CHAPTER 6 FINANCIAL PLAN

This chapter discusses the financial plan for the 2035 MTP. Federal legislation requires that the MTP be "financially constrained"; in other words, the cost of implementing and maintaining transportation improvements should be within a funding amount that can reasonably be expected to be available during the life of the plan.

Federal regulations establish the requirements for the financial plan in Title 23, Section 450.322(f)(10), of the Code of Federal Regulations. To summarize, the regulations (effective December 2007) state that the financial plan should include the following:

- Estimates of costs and revenue sources needed to operate and maintain federal-aid highways and public transportation
- Estimates of funds that will be available to support the MTP implementation and that are agreed upon by the MPO, public transportation operator(s), and the state
- Recommendations on any additional financing strategies to fund projects and programs included in the MTP
- Revenue and cost estimates that use an inflation rate to reflect "year of expenditure dollars" and that have been developed cooperatively by the MPO, state, and public transportation operator.

Funding to implement the MTP recommendations comes from federal, state, and local sources. This financial element of the MTP includes estimates of costs that would be required to implement the MTP as well as estimates of existing and contemplated sources of funds available to pay for these improvements.

Different sets of revenue assumptions apply for capital, for operations and maintenance (O&M), and for each mode—non-motorized (pedestrian, bicycle, and trail facilities); public transportation; and roads. An additional set of revenue assumptions was prepared for the Knik Arm Crossing, which is proposed to be implemented through a public-private partnership.

The costs to design, construct, operate, and maintain all elements of the recommended MTP through 2035 are more than $5.3 billion.

Identifying Project Categories—Short Term, Long Term, and Illustrative

The improvements in the MTP are broken into short- and long-term ranges. Short-term improvements are those that are expected to be fully funded and in place by 2023. Long-term projects are those that are expected to fully funded and in place by 2035.

Projects that are not expected to be funded by 2035, because of fiscal constraint, are listed as illustrative, meaning that they could be included in the adopted transportation plan if additional resources beyond those identified in the financial plan become available.

Screening criteria were used to identify projects that should be included in the short- and long-term lists and projects that should be identified as illustrative. Table 6-1 identifies how the projects were sorted into the three categories.

The screening criteria for each mode are provided in Chapter 7.

Table 6-1 Recommended Projects by Category

Project Mode	Project Category		
	Short Term, 2011–2023	Long Term, 2024–2035	Illustrative (Beyond 2035)
Roadway	39 Projects ($1,155.4M)	17 Projects ($951.2M)	24 Projects ($770.9M)
Non-motorized	77 Projects ($54.8M)	32 Projects ($28.2M)	6 projects ($42.1M)
Public Transportation	15 short- & long-term projects ($176.7M)		1 Project ($22M)

Note: Project costs are shown in 2010 dollars and have not been inflated.

Balancing Costs and Revenues

Cost Assumptions

The impacts of inflation in determining revenue and costs were considered in the development of the financial plan. The cost estimates for the roads and pedestrian, bicycle, and trail capital projects were calculated starting with a base year (2010) estimate provided by the DOT&PF or MOA. Projects included in recently adopted plans that contained cost estimates were inflated to the base year. A "year of expenditure" inflator of 4 percent was applied to the base year through 2023. The 4 percent year-of-expenditure inflator is based on general guidance of the Federal Highway Administration (FHWA). For the remainder of the plan (2024–2035), an inflator of 3.5 percent was applied. This inflator is used to reflect the fluctuation over time in construction costs. Cost estimates for the public transportation capital projects were provided by the MOA Public Transportation Department starting with a base year of 2011.

A year-of-expenditure inflator of 2.1 percent was applied to the base year through the balance of the plan. The 2.1 percent inflator is based on national trends. Historically, nationwide, inflation rates for public transportation capital projects have grown about 20 percent less a region's consumer price index (CPI). For the Anchorage area, the calculated inflation rate is 2.1 percent.

All tables in this chapter reflect planning-level cost estimates for use in demonstrating funding constraints, according to FHWA guidance. All funding is subject to federal, state, and local appropriation.

The financial plan does not establish the specific year in which each project will be constructed. Rather, it tallies the total capital cost for all projects in 2010 dollars, then applies the inflation rate of 4 percent to identify the program costs in 2011 dollars. The total capital cost is then reduced from that year's projected revenue, and the balance is then increased by the inflator and carried over to the next year. An example of the annual inflation factor calculation method used in the financial analysis is shown in Table 6-2.

Table 6-2 Example Calculations for the Cost of Recommended Short-Term Road Projects, 2011–2035

		2010 Short Term						
2011-2035 ALL Road Projects	Source	Total	2011		2012		2013	2014
Total Project Costs	Total Project cost	1,084	1,128		1,063		1,015	978
Less: Year's Spending	2010-2035 Annual Rev.		-105		-88		-74	-120
Projects Deferred to Future Years			1,023		976		941	858
Inflation			+4%		+4%		+4%	+4%
Deferred Projects			1,063		1,015		978	893

ST=Short Term

This methodology is applied to each mode. By the year 2035, the cost of the recommended improvements must balance with the projected revenues to meet the federal requirements for a fiscally constrained MTP.

Revenue Assumptions

Based on economic uncertainties and an expected decrease in federal funds, AMATS used a conservative approach to estimate revenues that can reasonably be expected to be available for transportation from federal, state and local funds. All revenue assumptions and projections were derived through a collaboration and consent of state, public transportation, local, and federal partners. The AMATS Technical Advisory Committee and Policy Committee approved a revenue growth scenario that blended low- and moderate-grow rates for each identified funding source.

To determine the inflator for the revenue projections, the yearly average of the Anchorage area CPI was determined. Between 1983 and 2010, the average annual change in the Anchorage area CPI was 2.5 percent. All revenues for capital projects and O&M were inflated at 2.5 percent annually. It is important to note, that depending on the revenue source, the inflator was applied at different years.

Projected revenue from identifiable sources for all capital projects totals $3.8 billion in 2035. See Table 6-3. Although revenues appear adequate to operate and maintain the system through 2035, a funding shortfall of about $2.1 billion is projected in 2035 for construction of all capital improvements, including the list of recommended short-term, long-term, and illustrative projects. To ensure the MTP meets the financially constrained requirement, projects were moved into the illustrative category.

A reduction in federal funds is anticipated. The current trend in federal gas tax income is flat to negative. In the short term, it is not assumed that an increase in federal revenue will occur unless the public changes its driving habits or a different revenue source is identified. (Trends in fuel efficiency and the corporate average fuel economy (CAFE) standard do not represent increased federal revenue.) Alaska, in the past, has received more federal funding than the amount the state has contributed in revenue.—a trend that may not continue in the future. Under the last federal highway bill, an authorized increase in federal spending for transportation was authorized without a corresponding increase in revenue. This is not likely to be the case with a new authorization. Authorization of a new highway bill is being debated in Congress.

Table 6-3 Total Revenue Forecast – Short Term (2011-2023)

Revenue Sources	Notes	Revenue in Millions $ 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
MOA Road Capital (road bonds to MTP projects)	1	2.0	3.2	3.4	5.2	5.2	5.8	4.1	4.2	4.3	4.4	4.5	4.6	4.7
AK Legislative Capital Program (not including State Bonds) – NHS	2	2.5	16.8	17.2	17.7	18.1	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0
AK Legislative Capital Program (not including State Bonds) - Non-NHS	2	0.0	30.0	30.7	31.5	32.3	33.1	33.9	34.7	35.6	36.5	37.4	38.3	39.3
Federal Other	3	0.0	0.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
FHWA NHS (Anchorage & Chugiak/Eagle River)	4	62.1	5.0	0.0	0.0	0.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0
FHWA Non-NHS (Anchorage & Chugiak/Eagle River)	5	21.6	11.9	11.9	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8
HSIP	6	6.7	16.4	7.8	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
State Match to FHWA NHS & Non-NHS Total	7	9.0	3.3	2.0	2.5	2.5	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Alaska Transportation Fund (ATF)	8	0.0	0.0	0.0	0.0	0.0	4.9	5.1	5.4	5.7	6.0	6.3	6.6	6.9
GO Bond	9	0.0	0.0	0.0	36.8	0.0	0.0	0.0	0.0	0.0	42.7	0.0	0.0	0.0
ARRC Match to federal funds	10	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Railroad track, facilities and infrastructure	11	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Road Revenue Source Total		***105.0***	***87.7***	***74.1***	***120.0***	***84.4***	***116.4***	***116.2***	***117.9***	***119.7***	***164.2***	***123.3***	***125.1***	***127.0***
TE Funds (10% of AMATS Allocation)	19	3.3	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
State Match to federal funds (TE)	12	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Local Match to federal funds (TE)	13	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
MOA Capital (bonds to bike/ped MTP projects)	14	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
AK Legislative Capital Program - Non-Motorized	15	2.7	2.7	2.7	2.8	2.8	2.9	3.0	3.1	3.1	3.2	3.3	3.4	3.5
Non-Motorized Transportation Revenue Source Total		***6.8***	***5.2***	***5.2***	***5.4***	***5.4***	***5.5***	***5.6***	***5.7***	***5.7***	***5.8***	***5.9***	***6.0***	***6.1***
Federal Transit Administration Capital Funding	16	2.1	10.0	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	4.1
FTA Very Small Starts Program for BRT		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FTA 5311 for Vanpools	17	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
MOA Transit Capital	18	0.4	1.4	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.8
CMAQ	19	3.3	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
State Match to federal funds (CMAQ)	20	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Local Match to federal funds (CMAQ)	21	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
State Transit Match Assistance SB77	22	0.2	0.2	0.2	0.2	0.5	0.5	0.5	0.5	0.5	0.8	0.8	0.8	0.8
AK Legislative Capital Program - Transit	23	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0
Alaska Mental Health Trust	24	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Public Transportation Revenue Source Total		***6.8***	***14.1***	***6.4***	***6.5***	***8.5***	***6.8***	***6.8***	***6.8***	***6.8***	***9.0***	***7.1***	***7.1***	***8.3***
Estimated Total Sources of Funding		**118.6**	**107.0**	**85.7**	**131.9**	**98.3**	**128.7**	**128.5**	**130.4**	**132.2**	**179.0**	**136.3**	**138.2**	**141.4**

Note 1) Years 2011-2016 reflects Capital Improvement Program (CIP) Numbers for projects in the MTP and modified by the MOA. Year 2017 is the 2011-2016 CIP MTP Road average. CPI applied beginning in 2018
Note 2) 2011 actual NHS/Non-NHS number. 2012 is a 6 year average of the MTP NHS/Non-NHS projects. CPI applied beginning in 2013
Note 3) Consists of $5million discretionary funding programs that are awarded on a competitive basis. Includes various other programs from EPA, HUD, Health and Human Services, & others that may be proposed and funded in new authorization from 2014-2023. Inflation applied beginning in 2024
Note 4) Reflects 2010-2013 & Draft 2012-2015 STIP numbers and $23 million annually beginning in 2016. CPI applied beginning in 2024
Note 5) Reflects 2010-2013 & Draft 2012-2015 STIP Non-NHS Allocation from ADOT&PF's Community Transportation Program (CTP) + Trails and Recreational Access for Alaska (TRAAK) program and Congestion Mitigation and Air Quality (CMAQ) program. Reduced by 10% for Enhancements,10% for CMAQ and 10% for Pavement Replacement each year based on current AMATS policy. CPI applied beginning in 2024
Note 6) 2011 & 2012 reflects current AMATS TIP. 2013 reflects a 30% reduction from current TIP amount. 2014 is an average of 2005-2013. Inflation by CPI applied beginning in 2024
Note 7) State required match of 9.03% of total Federal amounts on NHS, Non-NHS, HSIP, and Federal Other
Note 8) New Program Alaska Transportation Fund (ATF) created for Statewide improvements in 2015 (initial funding $350M annually with an average 5% return on investment and 28% of that investment returns to the Anchorage area based on Historical AMATS allocation formula funding recommended by the TAC)
Note 9) Based on history of GO bonds in 2002 and 2008. Assume state GO Bond every 6 years of total historical average (2014, 2020, 2026, 2032). Increased annually by CPI
Note 10) Amount based on calculation of 9.03% of Federal funds to ARRC

Table 6-3 Total Revenues Forecast - Long Term (2024-2035)

