

## 5 Financial Capacity Analysis

Title 23 of the United States Code and 23 CFR Part 450.322(d) (10) require that Metropolitan Planning Organizations have a financial plan leading to implementation of the transportation plan. The intent of this requirement is to keep local governments from producing "wish list" transportation plans that cannot be implemented.

This section of the transportation plan provides decision-makers with the information they need to prioritize transportation expenditures and to seek additional funding sources when predicted transportation costs exceed anticipated transportation revenues.

The financial plan has three sections: a summary, a discussion of revenue projection, a discussion of cost estimates, and a discussion of funding sources.

### Strategic Transportation Investment (STI)

Passed in 2013, the Strategic Transportation Investments Law (STI) allows NCDOT to use existing funding more efficiently and effectively to enhance the state's infrastructure, while supporting economic growth, job creation and a higher quality of life. This process encourages thinking from a statewide and regional perspective while also providing flexibility to address local needs.

STI also establishes the Strategic Mobility Formula, a new way of allocating available revenues based on data-driven scoring and local input.

NCDOT used the Strategic Mobility Formula for the first time to develop a draft of its 2016-2025 State Transportation Improvement Program (STIP) – a state- and federal-mandated requirement that identifies the construction funding for and scheduling of transportation projects throughout the state which was approved by the NCDOT Board in June, 2015.

While the Strategic Transportation Investments law (STI) allows NCDOT to make more efficient use of its existing revenue, only 1 in 5 (18 percent) of the 3,100 projects submitted for prioritization in 2014 can be funded over the next 10 years with current revenue resources.

Governor Pat McCrory's 25-Year Vision for transportation recognizes the need to pursue alternative funding solutions such as public-private partnerships and bond strategies that will allow us to take advantage of current low interest rates to deliver vital infrastructure improvements for North Carolina.

To that end, Governor McCrory has proposed two bonds approximately \$1.4 billion each, one for roads and one for public infrastructure. The North Carolina General Assembly has also proposed legislation to help address the department's need for additional revenue.

This section estimates the revenues and expenditures that the High Point MPO expects to be see between now and 2040. Please note that the revenues presented in this section of the plan are for all of Davidson, Forsyth, Guilford, and Randolph Counties. The High Point MPO boundary contains only a portion of these counties. We recognize that not all of the revenues will be spent inside the MPO boundary. *Although Table 5-1 implies a large surplus on both the highway and transit side the competition from adjacent MPOs and RPOs is a reality: we need to select and advocate strongly for our best projects.*

### Revenues vs. Needs

Table 5-1 summarizes the revenues and needs that the High Point MPO believes will be available between now and 2040. These tables use constant 2014 dollars for the comparison.

**TABLE 5-1: REVENUES, NEEDS, AND BALANCE**

	Revenues	Needs	Difference
Highways	\$1,992,246,258	\$1,951,535,000	\$40,711,258
Transit	\$ 154,634,247	\$ 162,431,781	(\$ 7,797,534)
<b>Total</b>	<b>\$2,146,880,505</b>	<b>\$2,113,966,781</b>	<b>\$32,913,724</b>

### Expected Revenue

This section discusses the amount of revenue that the MPO assumes will be available between now and 2040. Table 5-2 shows the expected revenue by major category.

**TABLE 5-2 EXPECTED REVENUES**

Highway	To 2021	2022-2030	2031-2040	Total 25 Years
Construction	\$ 351,092,368	\$ 634,509,083	\$ 891,828,807	\$ 1,877,430,258
Powell Bill	\$ 23,920,000	\$ 43,056,000	\$ 47,840,000	\$ 114,816,000
<b>Total</b>	<b>\$ 375,012,368</b>	<b>\$ 677,565,083</b>	<b>\$ 939,668,807</b>	<b>\$ 1,992,246,258</b>
<b>Transit</b>				
Intergovernmental Revenue	\$ 7,298,372	\$ 13,189,930	\$ 18,538,993	\$ 39,027,295
Government Fees	\$ 2,885,341	\$ 5,214,511	\$ 7,329,211	\$ 15,429,062
Fares Revenue	\$ 14,406,901	\$ 26,036,766	\$ 36,595,753	\$ 77,039,421
General Fund	\$ 3,332,482	\$ 6,022,604	\$ 8,465,019	\$ 17,820,105
Transit Capital Projects Fund	\$ 994,571	\$ 1,797,430	\$ 2,526,363	\$ 5,318,364
<b>Transit Total</b>	<b>\$ 28,917,667</b>	<b>\$ 52,261,240</b>	<b>\$ 73,455,339</b>	<b>\$ 154,634,247</b>
<b>Grand Total</b>	<b>\$ 403,930,035</b>	<b>\$ 729,826,324</b>	<b>\$ 1,013,124,146</b>	<b>\$ 2,146,880,505</b>

