

CHAPTER XI: FINANCIAL ELEMENT

The purpose of this chapter is to identify the level of funding that will be available over the life of the Henry County/Cities CTP. This funding could come from a variety of sources including, federal and/or state funds that are programmed by GDOT itself; state transportation funds (with possible federal reimbursement) that are programmed by the ARC; local funds that come from county and city general revenues; special purpose revenues that might result from voter-approved initiatives (such as SPLOST); and other revenue sources that are available to county and local governments, such as revenues from impact fees. Given the level of funding that is often necessary to construct large projects, it should not be surprising that the largest sum of dollars available to Henry County and its cities will be funds programmed in the Regional Transportation Improvement Program (TIP). However, given current ARC revenue forecasts which show serious deficits in funding on currently planned projects, any new Henry County projects added to the regionally funded transportation plan will most likely need a substantial local contribution.

Financial Data Sources

The information used in the financial forecasting process came from a variety of sources. Local governments in Georgia are required to submit to the Department of Community Affairs (DCA) annual data on each jurisdiction's expenditures. These data relate to both operations/maintenance and construction expenditures. Data from the years 1985 to 2005 were gathered from the DCA database for Henry County as well as the Cities of Hampton, Locust Grove, McDonough, and Stockbridge. Contacts were made with County and local officials to obtain budgetary data to confirm the DCA information.

Additional information was gathered from ARC's Transportation Improvement Program (TIP) which lists projects by jurisdiction. Past and current TIPs were examined to determine the historical share of the regional TIP funding that has been allocated to Henry County. Similarly, the Regional Transportation Plan (RTP) has identified projects that are worthy of future funding, and the Henry County projects found in this plan have been included in the financial assessment for the CTP effort. In addition, the ARC is currently in the process of forecasting future transportation revenues for the region from different federal, state and local sources. The latest estimates from this effort have been incorporated into this document.

Finally, revenues generated from previous Special Purpose Local Options Sales Tax (SPLOST) programs in Henry County were obtained and potential SPLOST revenue was projected. Potential impact fee revenues were projected in light of expected future development that will occur in Henry County; however, as of January 2007, a county-level traffic impact fee ordinance has not been enacted.

Financial Assumptions

Revenue forecasting necessarily requires making assumptions about future funding programs and economic conditions that might relate to potential revenues (such as future retail sales that would affect sales tax revenues). For example, the availability of federal funding for transportation projects technically cannot be estimated beyond the authorization period of the latest federal transportation legislation (in the most recent case, four years). However, given the federal requirement for regional transportation plans to be fiscally constrained, assumptions must be made concerning the availability of federal transportation funds over the life of the plan (in the ARC's case, 25 years). Federal guidance on how to make such estimation is very simple. Future projections are to be based on an evaluation of historic growth rates of federal funding. This approach has been adopted in this analysis as well. Note that this approach does not take into account the possibility of major increases or decreases in federal funding.

Although future federal funding for the Atlanta region has been estimated in this analysis, there is no guarantee that any jurisdiction will receive any of these funds, even though historically every county in the region has received some of the federal dollars. The TIP and RTP provide an estimate of the funds that are either programmed or expected to be spent in each jurisdiction. It is assumed that the funding levels allocated for Henry County projects in the current RTP and TIP will remain as the minimally specified funding level in the CTP as well as future RTPs and TIPs.



In general, the funding of transportation projects is often very specific to the type of project being funded. Thus, whereas an arterial improvement project could be replaced with another arterial improvement project if it was shown that the new project was more beneficial, projects in different project types generally cannot be substituted for one another. For example, one could not use federal bridge funding to add a lane to I-75. For purposes of this analysis, it is assumed that much of the funding that is available to Henry County in the regional TIP is targeted on projects for which there is no possibility of substitution for other project types. However, the funds for an arterial road that might be dropped from the plan could be used for another arterial road project.

The historic growth rates for sales tax revenues and development have also been used as an approximation for the expected increase in economic activity that relates to potential revenues.

Given the uncertainty associated with future economic and/or funding program values, the approach taken in this analysis is to provide a range of revenue estimates that reflect different levels of expectation with respect to funding levels. In particular, one of the major characteristics of recent transportation construction has been a dramatic increase in construction costs, with the increases being much greater than that assumed in the RTP and by GDOT. This phenomenon is occurring nationally. The response in most cost estimation procedures has been to assume a short-term increase in inflation of between 7% and 8%, but in the long term, that is, beyond four years, to assume a steady state inflation rate of around 4%. In this analysis, varying inflation rates have been considered and are reported. The resulting sensitivity analysis to key input assumptions permits the analyst to identify a lower and upper bound of potential funding revenues.

Henry County Compared to the Region

Figure XI - 1 and Figure XI - 2 show Henry County's portion of the region's population as compared to total transportation dollars available in the 2006-2011 TIP. As can be seen, assuming that the proportion of the region's population is a good surrogate for transportation need, only approximately 60% of the funds one would expect to come to Henry County have actually been allocated to the County. For purposes of this report, it is assumed that the funds allocated to Henry County in the RTP and TIP are indeed available for future investment in the County's transportation system. However, one of the purposes of the Comprehensive Transportation Plan is to position the County to take advantage of any additional funds that might become available from state or regional sources.

It is also interesting to note Henry County's relative position as compared to other counties in the Atlanta region in terms of county transportation spending. Figure XI - 3 through Figure XI - 5 show three different measures of relative position. Figure XI - 3 compares total transportation expenditures in 2004 to the expenditures per household. As shown, Henry County is grouped with the other counties that have higher transportation expenditures (to the right on the figure). These counties are primarily those that have passed SPLOST referenda and thus have the funding to invest in their county's transportation system. Figure XI - 4 shows the change in population from 1995 to 2005 and the level of transportation expenditures in 2004. Interestingly, there seems to be a linear relationship between these two variables that suggests Henry County, with its SPLOST funds, is typical of the level of funding the counties in the region have invested when compared to population growth. Finally, Figure XI - 5 shows the relationship between absolute population growth between 1995 and 2005 and the respective transportation expenditure per person in 2004.



