. This usually requires extra paperwork and extra time to correspond with Raleigh and the individual.

All of these items are on a demand requirement. This is something we cannot simply put to the side or do by appointment when it is convenient for us.

Even if this position is granted, there is a training period for at least twelve months in the real estate department. Usually you did not find someone with experience in the Register of Deeds office. Not only are there internal procedures and policies to follow, but there is knowledge of General Statutes. These individuals usually start in the real estate section to

learn the terminology, functions of the office, and how to locate information. Hopefully they can then be cross-trained in Vital Records, which is another training length of at least twelve months. This is so important for this office because if people are out or someone needs help, you have cross-trained individuals who can pitch in to help.

Remember, numbers and charts don't always play out real life situations that occur daily in a public office. We are public servants in this office and we have to give every effort to give good and efficient customer service.

I would appreciate your consideration in bringing the count back up to 13 employees, as we were in May 2007.

**UNION COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT
Meeting Date: May 7, 2007

Action Agenda Item No. _____
(Central Admin. use only)

SUBJECT: Approval of Overhire Full-time Regular Position - Register of Deeds

DEPARTMENT: Register of Deeds **PUBLIC HEARING:** No
Finance
Personnel

ATTACHMENT(S):
Correspondence from Register of
Deeds dated April 24, 2007

Position Count Form

INFORMATION CONTACT:
Crystal Crump
Kai Nelson
Mark Watson

TELEPHONE NUMBERS:
704.283.3797
704.292.2522
704.283.3869

DEPARTMENT'S RECOMMENDED ACTION: Approve overhire position pending the return to full staffing levels or establishment of FY2008 position budget authorization

BACKGROUND: The Register of Deeds position allocation authorization is 12.5 full-time equivalents (FTE). Currently, two individuals are on family medical leave - potentially for an extended period.

The Register of Deeds has requested additional staffing during the absence of these individuals. Additionally, as part of the fiscal year 2008 budget, the Register of Deeds has requested an increase in the FTE to 13.5.

The Register of Deeds has an experienced individual working part-time that can be transferred to the overhire position and become an immediate productive contributor to meeting the public's need for services from the deed's office.

Separately, as part of the FY2008 budget process, the BOCC can review the Register of Deeds' request for an increase in the FTE from 12.5 to 13.5.

FINANCIAL IMPACT: Sufficient funds (\$4800) are available in the FY2007 budget

Legal Dept. Comments if applicable: _____

Finance Dept. Comments if applicable: _____

Manager Recommendation: _____

REGISTER OF DEEDS

10-541800

MISSION STATEMENT

To provide for, in perpetuity, the preservation and protection of all recorded documents in a manner that ensures integrity, completeness, accuracy, and safekeeping of public records.

AGENCY PROGRAMS

Vital Records	Land Records, Plats & Plans	Official bonds
Notary Public Commissions	Transportation Right of Way Plans	Military Discharges
UCC Recording	Power of Attorney	

FY2008 MAJOR OUTCOMES

Provide more space for office.

Evaluate, in conjunction with Information Technology and Tax Administration, current computer and imaging technology and validate current technology platforms for cost and effectiveness.

Continue back file conversion projects and schedule for future years.

Provide forms and information on Register of Deeds website.

Provide marriage license application capabilities on Register of Deeds website.

Ensure staff members availability to attend workshops and maintain hours for certification and knowledge of General Statutes changes.

Provide adequate service and efficiency with increased number of employees.

Restore damaged books with new binders and ensure security of all documents.

FINANCIAL SUMMARY

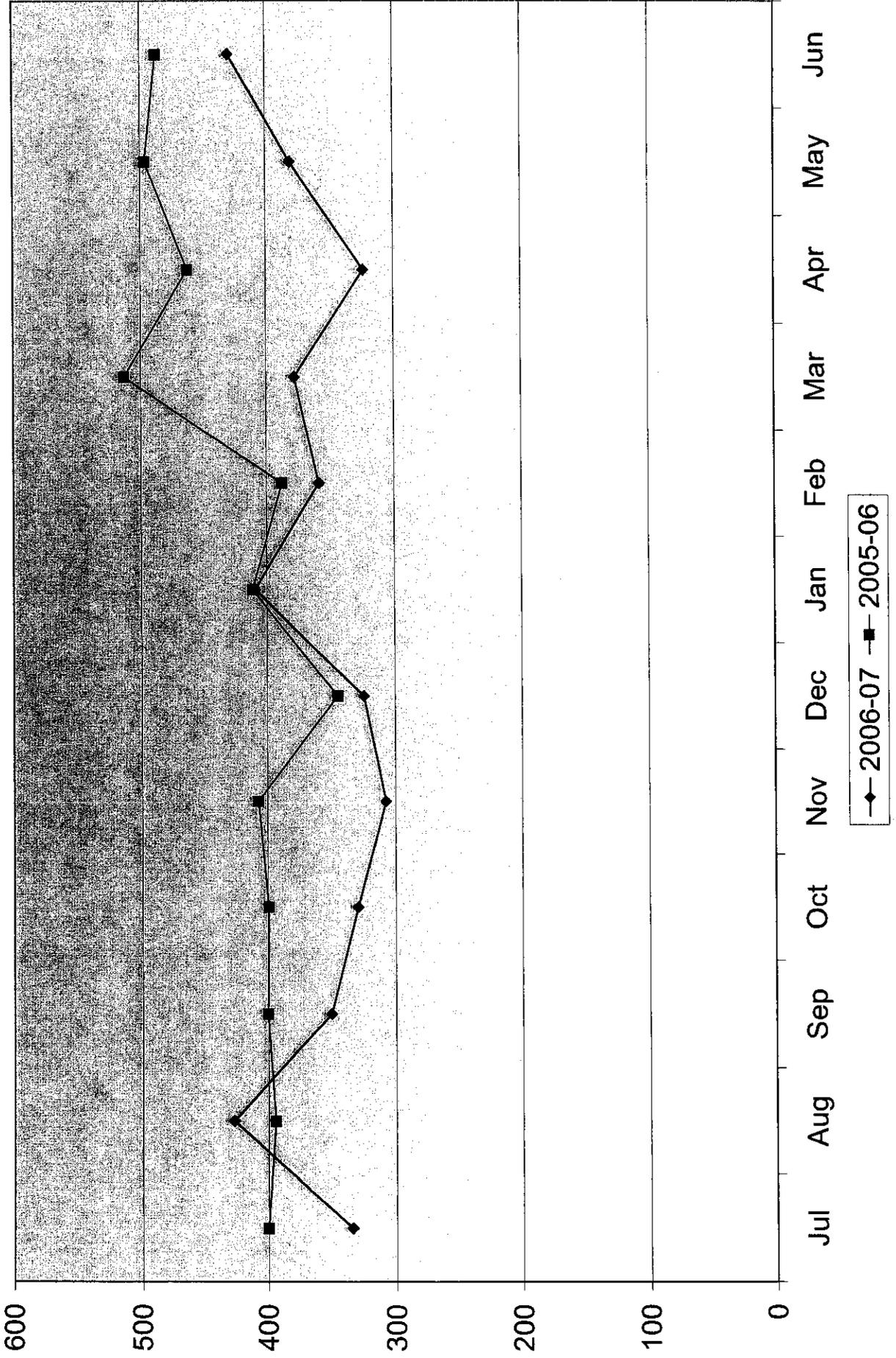
	FY 05-06	*****FY 06-07*****		*****FY 07-08*****		VARIANCE	% INC./ DEC.	ADOPTED
	ACTUAL	CURRENT	ESTIMATE	REQUEST	RECOMM.			
Expenditures								
Personnel	588,645	682,320	678,944	721,081	721,081	38,761	5.7%	685,730
Operating	466,301	515,818	512,502	527,483	527,483	11,665	2.3%	527,483
Capital	0	0	0	0	0	0	-	0
Other	0	0	0	0	0	0	-	0
Total	1,054,946	1,198,138	1,191,446	1,248,564	1,248,564	50,426	4.2%	1,213,213
Revenues								
State/Federal	0	0	0	0	0	0	-	0
Other	1,748,827	1,714,000	1,783,480	1,733,480	1,733,480	19,480	1.1%	1,733,480
Total	1,748,827	1,714,000	1,783,480	1,733,480	1,733,480	19,480	1.1%	1,733,480
Net County Cost	(693,881)	(515,862)	(592,034)	(484,916)	(484,916)	30,946	-6.0%	(520,267)

Positions	FY 05-06	FY 06-07	FY 07-08	FY 08-09	FY 09-10	VARIANCE	% INC./ DEC.	ADOPTED
Full-time Equivalency	12.0	12.0	12.0	13.0	13.0	1.0	8.3%	12.0
Part-time Equivalency	0.5	0.5	0.5	0.5	0.5	-	-	0.5

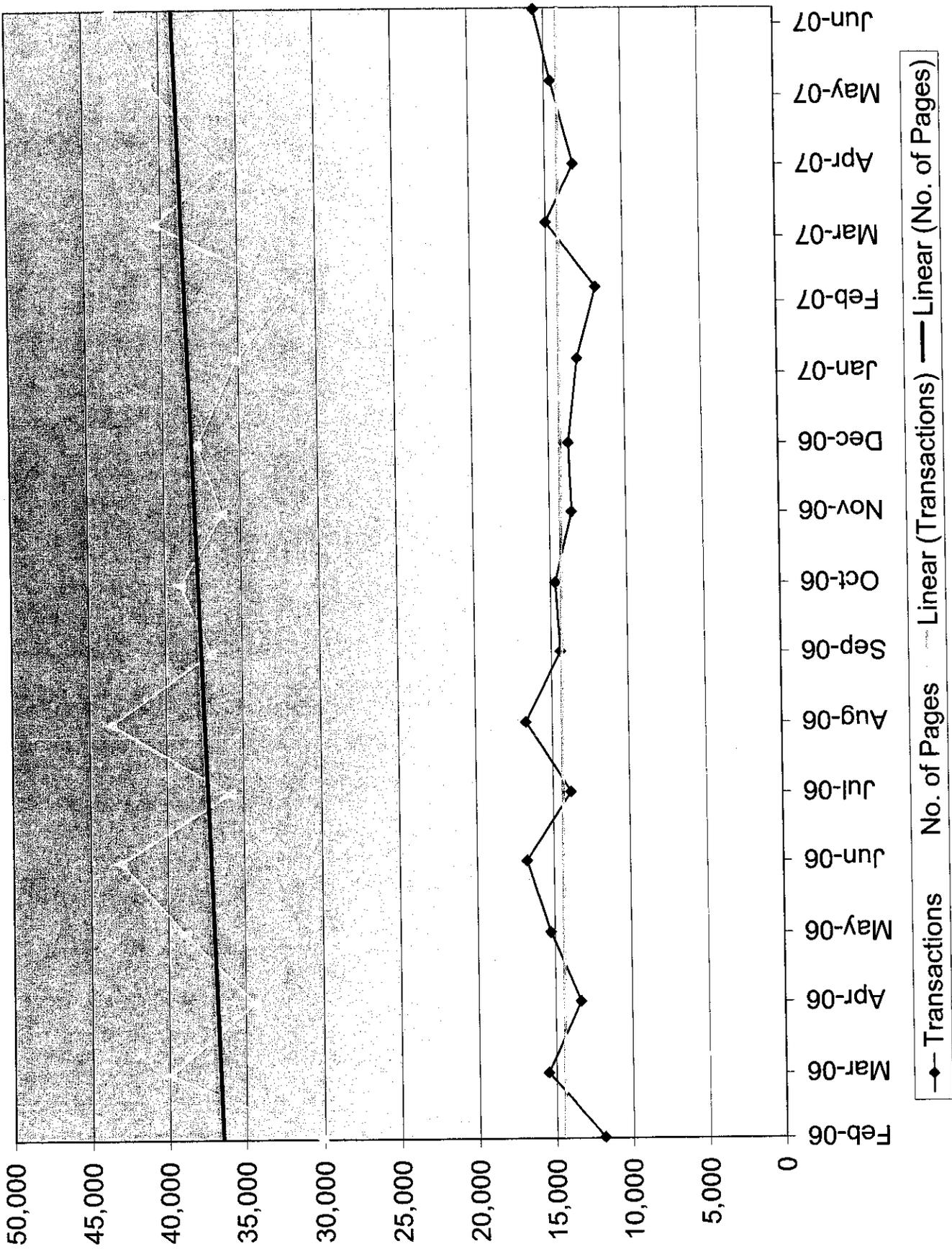
BUDGET HIGHLIGHTS

Personnel expense increase is attributable to additional Deputy Register of Deeds I position (\$35.4K), certification incentive pay (\$10.5K) and higher FY08 health benefit costs (\$2.2K) net of decrease due to FY07 unemployment claims (\$8K) and FY07 compensation and benefit adjustments (\$1.3K). The increase in operating expense is due to copier Quick Keys and maintenance for five new terminals in renovated area (\$10.5K) which will provide for increased copy accountability and additional professional service for archive imaging (\$8K) net of reduced facility occupancy cost charges (\$8.3K).

County Inspections Department
Number of Permits Issued



Register of Deeds Transactions and Pages Processed



**UNION COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT
Meeting Date: Aug. 06 2007

Action Agenda Item No. 15a
(Central Admin. use only)

SUBJECT: 9E Fire Districts

DEPARTMENT: Fire Marshals Office **PUBLIC HEARING:** No

ATTACHMENT(S): _____ **INFORMATION CONTACT:**
Neal Speer

TELEPHONE NUMBERS:
704-296-4296
704-226-5580

DEPARTMENT'S RECOMMENDED ACTION: Direct staff to proceed with pursuing Class 9E Fire Districts

BACKGROUND: All of Union County's eighteen (18) volunteer fire departments ("VFDs") currently have a Class 9S or better certification, as required under State law. Property owners living within five road miles of a fire station with a Class 9S or better rating are eligible for reduced insurance rates. Property owners living more than five road miles, but less than six road miles, from a fire station could also pay reduced insurance rates if the VFDs serving their areas were to obtain a Class 9E certification

Fifteen (15) of Union County's VFDs have response districts that include one or more areas located between five and six road miles from their fire stations. At its meeting on July 24, 2007, the Union County Fire Commission recommended that each of these 15 VFDs obtain a Class 9E certification. The Union County Fire Marshal's Office supports this recommendation.

FINANCIAL IMPACT: None

Legal Dept. Comments if applicable: _____

Finance Dept. Comments if applicable: _____

Manager Recommendation: _____

**UNION COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT

Meeting Date: August 6, 2007

Action Agenda Item No. 16a&b

(Central Admin. use only)

SUBJECT: Schools General Obligation Bonds

DEPARTMENT: Finance

PUBLIC HEARING: No

ATTACHMENT(S):
Resolutions

INFORMATION CONTACT:
Kai Nelson

TELEPHONE NUMBERS:

704.292.2522

DEPARTMENT'S RECOMMENDED ACTION: Adopt the following Resolutions:

Resolution of the Board of Commissioners of the County of Union, North Carolina Providing for the Issuance of Variable Rate General Obligation Bonds, of the County of Union, North Carolina

Resolution of the Board of Commissioners of the County of Union, North Carolina Providing for the Issuance of \$90,000,000 General Obligation School Bonds, Series 2007D of the County of Union, North Carolina

BACKGROUND: The BOCC at their June 18, 2007, meeting authorized staff to initiate sale of general obligation bonds for the purpose of discharging the County's commercial paper (CP) note program and provide new money to continue the UCPS authorized (2006 bond referendum) projects. Since that time, County staff has been working with the LGC, bond counsel and underwriters to complete the bond disclosure and financing documents. The LGC has scheduled its approval of the transactions for August 7 with the bond sales to occur on August 15 and September 5 with closing on September 6.

The attached two Resolutions authorize the County to issue the bonds. The Variable Rate General Obligation Bonds in the aggregate amount of \$130.7 million provides \$110.7 million to discharge the CP notes previously issued. The \$110.7 million of the \$130.7 has an underlying interest rate swap which synthetically fixes the variable rate bonds at 3.673% through 2031. The balance comprised of \$20 million, providing the new money for the Schools capital construction program, will remain unhedged.

The other resolution provides for the issuance of \$90 million in general obligation fixed rate

bonds. Together with the variable piece of \$20 million, the \$90 million fixed rate bonds will provide \$110 million in funding for the Schools' CIP which should provide sufficient resources to the Summer of 2008.

Both Resolutions cite documents related to the two financings such as official statements (a form of prospectus for investors), liquidity support agreements on the variable bonds, remarketing agreements, etc. Copies of the extensive bond legal documents are available in the County Clerk's office for review.

FINANCIAL IMPACT: The application to the LGC in connection with the 2007-2011 CIP contains a financing plan which provides for a 4.5 cents effective with the FY2008 budget followed by increases of 4.5 cents (FY2009) and 3.25 cents (FY2010) for a total of 12.25 cents. This component was included in the adopted FY2008 budget.

Legal Dept. Comments if applicable: _____

Finance Dept. Comments if applicable: _____

Manager Recommendation: _____

Extract of Minutes of a regular meeting of the Board of Commissioners of the County of Union, North Carolina, held in the Commissioners' Boardroom, 1st floor, Union County Government Center, Monroe, North Carolina, at 7:00 p.m. on August 6, 2007.

AGENDA ITEM

16a
MEETING DATE 8/6/07

* * *

A regular meeting of the Board of Commissioners of the County of Union, North Carolina (the "Board of Commissioners") was held in the Government Center, Board of Commissioners' Room, Room 118, Monroe, North Carolina, at 7:00 p.m. on August 6, 2007 (the "Meeting"), after proper notice, and was called to order by the Chairman, and on the roll being called, the following members of the Board of Commissioners answered present:

The following members of the Board of Commissioners were absent

Also present:

Commissioners _____ moved that the following resolution, copies of which having been made available to the Board of Commissioners, be adopted:

RESOLUTION OF THE BOARD OF COMMISSIONERS OF THE COUNTY OF UNION, NORTH CAROLINA PROVIDING FOR THE ISSUANCE OF VARIABLE RATE GENERAL OBLIGATION BONDS, OF THE COUNTY OF UNION, NORTH CAROLINA

WHEREAS, the Bond Orders have been adopted, and it is desirable to make provision for the issuance of the Bonds authorized by said Bond Orders;

WHEREAS, the County of Union, North Carolina (the "County") desires to execute and deliver a Bond Purchase Agreement to be dated on or about September 5, 2007 (the "Bond Purchase Agreement") among the County, the Local Government Commission (the "Commission") and Banc of America Securities LLC on its own behalf and on behalf of Wachovia Bank, National Association and Citigroup Global Markets Inc. (the "Underwriters"), pursuant to which the County and the Commission will sell the Bonds to the Underwriters in accordance with the terms and conditions set forth therein; and

WHEREAS, copies of the forms of the following documents relating to the transactions described above have been filed with the County and have been made available to the Board of Commissioners of the County (the "Board"):

1. the Bond Purchase Agreement;
2. the Standby Bond Purchase Agreement dated as of September 1, 2007 (the "Standby Agreement") among the County, Dexia Crédit Local, acting through its New York Branch, as liquidity provider, and Regions Bank, as paying agent;
3. the Remarketing and Interest Services Agreement dated as of

September 1, 2007 (the "2007A Remarketing Agreement") between the County and Banc of America Securities LLC, as remarketing agent for the 2007A Bonds (the "2007A Remarketing Agent"); and

4. the Remarketing and Interest Services Agreement dated as of September 1, 2007 (the "2007B Remarketing Agreement") between the County and Wachovia Bank, National Association, as remarketing agent for the 2007B Bonds (the "2007B Remarketing Agent"); and

5. the Remarketing and Interest Services Agreement dated as of September 1, 2007 (the "2007C Remarketing Agreement" and collectively with the 2007A Remarketing Agreement and the 2007B Remarketing Agreement, the "Remarketing Agreements") between the County and Citigroup Global Markets Inc., as remarketing agent for the 2007C Bonds (the "2007C Remarketing Agent" and collectively with the 2007A Remarketing Agent and the 2007B Remarketing Agent, the "Remarketing Agents"); and

6. the Official Statement to be dated on or about August 28, 2007 (the "Official Statement") with respect to the Bonds.

WHEREAS, the Board considered and recognized that variable interest rate debt instruments may subject the County to the risk of higher interest rates with respect to the Bonds in the future and that in addition to the variable interest cost, the County must pay the fees of the provider of a liquidity facility and the remarketing agents for the Bonds, which fees will increase the variable interest cost to the County, and has entered into interest rate swap agreements with respect to a portion of the Bonds to limit the risk of higher interest rates;

WHEREAS, the Board believes that variable rate debt financing and entering into interest rate hedging instruments with respect to a portion of the Bonds is superior to a fixed rate debt financing because it will lower the County's overall cost of capital;

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners of the County of Union, North Carolina, as follows:

Section 1. For purposes of this Bond Resolution, all capitalized, undefined words have the meanings ascribed to them in Appendix A hereto.

Section 2. The County shall issue not to exceed \$65,365,000 in total aggregate principal amount of its 2007A Bonds, not to exceed \$39,220,000 in total aggregate principal amount of its 2007B Bonds; and not to exceed \$26,145,000 in total aggregate principal amount of its 2007C Bonds.

Section 3. The Bonds shall be dated as of their date of issuance and pay interest as set forth in Appendix A hereto. The Bonds are being issued to provide funds to discharge all or a portion of the County's General Obligation Commercial Paper Bond Anticipation Notes, Series 2006, the proceeds of which were used to pay the capital costs of acquisition, construction, renovation and equipping of public school facilities in the County (the "Project") and to provide additional funds for the Project, pursuant to and in accordance with the Bond Orders.

Section 4. The Board has ascertained and hereby determines that the average period of usefulness of the capital projects being financed or refinanced by the proceeds of the Bonds is not less than 25 years computed from the date of issuance of the Bonds.

Section 5. The Bonds are payable in annual installments on March 1 in each year, as set forth in Section 2.18(b) of Appendix A. The Finance Director of the County may establish the principal of each maturity of the Bonds so long as the aggregate principal amount does not exceed \$130,730,000.

Section 6. The County covenants to take such action as may be required in the Opinion of Bond Counsel to cause the Bonds and all actions of the County with respect to the proceeds thereof to comply with Internal Revenue Code of 1986, as amended (the "Code"). The Finance Director of the County is hereby authorized to execute a no-arbitrage certificate in order to comply with Section 148 of the Code and the applicable Income Tax Regulations thereunder.

Section 7. The Finance Director is hereby directed to create and establish a special fund to be designated "County of Union, North Carolina Variable Rate General Obligation Bonds, Series 2007 Project Fund" (the "Project Fund"). A portion of the proceeds from the sale of the Bonds shall be deposited in the Project Fund as provided in Section 4.5 of Appendix A. Any moneys held in the Project Fund shall be invested and reinvested by the Finance Director as permitted by the laws of the State of North Carolina and the income, to the extent permitted by the Code, shall be retained in the Project Fund and applied with the proceeds of the Bonds to pay costs of the Project, as directed by the Finance Director. The Finance Director shall keep and maintain adequate records pertaining to the Project Fund and all disbursements therefrom so as to satisfy the requirements of the laws of the State of North Carolina and to assure that the County maintains its covenants with respect to the exclusion of the interest on the Bonds from gross income for purposes of federal income taxation. A portion of the proceeds of the sale of the Bonds shall be deposited in the CP Fund as provided in Section 4.5 of Appendix A. Other funds and accounts shall be established and applied as set forth in Appendix A.

Section 8. The Local Government Commission is hereby requested to sell the Bonds through a negotiated sale to the Underwriters pursuant to the terms of the Bond Purchase Agreement. The form and content of the Bond Purchase Agreement is in all respects approved and confirmed, and the Chairman, the County Manager or the Finance Director of the County is hereby authorized, empowered and directed to execute and deliver the Bond Purchase Agreement for and on behalf of the County, including necessary counterparts, in substantially the form and content presented to the County, but with such changes, modifications, additions or deletions therein as shall to him or her seem necessary, desirable or appropriate, his execution thereof to constitute conclusive evidence of his or her approval of any and all such changes, modifications, additions or deletions therein, and that from and after the execution and delivery of the Bond Purchase Agreement, the Chairman, the County Manager and the Finance Director of the County are hereby authorized, empowered and directed to do all such acts and things and to execute all such documents as may be necessary to carry out and comply with the provisions of the Bond Purchase Agreement as executed.

Section 9. The form and content of the Standby Agreement and the Remarketing Agreements be and the same hereby are in all respects approved and confirmed, and the Chairman, the County Manager or the Finance Director of the County be and they hereby are authorized, empowered, and directed to execute and deliver the Standby Agreement and the Remarketing Agreements for and on behalf of the County, including necessary counterparts, in substantially the form and content presented to the County, but with such changes, modifications, additions or deletions therein as shall to them seem necessary, desirable or appropriate, the execution thereof to constitute conclusive evidence of his or her approval of any and all such changes, modifications, additions or deletions therein, and that from and after the execution and delivery of the Standby Agreement and the Remarketing Agreements, the Chairman, the County Manager and the Finance Director of the County are hereby authorized, empowered and directed to do all such acts and things and to execute all such documents as may be necessary to carry out and comply with the provisions of the Standby Agreement and the Remarketing Agreements as executed.

Section 10. The form, terms and content of the Official Statement are in all respects

authorized, approved and confirmed, and the use of the Official Statement by the Underwriters and the Remarketing Agents in connection with the sale and remarketing of the Bonds is hereby in all respects authorized, approved and confirmed. The Chairman, the County Manager or Finance Director of the County is authorized to execute the Official Statement and the Official Statement on behalf of the County.

Section 11. The County agrees, in accordance with Rule 15c2-12 (the "Rule") promulgated by the Securities and Exchange Commission (the "SEC") and for the benefit of the Registered Owners and beneficial owners of the Bonds, as follows:

(1) by not later than seven months after the end of each Fiscal Year, beginning with the Fiscal Year ended June 30, 2007, to provide to each nationally recognized municipal securities information repository ("NRMSIR") and to the state information depository ("SID"), if any, for the State, in each case as designated by the SEC, the audited financial statements of the County for such Fiscal Year, if available, prepared in accordance with Section 159-34 of the General Statutes of North Carolina, as it may be amended from time to time, or any successor statute, or if such audited financial statements are not then available, unaudited financial statements of the County for such Fiscal Year to be replaced subsequently by audited financial statements of the County to be delivered within 15 days after such audited financial statements become available for distribution;

(2) by not later than seven months after the end of each Fiscal Year, beginning with the Fiscal Year ended June 30, 2007, to provide to each NRMSIR and to the SID, if any, in each case as designated by the SEC, (a) the financial and statistical data as of a date not earlier than the end of the preceding Fiscal Year for the type of information included under the captions "**THE COUNTY--DEBT INFORMATION**" and "**-TAX INFORMATION**" (excluding information on overlapping units) in the Official Statement referred to in Section 10 and (b) the combined budget of the County for the current Fiscal Year to the extent such items are not included in the audited financial statements referred to in clause (1) above;

(3) to provide in a timely manner to each NRMSIR or to the Municipal Securities Rulemaking Board (the "MSRB"), and to the SID, if any, notice of any of the following events with respect to the Bonds, if material:

- (a) principal and interest payment delinquencies;
- (b) non-payment related defaults;
- (c) unscheduled draws on the debt service reserves reflecting financial difficulties;
- (d) unscheduled draws on any credit enhancements reflecting financial difficulties;
- (e) substitution of any credit or liquidity providers, or their failure to perform;
- (f) adverse tax opinions or events affecting the status of the Bonds;
- (g) modification to the rights of the beneficial owners of the Bonds;

(h) call of any of the Bonds for redemption, other than mandatory sinking fund redemptions;

(i) defeasance of any of the Bonds;

(j) release, substitution or sale of any property securing repayment of the Bonds;

(k) rating changes; and

(4) to provide in a timely manner to each NRMSIR or to the MSRB, and to the SID, if any, notice of a failure of the County to provide required annual financial information described in (1) or (2) above on or before the date specified.

The County may comply with the undertaking described above by transmitting the required filings and notices to DisclosureUSA in accordance with its rules and procedures so long as that method for discharging such undertaking satisfies the Rule.

The County agrees that its undertaking under this Paragraph is intended to be for the benefit of the registered owners and the beneficial owners of the Bonds and is enforceable by any of the registered owners and the beneficial owners of the Bonds, including an action for specific performance of the County's obligations under this Paragraph, but a failure to comply will not be an event of default and will not result in acceleration of the payment of the Bonds. An action must be instituted, had and maintained in the manner provided in this Paragraph for the benefit of all of the registered owners and beneficial owners of the Bonds.

The County may modify from time to time, consistent with the Rule, the information provided or the format of the presentation of such information, to the extent necessary or appropriate in the judgment of the County, but:

(1) any such modification may only be made in connection with a change in circumstances that arises from a change in legal requirements, change in law or change in the identity, nature or status of the County;

(2) the information to be provided, as modified, would have complied with the requirements of the Rule as of the date of the Official Statement, after taking into account any amendments or interpretations of the Rule as well as any changes in circumstances;

(3) any such modification does not materially impair the interest of the registered owners or the beneficial owners, as determined by nationally recognized bond counsel or by the approving vote of the registered owners of a majority in principal amount of the Bonds.

Any annual financial information containing modified operating data or financial information will explain, in narrative form, the reasons for the modification and the impact of the change in the type of operating data or financial information being provided.

The provisions of this Paragraph terminate on payment, or provision having been made for payment in a manner consistent with the Rule, in full of the principal of and interest on the Bonds.

Section 12. No stipulation, obligation or agreement herein contained or contained in the

Bonds, this Bond Resolution, the Bond Purchase Agreement, the Standby Agreement, the Remarketing Agreements or any other instrument related to the issuance of the Bonds shall be deemed to be a stipulation, obligation or agreement of any officer, agent or employee of the County in his or her individual capacity, and no such officer, agent or employee shall be personally liable on the Bonds or be subject to personal liability or accountability by reason of the issuance thereof.

Section 13. The County Manager and the Finance Director of the County are hereby authorized, empowered and directed to do any and all other acts and to execute any and all other documents, which they, in their discretion, deem necessary and appropriate in order to consummate the transactions contemplated by (1) this Bond Resolution and (2) the other documents presented to this meeting; except that neither of the above is authorized or empowered to do anything or execute any document which is in contravention, in any way, of (a) the specific provisions of this Bond Resolution, (b) any agreement to which the County is bound or (c) any applicable law, statute, ordinance, rule or regulation of the United States of America or the State of North Carolina.

From the adoption of this Bond Resolution until the date the Bonds are issued, the County Manager and the Finance Director of the County are hereby authorized, empowered and directed to make any changes, modifications, additions or deletions to Appendix A hereto as shall to them seem necessary, desirable or appropriate that may be requested by the rating agencies rating the Bonds or other technical changes to the provisions of the Bonds necessary to implement the intent of this Bond Resolution. Such changes, modifications, additions or deletions to Appendix A shall be set forth in a certificate executed by the County Manager or the Finance Director of the County on the date the Bonds are issued.

Section 14. From and after the execution and delivery of the documents hereinabove authorized, the Chairman, the County Manager, the Finance Director and the Clerk to the Board of the County are hereby authorized, empowered and directed to do all such acts and things and to execute all such documents as may be necessary to carry out and comply with the provisions of said documents as executed, and are further authorized to take any and all further actions to execute and deliver any and all other documents as may be necessary in the issuance of the Bonds and the execution and delivery of the Bond Purchase Agreement.

The Chairman, the County Manager, the Finance Director and the Clerk to the Board of the County are hereby authorized and directed to prepare and furnish, when the Bonds are issued, certified copies of all the proceedings and records of the County Board of Commissioners relating to the Bonds, and such other affidavits, certificates and documents as may be required to show the facts relating to the legality and marketability of the Bonds as such facts appear on the books and records in such party's custody and control or as otherwise known to them; and all such certified copies, certificates, affidavits and documents, including any heretofore furnished, shall constitute representations of the County as to the truth of all statements contained therein.

Section 15. All acts and doings of the Chairman, the County Manager, the Finance Director and the Clerk to the Board of the County that are in conformity with the purposes and intents of this Resolution and in the furtherance of the issuance of the Bonds and the execution, delivery and performance of the Bond Purchase Agreements are in all respects approved and confirmed.

Section 16. If any one or more of the agreements or provisions herein contained is held contrary to any express provision of law or contrary to the policy of express law, though not expressly prohibited, or against public policy, or for any reason whatsoever is held invalid, then such covenants, agreements or provisions are null and void and separable from the remaining agreements and provisions and will in no way affect the validity of any of the other agreements and provisions hereof or of the Bonds authorized hereunder.

Section 17. All resolutions or parts thereof of the Board in conflict with the provisions herein contained are, to the extent of such conflict, hereby superseded and repealed.

Section 18. This Bond Resolution is effective on its adoption.

Upon motion of Commissioner _____, seconded by Commissioner _____, the foregoing order entitled: **“RESOLUTION OF THE BOARD OF COMMISSIONERS OF THE COUNTY OF UNION, NORTH CAROLINA PROVIDING FOR THE ISSUANCE OF VARIABLE RATE GENERAL OBLIGATION BONDS OF THE COUNTY OF UNION, NORTH CAROLINA”** was adopted by the following vote:

AYES:

NAYS:

PASSED, ADOPTED AND APPROVED this 6th day of August, 2007.

Extract of Minutes of a regular meeting of the Board of Commissioners of the County of Union, North Carolina, held in the Commissioners' Boardroom, 1st floor, Union County Government Center, Monroe, North Carolina, at 7:00 p.m. on August 6, 2007.

AGENDA ITEM

16b

MEETING DATE 8/6/07

* * *

A regular meeting of the Board of Commissioners of the County of Union, North Carolina (the "Board of Commissioners") was held in the Government Center, Board of Commissioners' Room, Room 118, Monroe, North Carolina, at 7:00 p.m. on August 6, 2007 (the "Meeting"), after proper notice, and was called to order by the Chairman, and on the roll being called, the following members of the Board of Commissioners answered present:

The following members of the Board of Commissioners were absent

Also present:

Commissioners _____ moved that the following resolution, copies of which having been made available to the Board of Commissioners, be adopted:

RESOLUTION OF THE BOARD OF COMMISSIONERS OF THE COUNTY OF UNION, NORTH CAROLINA PROVIDING FOR THE ISSUANCE OF \$90,000,000 GENERAL OBLIGATION SCHOOL BONDS, SERIES 2007D OF THE COUNTY OF UNION, NORTH CAROLINA

WHEREAS, the Bond Order hereinafter-described have been adopted, and it is desirable to make provision for the issuance of the Bonds authorized by said Bond Order;

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners (the "Board") of the County of Union, North Carolina (the "County"), as follows:

1. For purposes of this Resolution, the following words will have the meanings ascribed to them below:

"Bond Order" means the Bond Order relating to the School Projects (as defined herein), which was adopted by the Board on August 14, 2006 and approved by the vote of a majority of the voters who voted thereon at a referendum duly called and held.

"Federal Securities" means (a) direct obligations of the United States of America for the timely payment of which the full faith and credit of the United States of America is pledged; (b) obligations issued by any agency controlled or supervised by and acting as an instrumentality of the United States of America, the timely payment of the principal of and interest on which is fully guaranteed as full faith and credit obligations of the United States of America (including any securities described in (a) or (b) issued or held in the name of the Trustee in book-entry form on the books of the Department of Treasury of the

United States of America), which obligations, in either case, are held in the name of a trustee and are not subject to redemption or purchase prior to maturity at the option of anyone other than the holder; (c) any bonds or other obligations of the State of North Carolina or of any agency, instrumentality or local governmental unit of the State of North Carolina which are (1) not callable prior to maturity or (2) as to which irrevocable instructions have been given to the trustee or escrow agent with respect to such bonds or other obligations by the obligor to give due notice of redemption and to call such bonds for redemption on the date or dates specified, and which are rated by Moody's, if the 2007D Bonds are rated by Moody's, and S&P, if the 2007D Bonds are rated by S&P, within the highest rating category and which are secured as to principal, redemption premium, if any, and interest by a fund consisting only of cash or bonds or other obligations of the character described in clause (a) or (b) hereof which fund may be applied only to the payment of such principal of and interest and redemption premium, if any, on such bonds or other obligations on the maturity date or dates thereof or the specified redemption date or dates pursuant to such irrevocable instructions, as appropriate; or (d) direct evidences of ownership of proportionate interests in future interest and principal payments on specified obligations described in (a) held by a bank or trust company as custodian, under which the owner of the investment is the real party in interest and has the right to proceed directly and individually against the obligor on the underlying obligations described in (a), and which underlying obligations are not available to satisfy any claim of the custodian or any person claiming through the custodian or to whom the custodian may be obligated.

"*Moody's*" means Moody's Investors Service, a corporation organized and existing under the laws of the State of Delaware, its successors and their assigns and, if such corporation for any reason no longer performs the functions of a securities rating agency, "*Moody's*" will be deemed to refer to any other nationally recognized rating agency other than S&P designed by the County.

"*S&P*" means Standard & Poor's Ratings Services, a Division of The McGraw-Hill Companies, Inc., its successors and their assigns and, if such corporation for any reason no longer performs the functions of a securities rating agency, "*S&P*" will be deemed to refer to any other nationally recognized rating agency other than Moody's designed by the County.

"*2007D Bonds*" means the County's General Obligation School Bonds, Series 2007D authorized under the Bonds Orders.

2. The County shall issue \$90,000,000 in total aggregate principal amount of its 2007D Bonds.

3. The 2007D Bonds shall be dated their date of issuance and pay interest semiannually on March 1 and September 1, beginning March 1, 2008. The 2007D Bonds are being issued to provide funds to pay the capital costs incurred in connection with the construction, renovation, improvement, equipping and furnishing of public school facilities within the County, including the acquisition of land or rights-of-way therefor (the "*School Projects*"), pursuant to and in accordance with the Bond Order.

4. The Board has ascertained and hereby determines that the average period of usefulness of the School Projects being financed by the proceeds of the 2007D Bonds is not less than 25 years computed from the date of issuance of the 2007D Bonds.

5. The 2007D Bonds are payable in annual installments on March 1 in each year, as follows:

<u>YEAR</u>	<u>AMOUNT</u>	<u>YEAR</u>	<u>AMOUNT</u>
2009	\$3,000,000	2020	\$6,000,000
2010	3,000,000	2021	6,000,000
2011	3,000,000	2022	6,000,000
2012	4,000,000	2023	6,000,000
2013	4,000,000	2024	3,000,000
2014	5,000,000	2025	3,000,000
2015	6,000,000	2026	2,000,000
2016	6,000,000	2027	2,000,000
2017	6,000,000	2028	2,000,000
2018	6,000,000	2029	2,000,000
2019	6,000,000		

6. The 2007D Bonds are to be numbered from "RD-1" consecutively and upward. All 2007D Bonds shall bear interest from their date at a rate or rates which are determined on the sale thereof, computed on the basis of a 360-day year of twelve 30-day months.

7. The 2007D Bonds are to be registered as to principal and interest, and the Finance Director of the County is directed to maintain the registration records with respect thereto. The 2007D Bonds shall bear the original or facsimile signatures of the Chairman and Clerk to the Board of the County. An original or facsimile of the seal of the County is to be imprinted on each of the 2007D Bonds.

