Chapter V - FINANCIAL PLAN

Financial Plan

Federal requirements mandate that the *LRTP 2035* include a financial plan that demonstrates how the recommendations can be implemented based on system-level estimates of costs and reasonably expected revenues. Further, both costs and revenues must be expressed in year of expenditure (YOE) dollars to accurately account for the anticipated revenues available to the region and the costs of materials and labor to implement projects through 2035. These fiscal constraint requirements are critical to ensuring that the *LRTP 2035* is credible and provides realistic expectations of what can be accomplished; not simply a wish list that has little to no chance of being advanced.

The *2011-2014 Transportation Improvement Program (2011-2014 TIP)* was adopted by GTC on June 17, 2010 and meets the same fiscal constraint requirements as the *LRTP 2035.* The revenues used to the develop the *2011-2014 TIP* and the costs of projects included in it represent the full commitment of federal surface transportation funds for federal fiscal years (FFY) 2011 through 2014 in YOE dollars, commencing on October 1, 2010 and ending on September 30, 2014.

Costs

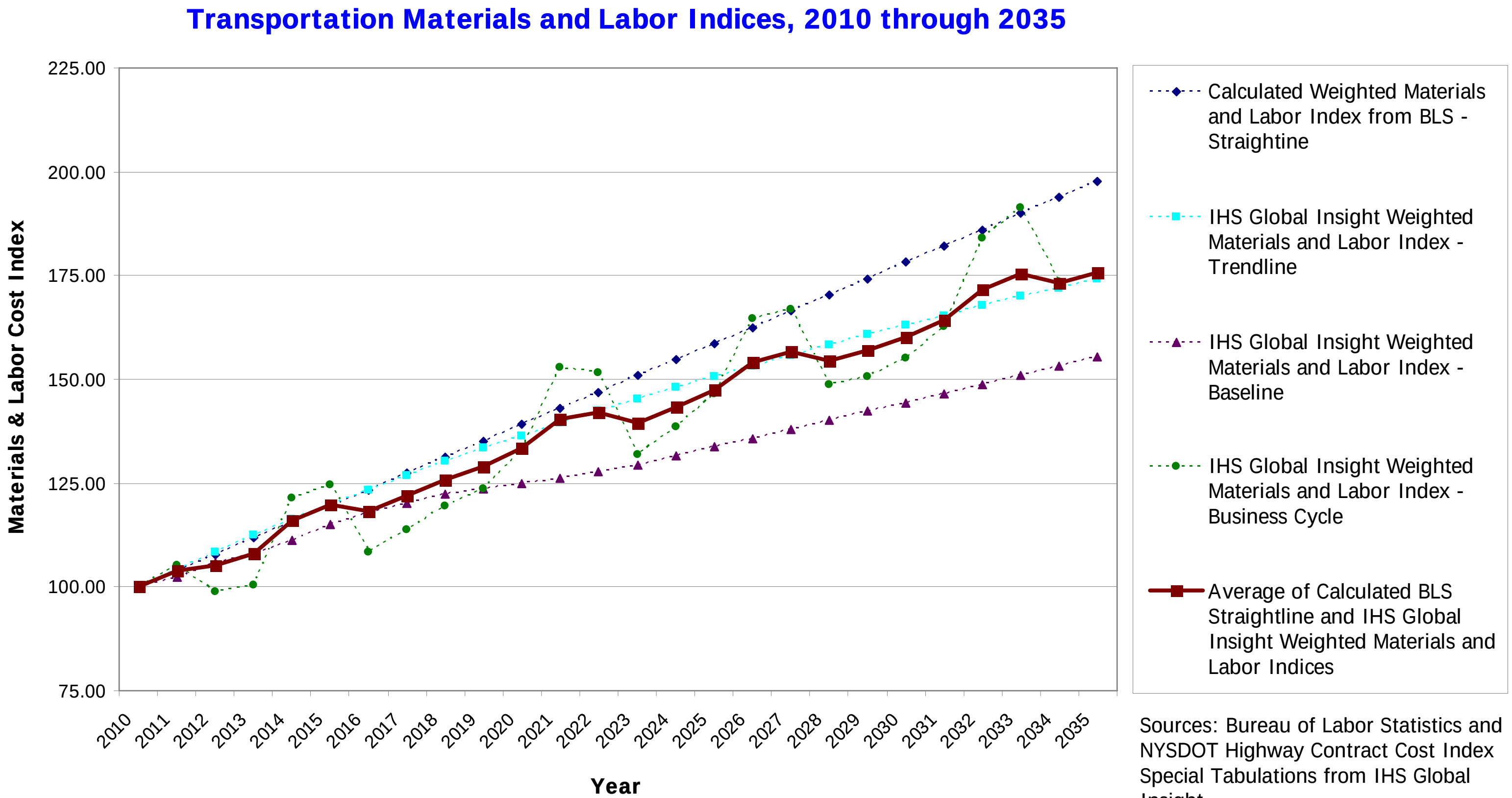
The primary driver of cost increases for transportation infrastructure and services will be global demand for materials and supplies. As the economies of developing nations – including the BRIC countries (Brazil, Russia, India, and China) – continue to expand, their corresponding investment in infrastructure plays a major role in determining global prices for oil, steel, concrete, and other materials. The future outlook for these economies is that they will continue to grow at a faster rate than the United States and the Eurozone albeit more slowly than prior to the Great Recession.

