

2045 Long Range Transportation Plan

October 2021

Appendix F – Fiscal Constraint Analysis



Appendix F

Fiscal Constraint Analysis

This appendix summarizes the fiscal constraint analysis for the SLATS 2045 LRTP. Developing a cost feasible plan is an important component of the transportation planning process and developing a fiscally constrained plan is a federal LRTP requirement that ensures that SLATS takes a realistic look at want can reasonably be expected to be funded through the 2045 planning horizon. The following sections summarize the analysis, assumptions, and the recommended projects, including a discussion of SLATS 2045 LRTP project programming and phasing.

Fiscal Constraint Requirement

FAST Act planning regulations require MPOs to consider financial implications of their planning efforts as part of the LRTP plan development process. Specific provisions in the law regarding the financial plan state the following requirements:

- Development of a financial plan that demonstrates how the adopted transportation plan can be implemented.
- Development of funding estimates that will be available to support LRTP implementation, including all necessary financial resources from public and private sources.
- State recommendations on pursuing additional financing strategies to fund projects and programs included in the LRTP.
- Account for all projects and strategies for which federal, state, local, or private funds could be used for financing and
 use an inflation rate to reflect multi-year costs and revenues.

Generally speaking, the LRTP is considered to be fiscally constrained when reasonable funding sources are available to cover the proposed transportation projects at the year of expenditure (YOE, or the fiscal year (FY) the project is likely to be constructed). Given that the LRTP addresses projects through the year 2045, it is important to note that the proposed project programming and phasing is subject to change as SLATS continually monitors on-going transportation needs throughout the region.

Projects that are programmed earlier in the planning cycle, such as FY 2024 to FY 2030, have a higher likelihood of being constructed while projects in the outer years (beyond FY 2030) are routinely revisited as part of the LRTP planning process that occurs every five years to determine if they continue to meet a regional transportation need. Overall, the SLATS Policy Board and TAC have the authority to review and confirm the projects, and the project programming and phasing. They also have the authority to amend the LRTP projects/phasing, in necessary, before the next LRTP update.

Roadway/Freight Investments

Funding for SLATS transportation maintenance and improvement projects come from a variety of Federal, State, local, and private sources. The Federal government is the primary source of funding for transportation systems in the United States. They are apportioned back to the states on a formula basis. The



primary source of revenue at the federal and state levels includes motor fuel taxes (MFT), vehicle registration fees, special motor carrier fees, parking fees, and toll fees. Revenue at the county and municipal levels is primarily based on MFT, property taxes, sales taxes, and special assessments. Private sector funding comes from developers and business associations through impact fees, right-of-way donations, and cost sharing.

Given financial realities, both at the regional and state level, it is financially challenging to address all of the roadway/freight needs through the horizon year 2045. Simply put, needs exceed available resources and historically federally funded projects within the SLATS MPA can take several years to fund, design, and construct. As such, SLATS use the LRTP process to help identify projects that best achieve the established LRTP goals and objectives. The estimated project costs are then compared to the anticipated revenues to determine the project programming and phasing.

Projected Available Revenues

According to the USDOT, historic authorizations of federal funds distributed by formula can be used to approximate future transportation funding available through the year 2045 planning horizon. Historic funding levels and projects funded in part with federal STBG-U dollars, allocated to SLATS through WisDOT and IDOT, can be used for regionally significant projects. Projects must meet federal and state requirements and communities are eligible for funding on roads functionally classified as major collector or higher.

As a bi-state MPO, SLATS receives federal funding from both Wisconsin and Illinois. Wisconsin provides funding every two years as part of a five-year programming cycle. The next programming cycle that is available to SLATS is the 2024 to 2029 cycle. Based on recent funding trends, and discussions with WisDOT, it is estimated that there will be \$1,900,495 available during this cycle (and approximately this same amount every two years barring any local or State delays).

It is important to note that in order for SLATS to use these federal dollars that the local agency must contribute 20% of the project cost (to fulfill the 80/20 funding split). Furthermore, the proposed projects must be designed and ready for construction letting within the first 2 fiscal years of each 5-year program cycle (assuming WisDOT has funding in the overall Statewide program in the first 2 years for SLATS) in order to be eligible to receive federal funding for the respective five-year programming cycle, and also allow other projects to proceed on schedule each cycle thereafter. Any delay can jeopardize funding, particularly in future funding cycles. This ultimately means fewer federal dollars (up to \$8M through 2045) will flow into the SLATS region for projects, and the timing of planned projects gets pushed out.

While delays by the State may not always be avoided, local delays can be. As such, local agencies need to commit to projects early, and plan accordingly to allow sufficient time to plan, design (100% locally funded), and let a project to meet the required deadlines (which has been taken into consideration in recommending the SLATS 2045 LRTP projects). Furthermore, WisDOT recommends having a backup "shelf-ready" design 60% complete in case an unforeseen project delay occurs, so that SLATS can substitute funding for the next project in an effort to avoid losing funding.