Revenue Sources	Notes	Revenue in Millions $ 2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total 2011-2035
MOA Road Capital (road bonds to MTP projects)	1	4.9	5.0	5.1	5.2	5.4	5.5	5.6	5.8	5.9	6.1	6.2	6.4	122.7
AK Legislative Capital Program (not including State Bonds)-NHS	2	22.6	23.2	23.7	24.3	24.9	25.6	26.2	26.9	27.5	28.2	28.9	29.6	545.9
AK Legislative Capital Program (not including State Bonds) - Non-NHS	2	40.3	41.3	42.3	43.4	44.5	45.6	46.7	47.9	49.1	50.3	51.6	52.9	969.2
Federal Other	3	5.1	5.3	5.4	5.5	5.7	5.8	5.9	6.1	6.2	6.4	6.6	6.7	120.7
FHWA NHS (Anchorage & Chugiak/Eagle River)	4	23.6	24.2	24.8	25.4	26.0	26.7	27.3	28.0	28.7	29.4	30.2	30.9	576.3
FHWA Non-NHS (Anchorage & Chugiak/Eagle River)	5	13.3	13.5	13.9	14.2	14.6	14.9	15.2	15.7	16.0	16.5	16.9	17.2	355.3
HSIP	6	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0	9.2	9.5	9.7	10.0	209.7
State Match to FHWA NHS & Non-NHS Total	7	4.9	5.0	5.2	5.3	5.4	5.6	5.7	5.8	6.0	6.1	6.3	6.4	125.4
Alaska Transportation Fund (ATF)	8	7.2	7.6	8.0	8.4	8.8	9.2	9.7	10.2	10.7	11.2	11.8	12.4	162.1
GO Bond	9	0.0	0.0	49.5	0.0	0.0	0.0	0.0	0.0	57.4	0.0	0.0	0.0	186.4
ARRC Match to federal funds	10	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2.5
Railroad track, facilities and infrastructure	11	1.0	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.3	1.3	1.3	27.1
Road Revenue Source Total		***130.6***	***134.1***	***187.1***	***141.1***	***144.9***	***148.8***	***152.4***	***156.7***	***218.0***	***165.1***	***169.6***	***173.9***	***3403.2***
TE Funds (10% of AMATS Allocation)	19	2.0	2.1	2.1	2.2	2.2	2.3	2.4	2.4	2.5	2.5	2.6	2.7	55.1
State Match to federal funds (TE)	12	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2.6
Local Match to federal funds (TE)	13	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2.6
MOA Capital (bonds to bike/ped MTP projects)	14	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	10.8
AK Legislative Capital Program - Non-Motorized	15	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	87.8
Non-Motorized Transportation Revenue Source Total		***6.1***	***6.3***	***6.4***	***6.6***	***6.8***	***7.0***	***7.2***	***7.3***	***7.5***	***7.6***	***7.8***	***8.0***	***158.9***
Federal Transit Administration Capital Funding	16	4.2	4.3	4.4	4.5	4.6	4.7	4.8	5.0	5.0	5.2	5.4	5.4	104.7
FTA Very Small Starts Program for BRT		0.0	0.0	15.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.9
FTA 5311 for Vanpools	17	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2.5
MOA Transit Capital	18	0.9	0.9	4.1	0.9	0.9	1.0	1.0	1.0	1.0	1.1	1.1	1.1	23.6
CMAQ	19	2.0	2.1	2.1	2.2	2.2	2.3	2.4	2.4	2.5	2.5	2.6	2.7	55.1
State Match to federal funds (CMAQ)	20	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2.6
Local Match to federal funds (CMAQ)	21	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2.6
State Transit Match Assistance SB77	22	0.8	1.0	1.0	1.0	1.0	1.0	1.3	1.3	1.3	1.3	1.3	1.3	20.1
AK Legislative Capital Program - Transit	23	0.0	2.1	0.0	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0	2.7	10.8
Alaska Mental Health Trust	24	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	8.3
Public Transportation Revenue Source Total		***8.5***	***11.0***	***28.1***	***9.2***	***9.4***	***9.7***	***12.6***	***10.4***	***10.5***	***10.8***	***11.1***	***13.9***	***246.2***
Estimated Total Sources of Funding		**145.2**	**151.4**	**221.6**	**156.9**	**161.1**	**165.5**	**172.2**	**174.4**	**236.0**	**183.5**	**188.5**	**195.8**	**3808.2**

Note 11) Railway/railroad infrastructure projects funded by combination of ARRC, FTA Sec 5307 & 5309, and FRA Federal funds. CPI applied beginning in 2018
Note 12) Assumes State Match of 50% of TE funds
Note 13) Assumes Local Match of 50% of TE funds
Note 14) Historical spending of MOA bonds. 2011-2016 = proposed CIP of MTP projects, 2017 = 2011-2016 average of actual/proposed bonds to MTP projects and then increased annually by CPI*
Note 15) 2005 - 2011 = State Legislative Capital Grants to the MOA for non-motorized projects; averaged and increased annually by CPI starting 2014
Note 16) FTA Formula funding to increase with reauthorization in 2013. Includes Section 5309 funding for C Street and Dimond Intermodal Facility and other grants. Inflation by CPI beginning in 2025
Note 17) FTA 5311 for vanpools are provided by the Matanuska-Susitna Borough. Inflated by CPI per year starting in 2024
Note 18) Local match for FTA funds. 20% of FTA capital funding
Note 19) 10% of AMATS allocation per current policy
Note 20) Assumes State Match of 50% of CMAQ funds
Notes 21) Assumes Local Match of 50% of CMAQ funds
Note 22) SB 77 increases from $1m per year every 5 years. MOA to receive 25% of total state amount
Note 23) State Legislative Grants assist in fleet replacement
Note 24) Inflation by CPI beginning in 2012.

In the short term, federal revenue is projected to drop approximately 30 percent in 2013 from historical levels and then remain flat. For the long term and beyond, during the next transportation bill cycle (2 or 6 years), a moderate revenue increase is more likely nationwide, but this increase may not translate to an increase in Alaska. With the assumptions discussed, all federal revenue sources are projected to remain constant during the short-term portion of the MTP. The inflator will then be applied beginning in 2024 through the balance of the MTP (until 2035).

Transportation Modes—Roads, Public Transportation, and Non-Motorized Projects

Three main funding sources have been identified to implement the MTP recommendations. The sources and assumptions are described below:

- Municipal Funds—For the MTP financial plan, it is assumed that the MOA will continue to issue voter-approved bonds in support of transportation improvements and to provide matching funds to federally funded projects. Forecasted funding levels are based on the amount of bond funding that has historically gone to MTP projects from 2005–2010, coupled with those funds included in the 2011—2016 Capital Improvement Program (CIP). The 2011–2016 amounts were averaged and increased by the Anchorage CPI at 2.5 percent per year, beginning in 2017.

- State Funds—For the MTP financial plan, it is assumed that the State of Alaska will continue to fund Anchorage area transportation improvements as appropriated by the Alaska Legislature. The amount of state general funds appropriated by the Legislature for MTP projects in 2005–2011 was averaged and increased by the CPI.

  Statewide general obligation bonds are assumed to continue in the future, approximately every 6 years. Anchorage received $37.5 million and $36.1 million in state general obligation bonds in 2002 and 2008, respectively. These amounts were averaged, and then increased by the CPI.

  A further assumption is the existence of a state-funded transportation program in the future, as introduced in the Legislature during the 2010–2011 session. The first year anticipated for this new funding source is 2016. The estimated revenue assumes an initial state investment of $350 million, with the AMATS study area receiving 28 percent of the 5 percent estimated annual interest earned on the fund. This amount is increased by the 2.5 percent CPI each year.

  The Alaska Mental Health Trust supports AnchorRIDES vehicle purchases, and this funding support is expected to continue. In addition, the state transit-match assistance, as initiated in 2011 by the passage of SB 77, is assumed to continue.

- Federal Funds—For the MTP financial plan, it is assumed that there will continue to be funds provided by both the Federal Transit Administration and FHWA. Based on guidance from the DOT&PF, the historical funding levels allocated to AMATS for the Community Transportation Program (CTP) and Trails and Recreational Access for Alaska (TRAAK) program are anticipated to be reduced by approximately 30 percent beginning in 2013. Federal funds for the NHS are based on historical averages and coordination with the DOT&PF, and are estimated at $23 million per year beginning in 2016. The Anchorage CPI is applied to federal funds annually beginning in 2024.

The non-NHS federal funds allocated to AMATS are programmed into the following four categories by percentage, as identified in No. 3 of the AMATS policies and procedures:

- Transportation Enhancements (TE) Non-motorized: 10-15 percent
- Congestion Mitigation Air Quality (CMAQ): 10 percent
- Pavement Replacement: 15-20 percent (included in the O&M analysis)
- Roadway Improvements: 55-65 percent

The total amounts of federal, state, and local funds, by category, in the MTP are shown in Figure 6-1. Figure 6-2 shows the annual level of federal, state, and local funds expected for the MTP through the year 2035.

The assumptions described above differ from those used in the 2027 LRTPs for Chugiak-Eagle River and the Anchorage Bowl. The comparison of the differences in the federal, state, and local funding assumptions between the 2027 LRTPs and the 2035 MTP are shown in Figure 6-3.

