

9. Financial Plan

Executive Summary/Key Points

- The financial plan chapter provides a comparison of existing funding streams with projected needs by examining
 - the various funding sources for transportation,
 - a review of the historical trends for funding in the urban area;
 - a summary of the federal and State funds in the draft Fiscal Year 2016-2025 State Transportation Improvement Program (STIP); and the
 - urban area's projected transportation revenues through the 2040 horizon year.
- The overall projected revenues for street and highway projects in the Winston-Salem Urban Area will meet the estimated cost of all of the projects planned.

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9.1 Introduction

When the Intermodal Surface Transportation Efficiency Act (ISTEA) was enacted by Congress in 1991, one of the primary provisions of that original legislation was that the long range transportation plan (LRTP) for an urbanized area must be financially constrained. This meant that a financial plan had to be developed as a part of the LRTP. As subsequent transportation legislation (TEA-21, SAFETEA-LU, and the current MAP-21) became enacted, the financial plan provisions in the legislation have remained fairly consistent. Only the plan's formal name has changed from LRTP to the Metropolitan Transportation Plan or MTP (Plan).

The financial plan is basically a comparison of existing funding streams with projected needs. The statutory language specifically requires that the financial plan indicate the resources from public and private sources that are reasonably expected to be made available to carry out the Plan. The federal law also requires that an urban area's financial plan will:

- Demonstrate how the State Transportation Improvement Program (STIP) can be implemented.
- Identify any innovative financing techniques to provide funds for the projects, programs and strategies in the long range transportation plan.
- Identify other transportation projects that would be implemented if additional funds were available.

The federal and state lawmakers who represent the Winston-Salem Urban Area are continuing to face a serious challenge to find sufficient funding to meet our urban area's ever growing transportation needs. Population growth, greater amounts of individual travel, and increases in economic activity and freight shipments are deteriorating the transportation infrastructure, causing congestion and increasing the overall burden on the surface transportation network. Also, the cost of building and maintaining this network has continued to climb in recent years.

At the same time, North Carolina has less money available to spend on transportation. Gas taxes – a staple of transportation funding – have declined in their purchasing power, are less capable of filling the funding need, and have increasingly become politically difficult to increase. Other funding sources, like North Carolina's general funds, are being squeezed by major items like education.

As a result of these financial constraints, the focus of the Winston-Salem Urban Area 2040 Transportation Plan update and the financial plan components has been to significantly reduce the number of major transportation projects that can be objectively accomplished by the 2040 horizon year, and concentrate on making other lower cost type improvements such as intersection modifications, improving the overall traffic signal system, building numerous greenways and sidewalks, modifying existing streets for bicycle accommodations and providing some additional transit services.

In this section, the financial plan for the Plan is presented. The financial plan contains several important sections including, the various funding sources for transportation, a review of the historical trends for funding in the urban area, a summary of the federal and State funds in the draft Fiscal Year 2016-2025 STIP, and the urban area's projected transportation revenues through the 2040 horizon year.

9.2 Streets and Highways

Street and Highway Funding Revenue Sources

The North Carolina Department of Transportation (NCDOT) is responsible for the funding and implementation of thousands of street and highway projects every year in North Carolina. A variety of federal, State, and, local funds are used to plan, design, construct and maintain these projects. Funding for most of the street and highway projects in the Winston-Salem Urban Area come from the federal government or the State of North Carolina. However, there is a growing shift of the financial burden being placed at the local level as federal and State resources continue to face funding shortfalls. Below is a brief description of each of the major funding categories:

Federal Funds

Each year, highway users pay billions of dollars in highway excise taxes, which end up in the federal Highway Trust Fund. Federal legislation generally requires that funds paid into the Highway Trust Fund be returned to the States for various highway programs. There are four (4) primary categories of federal funds which are usually provided for street and highway purposes in the Winston-Salem urban area. The categories include: Surface Transportation Program/Direct Attributable (STP/STP-DA), National Highway Performance Program and Interstate Maintenance (NHP and NHPIM), Highway Safety Improvement Program (HSIP), and Congestion Mitigation and Air Quality (CMAQ).

State Funds

The State of North Carolina has been funding street and highway projects since 1921, which is when the North Carolina General Assembly first imposed the gasoline tax of .01 cents per gallon on all motor vehicle fuels sold or distributed in the state. The Highway Fund, along with the Highway Trust Fund and Powell Bill Funds are the three primary revenue sources for street and highway purposes in the Winston-Salem urban area.

Local Funding

Municipalities often use local taxes or bonds to build and maintain their streets and highways. The City of Winston-Salem in 2014 and other municipalities like the Town of Kernersville have passed bond referendums to help build needed streets, widen roads, improve intersections and other improvements like install traffic signals, signs, pavement markings and traffic calming facilities.

