A stylized map background with a green color scheme. A blue river flows from the top right towards the center. A network of white lines represents roads or boundaries, crisscrossing the map. The text 'CHAPTER 11' is overlaid in white, with a dollar sign (\$) positioned above the letter 'A' in 'CHAPTER'.

# CHAPTER 11

## **Financial Analysis & Fiscal Constraint**

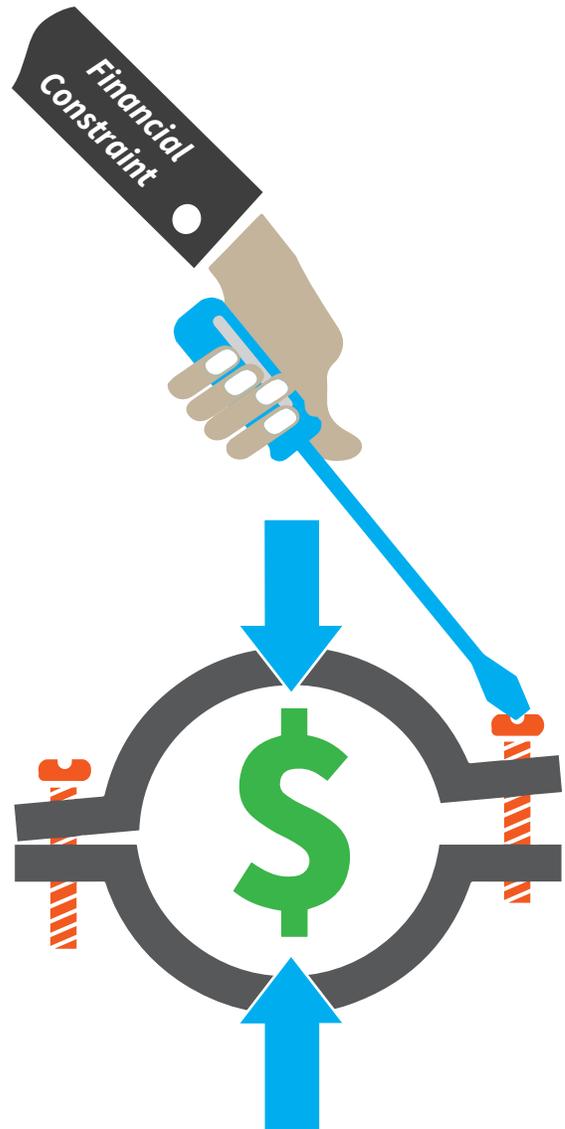
## 11.1 Introduction

This chapter provides an in-depth analysis of the various funding sources especially federal, state and local. The chapter describes the historical trends analysis undertaken to ascertain potential funding sources based on funding categories and roadway improvement types in the future.

The funding projections were adjusted to reflect inflation. Similarly, projections were established for the transit revenues for Atrans. Further, the chapter explains the need for a fiscally constrained MTP based on identified phased improvements as illustrated in the next chapter.

MTPs are fiscally constrained based on federal requirements. In order to be fiscally constrained, the costs of programmed projects must not exceed the amount of funding that is reasonably expected to be available. This chapter describes the analysis used for estimating project costs, and then summarizes the revenue sources utilized in forecasting the amount of available funding.

Figure 11.1: Financial Constraint



## 11.2 Streets and Highways Revenue Analysis

In the MPA, the amount of state and federal funding for transportation projects is determined by the LADOTD, in consultation with the MPO, on an annual basis. The LADOTD has a statewide pool of transportation funds that is used for small urban transportation projects in the state.

The money in this funding category is distributed to best address the unmet needs in any of the six small urbanized areas (under 200,000 in population). This means that the actual amount of state and Federal funds spent in any single small urban area can vary widely from year to year. For this reason, revenue forecasts are based on averages.

Projection of funding is a two step process:

- Historical average amount of funding is calculated, and
- Future average amount of funding is projected based on these historical trends.