8. The 2007D Bonds will initially be issued by means of a book-entry system with no physical distribution of bond certificates made to the public. One bond certificate for each maturity of each series will be issued to The Depository Trust Company, New York, New York ("*DTC*"), and immobilized in its custody. A book-entry system will be employed, evidencing ownership of the 2007D Bonds in principal amounts of \$5,000 or integral multiples thereof, with transfers of beneficial ownership effected on the records of DTC and its participants pursuant to rules and procedures established by DTC. Interest on the 2007D Bonds will be payable to DTC or its nominee as registered owner of the 2007D Bonds in immediately available funds. The principal of and interest on the 2007D Bonds will be payable to owners of 2007D Bonds shown on the records of DTC at the close of business on the 15th day of the month preceding an interest payment date or a bond payment date. The County will not be responsible or liable for maintaining, supervising or reviewing the records maintained by DTC, its participants or persons acting through such participants.

If (a) DTC determines not to continue to act as securities depository for the 2007D Bonds or (b) the Finance Director for the County determines that the continuation of the book-entry system of evidence and transfer of ownership of the 2007D Bonds would adversely affect the interests of the beneficial owners of the 2007D Bonds, the County will discontinue the book-entry system with DTC. If the County fails to identify another qualified securities depository to replace DTC, the County will authenticate and deliver replacement bonds in accordance with the rules and procedures of DTC.

9. The 2007D Bonds maturing on or before March 1, 2017 will not be subject to redemption prior to maturity. The 2007D Bonds maturing after March 1, 2017 will be subject to redemption prior to maturity, at the option of the County, from any moneys that may be made available for such purpose, either in whole or in part on any date on or after March 1, 2017, at the redemption price of the principal amount of 2007D Bonds to be so redeemed, plus accrued interest to the redemption date.

If less than all of the 2007D Bonds are called for redemption, the County shall select the maturity or maturities of the 2007D Bonds to be redeemed in such manner as the County in its discretion may determine and DTC and its participants shall determine which of the 2007D Bonds within a maturity are to be redeemed by lot; provided, however, that the portion of any 2007D Bonds to be redeemed shall be in principal amount of \$5,000 or integral multiples thereof and that, in selecting 2007D Bonds for redemption, each 2007D Bonds shall be considered as representing that number of 2007D Bonds which is obtained by dividing the principal amount of such 2007D Bonds by \$5,000. Whenever the County elects to redeem 2007D Bonds, notice of such redemption of 2007D Bonds, stating the redemption date, redemption price and identifying the 2007D Bonds or portions thereof to be redeemed by reference to their numbers and further stating that on such redemption date there shall become due and payable on each 2007D Bonds or portion thereof so to be redeemed, the principal thereof, and interest accrued to the redemption date and that from and after such date interest thereon shall cease to accrue, shall be given not less than 30 days nor more than 60 days before the redemption date in writing to DTC or its nominee as the registered owner of the 2007D Bonds, by prepaid certified or registered United States mail, at the address provided to the County by DTC, but any failure or defect in respect of such mailing will not affect the validity of the redemption. If DTC is not the registered owner of the 2007D Bonds, the County will give notice at the time set forth above by prepaid first class United States mail, to the then-registered owners of the 2007D Bonds or portions thereof to be redeemed at the last address shown on the registration books kept by the County. The County will also mail or transmit by facsimile a copy of the notice of redemption within the time set forth above (1) to the Local Government Commission of North Carolina (the "*Local Government Commission*"), (2) to each of the then-existing securities depositories and (3) to at least two of the then-existing national information services.

10. The 2007D Bonds and the provisions for the registration of the 2007D Bonds and for the approval of the 2007D Bonds by the Secretary of the Local Government Commission are to be in substantially the form set forth in Exhibit A hereto.

11. The County covenants to take such action as may be required in the opinion of nationally recognized bond counsel to cause the 2007D Bonds and all actions of the County with respect to the proceeds thereof to comply with Internal Revenue Code of 1986, as amended (the "*Code*"). In particular, the County covenants as follows:

(a) At least one of the following two conditions will be satisfied for the 2007D Bonds: (1) less than 10% of the proceeds of the 2007D Bonds, reduced by costs of issuance, will be used directly or indirectly in the business of a person other than a state or local governmental unit or (2) less than 10% of the principal or interest on the 2007D Bonds will be (under the terms of such issue or any underlying arrangement) directly or indirectly (A) secured by an interest in property used or to be used in a private business or any interest in payments made with respect to such property or (B) to be derived from payments made with respect to property, or borrowed money, used or to be used in a private business;

(b) Less than 5% of the proceeds of the 2007D Bonds, reduced by costs of issuance, will be used by nongovernmental persons for a use unrelated to the purposes for which the 2007D Bonds are being issued;

(c) It will not loan directly or indirectly more than 5% of the proceeds of the 2007D Bonds to nongovernmental persons;

(d) It will not enter into any management contract with respect to the School Projects financed with the proceeds of the 2007D Bonds unless it obtains an opinion of nationally recognized bond counsel that such management contract will not impair the

exclusion from a recipient's gross income for federal income tax purposes of the interest on the 2007D Bonds;

(e) The County acknowledges that the continued exclusion of interest on the 2007D Bonds from a recipient's gross income for federal income tax purposes depends, in part, on compliance with the arbitrage limitations imposed by Section 148 of the Code. The County covenants to comply with all the requirements of Section 148 of the Code, including the rebate requirements, and it shall not permit at any time any of the proceeds of the 2007D Bonds or other funds of the County to be used, directly or indirectly, to acquire any asset or obligation, the acquisition of which would cause the 2007D Bonds to be "arbitrage bonds" for purposes of Section 148 of the Code;

(f) The 2007D Bonds shall not be "federally guaranteed" as defined in Section 149(b) of the Code;

(g) The County covenants to file or cause to be filed Form 8038G in accordance with Section 149(e) of the Code.

12. The Finance Director is hereby directed to create and establish a special fund to be designated "County of Union, North Carolina General Obligation School Bonds, Series 2007D Project Fund" (the "Project Fund"). The Finance Director shall deposit the proceeds from the sale of the 2007D Bonds in the Project Fund. The Finance Director shall invest and reinvest any moneys held in the Project Fund as permitted by the laws of the State of North Carolina and the income, to the extent permitted by the Code, is to be retained in the Project Fund and applied with the proceeds of the 2007D Bonds to pay the costs of the School Projects, as directed by the Finance Director. The Finance Director shall keep and maintain adequate records pertaining to the Project Fund and all disbursements therefrom so as to satisfy the requirements of the laws of the State of North Carolina and to assure that the County maintains its covenants with respect to the exclusion of the interest on the 2007D Bonds from gross income for purposes of federal income taxation.

13. Actions taken by officials of the County to select paying and transfer agents, and a bond registrar, or alternate or successor agents and registrars pursuant to Section 159E-8 of the Registered Public Obligations Act, Chapter 159E of the General Statutes of North Carolina, are hereby authorized and approved.

14. The Local Government Commission is hereby requested to sell the 2007D Bonds through a competitive sale to the bidder whose bid results in the lowest interest cost to the County, determined on the basis of the net interest cost method.

15. The Chairman, the County Manager, the Clerk to the Board and the Finance Director of the County are hereby authorized and directed to cause the 2007D Bonds to be prepared and, when they shall have been duly sold by the Local Government Commission, to execute the 2007D Bonds and to turn the 2007D Bonds over to the registrar and transfer agent of the County for delivery through the facilities of DTC to the purchaser or purchasers to whom they may be sold by the Local Government Commission.

16. The form and content of the Preliminary Official Statement to be dated on or about August 3, 2007 together with the final Official Statement to be dated on or about August 15, 2007 and the Notice of Sale with respect to the 2007D Bonds are in all respects authorized, approved and confirmed, and the Chairman, the County Manager, the Clerk to the Board and the Finance Director of the County are authorized, empowered and directed to execute and deliver the Official Statement in substantially the form and content presented to the Board, but with such changes, modifications, additions or deletions therein as shall to the Chairman, the County Manager, the Clerk to the Board and the Finance Director of the County

seem necessary, desirable or appropriate, their execution thereof to constitute conclusive evidence of the approval of the Board of any and all changes, modifications, additions or deletions therein from the form and content of the Official Statement presented to the Board.

17. The Chairman, the County Manager, the Clerk to the Board and the Finance Director of the County are authorized and directed to execute and deliver for and on behalf of the County any and all additional certificates, documents, opinions or other papers and perform all other acts as may be required by the documents contemplated hereinabove or as may be deemed necessary or appropriate in order to implement and carry out the intent and purposes of this Resolution.

18. The County agrees, in accordance with Rule 15c2-12 (the "Rule") promulgated by the Securities and Exchange Commission (the "SEC") and for the benefit of the Registered Owners and beneficial owners of the 2007D Bonds, as follows:

(1) by not later than seven months after the end of each Fiscal Year, beginning with the Fiscal Year ending June 30, 2007, to provide to each nationally recognized municipal securities information repository ("NRMSIR") and to the state information depository ("SID"), if any, for the State, in each case as designated by the SEC, the audited financial statements of the County for such Fiscal Year, if available, prepared in accordance with Section 159-34 of the General Statutes of North Carolina, as it may be amended from time to time, or any successor statute, or if such audited financial statements are not then available, unaudited financial statements of the County for such Fiscal Year to be replaced subsequently by audited financial statements of the County to be delivered within 15 days after such audited financial statements become available for distribution;

(2) by not later than seven months after the end of each Fiscal Year, beginning with the Fiscal Year ending June 30, 2007, to provide to each NRMSIR and to the SID, if any, in each case as designated by the SEC, (a) the financial and statistical data as of a date not earlier than the end of the preceding Fiscal Year for the type of information included under the captions "**THE COUNTY--DEBT INFORMATION**" and "**-TAX INFORMATION**" (excluding information on overlapping units) in the Official Statement referred to in Section 16 and (b) the combined budget of the County for the current Fiscal Year to the extent such items are not included in the audited financial statements referred to in clause (1) above;

(3) to provide in a timely manner to each NRMSIR or to the Municipal Securities Rulemaking Board (the "MSRB"), and to the SID, if any, notice of any of the following events with respect to the 2007D Bonds, if material:

- (a) principal and interest payment delinquencies;
- (b) non-payment related defaults;
- (c) unscheduled draws on the debt service reserves reflecting financial difficulties;
- (d) unscheduled draws on any credit enhancements reflecting financial difficulties;
- (e) substitution of any credit or liquidity providers, or their failure to perform;

- (f) adverse tax opinions or events affecting the tax-exempt status of the 2007D Bonds;
 - (g) modification to the rights of the beneficial owners of the 2007D Bonds;
 - (h) call of any of the 2007D Bonds for redemption;
 - (i) defeasance of any of the 2007D Bonds;
 - (j) release, substitution or sale of any property securing repayment of the 2007D Bonds;
 - (k) rating changes; and
- (4) to provide in a timely manner to each NRMSIR or to the MSRB, and to the SID, if any, notice of a failure of the County to provide required annual financial information described in (1) or (2) above on or before the date specified.

The County agrees that its undertaking under this Paragraph is intended to be for the benefit of the registered owners and the beneficial owners of the 2007D Bonds and is enforceable by any of the registered owners and the beneficial owners of the 2007D Bonds, including an action for specific performance of the County's obligations under this Paragraph, but a failure to comply will not be an event of default and will not result in acceleration of the payment of the 2007D Bonds. An action must be instituted, had and maintained in the manner provided in this Paragraph for the benefit of all of the registered owners and beneficial owners of the 2007D Bonds.

The County may meet the continuing disclosure filing requirements described above either by providing the required information directly to the NRMSIRs and SID, if any, or by providing such information to DisclosureUSA for subsequent transmission to the NRMSIRs and SID, if any, without separately providing such information to such NRMSIRs or SID.

The County may modify from time to time, consistent with the Rule, the information provided or the format of the presentation of such information, to the extent necessary or appropriate in the judgment of the County, but:

- (1) any such modification may only be made in connection with a change in circumstances that arises from a change in legal requirements, change in law or change in the identity, nature or status of the County;
- (2) the information to be provided, as modified, would have complied with the requirements of the Rule as of the date of the Official Statement, after taking into account any amendments or interpretations of the Rule as well as any changes in circumstances;
- (3) any such modification does not materially impair the interest of the registered owners or the beneficial owners, as determined by nationally recognized bond counsel or by the approving vote of the registered owners of a majority in principal amount of the 2007D Bonds.

Any annual financial information containing modified operating data or financial information will explain, in narrative form, the reasons for the modification and the impact of the change in the type of operating data or financial information being provided.

The provisions of this Paragraph terminate on payment, or provision having been made for payment in a manner consistent with the Rule, in full of the principal of and interest on the 2007D Bonds.

19. Those portions of this Resolution other than Paragraph 18 may be amended or supplemented, from time to time, without the consent of the owners of the 2007D Bonds if in the opinion of nationally recognized bond counsel, such amendment or supplement would not adversely affect the interests of the owners of the 2007D Bonds and would not cause the interest on the 2007D Bonds to be included in the gross income of a recipient thereof for federal income tax purposes. This Resolution may be amended or supplemented with the consent of the owners of a majority in aggregate principal amount of the outstanding 2007D Bonds, exclusive of 2007D Bonds, if any, owned by the County, but a modification or amendment (1) may not, without the express consent of any owner of 2007D Bonds, reduce the principal amount of any 2007D Bonds, reduce the interest rate payable on it, extend its maturity or the times for paying interest, change the monetary medium in which principal and interest is payable, or reduce the percentage of consent required for amendment or modification and (2) as to an amendment to Paragraph 18, must be limited as described therein.

Any act done pursuant to a modification or amendment consented to by the owners of the 2007D Bonds is binding on all owners of the 2007D Bonds and will not be deemed an infringement of any of the provisions of this Resolution, whatever the character of the act may be, and may be done and performed as fully and freely as if expressly permitted by the terms of this Resolution, and after consent has been given, no owner of a 2007D Bonds has any right or interest to object to the action, to question its propriety or to enjoin or restrain the County from taking any action pursuant to a modification or amendment.

If the County proposes an amendment or supplemental resolution to this Resolution requiring the consent of the owners of the 2007D Bonds, the Registrar shall, on being satisfactorily indemnified with respect to expenses, cause notice of the proposed amendment to be sent to each owner of the 2007D Bonds then outstanding by first-class mail, postage prepaid, to the address of such owner as it appears on the registration books; but the failure to receive such notice by mailing by any owner, or any defect in the mailing thereof, will not affect the validity of any proceedings pursuant hereto. Such notice shall briefly set forth the nature of the proposed amendment and shall state that copies thereof are on file at the principal office of the Registrar for inspection by all owners of the 2007D Bonds. If, within 60 days or such longer period as shall be prescribed by the County following the giving of such notice, the owners of a majority in aggregate principal amount of 2007D Bonds then outstanding have consented to the proposed amendment, the amendment will be effective as of the date stated in the notice.

20. Nothing in this Resolution precludes (a) the payment of the 2007D Bonds from the proceeds of refunding bonds or (b) the payment of the 2007D Bonds from any legally available funds.

If the County causes to be paid, or has made provisions to pay, on maturity or on redemption before maturity, to the owners of the 2007D Bonds the principal of the 2007D Bonds (including interest to become due thereon), through setting aside trust funds or setting apart in a reserve fund or special trust account created pursuant to this Resolution or otherwise, or through the irrevocable segregation for that purpose in some sinking fund or other fund or trust account with an escrow agent or otherwise, moneys sufficient therefor, including, but not limited to, interest earned or to be earned on Federal Securities, the County shall so notify Moody's and S&P, and then the such 2007D Bonds shall be considered to have been discharged and satisfied, and the principal of the 2007D Bonds (including and interest thereon) shall no longer be deemed to be outstanding and unpaid; provided, however, that nothing in this Resolution requires the deposit of more than such Federal Securities as may be sufficient, taking into account both the

principal amount of such Federal Securities and the interest to become due thereon, to implement any such defeasance.

If such a defeasance occurs and after the County receives an opinion of a nationally recognized accounting firm that the segregated moneys or Federal Securities together with interest earnings thereon are sufficient to effect a defeasance, the County shall execute and deliver all such instruments as may be necessary to effect such a defeasance and desirable to evidence such release, discharge and satisfaction. The County shall make provisions for the mailing of a notice to the owners of the 2007D Bonds that such moneys are so available for such payment.

Upon motion of Commissioner _____, seconded by Commissioner _____, the foregoing order entitled: **“RESOLUTION OF THE BOARD OF COMMISSIONERS OF THE COUNTY OF UNION, NORTH CAROLINA PROVIDING FOR THE ISSUANCE OF GENERAL OBLIGATION SCHOOL BONDS, SERIES 2007D OF THE COUNTY OF UNION, NORTH CAROLINA”** was adopted by the following vote:

AYES:

NAYS:

PASSED, ADOPTED AND APPROVED this 6th day of August, 2007.

APPENDIX A
FORM OF 2007D BONDS

No. RD-

\$

UNITED STATES OF AMERICA
STATE OF NORTH CAROLINA
COUNTY OF UNION

<u>INTEREST</u> <u>RATE</u>	<u>MATURITY DATE</u> MARCH 1,	<u>DATED DATE</u> SEPTEMBER 6, 2007	<u>CUSIP</u> 906395[]
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REGISTERED OWNER: CEDE & CO.

PRINCIPAL SUM: DOLLARS

GENERAL OBLIGATION SCHOOL BOND, SERIES 2007D

THE COUNTY OF UNION, NORTH CAROLINA (the "County") acknowledges itself indebted and for value received hereby promises to pay to the Registered Owner named above, on the Maturity Date specified above, upon surrender hereof, the Principal Sum shown above and to pay to the Registered Owner hereof interest thereon from the date of this 2007D Bonds until it shall mature at the Interest Rate per annum specified above, payable on March 1, 2008 and semiannually thereafter on September 1 and March 1 of each year. Principal of and interest on this 2007D Bonds are payable in immediately available funds to The Depository Trust Company ("DTC") or its nominee as registered owner of the 2007D Bonds and is payable to the owner of the 2007D Bonds shown on the records of DTC at the close of business on the 15th day of the month preceding an interest payment date or a bond payment date. The County is not responsible or liable for maintaining, supervising or reviewing the records maintained by DTC, its participants or persons acting through such participants.

This 2007D Bonds is issued in accordance with the Registered Public Obligations Act, Chapter 159E of the General Statutes of North Carolina, and pursuant to The Local Government Finance Act, the Bond Order adopted by the Board of Commissioners of the County on August 14, 2006 which was approved by the vote of a majority of the voters who voted thereon at a referendum duly called and held. The 2007D Bonds are being issued to provide funds to pay the capital costs incurred in connection with construction, renovation, improvement, equipping and furnishing of public school facilities within the County, including the acquisition of land or rights-of-way therefor.

The 2007D Bonds maturing on or before March 1, 2017 will not be subject to redemption prior to maturity. The 2007D Bonds maturing after March 1, 2017 will be subject to redemption prior to maturity, at the option of the County, from any moneys that may be made available for such purpose, either in whole or in part on any date on or after March 1, 2017. 2007D Bonds called for redemption will be redeemed at the redemption price of the principal amount of 2007D Bonds to be so redeemed, plus accrued interest to the redemption date.

If less than all of the 2007D Bonds are called for redemption, the County shall select the maturity or maturities of the 2007D Bonds to be redeemed in such manner as the County in its discretion may

determine and DTC and its participants shall determine which of the 2007D Bonds within a maturity are to be redeemed by lot; provided, however, that the portion of any 2007D Bonds to be redeemed shall be in principal amount of \$5,000 or integral multiples thereof and that, in selecting 2007D Bonds for redemption, each 2007D Bonds shall be considered as representing that number of 2007D Bonds which is obtained by dividing the principal amount of such 2007D Bonds by \$5,000. Whenever the County elects to redeem 2007D Bonds, notice of such redemption of 2007D Bonds, stating the redemption date, redemption price and identifying the 2007D Bonds or portions thereof to be redeemed by reference to their numbers and further stating that on such redemption date there shall become due and payable on each 2007D Bonds or portion thereof so to be redeemed, the principal thereof and interest accrued to the redemption date and that from and after such date interest thereon shall cease to accrue, shall be given not less than 30 days nor more than 60 days before the redemption date in writing to DTC or its nominee as the registered owner of the 2007D Bonds, by prepaid certified or register United States mail, at the address provided to the County by DTC, but any failure or defect in respect of such mailing will not affect the validity of the redemption. If DTC is not the registered owner of the 2007D Bonds, the County will give notice at the time set forth above by prepaid first class United States mail to the then-registered owners of the 2007D Bonds or portions thereof to be redeemed at the last address shown on the registration books kept by the County.

It is hereby certified and recited that all conditions, acts and things required by the Constitution or statutes of the State of North Carolina to exist, be performed or happen precedent to or in the issuance of this 2007D Bonds, exist, have been performed and have happened, and that the amount of this 2007D Bonds, together with all other indebtedness of the County, is within every debt and other limit prescribed by said Constitution or statutes. The faith and credit of the County are hereby pledged to the punctual payment of the principal of and interest on this 2007D Bonds in accordance with its terms.

This 2007D Bonds is not valid or obligatory for any purpose until the certification hereon has been signed by an authorized representative of the Local Government Commission.

IN WITNESS WHEREOF, the County has caused this 2007D Bonds to bear the original or facsimile of the signatures of the Chairman of the Board of the County and the Clerk to the Board of the County and an original or facsimile of the seal of the County to be imprinted hereon and this 2007D Bonds to be dated their date of issuance.

(SEAL)

Clerk to the Board

Chairman of the Board

Date of Execution: September 6, 2007

The issue hereof has been approved under the provisions of The Local Government Bond Act.

Secretary of the Local Government Commission

FORM OF ASSIGNMENT

ASSIGNMENT

FOR VALUE RECEIVED the undersigned hereby sells, assigns and transfers unto

(Please print or typewrite Name and Address,
including Zip Code, and Federal Taxpayer Identification or
Social Security Number of Assignee)

the within 2007D Bonds and all rights thereunder, and hereby irrevocably constitutes and appoints

Attorney to register the transfer of the within 2007D Bonds on the books kept for registration thereof,
with full power of substitution in the premises.

Dated: _____

Signature guaranteed by:

NOTICE: Signature must be guaranteed by a Participant in the Securities Transfer Agent Medallion Program ("*Stamp*") or similar program.

NOTICE: The signature to this assignment must correspond with the name as it appears on the face of the within Bond in every particular, without alteration, enlargement or any change whatever.

TRANSFER FEE MAY BE REQUIRED

**UNION COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT

Meeting Date: August 6, 2007

Action Agenda Item No. 17adb

(Central Admin. use only)

SUBJECT: Announcment of Vacancies on Boards and Committees

DEPARTMENT: Board of
Commissioners

PUBLIC HEARING: No

ATTACHMENT(S):

INFORMATION CONTACT:

Lynn G. West
Clerk to the Board of Commissioners

TELEPHONE NUMBERS:

(704) 283-3853

DEPARTMENT'S RECOMMENDED ACTION: Announce vacancies

BACKGROUND: a. Juvenile Crime Prevention Council (JCPC) - 11 Vacancies

1) District Attorney or Designee; 2) Substance Abuse Professional; 3) Two persons under the age of 18; 4) Juvenile Defense Attorney; 5) Member of the Business Community; 6) Representative of United Way or other non-profit; and 7) County Commissioner Appointees

b. Nursing Home Advisory Committee (3 Vacancies)

FINANCIAL IMPACT:

Legal Dept. Comments if applicable: _____

Finance Dept. Comments if applicable: _____

Manager Recommendation: _____

Reference	Vendor Name	Purpose	Payment Terms	Comprehensive Plans	Budget Amendment
Agenda Item 5 - Contracts Over \$5,000 (List)					
A	Netsmart Technologies	Patient scheduling, accounting, etc software maintenance agreement	\$ 17,843 Lump sum amount per year (renewable annually)	Operating Budget - 2008	n/a
B	Union County Public Schools	Memorandum of agreement for school health services	n/a	n/a	n/a
C	Union Smart Start	Revenue (reimbursement) contracts for the following programs: 1) Smart Start Health Check 2) Smart Start Breastfeeding 3) Smart Start Smiles 4) Smart Start Early Intervention Liaison	\$ 36,230 Maximum per year \$ 49,199 Maximum per year \$ 52,000 Maximum per year \$ 56,797 Maximum per year	Operating Budget - 2008	n/a
D	Union County Drug Treatment Court	Memorandum of agreement to provide health expertise to drug court	n/a	n/a	n/a
E	Town of Indian Trail	Revenue contract amendment to add an additional contract Deputy position (Sergeant), Amendment # 4	\$ 600,792 Fiscal year 2007-2008 maximum revenue for 8 Deputies and 1 Sergeant	Operating Budget - 2008 (for County's 10% portion)	BA # 3
F	Watch Systems, LLC	Sex offender registration and notification program	\$ 7,000 Lump sum amount per year (renewable annually)	Operating Budget - 2008	n/a
G	N.C. State Highway Patrol	Memorandum of understanding regarding VIPER (Voice Interoperability Plan for Emergency Responders)	n/a	n/a	n/a
H	R. R. Bowker	Web subscription	\$ 5,750 Lump sum amount per year	Operating Budget - 2008	n/a
I	Greg Williams	Indemnification for Union County regarding easement / encroachment	n/a	n/a	n/a
J	HDR Engineering, Inc. of the Carolinas	Water distribution system water quality action plan; Task Order #38	\$ 46,391 Lump sum amount (NTE)	Water & Sewer Master Plan 2005 CIP2006 & CIP2007 Capital Project Ordinance	n/a
K	HDR Engineering, Inc. of the Carolinas	Storm water plan review and FEMA review on-call; Task Order #36, Amendment #1	\$ 15,000 Lump sum amount (NTE)	Operating Budget - 2008	n/a
L	CEO, Inc.	Stormwater engineering recruitment agreement	\$ 25,000 Lump sum amount (NTE)	Operating Budget - 2008	n/a

MEETING DATE

**UNION COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT
Meeting Date: August 6, 2007

Action Agenda Item No. 6/3
(Central Admin. use only)

SUBJECT: Infrastructure Management Group, Inc. - Planning and Permitting Business Process

DEPARTMENT: Central Administration **PUBLIC HEARING:** No

ATTACHMENT(S):

INFORMATION CONTACT:
Dick Black

TELEPHONE NUMBERS:

DEPARTMENT'S RECOMMENDED ACTION: Increase the Interim County Manager's authorization to approve an agreement with Infrastructure Management Group, Inc. in an amount not to exceed \$185,000; said increase attributable to the implementation of a re-engineered planning and permitting business process

BACKGROUND: At the July 2 meeting of the BOCC, the Interim County Manager was authorized to approve an agreement with Infrastructure Management Group, Inc. relating to the utility performance improvement. The program work plan at the time did contemplated a focus on assessment only - project initiation, analysis and recommendation. The implementation component services, if any, remained undefined.

An expanded program work plan has been developed to include the implementation of a re-engineered planning and permitting business process at an estimated cost of \$39K.

The utility assessment component is estimated at approximately \$145K with the planning and permitting business process estimated at \$40K for a combined total of \$185K.

FINANCIAL IMPACT: Funds are available in the 2008 operating budget of the water and sewer utility

Legal Dept. Comments if applicable: _____

**UNION COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT

Meeting Date: August 6, 2007

Action Agenda Item No. 6/4
(Central Admin. use only)

SUBJECT: Property Mangement Services Review Team Appointments

DEPARTMENT: Central Administration **PUBLIC HEARING:** Choose one....

ATTACHMENT(S): _____ **INFORMATION CONTACT:**
Richard Black

TELEPHONE NUMBERS: _____

DEPARTMENT'S RECOMMENDED ACTION: Accept Interim County Manager's Review Team Appointments Recommendation.

BACKGROUND: At its July 2 regular meeting, the Board of County Commissioners approved Amendment #11 to the agreement with The Keith Corporation for Property Management Services for FY08 and directed a team be formed, approved by the Board, to conduct a thorough review of the services provided and their associated costs.

As Interim Manager, I recommend the team be comprised of the Finance Director, Internal Auditor, General Services Director and representatives of principal user Departments as designated by the Sheriff for the Sheriff's Office, the Director of Social Services, and the Library Director. I anticipate the team will begin work in mid-August and will report its findings and recommendations to the Board no later than December of this year.

FINANCIAL IMPACT:

Legal Dept. Comments if applicable: _____

Finance Dept. Comments if applicable: _____



**Union County
General Services Department**

MEMORANDUM

To: Richard Black, Interim County Manager
From: Barry G. Wyatt, Director
Date: June 26, 2007
Re: The Keith Corporation Contract Amendment

In 1997, the Board of County Commissioners directed staff to seek proposals for the outsourcing of all Property Management Services.

Working with Centralina Council of Governments, we developed a Request for Proposals (RFP), mailed the RFP to seven firms known to offer Property Management Services, advertised and ultimately received three proposals with The Keith Corporation providing the best value at an annual cost of \$473,981 or \$1.95 per square foot for 243,181 square feet of space to be maintained. The other two proposals received were for \$657,794 and \$1,020,943 respectively.

At the time the initial contract was awarded there were no additional costs associated with the contract; existing budgets covered the cost even with an increase in the level of service for maintenance, housekeeping and landscaping.

Since that time, seven new buildings, and an expanded Main Library and new expanded Animal Shelter have been added; increasing the square footage maintained by 125% to 547,341. In addition, we reduced contracted painting services by having The Keith Corporation add a painter to staff saving an estimated \$20,000 per year. Last year, two County positions were eliminated and two positions were added to The Keith Corporation contract at an annual savings of some \$2,500.

The contract amendment for FY08 is \$1,474,704 and represents a \$64,407 increase over the FY07 budget. This increase is due to the following factors:

- Increased cost of janitorial and paper supplies.
- Increased demand at the Agricultural Services and Conference Center for additional floor stripping, waxing and buffing for the event hall; grout cleaning of the Conference Center bathrooms and catering kitchen; service hall floor maintenance; deep cleaning of the catering kitchen; and cleaning and polishing the event hall wainscoting; all due to the heavy usage of the facility.
- 3% salary increase for maintenance staff.
- Addition of 3,500 square feet to be cleaned at the Sheriff's Office.

- Addition of 4,240 square feet to be cleaned at Union Village for Juvenile Probation.
- More frequent bush hogging open fields at the Agricultural Services and Conference Center.
- Increase in mileage reimbursement rate.
- Full year of maintenance and housekeeping services at the Animal Shelter.

Discounting the cost associated with the addition of a painter and the two former County positions previously mentioned, this contract amendment represents a per square foot cost of \$2.40 or 23.1% more than the original contract amount of \$1.95 in February, 1998. In comparison, the increase in The Keith Corporation contract on a square foot basis has increased less than the Consumer Price Index or CPI which has increased 26.9% and the inflation rate which has increased 27.6% over the same period.

From the above, it certainly appears Union County has a cost effective service contract in place; however, it is always prudent to periodically review the services being provided to ensure that we are being as cost effective as possible. If the Board desires, a team will be formed including the Finance Director, the Internal Auditor, representatives from two customer Departments and myself to conduct a thorough review of the services provided and their associated costs and will report back to you our findings and recommendations no later than December of this year.

I recommend your support and the Board's support in approving the FY08 contract amendment and that any changes as a result of the review be implemented for the FY09 budget year.

**UNION COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT

Meeting Date: August 6, 2007

Action Agenda Item No. 6/5a&b
(Central Admin. use only)

SUBJECT: Pay Grade Assignment

DEPARTMENT: 911 Emergency
Communications

PUBLIC HEARING: No

ATTACHMENT(S):
N/A

INFORMATION CONTACT:
Mark Watson

TELEPHONE NUMBERS:

704.283.3869

DEPARTMENT'S RECOMMENDED ACTION:

1. Approve the assignment of Pay Grade 64 to the position classification of "Addressing Coordinator"
2. Approve the revision of the Pay Grade assignment FROM: Pay Grade 63, TO: Pay Grade 65 for the position classification of "E-911 Data Base Supervisor"

BACKGROUND:

1. The position classification of "Addressing Coordinator" was approved by the Commission and allocated to the Emergency Communications Department in the 2007-2008 budget. The Pay Grade was not assigned at that time.
2. This administrative action is requested in order to maintain the proper order and hierarchy structure within the County's Pay Plan.

FINANCIAL IMPACT: NO additional funding allocation or change to allocated FTE's is required.

Legal Dept. Comments if applicable: _____

Finance Dept. Comments if applicable: _____

Manager Recommendation: _____

**UNION COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT

Meeting Date: August 6, 2007

Action Agenda Item No. 6/6
(Central Admin. use only)

SUBJECT: Disposal of Surplus Well Lot

DEPARTMENT: Public Works

PUBLIC HEARING: No

ATTACHMENT(S):
Offer to Purchase

INFORMATION CONTACT:
Christie Putnam

TELEPHONE NUMBERS:
704-296-4212

DEPARTMENT'S RECOMMENDED ACTION: Adopt Resolution Authorizing Upset Bid Process

BACKGROUND: The County has received an offer to purchase a well lot located in Waxhaw, NC. The well lot, an asset of the enterprise system, is no longer used by Public Works and is not essential to the water system.

The County has received an offer to purchase. Under statutes, the County is required to advertise the offer to purchase (\$4,000) and provide other interested parties an opportunity to purchase the property.

FINANCIAL IMPACT: Additional revenue to the water and sewer system.

Legal Dept. Comments if applicable: _____

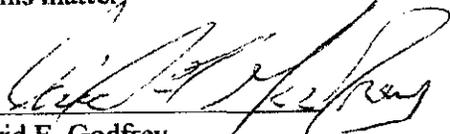
Finance Dept. Comments if applicable: _____

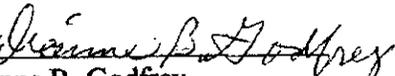
Manager Recommendation: _____

6-27-07

To Whom it May Concern,

I David F. Godfrey and Dianne B. Godfrey are making a bid for the land on Yamasee Road in Waxhaw, North Carolina parcel number; 05087050. This land is also known as P/18 Wysacky-Well House in Waxhaw, North Carolina. Our current bid is \$4,000 with a deposit of 5% being \$200 given this day. Thank you for your consideration on this matter,

X 
David F. Godfrey

X 
Dianne B. Godfrey

RESOLUTION AUTHORIZING UPSET BID PROCESS

WHEREAS, Union County is the owner of a vacant parcel of real property, approximately .65 acres in size and bounded on one side by Yamasee Road in Waxhaw, Union County Tax Parcel No. 05087050 (the "Subject Property"), as shown on the map attached as Exhibit A and incorporated herein by reference; and

WHEREAS, pursuant to N.C.G.S. § 160A-269, Union County is authorized to dispose of real property by upset bid after receipt of an offer for the property; and

WHEREAS, Union County has received an offer to purchase the Subject Property in the amount of \$4,000.00, submitted by David F. Godfrey and Dianne B. Godfrey (the "Godfreys"); and

WHEREAS, the Godfreys have paid the required five percent (5%) deposit on their offer.

NOW, THEREFORE, BE IT RESOLVED by the Union County Board of Commissioners (the "Board") as follows:

1. The Board proposes to accept the Godfrey's offer and authorizes sale of the Subject Property through the upset bid procedure of N.C.G.S. § 160A-269; provided that final acceptance of the final high offer shall be subject to approval by the Board. The Board reserves the right to withdraw the Subject Property from sale at any time before the final high bid is accepted and further reserves the right to reject at any time all bids.
2. The Clerk to the Board shall cause a notice of the proposed sale to be published. Such notice shall include a general description of the Subject Property, the amount and terms of the offer, and a statement that within ten (10) days any person may raise the bid in accordance with the procedure outlined in this Resolution.
3. Persons desiring to upset the offer that has been received shall submit a sealed bid with their offer to the office of the Clerk to the Board within ten (10) days after the notice of sale is published. Bids shall be submitted no later than 5:00 p.m. on the last day of the 10-day period, and the Clerk shall date-stamp bids upon receipt. The mailing and physical address of the Clerk to the Board is as follows:

Ms. Lynn West, Clerk to the Board
500 N. Main St., Room 925
Monroe, NC 28112

The envelope containing the bid shall be clearly marked "Sealed Bid for Property Located on Yamasee Road in Waxhaw." It shall be the specific responsibility of the bidder to deliver his bid to the Clerk to the Board at the appointed place and prior to

the announced time for the opening of bids. Late delivery of a bid for any reason, including delivery by United States Mail or other carrier, will disqualify the bid.

4. A qualifying higher bid is one that raises the existing offer by not less than ten percent (10%) of the first one thousand dollars (\$1,000) and five percent (5%) of the remainder. A qualifying higher bid must also be accompanied by a deposit in the amount of five percent (5%) of the bid. The deposit may be made in cash, cashier's check, or certified check. The County will return the deposit on any bid not accepted, and will return the deposit on an offer subject to upset if a qualifying higher bid is received. If the Board agrees to sell the Subject Property, the County will return the deposit of the final high bidder at closing. If, after acceptance by the Board of the final high bid, the final high bidder fails to close the sale in accordance with the terms of this Resolution and any purchase agreement, then in such event the bid deposit of the high bidder shall be forfeited. In the event the high bidder intends to seek a rezoning of the Subject Property prior to closing, as discussed below, the County reserves the right to require an additional deposit to be held in escrow upon execution of the purchase agreement.
5. At the conclusion of the 10-day period, the Clerk to the Board shall open the bids, if any, and the highest such qualifying bid will become the new offer. If there is more than one bid in the highest amount, the first such bid received will become the new offer. If a qualifying higher bid is received, the Clerk to the Board shall cause a new notice of upset bid to be published, and shall continue to do so until a 10-day period has passed without any qualifying upset bid having been received. At that time, the amount of the final high bid shall be reported to the Board of Commissioners. The Board shall determine whether or not to accept the final high bid not later than ninety (90) days after the final upset bid period has passed.
6. Bidders shall not attach any conditions to their bids. Any conditions attached to bids received for purchase of the Subject Property shall render the bid nonresponsive, and such bid shall not be considered by the Board.
7. The buyer must pay with cash at the time of closing.
8. Title to the Subject Property shall be transferred to the buyer by Quitclaim Deed.