In order to determine revenue for the High Point MPO over the next 25 years, staff looked at funding levels in the first five years of the North Carolina 2016-2025 State Transportation Improvement Program (STIP) for the High Point area. Over the first five years of the STIP, NCDOT has allocated approximately \$220,000,000. The average allocation per year is approximately \$55,000,000. That yearly allocation was then used as the basis for generating the allocated funding available over the next 25 years to be \$1,877,430,258. This allocation includes an increase in funding of about 2.5% per year. Table 5-2 shows this allocation along with the estimated amount our member jurisdiction should receive through the Powell Bill program to be approximately \$2 billion dollars.

The High Point MPO Metropolitan Area Boundary includes a portion of four counties, Davidson, Forsyth, Guilford, and Randolph. The information provided below is inclusive of data for those entire counties, not just the portion included in the High Point MPO.

Past Construction Revenues

Figure 5-1 is a graph showing highway construction spending in counties served by the High Point MPO. The graph shows spending in constant 2010 dollars instead of nominal, year of expenditure dollars. Between 1990 and 2010 NCDOT spent \$5,167,000,000 building new roads in the four counties served by the High Point MPO. Figure 5-1 shows that most of this money went into Guilford and Forsyth Counties with smaller amounts going to Davidson and Randolph Counties.

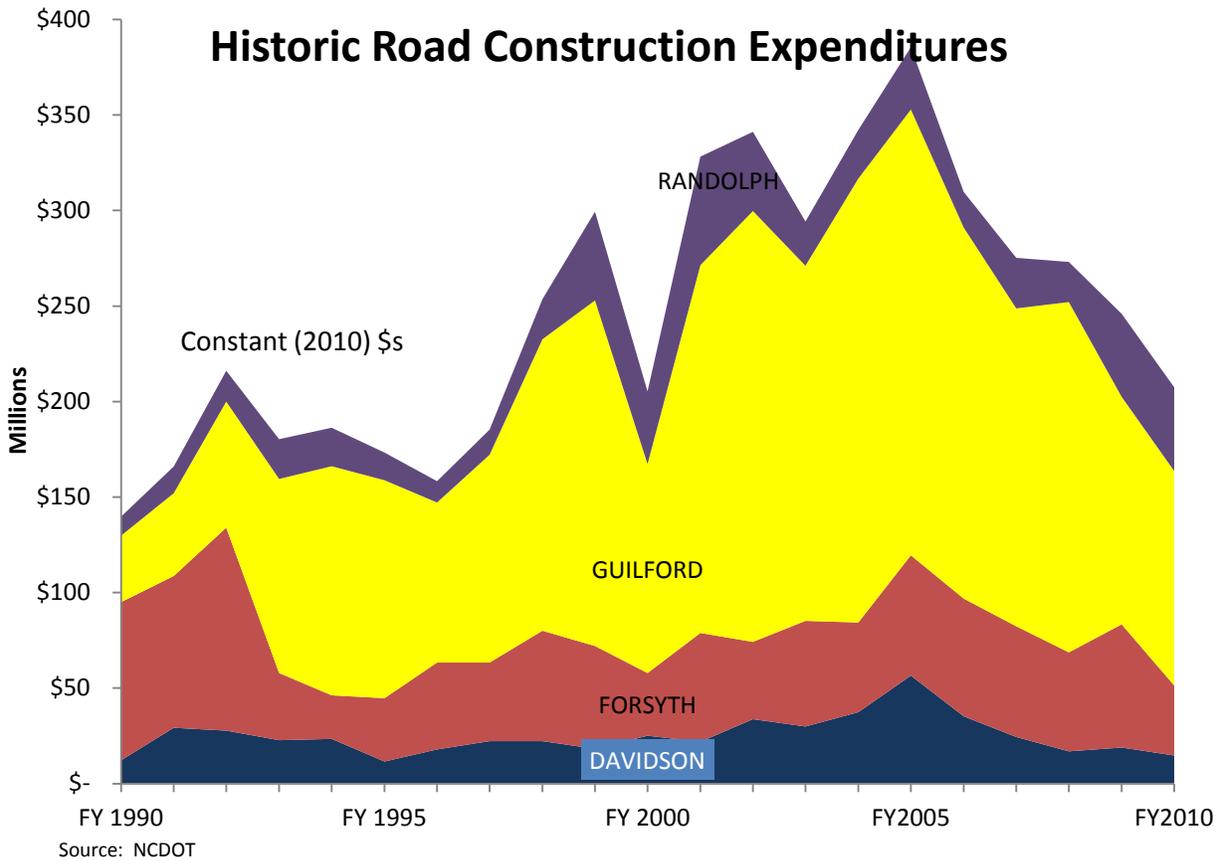
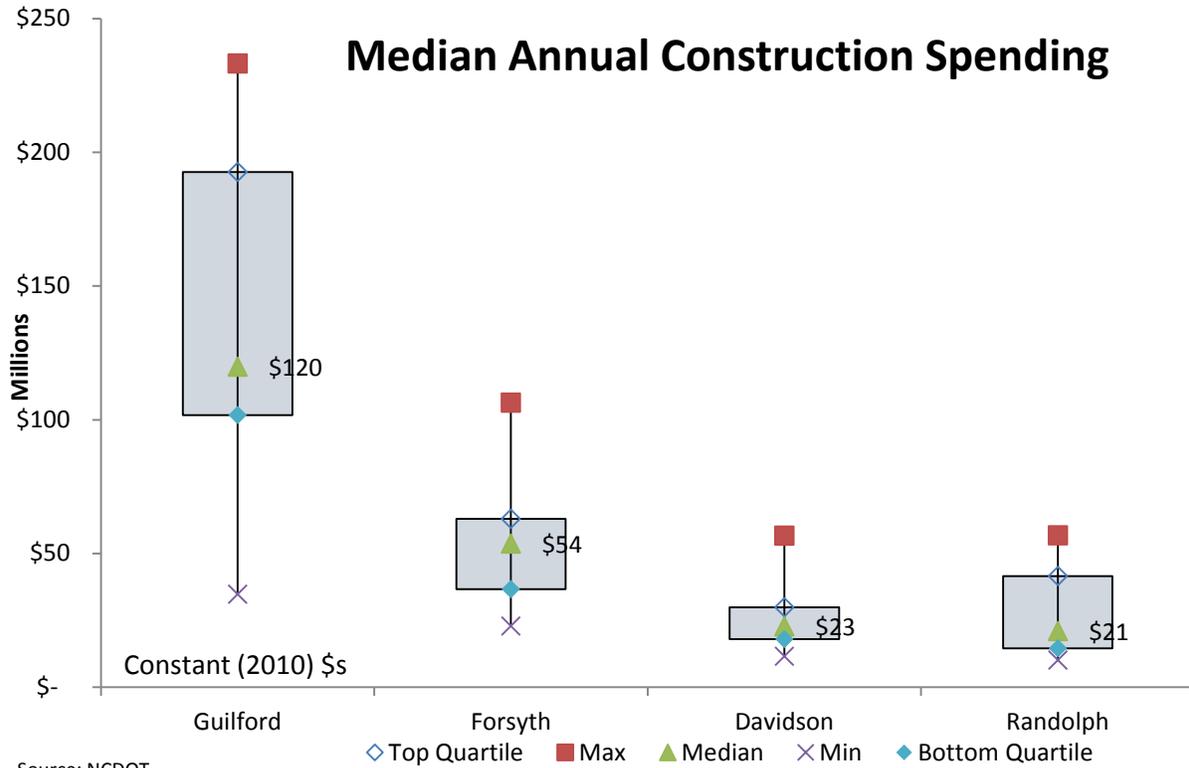