Two separate data sources were utilized to estimate the escalation in prices of materials and labor through 2035. Initially, a straight line projection of the change in a weighted average of the Bureau of Labor Statistics' (BLS) Producer Price Index (PPI) for Materials and Supply Inputs to Highway and Street Construction from 1986 to 2010 and Consumer Price Index for Northeast Urban Consumers – Size Class B/C (between 50,000 and 1.5 million residents) from 1996 to 2010 was calculated. The average annual increase of 4.07 percent was applied to the years 2011 through 2035 using 2010 as the base year to create the first dataset.

The second source of data used to estimate future inflation in transportation costs was obtained from NYSDOT. NYSDOT purchases highway contract cost index special tabulations from IHS Global Insight. These tabulations are one of several inputs into the escalation factors used by NYSDOT in preparing cost estimates for future projects. The IHS Global Insight tabulations include three weighted indices of future materials and labor: baseline, trend, and business cycle.

Given the uncertainty over such a long time period and the unique advantages and disadvantages of using various historical trends and future projections, the annual increase in costs over the next nearly 25 years is estimated to be the average of all four indices – 3.2 percent. Exhibit 22 presents the rate of change for the various indices (displayed as broken lines) as well as the average (displayed as the solid line) that is being used to escalate current costs to YOE dollars.

Exhibit 22



Sources: Bureau of Labor Statistics and NYSDOT Highway Contract Cost Index Special Tabulations from IHS Global Insight

Revenues

There is just as, if not more, uncertainty regarding the availability of future revenues for transportation projects and programs in the region through 2035. The last multi-year surface transportation legislation, SAFETEA-LU, which authorizes funding for highway and transit programs expired on September 30, 2009 and has been extended multiple times. Successor legislation was not enacted during the development of the *LRTP 2035.*

The vast majority of taxes collected on the sale of motor fuels (e.g., gasoline, diesel, etc.) are deposited into the Highway Trust Fund (HTF), with a small amount (.01 cents) going to the Leaking Underground Storage Tank Trust Fund. The HTF via its Highway Account and Mass Transit Account is the primary source of revenues for federally-funded surface transportation programs. The major formula-based programs funded through the HTF that are apportioned by legislated formulas include:

FHWA Programs

- Highway Bridge
- Interstate Maintenance
- National Highway System
- Surface Transportation (Flex, Large Urban, Small Urban, and Rural)
- Highway Safety Improvement
- Congestion Mitigation and Air Quality Improvement
- Transportation Enhancements
- Safe Routes to School

FTA Programs

- Urbanized Areas
- Elderly Persons and Persons with Disabilities
- Other than Urbanized Area
- Job Access and Reverse Commute
- New Freedom

The major reason for the delay in enacting a successor to SAFETEA-LU has been how to pay for federal surface transportation programs. The HTF is no longer the reliable source of revenue that it has been in the past. The federal excise taxes on the major motor fuels of gasoline (18.4 cents per gallon) and diesel (24.4 cents per gallon) have not been raised since 1993. Materials and labor have increased appreciably since that time, eroding the purchasing power of the HTF. In addition, requirements for increased fuel efficiency for new vehicles mean that increases in driving are resulting in increased wear and tear on transportation infrastructure but less revenue for improvements on a vehicle miles traveled basis. The *LRTP 2035* fully presumes that the HTF will be replaced with a new user fee (potentially, a graduated vehicle miles travelled tax charge based on impact to infrastructure) or that federal transportation revenues will be derived from some other means.

Discussions on the structure of federal highway and transit programs in the successor to SAFETEA-LU are also taking place. Most of these discussions include the consolidation of programs around major initiatives that serve national interests. Inherent in these discussions is the need to provide more funding to and flexibility in what projects and programs are advanced with federal funds while requiring a higher degree of accountability regarding outcomes (e.g., the structural condition of infrastructure, performance of public transportation services, etc.).

