



2006 – 2012
METROPOLITAN TRANSPORTATION
IMPROVEMENT PROGRAM

FROM

CAPITAL AREA
METROPOLITAN PLANNING ORGANIZATION

ENDORSED BY THE TECHNICAL COORDINATING COMMITTEE
September 1, 2005

APPROVED BY THE TRANSPORTATION ADVISORY COMMITTEE
September 21, 2005



CAPITAL AREA
METROPOLITAN PLANNING ORGANIZATION
LEAD PLANNING AGENCY: CITY OF RALEIGH
Phone (919) 831-6785 -- Fax (919) 831-6821

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P.O. BOX 590
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September 22, 2005

Mr. Lyndo Tippet, Secretary
North Carolina Department of Transportation
P.O. Box 25201
Raleigh, NC 27611-5201

**Subject: Capital Area Metropolitan Transportation Improvement Program (MTIP)
for Federal Fiscal Years 2006 through 2012**

Dear Secretary Tippet:

Transmitted herewith is the approved Capital Area Metropolitan Transportation Improvement Program (MTIP) for federal fiscal years (FY) 2006 through 2012. The enclosed document includes supporting information as follows:

1. FY 2006 – 2012 Capital Area MPO MTIP
2. Air Quality Conformity Determination Report
3. TAC Resolution finding FY 2006-2012 MTIP in Conformity with the Statewide Implementation Plan (SIP)
4. TAC Resolution of MTIP Approval

The Capital Area MPO Transportation Advisory Committee (TAC) approved the FY 2006-2012 MTIP on September 21, 2005; following a public comment period that began on Friday, July 15, 2005 and concluded with the Public Hearing on Wednesday, September 21, 2005 that was continued from the TAC's previous meeting on August 17, 2005.


Pursuant to our meeting with you on August 24, 2005, our approved MTIP reflects the agreed upon funding and schedules for the Raleigh Signal System Upgrade (U-4708) and the New Falls of Neuse Connector (U-4901). The MTIP also includes several minor technical corrections to the transit program. Since these agreed upon modifications differ from the currently adopted FY 2006-2012 STIP, we request that you acknowledge your concurrence with these changes and carry out making the appropriate revisions to the STIP.

As Deputy Secretary Dan DeVane committed on your department's behalf, we also ask that you confirm your intent to use your best efforts to help us restore funding and schedules to our top priority major highway improvement projects, including the I-540 Western Wake Freeway to NC 55 at Holly Springs, I-40 from Wade Avenue to US1/64, and US 401 in northeastern Wake County, in the upcoming FY2007-2013 TIP update.

It is clear that state and federal funding levels apportioned by state law to the Triangle Region continue to be woefully inadequate to meet the growing transportation needs of our area. However, we remain committed to cooperatively developing solutions to these problems working in close partnership with NCDOT.

Thank you for your consideration; if you have questions about the MTIP, please contact Mr. Ed Johnson, Director of the Capital Area MPO.

Sincerely,



Joe Bryan, Chairman
Transportation Advisory Committee
Capital Area MPO

cc: David King, Deputy Secretary, Transit, Rail, Aviation, and Ferry, NCDOT
Len Sanderson, P.E., State Highway Administrator, NCDOT
Mike Bruff, P.E., Manager, Transportation Planning Branch, NCDOT
Calvin W. Leggett, P.E. Program Development Branch, NCDOT
Gregory J. Thorpe, Ph.D. Manager, Project Development and Environmental
Analysis Branch, NCDOT

CAPITAL AREA METROPOLITAN PLANNING ORGANIZATION

ID NO.	COUNTY	ROUTE/CITY	LOCATION AND DESCRIPTION	LENGTH	TOTAL	PRIOR YRS.	WORK TYPE	FUNDING	COST	SCHEDULE
				(MI) (KM)	EST. COST (THOU.)	COST (THOU.)			ESTIMATES (THOU.)	
I-4705	WAKE	I-40 I-440	SOUTH SAUNDERS STREET (MILEPOST 298) TO I-40/I-440-US 64 (MILEPOST 301). PAVEMENT REHABILITATION.	3.0	7000		PLANNING/DESIGN CONSTRUCTION	IM	7000	IN PROGRESS FFY 06
I-4709	WAKE	I-40 I-440	US 1 (MILEPOST 293) TO SOUTH SAUNDERS STREET (MILEPOST 298). PAVEMENT REHABILITATION.	5.0	5000		PLANNING/DESIGN CONSTRUCTION	IM	5000	IN PROGRESS FFY 07
I-4710	WAKE	I-40	CARY TOWNE BOULEVARD (MILE POST 291) TO SOUTH OF BUCK JONES ROAD (MILE POST 292). PAVEMENT REPAIR.	1.1	270	270	UNDER CONSTRUCTION			
I-4735	WAKE	I-40 I-440	US 1 (MILEPOST 293) TO I-40/I-440 (MILEPOST 301). PAVEMENT REPAIR.	8.0	1000	1000				
I-4739	JOHNSTON	I-40	NC 42, CONVERT EXISTING INTERCHANGE TO A SINGLE POINT URBAN INTERCHANGE.		1120	1120	PLANNING/DESIGN PROGRAMMED FOR PLANNING AND ENVIRONMENTAL STUDY ONLY			IN PROGRESS
I-4744	WAKE	I-40	SR 1728 (WADE AVENUE, MILEPOST 289) TO I-440/US 1-64 (MILEPOST 293). ADD LANES.	4.0	45320	320	PLANNING/DESIGN RIGHT-OF-WAY CONSTRUCTION STRATEGIC HIGHWAY CORRIDOR PROJECT STRATEGIC HIGHWAY CORRIDOR PROJECT	NHS NHS	1000 44000	IN PROGRESS POST YEARS POST YEARS
I-4902	WAKE	I-40	SR 1728 (WADE AVENUE, MILEPOST 289) TO I-440/US 1-64 (MILEPOST 293). PAVEMENT REPAIR.	4.0	1000		CONSTRUCTION	IM	1000	FFY 08
I-4903	GRANVILLE	I-85	DURHAM COUNTY LINE (MILEPOST 185) TO US 15 (MILEPOST 186). PAVEMENT REPAIR.	1.0	300		CONSTRUCTION	IM	300	FFY 08
I-4708	WAKE	I-440	SIX FORKS ROAD (MILEPOST 8) TO NEW BERN AVENUE (MILEPOST 13). MILL AND OVERLAY.	5.0	1500	1500	UNDER CONSTRUCTION			
R-2000 *	DURHAM WAKE	I-540	NORTHERN WAKE FREEWAY, NC 55 WEST OF MORRISVILLE TO US 64 EAST NEAR KNIGHTDALE. FREEWAY ON NEW LOCATION.	29.0	757500	718882	CONSTRUCTION PART COMPLETE - PART UNDER CONSTRUCTION STRATEGIC HIGHWAY CORRIDOR PROJECT	NHS	38618	FFY 06
R-2641 *	WAKE	I-540	EASTERN WAKE FREEWAY, PROPOSED US 64 BYPASS TO US 64 EAST. FREEWAY ON NEW LOCATION.	2.1	85539	68781	CONSTRUCTION UNDER CONSTRUCTION STRATEGIC HIGHWAY CORRIDOR PROJECT	T	16758	SFY 05
R-3600	WAKE	US 1A	WAKE FOREST, US 1 (CAPITAL BOULEVARD) TO NC 98 BYPASS. WIDEN TO MULTI-LANES.	1.9	10425	25	RIGHT-OF-WAY CONSTRUCTION UNFUNDED PROJECT	STP STP	2100 8300	POST YEARS POST YEARS
R-4404	PERSON GRANVILLE DURHAM WAKE	US 15-501, US 64, US 70, US 158, NC 147	NATIONAL HIGHWAY SYSTEM GUARDRAIL REHABILITATION. UPGRADE SUBSTANDARD GUARDRAIL, END TREATMENTS AND BRIDGE ANCHOR UNITS.		2040	2040	UNDER CONSTRUCTION			

* INDICATES INTRASTATE PROJECT

ALL SCHEDULES SUBJECT TO AVAILABILITY OF FUNDS

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				(MI) (KM)	EST. COST (THOU.)	COST (THOU.)			ESTIMATES (THOU.)		(FISCAL YEARS)
R-2547	WAKE	US 64	KNIGHTDALE BYPASS, I-440 (RALEIGH BELTLINE) TO US 64 NEAR SR 1003 (ROLESVILLE ROAD). CONSTRUCT MULTI-LANE FREEWAY, NEW LOCATION.	10.2	261043	223368	CONSTRUCTION PART COMPLETE - DESIGN BUILD PROJECT	NHS	37675	FFY 05	
							STRATEGIC HIGHWAY CORRIDOR PROJECT				
R-4469	DAVIE STANLY CABARRUS MECKLENBURG RANDOLPH CHATHAM WAKE DAVIDSON	US 64-NC 49	US 64, I-40 AT RALEIGH TO I-40 NEAR STATESVILLE AND NC 49, US 64 AT ASHEBORO TO CHARLOTTE. PILOT STUDY TO IDENTIFY MEASURES FOR CONTROLLING ACCESS AND OPTIMIZING INTERSECTION EFFICIENCY TO PROTECT TRAFFIC-CARRYING CAPACITY OF ROADWAY.		1600	1600	SCHEDULED FOR CORRIDOR PLANNING STUDY ONLY, PRE-TIP PROJECT				
R-2552 *	JOHNSTON WAKE	US 70	CLAYTON BYPASS, I-40 TO US 70-70 BUSINESS. FREEWAY ON NEW LOCATION.	9.5	178687	85939	CONSTRUCTION UNDER CONSTRUCTION	T	92748	SFY 06 08	
							STRATEGIC HIGHWAY CORRIDOR PROJECT				
R-2609	HARNETT WAKE CUMBERLAND	US 401	MULTI-LANES NORTH OF FAYETTEVILLE TO FUQUAY-VARINA. WIDEN TO MULTI-LANES. (INCLUDES B-3153)	34.0	186400		RIGHT-OF-WAY CONSTRUCTION	STP STP	29600 156800	POST YEARS POST YEARS	
							STRATEGIC HIGHWAY CORRIDOR PROJECT				
R-2814	FRANKLIN WAKE	US 401	NORTH OF SR 2044 (LIGON MILL ROAD) TO NC 39 IN LOUISBURG. WIDEN TO MULTI-LANES.	18.5	91179	7819	PLANNING/DESIGN MITIGATION RIGHT-OF-WAY CONSTRUCTION RIGHT-OF-WAY CONSTRUCTION PART COMPLETE	STP STP STP STP STP	7819 5041 13225 5700 51575	IN PROGRESS FFY 08 FFY 08 10 FFY 08 10 POST YEARS POST YEARS	
R-3410	JOHNSTON	NC 42	NC 50 TO US 70. WIDEN TO MULTI-LANES.	8.0	39500		RIGHT-OF-WAY CONSTRUCTION UNFUNDED PROJECT	STP STP	7000 32500	POST YEARS POST YEARS	
R-3825	JOHNSTON	NC 42	US 70 TO SR 1003 (BUFFALOE ROAD). WIDEN TO MULTI-LANES.	6.0	28850	500	PLANNING/DESIGN RIGHT-OF-WAY CONSTRUCTION RIGHT-OF-WAY CONSTRUCTION	STP STP STP STP	1550 6500 3100 17200	IN PROGRESS FFY 06 FFY 08 POST YEARS POST YEARS	
R-2540	WAKE HARNETT	NC 55	US 421 TO US 401. UPGRADE EXISTING ROADWAY.	20.0	103100		RIGHT-OF-WAY CONSTRUCTION UNFUNDED PROJECT	STP STP	35000 68100	POST YEARS POST YEARS	
R-2906	DURHAM WAKE	NC 55	US 64 IN WAKE COUNTY TO SR 1121 (CORNWALLIS ROAD) IN DURHAM COUNTY. WIDEN TO MULTI-LANES.	13.0	63399	45832	PLANNING/DESIGN CONSTRUCTION CONSTRUCTION	STP O	219 17348	IN PROGRESS FFY 07 FFY 07	
							ADVANCE CONSTRUCTED IN FFY 03 WITH PAYBACK IN FFY 07 AS PROGRAMMED				

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				(MI) (KM)	EST. COST (THOU.)	COST (THOU.)			ESTIMATES (THOU.)	
R-2907	WAKE	NC 55	SR 1108 (WAKE CHAPEL ROAD) IN FUQUAY-VARINA TO SR 1114 (RALPH STEPHENS ROAD) SOUTH OF HOLLY SPRINGS. WIDEN TO FIVE LANES WITH CURB AND GUTTER.	3.3	15659	15659	UNDER CONSTRUCTION			
R-2542	GRANVILLE	NC 56	WEST OF I-85 TO NC 50. CORRIDOR UPGRADE AND SAFETY IMPROVEMENTS.	3.7	21221	1171	RIGHT-OF-WAY CONSTRUCTION UNFUNDED PROJECT	STP STP	4650 15400	POST YEARS POST YEARS
R-2809	WAKE	NC 98	WAKE FOREST BYPASS, WEST OF SR 1923 (THOMSON MILL ROAD) TO EAST OF SR 2053 (JONES DAIRY ROAD). MULTI-LANES ON NEW LOCATION.	4.7	86807	67303	PLANNING/DESIGN RIGHT-OF-WAY MITIGATION CONSTRUCTION PART COMPLETE - PART UNDER CONSTRUCTION	 STP STP	 2004 17500	IN PROGRESS IN ACQUISITION FFY 06 FFY 06 07
R-2635 *	WAKE	NEW ROUTE	WESTERN WAKE FREEWAY, NC 55 (SOUTH) TO NC 55 (NORTH). FREEWAY ON NEW LOCATION.	12.4	294615	15638	PLANNING/DESIGN MITIGATION RIGHT-OF-WAY CONSTRUCTION STRATEGIC HIGHWAY CORRIDOR PROJECT	 T T T	 5250 52975 220752	IN PROGRESS SFY 10 SFY 07 09 10 SFY 10 12
R-2721 *	WAKE	NEW ROUTE	SOUTHERN WAKE FREEWAY, NC 55 (SOUTH) TO US 401 SOUTH. FREEWAY ON NEW LOCATION.	7.8	174590	4390	PLANNING/DESIGN RIGHT-OF-WAY CONSTRUCTION UNFUNDED PROJECT STRATEGIC HIGHWAY CORRIDOR PROJECT	 STP STP	 30000 140200	IN PROGRESS POST YEARS POST YEARS
R-2828 *	WAKE	NEW ROUTE	SOUTHERN WAKE FREEWAY, US 401 TO I-40. CONSTRUCT FREEWAY ON NEW LOCATION.	8.7	121830	5830	PLANNING/DESIGN RIGHT-OF-WAY CONSTRUCTION UNFUNDED PROJECT STRATEGIC HIGHWAY CORRIDOR PROJECT	 STP STP	 15000 101000	IN PROGRESS POST YEARS POST YEARS
R-2829 *	WAKE	NEW ROUTE	EASTERN WAKE FREEWAY, I-40 TO PROPOSED US 64 BYPASS. FREEWAY ON NEW LOCATION.	10.8	205900	2900	PLANNING/DESIGN RIGHT-OF-WAY CONSTRUCTION UNFUNDED PROJECT STRATEGIC HIGHWAY CORRIDOR PROJECT	 STP STP	 25000 178000	IN PROGRESS POST YEARS POST YEARS
R-3618	JOHNSTON	NEW ROUTE	SR 1553 (SHOTWELL ROAD) WEST OF US 70 TO NC 42 EAST OF CLAYTON. TWO LANES ON MULTI-LANE RIGHT OF WAY, NEW LOCATION.	3.0	9850		RIGHT-OF-WAY CONSTRUCTION UNFUNDED PROJECT	STP STP	1300 8550	POST YEARS POST YEARS
U-4901	WAKE	NEW ROUTE	FALLS OF NEUSE WIDEN TO MULTILANES AND REALIGNMENT FROM RAVEN RIDGE ROAD TO NEUSE RIVER INCLUDING NEW STRUCTURE OVER THE NEUSE RIVER.		18000		RIGHT-OF-WAY CONSTRUCTION CONSTRUCTION	O STP L	4000 10400 3600	FFY 09 FFY 11 FFY 09 11 12

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				(KM)	(THOU.)	(THOU.)			(THOU.)	(FISCAL YEARS)
U-2901	WAKE	APEX	NC 55 (WILLIAMS STREET), US 1 TO US 64. WIDEN TO A MULTI-LANE CURB AND GUTTER FACILITY.	3.2	20255	1655	RIGHT-OF-WAY CONSTRUCTION PART COMPLETE - PART UNFUNDED	STP STP	2800 15800	POST YEARS POST YEARS
U-2908	WAKE	CARY	NC 54, SR 1415 (MAYNARD ROAD) TO SR 1655 (TRINITY ROAD). WIDEN TO MULTI-LANES.	0.8	2800		RIGHT-OF-WAY CONSTRUCTION UNFUNDED PROJECT	STP STP	100 2700	POST YEARS POST YEARS
U-3101	WAKE	CARY	US 1-64, US 64 TO SOUTH OF SR 1313 (WALNUT STREET). REHABILITATE PAVEMENT, ADDITIONAL TRAVEL LANES AND MODIFY SR 1313 INTERCHANGE.	2.6	62546	24279	PLANNING/DESIGN RIGHT-OF-WAY CONSTRUCTION CONSTRUCTION PART COMPLETE - PART UNDER CONSTRUCTION STRATEGIC HIGHWAY CORRIDOR PROJECT	 C NHS	 5700 32567	IN PROGRESS IN ACQUISITION FFY 06 07 FFY 06
U-3802	WAKE	CARY	CARY SIGNAL SYSTEM		14351	14351	UNDER CONSTRUCTION BY CITY - NCDOT PARTICIPATION			
U-3605	JOHNSTON	CLAYTON	FRONT STREET EXTENSION, MILLS STREET TO PECAN LANE. TWO-LANE FACILITY ON NEW LOCATION.				PROGRAMMED FOR PLANNING AND ENVIRONMENTAL STUDY ONLY			
U-4721 *	DURHAM	DURHAM	NORTHERN DURHAM PARKWAY, I-540 TO ROXBORO ROAD.	29.4			THE CROSS SECTION FOR THIS PROJECT WILL BE ESTABLISHED BY AGREEMENT OF THE MPO AND NCDOT THROUGH THE STATE AND ENVIRONMENTAL REVIEW PROCESS. STRATEGIC HIGHWAY CORRIDOR PROJECT			
U-3607	WAKE	GARNER	NEW RAND ROAD, TIMBER DRIVE TO US 70. WIDEN TO THREE LANES.	1.1	6500		RIGHT-OF-WAY CONSTRUCTION UNFUNDED PROJECT	STP STP	3250 3250	POST YEARS POST YEARS
U-4703	WAKE	GARNER	TIMBER DRIVE EAST EXTENSION, NC 50 TO WHITE OAK ROAD. MULTI-LANES ON NEW LOCATION.	1.3	11160	320	RIGHT-OF-WAY CONSTRUCTION	O STP	1240 9600	FFY 08 FFY 09
U-3441	WAKE	KNIGHTDALE	SR 2233 (NORTH SMITHFIELD ROAD), CARRINGTON DRIVE TO SR 2049 (FORESTVILLE ROAD). WIDEN TO MULTI-LANES.	1.0	7446	256	RIGHT-OF-WAY CONSTRUCTION UNFUNDED PROJECT	STP STP	1640 5550	POST YEARS POST YEARS
U-3343	WAKE	MORRISVILLE	SR 1002 (AVIATION PARKWAY), NC 54 TO I-40. WIDEN TO MULTI-LANES.	2.6	18275	275	RIGHT-OF-WAY CONSTRUCTION UNFUNDED PROJECT	STP STP	800 17200	POST YEARS POST YEARS
U-3344	WAKE	MORRISVILLE	SR 3015 (AIRPORT BOULEVARD), NC 54 TO I-40. WIDEN TO MULTI-LANES.	1.9	8416	6316	PLANNING/DESIGN RIGHT-OF-WAY CONSTRUCTION PART COMPLETE	 S	 2100	IN PROGRESS IN ACQUISITION SFY 06
U-3620	WAKE	MORRISVILLE	MCCRIMMON PARKWAY, NC 54 TO AIRPORT BOULEVARD. EXTEND ROADWAY AS A MULTI-LANE CURB AND GUTTER FACILITY.	0.4	3400		RIGHT-OF-WAY CONSTRUCTION UNFUNDED PROJECT	STP STP	900 2500	POST YEARS POST YEARS

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U-0515E	WAKE	RALEIGH	US 70, SR 2026 (HAMMOND ROAD)-SR 2812 (TIMBER DRIVE). CONSTRUCT AN INTERCHANGE.		10200		CONSTRUCTION UNFUNDED PROJECT	STP	10200	POST YEARS
U-2719	WAKE	RALEIGH	I-440 (CLIFF BENSON BELTLINE), SOUTH OF SR 1313 (WALNUT STREET) TO NORTH OF SR 1728 (WADE AVENUE). WIDEN TO MULTI-LANES.	3.5	77320	320	RIGHT-OF-WAY CONSTRUCTION	NHS NHS	12000 65000	POST YEARS POST YEARS PROGRAMMED FOR PLANNING AND ENVIRONMENTAL STUDY ONLY
STRATEGIC HIGHWAY CORRIDOR PROJECT										
U-2823	WAKE	RALEIGH	US 70 (GLENWOOD AVENUE), WEST OF SR 1664 (DURALEIGH ROAD) TO WEST OF SR 1876 (TRIANGLE DRIVE). UPGRADE ROADWAY TO IMPROVE CAPACITY, SAFETY AND TRAFFIC OPERATIONS INCLUDING INTERCHANGE AT LYNN ROAD.	3.3	32700		PLANNING/DESIGN RIGHT-OF-WAY	NHS	1600	IN PROGRESS FFY 11
							CONSTRUCTION	NHS	31100	POST YEARS
U-2918	WAKE	RALEIGH	SR 1829 (STRICKLAND ROAD) EXTENSION, US 70 TO EAST OF SR 1822 (LEESVILLE ROAD). MULTI-LANES, PART ON NEW LOCATION.	2.8	16500	300	PLANNING/DESIGN RIGHT-OF-WAY	STP	2100	IN PROGRESS POST YEARS
							CONSTRUCTION	STP	14100	POST YEARS
U-3111	WAKE	RALEIGH	TRYON ROAD EXTENSION, SR 1004 (OLD GARNER ROAD) TO SR 2542 (ROCK QUARRY ROAD). MULTI-LANES ON NEW LOCATION.	2.9	21050	150	RIGHT-OF-WAY CONSTRUCTION	STP STP	1600 19300	POST YEARS POST YEARS PROGRAMMED FOR PLANNING AND ENVIRONMENTAL STUDIES ONLY
U-3817	WAKE	RALEIGH	EDWARDS MILL ROAD EXTENSION, NC 54 TO WESTERN BOULEVARD. MULTI-LANES ON NEW LOCATION.	0.7	22100		RIGHT-OF-WAY CONSTRUCTION UNFUNDED PROJECT	STP STP	4300 17800	POST YEARS POST YEARS
U-4417	WAKE	RALEIGH	SR 1321 (AVENT FERRY ROAD)/SR 1012 (WESTERN BOULEVARD), MONORAIL ACCOMMODATIONS. EVALUATE INTERCHANGE AND GRADE SEPARATION.	0.1	8300		RIGHT-OF-WAY CONSTRUCTION UNFUNDED PROJECT	STP STP	1500 6800	POST YEARS POST YEARS
U-4432	WAKE	RALEIGH	SR 1370 (TRYON ROAD), WEST OF BRIDGE NO. 259 OVER NORFOLK SOUTHERN RAILWAY TO US 70-401-NC 50 (WILMINGTON STREET). WIDEN TO MULTI-LANES, PART ON NEW LOCATION WITH NEW STRUCTURE OVER SOUTHERN RAILROAD.		500	500	PROGRAMMED FOR PLANNING AND ENVIRONMENTAL STUDY ONLY			
U-4437	WAKE	RALEIGH	NC 54 (HILLSBOROUGH STREET) AND SR 1664-3074 (BLUE RIDGE ROAD) NEAR CSX TRANSPORTATION SYSTEM AND SOUTHERN RAILROAD AND SR 3042 (BERYL ROAD). CONSTRUCT A GRADE SEPARATION.		960	960	PROGRAMMED FOR PLANNING AND ENVIRONMENTAL STUDY ONLY			
U-4447	WAKE	RALEIGH	HILLSBOROUGH STREET RECONSTRUCTION PROJECT, GORMAN STREET TO WOODBURN ROAD INCLUDING HORNE STREET, BROOKS STREET, CLARK AVENUE AND OBERLIN ROAD.		970	970	PROGRAMMED FOR PLANNING AND ENVIRONMENTAL STUDY ONLY			
U-4708	WAKE	RALEIGH	REHABILITATION OF EXISTING COMPUTERIZED SIGNAL SYSTEM.		28000		CONSTRUCTION CONSTRUCTION CONSTRUCTION	CMAQ STP L	18000 3000 7000	FFY 08 09 10 FFY 08 09 10 FFY 08 09 10

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U-4026	DURHAM WAKE	RESEARCH TRIANGLE PARK	SR 1613-SR 1999 (DAVIS DRIVE), SR 3014 (MORRISVILLE-CARPENTER ROAD) IN WAKE COUNTY TO NC 54 IN DURHAM COUNTY. WIDEN TO MULTI-LANES.	5.7	35918	8518	PLANNING/DESIGN			IN PROGRESS IN ACQUISITION
							RIGHT-OF-WAY			
							CONSTRUCTION	C	5300	
U-4410	WAKE	RESEARCH TRIANGLE PARK	RTP ACCESS ROUTES. SECTION A, LOUIS STEPHENS ROAD, LOTS 6 AND 12 TO SOUTH LOOP ROAD. SECTION D, LOUIS STEPHENS ROAD, HOPSON ROAD TO DEVELOPMENT DRIVE AND SECTION F, GEORGE WATTS HILL EXTENSION TO CHURCH STREET.		19238	9963	CONSTRUCTION	S	18100	SFY 06
							CONSTRUCTION	O	4000	SFY 06
							PLANNING/DESIGN			IN PROGRESS
							RIGHT-OF-WAY	S	167	SFY 06
							RIGHT-OF-WAY	O	83	FFY 06
							CONSTRUCTION	S	2733	SFY 07 08
							CONSTRUCTION	O	967	FFY 07
							CONSTRUCTION	O	500	SFY 08
							CONSTRUCTION	S	3217	POST YEARS
							CONSTRUCTION	O	1608	POST YEARS
UNDER							PLANNING, DESIGN, RIGHT OF WAY AND UTILITIES BY OTHERS - PART CONSTRUCTION			
U-4763	WAKE DURHAM	TRIANGLE PARKWAY	I-40 TO MCCRIMMON PARKWAY. MULTI-LANE FACILITY ON NEW LOCATION.				NORTH CAROLINA TURNPIKE AUTHORITY PROJECT - PROGRAMMED FOR PLANNING AND ENVIRONMENTAL STUDY ONLY STRATEGIC HIGHWAY CORRIDOR PROJECT			
U-4735 11 12	WAKE	VARIOUS	CAMPO DA FUNDS.		5250		CONSTRUCTION	STP	4200	FFY 06 07 08 09 10
							CONSTRUCTION	O	1050	FFY 06 07 08 09 10
U-9999B 11 12	WAKE	VARIOUS	CAMPO PLANNING (PL SUPPLEMENT).		3114	414	CONSTRUCTION	C	540	FFY 06 07 08 09 10
							CONSTRUCTION	STP	2160	FFY 06 07 08 09 10
B-4946	WAKE	US 70	US 401. REPLACE BRIDGE NO. 251		5500		RIGHT-OF-WAY	FA	500	FFY 10
							CONSTRUCTION	FA	2500	FFY 12
							CONSTRUCTION	FA	2500	POST YEARS
B-3916	WAKE	US 401	MIDDLE CREEK. REPLACE BRIDGE NO. 63		2465	415	RIGHT-OF-WAY			IN ACQUISITION
							CONSTRUCTION	FA	2050	FFY 06
B-4137	HARNETT	NC 42	NORFOLK AND SOUTHERN RAILWAY. REPLACE BRIDGE NO. 35		675	100	RIGHT-OF-WAY	FA	50	FFY 06
							CONSTRUCTION	FA	525	FFY 08
B-4556	JOHNSTON	NC 50	BLACK CREEK. REPLACE BRIDGE NO. 74		700	150	RIGHT-OF-WAY	FA	50	FFY 07
							CONSTRUCTION	FA	500	FFY 08
B-4654	WAKE	NC 50	US 70. REPLACE BRIDGE NO. 69		3600	300	RIGHT-OF-WAY	FA	300	FFY 07
							CONSTRUCTION	FA	3000	FFY 08
B-3481	JOHNSTON	NC 96	LITTLE RIVER. REPLACE BRIDGE NO. 94		1322	122	RIGHT-OF-WAY			IN ACQUISITION
							CONSTRUCTION	FA	1200	FFY 07
B-4830	FRANKLIN WAKE	NC 97	MOCASSIN CREEK. REPLACE BRIDGE NO. 20		1650		RIGHT-OF-WAY	FA	150	FFY 09
							CONSTRUCTION	FA	1500	FFY 10

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ID NO.	COUNTY	ROUTE/CITY	LOCATION AND DESCRIPTION	LENGTH	TOTAL	PRIOR YRS.	WORK TYPE	FUNDING	COST	SCHEDULE
				(MI) (KM)	EST. COST (THOU.)	COST (THOU.)			ESTIMATES (THOU.)	
B-4514	FRANKLIN	SR 1003	TAR RIVER. REPLACE BRIDGE NO. 36		1400	300	RIGHT-OF-WAY CONSTRUCTION	NFA NFA	100 1000	FFY 08 FFY 09
B-3521	WAKE	SR 1006	MIDDLE CREEK. REPLACE BRIDGE NO. 273		1825	1825	UNDER CONSTRUCTION			
B-4299	WAKE	SR 1006	CREEK. REPLACE BRIDGE NO. 255		665	190	RIGHT-OF-WAY CONSTRUCTION	FA	475	IN ACQUISITION FFY 06
B-4655	WAKE	SR 1006	BLACK CREEK. REPLACE BRIDGE NO. 277		730	70	RIGHT-OF-WAY CONSTRUCTION	NFA NFA	60 600	FFY 07 FFY 08
B-3522	WAKE	SR 1007	BUFFALO CREEK. REPLACE BRIDGE NO. 215		2024	2024	UNDER CONSTRUCTION			
B-4300	WAKE	SR 1007	CLARKS CREEK. REPLACE BRIDGE NO. 29		1145	200	RIGHT-OF-WAY CONSTRUCTION	FA FA	95 850	FFY 06 FFY 07
B-4301	WAKE	SR 1007	POPLAR CREEK. REPLACE BRIDGE NO. 229		1185	150	RIGHT-OF-WAY CONSTRUCTION	FA FA	85 950	FFY 06 FFY 07
B-4656	WAKE	SR 1011	SR 1012. REPLACE BRIDGE NO. 492		1620	300	RIGHT-OF-WAY CONSTRUCTION	FA FA	120 1200	FFY 09 FFY 10
B-4657	WAKE	SR 1101	NORFOLK AND SOUTHERN RAILROAD. REPLACE BRIDGE NO. 340		810	150	RIGHT-OF-WAY CONSTRUCTION	NFA NFA	60 600	FFY 10 FFY 11
B-4113	FRANKLIN	SR 1106	LITTLE RIVER. REPLACE BRIDGE NO. 15		1275	175	RIGHT-OF-WAY CONSTRUCTION	NFA	1100	IN ACQUISITION FFY 06
B-3256	WAKE	SR 1108	NORFOLK SOUTHERN RAILWAY. REPLACE BRIDGE NO. 337		2279	2279	UNDER CONSTRUCTION			
B-4658	WAKE	SR 1117	BUCKHORN CREEK. REPLACE BRIDGE NO. 345		1485	150	RIGHT-OF-WAY CONSTRUCTION	NFA NFA	60 1275	FFY 07 FFY 08
B-4754	GRANVILLE	SR 1139	FORK OF REEDS CREEK. REPLACE BRIDGE NO. 220		550		RIGHT-OF-WAY CONSTRUCTION	NFA NFA	50 500	FFY 09 FFY 10
B-4114	FRANKLIN	SR 1146	CAMPING CREEK. REPLACE BRIDGE NO. 151 WITH CULVERT.		753	100	RIGHT-OF-WAY CONSTRUCTION	NFA NFA	53 600	FFY 06 FFY 07
B-4748	FRANKLIN	SR 1147	HORSE CREEK. REPLACE BRIDGE NO. 2		550		RIGHT-OF-WAY CONSTRUCTION	NFA NFA	50 500	FFY 08 FFY 09
B-4831	WAKE	SR 1152	WHITE OAK CREEK. REPLACE BRIDGE NO. 371		2200		RIGHT-OF-WAY CONSTRUCTION	NFA NFA	200 2000	FFY 09 FFY 10
B-4749	FRANKLIN	SR 1200	MIDDLE CREEK. REPLACE BRIDGE NO. 27		1100		RIGHT-OF-WAY CONSTRUCTION	NFA NFA	100 1000	FFY 08 FFY 09
B-3523	WAKE	SR 1300	SWIFT CREEK. REPLACE BRIDGE NO. 525		880	880	UNDER CONSTRUCTION			