Figure 6-1 Federal, State, and Local Revenues – Totals through 2035

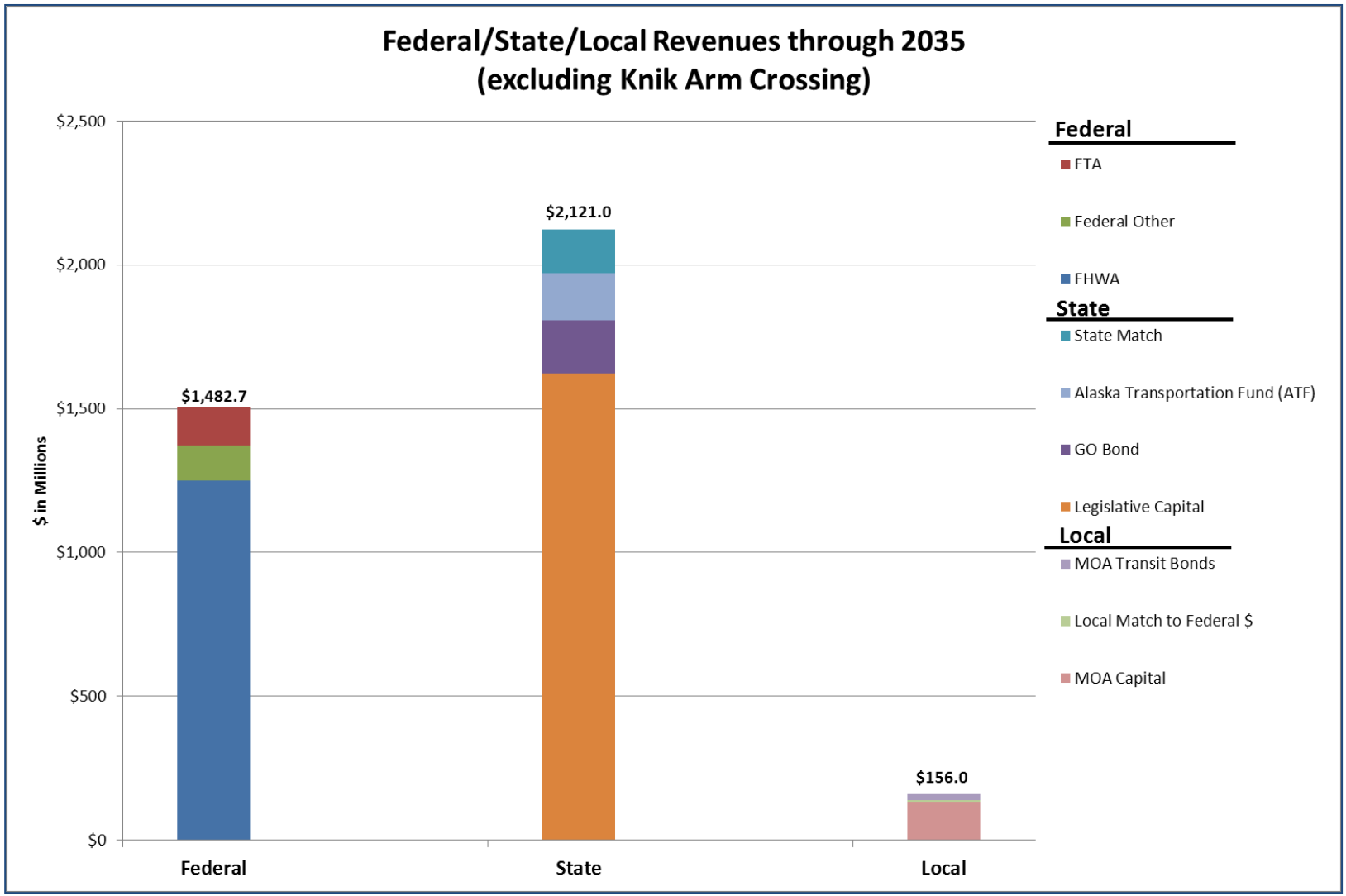


Figure 6-2 Federal, State, and Local Revenues by Year through 2035

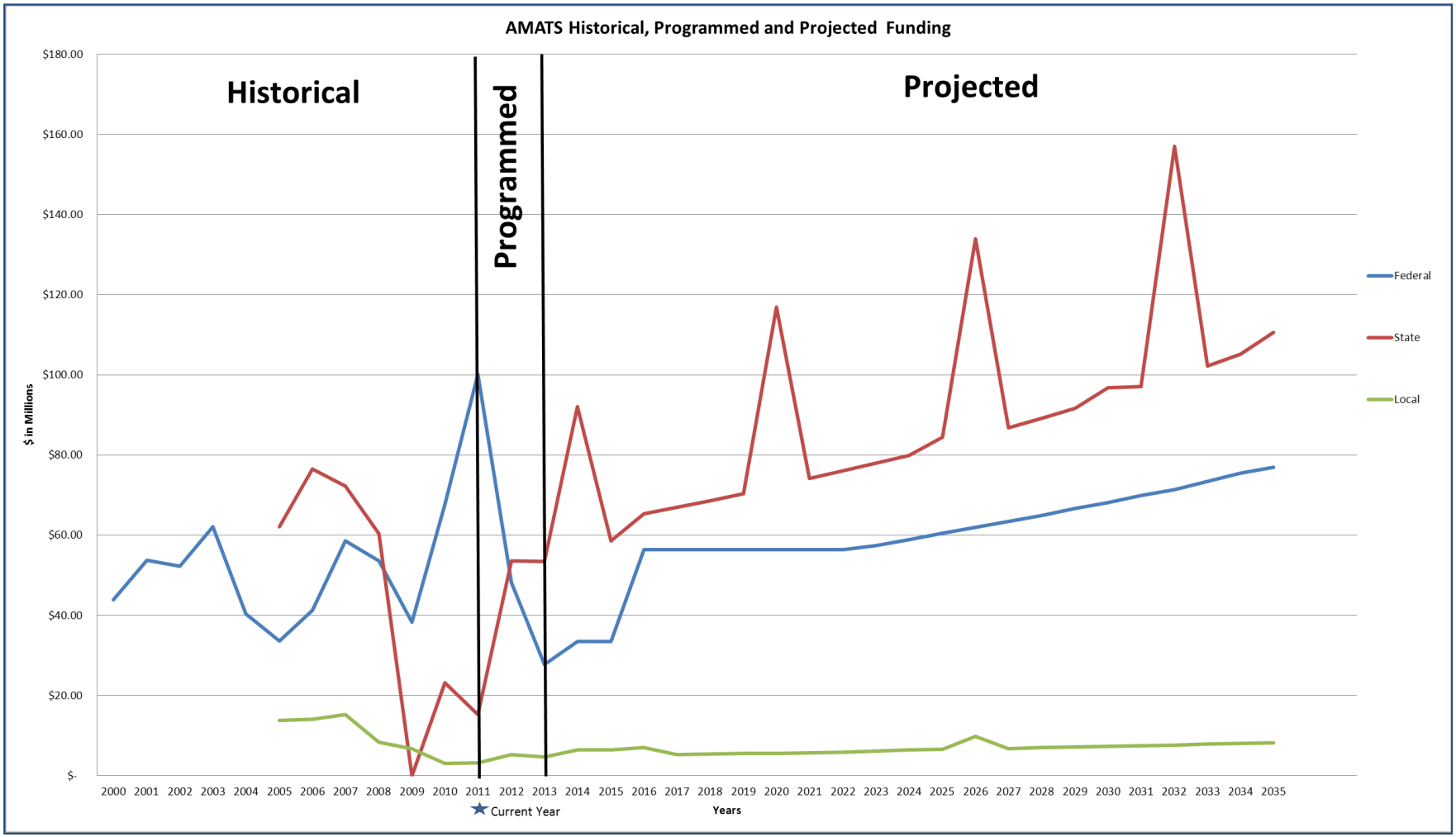
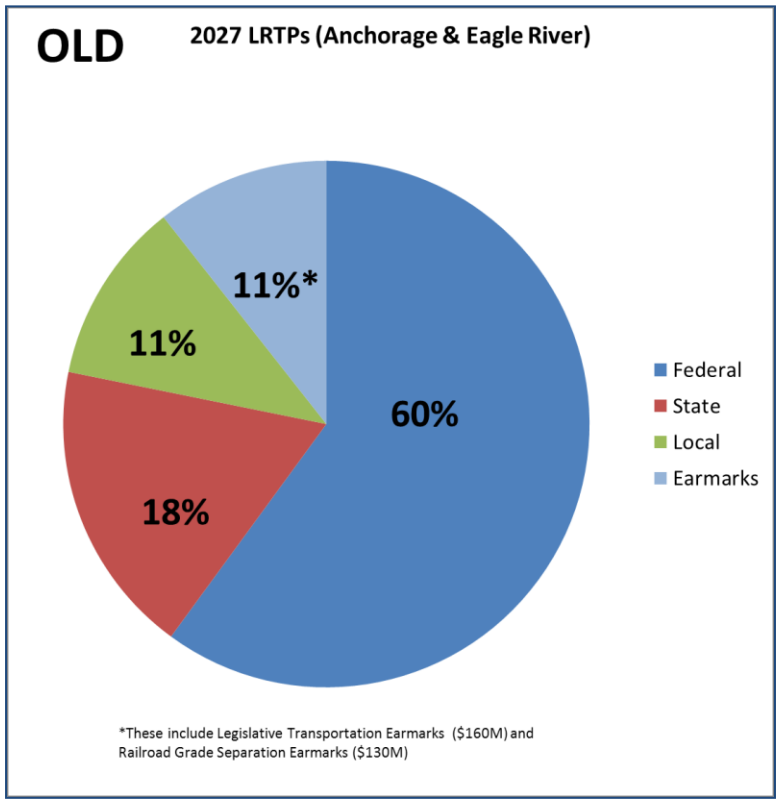
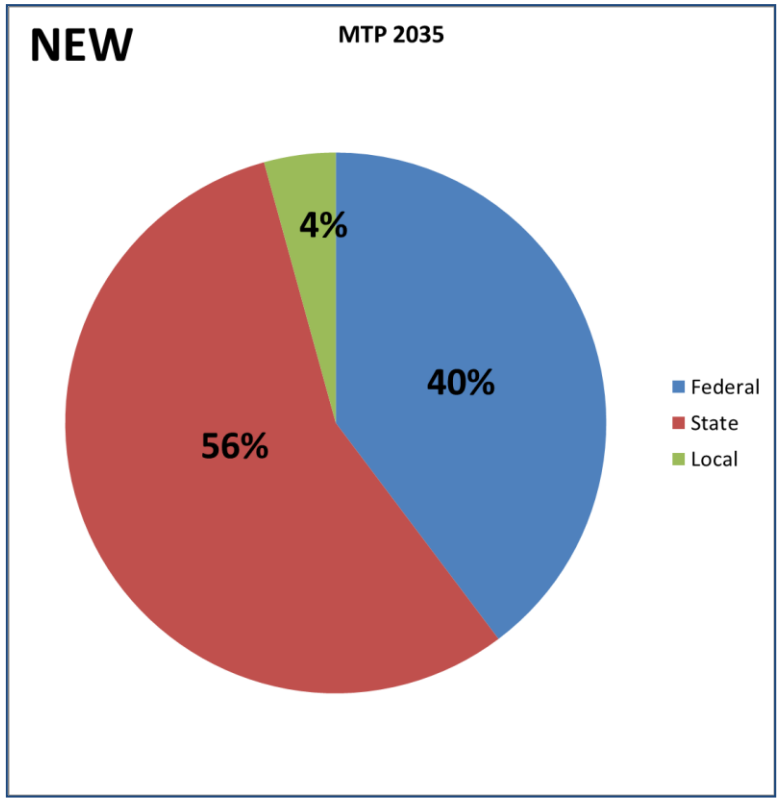


Figure 6-3 Comparison of Federal, State, and Local Revenues Percentages – 2027 LRTP vs. 2035 MTP





Examining Project Cost and Revenue Detail

Roads

Capital Costs and Estimated Revenues

Road capital projects are divided into two categories: NHS and non-NHS projects. The purpose of the NHS is to provide an interconnected system of principal arterial routes to serve major population centers, international border crossings, ports, airports, public transportation facilities, and other major travel destinations; meet national defense requirements; and serve interstate and interregional travel. Some federal funds are specifically designated only for use on the NHS. The priorities for those funds are determined, statewide, by the DOT &PF. However, funds other than NHS funds can also be spent on NHS facilities.

The following are NHS facilities within the AMATS planning area:

- Glenn Highway and 5th/6th avenues
- Seward Highway
- Minnesota Drive/O'Malley Road, from 5th Avenue to Seward Highway
- International Airport Road, from Minnesota Drive to Ted Stevens Anchorage International Airport
- C Street viaduct to the Port of Anchorage
- Boniface Parkway, from Glenn Highway to JBER gate
- Muldoon Road
- Tudor Road

The cost of implementing NHS road improvement recommendations in this MTP is approximately $2.9 billion. Other NHS-related expenditures for pavement rehabilitation, rut repair, and preservation are included with the O&M costs. Federal revenues designated for the NHS, federal discretionary funds, and state bonding and capital program sources projected to be available to pay for NHS improvements total approximately $1.5 billion. The remaining balance of $1.4 billion can be covered by a portion of available non-NHS revenues.

Non-NHS revenue sources can be used more flexibly than NHS funding. The estimated expenditures for the non-NHS road portion of the MTP total $473 million. The remaining revenue from all sources (federal, state, and local) available to fund these needs is approximately $1.9 billion. A portion of the non-NHS revenues, $1.4 billion, is applied toward funding the NHS program described above.

The revenue and inflation-adjusted costs for the combined NHS and non-NHS road projects are shown in Tables 6-4 and 6-5, respectively.

Table 6-4 Road Projects Capital Funding Sources – Short Term (2011-2023)

Funding Sources	Notes	Funding in Millions $ 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
MOA Road Capital (road bonds to MTP projects)	1	2.0	3.2	3.4	5.2	5.2	5.8	4.1	4.2	4.3	4.4	4.5	4.6	4.7
AK Legislative Capital Program (not including State Bonds) – NHS	2	2.5	16.8	17.2	17.7	18.1	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0
AK Legislative Capital Program (not including State Bonds) - Non-NHS	2	0.0	30.0	30.7	31.5	32.3	33.1	33.9	34.7	35.6	36.5	37.4	38.3	39.3
Federal Other	3				5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
FHWA NHS (Anchorage & Chugiak/Eagle River)	4	62.1	5.0	0.0	0.0	0.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0
FHWA Non-NHS (Anchorage & Chugiak/Eagle River)	5	33.2	18.5	18.5	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8
Transportation Enhancements	5A	(3.3)	(1.9)	(1.9)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)
CMAQ	5A	(3.3)	(1.9)	(1.9)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)
Pavement Replacement	5A	(5.0)	(2.8)	(2.8)	(3.0)	(3.0)	(3.0)	(3.0)	(3.0)	(3.0)	(3.0)	(3.0)	(3.0)	(3.0)
HSIP	6	6.7	16.4	7.8	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
State Match to FHWA NHS & Non-NHS Total	7	9.0	3.3	2.0	2.5	2.5	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Alaska Transportation Fund (ATF)	8	0.0	0.0	0.0	0.0	0.0	4.9	5.1	5.4	5.7	6.0	6.3	6.6	6.9
GO Bond	9				36.8						42.7			
ARRC Match to federal funds	10	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Railroad track, facilities and infrastructure	11	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Estimated Total Sources of Funding		**105.0**	**87.7**	**74.1**	**120.0**	**84.4**	**116.4**	**116.2**	**117.9**	**119.7**	**164.2**	**123.3**	**125.1**	**127.0**