### 11.2.1 Funding Sources

The implementation of a financially constrained plan for the MPA will involve several sources of funding. These sources include various programs at the local, State, and Federal levels. Since many of the improvement projects are located on State and Federal Highway Systems, substantial financial assistance is funded through LADOTD and FHWA.

The historical funding database was used to aggregate all of the local, State and Federal funded projects from 1991 through 2015 by funding source. Table 11.1 summarizes the funding levels from recurring sources.

The following section describes the State and Federal funding sources, as well as several local programs that can be used to fund local projects. The MTP projects for the 25-year horizon were allocated to appropriate funding programs to develop an estimated need by funding source for the plan.

**Table 11.1:** Historical Funding by Recurring Source - State and Federal Projects

Source	Actual Dollars	2015 Dollars	Annual Average
FAP, NHS, NHPP, IM	\$83,838,694	\$125,776,765	\$4,931,079
STPFLEX	\$15,961,228	\$20,427,347	\$696,026
STPENH	\$6,483,524	\$7,705,275	\$243,542
STPHAZ	\$1,627,567	\$1,823,088	\$83,737
STP<200K	\$51,612,997	\$66,722,630	\$2,497,686
OFA	\$3,242,452	\$5,615,927	\$257,775
FBRON	\$67,912,750	\$77,480,595	\$3,346,428
HSIP	\$7,152,189	\$7,149,710	\$357,486
State Cash	\$3,123,575	\$3,392,913	\$132,395
State General Fund, NFABOND	\$5,150,782	\$5,202,442	\$0
Overlay	\$3,383,909	\$5,238,653	\$240,411
Maintenance	\$397,319	\$567,425	\$26,058
Miscellaneous (Other)	\$588,450	\$781,462	\$47,331
Local	\$355,080	\$381,249	\$15,250
<b>TOTAL</b>	<b>\$250,475,436</b>	<b>\$327,884,231</b>	<b>\$16,394,212</b>
<b>Federal</b>	<b>\$237,831,401</b>	<b>\$312,701,336</b>	<b>\$15,635,067</b>
<b>State</b>	<b>\$12,644,035</b>	<b>\$15,182,895</b>	<b>\$759,145</b>

Source: LADOTD Letting List Database, 1991-2015

## Potential Funding Sources – Federal

### FAST Act

FAST Act authorizes the Federal surface transportation programs for highways, highway safety, and transit for the five-year period 2016 through 2020. The legislation provides a total funding of \$226 billion nationally for highways and \$61 billion for transit for the five year period.

This legislation includes several categories of funding for highways, under which many of the projects in the financially constrained plan will be eligible for Federal funding assistance. These funding categories are:

- National Highway Performance Program (NHPP);
- Surface Transportation Block Grant Program (STPBG);
  - Transportation Alternatives set-aside
  - Recreational Trails
  - Bridge
- Highway Safety Improvement Program (HSIP);
  - Railways-Highway Grade Crossings Program
- National Highway Freight Program (NHFP);
- Metropolitan Transportation Planning Grants (PL);
- Congestion Mitigation and Air Quality (CMAQ); and
- Other: FASTLANE, TIFIA, TIGER.

### Potential Funding Sources – State

The state funding sources include:

- State of Louisiana Highway Trust Fund;
- State of Louisiana General Fund; and
- State Bonds.

### Potential Funding Sources – Local

Any costs not covered by Federal and state programs will be the responsibility of the local governmental jurisdictions. Local funding can come from a variety of sources including property taxes, sales taxes, user fees, special assessments, and impact fees.

Each of these potential sources is important and warrants further discussion.

Table 11.2: Potential Local Funding Options

Type	Facts
Property Tax 	Primary source accounting for 80% of local revenues
General Sales Tax 	Retail tax on sale of all commodities
User Fees 	Fees charged for utilizing a service or facility like utilities, parks, zoo, museum etc.
Special Assessments 	Fees levied on those who benefit directly from any improvement such as new bike lanes or sidewalks along a local market area
Impact Fees 	Fees levied on those whose development creates or adds stress to local transportation network
Bond Issues 	Typically approved by voters for major upgrades to roadways, utility systems etc.