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				(MI) (KM)	EST. COST (THOU.)	COST (THOU.)			ESTIMATES (THOU.)	
B-4302	WAKE	SR 1301	TERRIBLE CREEK. REPLACE BRIDGE NO. 336		1700	150	RIGHT-OF-WAY CONSTRUCTION	NFA NFA	100 1450	FFY 07 FFY 08
B-4557	JOHNSTON	SR 1309	BIG BRANCH. REPLACE BRIDGE NO. 113		305	30	RIGHT-OF-WAY CONSTRUCTION	NFA NFA	25 250	FFY 08 FFY 09
B-4587	NASH FRANKLIN	SR 1316	CYPRESS CREEK. REPLACE BRIDGE NO. 82		1360	150	RIGHT-OF-WAY CONSTRUCTION	NFA NFA	60 1150	FFY 07 FFY 08
B-4558	JOHNSTON	SR 1330	STONEY FORK CREEK. REPLACE BRIDGE NO. 86		595	100	RIGHT-OF-WAY CONSTRUCTION	NFA NFA	45 450	FFY 08 FFY 09
B-4559	JOHNSTON	SR 1330	BLACK CREEK. REPLACE BRIDGE NO. 84		1240	250	RIGHT-OF-WAY CONSTRUCTION	NFA NFA	90 900	FFY 07 FFY 08
B-4560	JOHNSTON	SR 1331	BLACK CREEK. REPLACE BRIDGE NO. 102		970	200	RIGHT-OF-WAY CONSTRUCTION	NFA NFA	70 700	FFY 07 FFY 08
B-3375	WAKE	SR 1375	SWIFT CREEK. REPLACE BRIDGE NO. 301. LAKE WHEELER SPILLWAY. REPLACE BRIDGE NO. 471		2560	2560	UNDER CONSTRUCTION			
B-3917	WAKE	SR 1379	SWIFT CREEK. REPLACE BRIDGE NO. 311		2310	260	RIGHT-OF-WAY CONSTRUCTION	NFA	2050	IN ACQUISITION FFY 06
B-4659	WAKE	SR 1393	BASSAL CREEK. REPLACE BRIDGE NO. 373		855	85	RIGHT-OF-WAY CONSTRUCTION	NFA NFA	70 700	FFY 07 FFY 08
B-3703	WAKE	SR 1404	MIDDLE CREEK. REPLACE BRIDGE NO. 317		1070	1070	UNDER CONSTRUCTION			
B-4561	JOHNSTON	SR 1525	SWIFT CREEK. REPLACE BRIDGE NO. 147		1080	200	RIGHT-OF-WAY CONSTRUCTION	NFA NFA	80 800	FFY 07 FFY 08
B-4772	JOHNSTON	SR 1525	MILL BRANCH CREEK. REPLACE BRIDGE NO. 326		825		RIGHT-OF-WAY CONSTRUCTION	NFA NFA	75 750	FFY 09 FFY 10
B-3257	WAKE	SR 1564	SOUTHERN RAILROAD. REPLACE BRIDGE NO. 245		6004	6004	UNDER CONSTRUCTION			
B-4697	WAKE	SR 1600	WHITE OAK CREEK. REPLACE BRIDGE NO. 55		750	90	RIGHT-OF-WAY CONSTRUCTION	NFA NFA	60 600	FFY 07 FFY 08
B-3526	WAKE	SR 1613	CREEK. REPLACE BRIDGE NO. 65		839	839	UNDER CONSTRUCTION BY CITY OF CARY			
B-3259	WAKE	SR 1649	CRABTREE CREEK. REPLACE BRIDGE NO. 44. TURKEY CREEK. REPLACE BRIDGE NO. 45		2893	2893	UNDER CONSTRUCTION			
B-3672	JOHNSTON	SR 1718	BUFFALO CREEK. REPLACE BRIDGE NO. 415		745	150	RIGHT-OF-WAY CONSTRUCTION	NFA NFA	20 575	FFY 06 FFY 07
B-4750	FRANKLIN	SR 1719	NORRIS CREEK. REPLACE BRIDGE NO. 90		825		RIGHT-OF-WAY CONSTRUCTION	NFA NFA	75 750	FFY 08 FFY 09

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				(MI) (KM)	EST. COST (THOU.)	COST (THOU.)			ESTIMATES (THOU.)		
B-3863	JOHNSTON	SR 1722	LITTLE RIVER. REPLACE BRIDGE NO. 151		983	200	RIGHT-OF-WAY CONSTRUCTION	NFA NFA		33 750	FFY 06 FFY 07
B-4166	JOHNSTON	SR 1733	LITTLE RIVER. REPLACE BRIDGE NO. 170		785	785	UNDER CONSTRUCTION				
B-3704	WAKE	SR 1834	LOWER BARTONS CREEK. REPLACE BRIDGE NO. 108		1548	1548	UNDER CONSTRUCTION				
B-3528	WAKE	SR 1839	SYCAMORE CREEK. REPLACE BRIDGE NO. 429		1850	200	RIGHT-OF-WAY CONSTRUCTION	NFA NFA		200 1450	FFY 06 FFY 07
B-4303	WAKE	SR 1844	LOWER BARTONS CREEK. REPLACE BRIDGE NO. 102		2550	200	RIGHT-OF-WAY CONSTRUCTION	NFA NFA		200 2150	FFY 07 FFY 08
B-4660	WAKE	SR 2000	NEUSE RIVER. REPLACE BRIDGE NO. 19		3800	500	RIGHT-OF-WAY CONSTRUCTION	NFA NFA		300 3000	FFY 08 FFY 09
B-4947	WAKE	SR 2000	CRABTREE CREEK. REPLACE BRIDGE NO. 469		5500		RIGHT-OF-WAY CONSTRUCTION CONSTRUCTION	NFA NFA NFA		500 2500 2500	FFY 10 FFY 12 POST YEARS
B-3529	WAKE	SR 2006	PERRY CREEK. REPLACE BRIDGE NO. 124		2815	2815	UNDER CONSTRUCTION				
B-3918	WAKE	SR 2044	TOM CREEK. REPLACE BRIDGE NO. 127		1496	1496	UNDER CONSTRUCTION				
B-3705	WAKE	SR 2045	SMITHS CREEK. REPLACE BRIDGE NO. 125		3655	205	RIGHT-OF-WAY CONSTRUCTION	NFA		3450	IN ACQUISITION FFY 06
B-3919	WAKE	SR 2053	AUSTIN CREEK. REPLACE BRIDGE NO. 448 SMITHS CREEK. REPLACE BRIDGE NO. 140		2185	100	RIGHT-OF-WAY CONSTRUCTION INCLUDES B-3920	NFA NFA		185 1900	FFY 07 FFY 08
B-4304	WAKE	SR 2217	BEAVER DAM CREEK. REPLACE BRIDGE NO. 143		1550	150	RIGHT-OF-WAY CONSTRUCTION	NFA NFA		150 1250	FFY 07 FFY 08
B-4661	WAKE	SR 2227	POWELL CREEK. REPLACE BRIDGE NO. 151		700	150	RIGHT-OF-WAY CONSTRUCTION	NFA NFA		50 500	FFY 08 FFY 09
B-4662	WAKE FRANKLIN	SR 2308 SR 1726	MOCCASIN CREEK. REPLACE BRIDGE NO. 196		500	60	RIGHT-OF-WAY CONSTRUCTION	NFA NFA		40 400	FFY 08 FFY 09
B-3530	WAKE	SR 2320	BUFFALO CREEK. REPLACE BRIDGE NO. 174		1106	1106	UNDER CONSTRUCTION				
B-4305	WAKE	SR 2333	LITTLE RIVER. REPLACE BRIDGE NO. 189		739	100	RIGHT-OF-WAY RIGHT-OF-WAY CONSTRUCTION	NFA NFA		14 625	IN ACQUISITION FFY 06 FFY 06
B-4663	WAKE	SR 2507	MARKS CREEK. REPLACE BRIDGE NO. 225		610	60	RIGHT-OF-WAY CONSTRUCTION	NFA NFA		50 500	FFY 08 FFY 09

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				(MI) (KM)	EST. COST (THOU.)	COST (THOU.)			ESTIMATES (THOU.)		
B-4832	WAKE	SR 2511	POPLAR CREEK. REPLACE BRIDGE NO. 230		1100		RIGHT-OF-WAY CONSTRUCTION	NFA NFA		100 1000	FFY 08 FFY 09
B-3376	WAKE	SR 2564	BIG BRANCH CREEK. REPLACE BRIDGE NO. 246		1165	1165	UNDER CONSTRUCTION				
B-4306	WAKE	SR 2742	BLACK CREEK. REPLACE BRIDGE NO. 275		555	555	UNDER CONSTRUCTION				
B-4833	WAKE	SR 2761	LITTLE BLACK CREEK. REPLACE BRIDGE NO. 376		1100		RIGHT-OF-WAY CONSTRUCTION	NFA NFA		100 1000	FFY 09 FFY 10
B-4331	WAKE	RALEIGH	STONEBROOK DRIVE OVER MARSH CREEK. REPLACE BRIDGE NO. 661		1154	229	RIGHT-OF-WAY CONSTRUCTION	NFAM NFAM		25 900	FFY 06 FFY 06
B-4905	DURHAM FRANKLIN GRANVILLE PERSON VANCE WAKE WARREN	VARIOUS	ENVIRONMENTAL MITIGATION FOR BRIDGE PROJECTS IN DIVISION 5.		5168	5168	IN PROGRESS				
C-4403	WAKE	GARNER	US 401 TO TIMBER DRIVE. DESIGN AND IMPLEMENT A COMPUTERIZED TRAFFIC SIGNAL SYSTEM.		2239	2239	UNDER CONSTRUCTION				
C-4925	WAKE	HOLLY SPRINGS	SIDEWALK ALONG 0.9 MILES OF HW 55/MAIN STREET		464		CONSTRUCTION CONSTRUCTION	CMAQ L		371 93	FFY 07 FFY 07
C-4926	WAKE	NCSU	ONE-WAY STREET CONFIGURATION AROUND REYNOLDS COLLISEUM AND SIGNALIZATION AT CATES AVE AND PULLEN ROAD.		165		CONSTRUCTION CONSTRUCTION	CMAQ L		132 33	FFY 08 FFY 08
C-4700	WAKE	RALEIGH	FOURTEEN , CLEAN DIESEL AND PARTICULATE AFV TRANSIT BUSES		4000		MITIGATION	CMAQ		4000	FFY 07
C-4924A	WAKE	various	TRANSPORTATION DEMAND MANAGEMENT PROGRAM COORDINATION FOR BEST WORKPLACES FOR COMMUTERS PROGRAM		150		CONSTRUCTION CONSTRUCTION	CMAQ L		120 30	FFY 06 07 08 FFY 06 07 08
E-4758	WAKE	APEX	NORTH SALEM STREET, CONSTRUCT SIDEWALKS, CURB, DRAINAGE IMPROVEMENTS AND LANDSCAPE STROLLWAY, HUNTER STREET TO THE FUTURE PEAKWAY CROSSING.		180	180	UNDER CONSTRUCTION				
E-4528	WAKE	CARPENTER-APEX	AMERICAN TOBACCO TRAIL. PHASE A: SR 1160 (OLIVE CHAPEL ROAD) 2.5 MILES NORTH TO SR 1603 (WIMBERLY ROAD). PHASE B: SR 1603 NORTH TO THE CHATHAM COUNTY LINE.		1604	1604	UNDER CONSTRUCTION				
E-3116B	WAKE	CARY	BLACK CREEK GREENWAY, PHASE 4; GREENWAY AND BICYCLE PATH.	3.6	330	330	UNDER CONSTRUCTION				

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E-3805	WAKE	CARY	SPEIGHT BRANCH GREENWAY: TRYON ROAD TO CARY PARKWAY.	1.5	400	400	UNDER CONSTRUCTION				
E-4402	WAKE	FUQUAY VARINA	GREENWAY HERITAGE TRAIL: CAROL H. JOHNSON PARK TO SOUTH PARK.	1.5	400		CONSTRUCTION	STP	400	FFY 07	
E-4757	WAKE	GARNER	REHABILITATION AND LANDSCAPING OF HISTORIC GARNER DEPOT.		17	17	IN PROGRESS				
E-4925	WAKE	HOLLY SPRINGS	PHASE I: NC 55 (MAIN STREET), CENTER ROAD TO RALEIGH STREET. STREETSCAPING.		240		CONSTRUCTION CONSTRUCTION	STP O	192 48	FFY 06 FFY 06	
E-3800	WAKE	RALEIGH	URBAN YOUTH WORK PROGRAM.		250	175	TRAINING IN PROGRESS	STP	75	FFY 06 07 08	
E-3806AA	WAKE	RALEIGH	REEDY CREEK GREENWAY: NORTH CAROLINA MUSEUM OF ART TO MEREDITH COLLEGE AND HILLSBOROUGH STREET. CONSTRUCT OFF-ROAD MULTI-USE TRAIL.	1.5	4345	4345	UNDER CONSTRUCTION				
E-3806B	WAKE	RALEIGH	REEDY CREEK BIKEWAY: BLUE RIDGE ROAD TO UMSTEAD STATE PARK.	3.5	900	900	UNDER CONSTRUCTION				
E-4116	WAKE	RALEIGH	NORTH CAROLINA STATE UNIVERSITY. GREENWAY AND ENVIRONMENTAL MITIGATION ALONG ROCKY BRANCH BETWEEN GORMAN STREET AND PULLEN ROAD.		5709	5709	UNDER CONSTRUCTION				
E-4759	WAKE	RALEIGH	BIKE/PEDESTRIAN AMENITIES AND LANDSCAPING OF REEDY CREEK GREENWAY/MUSEUM PARK TRAIL.		56	56	UNDER CONSTRUCTION				
E-4829	WAKE	RALEIGH	NEUSE RIVER GREENWAY. FALLS LAKE DAM SOUTH TO THE SOCCER COMPLEX ON SR 2006 (PERRY CREEK ROAD).		500	500	CONSTRUCTION BY CITY OF RALEIGH				
E-4927	WAKE	RALEIGH	NORTH CAROLINA STATE CAPITOL FOUNDATION. PHASE I: PROVIDE HANDICAP ACCESSIBILITY ALONG THE SOUTHEAST GROUNDS OF THE STATE CAPITOL BUILDING (FAYETTEVILLE STREET MALL AT MORGAN STREET TO THE CAPITOL).		300		CONSTRUCTION CONSTRUCTION	STP O	240 60	FFY 07 FFY 07	
E-4929	WAKE	RALEIGH	EASTERN TERMINUS OF I-440 PEDESTRIAN BRIDGE NORTH TO GLEN EDEN DRIVE. CONSTRUCT MULTI-USE FACILITY.		250		CONSTRUCTION CONSTRUCTION	STP O	200 50	FFY 07 FFY 07	
E-4978	WAKE	RALEIGH	EDWARDS MILL ROAD EXTENSION, REEDY CREEK ROAD TO TRINITY ROAD. CONSTRUCT MULTI-USE PATH.	1.3	300		CONSTRUCTION	STP	300	FFY 07	

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E-4979	WAKE	RALEIGH	HOUSE CREEK, CRABTREE CREEK TO MEREDITH COLLEGE, PHASE I. CONSTRUCT GREENWAY.	0.8	400		CONSTRUCTION		STP	400	FFY 07
E-2913B	WAKE DURHAM	TRIANGLE REGION	INCLUDES RESEARCH TRIANGLE PARK, DURHAM AND WAKE COUNTIES. ON-ROAD IMPROVEMENTS AND SIGNING.		900	900	UNDER CONSTRUCTION				
E-4527	WAKE	WAKE FOREST	FRONT STREET, ROOSEVELT TO NORTH AVENUE; STADIUM AVENUE, WINGATE STREET TO JUBSON STREET; DURHAM ROAD EAST FROM TYLER RUN DRIVE; TYLER RUN DRIVE, DURHAM ROAD TO WOODLAND AVENUE. CONSTRUCT SIDEWALKS.		73	73	UNDER CONSTRUCTION				
E-4708	WAKE	WAKE FOREST	WAKE FOREST BYPASS GREENWAY.						SCHEDULED FOR FEASIBILITY STUDY		
E-4756	WAKE	WAKE FOREST	CONSTRUCT MULTI-USE PAVED TRAIL (0.5 MILES OF OLD MILL STREAM GREENWAY).		168	13	CONSTRUCTION CONSTRUCTION		STP O	129 26	FFY 06 FFY 06
E-4928	WAKE	WAKE FOREST	PHASE I: STREETSCAPING ALONG BOTH SIDES OF SR 1941 (SOUTH WHITE STREET), ROOSEVELT AVENUE TO WAIT AVENUE AND THE WEST SIDE TO JONES STREET.		106		CONSTRUCTION CONSTRUCTION		STP O	85 21	FFY 06 FFY 06
E-4762	WAKE	WENDELL	SR 2355 (THIRD STREET), ENCLOSED BRICK WALKWAY AT MAIN STREET INTERSECTION.		16	16	UNDER CONSTRUCTION				
P-2908	MECKLENBURG GUILFORD DURHAM NASH EDGECOMBE ROWAN CABARRUS WILSON ALAMANCE JOHNSTON WAKE	AMTRAK	CAPITAL AND OPERATIONS COST OF TRAIN 79/80 BETWEEN CHARLOTTE AND ROCKY MOUNT.		40253	23634	OPERATIONS IN PROGRESS		S(5)	16619	SFY 06 07 08 09 10
P-2918	DURHAM ALAMANCE GUILFORD ROWAN CABARRUS MECKLENBURG WAKE	AMTRAK	TRAIN 73/74 OPERATIONS BETWEEN CHARLOTTE AND RALEIGH AND CAPITAL YARD MAINTENANCE FACILITY.		51908	28079	OPERATIONS OPERATIONS IN PROGRESS		S(5) T2001	8381 15448	SFY 06 07 08 09 10 FFY 06 07 08 09 10
P-3803	WAKE	RALEIGH	TRACK AND STATION CONSTRUCTION.		4300	4300	IN PROGRESS				

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Y-2940A	WAKE	APEX	EAST THOMPSON STREET AT CSX TRANSPORTATION CROSSING 630 691Y. INSTALL AUTOMATIC WARNING DEVICES. RAIL PASSENGER CROSSING.		78	78	FUNDED - CONSTRUCTION NOT AUTHORIZED			
W-4813	WAKE	I-440 , I-40, SR 1728 WADE AVENUE	I-440 NORTHERN SECTION, I-40 AND SR 1728 (WADE AVENUE). INSTALL MILLED RUMBLE STRIPS (OR RUMBLE STRIPS WHERE APPROPRIATE) ON THE INSIDE AND OUTSIDE PAVED SHOULDERS.		290		CONSTRUCTION	HES	290	FFY 06
W-4814	WAKE DURHAM	I-540, SR 3097 AVIATION PARKWAY	I-540, I-40 EASTWARD TO EAST OF US 1 (CAPITAL BOULEVARD) AND SR 3097 (AVIATION PARKWAY), TERMINAL BOULEVARD NORTHWARD TO SR 1644 (GLOBE ROAD). INSTALL MILLED RUMBLE STRIPS ON THE INSIDE AND OUTSIDE PAVED SHOULDERS.		150		CONSTRUCTION	HES	150	FFY 06
W-4812	WAKE FRANKLIN	US 64 AND US 1	US 64, US 64 BUSINESS TO THE FRANKLIN COUNTY LINE; US 1, CHATHAM COUNTY LINE TO US 64-SR 1009 (TRYON ROAD). INSTALL MILLED RUMBLE STRIPS ON THE INSIDE AND OUTSIDE PAVED SHOULDERS.		160		CONSTRUCTION	HES	160	FFY 06
W-4421	WAKE	NC 50 CREEDMOOR ROAD	SR 1842 (SHOOTING CLUB ROAD) NORTH OF RALEIGH. INSTALL GUARDRAIL ALONG BOTH SHOULDERS OF NC 50 AND CONSTRUCT A NORTHBOUND LEFT TURN LANE AT SR 1842.		510	510	DIVISION PROJECT - UNDER CONSTRUCTION			
W-4404	WAKE	SR 2000 (WAKE FOREST ROAD)	RALEIGH AT I-440 (BELTLINE). WIDEN SR 2000 FOR DUAL LEFT TURN LANES ONTO I-440 (INNER AND OUTER BELTLINE) AND WIDEN I-440 ON-RAMPS TO ACCEPT DUAL LEFT TURN LANES. REVISE TRAFFIC SIGNALS PROVIDING PROTECTED TURN PHASE FOR DUAL LEFT TURN LANES.		2360	820	CONSTRUCTION	HES	1540	FFY 06
TJ-4991	WAKE	WAKE COUNTY	PROVIDE OPERATING ASSISTANCE TO COUNTIES AND COMMUNITY TRANSPORTATION SYSTEMS TO MEET WORK FIRST AND EMPLOYMENT TRANSPORTATION NEEDS.		72		OPERATIONS	OAWF	72	FFY 06 07
TL-4991	WAKE	WAKE COUNTY	PROVIDE OPERATING ASSISTANCE FOR ADDITIONAL TRANSPORTATION SERVICES TO THE ELDERLY AND DISABLED.		334		OPERATIONS	EDTAP	334	FFY 06 07
TR-4991	WAKE	WAKE COUNTY	PROVIDE MAINTENANCE ASSISTANCE FOR COMMUNITY TRANSPORTATION SYSTEMS TO SERVE THE RURAL GENERAL PUBLIC.		198		OPERATIONS	RGP	198	FFY 06 07
TA-4811	WAKE	CARY	NEW BUSES		110		CAPITAL CAPITAL CAPITAL UNFUNDED PROJECT	STAT L FED	9 10 91	FFY 07 FFY 07 FFY 07

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TA-4812	WAKE	CARY	EXPANSION BUSES		110		CAPITAL	STAT	9	FFY 08	
							CAPITAL	L	10	FFY 08	
							CAPITAL UNFUNDED PROJECT	FED	91	FFY 08	
TA-4813	WAKE	CARY	REPLACEMENT BUSES		225		CAPITAL	STAT	18	FFY 09	
							CAPITAL	L	20	FFY 09	
							CAPITAL UNFUNDED PROJECT	FED	187	FFY 09	
TA-4814A	WAKE	CARY	REPLACEMENT BUSES		330		CAPITAL	STAT	26	FFY 10	
							CAPITAL	L	30	FFY 10	
							CAPITAL UNFUNDED PROJECT	FED	274	FFY 10	
TA-4814B	WAKE	CARY	EXPANSION BUSES		110		CAPITAL	STAT	9	FFY 10	
							CAPITAL	L	10	FFY 10	
							CAPITAL UNFUNDED PROJECT	FED	91	FFY 10	
TA-4815	WAKE	CARY	REPLACEMENT BUSES		121		CAPITAL	STAT	10	FFY 11	
							CAPITAL	L	11	FFY 11	
							CAPITAL UNFUNDED PROJECT	FED	100	FFY 11	
TA-4901	WAKE	CARY	EXPANSION AND REPLACEMENT BUSES		440		CAPITAL	L	40	FFY 06	
							CAPITAL	STATG	35	FFY 06	
							CAPITAL UNFUNDED PROJECT	FED	365	FFY 06	
TA-4922A	WAKE	CARY	REPLACEMENT BUSES		121		CAPITAL	STAT	10	FFY 12	
							CAPITAL	L	11	FFY 12	
							CAPITAL UNFUNDED PROJECT	FED	100	FFY 12	
TA-4922B	WAKE	CARY	EXPANSION BUSES		121		CAPITAL	STAT	10	FFY 12	
							CAPITAL	L	11	FFY 12	
							CAPITAL UNFUNDED PROJECT	FED	100	FFY 12	
TM-4716C	WAKE	CARY	CAPITAL COST OF CONTRACTING		1400		CAPITAL	FUZ	560	FFY 06	
							CAPITAL	L	840	FFY 06	
TM-4716D	WAKE	CARY	CAPITAL COST OF CONTRACTING		1600		CAPITAL	FUZ	640	FFY 07	
							CAPITAL	L	960	FFY 07	
TM-4716E	WAKE	CARY	CAPITAL COST OF CONTRACTING		1700		CAPITAL	FUZ	680	FFY 08	
							CAPITAL	L	1020	FFY 08	

* INDICATES INTRASTATE PROJECT

ALL SCHEDULES SUBJECT TO AVAILABILITY OF FUNDS

CAPITAL AREA METROPOLITAN PLANNING ORGANIZATION

ID NO.	COUNTY	ROUTE/CITY	LOCATION AND DESCRIPTION	LENGTH	TOTAL	PRIOR YRS.	WORK TYPE	FUNDING	COST	SCHEDULE
				(MI) (KM)	EST. COST (THOU.)	COST (THOU.)			ESTIMATES (THOU.)	
TM-4716F	WAKE	CARY	CAPITAL COST OF CONTRACTING		2000		CAPITAL	FUZ	800	FFY 09
							CAPITAL	L	1200	FFY 09
TM-4716G	WAKE	CARY	CAPITAL COST OF CONTRACTING		2400		CAPITAL	FUZ	960	FFY 10
							CAPITAL	L	1440	FFY 10
TM-4716H	WAKE	CARY	CAPITAL COST OF CONTRACTING		2400		CAPITAL	FUZ	960	FFY 11
							CAPITAL	L	1440	FFY 11
TM-4716I	WAKE	CARY	CAPITAL COST OF CONTRACTING		2400		CAPITAL	FUZ	960	FFY 12
							CAPITAL	L	1440	FFY 12
TA-4785	WAKE	RALEIGH	REPLACEMENT BUSES		5115		CAPITAL	STAT	409	FFY 07
							CAPITAL	L	460	FFY 07
							CAPITAL	FED	4246	FFY 07
TA-4786	WAKE	RALEIGH	REPLACEMENT BUSES (30 FT)		2100		CAPITAL	STAT	168	FFY 09
							CAPITAL	L	189	FFY 09
							CAPITAL	FED	1743	FFY 09
TA-4902	WAKE	RALEIGH	NEW BUSES		5321		CAPITAL	STAT	426	FFY 06
							CAPITAL	L	479	FFY 06
							CAPITAL	FED	4416	FFY 06
TA-4903	WAKE	RALEIGH	NEW BUSES		2240		CAPITAL	STAT	179	FFY 07
							CAPITAL	L	202	FFY 07
							CAPITAL	FED	1859	FFY 07
TA-4904	WAKE	RALEIGH	NEW CONNECTOR BUSES		500		CAPITAL	STAT	40	FFY 07
							CAPITAL	L	45	FFY 07
							CAPITAL	FED	415	FFY 07
TA-4918	WAKE	RALEIGH	EXPANSION BUSES (FIXED RT)		1120		CAPITAL	STAT	90	FFY 08
							CAPITAL	L	101	FFY 08
							CAPITAL	FED	929	FFY 08
TA-4919	WAKE	RALEIGH	EXPANSION BUSES		4551		CAPITAL	STAT	364	FFY 08
							CAPITAL	L	410	FFY 08
							CAPITAL	FED	3777	FFY 08

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ALL SCHEDULES SUBJECT TO AVAILABILITY OF FUNDS

CAPITAL AREA METROPOLITAN PLANNING ORGANIZATION

ID NO.	COUNTY	ROUTE/CITY	LOCATION AND DESCRIPTION	LENGTH	TOTAL	PRIOR YRS.	WORK TYPE	FUNDING	COST	SCHEDULE
				(MI) (KM)	EST. COST (THOU.)	COST (THOU.)			ESTIMATES (THOU.)	
TA-4920	WAKE	RALEIGH	EXPANSION BUSES. (COMMUTER)		500		CAPITAL	STAT	40	FFY 08
							CAPITAL	L	45	FFY 08
							CAPITAL	FED	415	FFY 08
							UNFUNDED PROJECT			
TD-4729B	WAKE	RALEIGH	RENOVATION OF TRANSIT MAINTENANCE FACILITY-- CONSTRUCTION		3508		CAPITAL	STAT	351	FFY 06
							CAPITAL	L	351	FFY 06
							CAPITAL	FED	2806	FFY 06
							UNFUNDED PROJECT			
TD-4730	WAKE	RALEIGH	INTERMODAL CENTER--DESIGN, LAND ACQUISITION AND CONSTRUCTION		18567		CAPITAL	STAT	1857	FFY 06
							CAPITAL	L	1857	FFY 06
							CAPITAL	FED	14853	FFY 06
							UNFUNDED PROJECT			
TG-4790	WAKE	RALEIGH	ROUTINE CAPITAL ITEMS AND PREVENTIVE MAINTENANCE		2819		CAPITAL	FUZ	2255	FFY 06
							CAPITAL	L	564	FFY 06
TG-4791	WAKE	RALEIGH	ROUTINE CAPITAL ITEMS AND PREVENTIVE MAINTENANCE		3048		CAPITAL	FUZ	2438	FFY 07
							CAPITAL	L	610	FFY 07
TG-4792	WAKE	RALEIGH	ROUTINE CAPITAL ITEMS AND PREVENTIVE MAINTENANCE		2936		CAPITAL	FUZ	2349	FFY 08
							CAPITAL	L	587	FFY 08
TG-4793	WAKE	RALEIGH	ROUTINE CAPITAL ITEMS AND PREVENTIVE MAINTENANCE		2999		CAPITAL	FUZ	2399	FFY 09
							CAPITAL	L	600	FFY 09
TG-4794	WAKE	RALEIGH	ROUTINE CAPITAL ITEMS AND PREVENTIVE MAINTENANCE		2931		CAPITAL	FUZ	2345	FFY 10
							CAPITAL	L	586	FFY 10
TG-4903	WAKE	RALEIGH	ROUTINE CAPITAL ITEMS AND PREVENTIVE MAINTENANCE		3100		CAPITAL	FUZ	2480	FFY 11
							CAPITAL	L	620	FFY 11
TG-4904	WAKE	RALEIGH	ROUTINE CAPITAL ITEMS AND PREVENTIVE MAINTENANCE		3043		CAPITAL	FUZ	2434	FFY 12
							CAPITAL	L	609	FFY 12
TM-4905	WAKE	RALEIGH	AUTOMATIC PASSENGER COUNTER		409		CAPITAL	L	82	FFY 06
							CAPITAL	FED	327	FFY 06
TM-4906	WAKE	RALEIGH	SURVEILLANCE CAMERAS		542		CAPITAL	L	108	FFY 06
							CAPITAL	FED	434	FFY 06
TM-4907	WAKE	RALEIGH	AVL/CAD		500		CAPITAL	L	100	FFY 09
							CAPITAL	FED	400	FFY 09

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ALL SCHEDULES SUBJECT TO AVAILABILITY OF FUNDS

CAPITAL AREA METROPOLITAN PLANNING ORGANIZATION

ID NO.	COUNTY	ROUTE/CITY	LOCATION AND DESCRIPTION	LENGTH (MI) (KM)	TOTAL EST. COST (THOU.)	PRIOR YRS. COST (THOU.)	WORK TYPE	FUNDING	COST ESTIMATES (THOU.)		SCHEDULE (FISCAL YEARS)
TM-4908	WAKE	RALEIGH	REAL TIME TRAVEL INFO.		131		CAPITAL CAPITAL UNFUNDED PROJECT	L	26	FFY 08 09	
								FED	105	FFY 08 09	
TA-4797	DURHAM ORANGE WAKE	TRIANGLE TRANSIT AUTHORITY	REPLACEMENT BUSES.		2400		CAPITAL CAPITAL CAPITAL UNFUNDED PROJECT	STAT	240	FFY 09	
								L	240	FFY 09	
								FED	1920	FFY 09	
TA-4818	DURHAM ORANGE WAKE	TRIANGLE TRANSIT AUTHORITY	REPLACEMENT BUSES.		6900		CAPITAL CAPITAL CAPITAL UNFUNDED PROJECT	STAT	690	FFY 08	
								L	690	FFY 08	
								FED	5520	FFY 08	
TA-4819	DURHAM ORANGE WAKE	TRIANGLE TRANSIT AUTHORITY	REPLACEMENT BUSES (COMMUTER)		4500		CAPITAL CAPITAL CAPITAL UNFUNDED PROJECT	STAT	450	FFY 11	
								L	450	FFY 11	
								FED	3600	FFY 11	
TA-4945	DURHAM ORANGE WAKE	TRIANGLE TRANSIT AUTHORITY	REPLACEMENT BUSES		3600		CAPITAL CAPITAL CAPITAL UNFUNDED PROJECT	STAT	360	FFY 12	
								L	360	FFY 12	
								FED	2880	FFY 12	
TE-4705B	DURHAM WAKE	TRIANGLE TRANSIT AUTHORITY	PHASE I REGIONAL RAIL SERVICE		175000		CAPITAL CAPITAL CAPITAL Full Project Cost	STAT	14000	FFY 06	
								FNS	15750	FFY 06	
								L	145250	FFY 06	
TE-4707A	WAKE	TRIANGLE TRANSIT AUTHORITY	AIRPORT RAIL PROJECT--PLANNING/PE/DEIS		2751		CAPITAL CAPITAL CAPITAL UNFUNDED PROJECT	STAT	688	FFY 06	
								L	688	FFY 06	
								FED	1375	FFY 06	
TE-4707B	WAKE	TRIANGLE TRANSIT AUTHORITY	AIRPORT RAIL PROJECT--PLANNING/PE/DEIS		2751		CAPITAL CAPITAL CAPITAL UNFUNDED PROJECT	STAT	688	FFY 07	
								L	688	FFY 07	
								FED	1375	FFY 07	
TG-4811	DURHAM ORANGE WAKE	TRIANGLE TRANSIT AUTHORITY	ROUTINE CAPITAL ITEMS--SHOP EQUIPMENT, SPARE PARTS		171		CAPITAL CAPITAL	FUZ	137	FFY 06	
								L	34	FFY 06	
TG-4812	DURHAM ORANGE WAKE	TRIANGLE TRANSIT AUTHORITY	ROUTINE CAPITAL ITEMS--SHOP EQUIPMENT, SPARE PARTS		171		CAPITAL CAPITAL	FUZ	137	FFY 07	
								L	34	FFY 07	