Figure XI - 1: Henry County Population Share

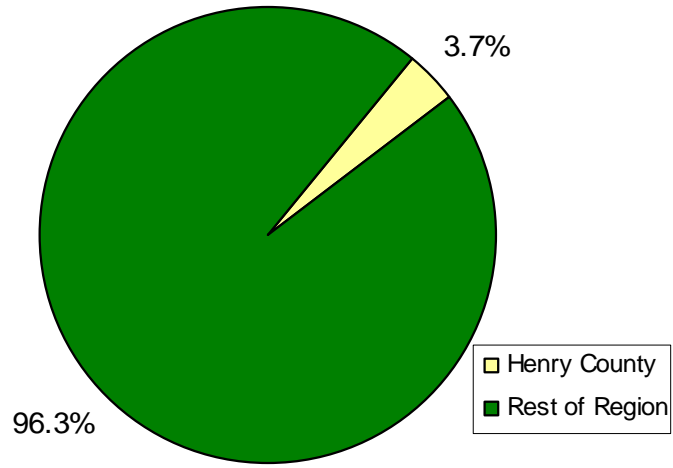


Figure XI - 2: Henry County TIP Share

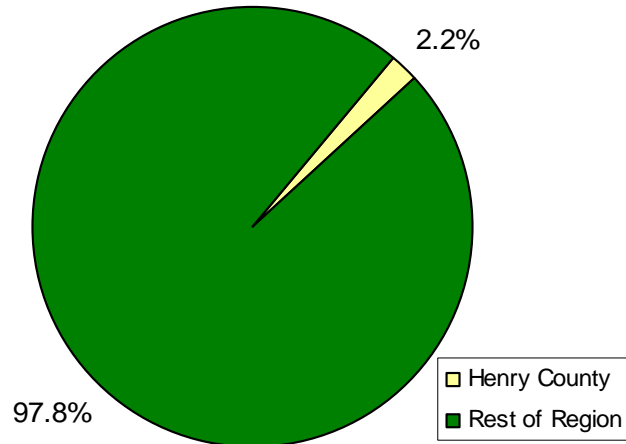


Figure XI - 3: County Transportation Expenditures vs. County Expenditures per Household, Atlanta Region, 2004

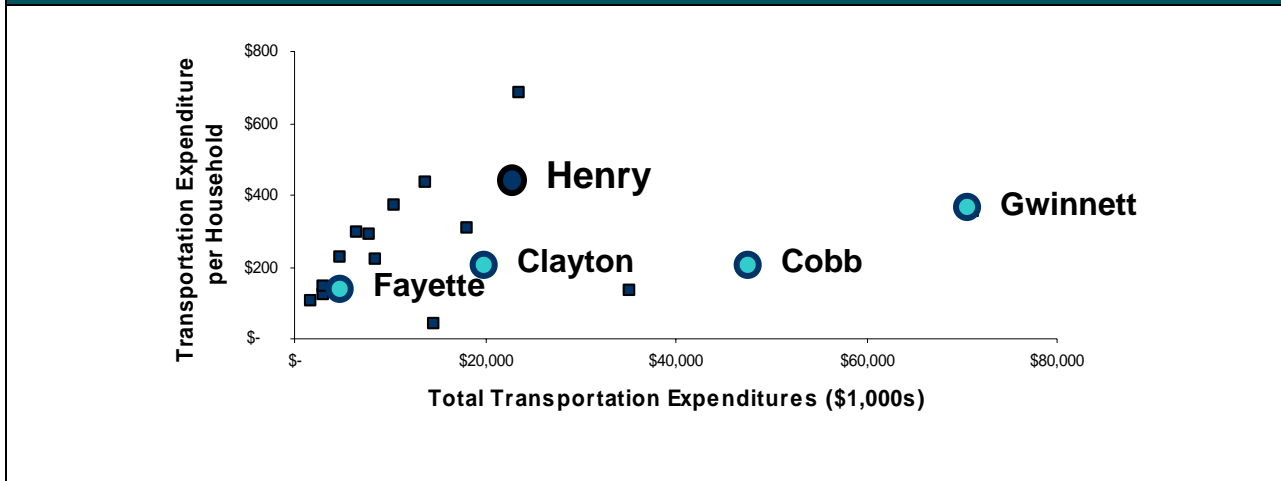
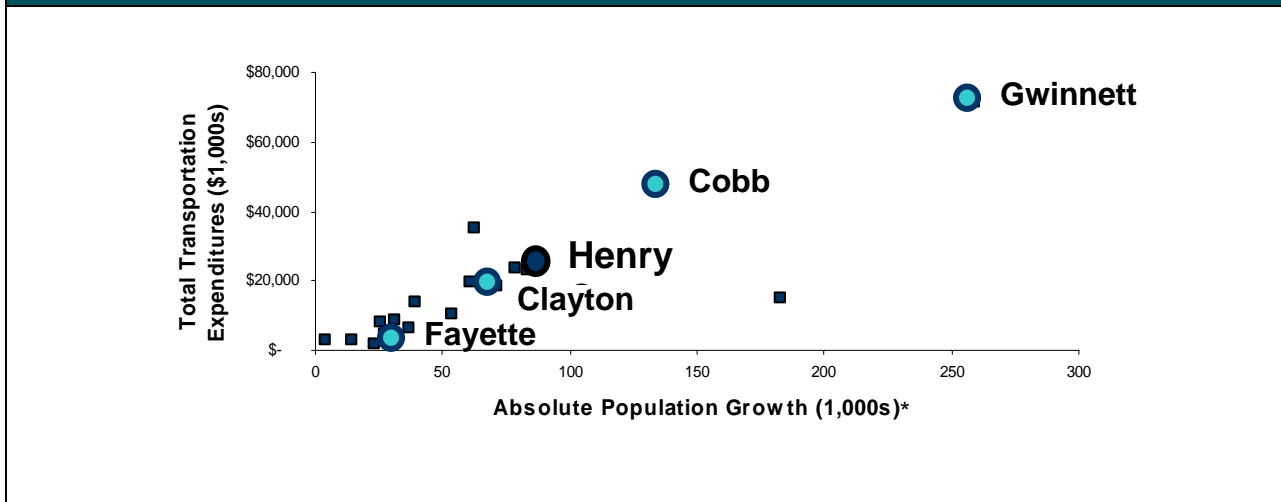