Note 1) Years 2011-2016 reflects Capital Improvement Program (CIP) Numbers for projects in the MTP and modified by the MOA. Year 2017 is the 2011-2016 CIP MTP Road average. CPI applied beginning in 2018
Note 2) 2011 actual NHS/Non-NHS number. 2012 is a 6 year average of the MTP NHS/Non-NHS projects. CPI applied beginning in 2013
Note 3) Consists of $5million discretionary funding programs that are awarded on a competitive basis. Includes various other programs from EPA, HUD, Health and Human Services, & others that may be proposed and funded in new authorization from 2014-2023. Inflation applied beginning in 2024
Note 4) Reflects 2010-2013 & Draft 2012-2015 STIP numbers and $23 million annually beginning in 2016. CPI applied beginning in 2024
Note 5) Reflects 2010-2013 & Draft 2012-2015 STIP Non-NHS Allocation from ADOT&PF's Community Transportation Program (CTP) + Trails and Recreational Access for Alaska (TRAAK) program and Congestion Mitigation and Air Quality (CMAQ) program. Reduced by 10% for Enhancements,10% for CMAQ and 10% for Pavement Replacement each year based on current AMATS policy. CPI applied beginning in 2024
Note 5A) Calculated based on current AMATS policy.
Note 6) 2011 & 2012 reflects current AMATS TIP. 2013 reflects a 30% reduction from current TIP amount. 2014 is an average of 2005-2013. Inflation by CPI applied beginning in 2024
Note 7) State required match of 9.03% of total Federal amounts on NHS, Non-NHS, HSIP, and Federal Other
Note 8) New Program Alaska Transportation Fund (ATF) created for Statewide improvements in 2015 (initial funding $350M annually with an average 5% return on investment and 28% of that investment returns to the Anchorage area based on Historical AMATS allocation formula funding recommended by the TAC)
Note 9) Based on history of GO bonds in 2002 and 2008. Assume state GO Bond every 6 years of total historical average (2014, 2020, 2026, 2032). Increased annually by CPI
Note 10) Amount based on calculation of 9.03% of Federal funds to ARRC
Note 11) Railway/railroad infrastructure projects funded by combination of ARRC, FTA Sec 5307 & 5309, and FRA Federal funds. CPI applied beginning in 2024

Table 6-4 Road Projects Capital Funding Sources - Long Term (2024-2035)

Funding Sources	Notes	Funding in Millions $ 2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total 2011-2035
MOA Road Capital (road bonds to MTP projects)	1	4.9	5.0	5.1	5.2	5.4	5.5	5.6	5.8	5.9	6.1	6.2	6.4	122.7
AK Legislative Capital Program (not including State Bonds) – NHS	2	22.6	23.2	23.7	24.3	24.9	25.6	26.2	26.9	27.5	28.2	28.9	29.6	545.9
AK Legislative Capital Program (not including State Bonds) - Non-NHS	2	40.3	41.3	42.3	43.4	44.5	45.6	46.7	47.9	49.1	50.3	51.6	52.9	969.2
Federal Other	3	5.1	5.3	5.4	5.5	5.7	5.8	5.9	6.1	6.2	6.4	6.6	6.7	120.7
FHWA NHS (Anchorage & Chugiak/Eagle River)	4	23.6	24.2	24.8	25.4	26.0	26.7	27.3	28.0	28.7	29.4	30.2	30.9	576.3
FHWA Non-NHS (Anchorage & Chugiak/Eagle River)	5	20.3	20.8	21.3	21.9	22.4	23.0	23.5	24.1	24.7	25.3	26.0	26.6	548.1
Transportation Enhancements	5A	(2.0)	(2.1)	(2.1)	(2.2)	(2.2)	(2.3)	(2.4)	(2.4)	(2.5)	(2.5)	(2.6)	(2.7)	(55.1)
CMAQ	5A	(2.0)	(2.1)	(2.1)	(2.2)	(2.2)	(2.3)	(2.4)	(2.4)	(2.5)	(2.5)	(2.6)	(2.7)	(55.1)
Pavement Replacement	5A	(3.0)	(3.1)	(3.2)	(3.3)	(3.4)	(3.5)	(3.5)	(3.6)	(3.7)	(3.8)	(3.9)	(4.0)	(82.6)
HSIP	6	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0	9.2	9.5	9.7	10.0	209.7
State Match to FHWA NHS & Non-NHS Total	7	4.9	5.0	5.2	5.3	5.4	5.6	5.7	5.8	6.0	6.1	6.3	6.4	125.4
Alaska Transportation Fund (ATF)	8	7.2	7.6	8.0	8.4	8.8	9.2	9.7	10.2	10.7	11.2	11.8	12.4	162.1
GO Bond	9			49.5						57.4				186.4
ARRC Match to federal funds	10	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2.5
Railroad track, facilities and infrastructure	11	1.0	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.3	1.3	1.3	27.1
Estimated Total Sources of Funding		**130.6**	**134.1**	**187.1**	**141.1**	**144.9**	**148.8**	**152.4**	**156.7**	**218.0**	**165.1**	**169.6**	**173.9**	**3,403.2**

Note 1) Years 2011-2016 reflects Capital Improvement Program (CIP) Numbers for projects in the MTP and modified by the MOA. Year 2017 is the 2011-2016 CIP MTP Road average. CPI applied beginning in 2018
Note 2) 2011 actual NHS/Non-NHS number. 2012 is a 6 year average of the MTP NHS/Non-NHS projects. CPI applied beginning in 2013
Note 3) Consists of $5million discretionary funding programs that are awarded on a competitive basis. Includes various other programs from EPA, HUD, Health and Human Services, & others that may be proposed and funded in new authorization from 2014-2023. Inflation applied beginning in 2024
Note 4) Reflects 2010-2013 & Draft 2012-2015 STIP numbers and $23 million annually beginning in 2016. CPI applied beginning in 2024
Note 5) Reflects 2010-2013 & Draft 2012-2015 STIP Non-NHS Allocation from ADOT&PF's Community Transportation Program (CTP) + Trails and Recreational Access for Alaska (TRAAK) program and Congestion Mitigation and Air Quality (CMAQ) program. Reduced by 10% for Enhancements,10% for CMAQ and 10% for Pavement Replacement each year based on current AMATS policy. CPI applied beginning in 2024
Note 5A) Calculated based on current AMATS policy.
Note 6) 2011 & 2012 reflects current AMATS TIP. 2013 reflects a 30% reduction from current TIP amount. 2014 is an average of 2005-2013. Inflation by CPI applied beginning in 2024
Note 7) State required match of 9.03% of total Federal amounts on NHS, Non-NHS, HSIP, and Federal Other
Note 8) New Program Alaska Transportation Fund (ATF) created for Statewide improvements in 2015 (initial funding $350M annually with an average 5% return on investment and 28% of that investment returns to the Anchorage area based on Historical AMATS allocation formula funding recommended by the TAC)
Note 9) Based on history of GO bonds in 2002 and 2008. Assume state GO Bond every 6 years of total historical average (2014, 2020, 2026, 2032). Increased annually by CPI
Note 10) Amount based on calculation of 9.03% of Federal funds to ARRC
Note 11) Railway/railroad infrastructure projects funded by combination of ARRC, FTA Sec 5307 & 5309, and FRA Federal funds. CPI applied beginning in 2024

Table 6-5 Road Projects Sources and Uses of Revenue

		Revenue in Millions $													
Short Term (2011-2023)	**Source**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
Total Project Costs	Total Project cost	1,084	1,128	1,063	1,015	978	893	841	753	663	566	465	312	197	74
Less: Year's Spending	2010-2035 Annual Rev.		-105	-88	-74	-120	-84	-116	-116	-118	-120	-164	-123	-125	-127
Projects Deferred to Future Years			1,023	976	941	858	808	724	637	545	447	300	189	72	(53)
Inflation			+4%	+4%	+4%	+4%	+4%	+4%	+4%	+4%	+4%	+4%	+4%	+4%	+4%
Deferred Projects			1,063	1,015	978	893	841	753	663	566	465	312	197	74	(55)
Long Term (2024-2035)	**Source**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	
Total Project Costs	Total Project cost	(55)[1]	1,585	1,505	1,419	1,275	1,173	1,064	948	823	690	488	334	171	
Less: Year's Spending	2010-2035 Annual Rev.		-131	-134	-187	-141	-145	-149	-152	-157	-218	-165	-170	-174	
Projects Deferred to Future Years			1,454	1,371	1,232	1,134	1,028	916	795	666	472	323	165	(3)	
Inflation			+3.5%	+3.5%	+3.5%	+3.5%	+3.5%	+3.5%	+3.5%	+3.5%	+3.5%	+3.5%	+3.5%	+3.5%	
Deferred Projects			1,505	1,419	1,275	1,173	1,064	948	823	690	488	334	171	(3)[2]	

Note 1) Equals 2023 deferred project total plus inflated long term project costs.
Note 2) In 2035 a surplus of $3 Million is projected.

Operations and Maintenance

Adequate funding of street O&M functions is important to ensure that the road system continues to function well. The O&M functions include activities such as signing, marking, lighting, street sweeping, traffic signal system operation, snow clearing, sanding, pothole repair, landscaping, and sidewalk maintenance.

The O&M cost for new roadway projects recommended in this MTP is based on the current cost per lane mile times the new road lane miles added to the system as a result of implementation of the roadway projects. Table 6-6 shows the results of calculating the difference between the existing 2011 lane miles and the future 2035 lane miles. Because cost per lane mile varies from the DOT&PF and the MOA, the additional lane miles are broken out by new lane miles added to the DOT&PF system and new lane miles added to the MOA system.

The MOA lane miles are further broken out by the Anchorage Roads and Drainage Service Area (ARDSA) and Chugiak/Birchwood/Eagle River Rural Roads Service Area (CBERRRSA), which also have different cost structures. ARDSA is the largest road service area in Anchorage. It has full maintenance and construction authority for drainage and road facilities in the Anchorage Bowl. CBERRRSA encompasses more than 350 lane miles of roadway in the Chugiak, Birchwood, and Eagle River areas.

The DOT&PF and MOA jointly share the responsibility of maintaining roadways in the Anchorage Bowl. For the most part, the MOA maintains municipality-owned roads and the DOT&PF maintains state-owned roads. However, in cases where efficiencies can be achieved, the maintenance responsibilities have been shifted through formal maintenance agreements.

Table 6-6 Lane Mile Increases by Agency Maintenance Responsibility

Agency	Summer Maintenance (miles)	Winter Maintenance (miles)	Year-Round Maintenance (miles)
DOT&PF	1.42	1.89	92.45
MOA ARDSA	1.89	1.42	1.31
MOA CBERRSA	0	0	5.83

The ability and willingness to pay the additional cost of maintaining this expanded system should be resolved before a commitment to build them is made. The DOT&PF contracts with the MOA for certain O&M functions. Three roadways recommended for widening (Northern Lights Boulevard, Fireweed Lane, and the proposed northern access road to the U-Med area) currently have split maintenance responsibilities. As a result, the additional lane miles were further broken out by summer and winter maintenance responsibilities.

Assumptions for the O&M costs include the following:

- Conversions of four lane-roads to three-lane roads decrease the maintenance cost by one lane.
- The restriping of the A/C couplet will not increase the maintenance cost of these facilities because the pavement area will remain the same.
- There is no difference between the maintenance costs based on roadway classification. In other words, lane mile costs for freeways are the same as those for arterials.

The DOT&PF and MOA spent almost $47 million in 2011 for O&M of the public road system in the AMATS planning area. See Table 6-7. Based on the current O&M budgets, the average cost per lane mile on DOT&PF facilities is $10,000. The average cost per lane mile within ARDSA is $16,000 and within CEBERRRSA is $9,500. The cost to maintain a separated path or walkways adjacent to the roadway is included in the amounts. Although these amounts differ by responsible organization, it is important to note that the services provided also differ. For example, ARDSA includes the expensive costs of longer time spent by crews clearing and hauling snow in residential streets than the time spent clearing snow on the high speed facilities maintained by the DOT&PF.

New roads and lanes to be built as a part of the MTP implementation will add maintenance cost of about $1 million per year by 2035. During the 2011–2035 MTP period, O&M costs for the road system are projected to be $1.5 billion.

In some cases, the recommended MTP projects may result in a net cost savings for maintenance, especially where improvements to the existing substandard roadbed and drainage reduce the need to repair the roadway surface. It is assumed that the DOT&PF and MOA will continue the current level of service for maintaining the existing system and additional lane miles added as a part of the MTP projects.