FIGURE 5-1: CONSTRUCTION SPENDING SINCE 1990

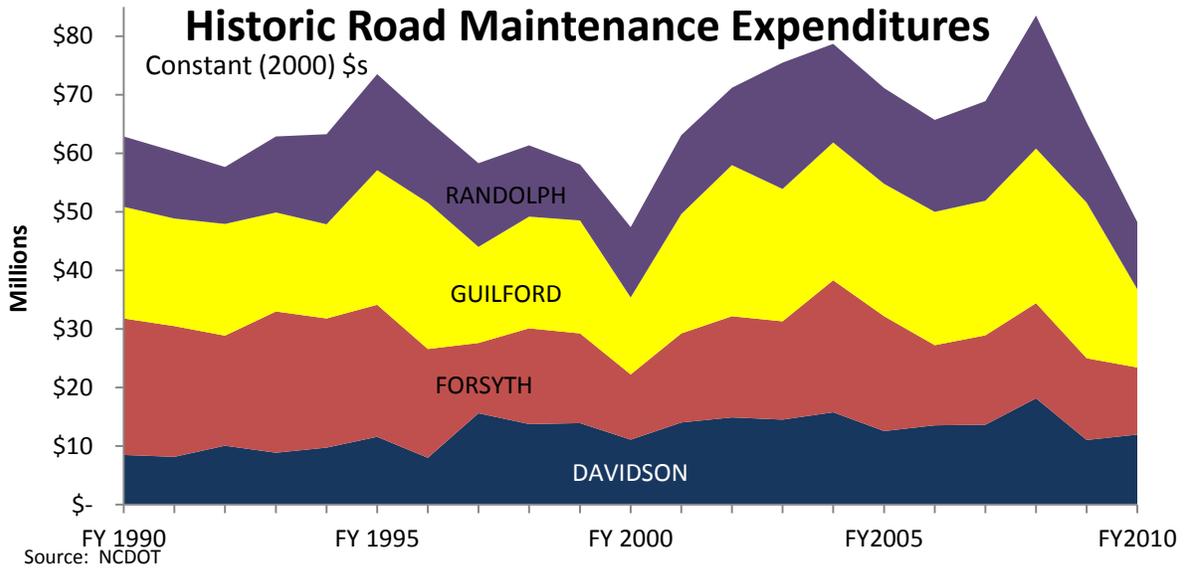
Figure 5-1 does not help us much with estimating future construction revenues. Figure 5-2 shows the median construction spending from 1990 to 2010. Figure 5-2 also lets us see how much variability there is in spending as well as a typical range for spending.



**FIGURE 5-2: ANNUAL CONSTRUCTION EXPENDITURES SHOWING VARIABILITY**

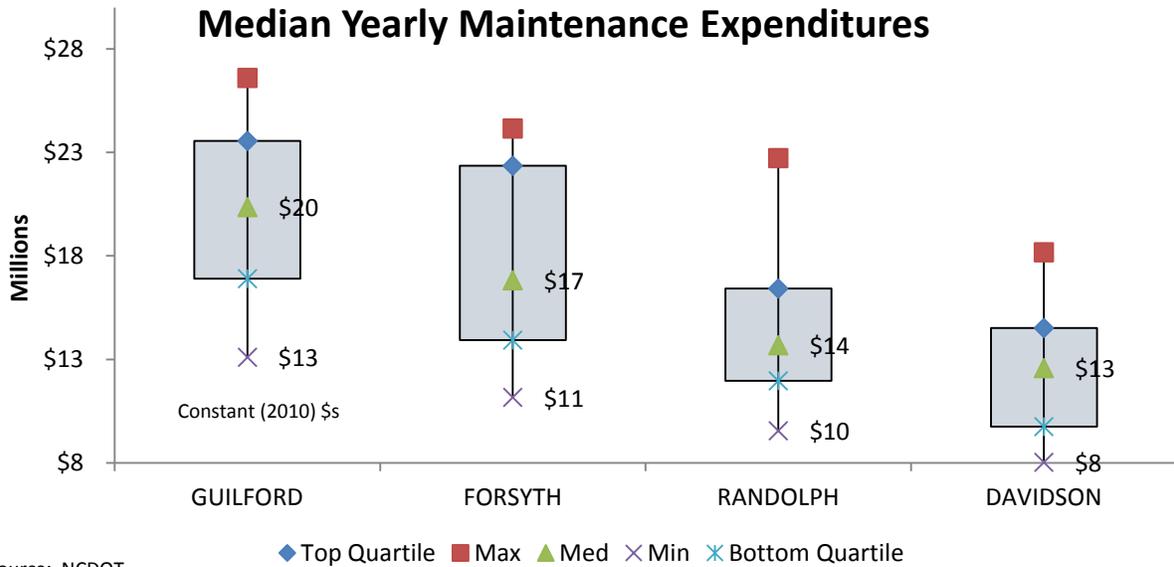
### Past Maintenance Revenues

Figure 5-3 is a graph showing highway maintenance spending in counties served by the High Point MPO. The graph shows spending in constant 2010 dollars instead of nominal, year of expenditure dollars. Between 1990 and 2010 NCDOT spent \$1,363,000,000 maintaining roads and bridges in the four counties served by the High Point MPO. Figure 5-3 shows this money was roughly equally distributed between the four counties served by the High Point MPO.