### System Maintenance and Operation

The maintenance and operation of the transportation system was considered in the development of the plan and phased program. Typically, maintenance costs are applicable to the system as a whole.

The balancing act of meeting identified transportation improvement needs and maintaining the present transportation system will continue to place local decision makers and revenue forecasts somewhat at odds. Recommendations in this plan are conservative because they factor in the impact of maintenance costs in the determination of available funding.

### 11.2.2 Historical Funding

In order to determine the financial feasibility of implementing a program of projects in the MTP, an analysis of historical funding was conducted. A database of project let within the MPA from 1991 through 2015 was obtained from the LADOTD. The database contains all sources of state and Federal funding including both recurring and non-recurring funds. In order to estimate the expected future revenues, the non-recurring funds were excluded from each year's total historical revenue.

In the next step, the projects were grouped by year. To estimate the cost of historical projects in 2015 dollars, shown in Table 11.3, an average annual Consumer Price Index (CPI) factor was calculated using the historical South Urban areas CPI factors.

Table 11.3: Historical State & Federal Funding\* (1991-2015)

Year	Real Dollars	CPI Factor	2015 Dollars
1991	\$7,798,808	1.732	\$13,507,535
1992	\$30,776,621	1.686	\$51,889,383
1993	\$23,830,937	1.635	\$38,963,582
1994	\$16,002,474	1.591	\$25,459,936
1995	\$7,369,198	1.545	\$11,385,411
1996	\$1,248,911	1.498	\$1,870,869
1997	\$5,242,721	1.467	\$7,691,072
1998	\$4,342,079	1.448	\$6,287,330
1999	\$1,598,570	1.421	\$2,271,568
2000	\$2,727,515	1.376	\$3,753,061
2001	\$3,069,021	1.345	\$4,127,833
2002	\$14,012,055	1.328	\$18,608,009
2003	\$0	1.298	\$0
2004	\$1,018,140	1.266	\$1,288,965
2005	\$2,576,221	1.222	\$3,148,142
2006	\$8,744,206	1.182	\$10,335,651
2007	\$1,311,237	1.149	\$1,506,611
2008	\$903,690	1.103	\$996,770
2009	\$10,720,794	1.107	\$11,867,919
2010	\$55,984,590	1.089	\$60,967,219
2011	\$8,694,729	1.053	\$9,155,550
2012	\$8,852,328	1.031	\$9,126,750
2013	\$9,701,507	1.015	\$9,847,030
2014	\$20,653,688	0.998	\$20,612,381
2015	\$4,310,032	1.000	\$4,309,432

\* Recurring Funds Only. Excludes Interstate, DEMO, TIME, ARRA Funding.

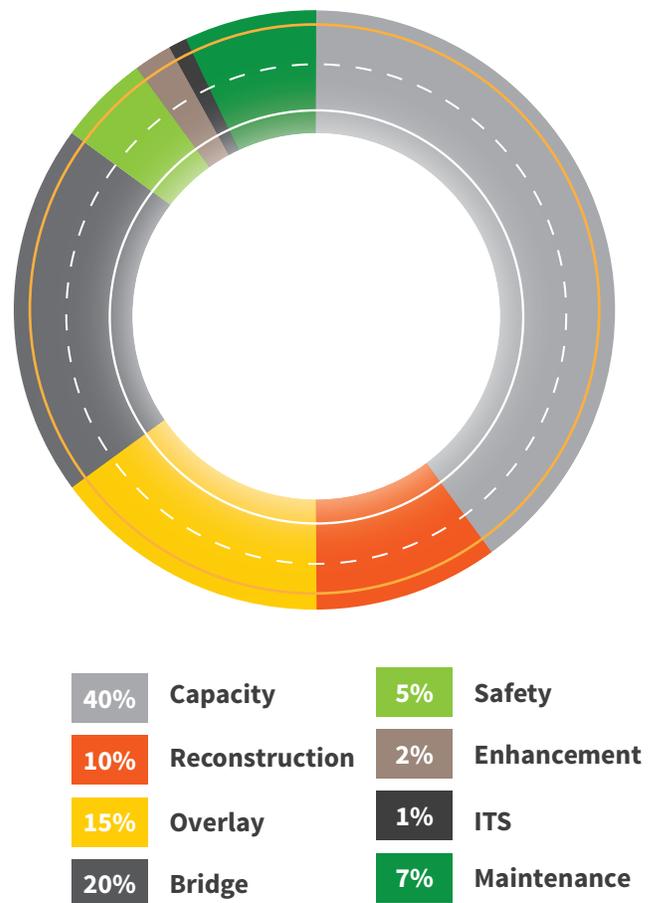
After converting the revenue into 2015 dollars, the database was then grouped by project type and funding source.