To estimate reasonably expected federal revenues in YOE dollars, the percent increase from TEA-21 (the predecessor authorization legislation) to SAFETEA-LU – inclusive of extensions to both – for the formula-based programs listed previously were determined and applied to the amounts allocated to the GTC TIP area in six-year increments. There is speculation that the successor to SAFETEA-LU will be a standard six-year authorization that will be enacted in 2013 (i.e., FFY 2013 through FFY 2018).

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Since the current TIP *(2011-2014 TIP)* represents the commitment of federal funds through FFY 2014, it is assumed that only funds authorized in FFYs 2015 through 2018 will be available for new projects.

The GTC TIP area includes the counties of Genesee, Livingston, Monroe, Ontario, Orleans, Wayne, and Wyoming. Federal funds programmed in Seneca and Yates counties are determined by the New York State Department of Transportation and not included in this analysis as it is not anticipated that GTC will be involved in these deliberations.

Even at these increased levels, the United States will continue to significantly lag the investment in transportation that emerging nations are projected to make as measured by percent of gross domestic product (GDP). China is currently investing upwards of 10 percent of its GDP in infrastructure and India is investing approximately five percent. The United States is currently investing less than two percent across all levels of government. The disparity in GDP between the United States and China is shrinking with (according to some sources) the Chinese economy expected to surpass that of the United States as the largest in the world sometime between 2016 and 2022.

The ability to move workers and freight in a safe, efficient, and reliable manner is crucial to economic productivity and competitiveness in the global marketplace. Accordingly, the increases in reasonably expected federal surface transportation revenues during the time period covered by the *LRTP 2035* are deemed appropriate given the recognition by policymakers of the importance of transportation infrastructure and services to the economic vitality of the nation.

To account for the uncertainty in the composition of federal transportation funding programs (including the potential consolidation of existing programs), reasonably expected future revenues were combined to create the following categories:

- <u>Highway and Bridge</u> – includes the FHWA Highway Bridge, Interstate Maintenance, National Highway System, and Surface Transportation programs
- <u>General Public Transportation</u> – includes the FTA Urbanized Area (Section 5307) and Other than Urbanized Area (Section 5311) programs
- <u>Human Service Public Transportation</u> – includes the FTA Elderly Persons and Persons with Disabilities (Section 5310), Job Access and Reverse Commute (Section 5316), and New Freedom (Section 5317) programs
- <u>Flexible</u> – includes the FHWA Congestion Mitigation and Air Quality, Transportation Enhancements, and Safe Routes to School programs

Programs that are not apportioned by legislated formula are discretionary and typically allocated by Congress. These non-recurring revenues include earmarks and are not included in the estimates of reasonably expected revenues given the uncertainty of their availability over the period covered by the *LRTP 2035.*

In addition, states have the ability to transfer funds among apportioned programs (e.g., a state may transfer up to 50 percent of its National Highway System program funds to the Interstate Maintenance, Surface Transportation, Highway Bridge, Congestion Mitigation and Air Quality Improvement, and/or Highway Safety Improvement programs). New York State has never availed itself of these transferability options but the combined categories used in the *LRTP 2035* do account for the continued availability of these provisions.

Apportioned federal programs (i.e., those distributed by legislated formula) typically require a non-federal match of 20 percent of the total project cost – current exceptions include the FHWA Interstate Maintenance and Highway Safety Improvement programs, which require a 10 percent non-federal match, and the FTA Job Access and Reverse Commute and New Freedom programs, which require a 20 percent match for capital expenses and a 50 percent match for operating expenses. Non-federal revenue sources include those provided by state and local governments and authorities that are generated by taxes, fees, tolls, and fares.

The projections of reasonably expected federal revenues in YOE dollars by the combined categories discussed above by anticipated federal authorization legislations through 2035 are presented in Exhibit 23.

Nearly all of the federal-aid-eligible transportation system in the GTC TIP area is owned, operated, and maintained by state, regional, county, and city departments and authorities – all of whom are members of GTC. As an example, 95 percent of the 1,484 bridges in the GTC TIP area are under the jurisdiction of GTC member agencies. Each of these agencies makes substantial investments in the regional transportation system with non-federal revenues complementing the federal highway or transit funding available to the region.

NYSTA does not receive any federal funding for the approximately 75-mile portion of Interstate 90 that crosses the GTC TIP area. Because this portion of the NYS Thruway is tolled, federal legislation requires an agreement with USDOT for Interstate Maintenance Program funds to be programmed for projects on it.