Table 6-7 Roads and Non-Motorized Operations & Maintenance Funding vs. Expenses – Short Term (2011-2023)

	Revenue and Expenses in Millions $												
	2011	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
Revenue Estimates													
AMATS Pavement Replacement	5.0	2.8	2.8	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
MOA Road Capital (road bonds to LRTP surface rehab projects)	3.9	3.0	4.0	4.5	2.2	4.0	3.6	3.7	3.8	3.9	4.0	4.1	4.2
AK Legislative Capital Program (not including State Bonds) - Non-NHS Pavement Rehab	0.0	2.3	2.4	2.4	2.5	2.5	2.6	2.7	2.7	2.8	2.9	2.9	3.0
DOT&PF O&M Budget	12.0	12.3	12.6	12.9	13.3	13.6	13.9	14.3	14.6	15.0	15.4	15.8	16.2
DOT&PF Traffic Signal Management	1.7	1.7	1.8	1.8	1.9	1.9	2.0	2.0	2.0	2.1	2.2	2.2	2.3
DOT&PF MS4 Permit Compliance	2.9	3.0	3.0	3.1	3.2	3.3	3.4	3.4	3.5	3.6	3.7	3.8	3.9
DOT&PF Sidewalk Snow Removal	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
MOA ARDSA O&M Budget	20.5	21.0	21.6	22.1	22.7	23.2	23.8	24.4	25.0	25.6	26.3	26.9	27.6
MOA CBERRRSA O&M Budget	0.19	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
Estimated Total Sources of Funding	**46.7**	**46.8**	**48.9**	**50.6**	**49.4**	**52.3**	**53.0**	**54.3**	**55.6**	**56.9**	**58.2**	**59.6**	**61.0**
M&O Expenses													
DOT&PF	17.1	17.5	18.0	18.4	18.9	19.3	19.8	20.3	20.8	21.4	21.9	22.4	23.0
DOT&PF Pavement Replacement Projects	5.0	5.1	5.0	5.4	5.5	5.5	5.6	5.7	5.7	5.8	5.9	5.9	6.0
MOA ARDSA	20.5	21.0	21.6	22.1	22.7	23.2	23.8	24.4	25.0	25.6	26.3	26.9	27.6
MOA CBERRRSA	0.19	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
MOA Pavement Replacement Projects	3.90	3.00	4.00	4.50	2.20	4.00	3.60	3.69	3.78	3.88	3.97	4.07	4.17
Estimated Total Expenses	**46.7**	**46.9**	**48.7**	**50.6**	**49.4**	**52.3**	**53.1**	**54.3**	**55.6**	**56.9**	**58.2**	**59.6**	**61.0**

Table 6-7 Roads and Non-Motorized Operations & Maintenance Funding vs. Expenses – Long Term (2024-2035)

	Revenue and Expenses in Millions $												
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total 2011-2035
Revenue Estimates													
AMATS Pavement Replacement	3.0	3.1	3.2	3.3	3.4	3.5	3.5	3.6	3.7	3.8	3.9	4.0	82.6
MOA Road Capital (road bonds to LRTP surface rehab projects)	4.3	4.4	4.5	4.6	4.7	4.8	5.0	5.1	5.2	5.3	5.5	5.6	107.8
AK Legislative Capital Program (not including State Bonds) - Non-NHS Pavement Rehab	3.1	3.2	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	3.9	4.0	74.2
DOT&PF O&M Budget	16.6	17.0	17.4	17.8	18.3	18.7	19.2	19.7	20.2	20.7	21.2	21.7	410.3
DOT&PF Traffic Signal Management	2.3	2.4	2.4	2.5	2.6	2.6	2.7	2.8	2.8	2.9	3.0	3.0	57.5
DOT&PF MS4 Permit Compliance	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.8	4.9	5.0	5.1	5.2	99.1
DOT&PF Sidewalk Snow Removal	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	17.1
MOA ARDSA O&M Budget	28.3	29.0	29.7	30.5	31.2	32.0	32.8	33.6	34.5	35.3	36.2	37.1	701.1
MOA CBERRRSA O&M Budget	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	6.6
Estimated Total Sources of Funding	**62.5**	**64.1**	**65.7**	**67.4**	**69.1**	**70.8**	**72.5**	**74.3**	**76.2**	**78.1**	**80.0**	**82.1**	**1,556.2**
M&O Expenses													
DOT&PF	23.6	24.2	24.8	25.4	26.0	26.7	27.3	28.0	28.7	29.4	30.2	30.9	**584.1**
DOT&PF Pavement Replacement Projects	6.1	6.3	6.4	6.6	6.8	7.0	7.1	7.3	7.5	7.7	7.8	8.0	**156.6**
MOA ARDSA	28.3	29.0	29.7	30.5	31.2	32.0	32.8	33.6	34.5	35.3	36.2	37.1	**701.1**
MOA CBERRRSA	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	**6.6**
MOA Pavement Replacement Projects	4.28	4.39	4.50	4.61	4.72	4.84	4.96	5.09	5.21	5.34	5.48	5.61	**107.8**
Estimated Total Expenses	**62.5**	**64.1**	**65.7**	**67.4**	**69.1**	**70.8**	**72.5**	**74.3**	**76.2**	**78.1**	**80.1**	**82.1**	**1556.2**

Assumptions:
DOT&PF and MOA will continue to maintain the existing system and additional lane miles added as part of the MTP to the current level of service.
The system will be maintained at the level of funding available.
2.5% growth in both revenue and expenses for the O&M budgets. This is a conservative assumption compared to the actual 5- year average growth rate in the DOT&PF, ARDSA, and CEBERRRSA M&O budgets. Averaged over time, these budgets have increased greater than 2.5% per year.

Public Transportation

Capital Costs

Public transportation capital costs are projected to be $243 million, and are made up of replacement and expansion for People Mover, AnchorRIDES, and Share-a-Ride vehicles; bus stop improvements; public transportation centers and facilities; ITS projects; fleet improvements and support equipment and vehicles; BRT implementation; and ride sharing and associated marketing.

Available capital funding from federal and municipal sources is sufficient to cover the estimated capital expenses. The capital program funding will be from FTA sources—Sections 5307, 5309, 5311, 5316, 5317, and 5340 funds and the Very Small Starts program; FHWA CMAQ; state and local matching funds; the Alaska Mental Health Trust Authority; Alaska Legislature grants; and a new (State Fiscal Year 2012) State Transit Match Assistance program.

The funding sources for public transportation capital improvement projects are shown in Table 6-8. The annual funding amounts and the annual use of the revenue for the public transportation projects are shown in Table 6-9.

Operating Costs

This MTP expands existing public transportation services: People Mover, AnchorRIDES, and Share-a-Ride. It is consistent with the Anchorage comprehensive plan, the People Mover Blueprint, Anchorage Downtown Comprehensive Plan, Human Services Transportation Coordination Plan, Public Transit Advisory Board recommendations, and public requests for service.

Within the MTP planning horizon, People Mover expansion includes implementing half-hour headways until 6:00 p.m. on all local routes within the Anchorage Bowl, and15 minute peak period headways on six routes. Local service in Eagle River is reinstated and additional service is provided on the Glenn Highway. A new BRT route is initiated between Downtown, Midtown, and the U-Med district; and a new South Anchorage express route will be added. New coverage in the Klatt Road/Southport area, along Abbott Road/Elmore Road, and along International Airport Road is identified in the MTP.

The required peak-hour fleet will be approximately 92 People Mover buses—slightly more than double the fleet in 2011. The annual O&M costs are estimated to increase from $26.3 million in 2011 to $48.6 million in 2035, with 2.5 percent inflation added per year. Table 6-10 shows the annual funding and expenditures for the O&M of the public transportation system.

Table 6-8 Public Transportation Capital Funding Sources – Short Term (2011-2023)

Funding Sources	Notes	Funding in Millions $ 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Revenue Estimates														
Federal Transit Administrative Capital Funding - Formula funding Section 5307, 5316 and 5317	Note 1	1.1	1.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.5	2.6	2.6
Federal Transit Administrative Capital Funding-Competitive - Section 5309 and Other		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.3	2.4	2.4
Section 5309 from Prior Years: Dimond Center Intermodal Facility.	Note 2		2.9											
Pending Section 5309 from Prior Years: C Street Intermodal Facility.			5.0											
FTA Very Small Starts Program for BRT														
FTA 5311 for Vanpools	Note 3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
MOA Transit Capital	Note 4	0.4	1.4	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.0	1.0	1.0
CMAQ	Note 5	3.3	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.4	2.4	2.5
State Match to federal funds (CMAQ)	Note 6	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Local Match to federal funds (CMAQ)	Note 7	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
State Transit Match Assistance SB77	Note 8	0.2	0.2	0.2	0.2	0.5	0.5	0.5	0.5	0.5	0.8	1.3	1.3	1.3
AK Legislative Capital Program - Transit	Note 9					1.7					1.9	2.4		
Alaska Mental Health Trust	Note 10	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4
Estimated Total Sources of Funding		**6.8**	**14.1**	**6.4**	**6.5**	**8.5**	**6.8**	**6.8**	**6.8**	**6.8**	**9.0**	**12.6**	**10.4**	**10.5**

Note 1) FTA Formula funding to increase with reauthorization in 2013 and inflated by CPI per year starting in 2024
Note 2) Amount left from prior year funding, anticipate obligating in 2012. MOA match has already been applied.
Note 3) FTA 5311 for vanpools are provided by the Matanuska-Susitna Borough. Inflated by CPI per year starting in 2024
Note 4) Local match for FTA funds. 20% of FTA capital funding
Note 5) 10% of AMATS allocation per current policy

Table 6-8 Public Transportation Capital Funding Sources – Long Term (2024-2035)

Funding Sources	Notes	Funding in Millions $ 2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total, 2011-2035
Revenue Estimates														
Federal Transit Administrative Capital Funding - Formula funding Section 5307, 5316 and 5317	Note 1	2.2	2.2	2.3	2.3	2.4	2.4	2.5	2.6	2.6	2.7	2.8	2.8	55.1
Federal Transit Administrative Capital Funding-Competitive - Section 5309 and Other		2.0	2.1	2.1	2.2	2.2	2.3	2.3	2.4	2.4	2.5	2.6	2.6	41.7
Section 5309 from Prior Years: Dimond Center Intermodal Facility.	Note 2													2.9
Pending Section 5309 from Prior Years: C Street Intermodal Facility.														5.0
FTA Very Small Starts Program for BRT				11.1										11.1
FTA 5311 for Vanpools	Note 3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2.5
MOA Transit Capital	Note 4	0.9	0.9	4.1	0.9	0.9	1.0	1.0	1.0	1.0	1.1	1.1	1.1	23.6
CMAQ	Note 5	2.0	2.1	2.1	2.2	2.2	2.3	2.4	2.4	2.5	2.5	2.6	2.7	55.1
State Match to federal funds (CMAQ)	Note 6	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2.6
Local Match to federal funds (CMAQ)	Note 7	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2.6
State Transit Match Assistance SB77	Note 8	0.8	1.0	1.0	1.0	1.0	1.0	1.3	1.3	1.3	1.3	1.3	1.3	20.1
AK Legislative Capital Program - Transit	Note 9		2.1					2.4					2.7	10.8
Alaska Mental Health Trust	Note 10	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	8.3
Estimated Total Sources of Funding		**8.5**	**11.0**	**22.3**	**9.2**	**9.4**	**9.7**	**12.6**	**10.4**	**10.5**	**10.8**	**11.1**	**13.9**	**240.4**

Note 6) Assumes State Match of 50% of CMAQ funds
Note 7) Assumes Local Match of 50% of CMAQ funds
Note 8) SB 77 increases from $1m per year every 5 years. MOA to receive 25% of total state amount
Note 9) State Legislative Grants assist in fleet replacement. $1.5M in 2010$ inflated by CPI per year.
Note 10) Historical funding held constant 2011-2014. Inflated by CPI per Year starting 2015

Table 6-9 Public Transportation Projects Sources and Uses of Revenue

	Revenue in Millions $												
Short Term (2011-2023)	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
Current Year Project Cost in Year of Expenditure Dollars	6.8	10.5	4.4	7.7	4.3	3.7	3.9	4.0	7.7	12.9	14.1	12.3	9.0
Previously Deferred Revenue	+ 0.0	+ 0.0	+(3.6)	+(5.6)	+(4.4)	+(8.5)	+(11.7)	+(14.5)	+(17.3)	+(16.4)	+(12.5)	+(5.5)	+(0.3)
Current Year Revenue	- 6.8	- 14.1	- 6.4	- 6.5	- 8.5	- 6.8	- 6.8	- 6.8	- 6.8	- 9.0	- 7.1	- 7.1	- 8.3
Total Deferred Revenue	0.0	(3.6)	(5.6)	(4.4)	(8.5)	(11.7)	(14.5)	(17.3)	(16.4)	(12.5)	(5.5)	(0.3)	0.3
Long Term (2024-2035)	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	
Current Year Project Cost in Year of Expenditure Dollars	16.0	5.1	5.3	22.9	5.8	5.9	10.8	6.3	17.3	15.1	16.1	15.8	
Previously Deferred Revenue	+ 0.3	+ 7.8	+ 1.9	+ (15.1)	+ (1.4)	+ (5.0)	+ (8.8)	+ (10.6)	+ (14.6)	+ (7.8)	+ (3.5)	+ 1.5	
Current Year Revenue	- 8.5	- 11.0	- 22.3	- 9.2	- 9.4	- 9.7	- 12.6	- 10.4	- 10.5	- 10.8	- 11.1	- 13.9	
Total Deferred Revenue	7.8	1.9	(15.1)	(1.4)	(5.0)	(8.8)	(10.6)	(14.6)	(7.8)	(3.5)	1.5	3.3	

Summary:

Assume total capital cost for all Transit improvements is $243.7 million

Revenues or spending is the estimated yearly funding to spent on projects to reduce the total projects deferred to the next year

Transit 2.1% annual project inflation from 2011-2035, which reflects 85% of CPI. Currently Transit Projects Costs from 2011-2035 are shown in Year of Expenditure Dollars resulting in a 0.0% Inflation.