Occasionally, street and highway facilities in the Winston-Salem urban area are constructed by the private sector, usually as a condition of development. In some locations, portions of planned streets and highways on the Comprehensive Transportation Plan (formerly the Thoroughfare Plan), Collector Street Plan, or small area plans are built. Other minor road widening, turn lanes, sidewalks, greenways and greenway easements, bus stops and shelters are built to serve the development site as well as the overall needs of the general public.

Historical Trends

Until recently, NCDOT's historical records on revenues for street and highway projects for the years 1986 through 2014 have been on a county by county basis. Thus, the calculated totals below for

construction and maintenance through the years have been only for Winston-Salem/Forsyth County and has not included the entire urban area for the MPO, which has expanded into parts of Davidson, Davie and Stokes Counties in the 2000 United States Census. Also, the figures do not include the contributions of the City of Winston-Salem, the Town of Kernersville and any of the other municipalities within the MPO.

Most of the funding for street and highway projects in Winston-Salem/Forsyth County has been at a very slow pace. Through the STIP, the City/County has seen the amount of funding (both federal and State) grow by only four (4) percent per year for construction, and about four (4) percent per year for maintenance. During this period, Winston-Salem/Forsyth County has averaged only about \$35 million per year for construction and only \$11 million per year for maintenance, for a total of only \$46 million per year. In more recent years, from 2006 through 2014, the figures have averaged over \$60 million spent on construction and maintenance. These calculations are useful in estimating a realistic minimum of revenues to develop long-range projections from for Winston-Salem/Forsyth County and the entire MPO.

Review of the Fiscal Year 2016-2025 STIP

In June 2015, the North Carolina Board of Transportation (NCBOT) adopted the Fiscal Year 2016-2025 STIP which contains the “committed program” of street and highway projects from Fiscal Years 2016 through 2020, and the “developmental program” of projects from Fiscal Years 2021 through 2025. With the new STIP, NCDOT has been able to calculate the amount of federal and State revenues for the entire MPO, including the areas outside of Winston-Salem/Forsyth County.

Street and Highway Construction

In **Table 9.1**, the STIP for the Winston-Salem Urban Area MPO shows that there will be at least \$484.06 million in federal and State funds to build new major streets and highways, widen existing facilities and make other improvements to increase the capacity and function of the street and highway network in the urban area. The calculations come from all of the street and highway projects assumed to be in place by the 2021, 2030 and 2040 horizon years.

Table 9.1
Winston-Salem Urban Area Metropolitan Planning Organization
2040 Transportation Plan
2016-2025 State Transportation Improvement Program
Street and Highway Revenues (Construction Only, not Maintenance)

	STIP Funding Sources (\$000)							STIP Funding Sources Total (\$000)
	HP or NHP	STP or STP-DA	HSIP	CMAQ or Federal Aid	State	Highway Trust Fund	NFA	
Grand Totals (in \$000)	\$277,258	\$14,698	\$0	\$1,494	\$32,033	\$159,686	\$0	\$484,059
STIP Annual Average (in \$000)	\$27,726	\$1,470	\$0	\$149	\$3,203	\$15,969	\$0	\$48,516
Federal Programs Total (in \$000)								\$292,340
Annual Federal Average (in \$000)								\$29,234
State Programs Total (in \$000)								\$191,719
Annual State Average (in \$000)								\$19,172

This averages to approximately \$48.52 million per year. Of this amount, the federal/State split in funding is mostly on the federal side with federal resources providing about \$29.34 million per year, and the State providing another \$19.18 million per year. Most of the Federal funding will come from the Federal National Highway Performance Program (NHP) and Surface Transportation Program (STP), averaging about \$29.20 million per year.

Street and Highway Maintenance

Currently, another \$12.5 million of federal and State funds (not including Powell Bill funds) are spent annually for maintenance of the system, including pavement rehabilitation and resurfacing, replacing bridges, safety improvements, railroad crossing improvements, etc. Most of these maintenance funds come from the federal government.

Funding Assumptions

Based on the history of the financing of streets and highways, and the analysis of existing financial resources available to the NCDOT and the Winston-Salem urban area from the 2016-2015 MTIP, the following very conservative general assumptions were made to guide the development of revenue projections through the year 2040:

- As the nation's fleet of personal vehicles becomes more energy efficient, significantly less revenue will come from gasoline taxes and automotive related sources. The use of Transportation Infrastructure Finance and Innovation Act of 1998 (TIFIA) and Grant Anticipation Revenue Vehicles (GARVEE Bonds) will make up some of the federal revenue losses.
- Funding from the federal government will continue to slowly increase by two percent (2%) annually through 2021 with the passage of another federal transportation bill in 2015. However, from 2022 through 2040, there will be no increase (0%) in federal funds.
- Funding from the State of North Carolina will continue to increase by two percent (2%) annually through 2021. However, from 2022 through 2040, there will be no increase (0%) in State funds. For the State Highway Trust Funds, it is projected that as the Northern Beltway and long-range improvements to US 52 are completed, the availability and use of these funds in the Urban Area will actually go down by a minus 2 percent (-2%) annually.
- The NCDOT and all of the municipalities within the MPO will continue to receive a small increase of Powell Bill funding for the maintenance of all street and highway facilities by an average of two percent (2%) annually through 2021. From 2022 through 2040, there will be no increase (0%) funding from the State of North Carolina.
- The Winston-Salem Urban Area is designated as a Transportation Management Area (TMA), and has the authority to direct the expenditures of federal Surface Transportation Program – Direct Attributable (STP-DA) and Congestion Mitigation and Air Quality (CMAQ) funds to various projects in the MPO. These funds will continue to be available for the MPO and will slowly increase by two percent (4%) annually through 2021. However, from 2022 through 2040, there will be no increase (0%) in either CMAQ or STP-DA funds.
- The City of Winston-Salem will be the only municipality to approve of general obligation bonds and 2/3 bonds to pay for various local street and highway projects and other local transportation facilities. Projects coming from municipalities other than Winston-Salem will generate their own funds from their general funds.
- The City of Winston-Salem will continue to use the motor vehicle registration tax funds for various City street improvement projects, and this will increase in the 2030 and 2040 horizon years.

Revenue Projections

Table 9.2 on the following page, is a summary of the revenue projections for street and highway projects for the Urban Area through the year 2040. With the conservative projected increases in revenues from the federal government, the State of North Carolina and local municipalities, a total of over \$3.281 billion dollars will be available in the future. Over \$1.281 billion will come from various federal sources while over \$1.549 billion will come from the State of North Carolina. Local resources including bond referendums and 2/3 bonds, municipal revenues, developer participation in projects, and other general revenues will provide another \$451 million in revenues through 2035. Of the \$3.281 billion dollars expected for the urban area, approximately \$576 million will be used to maintain the street and highway system, or approximately 17.6% of the total expected revenues.

Table 9-2
Winston-Salem Urban Area Metropolitan Planning Organization
2040 Transportation Plan
2016-2040 Street and Highway Revenue Projections Summary

July 12, 2015

Federal Construction Funding Sources							2016-2021	2022-2030	2031-2040	Grand
	2016	2017	2018	2019	2020	2021	Totals	Totals	Totals	Totals
CMAQ	\$ 1,865	\$ 1,865	\$ 1,902	\$ 1,940	\$ 1,979	\$ 2,019	\$ 11,571	\$ 18,169	\$ 20,187	\$ 49,927
HP/NHP	\$ 25,962	\$ 26,482	\$ 27,011	\$ 27,551	\$ 28,102	\$ 28,664	\$ 163,773	\$ 257,980	\$ 286,645	\$ 708,398
STP/STPDA	\$ 5,003	\$ 5,103	\$ 5,205	\$ 5,309	\$ 5,415	\$ 5,524	\$ 31,560	\$ 49,713	\$ 55,237	\$ 136,510
HSIP	\$ 1,600	\$ 1,632	\$ 1,665	\$ 1,698	\$ 1,732	\$ 1,767	\$ 10,093	\$ 15,899	\$ 17,665	\$ 43,657
Federal Total	\$ 34,430	\$ 35,082	\$ 35,783	\$ 36,499	\$ 37,229	\$ 37,973	\$ 216,996	\$ 341,761	\$ 379,735	\$ 938,492
Federal Maintenance Funding Sources	2016	2017	2018	2019	2020	2021	2016-2021	2022-2030	2031-2040	Grand Totals
Highway Fund Bridge	\$ 3,811	\$ 3,887	\$ 3,965	\$ 4,044	\$ 4,125	\$ 4,207	\$ 24,038	\$ 37,866	\$ 42,073	\$ 103,977
NHPIM	\$ 6,037	\$ 6,157	\$ 6,280	\$ 6,406	\$ 6,534	\$ 6,665	\$ 38,079	\$ 59,983	\$ 66,648	\$ 164,710
STPOFF	\$ 1,088	\$ 1,110	\$ 1,132	\$ 1,155	\$ 1,178	\$ 1,201	\$ 6,864	\$ 10,813	\$ 12,015	\$ 29,692
HSIP	\$ 1,600	\$ 1,632	\$ 1,665	\$ 1,698	\$ 1,732	\$ 1,767	\$ 10,093	\$ 15,899	\$ 17,665	\$ 43,657
Maintenance Total	\$ 12,535	\$ 12,786	\$ 13,042	\$ 13,303	\$ 13,569	\$ 13,840	\$ 79,075	\$ 124,561	\$ 138,401	\$ 342,037
North Carolina Funding Sources	2016	2017	2018	2019	2020	2021	2016-2021	2022-2030	2031-2040	Grand Totals
State	\$ 10,678	\$ 10,891	\$ 11,109	\$ 11,331	\$ 11,558	\$ 11,789	\$ 67,356	\$ 106,101	\$ 117,890	\$ 291,348
Highway Trust Fund	\$ 42,729	\$ 43,584	\$ 44,455	\$ 45,345	\$ 46,251	\$ 47,176	\$ 269,541	\$ 384,709	\$ 352,921	\$ 1,007,171
Powell Bill	\$ 8,590	\$ 8,762	\$ 8,937	\$ 9,116	\$ 9,298	\$ 9,484	\$ 54,188	\$ 85,359	\$ 94,843	\$ 234,391
Discretionary	\$ 600	\$ 612	\$ 624	\$ 637	\$ 649	\$ 662	\$ 3,785	\$ 5,962	\$ 6,624	\$ 16,371
North Carolina Total	\$ 62,597	\$ 63,849	\$ 65,126	\$ 66,429	\$ 67,757	\$ 69,112	\$ 394,871	\$ 582,131	\$ 572,279	\$ 1,549,281
Local Funding Sources	2016	2017	2018	2019	2020	2021	2016-2021	2022-2030	2031-2040	Grand Totals
City of Winston-Salem Bonds							\$ -	\$ 90,000	\$ 100,000	\$ 190,000
Winston-Salem 2/3 Bonds	\$ 8,000		\$ 9,000		\$ 10,000		\$ 27,000	\$ 42,000	\$ 60,000	\$ 129,000
Other Local	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 12,000	\$ 18,000	\$ 36,000	\$ 66,000
Developer	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 12,000	\$ 18,000	\$ 36,000	\$ 66,000
Local Total	\$ 12,000	\$ 4,000	\$ 13,000	\$ 4,000	\$ 14,000	\$ 4,000	\$ 51,000	\$ 168,000	\$ 232,000	\$ 451,000
Grand Totals	\$ 121,563	\$ 115,717	\$ 126,951	\$ 120,230	\$ 132,555	\$ 124,926	\$ 741,942	\$ 1,216,453	\$ 1,322,415	\$ 3,280,810