* INDICATES INTRASTATE PROJECT

ALL SCHEDULES SUBJECT TO AVAILABILITY OF FUNDS

CAPITAL AREA METROPOLITAN PLANNING ORGANIZATION

ID NO.	COUNTY	ROUTE/CITY	LOCATION AND DESCRIPTION	LENGTH	TOTAL	PRIOR YRS.	WORK TYPE	FUNDING	COST	SCHEDULE
				(MI) (KM)	EST. COST (THOU.)	COST (THOU.)			ESTIMATES (THOU.)	
TG-4821	DURHAM ORANGE WAKE	TRIANGLE TRANSIT AUTHORITY	ROUTINE CAPITAL ITEMS--SHOP EQUIPMENT, SPARE PARTS		171		CAPITAL CAPITAL	FUZ L	137 34	FFY 08 FFY 08
TG-4822	DURHAM ORANGE WAKE	TRIANGLE TRANSIT AUTHORITY	ROUTINE CAPITAL ITEMS--SHOP EQUIPMENT, SPARE PARTS		171		CAPITAL CAPITAL	FUZ L	137 34	FFY 09 FFY 09
TG-4823	DURHAM ORANGE WAKE	TRIANGLE TRANSIT AUTHORITY	ROUTINE CAPITAL ITEMS--SHOP EQUIPMENT, SPARE PARTS		171		CAPITAL CAPITAL	FUZ L	137 34	FFY 10 FFY 10
TG-4927	DURHAM ORANGE WAKE	TRIANGLE TRANSIT AUTHORITY	ROUTINE CAPITAL ITEMS--SHOP EQUIPMENT, SPARE PARTS		171		CAPITAL CAPITAL	FUZ L	137 34	FFY 11 FFY 11
TG-4928	DURHAM ORANGE WAKE	TRIANGLE TRANSIT AUTHORITY	ROUTINE CAPITAL ITEMS--SHOP EQUIPMENT, SPARE PARTS		171		CAPITAL CAPITAL	FUZ L	137 34	FFY 11 FFY 12
TP-4724	DURHAM ORANGE WAKE	TRIANGLE TRANSIT AUTHORITY	PLANNING ASSISTANCE---UPWP		1329		PLANNING PLANNING PLANNING	STAT FUZ L	133 1063 133	FFY 06 FFY 06 FFY 06
TP-4725	DURHAM ORANGE WAKE	TRIANGLE TRANSIT AUTHORITY	PLANNING ASSISTANCE---UPWP		1329		PLANNING PLANNING PLANNING	STAT FUZ L	133 1063 133	FFY 07 FFY 07 FFY 07
TP-4732	DURHAM ORANGE WAKE	TRIANGLE TRANSIT AUTHORITY	PLANNING ASSISTANCE---UPWP		1329		PLANNING PLANNING PLANNING	STAT FUZ L	133 1063 133	FFY 08 FFY 08 FFY 08
TP-4733	DURHAM ORANGE WAKE	TRIANGLE TRANSIT AUTHORITY	PLANNING ASSISTANCE---UPWP		1329		PLANNING PLANNING PLANNING	STAT FUZ L	133 1063 133	FFY 09 FFY 09 FFY 09
TP-4734	DURHAM ORANGE WAKE	TRIANGLE TRANSIT AUTHORITY	PLANNING ASSISTANCE---UPWP.		1329		PLANNING PLANNING PLANNING	STAT FUZ L	133 1063 133	FFY 10 FFY 10 FFY 10
TP-4914	DURHAM ORANGE WAKE	TRIANGLE TRANSIT AUTHORITY	PLANNING ASSISTANCE---UPWP		1329		PLANNING PLANNING PLANNING	STAT FUZ L	133 1063 133	FFY 11 FFY 11 FFY 11
TP-4915	DURHAM ORANGE WAKE	TRIANGLE TRANSIT AUTHORITY	PLANNING ASSISTANCE---UPWP		1329		PLANNING PLANNING PLANNING	STAT FUZ L	133 1063 133	FFY 12 FFY 12 FFY 12
TA-4808	WAKE	VARIOUS	REPLACEMENT BUSES (30 FT)		1440		CAPITAL CAPITAL CAPITAL	L STATG FED	130 115 1195	FFY 10 FFY 10 FFY 10

* INDICATES INTRASTATE PROJECT

ALL SCHEDULES SUBJECT TO AVAILABILITY OF FUNDS

CAPITAL AREA METROPOLITAN PLANNING ORGANIZATION

ID NO.	COUNTY	ROUTE/CITY	LOCATION AND DESCRIPTION	LENGTH	TOTAL	PRIOR YRS.	WORK TYPE	FUNDING	COST	SCHEDULE	
				(MI) (KM)	EST. COST (THOU.)	COST (THOU.)			ESTIMATES (THOU.)		(FISCAL YEARS)
TA-9NCSU	WAKE	VARIOUS	HYBRID DIESEL ELECTRIC BUS		490		CAPITAL CAPITAL CAPITAL UNFUNDED		STATU FED	83 407	FFY 06 FFY 06
TE-4705C	DURHAM WAKE		PHASE I REGIONAL RAIL		235		UNFUNDED PROJECT			235	FFY 07
TE-4705D	DURHAM WAKE		PHASE I REGIONAL RAIL		130000		CAPITAL UNFUNDED PROJECT			130000	FFY 08
TE-4705E	DURHAM WAKE		PHASE I REGIONAL RAIL		5000		CAPITAL UNFUNDED PROJECT			5000	FFY 09

* INDICATES INTRASTATE PROJECT

ALL SCHEDULES SUBJECT TO AVAILABILITY OF FUNDS

FUNDING REPORT CAPITAL AREA METROPOLITAN PLANNING ORGANIZATION -

PROGRAMS
 STATE CASH FLOW *
 FED CASH FLOW *
 INTRASTATE *
 LOOPS *
 UNFUNDED *
 FEASIBILITY *

LOCATION	COUNTY	ID NUMBER	DESCRIPTION	LEN. (MI)	TOTAL PROJ COST (THOU)	PRIOR YEAR COST (THOU)	TYPE OF WORK AND ESTIMATED COST IN THOUSANDS																POST YEAR COST (THOU)
							FISCAL YEARS																
							FUND	FFY06		FFY07	FFY08	FFY09	FFY10	FFY11	FFY12								
I-40 I-440	WAKE	I-4705	SOUTH SAUNDERS STREET (MILEPOST 298) TO I-40/I-440-US 64 (MILEPOST 301). PAVEMENT REHABILITATION.	3.0	7000		IMPM	C	7000														
I-40 I-440	WAKE	I-4709	US 1 (MILEPOST 293) TO SOUTH SAUNDERS STREET (MILEPOST 298). PAVEMENT REHABILITATION.	5.0	5000		IMPM			C	5000												
I-40	WAKE	I-4710	CARY TOWNE BOULEVARD (MILE POST 291) TO SOUTH OF BUCK JONES ROAD (MILE POST 292). PAVEMENT REPAIR.	1.1	270	270	UNDER CONSTRUCTION																
I-40 I-440	WAKE	I-4735	US 1 (MILEPOST 293) TO I-40/I-440 (MILEPOST 301). PAVEMENT REPAIR.	8.0	1000	1000																	
I-40	JOHNSTON	I-4739	NC 42, CONVERT EXISTING INTERCHANGE TO A SINGLE POINT URBAN INTERCHANGE.		1120	1120																	
I-40	WAKE	I-4744	SR 1728 (WADE AVENUE, MILEPOST 289) TO I-440/US 1-64 (MILEPOST 293). ADD LANES.	4.0	45320	320	NHS														R	1000	
							NHS														C	44000	
							PROGRAMMED FOR PLANNING AND ENVIRONMENTAL STUDIES ONLY																
I-40	WAKE	I-4902	SR 1728 (WADE AVENUE, MILEPOST 289) TO I-440/US 1-64 (MILEPOST 293). PAVEMENT REPAIR.	4.0	1000		IMPM					C	1000										
I-85	GRANVILLE	I-4903	DURHAM COUNTY LINE (MILEPOST 185) TO US 15 (MILEPOST 186). PAVEMENT REPAIR.	1.0	300		IMPM						C	300									
I-440	WAKE	I-4708	SIX FORKS ROAD (MILEPOST 8) TO NEW BERN AVENUE (MILEPOST 13). MILL AND OVERLAY.	5.0	1500	1500																	
							UNDER CONSTRUCTION																
I-540	DURHAM WAKE	R-2000 *	NORTHERN WAKE FREEWAY, NC 55 WEST OF MORRISVILLE TO US 64 EAST NEAR KNIGHTDALE. FREEWAY ON NEW LOCATION.	29.0	757500	718882	NHS	C	12612	AA													
							NHS	C	20545	AB													
							NHS	C	5461	AC													
							PART COMPLETE - PART UNDER CONSTRUCTION																
I-540	WAKE	R-2641 *	EASTERN WAKE FREEWAY, PROPOSED US 64 BYPASS TO US 64 EAST. FREEWAY ON NEW LOCATION.	2.1	85539	68781	T	C	16758														
							UNDER CONSTRUCTION																
US 1A	WAKE	R-3600	WAKE FOREST, US 1 (CAPITAL BOULEVARD) TO NC 98 BYPASS. WIDEN TO MULTI-LANES.	1.9	10425	25	STP															R	2100
							STP															C	8300
							UNFUNDED PROJECT																
US 64	WAKE	R-2547	KNIGHTDALE BYPASS, I-440 (RALEIGH BELTLINE) TO US 64 NEAR SR 1003 (ROLESVILLE ROAD). CONSTRUCT MULTI-LANE FREEWAY, NEW LOCATION.	10.2	261043	223368	NHS	C	37675														
							PART COMPLETE - PART UNDER CONSTRUCTION AS DESIGN BUILD WITH PAYBACK IN FFY 03, 04, 05 AND 06 AS PROGRAMMED																

LOCATION	COUNTY	ID NUMBER	DESCRIPTION	LEN. (MI)	TOTAL PROJ COST (THOU)	PRIOR YEAR COST (THOU)	TYPE OF WORK AND ESTIMATED COST IN THOUSANDS												POST YEAR COST (THOU)					
							FUND	FISCAL YEARS																
								FFY06	FFY07	FFY08	FFY09	FFY10	FFY11	FFY12	FFY06		FFY07			FFY08		FFY09		FFY10
US 64-NC 49	CABARRUS CHATHAM DAVIDSON DAVIE MECKLENBURG RANDOLPH STANLY WAKE	R-4469	US 64, I-40 AT RALEIGH TO I-40 NEAR STATESVILLE AND NC 49, US 64 AT ASHEBORO TO CHARLOTTE. PILOT STUDY TO IDENTIFY MEASURES FOR CONTROLLING ACCESS AND OPTIMIZING INTERSECTION EFFICIENCY TO PROTECT TRAFFIC-CARRYING CAPACITY OF ROADWAY.		1600	1600																		
			SCHEDULED FOR CORRIDOR PLANNING STUDY ONLY, PRE-TIP PROJECT																					
US 70	JOHNSTON WAKE	R-2552 *	CLAYTON BYPASS, I-40 TO US 70-70 BUSINESS. FREEWAY ON NEW LOCATION.	9.5	178687	85939	T	C	45274	C	45274													
							T				C	2200	D											
			UNDER CONSTRUCTION																					
US 401	CUMBERLAND HARNETT WAKE	R-2609	MULTI-LANES NORTH OF FAYETTEVILLE TO FUQUAY- VARINA. WIDEN TO MULTI-LANES. (INCLUDES B-3153)	34.0	186400		STP														R	29600		
							STP														C	41200	A	
							STP														C	26600	B	
							STP														C	41400	C	
							STP														C	47600	D	
			PROGRAMMED FOR PLANNING AND ENVIRONMENTAL STUDIES ONLY																					
US 401	FRANKLIN WAKE	R-2814	NORTH OF SR 2044 (LIGON MILL ROAD) TO NC 39 IN LOUISBURG. WIDEN TO MULTI-LANES.	18.5	90519	7159	STP	R	2621	A														
							STP				C	6800	A											
							STP							R	2420	B								
							STP										C	6425	B	C	19275	B		
							STP														R	2785	C	
							STP														C	15700	C	
							STP														R	2915	D	
							STP														C	16600	D	
			PART COMPLETE																					
NC 42	JOHNSTON	R-3410	NC 50 TO US 70. WIDEN TO MULTI-LANES.	8.0	39500		STP														R	1600	A	
							STP														C	6900	A	
							STP														R	4000	B	
							STP														C	14500	B	
							STP														R	1400	C	
							STP														C	11100	C	
			UNFUNDED PROJECT																					
NC 42	JOHNSTON	R-3825	US 70 TO SR 1003 (BUFFALOE ROAD). WIDEN TO MULTI-LANES.	6.0	28850	500	STP	R	1550	A														
							STP				C	6500	A											
							STP														R	3100	B	
							STP														C	17200	B	
NC 55	HARNETT WAKE	R-2540	US 421 TO US 401. UPGRADE EXISTING ROADWAY.	20.0	103100		STP														R	5450	A	
							STP														C	14200	A	
							STP														R	7000	B	
							STP														C	7000	B	
							STP														R	8700	C	
							STP														C	22100	C	
							STP														R	7000	D	
							STP														C	6400	D	
							STP														R	5450	E	
							STP														C	15200	E	
							STP														R	1400	F	
							STP														C	3200	F	
			UNFUNDED PROJECT																					
NC 55	DURHAM WAKE	R-2906	US 64 IN WAKE COUNTY TO SR 1121 (CORNWALLIS ROAD) IN DURHAM COUNTY. WIDEN TO MULTI-LANES.	13.0	63399	45832	STP				C	219	A											
							O				C	17348	A											
			SECTION "A" UNDER CONSTRUCTION, ADVANCE CONSTRUCTED IN FFY 03 WITH PAYBACK IN FFY 07 AS PROGRAMMED																					

LOCATION	COUNTY	ID NUMBER	DESCRIPTION	LEN. (MI)	TOTAL PROJ COST (THOU)	PRIOR YEAR COST (THOU)	TYPE OF WORK AND ESTIMATED COST IN THOUSANDS										POST YEAR COST (THOU)				
							FISCAL YEARS														
							FUND	FFY06	FFY07	FFY08	FFY09	FFY10	FFY11	FFY12							
NC 55	WAKE	R-2907	SR 1106 (WAKE CHAPEL ROAD) IN FUQUAY-VARINA TO SR 1114 (RALPH STEPHENS ROAD) SOUTH OF HOLLY SPRINGS. WIDEN TO FIVE LANES WITH CURB AND GUTTER.	3.3	15659	15659															
							UNDER CONSTRUCTION														
NC 56	GRANVILLE	R-2542	WEST OF I-85 TO NC 50. CORRIDOR UPGRADE AND SAFETY IMPROVEMENTS.	3.7	21221	1171	STP											R	600	A	
							STP											C	2850	A	
							STP											R	1700	B	
							STP											C	5050	B	
							STP											R	2350	C	
							STP											C	7500	C	
							UNFUNDED PROJECT														
NC 98	WAKE	R-2609	WAKE FOREST BYPASS, WEST OF SR 1923 (THOMSON MILL ROAD) TO EAST OF SR 2053 (JONES DAIRY ROAD). MULTI-LANES ON NEW LOCATION.	4.7	86807	67303	STPDA			C	4400	A	C	4400	A						
							STPDA	C	8700	B											
							STP	A	2004	WM											
							PART COMPLETE - PART UNDER CONSTRUCTION														
US 15-501, US 64, US 70, US 158, NC 147	DURHAM GRANVILLE PERSON WAKE	R-4404	NATIONAL HIGHWAY SYSTEM GUARDRAIL REHABILITATION. UPGRADE SUBSTANDARD GUARDRAIL, END TREATMENTS AND BRIDGE ANCHOR UNITS.		2040	2040															
							UNDER CONSTRUCTION														
NEW ROUTE	WAKE	R-2635 *	WESTERN WAKE FREEWAY, NC 55 (SOUTH) TO NC 55 (NORTH). FREEWAY ON NEW LOCATION.	12.4	294615	15638	T											R	12725	A	
							T											C	30100	A	
							T				R	8600	B	R	8600	B					
							T											C	95400	B	
							T			R	11525	C	R	11525	C						
							T									C	23813	C	C	71439	C
							T					A	5250	WM							
NEW ROUTE	WAKE	R-2721 *	SOUTHERN WAKE FREEWAY, NC 55 (SOUTH) TO US 401 SOUTH. FREEWAY ON NEW LOCATION.	7.8	174590	4390	STP											R	30000		
							STP											C	140200		
							UNFUNDED PROJECT														
NEW ROUTE	WAKE	R-2628 *	SOUTHERN WAKE FREEWAY, US 401 TO I-40. CONSTRUCT FREEWAY ON NEW LOCATION.	8.7	121830	5630	STP											R	15000		
							STP											C	101000		
							UNFUNDED PROJECT														
NEW ROUTE	WAKE	R-2629 *	EASTERN WAKE FREEWAY, I-40 TO PROPOSED US 64 BYPASS. FREEWAY ON NEW LOCATION.	10.8	205900	2900	STP											R	25000		
							STP											C	178000		
							UNFUNDED PROJECT														
NEW ROUTE	JOHNSTON	R-3618	SR 1553 (SHOTWELL ROAD) WEST OF US 70 TO NC 42 EAST OF CLAYTON. TWO LANES ON MULTI-LANE RIGHT OF WAY, NEW LOCATION.	3.0	8650		STP											R	1300		
							STP											C	8550		
							UNFUNDED PROJECT														
NEW ROUTE	WAKE	U-4901	FALLS OF NEUSE WIDEN TO MULTILANES AND REALIGNMENT FROM RAVEN RIDGE ROAD TO NEUSE RIVER INCLUDING NEW STRUCTURE OVER THE NEUSE RIVER.		18000		STP							C	5200		C	5200			
							L							C	1000		C	1300		C	1300
							O							C	4000						
VARIOUS	WAKE	U-4735	CAMPO DA FUNDS.		5250		STPDA	C	600	C	600	C	600	C	600	C	600	C	600		
							O	C	150	C	150	C	150	C	150	C	150	C	150		
VARIOUS	WAKE	U-9999B	CAMPO PLANNING (PL SUPPLEMENT).		3114	414	STPDA	C	280	C	280	C	280	C	280	C	480	C	280	C	280
							C	C	70	C	70	C	70	C	70	C	120	C	70	C	70

LOCATION	COUNTY	ID NUMBER	DESCRIPTION	LEN. (MI)	TOTAL PROJ COST (THOU)	PRIOR YEAR COST (THOU)	TYPE OF WORK AND ESTIMATED COST IN THOUSANDS												POST YEAR COST (THOU)		
							FISCAL YEARS														
							FUND	FFY06	FFY07	FFY08	FFY09	FFY10	FFY11	FFY12							
APEX	WAKE	U-2901	NC 55 (WILLIAMS STREET), US 1 TO US 64. WIDEN TO A MULTI-LANE CURB AND GUTTER FACILITY.	3.2	20255	1655	STP												R	2800	B
							STP												C	15800	B
PART COMPLETE - PART UNFUNDED																					
CARY	WAKE	U-2908	NC 54, SR 1415 (MAYNARD ROAD) TO SR 1655 (TRINITY ROAD). WIDEN TO MULTI-LANES.	0.8	2800		STP												R	100	
							STP												C	2700	
UNFUNDED PROJECT																					
CARY	WAKE	U-3101	US 1-64, US 64 TO SOUTH OF SR 1313 (WALNUT STREET). REHABILITATE PAVEMENT, ADDITIONAL TRAVEL LANES AND MODIFY SR 1313 INTERCHANGE.	2.6	62546	24279	NHS	C	16283	C	C	16284	C								
							C	C	2850	D	C	2850	D								
PART COMPLETE - PART UNDER CONSTRUCTION - SECTION "D" CONSTRUCTION TO BE FUNDED BY THE TOWN OF CARY																					
CARY	WAKE	U-3802	CARY SIGNAL SYSTEM		14351	14351	UNDER CONSTRUCTION BY CITY - NCDOT PARTICIPATION														
PROGRAMMED FOR PLANNING AND ENVIRONMENTAL STUDY ONLY																					
CLAYTON	JOHNSTON	U-3605	FRONT STREET EXTENSION, MILLS STREET TO PECAN LANE. TWO-LANE FACILITY ON NEW LOCATION.																		
PROGRAMMED FOR PLANNING AND ENVIRONMENTAL STUDY ONLY																					
DURHAM	DURHAM WAKE	U-4721 *	NORTHERN DURHAM PARKWAY, I-540 TO ROXBORO ROAD.	29.4			THE CROSS SECTION FOR THIS PROJECT WILL BE ESTABLISHED BY MUTUAL AGREEMENT OF THE MPO AND NCDOT THROUGH THE STATE AND FEDERAL ENVIRONMENTAL REVIEW PROCESS.														
GARNER	WAKE	U-3607	NEW RAND ROAD, TIMBER DRIVE TO US 70. WIDEN TO THREE LANES.	1.1	6500		STP												R	3250	
							STP												C	3250	
UNFUNDED PROJECT																					
GARNER	WAKE	U-4703	TIMBER DRIVE EAST EXTENSION, NC 50 TO WHITE OAK ROAD. MULTI-LANES ON NEW LOCATION.	1.3	11160	320	STPDA						C	4800		C	4800				
							O						R	1240							
KNIGHTDALE	WAKE	U-3441	SR 2233 (NORTH SMITHFIELD ROAD), CARRINGTON DRIVE TO SR 2049 (FORESTVILLE ROAD). WIDEN TO MULTI-LANES.	1.0	7446	256	STP												R	1640	
							STP												C	1950	A
							STP												C	3600	B
UNFUNDED PROJECT																					
MORRISVILLE	WAKE	U-3343	SR 1002 (AVIATION PARKWAY), NC 54 TO I-40. WIDEN TO MULTI-LANES.	2.6	18275	275	STP												R	800	
							STP												C	17200	
UNFUNDED PROJECT																					
MORRISVILLE	WAKE	U-3344	SR 3015 (AIRPORT BOULEVARD), NC 54 TO I-40. WIDEN TO MULTI-LANES.	1.9	8416	6316	S	C	2100	A											
PART COMPLETE																					
MORRISVILLE	WAKE	U-3620	MCCRIMMON PARKWAY, NC 54 TO AIRPORT BOULEVARD. EXTEND ROADWAY AS A MULTI-LANE CURB AND GUTTER FACILITY.	0.4	3400		STP												R	900	
							STP												C	2500	
UNFUNDED PROJECT																					
TRIANGLE PARKWAY	DURHAM WAKE	U-4763	I-40 TO MCCRIMMON PARKWAY. MULTI-LANE FACILITY ON NEW LOCATION.				NORTH CAROLINA TURNPIKE AUTHORITY PROJECT - PROGRAMMED FOR PLANNING AND ENVIRONMENTAL STUDY ONLY														
PROGRAMMED FOR PLANNING AND ENVIRONMENTAL STUDY ONLY																					
RALEIGH	WAKE	U-0515E	US 70, SR 2026 (HAMMOND ROAD)-SR 2812 (TIMBER DRIVE). CONSTRUCT AN INTERCHANGE.		10200		STP												C	10200	E
UNFUNDED PROJECT																					
RALEIGH	WAKE	U-2719	I-440 (CLIFF BENSON BELTLINE), SOUTH OF SR 1313 (WALNUT STREET) TO NORTH OF SR 1728 (WADE AVENUE). WIDEN TO MULTI-LANES.	3.5	77320	320	NHS												R	12000	
							NHS												C	65000	
PROGRAMMED FOR PLANNING AND ENVIRONMENTAL STUDY ONLY																					

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							FUND	FISCAL YEARS																	
								FFY06	FFY07	FFY08	FFY09	FFY10	FFY11	FFY12											
RALEIGH	WAKE	U-2823	US 70 (GLENWOOD AVENUE), WEST OF SR 1664 (DURALEIGH ROAD) TO WEST OF SR 1876 (TRIANGLE DRIVE). UPGRADE ROADWAY TO IMPROVE CAPACITY, SAFETY AND TRAFFIC OPERATIONS INCLUDING INTERCHANGE AT LYNN ROAD.	3.3	32700		NHS											R	1600						
							NHS																	C	31100
RALEIGH	WAKE	U-2918	SR 1829 (STRICKLAND ROAD) EXTENSION, US 70 TO EAST OF SR 1822 (LEESVILLE ROAD). MULTI-LANES, PART ON NEW LOCATION.	2.8	16500	300	STP																	R	2100
							STP																	C	14100
RALEIGH	WAKE	U-3111	TRYON ROAD EXTENSION, SR 1004 (OLD GARNER ROAD) TO SR 2542 (ROCK QUARRY ROAD). MULTI-LANES ON NEW LOCATION.	2.9	21050	150	STP																	R	1600
							STP																	C	8900
							STP																	C	10400
							PROGRAMMED FOR PLANNING AND ENVIRONMENTAL STUDIES ONLY																		
RALEIGH	WAKE	U-3817	EDWARDS MILL ROAD EXTENSION, NC 54 TO WESTERN BOULEVARD. MULTI-LANES ON NEW LOCATION.	0.7	22100		STP																	R	4300
							STP																	C	17800
							UNFUNDED PROJECT																		
RALEIGH	WAKE	U-4417	SR 1321 (AVENT FERRY ROAD)/SR 1012 (WESTERN BOULEVARD), MONORAIL ACCOMMODATIONS. EVALUATE INTERCHANGE AND GRADE SEPARATION.	0.1	8300		STP																	R	1500
							STP																	C	6800
							UNFUNDED PROJECT																		
RALEIGH	WAKE	U-4432	SR 1370 (TRYON ROAD), WEST OF BRIDGE NO. 259 OVER NORFOLK SOUTHERN RAILWAY TO US 70-401-NC 50 (WILMINGTON STREET). WIDEN TO MULTI-LANES, PART ON NEW LOCATION WITH NEW STRUCTURE OVER SOUTHERN RAILROAD.		500	500																			
							PROGRAMMED FOR PLANNING AND ENVIRONMENTAL STUDY ONLY																		
RALEIGH	WAKE	U-4437	NC 54 (HILLSBOROUGH STREET) AND SR 1664-3074 (BLUE RIDGE ROAD) NEAR CSX TRANSPORTATION SYSTEM AND SOUTHERN RAILROAD AND SR 3042 (BERYL ROAD). CONSTRUCT A GRADE SEPARATION.		960	960																			
							PROGRAMMED FOR PLANNING AND ENVIRONMENTAL STUDY ONLY																		
RALEIGH	WAKE	U-4447	HILLSBOROUGH STREET RECONSTRUCTION PROJECT, GORMAN STREET TO WOODBURN ROAD INCLUDING HORNE STREET, BROOKS STREET, CLARK AVENUE AND OBERLIN ROAD.		970	970																			
							PROGRAMMED FOR PLANNING AND ENVIRONMENTAL STUDY ONLY																		
RALEIGH	WAKE	U-4708	REHABILITATION OF EXISTING COMPUTERIZED SIGNAL SYSTEM.		24700		CMAQ						C	6000		C	6000		C	6000					
							STP						C	1000		C	1000		C	1000					
							LOCAL						C	2334		C	2333		C	2333					
RESEARCH TRIANGLE PARK	DURHAM WAKE	U-4026	SR 1613-SR 1999 (DAVIS DRIVE), SR 3014 (MORRISVILLE-CARPENTER ROAD) IN WAKE COUNTY TO NC 54 IN DURHAM COUNTY. WIDEN TO MULTI-LANES.	5.7	35918	8518	C	C	5300	A															
							S	C	9050	B	C	9050	B												
							O	C	4000	B															

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							FISCAL YEARS																				
							FUND	FFY06	FFY07	FFY08	FFY09	FFY10	FFY11	FFY12													
RESEARCH TRIANGLE PARK	WAKE	U-4410	RTP ACCESS ROUTES. SECTION A, LOUIS STEPHENS ROAD, LOTS 6 AND 12 TO SOUTH LOOP ROAD. SECTION D, LOUIS STEPHENS ROAD, HOPSON ROAD TO DEVELOPMENT DRIVE AND SECTION F, GEORGE WATTS HILL EXTENSION TO CHURCH STREET.		19238	9963	S													C	3217	DA					
							O																C	1608	DA		
							S			C	1933	DB															
							S	R	167	DB																	
							O			C	967	DB															
							O	R	83	DB																	
							S						C	800	F												
							O						C	500	F												
PLANNING, DESIGN, RIGHT OF WAY AND UTILITIES BY OTHERS - PART UNDER CONSTRUCTION																											
GARNER	WAKE	C-4403	US 401 TO TIMBER DRIVE. DESIGN AND IMPLEMENT A COMPUTERIZED TRAFFIC SIGNAL SYSTEM.		2239	2239	UNDER CONSTRUCTION																				
RALEIGH	WAKE	C-4700	FOURTEEN (14), CLEAN DIESEL AND PARTICULATE AFV TRANSIT BUSES		4000		CMAQ		A	4000																	
US 70	WAKE	B-4946	US 401. REPLACE BRIDGE NO. 251		5500		FA							R	500												
							FA									C	2500		C	2500							
US 401	WAKE	B-3916	MIDDLE CREEK. REPLACE BRIDGE NO. 63		2465	415	FA	C	2050																		
NC 42	HARNETT	B-4137	NORFOLK AND SOUTHERN RAILWAY. REPLACE BRIDGE NO. 35		675	100	FA	R	50																		
							FA					C	525														
NC 50	JOHNSTON	B-4556	BLACK CREEK. REPLACE BRIDGE NO. 74		700	150	FA			R	50																
							FA					C	500														
NC 50	WAKE	B-4654	US 70. REPLACE BRIDGE NO. 69		3600	300	FA			R	300																
							FA					C	3000														
NC 96	JOHNSTON	B-3481	LITTLE RIVER. REPLACE BRIDGE NO. 94		1322	122	FA			C	1200																
NC 97	FRANKLIN WAKE	B-4830	MOCASSIN CREEK. REPLACE BRIDGE NO. 20		1650		FA							R	150												
							FA								C	1500											
SR 1003	FRANKLIN	B-4514	TAR RIVER. REPLACE BRIDGE NO. 36		1400	300	NFA							R	100												
							NFA								C	1000											
SR 1006	WAKE	B-3521	MIDDLE CREEK. REPLACE BRIDGE NO. 273		1825	1825	UNDER CONSTRUCTION																				
SR 1006	WAKE	B-4299	CREEK. REPLACE BRIDGE NO. 255		665	190	FA	C	475																		
SR 1006	WAKE	B-4655	BLACK CREEK. REPLACE BRIDGE NO. 277		730	70	NFA			R	60																
							NFA					C	600														
SR 1007	WAKE	B-3522	BUFFALO CREEK. REPLACE BRIDGE NO. 215		2024	2024	UNDER CONSTRUCTION																				
SR 1007	WAKE	B-4300	CLARKS CREEK. REPLACE BRIDGE NO. 29		1145	200	FA	R	95																		
							FA					C	850														
SR 1007	WAKE	B-4301	POPLAR CREEK. REPLACE BRIDGE NO. 229		1185	150	FA	R	85																		
							FA					C	950														
SR 1011	WAKE	B-4656	SR 1012. REPLACE BRIDGE NO. 492		1620	300	FA							R	120												
							FA								C	1200											