The next step focused on identifying and delineating funding based on the general project type as shown in Table 11.4.

Table 11.4: Funding by General Project Type

Category	Total	Annual Average	Actual Percent	Rounded Percent
Capacity	\$119,187,787	\$4,767,511	36.3%	40%
Reconstruction	\$39,309,338	\$1,572,374	12.0%	10%
Overlay	\$49,619,034	\$1,984,761	15.1%	15%
Bridge	\$69,094,810	\$2,763,792	21.0%	20%
Safety	\$19,472,267	\$778,891	5.9%	5%
Enhancement	\$4,486,081	\$179,443	1.4%	2%
ITS	\$1,753,641	\$70,146	0.5%	1%
Maintenance	\$25,755,651	\$1,030,226	7.8%	7%
	\$328,678,609	\$13,147,144	100.0%	100%

Figure 11.2: Funding by General Project Type



**Table 11.5:** Annual Distribution of Funding by Improvement Type

Improvement Type	Annual Funding
Capacity	\$5,600,000
Reconstruction	\$1,400,000
Overlay	\$2,100,000
Bridge	\$2,800,000
Safety	\$700,000
Enhancement	\$280,000
ITS	\$140,000
Capacity	\$5,600,000
Reconstruction	\$1,400,000
Annual Average	\$14,000,000

The next step involved forecasting funding for the twenty five year time frame of the MTP. The MTP was split into the following time periods:

- Phase I: 2016 – 2020
- Phase II: 2021 – 2030
- Phase III: 2031 – 2040

**11.2.3 Forecast Funding Availability**

The feasibility of the Financially Constrained Plan was assessed by comparing the estimated cost of the programmed improvements to the projected funds available from varied funding sources based on improvement type. The projection of recurring funding was made by analyzing historical data on expenditures for street and highway construction in the MPA.

Historical information obtained from the LADOTD indicates that on average, in the last 25 years, contracts totaling \$14 million per year in 2015 dollars were let for construction and maintenance of the transportation infrastructure within the MPA. This amount was then used to forecast the funding to 2040.

Also, typical project cost by improvement type is ascertained through agency consultation with member entity engineering departments as illustrated in Appendix E.