Table 6-10 Public Transportation Capital Projects and Operations & Maintenance Expenses

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
FLEET REPLACEMENT (# OF VEHICLES)														
PEOPLE MOVER			11								18		15	8
ANCHORRIDES			9	9	9	9	10	10	10	10	10	11	11	11
SHARE-A-RIDE			15	15	15	15	16	20	20	20	20	21	25	25
FLEET EXPANSION						0	2	0	0	0	0	0	12	0	0
Service Expansion Priority 1--Increase span of service Mon-Fri, Sun; Misc Service Improvements.	0 buses													
Service Expansion Priority 2--:30 headways on all routes	2 buses						2							
Service Expansion Priority 3--:15 peak service on 3, 36, 45	12 buses											12		
Service Expansion Priority 4--:15 peak service on 7, 9, 15	10 buses													
Service Expansion Priority 5--Glenn Highway Commute, Eagle River Local Service	9 buses													
Bus Rapid Transit (H2H)--Initial BRT	8 buses													
Service Expansion Priority 6--South Anchorage Park & Ride	2 buses													
Service Expansion Priority 7--New Service (Klatt/Southport, Abbott/Elmore, International)	6 buses													
AnchorRIDES expansion			1	1	1	1	1	1	1	1	1	1	1	1
Vanpool expansion			5	5	5	5	5	5	5	5	5	5	5	5
		PRICE PER VEHICLE	R-6 40' and 5 30'								R 2008		R 2010	R 2011
PEOPLE MOVER		$ 0.402	$ 4.51	$ -	$ -	$ 0.87	$ -	$ -	$ -	$ -	$ 8.72	$ 5.94	$ 7.58	$ 4.13
ANCHOR RIDES		$ 0.069	$ 0.70	$ 0.72	$ 0.73	$ 0.75	$ 0.84	$ 0.86	$ 0.88	$ 0.90	$ 0.92	$ 1.02	$ 1.04	$ 1.06
SHARE-A-RIDE		$ 0.042	$ 0.86	$ 0.88	$ 0.89	$ 0.91	$ 0.98	$ 1.19	$ 1.21	$ 1.24	$ 1.27	$ 1.34	$ 1.58	$ 1.62
TOTAL VEHICLE COST (2011 $)			$ 6.08	$ 1.59	$ 1.63	$ 2.54	$ 1.82	$ 2.05	$ 2.09	$ 2.14	$ 10.91	$ 8.30	$ 10.20	$ 6.81
CAPITAL Program														
People Mover Fleet Replacement and Expansion			$ 4.51	$ -	$ -	$ 0.87	$ -	$ -	$ -	$ -	$ 8.72	$ 5.94	$ 7.58	$ 4.13
AnchorRIDES Fleet Replacement and Expansion			$ 0.70	$ 0.72	$ 0.73	$ 0.75	$ 0.84	$ 0.86	$ 0.88	$ 0.90	$ 0.92	$ 1.02	$ 1.04	$ 1.06
Share-a-Ride (Vanpool) Fleet Replacement and Expansion			$ 0.86	$ 0.88	$ 0.89	$ 0.91	$ 0.98	$ 1.19	$ 1.21	$ 1.24	$ 1.27	$ 1.34	$ 1.58	$ 1.62
Bus Stop Improvements		0.50	$ 0.51	$ 0.52	$ 0.53	$ 0.54	$ 0.55	$ 0.57	$ 0.58	$ 0.59	$ 0.60	$ 0.62	$ 0.63	$ 0.64
Transit Centers & Facilities				$ 1.04	$ 1.06									
ITS/Automated Operating Systems		0.10	$ 0.10	$ 0.10	$ 0.11	$ 0.11	$ 0.11	$ 0.11	$ 0.12	$ 0.12	$ 0.12	$ 0.12	$ 0.13	$ 0.13
Fleet Improvements/Support Equipment		0.25	$ 0.26	$ 0.26	$ 0.27	$ 0.27	$ 0.28	$ 0.28	$ 0.29	$ 0.30	$ 0.30	$ 0.31	$ 0.31	$ 0.32
Management Information Systems		0.05	$ 0.05	$ 0.05	$ 0.05	$ 0.05	$ 0.06	$ 0.06	$ 0.06	$ 0.06	$ 0.06	$ 0.06	$ 0.06	$ 0.06
Support Vehicles		0.10	$ 0.10	$ 0.10	$ 0.11	$ 0.11	$ 0.11	$ 0.11	$ 0.12	$ 0.12	$ 0.12	$ 0.12	$ 0.13	$ 0.13
Dimond Center Intermodal Facility			$ 2.70											
Muldoon Transit Center Relocation					$ 3.19									
Hillside Park & Ride												$ 3.69		
BRT Routes (Very Small Start)--Stops & Stations														
RTA Recommendations														
Anchorage Ridesharing/Transit Marketing			$ 0.72	$ 0.72	$ 0.72	$ 0.72	$ 0.74	$ 0.76	$ 0.78	$ 0.79	$ 0.81	$ 0.83	$ 0.86	$ 0.88
Transit Warm Storage Expansion										$ 3.543				
CAPITAL Annual Total		**$ 6.80**	**$ 10.52**	**$ 4.40**	**$ 7.67**	**$ 4.34**	**$ 3.67**	**$ 3.94**	**$ 4.02**	**$ 7.65**	**$ 12.93**	**$ 14.06**	**$ 12.32**	**$ 8.97**
2011 Operating Budget, as amended in AM 153-2011 (A)		$ 26.27												
ADDITIONAL O&M COSTS														
Service Expansion Priority 1--Increase span of service Mon-Fri, Sun; Misc Service Improvements.	0.50			$ 0.500										
Service Expansion Priority 2--:30 headways on all routes	4.00						$ 2.00			$ 2.00				
Service Expansion Priority 3--:15 peak service on 3, 36, 45	1.20												$ 1.20	
Service Expansion Priority 4--:15 peak service on 7, 9, 15	1.00													
Service Expansion Priority 5--Glenn Highway Commute, Eagle River Local Service	3.00													
Bus Rapid Transit (H2H)--Initial BRT	3.10													
Service Expansion Priority 6--South Anchorage Park & Ride	1.10													
Service Expansion Priority 7--New Service (Klatt/Southport, Abbott/Elmore, International)														

Notes/Assumptions
Vehicle costs based on 2011 actuals
People Mover buses replaced every 12 years
AnchorRIDES & Vanpool vehicles replaced every 5 years
People Mover phased expansion--Doubles fleet over life of the plan
AnchorRIDES expansion of 1% annually
Vanpool expansion doubles fleet by 2031
Dimond Center Intermodal Facility to be costed
RTA Recommendations yet to be costed

Table 6-10 Public Transportation Capital Projects and Operations & Maintenance Expenses (cont.)

		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	TOTALS
FLEET REPLACEMENT (# OF VEHICLES)														
PEOPLE MOVER		11			2	0	0	0	0	18	12	15	8	118
ANCHORRIDES		11	11	12	12	12	12	12	13	13	13	13	13	266
SHARE-A-RIDE		25	25	26	30	30	30	30	31	30	30	30	30	574
FLEET EXPANSION		10	0	0	9	0	0	8	0	0	2	0	6	49
Service Expansion Priority 1--Increase span of service Mon-Fri, Sun; Misc Service Improvements.	0 buses													
Service Expansion Priority 2--:30 headways on all routes	2 buses													
Service Expansion Priority 3--:15 peak service on 3, 36, 45	12 buses													
Service Expansion Priority 4--:15 peak service on 7, 9, 15	10 buses	10												
Service Expansion Priority 5--Glenn Highway Commute, Eagle River Local Service	9 buses				9									
Bus Rapid Transit (H2H)--Initial BRT	8 buses							8						
Service Expansion Priority 6--South Anchorage Park & Ride	2 buses										2			
Service Expansion Priority 7--New Service (Klatt/Southport, Abbott/Elmore, International)	6 buses												6	
AnchorRIDES expansion		1	1	1	1	1	1	1	1	1	1	1	1	24
Vanpool expansion		5	5	5	5	5	5	5	5					100
		R 2012			R EX 2015			R EX 2018		R 2020	R EX 2021	R 2022	R 2023	
PEOPLE MOVER		$ 11.06	$ -	$ -	$ 6.17	$ -	$ -	$ 4.77	$ -	$ 11.20	$ 8.89	$ 9.73	$ 9.27	$ 92.84
ANCHOR RIDES		$ 1.08	$ 1.11	$ 1.23	$ 1.25	$ 1.28	$ 1.30	$ 1.33	$ 1.46	$ 1.49	$ 1.53	$ 1.56	$ 1.59	$ 26.64
SHARE-A-RIDE		$ 1.65	$ 1.69	$ 1.78	$ 2.05	$ 2.09	$ 2.14	$ 2.18	$ 2.29	$ 1.95	$ 1.99	$ 2.03	$ 2.07	$ 37.89
TOTAL VEHICLE COST (2011 $)		$ 13.80	$ 2.79	$ 3.00	$ 9.47	$ 3.37	$ 3.44	$ 8.29	$ 3.76	$ 14.64	$ 12.41	$ 13.32	$ 12.93	$ 157.36
CAPITAL Program														
People Mover Fleet Replacement and Expansion		$ 11.06	$ -	$ -	$ 6.17	$ -	$ -	$ 4.77	$ -	$ 11.20	$ 8.89	$ 9.73	$ 9.27	$ 92.84
AnchorRIDES Fleet Replacement and Expansion		$ 1.08	$ 1.11	$ 1.23	$ 1.25	$ 1.28	$ 1.30	$ 1.33	$ 1.46	$ 1.49	$ 1.53	$ 1.56	$ 1.59	$ 26.64
Share-a-Ride (Vanpool) Fleet Replacement and Expansion		$ 1.65	$ 1.69	$ 1.78	$ 2.05	$ 2.09	$ 2.14	$ 2.18	$ 2.29	$ 1.95	$ 1.99	$ 2.03	$ 2.07	$ 37.89
Bus Stop Improvements		$ 0.66	$ 0.67	$ 0.68	$ 0.70	$ 0.71	$ 0.73	$ 0.74	$ 0.76	$ 0.77	$ 0.79	$ 0.81	$ 0.82	$ 15.72
Transit Centers & Facilities														$ 2.11
ITS/Automated Operating Systems		$ 0.13	$ 0.13	$ 0.14	$ 0.14	$ 0.14	$ 0.15	$ 0.15	$ 0.15	$ 0.15	$ 0.16	$ 0.16	$ 0.16	$ 3.14
Fleet Improvements/Support Equipment		$ 0.33	$ 0.33	$ 0.34	$ 0.35	$ 0.36	$ 0.36	$ 0.37	$ 0.38	$ 0.39	$ 0.39	$ 0.40	$ 0.41	$ 7.86
Management Information Systems		$ 0.07	$ 0.07	$ 0.07	$ 0.07	$ 0.07	$ 0.07	$ 0.07	$ 0.08	$ 0.08	$ 0.08	$ 0.08	$ 0.08	$ 1.57
Support Vehicles		$ 0.13	$ 0.13	$ 0.14	$ 0.14	$ 0.14	$ 0.15	$ 0.15	$ 0.15	$ 0.15	$ 0.16	$ 0.16	$ 0.16	$ 3.14
Dimond Center Intermodal Facility														$ 2.70
Muldoon Transit Center Relocation														$ 3.19
Hillside Park & Ride														$ 3.69
BRT Routes (Very Small Start)--Stops & Stations					$ 11.10									$ 11.10
RTA Recommendations														$ -
Anchorage Ridesharing/Transit Marketing		$ 0.90	$ 0.92	$ 0.94	$ 0.97	$ 0.99	$ 1.02	$ 1.04	$ 1.07	$ 1.10	$ 1.12	$ 1.15	$ 1.18	$ 21.73
Transit Warm Storage Expansion														$ 3.54
CAPITAL Annual Total		$ 16.01	$ 5.05	$ 5.31	$ 22.93	$ 5.79	$ 5.91	$ 10.81	$ 6.34	$ 17.28	$ 15.11	$ 16.08	$ 15.76	$ 243.67
														$ 89.00
2011 Operating Budget, as amended in AM 153-2011 (A)														$ 142.38
ADDITIONAL O&M COSTS														
Service Expansion Priority 1--Increase span of service Mon-Fri, Sun; Misc Service Improvements.	0.50													$ 0.500
Service Expansion Priority 2--:30 headways on all routes	4.00													$ 4.000
Service Expansion Priority 3--:15 peak service on 3, 36, 45	1.20													$ 1.200
Service Expansion Priority 4--:15 peak service on 7, 9, 15	1.00		$ 1.000											$ 1.000
Service Expansion Priority 5--Glenn Highway Commute, Eagle River Local Service	3.00					$ 3.00								$ 3.000
Bus Rapid Transit (H2H)--Initial BRT	3.10								$ 3.10					
Service Expansion Priority 6--South Anchorage Park & Ride	1.10											$ 1.10		$ 1.100
Service Expansion Priority 7--New Service (Klatt/Southport, Abbott/Elmore, International)														$ -
														$ -
														$ -

Notes/Assumptions
Vehicle costs based on 2011 actuals
People Mover buses replaced every 12 years
AnchorRIDES & Vanpool vehicles replaced every 5 years
People Mover phased expansion--Doubles fleet over life of the plan
AnchorRIDES expansion of 1% annually
Vanpool expansion doubles fleet by 2031
Dimond Center Intermodal Facility to be costed
RTA Recommendations yet to be costed

Expansion of the AnchorRIDES system will increase the fleet from 46 vehicles in 2011 to 61 vehicles in 2035. With increased emphasis on coordinated human-services transportation from federal and state funding sources, most of the increase in O&M costs will be provided through other sources, similar to the current Medicaid funding for many AnchorRIDES trips.