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							FISCAL YEARS																		
							FUND	FFY06	FFY07	FFY08	FFY09	FFY10	FFY11	FFY12											
SR 1101	WAKE	B-4657	NORFOLK AND SOUTHERN RAILROAD. REPLACE BRIDGE NO. 340		810	150	NFA							R	60										
							NFA								C	600									
SR 1106	FRANKLIN	B-4113	LITTLE RIVER. REPLACE BRIDGE NO. 15		1275	175	NFA	C	1100																
SR 1108	WAKE	B-3256	NORFOLK SOUTHERN RAILWAY. REPLACE BRIDGE NO. 337		2279	2279	UNDER CONSTRUCTION																		
SR 1117	WAKE	B-4658	BUCKHORN CREEK. REPLACE BRIDGE NO. 345		1485	150	NFA			R	60														
							NFA					C	1275												
SR 1139	GRANVILLE	B-4754	FORK OF REEDS CREEK. REPLACE BRIDGE NO. 220		550		NFA							R	50										
							NFA								C	500									
SR 1146	FRANKLIN	B-4114	CAMPING CREEK. REPLACE BRIDGE NO. 151 WITH CULVERT.		753	100	NFA	R	53																
							NFA				C	600													
SR 1147	FRANKLIN	B-4748	HORSE CREEK. REPLACE BRIDGE NO. 2		550		NFA				R	50													
							NFA						C	500											
SR 1152	WAKE	B-4831	WHITE OAK CREEK. REPLACE BRIDGE NO. 371		2200		NFA							R	200										
							NFA								C	2000									
SR 1200	FRANKLIN	B-4749	MIDDLE CREEK. REPLACE BRIDGE NO. 27		1100		NFA					R	100												
							NFA								C	1000									
SR 1300	WAKE	B-3523	SWIFT CREEK. REPLACE BRIDGE NO. 525		880	880	UNDER CONSTRUCTION																		
SR 1301	WAKE	B-4302	TERRIBLE CREEK. REPLACE BRIDGE NO. 336		1700	150	NFA			R	100														
							NFA						C	1450											
SR 1309	JOHNSTON	B-4557	BIG BRANCH. REPLACE BRIDGE NO. 113		305	30	NFA					R	25												
							NFA								C	250									
SR 1316	FRANKLIN NASH	B-4587	CYPRESS CREEK. REPLACE BRIDGE NO. 82		1360	150	NFA			R	60														
							NFA						C	1150											
SR 1330	JOHNSTON	B-4558	STONEY FORK CREEK. REPLACE BRIDGE NO. 86		595	100	NFA					R	45												
							NFA								C	450									
SR 1330	JOHNSTON	B-4559	BLACK CREEK. REPLACE BRIDGE NO. 84		1240	250	NFA			R	90														
							NFA						C	900											
SR 1331	JOHNSTON	B-4560	BLACK CREEK. REPLACE BRIDGE NO. 102		970	200	NFA			R	70														
							NFA						C	700											
SR 1375	WAKE	B-3375	SWIFT CREEK. REPLACE BRIDGE NO. 301. LAKE WHEELER SPILLWAY. REPLACE BRIDGE NO. 471		2560	2560	UNDER CONSTRUCTION																		
SR 1379	WAKE	B-3917	SWIFT CREEK. REPLACE BRIDGE NO. 311		2310	260	NFA	C	2050																
SR 1393	WAKE	B-4659	BASSAL CREEK. REPLACE BRIDGE NO. 373		855	85	NFA			R	70														
							NFA						C	700											

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							FUND	FISCAL YEARS																		
								FFY06	FFY07	FFY08	FFY09	FFY10	FFY11	FFY12												
SR 1404	WAKE	B-3703	MIDDLE CREEK. REPLACE BRIDGE NO. 317		1070	1070																				
							UNDER CONSTRUCTION																			
SR 1525	JOHNSTON	B-4561	SWIFT CREEK. REPLACE BRIDGE NO. 147		1080	200	NFA		R	80																
							NFA				C	800														
SR 1525	JOHNSTON	B-4772	MILL BRANCH CREEK. REPLACE BRIDGE NO. 326		825		NFA		R	75																
							NFA				C	750														
SR 1564	WAKE	B-3257	SOUTHERN RAILROAD. REPLACE BRIDGE NO. 245		6004	6004																				
							UNDER CONSTRUCTION																			
SR 1600	WAKE	B-4697	WHITE OAK CREEK. REPLACE BRIDGE NO. 55		750	90	NFA		R	60																
							NFA				C	600														
SR 1613	WAKE	B-3526	CREEK. REPLACE BRIDGE NO. 65		839	839																				
							UNDER CONSTRUCTION BY CITY OF CARY																			
SR 1649	WAKE	B-3259	CRABTREE CREEK. REPLACE BRIDGE NO. 44. TURKEY CREEK. REPLACE BRIDGE NO. 45		2893	2893																				
							UNDER CONSTRUCTION																			
SR 1718	JOHNSTON	B-3672	BUFFALO CREEK. REPLACE BRIDGE NO. 415		745	150	NFA	R	20																	
							NFA				C	575														
SR 1719	FRANKLIN	B-4750	NORRIS CREEK. REPLACE BRIDGE NO. 90		825		NFA		R	75																
							NFA				C	750														
SR 1722	JOHNSTON	B-3863	LITTLE RIVER. REPLACE BRIDGE NO. 151		983	200	NFA	R	33																	
							NFA				C	750														
SR 2308	FRANKLIN	B-4662	MOCCASIN CREEK. REPLACE BRIDGE NO. 196		500	60	NFA		R	40																
SR 1726	WAKE						NFA				C	400														
SR 1733	JOHNSTON	B-4166	LITTLE RIVER. REPLACE BRIDGE NO. 170		785	785																				
							UNDER CONSTRUCTION																			
SR 1834	WAKE	B-3704	LOWER BARTONS CREEK. REPLACE BRIDGE NO. 108		1548	1548																				
							UNDER CONSTRUCTION																			
SR 1839	WAKE	B-3528	SYCAMORE CREEK. REPLACE BRIDGE NO. 429		1850	200	NFA	R	200																	
							NFA				C	1450														
SR 1844	WAKE	B-4303	LOWER BARTONS CREEK. REPLACE BRIDGE NO. 102		2550	200	NFA		R	200																
							NFA				C	2150														
SR 2000	WAKE	B-4660	NEUSE RIVER. REPLACE BRIDGE NO. 19		3800	500	NFA		R	300																
							NFA				C	3000														
SR 2000	WAKE	B-4947	CRABTREE CREEK. REPLACE BRIDGE NO. 469		5500		NFA		R	500																
							NFA				C	2500								C	2500					
SR 2006	WAKE	B-3529	PERRY CREEK. REPLACE BRIDGE NO. 124		2815	2815																				
							UNDER CONSTRUCTION																			
SR 2044	WAKE	B-3918	TOM CREEK. REPLACE BRIDGE NO. 127		1496	1496																				
							UNDER CONSTRUCTION																			
SR 2045	WAKE	B-3705	SMITHS CREEK. REPLACE BRIDGE NO. 125		3655	205	NFA	C	3450																	

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							FUND	FISCAL YEARS												
								FFY06	FFY07	FFY08	FFY09	FFY10	FFY11	FFY12						
SR 2053	WAKE	B-3919	AUSTIN CREEK. REPLACE BRIDGE NO. 448 SMITHS CREEK. REPLACE BRIDGE NO. 140		2185	100	NFA		R	185										
							NFA				C	1900								
							INCLUDES B-3920													
SR 2217	WAKE	B-4304	BEAVER DAM CREEK. REPLACE BRIDGE NO. 143		1550	150	NFA		R	150										
							NFA				C	1250								
SR 2227	WAKE	B-4661	POWELL CREEK. REPLACE BRIDGE NO. 151		700	150	NFA				R	50								
							NFA						C	500						
SR 2320	WAKE	B-3530	BUFFALO CREEK. REPLACE BRIDGE NO. 174		1106	1106	UNDER CONSTRUCTION													
SR 2333	WAKE	B-4305	LITTLE RIVER. REPLACE BRIDGE NO. 189		739	100	NFA	R	14											
							NFA	C	625											
SR 2507	WAKE	B-4663	MARKS CREEK. REPLACE BRIDGE NO. 225		610	60	NFA				R	50								
							NFA						C	500						
SR 2511	WAKE	B-4832	POPLAR CREEK. REPLACE BRIDGE NO. 230		1100		NFA				R	100								
							NFA						C	1000						
SR 2564	WAKE	B-3376	BIG BRANCH CREEK. REPLACE BRIDGE NO. 246		1165	1165	UNDER CONSTRUCTION													
SR 2742	WAKE	B-4306	BLACK CREEK. REPLACE BRIDGE NO. 275		555	555	UNDER CONSTRUCTION													
SR 2761	WAKE	B-4833	LITTLE BLACK CREEK. REPLACE BRIDGE NO. 376		1100		NFA						R	100						
							NFA							C	1000					
VARIOUS	DURHAM FRANKLIN GRANVILLE PERSON VANCE WAKE WARREN	B-4905	ENVIRONMENTAL MITIGATION FOR BRIDGE PROJECTS IN DIVISION 5.		5168	5168	IN PROGRESS - SEGMENT A (FA), SEGMENT B (NFA)													
RALEIGH	WAKE	B-4331	STONEBROOK DRIVE OVER MARSH CREEK. REPLACE BRIDGE NO. 661		1154	229	NFAM	R	25											
							NFAM	C	900											
US 64 AND US 1	FRANKLIN WAKE	W-4812	US 64, US 64 BUSINESS TO THE FRANKLIN COUNTY LINE; US 1, CHATHAM COUNTY LINE TO US 64-SR 1009 (TRYON ROAD). INSTALL MILLED RUMBLE STRIPS ON THE INSIDE AND OUTSIDE PAVED SHOULDERS.		160		HES	C	160											
I-540, SR 3097 AVIATION PARKWA	DURHAM WAKE	W-4814	I-540, I-40 EASTWARD TO EAST OF US 1 (CAPITAL BOULEVARD) AND SR 3097 (AVIATION PARKWAY), TERMINAL BOULEVARD NORTHWARD TO SR 1644 (GLOBE ROAD). INSTALL MILLED RUMBLE STRIPS ON THE INSIDE AND OUTSIDE PAVED SHOULDERS.		150		HES	C	150											

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							FUND	FFY06	FFY07	FFY08	FFY09	FFY10	FFY11	FFY12					
NC 50 CREEDMOOR ROAD	WAKE	W-4421	SR 1842 (SHOOTING CLUB ROAD) NORTH OF RALEIGH. INSTALL GUARDRAIL ALONG BOTH SHOULDERS OF NC 50 AND CONSTRUCT A NORTHBOUND LEFT TURN LANE AT SR 1842.	510	510														
DIVISION PROJECT - UNDER CONSTRUCTION																			
SR 2000 (WAKE FOREST ROAD)	WAKE	W-4404	RALEIGH AT I-440 (BELTLINE). WIDEN SR 2000 FOR DUAL LEFT TURN LANES ONTO I-440 (INNER AND OUTER BELTLINE) AND WIDEN I-440 ON-RAMPS TO ACCEPT DUAL LEFT TURN LANES. REVISE TRAFFIC SIGNALS PROVIDING PROTECTED TURN PHASE FOR DUAL LEFT TURN LANES.	2360	820	HES	C	1540											
I-440, I-40, SR 1728 WADE AVENUE	WAKE	W-4813	I-440 NORTHERN SECTION, I-40 AND SR 1728 (WADE AVENUE). INSTALL MILLED RUMBLE STRIPS (OR RUMBLE STRIPS WHERE APPROPRIATE) ON THE INSIDE AND OUTSIDE PAVED SHOULDERS.	290		HES	C	290											
APEX	WAKE	Y-2940A	EAST THOMPSON STREET AT CSX TRANSPORTATION CROSSING 630 691Y. INSTALL AUTOMATIC WARNING DEVICES. RAIL PASSENGER CROSSING.	78	78														
FUNDED - CONSTRUCTION NOT AUTHORIZED																			
AMTRAK	ALAMANCE CABARRUS DURHAM EDGECOMBE GUILFORD JOHNSTON MECKLENBURG NASH ROWAN WAKE WILSON	P-2908	CAPITAL AND OPERATIONS COST OF TRAIN 79/80 BETWEEN CHARLOTTE AND ROCKY MOUNT.	40253	23634	S(5)	O	3130	O	3224	O	3321	O	3421	O	3523			
IN PROGRESS																			
AMTRAK	ALAMANCE CABARRUS DURHAM GUILFORD MECKLENBURG ROWAN WAKE	P-2918	TRAIN 73/74 OPERATIONS BETWEEN CHARLOTTE AND RALEIGH AND CAPITAL YARD MAINTENANCE FACILITY.	51908	28079	T2001	O	2785	O	2911	O	3008	O	3249	O	3495			
						S(5)	O	1870	O	1776	O	1679	O	1579	O	1477			
IN PROGRESS																			
APEX	WAKE	E-4758	NORTH SALEM STREET, CONSTRUCT SIDEWALKS, CURB, DRAINAGE IMPROVEMENTS AND LANDSCAPE STROLLWAY, HUNTER STREET TO THE FUTURE PEAKWAY CROSSING.	180	180														
UNDER CONSTRUCTION																			
TRIANGLE TRANSIT AUTHORITY	DURHAM ORANGE WAKE	TP-4914	PLANNING ASSISTANCE---UPWP	1329		STAT									PL	133			
						L									PL	133			
						FUZ									PL	1063			
TRIANGLE TRANSIT AUTHORITY	DURHAM ORANGE WAKE	TP-4915	PLANNING ASSISTANCE---UPWP	1329		STAT									PL	133			
						L									PL	133			
						FUZ									PL	1063			

LOCATION	COUNTY	ID NUMBER	DESCRIPTION	LEN. (MI)	TOTAL PROJ COST (THOU)	PRIOR YEAR COST (THOU)	TYPE OF WORK AND ESTIMATED COST IN THOUSANDS												POST YEAR COST (THOU)							
							FISCAL YEARS																			
							FUND	FFY06	FFY07	FFY08	FFY09	FFY10	FFY11	FFY12												
CARY	WAKE	TM-4716E	CAPITAL COST OF CONTRACTING		1700		L					CP	1020													
							FUZ					CP	680													
CARY	WAKE	TM-4716F	CAPITAL COST OF CONTRACTING		2000		L					CP	1200													
							FUZ					CP	800													
CARY	WAKE	TM-4716G	CAPITAL COST OF CONTRACTING		2400		L					CP	1440													
							FUZ					CP	960													
CARY	WAKE	TM-4716H	CAPITAL COST OF CONTRACTING		2400		L					CP	1440													
							FUZ					CP	960													
CARY	WAKE	TM-4716I	CAPITAL COST OF CONTRACTING		2400		L					CP	1440													
							FUZ					CP	960													
FUQUAY VARINA	WAKE	E-4402	GREENWAY HERITAGE TRAIL: CAROL H. JOHNSON PARK TO SOUTH PARK.	1.5	400		STPEB			C	400															
GARNER	WAKE	E-4757	REHABILITATION AND LANDSCAPING OF HISTORIC GARNER DEPOT.		17	17																				
HOLLY SPRINGS	WAKE	E-4925	PHASE I: NC 55 (MAIN STREET), CENTER ROAD TO RALEIGH STREET. STREETSCAPING.		240		STPE	C	192																	
							O	C	48																	
RALEIGH	WAKE	E-3800	URBAN YOUTH WORK PROGRAM.		250	175	STPE	T	25	T	25	T	25													
RALEIGH	WAKE	E-3806AA	REEDY CREEK GREENWAY: NORTH CAROLINA MUSEUM OF ART TO MEREDITH COLLEGE AND HILLSBOROUGH STREET. CONSTRUCT OFF-ROAD MULTI-USE TRAIL.	1.5	4345	4345																				
RALEIGH	WAKE	E-3806B	REEDY CREEK BIKEWAY: BLUE RIDGE ROAD TO UMSTEAD STATE PARK.	3.5	900	900																				
RALEIGH	WAKE	E-4116	NORTH CAROLINA STATE UNIVERSITY. GREENWAY AND ENVIRONMENTAL MITIGATION ALONG ROCKY BRANCH BETWEEN GORMAN STREET AND PULLEN ROAD.		5709	5709																				
RALEIGH	WAKE	E-4759	BIKE/PEDESTRIAN AMENITIES AND LANDSCAPING OF REEDY CREEK GREENWAY/MUSEUM PARK TRAIL.		56	56																				
RALEIGH	WAKE	E-4829	NEUSE RIVER GREENWAY. FALLS LAKE DAM SOUTH TO THE SOCCER COMPLEX ON SR 2006 (PERRY CREEK ROAD).		500	500																				
RALEIGH	WAKE	E-4927	NORTH CAROLINA STATE CAPITOL FOUNDATION. PHASE I: PROVIDE HANDICAP ACCESSIBILITY ALONG THE SOUTHEAST GROUNDS OF THE STATE CAPITOL BUILDING (FAYETTEVILLE STREET MALL AT MORGAN STREET TO THE CAPITOL).		300		STPE			C	240															
							O			C	60															

LOCATION	COUNTY	ID NUMBER	DESCRIPTION	LEN. (MI)	TOTAL PROJ COST (THOU)	PRIOR YEAR COST (THOU)	TYPE OF WORK AND ESTIMATED COST IN THOUSANDS												POST YEAR COST (THOU)						
							FISCAL YEARS																		
							FUND	FFY06	FFY07	FFY08	FFY09	FFY10	FFY11	FFY12											
RALEIGH	WAKE	E-4929	EASTERN TERMINUS OF I-440 PEDESTRIAN BRIDGE NORTH TO GLEN EDEN DRIVE. CONSTRUCT MULTI-USE FACILITY.		250		STPE			C	200														
							O			C	50														
RALEIGH	WAKE	E-4978	EDWARDS MILL ROAD EXTENSION, REEDY CREEK ROAD TO TRINITY ROAD. CONSTRUCT MULTI-USE PATH.	1.3	300		STPEB			C	300														
RALEIGH	WAKE	E-4979	HOUSE CREEK, CRABTREE CREEK TO MEREDITH COLLEGE, PHASE I. CONSTRUCT GREENWAY.	0.8	400		STPEB			C	400														
RALEIGH	WAKE	P-3803	TRACK AND STATION CONSTRUCTION.		4300	4300	IN PROGRESS																		
RALEIGH	WAKE	TA-4785	REPLACEMENT BUSES		5115		STAT			CP	409														
							L			CP	460														
							FED			CP	4246														
RALEIGH	WAKE	TA-4786	REPLACEMENT BUSES		2100		UNFUNDED PROJECT																		
							STAT										CP	168							
							L									CP	189								
RALEIGH	WAKE	TA-4808	REPLACEMENT BUSES		1440		UNFUNDED PROJECT																		
							STAT										CP	115							
							L									CP	130								
RALEIGH	WAKE	TA-4902	NEW BUSES		5321		UNFUNDED PROJECT																		
							STAT	CP	426																
							L	CP	479																
RALEIGH	WAKE	TA-4903	NEW BUSES		2240		UNFUNDED PROJECT																		
							STAT										CP	179							
							L									CP	202								
RALEIGH	WAKE	TA-4904	NEW CONNECTOR BUSES		500		UNFUNDED PROJECT																		
							STAT											CP	40						
							L									CP	45								
RALEIGH	WAKE	TA-4918	EXPANSION BUSES		6170		UNFUNDED PROJECT																		
							STAT											CP	494						
							L									CP	555								
RALEIGH	WAKE	TA-4919	EXPANSION BUSES		4551		UNFUNDED PROJECT																		
							STAT											CP	364						
							L									CP	410								
RALEIGH	WAKE	TA-4920	EXPANSION BUSES		500		UNFUNDED PROJECT																		
							STAT											CP	40						
							L									CP	45								
RALEIGH	WAKE	TA-4921	REPLACEMENT BUSES		1440		UNFUNDED PROJECT																		
							STAT											CP	115						
							L									CP	130								
RALEIGH	WAKE	TD-4729B	RENOVATION OF TRANSIT MAINTENANCE FACILITY--CONSTRUCTION		3508		UNFUNDED PROJECT																		
							STAT	CP	351																
							L	CP	351																

LOCATION	COUNTY	ID NUMBER	DESCRIPTION	LEN. (MI)	TOTAL PROJ COST (THOU)	PRIOR YEAR COST (THOU)	TYPE OF WORK AND ESTIMATED COST IN THOUSANDS												POST YEAR COST (THOU)								
							FISCAL YEARS																				
							FUND	FFY06	FFY07	FFY08	FFY09	FFY10	FFY11	FFY12													
TRIANGLE TRANSIT AUTHORITY	DURHAM WAKE	TE-4705B	PHASE I REGIONAL RAIL SERVICE		692000		STAT	CP	138000																		
							L	CP	138000																		
							FNS	CP	416000																		
TRIANGLE TRANSIT AUTHORITY	WAKE	TE-4707A	AIRPORT RAIL PROJECT--PLANNING/PE/DEIS		2751		STAT	CP	688																		
							L	CP	688																		
							FED	CP	1375																		
UNFUNDED PROJECT																											
TRIANGLE TRANSIT AUTHORITY	WAKE	TE-4707B	AIRPORT RAIL PROJECT--PLANNING/PE/DEIS		2751		STAT			CP	688																
							L			CP	688																
							FED			CP	1375																
UNFUNDED PROJECT																											
TRIANGLE TRANSIT AUTHORITY	DURHAM ORANGE WAKE	TG-4811	ROUTINE CAPITAL ITEMS--SHOP EQUIPMENT, SPARE PARTS		171		L	CP	34																		
							FUZ	CP	137																		
TRIANGLE TRANSIT AUTHORITY	DURHAM ORANGE WAKE	TG-4812	ROUTINE CAPITAL ITEMS--SHOP EQUIPMENT, SPARE PARTS		171		L			CP	34																
							FUZ			CP	137																
TRIANGLE TRANSIT AUTHORITY	DURHAM ORANGE WAKE	TG-4821	ROUTINE CAPITAL ITEMS--SHOP EQUIPMENT, SPARE PARTS		171		L				CP	34															
							FUZ				CP	137															
TRIANGLE TRANSIT AUTHORITY	DURHAM ORANGE WAKE	TG-4822	ROUTINE CAPITAL ITEMS--SHOP EQUIPMENT, SPARE PARTS		171		L					CP	34														
							FUZ					CP	137														
TRIANGLE TRANSIT AUTHORITY	DURHAM ORANGE WAKE	TG-4823	ROUTINE CAPITAL ITEMS--SHOP EQUIPMENT, SPARE PARTS		171		L						CP	34													
							FUZ						CP	137													
TRIANGLE TRANSIT AUTHORITY	DURHAM ORANGE WAKE	TG-4927	ROUTINE CAPITAL ITEMS--SHOP EQUIPMENT, SPARE PARTS		171		L								CP	34											
							FUZ							CP	137												
TRIANGLE TRANSIT AUTHORITY	DURHAM ORANGE WAKE	TG-4928	ROUTINE CAPITAL ITEMS--SHOP EQUIPMENT, SPARE PARTS		171		L										CP	34									
							FUZ										CP	137									
TRIANGLE TRANSIT AUTHORITY	DURHAM ORANGE WAKE	TP-4724	PLANNING ASSISTANCE---UPWP		1329		STAT	PL	133																		
							L	PL	133																		
							FUZ	PL	1063																		
TRIANGLE TRANSIT AUTHORITY	DURHAM ORANGE WAKE	TP-4725	PLANNING ASSISTANCE---UPWP		1329		STAT			PL	133																
							L			PL	133																
							FUZ			PL	1063																
TRIANGLE TRANSIT AUTHORITY	DURHAM ORANGE WAKE	TP-4732	PLANNING ASSISTANCE---UPWP		1329		STAT				PL	133															
							L				PL	133															
							FUZ				PL	1063															
TRIANGLE TRANSIT AUTHORITY	DURHAM ORANGE WAKE	TP-4733	PLANNING ASSISTANCE---UPWP		1329		STAT					PL	133														
							L					PL	133														
							FUZ					PL	1063														

LOCATION	COUNTY	ID NUMBER	DESCRIPTION	LEN. (MI)	TOTAL PROJ COST (THOU)	PRIOR YEAR COST (THOU)	TYPE OF WORK AND ESTIMATED COST IN THOUSANDS												POST YEAR COST (THOU)						
							FUND	FISCAL YEARS																	
								FFY06	FFY07	FFY08	FFY09	FFY10	FFY11	FFY12											
TRIANGLE TRANSIT AUTHORITY	DURHAM ORANGE WAKE	TP-4734	PLANNING ASSISTANCE---UPWP.		1329		STAT										PL	133							
							L										PL	133							
							FUZ										PL	1063							
WAKE COUNTY	WAKE	TJ-4991	PROVIDE OPERATING ASSISTANCE TO COUNTIES AND COMMUNITY TRANSPORTATION SYSTEMS TO MEET WORK FIRST AND EMPLOYMENT TRANSPORTATION NEEDS.		72		OAWF	O	36	O	36														
WAKE COUNTY	WAKE	TL-4991	PROVIDE OPERATING ASSISTANCE FOR ADDITIONAL TRANSPORTATION SERVICES TO THE ELDERLY AND DISABLED.		334		EDTAP	O	167	O	167														
WAKE COUNTY	WAKE	TR-4991	PROVIDE MAINTENANCE ASSISTANCE FOR COMMUNITY TRANSPORTATION SYSTEMS TO SERVE THE RURAL GENERAL PUBLIC.		198		RGP	O	99	O	99														
WAKE FOREST	WAKE	E-4527	FRONT STREET, ROOSEVELT TO NORTH AVENUE; STADIUM AVENUE, WINGATE STREET TO JUBSON STREET; DURHAM ROAD EAST FROM TYLER RUN DRIVE; TYLER RUN DRIVE, DURHAM ROAD TO WOODLAND AVENUE. CONSTRUCT SIDEWALKS.	73		73	UNDER CONSTRUCTION																		
WAKE FOREST	WAKE	E-4708	WAKE FOREST BYPASS GREENWAY.				SCHEDULED FOR FEASIBILITY STUDY																		
WAKE FOREST	WAKE	E-4756	CONSTRUCT MULTI-USE PAVED TRAIL (0.5 MILES OF OLD MILL STREAM GREENWAY).		168	13	STPE	C	129																
							O	C	26																
WAKE FOREST	WAKE	E-4928	PHASE I: STREETSCAPING ALONG BOTH SIDES OF SR 1941 (SOUTH WHITE STREET), ROOSEVELT AVENUE TO WAIT AVENUE AND THE WEST SIDE TO JONES STREET.		106		STPE	C	85																
							O	C	21																
WENDELL	WAKE	E-4762	SR 2355 (THIRD STREET), ENCLOSED BRICK WALKWAY AT MAIN STREET INTERSECTION.		16	16	UNDER CONSTRUCTION																		



TRIANGLE J COUNCIL OF GOVERNMENTS

World
Class
Region

4307 Emperor Blvd. P.O. Box 12276
Research Triangle Park, NC 27709
919.549.0551 FAX: 919.549.9390

May 5, 2005

Mr. John F. Sullivan, III, P.E.
Division Administrator – North Carolina Division, FHWA
310 New Bern Avenue, Suite 410
Raleigh, NC 27601

Subject: Transmittal of Conformity Analysis Report and Determination on the Long Range Transportation Plans and 2004-2010 TIPs for the Burlington-Graham MPO, the Durham-Chapel Hill-Carrboro MPO, the Capital Area MPO and the rural portions of Chatham, Franklin, Granville, Johnston, Orange and Person Counties within the Research Triangle Non-Attainment Area.

Dear Mr. Sullivan:

The Burlington-Graham MPO, the Durham-Chapel Hill-Carrboro MPO, the Capital Area MPO and the North Carolina Department of Transportation (NCDOT) found the long range transportation plans and 2004-2010 TIPs in the Triangle Non-Attainment Area to conform to the intent of the North Carolina State Implementation Plan. The attached report and resolutions document the validity of the long range transportation plans, the relevant MPO or NCDOT conformity finding for the long range transportation plans and TIPs, and the long range transportation plans' and TIPs' compliance with the conformity requirements of both North Carolina Code and the Federal Register. Please begin your agency's review of this conformity finding and its related documentation.

If any of the federal reviewers of this document have any questions or comments regarding the basis of these conformity determinations please let me know as quickly as possible so that they can be resolved. I may be reached at (919) 558-9320.

Sincerely,

John Hodges-Copple
Director of Regional Planning

Conformity Analysis and Determination Report

2030 Long Range Transportation Plans:

- Capital Area Metropolitan Planning Organization,
- Durham-Chapel Hill-Carrboro Metropolitan Planning Organization
- Burlington-Graham Metropolitan Planning Organization (Orange County portion)

Projects from the FY 2004-2010 Transportation Improvement Program:

- The portions of Chatham County, Franklin County, Granville County, Johnston County, Orange County and Person County that are within the Triangle Ozone Non-Attainment Area but Outside the Metropolitan Planning Organization Areas

April 29, 2005

Prepared by:

The Triangle J Council of Governments for the
Capital Area Metropolitan Planning Organization,
Durham-Chapel Hill-Carrboro Metropolitan Planning Organization,
Burlington-Graham Metropolitan Planning Organization,
Triangle Area Rural Planning Organization,
Kerr-Tar Rural Planning Organization,
Upper Coastal Plain Rural Planning Organization
and
The NCDOT Transportation Planning Branch

In cooperation with:

The North Carolina Department of Environment and Natural Resources
Division of Air Quality

Contact Information

Additional copies of this report can be obtained from the Triangle J Council of Governments at the following address:

Triangle J Council of Governments
P.O. Box 12276
Research Triangle Park, NC 27709

This document, including the appendices, can be downloaded from the website:

www.triangleair.org

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List of Acronyms

BG MPO:	Burlington-Graham Metropolitan Planning Organization
CAAA:	Clean Air Act Amendments of 1990 (United States)
CAMPO:	Capital Area Metropolitan Planning Organization
CFR:	Code of Federal Regulations
CMAQ:	Congestion Mitigation/Air Quality
CO:	Carbon Monoxide
DAQ:	Division of Air Quality (North Carolina)
DCHC MPO:	Durham-Chapel Hill –Carrboro Metropolitan Planning Organization
DENR:	Department of Environment and Natural Resources (North Carolina)
DMV:	Division of Motor Vehicles
DOT:	Department of Transportation (North Carolina)
EPA:	Environmental Protection Agency (United States)
FHWA:	Federal Highway Administration
FTA:	Federal Transit Administration
HBO:	Home Based Other (trip purpose)
HBS:	Home Based Shopping (trip purpose)
HBW:	Home Based Work (trip purpose)
HOV:	High Occupancy Vehicle
HPMS:	Highway Performance Management System
I/M:	Inspection/Maintenance
ISTEA:	Intermodal Surface Transportation Efficiency Act
ITRE:	Institute for Transportation Research and Education
KT RPO:	Kerr-Tar Rural Transportation Planning Organization
LRTP:	Long Range Transportation Plan
MPO:	Metropolitan Planning Organization
NAAQS:	National Ambient Air Quality Standards
NCDOT:	North Carolina Department of Transportation
NHB:	Non Home Based (trip purpose)
NOx:	Nitrogen Oxides
RPO:	Rural Transportation Planning Organization
RTAC:	Rural Transportation Advisory Committee
RTCC:	Rural Technical Coordinating Committee
RVP:	Reid Vapor Pressure
SIP:	State Implementation Plan
TAC:	Transportation Advisory Committee
TAZ:	Traffic Analysis Zone
TARPO:	Triangle Area Rural Transportation Planning Organization
TCC:	Technical Coordination Committee
TCM:	Transportation Control Measure
TDM:	Transportation Demand Management
TEA-21:	Transportation Efficiency Act for the 21 st Century
TIP:	Transportation Improvement Program
TRM:	Triangle Regional Model
UCPRPO:	Upper Coastal Plain Rural Transportation Planning Organization
USEPA:	United States Environmental Protection Agency
VKT:	Vehicle Kilometers of Travel
VMT:	Vehicle Miles of Travel
VOC:	Volatile Organic Compounds

Conformity Analysis and Determination Report

2030 Long Range Transportation Plans:

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- Durham-Chapel Hill-Carrboro Metropolitan Planning Organization
- Burlington-Graham Metropolitan Planning Organization (Orange County portion)

Projects from the FY 2004-2010 Transportation Improvement Program:

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Overview

Transportation conformity ("conformity") is a way to ensure that Federal funding and approval goes to transportation activities that are consistent with air quality goals. Conformity applies to transportation plans, transportation improvement programs (TIPs), and projects funded or approved by the Federal Highway Administration (FHWA) or the Federal Transit Administration (FTA) in areas that do not meet or previously have not met air quality standards for ozone, carbon monoxide, particulate matter, or nitrogen dioxide. These areas are known as "non-attainment areas" or "maintenance areas," respectively.