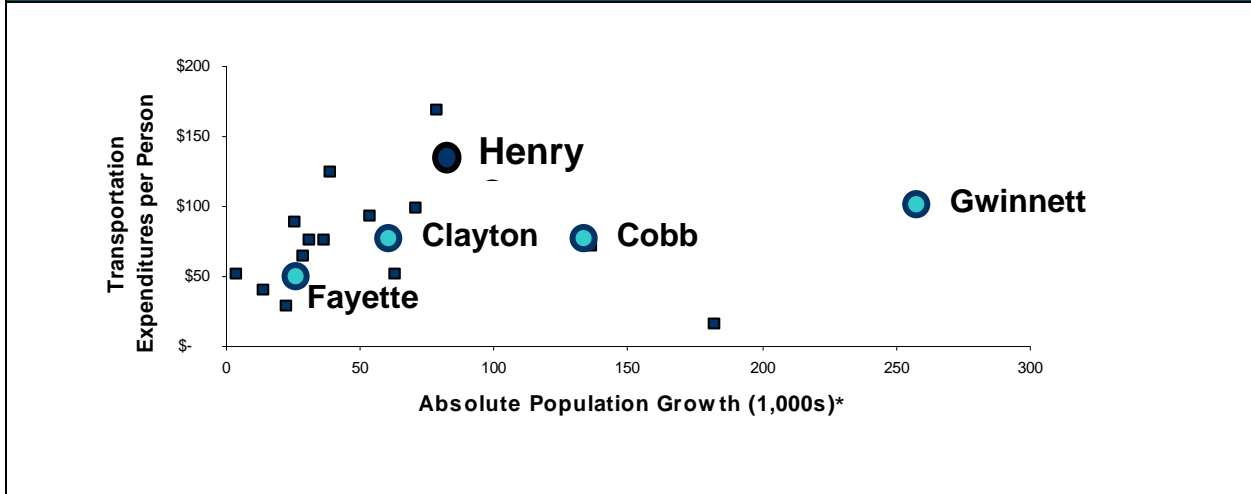
Figure XI - 4: County Absolute Growth in Population (1995-2005) vs. County Transportation Expenditures, Atlanta Region, 2004



*Growth in persons



Figure XI - 5: County Absolute Growth in Population (1995-2005) vs. County Transportation Expenditures per Person, Atlanta Region, 2004



*Growth in persons

When one compares the data from 1995 to 2005 for similar types of relationships, Henry County's position is very favorable as compared to other counties in the region. The key message from Figure XI - 3 to Figure XI - 5 is that the SPLOST program has provided Henry County with critical resources in attempting to keep pace with the population growth and respective transportation demands in the County. Of course, an argument can be made that most of the counties in the database are not spending enough to provide a good transportation system to their citizens, but at least on a comparative basis, Henry County seems to be in a better position than many others.

RTP and TIP Funding

Henry County projects found in the TIP and the adopted RTP *Mobility 2030* are organized into three categories: highways, transit, and other transportation expenditures (see Figure XI - 6). The highway category includes expenditures for projects such as interchange improvements, bridge replacements, and roadway capacity upgrades. Transit expenditures include the costs for purchasing transit vehicles, building transit facilities, and maintaining vehicles and facilities. Other transportation expenditures include the costs associated with building bicycle and pedestrian facilities as well as transportation-related studies.

When comparing Henry County's funding in the TIP to the region's TIP modal allocation, Henry County has a higher proportion of money allocated for highways than to other modes (see Figure XI - 7). Conversely, Henry County's share of both transit and other transportation funds are considerably lower than that of the region as a whole.



Figure XI - 6: Henry County Project Funding in Recent TIPs

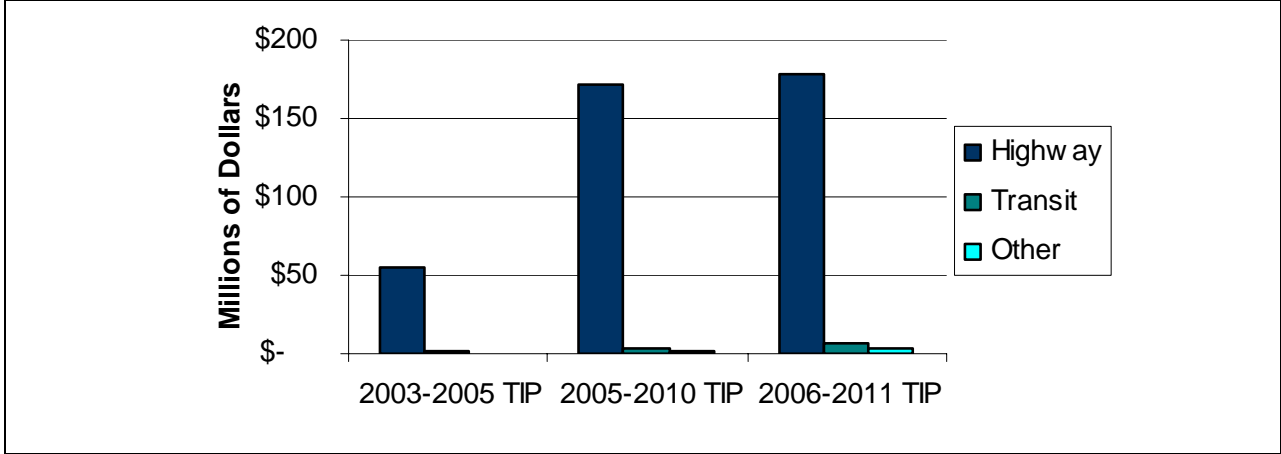
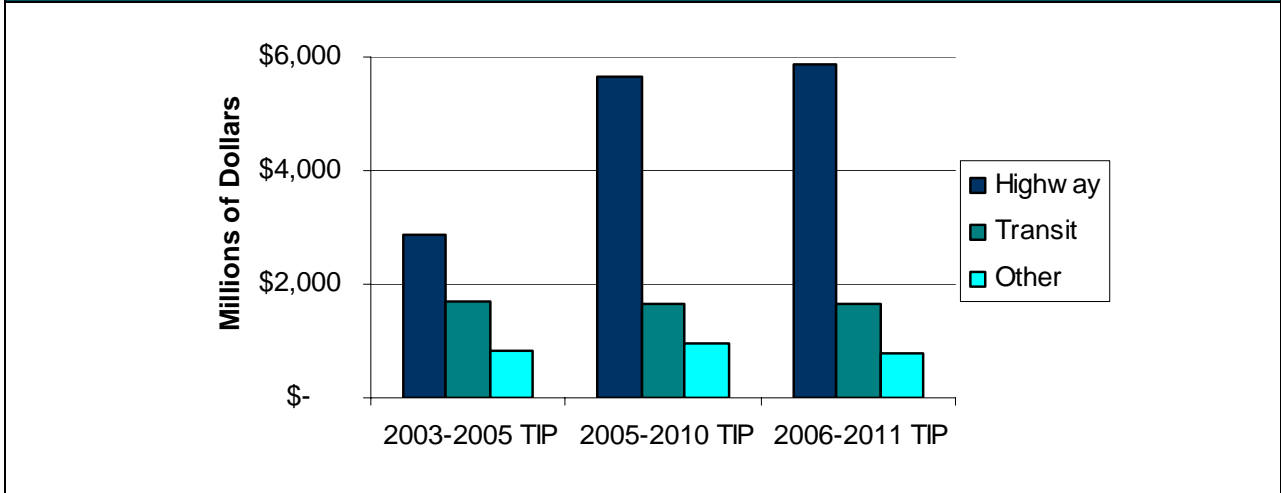