**FIGURE 5-3: HIGHWAY MAINTENANCE REVENUES SINCE 1990**

Figure 5-4 shows the median maintenance spending between 1990 and 2010. Figure 5-4 also lets us see how much variable spending has been since 1990. Based on this analysis the four counties will probably split about \$64,000,000 a year for the next twenty years.



**FIGURE 5-4: MONEY USED FOR HIGHWAY MAINTENANCE 1990**

North Carolina provides street maintenance assistance to municipalities in the form of Powell Bill funds. The Powell Bill funds are calculated at a rate of 1-3/4 ¢/gallon of motor fuel sold. NCDOT distributes Powell Bill funds to municipalities by formula. NCDOT uses Equation 5-1 to distribute Powell Bill funds to municipalities in 2006 (2012 North Carolina State Street-Aid, 2012). In equation 5-1 population is the

city’s population for this year and miles is the number of miles of road<sup>1</sup> maintained by that city that is eligible for Powell Bill money.

$$Powell\_Bill\$ = Population * \$22.56 + Miles * \$1,642.85$$

**EQUATION 5-1: POWELL BILL ALLOCATION**

*In the financial plan, the MPO has assumed that the annual Powell Bill allocations from NCDOT will remain unchanged.*

**TABLE 5-3: ESTIMATED POWELL BILL REVENUES**

Municipality	2014 Powell Bill	2010 Powell Bill
Archdale	\$ 325,000	\$260,618
Denton	\$ 54,000	\$51,604
High Point	\$ 2,900,000	\$2,560,450
Jamestown	\$ 101,000	\$88,128
Lexington	\$ 589,000	\$587,588
Thomasville	\$ 717,000	\$661,439
Trinity	\$ 152,000	\$145,733
Wallburg	\$ 0	\$ 0
<b>Total</b>	<b>\$ 4,784,000</b>	<b>\$4,355,560</b>

### Estimated Transit Revenues

The MPO estimated transit revenues using a similar process. Figure 5-5 shows how much money our transit agencies spent each year in constant dollars. Based on the available information the four transit providers in the High Point MPO service area spent about \$15,200,000 per year between 1992 and 2011.

### Estimated Needs

The next two sections of this report document the dollar value of the needs that the MPO expects to see over the next twenty years. The estimate of needs is broken down into highway needs and transit needs. Ideally we would also include a non-motorized (bicycle and pedestrian) section. Many of these projects will be funded as part of highway projects, so we believe this approach is reasonable.

<sup>1</sup> Actually it is the number of center line miles of road.