A conformity determination demonstrates that the total emissions projected for a plan or program are within the emissions limits ("budgets") established by the air quality plan or State Implementation Plan (SIP) for air quality, and that transportation control measures (TCMs) – specific projects or programs enumerated in the SIP that are designed to improve air quality – are implemented in a timely fashion. Counties within the Triangle were designated non-attainment for the 8-hour ozone standard and the effective date of the designation was June 15, 2004. The conformity rule (40 CFR Part 93) requires that FHWA/FTA make the final conformity determination by June 15, 2005 on the entire non-attainment area.

Determining Conformity

Regional emissions are estimated based on highway and transit usage according to transportation plans and TIPs. The projected emissions for the plan and TIP must not exceed the emissions limits (or "budgets") established by the SIP (or the base year emissions, in areas where no SIP has yet been approved or found adequate by the U.S. Environmental Protection Agency (EPA)). Where TCMs are included, responsible MPOs and NCDOT are required to demonstrate that TCMs are implemented in a timely fashion.

The Decision Process

A formal interagency consultation process involving the Environmental Protection Agency (EPA), FHWA, FTA and state and local transportation and air quality agencies is required in developing SIPs, TIPs, and transportation plans, and in making conformity determinations. Metropolitan Planning Organization (MPO) policy boards make initial conformity determinations in metropolitan areas, while the NC Department of Transportation (NCDOT) does so in areas outside of MPOs, in consultation with affected Rural Planning Organizations (RPOs).

Four organizations are responsible for making the conformity determinations in four distinct parts of the Triangle Ozone Non-attainment Area:

- a. the Capital Area MPO within the CAMPO metropolitan area boundary – currently all of Wake County, with expansion into parts of neighboring counties anticipated in 2005.
- b. the DCHC MPO within its metropolitan area boundary – all of Durham County and parts of Orange and Chatham counties.
- c. the Burlington-Graham MPO within its portion of the metropolitan area boundary in western Orange County.
- d. the NCDOT in a rural area that is comprised of those portions of Chatham, Orange, Person, Franklin, Granville and Johnston Counties that remain outside of any MPO metropolitan area boundary.

Each of these responsible organizations must make a conformity determination for its respective area in order for all of the areas to be designated in conformity.

The final conformity determination is made at the Federal level by FHWA/FTA. These determinations must be made at least every three years, or when transportation plans or TIPs are updated, or within one year of the effective date of a non-attainment designation. Conformity determinations must also be made within 18 months after the approval of a State Implementation Plan (SIP) containing motor vehicle emission budgets or determination of adequacy of those budgets.

The conformity analyses are made available to the public as part of the MPO and/or State DOT planning processes. MPOs are required to make transportation plans, TIPs, and conformity determinations available to the public, accept and respond to public comments, and provide adequate notice of relevant public meetings. Project sponsors of specific transportation projects within the transportation plans and TIPs must also include appropriate public involvement during project development.

Emissions Budget

The SIP places limits on emissions of each pollutant for each source type (mobile, stationary and area sources). Projected emissions from highway and transit usage must be less than or equal to the emissions limits for on-road mobile vehicles that are established by the SIP, or be less than baseline emissions where no SIP has yet been adopted. These limits on motor vehicle emissions sources are called "budgets." Budgets are developed as part of the air quality planning process by State air quality/ environmental agencies, and approved by EPA. Transportation agencies participate in this process.

Transportation Control Measures (TCMs)

Areas can include TCMs in their SIPs. TCMs are specific programs designed to reduce emissions from transportation sources by reducing vehicle use or changing traffic flow or congestion conditions. These programs can include:

- developing high occupancy vehicle (HOV) facilities
- ordinances to promote non-motor vehicle travel
- transit improvements
- signal timing
- bicycle and pedestrian facilities
- land use planning

Executive Summary

The purpose of this report is to comply with the provisions of the Clean Air Act Amendments of 1990 and the Transportation Equity Act for the 21st Century (TEA-21) of 1998. It demonstrates that the financially constrained long-range transportation plans (LRTPs) and the transportation improvement programs (TIPs) eliminate or reduce violations of the national ambient air quality standards (NAAQS) in the following areas:

- The Capital Area Metropolitan Planning Organization (CAMPO),
- The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO),
- The portion of Orange County within the Burlington-Graham Metropolitan Planning Organization (BG MPO).
- The portions of the Triangle Area Rural Planning Organization (TARPO) which are in the Triangle Ozone Non-Attainment Area (Orange County and four townships in Chatham County: Baldwin, Center, New Hope and Williams Townships),
- The portions of the Kerr-Tar Rural Planning Organization (Kerr-Tar RPO) which are in the Triangle Ozone Non-Attainment Area (Franklin, Granville and Person Counties), and
- Johnston County in the Upper Coastal Plain Rural Planning Organization.

The plan accomplishes the intent of the North Carolina State Implementation Plan (SIP). This conformity determination is based on a regional emissions analysis that uses the transportation networks approved by each of the above-named Metropolitan Planning Organizations (MPOs) and Rural Planning Organizations (RPOs) for the 2030 long-range transportation plans, and the emissions factors developed by the North Carolina Department of Environment and Natural Resources (DENR). The above-named MPOs and RPOs combine to form a region known as the Research Triangle, or “Triangle.” Based on this analysis, 2030 Long-Range Transportation Plans for the CAMPO, the DCHC MPO, and the BGMPO, and their respective Transportation Improvement Programs conform to the purpose of the North Carolina SIP. The respective FY 2004-2010 TIPs are subsets of the applicable 2030 long-range transportation plans. The conformity analysis for the relevant portions of the RPOs during the TIP years is specifically addressed by the North Carolina Department of Transportation (NCDOT). The NCDOT analysis also showed the Transportation Improvement Programs conform to the purpose of the North Carolina SIP.

The United States Environmental Protection Agency (USEPA) originally declared Durham County, Wake County and Dutchville Township in Granville County non-attainment for ozone (O₃) and Durham County and Wake County non-attainment for Carbon Monoxide (CO) on November 15, 1990. Durham County, Wake County and Dutchville Township were redesignated by USEPA to attainment with a maintenance plan for ozone on June 17, 1994 and Durham County and Wake County were redesignated by USEPA to attainment with a maintenance plan for CO on September 18, 1995.

In 1997 the NAAQS for ozone was reviewed and revised to reflect improved scientific understanding of the health impacts of this pollutant. When the standard was revised in 1997, an eight-hour ozone standard was established. The USEPA designated the entire Triangle area as a “basic” non-attainment area for eight-hour ozone with an effective date of June 15, 2004.

The non-attainment designation covers the following geographic areas:

- Durham County
- Wake County
- Orange County
- Johnston County
- Franklin County
- Granville County
- Person County
- Baldwin, Center, New Hope and Williams Townships in Chatham County

The conformity determination is based on the following Long Range Transportation Plans (LRTPs):

- *2030 Transportation Plan for the Capital Area MPO*
- *2030 Transportation Plan for the Durham-Chapel Hill-Carrboro MPO*
- *2030 Transportation Plan for the Burlington-Graham MPO.*

These three LRTPs, taken together, and with projects from the most recent TIP in the rural areas outside of the urban areas, form in effect a Triangle Regional Transportation plan. Each plan has three analysis years: 2010, 2020, and 2030. Each analysis year includes expected population and employment data and roadway and transit projects that should be open. The plans are fiscally constrained; funding sources for roadway and transit projects are identified.

DENR prepared base and future emission rates for the vehicle fleet using MOBILE6.2. These rates were applied to VMT or normalized VMT from the Triangle Regional Model (TRM). VMT normalization for CO was necessary to match the Triangle's VMT with the HPMS VMT that was used to develop the CO budgets. Only Durham and Wake Counties and Dutchville Township in Granville County have emissions budgets.

Table 1 summarizes the conformity requirements of 40 CFR Part 51 and 93 and gives the status of each long range transportation plan in relation to each of these requirements. Tables 2 through 4 contain results from the budget comparisons for Durham County, Wake County and Dutchville Township in Granville County.

Tables related to CO in this report show three CO budgets to document that plan emissions would be below budgets for any of the three conditions:

1. The ***existing*** CO budgets from the Federal Register notice of August 2, 1995, with an effective date of September 18, 2005 (see Appendix A).
2. The ***previously proposed*** CO budgets from the Federal Register notice of November 7, 1995, which apparently never received final approval (see Appendix A).
3. The ***currently proposed*** CO budgets that have been submitted to USEPA by the State.

Tables 5 through 10 provide the summary for the remaining areas that do not have emissions budgets. Details are included in Section 5 of the report. In every horizon year for every pollutant in each geographic area, the emissions expected from the implementation of the long-range plans and TIPs are less than the emissions budgets established in the SIP or the baseline emissions where no SIP budget is available. Table 11 contains a cross-reference index for the report.

Table 1. Status of Conformity Requirements

Criteria (√ indicates the criterion is met)	Burlington-Graham MPO	Durham-Chapel Hill-Carrboro MPO	Capital Area MPO	Rural Area of the Triangle
Less Than Emissions Budget(s) or Baseline	√	√	√	√
TCM Implementation	The NC SIP includes no Transportation Control Measures in the Triangle Area			
Interagency Consultation	√	√	√	√
Latest Emissions Model	√	√	√	√
Latest Planning Assumptions	√	√	√	√
Fiscal Constraint	√	√	√	√

Table 2. Durham County Emissions Comparison Summary (kg/day)¹

Year	NOx		VOC		CO			
	SIP Budgets	LRTP Emissions	SIP Budgets	LRTP Emissions	Existing SIP Budgets	Previously Proposed SIP Budgets	Currently Proposed SIP Budgets	LRTP Emissions
2002 ²		19,494		9,120				
2005 ³	N/A	N/A	N/A	N/A	148,418	145,794	145,794	135,736
2007 ³	13,871	13,344	7,530	6,459	N/A	N/A	N/A	N/A
2009 ³	13,871	10,957	7,530	5,663	N/A	N/A	N/A	N/A
2010 ³	10,297	9,672	6,142	5,298	148,418	145,794	145,794	108,890
2012 ³	8,246	7,489	5,389	4,574	N/A	N/A	N/A	N/A
2015 ³	5,888	5,244	4,772	3,863	148,418	145,794	160,771	95,590
2020	5,888	3,337	4,772	3,209	148,418	145,794	160,771	90,498
2030 ⁴	5,888	2,686	4,772	3,094	148,418	145,794	160,771	104,141

Table 3. Wake County Emissions Comparison Summary (kg/day)¹

Year	NOx		VOC		CO			
	SIP Budgets	LRTP Emissions	SIP Budgets	LRTP Emissions	Existing SIP Budgets	Previously Proposed SIP Budgets	Currently Proposed SIP Budgets	LRTP Emissions
2002 ²		52,029		25,035				
2005 ³	N/A	N/A	N/A	N/A	353,082	347,570	347,570	296,260
2007 ³	37,539	35,383	18,180	17,846	N/A	N/A	N/A	N/A
2009 ³	37,539	29,474	18,180	15,817	N/A	N/A	N/A	N/A
2010 ³	27,125	26,311	15,749	14,919	353,082	347,570	347,570	297,395
2012 ³	22,144	20,881	14,188	13,207	N/A	N/A	N/A	N/A
2015 ³	16,239	15,096	13,018	11,531	353,082	347,570	348,604	287,339
2020	16,239	10,030	13,018	10,100	353,082	347,570	348,604	284,656
2030 ⁴	16,239	8,516	13,018	10,321	353,082	347,570	348,604	344,841

1. To obtain tons per day, divide kilograms per day by 907.2.
2. Baseline year.
3. Budget year; 2009 is also the attainment year for ozone.
4. Horizon year.

Table 4. Dutchville Township (Granville County) Emissions Comparison Summary (kg/day)¹

Year	NO _x		VOC	
	SIP Budgets	Long Range Plan or TIP Emissions	SIP Budgets	Long Range Plan or TIP Emissions
2002 ²		2,372		615
2007 ³	1,324	1,311	499	428
2009 ³	1,324	1,139	499	391
2010 ³	1,025	1,008	417	371
2012 ³	807	774	372	326
2015 ³	562	534	336	281
2020	562	335	336	242
2030 ⁴	562	295	336	272

1. To obtain tons per day, divide kilograms per day by 907.2.
2. Baseline year.
3. Budget year; 2009 is also the attainment year for ozone.
4. Horizon year.

Table 5. Remainder of Granville County Emissions Comparison Summary (kg/day)

Year	NO _x		VOC	
	Baseline (2002) Emissions	Long Range Plan or TIP Emissions	Baseline (2002) Emissions	Long Range Plan or TIP Emissions
2010	3,924	2,068	1,848	1,086
2020	3,924	823	1,848	635
2030	3,924	510	1,848	536

Table 6. Franklin County Emissions Comparison Summary (kg/day)¹

Year	NO _x		VOC	
	Baseline (2002) Emissions	Long Range Plan or TIP Emissions	Baseline (2002) Emissions	Long Range Plan or TIP Emissions
2010	3,129	1,829	2,403	1,382
2020	3,129	841	2,403	911
2030	3,129	602	2,403	811

Table 7. Johnston County Emissions Comparison Summary (kg/day)

Year	NO _x		VOC	
	Baseline (2002) Emissions	Long Range Plan or TIP Emissions	Baseline (2002) Emissions	Long Range Plan or TIP Emissions
2010	17,136	10,182	7,955	4,879
2020	17,136	4,101	7,955	3,203
2030	17,136	2,688	7,955	2,888

Table 8. Orange County Emissions Comparison Summary (kg/day)

Year	NO _x		VOC	
	Baseline (2002) Emissions	Long Range Plan or TIP Emissions	Baseline (2002) Emissions	Long Range Plan or TIP Emissions
2010	13,668	6,711	4,270	2,470
2020	13,668	2,100	4,270	1,507
2030	13,668	1,608	4,270	1,478

Table 9. Person County Emissions Comparison Summary (kg/day)

Year	NO_x		VOC	
	Baseline (2002) Emissions	Long Range Plan or TIP Emissions	Baseline (2002) Emissions	Long Range Plan or TIP Emissions
2010	1,840	1,103	1,610	1,023
2020	1,840	599	1,610	660
2030	1,840	484	1,610	592

Table 10. Chatham County (part) Emissions Comparison Summary (kg/day)

Year	NO_x		VOC	
	Baseline (2002) Emissions	Long Range Plan or TIP Emissions	Baseline (2002) Emissions	Long Range Plan or TIP Emissions
2010	729	503	612	444
2020	729	160	612	180
2030	729	142	612	194

Table 11. Cross-Reference Index

Conformity Determination Report for the Long-Range Transportation Plans and TIPs in the Triangle Region
Ozone Non-Attainment Area

Conformity Requirement	Page # or Appendix
Formal findings of conformity.	p. 34
Table of Contents.	iii
The purpose of this report is to comply with the requirements of the CAAA, TEA-21, and 40 CFR 51 and 93.	p. 10
The former and current classification of the airshed and the pollutants for which the airshed was classified as non-attainment.	p. 13
The dates Durham and Wake Counties and Dutchville Township were redesignated to a Maintenance Area under the CO and 1-hour ozone standards and the date the region was designated non-attainment under the 8-hour ozone standard.	p. 13
The emissions expected from implementation of the long-range plans are equal to, or less than, the emissions budgets in the Maintenance Plans and established in the SIP.	pp. 31-32
The adopted long-range plan is fiscally constrained (§93.108).	p. 15
The latest planning assumptions were used in the conformity analysis (§93.110).	pp. 15-16
The latest emissions model was used in the conformity analysis (§93.111).	p. 25
The list of federally funded T.C.M. activities included. (§93.113).	p. 26
Conformity determined according to §93.105 and the adopted public involvement procedures.	pp. 33-34
Dates of the Technical Coordinating Committee reviews of the conformity determination and the recommendation.	Appendix M
SIP emissions budget or baseline comparison demonstrates conformity of the adopted long-range transportation plan.	p. 33
Listing of projects in each analysis year (both highway and transit).	pp. 17-19, Appendix D
Explanation of the VMT Normalization Method.	p. 26, Appendix G
Analysis of “rural area” projects.	Appendix I
Off-model analysis performed.	p. 27, Appendix H
Significant comments of reviewing agencies addressed by the MPO, or a statement that no significant comments were received.	Appendix K
Emissions Calculations.	Appendix I
MOBILE6.2 input files.	Appendix F

Conformity Analysis and Determination Report

2030 Long Range Transportation Plans:

- **Capital Area Metropolitan Planning Organization,**
- **Durham-Chapel Hill-Carrboro Metropolitan Planning Organization**
- **Burlington-Graham Metropolitan Planning Organization (Orange County Portion)**

Projects from the FY 2004-2010 Transportation Improvement Program:

- **the portions of Chatham County, Franklin County, Granville County, Johnston County, Orange County and Person County that are within the Triangle Ozone Non-Attainment Area but Outside the Metropolitan Planning Organization Areas**

1. Introduction

The Clean Air Act requires the United States Environmental Protection Agency (USEPA) to set limits on how much of a particular pollutant can be in the air anywhere in the United States. National Ambient Air Quality Standards (NAAQS) are the pollutant limits set by the USEPA; they define the allowable concentration of pollution in the air for six different pollutants – Carbon Monoxide, Lead, Nitrogen Dioxide, Particulate Matter, Ozone, and Sulfur Dioxide.

The Clean Air Act specifies how areas within the country are designated as either “attainment” or “non-attainment” of an air quality standard, and authorizes USEPA to define the boundaries of non-attainment areas. For areas designated as non-attainment for one or more NAAQS, the Clean Air Act defines a specific timetable to attain the standard and requires that non-attainment areas demonstrate reasonable and steady progress in reducing air pollution emissions until such time that an area can demonstrate attainment. Each state must develop and submit a State Implementation Plan (SIP) that addresses each pollutant for which it violates the NAAQS. Individual state air quality agencies are responsible for defining the overall regional plan to reduce air pollution emissions to levels that will enable attainment and maintenance of the NAAQS. This strategy is articulated through the SIP.

In North Carolina, the agency responsible for SIP development is the North Carolina Department of Environment and Natural Resources, Division of Air Quality (NC DENR/DAQ). The delineation and implementation of strategies to control emissions from on-road mobile sources is a significant element of the state plan to improve air quality, which links transportation and air quality planning activities within a non-attainment area. The process of ensuring that a region’s transportation planning activities contribute to attainment of the NAAQS, or “conform” to the purposes of the SIP, is referred to as transportation conformity. In order to receive federal transportation funds within the non-attainment area, the area must demonstrate through a federally mandated conformity process that the transportation investments, strategies and programs, taken as a whole, contribute to the air quality goals defined in the state air quality plan.

In order to ensure the conformity requirements are met, Section 176 (c) of the Clean Air Act authorizes the USEPA Administrator to “promulgate criteria and procedures for demonstrating and assuring conformity in the case of transportation plans, programs, and projects.” This is accomplished through the Transportation Conformity Rule, developed by the USEPA to outline all federal requirements associated with transportation conformity. The Transportation Conformity Rule in conjunction with the Metropolitan Planning Regulations direct transportation plan and program development as well as the conformity process.

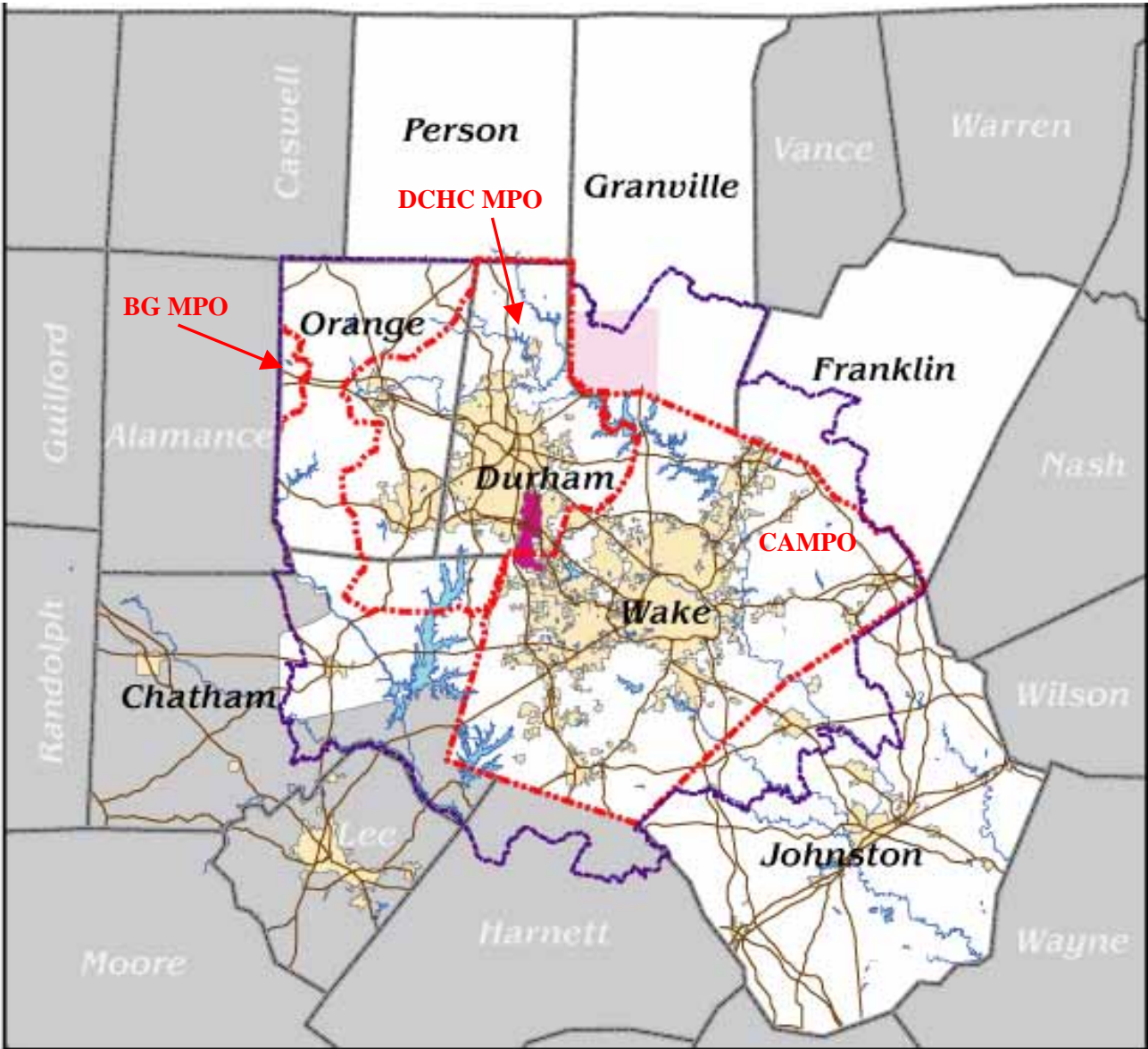
The purpose of this report is to comply with the provisions of the Clean Air Act Amendments of 1990 in concurrence with all conformity requirements as detailed in 40 CFR Parts 51 and 93 (the Transportation Conformity Rule) and 23 CFR Part 450 (the Metropolitan Planning Regulations as established in TEA-21). It demonstrates that the financially constrained long-range transportation plans and the transportation improvement programs (TIPs) eliminate or reduce future violation of the National Ambient Air Quality Standards (NAAQS) in the following jurisdictions:

- The Capital Area Metropolitan Planning Organization (CAMPO),
- The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO),
- The Burlington-Graham Metropolitan Planning Organization (BG MPO).
- The portions of the Triangle Area Rural Planning Organization (TARPO) which are in the Triangle Ozone Non-Attainment Area (Orange County and four townships in Chatham County),
- The portions of the Kerr-Tar Rural Planning Organization (Kerr-Tar RPO) which are in the Triangle Ozone Non-Attainment Area (Franklin, Granville and Person Counties), and
- Johnston County in the Upper Coastal Plain Rural Planning Organization.

The plan accomplishes the intent of the North Carolina State Implementation Plan (SIP). This conformity determination is based on a regional emissions analysis that uses the transportation network approved by each of the above-named Metropolitan Planning Organizations (MPOs) and Rural Planning Organizations (RPOs) for the 2030 long-range transportation plan, and the emissions factors developed in cooperation with the North Carolina Department of Environment and Natural Resources (DENR). The above-named MPOs and portions of RPOs combine to form a region known as the “Triangle.” The entire Triangle non-attainment region is shown as a map on Figure 1.

All Federally funded projects and regionally significant projects, regardless of funding source, in areas designated by the United States Environmental Protection Agency (USEPA) as air quality non-attainment or maintenance areas must come from a conforming long-range transportation plan and transportation improvement program (TIP). The Triangle region is required by 40 CFR 51 and 93 to make a conformity determination on any newly adopted or amended fiscally constrained long-range transportation plan and TIP. In addition, the United States Department of Transportation (USDOT), specifically, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA), must make a conformity determination on the three MPO Plans in the Triangle region and the related TIPs in all non-attainment and maintenance areas.

Figure 1. Triangle Ozone Non-Attainment Area



BG MPO is Burlington-Graham MPO (small part of Orange County in the non-attainment area).

CAMPO is Capital Area MPO (all of Wake County)

DCHC MPO is Durham-Chapel Hill-Carrboro MPO (all of Durham and parts of Orange and Chatham Counties)

In order to assist the Triangle region in making a conformity determination on the adopted 2030 fiscally constrained long-range transportation plans, the following agencies shared leading roles composing substantial portions of this document pertaining to specific areas:

<i>Agency</i>	<i>Counties</i>
CAMPO	Wake
DCHC MPO	Durham, Orange (part), Chatham (part)
BG MPO	Orange (part)
NCDOT, with RPO input	Chatham (part), Franklin, Granville, Johnston, Orange (part), Person

These analyses are consistent with the set of amendments to 40 CFR Part 93, published in the July 1, 2004 **Federal Register**, *Transportation Conformity Rule Amendments for the New 8-hour Ozone and PM_{2.5} National Ambient Air Quality Standards and Miscellaneous Revisions for Existing Areas; Transportation Conformity Rule Amendments: Response to Court Decision and Additional Rule Changes; Final Rule*, effective on August 2, 2004. Based on the regional emissions budget tests and interim tests documented in this report, the following Transportation Plans conform to the purpose of the North Carolina SIP:

- Capital Area MPO 2030 LRTP
- Durham-Chapel Hill-Carrboro MPO 2030 LRTP
- Burlington-Graham MPO 2030 LRTP
- 2004-2010 TIP in the Triangle Non-Attainment Area outside of MPOs

This report documents the regional emissions budget test, the interim emissions test, interagency consultation process, public involvement process, and analysis methodology used to demonstrate transportation conformity for each MPO and rural county and thus for the Triangle region.

40 CFR Part 93 requires that a conforming transportation plan satisfy six conditions:

- The transportation plan must be consistent with the motor vehicle emissions budget(s) in an area where the applicable implementation plan or implementation plan submission contains a budget (*40 CFR Part 93.118*).
- The transportation plan, TIP, or FHWA/FTA project not from a conforming plan must provide for the timely implementation of TCMs from the applicable implementation plan (*40 CFR Part 93.113b*).
- The MPO must make the conformity determination according to the consultation procedures of *40 CFR Part 93.105*.
- The conformity determination must be based on the latest emissions estimation model available (*40 CFR Part 93.111*).
- The conformity determination must be based on the latest planning assumptions (*40 CFR Part 93.110*).
- The Transportation Plan, TIP, or FHWA/FTA project must meet the interim emissions tests where applicable (*40 CFR Part 93.119*).

This report shows that each MPO’s 2030 Transportation Plan and the TIP in rural areas outside of MPOs meets each condition. Each condition is discussed in the following sections of this report.

2. Air Quality Planning

USEPA originally declared Durham County, Wake County and Dutchville Township in Granville County non-attainment for ozone (O₃) under the 1-hour ozone standard and Durham County and Wake County non-attainment for Carbon Monoxide (CO) on November 15, 1990. Ozone, the primary component of smog, is a compound formed when volatile organic compounds (VOC) and oxides of nitrogen (NO_x) mix together in the atmosphere with sunlight. NO_x and VOC are referred to as ozone “precursors.” Durham County, Wake County and Dutchville Township were redesignated by USEPA to attainment with a maintenance plan for ozone under the 1-hour standard on June 17, 1994 and Durham County and Wake County were redesignated by USEPA to attainment with a maintenance plan for CO on September 18, 1995. The ozone redesignations were based on monitoring data from 1990 through 1992 and a demonstration of maintenance of the standard until 2004. The CO redesignations were based on monitoring data from 1991 through 1994 and a demonstration of maintenance of the standard until 2005.

In 1997 the NAAQS for ozone was reviewed and revised to reflect improved scientific understanding of the health impacts of this pollutant. When the standard was revised in 1997, an eight-hour ozone standard was established that is designed to replace the one-hour standard. The USEPA designated the entire Triangle area as a “basic” non-attainment area for ozone under the eight-hour standard with an effective date of June 15, 2004; the designation covers the following geographic areas:

- Durham County
- Wake County
- Orange County
- Johnston County
- Franklin County
- Granville County
- Person County
- Baldwin, Center, New Hope and Williams Townships in Chatham County

As a “Basic” non-attainment area, the Triangle is subject to Subpart I standards of the Clean Air Act. The USEPA direct final rule from the Federal Register for CO is found in Appendix A. The USEPA direct final rule for ozone is provided in Appendix B.

2.1 Emissions Budgets and Baseline Emissions

DENR prepared emissions budgets as part of their CO and 1-hour ozone maintenance plans for those areas subject to budgets. All of Durham and Wake Counties, and Dutchville Township in southwest Granville County, are maintenance areas under the 1-hour ozone standard and have emission budgets.

SIPs for the 8-hour ozone standard have not yet been submitted by the State and found adequate or approved by USEPA. Therefore, in the remaining areas of the Triangle Ozone Non-Attainment Area (outside of Durham and Wake Counties, and Dutchville Township in southwest Granville County), future long range transportation plan and TIP emissions can not be compared to a budget, but are instead compared to emissions estimated from travel during the 2002 baseline year. Section 4 of this report provides these comparisons.

Durham and Wake Counties have CO maintenance requirements under an existing SIP; a proposed SIP update has also been submitted by the State and is undergoing review by USEPA. The proposed

update would supplement the existing 2005 CO budgets with a 2015 budget for each county. Under the existing SIP, the 2005 budgets would apply to all subsequent years. Under the update, the existing 2005 budgets would apply between 2005 and 2014 and the new 2015 budgets would apply from 2015 onwards.

Tables related to CO in this report show three CO budgets to document that plan emissions would be below budgets for any of the three conditions:

1. The **existing** CO budgets from the Federal Register notice of August 2, 1995, with an effective date of September 18, 2005 (see Appendix A).
2. The **previously proposed** CO budgets from the Federal Register notice of November 7, 1995, which apparently never received final approval (see Appendix A).
3. The **currently proposed** CO budgets that have been submitted to USEPA by the State.

Existing and previously proposed emissions budgets are listed in the Federal Register (appendices A & B). Tables 12, 13 and 14 list the current, previously proposed and currently proposed emission budgets for those portions of the Triangle subject to SIP budgets.

Table 12. VOC Budget for Durham and Wake Counties and Dutchville Township

Area	VOC			
	motor vehicle emissions budget (tons/day)			
	2007	2010	2012	2015*
Durham	8.30	6.77	5.94	5.26
Wake	20.04	17.36	15.64	14.35
Granville (Dutchville Twp.)	0.55	0.46	0.41	0.37

* emission budgets have not been established beyond 2015; all subsequent years are compared to the 2015 budget.

Table 13. NOx Budget for Durham and Wake Counties and Dutchville Township

Area	NOx			
	motor vehicle emissions budget (tons/day)			
	2007	2010	2012	2015*
Durham	15.29	11.35	9.09	6.49
Wake	41.38	29.90	24.41	17.90
Granville (Dutchville Twp.)	1.46	1.13	0.89	0.62

* emission budgets have not been established beyond 2015; all subsequent years are compared to the 2015 budget.

Table 14. Existing, Previously Proposed and Currently Proposed CO Budget - Durham and Wake Counties

CO: from existing, previously proposed and currently proposed update to State Implementation Plan (SIP)			
Area	motor vehicle emissions budget (tons/day)		
	existing SIP (2005 budget)*	previously proposed SIP (2005 budget)*	currently proposed SIP (2015 budget)*
	Durham County	163.6	160.71
Wake County	389.2	383.13	384.27

* existing and previously proposed SIP emission budgets are not established beyond 2005; all subsequent years would be compared to the 2005 budget; currently proposed SIP would establish a new budget for 2015; all subsequent years would be compared to the 2015 budget.