The Share-a-Ride vanpool fleet is estimated to increase from 76 vehicles in 2011 to 151 vehicles in 2035. The majority of the O&M costs for the program are from rider fees; however, FHWA CMAQ funds will be used to provide funding for project overhead and approximately $40,000 annually in FTA Section 5307 funding is provided for capital and major maintenance expenses of the vanpool fleet. Vehicle acquisition is funded through a capital program of FHWA CMAQ, and FTA Sections 5307 and 5311 funds, as well as matching funds from both MOA and Mat-Su Borough.

The operating budget for the public transportation system is funded by multiple sources: local property tax dollars; passenger fares; grants from the FTA, FHWA, and Department of Health and Human Services (DHHS), Older Americans Act; advertising revenues; and miscellaneous revenues.

The State of Alaska, which occasionally provides funding for small capital projects, had not provided operating funding for public transportation until the 2011 legislative session, when $1.5 million statewide was approved for 50/50 matching to cover capital and operations costs. For this MTP, it is assumed that a similar level of state support for public transportation will continue in the future.

Funding for the expanded operations of the public transportation system will require increased MOA general fund allocations or new sources. Funding from property taxes depends on the willingness of the Municipal Assembly and the MOA Administration to allocate money for this purpose and on support of the general public. Many other public transportation systems receive allocations from additional funding sources, such as a percentage of sales tax, gasoline tax, or vehicle registration tax.

Non-motorized Transportation

Capital Costs

Projects identified in the 2010 Anchorage Bicycle Plan, 2007 Anchorage Pedestrian Plan, and 1997 Areawide Trails Plan were considered for inclusion in this MTP. First, the projects that were remaining to be built from the Trails Plan, with the exceptions of the Coastal Tail extension and Alaska Railroad Trail, were added to the initial list. Next, bicycle facility projects located on the core bicycle network and identified as a "Priority A" projects within the Bicycle Plan were included in the initial list of projects. Finally, the pedestrian projects identified in the Anchchorage Pedestrian Plan, excluding crosswalks, that ranked within the top 200 on the Project Priority List and were not covered in either the trails or bicycle plans were included in the initial list of projects.

After the initial list was compiled, the non-motorized projects that were adjacent to the MTP roadway projects were removed from the list. Those non-motorized elements were included in the cost estimates for the related roadway projects and assumed to be built as part of that particular roadway improvement. The remaining projects were given a project cost estimate and scored using the project screening criteria to develop the list of short-term, long-term, and illustrative projects. See Chapter 7 for the screening criteria.

Project cost estimates were either inflated at 4 percent per year from the plan in which they were identified or were revised by the MOA to better reflect the complete project cost in 2010 dollars.

As a result, about $158.9 million has been identified as projected revenue during the course of the plan and about$155.9 million in project costs are needed, leaving a $3 million surplus that can be applied to road projects that support non-motorized elements.

The funding sources for non-motorized transportation capital improvement projects are shown in Table 6-11. The annual funding amounts and the annual use of the revenue for the non-motorized transportation projects are shown in Table 6-12.

Maintenance Costs

Estimated maintenance costs for sidewalks, bicycle paths, and trails adjacent to roadways are incorporated into the roadway O&M costs. The MOA Parks and Recreation Department estimated cost to maintain a trail that is not adjacent to a roadway at $2,600 per mile. As part of this MTP, 3.41 additional miles of trails, not adjacent to roadways, are anticipated to be built at an additional cost of about $8,900 per year. This additional cost is expected to be absorbed as part of the annual budget for the MOA Parks and Recreation Department over time.

Table 6-11 Non-motorized Transportation Projects Capital Funding Sources

	Funding in Millions $													
Short Term (2011-2023)	**Notes**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
Revenue Estimates														
TE Funds (10% of AMATS Allocation)	1	3.3	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
State Match to federal funds (TE)	2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Local Match to federal funds (TE)	3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
MOA Capital (bonds to bike/ped MTP projects)	4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
AK Legislative Capital Program - Non-Motorized	5	2.7	2.7	2.7	2.8	2.8	2.9	3.0	3.1	3.1	3.2	3.3	3.4	3.5
Estimated Total Sources of Funding		6.8	5.2	5.2	5.4	5.4	5.5	5.6	5.7	5.7	5.8	5.9	6.0	6.1
Long Term (2024-2035)	**Notes**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**Total, 2011 - 2035**
Revenue Estimates														
TE Funds (10% of AMATS Allocation)	1	2.0	2.1	2.1	2.2	2.2	2.3	2.4	2.4	2.5	2.5	2.6	2.7	55.1
State Match to federal funds (TE)	2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2.6
Local Match to federal funds (TE)	3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2.6
MOA Capital (bonds to bike/ped MTP projects)	4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	10.8
AK Legislative Capital Program - Non-Motorized	5	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.6	87.8
Estimated Total Sources of Funding		6.1	6.3	6.4	6.6	6.8	7.0	7.2	7.3	7.5	7.6	7.8	8.0	158.9

Note 1) 10% of AMATS allocation per current policy
Note 2) Assumes State Match of 50% of TE funds
Note 3) Assumes Local Match of 50% of TE funds
Note 4) Historical spending of MOA bonds. 2011-2016 = proposed CIP of MTP projects, 2017 = 2011-2016 average of actual/proposed bonds to MTP projects and then increased annually by CPI*
Note 5) 2005 - 2011 = State Legislative Capital Grants to the MOA for non-motorized projects; averaged and increased annually by CPI starting 2014

Table 6-12 Non-motorized Transportation Projects Sources and Uses of Revenue

		Revenue in Millions $														
Short Term (2011-2023)	**Source**	**2010**	**2011**	**2012**	**2013**	**2014**	**2013**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
Total Project Costs	**Total Project cost**	**60.1**	62.5	58.0	54.9	51.7	54.9	48.1	44.4	40.5	36.3	31.9	27.2	22.3	17.0	11.5
Less: Year's Spending	**2011-2035 Annual Rev.**		-6.8	-5.2	-5.2	-5.4	-5.2	-5.4	-5.5	-5.6	-5.7	-5.7	-5.8	-5.9	-6.0	-6.1
Projects Deferred to Future Years			55.7	52.8	49.7	46.3	49.7	42.7	38.9	34.9	30.6	26.2	21.4	16.4	11.0	5.4
Inflation			+4.0%	+4.0%	+4.0%	+4.0%	+4.0%	+4.0%	+4.0%	+4.0%	+4.0%	+4.0%	+4.0%	+4.0%	+4.0%	+4.0%
Deferred Projects			58.0	54.9	51.7	48.1	51.7	44.4	40.5	36.3	31.9	27.2	22.3	17.0	11.5	5.6
Long Term (2024-2035)	**Source**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**		
Total Project Costs	**Total Project cost**	**5.6**[1]	67.8	63.9	59.6	55.1	50.2	44.9	39.2	33.1	26.7	19.9	12.7	5.1		
Less: Year's Spending	**2011-2035 Annual Rev.**		-6.1	-6.3	-6.4	-6.6	-6.8	-7.0	-7.2	-7.3	-7.5	-7.6	-7.8	-8.0		
Projects Deferred to Future Years			61.7	57.6	53.2	48.5	43.4	37.9	32.0	25.8	19.2	12.3	4.9	(2.9)		
Inflation			+3.5%	+3.5%	+3.5%	+3.5%	+3.5%	+3.5%	+3.5%	+3.5%	+3.5%	+3.5%	+3.5%	+3.5%		
Deferred Projects			63.9	59.6	55.1	50.2	44.9	39.2	33.1	26.7	19.9	12.7	5.1	(3.0)		

Note: 1) Equals 2023 deferred project total plus inflated long term project cost.

Summary:
Assume 2010 capital cost for all Bike/Ped/Trail improvements is $98.1 million in 2010 dollars.
Revenues or spending is the estimated yearly funding to spent on projects to reduce the total projects deferred to the next year
4% annual project inflation from 2011-2023, 3.5% from 2024-2035

Alaska Railroad

Capital and Operating Costs and Estimated Revenues

Capital funding for selected Alaska Railroad Corporation (ARRC) improvements is estimated to originate from the FTA and the Federal Railroad Administration (FRA). The O&M of railroad capital facilities is the responsibility of the ARRC. The corporation reports systemwide operating, capital, and funding sources for purposes of the National Transit Database. FTA formula programs (Urbanized Area Formula funds and Fixed Guideway Modernization funds) are calculated on passenger revenue vehicle miles and rail route miles.

Knik Arm Crossing—Public-Private Partnership

Capital and Operating Costs and Estimated Revenues

The effort to develop the MTP financial plan for the Knik Arm Crossing project was a cooperative effort between the AMATS staff and representatives from KABATA. The detailed financial information prepared for the Knik Arm Crossing far exceeds that required for an MTP. The financial information simplifies the key elements of available data at a planning level and in a format that is similar to the financial planning assumptions, forecast, and descriptions used for all other modes of transportation and projects in the MTP. The financial analysis in this plan is based on an February 2011 “pro-forma” funding plan that KABATA has developed as a likely funding scenario based on current information, market forces, and investor climate.

In general terms, the financial plan for the Knik Arm Crossing is for a toll project—the only toll facility recommended in the MTP—expected to generate revenue from user fees. Those fees will be used, directly indirectly, or both, to fund project construction, operations, and maintenance. The project is planned to be delivered under a public-private partnership (P3). Under this structure, the selected private partner will finance, design, build, operate, and maintain the facility under the terms of a public-private agreement for an expected term of 35 years after substantial completion. The private partner will be compensated for the finance, design, build, operation, and maintenance through periodic payments called "availability fees." Those availability fees will be paid by the project owner, KABATA, a public corporation of the State of Alaska, by using toll revenue backed by a state-provided project reserve fund. The private partner will be the borrower of debt financing and the provider of equity to fund construction of Phase I of the project and will also be responsible for Phase II future capacity

improvements within the Phase I alignment. Phase II capacity improvements and project extensions, like the Ingra-Gambell connection, will be funded separately by KABATA by using projected surplus toll revenue.

The revenue sources and amounts to support the project will be a blend and balanced mix of sources, including public and private funds. The opportunities to fund the project that would then be backed with future toll revenues are currently assumed to be a combination of private activity bonds, Transportation Infrastructure Finance and Innovation Act (TIFIA) loans, private equity, bank credit facilities/lines of credit, taxable bonds, and other sources unknown until project proposals are received in 2012, after the MTP adoption. The public funds include state general funds, a proposed state-funded reserve account that is eventually replenished with surplus toll revenues, possibly state-issued general obligation bonds, and a small amount of state funds to match existing federal dollars.

There also is a reasonable expectation that funds from the federal Transportation Investment Generating Economic Recovery (TIGER) grant program could be used to support the project.