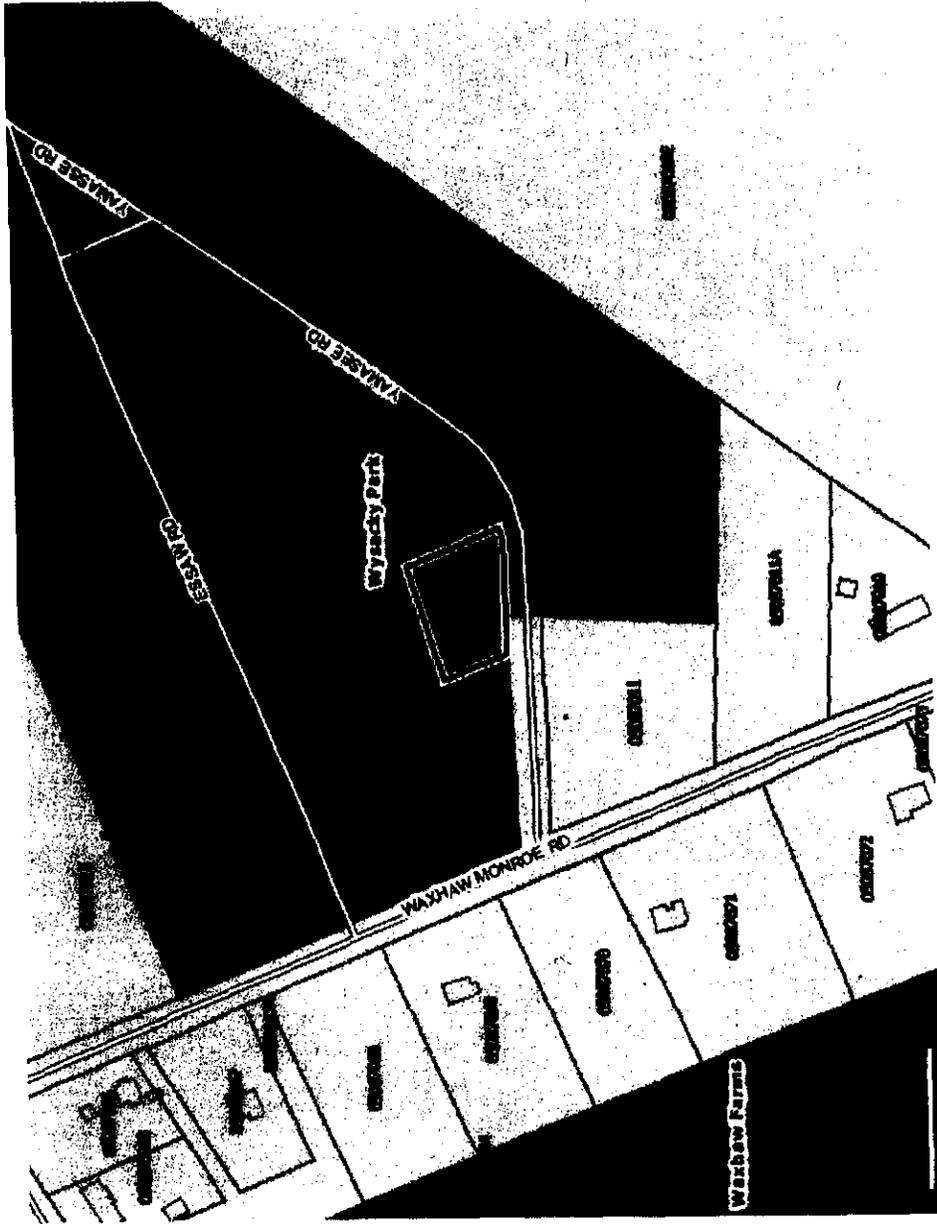
Adopted this the ___ day of _____, 2007

GoMAPS - Union County NC Public Access

LEGEND

	Highways
	Streets
	Structures
	Parcels
	Subdivisions
	Municipal Areas
	Fairview
	Hamby Bridge
	Indian Trail
	Lake Park
	Marshville
	Marvin
	Mineral Springs
	Mint Hill
	Monroe
	Stallings
	Unionville
	Waxhaw
	Weddington

MapSource, Clearwater
 Tuesday, July 24 2007



This map is prepared for the inventory of real property found within Union County, NC and is compiled from recorded deeds, plats, and other public records and data. Users of this map are hereby notified that the aforementioned public primary information sources should be consulted for verification of the information contained on this map. Union County and the mapping companies assume no legal responsibilities for the information contained on this map.

Grid based on the North Carolina State Plane Coordinate System
 All dimensions in feet

**UNION COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT

Meeting Date: August 6, 2007

Action Agenda Item No. 6/1
(Central Admin. use only)

SUBJECT: Radio Project - Grant Opportunity

DEPARTMENT: Homeland Security

PUBLIC HEARING: No

ATTACHMENT(S):

INFORMATION CONTACT:

Patrick Beekman
Gary Thomas

TELEPHONE NUMBERS:

292-2670

283-3550

DEPARTMENT'S RECOMMENDED ACTION: Authorize the County Manager to submit for a Federal grant for approximately \$3.3 million to help pay for the infrastructure costs of our new radio system.

BACKGROUND: In cooperation with Charlotte/Mecklenburg and Gaston County, Union County is submitting for a new Federal grant to help pay for the infrastructure cost of the 800 Mghz radio project. Charlotte/Mecklenburg County is taking the lead to prepare the grant. Individual counties are not eligible to submit for this grant alone. Only "regional" communication systems (two or more counties) are eligible to submit for this grant. This grant has a submission deadline of August 22, 2007 and will be awarded in September, 2007. Union County is requesting approximately \$3.3 million of Federal grant money. This grant requires an equal match by the County. Our match will be paid with the money we will be spending on the construction of the radio system that we had already planned on spending. Therefore, the net affect of this grant, should it be awarded, is to reduce the overall cost of the project by the amount, if any, we may receive from this grant. Obviously, we should not count on receiving any grant money, but the timing of this grant could not be more fortutious.

FINANCIAL IMPACT: The amount that we must match for this grant.

Legal Dept. Comments if applicable: _____

Finance Dept. Comments if applicable: _____

Manager Recommendation: _____

**UNION COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT

Meeting Date: August 6 2007

Action Agenda Item No. 6/8a
(Central Admin. use only)

SUBJECT: Mill Grove Road Water Main Improvements

DEPARTMENT: Public Works

PUBLIC HEARING: No

ATTACHMENT(S):
Engineer's Bid Report
Bid Tabulation

INFORMATION CONTACT:
Christie Putnam

TELEPHONE NUMBERS:
704-296-4212

DEPARTMENT'S RECOMMENDED ACTION: Accept the low bidder and authorize award of the construction contract, authorize County Manager to execute the construction agreement upon legal review.

BACKGROUND: This project was approved as a part of the Secret Short Cut/Idlewild Road CIP project for FY 05-06. The project consists of approximately 4,100 lf of 12-inch water line with valves, hydrants and apputenances.

FINANCIAL IMPACT: \$297,765.11

Legal Dept. Comments if applicable: _____

Finance Dept. Comments if applicable: _____

Manager Recommendation: _____

UNION COUNTY
BOARD OF COMMISSIONERS

ACTION AGENDA ITEM ABSTRACT

Meeting Date: July 2, 2007

Action Agenda Item No. 7/3a
(Central Admin. use only)

SUBJECT: Mill Grove Road Water Main Improvements

DEPARTMENT: Public Works

PUBLIC HEARING: No

ATTACHMENT(S):
Engineer's Bid Report
Bid Tabulation

INFORMATION CONTACT:
Christie Putnam

TELEPHONE NUMBERS:
704-296-4212

DEPARTMENT'S RECOMMENDED ACTION: Accept the low bidder and authorize award of the construction contract, authorize County Manager to execute the construction agreement upon legal review.

BACKGROUND: This project was approved as a part of the Secret Short Cut/Idlewild Road CIP project for FY 05-06. The project consists of approximately 4,100 lf of 12-inch water line with valves, hydrants and apputenances.

FINANCIAL IMPACT: \$297,765.11

Legal Dept. Comments if applicable:

Finance Dept. Comments if applicable:

Manager Recommendation:

ENGINEERING REPORT FOR BIDS

ON

**UNION COUNTY
MILL GROVE ROAD
WATER MAIN IMPROVEMENTS**

June 18, 2007

- I. DATE AND TIME OF BID OPENING: June 4, 2007, at 2:00 p.m.
- II. LOCATION OF BID OPENING: Union County Public Works Public Meeting Room
- III. REPORT SUBMITTED TO: County Commissioners, Union County, North Carolina

IV. DESCRIPTION OF PROJECT:

Project consists of approximately 4,074 LF of 12-inch, and 20 LF of 6-inch water lines, fittings, valves, hydrants and appurtenances, road bores, creek crossings, and field work items.

V. ADVERTISEMENT FOR BIDS:

The "Advertisement for Bids" for the project was placed in the following publications:

- 1. Enquirer-Journal

Drawings and specifications were available for public review during the advertisement period at the following locations:

- 1. Hazen and Sawyer, P.C., 4944 Parkway Plaza Boulevard, Suite 375, Charlotte, North Carolina.
- 2. Union County Public Works Department, 400 North Church Street, Monroe, North Carolina.

In response to the Advertisement for Bids, six (6) contractors requested and received drawings and specifications. Three (3) bids were received. The Bids were all publicly opened and read aloud at the date, time, and place specified.

VI. SUMMARY OF BID OPENINGS

The Total Bid for each Bidder for the Mill Grove Road Water Main Improvements is listed in the order in which they rank:

Contractor	Address	Total Amount of Bid
State Utility Contractors, Inc.	4417 Old Charlotte Highway Monroe, NC 28110 (704) 289-6400 Fax (704) 282-0590	\$299,180.00 (Corrected amount is \$297,765.11) (1, 2, &3) errors noted.
Sanders Utility Construction, Co., Inc.	6801 Brookshire Boulevard Charlotte, NC 28216 (704) 399-5600 Fax (704) 393-7786	\$359,430.09
Buckeye Construction Co., Inc.	654 Buckeye Cove Road Canton, NC 28716 (828) 648-4511 Fax (828) 665-9374	\$511,203.60

For comparison, Hazen and Sawyer's estimate for the project was; \$286,628.85.

Several minor bid irregularities were found in the bids and are listed below:

<u>Contractor</u>	<u>Description of Irregularities</u>
State Utility Contractors	(1) Payment Item No. 21, \$8,600.00 entered; should be \$8,208.37. (2) Payment Item No. 22, \$11,967.75 entered; should be \$10,944.49. (3) Total bid item should be \$297,765.11.
Buckeye Construction	Addendum No. 1 acknowledge in Bid; Addendum Nos. 2 and 3 were acknowledged by phone and fax.

These bid irregularities did not affect the order of the bids.

VII. RECOMMENDATION

Based solely on our bid canvass, we make the following recommendation to Union County.

1. We have discussed the bid errors with Ron Brown of State Utility, and he is agreeable to the corrected amount of \$297,765.11 for State Utility's bid amount and accepts this amount as the bid amount for the project.
2. Based on our discussion with State Utility Contractors, Inc., Hazen and Sawyer recommend the contract to be awarded to the lowest responsible bidder, State Utility Contractors, Inc., in the corrected amount of \$297,765.11, for construction of the Mill Grove Road Water Main Improvements.

Should you have any questions concerning the bids received or our recommendations, please do not hesitate to contact us. We look forward to continued work on this important project for Union County.

Respectfully submitted,

HAZEN AND SAWYER, P.C.



Benjamin Thompson, P.E.
Associate

Union County, North Carolina - Mill Grove Road Water Main Improvements
June 4, 2007

1 30004
CERTIFIED BID TABULATION

Pay Item Number	Item Description	Estimate Quantity	Unit of Measure	State Utility Contractors, Inc		Sanders Utility Construction Co Inc		Buckeye Construction Co.	
				Unit Price \$	Total \$	Unit Price \$	Total \$	Unit Price \$	Total \$
1	Cast Iron Waterline								
A	12-inch DIP Pipe	4.076	LF	\$42.00	\$171,192.00	\$42.00	\$171,192.00	\$42.00	\$171,192.00
B	8-inch DIP Pipe	20.11	LF	\$31.00	\$623.61	\$31.00	\$623.61	\$31.00	\$623.61
2	Fluoropolymer Joint DIP								
A	12-inch DIP Pipe	455.1	LF	\$47.00	\$21,419.50	\$47.00	\$21,419.50	\$47.00	\$21,419.50
3	Gate Valve								
A	12"	2	EA	\$1,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$1,000.00	\$2,000.00
4	11-inch Air Release Valve Assemblies	21	EA	\$2,100.00	\$44,100.00	\$2,100.00	\$44,100.00	\$2,100.00	\$44,100.00
5	Fluoropolymer Assemblies	5	EA	\$2,819.00	\$14,095.00	\$2,819.00	\$14,095.00	\$2,819.00	\$14,095.00
6	Connection to Existing Waterlines (78 L.V)								
A	1/2" (1/2") 12" (1/2") 12" (1/2") 12" (1/2")	1	EA	\$1,100.00	\$1,100.00	\$1,100.00	\$1,100.00	\$1,100.00	\$1,100.00
7	Connection to Existing Waterlines (78 L.V)								
A	48-87 (1/2") 12" (1/2") 12" (1/2") 12" (1/2")	1	EA	\$6,150.00	\$6,150.00	\$6,150.00	\$6,150.00	\$6,150.00	\$6,150.00
8	Box and Joints								
A	18x20 (1/2") 20" (1/2") 20" (1/2") 20" (1/2")	40	LF	\$180.00	\$7,200.00	\$180.00	\$7,200.00	\$180.00	\$7,200.00
B	24x24 (1/2") 24" (1/2") 24" (1/2") 24" (1/2")	24	LF	\$180.00	\$4,320.00	\$180.00	\$4,320.00	\$180.00	\$4,320.00
C	30x30 (1/2") 30" (1/2") 30" (1/2") 30" (1/2")	30	LF	\$180.00	\$5,400.00	\$180.00	\$5,400.00	\$180.00	\$5,400.00
9	Dry Hole (Without Casts) (10x22 (1/2"))	18	LF	\$200.00	\$3,600.00	\$200.00	\$3,600.00	\$200.00	\$3,600.00
10	Base Coat and Asphalt Reinforcement	10	LF	\$45.00	\$450.00	\$45.00	\$450.00	\$45.00	\$450.00
11	Driveway Repairs & Repaving								
A	Asphalt	24	LF	\$30.00	\$720.00	\$30.00	\$720.00	\$30.00	\$720.00
B	Gravel	33	LF	\$50.00	\$1,650.00	\$50.00	\$1,650.00	\$50.00	\$1,650.00
C	Gravel	60	LF	\$11.00	\$660.00	\$11.00	\$660.00	\$11.00	\$660.00
12	Reinforcement Slabs	60	TON	\$27.00	\$1,620.00	\$27.00	\$1,620.00	\$27.00	\$1,620.00
13	Reinforcement B.C. Mason								
14	8ft Fencing	3,440	LF	\$3.00	\$10,320.00	\$3.00	\$10,320.00	\$3.00	\$10,320.00
15	8ft Chain Link Fence	10	EA	\$75.00	\$750.00	\$75.00	\$750.00	\$75.00	\$750.00
16	Excavator Control Mats	1,348	SY	\$3.25	\$4,381.00	\$3.25	\$4,381.00	\$3.25	\$4,381.00
17	Man Protection	2	EA	\$100.00	\$200.00	\$100.00	\$200.00	\$100.00	\$200.00
18	Outlet Protection	1	EA	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00
19	Construction Entrance	2	EA	\$800.00	\$1,600.00	\$800.00	\$1,600.00	\$800.00	\$1,600.00
20	Fencing								
A	8ft Vinyl Fence	70	LF	\$30.00	\$2,100.00	\$30.00	\$2,100.00	\$30.00	\$2,100.00
B	4ft Vinyl Fence	75	LF	\$15.00	\$1,125.00	\$15.00	\$1,125.00	\$15.00	\$1,125.00
C	Wrought Iron Fence	70	LF	\$12.00	\$840.00	\$12.00	\$840.00	\$12.00	\$840.00
21	Concrete Walls, Curb, & Thruot Decking	7	CY	\$275.00	\$1,925.00	\$275.00	\$1,925.00	\$275.00	\$1,925.00
	Sub-Total				\$273,612.25		\$330,872.00		\$472,357.00
22	Mobilization (3% Max)				\$8,208.37		\$10,444.44		\$14,170.73
23	Contingency Allowance 4%				\$11,967.75		\$15,031.83		\$19,884.37
24	Cost Testing Allowance				\$3,000.00		\$3,000.00		\$3,000.00
	Total				\$296,788.37		\$359,348.27		\$509,412.10

CERTIFICATION

The Bids Tabulation herein were opened and read aloud at 2:00 p.m. local time, on June 4, 2007, in the Union County Public Works Department, 400 North Church Street, Monroe, North Carolina.

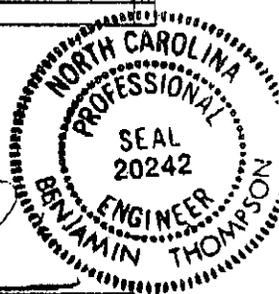
In checking of the bid amounts, the following errors were found:

- (1) Contractor entered \$8,600.00, mathematically incorrect. Corrected amount for 3% is, \$8,208.37
- (2) Contractor entered \$11,967.75, mathematically incorrect. Corrected amount for 4% is, \$10,944.49
- (3) Contractor entered \$299,180.00, mathematically incorrect due to errors (1) & (2); Corrected total is, \$207,765.11
- (4) Only addendum #1 was acknowledged in the bid, addendum 2 & 3 were acknowledged by phone and fax.
- (5) This Bid Tabulation reflects the corrected error amounts in the shaded areas.



Benjamin Thompson, P.E.
Associate

HAZEN and SAWYER, P.C.



**UNION COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT

Meeting Date: August 6, 2007

Action Agenda Item No. 6/9a
(Central Admin. use only)

SUBJECT: Government Center Phase V Renovations-Bid Award Recommendation

DEPARTMENT: General Services **PUBLIC HEARING:** No

ATTACHMENT(S): Bid Tabulation **INFORMATION CONTACT:** Barry Wyatt

TELEPHONE NUMBERS:
704-283-3868

DEPARTMENT'S RECOMMENDED ACTION:

- 1. Accept Bids.
- 2. Award bid to the lowest responsive, responsible bidder, Godfrey Construction Co., in the amount of \$227,800.00.
- 3. Authorize the Interim County Manager to approve contract documents.

BACKGROUND: Phase V renovations will upfit the space vacated by the Tax Collector's Office in the Historic Post Office for the Union County Public School's Child Nutrition Program. This phase of the project should be completed by January 1, 2008.

FINANCIAL IMPACT: The Board approved funding for this and future renovation phases in the 2006 CIP whose funding was authorized in the FY07 adopted budget.

Legal Dept. Comments if applicable: _____

Finance Dept. Comments if applicable: _____

Manager Recommendation: _____

BID TABULATION
Union County Government Center
Office Renovation Phase V
 July 10, 2007

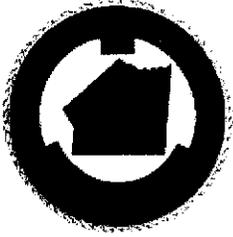
General Contractors	License #	Addenda		Qualification		Bid		Position	BASE BID	Alternate #1 Proprietary Materials and Suppliers	TOTAL
		Received	Statement	MBF	Bond	Bond					
R. Black & Associates	60805	1,2,3		X	X	X	X	5	\$299,000.00	\$3,000.00	\$302,000.00
Carpenter Construction Co.	35725	1,2,3	X	X	X	X	X	2	\$233,862.00	\$0.00	\$233,862.00
Godfrey Construction Co.	28326	1,2,3	X	X	X	X	X	1	\$226,800.00	\$1,000.00	\$227,800.00
Ponder & Company, Inc.	38006	1,2,3	X	X	X	X	X	3	\$267,133.00	\$0.00	\$267,133.00
H. C. Rummage, Inc.	10526	1,2,3		X	X	X	X	4	\$267,750.00	\$0.00	\$267,750.00

I certify that the above is a true and accurate tabulation of the bids received at the above referenced dates.

Ramsay Burgin Smith ARCHITECTS, Inc.



 Signature



UNION COUNTY
Office of the Tax Administrator
300 N. Main Street
P.O. Box 97
Monroe, NC 28111-0097

704-283-3746
704-283-3616 Fax

AGENDA ITEM.

6/10a John C. Petoskey
Tax Administrator

MEETING DATE 8/6/07

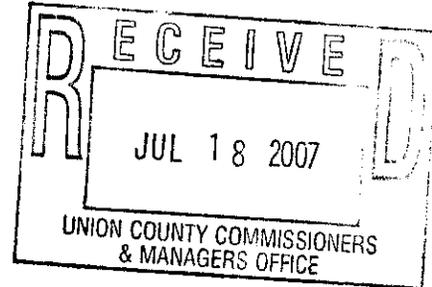
MEMORANDUM

TO: Richard Black
Central Administration

FROM: John C. Petoskey
Tax Administrator

DATE: July 18, 2007

RE: **Second** Motor Vehicle Billing

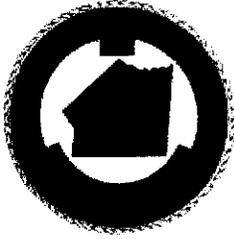


I hereby certify the Second Motor Vehicle Billing Motor Vehicle Valuation under the staggered program as required by N.C.G.S.105-330. Attached hereto is a list of the values, rates and taxes for each taxing unit.

JCP: lm

- Motor Vehicle Billing Summary -

---Bdg No---	-----Description-----	--Key--	Bill Year	Rate Year	Tax Rate	Count	-----Total----- ---Value---	-----Tax-----
10	County.....	CN99999	2007	2005	.5600	22	226,410	1,436.09
10	County.....	CN99999	2007	2006	.6367	14,832	147,883,522	940,738.32
Totals.....						14,854	148,109,932	942,174.41
77	School dist - County.....	SC999	2007	2005	.0700	22	226,410	179.54
Totals.....						22	226,410	179.54
32	Fire Dist - Springs.....	FR015	2007	2006	.0313	765	7,410,299	2,319.40
39	Fire Dist - Stallings....	FR020	2007	2005	.0390	4	73,690	28.74
39	Fire Dist - Stallings....	FR020	2007	2006	.0444	1,443	15,497,108	6,879.92
38	Fire dist - Hemby Bridge..	FR023	2007	2005	.0404	3	15,240	6.16
38	Fire dist - Hemby Bridge..	FR023	2007	2006	.0464	1,668	17,292,062	8,014.54
37	Fire dist - Wesley Chapel:	FR026	2007	2005	.0150	5	56,660	9.63
37	Fire dist - Wesley Chapel:	FR026	2007	2006	.0152	1,724	24,471,069	3,718.68
34	Fire Dist - Waxhaw.....	FR028	2007	2006	.0413	804	7,714,525	3,186.01
Totals.....						6,416	72,530,653	24,163.08
78	220125 Taxes Payable - Marvin.....	MN01000	2007	2005	.0517	1	16,370	16.92
78	220125 Taxes Payable - Marvin.....	MN01000	2007	2006	.0500	214	3,165,810	1,583.41
78	220130 Taxes Payable - Monroe.....	MN02000	2007	2005	.4900	1	750	8.68
78	220130 Taxes Payable - Monroe.....	MN02000	2007	2006	.5300	2,562	21,722,162	127,271.56
78	220170 Taxes Payable - Wingate.....	MN03000	2007	2006	.3800	207	1,315,555	4,995.79
78	220120 Taxes Payable - Marshville...	MN04000	2007	2006	.3800	186	1,329,887	4,997.30
78	220150 Taxes Payable - Waxhaw.....	MN05000	2007	2006	.3400	429	4,726,805	16,071.15
78	220110 Taxes Payable - Indian Trail..	MN06000	2007	2005	.0800	8	92,900	74.32
78	220110 Taxes Payable - Indian Trail..	MN06000	2007	2006	.1000	1,979	21,365,829	21,365.91
78	220140 Taxes Payable - Stallings....	MN07000	2007	2005	.2500	1	29,250	73.13
78	220140 Taxes Payable - Stallings....	MN07000	2007	2006	.2500	894	9,439,329	23,595.69
78	220160 Taxes Payable - Weddington....	MN08000	2007	2005	.0300	2	17,130	7.39
78	220160 Taxes Payable - Weddington....	MN08000	2007	2006	.0300	566	7,524,153	2,257.67
78	220115 Taxes Payable - Lake Park....	MN09000	2007	2006	.2300	207	2,129,931	4,898.94
78	220175 Taxes Payable - Fairview.....	MN09300	2007	2006	.0200	163	1,692,482	338.51
78	220145 Taxes Payable - Hemby Bridge..	MN09500	2007	2006	.0300	85	766,720	230.08
78	220165 Taxes Payable - Wesley Chapel:	MN09700	2007	2006	.0200	345	4,166,175	832.16
78	220135 Taxes Payable - Unionville...	MN09800	2007	2006	.0200	327	3,000,718	600.09
78	220155 Taxes Payable - Mnrl Sprngs...	MN09900	2007	2006	.0270	170	1,704,756	460.32
Totals.....						8,347	84,206,712	209,679.02
Grand Totals.....								1,176,196.05



UNION COUNTY
Office of the Tax Administrator
300 N. Main Street
P.O. Box 97
Monroe, NC 28111-0097

AGENDA ITEM

#

6/10 bdc
704-283-4646

MEETING DATE

8/6/07
704-283-3616 Fax

John C. Petoskey
Tax Administrator

MEMORANDUM

TO: Richard Black
Central Administration

FROM: John C. Petoskey
Tax Administrator

DATE: Friday, June 29, 2007

RE: Twelfth Motor Vehicle Release/Refund Register

I hereby certify the following releases/refunds that were made during the period of 06/1/2007 – 06/30/2007. The releases/refunds represent releases/refunds of both monthly and annual vehicle values and taxes. Should you have any questions, please call.

JCP:lm

--- M O T O R V E H I C L E S Y S T E M ---

---Date--- --Ti
06/29/2007 12:3

Assessor Release Register for the period 06/01/2007 to 06/30/2007

(Summary)

MEETING DATE 8/6/07

---Bdg No---	-----Description-----	--Key--	Bill Year	Rate Year	-----Value-----	-----Total-----	-----Tax-----	-----Int-----
10	County.....	CN99999	2005	2004	22,908	120.27-		18
10	County.....	CN99999	2005	2005	77,830	462.46-		55
10	County.....	CN99999	2006	2005	225,010	2,016.40-		124
10	County.....	CN99999	2006	2006	1,245,246	8,082.02-		108
10	County.....	CN99999	2007	2006	1,314,532	8,477.56-		
Net Totals.....					2,885,526	19,158.71-		306
76	School dist - Monroe.....	SC100	2005	2005	19,280	13.50-		2
76	School dist - Monroe.....	SC100	2006	2005	53,940	40.15-		3
77	School dist - County.....	SC999	2005	2004	22,908	16.03-		2
77	School dist - County.....	SC999	2005	2005	58,550	44.32-		4
77	School dist - County.....	SC999	2006	2005	171,070	211.98-		12
Net Totals.....					325,748	325.98-		25
32	Fire Dist - Springs.....	FR015	2006	2006	4,340	1.39-		
32	Fire Dist - Springs.....	FR015	2007	2006	83,578	26.16-		
39	Fire Dist - Stallings....	FR020	2006	2006	122,448	54.36-		
39	Fire Dist - Stallings....	FR020	2007	2006	230,025	102.13-		
38	Fire dist - Hemby Bridge..	FR023	2005	2004	4,220	1.80-		
38	Fire dist - Hemby Bridge..	FR023	2006	2005	35,470	17.31-		1
38	Fire dist - Hemby Bridge..	FR023	2006	2006	70,153	38.08-		
38	Fire dist - Hemby Bridge..	FR023	2007	2006	52,387	32.18-		
37	Fire dist - Wesley Chapel:	FR026	2006	2006	184,012	28.79-		
37	Fire dist - Wesley Chapel:	FR026	2007	2006	112,206	17.05-		
34	Fire Dist - Waxhaw.....	FR028	2006	2006	64,124	26.81-		
34	Fire Dist - Waxhaw.....	FR028	2007	2006	64,168	26.50-		
Net Totals.....					1,027,131	372.56-		3
78	220125 Taxes Payable - Marvin.....	MN01000	2006	2006	11,408	5.05-		
78	220125 Taxes Payable - Marvin.....	MN01000	2007	2006	21,192	10.60-		
78	220130 Taxes Payable - Monroe.....	MN02000	2005	2005	19,280	94.47-		14
78	220130 Taxes Payable - Monroe.....	MN02000	2006	2005	64,370	351.25-		29
78	220130 Taxes Payable - Monroe.....	MN02000	2006	2006	339,369	1,898.69-		44
78	220130 Taxes Payable - Monroe.....	MN02000	2007	2006	201,875	1,114.94-		
78	220170 Taxes Payable - Wingate.....	MN03000	2006	2005	0	94.58-		1
78	220170 Taxes Payable - Wingate.....	MN03000	2006	2006	3,110	11.81-		
78	220170 Taxes Payable - Wingate.....	MN03000	2007	2006	2,120	8.06-		
78	220120 Taxes Payable - Marshville...	MN04000	2006	2006	0	22.86-		
78	220120 Taxes Payable - Marshville...	MN04000	2007	2006	21,630	82.19-		
78	220150 Taxes Payable - Waxhaw.....	MN05000	2006	2005	0	6.21-		
78	220150 Taxes Payable - Waxhaw.....	MN05000	2006	2006	60,840	206.85-		3

--- M O T O R V E H I C L E S Y S T E M ---

---Date--- --Tj
06/29/2007 12:3

Assessor Release Register for the period 06/01/2007 to 06/30/2007

(Summary)

78	220150	Taxes Payable - Waxhaw.....	MN05000	2007	2006	28,780	97.85-	
78	220110	Taxes Payable - Indian Trail..	MN06000	2005	2004	22,908	18.33-	2
78	220110	Taxes Payable - Indian Trail..	MN06000	2005	2005	20,000	16.00-	1
78	220110	Taxes Payable - Indian Trail..	MN06000	2006	2005	23,790	20.21-	1
78	220110	Taxes Payable - Indian Trail..	MN06000	2006	2006	113,900	125.82-	1
78	220110	Taxes Payable - Indian Trail..	MN06000	2007	2006	88,085	88.08-	
78	220140	Taxes Payable - Stallings....	MN07000	2006	2006	78,881	197.20-	1
78	220140	Taxes Payable - Stallings....	MN07000	2007	2006	218,363	545.92-	
78	220160	Taxes Payable - Weddington....	MN08000	2006	2006	3,820	1.15-	
78	220160	Taxes Payable - Weddington....	MN08000	2007	2006	122,276	36.67-	
78	220115	Taxes Payable - Lake Park....	MN09000	2006	2005	0	12.90-	
78	220115	Taxes Payable - Lake Park....	MN09000	2007	2006	1,524	3.51-	
78	220175	Taxes Payable - Fairview.....	MN09300	2006	2005	0	3.75-	
78	220175	Taxes Payable - Fairview.....	MN09300	2006	2006	20,000	4.00-	
78	220175	Taxes Payable - Fairview.....	MN09300	2007	2006	33,950	6.79-	
78	220165	Taxes Payable - Wesley Chapel:	MN09700	2006	2006	40,410	9.16-	
78	220165	Taxes Payable - Wesley Chapel:	MN09700	2007	2006	14,928-	2.98	
78	220135	Taxes Payable - Unionville....	MN09800	2006	2006	91,893	18.38-	
78	220135	Taxes Payable - Unionville....	MN09800	2007	2006	32,415	6.49-	
78	220155	Taxes Payable - Mnrl Sprngs..	MN09900	2006	2006	4,340	1.17-	
78	220155	Taxes Payable - Mnrl Sprngs..	MN09900	2007	2006	17,933	4.84-	
Net Totals.....						1,693,534	5,122.80-	103
84	220000	NC State Interest.....	NC00000	2005	2004	0	.00	
84	220000	NC State Interest.....	NC00000	2005	2005	0	.00	12
84	220000	NC State Interest.....	NC00000	2006	2005	0	.00	74
84	220000	NC State Interest.....	NC00000	2006	2006	0	.00	172
Net Totals.....						0	.00	260
Net Grand Totals.....							24,980.05-	699

--- M O T O R V E H I C L E S Y S T E M ---

---Date--- --Ti
06/29/2007 12:3

Assessor Refund Register for the period 06/01/2007 to 06/30/2007

(Summary)

6/10c
MEETING DATE 8/6/07

---Bdg No---	-----Description-----	--Key--	Bill Year	Rate Year	-----Value-----	-----Total-----	-----Tax-----	-----Int-----
10	County.....	CN99999	2002	2001	0		.97-	
10	County.....	CN99999	2002	2002	0		75.69-	
10	County.....	CN99999	2003	2002	0		35.47-	
10	County.....	CN99999	2003	2003	0		200.29-	
10	County.....	CN99999	2004	2003	0		27.14-	
10	County.....	CN99999	2004	2004	0		145.21-	
10	County.....	CN99999	2005	2004	0		20.64-	
10	County.....	CN99999	2005	2005	0		236.43-	
10	County.....	CN99999	2006	2005	25,110		416.03-	
10	County.....	CN99999	2006	2006	67,004		787.75-	
Net Totals.....						92,114	1,945.62-	
77	School dist - County.....	SC999	2002	2001	0		.14-	
77	School dist - County.....	SC999	2002	2002	0		11.26-	
77	School dist - County.....	SC999	2003	2002	0		5.27-	
77	School dist - County.....	SC999	2003	2003	0		26.45-	
77	School dist - County.....	SC999	2004	2003	0		3.58-	
77	School dist - County.....	SC999	2004	2004	0		19.36-	
77	School dist - County.....	SC999	2005	2004	0		2.75-	
77	School dist - County.....	SC999	2005	2005	0		29.56-	
77	School dist - County.....	SC999	2006	2005	25,110		51.96-	
Net Totals.....						25,110	150.33-	
32	Fire Dist - Springs.....	FR015	2006	2006	3,680		1.15-	
39	Fire Dist - Stallings.....	FR020	2006	2005	2,580		3.95-	
37	Fire dist - Wesley Chapel:	FR026	2003	2003	66,010-		6.43-	
37	Fire dist - Wesley Chapel:	FR026	2004	2003	8,955-		.88-	
37	Fire dist - Wesley Chapel:	FR026	2004	2004	51,670-		3.87-	
37	Fire dist - Wesley Chapel:	FR026	2005	2004	7,344-		.55-	
37	Fire dist - Wesley Chapel:	FR026	2005	2005	82,348-		6.22-	
37	Fire dist - Wesley Chapel:	FR026	2006	2005	13,740-		3.67-	
37	Fire dist - Wesley Chapel:	FR026	2006	2006	80,851-		11.08-	
34	Fire Dist - Waxhaw.....	FR028	2006	2006	98,405		.58-	
Net Totals.....						206,253-	38.38-	
78	220130 Taxes Payable - Monroe.....	MN02000	2006	2006	22,480		124.14-	
78	220170 Taxes Payable - Wingate.....	MN03000	2006	2005	2,500		9.00-	
78	220150 Taxes Payable - Waxhaw.....	MN05000	2002	2001	300		.00	
78	220150 Taxes Payable - Waxhaw.....	MN05000	2002	2002	23,500		.00	
78	220150 Taxes Payable - Waxhaw.....	MN05000	2003	2002	11,010		.00	
78	220150 Taxes Payable - Waxhaw.....	MN05000	2003	2003	66,010		.00	

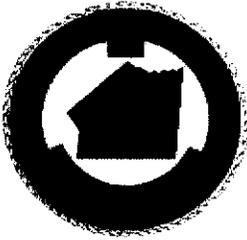
--- M O T O R V E H I C L E S Y S T E M ---

---Date--- --T
06/29/2007 12:3

Assessor Refund Register for the period 06/01/2007 to 06/30/2007

(Summary)

78	220150	Taxes Payable - Waxhaw.....	MN05000	2004	2003	8,955	.00	
78	220150	Taxes Payable - Waxhaw.....	MN05000	2004	2004	51,670	.00	
78	220150	Taxes Payable - Waxhaw.....	MN05000	2005	2004	7,344	.00	
78	220150	Taxes Payable - Waxhaw.....	MN05000	2005	2005	82,348	.00	
78	220150	Taxes Payable - Waxhaw.....	MN05000	2006	2005	24,940	34.73-	
78	220150	Taxes Payable - Waxhaw.....	MN05000	2006	2006	98,405	.00	
78	220110	Taxes Payable - Indian Trail..	MN06000	2006	2005	0	6.10-	
78	220140	Taxes Payable - Stallings....	MN07000	2006	2005	2,580	6.45-	
78	220160	Taxes Payable - Weddington...	MN08000	2006	2005	11,200	3.36-	
78	220135	Taxes Payable - Unionville...	MN09800	2006	2005	0	3.75-	
Net Totals.....						413,242	187.53-	
84	220000	NC State Interest.....	NC00000	2006	2005	0	.00	
84	220000	NC State Interest.....	NC00000	2006	2006	0	.00	
Net Totals.....						0	.00	
Net Grand Totals.....							2,321.86-	



UNION COUNTY
Office of the Tax Administrator **AGENDA ITEM**
Collections Division
500 N. Main St. Ste 119
P.O. Box 38
Monroe, NC 28111-0038

6/10d
704-283-3848
MEETING DATE 5/6/07 Fax

TO: Lynn West
Clerk to the Board

FROM: John Petoskey
Tax Administrator *Jep.*

DATE: July 11, 2007

SUBJECT: Departmental Monthly Report

The collector's monthly/year to date collections report for the month ending June 30, 2007 is attached for your information and review.

Should you desire additional information, I will do so at your request.