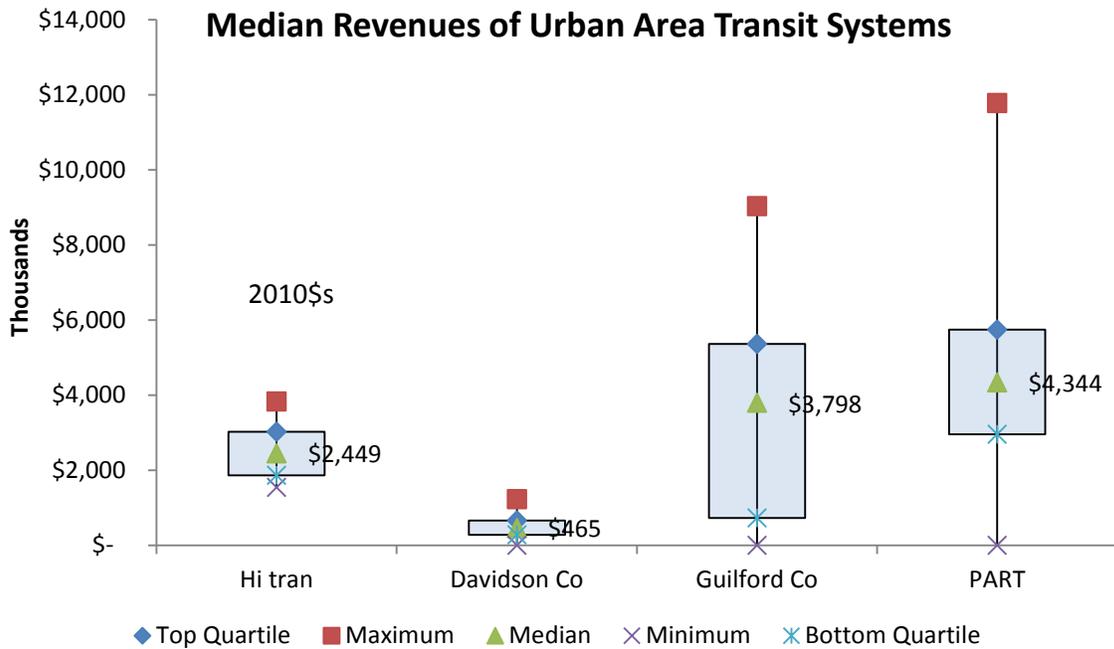


FIGURE 5-5: REPORTED TRANSIT REVENUES

### Highway Needs

The next two subsections present the assumed construction and maintenance needs for roads in the High Point Service Area.

### Construction Needs

The construction needs are based on the current cost estimates for projects in the 2016-2025 Transportation Improvement Program.

TABLE 5-4: ESTIMATED CONSTRUCTION NEEDS WITHIN THE HIGH POINT MPO

	To 2021	2022-2030	2031-2040	Total
<b>Construction</b>	\$649,213,000	\$652,806,000	\$649,516,000	\$1,951,535,000

### Maintenance Needs

Maintenance needs are assumed to be fully covered in the annual maintenance expenditures in the counties served by the MPO.

### Transit Needs

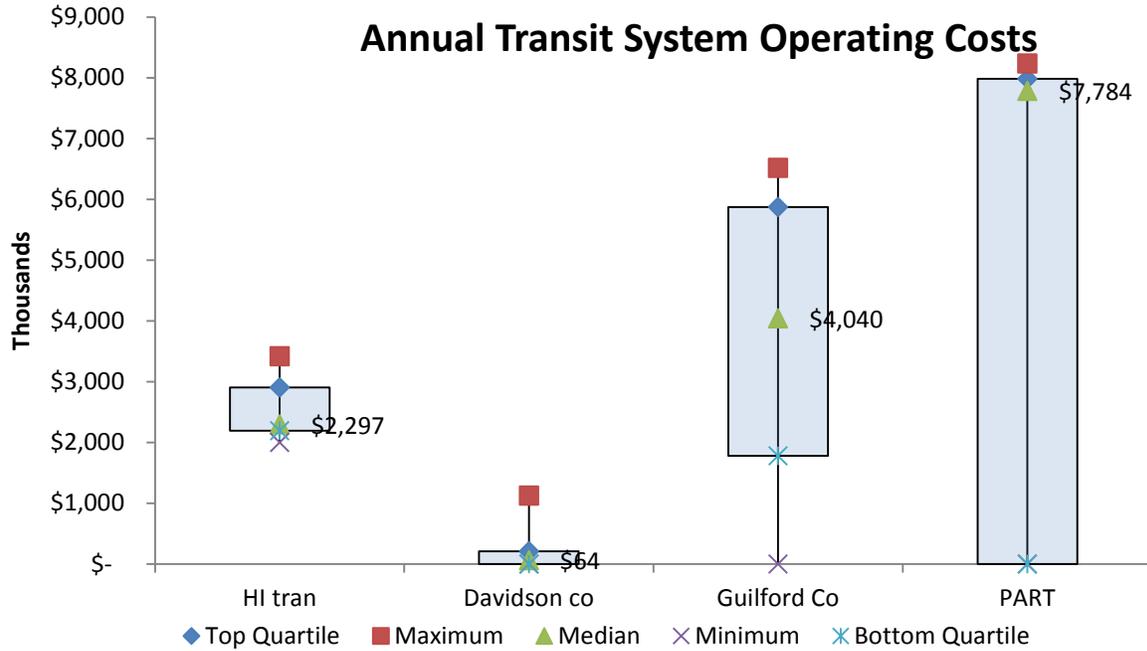
The MPO estimated transit needs by assuming that future transit expenditures would be similar to past transit expenditures. Table 5-5 summarizes this information.