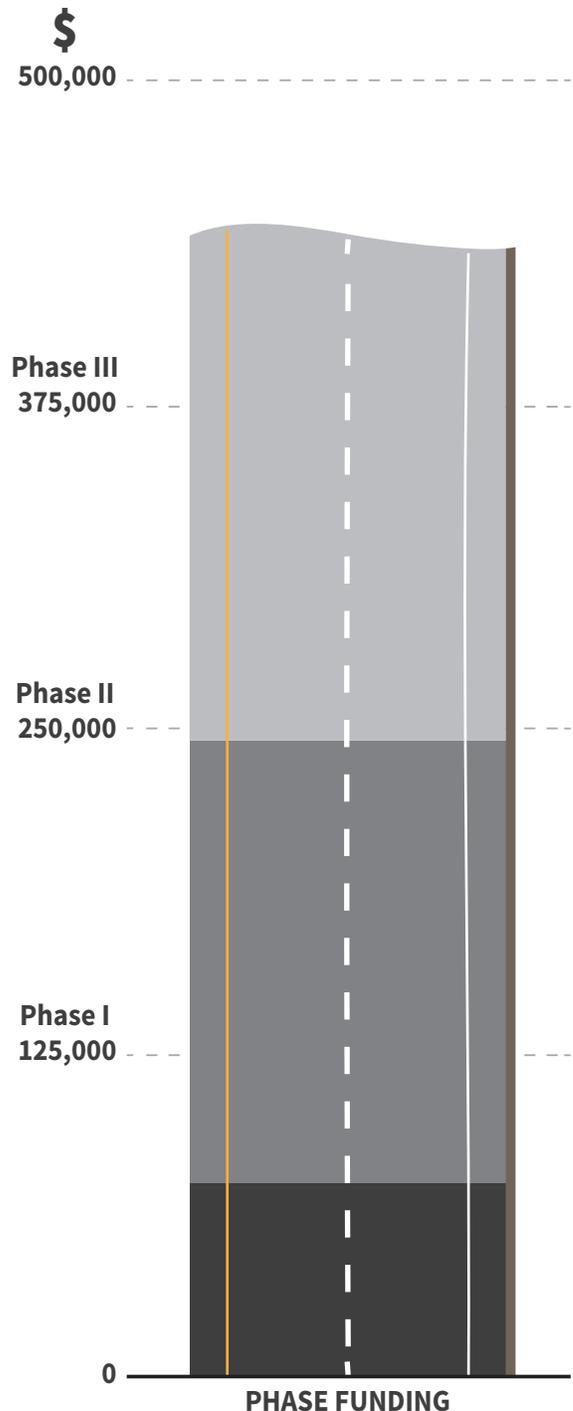
An inflation factor of two percent per year was applied to the \$14 million to forecast the annual availability of funds from 2016 through 2020 and one and half percent was applied from 2021 through 2040. Total available State and Federal funds forecasted over the life of the Financially Constrained Plan is approximately \$446 million.

**11.2.4 Financially Constrained Plan**

The annual amounts were aggregated to the three time periods of the MTP, resulting in the forecasted availability of all funds for each Phase.

- Phase I (2010-2015) - \$75,799,967
- Phase II (2016-2025) - \$171,273,172
- Phase II (2026-2035) - \$198,769,508

**Figure 11.3:** Phased Funding Forecast



## 11.3 Transit Revenue Analysis

This financial plan focuses on the Atrans system because detailed financial data and needs were not available for other transit providers. For other providers, such as Rapides ARC, it is assumed that the future discretionary federal funding available to them will be sufficient to continue operating at their current levels of service.

The financial plan also focuses on federal funding, assuming that all local/state match funding and funding above and beyond local match requirements will grow proportionally to federal funding and continue to meet the financial needs of Atrans.

### Projecting Future Revenue

The primary federal revenue sources for Atrans are the Section 5307, Section 5339, and Section 5310 FTA grant programs. Of these, the formula-based Section 5307 is the largest revenue source and can be thought of as a dedicated funding source for Atrans.

The other two grant programs are also formula-based, but for small Urbanized Areas like Alexandria they are allocated to State of Louisiana which then sub-allocates this funding to transit providers serving these Urbanized Areas based on its own methodology. So while the amount allocated to the Alexandria Urbanized Area (UZA) is still somewhat formula-based, Atrans competes for this funding with transit providers in other small UZA's and within our UZA, such as with Rapides ARC which has used an average of about \$90,000 in Section 5310 funding annually in recent years. Therefore, Section 5339 and Section 5310 funds will be treated as semi-discretionary.