Figure XI - 7: Project Funding Levels by Category in Recent TIPs



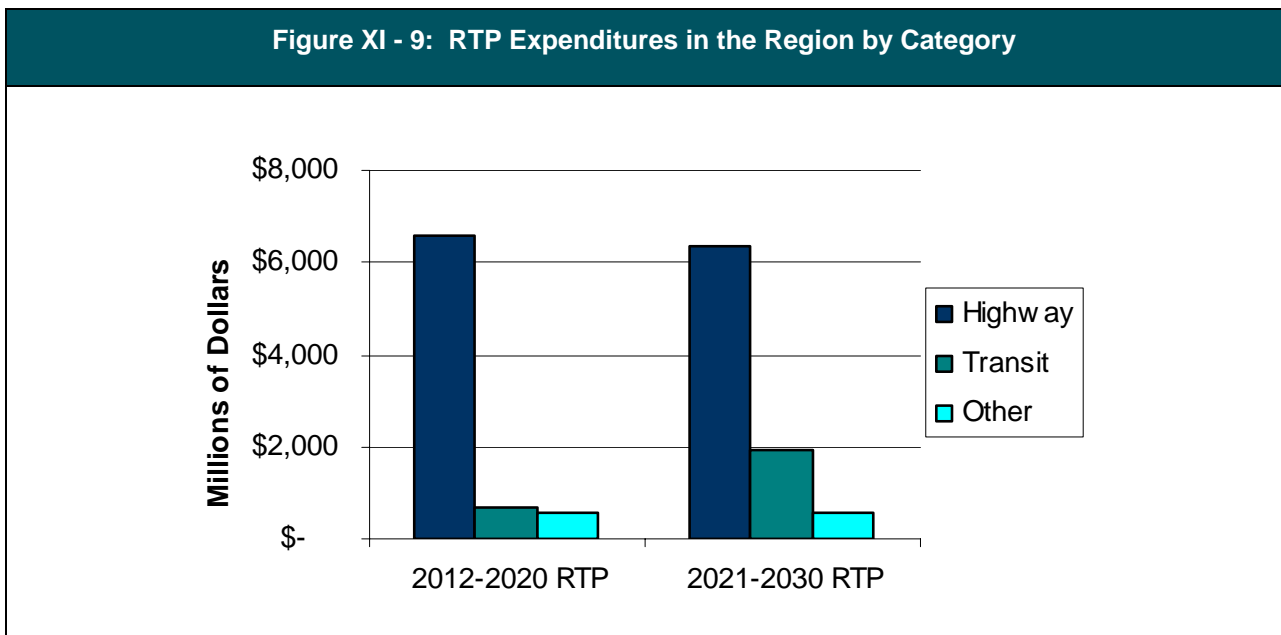
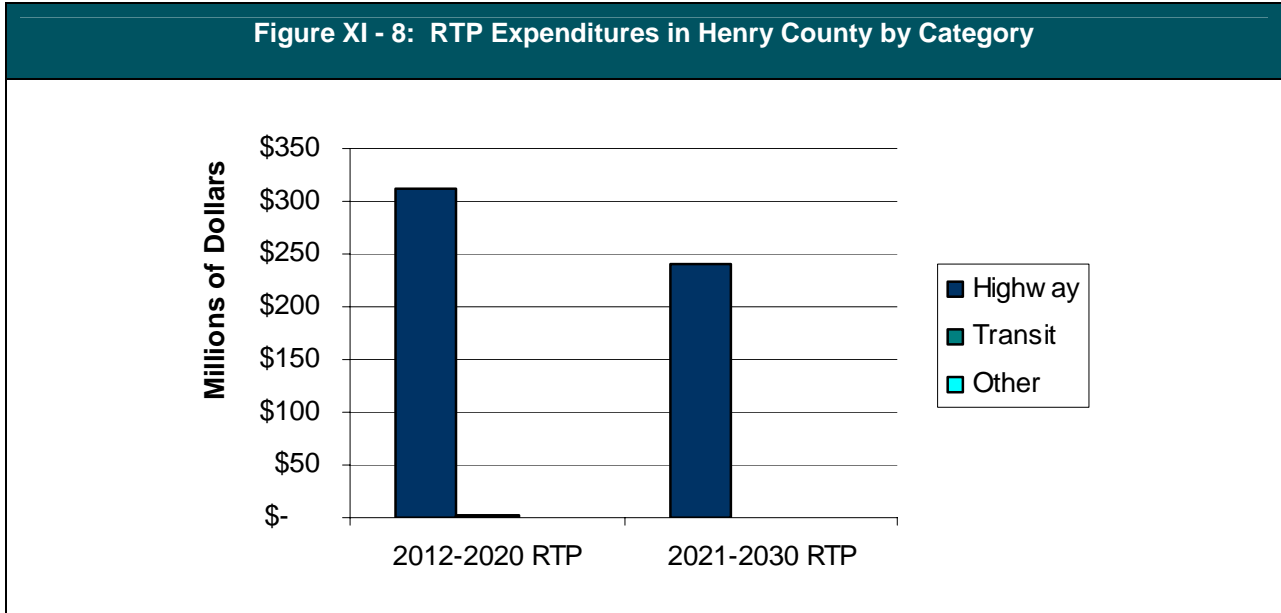
Henry County’s portion of TIP funding has increased substantially in recent years. In the Atlanta region’s 2003-2005 TIP, Henry County projects totaled just over \$50 million. The next TIP spanning 2005-2010 allotted more than \$170 million for Henry County (Note: These two values are not directly comparable as the planning horizons are different between these two programs). To create a more direct comparison between the funding levels of the two TIP programs, the 2003-2005 TIP was pro-rated to a comparable time frame in order to compare it to the 2005-2010 TIP. After this adjustment, the 2003-2005 TIP over six years had a value of more than \$100 million. Thus, the equivalent funding level between the 2003-2005 TIP and the 2005-2010 TIP increased by more than 50%. However, the most recent TIP (2006-2011) showed only a nominal increase in TIP expenditures planned for Henry County.