3. Long-Range Transportation Plans

The 2030 Transportation Plans were developed between 2003 and 2004. Federal law *40 CFR part 93.104(b)(3)* requires a conformity determination of transportation plans no less frequently than every three years. As required in *40 CFR 93.106*, the horizon years for the transportation plans are no more than ten years apart.

The CAMPO area includes all of Wake County. The DCHC MPO area includes all of Durham and parts of Orange and Chatham Counties. The BGMPO area includes a small portion of Orange County within the 8-hour non-attainment area for ozone. The remaining portions of the non-attainment area are rural areas within the Triangle Area, Kerr-Tar and Upper Coastal Plain RPOs.

3.1 Consultation

The 2030 Transportation Plans are consistent with consultation requirements discussed in *40 CFR 93.105*.

Consultation on the development of this conformity determination was accomplished through interagency consultation meetings held on July 1, 2004, October 1, 2004, November 19, 2004 and December 20, 2004. A copy of the agenda, summary of the topics discussed, and a list of the attendees at each of these meetings is included in Appendix C.

3.2 Financial Constraint Assumptions

The Transportation Plans are fiscally constrained as discussed in *40 CFR 93.108*. The DCHC MPO, Capital Area MPO and Burlington-Graham Long Range Transportation Plans are fiscally constrained to the year 2030. All projects included in the current 2004-2010 TIP and those anticipated in the draft 2006-2012 TIP are fiscally constrained, and funding sources have been identified for construction and operation. The estimates of available funds are based on historic funding availability and include federal, state, private, and local funding sources. Additional detail on fiscal constraint is included in each MPO long range transportation plan. It is assumed that the projects listed for each horizon year will be completed and providing service by the end of the indicated calendar year (December 31). These transportation networks are described in the respective 2030 Long-Range Transportation Plans. They are also described in greater detail in Appendix D.

3.3 Latest Planning Assumptions

The 2030 Transportation Plans were developed with the latest planning assumptions as discussed in *40 CFR 93.110*. A single travel demand model was developed for the urbanized portion of the Triangle non-attainment area. A single set of population, housing and employment projections was developed. In addition, a set of highway and transit projects that was consistent across jurisdictional boundaries was developed and refined through MPO cooperation. This collection of socioeconomic data, highway and transit networks and travel forecast tools, representing the latest planning assumptions, was finalized through the adoption of the draft Long Range Transportation Plans by the Capital Area MPO and Durham-Chapel Hill-Carrboro MPO in September 2004. October 1, 2004 marked the date that the conformity analysis began and was determined through interagency consultation. Additional detail on these planning assumptions is provided below.

Land use and demographic data were collected by regional planning agencies and staff members of DCHC MPO and CAMPO. A regional methodology was agreed upon that included updating residential and employment data to the end of 2002, and preparing growth forecasts to 2030. Residential data included population, dwelling units, households, median income and university-related group quarters population (dormitories, fraternities and sororities). Residential data were based on Census 2000 data from Summary File 1, except that median income data were based on the Census Transportation Planning Package part 1. Housing and Population data were updated to 2002 by collecting new certificates of occupancy from local jurisdictions and applying household size and occupancy rates from Census 2000 to new housing units. University-related population was corrected to 2002 with information supplied by area universities. Median income was interpolated for missing zones based on nearby zones with similar residential development patterns. Residential data were checked for consistency against tax maps and were reviewed by local planning department staff.

Employment data were collected from Employment Security Commission records and data maintained by InfoUSA. These lists were merged, and large employers were contacted directly to verify work location and number of employees. The results were verified for each county against employment benchmark totals obtained from the Bureau of Economic Analysis and from Woods and Poole. Zonal employment data were checked for consistency against existing land use maps and were reviewed by local planning department staff.

Forecasts were prepared by local planning department staff with guidance from staff at the two MPO's. A regional methodology was applied to maintain consistency between residential and employment forecasts and adopted land use plans. Data and forecasts were submitted for public review by each MPO, and adopted for use in developing travel demand and air quality forecasts by each MPO's Transportation Advisory Committee.

The Triangle Regional Travel Demand Model (TRM) uses the basic four-step process (trip generation, trip distribution, mode choice and assignment). All four steps of the process are discussed in greater detail in the sections below. The Triangle Regional Model was calibrated to 1995 conditions in December 1998 and was updated and validated to reflect December 2002 conditions in March 2004.

The Triangle Regional Model's TRANPLAN model is housed at the Institute for Transportation Research and Education (ITRE) at NC State University and NCDOT. The TRANPLAN model covers all of Durham, Wake and Orange Counties (including the portions within the BG MPO and the Triangle Area RPO), all of the portion of Chatham County that is in the Triangle ozone non-attainment area, all of Dutchville Township in Granville County, and portions of Franklin, Granville and Johnston counties (which are non-attainment) along with a portion of Harnett County (which is in attainment).

Outside of the modeled area, NCDOT utilizes a spreadsheet that incorporates the vehicle-miles traveled (VMT) universe file and historical trends to project the VMT in future years at the county level. The spreadsheet calculates speed based on a model originally developed by the Texas Transportation Institute but modified by NCDOT. Speeds generated by the spreadsheet are incorporated into the MOBILE6.2 emissions program. Then, emission factors developed by

Mobile6.2 are imported into the spreadsheet and multiplied by forecasted VMT to generate emissions. The rural spreadsheet model is used for all of Person County and is factored based on population percentage for those portions of non-attainment counties not covered by the TRANPLAN model. This methodology has been used to demonstrate conformity in other areas and has received approval from interagency partners.

There are no court orders or special agreements that apply to conformity (40 CFR 93.109).

3.4 Future year roadway projects

Roadway improvements used for conformity modeling were developed in the 2030 Transportation Plan process in each MPO. Outside of the MPO boundaries, TIP projects from the 2004-2010 TIP served as the future year roadway projects. For the 2030 Plans, lists of needed projects were developed based on modeled congestion and identified local needs. Improvements were coded into the TRM and analyzed. Intermediate analysis for the years 2010, and 2020 were performed to assist in prioritizing the 2030 roadway needs. The final 2010, 2020, and 2030 networks are fiscally constrained. Projects were added from MPO priority lists until estimated project costs equaled the expected funding available. The base network (2002) and the three future networks (2010, 2020, and 2030) used for the conformity determination are the same as the networks used for the 2030 Transportation Plans. Throughout the process to develop the roadway networks, the MPOs and NCDOT identified any initial inconsistencies in project timing and characteristics (e.g. cross-section) for those projects crossing jurisdictional boundaries and reached consensus on consistent solutions.

The interagency partners also jointly developed lists of regionally significant and exempt projects. The checklist below was used to guide the identification of regionally significant projects. After the MPOs, RPOs and NCDOT generated initial lists, the lists were reviewed by DENR , EPA, FTA and FHWA. The regional, state and federal agencies reached concurrence on the lists.

Regionally Significant Project Checklist

1. The facility serves regional transportation needs (i.e. facilities that provide access to and from the region or that provide access to major destinations in the region).
2. The facility is functionally classified higher than a minor arterial (minor arterials may be regionally significant if their main purpose is to provide access to major facilities in the region).
3. The facility is a fixed guideway transit facility.
4. The facility is included in the travel model for the region (in many cases collector streets are modeled and not regionally significant).

To be regionally significant a facility should meet one or more criteria in this checklist. 40 CFR Part 93.101

Appendix D includes lists of the future year roadway projects in the Triangle area as indicated below, including indications of which projects are regionally significant and which projects are exempt. There are no future roadway projects within the portion of Orange County within the Burlington-Graham MPO, therefore no list of projects is included.

Area	Location of Roadway Project List in Appendix D
Durham-Chapel Hill-Carrboro MPO	2030 LRTP (Appendix D1) 2004-2010 TIP (Appendix D2)
Capital Area MPO	2030 LRTP (Appendix D3) 2004-2010 TIP (Appendix D4)
Burlington-Graham MPO	no future year projects in 2030 LRTP or it's TIP subset
Triangle Area RPO (portions of Chatham and Orange Counties in non-attainment area)	2004-2010 TIP (Appendix D5)
Kerr-Tar RPO (Franklin, Person and Granville Counties)	2004-2010 TIP (Appendix D6)
Upper Coastal Plain RPO (Johnston County)	2004-2010 TIP (Appendix D7)

The exempt projects listed in Appendix D, both highway and transit, will serve as the Long Range Transportation Plans (LRTPs) for the region in the event of a conformity lapse. A **conformity** lapse is when an area develops a LRTP that does not pass the conformity test. In the event of a conformity lapse, the TAC will adopt a LRTP of exempt projects (40 CFR 93.126-128) that will serve as the LRTP/TIP for the area. This will allow exempt projects to receive federal funding. A second and distinct type of lapse, a **planning** lapse, is when an area has missed their required LRTP update date. During a **planning** lapse new Federal aid funds are stopped for all projects **INCLUDING** exempt projects (40 CFR 93.126-128).

3.5 Transit networks

As with the roadway projects, each MPO developed transit projects for its LRTP. The base year network was modeled from existing routes and fares for the transit systems in 2002. Future year networks were based on fiscally-constrained projected new or expanded services from regional transit plans, local bus system short range plans, corridor transit plans and other projected bus service expansion estimates, where available. As with the roadway networks, the MPOs and NCDOT identified and rectified any initial inconsistencies in project characteristics or implementation years where transit projects crossed jurisdictional boundaries.

Appendix D includes lists of the future year roadway projects in the Triangle area as indicated below, including indications of which projects are regionally significant and which projects are exempt. There are no future transit projects within the portion of Orange County within the Burlington-Graham MPO, therefore no list of projects is included. The table at the top of the next page indicates where transit projects are listed in this report.

Area	Location of Transit Project List in Appendix D
Durham-Chapel Hill-Carrboro MPO	2030 LRTP (Appendix D1) 2004-2010 TIP (Appendix D2)
Capital Area MPO	2030 LRTP (Appendix D3) 2004-2010 TIP (Appendix D4)
Burlington-Graham MPO	no future year projects in 2030 LRTP or it's TIP subset
Triangle Area RPO (portions of Chatham and Orange Counties in non-attainment area)	only projects are operations and maintenance for community transportation systems
Kerr-Tar RPO (Franklin, Person and Granville Counties)	only projects are operations and maintenance for community transportation systems
Upper Coastal Plain RPO (Johnston County)	only projects are operations and maintenance for community transportation systems

3.6 Congestion Mitigation/Air Quality (CMAQ) Projects

The NC Department of Transportation has established an allocation and review process for CMAQ projects. Each MPO and RPO in a non-attainment or maintenance area receives an allocation of CMAQ funds based on population and air quality status. In addition, a statewide pool of CMAQ funds will be allocated to projects serving more than one non-attainment area on a competitive basis. MPO and RPO project priorities and project applications for statewide funding were submitted to NC DOT by January 31, 2005. Appendix E includes a listing of funded CMAQ projects in the Triangle Area.

3.7 Trip generation

The trip generation module of the Triangle Regional Model is a cross-classification model using household size and income group. In addition to being stratified by size and income, the trip rates were also stratified by area type and trip purpose. Trip purposes used in the model for the trip generation and trip distribution steps were home based work (HBW), home based shopping, home based other (HBO), and non-home-based (NHB). The home based shopping trip purpose is collapsed into the home based other trip purpose for the mode split step. In addition to stratification by various trip purposes, the TRM also stratifies Home Based Work, Home Based Shopping, and Home Base Other trips based on whether the household is in an area designated as either urban or non-urban. Non Home Based trips are not stratified in this manner as these trips do not originate at the household. This stratification is applied during the trip generation and trip distribution steps. Prior to mode choice, all stratifications are collapsed such that 3 trip purposes are carried forward in the process: Home Based Work, Home Based Other (which includes shopping), and Non Home Based. Due to a lack of data on school enrollment, home based school trips were included in the home based other category. Several employment types were identified

as special generators for the Triangle Region. This classification was based on employment centers that exhibited unique trip attraction characteristics as demonstrated by the travel behavior survey data. Universities, regional shopping centers, regional hospitals and the RDU airport were all identified as special generators. Special generator rates were developed for those groups. Trip tables were also built for commercial vehicles, internal – external trips, and through trips.

The travel behavior survey was used to determine where the trips would be ‘attracted to’. Regression coefficients were developed for industrial, retail, highway retail, office and service employment, as well as total dwelling units.

3.8 Trip distribution

The Triangle Regional Model uses a standard gravity model to distribute trips. The model builds zone-to-zone trip tables (by purpose) using a weighted sum of travel time and distance. For assignment purposes the individual trip tables are aggregated into a single trip table for each LRTP analysis year (2002, 2010, 2020, and 2030).

3.9 Mode choice and transit assignment

The mode choice for the Triangle Regional model is based on a nested LOGIT model. This approach creates a predictive model that is responsive to changes in mode service variables such as travel time and cost. The different ‘nests’ of the model reflect a traveler’s choice between drive-to transit, walk-to transit, single occupancy vehicles, and multiple occupancy vehicles. The coefficients for the mode choice model were developed from the Triangle Travel Behavior survey and the Triangle On-Board transit survey. The constants were derived through the calibration process. A bike/walk zone walk element was also introduced into the Triangle Regional Model through the use of GIS tools and the Travel Behavior survey data. Bike/walk zone interchanges were removed from the trip tables by identifying high-density zones with a high degree of pedestrian friendly characteristics. The percentage of trips removed was determined from the travel behavior survey.

3.10 Highway assignment and vehicle miles traveled

Once the total number of trips has been determined, and the mode by which the trip is made has been chosen, the trips are assigned to the network. For the Triangle Regional Model, this is done using an equilibrium loading. In an equilibrium loading, trips are loaded in a series of ‘all or nothing’ loadings. After each ‘all or nothing’ loading, travel times are recalculated. This process continues until the network is in equilibrium. The network is considered to be in equilibrium when further travel time reductions for an individual traveler cannot be achieved by changing the selected path. To better capture the effects of congestion, the Triangle model was loaded separately for the a.m., p.m. and off-peak time periods. Peak periods are 4-hour periods.

3.11 Method of reporting VMT and speed

The Triangle regional model has the capability to provide output by peak period in addition to daily output. Since the TRM can model peak period volumes and speeds, these must be used in the air quality analysis. The vehicle kilometers of travel (VKT), is converted to vehicle miles of travel (VMT). Vehicle miles traveled (VMT) used in the conformity determination are from the last iteration of the model. Each link in the roadway network carries a functional classification. The

VMT for each functional class is multiplied by an emissions factor. The North Carolina Division of Air Quality (DAQ) provides the emissions factors based on MOBILE6.2 output.

The MOBILE6.2 model requires as an input the weighted speeds by functional classification. This information can be derived directly from the model link data output. This first requires the separation of the model link data into functional classification. The congested link speed in mph can then be determined by converting the link distance to miles and dividing by travel time. The congested speed is then weighted by the ratio of the link VMT to the system VMT for each of the functional classifications. This input is then used for MOBILE6.2.

Congested and uncongested speeds are calculated using the model output. The congested speeds are sent to DAQ to determine actual emissions factors.

4. Regional Emission Tests

Baseline and action scenarios were developed to use in the emissions tests. The Baseline and action scenarios were agreed to through the interagency consultation process. The Baseline scenario is the set of highway, transit, pedestrian/bicycle and travel demand management facilities and services, and accompanying socioeconomic conditions, in place as of December 2002. The Baseline scenario includes the 2002 highway and transit networks as described in the previous section. The action scenarios include all of the Baseline scenario components, plus those facilities and services resulting from implementation of the transportation plans in each analysis year, including the 2009 attainment year, the 2010 and 2020 interim years and the 2030 horizon year.

In areas with an USEPA approved attainment demonstration or maintenance plan, an emissions budget comparison satisfies the emissions test requirement of 40 CFR Part 93.118. For pollutants for which an emissions budget has been submitted, the estimated emissions from the transportation plan must be less than or equal to the emissions budget values. Emissions factors were provided by DENR.

Table 15 illustrates what parts of the Triangle Ozone Non-Attainment Area have emissions budgets, what parts are covered by the Triangle Regional Model (TRM) and how each part was analyzed for each pollutant in each comparison year.

Four counties in the non-attainment area are completely within the Triangle Regional travel demand Model (TRM) boundary: Chatham (Baldwin, Center, New Hope and Williams Townships which are designated non-attainment), Durham, Orange and Wake. Person County is completely outside of the TRM boundary. The other 3 counties, Granville, Franklin and Johnston, have parts that are within the modeled area and parts that are outside of the modeled area.

4.0.1. Sub-area emission budgets

All of Durham and Wake Counties, and Dutchville Township in SW Granville County, are maintenance areas under the 1-hour ozone standard and have emission budgets. These budgets were used in performing the emissions analysis.

4.0.2 Emissions analysis source

Vehicle Miles of Travel (VMT) and speeds for the emissions analysis were derived from the TRM where it is available. Person County VMT and speeds came from the NCDOT rural spreadsheet; VMT and speeds for the portions of Franklin, Granville and Johnston outside the modeled area came from the NCDOT rural spreadsheet factored by the percentage of each county's population in the rural area, a method that has been used in prior analyses.

4.0.3 Emissions comparison years (ozone)

For areas with budgets under the 1-hour standard (Durham and Wake Counties and Dutchville Township in Granville County), emissions must be analyzed for years where there is a 1-hour emission budget, the attainment year, the horizon year and intermediate years such that intervals do not exceed 10 years. The attainment year for the Triangle area is 2009. The following years were analyzed to meet the requirements: 2007 (1-hour budget), 2009 (attainment year), 2010 (1-

hour budget year), 2012 (1-hour budget year), 2015 (1-hour budget year), 2020 (intermediate year), and 2030 (LRTP horizon year).

Analysis years where there is a budget and no LRTP model runs, do not require additional runs; interpolation was used to derive data for the non-matching years (2007, 2012, 2015). Also, in accordance with 40 CFR 93.118, since there was no budget for the required analysis years 2009, 2020 and 2030, the 2007 budgets were used for 2009 and the 2015 budgets were used for 2020 and 2030.

For *areas without budgets under the 1-hour standard*, emissions must be calculated for a baseline year (2002), an interim year not more than 5 years from the year in which conformity is determined (i.e. within 5 years of 2005), the horizon year (2030 in all cases), and intermediate years such that intervals do not exceed 10 years. In order to meet these conditions, the years 2002 (baseline), 2010, 2020 and 2030 (LRTP horizon) were analyzed.

Table 15. Triangle Area Transportation Conformity Analysis Matrix

County	Area model status	Area emissions budget status	Emissions analysis source	Emissions comparison years								
				2002 baseline	2005	2007 ¹	2009 ¹	2010 ¹	2012 ¹	2015 ¹	2020	2030 horizon
Person	rural area (all)	no emissions budget	rural spreadsheet	O3				O3			O3	O3
Granville	modeled area	emissions budget ²	TRM	O3		O3	O3	O3	O3	O3	O3	O3
	rural area	no emissions budget	rural spreadsheet (factored) ³	O3				O3			O3	O3
Franklin	modeled area	no emissions budget	TRM	O3				O3			O3	O3
	rural area	no emissions budget	rural spreadsheet (factored) ³	O3				O3			O3	O3
Johnston	modeled area	no emissions budget	TRM	O3				O3			O3	O3
	rural area	no emissions budget	rural spreadsheet (factored) ³	O3				O3			O3	O3
Chatham (part)	modeled (all) ⁴	no emissions budget	TRM	O3				O3			O3	O3
Orange	modeled (all)	no emissions budget	TRM	O3				O3			O3	O3
Durham	modeled (all)	emissions budget	TRM	O3	CO	O3	O3	CO O3	O3	CO O3	CO O3	CO O3
Wake	modeled (all)	emissions budget	TRM	O3	CO	O3	O3	CO O3	O3	CO O3	CO O3	CO O3

TRM: Triangle Regional Model

O3: Ozone

CO: Carbon Monoxide

¹ Areas with emissions budgets from the 1-hour ozone SIP are required to do comparisons for 2007, 2009, 2010, 2012 and 2015; interpolation, rather than model runs, was used for 2007, 2012 and 2015.

² Dutchville Township in Granville County has an emissions budget under the former 1-hour ozone standard.

³ where part of a county is covered by the regional model, the remainder of the county was analyzed using the NCDOT rural spreadsheet, factored by the percentage of county’s population that lives outside of the modeled area.

⁴ a sensitivity analysis was performed to clarify the effect of the small portion of the non-attainment area in Chatham County that is outside of the current TRM boundary; it was determined to be insignificant.

4.0.4 Emission comparison years (CO)

Durham and Wake Counties have CO maintenance requirements under an existing SIP; a proposed SIP update has also been prepared and is undergoing review. The proposed update would supplement the existing 2005 budgets with a 2015 budget for each county. The 2015 budget number is proposed in the CO SIP Maintenance Plan update that will be submitted to the USEPA for review and adequacy. Under the existing SIP, the 2005 budgets would apply to all subsequent years. Under the update, the existing 2005 budgets would apply between 2005 and 2014 and the new 2015 budgets would apply from 2015 onwards. Both counties are entirely within the modeled area and have emissions budgets under the existing SIP and proposed update; the TRM was used as the analysis tool. Listed below is specific CO budget and comparison year information:

- Existing CO SIP Budget Year: 2005 (Durham and Wake Counties)
- Proposed CO SIP Budget Years: 2005, 2015 (Durham and Wake Counties)
- Comparison Years for Existing CO SIP – 2005, 2010, 2020, 2030 (Durham and Wake Counties)
- Comparison Years for Proposed CO SIP – 2005, 2010, 2015, 2020, 2030 (Durham and Wake Counties)

The use of different analysis methods in different parts of the non-attainment area does not preclude future unified conformity efforts in the region.

4.1 Emissions Model

MOBILE 6.2 was used to develop the emissions factors. Motor vehicle emissions controls considered in the MOBILE6.2 model include the following:

<u>Strategy</u>	<u>Methodology/Approach</u>
<i>I/M Program (per NC SIP)</i>	<i>Ran Model in Place</i>
<i>Tier 2 vehicle's Emission Standards</i>	<i>Ran Model in Place</i>
<i>Low Sulfur Gasoline and Diesel fuels</i>	<i>Ran Model in Place</i>
<i>Heavy Duty Vehicle Rules 2004 and 2007</i>	<i>Ran Model in Place</i>
<i>Low RVP Gasoline</i>	<i>Ran Model in Place</i>
<i>On board vapor recovery</i>	<i>Ran Model in Place</i>

Also, area specific information is used for such items as vehicle age distribution and vehicle type distribution rather than national default values, as documented below.

4.1.1 Development of Emissions Factors

A critical element of any emissions analysis or estimate is the development and utilization of the emissions factors applied to the travel estimates. In order to assure that the emissions factors used in the conformity analysis were compatible with those used in the development of the North Carolina SIP, DENR provides emission factors and model inputs for each non-attainment and maintenance area in North Carolina. The MOBILE6.2 emissions factor model was used to develop the emissions factors in December 2004 for the Triangle. These factors are shown in Appendix F.

NCDENR provides motor vehicle emissions factors by federal functional classification of the roadway system. In addition the percentage of motor vehicles subject to the inspection and maintenance program is estimated from accident data. The scope of North Carolina’s motor vehicle inspection and maintenance program is set to expand from nine counties to forty-eight counties by 2007. The phase-in of the I/M program is reflected in Table 16.

Table 16. Percentage of Vehicles Subject to Inspection and Maintenance Programs

Location	2002	2005	2007-2030
Wake County	81%	93%	95%
Durham County	83%	90%	91%
Johnston County	0%	83%	88%
Chatham County	0%	95%	96%
Granville County	0%	78%	79%
Orange County	72%	87%	89%
Person County	0%	14%	15%
Franklin County	0%	84%	88%

4.1.2 Development of VMT Mix by Vehicle Type

The North Carolina Department of Transportation (NCDOT) provides data on VMT for six urban and six rural road types; vehicle mix data are available for the same road types. Automatic traffic recording stations and selected Highway Performance Monitoring System (HPMS) locations were used and counts taken throughout 1999 - 2001 are used to determine the percentage of vehicles, by vehicle type, for various road types. Vehicle classification data was used in conjunction with MOBILE6.2 default vehicle mix to estimate fleet distribution by functional class. The classification data was iteratively adjusted to replicate MOBILE6.2’s national classification default within the analysis area. The final numbers reflect the change in the mix (i.e. increase in the number of SUVs and pick-ups) for each year using MOBILE6.2 projection and variation of mix across the different road type using NC data. This reflects 16 vehicle classes per road type.

4.1.3 Vehicle Age Distributions

The vehicle age distribution is based on the North Carolina Department of Motor Vehicles’ 2002 (DMV) registration records for the in-use fleet in the Triangle area. DMV provided the information. The data was modified and arranged to comply with MOBILE6.2

4.2 Transportation Control Measures

The North Carolina State Implementation Plan lists no transportation control measures pertaining to the Triangle.

4.3 CO VMT Normalization

Base year (2002) vehicle miles traveled from the Triangle travel demand model differ from the base year VMT calculated by NCDOT using the HPMS sample – the method used to develop the 2005 emission budgets in the current State Implementation Plan (SIP) for CO in Durham and Wake Counties. Differences between the Triangle Regional Model VMT and NCDOT VMT center around the extent of locally maintained thoroughfares in the Triangle for which NCDOT had insufficient data at the time the sample was taken. The difference is significant. The HPMS

VMT estimate for Wake County is 16.7 million miles per day. The Triangle Regional Model estimates 21.1 million miles daily (see Appendix G). This difference was significant enough in the comparison of the 2005 CO budget for Wake County to warrant VMT normalization.

Since future year comparisons used in the conformity determination are based on the Triangle model, results of the model are normalized to reflect differences between the modeled and HPMS measured VMT, in essence, using the same ruler to measure base and future emissions. Because the largest difference is miles of local streets, two normalization factors are calculated - one for local streets and another for non-local streets. To calculate these factors, the 2002 HPMS VMT is divided by the 2002 Model VMT to produce two factors for Wake County: 0.8496 for non-local streets and 0.4410 for local streets.

Conformity estimates for CO in the Year 2005 in Wake County under the existing SIP use Normalized VMT. Year 2005 TRM VMT is multiplied by these factors before applying the emission rates supplied by DENR. Appendix G contains the calculation of the factors. The VMT normalization technique was developed cooperatively by NCDOT and DENR with comment from FHWA and USEPA. This methodology has been accepted by USEPA, FHWA and FTA.

4.4 Off-model Analysis

The Triangle Regional Model (TRM) does not include algorithms that can calculate the effects on VMT and speeds (and hence air quality) of certain transportation related activities designed to influence people's travel modes or affect the supply of or demand for transportation services. Examples of such activities that currently exist in the Triangle include:

- Transportation Demand Management (TDM) programs such as the Triangle Best Workplaces for Commuters program and the SmartCommute@RTP program which cover approximately 10% of the region's workforce,
- Land use strategies, such as compact, mixed-use, pedestrian- and transit-oriented development and design initiatives, over and above those reflected in the Traffic Analysis Zone (TAZ) socioeconomic data,
- The provision of park-and-ride lots to facilitate the use of transit and ridesharing,
- Commuter Services Programs operated by the Triangle Transit Authority, such as the Guaranteed Ride Home program, rideshare matching software and the vanpool program, and
- Incident management programs conducted on the region's Interstate highways and other freeways in Wake and Durham Counties, including surveillance cameras, the Motorist Assistance Patrols, and traveler information activities.

In order to accurately account for the impacts of such activities, they are reflected through "off-model" analyses. Although these and other programs are suitable for off-model analysis, this conformity determination included off-model analysis only for the last of these listed activities, the interstate incident management program. Once more experience is gained in other activities, they may be reflected in future conformity analyses. FHWA Region IV's *Off-Model Air Quality Analysis: A Compendium of Practice* provided guidance on estimating these emissions effects. Appendix H includes the calculations for this off-model analysis in Durham and Wake Counties.

4.5 Emissions Comparison Tests by Location and Pollutant

USEPA originally declared Durham County, Wake County and Dutchville Township in Granville County non-attainment under the 1-hour standard for ozone (O₃) and Durham County and Wake County non-attainment for Carbon Monoxide (CO) on November 15, 1990. Durham County, Wake County and Dutchville Township were redesignated by USEPA to attainment with a maintenance plan for ozone on June 17, 1994 and Durham County and Wake County were redesignated by USEPA to attainment with a maintenance plan for CO on September 18, 1995.

Both volatile organic compounds (VOCs) and oxides of nitrogen (NO_x) are precursors of ozone. In the approved maintenance plans for ozone for Durham County, Wake County, and Dutchville Township, the North Carolina Department of Environment and Natural Resources (DENR) prepared emissions budgets for both VOC and NO_x. USEPA approved the second ten-year update of these emissions budgets on September 20, 2004 with an effective date of November 19, 2004. The last year for VOC and NO_x emissions budgets is 2015; therefore, analysis years beyond 2015 were compared to the 2015 emissions budget. The USEPA approval and promulgation rulings for CO and ozone containing the budgets are in Appendices A and B.

In 1997 the NAAQS for ozone was reviewed and revised to reflect improved scientific understanding of the health impacts of this pollutant. When the standard was revised in 1997, an eight-hour ozone standard was established. The USEPA designated the entire Triangle area as a “basic” non-attainment area for eight-hour ozone with an effective date of June 15, 2004.

The non-attainment designation covers the following geographic areas:

- Durham County
- Wake County
- Orange County
- Johnston County
- Franklin County
- Granville County
- Person County
- Baldwin, Center, New Hope and Williams Townships in Chatham County

Four organizations are responsible for conformity determinations; each must make a conformity determination for its respective area in order for all of the areas to be designated in conformity:

- the Capital Area MPO within the CAMPO metropolitan area boundary – currently all of Wake County, with expansion into parts of neighboring counties anticipated in 2005.
- the DCHC MPO within its metropolitan area boundary – all of Durham County and parts of Orange and Chatham counties.
- the Burlington-Graham MPO within its portion of the metropolitan area boundary in western Orange County.
- the NCDOT in a rural area that is comprised of those portions of Chatham, Orange, Person, Franklin, Granville and Johnston Counties that remain outside of any MPO metropolitan area boundary.

For this report, emissions were calculated and reported at the County level, or for part of a county if only a part is in a non-attainment area (Chatham County) or where an emissions budget exists for part of a county (Dutchville Township in Granville County). Table 17 summarizes the emissions test used and decision-making responsibility for conformity findings in each County.

Table 17. Emissions Test and Responsibility for Conformity Findings

Location	Pollutant(s)	Emissions Test	Conformity Finding Responsibility
Wake County	O3, CO	budget	Capital Area MPO
Durham County	O3, CO	budget	Durham-Chapel Hill-Carrboro MPO
Johnston County	O3	less-than-baseline	NC DOT (consultation with Upper Coastal Plain RPO)
Chatham County (<i>Baldwin, Center, New Hope, Williams Townships</i>)	O3	less-than-baseline	Durham-Chapel Hill-Carrboro MPO NC DOT (consultation with Triangle Area RPO)
Granville County	O3	budget (Dutchville Twp) less-than-baseline (elsewhere)	NC DOT (consultation with Kerr-Tar RPO)
Orange County	O3	less-than-baseline	Durham-Chapel Hill-Carrboro MPO Burlington-Graham MPO NC DOT (consultation with Triangle Area RPO)
Person County	O3	less-than-baseline	NC DOT (consultation with Kerr-Tar RPO)
Franklin County	O3	less-than-baseline	NC DOT (consultation with Kerr-Tar RPO)

The results of the emission comparisons are summarized by County in Tables 18 through 26. Detailed emissions analysis results by county are contained in Appendix I.

Emissions from vehicles are expected to show dramatic decreases, even with continuing increases in vehicle miles of travel (VMT), for several reasons.

- Fleet turnover. Older, more polluting vehicles (gasoline and diesels) continue to be retired and replaced with newer, cleaner vehicles.
- Newer vehicles will continue to get cleaner with each subsequent model year over the next four years. The new Federal tailpipe standards are set at an average standard of 0.07 grams per mile

for nitrogen oxides for all classes of passenger vehicles beginning in 2004. This includes all light-duty trucks, as well as the largest SUVs. For more detail, including phase-in by vehicle type, see USEPA's Tier 2 Vehicle Standard Final Rule at: <http://www.epa.gov/otaq/regs/ld-hwy/tier-2/finalrule.htm>

- Gasoline fuels are improving. Refiners and importers of gasoline will be required to meet stricter sulfur content requirements by 2006. Low sulfur gasoline enables better emission controls, and can lead to further emission reductions from today's catalyst-equipped fleet. See USEPA's Gasoline Sulfur Program Final Rule at: <http://www.epa.gov/otaq/regs/ld-hwy/tier-2/finalrule.htm>
- Emissions from heavy-duty on-highway vehicles are expected to decrease due to USEPA's Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements. Stricter NOx emission standards will be phased in between 2007 and 2010 for diesel engines. New standards for on-road diesel fuel (15 ppm sulfur content) will be phased in at the terminal level by July 15, 2006 and at the retail stations by September 1, 2006. See: <http://www.epa.gov/otaq/diesel.htm#hd2007>
- Expansion of vehicle inspection and maintenance programs to more counties in North Carolina so that more polluting vehicles are identified and repaired, thus lowering emissions.