Table 11.7 shows the projected amount of federal funding anticipated to be available to Atrans. The following underlying assumptions were used to develop these projections:

- Atrans will be the recipient of all Section 5307 funding for the Alexandria Urbanized Area.
- Per FTA guidance, the FY 2016 Section 5307 allocation for Atrans will be \$1,057,643.
- Other transportation providers (e.g. Rapides ARC) will continue to use an average of \$80,881 annually (2016 dollars) in Section 5310 funding.
- Atrans will use Section 5307 “rollover” funding (the result of not obligating all federal allocations) and the occasional federal discretionary grant to fund operational and capital costs proposed in the MPO’s Draft 2016-2020 Transportation Improvement Program (TIP). This amounts to an additional approximately \$225,927 in federal funding.
- Federal transit funding will grow by approximately 2% annually from 2016 to 2020, consistent with FAST Act guidance. Beyond 2020, this growth rate is assumed to decrease to a rate of 1.5% annually, which is lower than historical trends but accounts for the expectation that federal transportation revenues will grow at a slower rate in the future.

**Table 11.6:** Projected Atrans Federal Transit Revenues

Stage	Section 5307	Section 5339	Section 5310 <sup>1</sup>	Rollover/Other Federal Funds
Phase I (2016-2020)	\$5,510,668	\$523,247	\$325,745	\$225,927
Phase II (2021-2030)	\$12,473,168	\$1,184,348	\$737,309	\$0
Phase III (2031-2040)	\$14,475,621	\$1,374,485	\$855,678	\$0

<sup>1</sup> Excludes funding assumed to go to other providers, like Rapids ARC.

**NOTE:** Funding is in Year of Expenditure (YOE) dollars.

### Projecting Future Costs

The operational and capital costs proposed for Atrans in the MPO’s Draft 2016-2020 TIP will be used as the costs for Stage I (2016-2020) of the 2040 MTP.

Beyond Stage I, the following assumptions were used to develop the operational and capital costs for continuing to operate Atrans at its current level of service through 2040.

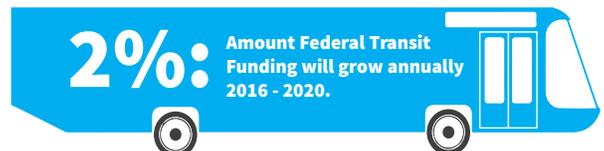
These assumptions are based on information in the MPO’s TIP information and FTA guidance.

- Costs for operating assistance and capital projects in 2020 dollars are:
  - \$750,000 annually for operating assistance
  - \$51,000 annually for preventative maintenance
  - \$3,000 annual for miscellaneous equipment
  - \$350,000 for each day-time route bus
  - \$275,000 for each night-time route bus
  - \$60,000 for each ADA vehicle
  - \$30,000 for each support vehicle
- The average replacement age for Atrans vehicles are:
  - Day-time Route buses (35’ Buses) – 12 years
  - Night-time Route buses (30’ Buses) – 7 years
  - ADA Vans – 5 years
  - Support Vehicles – 5 years
- Costs increase 2.5% annually after 2020 in order to account for inflation. Inflation is already factored in from 2016 to 2020.

### Demonstrating Fiscal Constraint

In order to demonstrate that it is financially feasible to continue operating Atrans at its current level of service in the future, Atrans’ projected federal costs were compared to its projected federal revenues for each time period, or “phase,” of the 2040 MTP.

This information is summarized in Table 11.7, which demonstrates that the transit element of the 2040 MTP is fiscally-constrained.



**Table 11.7:** Federal Funds Anticipated for ATRANS

Phase	ATRANS Costs (Federal Share)	Federal Funds Anticipated for ATRANS		
		Total	Dedicated <sup>1</sup>	Rollover and Discretionary <sup>2</sup>
Phase I (2016-2020)	\$6,585,587	\$6,585,587	\$5,510,668	\$1,074,919
Phase II (2021-2030)	\$13,498,851	\$14,394,826	\$12,473,168	\$1,921,658
Phase III (2031-2040)	\$17,025,541	\$17,601,758	\$14,475,621	\$3,126,137

<sup>1</sup> FTA Section 5307 grant program (excluding rollover)

<sup>2</sup> Section 5307 rollover, Section 5339, Section 5310, and all other discretionary grant programs.

**NOTE:** Costs and funding is in Year of Expenditure (YOE) dollars.