Attachment

JP/PH

JUNE 2007
PERCENTAGE FOR REGULAR AND MOTOR VEHICLE

JUNE 30, 2007 REGULAR TAX	2007	2006	2005	2004
BEGINNING CHARGE	286,831.96	96,109,645.88	86,075,111.36	75,828,229.96
DISCOVERIES				
FARM DEFERMENTS		19,145.18	21,732.04	19,571.34
RELEASES	(213.05)	(29,078.21)	(2,559.33)	(1,386.27)
TOTAL CHARGE	286,618.91	96,099,712.85	86,094,284.07	75,846,415.03
BEGINNING COLLECTIONS	15,706.91	93,962,411.46	85,566,708.54	75,581,853.19
COLLECTIONS	1,398.69	463,481.30	47,634.73	16,621.09
TOTAL COLLECTIONS	17,105.60	94,425,892.76	85,614,343.27	75,598,474.28
BALANCE OUTSTANDING	269,513.31	1,673,820.09	479,940.80	247,940.75
PERCENTAGE OF REGULAR	5.97%	98.26%	99.44%	99.67%
JUNE 30, 2007 MOTOR VEHICLE				
BEGINNING CHARGE	-	10,362,900.28	10,042,126.58	8,186,806.48
1ST M/V BILLING	1,000,159.25			
ASSESSOR RELEASE	(8,681.58)	(10,517.29)	(658.38)	
ASSESSOR REFUND		(1,276.17)	(296.15)	(200.04)
COLLECTOR RELEASE	(2,508.53)	(7,469.92)	(153.49)	
COLLECTOR REFUND	(78.97)	(2,868.37)	(98.27)	
REIMBURSEMENTS		7,036.36	493.01	185.36
ADJUSTMENTS	3.27	33.71	2.49	-
TOTAL CHARGE	988,893.44	10,347,838.60	10,041,415.79	8,186,791.80
BEGINNING COLLECTIONS	-	8,702,826.55	9,900,066.25	8,116,144.42
COLLECTIONS	271,175.01	693,143.07	12,439.95	1,072.96
TOTAL COLLECTIONS	271,175.01	9,395,969.62	9,912,506.20	8,117,217.38
BALANCE OUTSTANDING	717,718.43	951,868.98	128,909.59	69,574.42
PERCENTAGE OF MOTOR VEHICLE	27.42%	90.80%	98.72%	99.15%
OVERALL CHARGED	1,275,512.35	106,447,551.45	96,135,699.86	84,033,206.83
OVERALL COLLECTED	288,280.61	103,821,862.38	95,526,849.47	83,715,691.66
OVERALL PERCENTAGE	22.60%	97.53%	99.37%	99.62%

**JUNE 2007
PERCENTAGE FOR REGULAR AND MOTOR VEHICLE**

JUNE 30, 2007 REGULAR TAX	2003	2002	2001	2000
BEGINNING CHARGE	60,641,229.99	51,675,021.17	48,122,921.73	43,553,122.94
DISCOVERIES				
FARM DEFERMENTS	3,184.74			
RELEASES	(295.41)	(19.91)	(19.18)	
TOTAL CHARGE	60,644,119.32	51,675,001.26	48,122,902.55	43,553,122.94
BEGINNING COLLECTIONS	60,481,805.34	51,569,485.41	48,050,283.36	43,504,410.78
COLLECTIONS	3,172.82	1,044.41	379.95	18.69
TOTAL COLLECTIONS	60,484,978.16	51,570,529.82	48,050,663.31	43,504,429.47
BALANCE OUTSTANDING	159,141.16	104,471.44	72,239.24	48,693.47
PERCENTAGE OF REGULAR	99.74%	99.80%	99.85%	99.89%
JUNE 30, 2007 MOTOR VEHICLE				
BEGINNING CHARGE	8,553,653.96	-	-	-
1ST M/V BILLING		-	-	-
ASSESSOR RELEASE		-	-	-
ASSESSOR REFUND	(273.91)	-	-	-
COLLECTOR RELEASE		-	-	-
COLLECTOR REFUND		-	-	-
REIMBURSEMENTS	21.66	-	-	-
ADJUSTMENTS	(0.09)	-	-	-
TOTAL CHARGE	8,553,401.62	-	-	-
BEGINNING COLLECTIONS	8,487,846.35	-	-	-
COLLECTIONS	849.21	-	-	-
TOTAL COLLECTIONS	8,488,695.56	-	-	-
BALANCE OUTSTANDING	64,706.06	-	-	-
PERCENTAGE OF MOTOR VEHICLE	99.24%			
OVERALL CHARGED	69,197,520.94	51,675,001.26	48,122,902.55	43,553,122.94
OVERALL COLLECTED	68,973,673.72	51,570,529.82	48,050,663.31	43,504,429.47
OVERALL PERCENTAGE	99.68%	99.80%	99.85%	99.89%

**JUNE 2007
PERCENTAGE FOR REGULAR AND MOTOR VEHICLE**

JUNE 30, 2007 REGULAR TAX	1999	1998	1997	1996
BEGINNING CHARGE	40,736,859.08	37,964,034.52	35,335,292.87	33,436,497.93
DISCOVERIES				
FARM DEFERMENTS				
RELEASES				
TOTAL CHARGE	40,736,859.08	37,964,034.52	35,335,292.87	33,436,497.93
BEGINNING COLLECTIONS	40,695,209.93	37,934,455.89	35,315,706.04	33,421,033.01
COLLECTIONS	57.79		74.61	
TOTAL COLLECTIONS	40,695,267.72	37,934,455.89	35,315,780.65	33,421,033.01
BALANCE OUTSTANDING	41,591.36	29,578.63	19,512.22	15,464.92
PERCENTAGE OF REGULAR	99.90%	99.92%	99.94%	99.95%
JUNE 30, 2007 MOTOR VEHICLE				
BEGINNING CHARGE	-	-	-	-
1ST M/V BILLING	-	-	-	-
ASSESSOR RELEASE	-	-	-	-
ASSESSOR REFUND	-	-	-	-
COLLECTOR RELEASE	-	-	-	-
COLLECTOR REFUND	-	-	-	-
REIMBURSEMENTS	-	-	-	-
ADJUSTMENTS	-	-	-	-
TOTAL CHARGE	-	-	-	-
BEGINNING COLLECTIONS	-	-	-	-
COLLECTIONS	-	-	-	-
TOTAL COLLECTIONS	-	-	-	-
BALANCE OUTSTANDING	-	-	-	-
PERCENTAGE OF MOTOR VEHICLE				
OVERALL CHARGED	40,736,859.08	37,964,034.52	35,335,292.87	33,436,497.93
OVERALL COLLECTED	40,695,267.72	37,934,455.89	35,315,780.65	33,421,033.01
OVERALL PERCENTAGE	99.90%	99.92%	99.94%	99.95%

LEASES JULY 2007

Name	Release #	Real Value	Pers. Value	UCGT	HembyGT	WesleyGT	FairviewF	LanesCr	To
MULLIS CONNIE G & HUSBAND J	2850		48,590	90.28					90
MULLIS CONNIE G & HUSBAND J	2851		48,590				45.09		45
LOPEZ MANUEL	2852	10,690		68.06				5.00	73
BROADWAY MAURICÉ E & CARO	2853		13,146	83.70	6.10				89
GORDON WALTER L	47	709,310		3,688.47		88.06			3,776
GORDON WALTER L	306	579,310		3,688.47		88.06			3,776
		1,299,310	110,326	7,618.98	6.10	176.12	45.09	5.00	7,851

0103
 MEETING DATE 8/6/07



UNION COUNTY AGENDA ITEM
Office of the Tax Administrator # 6/10/07
300 N. Main Street
P.O. Box 97
Monroe, NC 28111-0097

704-283-3746
MEETING DATE 8/16/07
704-283-3616 Fax
John C. Petoskey
Tax Administrator

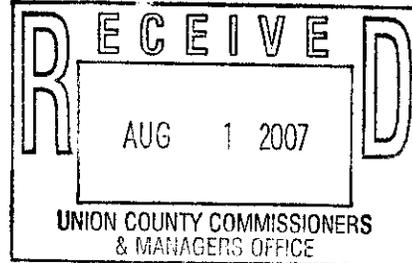
MEMORANDUM

TO: Richard Black
Central Administration

FROM: John C. Petoskey
Tax Administrator

DATE: Tuesday, July 31, 2007

RE: First Motor Vehicle Release/Refund Register



I hereby certify the following releases/refunds that were made during the period of 07/1/2007 – 07/31/2007. The releases/refunds represent releases/refunds of both monthly and annual vehicle values and taxes. Should you have any questions, please call.

JCP:tm

Assessor Release Register for the period 07/01/2007 to 07/31/2007

(Summary)

Bdg No	Description	Key	Bill Rate		Total		
			Year	Year	Value	Tax	Int
10	County	CN99999	2004	2004	2,600	13.65-	3.07-
10	County	CN99999	2005	2004	0	189.89-	25.10-
10	County	CN99999	2005	2005	17,120	79.89-	9.40-
10	County	CN99999	2006	2004	20,000	105.00-	10.00-
10	County	CN99999	2006	2005	158,391	1,127.78-	78.89-
10	County	CN99999	2006	2006	384,247	2,446.51-	83.11-
10	County	CN99999	2007	2005	0	128.20-	.00
10	County	CN99999	2007	2006	1,544,271	9,912.86-	.00
Net Totals					2,126,629	14,003.78-	209.57-
76	School dist - Monroe	SC100	2005	2004	0	25.32-	3.19-
76	School dist - Monroe	SC100	2005	2005	17,120	9.98-	1.11-
76	School dist - Monroe	SC100	2006	2005	2,610	1.82-	.25-
76	School dist - Monroe	SC100	2007	2005	0	12.65-	.00
77	School dist - County	SC999	2004	2004	2,600	1.82-	.32-
77	School dist - County	SC999	2006	2004	20,000	14.00-	1.38-
77	School dist - County	SC999	2006	2005	155,781	139.17-	9.76-
77	School dist - County	SC999	2007	2005	0	3.39-	.00
Net Totals					198,111	208.15-	16.01-
32	Fire Dist - Springs	FR015	2006	2006	3,330	1.04-	.09-
32	Fire Dist - Springs	FR015	2007	2006	80,000	25.34-	.00
39	Fire Dist - Stallings	FR020	2006	2006	31,290	13.90-	.51-
39	Fire Dist - Stallings	FR020	2007	2006	107,544	47.76-	.00
38	Fire dist - Hemby Bridge	FR023	2006	2005	0	1.95-	.06-
38	Fire dist - Hemby Bridge	FR023	2006	2006	27,140	12.59-	.37-
38	Fire dist - Hemby Bridge	FR023	2007	2005	0	1.95-	.00
38	Fire dist - Hemby Bridge	FR023	2007	2006	194,592	90.28-	.00
37	Fire dist - Wesley Chapel	FR026	2006	2005	0	1.00-	.02-
37	Fire dist - Wesley Chapel	FR026	2007	2006	74,104	11.27-	.00
34	Fire Dist - Waxhaw	FR028	2007	2006	65,438	27.04-	.00
Net Totals					583,438	234.12-	1.05-
78	220125 Taxes Payable - Marvin	MN01000	2006	2005	0	3.45-	.07-
78	220125 Taxes Payable - Marvin	MN01000	2007	2006	65,944	26.55-	.00
78	220130 Taxes Payable - Monroe	MN02000	2005	2004	0	181.94-	24.03-
78	220130 Taxes Payable - Monroe	MN02000	2005	2005	17,120	74.90-	8.78-
78	220130 Taxes Payable - Monroe	MN02000	2006	2005	2,610	159.19-	7.53-
78	220130 Taxes Payable - Monroe	MN02000	2006	2006	152,207	841.73-	25.49-
78	220130 Taxes Payable - Monroe	MN02000	2007	2005	0	92.65-	.00
78	220130 Taxes Payable - Monroe	MN02000	2007	2006	196,485	1,071.38-	.00

6/10/07
MEETING DATE 8/6/07

Assessor Release Register for the period 07/01/2007 to 07/31/2007

(Summary)

78 220170	Taxes Payable - Wingate.....	MN03000	2006	2005	0	11.80-	.32-
78 220170	Taxes Payable - Wingate.....	MN03000	2007	2006	43,675	165.96-	.00
78 220120	Taxes Payable - Marshville...	MN04000	2006	2006	3,790	14.40-	.51-
78 220150	Taxes Payable - Waxhaw.....	MN05000	2004	2004	2,600	8.84-	2.14-
78 220150	Taxes Payable - Waxhaw.....	MN05000	2007	2006	64,240	218.42-	.00
78 220110	Taxes Payable - Indian Trail..	MN06000	2006	2005	0	3.87-	.09-
78 220110	Taxes Payable - Indian Trail..	MN06000	2006	2006	36,770	36.77-	1.54-
78 220110	Taxes Payable - Indian Trail..	MN06000	2007	2005	0	3.87-	.00
78 220110	Taxes Payable - Indian Trail..	MN06000	2007	2006	280,553	280.54-	.00
78 220140	Taxes Payable - Stallings....	MN07000	2006	2006	13,750	34.38-	.95-
78 220140	Taxes Payable - Stallings....	MN07000	2007	2006	28,023	70.06-	.00
78 220160	Taxes Payable - Weddington...	MN08000	2007	2006	47,071	14.13-	.00
78 220115	Taxes Payable - Lake Park....	MN09000	2007	2006	19,145	44.03-	.00
78 220175	Taxes Payable - Fairview.....	MN09300	2007	2006	56,098	11.22-	.00
78 220145	Taxes Payable - Hemby Bridge..	MN09500	2006	2006	7,140	2.14-	.08-
78 220145	Taxes Payable - Hemby Bridge..	MN09500	2007	2006	4,791-	1.44	.00
78 220165	Taxes Payable - Wesley Chapel:	MN09700	2007	2006	20,000	4.00-	.00
78 220135	Taxes Payable - Unionville...	MN09800	2007	2006	48,270	11.25-	.00
78 220155	Taxes Payable - Mnrl Sprngs..	MN09900	2006	2006	3,330	.90-	.09-
78 220155	Taxes Payable - Mnrl Sprngs..	MN09900	2007	2006	20,000	5.40-	.00
	Net Totals.....				1,124,030	3,392.33-	71.62-
84 220000	NC State Interest.....	NC00000	2005	2004	0	.00	11.92-
84 220000	NC State Interest.....	NC00000	2005	2005	0	.00	4.94-
84 220000	NC State Interest.....	NC00000	2006	2004	0	.00	3.57-
84 220000	NC State Interest.....	NC00000	2006	2005	0	.00	43.52-
84 220000	NC State Interest.....	NC00000	2006	2006	0	.00	102.12-
	Net Totals.....				0	.00	166.07-
	Net Grand Totals.....					17,838.38-	464.32-

Assessor Refund Register for the period 07/01/2007 to 07/31/2007

(Summary)

---Bdg No---	-----Description-----	--Key--	Bill Rate		--Value--	-----Total-----		
			Year	Year		---Tax---	---Int---	
10	County.....	CN99999	2005	2004	0	229.33-		.00
10	County.....	CN99999	2006	2005	55,300	348.02-		.00
10	County.....	CN99999	2006	2006	97,350	626.08-		2.46-
10	County.....	CN99999	2007	2006	16,405	126.02-		.00
Net Totals.....					169,055	1,329.45-		2.46-
76	School dist - Monroe.....	SC100	2005	2004	0	26.76-		.00
76	School dist - Monroe.....	SC100	2006	2005	19,500	15.05-		.00
77	School dist - County.....	SC999	2005	2004	0	3.79-		.00
77	School dist - County.....	SC999	2006	2005	35,800	28.42-		.00
Net Totals.....					55,300	74.02-		.00
39	Fire Dist - Stallings....	FR020	2006	2006	20,000	8.88-		.00
38	Fire dist - Hemby Bridge..	FR023	2006	2005	14,420	7.78-		.00
38	Fire dist - Hemby Bridge..	FR023	2007	2006	16,405	9.19-		.00
37	Fire dist - Wesley Chapel:	FR026	2006	2006	36,500	5.66-		.00
Net Totals.....					87,325	31.51-		.00
78	220125 Taxes Payable - Marvin.....	MN01000	2006	2006	19,200	9.61-		.00
78	220130 Taxes Payable - Monroe.....	MN02000	2005	2004	0	192.41-		.00
78	220130 Taxes Payable - Monroe.....	MN02000	2006	2005	19,500	105.38-		.00
78	220130 Taxes Payable - Monroe.....	MN02000	2006	2006	25,900	147.27-		2.23-
78	220150 Taxes Payable - Waxhaw.....	MN05000	2005	2004	0	18.44-		.00
78	220110 Taxes Payable - Indian Trail..	MN06000	2006	2005	21,380	20.96-		.00
78	220110 Taxes Payable - Indian Trail..	MN06000	2006	2006	37,300	38.28-		.00
78	220115 Taxes Payable - Lake Park....	MN09000	2007	2006	16,405	37.73-		.00
Net Totals.....					139,685	570.08-		2.23-
84	220000 NC State Interest.....	NC00000	2005	2004	0	.00		.00
84	220000 NC State Interest.....	NC00000	2006	2005	0	.00		.00
84	220000 NC State Interest.....	NC00000	2006	2006	0	.00		4.01-
Net Totals.....					0	.00		4.01-
Net Grand Totals.....						2,005.06-		8.70-

MEETING DATE 8/16/07
6/1/09
6/1/09

AGENDA ITEM

#

6/11a

MEETING DATE

8/6/07

MOTOR VEHICLE TAX REFUNDS
for JUNE 2007

Approval of Board of County Commissioners not required:

Collector Refunds for JUNE 2007	3,541.22
(adjustments to JUNE collector refund register)	(760.67)

To be approved by Board of County Commissioners on 8-6-07
(to be submitted by Assessor's Office)

Assessor Refunds for JUNE 2007	2,325.53
(adjustments to JUNE assessor refund register)	(607.76)

Approval requested for overpayments:

Overpayments for JUNE 2007	<u>4,704.32</u>
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Total to be refunded for JUNE 2007	<u><u>9,202.64</u></u>
------------------------------------	------------------------

Debbie Cox

1-12-07

6/11/07
MEETING DATE 8/6/07

Corrected JUNE 2007 Releases				#
YEAR/DESCRIPTION	as Reported and Approved	as corrected	Difference	MEETING DATE
2007	7/2/2007	8/6/2007		
UCGT	66.73	66.73	-	
UCLL	14.17	14.17	-	
CSGT - 999	8.41	8.41	-	
CS LL - 999	1.79	1.79	-	
NEW SALEM FIRE FEE	121.95	121.95	-	
TOTAL - 2007	213.05	213.05	-	
2006				
UCGT	26,089.23	26,089.23	-	
UCLL	2,426.70	2,426.70	-	
CSGT - 999	64.39	64.39	-	
CS LL - 999	5.35	5.35	-	
SPRINGS	6.98	6.98	-	
SPRINGS LL	0.58	0.58	-	
STALLINGS GT	3.80	3.80	-	
STALLINGS LL	0.38	0.38	-	
WESLEY CH GT	8.72	8.72	-	
WESLEY CH LL	0.87	0.87	-	
	93.43	93.43	-	
LANES CREEK FIRE FEE	100.00	100.00	-	
NEW SALEM FIRE FEE	133.20	133.20	-	
STACK FIRE FEE	97.10	97.10	-	
WINGATE FIRE FEE	47.48	47.48	-	
TOTAL - 2006	29,078.21	29,078.21	-	
2005				
UCGT	2,089.31	1,454.99	(634.32)	
UCLL	27.91	27.91	-	
CSGT - 999	261.18	181.89	(79.29)	
CS LL - 999	3.48	3.48	-	
STALLINGS GT	44.18	-	(44.18)	
BAKERS FIRE FEE	83.52	83.52	-	
STACK FIRE FEE	49.75	49.75	-	
TOTAL - 2005	2,559.33	1,801.54	(757.79)	
2004				
UCGT	1,215.80	1,215.80	-	
UCLL	3.23	3.23	-	
CSGT - 999	162.13	162.13	-	
CS LL - 999	0.43	0.43	-	
BAKERS FIRE FEE	4.68	4.68	-	
TOTAL - 2004	1,386.27	1,386.27	-	
2003				
UCGT	253.49	253.49	-	
UCLL	3.39	3.39	-	
CSGT - 999	33.49	33.49	-	

Corrected JUNE 2007 Releases				
YEAR/DESCRIPTION	as Reported and Approved	as corrected	Difference	
CS LL - 999	0.45	0.45	-	
BAKERS FIRE FEE	4.59	4.59	-	
TOTAL - 2003	295.41	295.41	-	
2002				
UCGT	13.55	13.55	-	
CSGT - 999	2.02	2.02	-	
BAKERS FIRE FEE	4.34	4.34	-	
TOTAL - 2002	19.91	19.91	-	
2001				
UCGT	13.55	13.55	-	
CSGT - 999	2.02	2.02	-	
BAKERS FIRE FEE	3.61	3.61	-	
TOTAL - 2001	19.18	19.18	-	
Grand Totals - All Years	33,571.36	32,813.57	(757.79)	



UNION COUNTY FINANCE DEPARTMENT

AGENDA ITEM

6/11c

MEETING DATE 8/6/07

500 N MAIN STREET, SUITE 901, MONROE, NORTH CAROLINA 28112
PHONE: (704) 283-3813 FAX: (704) 225-0664

July 25, 2007

To: Board of Commissioners

From: Finance

Re: Approval to write off bad check

The County has accumulated 8 checks that have been returned to us due to non-sufficient funds. We are requesting that the Board of Commissioners give us approval to write off these checks. The Finance, Health, Library and Personnel have tried to collect these funds by phone calls and letters. The total checks to be written off will be \$353.10.

Thank you for your attention on this matter.

UNION COUNTY
BOARD OF COMMISSIONERS

ACTION AGENDA ITEM ABSTRACT

Meeting Date: August 6, 2007

Action Agenda Item No. 6/12a
(Central Admin. use only)

SUBJECT: ACCEPTANCE OF WIC MINI-GRANT

DEPARTMENT: HEALTH

PUBLIC HEARING: No

ATTACHMENT(S):
Grant Acceptance Letter

INFORMATION CONTACT:
Jenny Kirksey

TELEPHONE NUMBERS:
704-296-4801

DEPARTMENT'S RECOMMENDED ACTION: Accept \$1,892.06 mini-grant from the State for the WIC Program.

BACKGROUND: The WIC Program has been awarded a \$1,892.06 mini-grant from the State for the purchase of equipment. The equipment to be purchased has been approved, and these funds must be spent within the first quarter of the FY 07/08 fiscal year.

FINANCIAL IMPACT: No financial impact to the county.

Increase revenue:
10451152-4316-13602 \$1,892.06

Increase expenditures:
10551152-5260-13602 \$1,764.75
10551152-5290-13602 \$ 127.31

Legal Dept. Comments if applicable: _____

Finance Dept. Comments if applicable: _____

Manager Recommendation:



**North Carolina Department of Health and Human Services
 Division of Public Health – Women's & Children's Health Section**
 1914 Mail Service Center • Raleigh, North Carolina 27699-1914
 Tel 919-707-5800 • Fax 919-870-4818

Michael F. Easley, Governor

Carmen Hooker Odom, Secretary

June 27, 2007

Vivian Hansen, WIC Director
 Union County Health Department
 1224 W. Roosevelt Blvd.
 Monroe, NC 28110

Dear Ms. Hansen:

Congratulations! Your Special WIC Mini-Grant application has been reviewed and approved in the amount of \$1,892.06. The following items were approved:

Description	Quantity	Price per Item	Total
Base cabinet 36" oak unfinished	1	\$115.00	\$115.00
Drawer cabinet	1	\$120.00	\$120.00
Oak end panel	1	\$9.98	\$9.98
Kick plate 3" filler for cabinets	2	\$7.98	\$15.96
Wood finish stain	1	\$5.87	\$5.87
Clear finish polyurethane	1	\$8.87	\$8.87
Fine Grade sandpaper	1	\$3.97	\$3.97
Countertop	1	\$56.00	\$56.00
End cap	1	\$11.48	\$11.48
Back splash	1	\$16.97	\$16.97
Cabinet hardware ¹	1	\$18.00	\$18.00
4' shelf unit	1	\$200.00	\$200.00
23" Samsung flat panel TV	1	\$799.99	\$799.99
Samsung Up Convert DVD player	1	\$99.99	\$99.99
Sanus wall mount	1	\$99.99	\$99.99
Rocket Cable	1	\$64.99	\$64.99
Floor lamp	1	\$200.00	\$200.00
Shelf 18" wide	1	\$25.00	\$25.00
Shelf Brackets	2	\$10.00	\$20.00
TOTAL			\$1,892.06

This memo serves as your approval to purchase the equipment listed above. As with all equipment, the following requirements apply:

1. If the purchase price exceeds the amount approved, you must request approval of the excess before incurring the cost.
2. Equipment purchased with WIC funds must be used for the WIC Program alone.

3. Submit a copy of the invoice for equipment to the Nutrition Services Branch (Attention: Gennell Morgan) at the time you report the expenditure. The invoice should indicate the actual cost of each item including discount and sales tax and any serial or identification number.

We will be increasing your client services budget within the next week. Should some of the activities fall under the other program areas (Nutrition Education, General Administration, or Breastfeeding), please submit a budget revision no later than August 29, 2007 to move funds accordingly. A revised Agreement Addendum will be sent separately. Please remember that these funds must be spent by September 30, 2007 and reported on (or before) your October expenditure report for the service month of September. Agencies are responsible for ordering and paying for all items included in this approval memo.

We are pleased to be able to offer your agency these additional funds and hope that they will enhance your local WIC operations. Should you need any additional assistance with this mini-grant process, please contact your Regional Nutrition Consultant.

Sincerely,



Kimberly S. Lovenduski, MPA
Operations Manager
Nutrition Services Branch

**UNION COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT

Meeting Date: 08/06/2007

Action Agenda Item No. 6/13670
(Central Admin. use only)

SUBJECT: Refund of excise stamp to Jarvis Law Group, PLLC, in the amount of \$752.00. Jarvis Law Group, PLLC, filed a deed in the Register of Deeds office that had a typographical error that resulted in an excise tax overpayment.

DEPARTMENT: Register of Deeds

PUBLIC HEARING: No

ATTACHMENT(S):
See letter and deed from the Jarvis Law Group, PLLC.

INFORMATION CONTACT:
Crystal D. Crump

TELEPHONE NUMBERS:
704-283-3794

DEPARTMENT'S RECOMMENDED ACTION: Refund Jarvis Law Group, PLLC, in the amount of \$752.00 for excise tax overpayment.

BACKGROUND:

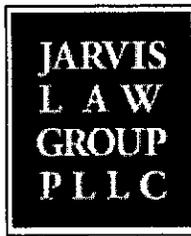
FINANCIAL IMPACT: This amount will need to come out of budget code 10424000-4160.

Legal Dept. Comments if applicable: _____

Finance Dept. Comments if applicable: _____

Manager Recommendation: _____

North Charlotte • Speedway Office
125 Floyd Smith Dr., Ste. 100
Charlotte, NC 28262
P 704.548.5385 • F 704.548.3938



Lisa F. Jarvis
Allen R. Starrett

South Charlotte • Ballantyne Office
7825 Ballantyne Commons Pkwy., Ste. 230
Charlotte, NC 28277
P 704.544.6303 • F 866.209.3745

www.jarvislawgroup.com

Crystal Crump, Register of Deeds
Union County Government Center
500 N Main St.
Room 205, 2nd Floor
Monroe, NC 28112

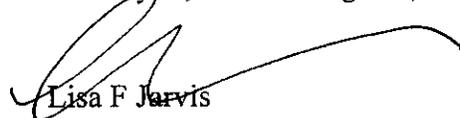
Dear Ms. Crump:

I write to you to request a refund of \$752.00 for a tax overpayment made to your office that resulted from a typographical error.

Please find the enclosed copy of the settlement statement, the original Warranty Deed for re-recording and a check for \$23.00 payable to Union County ROD. This is in regards to the recent sale and purchase of 2929 Twelve Mile Creek Road in Matthews, NC. On line number 1203, you will notice a tax line item of \$6,790.00 to be paid to the Union County Register of Deeds. We submitted a check for this amount to your office before we discovered that a mistake had been made on our end. If you will note the contract sales price of \$3,019,000.00, then you will realize that the correct tax amount due and paid should have been \$6,038.00.

We are requesting that you refund the \$752.00. We have included a check for \$23.00 for the re-recording fees.

Thank you, and best regards,


Lisa F Jarvis
Attorney at Law

**UNION COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT

Meeting Date: 08/06/2007

Action Agenda Item No. 6/13(a)(2)
(Central Admin. use only)

SUBJECT: Refund of excise stamp to Iredell County Register of Deeds in the amount of \$4,046.00. Tenika Rudisell Hall, Esquire, filed a deed in Union County when it should have been filed in Iredell County. Ms. Hall has asked that the refund be made payable to the Iredell County Register of Deeds to avoid further delay.

DEPARTMENT: Register of Deeds **PUBLIC HEARING:** No

ATTACHMENT(S):
See attached letter and copy of the deed indicating the amount of the excise stamp paid in Union County.

INFORMATION CONTACT:
Crystal D. Crump

TELEPHONE NUMBERS:
704-283-3794

DEPARTMENT'S RECOMMENDED ACTION: Refund Iredell County Register of Deeds in the amount of \$4,046.00 on behalf of Tenika Rudisell Hall, Esquire, for recording the deed in the wrong county.

BACKGROUND:

FINANCIAL IMPACT: This amount will need to come out of budget code 10424000-4160.

Legal Dept. Comments if applicable: _____

Finance Dept. Comments if applicable: _____

Manager Recommendation: _____



Tenika Rudisell Hall, Esquire
706 McGill Place
Durham, North Carolina 27701
Phone: (919) 724-6610
E-Mail: tenikah@gmail.com

July 2, 2007

Crystal Crump
Register of Deeds
P O Box 248
Monroe, NC 28111

Re: Millenium/Deborah Roberson

Dear Ms. Crump,

My office mistakenly recorded a deed in Book 4598, at Page 64 of the Union County Registry that should have been recorded in Iredell County. Could you please return the excise tax, which was \$4,046, the original deed and deed of trust to me at:

706 McGill Place, Durham, NC 27701.

Thank you so much for catching my error and e-mailing me. Should you have any questions or require any additional information, please do not hesitate to contact my office.

Kindest Regards,

A handwritten signature in cursive script that reads "Tenika R. Hall".

Tenika R. Hall
Attorney at Law

**UNION COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT

Meeting Date: August 6, 2007

Action Agenda Item No. *6/14a*

(Central Admin. use only)

SUBJECT: Restructure: Planning Department & Zoning Administration

DEPARTMENT: Planning

PUBLIC HEARING: No

ATTACHMENT(S):

Memo: Richard Black

Job Descriptions:

1. Planner
2. Zoning Investigator

Organization Charts

1. Current
2. Revised

INFORMATION CONTACT:

Richard Black
Mark Watson

TELEPHONE NUMBERS:

704.252.2580
704.283.3869

DEPARTMENT'S RECOMMENDED ACTION:

Approved the re-distribution of responsibilities and duties of the Land Use Administrator as outlined by the following actions:

1. Add the following position classifications to the Union County Classification Plan and Pay Plan:

Planner, Pay Grade 66

Zoning Investigator, Pay Grade 62

2. Approve the Position Reclassification and FTE Transfer of the current "Land Use Administrator" classification, Pay Grade 71 (1 FTE in Inspections Department allocation) TO a "Planner" classification, Pay Grade 66, (1 FTE in the Planning Department Allocation)

3. Approve the addition of a Zoning Investigator (.5 FTE) to the Inspections Department position allocation.

NOTE: The re-distributed duties of the Land Use Administrator will be performed by 1) the Senior Planner for Land Use and Public Facilities Planning and 2) the Zoning Investigator.

BACKGROUND: Current FTE allocation:

Zoning Administration 1 FTE = 40 hours
- Land Use Administrator

Planning Department 5 FTE = 200 hours
- Planning Division Director
- Senior Planner / Zoning and Land Use
- Senior Planner / Land Use and Public Facilities Planning
- Administrative Assistant
- Secretary

Total Hours: 6 FTE = 240 Hours

Requested Re-Allocation

Zoning Administration .5 FTE = 20 hours
- Zoning Investigator

Planning Department 6 FTE = 240 hours
- Planning Division Director
- Senior Planner / Zoning and Land Use
- Senior Planner / Land Use and Public Facilities Planning
- Planner
- Administrative Assistant
- Secretary

Total Hours: 6.5 FTE = 260 Hours

FINANCIAL IMPACT: NOTE: NO new funding allocation is required in conjunction with these requested actions. This is a reallocation of resources.

The addition of .5 FTE (20 hours) is allocated to a part-time position without benefits.

Legal Dept. Comments if applicable: _____

Finance Dept. Comments if applicable: _____

Manager Recommendation: _____



OFFICE OF THE COMMISSIONERS AND MANAGER

500 N. Main St., Room 921 • Monroe, NC 28112 • Phone (704) 283-3810 • Fax (704) 282-0121

To: Union County Board of Commissioners

From: Richard Black, Interim County Manager / Planning Director

Date: 8/2/2007

RE: Restructure Planning Department and Zoning Administration

Last year the Board of Commissioners adopted the Adequate Public Facilities section (APFO) of the Land Use Ordinance and along with that adoption created a new position to review development applications for compliance with this new section. In addition to APFO duties, this new position (Senior Planner – Land Use/Public Facilities Planning) is responsible for long range planning, such as the County's Comprehensive Plan. We held off on filling the position initially so we could evaluate the type and amount of work this new section of the ordinance would create. After almost one year it is apparent that while the new APFO section does create additional duties and requires a large amount of staff time to enforce it, **by itself**, does not warrant the addition of new staff. The extra duties, however, do create a work load on existing staff to warrant the additional positions.

Currently, the office of the Land Use Administrator handles the duties of the APFO. This office is staffed by one person that handles the above duties plus those which are assigned per the job description. The main need in the Land Use Administrator's office is a zoning investigator position that can respond to zoning complaints by visiting the site and documenting what is there and whether it is a violation. This function could be handled by a part-time position.

The position of the Senior Planner – Zoning & Land Use currently handles rezonings, text amendments, and subdivision review process. Since most of the time of the Senior Planner-Zoning & Land Use is spent dealing with the above duties there is little to no time for long range planning activities. This need could be addressed by a Planner position that could help lighten the load of the above duties and could also handle some long range planning duties.

In light of the evaluation of the APFO position and the above mentioned needs I am proposing the following restructuring of the positions in the Planning Department. The existing Land Use Administrator position will be reclassified from its current grade to that of a Senior Planner. This position will continue to perform its assigned duties and will add the APFO duties permanently. The position will be called Senior Planner – Land Use Administrator and will replace the Senior Planner position created solely to handle the APFO. The current Land Use Administrator position will be divided into two new positions: a Planner and a Zoning Investigator. The Planner will be a full-time position. The Zoning Investigator position will be a part-time, no benefits position. As you can see this reorganization increases staff in areas where they are needed, but these new positions do not increase the overall budget of the Planning Department, Inspections Department, or the County.

Planner

UNION COUNTY JOB DESCRIPTION

JOB TITLE: PLANNER PLANNING

GENERAL STATEMENT OF JOB

Under general supervision, performs professional planning and research work in the County Planning Department. Work involves application of land use ordinances such as those pertaining to subdivisions, zoning, and others. Employee must exercise considerable tact and courtesy in frequent contacts with County, municipal, state and federal officials, and private citizens. Reports to the Senior Planner - Land/Use & Public Facilities Division. Also dotted line reports to Sr. Planner – Zoning and Land/Use.

SPECIFIC DUTIES AND RESPONSIBILITIES

ESSENTIAL JOB FUNCTIONS

Responds to data requests from public and private entities.

Performs comprehensive long-range planning (i.e. updates subdivision maps and corresponding data, rezoning data, and develops alternative land use policies, goals, and objectives).

Researches plat and site histories to determine compliance with subdivision standards.

Assists with the rezoning, subdivision, and ordinance amending processes.

Coordinates with the EMS and Communications Department efforts to establish/maintain a Master Street Address Guide (MSAG) for enhanced 911 system.

Provides continuous maintenance to the road naming and house numbering system.

Serves as County's liaison to the Census Bureau.

Assists with demographic data research, publication, and distribution; answers census questions for published data.

Assists with rezoning applications, post property, and gathers pertinent site data.

Notifies Inspections Department about rezoning and updates the official zoning maps.

Monitors Federal, State, regional, and private sector policies that affect growth in Union County.

Assists with identifying existing land use and public facilities; prepares graphics showing physical location and attributes data.

Planner

Plans for transportation (i.e. provides information about thoroughfare plans, new road alignments, etc).

Attends planning board meetings, may record minutes and prepare minutes for final documentation.

Serves on various local and regional committees.

Provides any other assistance deemed necessary by the Sr. Planner as requested.

ADDITIONAL JOB FUNCTIONS

Performs other related work as required.

MINIMUM TRAINING AND EXPERIENCE

Graduation from a four year college or university with a degree in planning or a related field, and 1 to 3 years of experience in urban planning, or related at the local government level; or any equivalent combination of training and experience which provides the required skills, knowledge and testing.

MINIMUM QUALIFICATIONS OR STANDARDS REQUIRED TO PERFORM ESSENTIAL JOB FUNCTIONS

Physical Requirements: Must be physically able to operate a variety of machinery and equipment including computers, typewriters, calculators, drafting instruments, etc. Must be able to exert up to 30 pounds of force occasionally, and/or a negligible amount of force constantly to move objects. Physical demand requirements are in excess of those for Sedentary Work. Light Work usually requires walking or standing to a significant degree. However, if the use of arm and/or leg controls requires exertion of forces greater than that for Sedentary Work and the worker sits most of the time, the job is rated for Light Work.

Data Conception: Requires the ability to compare and/or judge the readily observable, functional, structural or compositional characteristics (whether similar or divergent from obvious standards) of data, people or things.

Interpersonal Communication: Requires the ability of speaking and/or signaling people to convey or exchange information. Includes giving instructions, assignments or directions to subordinates or assistants.

Language Ability: Requires the ability to read a variety of reports, correspondence, real property appraisals and assessments, maps, deeds, surveys and permits, etc. Requires the ability to prepare correspondence, reports, permits, forms, maps, etc., using prescribed formats and conforming to all rules of punctuation, grammar, diction, and style. Requires the ability to speak before groups of people with poise, voice control and confidence.

Intelligence: Requires the ability to apply principles of logical or scientific thinking to define problems, collect data, establish facts, and draw valid conclusions; to interpret a variety of technical instructions in mathematical or diagrammatic form; and to deal with several abstract and concrete variables.

Verbal Aptitude: Requires the ability to record and deliver information, to explain procedures, to follow oral and written instructions. Must be able to communicate effectively and efficiently in a variety of technical or professional languages including engineering, legal, and mapping terminology.

Planner

Numerical Aptitude: Requires the ability to utilize mathematical formulas; to add and subtract; multiply and divide; utilize decimals and percentages; understand and apply the theories of algebra, geometry, and statistical inference.

Form/Spatial Aptitude: Requires the ability to inspect items for proper length, width and shape.

Motor Coordination: Requires the ability to coordinate hands and eyes rapidly and accurately in using office equipment.

Manual Dexterity: Requires the ability to handle a variety of items such as office equipment. Must have minimal levels of eye/hand/foot coordination.

Color Discrimination: Requires the ability to differentiate between colors and shades of color.

Interpersonal Temperament: Requires the ability to deal with people beyond giving and receiving instructions. Must be adaptable to performing under stress and when confronted with persons acting under stress.

Physical Communication: Requires the ability to talk and hear: (Talking: expressing or exchanging ideas by means of spoken words. Hearing: perceiving nature of sounds by ear.) Must be able to communicate via a telephone.

UNION COUNTY JOB DESCRIPTION

JOB TITLE: ZONING INVESTIGATOR

GENERAL STATEMENT OF JOB

Under general supervision primary responsibilities involve the enforcement of the Union County Land Use Ordinance. Investigative work includes reviewing, coordinating and inspecting complaints of violations of the Land Use Ordinance. Reports to the Sr. Planner – Land Use & Public Facilities Division.

SPECIFIC DUTIES AND RESPONSIBILITIES

ESSENTIAL JOB FUNCTIONS

Investigates alleged violations of the Land Use Ordinance by interviewing the public, researching pertinent records, interpreting relevant code or ordinance sections, inspecting the alleged violations, photographing properties, and preparing staff reports.

Attempts to obtain voluntary compliance in cases of violation; provides precise verbal or written notification of steps necessary to comply with the relevant codes or ordinances.

Interpret and enforce land-use codes and ordinances by conducting investigations to obtain evidence necessary for the issuance of criminal complaints.

Appears as a witness in Court enforcement proceedings.

Conducts periodic inspections of premises operating under Special Use Permits or Variances and obtains compliance with the conditions of such Special Use Permits and Variances.

Places Special Use and Rezoning advertisement signs on affected properties.

Coordinates closely with Sr. Planner – Land Use & Public Facilities Division on zoning violations.