The combination of the technology/fuel improvements/vehicle maintenance and resulting emission reductions exceeds the effect of increased VMT in the Triangle area. The trend in the Triangle area is not uncommon. On a national level this trend is also seen in data gathered by the Federal Highway Administration (FHWA). For additional detail, see the FHWA web site on vehicle miles traveled and vehicle emissions at: <http://www.fhwa.dot.gov/environment/vmtems.htm>

Table 18. Durham County Emissions Comparison (kg/day)¹

Year	NO _x		VOC		CO			
	SIP Budgets	L RTP Emissions	SIP Budgets	L RTP Emissions	Existing SIP Budgets	Previously Proposed SIP Budgets	Currently Proposed SIP Budgets	L RTP Emissions
2002 ²		19,494		9,120				
2005 ³	N/A	N/A	N/A	N/A	148,418	145,794	145,794	135,736
2007 ³	13,871	13,344	7,530	6,459	N/A	N/A	N/A	N/A
2009 ³	13,871	10,957	7,530	5,663	N/A	N/A	N/A	N/A
2010 ³	10,297	9,672	6,142	5,298	148,418	145,794	145,794	108,890
2012 ³	8,246	7,489	5,389	4,574	N/A	N/A	N/A	N/A
2015 ³	5,888	5,244	4,772	3,863	148,418	145,794	160,771	95,590
2020	5,888	3,337	4,772	3,209	148,418	145,794	160,771	90,498
2030 ⁴	5,888	2,686	4,772	3,094	148,418	145,794	160,771	104,141

Table 19. Wake County Emissions Comparison (kg/day)¹

Year	NO _x		VOC		CO			
	SIP Budgets	L RTP Emissions	SIP Budgets	L RTP Emissions	Existing SIP Budgets	Previously Proposed SIP Budgets	Currently Proposed SIP Budgets	L RTP Emissions
2002 ²		52,029		25,035				
2005 ³	N/A	N/A	N/A	N/A	353,082	347,570	347,570	296,260
2007 ³	37,539	35,383	18,180	17,846	N/A	N/A	N/A	N/A
2009 ³	37,539	29,474	18,180	15,817	N/A	N/A	N/A	N/A
2010 ³	27,125	26,311	15,749	14,919	353,082	347,570	347,570	297,395
2012 ³	22,144	20,881	14,188	13,207	N/A	N/A	N/A	N/A
2015 ³	16,239	15,096	13,018	11,531	353,082	347,570	348,604	287,339
2020	16,239	10,030	13,018	10,100	353,082	347,570	348,604	284,656
2030 ⁴	16,239	8,516	13,018	10,321	353,082	347,570	348,604	344,841

Table 20. Dutchville Township (Granville County) Emissions Comparison (kg/day)¹

Year	NO _x		VOC	
	SIP Budgets	Long Range Plan or TIP Emissions	SIP Budgets	Long Range Plan or TIP Emissions
2002 ²		2,372		615
2007 ³	1,324	1,311	499	428
2009 ³	1,324	1,139	499	391
2010 ³	1,025	1,008	417	371
2012 ³	807	774	372	326
2015 ³	562	534	336	281
2020	562	335	336	242
2030 ⁴	562	295	336	272

1. To obtain tons per day, divide kilograms per day by 907.2.
2. Baseline year.
3. Budget year; 2009 is ozone attainment year.
4. Horizon year.

Table 21. Remainder of Granville County Emissions Comparison (kg/day)

Year	NO _x		VOC	
	Baseline (2002) Emissions	Long Range Plan or TIP Emissions	Baseline (2002) Emissions	Long Range Plan or TIP Emissions
2010	3,924	2,068	1,848	1,086
2020	3,924	823	1,848	635
2030	3,924	510	1,848	536

Table 22. Franklin County Emissions Comparison (kg/day)¹

Year	NO _x		VOC	
	Baseline (2002) Emissions	Long Range Plan or TIP Emissions	Baseline (2002) Emissions	Long Range Plan or TIP Emissions
2010	3,129	1,829	2,403	1,382
2020	3,129	841	2,403	911
2030	3,129	602	2,403	811

Table 23. Johnston County Emissions Comparison (kg/day)

Year	NO _x		VOC	
	Baseline (2002) Emissions	Long Range Plan or TIP Emissions	Baseline (2002) Emissions	Long Range Plan or TIP Emissions
2010	17,136	10,182	7,955	4,879
2020	17,136	4,101	7,955	3,203
2030	17,136	2,688	7,955	2,888

Table 24. Orange County Emissions Comparison (kg/day)

Year	NO _x		VOC	
	Baseline (2002) Emissions	Long Range Plan or TIP Emissions	Baseline (2002) Emissions	Long Range Plan or TIP Emissions
2010	13,668	6,711	4,270	2,470
2020	13,668	2,100	4,270	1,507
2030	13,668	1,608	4,270	1,478

Table 25. Person County Emissions Comparison (kg/day)

Year	NO _x		VOC	
	Baseline (2002) Emissions	Long Range Plan or TIP Emissions	Baseline (2002) Emissions	Long Range Plan or TIP Emissions
2010	1,840	1,103	1,610	1,023
2020	1,840	599	1,610	660
2030	1,840	484	1,610	592

Table 26. Chatham County (part) Emissions Comparison (kg/day)

Year	NO _x		VOC	
	Baseline (2002) Emissions	Long Range Plan or TIP Emissions	Baseline (2002) Emissions	Long Range Plan or TIP Emissions
2010	729	503	612	444
2020	729	160	612	180
2030	729	142	612	194

5. Public Involvement and Interagency Consultation

The 2030 Transportation Plans are consistent with consultation requirements discussed in *40 CFR 93.105*. Interagency consultation was a cooperative effort on the part of the Capital Area MPO, the Durham-Chapel Hill-Carrboro MPO, the Burlington-Graham MPO, the Triangle Area RPO, the Kerr-Tar RPO, the Upper Coastal Plain RPO, the North Carolina Department of Transportation and the Federal Highway Administration. The process was administered by the Triangle J Council of Governments on behalf of the partners and was organized according to the sections in the document titled *Triangle Region Transportation Conformity: Pre-Analysis Consensus Plan*, a document agreed to at the initial interagency consultation meeting on July 1, 2004 and updated periodically. Subsequent interagency consultation meetings were held on October 1, 2004, November 19, 2004, December 20, 2004 and January 7, 2005.

A copy of the latest version of the Consensus Plan, written agency comments and agendas and summaries of the interagency consultation meetings are included in Appendix C.

Public review of this report was handled in accordance with each MPO and RPO public participation policy for Transportation Plans. A copy of the public participation policies are included in Appendix J. Comments from the public participation process are incorporated into the final Conformity Analysis and Determination Report. Those comments are included in Appendix K of the final report.

6. Conclusion

Based on the analysis and consultation discussed above the following transportation plans and TIPs conform to the purpose of the North Carolina State Implementation Plan. In every horizon year for every pollutant in each geographic area, the emissions expected from the implementation of the long-range plans and TIPs are less than the emissions budgets established in the SIP or the baseline emissions where no SIP budget is available.

Table 27: Summary of Conformity Status of Triangle Transportation Plans

Criteria (√ indicates the criterion is met)	Burlington-Graham MPO 2030 LRTP & 2004-10 TIP*	Durham-Chapel Hill-Carrboro MPO 2030 LRTP & 2004-10 TIP*	Capital Area MPO 2030 LRTP & 2004-10 TIP*	Rural Area of the Triangle 2004-10 TIP
Less Than Emissions Budget(s) or Baseline	√	√	√	√
TCM Implementation	The NC SIP includes no Transportation Control Measures in the Triangle Area			
Interagency Consultation	√	√	√	√
Latest Emissions Model	√	√	√	√
Latest Planning Assumptions	√	√	√	√
Fiscal Constraint	√	√	√	√

* The 2004-10 TIPs are subsets of the 2030 LRTPs

Specific conformity findings for each of these areas are listed below:

Burlington-Graham MPO Ozone Conformity Finding for the 2030 Long-Range Transportation Plan and 2004-2010 Transportation Improvement Program

Based on the analysis and consultation and involvement processes described in this report, the Burlington-Graham MPO 2030 Long-Range Transportation Plan and 2004-2010 Transportation Improvement Program are found to conform to the purpose of the North Carolina State Implementation Plan. The emissions expected from the implementation of the Burlington-Graham MPO 2030 Long-Range Transportation Plan and 2004-2010 Transportation Improvement Program are in conformity with the 8-hour ozone standard.

Capital Area MPO Ozone and Carbon Monoxide Conformity Finding for the 2030 Long-Range Transportation Plan and 2004-2010 Transportation Improvement Program

Based on the analysis and consultation and involvement processes described in this report, the Capital Area MPO 2030 Long-Range Transportation Plan and 2004-2010 Transportation Improvement Program are found to conform to the purpose of the North Carolina State Implementation Plan. The emissions expected from the implementation of the Capital Area MPO 2030 Long-Range Transportation Plan and 2004-2010 Transportation Improvement Program are less than the applicable budgets for NO_x, VOC and CO; therefore the LRTP and TIP are in conformity with the 8-hour ozone standard and the carbon monoxide standard.

Durham-Chapel Hill-Carrboro MPO Ozone and Carbon Monoxide Conformity Finding for the 2030 Long-Range Transportation Plan and 2004-2010 Transportation Improvement Program

Based on the analysis and consultation and involvement processes described in this report, the Durham-Chapel Hill-Carrboro MPO 2030 Long-Range Transportation Plan and 2004-2010 Transportation Improvement Program are found to conform to the purpose of the North Carolina State Implementation Plan. The emissions expected from the implementation of the Durham-Chapel Hill-Carrboro MPO 2030 Long-Range Transportation Plan and 2004-2010 Transportation Improvement Program are less than the applicable budgets for NO_x, VOC and CO; therefore the LRTP and TIP are in conformity with the 8-hour ozone standard and the carbon monoxide standard.

NCDOT Triangle Rural Area Ozone Conformity Finding for the 2004-2010 Transportation Improvement Program

Based on the analysis and consultation and involvement processes described in this report, the 2004-2010 Transportation Improvement Programs for the rural counties in the Triangle are found to conform to the purpose of the North Carolina State Implementation Plan. The emissions expected from the implementation of the 2004-2010 Transportation Improvement Program are less than the SIP budget for NO_x and VOC in Dutchville Township in Granville County and less than baseline emissions in the remainder of the rural area; therefore the TIP is in conformity with the 8-hour ozone standard.

Appendix K. Public Comment and Responses

Appendix K contains comments on the draft report and responses to these comments. Each commenter is assigned a code and each comment a number. Responses follow each comment. In certain instances, the responders inserted italicized, bracketed wording to clarify the comment, using the format *[clarifying comment]*. An example would be where a commenter referred to “the 2030 LRTP” when the comment addressed one of the specific 2030 Long Range Transportation Plans covered by this conformity report; in this example, the comment would be edited to read: “the *[Durham-Chapel Hill-Carrboro MPO]* 2030 LRTP.” Except as noted by these italicized, bracketed comments, no changes were made to the comments as received. All comments were submitted in digital formats; importing and combining these files in this appendix may have altered the formatting of the original comments.

Comments are addressed in the order that they were adopted or endorsed by the submitting organization, or received at the offices of the Triangle J Council of Governments, which worked with the Triangle Air Quality Conformity partner organizations to coordinate the responses to the comments.

The following organizations and individuals submitted comments on the January 25, 2005 draft conformity report:

1. Town of Chapel Hill (CH)
resolution adopted by Town of Chapel Hill on February 14, 2005; received via email from David Bonk at TJCOG on March 3, 2005
2. Institute for Transportation Research and Education (ITRE)
verbal comment provided by Leta Huntsinger to John Hodges-Copple of TJCOG on January 28, 2005 via telephone call
3. U.S. Environmental Protection Agency (EPA)
received via email from Edward Dancausse at TJCOG on February 25, 2005
4. Federal Highway Administration (FHWA)
received via email from Edward Dancausse at TJCOG on February 28, 2005
5. North Carolina Department of Environment and Natural Resources Division of Air Quality (DAQ)
received via email from Edward Dancausse at TJCOG on February 28, 2005
6. Mr. Tim Smelzer (TS)
received via email at TJCOG on February 28, 2005

Town of Chapel Hill (CH)

A RESOLUTION PROVIDING THE DURHAM-CHAPEL HILL-CARRBORO TRANSPORTATION ADVISORY COMMITTEE WITH COMMENTS ON THE DRAFT TRIANGLE AIR QUALITY CONFORMITY ANALYSIS AND DETERMINATION REPORT (2005-02-14/R-15)

WHEREAS, the Durham-Chapel Hill-Carrboro Transportation Advisory Committee has approved a draft 2030 Regional Transportation Plan; and

WHEREAS, the 2030 Regional Plan has been used to prepare the draft Triangle Air Quality Conformity Analysis and Determination; and

WHEREAS, the Transportation Advisory Committee has released the draft Triangle Air Quality Conformity Analysis and Determination Report; and.

WHEREAS, the Council has reviewed the Triangle Air Quality Conformity Analysis and Determination Report;

NOW, THEREFORE, BE IT RESOLVED by the Council of the Town of Chapel Hill that the Council provides the Durham-Chapel Hill-Carrboro Transportation Advisory Committee with the following comments and recommendations.

CH1:

- The Report provide a more detailed explanation of why projected air pollutant emissions are estimated to decline at the same time vehicle miles of travel and congestion area projected to increase.

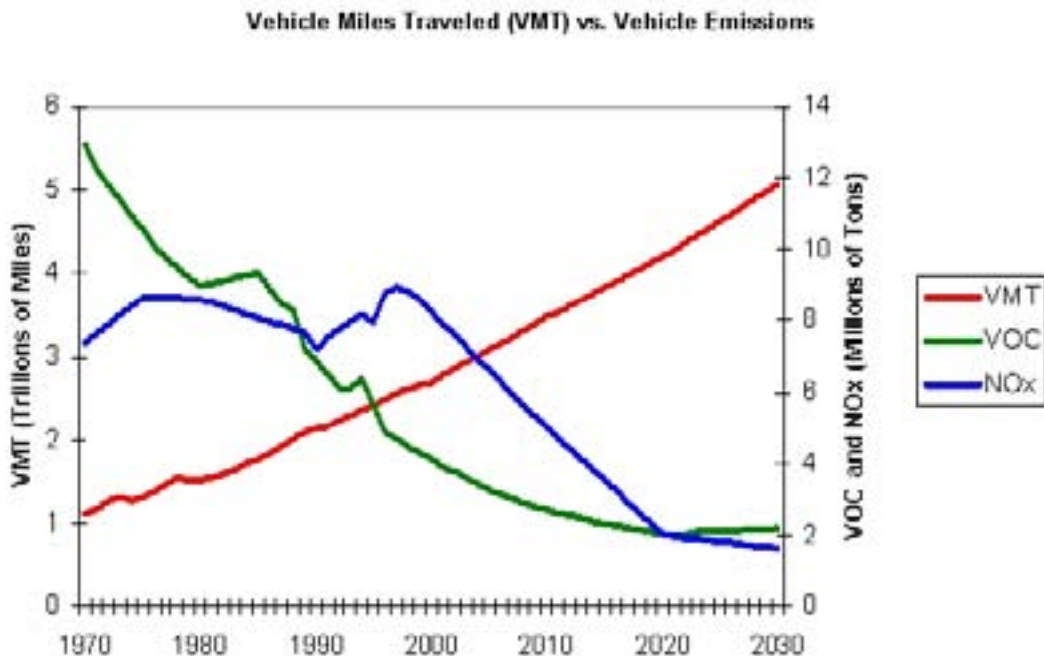
Response:

The report includes an explanation of why emissions are declining despite increased VMT. Emissions from vehicles are expected to show dramatic decreases, even with continuing increases in vehicle miles of travel (VMT), for several reasons.

- Fleet turnover. Older, more polluting vehicles (gasoline and diesels) continue to be retired and replaced with newer, cleaner vehicles.
- Newer vehicles will continue to get cleaner with each subsequent model year over the next four years. The new Federal tailpipe standards are set at an average standard of 0.07 grams per mile for nitrogen oxides for all classes of passenger vehicles beginning in 2004. This includes all light-duty trucks, as well as the largest SUVs. Vehicles weighing less than 6000 pounds will be phased-in to this standard between 2004 and 2007. For the heaviest light-duty trucks, the program provides a three-step approach to reducing emissions. First, in 2004, standards were not to exceed 0.6 grams per mile (gpm). Second, these vehicles are required to achieve an interim standard of 0.2 gpm to be phased-in between 2004-2007. Third, in the final step, half of these vehicles will meet the 0.07 standard in 2008, and the remaining will comply in 2009. See USEPA's Tier 2 Vehicle Standard Final Rule at: <http://www.epa.gov/otaq/regs/ld-hwy/tier-2/finalrule.htm>

- Gasoline fuels are improving and continue to improve. In 2004, the nation's refiners and importers of gasoline had the flexibility to manufacture gasoline with a range of sulfur levels as long as all of their production was capped at 300 parts per million (ppm) and their annual corporate average sulfur levels are 120 ppm. In 2005, the refinery average is set at 30 ppm, with a corporate average of 90 ppm and a cap of 300 ppm. Finally, in 2006, refiners will meet a 30 ppm average sulfur level with a maximum cap of 80 ppm. Low sulfur gasoline enables better emission controls, and can lead to further emission reductions from today's catalyst-equipped fleet. See USEPA's Gasoline Sulfur Program Final Rule at: <http://www.epa.gov/otaq/regs/ld-hwy/tier-2/finalrule.htm>
- Emissions from heavy-duty on-highway vehicles are expected to decrease due to USEPA's Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements. NOx emission standard of 0.2 g/bhp-hr will be phased in between 2007 and 2010 for diesel engines. The phase-in will be on a percent-of-sales basis: 50 % from 2007-2009 and 100% in 2010. New standards for on-road diesel fuel (15 ppm sulfur content) will be phased in at the terminal level by July 15, 2006 and at the retail stations by September 1, 2006. Also see: <http://www.epa.gov/otaq/diesel.htm#hd2007>
- Expansion of vehicle inspection and maintenance programs to more counties in North Carolina so that more polluting vehicles are identified and repaired, thus lowering emissions.

The combination of the technology/fuel improvements/vehicle maintenance and resulting emission reductions exceeds the effect of increased VMT in the Triangle area. The trend in the Triangle area is not uncommon. On a national level this trend is also seen in data gathered by the Federal Highway Administration (FHWA); see graph below. Please see the FHWA web site on vehicle miles traveled and vehicle emissions at: <http://www.fhwa.dot.gov/environment/vttems.htm>



Source: Statement of Senator Bob Smith, Environment & Public Works Committee Hearing on Transportation & Air Quality, July 30, 2002

CH2:

- The Report include a more detailed explanation of how the vehicle miles of travel normalization procedure was completed.

Response:

Appendix G has been expanded to include more detail on the normalization procedure.

CH3:

- The development of the next Regional Transportation Plan include the collection of adequate travel data to reduce the need for normalization of vehicle miles traveled

Response:

The use of normalization (see Appendix G) is due to different data sources for the VMT used to develop the original emissions budgets and the subsequent modeled emissions estimates, not to the adequacy of travel data collected as part of LRTP development. VMT for the SIP emission budgets came from HPMS, while VMT for the emissions comparison came from the regional model. Normalization allows the VMT from these different sources to be compared on an equivalent basis. Since future emission budgets in the Triangle will be developed from VMT from the regional model, the need for normalization should disappear, unless differences in modeling versions affect VMT equivalency. Improving travel data collected as part of LRTP development can be valuable in ensuring that the VMT estimates in the travel model are as accurate as possible.

CH4:

- The Report describe what standards were used to assess the impact of the incident management program as part of the off model analysis.

Response: Appendix H has been expanded to include more detail on the off-model analysis used to account for the impacts of the freeway incident management program.

CH5:

- The [Durham-Chapel Hill-Carrboro MPO] Transportation Advisory Committee establish criteria for considering other off-model analysis such as travel demand management programs and land use policies.

This the 14th day of February, 2005

Response: Travel Demand Management (TDM) programs and land use policies are both suitable for off-model analysis. Since the Triangle Best Workplaces for Commuters program was in its initial year during this planning cycle, and many of the more transit-oriented developments in the area are relatively new, for example Southern Village and Meadowmont, it was decided to not use an off-model TDM analysis until more experience is gained in the Triangle. Criteria provided by MPO Transportation Advisory Committees (TACs) would be valuable in determining appropriate off-model analysis for future LRTP conformity analyses.

ITRE1:

Staff from the ITRE Transportation Model Team notes that the Triangle Regional Model (TRM) uses four trip purposes during the trip generation and trip distribution steps: Home Based Work, Home Based Shopping, Home Based Other and Non Home Based, but that the Home Based Shopping trip purpose is collapsed into the Home Based Other trip purpose for the mode split step. In addition to stratification by various trip purposes, the TRM also stratifies Home Based Work, Home Based Shopping, and Home Base Other trips based on whether the household is in an area designated as either urban or non-urban. Non Home Based trips are not stratified in this manner as these trips do not originate at the household. This stratification is applied during the trip generation and trip distribution steps. Prior to mode choice, all stratifications are collapsed such that 3 trip purposes are carried forward in the process: Home Based Work, Home Based Other (which includes shopping), and Non Home Based.

Response:

This final conformity report includes the noted clarification. For further information, contact Leta Huntsinger at ITRE.

United States Environmental Protection Agency (USEPA)

To: Eddie Dancausse
From: Matt Laurita
Date: February 22, 2005
Subj: EPA Comments on the Triangle Area Conformity Determination Report

Eddie,
Below are my comments:

USEPA1:

1. Page 2: In the section titled “The Decision Process,” the paragraph that begins “Conformity determinations must also be made...” should include a the conformity trigger of 18 months after the approval of a SIP containing motor vehicle emissions budgets or determination of adequacy of those budgets.

Response: The recommended language has been added.

USEPA2:

2. Page 3 (and again on Pages 12 and 25): The discussion on the redesignation for 1-hour ozone and carbon monoxide should indicate that the areas were redesignated to attainment with a maintenance plan. ‘Maintenance’ is not a designation.

Response: The recommended change has been made.

USEPA3:

3. Page 11: The reference to 40 CFR Part 93.390 should be 40 CFR 51.390. Also, the following reference to 40 CFR Part 416 is unknown, as there is no 40 CFR Part 416.

Response: The recommended changes have been made.

USEPA4:

4. Page 13, Table 14: The proposed 2015 budgets are shown as being equal to the existing 2005 budgets. This is inconsistent with the values shown in Tables 2, 3, 18, and 19. Please correct this.

Response: Table 14 has been reworked and additional text added to clarify the nature of CO budgets for Durham and Wake Counties.

USEPA5:

5. Page 20, Section 4.0.1: The 1-hour ozone standard is still an applicable standard until it is revoked for an area (no sooner than June 15, 2005). Therefore, it should not be referred to as “former.”

Response: The recommended change has been made.

USEPA6:

6. Page 20, Section 4.0.3: It should be noted that the 2002 baseline emissions are only required in areas without budgets, similar to the first interim year requirement.

Response: Section 4.0.3 has been rewritten based on this comment and a more extensive comment from FHWA (see comment FHWA11).

USEPA7:

7. Page 20: In the final paragraph, “2010 and 2030” should be “2010 and 2020.”

Response: The recommended language has been added.

USEPA8:

8. Please include a statement that specifically finds the transportation plans and TIPs in conformity for the 8-hour ozone and carbon monoxide standards. The statements of conformity included in the report are too general. The authors may also want to consider revising the title to include the pollutants of concern, as well.

Response: More specific language related to the conformity findings has been added to the concluding section, including a separate finding for each MPO and the rural area, with the title of each finding noting the pollutants of concern.

USEPA9:

9. The report should include the VMT and speeds used in the modeling for all counties (perhaps as an appendix) and show the calculations leading to the actual emissions (for example, Appendix F of the Greensboro 2030 LRTP Conformity Determination).

Response: Appendix L has been added which includes the VMT and speeds for all counties.

USEPA10:

10. Appendix A: The 2005 CO budgets used for comparison are from a SIP that was never approved by EPA. The Federal Register notice in the appendix is to propose approval of a maintenance plan revision, but that approval was never finalized. Therefore, emission comparisons should be made to the 2005 budgets established by the maintenance plan approved on Sept 18, 1995 (60 FR 39258). Please consult with NCDENR to determine the county-level budgets based on the motor vehicle emission budgets in that maintenance plan.

Overall, it is a well-written and organized report.

Response: The report has been changed to clarify the CO budgets.

Federal Highway Administration (FHWA)

FHWA Review and Comments-2/28/05

Triangle Area DRAFT Conformity Determination Report

FHWA1:

General Comments

- Make MOBILE consistent throughout
- Be consistent on how nonattainment is written. I saw it as Non-attainment, non-attainment and nonattainment.

Response: “Mobile6.2” is now used throughout. Non-attainment is now always hyphenated; sometimes it is capitalized if referring specifically to the Triangle Ozone Non-attainment Area.

FHWA2:

Overview, page 1

1. Great job giving some background on transportation conformity and relating the information in laymen’s terms.

2. Paragraph 1, sentence 1

Currently:

Transportation Conformity (“conformity”) is a way to ensure that Federal funding and approval goes to **those** transportation activities that are consistent with air quality goals.

Suggested:

Transportation Conformity (“conformity”) is a way to ensure that Federal funding and approval goes to transportation activities that are consistent with air quality goals.

- Delete the word “those”

3. Paragraph 2, first sentence

I would suggest moving the first sentence to the bottom of the first paragraph.

Therefore, it would read: ... or nitrogen dioxide. There areas are known as “nonattainment areas” or “maintenance areas,” respectively.

The second paragraph would start with: A conformity determination demonstrates...

4. Paragraph 2, last sentence

Currently:

The conformity rule (40 CFR Part 93) requires that a conformity determination must be made by 6/15/05.

Suggested:

The conformity rule (40 CFR Part 93) requires that **FHWA/FTA make the final** conformity determination by 6/15/05.

5. Paragraph 3, sentence 2

Currently:

The projected emissions for the plan and TIP must not exceed the emissions limits (or “budgets”) established by the SIP (or base year emissions, where no SIP has yet been adopted).

Suggested:

The projected emissions for the plan and TIP must not exceed the emissions limits (or “budgets”) established by the SIP (or base year emissions, **in areas where no SIP has approved or found adequate by EPA**).

Overview, page 2,

1. *Paragraph 3*

Currently:

Conformity determinations **must also be** made at the Federal Level by FHWA/FTA.

Suggested:

The final conformity determination **is** made at the Federal level by FHWA/FTA.

Response: All of the recommended language changes listed above as part of comment FHWA2 have been made.

FHWA3:

Executive Summary, page 3

1. **Paragraph 3, sentence 1**

Write out the acronym for USEPA, since this is a new section.

Executive Summary, Page 5

1. Amend the foot note accordingly
a. 2009 – Attainment year

2. May want to add a footnote explaining why 2007 and 2009; and 2015, 2020 and 2030 have the same budgets.

Response: The recommended changes have been made; space limits prevented adding the additional footnote explaining why certain years have the same budgets; the explanation was added in the body of the report.

FHWA4:

Introduction, page 8,

1. *Paragraph 2, sentence 1*

Currently:

The Clean Air Act specifies how areas within the country are designated as either “attainment” or “nonattainment” of an air quality standard, and **provides USEPA the authority** to define the boundaries of nonattainment areas.

Suggested:

The Clean Air Act specifies how areas within the country are designated as either “attainment” or “nonattainment” of an air quality standard, and **authorizes USEPA** to define the boundaries of nonattainment areas.

2. *Paragraph 2, sentence 3*

Currently:

Each state must develop and submit a State Implementation Plan (SIP) that addresses each pollutant for which it **fails to meet** the NAAQS.

Suggested:

Each state must develop and submit a State Implementation Plan (SIP) that addresses each pollutant for which it **violates** the NAAQS.

3. **Paragraph 3, sentence 2**

Currently:

The delineation and implementation of strategies to control emissions from on-road mobile sources is a significant element of the state plan to improve air quality, thereby creating a direct link between transportation and air quality planning activities within a nonattainment area.

Suggested:

The delineation and implementation of strategies to control emissions from on-road mobile sources is a significant element of the state plan to improve air quality, **which links** transportation and air quality planning activities within a nonattainment area.

Introduction, page 9

1. **Paragraph 4, sentence 1**

Currently:

All Federally funded projects in areas designated by the United States Environmental Protection Agency (USEPA) ...

Suggested:

All Federally funded projects **and regional significant projects, regardless of funding**, in areas designated by the United States Environmental Protection Agency (USEPA) ...

Response: All of the recommended language changes have been made.

FHWA5:

2. **Paragraph 4, sentence 4**

Does 23 CFR 134 exist?

Response: The reference has been removed.

FHWA6:

Map, Page 10

1. Label MPOs on the map.

Response: The MPOs have been labeled.

FHWA7:

Page 11

Paragraph 3, 3rd bullet

Currently:

The MPO must make a conformity determination according to the consultation procedures of 40 CFR Part 93.105 and the implementation plan revision required by 40 CFR Part 93.390 (40 CFR Part 416) I do not think that 40 CFR Part 93.390 (40 CFR Part 416) exists???

Suggested:

The MPO must make a conformity determination according to the consultation procedures of 40 CFR Part 93.105.

Add a 6th bullet:

- The Transportation Plan, TIP, or FHWA/FTA project must meet the interim emissions tests where applicable (40 CFR Part 93.119)

Page 12

1. Paragraph 5, sentence 1 [2.1 Emissions Budgets and Baseline Emissions]

Currently:

SIPs for the 8-hour standard have not yet been prepared and adopted.

Suggested:

SIPs for the 8-hour standard have not yet been prepared.

I would suggest leaving off adopted, unless you want to say found adequate or approved by EPA.

Response: All of the recommended language changes have been made.

FHWA8:

2. Paragraph 6, sentence 1 [2.1 Emissions Budgets and Baseline Emissions]

Currently:

Durham and Wake Counties have CO maintenance requirements under an existing SIP; a proposed SIP update has also been prepared and is undergoing review

Comment:

Who is currently reviewing the budgets? USEPA? DENR?

May want to add a sentence that states that EPA has to find the budget adequate before they can be used in a conformity determination; then, based on that, why two budgets are being used for the CO conformity determination.

Response: The section has been changed to clarify the current status and responsibilities associated with the CO SIP and budgets.

FHWA9:

Page 16

1. *Paragraph 5*

Currently:

The TAC must adopt a LRTP of exempt projects (40 CFR 93.126, 127 & 128) that will serve as the LRTP/TIP for the area in the event of a conformity lapse.

Suggested:

In the event of a conformity lapse, the TAC will adopt a LRTP of exempt projects (40 CFR 93.126-128) that will serve as the LRTP/TIP for the area.

Page 17

1. There is a typo. CMAQ is written as CAMQ towards the bottom of the page.

Response: All of the recommended language changes have been made.

FHWA10:

Page 18 [3.9 Mode Choice and Transit Assignment]

1. **Last sentence**

Currently:

The percentage of trips removed was determined from the travel behavior survey, and in no on zone exceeded the percentage of bike/walk trips from the region.

Comments:

This sentence is unclear. It may just mean deleting a word or adding another sentence for clarification.

Response: The sentence was clarified.

FHWA11:

Regional Emissions Budget Test, Page 20

1. Change heading to **Regional Emission Tests**
2. Include a paragraph on interim emissions test [40 CFR 93.119]
3. 2nd paragraph: Should “Table 14” be “Table 15”
4. Section 4.0.3 Emission Comparison Years

Although the information in this section is accurate, it is not written clearly. One suggestion would be to write a paragraph (or two) on the areas with budgets explaining the budget comparison years and justification from the regulations. Then write a separate paragraph on areas without emissions budgets and include justification from the regulation.

For Example:

For *areas with budget under the 1-hour standard* (Durham and Wake Counties and Dutchville Township in Granville County), emissions must be analyzed for years where there is a 1-hour emission budget, the attainment year, the horizon year and intermediate years such that intervals do not exceed 10 years. The attainment year for the Triangle area is 2009. The following years were analyzed to meet the requirements: 2007 (1-hour budget), 2009 (attainment year), 2010 (1-hour budget year), 2012 (1-hour budget year), 2015 (1-hour budget year), 2020 (intermediate year), and 2030 (LRTP horizon year).

Analysis years where there is a budget and no LRTP model runs, do not require additional runs; interpolation was used to derive data for the non-matching years (2007, 2012, 2015). Also, in accordance with 40 CFR 93.118, since there was no budget for the required analysis years 2009, 2020 and 2030, the 2007 budgets were used for 2009 and the 2015 budgets were used for 2020 and 2030.