Source: NCDOT Funding Summary for the Winston-Salem Urban Area Metropolitan Planning Organization, June 2015

The City of Winston-Salem will approve of and issue \$319 million of general obligation and 2/3 bonds following this approximate schedule:

- By 2021 - \$27 million in 2/3 bonds
- By 2030 - \$132 million in general obligation bonds and 2/3 bonds
- By 2040 - \$160 million in general obligation bonds and 2/3 bonds

Projected Street and Highway Projects Funding

Based on the historical trends of funding provided at the federal and State levels and the very conservative assumptions for funding in the future, **Table 9.3** on the following page presents all of the major street and highway projects that are anticipated will be constructed through 2040 in the Winston-Salem Urban Area.

The projects have been assigned to the 2021, 2030 and 2040 horizon years based on their funding availability and cost estimates in the 2016-2025 STIP, the Capital Improvement Programs for Winston-Salem, Kernersville and other municipalities within the MPO, where feasibility studies have been completed for them, or are considered to be high priority projects. For a few projects, the cost estimates were generated using NCDOT's latest estimating figures.

All of the projects cost estimates are in 2015 dollars. However, following the lead of NCDOT in their preparation of the 2016-2025 STIP, an inflation factor of two percent (2.5%) per year was applied to each project where construction has not already begun. For the projects in the 2030 and 2040 horizon years, given the uncertainty of project construction within that horizon year, the projects were assigned the maximum inflation factor of five percent (5.0%) to present a "worst case" scenario.

The total cost estimate for the street and highway projects (in 2015 dollars) is approximately \$2.847 billion. Using an assumed inflation factor for each project, the total cost estimate is approximately \$3.655 billion, of which only \$484.059 million is currently programmed for funding.

Future Revenue Needs

The overall projected revenues for street and highway projects in the Winston-Salem Urban Area will meet the estimated cost of all of the major street and highway projects planned within the 2040 Transportation Plan.