MINIMUM TRAINING AND EXPERIENCE

High school diploma or GED plus three to four years of experience in investigative work, insurance, code enforcement, law enforcement, or zoning enforcement or related; or any equivalent combination of training and experience which provides the required skills, knowledge and testing.

Zoning Investigator

SPECIAL REQUIREMENTS

Must have or have the ability to obtain a Zoning Enforcement Officer Certification from the North Carolina Department of Insurance.

Must possess a valid North Carolina drivers' license.

MINIMUM QUALIFICATIONS OR STANDARDS REQUIRED TO PERFORM ESSENTIAL JOB FUNCTIONS

Knowledge, Skills, and Abilities: Thorough knowledge of the County Zoning Ordinance and various environmental codes; ability to read and interpret blueprints, site plans and designs and to ensure compliance with appropriate ordinances and codes; thorough knowledge of legal procedures related to the enforcement of ordinances and codes; ability to establish and maintain effective working relationships with County officials, associates and the general public; ability to enforce ordinances and regulations with firmness, tact and impartiality.

Physical Requirements: Must be physically able to operate a variety of office equipment including computers, copiers, calculators, pens, pencils, telephones, fax machines, etc. Must be physically able to operate a motor vehicle. Must be physically able to operate tools including tape measurers, measuring wheel, various scales, staplers, etc. Must be able to exert a negligible amount of force constantly, and up to 25 pounds of force occasionally, to move objects. Light Work usually requires walking or standing to a significant degree. However, if the use of arm and/or leg controls requires exertion of forces greater than that for Sedentary Work and the worker sits most of the time, the job is rated for Light Work.

Data Conception: Requires the ability to compare and/or judge the readily observable, functional, structural or compositional characteristics (whether similar or divergent from obvious standards) of data, people or things.

Interpersonal Communication: Requires the ability of speaking and/or signaling people to convey or exchange information. Includes giving instructions, assignments or directions to subordinates or assistants. Must be able to speak confidently in front of large groups of people.

Language Ability: Requires the ability to read a variety of reports, correspondence, purchase orders, time-off request forms, progress reports, invoices, computer manuals, training manuals, etc. Requires the ability to prepare correspondence, reports, expense accounts, inter-departmental memos, budget reports, progress reports, etc., using prescribed formats and conforming to all rules of punctuation, grammar, diction, and style.

Intelligence: Requires the ability to apply principles of logical or scientific thinking to define problems, collect data, establish facts, and draw valid conclusions; to interpret an extensive variety

Zoning Investigator

of technical instructions in mathematical or diagrammatic form; and to deal with several abstract and concrete variables.

Verbal Aptitude: Requires the ability to record and deliver information, to explain procedures, to follow oral and written instructions. Must be able to communicate effectively and efficiently in a variety of technical or professional languages including legal, accounting, computer, and personnel.

Numerical Aptitude: Requires the ability to utilize mathematical formulas; to add and subtract; multiply and divide; utilize decimals and percentages, and to use descriptive statistics.

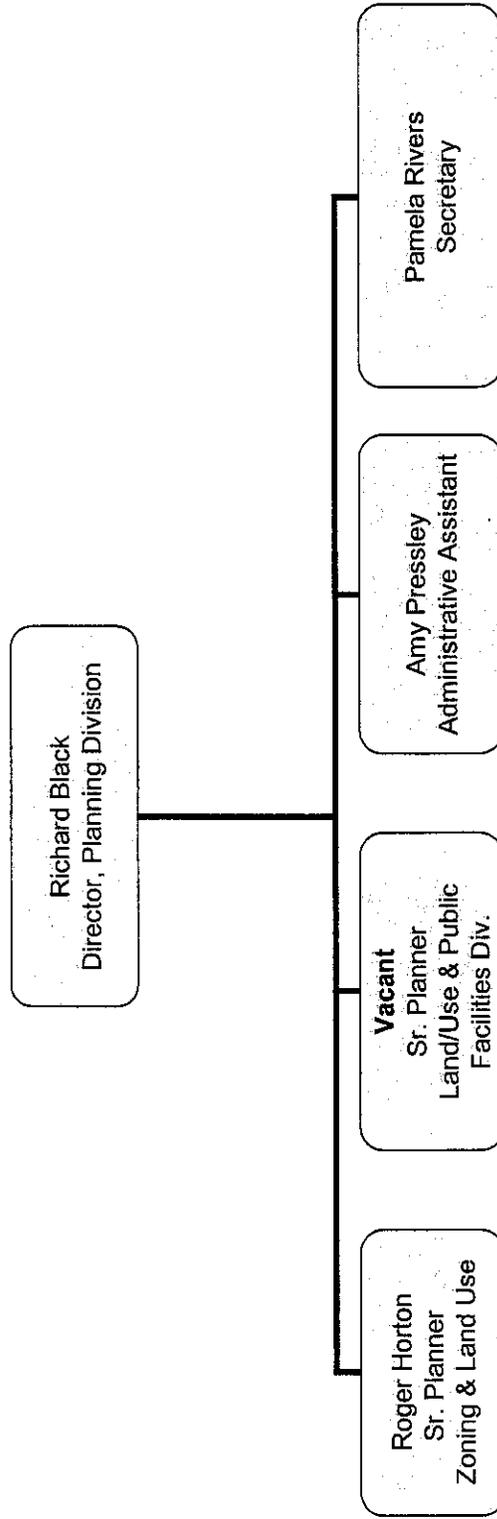
Form/Spatial Aptitude: Requires the ability to inspect items for proper length, width and shape.

Motor Coordination: Requires the ability to coordinate hands and eyes at a normal speed in using office equipment.

Manual Dexterity: Requires the ability to handle a variety of items such as office equipment. Must have minimal levels of eye/hand/foot coordination.

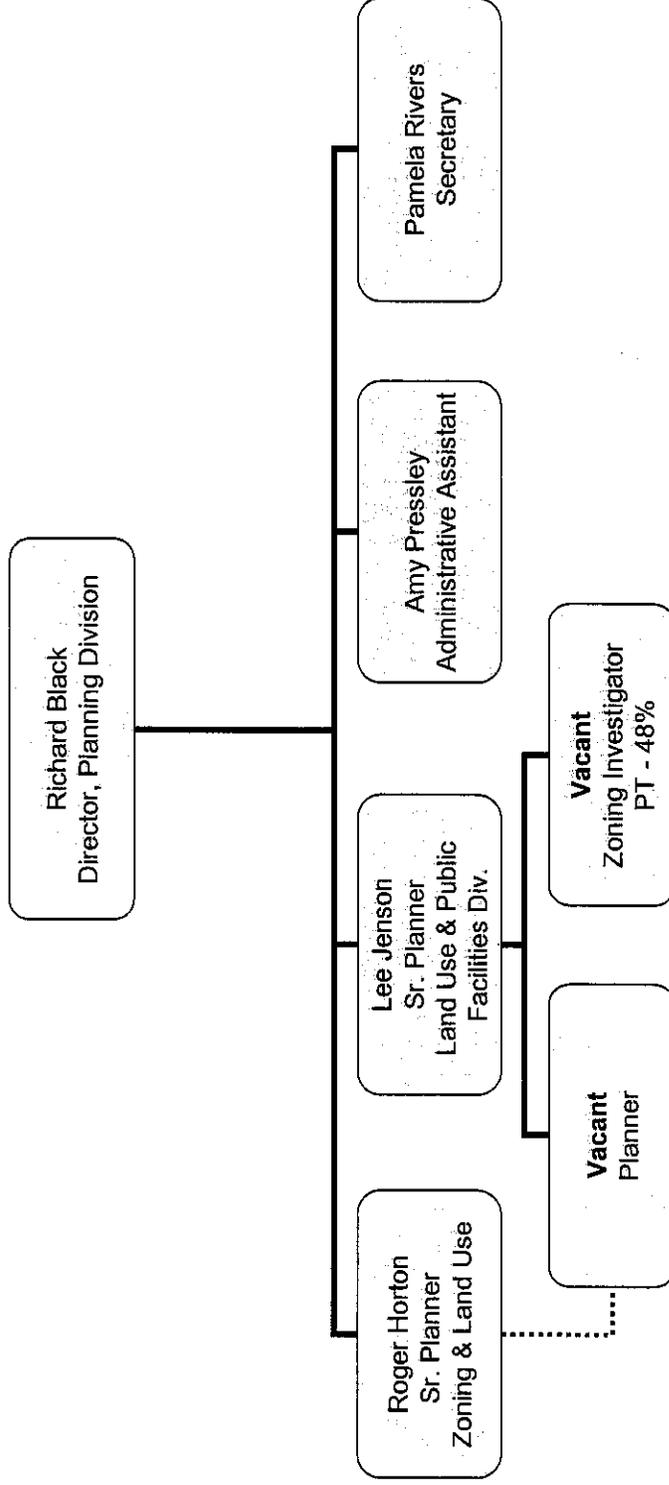
Planning Dept.

July 2007



Planning Dept.

July 2007 - Revised



- Zoning Investigator will be budgeted 100% in the Inspections Dept.
- Sr. Planner Land Use & Public Facilities Div. will be budgeted 70% in the Planning Dept. and 30% in the Inspections Dept.
- Planner will be budgeted 100% out of the Inspections Dept.

**UNION COUNTY
BOARD OF COMMISSIONERS**

ACTION AGENDA ITEM ABSTRACT
Meeting Date: August 6, 2007

Action Agenda Item No. 6/15
(Central Admin. use only)

SUBJECT: Community Transportation Improvement Plan

DEPARTMENT: Transportation **PUBLIC HEARING:** No

ATTACHMENT(S): Final Report **INFORMATION CONTACT:** Annette Sullivan

TELEPHONE NUMBERS:
704-292-2566
704-361-1494

DEPARTMENT'S RECOMMENDED ACTION: Adopt Community Transportation Improvement Plan

BACKGROUND: The North Carolina Department of Transportation (NCDOT) requires that all transit systems have a comprehensive five year master plan (known as a "Community Transportation Improvement Plan"). The County is required to adopt a Community TIP in order to receive federal and State funds for transportation. To meet this requirement, NCDOT develops scopes of work for the request for proposals, contracts with multiple consulting firms, and funds 90% of the cost of this effort. Union County is responsible for assembling a group of representatives of stakeholders (ex: contracting agencies, municipalities in the county, Chamber of Commerce, Private Transportation providers, County Manager, Finance Director, County Commissioner) approved by the County Commission and to participate in the cost with a 10% match.

Four counties (Anson, Union, Richmond, Stanly) were designated by NCDOT to complete the study process at the same time and encouraged by NCDOT to select a single consulting firm to perform the multiple but separate plan reviews. The four transit Directors recommended to NCDOT that it contract with RLS and Associates to perform the Community TIP. The plan was developed over an eleven month period in 2006.

The report's major recommendations include: ongoing replacement of capital items (vehicles) using NCDOT replacement schedule, expansion of service (trips and hours), creation and implementation of a deviated fixed route system in the city of Monroe with city funding participation, coordination agreement with Anson County for out of county trips when possible.

The County provides the local match for vehicle replacements as prescribed by federal and State replacement schedules. The FY2008 budget contains the required local funds to meet the County's obligations under the Community TIP. The County has also increased its effort in coordinating out of county trips with Anson County and has entered into an agreement to facilitate that effort.

The expansion of service and deviated fixed route system are components of the plan that Transportation is continuing to explore. Implementation of these two initiatives will require additional resources and participation by the City of Monroe.

FINANCIAL IMPACT: Annual operating budget; subject to Commission approval

Legal Dept. Comments if applicable: _____

Finance Dept. Comments if applicable: _____

Manager Recommendation: _____

◆
**UNION COUNTY COMMUNITY
TRANSPORTATION IMPROVEMENT
PLAN**

FINAL REPORT

**NORTH CAROLINA DEPARTMENT OF
TRANSPORTATION – DIVISION OF
PUBLIC TRANSPORTATION**

◆
JUNE 21, 2007

**PREPARED BY:
RLS & ASSOCIATES, INC.
3131 S. DIXIE HIGHWAY, SUITE 545
DAYTON, OHIO 45439**



3131 S. Dixie Hwy., #545 • Dayton, OH 45439

www.rlsandassoc.com

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I. INTRODUCTION

Union County Transportation provides public transportation for Union County using the combined resources of the Federal Transit Administration (FTA) Section 5311, North Carolina Department of Transportation (NCDOT), Union County, and other sources. Union County Transportation provides demand response services throughout the County. Union County is the Section 5311 Grant recipient.

This Community Transportation Improvement Plan (CTIP) represents an opportunity to improve current transportation services and further local efforts to coordinate the transportation services provided by Union County Transportation and other transportation providers throughout Union County. This CTIP has the following purposes, as prescribed by NCDOT:

- ◆ To evaluate community transportation systems current approaches to all facets of management and operations;
- ◆ To evaluate the results of the current organizational direction;
- ◆ To identify organizational and operational strengths and to target opportunities for improvement on processes and results that affect all key stakeholders – including customers, employees, granting agencies and the public; and
- ◆ To assist the NCDOT Public Transportation Division in aligning and maximizing available resources (employee development/training, administrative, operating and capital funding) to facilitate each system's continuous improvement process.

This document describes the information, findings, and recommendations of the CTIP. It includes relevant information describing community characteristics and existing transportation services. It also includes a critical review of current transportation services, recommendations for improvement of these services, and a plan to implement these improvements.

Several types of information have been collected. Historical and current ridership, service structure, organizational structure, and financial information for Union County Transportation appear in Chapter II. Chapter III includes a description of the organizational approach used by Union County Transportation, while the overall results of Union County Transportation's management approach is included in Chapter IV. The

final chapter contains a summary of the CTIP evaluation and the recommendations to improve Union County Transportation service.

All information, findings and recommendations were presented to the Union County CTIP Steering Committee for review before inclusion in the final CTIP document.

II. SYSTEM OVERVIEW

SUMMARY OF PAST CTIP

This is Union County's first CTIP. The last five-year plan was completed in 1992 when a Transportation Development Plan (TDP) was done. The primary recommendations included the following:

- ◆ Implement a coordinated system of human service agency providers. Other alternatives that were reviewed include continue current policies, implement a consolidated system, involve private sector, and develop a public transit system.
- ◆ Utilize newly available E&DTAP funding to supplement existing agency transportation services.
- ◆ Purchase replacement vehicles as well as additional vehicles to expand agency fleets.

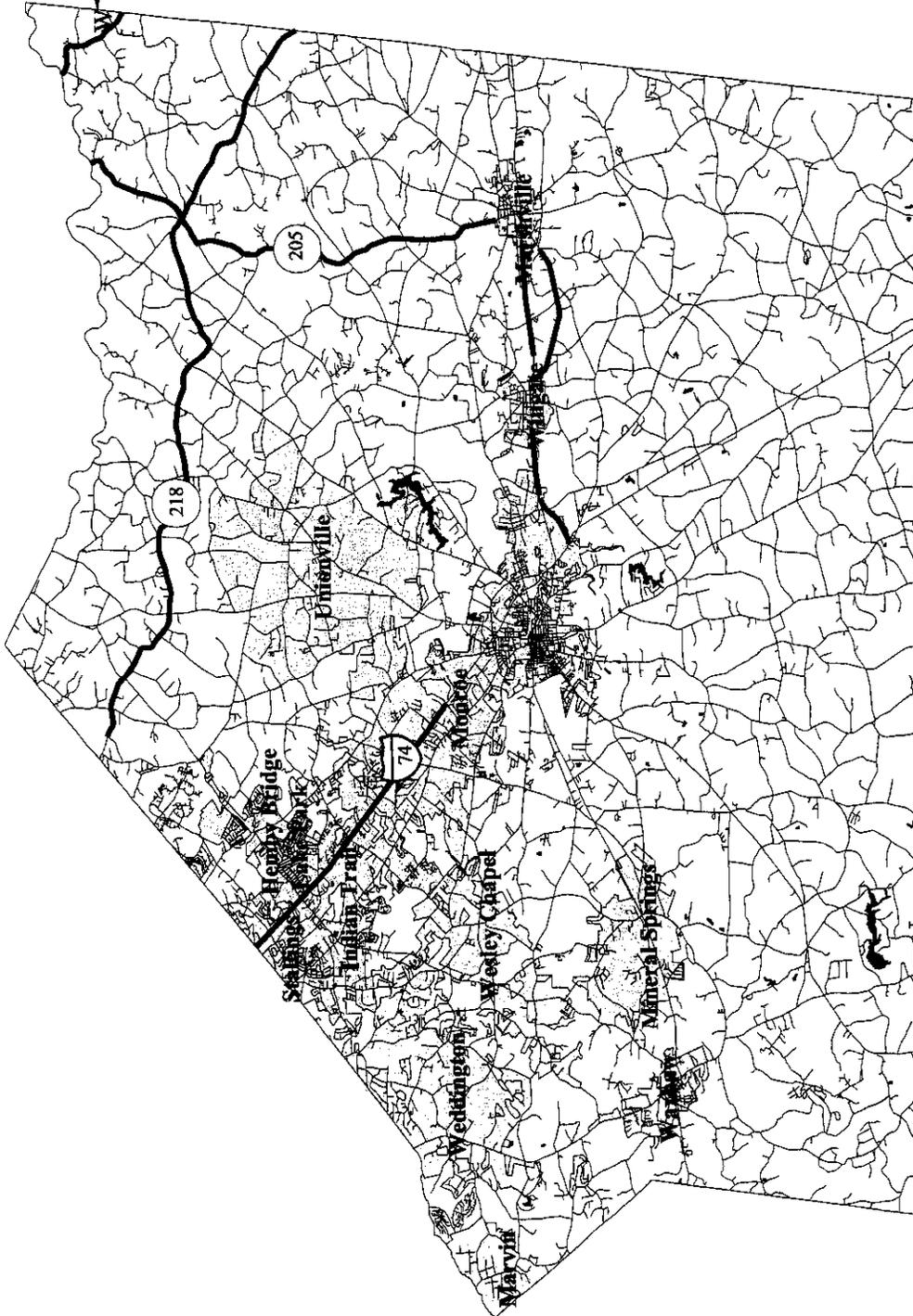
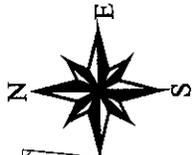
These recommendations were pursued initially. However, in 1994 Union County Transportation was formed as a department within the county government. In 2003, it began public transportation services throughout Union County. It currently also provides a Rural General Public (RGP) program that serves Union County residents who are not eligible for transportation through a human service agency.

SETTING

Union County is geographically located in south central North Carolina, east of the City of Charlotte. Mecklenburg, Cabarrus, and Stanly Counties border Union County to the north, Anson County borders it to the east, and South Carolina forms its southern western borders. The City of Monroe, the largest municipality, is also the County seat.

Exhibit II-1 on the following page is a location map of Union County. U.S. 74 is the primary east-west highway in the county connecting it with the City of Charlotte and locations to the east. U.S. 601 provides access to South Carolina to the south and to Concord and Kannapolis and other areas of North Carolina to the north. State routes 200 and 207 provide north-south access and state routes 84, 75 and 218 run in an east-west direction through the County.

Summary of Past CTIP



 Major Roads
 Cities and Towns



RLS & Associates, Inc.

**Exhibit II-1
Location Map
Union County Transportation
Development Plan**

**Economic/
Demographic
Characteristics of
Union County**

Population

Union County's 2005 population was 155,736. The map in Exhibit II-2 shows the population density for each block group within the county. The block groups of highest population density were located in Monroe. The communities of Unionville, Weddington, Indian Trail and Hemby Bridge had block groups with moderately high population densities. Block groups outside of these locations have lower population densities.

Exhibit II-3 shows a comparison of 1990, 2000 and 2005 population of Union County. This shows a 46.9 percent growth from 1990 to 2000. From 2000 to 2005, the County's population grew by 27.7 percent. To adequately serve this growing population, Union County Transportation must increase its services.

**Exhibit II-3
Population of Union County, 1990 – 2005**

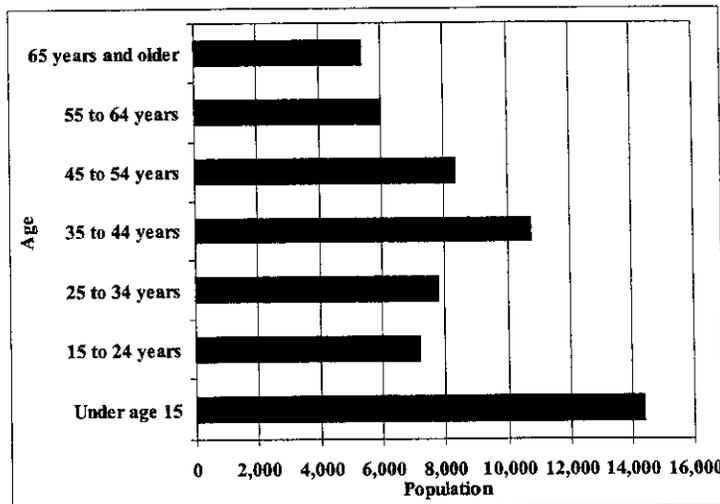
Year	1990	2000	2005
Population	84,210	123,677	155,736

Source: North Carolina Department of Commerce,
4th Quarter 2005 County Profiles.

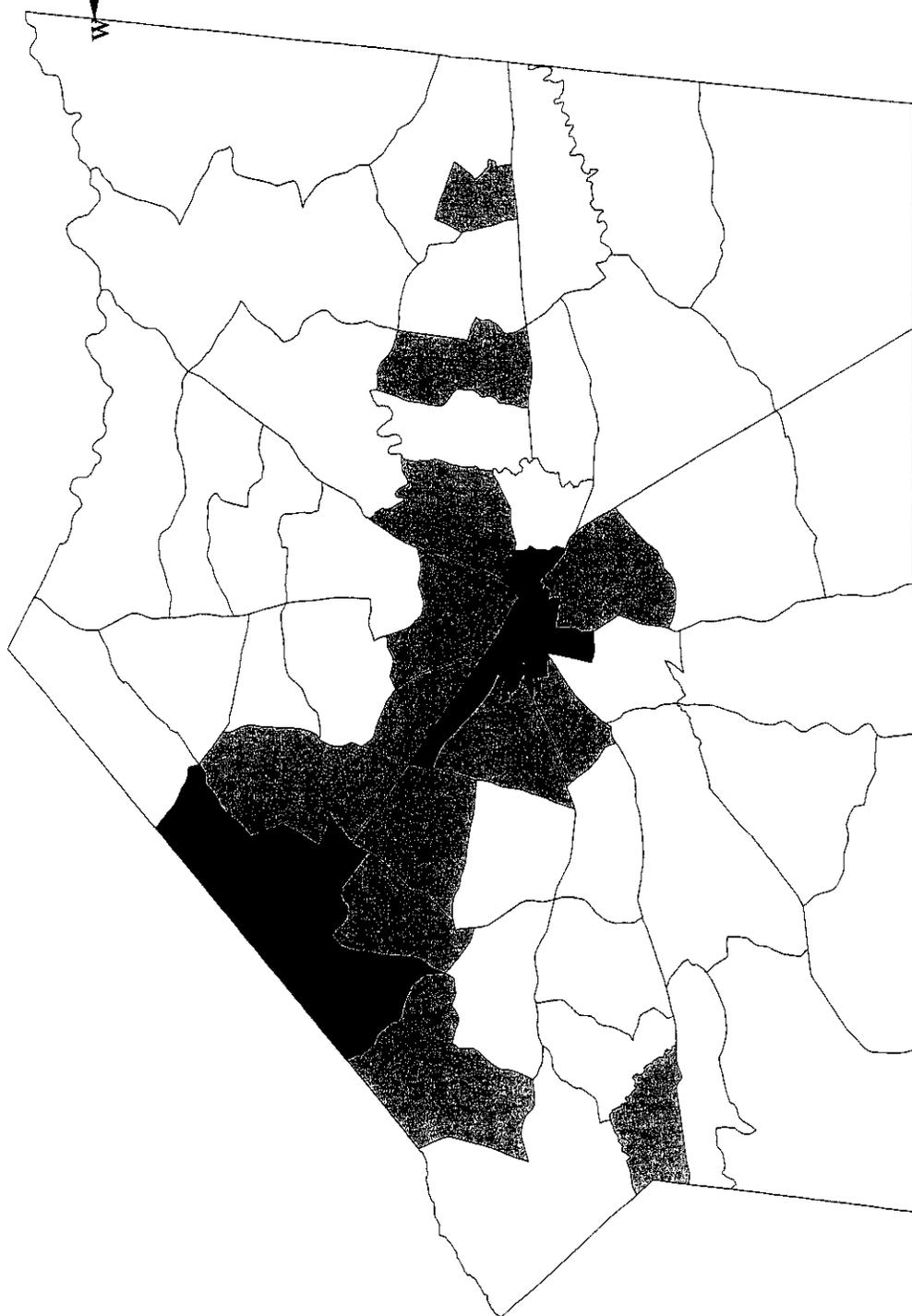
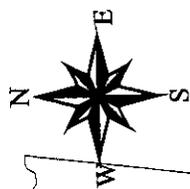
Age

According to recent estimates, the largest age group in Union County was under 15 years old, which is twenty four (24) percent of the population (see Exhibit II-4). The second largest age group was 35 to 44 year olds (18 percent). Approximately fourteen (14) percent of the population in Union County was between 45 and 54 years of age. The high percentage of youth of the overall population will affect the type of transportation services that Union County Transportation will need to provide.

**Exhibit II-4
Union County 2005 Population by Age**



Source: Charlotte Regional Partnership, Experian/Applied Geographic Solutions.



Persons / Sq. Mi.

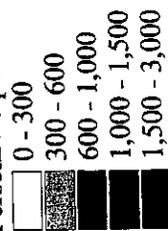


Exhibit II-2 Population Density

Union County Transportation Development Plan



RLS & Associates, Inc.

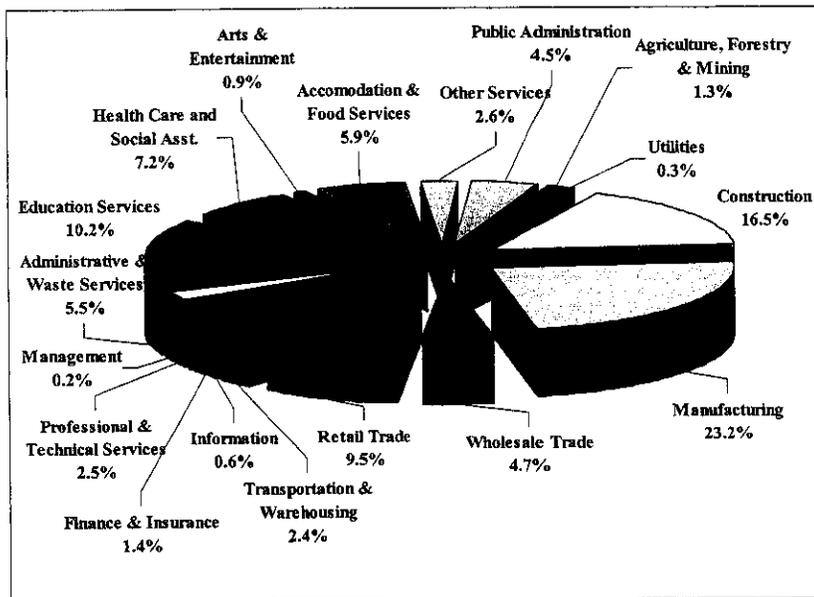
**Economic/
Demographic
Characteristics of
Union County**

Industry and Labor Force

In the second quarter of 2005, Union County's labor force consisted of approximately 30,000 persons. An estimated 28,637 were employed for an unemployment rate of 4.5 percent.

According to the North Carolina Department of Commerce, manufacturing was the largest employment sector in Union County with 11,556 total employment. Construction represents the next highest number of employees at 8,212. These two sectors combined comprise nearly forty (40) percent of the employment in Union County. The next highest employment sector is Educational Services. This area employs 5,067 people or 10.1 percent of the total workforce. Exhibit II-5 shows the breakdown of Union County's employment by industry.

**Exhibit II-5
Union County Employment by Sector**



Source: North Carolina Department of Commerce, 2005

UNION COUNTY TRANSPORTATION

Union County Transportation is organized as a department within the Union County government structure. It is organized to provide transportation services to agency clients and the general public. The Transportation Director reports to the County Manager.

Current Transit Services

Union County Transportation operates countywide demand response and subscription transit services that are open to the general public. The majority of the services are provided under contract with human service agencies. An estimated sixty four (64) percent of Union County

Union County
Transportation

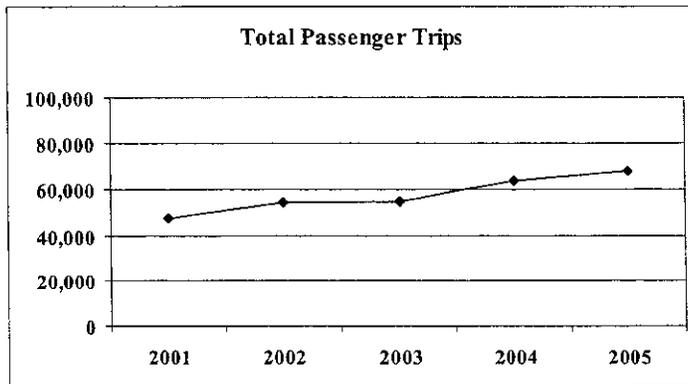
Transportation's ridership is through agency contracts. While most service is provided within Union County, Union County Transportation provides regular trips to locations outside the County, most often to medical facilities in Charlotte. About twenty one (21) percent of Union County Transportation's ridership is in the general public category. The other fifteen (15) percent is in the other category.

A 48-hour advance trip reservation is required to access service. Same-day trip requests are accepted, but service is not guaranteed. Union County Transportation is based at the County Maintenance facility/Transportation Operations center on Patton Avenue in Monroe.

Operating Statistics

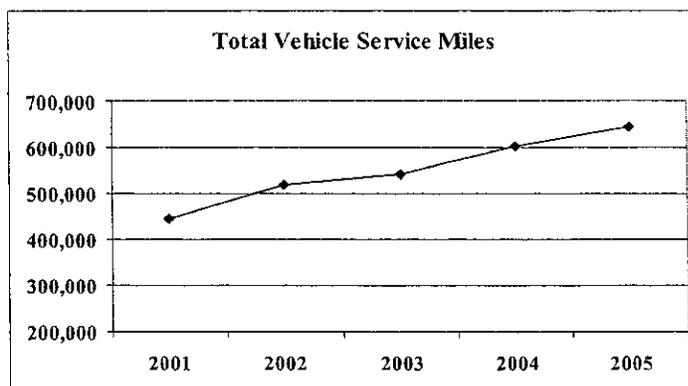
Total system ridership has increased steadily over the past four years as shown in Exhibit II-6. In 2001, passenger trips totaled 47,408, while in 2005 they totaled 68,023. In each year between 2001 and 2005 there was an increase in ridership.

**Exhibit II-6
Annual Passenger Trips**



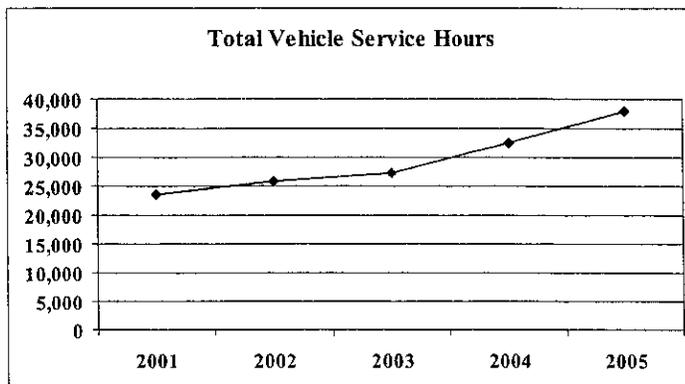
The amount of service provided by Union County Transportation, as measured by vehicle service miles, also increased each year. From 2001 to 2005 annual vehicle service miles increased from 444,044 to 644,878. This is depicted in Exhibit II-7.

**Exhibit II-7
Total Vehicle Miles**



This steady increase is also reflected in the number of revenue hours provided by Union County Transportation. Between 2001 and 2005, annual vehicle service hours increased from 25,534 to 37,898. This is shown in Exhibit II-8.

**Exhibit II-8
Total Vehicle Service Hours**



Mission Statement and Goals

Union County Transportation updates its mission statement and goals annually. As part of the County’s budget process, the County Commissioners approves the annual revisions of these. They are included in the Union County Transportation’s *Policy and Procedures Manual*. The following are the current version of Union County Transportation’s mission statement and goals:

Mission Statement

It is the mission of Union County Transportation to provide efficient and affordable transportation for the citizens of Union County while working towards meeting the changing and increasing needs of the county’s residents, employers, and contracting agencies.

Goal #1

Assure federal compliance is maintained for all funding received.

Goal #2

Provide 60,000+ trips to the citizens of Union County.

Goal #3

Create Memorandum of Understanding with Anson County to coordinate out-of-County trips.

Goal #4

Explore possible coordination with Mecklenburg County for out-of-County transport.

Goal #5

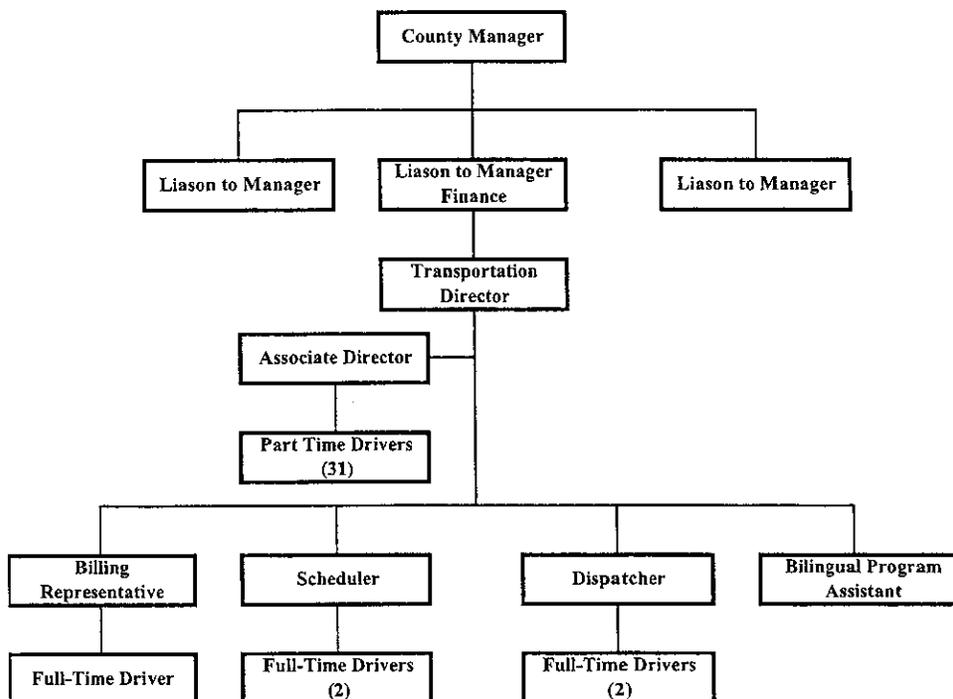
Explore other possible revenue sources (ex: City of Monroe).

Union County Transportation met its goals in 2006.

Employee Base

Union County Transportation has forty-two (42) employees. There are five (5) full-time and thirty-one (31) part-time drivers, an Associate Director, Billing Representative, Scheduler, Dispatcher, and a Transportation Director. The organization chart for Union County Transportation appears in Exhibit II-9 below.

**Exhibit II-9
Union County Transportation Organization Chart**



Resource Inventory

Union County Transportation maintains a vehicle inventory of twenty-one vehicles. These are a mixed fleet of van conversions and mini-vans. All vehicles have seating capacities less than that required for drivers to have a CDL. They are listed in Exhibit II-10.

Union County Transportation

Other equipment is kept at the Union County Transportation offices, which are located within the Union County vehicle maintenance building on Patton Avenue in Monroe. Transportation vehicles, office equipment, and office furniture are maintained at this location.

**Exhibit II-10
Union County Transportation Fleet Roster**

Make	Type	Year	Capacity	Wheelchair Capacity
Dodge	Mini-Van	2003	6	0
Dodge	Mini-Van	2005	6	0
Dodge	Mini-Van	2005	6	0
Dodge	Mini-Van	2004	6	0
Dodge	Center Aisle	2002	13	0
Dodge	Center Aisle	2002	13	0
Ford	Van Conversion	2006	9	2
Dodge	Center Aisle	2002	13	0
Dodge	Mini-Van	2003	6	0
Dodge	Van Conversion	2002	13	0
Dodge	Mini-Van	2003	6	0
Dodge	Van Conversion	2002	9	2
Dodge	Van Conversion	2003	9	2
Dodge	Van Conversion	2003	13	0
Chevrolet	Mini-Van	2004	6	0
Dodge	Center Aisle	2001	13	0
Dodge	Center Aisle	2001	13	0
Ford	Van Conversion	2006	13	0
Ford	Van Conversion	2006	9	2
Ford	Van Conversion	2006	9	2
Ford	Van Conversion	2006	9	2

Union County Transportation Operating Revenues

Union County Transportation Revenues are from several sources including State and federal grants and purchase of service contracts. The revenues for 2004 and 2005 for Union County Transportation operating costs appear in Exhibit II-11. In both 2004 and 2005, the largest source of revenue is from human service agency purchase of service contracts. These were \$272,088 in 2004 and \$398,827 in 2005. The second highest revenue source is Rural Operating Assistance Program (ROAP) funding. These are monies provided by the North Carolina Department of Transportation. Community Transportation Program Funds, which cover administrative and capital costs, comprise the third largest source of revenue. These are a combination of state and federal funding.

**Exhibit II-11
Union County Transportation Revenues**

Revenue Source	2004	2005
Community Transportation Program	\$103,912	\$117,666
Local Admin. Funding	\$18,388	--
Rural Operating Assistance Program	\$124,185	\$125,100
Local Operating Funding	\$6,680	\$85,135
Service Contracts	\$272,088	\$398,827
Fares/Donations	\$11,010	\$12,717
Other Revenue	\$63,260	\$2,649
Total	\$511,473	\$742,795

**Union County
Transportation**

CUSTOMER SERVICE REQUIREMENTS

In a previous section the Union County Transportation annual goals and objectives were listed. None of these goals dealt directly with customer service, which should be included. Two of the goals pertained to coordinating service with public transportation service in adjacent counties. A third goal is to explore new revenue sources, such as the City of Monroe. These goals could result in improved service to Union County Transportation riders.

**Customer Service
Requirements**

BUSINESS DIRECTIONS

Rapid growth in Union County in recent years has resulted in greater population levels and densities. This has a direct impact on what types of transportation services should be provided. In Monroe, consideration is given to providing fixed route or route deviation service in place of some demand response services. With much of this growth occurring near the Mecklenburg County border, portions of Union County will increasingly become a part of the greater Charlotte urban area. Demand will result for increased commuter and medical transportation service to locations within Mecklenburg County.

Business Directions

III. ORGANIZATIONAL APPROACH AND WORK SYSTEMS

LEADERSHIP

Leadership

The Transportation Director is given the authority to provide direction and make important decisions for Union County Transportation. The County Manager and the Board of County Commissioners rely on the Transportation Director to manage day-to-day operations as well as to provide recommendations for budget and service levels. The Associate Director provides direct supervision to Union County Transportation's thirty-one (31) part time transit drivers.