For *areas without budgets under the 1-hour standard*, emissions must be calculated for a baseline year (2002), an interim year not more than 5 years from the year in which conformity is determined (i.e. within 5 years of 2005), the horizon year (2030 in all cases), and intermediate years such that intervals do not exceed 10 years. In order to meet these conditions, the years 2002 (baseline), 2010, 2020 and 2030 (LRTP horizon) were analyzed.

Response:

The title has been changed. The table number has been corrected. A paragraph on interim emission tests has been added. The suggested re-write of Section 4.0.3 has been incorporated.

FHWA12:

Page 26

1. Paragraph 1

Comment:

It seems that this is a disjointed paragraph. The first sentence is about how emissions in partial counties were calculated. The second sentence is about the requirements for the LRTP. The third sentence is about emission comparison years. The last sentence is about emissions test.

The second sentence seems out of place. Either delete it or add another sentence that explains the relevance to the other sentences.

Response:

The second and third sentences related to the emissions budgets that were discussed earlier in the report were removed.

FHWA13:

Emissions Comparison, page 27

1. Amend the foot note
 - a. 2009 – Attainment year
2. May want to add a footnote explaining why 2007 and 2009; and 2015, 2020 and 2030 have the same budgets.

Response: The 2009 attainment year was added; space limits prevented adding the additional footnote explaining why certain years have the same budgets; the explanation was added in the body of the report.

FHWA14:

Table 3 [page 5] and Table 20 [page 27]

Comment:

For VOC emission budget, why does 2009 have the same budget as 2010? Shouldn't it have the same budget as 2007?

Response: The 2009 budget has been corrected.

FHWA15:

Below are some conformity checklist items that need to be addressed in the conformity report:

3. The report contains a copy of the Adopting Resolution by the Metropolitan Planning Organization (MPO) of the LRTP, and the Conformity Determination for the LRTP.

Make sure that all adopting resolutions and conformity determinations are included as an appendix in the final conformity determination report .

7. The report documents all projects for each of the LRTP's horizon years, including project identification number for reference in the TIP, exempt status, and regional significance, including non-federal projects. Recommendation: Explain the process for non-federal regionally significant project disclosure.

Yes, this is included in Appendix D: Description of Future Transportation Systems

Need to add a section to discuss the process for determining Regional Significant and exempt projects to Section 3, Long Range Transportation Plan, page 13. Provide the following Regional Significance Checklist as part of the information:

Regional significant Checklist

1. **The facility serves regional transportation needs (i.e. facilities that provide access to and from the region or that provide access to major destinations in the region;**
2. **The facility is functionally classified higher than a minor arterial (minor arterials may be regionally significant if their main purpose is to provide access to major facilities in the region);**
3. **The facility is a fixed guideway transit facility; and**
4. **The facility is included in the travel model for the region (in many cases collector streets are modeled and not regionally significant). To be regionally significant a facility should meet one or more criteria in this checklist. 40 CFR Part 93.101**

11. The report documents comments raised verbally or in writing by an interagency consultation partner and how the MPO addressed such concerns; or, the report states that no significant comments were received.

Yes, see Appendix C: Interagency Consultation. Make sure all interagency meeting summaries and all agency comments related to the draft report are included in the final determination report. Specifically the Technical Consultation Meeting on 11/19/04.

12. The report documents the public participation process of the Transportation Plan and conformity analysis including any comments raised verbally or in writing and how the MPO addressed such concerns; or, the report states that no significant comments were received.

Yes, see Section 5: Interagency Consultation and Public Involvement on page 10; Appendix G: Agency Comments of the Draft Report and Interagency Meeting Summaries

See Appendix H: Public Participation Policy-remember to add the missing policies

20. Applicable if Emission Reduction Test was used: The report documents that the “Baseline” scenario includes all the future transportation system resulting from all in place regionally significant highway and transit facilities; all ongoing travel demand management and regionally significant projects that are currently under construction or undergoing right-of-way acquisition, regardless of funding source.

I recommend a paragraph in the conformity report that summarizes the “ Baseline Scenario” for the interim emissions test in the conformity determination report.

21. Applicable if Emission Reduction Test was used. The report documents that the “Action” scenario includes all facilities, services, and activities in the “Baseline” scenario as well as all the future transportation system resulting from the implementation of the proposed Transportation Plan, all expected regionally significant projects and additional projects delineated in 40 CFR 93.119 (g).

I recommend a paragraph in the conformity report that summarizes the “ Action Scenario” for the interim emissions test in the conformity determination report.

22. The report documents that the requirements of 40 CFR 93.122 are met, including but not limited to, explaining how the Vehicle Miles of Travel (VMT) from projects which are not regionally significant have been estimated in accordance with reasonable professional practice, and how reasonable methods were used to estimate VMT for off-model transportation projects.

Please indicate the date the travel model was updated and calibrated.

24. How the time the “conformity analysis begins” has been defined through interagency consultation

On page 14, Section 3.3 Latest Planning Assumptions. The date of 10/1/04 was the date that the conformity analysis began. Add a sentence that this date was defined through interagency consultation.

Response:

The final version of the report will include all the adopting resolutions. The timing of TRM calibration, updating and validation was added to the report; see Section 3.3. Clarification that the timing of the latest planning assumptions and the selection of exempt and regionally significant projects was agreed to through interagency consultation was added in Section 3.3.. A description of how regionally significant and exempt projects were determined has been added, including a regional significance checklist; see Section 3.4. All agency comments are included in this appendix and summaries of all interagency meetings are included in Appendix C. All public participation policies are included in Appendix J. Additional language has been added to the report on the Baseline Scenario for the interim emissions test and on the action scenarios; see beginning of Section 4.

N.C. Department of Environment and Natural Resources Division of Air Quality (DAQ)

DAQ Comments on Triangle Area Conformity Analysis and Determination Report

DAQ1:

Overview, page 1, Transportation Conformity

I would suggest combining the first two paragraphs. The first sentence of the second paragraph really refers back up to the last sentence in the previous paragraph and to me the break does not seem needed.

Response: The wording has been changed; see response to comment FHWA2.

DAQ2:

I would consider changing all date references from MM/DD/YY to Month Date, Year format.

Response: The document has been changed to use Month Date, Year format.

DAQ3:

In the last sentence in the second paragraph, I would consider the following... “The conformity rule requires that a conformity determination must be made by *June 15, 2005 on the entire non-attainment area.*”

Overview, page 2, The Decision Process

Consider, “*The conformity analyses are* made available to the public...”

Overview, page 2, Emissions Budget

Consider the following changes, “These *emissions* limits ~~for~~ *on* motor vehicle emissions sources are called ‘budgets.’”

Executive Summary, page 3

First paragraph, I believe in the last sentence “violation” should be plural.

Second Paragraph (after bullets) consider, “The *respective* FY 2004-2010 TIPs ~~is~~ *are* a subset of ~~the~~ *their* 2030 long-range transportation plans.”

Executive Summary, page 4

“The plans are fiscally constrained: funding sources for roadway and transit projects are identified.” I do not think a colon is the proper punctuation here. Maybe a semi-colon would be a better choice.

Second paragraph after bullets in the last sentence, I would change “had” to the present tense.

Tables 2, 3, and 4, page 5

I would change the table titles to “SIP Budget” instead of “SIP Emissions”.

Also footnote 1. should use 707.2.

3.3 Latest Planning Assumptions, page 14

Consider, “*In addition And* a set of highway and transit projects that was consistent...”

Response: The recommended changes have been made; footnote 1 on page 5 uses a factor of 907.2, which was probably intended by the commenter.

DAQ4:

3.3 Latest Planning Assumptions, page 15

Combine the first two paragraphs.

Last sentence of second paragraph, consider changing use of “were” to “was”.

Third paragraph, last sentence, I again think “was” sounds better than “were”.

Response: The paragraphs were combined; “data” is plural, so the use of “were” was retained.

DAQ5:

4.0.2 Emissions Analysis Source

Last sentence, “...a method *that* has *been* use in prior analyses.”

Response: The phrase was changed to read, “...a method that has been used in prior analyses.”

DAQ5:

4.0.3 Emissions Comparison Years (Ozone)

Second paragraph, intermediate analysis years should be 2010 and 2020, not 2010 and 2030.

Response: Section 4.0.3 has been rewritten; see comment [FHWA11](#).

DAQ6:

Table 16. Percentage of Vehicles Subject to I&M Programs

Some of these values are incorrect; please refer to the latest I&M fractions provided by DAQ. Also we are saying that in 2002 some areas (Person, Johnston, etc) are subject to I&M programs and yet we are not using these percentages in the analysis. I am not sure how we should address this in the table. I agree with not applying an I&M program in counties in the analysis until the programs are in place, but showing the table as such, makes the issue a bit confusing.

Response: The I/M fractions in Table 16 have been revised based on guidance from DAQ to NCDOT.

DAQ7:

Tables 18, 19, 20

Again, I suggest that “SIP Emissions” be changed to “SIP Budget”.

In Table 20, the incorrect Budget for VOC for 2009 was inserted. The budget should be 499 not 417.

Again, the footnote 1 should use the conversion value 907.2.

Response: The recommended changes and corrections have been made.

DAQ8:

Appendix F: Mobile6 Emission Factors

In the copy I downloaded, there were no factors listed for 2010 except for Durham and Wake County. Please make sure that all factors are included.

I would also find the organization easier to follow if the Emission Factors were arranged by county by year rather than by year and then by county.

Also, in these tables you have a “County Total”. This number does not have any meaning and should be removed from all of the tables.

Format for 2015 EF for Wake County is different. Please reformat spreadsheet to remove grid lines.

Response: Emission factors for all areas for 2010 have been added. County total lines have been removed. Gridlines have been removed from the 2015 table for Wake County. For this report, the order of the tables was left consistent with the draft report; a different format can be used in subsequent conformity reports.

DAQ9:

Appendix H: Off-Model Analysis

These pages are confusing. I would suggest showing all of the analysis years on the left for which off-model calculations are being performed. (Wake's was especially confusing with dates on left for VOC and NOx and different dates on right for CO. Either use one table with all dates on left or separate CO and NOx/VOC tables) I say this because in the summary sheets you are showing off-model reductions for 2005 CO (for example) without showing in the worksheets the calculations. I realize this will lengthen the worksheets, but I think it will make it much more clear.

Response: The tables in this and other appendices are taken directly from the spreadsheets used by NCDOT; to guard against any transcription or recalculation errors, the responders would prefer not to reformat this material at this time. The MPOs would welcome working with NCDENR DAQ, NCDOT and the other interagency partners to improve the clarity of these spreadsheets for future conformity reports and to make them consistent across all areas in North Carolina.

DAQ10:

Appendix I: Emission Analysis Results by County

For areas without a SIP budget, I would consider changing the term "Budget Amount" to "Base Year Emissions" or something similar.

Response: For areas without a SIP budget, the term "Budget Amount" has been changed to "Base Year Emissions."

DAQ11:

Appendix ??: Emissions/VMT Calculations

Durham County

- I&M fractions for 2007 and later should be 91%, not 93%. Please update sheets and related tables in report.
- Double check naming of Emission Worksheets. 12_AM for NOx is named 10_AM (Same for PM and OP).
- **IMPORTANT**... 12_OP for NOx uses 2010 OP VMT. Entire worksheet needs to be redone. Value with 91% I&M fraction and correct VMT is 3,305.43 vs. 3178.21.
- 15_OP NOx analysis is named 10_OP.
- To be more clear, CO worksheets for 2005 should be renamed "Year of Analysis= 05_PM" etc like other sheets.
- ITS worksheet needs to be more complete and contain all years for all pollutants.

Modeled Franklin County

- VMT sheets are mislabeled: 2015 for 2020 and 2025 for 2030.
- Worksheet other data has I&M fraction dates wrong (again 2015 for 2020 and 2025 for 2030).

- **IMPORTANT**... Composite emission rates for Other P-A and Minor Arterial are zeroed out for all years. This needs to be corrected and all related sheets and report areas updated.
- “Worksheet Comparison” doesn’t include rural portions.

Rural Franklin County

- I would not include the worksheets for 2005 NOx and VOC calculations as it is not used.

Chatham County

- **IMPORTANT**... Composite Emission rates for Other P-A and Minor Arterials are zeroed out. Please update all sheets and related areas in report.

Modeled Johnston County

- Do not include the worksheet comparison sheet that does not include rural portion.
- **IMPORTANT**... Composite EF for Other P-A and Minor Arterials are zeroed out. Please update sheets and related areas in the report.

Rural Johnston County

- Remove 2005 worksheets.

Rural Person County

- Remove 2005 worksheets.

Rural Granville County

- Remove 2005 worksheets.
- Rural VMT sheets say Davidson County for later years.
- Emission Factors are incorrect. DAQ supplied 79% for 2007 and later. 83% was used in the worksheets. Please correct and update report.

Dutchfield Township

- Emission Factors for 2007-2030 are wrong. 79% should be used. Correct worksheets and update report.

Wake County

- 2007-2030 I&M fraction should be 95% not 96%. Please correct worksheets and update report.
- On ITS worksheets break NOx and VOC tables from CO or list all budget years.
- ITS off model needs to show all calculations for all years.

Orange County

- No comments.

Response: These comments refer to spreadsheets embedded in the NCDOT calculations leading to the emissions comparisons shown in Appendix I. NCDOT has re-run the analysis with corrected I/M fractions and emission factors. NCDOT has also edited the labeling within these worksheets.

Tim Smelzer (TS)

-----Original Message-----

From: clean aqnow [mailto:cleanaqnow@yahoo.com]

Sent: Monday, February 28, 2005 8:22 AM

To: comments@dchcmpo.org; Johnson, Ed; johnc@tjcog.org; alex.mcneil@fta.dot.gov; edward.dancausse@fhwa.dot.gov

Cc: michaelr@edf.org; gthomson@selcnc.org

Subject: Comments on the Draft Triangle Air Quality Conformity Determination and Analysis Report

I am submitting comments on the “Draft Triangle Air Quality Conformity Analysis and Determination. Please enter these comments into public record.

As you know, the basic purpose of the conformity determination is to ensure that transportation plans, programs, and projects conform to the State Implementation Plans’ purpose of eliminating violations of the National Ambient Air Quality Standards (NAAQS) for ozone and carbon monoxide and achieving attainment of the standards. More specifically, conformity determination must show that a transportation plan, program or project will not cause or contribute to any violations of the NAAQS for these pollutants or delay timely attainment of standards.

Unfortunately, the Triangle conformity analysis contains substantial deficiencies, and we urge the CAMPO and DCHC Transportation Advisory Committees to withhold making conformity determinations until conformity analysis issues are resolved. We also urge the NC Division of Air Quality, EPA, and USDOT to withhold approval until our questions are answered and staff responds to our requests.

Comment TS1:

Model Concerns

We continue to be concerned with the Triangle Regional Model (TRM). While we understand TTA’s recent efforts to improve the model, we are concerned that the current model’s shortcomings threaten the validity of the LRTP and subsequently the air quality conformity analysis.

Response:

It is important to distinguish between the project-level modeling for TTA’s regional rail system and the region-wide modeling for the long range transportation plans in the Triangle Ozone Non-Attainment Area. The review of the Triangle Regional Model undertaken by the Federal Transit Administration is being conducted for the purpose of obtaining a New Starts rating for the Regional Rail project. The review is project specific and does not reflect on the development of Long Range Transportation Plans or on the Air Quality Analysis conducted as part of the plan approval process. It is anticipated that this review will have the added benefit of providing improvements to overall transit component modeling.

Comment TS2:

For example, the model underestimates traffic on secondary roads. Given the growth forecasts in the region and the thin margins between the modeled emissions and the mobile source budgets in Wake County, we are concerned this indicates underestimation of current and future emissions.

Response:

The model does not underestimate traffic on secondary roads. What the commenter may be referring to is a tendency in the TRM to under assign traffic to parallel roads in close proximity to principal arterial freeways under certain conditions (with the related result of over-assigning traffic to the freeways under these conditions). This effect tends to overstate freeway congestion and quite likely leads to higher emissions estimates than if the model assignment was more balanced, thus leading to a rather conservative (high) estimate of overall emissions.

Also, as is common to the state-of-practice traffic assignment algorithms used in the TRM, the model assigns local traffic on collector streets to several possible alternative collectors – the total trips taken by functional class on these secondary roads are correct, but any given street may show more or less traffic than counted in the base year. While this limits the applicability of the regional model to small area analysis, it does not invalidate the overall summary statistics. Therefore, the aggregate vehicle miles and speeds by facility type as generated by the Triangle Regional Model for emissions factor modeling are quite accurate, and where modelled traffic assignments differ from baseline counts, they tend to overstate levels of congestion that in turn lead to higher emissions estimates. In short, future improvements of the model are likely to reduce future forecasts of emissions rather than increase them.

Comment TS3:

Specific concerns about this Draft Triangle Air Quality Conformity Analysis and Determination are: Network Coding – networks in urban areas are coded with rural designation with high speed in LG1. LG2 and LG3 are inconsistent with LG1.

Response:

These codes are data fields available for use in the Tranplan modeling system. As applied in the Triangle Regional Model, LG3 indicates the Federal Functional Class. LG2 was designated for TrueSpeed post processing, but the TRM speed is link based. Each of those attributes are only used to provide categorized summaries of model results for submission to Air Quality analysis and do not otherwise participate in the operation of the model (The issue of what Classification is used is addressed below). The LG3 coding was performed by NCDOT after the model runs were complete.

LG1 is the parameter for each highway link that summarizes that link's operating characteristics with respect to capacity and speed. To the best of our knowledge, no link is coded to overstate the speed at which traffic is permitted to flow (the links are coded to the posted speed limit, and were reviewed in 2004 as part of the development of the current model). The urban and rural distinction in LG1 is used in two ways. First, roads coded as "rural", but otherwise equivalent to an "urban" road with the same set of speed and lane characteristics, have higher vehicle capacities and show a slower degradation of speed with additional volume – this is intended to reflect the lower incidence of turning traffic and driveway access in the rural areas, and the higher incidence of stop signs and traffic signals in the urban areas. One of the limitations of the Tranplan system is that a maximum of 99 codes are available to cover all combinations of speed, lanes and other relevant highway link attributes. Consequently, where unusual situations of low turning movement traffic or low signal/stop sign density exist in urban areas, an LG1 code from the "rural" series was sometimes used to provide a more accurate characterization of the link with respect to its actual speed and other operational characteristics.

Comment TS4:

Functional class designation are based on 1990 Census not 2000 Census. Functional class designation should reflect 2000 UZA.

Response:

The Federal Functional Class designations are maintained by NCDOT in accordance with Federal regulations. The emissions analysis assigned road segments to the functional classes that had been certified at the time of this Air Quality Conformity Determination. The Functional Classifications are now currently making their way through their required decennial review, and classifications based on the 2000 UZA will be used in the next LRTP Air Quality Conformity Designation.

Comment TS5:

Mode splits numbers for the base and future years highlight flaws in the model. Please publish model split results. We would like to request the average weekday ridership numbers for TTA, DATA, CAT, and CHT for 2002, 2008, 2010, 2020, and 2030. Model travel times and bus speeds are incorrect and illogical.

Response:

Modeling issues associated with the transit component of the model are being addressed by the Triangle Regional Model Team partners. Since the model slightly underestimates overall transit ridership (based on the 2002 baseline) and underestimates ridership on the two most extensive transit systems in the region, CHT and DATA, any improvement in the transit modeling is likely to lower the future estimates of mobile source emissions.

Transit mode shares have been published in the DCHC 2030 Long Range Transportation Plan (Figures 27-29). Listed below is a table of average weekday unlinked trips by Company for 2002, 2008, 2010, 2020 and 2030, along with the ridership counts used for validation in 2002.

Company	Observed Trips 2002	Modeled Trips				
		2002	2008	2010	2020	2030
TTA - Bus	2,713	6,536	1,476	2,150	4,578	4,620
CAT	11,979	13,026	15,074	32,051	33,796	40,700
CHT	20,723	15,782	26,088	31,984	41,126	42,064
DATA	15,756	12,932	12,860	16,116	32,757	35,216
Wolfline	NA	NA	3,067	1,312	1,194	5,660
Duke	NA	NA	18,239	18,432	17,949	18,632
NCCU	NA	NA	347	220	188	146
Orange Public Transit	NA	NA	NA	NA	353	422
Cary - Bus	NA	NA	NA	NA	NA	6,982
Regional Rail	NA	NA	3,343	3,490	10,471	8,873
Total Transit	51,171	48,276	80,494	105,755	142,412	163,315

Comment TS6:

Traffic analysis zones are based on the 1990 structure and land, therefore do not represent nor capture the growth and current land use. Traffic analysis zones based on the 2000 Census were available and should have been used.

Response:

The date of the Traffic Analysis Zone structure is unrelated to the date of the socioeconomic data that was used in the model. The traffic analysis zones are simply small geographic areas used as a means of simplifying and summarizing the traffic that enters and leaves those areas so that the model's traffic assignment is computationally tractable. So while the Tranplan model platform in the Triangle does require use of the 1990 tract and block group based zone structure, the data that was collected was based on a comprehensive survey of land use as of 2002, including use of the 2000 Census Results. All socio-economic data and planning assumptions were updated to base conditions in 2002 using a Census 2000 based zone structure, and future forecasts were comprehensively revised to reflect planning assumptions and regional growth forecasts in effect in mid-2004. The resulting data and forecasts were then carefully mapped into the 1990 geography zone structure for use in the Tranplan model.

Comment TS7:

Air Quality Analysis Concerns

Appendix X – Off model analysis appears to be exaggerated. We would like to see detailed analysis methodology and assumptions. Are these off model factors reflected in LRTP investments? If so, furnish documentation.

Response:

Greater detail on the off-model analysis has been added to Appendix H. All analysis was conducted in accordance with the FHWA Region IV's *Off-Model Air Quality Analysis: A Compendium of Practice*. Note that this conformity analysis, to be conservative, only used off-model analysis for one long-established program: the freeway incident management system. Other programs that are newer to the region, such as the Triangle Best Workplaces for Commuters program and related Transportation Demand Management activities, are also suitable for off-model analysis and, if included, would be expected to lead to further emissions reductions. The freeway incident management program, consisting of motorist assistance patrols and freeway camera monitoring, currently exists and is funded by NCDOT. The LRTP fiscal constraint analysis assumes continued funding of this program in the same manner.

Comment TS8:

Appendix G – Please furnish methodology used for the VMT Normalization. Function class comments apply.

Response: Appendix G has been expanded to include more detail on the normalization procedure.

Comment TS9:

Inconsistencies between LRTP projects and TIP projects. For example I-3306 project's scope and limits in the 2004-2010 differs from scope and limits in the 2030 LRTP.

Response:

I-3306 is the TIP project involving the I-40 widening in Durham and Orange Counties, part of which is underway and part of which is "post-year," meaning it is not funded in the 2004-2010 TIP. The DCHC MPO 2030 LRTP includes all of the funded portion of TIP project I-3306.

Comment TS10:

Public Involvement

No mechanism for feedback loop and consideration of public comments.

Response:

The public involvement activities for the DCHC 2030 LRTP met the DCHC MPO public involvement policies and federal requirements. The particular public involvement process for the "Air Quality Conformity Determination and Analysis Report" included: 1) 30-day public comment period from 1/28/05 to 2/28/05; public hearing on 2/9/05; TAC receives public and agency comments at 3/9/05 TAC meeting – one month before the scheduled vote on the Report; and, staff develops responses to public and agency comments, and present to the TAC at 4/13/05 TAC meeting.

Similarly, the public involvement activities for the Capital Area MPO 2030 LRTP met the CAMPO public involvement policies and federal requirements. The particular public involvement process for the "Air Quality Conformity Determination and Analysis Report" included: 1) a public comment period from 1/25/05 through 3/11/05; with a public hearing on 2/16/05; in which the TAC receives public and agency comments at the 2/16/05 TAC meeting and staff develops responses to public and agency comments, and presents to the TAC at 3/16/05 TAC meeting.

Comment TS10:

The 2030 LRTP approved by both the TAC is significantly different from draft commented on by the public. No explanation provided by staff. It appears incomplete plan (work in progress) was released for public comments – this violates the intent of ISTEA and TEA21.

Response:

The final LRTPs endorsed by the TACs (subject to air quality conformity findings) in September 2004 are substantially similar to the drafts released for initial public comment and are also similar to the previous 2025 LRTPs adopted by the TACs over the previous couple of years. The 2030 LRTPs are minor updates to the 2025 LRTPs, undertaken to comply with the deadlines of the new ozone non-attainment designation.

Based on public, agency and TAC comments received before and during the public comment period on the draft plans, the MPOs made changes to the draft 2030 LRTPs to produce the versions endorsed by the TACs in September 2004. These changes included:

- Cost and revenue information was updated.
- Several projects were moved to postyear status in order to meet fiscal constraint requirements.
- The implementation year of some bus transit improvements was delayed to meet fiscal constraint requirements.
- Fixed guideway project descriptions and costs were modified to reflect recent TTA planning changes.

Comment TS11:

Public comment period is inconsistency the Public Involvement period. Public comment period should start on the day Notices appear in newspapers. We look forward to working with you and other partners to improve transportation planning and decision making in the region. Conformity determinations help protect health, particularly the health of children who, as a group, are especially sensitive to air pollution from transportation. TAC is entrusted to make conformity determinations. The TAC is also exposed to litigation associated with conformity determinations. Our organization will pursue legal options if these significant substantive deficiencies are not addressed.

Sincerely,

Tim Smelzer

Response:

The DCHC MPO public involvement process for the “Air Quality Conformity Determination and Analysis Report” consists of the following events:

- 1/25/05 – MPO published “Air Quality Conformity Determination and Analysis Report” on Web site and announces public comment period.
- 1/28/05 – MPO sends copy of Report to area libraries.
- 1/28/05 – Public comment period formally begins.
- 2/4/05 – Durham Herald-Sun publishes Public Notice announcing public comment period and availability of Report.
- 2/5/05 – News and Observer publishes Public Notice.
- 2/9/05 – TAC conducts public hearing on Report.
- 2/28/05 – Public comment period closes.
- 3/9/05 – TAC receives compilation of public comments.
- 4/13/05 – TAC approves Report and forwards to federal agencies for review.

The DCHC MPO posted the Report and public comment period information on the MPO Web site in advance of the formal public comment period, and the MPO accepted all public, agency and local government comments through the March 9, 2005 TAC meeting.

N.C. Capital Area Metropolitan Planning Organization

RESOLUTION ADOPTING THE FY 2006-2012 CAPITAL AREA MPO METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM (MTIP)

A motion was made by Mayor Meeker and seconded by Mayor Byrne for adoption of the following resolution and upon being put to a vote was duly adopted.

WHEREAS, the Transportation Advisory Committee has found that the Metropolitan Planning Organization is conducting transportation planning in a continuous, cooperative, and comprehensive manner in accordance with 23 U.S.C. 134 and 49 U.S.C. 1607;

WHEREAS, the Transportation Advisory Committee has found that the Transportation Improvement Program conforms to the purpose of the North Carolina State Implementation Plan for maintaining the National Ambient Air Quality Standards in accordance with 40 CFR 51 & 93;

WHEREAS, the Transportation Advisory Committee has found the Transportation Improvement Program to be in full compliance with Title VI of the Civil Rights Act of 1964 and the Title VI Assurance executed by each State under 23 U.S.C. 324 and 29 U.S.C. 794;

WHEREAS, the Transportation Advisory Committee has considered how the Transportation Improvement Program will affect the involvement of Disadvantaged Business Enterprises in the FHWA and the FTA funded project (Sec. 105(f), Pub. L. 97-424, 96 Stat. 2100, 49 CFR part 23);

WHEREAS, the Transportation Advisory Committee has considered how the Transportation Improvement Program will affect the elderly and the disabled per the provision of the Americans With Disabilities Act of 1990 (Pub. L. 101-336, 104 Stat. 327, as amended) and the U.S. DOT implementing regulations;

WHEREAS, the CAPITAL AREA MPO FY 2006-12 Metropolitan Transportation Improvement Program (MTIP) is a subset of the currently conforming 2030 Long Range Transportation Plan;

WHEREAS, the Transportation Plan has a planning horizon of 25 years, and meets all the requirements for an adequate Transportation Plan,

WHEREAS, the Transportation Advisory Committee has provided for a minimum 30-day public comment period for the Metropolitan Transportation Improvement Program consistent with the MPO TIP Public Involvement Policy;

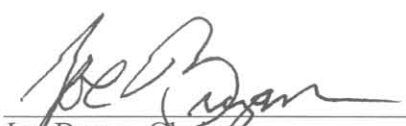
WHEREAS, the Transportation Advisory Committee has solicited public and private transportation provider comment;

N.C. Capital Area
Metropolitan Planning Organization

RESOLUTION ADOPTING THE FY 2006-2012 CAPITAL AREA MPO
METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM (MTIP)
(CONTINUED)

WHEREAS, the Metropolitan Transportation Improvement Program, for years one and two, will serve as the project selection document for transportation projects within the CAPITAL AREA MPO, and the NCDOT may move projects and phases of projects without additional programming or project selection approval by the MPO within that three-year period, providing that air quality conformity and financial constraint criteria are still met;

NOW THEREFORE, be it resolved that the CAPITAL AREA MPO Transportation Advisory Committee (TAC) adopts the FY 2006-2012 Metropolitan Transportation Improvement Program dated 21 September, 2005 for the NC Capital Area Metropolitan Planning Organization. Signed this 21st day of September, 2005



Joe Bryan, Chair
Transportation Advisory Committee



Ed Johnson, Capital Area MPO Director
Transportation Advisory Committee Clerk

County of Wake

State of North Carolina

I, SHAE SATTERWHITE Notary Public for said County and State, do hereby certify that JOE BRYAN personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 23rd day of SEPTEMBER, 20 05.





Notary Public

My commission expires April 19, 2008.

CAPITAL AREA METROPOLITAN PLANNING ORGANIZATION
RESOLUTION FINDING THE CAPITAL AREA
METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM
FOR FY 2006 - 2012 IN CONFORMITY WITH
THE NORTH CAROLINA STATE IMPLEMENTATION PLAN

A motion was made by Mayor Meeker and seconded by Mayor Byrne for adoption of the following resolution and upon being put to a vote was duly adopted.

WHEREAS, the Transportation Advisory Committee is the duly recognized transportation decision making body for the 3-C transportation planning process of the Capital Area Metropolitan Planning Organization; and

WHEREAS, the United States Environmental Protection Agency designated Wake, Johnston, Franklin, Person, Granville, Durham and Orange Counties and portions of Chatham County as non-attainment for ozone under the 8-hour standard on June 15, 2004 and re-designated Wake and Durham Counties as attainment with a maintenance plan for carbon monoxide on September 18, 1995; and

WHEREAS, the United States Department of Transportation found that the Capital Area MPO 2030 LRTP conforms to the intent of the North Carolina State Implementation Plan on June 15, 2005; and

WHEREAS, that conformity determination used the latest planning assumptions approved by the Capital Area Metropolitan Planning Organization; and

WHEREAS, that conformity determination used the latest emissions model approved by the United States Environmental Protection Agency; and

WHEREAS, there are no transportation control measures listed in North Carolina's State Implementation Plan; and

WHEREAS, that conformity determination was made according to the established interagency consultation procedures for North Carolina; and

WHEREAS, the programs and projects included in the Capital Area MPO Long Range Transportation Plan are consistent with the North Carolina State Implementation Plan's emissions budgets for Wake County based on an emissions analysis dated June 15, 2005; and

WHEREAS, the programs and projects included in the Capital Area MPO Metropolitan Transportation Improvement Program for FY 2006-2012 are financially constrained in accordance with State and Federal law; and


CAPITAL AREA METROPOLITAN PLANNING ORGANIZATION

RESOLUTION FINDING THE CAPITAL AREA
METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM
FOR FY 2006 - 2012 IN CONFORMITY WITH
THE NORTH CAROLINA STATE IMPLEMENTATION PLAN
(CONTINUED)

WHEREAS, the programs and projects included in the Capital Area MPO Metropolitan Transportation Improvement Program for FY 2006-2012 are a subset of the conforming 2030 Long Range Transportation Plan, and

WHEREAS, the Transportation Advisory Committee first adopted the Capital Area MPO 2006-2012 Metropolitan Transportation Improvement Program on 21 September 2005.

NOW, THEREFORE BE IT RESOLVED that the Capital Area MPO Metropolitan Transportation Improvement Program for FY 2006-2012 conforms to the intent of the North Carolina State Implementation Plan in accordance with 40 CFR Part 93 , Signed this 21st day of September, 2005



Joe Bryan, Chair
Transportation Advisory Committee



Ed Johnson, Capital Area MPO Director
Transportation Advisory Committee Clerk

County of Wake

State of North Carolina

I, SHAE SATTERWHITE Notary Public for said County and State, do hereby certify that JOE BRYAN personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 23rd day of SEPTEMBER, 2005.





Notary Public