Regional Transportation Plan Funding

As is the case with the TIP, Henry County’s proportion of funding for highway projects in the transportation plan is significantly higher than funding for transit or other projects (see Figure XI - 8). Likewise, Henry County’s proportion of funding for transit and other transportation is considerably lower than that of the region as a whole (see Figure XI - 9). No *Mobility 2030* funds are allocated to “other” transportation projects and there is only limited funding for transit.



The level of funding planned beyond 2011 will initially be comparable to current levels of funding and after 2020 is expected to decrease. In the current TIP, Henry County is programmed to receive about \$30 million per year over the six year planning horizon. This level is expected to increase to an average of about \$33 million per year from 2012-2020 and then fall to just under \$25 million per year from 2021 to 2030. To a large extent, this decreased funding beyond 2020 is due to the uncertainty associated with funding levels in these "out" years.



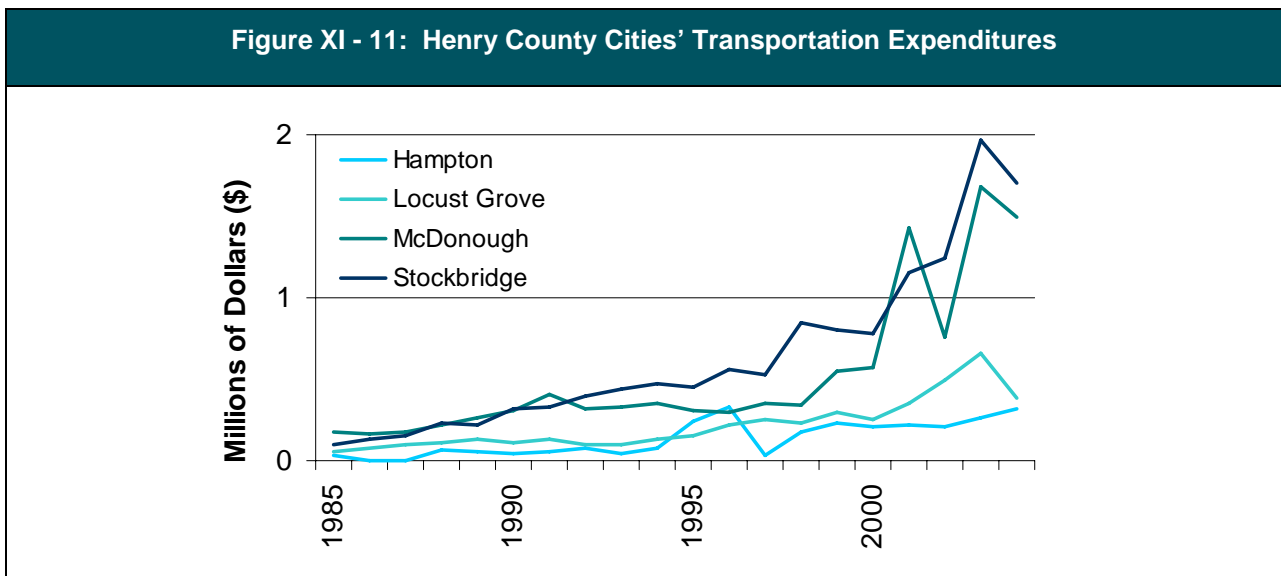
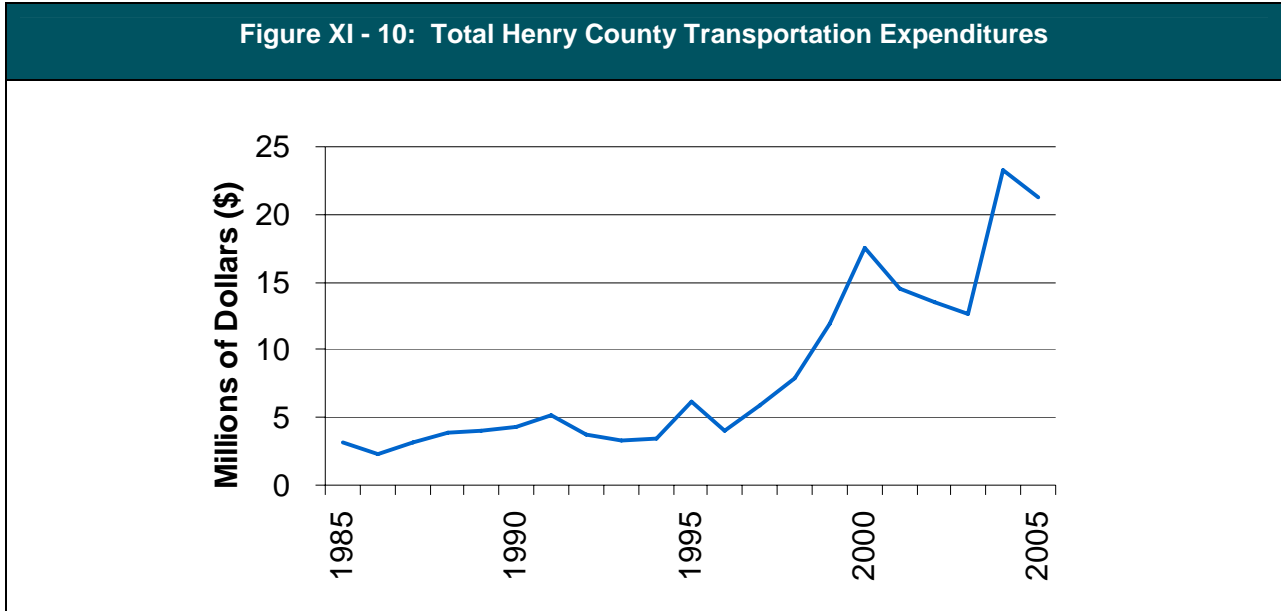
City and County Expenditures