Senior Leadership Direction

Union County Transportation's philosophy, approach and values are established by management at the initial new employee training sessions. These are reinforced through formal and informal on-going communications with employees. An annual performance review is given to each Union County Transportation employee, and if necessary, feedback is given to employees when there is a complaint from a passenger or a contract agency.

Union County Transportation management assists each underperforming employee to develop a performance improvement plan as part of the annual performance appraisal. Any significant deviation from the management's approach and values are corrected in this manner.

Management encourages employees to develop their own work-related interests. Every attempt is also made to utilize employee strengths. Management also delegates responsibilities where appropriate. In these ways, an environment of innovation and empowerment is fostered.

Organizational Performance Review

An on-going review of Union County Transportation performance is conducted primarily using NCDOT Operating Statistics reports. These reports include the following indicators:

- ◆ Total service miles;
- ◆ Transit system service miles;
- ◆ Total service hours;
- ◆ Total passenger trips;
- ◆ Transit system passenger trips;
- ◆ Total revenue;
- ◆ Total contract revenue
- ◆ Fare revenue;
- ◆ Total expense;

Leadership

- ◆ Peak vehicles;
- ◆ Driver FTE;
- ◆ Passenger trips per hour (weekday);
- ◆ Passenger trips per mile (weekday);
- ◆ Total passenger trips per hour;
- ◆ Total passenger trips per mile;
- ◆ Cost per passenger trip;
- ◆ Cost per hour;
- ◆ Cost per mile;
- ◆ Service miles per peak vehicle;
- ◆ Passenger trips per driver FTE.

Each of these indicators for the current year is compared with the previous two years. The operating statistics showed that Union County Transportation service hours have increased by more than ten percent in 2005 to accommodate growth in demand. Ridership also increased by about seven (7) percent from 2004 to 2005. This service increase resulted in total contract revenue increased by nearly fifty (50) percent in 2005.

The overall performance of Union County Transportation service is reported to their Transportation Advisory Board (TAB) each year and to the County Manager in the annual budget process. This reporting should occur more frequently. For example, a monthly performance summary can be sent to the County Manager and TAB members.

Strategic Development and Deployment

Union County Transportation utilizes the CTIP to update its five-year strategic plan. Steering Committee members for the current CTIP, and the most recent TDP, include the five core agencies: Union County Department of Social Services, Health Department, Senior Services Department, the Mental Health Agency, and ARC of Union County. Several local municipal representatives are also on the CTIP Steering Committee. As a result of past efforts, Union County Transportation has significantly expanded services using a combination of agency contract revenue and state/federal grants.

CUSTOMER AND MARKET FOCUS

Customer and Market Knowledge

Union County Transportation bases its knowledge of potential customers primarily from requests for service from agencies and the general public. It also utilizes on-board surveys that are conducted periodically. Additional outreach efforts are recommended.

**Customer and
Market Focus**

Marketing Activities

Union County Transportation produces two brochures describing its services that are printed in English and Spanish. One brochure includes information on the Rural General Public (RGP) program. It includes eligibility, types of trips provided, how to access service, hours of operation, fares, and other policies. The second brochure describes the agency client services. Similar information is provided in this brochure as in the RGP brochure. These brochures are distributed throughout the community including passengers, agencies, and government offices. Starting in 2005, radio advertisements were purchased. One suggested improvement is to include a brief description of RGP services in the agency client services brochure, or the two brochures can be combined into one.

Customer Satisfaction and Relationships

Union County Transportation maintains three (3) telephone lines for passengers to access service, seek assistance or report complaints. Three (3) additional lines are reserved for the administrative offices. Complaints can also be sent in by mail. Office hours are 7:00 a.m. to 5:00 p.m. on weekdays, but calls are often taken during later hours.

Passenger Survey

An on-board passenger survey was done as part of the CTIP. A total of thirty (30) surveys were completed. Twenty (20) were from agency clients and ten (10) were from general public riders. A summary of the results from agency clients appears in Exhibit III-1 below. As can be seen, agency client survey respondents are generally satisfied with the service. The only negative comment was that one person had difficulty scheduling their trip.

**Exhibit III-1
On-Board Passenger Survey – Agency Clients**

Question	Yes	No
1. Is the driver courteous?	20	0
2. Are the passengers reminded to wear their seatbelts?	20	0
3. Does the driver observe all speed laws and other traffic regulations?	20	0
4. Is the driver helpful in assisting you in and out of the van and carrying your groceries if you need help?	20	0
5. Is the van exterior and interior reasonably clean?	20	0
6. Does the driver respond within a reasonable period of time (15 - 20 minutes) for passenger pick-up?	20	0
7. Have you met with some difficulty in scheduling your trips?	1	19

The ten (10) general public passengers exhibited a similar level of satisfaction. The only negative comments were from two passengers who did not feel the drivers were courteous, and Union County Transportation did not respond for a trip request within a reasonable period of time. Exhibit III-2 displays the results.

**Exhibit III-2
On-Board Passenger Survey – General Public**

Question	Yes	No
1. Is the driver courteous?	8	2
2. Are the passengers reminded to wear their seatbelts?	10	0
3. Does the driver observe all speed laws and other traffic regulations?	10	0
4. Is the driver helpful in assisting you in and out of the van and carrying your groceries if you need help?	10	0
5. Is the van exterior and interior reasonably clean?	10	0
6. Does the driver respond within a reasonable period of time (15 - 20 minutes) for passenger pick-up?	8	2
7. Have you met with some difficulty in scheduling your trips?	0	10
8. Is the fare reasonable?	10	0
9. If there has been a reason for you to voice a complaint, do you feel your complaint was handled in a timely and efficient manner?	10	0

Stakeholder Surveys

Personal interviews were held with a number of Union County Transportation stakeholders. These included representatives of agencies using Union County Transportation service, local officials, and other interested persons. A summary of these interviews appears below.

County Manager

The Union County Manager oversees Union County Transportation, as it is a department within the County government. In conjunction with the Transportation Director, the County Manager develops the annual budget for Union County Transportation for approval by the County Commissioners. The County Manager is generally satisfied with the services provided and how they are managed.

Department of Social Services

DSS is a countywide human service agency offering a broad range of community services such as job training and placement, income assistance, and child welfare services. Clients of DSS contact Union County Transportation directly to arrange transportation. It is estimated that DSS would probably be a larger user of Union County Transportation services; however, it has been discovered that DSS needs are too vast for Union County Transportation's capacity to accommodate. Suggested areas of improvement include service to multiple counties, a citywide series of fixed routes to common areas of interest, and concentration of coordination efforts with neighboring counties. DSS has a representative on the Union County Transportation Advisory Board (TAB).

Work First of Union County

Acting as an employment assistance arm of the Union County Department of Social Services, Work First serves clients in Union County with a variety of employment services. Clients of Work First are provided transportation as part of the program. Work First case workers arrange for client transportation. Among concerns voiced by clients are service issues such as limited operating hours and service area. Some suggestions by Work First representatives for improvement included expanding operating hours to include evenings and weekend shifts, increasing fleet size to accommodate more passengers, and expanding service areas to include neighboring counties.

Union County LINKS

LINKS is a youth assistance program of the Union County Department of Social Services. LINKS assists Union County residents between thirteen (13) and twenty one (21) years of age with achieving independent living conditions. Transportation for LINKS clients is currently being purchased under the DSS umbrella. The Transit Advisory Board does not currently seat a LINKS representative, but this program is represented by other DSS personnel.

Union County Department of Health

This is a local area government organization providing health care services to Union County citizens. Services include health education, nutrition assistance and health care management oversight. Transportation needs are currently being purchased on an as needed basis from Union County Transportation. Some of their client's transportation needs are not currently being met due to hours of operation and service area. Suggested areas of improvement included larger vehicles, possible fixed routes to common destinations of interest and service into neighboring counties. A Health Department representative currently serves on the Union County Transportation Advisory Board.

**Customer and
Market Focus**

The Arc of Union County

The Arc is an advocacy organization serving people with developmental disabilities. The Arc's efforts are focused on the social acceptance and overall integration of developmentally disabled individuals. Individuals are offered a variety of services including counseling, recreation and supports, including those for older adults. Transportation services are being purchased through a written contract with Union County Transportation. The Arc has indicated a rising need for expanded service hours that would include evenings and weekends. A representative from the Arc currently serves on the Advisory Board.

Disability Rights of Union County

Disability Rights of Union County is a local nonprofit organization offering counseling and rehabilitation services to the disabled citizens of Union County. Client transportation needs are currently being purchased on an as needed basis from Union County Transportation. No contract is in place for a specified level of service or fare structure. Suggested areas of improvement have been identified as extended service hours, higher agency coordination efforts and a possible in-city fixed route with stops along the more traveled corridors. The Transit Advisory Board does not currently seat a representative from Disability Rights.

Union Diversified Industries (UDI)

UDI operates a sheltered workshop for disabled persons on Walkup Avenue in Monroe. It currently contracts with Union County Transportation for the transportation of sixteen (16) clients daily. Its operating hours are from 8:00 a.m. to 4:00 p.m. on weekdays. This agency also owns three 12-passenger vans. Overall it is pleased with Union County Transportation service. However, because of costs it plans to reduce this contract and provide more transportation in-house.

Ellen Fitzgerald Senior Center

The Ellen Fitzgerald Senior Center is a facility that is provided by the City of Monroe, Parks and Recreation Department. It organizes a number of activities for its members. Membership is based on age and Monroe residents do not have to pay a membership fee. There are currently about 700 members, and some use Union County Transportation to get to the Center on a daily basis. This Senior Center does not contract for transportation service. Trips to and from this location are provided under either the Home and Community Care Block Grant or EDTAP.

FINANCIAL MANAGEMENT

A financial audit is done annually for the Union County government. There were no findings specific to the transportation program.

**Financial
Management**

The Transportation Director, in conjunction with the County Manager and Finance Department, completes and submits the annual Union County Transportation budget to the County Commissioners for approval. The Transportation Director is responsible for monitoring the budget. The County Finance Department produces monthly an actual versus budget line item variance report that is used to monitor spending levels.

Union County Transportation collects fares from passengers each day. The fares are placed in an envelope carried by each driver. Passenger fares are turned in daily with the completed driver manifests. The Associate Director and one other person count the fares. Fare revenues are stored in a locked drawer until they are deposited in a bank, normally on a daily basis. Fuel purchases are made with fleet fuel cards. There is no petty cash fund.

Indirect costs are claimed by Union County. The rate was approved by NCDOT at 13.4 percent. The County self-insures Union County Transportation vehicles for collision. It also has a full-time Risk Manager position.

HUMAN RESOURCES/OPERATIONS FOCUS

Work Systems

Union County Transportation maintains a written policies and procedures manual for employees to follow. These set standards for employee conduct and provide guidance for situations as they arise. These policies and procedures provide a basis for the annual employee review. The Associate Director conducts employee performance reviews for drivers. The Transportation Director conducts reviews for administrative staff. The Transportation Director budgets \$1,000 for employee appreciation and for high performers.

The Transportation Director uses a four-part approach to encourage and motivate employees. This includes the following:

1. Develop employee work-related interests;
2. Utilize employee strengths as much as possible;
3. Modify job descriptions as appropriate to better match employee strengths and interests; and
4. Delegate responsibilities.

Job descriptions have been created for each Union County Transportation position. Extensive cross training is provided so that every position has a back up. Effective communication results from regular use of written notices, letters, and meeting summaries on personnel related matters.

When an opening occurs, the County Human Resources Department advertises the position on the County website and at the Employment Security Commission Office. The Human Resources Department does the initial screening of the applicants. Union County Transportation positions are rarely advertised in the local newspaper. The Transportation Director conducts interviews for drivers and office personnel. Driver license checks are done by the County Human Resources Department.

Employee Training, Education and Development

Union County utilizes a Performance Improvement Plan (PIP) system to keep employees current with necessary skills and training, and serves as a gauge for employee performance. PIP's are used when deficiencies are identified in the annual performance review process. The PIP sets out specific skills or behaviors for employees to achieve effective levels of performance.

Union County Transportation also conducts regular training sessions for all employees. Recently this included defensive driving, wheelchair-lift training, CPR and first-aid training, car seat training, and bloodborne pathogen training. Attendance at all training sessions is documented by a sign-in sheet.

Employee Well-Being and Satisfaction

A confidential employee satisfaction survey was conducted for all Union County Transportation employees. All employees were given the opportunity to participate in the survey. Survey participants were given a choice of either completing the survey and returning it directly to the consultant, or being provided a self-addressed stamped envelope and mailing it directly to the consultant. A total of forty-five (45) statements were given regarding different aspects of management practices. Respondents were asked to rate on a scale of one to five whether they agree or disagree with each statement, with five being "strongly agree" and one being "strongly disagree." Average scores were then calculated for the twenty-seven (27) employees who completed the survey. The higher scores indicate relative strengths, while lower scores identify areas for improvement. Exhibit III-3 show the five highest and five lowest rated statements. The complete results and the survey instrument appear in the appendix.

The five highest rated statements relate to job satisfaction and how management treats employees. The highest rating was 4.78. The lowest rated items relate to employee feedback, the condition of vehicles and other equipment, the service schedules, and employee input. These are areas that efforts should be made to improve. The lowest single rating was 3.52. The overall average rating was 4.37, which indicates that most employees are generally satisfied with the work environment.

**Exhibit III-3
Employee Satisfaction Survey**

Highest Average Rating - Employees Most Agreed	
Management is honest with employees.	4.78
I am happy with my present employment.	4.78
I enjoy working for Union County Transportation.	4.74
I enjoy performing my job.	4.70
Management treats employees with dignity and respect.	4.70
Lowest Average Rating - Employees Most Disagreed	
The organization's equipment is always in good working condition.	3.52
I receive feedback regularly regarding what I do well and I am rewarded accordingly.	3.85
The organization serves the needs of the entire community, including those who do not ride our transportation.	3.96
I am provided reasonable schedules that can be operated on-time and at safe speed limits.	3.98
I receive feedback regularly regarding areas I need to improve upon.	4.00
Everyone in the organization helps to create the vision for the future.	4.00

INFORMATION AND ANALYSIS

Performance Measurement

With the recent purchase of Route Match scheduling software, operating statistics have been collected using this program. This software helps to minimize human errors in collecting and transcribing the data used to calculate the operating statistics.

Union County Transportation's System Safety Plan is comprised of a number of safety related policies and procedures located in the Union County Transportation Policy and Procedures Manual. This lists and describes a number of safety policies pertaining to Union County Transportation employees and passengers. It includes sections on Passenger Safety, Wheelchair/Mobility Device Securement, Emergency Procedures, and other policies affecting system safety.

Analysis of Organizational Performance

The Transportation Director and the Associate Director are responsible for analyzing system performance. Operating data is used to guide a number of actions that may be taken. The most common action taken in response to the review of performance data is to adjust service levels. Increasing or decreasing ridership will cause management to change service levels for the affected trips. This results in slightly different number of service hours each day.

OPERATIONS MANAGEMENT

Policies and Procedures

The Scheduler is primarily responsible for scheduling. The Bilingual Assistant is available to assist the Scheduler if needed. The Transportation Director and the Associate Director provides back-up support if the Scheduler is not available. There are three telephone lines available to passengers making trip reservations. They are connected with a "rollover" feature, if one is busy. There are an estimated two hundred (200) to three hundred (300) calls are taken each day. Trips may be reserved during regular office hours between 8:00 a.m. and 5:00 p.m. on weekdays. Outside of these hours trips may be reserved using the voice mail system.

Passengers must call at least 48 hours in advance to reserve a trip. Same-day calls are accepted but rides are not guaranteed. Standing orders and subscription trip reservations follow the same policies, and are reviewed and approved by the Transportation Director. Flag stops are not allowed. A significant number of trips are provided outside of the County, mostly for medical purposes in Charlotte, Asheville, or Salisbury. One or two vehicles each day are scheduled for these trips. It was estimated that about twenty (20) percent of Union County Transportation trips are in the "general public" category. All trips, including contract trips, are open to the general public.

If a trip cannot be scheduled for the time originally requested, then the Union County Transportation call-taker will negotiate an alternate time with the passenger. If an alternate time is acceptable, then the trip is scheduled. Only if an alternate time is not found, that a trip denial is recorded. Union County Transportation had about 194 trip denials over the past nine months. Union County Transportation does not use a window of time in its definition of a trip denial, such as trips that are greater than two hours from the originally requested pick-up time. It also does not record whether a trip denial is for a disabled passenger.

No-shows and cancellations are also documented. A policy for disruptive passengers exists and is included in the system brochure.

The Transportation Director is responsible for assigning drivers and vehicles runs. The Associate Director is primarily responsible for monitoring daily operations. Some street supervision is performed, normally to address a complaint or a problem. In the past year, there has been two chargeable accidents. Accident and incident procedures are included in the Emergency Procedures section of the Union County Transportation Policy and Procedures Manual.

Union County Transportation employs a "door-to-door" policy for transporting passengers in wheelchairs. Personal care attendants are

Operations Management

allowed on-board vehicles without paying a fare. Drivers are not allowed to assist passengers by helping with packages or by entering their homes. Service animals are allowed on-board Union County Transportation vehicles. A list of the topics covered in the Union County Transportation Policies and Procedures Manual appears in Exhibit III-4 below.

**Exhibit III-4
Union County Transportation Policies and Procedures**

Functional Area	Policy
Human Resources	Mission Statement Goals Traffic Violations At Fault Accidents
Operations	Eligibility, Denial and Termination of Service General Policies Cancellations Complaints Medical Transportation Seat Belts/Child Restraints Service Animal Policy Wheelchair/Mobility Device Securement Passenger Safety Passenger Guidelines Emergency Procedures
Finance and Administration	Deposit Procedures

Union County Transportation's vehicle use varies by day of week. Exhibit III-5 depicts the vehicle utilization for five weekdays of a week in April 2006. According to Union County Transportation staff, this is representative of what is currently being operated. When comparing these vehicles to the current roster included in Exhibit II-10, it should be noted that two vehicles that were put into service in 2000 and used during this week have since been replaced.

A total of seventeen (17) vehicles are normally in service on weekdays. Most vehicles are in operation for eight (8) to nine (9) hours during the day. Thursday had the greatest number of vehicles deployed with nineteen (19), but four of these were for four-hour periods. The peak vehicle requirement is seventeen (17). This occurred on Monday and Tuesday during the mid-morning period. On Wednesday, Thursday and Friday, there were sixteen (16) vehicles in operation during the peak period.

The vehicle utilization shows the fleet of twenty-one (21) is sufficient to handle the demand for Union County Transportation service. Overall vehicle utilization is high with most vehicles operating for the majority of the service day.

The number of passengers per vehicle hour is one indicator of the overall effectiveness and efficiency of Union County Transportation's scheduling and operating policies and procedures. Exhibit III-6 shows the total ridership and the average number of passengers per service hour for the five weekdays depicted in the vehicle utilization charts in Exhibit III-5. This daily average fluctuates from 2.1 passengers per service hour to 2.4 passengers per service hour and averages 2.3 for the week. The average for Single County Community Transportation systems in North Carolina for FY 2004 was 2.95 passengers per hour.¹ Union County Transportation's predominant service type, which is door-to-door demand response service, is likely the reason for its lower than average productivity levels.

**Exhibit III-6
Ridership and Productivity**

Day	Total Passengers	Passengers/Service Hour
Monday	364	2.2
Tuesday	376	2.4
Wednesday	375	2.4
Thursday	336	2.1
Friday	347	2.2
Total/Average	1,798	2.3

Federal and State Compliance Management

The primary tool used by Union County Transportation to assure compliance with federal and state regulation is the *Biennial Federal and State Compliance Questionnaire* provided by NCDOT Public Transportation Division. NCDOT PTD distributes this questionnaire to all section 5311 subrecipients to verify compliance with these regulations.

Answers to a series of the compliance questions mostly indicated that Union County Transportation is in compliance with the regulations. However, it indicated that trips are renegotiated and only counted as trip denials if no alternative time can be agreed upon. While this in compliance with this regulation, Union County Transportation needs to document those trip denials for disabled and non-disabled persons, as well as human service agency and general public trips. Using a standard that defines trips denials as outside a window of time (plus/minus two hours) from the originally requested trip time should provide a better quality of service for passengers.

¹ North Carolina Department of Transportation, Public Transportation Division, Operating Statistics Summary, July 2003 – June 2004, Community Transportation, Single County Systems, Performance Indicators.

IV. RESULTS OF CURRENT APPROACH

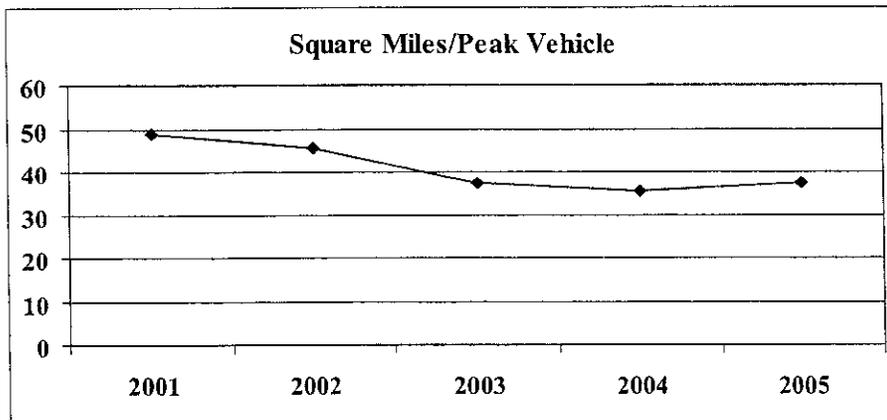
Performance and productivity measures can be good indicators of the overall results of a transit system. Union County Transportation regularly collects data and calculates a number of these measures for the annual Operating Statistics report that is submitted to NCDOT. Five-year trends for these are examined in this section.

LEADERSHIP

Leadership

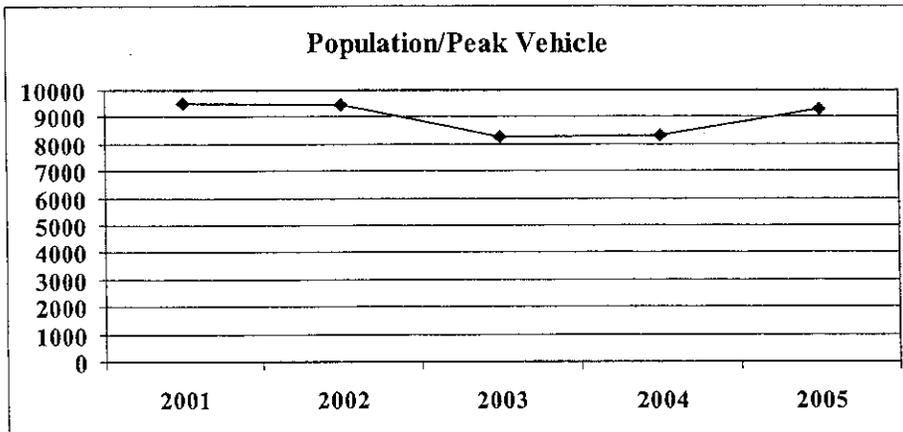
In the past decade since the completion of the last Transportation Development Plan (TDP), one of the primary goals of Union County Transportation management was to increase service in response to meeting unmet transportation needs. The overall increase in service is reflected in the number of square miles in Union County per the maximum number of vehicles Union County Transportation operates at the same time (peak vehicles). This is depicted in Exhibit IV-1. As shown, in 2004 the number of square miles per peak vehicle dropped to under thirty-six (36).

**Exhibit IV-1
Union County Transportation Service Availability**



Except in a rare case, the total area of a County will remain constant. But population will constantly increase and decrease. The proportion of the level of service to the population is an indication of whether service is keeping pace with the population growth or losses. Exhibit IV-2 shows the proportion of Union County population to Union County Transportation's peak vehicle requirement. Despite the population increasing from 123,675 in 2001 to 158,002 in 2005, the total Union County population per peak vehicle decreased from over 9,500 to fewer than 9,300 during this time period.

**Exhibit IV-2
Union County Transportation Service Availability**



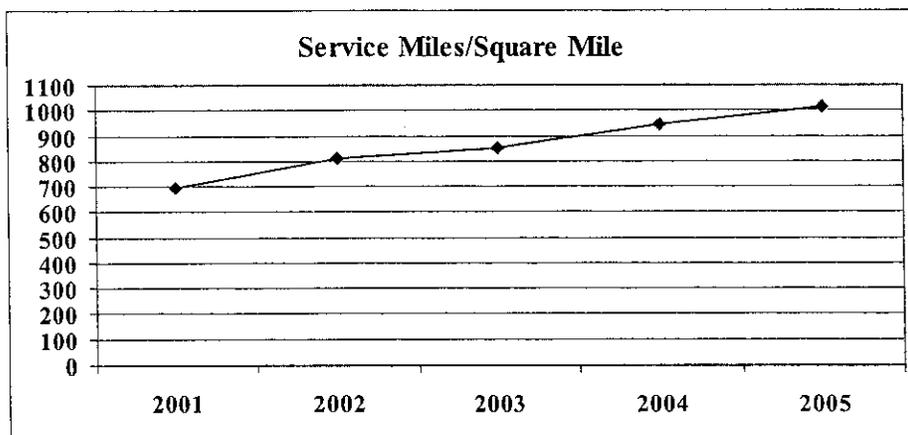
CUSTOMER SERVICE

Customer Service

Several factors indicate a positive trend in customer satisfaction. The results of the on-board survey conducted by the consultant for the CTIP, described in section III, indicate overall satisfaction with Union County Transportation service. Other factors are described in seven performance indicators related to customer satisfaction.

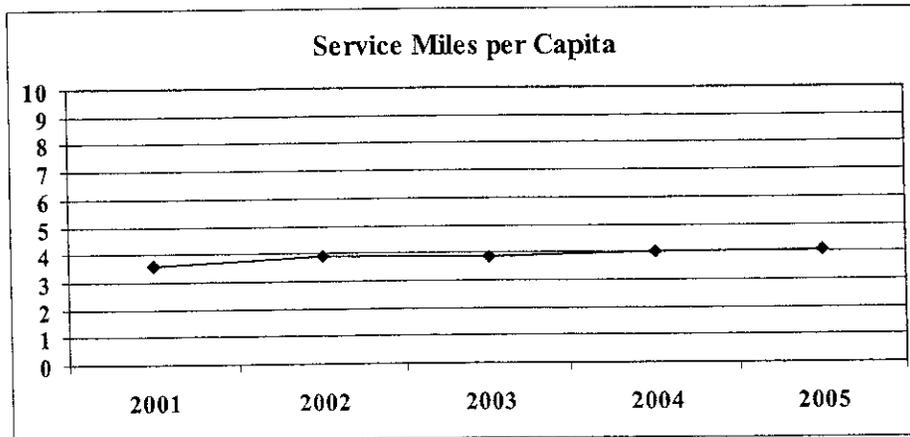
An indication of customer satisfaction is that the overall amount of service in Union County has improved. Exhibit IV-3 shows the number of service miles provided by Union County Transportation per the number of square miles in Union County. This has increased steadily over the past five years from about 700 in 2001 to over 1,000 in 2005.

**Exhibit IV-3
Service Productivity/Customer Service**



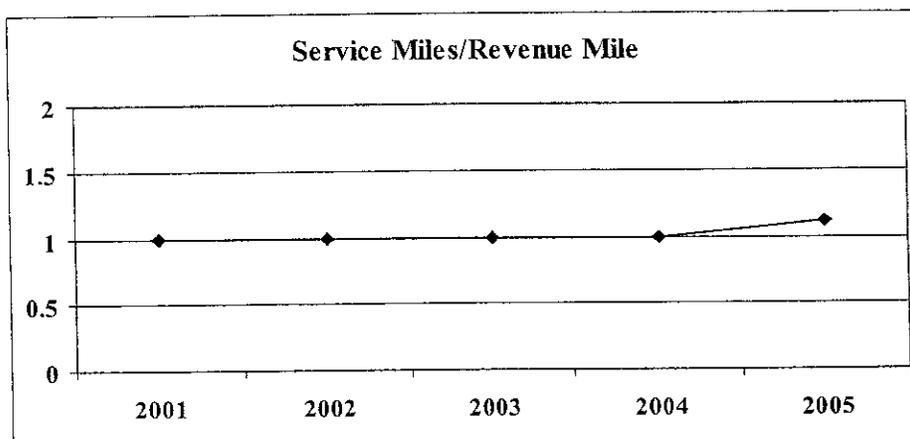
Another indication that Union County Transportation is maintaining an appropriate level of service is the number of service miles provided annually per person residing in Union County (vehicle service miles per capita). Exhibit IV-4 shows an increase in the number of service miles per capita from about 3.6 to about 4.1.

**Exhibit IV-4
Service Productivity/Customer Service**



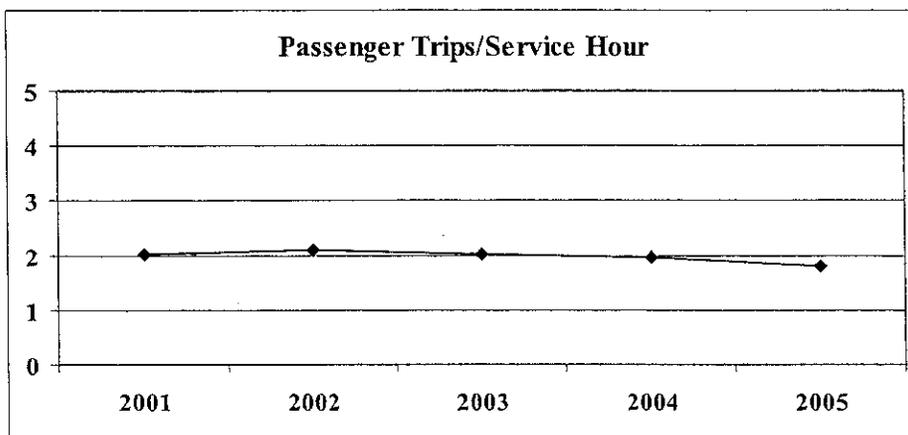
The number of service miles per revenue mile indicates how efficiently Union County Transportation uses its vehicles to serve its customers. Service miles are the total number of miles operated by Union County Transportation vehicles each year. Revenue miles are the portion of the total service miles that occur when the vehicles are transporting passengers. While such local factors as geography and base location affect how many deadhead miles occur, this measure is also an indication of system efficiency. Customer satisfaction is generally improved when non-revenue miles (and costs) are minimized. In 2001 through 2004, Union County Transportation was not able to separate the service miles and revenue miles. In 2005, Union County Transportation reported more service miles than revenue miles resulting in a ratio of 1.1.

**Exhibit IV-5
Service Productivity/Customer Service**



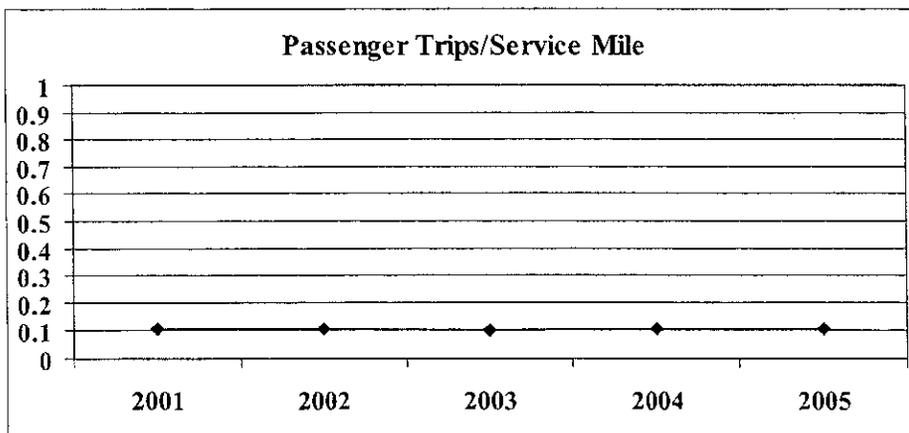
The number of trips per vehicle service hour is a common measure of productivity used in the transit industry. Exhibit IV- 6 shows Union County Transportation’s performance in this area over the past five years. In rural areas this measure can be lowered by increasing trips to out-of-County destinations, increasing service to the lesser-populated areas, or providing more demand response trips or less group subscription trips. The slight decrease in Union County Transportation’s passengers per service hour in 2005 is likely a result of a combination of these factors. Its 1.8 passengers per service hour rate in 2005 is slightly below average for the type of area that it serves.

**Exhibit IV-6
Service Productivity/Customer Service**



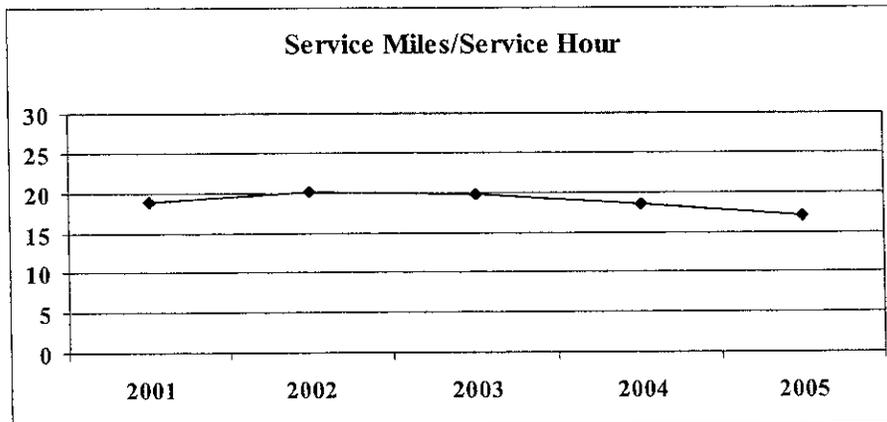
A similar measure to passengers per service hour is the number of passengers per service mile. This also shows a constant level over the past five years. Exhibit IV-7 depicts this trend.

**Exhibit IV-7
Service Productivity/Customer Service**



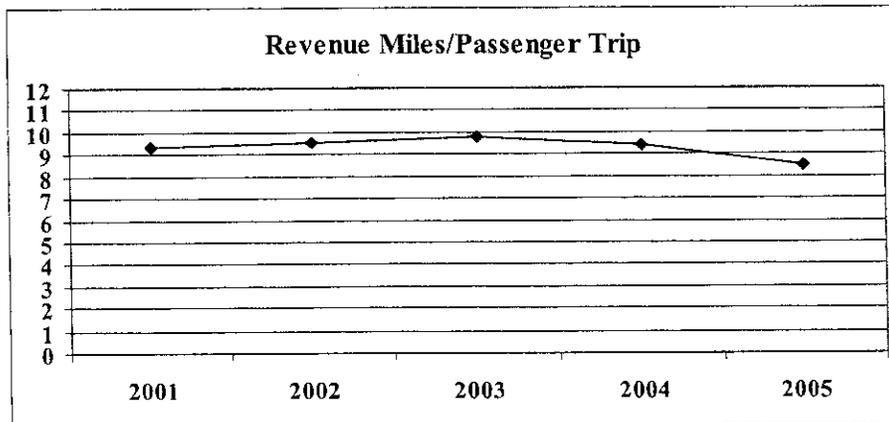
The number of service miles per service hours is an indication of the average speed of Union County Transportation vehicles throughout the operating day. This measure includes time for pick-ups and drop-offs and other times when the vehicle is stopped. Over the past five years this measure has dropped from about twenty (20) to seventeen (17) service miles per service hour. Exhibit IV-8 shows the annual average for the past five years.

**Exhibit IV-8
Service Productivity/Customer Service**



The number of revenue miles per passenger trip is indicative of the average trip length of Union County Transportation passengers. Exhibit IV-9 shows this annual average from 2001 to 2005. It has gradually decreased over the past five years from 9.4 in 2001 to 8.5 in 2005. An increase in local trips, such as those with both origins and destinations in Monroe, is likely a significant factor in this trend.

**Exhibit IV-9
Service Productivity/Customer Service**



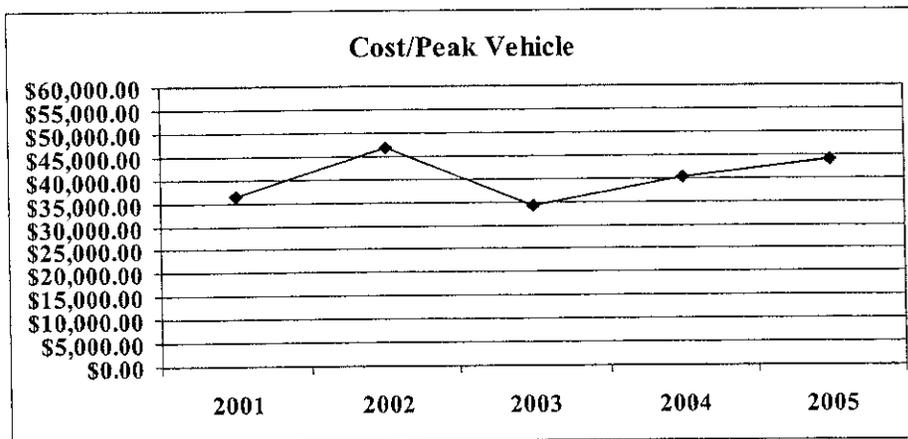
FINANCIAL MANAGEMENT

**Financial
Management**

Monitoring financial performance is an important part of the overall management of a transit system. Some operating costs, such as fuel and insurance, can be difficult to predict from year to year. Unexpected increases in costs can cause reductions in service or trigger requests to funding agencies for additional revenues. Keeping costs at or below the rate of inflation is an important challenge for management to undertake.

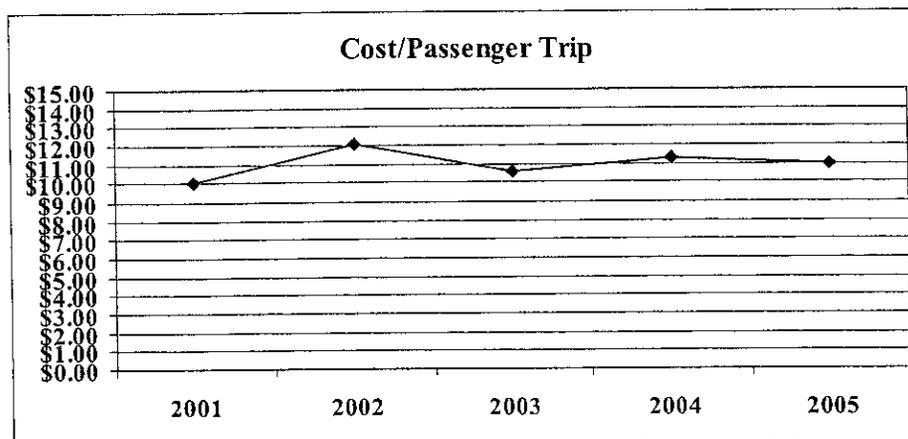
The average total operating cost per peak vehicle have fluctuated over the past five years, as depicted in Exhibit IV-10. Off-peak service improvements will cause disproportionate increases in this measure.