TABLE 5-5: ESTIMATED TRANSIT NEEDS

	To 2021	2022-2030	2031-2040	Total
<b>Operating &amp; Capital</b>	\$28,917,667	\$52,261,240	\$73,455,339	\$154,634,247

Figure 5-6 shows the median transit operating expenditures for the transit providers serving the MPO area. Figure 5-6 is based on information for the years 1992-2011 from the National Transit database. All amounts are in constant 2010 dollars (TS1.2TimeSeriesSysWiedOpexSvc, 2012).

OPERATING COSTS



Source: National Transit Database

FIGURE 5-6 ESTIMATED TRANSIT OPERATING COSTS IN THE URBAN AREA

### Assumptions

This part of the financial capacity analysis describes the assumptions that drive the estimates of revenues and expenditures. This analysis has several limitations:

- Major changes in public policy and funding streams are likely during the forecast period,
- Major changes in travel behavior are likely during the forecast period,
- Federal, states, and local funds are added together,
- The forecast does not consider limitations on some funding streams,
- Private sector funding is not considered,
- The analysis ignores the business cycle,

### Funding Sources

This section discusses the funding sources, which the Metropolitan Planning Organization believes are reasonably foreseeable and available. Available funding is limited to federal transportation dollars, state transportation dollars, toll revenues, capital funds, Powell bill funds, bonds, impact fees, and grants.

However, the MPO cannot assume that all types of funds are reasonably available because the MPO has not used them in the past.

## Federal & State Funding

By far the largest sources of transportation funding in North Carolina are the state and federal funds devoted to transportation projects.

## Federal Funding

Federal transportation funds are generally derived from the federal motor fuels tax collected by the states and returned to them on a formula basis. Federal funds account for a large part of construction and planning funds available in North Carolina. Federal authorizations usually require a twenty percent match<sup>2</sup>. For highways the NCDOT usually provides the matching amounts (80:20) while NCDOT and the local government provide the match for transit money (80:10:10).

The future of transportation funding is uncertain. Fuel tax revenues are losing power as fuel costs force users to forego travel or use more fuel-efficient vehicles while demographic changes may further lower fuel tax revenues. Transportation revenues at all levels are falling because of these trends. So far there is no agreement regarding how to fund transportation going forward.

## State Funding

North Carolina's funding picture mirrors that of the federal government. Costs are increasing as revenues decline.

## Toll Authority

Early in this decade, the North Carolina legislature created the North Carolina toll authority. When created, the toll authority had the authority to implement up to five projects using toll financing<sup>3</sup>. Contrary to popular opinion, the fees collected do not fully cover the cost of maintenance and operations. The chief advantage implementing facilities using tolls lies in constructing them earlier than would normally be possible.

North Carolina opened its first toll road of the modern era in 2012 (Sicelhoff, 2011). The toll authority is considering more projects in the state however, no toll facilities are currently planned for the Triad area or High Point. Because the North Carolina Turnpike Authority is not considering toll roads in the Triad the MPO did not include toll revenues as a foreseeable funding source.

## Local Sources

Cities in North Carolina have a limited menu of options for funding transportation work. They may raise property taxes or in some cases use sales tax revenue<sup>4</sup> to provide transportation services. These funds are then included in the City's capital budget. Most often these funds are used for small construction, maintenance work and sidewalk construction depending upon the desire of local decision makers.

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<sup>2</sup> Rarely, federal funds are available at 90% or even 100% but these funding streams are small or limited to a small number of project types.

<sup>3</sup> As of November 2012 only one toll road has opened in North Carolina.

<sup>4</sup> Sales taxes are actually levied by the County Commissioners.

## Bonds

The City of High Point has been successful at getting citizens to approve bonds for many public projects including transportation related bonds. The most recent transportation bond program raised approximately twelve million dollars. In general, High Point asked its citizens for bond approvals every four or five years. In the most recent bond issue, the City received approximately \$37,000,000 over the five-year period of the bond. The MPO has assumed that High Point will have six bond referenda over the next thirty years and that each bond will generate \$40,000,000 in 2010 dollars for use on transportation projects.

## Impact Fees

Impact fees are available to North Carolina cities, and High Point can use impact fees to provide infrastructure associated with large developments. This infrastructure is often in the form of turn lanes or new traffic control devices

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