Innovative Funding Techniques

Some of the following innovative funding techniques have the potential to supplement the projected revenues should the revenues fall short of their targets and likely can help with some of the lower cost road projects, intersection improvements and safety projects:

- Advertising revenue
- Battery Tax
- Bicycle Fees
- Congestion Pricing
- Driver's License Fee Increases
- Drive Through Service Fee
- Electricity Generated by Vehicle Tax
- Emissions Fees
- Facility Tolling
- Fare Programs
- Impact Fees
- Mileage Fee (Vehicle Miles Traveled Fee)
- New Vehicle Tax
- Privatizing Transportation Facilities
- Property Tax, Vehicle Ownership Tax, or Use Fees
- Registration Fees – The City of Winston-Salem is currently using these fees to pay for some transportation improvements
- Rental Car Tax
- Road Utility Fees
- Safety Violation Fee
- Sales Tax on Transportation Related Goods
- Special License Plate Fees
- Studded Tire Fee
- Temporary Visitor Access Fee
- Tire Tax
- Title Fees
- Transportation Impact Fee
- Use Fuels Tax Increase
- Vehicle Impact Fee
- Weight Mile Truck Tax

**Table 9.3
Winston-Salem Urban Area Metropolitan Planning Organization
2040 Transportation Plan Update
Street and Highway Project Cost Estimates and Financial Projections**

July 12, 2015

Project Title	Project Description	STIP Number	2015 Estimated Project Cost (\$000)	Estimated Urban Area Portion Cost (\$000)	NCDOT Estimated Date of Completion	Inflation Factor Used (%) *	Final Inflated Cost (\$000)	Prior Years Cost (\$000)	STIP Funding Sources (\$000)							STIP Funding Sources Total (\$000)	Non STIP or Post Year Costs (\$000)	By 2030 Federal	By 2030 State	By 2040 Federal	By 2040 State	All Years Local	Project Status, Notes
									NHP or NHPB	STP or STP-DA	IM IMPM	CMAQ and Federal Aid	State	Highway Trust Fund	NFA								
2016 - 2021 Projects																							
Salem Creek Connector	New Multi-Lane Road; Salem Avenue to US 52	U-2925	\$93,371	\$93,371	Nov. 2016	1.000	\$93,371	\$90,827		\$2,544					\$2,544	\$636				\$636	Under Construction, betterments to be included; STP DA Local Match \$636 in City Bonds		
Business 40 (US 421) Improvements	Rebuilding Corridor with New Interchanges, Bridges, Pavement Surface	U-2827 BA & BB	\$91,346	\$91,346	2021	1.000	\$91,346	\$0	\$89,852		\$1,494				\$91,346	\$3,000				\$3,000	Planning underway; betterments to be included; CMAQ local match \$374; \$2.626 in City Bonds		
Northern Beltway (East)	Build Six-Lane Freeway, Business 40 to US 158	U-2579 B	\$181,772	\$181,772	Nov. 2018	1.000	\$181,772	\$49,356	\$108,383			\$24,033		\$132,416	\$0						Under Construction, Paid with GARVEE Bonds		
Macy Grove Road Extension (North)	New Multi-Lane Road; East Mountain Street to North Main Street (NC 150)	U-4734	\$17,930	\$17,930	2021	1.000	\$17,930	\$2,376					\$15,554	\$15,554	\$0								
Northern Beltway (East)	Build Six-Lane Freeway, US 158 to US 311	U-2579 C	\$68,290	\$68,290	2021	1.000	\$68,290	\$496	\$12,690			\$3,000	\$52,600	\$68,290	\$0						Construction begins in 2018 with GARVEE Bonds		
Idols Road Extension	New Wide Two-Lane Road	U-2707	\$15,578	\$15,578	2019	1.000	\$15,578	\$5,278					\$10,300	\$10,300	\$0						Right-of-Way Completed		
Northern Beltway (West)	US 421 Interchange with Peace Haven Road	R-2247CD	\$14,260	\$14,260	2018	1.000	\$14,260	\$0	\$12,593			\$1,667		\$14,260	\$0								
Northern Beltway (West)	US 52 Interchange with Bethania-Rural Hall Road (NC 65)	R-2247EC	\$18,530	\$18,530	2018	1.000	\$18,530	\$0	\$15,197			\$3,333		\$18,530	\$0								
2022 - 2030 Projects																							