Over the past 20 years, transportation spending in Henry County has seen important increases for both the Cities as well as the County. Over this period, total transportation spending for the County has increased by about seven times from \$3 million in 1985 to \$21 million in 2005, which reflects the availability of SPLOST revenues. Combined City spending has increased by more than 10 times from



\$367,000 in 1985 to just under \$4 million in 2004. Since 1990, County transportation expenditures have increased at an annual rate of about 11% per year which is more than one and a half times the rate of the average yearly population increase over the same time period of about 7% per year.

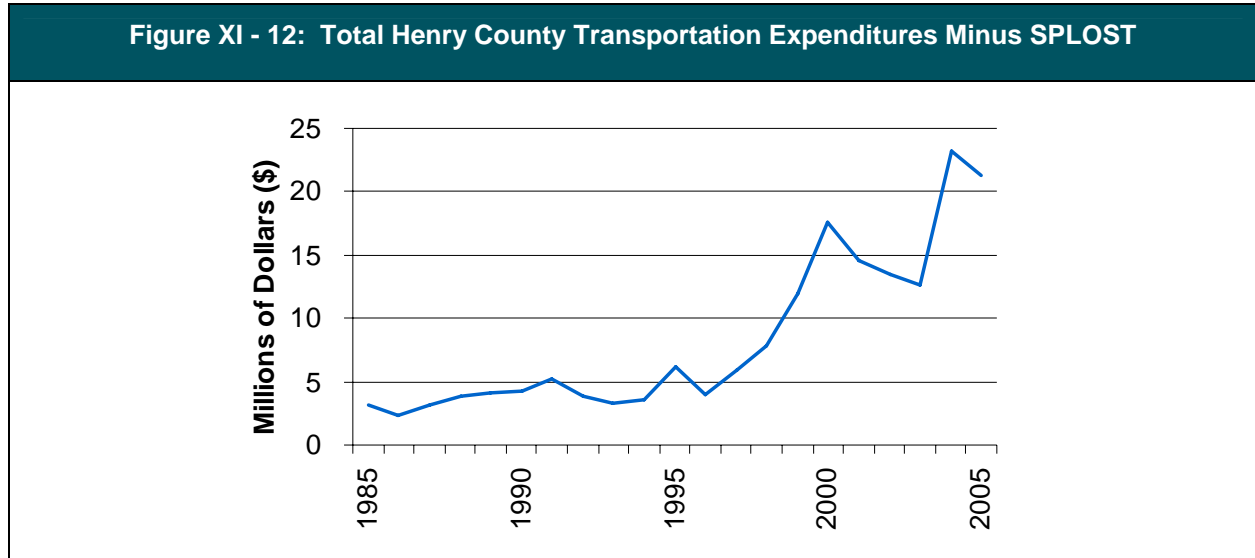
As noted earlier, one of the driving factors for the County's increased transportation expenditures is the Henry County SPLOST program. Since 1996, Henry County voters have approved two SPLOST referenda, a large portion of which has been devoted to funding transportation improvements. Thus far, \$139 million has been collected from the additional 1% sales tax, of which \$46 million has been spent to date on transportation projects. SPLOST collections have also grown over the life of the SPLOST. Since its inception, SPLOST collections have increased an average of more than 10% per year and have more than doubled from \$12.4 million in 1998 to \$25.4 million in 2005. Figure XI - 10 and Figure XI - 11 show the total transportation expenditures for both Henry County and its Cities since 1985.



In addition to the SPLOST revenues, the only other local funding source for transportation in Henry County is the general budget. In addition to the influx of funding from the SPLOST program, general



budget expenditures on transportation have increased nearly 13% per year over the life of the SPLOST program from under \$6 million in 1997 to more than \$15 million in 2005. Figure XI - 12 shows the general transportation budget expenditures for Henry County when SPLOST expenditures are not considered.



Discretionary Funding

One of the key challenges in developing a finance plan for the CTP is determining which funding is “discretionary,” that is, what funding currently being considered for other projects can be shifted to new priorities. In making this determination, the projects in *Mobility 2030* were divided into project categories. Projects in the current TIP were not included in this process because County and City representatives determined that these projects already had been committed to or were so far along in the planning process that they should not be changed.

The *Mobility 2030* project categories included: interstate highways, bridges, local arterial roads, transit, and bicycle and pedestrian system expenditures. The interstate highway classification included any money spent on interstate highways, whether the investment was widening the road or making improvements at interchanges. Bridges included expenditures to replace functionally and/or structurally obsolete bridges. Local arterial roads included all expenses related to changes in local roads from capacity upgrades to intersection realignments. The transit category included all transit expenses and the bicycle/pedestrian category included all projects for non-motorized transportation. The resulting expenditures by type and time period are shown in Table XI - 1. A more detailed view of all Henry County projects in *Mobility 2030* can be found in the Appendix.