Illinois provides a smaller portion of federal funding on an annual basis, which totals approximately \$200,000 per year. As such, SLATS has historically taken the approach of "banking" the annual funds in order to build-up funding to complete "larger" projects. As of FY 2021, there was a balance of \$1,064,395.



This balance, along with approximately an additional \$935,000 is set aside for the completion of the Old River Road (currently programmed in the TIP for construction in FY 2024. SLATS has committed a maximum of \$2,000,000 in federal funding for this project).

Another important assumption regarding Illinois funding is that the state has historically allowed SLATS to program projects for construction prior to having all of the funds available in that FY. For example, as mentioned, Old River Road is programmed for construction FY 2024; however, SLATS is only anticipated to have approximately \$1.67 million of the \$2 million federal funds that will be required. As such, SLATS will pay off the balance in FY 2026 and will start to rebuild a positive fund balance.

The annual federal funding contributions, for both Wisconsin and Illinois, are summarized in **Table 2** (provided later in this chapter).

Inflation Factors

For the purpose of the LRTP fiscal constraint analysis, the respective state federal funds were inflated at 2.0% (applied every two years to correspond with the Wisconsin five-year funding cycles, and annually to the Illinois federal funds). This reflects a relatively small increase in projected funding through the LRTP horizon year 2045 and is consistent with what SLATS has used in the past. At the same time, construction costs have been increasing and 3% annual increase has been applied to each of the projects baseline cost (2021 dollars) to represent the YOE cost. Given these inflation factors, it is important to note the challenge of funding projects as they are pushed further out in the programing cycle as the gap between revenues and construction costs widen.

Fiscally Constrained Projects

Potential projects were identified based on current and future year needs, technical analysis, on-going studies, and stakeholder and public input. Furthermore, the projects were selected as they support the SLATS 2045 LRTP goals and objectives.

For the purpose of this analysis, it is assumed that the local match will be available in the respective FY that each project is programmed. Planned local projects that do not include federal funding are not included in the fiscal constraint analysis. Projects in the current program cycle (e.g. Park Avenue from Cranston to Inman and Henry from Royce to Prairie) are also not included but are moving forward.

Figure 1 displays the location of the fiscally constrained projects. **Table 1** summarizes the recommended fiscally constrained projects for the SLATS 2045 LRTP. **Table 2** displays the anticipated programming and phasing of each project. This table allows one to track the federal funds available, YOE project cost, and the 80/20 required split. A description of each fiscally constrained project follows.



FIGURE 1. FISCALLY CONSTRAINED PROJECTS

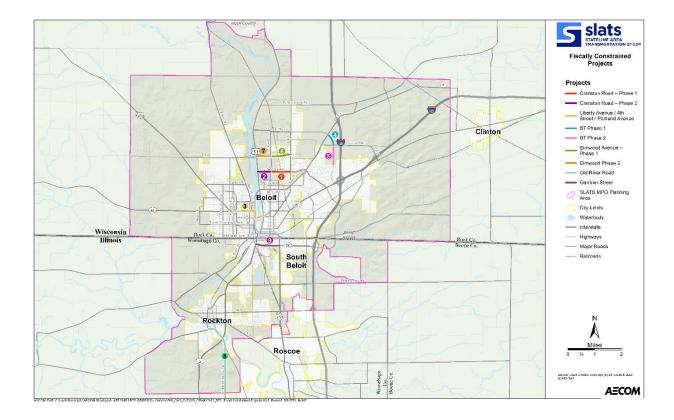


TABLE 1. SLATS 2045 LRTP FISCALLY CONSTRAINED PROJECTS (INCLUDING PROGRAM FY, AND PROJECT PHASING)

Wisconsin

- **1. Cranston Road Phase 1** (Park Avenue to Prairie Avenue) FY 2025
- **2. Cranston Road Phase 2** (Riverside Drive to Park Avenue) FY 2027 / 2029
- 3. Liberty Avenue / 4th Street / Portland Avenue FY 2027
- **4. BT Phase 1** (S to approx. 200 feet south of Hart) FY 2029
- **5. BT Phase 2** (200 feet south of Hart to Winchester) FY 2031
- **6. Elmwood Avenue Phase 1** (Riverside Drive to Park) FY 2033
- 7. Elmwood Avenue Phase 2 (Park to Prairie) 2035

NOTE: Funds beyond FY 2035 have not been identified for a specific project at this time.

Illinois

- **8. Old River Road** (IL-75 to Roscoe Road) FY 2024 (currently in the 2021 TIP)
- **9. Gardner Street** Phase 1 (FY 2028) and Phase 2 (FY 2032); the limits of phase 1 and phase 2 to be determined.

NOTE: Funds beyond FY 2032 have not been identified for a specific project at this time.