**Exhibit IV-10
Cost of Service**



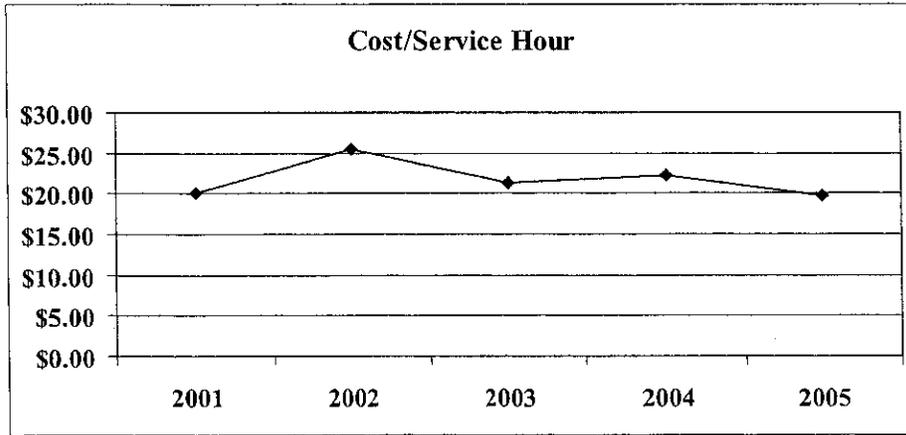
The cost per passenger trip measure reflects not only the overall cost of providing Union County Transportation service, but it also gauges how efficient it is in providing trips. Exhibit IV-11 shows that the cost per passenger trip fluctuated from \$10.00 in 2001 to \$12.06 in 2002. It then decreased to \$10.57 in 2003, and then rose to \$10.96 by 2005.

**Exhibit IV-11
Cost of Service**



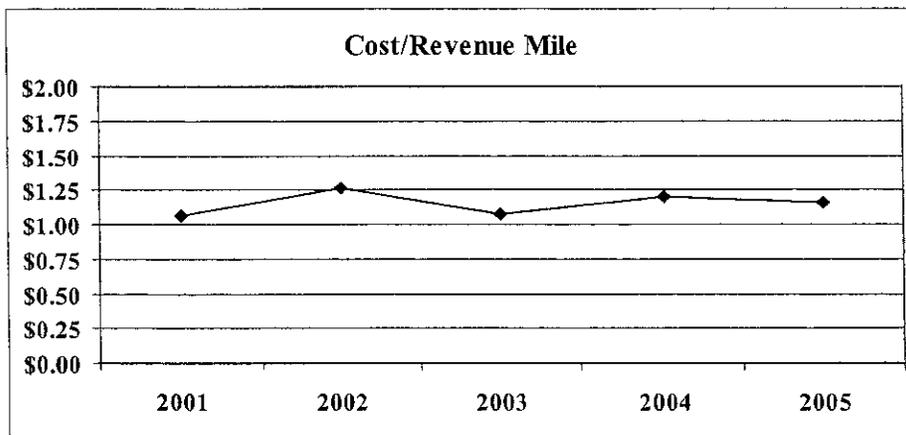
Total cost per service hour is a direct measure of Union County Transportation operating expenses. Exhibit IV-12 shows that this increased between 2001 and 2002 before decreasing to \$19.67 in 2005. This shows a similar pattern as the cost per passenger trip measure. They both indicated that the total cost of providing Union County Transportation services have been kept under control over the past five years.

**Exhibit IV-12
Cost of Service**



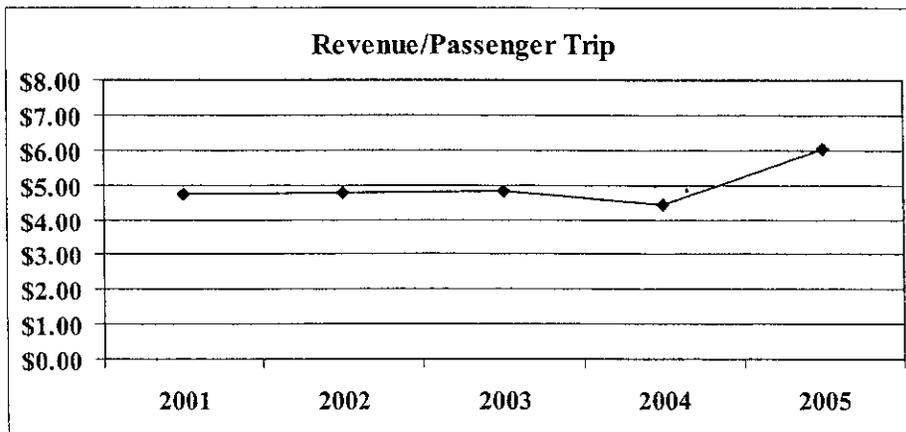
The cost per revenue mile indicator closely parallels the cost per service hour and the cost per passenger measures. This also shows a relatively constant level over the past five years. Exhibit IV-13 shows the five-year trend that results in a 2005 average cost per revenue mile of \$1.16.

**Exhibit IV-13
Cost of Service**



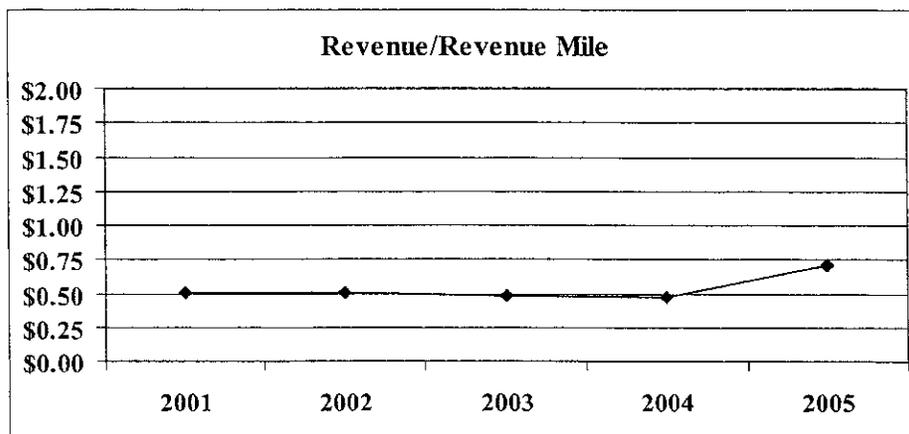
Revenue per passenger trip also increased over the past five years. Revenue used in this indicator includes passenger fares and contract revenue, and does not include local, state or federal subsidies. Exhibit IV-14 shows that average revenue per trip has decreased from \$4.73 in 2001 to \$4.42 in 2004. It then increased to \$6.05 in 2005.

**Exhibit IV-14
Cost of Service**



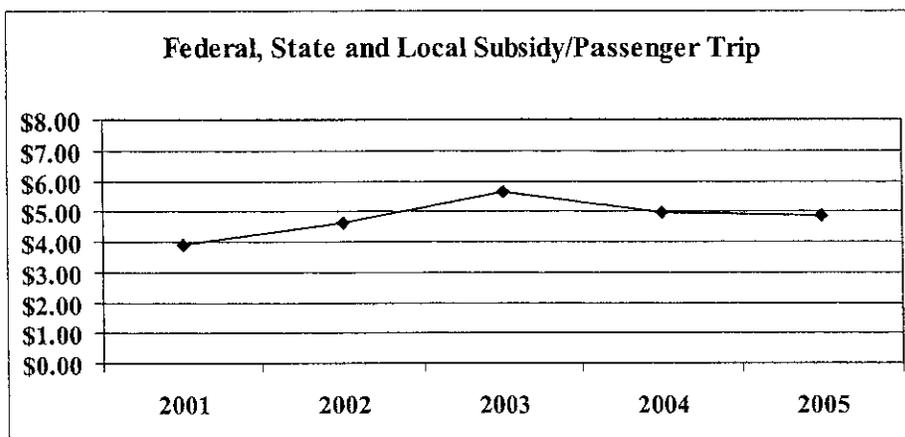
A similar pattern is seen for the amount of non-subsidy revenue per revenue mile as for revenue per passenger. Revenue per revenue mile increased remained constant around \$.50 from 2001 to 2004. It then increased to \$.71 in 2005. This is a result of a significant increase in contract revenues in 2005.

**Exhibit IV-15
Cost of Service**



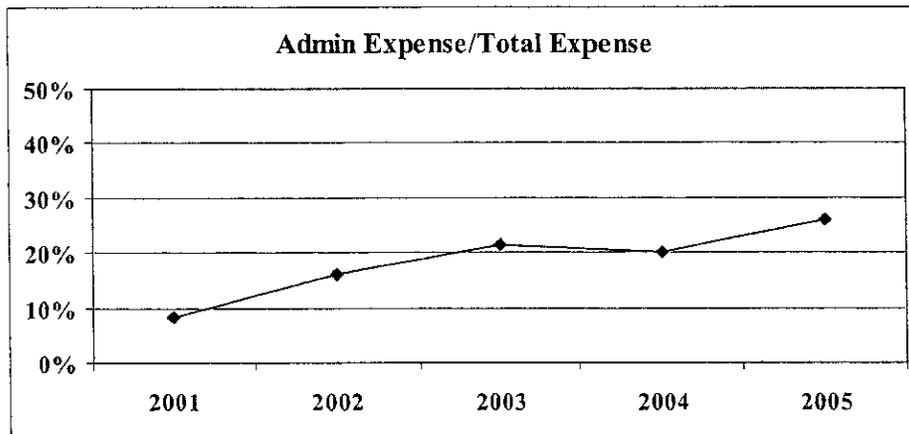
The amount of subsidy per passenger trip has leveled off after steadily increasing from 2001 to 2003. In 2001, it was \$3.93. This grew to \$5.65 in 2003, and then dropped to \$4.87 in 2005. This supports the explanation that the increase in contract revenues has resulted in a reduction of the amount of subsidy per passenger trip.

**Exhibit IV-16
Cost of Service**



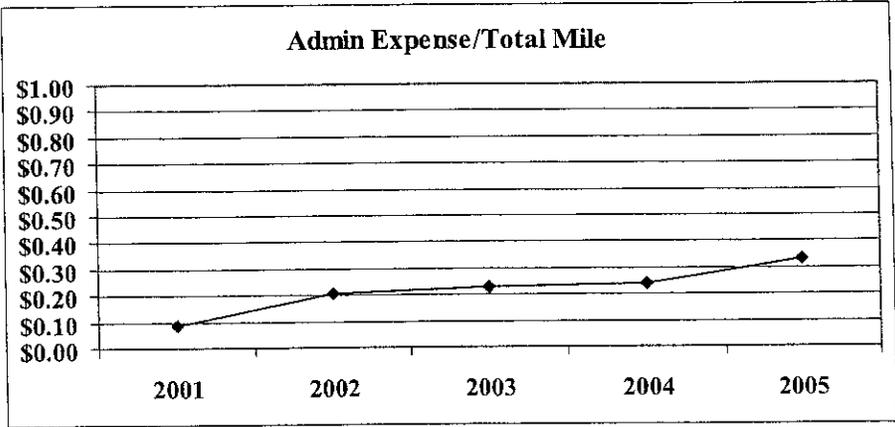
The percentage of administrative costs of total expenses has been increasing over the past five years. From a low of 8.2 percent in 2001, administrative costs have increased to 25.9 percent in 2005. The primary reasons for this is additional advertising and promotion costs, an increase in the indirect services line item, and added printing costs for Union County Transportation's brochure.

**Exhibit IV-17
Cost of Service**



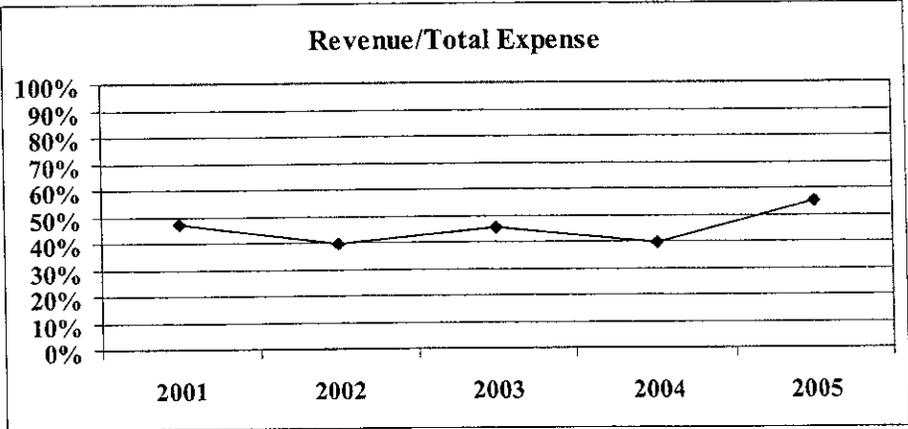
Some increase in the administrative expense per vehicle mile occurred between 2001 and 2004. In 2005, it increased to \$.33. This indicates that administrative costs have increased relative to service levels.

**Exhibit IV-18
Cost of Service**



As shown in Exhibit IV-19, a slight decrease in the percentage of farebox and agency contract revenue of total operating expenses has occurred between 2001 and 2004. In 2005, it rose to over fifty (50) percent. This indicates a stability of Union County Transportation passenger fare and contract revenue sources, and reflects the increase in 2005.

**Exhibit IV-19
Cost of Service**



HUMAN RESOURCES

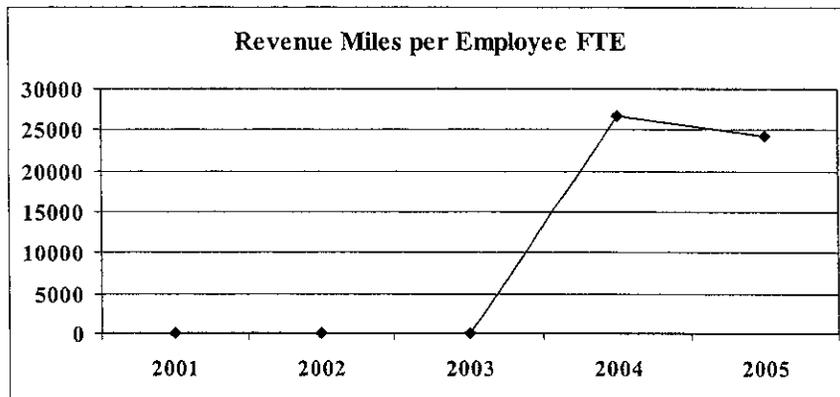
**Human
Resources**

Performance Indicators

The NCDOT Operating Statistics report has required that employee FTEs be reported only since 2004. Therefore only two years of data are available for several of the employee productivity indicators. This is not long enough of a time period to identify any trends. A change over one year can be an aberration or a result of a change in the way certain data is collected. It is only after multiple years of consistent data collection and review, that any operational or organizational change in response to a downward trend should be considered.

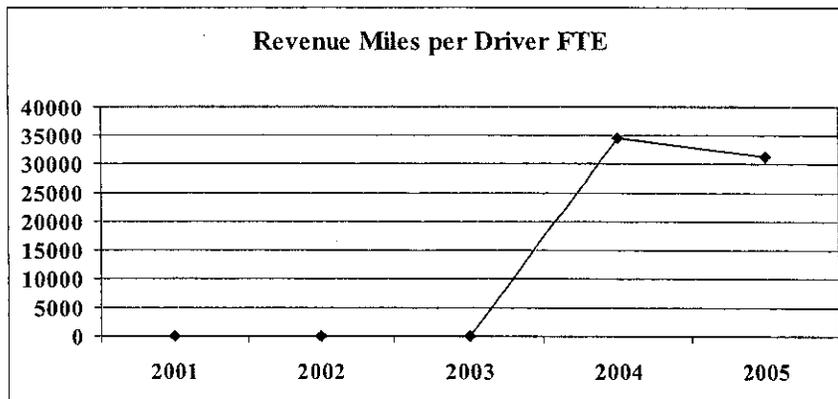
A slight decrease in the number of revenue miles per employee FTE occurred in the past year. Exhibit IV-20 shows these levels. In 2005, there were 24,287 revenue miles per FTE. This is one measure of employee productivity.

**Exhibit IV-20
Employee Utilization and Productivity**



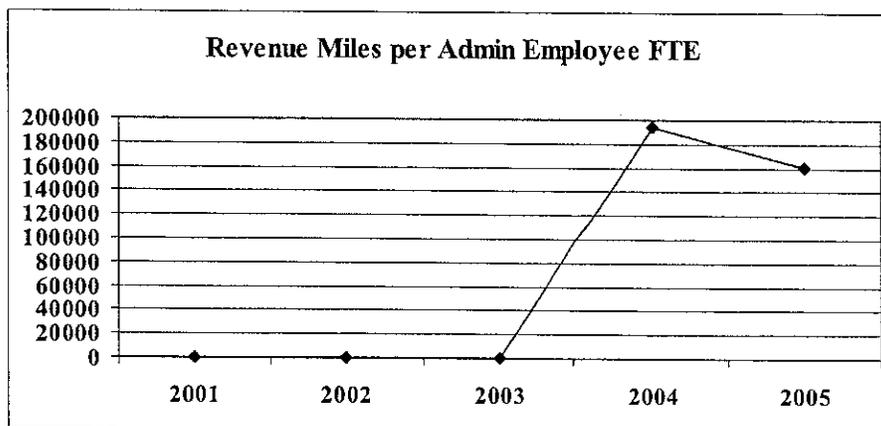
There was a decrease in the number of revenue miles per driver FTE from 2004 to 2005. Exhibit IV-20 shows that this decreased from about 34,583 in 2004 to about 31,245 in 2005.

**Exhibit IV-20
Employee Utilization and Productivity**



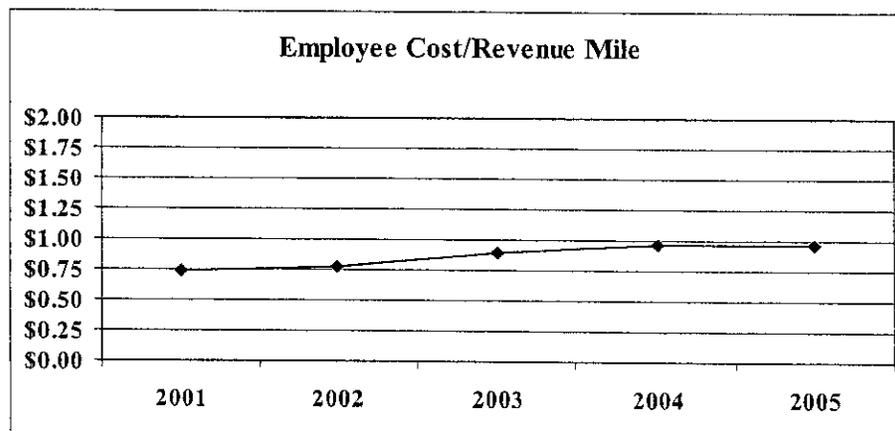
The number of revenue miles per administrative employee also decreased in 2005. As shown in Exhibit IV-21, this measure dropped from about 200,000 to just over 160,000. While no actions can be recommended based on the limited amount of data, this and the two previous performance measures should be monitored in the future.

**Exhibit IV-21
Employee Utilization and Productivity**



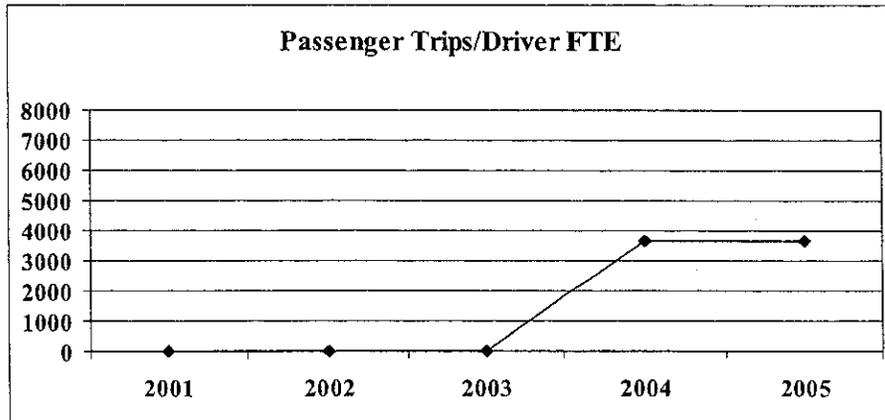
The employee cost per revenue mile indicator is a direct measure of employee productivity. Exhibit IV-22 shows that employee costs per revenue mile shows an increase between 2002 and 2004. In 2005, it remained constant at under one dollar per revenue mile.

**Exhibit IV-22
Employee Utilization and Productivity**



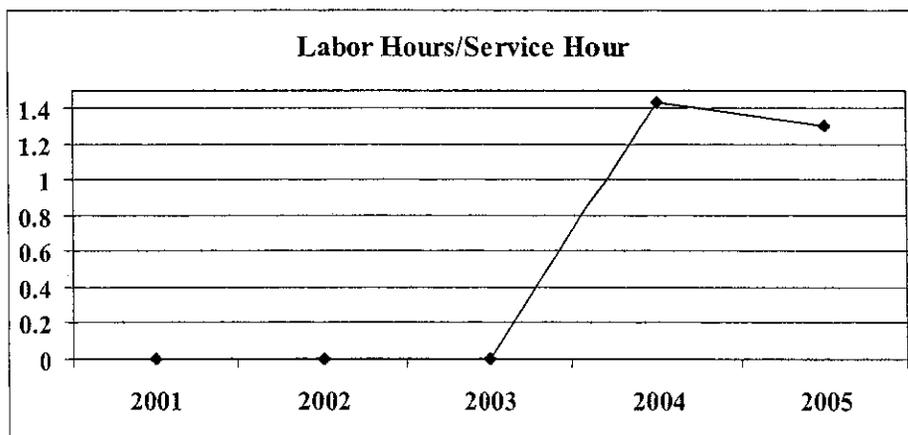
The number of passenger trips per driver FTE is also direct measure of employee productivity. Exhibit IV-23 shows that this has remained at about 3,700 in 2004 and 2005. A few more years of data are needed to determine if any trends exist.

**Exhibit IV-23
Employee Utilization and Productivity**



The number of labor hours per service hour is an indicator of how efficient employees are used in the provision of transportation services. While ancillary services, such as customer information, will tend to increase this measure, they can also improve the overall quality of a transit system. Therefore, any increases in this indicator can be justified by improvements in the overall customer experience. Exhibit IV-24 shows that the number of labor hours per service hour actually decreased in 2005.

**Exhibit IV-24
Employee Utilization and Productivity**



Employee Satisfaction

An employee satisfaction survey was conducted for the CTIP and the results are described in section III. This survey identified some areas that are strengths of the Union County Transportation management approach. These include:

- ◆ Management is honest with employees and treats employees with dignity and respect; and
- ◆ Most employees enjoy their job and enjoy working for Union County Transportation.

Areas that Union County Transportation management should work to improve include:

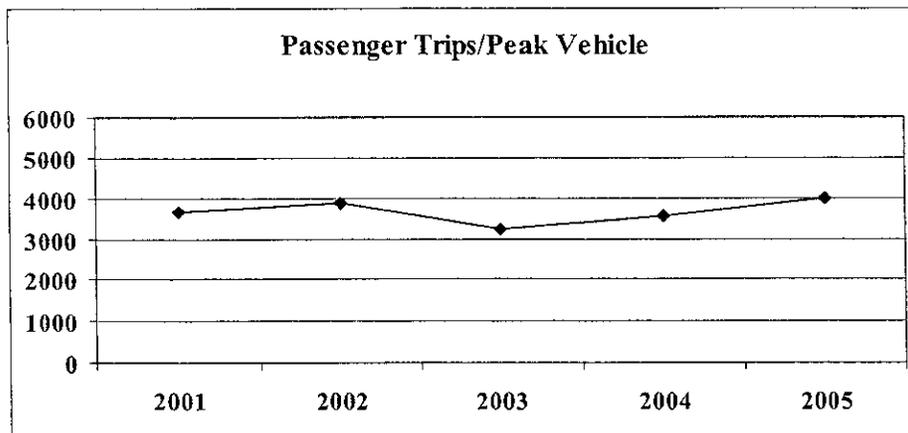
- ◆ The working condition of vehicles and equipment;
- ◆ Employee feedback;
- ◆ Service schedules;
- ◆ Employee participation in creating vision for organization;
- ◆ Serving the needs of the entire community, including those who do not use transportation services.

This survey found an overall satisfaction of employees with the working environment. With an overall rating of 4.37, most employees indicated that Union County Transportation is a desirable place to work.

OPERATIONS MANAGEMENT

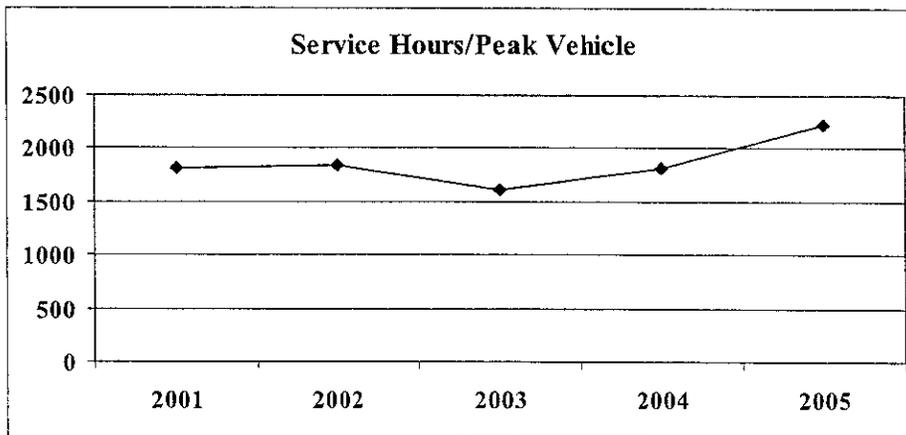
A reverse in the downward trend for the number of passenger trips per peak vehicle occurred in 2003. Prior to that this decreased from about 3,600 in 2001 to about 3,200 in 2003. In 2005, it increased to over 4,000. Exhibit IV-25 depicts this information.

**Exhibit IV-25
Vehicle Utilization and Maintenance**



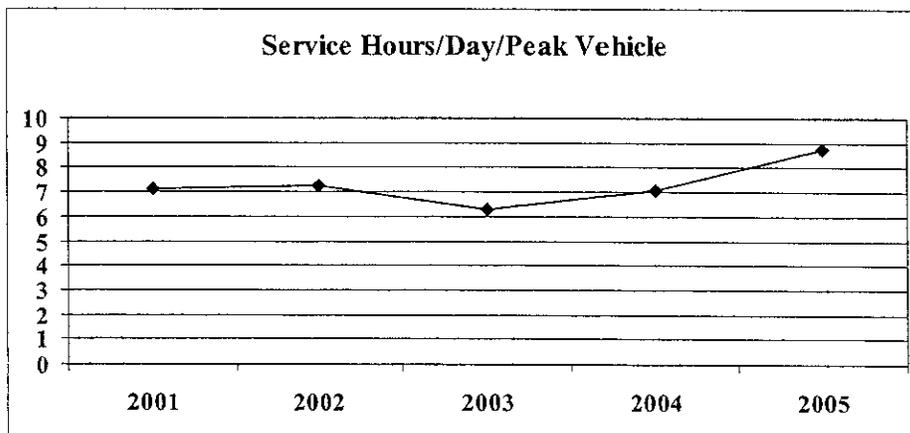
A similar pattern is seen in Exhibit IV-26 for the number of service hours per peak vehicle. This decreased from 2001 to 2004, and subsequently increased to its highest level in five years of 2,230 in 2005. The type of service that is provided can directly affect this measure. For example, if an operator provides a high proportion of peak service, such as that needed for sheltered workshops, this measure will be lower than other operators without high peak requirements.

**Exhibit IV-26
Vehicle Utilization and Maintenance**



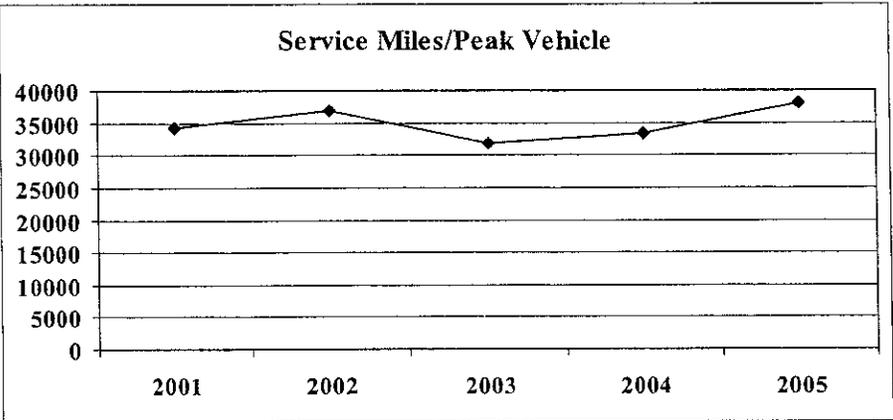
The number of service hours per day per peak vehicle is an estimate of the average time a vehicle is in operation during throughout a service day. As depicted in Exhibit IV-27, this also showed a steady decrease from 2001 to 2004, before an increase in 2005 to its highest level in five years of 8.7.

**Exhibit IV-27
Vehicle Utilization and Maintenance**



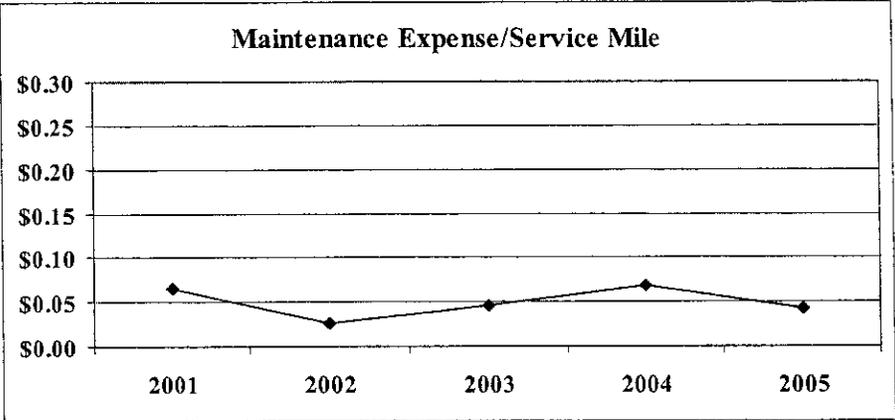
The number of service miles per peak vehicle is a measure of vehicle utilization. Since the entire Union County Transportation fleet is larger than the peak vehicle requirement, it is not a measure of the average number of miles put on each vehicle. That number would be smaller. Exhibit IV-28 depicts a fluctuating level of service miles per peak vehicle over the past five years. In 2005, it was just under 38,000.

**Exhibit IV-28
Vehicle Utilization and Maintenance**



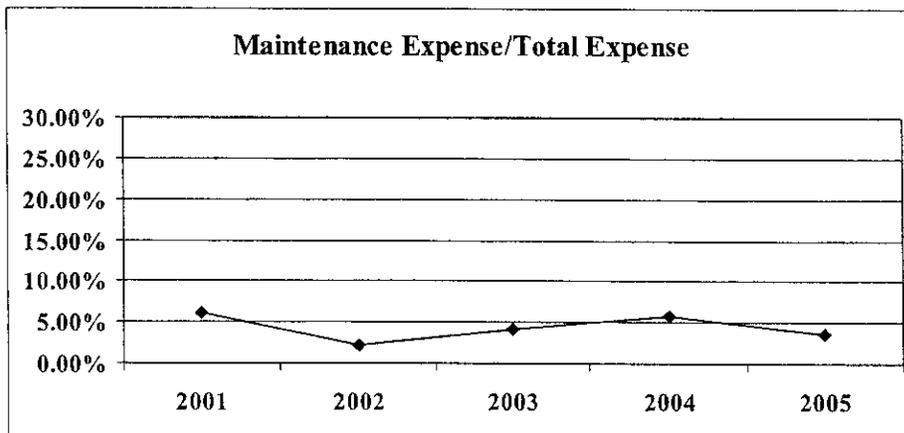
The maintenance expense per service mile has fluctuated over the past five years around \$.05. This is a relatively low cost for vehicle maintenance. Exhibit IV-29 shows this five-year trend.

**Exhibit IV-29
Vehicle Utilization and Maintenance**



A similar pattern is seen in the five-year trend for the percentage of maintenance expense of total expenses, as depicted in Exhibit IV-30. In these years, maintenance expense fluctuated around five (5) percent of total expenses.

**Exhibit IV-30
Vehicle Utilization and Maintenance**



ORGANIZATIONAL EFFECTIVENESS

Union County Transportation has increased service every year over the past five years. Vehicle service miles have increased from 444,044 in 2001 to 644,878 in 2005, which is a forty-five (45) percent increase. Vehicle service hours were increased by sixty-one (61) percent from 23,534 in 2001 to 37,898 in 2005. A corresponding increase in ridership can be expected, and did result. Total ridership on Union County Transportation rose from 47,408 in 2001 to 68,023 in 2005, which is a forty-three (43) percent increase.

The Simpson-Curtin rule states that a transit system can expect a service elasticity of 0.7; that is, for every one percent of service increase, a 0.7 percent increase in ridership can be expected. Using the 2005 percentage increase in service hours, Union County Transportation achieved a 0.89 ridership increase for every one percent increase in service hours. Using service miles, the results were more positive. For every one percent increase in service miles, there was an increase of 0.98 in ridership. Using this standard, the service increases over the past five years were successful.

Union County Transportation completed its *Biennial Federal and State Compliance Questionnaire* and submitted it to NCDOT. Union County

**Organizational
Effectiveness**

Transportation certified compliance in most areas with few exceptions. These are described in section III.

With medical facilities and other attractions located in nearby Charlotte, there are opportunities to coordinate service with adjacent counties. In particular, Anson County operates through Union County on its trips to and from Charlotte. Union County sends at least one vehicle, and occasionally two, into Charlotte each day. Coordinating trips between these two counties would likely result in financial benefits for each.

Coordinating Union County Transportation service with Mecklenburg County services, including CAT and STS, would also achieve savings. CAT, the public transportation provider in the Charlotte area, operates an express bus route in to downtown Charlotte. This is suitable for persons who are able to use public transit with destinations in downtown Charlotte. Three park and ride lots are used for this route and could be used for transfers to and from Union County Transportation vehicles. STS is the ADA and specialized service demand response provider in Mecklenburg County. Certain trips near the Union County border, particularly those with destinations at major medical facilities, could potentially be used to transfer passengers between STS and Union County Transportation.

V. IMPROVEMENT PLAN AND IMPLEMENTATION

SERVICE IMPROVEMENTS

Two major service improvements are proposed. Both are an expansion of the current services, and will require additional funding or a significant reallocation of current service.

Monroe Route Deviation Service

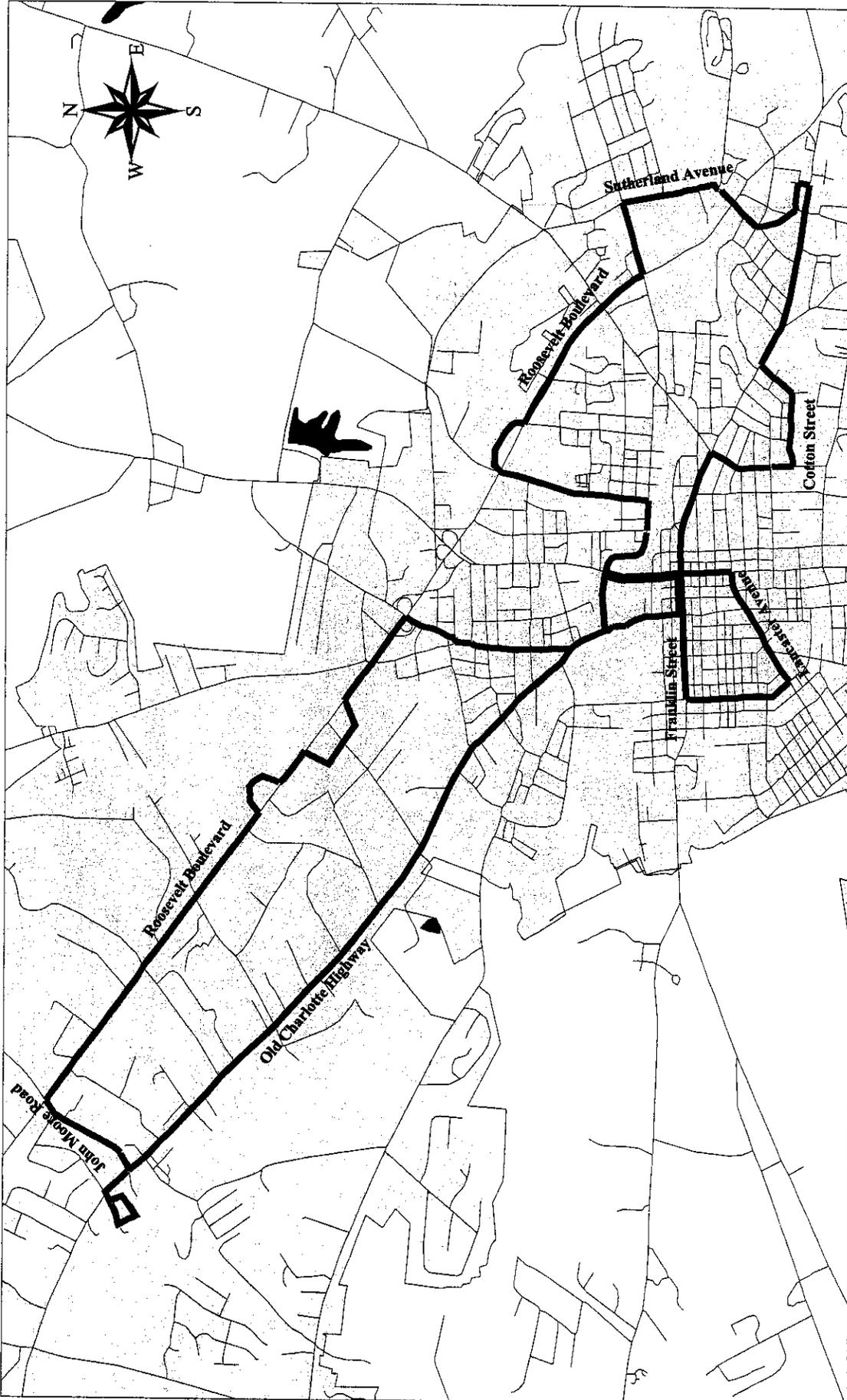
This recommendation includes a plan for establishing route deviation service in the City of Monroe. Route deviation refers to a type of transit service where a vehicle arrives at designated stops in accordance with a schedule but will depart from the route in response to requests for service. It allows the vehicle to provide curb-to-curb service for those who request it. Two routes are proposed to serve Monroe.