**Table XI - 1: Funds Allocated by Project Type by Time Period Listed in the RTP
(in constant 2005 dollars expressed in millions of dollars)**

RTP Period	Interstate	Bridges	Local Arterial	Transit	Bicycle/ Pedestrian
2012 – 2020	\$100.000	\$1.038	\$202.812	\$2.500	\$0.000
2021 – 2030	\$123.000	\$0.000	\$116.837	\$0.000	\$0.000
Total	\$223.000	\$1.038	\$319.649	\$2.500	\$0.000

Each of these funding categories is subject to strict guidelines on how the funds should be spent. Thus, as was noted earlier, it was assumed that funds cannot be transferred from one category to another. Furthermore, it was assumed that changes in the interstate highway system, which are the responsibility of the Georgia DOT, are beyond the scope of this analysis. Thus, other than minimal bridge and transit expenditures, the only discretionary funding available to Henry County for possible reallocation in the current ARC transportation plan is the funding allocated to local arterial projects. An overview of funding sources for local arterial road expenditures is shown in Table XI - 2. A more detailed view of all discretionary Henry County projects by time period in *Mobility 2030* can be found in the Appendix.

**Table XI - 2: Local Arterial Funds for Investment by Time Period Listed in the RTP
(in constant 2005 dollars expressed in millions)**

RTP Period	Federal	State	Local	Bonds
2012 – 2020	\$20.634	\$5.358	\$176.820	\$0.000
2021 – 2030	\$80.606	\$20.151	\$16.081	\$0.000
Total	\$101.240	\$25.509	\$192.901	\$0.000

Table XI - 2 shows the source of the funds that have been assigned to local arterial projects in the ARC's current transportation plan. Clearly, there is a relationship between some of the state and local funds and the availability of federal funds. That is, many of the local funds are considered local match for federally-funded projects. If the local match is used for another project, there is no guarantee that the federal funds will be available to match the new project. However, for purposes of this analysis, it was assumed that an arterial project that is worthy of consideration in place of a currently federally funded project would be worthy of federal funding as well.

Some other noteworthy observations from Table XI - 2 include the lack of state bond funding for Henry County projects and the high level of local funding for local arterial improvements. Local funding for arterial roads is expected to be nearly twice the level of federal expenditures and nearly eight times the level of state expenditures. Furthermore, it seems likely that the local share will be even greater than what *Mobility 2030* suggests as local expenditures appear to be unrealistically low in the 2021-2030 time frame.

Table XI-2 indicates that local funding is expected to play a large role in funding arterial projects in Henry County. Of the approximately 25 arterial transportation projects scheduled for completion between 2012 and 2030, only eight (8) have no local funding obligations. Approximately 60% of the projects, 14 of the 25, are assumed in *Mobility 2030* to be entirely funded from local sources.



Another important consideration for project funding is roadway functional classification. Current federal rules prohibit the use of federal transportation funds for local roads (urban and rural) and rural collector roads. This constraint should be kept in mind as changes to the County’s roadway functional classification system are considered.

Funding Forecast

In order to more accurately forecast funding levels for future local arterial projects and to provide a sense of the sensitivity of these forecasts to changing conditions, a variety of conditions were assumed in developing ranges of funding levels. Changing conditions included: the rate of growth in local (SPLOST) funding, inflation rates, what portion of the SPLOST was dedicated to transportation, and the sales tax rate that might be used for the SPLOST. Assumptions were also made concerning the overall eligibility of funds for arterial road projects. For example, federal and state funding for existing arterial road projects was considered transferable to other arterial road projects. The analysis further assumed that these levels were constant with respect to new funding as well as inflation. Thus, no additional funding is expected from these sources and inflation is assumed to not erode the value of the funding. It is also assumed that a SPLOST program will exist throughout the planning time horizon though ultimately this issue will be determined by the voters of Henry County.

The revenue forecast considered only federal, state and SPLOST dollars. No other local funding mechanism was considered, although other possible sources of transportation revenue are described later in this section. Table XI - 3 displays an overview of the most probable financial projections. The range in SPLOST values is calculated at a 5% rate of inflation. The low end of the range utilizes a 7% growth rate and 40% SPLOST utilization for transportation and the high end of the range utilizes an 11% growth rate and a 60% SPLOST utilization rate for transportation. The complete sensitivity analysis which includes SPLOST projections with inflation rates of 4%, 5%, and 6% combined with the portion of SPLOST allotted for transportation to be 25%, 40%, 50%, and 60% can be found in the Appendix.

Table XI - 3: 2012-2030 Local Arterial Funds Potentially Available (constant 2005 dollars expressed in millions)			
RTP Period	Federal	State	SPLOST
2012 – 2020	\$20.634	\$5.358	\$112.603 - \$255.222
2021 – 2030	\$80.606	\$20.151	\$149.719 - \$481.951
Total	\$101.240	\$25.509	\$262.322 - \$737.173

Funding for pedestrian, bicycle or transit projects may also at least partially come from some of the funding sources given in Table XI - 3. It is also possible that some of the funding, especially the SPLOST funds, may go toward non-arterial projects such as paving dirt roads, replacing bridges, constructing sidewalks, bike paths, and trails, and undertaking capital projects associated with public transportation services, such as park and ride lots and vehicle purchases.

Given that *Mobility 2030* assumes that about \$176.8 million in local funds will be available for the 2012-2020 time period for projects already identified, there is a distinct likelihood that Henry County will not have enough money for additional arterial projects during this investment period. If the upper bound of SPLOST collections is realized and inflation does not rise significantly, additional projects may be funded. However, if SPLOST collections are in the middle range or inflation is higher than expected, it is most likely that no additional projects could be funded. Furthermore if SPLOST collections are in the lower range or even the lower side of the middle range, it is quite possible that Henry County may have to remove projects from the 2012-2020 portion of *Mobility 2030*. If a new SPLOST referendum is not re-



approved by the Henry County voters upon the conclusion of any previous SPLOST, the resulting gap in SPLOST collections will almost surely mean the reduction in the number of projects that can be funded.