University Parkway	Widen to Six Lanes	U-2924	\$116,765	\$116,765	2030	1.300	\$151,795	\$0						\$0	\$151,795	\$100,000				\$51,795	Cost estimate way too high; City Bonds		
Great Wagon Road and Lewisville-Clemmons Road Ext.	New Three-Lane Road	U-5536	\$15,293	\$15,293	2030	1.300	\$19,881	\$100		\$12,154				\$12,154	\$7,627					\$7,627	Town of Lewisville Funds		
N. Main Street/Piney Grove Road Connector	New 2 Lane Divided Road		\$9,280	\$9,280	2030	1.300	\$12,064	\$0						\$0	\$12,064	\$12,064					Planning		
Interstate 40	Widen to Six Lanes	I-911A	\$48,850	\$48,850	2030	1.300	\$63,505	\$0						\$0	\$63,505	\$63,505					Planning		
Reidsville Road (US 158)	Widen to Multi-Lanes from Business 40 to NC 66	R-2577A	\$35,208	\$35,208	2030	1.300	\$45,770	\$0	\$35,208					\$35,208	\$10,562		\$10,562				Planning		
Thomasville Road (NC 109) *	Multi-Lanes on New Location	R-2568C	\$141,463	\$141,463	2030	1.300	\$183,902	\$0						\$0	\$183,902	\$183,902					Planning		
Northern Beltway (East)	Build Six-Lane Freeway, US 52 to US 311	U-2579 AA, AB	\$273,006	\$273,006	2030	1.300	\$354,908	\$0						\$0	\$354,908		\$354,908				Construction begins in 2022; complete by 2025		
Northern Beltway (East)	Build Six-Lane Freeway, US 52 to US 311	U-2579 D, E, F	\$266,500	\$266,500	2030	1.300	\$346,450	\$0						\$0	\$346,450		\$346,450				Construction begins in 2022; complete by 2025		
Hanes Mill Road	Widen to Multi-Lanes	U-2729 (U-5755)	\$11,732	\$11,732	2025	1.300	\$15,252	\$1,000					\$10,732	\$10,732	\$3,520					\$3,520	Planning Completed; City Bonds		
Interstate 40 *	Widen to Six Lanes, US 311 to Guilford County		\$76,380	\$76,380	2030	1.300	\$99,294	\$0						\$0	\$99,294	\$99,294					Feasibility Study Finished		
Business I-40 at Big Mill Farm Road	Build New Interchange; Includes Widening of Hopkins Road to NC 66	U-5760	\$29,700	\$29,700	2030	1.300	\$38,610	\$2,700					\$27,000	\$27,000	\$8,910					\$8,910	Feasibility Study Finished; Town of Kernersville Funds		
Ebert-Stratford Road Connector	New Three Lane Road		\$17,151	\$17,151	2030	1.300	\$22,296	\$0						\$0	\$22,296					\$22,296	Feasibility Study Finished; Through Development and \$17 million in City Bonds		
Forum Parkway Connector	New Wide Two-Lane Road	FS 1509A	\$4,305	\$4,305	2030	1.300	\$5,597	\$0						\$0	\$5,597		\$5,597				Feasibility Study by NCDOT		
Clemmons Road (US 158)	Widen to Three Lanes		\$26,957	\$26,957	2030	1.300	\$35,044	\$0						\$0	\$35,044		\$35,044				Planning;		
Interstate 40 at NC 109 and Clemmons Road	Interchange Modification	I-5880	\$3,670	\$3,670	2030	1.300	\$4,771	\$335	\$3,335					\$3,335	\$1,101	\$1,101					Planning;		
Hickory Tree Road	Widening to Multi-Lanes, US 52 to NC 150	U-5786	\$17,062	\$17,062	2030	1.300	\$22,181	\$750					\$16,312	\$16,312	\$5,119		\$5,119				Planning;		
Old Hollow Road (NC 66)	Widen to Three Lanes, Harley Drive to Bellaire Circle/Whitehall Village Lane	U-5824	\$17,598	\$17,598	2030	1.300	\$22,877	\$1,600					\$15,998	\$15,998	\$5,279		\$5,279				Planning;		
US 52 at Trinity Church Road	Convert grade separation to full interchange	I-5887	\$12,290	\$12,290	2030	1.300	\$15,977	\$1,100					\$11,190	\$11,190	\$3,687	\$3,687					Planning;		
East Mountain Street *	Widen to Multi-Lanes	U-3617	\$26,673	\$15,737	2030	1.300	\$20,458	\$0						\$0	\$20,458		\$20,458				Planning; 59% within the MPO;		
Peace Haven/Styers Ferry Road Connector	New Wide Two-Lane Road		\$10,417	\$10,417	2030	1.300	\$13,542	\$0						\$0	\$13,542					\$13,542	Feasibility Study Completed; Mainly Through Development; \$12 million in City Bonds;		
Piney Grove Road (SR 1969)	Widen to Three Lanes		\$7,454	\$7,454	2030	1.300	\$9,690	\$0						\$0	\$9,690					\$9,690	Possibly with STP-DA Funds, Town of Kernersville Funds		