Route deviation service can serve residents within a reasonable proximity of the route. Passengers can make trip reservations in advance, but same-day trip requests can also be accepted. Two new routes are included. One route would operate mostly through neighborhoods in the east end of Monroe. It would serve Union Regional Medical Center, the Monroe Senior Center, and the Union County Department of Social Services center on Roosevelt Boulevard. This route could also accommodate scheduled deviations to Union Diversified Industries on Walkup Avenue to meet the start and end times of their primary shifts. One vehicle would be needed for this route.

A second route would operate from downtown Monroe to the South Piedmont Community College on Charlotte Highway, Wal-Mart shopping center, Union Square Shopping Center, and the Monroe Mall on Roosevelt Boulevard. This route would also operate along Concord Avenue. Another vehicle would be dedicated to this route. Both routes would operate through downtown Monroe and their vehicles would meet each hour to facilitate transferring. Exhibit V-1 shows the proposed alignment for both routes. Exhibit V-2 includes draft schedules for each route.

Route deviation service could include curb-to-curb service that will require vehicles to be operated on narrow streets and driveways. This would necessitate a light transit vehicle be used for the added maneuverability. Also, the schedule must include time for deviations. Another option is to limit the deviations off the route to specific streets. This would mean that a person requesting a pick up may have to walk to the nearest street where the vehicle is permitted to deviate, rather than having a pick up in front of their home or destination. This will require less time to be built into the schedule for deviations.

Service Improvements



**Exhibit V-1 Proposed Monroe
Route Deviation Service
Union County Transportation
Development Plan**



RLS & Associates, Inc.

Proposed route 1
Proposed route 2

**Exhibit V-2
Monroe Route Deviation Draft Schedules**

Route 1

Clockwise

Route	Block	Pullout	Franklin/ Hayne	Union Cty. DSS	Union Regional Medical Ctr.	Cotton/ Charles	Franklin/ Johnson	Lancaster/ Charlotte	Franklin/ Hayne	Pull In
East	1-1	6:55	7:00	7:07	7:19	7:25	7:33	7:37	7:40	
East	1-1		8:00	8:07	8:19	8:25	8:33	8:37	8:40	
East	1-1		9:00	9:07	9:19	9:25	9:33	9:37	9:40	
East	1-1		10:00	10:07	10:19	10:25	10:33	10:37	10:40	
East	1-1		11:00	11:07	11:19	11:25	11:33	11:37	11:40	
East	1-1		12:00	12:07	12:19	12:25	12:33	12:37	12:40	
East	1-1		13:00	13:07	13:19	13:25	13:33	13:37	13:40	
East	1-1		14:00	14:07	14:19	14:25	14:33	14:37	14:40	
East	1-1		15:00	15:07	15:19	15:25	15:33	15:37	15:40	
East	1-1		16:00	16:07	16:19	16:25	16:33	16:37	16:40	
East	1-1		17:00	17:07	17:19	17:25	17:33	17:37	17:40	
East	1-1		18:00	18:07	18:19	18:25	18:33	18:37	18:40	18:50

Route 2

Clockwise

Route	Block	Pullout	Franklin/ Hayne	Charlotte Hwy./ Concord	Charlotte Hwy./ Dickerson	Charlotte Hwy./ John Moore	Charlotte Hwy./ Rocky River Rd.	Union Cty. Professional Devel. Center	John Moore/ Roosevelt Blvd.	Wal-Mart	Monroe Mall	Charlotte Hwy./ Concord	Franklin/ Hayne	Pull In
West	1-2	6:55	7:00	7:05	7:13	7:18	7:21	7:24	7:32	7:38	7:43	7:48	7:52	
West	1-2		8:00	8:05	8:13	8:18	8:21	8:24	8:32	8:38	8:43	8:48	8:52	
West	1-2		9:00	9:05	9:13	9:18	9:21	9:24	9:32	9:38	9:43	9:48	9:52	
West	1-2		10:00	10:05	10:13	10:18	10:21	10:24	10:32	10:38	10:43	10:48	10:52	
West	1-2		11:00	11:05	11:13	11:18	11:21	11:24	11:32	11:38	11:43	11:48	11:52	
West	1-2		12:00	12:05	12:13	12:18	12:21	12:24	12:32	12:38	12:43	12:48	12:52	
West	1-2		13:00	13:05	13:13	13:18	13:21	13:24	13:32	13:38	13:43	13:48	13:52	
West	1-2		14:00	14:05	14:13	14:18	14:21	14:24	14:32	14:38	14:43	14:48	14:52	
West	1-2		15:00	15:05	15:13	15:18	15:21	15:24	15:32	15:38	15:43	15:48	15:52	
West	1-2		16:00	16:05	16:13	16:18	16:21	16:24	16:32	16:38	16:43	16:48	16:52	
West	1-2		17:00	17:05	17:13	17:18	17:21	17:24	17:32	17:38	17:43	17:48	17:52	
West	1-2		18:00	18:05	18:13	18:18	18:21	18:24	18:32	18:38	18:43	18:48	18:52	18:57

**Service
Improvements**

Route deviation service could be designed to serve subscription service, standing orders, and existing agency contracts. For example, clients traveling to and from Union Diversified Industries (UDI) on Walkup Avenue could request a standing order be scheduled for door-to-door service for a particular trip each day. The necessary deviations would then be scheduled for a morning trip to UDI and for the return trip in the afternoon.

The resources required to start the route deviation service are summarized in Exhibit V-3. The two vehicles needed to operate the proposed routes would run 6,222 service hours annually. Using the estimated 2008 Union County Transportation's average hourly cost of \$22.13, annual operating costs are estimated at \$137,683. Potential revenue sources include new funding from the City of Monroe and from the Job Access Reverse Commute (JARC) program. It would also be possible to fund this service out of the Rural General Public (RGP) program and agency contracts.

**Exhibit V-3
Resource Requirements**

Service Hours	Vehicles	Annual Operating Cost	Driver FTEs	Potential Revenue Sources
6,222	2	\$137,683	3.0	City of Monroe, JARC, RGP, Agency Contracts

Weekday Evening Service

Union County Transportation has received a number of requests for evening service. CTIP Steering Committee members also mentioned it as a desirable service improvement, particularly for those needing transportation to work for second or third shifts. It is recognized that this is a relatively low demand time period for transportation. Therefore, evening service should begin with an agency contract or after a specific group of people willing to commit to using the service are identified. Through time, ridership can be expected to build.

Exhibit V-4 shows the estimated resource requirements for the start of weekday evening service. One vehicle is likely to be needed for an average of four hours per weekday evening. This translates into an annual operating cost of \$22,571. Another consideration for starting evening service is that a dispatcher will be needed during these hours. These costs are included in the \$22.13 hourly cost of Union County Transportation service. The most likely revenue sources for this are agency contracts and JARC funding.

**Service
Improvements**

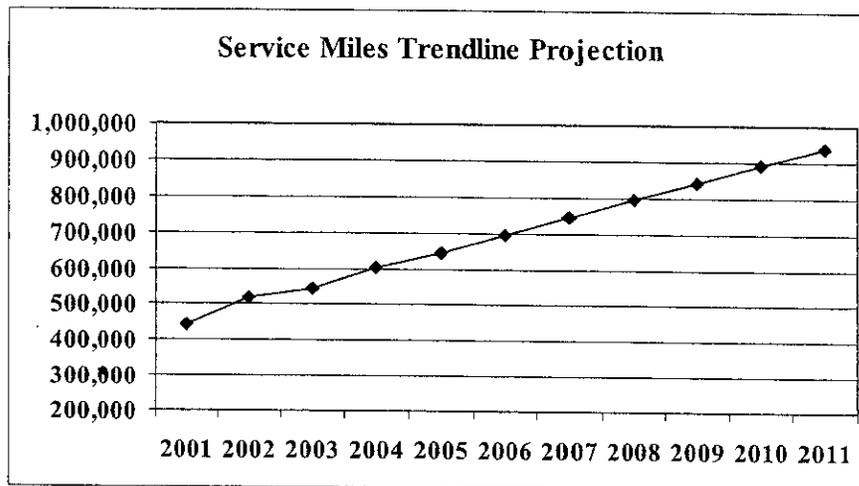
**Exhibit V-4
Resource Requirements**

Service Hours	Vehicles	Annual Operating Cost	Driver FTEs	Potential Revenue Sources
1,020	1	\$22,571	0.5	JARC, Agency Contracts

Expand Current Services

As described in Section II, Union County Transportation Service has increased by over ten (10) percent each year from 2001 to 2005. This is a result of a rapidly growing population and a corresponding increase in demand for transportation. Exhibit V-5 shows the actual number of service miles provided annually by Union County Transportation from 2001 to 2005 along with a trend line projection through 2011.

**Exhibit V-5
Union County Transportation Service Projection**



The continuation of this rapid growth should be viewed as the upper end of projected service levels for Union County Transportation. This straight-line projection results in an average annual increase in service of approximately five (5) to six (6) percent. They would include the expanded evening service as well as the Monroe route deviation service. The Monroe route deviation service totals about 6,222 service hours annually, while the evening service is estimated to total about 1,020 annual service hours. It would also include an expansion of existing agency contract and RGP services. With this level of growth, total service hours would increase by approximately 11,650 from 2006 levels. This would leave of 4,417 service hours annually for current agency contract and RGP services.

Exhibit V-6 summarizes the resource requirements for the growth of current agency contract and RGP services. Three additional vehicles will

**Service
Improvements**

be needed to operate the additional service along with 2.1 driver FTEs, for a total operating cost of \$97,747 annually.

**Exhibit V-6
Resource Requirements**

Service Hours	Vehicles	Annual Operating Cost	Driver FTEs	Potential Revenue Sources
4,417	3	\$97,747	2.1	RGP, Agency Contracts – DSS, DOH

Western Union County Service Expansion

Much of Union County's rapid growth is concentrated in the western part of the County. This includes the communities of Waxhaw, Weddington, Indian Trail, Hemby Bridge and Stallings. These communities are fast becoming suburbs of the greater Charlotte area. Service for Charlotte Area Transit System (CATS) commuter express service into Charlotte is likely to grow. This is further discussed in the subsequent section on CATS service. It is also expected that a significant portion of the expanded RGP and Agency Contract service would be concentrated in the western most populous area of the County. Some trips, particularly those with destinations in Charlotte/Mecklenburg County, can be coordinated with STS, which is Mecklenburg County's demand response service. The volume of trips provided in this part of the County should be monitored on a regular basis to determine if new types of services, such as the route deviation service proposed for Monroe, are warranted.

Anson County Coordination

Trips to locations outside of Union County carry higher costs than most trips due to deadhead miles or hours. With a greater volume of trips between Union County and Charlotte and other locations in Mecklenburg County, Union County Transportation must continue to find ways to control costs in meeting this demand. Coordinating these trips with Anson County is potentially an effective way to control these costs. One means of coordinating these trips is to develop a joint schedule with shared responsibility between Union and Anson County. Common transfer locations in Union County can be designated to facilitate the coordinated schedule. The result will be increased opportunities for out-of-county travel for Union and Anson County residents. The recently executed agreement between these counties will facilitate such an arrangement.

Charlotte Area Transit System Partnership

The Charlotte Area Transit System (CATS) currently operates commuter express route 74X connecting Union County with downtown Charlotte. This is done with financial support from Union County. There are three inbound morning trips between 5:57 a.m. and 6:57 a.m., and four outbound afternoon trips leaving downtown Charlotte between 4:08 p.m.

and 5:52 p.m. This route operates along U.S. 74 and stops in Union County at the K-Mart park and ride lot in Monroe, and the Union Centre park and ride lot in Indian Trail.

There are also long range transit plans for Mecklenburg County that will affect the U.S. 74 corridor.

Union County transit trips into Charlotte will be enhanced by long-range plans currently under consideration involving Bus Rapid Transit (BRT) or Light Rail Transit (LRT). The Southeast Corridor extends approximately 13.5 miles from Charlotte's Center City to the border of Mecklenburg and Union Counties. At the MTC meeting on September 27, 2006, the MTC adopted the following motion that:

1. BRT be selected as the locally preferred alternative in the Southeast Corridor; and
2. Implementation of BRT be delayed for at least five years to allow for the future reconsideration of Light Rail (LRT) in the Southeast Corridor; and
3. That CATS' staff is directed to take the necessary steps in design and engineering with NCDOT on the Highway Project (Independence Boulevard) so that light rail could be considered in the future.

Implementation of these long range plans will likely increase demand for transit from western Union County residents. The short range demand for CATS commuter express service is also likely to grow with the rapid increase in population near the Union County/Mecklenburg County border. This service is appealing to those commuting to downtown Charlotte who want to avoid downtown parking costs, save on gas and other automobile operating costs, and avoid traffic congestion.

Under certain circumstances, Union County Transportation will currently be able to transfer some of its passengers to CATS route 74X at the two park and ride lots in Union County. While these routes are designed for downtown Charlotte work trips, passengers with medical destinations can transfer in downtown Charlotte to other CATS routes serving the Carolinas Medical Center, Charlotte Institute of Rehabilitation, Presbyterian Hospital, Mercy Hospital and other medical facilities.

Marketing

Union County Transportation should annually prepare a schedule for promotional activities. There will be some printing, mailing and other costs associated with marketing efforts. Marketing efforts will be particularly important to maintain service to the general public. This can include newspaper advertising, press releases, special event promotions, targeted mass mailings, and other promotional activities. This is critical for new services such as the proposed route deviation service, weekday

**Service
Improvements**

evening service, and expanded RGP service. Marketing activities should be tied to these areas of service growth.

Union County Transportation should also combine the two brochures it uses to advertise RGP and Agency Client services. This will help save costs and simplify their distribution. It will also help promote awareness of the RGP program among agency clients, as well as advertising the existence of agency client transportation to RGP passengers.

**Service
Improvements**

SYSTEM RECOMMENDATIONS

A number of recommendations related to the management and operation of the Union County Transportation system are described in the following pages. These relate to all functional areas reviewed.

**System
Recommendations**

Leadership and Strategic Planning

Currently, Union County Transportation has a mission statement and goals to guide the overall management of the system. These are general statements providing an overall direction for the organization. It is difficult to determine how well the system is doing in meeting these goals. Union County Transportation should also adopt a series of objectives, some of which can be tied to performance measures, that relate to attainment of these goals. For example, the mission statement includes the words: "... provide efficient and affordable transportation..." A goal for this could be: "Operate UCT service in the most cost efficient way possible." There can be several annual objectives for this goal, such as \$xx cost per service hour, \$xx cost per passenger, etc.

Potential areas of growth of agency contract service are with the Union County Department of Social Services (DSS) and the Union County Department of Health (DOH). These agencies currently utilize other transportation providers for some of their needs. Union County Transportation should continue to work with these agencies to determine the potential for expanding existing contracts or providing new services.

Also, when expanding services, input from drivers and staff should be sought. The employee satisfaction survey identified this as an area for improvement.

The following recommendations for the Leadership and Strategic Planning areas are made:

- ◆ To better implement the Union County Transportation mission and goals, measurable objectives should be adopted each year. While certain objectives may relate to a single accomplishment and are not numerical in nature, many financial and performance objectives can be stated in specific measurable terms.

**System
Recommendations**

- ◆ Transportation needs of the Union County agencies, including the DSS and DOH, should be reviewed on an on-going basis by Union County Transportation staff.
- ◆ When new services are provided, input from drivers and staff should be sought. This could be in the form of a special service committee that may meet several times, or it may be a general open meeting where all employees are invited to attend. One opportunity for staff input will be for when the Monroe route deviation service is initiated.

Customer Service

Effective customer service is not only the responsibility of those taking reservations or providing information over the telephone. It is an attitude that should permeate the entire organization from drivers to top-level management. In order to foster an organization-wide culture of customer service, a customer service goal with measurable objectives should be added to Union County Transportation's set of goals. In addition, a customer service session should be added to the initial training that a new employee receives.

The following recommendations for the Customer Service area are made:

- ◆ A goal relating to customer service should be added to the current set of Union County Transportation goals. Measurable objectives, such as the number of complaints or on-time performance, should also be adopted at least annually.
- ◆ Customer service training should be initiated as part of the new employee orientation. Topics could include such things as passenger handling, passenger interaction, learning the different services provided by Union County Transportation.

Financial Management

Currently Union County Finance Department provides support to Transportation Department staff in the financial management area. This support encompasses a number of areas including budget preparation and monitoring, payroll, audit, and other essential areas. It also has created a self-insurance system where vehicle liability and collision are covered by a County self-insurance pool.

There are no recommendations in the Financial Management area.

System
Recommendations

Human Resources

The Union County Personnel Department provides support for recruiting and hiring, employee performance review, and other personnel management functions. Transportation staff provides an extensive set of training opportunities for new hires as well as refresher training for experienced personnel. Additional customer service training was noted in the Customer Service section above. A recommendation to improve system safety involves an employee award program.

The following recommendation for the Human Resources area is made:

- ◆ Union County Transportation should implement an award program for achieving safety goals over the course of a year or a month. Ideally this should be a cash award, but non-monetary awards are often used. It could be provided to those employees reaching a milestone or safety objective. For example, an award can be made to drivers who achieve a certain number of miles without an accident.

Operations

One area of recent concern is the high number of trip cancellations and no-shows by passengers. This resulted in a stricter cancellation policy that may lead to a suspension of riding privileges. In addition, Union County Transportation staff can better monitor no-shows and cancellations with newly acquired scheduling software. To improve communication of the cancellation policy with passengers, it should be included in the system brochure.

Another department of the Union County government performs vehicle maintenance. The Transportation Director does not have any direct control over personnel performing maintenance on their vehicles. Since warranties can be affected, and vehicle breakdowns need to be minimized, these vehicles should have a preventive maintenance schedule that is recommended by the manufacturer.

The following recommendations for the Operations area are made:

- ◆ Prior day cancellation policy should be included in Union County Transportation brochures.
- ◆ A preventive maintenance schedule should be created for each vehicle that is based on the manufacturer's recommended schedule. This should include maintenance that needs to be performed to maintain warranty provisions.

**System
Recommendations**

Federal Compliance

Many Union County Transportation trip requests are renegotiated if it can't be scheduled at the originally requested time. There is no standard for an acceptable window of time within which the trip should be scheduled. Also, they are only counted as trip denials if no alternative time can be agreed upon. However, the ADA regulations state that for demand response systems equivalent service must be provided to those with disabilities as to able-bodied persons. Without a standard for trip reservations, there are no statistics to back this equivalent service requirement. To better comply with this regulation, Union County Transportation should modify its trip denial definition to include a window of time from the originally requested trip time, such as plus or minus two hours, when a trip will be defined as a denial. It must also note wheelchair use or other disability with the trip denial record.

- ◆ The trip denial definition used by Union County Transportation should be modified to include a plus/minus two-hour window from the originally requested time. Negotiated trips that fall outside of this window should be counted as a trip denial.
- ◆ Trip denials should be reported and tracked. Any trip denials made for persons with ADA defined disabilities should be noted and reviewed to determine if there are any patterns of trip denials to these passengers.

COST AND REVENUE PROJECTIONS

Operating costs and revenues were projected from FY 2008 through FY 2012. These appear in Exhibit V-7. Service levels were increased through 2011 from current levels using the trendline projection described earlier in this section. Because projected operating costs begin to exceed revenues, more limited service growth appear in 2011 and 2012. Overall, Union County Transportation service is projected to grow from 40,016 revenue hours in FY 2007 to 49,365 revenue hours in FY 2012. This increased service level is projected to add some \$265,000 to the operating budget totaling over \$1.4 million in 2012.

The following assumptions were made for these projections:

- ◆ Operating and administrative expenses were increased by an assumed inflation rate of four (4) percent from the base year of 2006.
- ◆ Revenue sources were increased by the assumed four (4) percent inflation rate.

**Cost and Revenue
Projections**

Exhibit V - 7
Operating Cost and Revenue Projection, 2008 - 2012

	Fiscal Year				
	2008	2009	2010	2011	2012
Operating Costs					
TOTAL MILES	744,169	792,704	841,239	849,652	858,148
TOTAL VEHICLE HOURS	42,808	45,600	48,392	48,876	49,365
WEEKDAY PEAK BUSES REQUIRED	19	21	22	22	22
ANNUAL PASSENGERS CARRIED	76,491	80,227	83,889	87,485	88,097
PASSENGERS PER MILE	0.11	0.11	0.11	0.10	0.10
Operating Revenue					
ASSUMED INFLATION RATE %	4.0%	4.0%	4.0%	4.0%	4.0%
Administrative Expenses	\$273,199	\$284,127	\$295,492	\$307,312	\$319,604
Operating Expenses	\$829,146	\$918,550	\$1,013,780	\$1,064,874	\$1,118,543
TOTAL OPERATING COSTS	\$1,102,345	\$1,202,677	\$1,309,272	\$1,372,186	\$1,438,148
Operating Revenue					
Farebox Revenue	\$51,428	\$53,776	\$56,081	\$56,474	\$56,869
Other Operating Revenue	\$2,163	\$2,250	\$2,340	\$2,433	\$2,531
TOTAL OPERATING REVENUE	\$53,592	\$56,026	\$58,421	\$58,907	\$59,400
Community Transp. Program Funds-Administrative	\$127,177	\$132,264	\$137,554	\$143,056	\$148,779
Additional Administrative Funding (Local)	\$26,133	\$27,178	\$28,265	\$29,396	\$30,571
Local Funding (Monroe)	\$75,000	\$78,000	\$81,120	\$84,365	\$87,739
Rural Operating Assistance Program Funds	\$173,128	\$180,054	\$187,256	\$194,746	\$202,536
Additional Operating Funding (Local)	\$109,942	\$114,340	\$118,914	\$123,670	\$128,617
JARC	\$75,000	\$78,000	\$81,120	\$84,365	\$87,739
Current Agency Contracts	\$468,625	\$482,684	\$497,165	\$512,080	\$527,442
New Agency Contracts	\$0	\$100,000	\$104,000	\$108,160	\$112,486
TOTAL SUBSIDY REVENUES	\$1,108,597	\$1,248,546	\$1,293,814	\$1,338,744	\$1,385,310
NET (DEFICIT)/SURPLUS	\$6,252	\$45,868	(\$15,458)	(\$33,442)	(\$52,838)

- ◆ A new local funding source to support the Monroe route deviation service is added in 2008.
- ◆ Additional agency contract revenue is added in 2009. These new contracts are likely to come from agencies like DSS whose client demand for transportation is growing at a greater rate.
- ◆ Federal Job Access Reverse Commute (JARC) funding is included to help fund weekday evening service and the proposed Monroe route deviation service.

**Cost and Revenue
Projections**

FIVE-YEAR CAPITAL PLAN

The proposed capital plan consists of vehicle acquisition for both replacement and service expansion purposes. Using five years as the useful life for each vehicle, the entire twenty-one vehicle fleet will need to be replaced over the next five years. It is recognized that this replacement standard may be constrained by the availability of capital funding. Exhibit V-8 shows the recommended years for these vehicle replacements. It is also recommended that the number of wheelchair accessible vehicles be increased from the current six (6).

**Five-Year Capital
Plan**

A total of five vehicles are added to the peak requirement. Therefore, six vehicles (one spare) will be needed for expansion purposes. These are summarized in Exhibit V-9 below. The addition of these five accessible vehicles will increase the number of accessible vehicles to eleven (11).

**Exhibit V-9
Expansion Vehicle Acquisition**

Type	Year	Capacity	Wheelchair Capacity
Light Transit Vehicle	2008	20-26	Y
Light Transit Vehicle	2008	20-26	Y
Light Transit Vehicle	2008	20-26	Y
Van	2009	9-13	Y
Van	2009	9-13	Y
Van	2010	9-13	0

IMPLEMENTATION PLAN

Major implementation activities are summarized by year on the following pages. These include all CTIP recommendations described in this chapter.

Implementation Plan

Exhibit V-8
Five-Year Vehicle Replacement Plan

Make	Type	Year	Capacity	Wheelchair Capacity	Projected Replacement Date	Wheelchair Accessible
Dodge	Center Aisle	2001	13	0	2007	
Dodge	Center Aisle	2001	13	0	2007	
Dodge	Center Aisle	2002	13	0	2008	
Dodge	Center Aisle	2002	13	0	2008	
Dodge	Center Aisle	2002	13	0	2008	
Dodge	Van	2002	13	0	2008	
Dodge	Van	2002	9	2	2007	Y
Dodge	Mini-Van	2003	6	0	2007	
Dodge	Mini-Van	2003	6	0	2007	
Dodge	Mini-Van	2003	6	0	2007	
Dodge	Van	2003	9	2	2008	Y
Dodge	Van	2003	13	0	2009	
Dodge	Mini-Van	2004	6	0	2008	
Chevrolet	Mini-Van	2004	6	0	2009	
Dodge	Mini-Van	2005	6	0	2009	
Dodge	Mini-Van	2005	6	0	2009	
Ford	Van	2006	9	2	2010	Y
Ford	Van	2006	13	0	2010	
Ford	Van	2006	9	2	2010	Y
Ford	Van	2006	9	2	2011	Y
Ford	Van	2006	9	2	2011	Y

Year One – FY 2007

Some of the short range operational and management recommendations are included in the first year of implementation. Vehicles will also need to be acquired for replacement and service expansion purposes. The following action steps are included:

- ◆ Customer service training should be initiated as part of the new employee orientation. This does not need to be a lengthy session, but enough to establish a professional approach for employees to address passenger-related problems.
- ◆ Implement on-going review of human service agency transportation needs. This can be accomplished through regular meetings with agency representatives to discuss current services and potential new services to address unmet needs.
- ◆ Add a customer service goal and set of objectives to Union County Transportation's goals. While it is recognized that good customer service is currently being provided, this goal is meant to foster continuous improvement.
- ◆ Create a joint Union/Anson County schedule for trips into Charlotte and Mecklenburg County.
- ◆ Change the definition of trip denial and track trip denials to conform to ADA regulations.
- ◆ Request replacement vehicles from NCDOT according to the vehicle replacement schedule.

Year Two – FY 2008

The funding for the proposed Monroe route deviation service will need to be approved if it is to begin in 2009. The following action steps are included for 2008:

- ◆ Receive local funding approval of Monroe route deviation service, and with input from drivers and staff, complete the final design of its route alignments and schedules.
- ◆ Request light transit vehicles to expand the fleet for the proposed Monroe service.
- ◆ Create measurable annual objectives to measure progress toward systemwide goal implementation. (Refer to System Recommendations section on page 53 for further explanation.)
- ◆ Create a safety award program for vehicle operators. This can be based on a preset number of miles or hours driven without an accident or preventable accident. The benchmark can be set so not to overburden the Union County Transportation budget.
- ◆ Request the County maintenance service to modify the current maintenance plan to implement a preventive maintenance program based on the manufacturer's recommended maintenance schedule.

Implementation Plan

- ◆ Include the no-show and cancellation policy in the system brochure.
- ◆ Begin weekday evening service as dictated by a fully allocated contract with a human service agency.
- ◆ Expand RGP and agency contract trips throughout the County as dictated by demand. Continue working with DSS and other agencies to identify unmet needs.
- ◆ Request replacement vehicles from NCDOT according to the vehicle replacement schedule.
- ◆ Request vans to expand the fleet for RGP and agency contract service, if necessary.

Year Three – FY 2009

The route deviation service in Monroe would start, and weekday evening service would begin through agency contracts. The following action steps are included for 2009:

- ◆ Based on the work accomplished in 2008, make the necessary internal operational adjustments and implement Monroe route deviation service.
- ◆ Request replacement vehicles from NCDOT according to the vehicle replacement schedule.
- ◆ Request vans to expand the fleet for RGP and agency contract service, if necessary.

Year Four – FY 2010

A full evaluation of the new Monroe service should be conducted to determine what, if any, adjustments to the routes and schedules should be made. Vehicle replacement and demand response service expansion would continue. The following action steps are included for 2010:

- ◆ Conduct a full evaluation of the new Monroe route deviation service one year after implementation.
- ◆ Expand RGP and agency contract trips throughout the County as dictated by demand. Continue working with DSS and other agencies to identify unmet needs.
- ◆ Request replacement vehicles from NCDOT according to the vehicle replacement schedule.
- ◆ Request vans to expand the fleet for RGP and agency contract service, if necessary.

Year Five and Six – FY 2011/2012

Vehicle replacement and service evaluation would continue. The service expansion would be modest during these years. The following action steps are included for 2011 and 2012:

- ◆ Request replacement vehicles from NCDOT according to the vehicle replacement schedule.
- ◆ Update CTIP.

Implementation Plan

**UNION COUNTY PERSONNEL REPORT
REPORT OF RETIREES AND SEPARATION FROM SERVICE**

AGENDA ITEM

Consent Agenda
Information #1
MEETING DATE 8/6/07

JUNE, 2007

NAME	DATE OF HIRE	DATE OF SEPARATION	POSITION
RETIREES			
HEALTH DEPARTMENT			
ELSIE S KINDLEY	10/22/1996	6/30/2007	RPT PROCESSING ASSISTANT
PURCHASING/FACILITIES			
ARNOLD J PRICE	4/7/1998	6/30/2007	FLEET MANAGER
REGISTER OF DEEDS			
M ELLEN COX	10/11/1989	6/29/2007	ASSISTANT III - REG OF DEEDS
SEPARATION FROM SERVICE			
HEALTH DEPARTMENT			
ALEXANDRA BURCH	3/5/2007	6/11/2007	LPN II - INMATE HEALTH
PUBLIC LIBRARY			
THOMAS C TAYLOR	8/31/2006	6/7/2007	PT LA III - REFERENCE
MAE P LITTLE	12/9/2006	6/17/2007	PT SECURITY GUARD
PUBLIC WORKS			
SAMANTHA L STODGHILL	11/25/2002	6/1/2007	BILLING SERV REP
PURCHASING/FACILITIES			
ANDREA M MILLER	3/19/2007	6/12/2007	ADMINISTRATIVE SECRETARY
SHERIFF/JAIL/FACILITIES			
ANDRE K WESTON	10/16/2006	6/1/2007	DEP SHERIFF I
SOCIAL SERVICES			

<i>NAME</i>	<i>DATE OF HIRE</i>	<i>DATE OF SEPARATION</i>	<i>POSITION</i>
MELINDA A PRICE-SMITH	10/16/1989	6/15/2007	SOCIAL WORKER SUPERVISOR II
ANGELA SCOTT	8/14/2006	6/29/2007	SW III - DSS
TOMMY F LOPEZ	11/6/1995	6/5/2007	PT SOCIAL WORKER III
JOSE TORRES	11/28/2005	6/5/2007	PT FOREIGN LANGUAGE INTERPRETE
TRANSPORTATION			
EFRAIN HILDALGO	9/16/2006	6/18/2007	PT FLEET SERVICE WORKER

**UNION COUNTY PERSONNEL REPORT
REPORT OF NEW HIRES**

JUNE, 2007

<i>NAME</i>	<i>HIRE DATE</i>	<i>POSITION</i>
COLLECTION DIVISION		
TAMRA A MOSER	6/25/2007	PT TAX COLLECTION BUDGET
GARAGE		
TERESA H COAN	6/25/2007	ADMINISTRATIVE SECRETARY
PARKS AND RECREATION		
BENJAMIN WILLIAMS	6/7/2007	SEASONAL PARK RANGER
DEBRA A FOY-AHMED	6/11/2007	CLERK, PARKS AND RECREATION DE
ALEXANDRA P FISHER	6/19/2007	PART ATTENDANT II
COURTNEY S HELMS	6/19/2007	PART ATTENDANT II
LINSEY A ALMEIDA	6/21/2007	LIFEGUARD
BRETT M GRAYSON	6/21/2007	SEASONAL MAINT TECHNICIAN
PUBLIC LIBRARY		
JOANN JABLONSKI	6/4/2007	PT AUTOMATION SPECIALIST I
EMILY S GRIFFIN	6/19/2007	PT LA II - PUBLIC SERVICE
PUBLIC WORKS		
RICK L VENATOR	6/25/2007	TRMT PL OPER II
JAMES J SMITH	6/25/2007	TRMT PL OPER II
SHERIFF/JAIL/FACILITIES		
SANDRA L SHAW	6/11/2007	DETENTION OFFICER I
ANTHONY J DETOMASO	6/11/2007	DETENTION OFFICER I
SOCIAL SERVICES		
KARLA M BIRMINGHAM	6/11/2007	PT CSSA - ADULT
TRANSPORTATION		
JOHN W MCCORKLE	6/18/2007	PT 558100 - DRIVER

**UNION COUNTY PERSONNEL REPORT
REPORT OF NEW HIRES**

JUNE, 2007

<i>NAME</i>	<i>HIRE DATE</i>	<i>POSITION</i>
COLLECTION DIVISION		
TAMRA A MOSER	6/25/2007	PT TAX COLLECTION BUDGET
GARAGE		
TERESA H COAN	6/25/2007	ADMINISTRATIVE SECRETARY
PARKS AND RECREATION		
BENJAMIN WILLIAMS	6/7/2007	SEASONAL PARK RANGER
DEBRA A FOY-AHMED	6/11/2007	CLERK, PARKS AND RECREATION DE
ALEXANDRA P FISHER	6/19/2007	PART ATTENDANT II
COURTNEY S HELMS	6/19/2007	PART ATTENDANT II
LINSEY A ALMEIDA	6/21/2007	LIFEGUARD
BRETT M GRAYSON	6/21/2007	SEASONAL MAINT TECHNICIAN
PUBLIC LIBRARY		
JOANN JABLONSKI	6/4/2007	PT AUTOMATION SPECIALIST I
EMILY S GRIFFIN	6/19/2007	PT LA II - PUBLIC SERVICE
PUBLIC WORKS		
RICK L VENATOR	6/25/2007	TRMT PL OPER II
JAMES J SMITH	6/25/2007	TRMT PL OPER II
SHERIFF/JAIL/FACILITIES		
SANDRA L SHAW	6/11/2007	DETENTION OFFICER I
ANTHONY J DETOMASO	6/11/2007	DETENTION OFFICER I
SOCIAL SERVICES		
KARLA M BIRMINGHAM	6/11/2007	PT CSSA - ADULT
TRANSPORTATION		
JOHN W MCCORKLE	6/18/2007	PT 558100 - DRIVER

UNION COUNTY PERSONNEL REPORT AGENDA ITEM
REPORT OF NEW HIRES

Consent Agenda
Information # 2

JULY, 2007

MEETING DATE 8/6/07

NAME	HIRE DATE	POSITION
HEALTH DEPARTMENT		
RUBEN GOMEZ	7/9/2007	FOREIGN LANGUAGE INTERPRETER
ELIZABETH RODRIGUEZ OCASIO	7/9/2007	PHN II-HEALTH
DARLENE H HICKMAN	7/9/2007	RPT LPN II INMATE HEALTH
MICHELLE L HESS	7/23/2007	MED OFF ASST - INMATE HEALTH
PARKS AND RECREATION		
MICHAEL A ROHLEDER	7/23/2007	PARK MAINTENANCE SUPERVISOR
PERSONNEL		
KIMBERLY N PARKER	7/9/2007	CLASS AND COMP ANALYST
PUBLIC LIBRARY		
HANNAH W TERRELL	7/9/2007	PT LA III - REFERENCE
BENJAMIN F JOHNSON	7/14/2007	PT SECURITY GUARD
PUBLIC WORKS		
CAROL Y OSTENDORFF	7/2/2007	TRMT PL OPER II
MITCHELL B COCKERHAM	7/9/2007	ENGINEERING TECHNICIAN
STUART A GROGIN	7/9/2007	TRMT PL OPER I
LAWRENCE K MAYNARD	7/23/2007	ENGINEERING TECHNICIAN
PUBLIC WORKS/SEWER, SOLID WAST		
FLOYD L HAMILTON	7/19/2007	PT DROPOFF SITE ATTENDANTS
SHERIFF/JAIL/FACILITIES		
PATRICK W RAYNOR	7/9/2007	VOL SVCS CO-ANIMAL SVC
RALPH W HELMS	7/23/2007	DETENTION OFFICER I
ALFRED J MAINERO	7/23/2007	DEP SHERIFF I

**UNION COUNTY PERSONNEL REPORT
REPORT OF RETIREES AND SEPARATION FROM SERVICE**

JULY, 2007

<i>NAME</i>	<i>DATE OF HIRE</i>	<i>DATE OF SEPARATION</i>	<i>POSITION</i>
SEPARATION FROM SERVICE			
COMMUNICATIONS			
STACIE C NEAL	8/7/2006	7/27/2007	PUBLIC SAFETY INFO TECH MGR
HEALTH DEPARTMENT			
LATOYA C WELCH	8/23/2004	7/27/2007	NUTRITIONIST I
JANET A LUCKETT	6/13/2005	7/6/2007	NUTRITIONIST I
ANITA C MCGUIRE	10/17/2005	7/20/2007	PRACTICAL NURSE II
PARKS AND RECREATION			
LISA M WILLIAMS	2/17/1986	7/19/2007	SEASONAL PARK RANGER
PUBLIC LIBRARY			
ELIZABETH W MEDLIN	5/28/1997	7/27/2007	ADM BRANCH LIBRARIAN
PUBLIC WORKS			
NATHAN A CASE	5/29/2007	7/18/2007	METER TECHNICIAN
PUBLIC WORKS/SEWER, SOLID WAST			
CHARLES J BASSLER	9/27/2005	7/7/2007	PT DROPOFF SITE ATTENDANTS
SHERIFF/JAIL/FACILITIES			
JOSHUA I HARRINGTON	7/24/2006	7/2/2007	DETENTION OFFICER I



AGENDA ITEM

Grant & Gula
Information # 3

MEETING DATE 8/6/07

UNION COUNTY DEPARTMENT OF INSPECTION

500 N. Main St., Room 28
Monroe, NC 28112

PHONE (704) 283-3604

FAX (704) 292-2513

July 3, 2007

TO: Union County Commissioners

FROM: Mr. Donald Moore *Don Moore*

REFERENCE: Department of Inspection – June 2007

<u>Month</u>	<u>Building Permits Issued</u>	<u>Associated Construction Cost</u>
June 2007	429	\$74,934,228
May 2007	380	\$60,244,465
June 2006	486	\$98,358,406

Construction Cost - June 2007 – 24.38 % increase compared with May 2007

Construction Cost - June 2007 – 23.82 % decrease compared with June 2006

CC: ~~Richard Black~~
Wesley Baker

DLM/src

Building Permit Statistics

Statistics on Union County Building Permits Issued from Jun 1, 2007 to Jun 30, 2007

Permit Type	Count of Permits	Number of Units	Square Footage	Construction Value
Commercial				
Commercial - Addition	2	0	19,092	\$2,231,446.00
Commercial - New	12	0	168,081	\$20,423,110.00
Commercial - Upfit	5	0	2,004	\$131,300.00
Modular - New	75	0	66,636	\$418,000.00
Totals for Commercial	94	0	255,813	\$23,203,856.00
Residential				
Accessory - New	68	0	31,512	\$966,877.00
Condo - New	1	0	2,197	\$129,261.00
Modular - New	2	0	5,125	\$286,145.00
Single Family - Addition	18	0	8,672	\$671,566.00
Single Family - New	225	0	858,959	\$48,822,563.00
Single Family - Renovation	11	0	11,879	\$242,230.00
Townhouse - New	10	0	12,712	\$611,730.00
Totals for Residential	335	0	931,056	\$51,730,372.00
Grand Totals	429	0	1,186,869	\$74,934,228.00