Funding estimates in the 2021-2030 time period seem to have more flexibility in meeting the needs of the County and Cities. Currently, only about \$ 16.1 million of local money is assumed in *Mobility 2030*, whereas state and federal funding is considerably higher than in the 2012-2020 time frame. However, although there will be more money available in the long-range time horizon, it is likely that the transportation needs will be considerably greater due to a larger population in the County. Thus, though funding is higher, it will likely not be enough to meet the increased demands of a larger population and a more urbanized county.

Innovative Finance Strategies

Communities, metro areas, and states across the U.S. are challenged by providing adequate transportation facilities and services in an environment where construction and land costs are rapidly rising and transportation revenues are dwindling due to backlogs of unfunded capital program and system operation and maintenance needs. Given the funding constraints of traditional transportation funding sources, creative and innovative transportation finance strategies should be considered to meet the gap between available resources and transportation needs. Some key innovative finance strategies are described below. These represent viable options for Henry County and its Cities to consider as new transportation resources are needed over time.

Impact Fees

Although development impact fees are another potential source of funding for transportation projects, the potential revenues from impact fees are not expected to experience the rapid growth of other funding sources. Based on the Draft Transportation Impact Fee Study produced for Henry County (draft published in January, 2005), it is expected that impact fee revenues will initially generate about \$20 million per year and, given development rates, will grow approximately 1.5% per year in constant dollars. However, as is the case in other counties where impact fees are used, most of the revenue generated from impact fees is used to fund the development-specific improvements that are needed to mitigate the impact of additional growth within the vicinity of the project site. It is not clear whether such an investment focus would naturally coincide with the location of needed projects identified in the CTP. This funding source, however, could be useful for relatively small transportation improvement projects, such as intersection improvements, adding turn lanes on arterials, improved signal systems, and other similar projects.

New State or Regional Sales Tax Revenues

Several proposals have been made to increase the amount of funding available for transportation purposes across Georgia and in Metro Atlanta. One proposal would change the current 7.5 cents per gallon/3% sales tax on fuel to a statewide one percent (1%) sales tax on all retail goods. This can be expected to raise an additional \$1.2 to \$1.4 billion per year, although it is not clear how these additional funds would be allocated statewide or whether all of the revenues raised would indeed go for transportation purposes.

A second proposal which addresses the Metro Atlanta region's transportation funding situation allows two or more counties in Georgia to vote a one percent (1%) sales tax dedicated to transportation, where these funds are retained in the counties that generate them as well as the municipalities that are part of the voting jurisdictions. The proposal is aimed at developing a dedicated source of funds for transportation projects. The level of funding associated with this proposal will differ depending on the number of counties that opt into the plan, but the estimate for the region, assuming all counties join, is about \$1.5 billion per year. Again, it is not clear how these funds would be distributed. Although it is not known which, if any, strategy will be adopted, some form of transportation revenue enhancement could occur during the next two years, prior to the next state election cycle.



Bonding

States, some counties, and larger cities in the U.S. have turned to bond funding to support their transportation investment program. In essence, bond funding allows a government to borrow monies from the municipal bond market with the guarantee of payments over the life of the bond coming from a stable source of funds. In some cases, jurisdictions have passed special taxes (e.g., a sales tax) that serve as the guaranteed funding source, whereas in others, the bonds are issued against the general fund of the jurisdiction itself. The challenge for counties and municipalities in using bond funding is providing the guaranteed funding source, usually over many years. A finance program based on bonding is usually only used when capital-intensive projects require substantial upfront dollars.

Local Gas Tax

One of the proposals that has been considered by the Governor's Task Force on Local Transportation Finance has been to promote legislation that allows local jurisdictions to adopt a local option gas tax on sales within their jurisdiction. This proposal has not been adopted by the General Assembly and it is unlikely that such an option will be available in the near future. Using a non-state gas tax as a source of transportation funding would be effective most likely in a regional application (i.e. Metro Atlanta, for example).

Public Private Initiatives

Georgia is among a group of states considering public-private initiatives for funding transportation projects. Such initiatives promote the use of private capital to fund and operate a new facility over a specified time period in exchange for the revenues generated from tolls. Such arrangements are feasible for high volume roads where sufficient revenues will be obtained to justify the capital investment. It is not likely that any road in Henry County (except perhaps new lanes on I-75) would be a candidate for such a funding strategy. Another way to involve the private sector is through right-of-way donation for public projects. A recently successful example of this in Henry County can be found at Willow Lane and Tanger Blvd.

Financial Summary

In conclusion, the construction of future arterial highway projects is very dependent on the Henry County SPLOST Program. The SPLOST program is expected to provide funding for approximately 65% of Henry County's arterial highways expansion program over the life of ARC's Regional Transportation Plan (RTP) through 2030. Additionally, the Joint Henry County/Cities CTP has identified transportation needs beyond those identified in the adopted RTP. While it is possible that SPLOST funding combined with state and federal funding would go a long way to fund all planned projects, this will not likely happen. One reason for this will continue to be high inflation rates in construction costs that over the past few years have reduced the amount of construction dollars available for projects. Another factor is rising land (right-of-way) costs, especially in urban areas. Additionally, despite the best efforts of planners and engineers in making provisions for project cost contingencies, there is usually an increase in actual project costs over the planning-level estimates developed in the very early states of project definition. Until a significant level of design engineering is conducted on a transportation project, a detailed cost estimate is very difficult to develop.

There are other potential sources of funding that could support projects that have been identified in this CTP, but for which there is no funding in ARC's adopted RTP. The revenue sources that seem most feasible include impact fees and additional funds from statewide or regional funding sources dedicated to transportation investments. It will be especially important for Henry County to be engaged in the statewide and regional discussions that will precede the adoption of any new source of transportation funding. These discussions will likely start in 2007. The key to these discussions will be how any additional funding will be distributed to local jurisdictions, or alternatively, how investment decisions will be made.