**Table 9.3
Winston-Salem Urban Area Metropolitan Planning Organization
2040 Transportation Plan Update
Street and Highway Project Cost Estimates and Financial Projections**

July 12, 2010

Project Title	Project Description	STIP Number	2015 Estimated Project Cost (\$000)	Estimated Urban Area Portion Cost (\$000)	NCDOT Estimated Date of Completion	Inflation Factor Used (%) *	Final Inflated Cost (\$000)	Prior Years Cost (\$000)	STIP Funding Sources (\$000)							STIP Funding Sources Total (\$000)	Non STIP or Post Year Costs (\$000)	By 2030 Federal	By 2030 State	By 2040 Federal	By 2040 State	All Years Local	Project Status, Notes
									NHP or NHPB	STP or STP-DA	IM IMPM	CMAQ and Federal Aid	State	Highway Trust Fund	NFA								
2031 - 2040 Projects																							
Martin Luther King, Jr. Drive Extension	New Four Lane Divided Road		\$24,933	\$24,933	2040	1.600	\$39,893	\$0							\$0	\$39,893					\$39,893	Feasibility Study Completed; Paid for with City Bonds	
Reidsville Road (US 158) *	Widen to Multi-Lanes from NC 66 to Guilford County	R-2577B	\$42,900	\$34,320	2040	1.600	\$54,912	\$0							\$0	\$54,912				\$54,912		Planning; 80% within the MPO; Highway Trust Funds	
US 52	I-40 Bypass to Proposed Northern Beltway (Western Loop) Interchange. Widen and Upgrade Roadway and Interchanges.	U-2826	\$499,813	\$499,813	2040	1.600	\$799,701	\$0							\$0	\$799,701		\$799,701				Planning	
Northern Beltway (West)	Build Four-Lane Freeway, Interstate 40 to US 52	R-2247B-F	\$390,024	\$390,024	2040	1.600	\$624,038	\$62,890							\$0	\$561,148				\$561,148		Planning, EIS Completed	
Northern Beltway (West)	Build Four-Lane Freeway, US 158 to Interstate 40	R-2247A	\$29,301	\$29,301	2040	1.600	\$46,882	\$0							\$0	\$46,882				\$46,882		Planning, EIS Completed	
NC 801 (Davie County)	Widen to Multi-Lanes	R-3610	\$34,098	\$34,098	2040	1.600	\$54,557	\$0							\$0	\$54,557				\$54,557		Planning	
Bethania-Rural Hall Road (NC 65)	Widen to Multi-Lanes	U-2730B	\$63,468	\$63,468	2040	1.600	\$101,549	\$0							\$0	\$101,549				\$101,549		Planning	
Business 40 (US 421)	Widen to Six-Lane Freeway		\$69,540	\$69,540	2040	1.600	\$111,264	\$0							\$0	\$111,264			\$111,264			Planning	
Peace Haven/Styers Ferry Road Connector	New Wide Two-Lane Road		\$24,874	\$24,874	2040	1.600	\$39,798	\$0							\$0	\$39,798					\$39,798	Feasibility Study Completed; Some Through Development; \$30 million in City Bonds	
Grand Totals (in \$000)			\$2,847,782	\$2,828,266			\$3,877,534	\$218,808	\$277,258	\$14,698	\$0	\$1,494	\$32,033	\$159,686	\$0	\$485,169	\$3,177,689	\$463,553	\$783,417	\$910,965	\$819,048	\$200,707	
STIP Annual Average (in \$000)									\$27,726	\$1,470	\$0	\$149	\$3,203	\$15,969	\$0	\$48,516.90						\$3,177,690	
Federal Programs Total (in \$000)																\$293,450							
Annual Federal Average (in \$000)																\$29,345							
State Programs Total (in \$000)																\$191,719							
Annual State Average (in \$000)																\$19,171.90							
Notes: * = Project Extends Beyond MPO Boundary																							

9.3 Public Transportation

Winston-Salem Transit Authority

The Winston-Salem Transit Authority (WSTA) provides transit services for the citizens of Winston-Salem and Forsyth County. Primarily the services are in two areas, its regular fixed bus system, and Trans-Aid, which provides para-transit transportation to elderly and disabled residents. WSTA also provides maintenance services for the regional ridesharing program on a reimbursement basis with the Piedmont Authority for Regional Transportation (PART), maintains the Hampton D. Haith Administration Building, provides its own vehicle and facility maintenance at the Haith facility, and operates the Clark Campbell multi-modal Transportation center in downtown Winston-Salem.

Approximately 3.33 million passengers ride WSTA regular fixed route bus system each year, averaging about 9,250 riders per day. This is a large increase from 2004 when 2.75 million passengers rode the system each year. In this span, ridership has climbed 21.1%.

WSTA Funding Resources

WSTA receives its funding from a wide variety of resources including directly generated passenger revenues from the fare box, miscellaneous revenues (advertisements, vending machines, etc.), the new Transit Administration Fund (replacing the Mass Transit Tax Fund (MTTF)), State and federal grants. The State and federal grants are provided from the Federal Transit Administration (FTA), the North Carolina Department of Transportation Public Transportation Division (NCDOT – PTD).

The federal Mass Transit Account is the primary source of revenues for Federal-aid funding returned to the states for carrying out various public transportation programs. The major categories of funding include the Urban Area Formula Program Capital, Operating and Maintenance Assistance for Cities (Section 5307); Capital Investment and New Starts Programs (Sections 5308 and 5309); Elderly and Persons with Disabilities Formula Program (Section 5310); Non-Urbanized Area Formula Program (Section 5311), Rural Transit Assistance Program (RTAP), Surface Transportation Program (STP), Congestion Mitigation and Air Quality (CMAQ), and the Federal Job Access and Reverse Commute (JARC) Program (being implemented by WSTA).