The most significant non-federal transportation funding sources include:

- New York State Dedicated Highway and Bridge Trust Fund – This is the primary source of non-federal funding that is invested in the region's federal-aid highway and bridge network. Between 2005 and 2010, more than $200 million has been allocated for physical improvements to the highway and bridge network.

Exhibit 23

Projected Reasonably Expected Federal Aid Transportation Program in the GTC TIP Area, 2015 to 2035

(in millions of YOE dollars)

Combined Federal Aid Category	2015-2018	2019-2024	2025-2030	2031-2035	Total
Highway & Bridge	$ 366.33	$ 505.53	$ 601.58	$ 715.88	$ 2,189.32
Public Transportation	$ 46.31	$ 73.81	$ 95.73	$ 124.16	$ 340.01
Specialized Public Transportation	$ 5.79	$ 9.22	$ 11.96	$ 15.51	$ 42.49
Flexible	$ 35.07	$ 48.39	$ 57.58	$ 68.53	$ 209.56
Total Reasonably Expected Federal Aid	$ 453.48	$ 636.95	$ 766.86	$ 924.09	$ 2,781.38
Required Non-Federal Match[1]	$ 113.37	$ 159.24	$ 191.71	$ 231.02	$ 695.34
Total Matched Federal Aid Program	**$ 566.85**	**$ 796.19**	**$ 958.57**	**$ 1,155.11**	**$ 3,476.72**

- NYSTA Capital Program – The *2005-2011 NYSTA Capital Program* includes more than $200 million dollars in investments in the GTC TIP area. The largest initiative is the $150 million pavement reconstruction and bridge improvements project from the LeRoy interchange to west of the Batavia interchange, beginning in 2011. Other projects include multiple pavement and bridge repairs, preventive maintenance, and safety upgrades, as well as improvements to toll booths (including the addition of higher speed EZ Pass lanes) and travel plazas. An additional $8.5 million is included in the program for improvements to the Erie Canal.
- State Transportation Operating Assistance (STOA) – This is the primary state funding source for public transportation operations. Operations activities are not an eligible use of FTA Urbanized Area (Section 5307) funds, requiring that these revenues be used for RTS capital purposes only. In 2010, approximately $33 million in STOA funds were distributed to public transportation operators in the GTC TIP area, with $30.8 million (94 percent) for RTS.

Essential non-capital maintenance and operating activities performed on the federal-aid highway and bridge network are typically paid for with local taxes and fees, additional funds from the New York State Dedicated Highway and Bridge Trust Fund, and NYSTA tolls. These activities include snow and ice removal, mowing, and road debris cleanup, which are critical to safety and community appearance.

In addition, there are needed transportation projects and operating expenses to which federal transportation revenues cannot be allocated for implementation. Counties, cities, towns, and villages typically utilize funds from the State Consolidated Local Street and Highway Improvement Program (CHIPS) for highway and bridge projects that are expected to have a useful service life of at least 10 years. In SFY 2010-2011, the seven counties in the GTC TIP area and the City of Rochester have been apportioned over $16 million dollars from the CHIPS program.

On the public transportation side, RGRTA utilizes customer fares and Mortgage Recording Tax receipts. Farebox receipts (excluding guaranteed revenues, subsidy agreements, and school tripper service) and one-quarter of one percent of the New York State tax levied on mortgage transactions in the seven counties served by RGRTA provided needed revenues for expenses that would be the equivalent to highway and bridge projects advanced with CHIPS Program funds (i.e., routine maintenance and operating activities).

Given the importance of the transportation system to the social and economic vitality of the region, it is anticipated that public agencies will maintain their current level of effort with respect to capital and operating activities through 2035 and allocate the necessary funding to accomplish this.

Beyond public funds, the only private revenue source considered reasonably expected to be available for implementing the recommendations of the *LRTP 2035* are subsidy agreements to increase the frequency of or provide new public transportation service. Subsidy agreements are a contractual arrangement between a public transportation operator and another party to cover all or a part of the cost of expanded (i.e., more frequent or new) service. Subsidy agreements between RGRTA and businesses, colleges and universities, and other parties have averaged $3.5-$4 million per year since SFY 06-07. While it is difficult to estimate the level of these revenues over the next nearly 25 years, the benefits of public transportation and limited additional public funds for it mean that expanded public transportation service (more frequent or new service) will likely rely on subsidy agreements.