The private partner will consider many financial instruments in its plan of finance, but the actual plan will not be known until proposals are submitted and a partner is selected through a competitive procurement process. KABATA has engaged financial advisor Citigroup to prepare a pro forma financial plan that represents one potential financial solution. The ability of the selected private partner to obtain financing is reasonably expected, because the pro forma financial model indicates that revenue from tolls will exceed availability payments to the private partner by 50 percent during the 35 year contractual term of the P3 agreement.

State of Alaska legislation (SB 79/House Bill 80) was introduced in the 2011–2012 session. This pending legislation requests creation of a reserve account of $150 million for the Knik Arm Crossing project. The reserve account, held by the State of Alaska Department of Revenue, would be created with an initial deposit of state general funds to fund availability fee payments to the private partner during the early years (8 to 10 years) of operation, until the tolls alone can support these payments. Collected tolls would replenish the reserve account and fund Phase II of the project. Another aspect of the pending legislation involves increasing KABATA's existing bond limit. The ability of KABATA to issue and refund bonds was established in the legislation that created the agency. The proposed legislation requests support to raise the bond issuance limit from $500 million to $600 million to match the potential funding allocation provided by the U.S. Department of Transportation. Raising the bond limit provides a more attractive financial mix of funding sources available to the P3 partner.

For the purposes of demonstrating fiscal constraint within this MTP, it is assumed that $150 million would be the only additional state funds made available and that the allocation of these funds to a reserve account will not affect the allocation of the assumed flow of funds from the state to the rest of the roadway recommendations in the MTP.

The current pro forma plan suggests that KABATA would require the ability to pledge, transfer, or otherwise obligate and spend money that the legislature may appropriate in the future. However, the current financing plan for Knik Arm Crossing, including project toll revenues, does not jeopardize federal program funds or state general funds directed by the legislature to projects in AMATS.

For purposes of fiscal constraint, the revenue assumptions about the Knik Arm Crossing for the MTP, which are consistent with KABATA's pro-forma financial plan, are as follows:

- All revenue sources for construction, other than existing federal and state funds, will be secured by the private partner. The private partner will assume all risk associated with finance, design, construction, operations, and maintenance of the facility.
- One-way tolls will be assessed at $5 per passenger vehicle and $18 per commercial vehicle, beginning in 2016 when the bridge is forecast to open.
- Toll fees will increase at an average of 2.5 percent per year.
- In accordance with the February 2011 analysis for KABATA by Wilbur Smith Associates, bridge traffic will increase from 6,700 at the 2016 opening to 36,000 vehicles per day in 2035.
- In contrast to the 2027 adopted Anchorage Bowl LRTP, which stipulated that no additional federal, state, or local funds were to be allocated to the project, tolls collected in the early years will not be sufficient to meet the availability payments to the private partner, necessitating a legislative appropriation for a "loan" that would be repaid if toll revenues allow. Under SB 79, if approved, the state would provide a $150 million loan, which is assumed will be repaid by tolls.
- In contrast to the 2027 adopted Anchorage Bowl LRTP, which stipulated that no additional federal, state, or local funds were to be allocated to the project, any gap between the tolls collected and the required availability payments to the private partner will be the responsibility of the State of Alaska, subject to appropriation. Under SB 80, if approved, the monetary obligations incurred by KABATA under partnerships or agreements would be obligations of the state and satisfaction of those obligations from funds other than authority funds is subject to appropriation.

- Any state appropriation associated with SB 79 or SB 80 to cover the required availability payments are assumed to be in excess of what is identified in the MTP and will not adversely affect the amount of state funds anticipated to be committed within the AMATS area.
- The state will assume all risks associated with the availability payments.
- No additional federal highway program funds will be allocated to the crossing beyond those already identified by the DOT&PF and AMATS. The MTP carries forward the $26 million previously identified in the 2027 Anchorage Bowl LRTP for the Ingra-Gambell Extension, which is part of Phase II of the Knik Arm Crossing project.
- Phase II will be funded from toll revenues, when traffic volumes warrant.

Summary of Revenues and Costs

Similar to the information for other transportation improvements, for which project costs were updated, revenue assumptions and forecasts were revised, and inflation factors were applied, the Knik Arm Crossing project reflects updated costs, updated revenue sources and levels, and a spending plan. Table 6-13 describes the funding scenario and cost allocations proposed for the Knik Arm Crossing.

Table 6-13 Knik Arm Crossing Financial Plan

Funding Sources	Funding (Millions of $)
Bond	285
Transportation Infrastructure Finance and Innovation Act (TIFIA) loans	306
Equity	76
Federal and State Funds	35
Project Reserve Fund	150
Tolls	230
Total Sources	**1,082**
Fund Uses	Uses (Millions of $)
Development and construction	932
Project Reserve Fund	150
Total Uses	**1,082**

The existing adopted 2027 Anchorage Bowl LRTP states that the Knik Arm Crossing project would have no effect on the ability to finance or implement the other LRTP projects. The current pro forma financing suggests that KABATA would require the ability to pledge, transfer, or otherwise obligate and spend money that the legislature may appropriate in the future. However, similar to 2027 Anchorage Bowl LRTP, the financing plan for Knik Arm Crossing does not jeopardize federal program funds or state general funds directed by the legislature to projects in AMATS.

An important difference between the 2027 Anchorage Bowl LRTP and the 2035 MTP is that AMATS has assumed substantial future state funding for the rest of the transportation network within the AMATS area, based on historical trends. AMATS does not have the ability to decide on the allocation of future state legislative appropriations to transportation improvements within the AMATS area.

For purposes of fiscal constraint in this MTP, it is assumed that if the State of Alaska elects to provide funds for the bridge reserve account or appropriate other state funds at its discretion, these funds would be in excess of the funding assumed by AMATS for implementing its 2035 MTP.

The draft financial plan for the Knik Arm Crossing seems reasonable if the basis for the assumptions of population growth, traffic generated as a result of that growth, and the willingness to pay for tolls, with a regular increase in rates, can be agreed upon.

The revenue forecasts for the Knik Arm Crossing are hopeful, based upon assumptions developed by KABATA in February 2011. If the forecast does not materialize and KABATA enters into an agreement committing the state to a fixed level of return to a private firm, the state will have a legal obligation to pay.

The actual financial plan for the Knik Arm Crossing will not be known until after the adoption of this MTP in 2012 with the results of a successful project proposal and selection process to be carried out by KABATA. If the actual financial plan for the Knik Arm Crossing requires more state investment or is required to draw from sources such as federal NHS funds, that affect the implementation of other MTP projects, this MTP will have to be amended to reassess the Knik Arm Crossing, remove roadway projects from the network, resulting in worsening congestion, or new revenues sources and assumptions will need to be brought forward.

Conclusion

Table 6-3 depicts the annual revenues by funding source that will be required to implement the MTP. Ongoing costs to operate and maintain the transportation system are borne by the MOA and the State of Alaska from annual operating budgets.

Table 6-14 summarizes costs for the recommended MTP and the allocation of available revenues to fund implementation.

Transportation system infrastructure development, improvements, rehabilitation, and preservation are costly endeavors. The recommended transportation plan outlined in Chapter 6 will cost approximately $3.8 billion for capital items and $1.5 billion for O&M items.

Table 6-14 2035 MTP Sources and Uses of Revenue - Short Term (2011-2023)

		Revenue in Millions $															
		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Short-Term Total
Total Road, Non-motorized, ARR Project Costs	**Total Project Cost**	1,144.3	1,190.1	1,121.4	1,069.7	1,030.1	940.9	885.1	793.7	698.9	598.3	491.8	334.7	213.7	85.9	
Less: Year's Spending	2011-2035 Annual Rev.		-111.8	-92.9	-79.3	-125.4	-89.8	-121.9	-121.7	-123.6	-125.4	-170.0	-129.2	-131.1	-133.1	1,555.2
Projects Deferred to Future Years			1,078.3	1,028.6	990.5	904.7	851.1	763.2	672.0	575.3	472.9	321.8	205.5	82.6	(47.2)	
Inflation			+4%	+4%	+4%	+4%	+4%	+4%	+4%	+4%	+4%	+4%	+4%	+4%	+4%	
Deferred Projects			1,121.4	1,069.7	1,030.1	940.9	885.1	793.7	698.9	598.3	491.8	334.7	213.7	85.9	(49.1)	
Total Public Transportation Project Costs	**Total Project Cost**	0.0	6.8	10.5	4.4	7.7	4.3	3.7	3.9	4.0	7.7	12.9	14.1	12.3	9.0	
Previously Deferred Revenue			+0.0	+0.0	+(3.6)	+(5.6)	+(4.4)	+(8.5)	+(11.7)	+(14.5)	+(17.3)	+(16.4)	+(12.5)	+(5.5)	+(0.3)	
Less: Year's Spending	2011-2035 Annual Rev.		-6.8	-14.1	-6.4	-6.5	-8.5	-6.8	-6.8	-6.8	-6.8	-9.0	-7.1	-7.1	-8.3	101.0
Deferred Projects			0.0	(3.6)	(5.6)	(4.4)	(8.5)	(11.7)	(14.5)	(17.3)	(16.4)	(12.5)	(5.5)	(0.3)	0.3	
Total Project Costs	**Total Project Cost**	1,144.3	1,196.9	1,132.0	1,070.5	1,032.2	940.8	880.3	786.0	688.4	588.7	488.3	336.3	220.5	94.6	
Less: Year's Spending	2011-2035 Annual Rev.		-118.6	-107.0	-85.7	-131.9	-98.3	-128.7	-128.5	-130.4	-132.2	-179.0	-136.3	-138.2	-141.4	1,656.2
Projects Deferred to Future Years			1,078.3	1,025.0	984.9	900.3	842.5	751.6	657.5	558.0	456.5	309.3	200.0	82.3	(46.8)	
Deferred Projects			1,121.4	1,066.1	1,024.5	936.5	876.6	782.1	684.4	581.0	475.4	322.2	208.2	85.6	(48.7)	

Table 6-14 2035 MTP Sources and Uses of Revenue - Long Term (2024-2035)

		Revenue in Millions $													
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Long-Term Total	MTP Total
Total Road, Non-motorized, ARR Project Costs	**Total Project Cost**	**1,652.5**	**1,568.8**	**1,478.4**	**1,329.8**	**1,223.5**	**1,109.3**	**986.9**	**856.3**	**716.5**	**508.2**	**347.2**	**175.8**		
Less: Year's Spending	2011-2035 Annual Rev.	-136.7	-140.4	-193.5	-147.7	-151.7	-155.8	-159.6	-164.0	-225.5	-172.7	-177.4	-181.9	**2,006.9**	**3,562.1**
Projects Deferred to Future Years		1,515.7	1,428.4	1,284.9	1,182.1	1,071.8	953.5	827.3	692.3	491.0	335.5	169.8	(6.1)		
Inflation		+3.5%	+3.5%	+3.5%	+3.5%	+3.5%	+3.5%	+3.5%	+3.5%	+3.5%	+3.5%	+3.5%	+3.5%		
Deferred Projects		1,568.8	1,478.4	1,329.8	1,223.5	1,109.3	986.9	856.3	716.5	508.2	347.2	175.8	(6.3)		
Total Public Transportation Project Costs	**Total Project Cost**	**16.0**	**5.1**	**5.3**	**22.9**	**5.8**	**5.9**	**10.8**	**6.3**	**17.3**	**15.1**	**16.1**	**15.8**		
Previously Deferred Revenue	2011-2035 Annual Rev.	+0.3	+7.8	+1.9	+(15.1)	+(1.4)	+(5.0)	+(8.8)	+(10.6)	+(14.6)	+(7.8)	+(3.5)	+1.5		
Less: Year's Spending		-8.5	-11.0	-22.3	-9.2	-9.4	-9.7	-12.6	-10.4	-10.5	-10.8	-11.1	-13.9	**139.4**	**240.4**
Deferred Projects		7.8	1.9	(15.1)	(1.4)	(5.0)	(8.8)	(10.6)	(14.6)	(7.8)	(3.5)	1.5	3.3		
Total Project Costs	**Total Project Cost**	**1,668.8**	**1,581.7**	**1,485.6**	**1,337.7**	**1,227.9**	**1,110.3**	**989.0**	**852.1**	**719.2**	**515.5**	**359.8**	**193.0**		
Less: Year's Spending	2011-2035 Annual Rev.	-145.2	-151.4	-215.8	-156.9	-161.1	-165.5	-172.2	-174.4	-236.0	-183.5	-188.5	-195.8	**2,146.3**	**3,802.5**
Projects Deferred to Future Years		1,523.6	1,430.3	1,269.8	1,180.8	1,066.8	944.8	816.8	677.7	483.2	332.0	171.3	(2.8)		
Deferred Projects		1,576.6	1,480.3	1,314.8	1,222.2	1,104.4	978.1	845.7	701.9	500.4	343.7	177.2	(3.0)		