In Fiscal Year 2014-2015, WSTA had an overall budget of approximately \$15.204 million. Over \$11.395 or 75% went to the fixed route bus system, while over \$2.943 million or 19.4% went to the Trans-Aid operations in Forsyth County and another \$865,000 or 5.6% came from miscellaneous sources.

Fixed Route Bus System Revenues

Last year, WSTA's fixed route bus system received most of its revenues from the Transit Administration Fund. Over \$5.108 million or 33.6% of the total came from the Transit Administration Fund via property tax revenues. The FTA provided over \$3.571 million or 23.5% of the total revenues while the fare box provided only \$1.713 million or 11.3%. The rest of the total revenues came from a variety of taxes and other resources like NCDOT, contracted services, the City's Motor Vehicle Privilege Tax, etc.

Trans-Aid of Forsyth County Revenues

In Fiscal Year 2014-2015, Trans-Aid of Forsyth County, received its revenues from NCDOT- PTD, Forsyth County, property tax revenues, funds from human service agencies and miscellaneous grants. Over \$1.064 million or 36.2% of the total came from NCDOT while over \$1.058 million or 36.0% came from property tax revenues, and \$656,000 came from various human service agencies.

Elimination of the Mass Transit Tax Fund

In the early 1980's the Winston-Salem voters approved the use of a \$.05 levy on real property to support the transit system (Mass Transit Tax). In Fiscal Years 1982-1983 and 1983-1984, \$.03 of the Mass Transit Tax was levied but had gradually decreased with the yearly balancing of the annual budget.

Since 2003, the Mass Transit Tax rate was lowered to \$.015 and had remained that way until 2014. For a number of years the MTTF revenues had created a substantial balance for WSTA to operate its system with. For example, in 2001, the MTTF reserves had \$1.6 million and had increased to \$3.5 million in 2004. However, in recent years, with the downturn in the economy, and the reduction in general tax revenues, the MTTF fund balance was spent down rapidly until Fiscal Year 2011-2012 when the reserves had been completely depleted, mainly due to State operating assistance that was lower than anticipated and increased fuel and vehicle maintenance expenses.

Over the last several years, the growth in operating revenues and property tax support have not kept pace with growth in operating expenses. With the exception of Fiscal Year 2009-2010 when the City received federal stimulus funds, as mentioned above, the City has drawn down the reserves in the MTTF to ensure the operation of WSTA.

Transit Administration Fund

Given the tenuous nature of the MTTF, the City of Winston-Salem eliminated the fund altogether and initiated a new revenue source called the Transit Administration Fund in Fiscal Year 2014-2015. It is anticipated that this resource will provide a more stable revenue flow for WSTA in the coming years.

The Fund accounts for the portion of the property tax allocated to mass transit. In addition to operating support, the Transit Administration Fund have been used to provide local matching funds for federal capital grants that provide for the replacement of buses, facility maintenance, and other investments in the transit system. Typically, these grants cover 80% to 90% of the cost of these capital investments. The adopted Fiscal Year 2015-2016 allocation of the property tax rate is 3.62 cents per \$100 of assessed valuation on all property.

Long Term Financial Outlook

To ensure the long term financial sustainability of WSTA, staff is examining a wide variety of other funding options including fare increases (\$.10 increase would render approximately \$100,000); increase certain pass prices; tax rate increases (\$.01 would render approximately \$1.47 million); increase motor vehicle privilege license fee (\$10.00 increase would render approximately \$1.35 million, legislation would be required); and advertising at bus stops. Ideas for decreasing operations cost that are being studied currently include rerouting of service for increased efficiency and/or reduce service levels.

9.4 Other Modes

Historically, a small percentage of federal, State and local funds have been provided for other modes of transportation in the urban area, including public transportation, para-transit, greenways, sidewalks, and other pedestrian facilities. Private transportation providers such as airlines, trucking firms, taxis and other vehicles for hire, charter bus companies and intercity bus transportation receive no public funding and are not included in this analysis. The success or failure of these private transportation providers is based on the market demand for the services.

9.5 Bicycle and Pedestrian Funding Assumptions

Based on the history of the financing of bicycle and pedestrian projects, and the analysis of existing financial resources available to the NCDOT and the Winston-Salem Urban Area, the following very conservative and general assumptions were made to guide the development of revenue projections through the year 2040:

- Funding for bicycle paths, greenways, sidewalks and other pedestrian facilities will continue to increase at an average of five percent (5%) annually by a variety of federal, State and local sources.
- STP-DA funds (or an equivalent program) will continue to provide adequate funding for the implementation of numerous bicycle and pedestrian projects, programs and services.