Beyond revenues for transportation, trail maintenance activities performed by not-for-profit organizations are conducted in the region and are expected to continue at their current level or increase. These in-kind contributions are vital to the multi-use trails network and reduce the need for funding for preventive maintenance, debris clearance, and general repairs to keep these facilities attractive and usable.

Additional financing mechanisms that would include the participation of the private sector and provide the opportunity to reduce costs, thereby making reasonably expected revenues available for other projects, have also been considered. Public-private partnerships have not been used to date due to the lack of enabling legislation but have the potential to stretch limited revenues from all public sources (e.g., federal, state, and local). Mechanisms that include the private sector and are considered reasonable for this region include:

- Availability Payments – These represent payment for performance to a private operator (concessionaire) based on the availability of certain characteristics that can be related to condition and performance of a single or multiple facilities (e.g., highways, bridges, etc.). Availability payments can be appropriate when a project does not generate direct revenue and service quality is more important than revenue maximization. An example in this region could be for a public agency to bundle a set of bridges and offer the opportunity for a private concessionaire to maintain and operate the bridges for a specified period of time with payments made based on performance measures including, but not limited to, structural condition of the bridge, pavement quality, and lighting provisions. If the private sector could realize efficiencies that would reduce the cost for doing so below the amount at which the public agency would require using existing transportation revenues, savings would be realized that could be used for additional transportation projects, allowing limited existing revenues to go further in improving the regional transportation system.

- Leasing – Leasing of specific facilities would be advantageous to the regional transportation system as a whole if determined to be revenue positive and the funds were guaranteed to be allocated to transportation uses. Leasing arrangements typically include fixed assets of sufficient size to attract private interest. While not being recommended, one potential transportation asset for which leasing could be an option for generating additional revenues to a local government are parking garages and meters in the City of Rochester.

In order to take advantage of public-private partnerships (including those discussed above) at the state level, New York State would need to pass the requisite enabling legislation. This legislation must include provisions that protect the public interest from safety and fiscal perspectives while attracting interest from private sector operators. Typical examples include design-build and design-bid-build arrangements, but these do little for concessionaires to maximize revenues over the entire life-cycle of a facility. Accordingly, more comprehensive public-private partnerships such as design-build-operate-maintain arrangements should be considered in any enabling legislation as well.

Currently, the only tolled highway in the region is the Thruway (the Erie Canal is the only other tolled transportation facility). Tolling (including congestion pricing) on other highways and bridges is not considered a viable revenue source or financing mechanism. The primary reason for not considering tolling is that it is typically instituted when providing additional capacity which, based on the identified needs of the region, is not expected to be necessary over the next nearly 25 years. As such, introducing tolls on existing facilities is not considered reasonable and associated revenues that would be realized are not considered in the *LRTP 2035.*

Reasonably expected non-federal transportation revenues through 2035 from the State Dedicated Highway and Bridge

Trust Fund and for State Transportation Operating Assistance were projected based on the median amount over the past several years. Given the fiscal crisis facing New York State and in an effort to be conservative, no escalation factor was applied to these revenues. This is considered appropriate given competing needs that have led to recent reductions in these programs. In the case of the State Dedicated Highway and Bridge Trust Fund, the median is the 2009 allocation which is significantly less than the amounts made available from 1999 to 2003. In 2010, State Transportation Operating Assistance was slightly less than the amounts provided in the immediately two preceding years.

While tolls comprise more than 90 percent of NYSTA revenues and travel on the Thruway has begun to increase as the economy rebounds, there are significant needs on this system outside of the GTC TIP area. Accordingly, to be conservative in projecting the availability of these funds, the annual average amount programmed in the GTC TIP area in the *2005-2011 NYSTA Capital Program* minus the major reconstruction project scheduled in Genesee County was calculated and a compounded annual growth factor of one percent was applied from 2018 through 2035.

Exhibit 24

Projected Reasonably Expected Revenues for Federal-Aid-Eligible Projects and Programs by Source in the GTC TIP Area through 2035[1]

(in millions of YOE dollars)

Federal Transportation Aid Program	$	2,781.38
State Dedicated Highway and Bridge Program	$	833.93
State Transportation Operating Assistance	$	738.86
NYS Thruway Capital Program	$	405.04
Total Reasonably Expected Revenues	$	4,759.21

[1]Does not include revenues for non-capital maintenance and operating activities on the federal-aid system.

As presented in Exhibit 24, approximately $4.8 billion in revenues are projected to be available for federal-aid-eligible projects in the GTC TIP area through 2035. Again, non-capital maintenance and operating activities on the federal-aid system have and are expected to continue to be accomplished with other state and local funding sources.