Table 2. Fiscally Constrained Projects - Programming and Phasing \$ 1,900,499 \$ \$ 1,938,505 \$ \$ 1,977,275 \$ \$ 2,016,820 \$ \$ 2,057,157 \$ \$ 2,098,300 \$ \$ 2,140,266 \$ \$ 2,183,071 \$ - \$ 2,226,733 \$ \$ 2,271,267 \$ - \$ 2,316,693 1. Cranston Phase 1 (Park to Prairie) 1. Cranston Phase 1 (Park to Prairie) Local Share \$ 477.261 YOE Project Cost Remaining Federal Balance 2. Cranston Phase 2 (Riverside to Park) 2. Cranston Phase 2 (Riverside to Park) \$ 1,009,025 Local Share YOE Project Cost Remaining Federal Balance \$ 929,480 4. BT Phase 1 (S to approx. 200 feet south of Hart) 4. BT Phase \$ 1,918,828 Local Share 479,707 YOE Project Cost Remaining Federal Balance \$ 58,447 Ted \$ (80%) Teal (20%) Tal Project Conf 5. BT Phase 2 \$ 2.016.820 \$18K over (assume FC) \$ 508.921 20.1% \$ 2,525,742 Local Share YOE Project Cost Remaining Federal Balance 6. Elmwood Phase 1 (Riverside to Park) 6. Elmwood Phase 1 (Riverside to Park) \$ 2.057.157 896K over (assume FC) Local Share 5 538 253 20.7% YOE Project Cost Remaining Federal Balance 7. Elmwood Phase 2 (Park to Prairie) Elmwood Phase 2 (Park to Prairie) \$ 2,098,300 \$144K over (assume FC) \$ 571,033 21.4% Local Share YOE Project Cost Remaining Federal Balance Remaining balances to be programmed. \$ 2,183,071 3. Liberty / 4th / Portland Ave Bridge Improvements \$ 2,226,733 3. Liberty / 4th / Portland Ave Bridge Imp \$ 2,140,266 \$ 2,271,267 \$ 567,817 \$ 2,316,693 Local Share (FY 27 \$ 535,067 \$ 545,768 \$ 556,683 \$ 579,173 YOE Project Cost \$ 2,728,839 \$ 2,783,416 \$ 2,839,084 \$ 2,895,866

Remaining Federal Balance							s .		s -																
Illinois Projects	SFY 2021	SFY 2022	SFY 2023	SFY 2024	SFY 2025	SFY 2026	SFY 2027	SFY 2028	SFY 2029	SFY 2030	SFY 2031	SFY 2032	SFY 2033	SFY 2034	SFY 2035	SFY 2036	SFY 2037	SFY 2038	SFY 2039	SFY 2040	SFY 2041	SFY 2042	SFY 2043	SFY 2044	SFY 2045
Annual Federal Funding	\$ 204,020	\$ 199,449	\$ 203,438	\$ 207,507	\$ 211,657	\$ 215,890	\$ 220,208	\$ 224,612	\$ 229,104	\$ 233,686	\$ 238,360	\$ 243,127	\$ 247,990	\$ 252,950	\$ 258,009	\$ 263,169	\$ 268,432	\$ 273,801	\$ 279,277	\$ 284,862	\$ 290,560	\$ 296,371	\$ 302,298		
Running Total	\$ 1,064,395	\$ 1,263,844	\$ 1,467,282	\$ 1,674,789	\$ (113,554)	\$ 102,336	\$ 322,544	\$ 547,156	\$ (223,740)	\$ 9,946	\$ 248,306	\$ 491,433	\$ (60,577)	\$ 192,373	\$ 450,381	\$ 713,550	\$ 981,982	\$ 273,801	\$ 553,077	\$ 837,940	\$ 1,128,499	\$ 296,371	\$ 598,669	\$ 907,013	\$ 1,221,524
8. Old River Road	Fund Balance	8	Old River Road	\$ 2,000,000	67%																				
Local Share / Other Sources	in FY 2021			\$ 1,000,000	33%																l				
YOE Project Cost																					l				
Remaining Federal Balance			[\$ (325,211)																	l				
9a. Gardner (Phase 1)						9a. Ga	rdner (Phase 1)	\$ 1,000,000	50%																
Local Share								\$ 250,000	20%												l				
YOE Project Cost								\$ 1,250,000													l				
Remaining Federal Balance								\$ (452,844)											Remaining balan						
9b. Gardner (Phase 2)										9b. 0	iardner (Phase 2)	\$ 800,000	80%				\$ 981,982				\$ 1,128,499				\$ 1,221,524
Local Share												\$ 200,000	20%				\$ 245,495				\$ 282,125				\$ 305,381
YOE Project Cost			ı			1						\$ 1,000,000	1		1		\$ 1,227,477			l	\$ 1,410,624	1			\$ 1,526,905
Remaining Federal Balance												\$ (308,567)					s -				s .				s -

Wisconsin Portion of the SLATS MPA – Fiscally Constrained Projects

Cranston Road (Projects 1 and 2 on Figure 1)

Cranston Road, Riverside Drive (US 51) to Prairie Avenue, is a main east-west four lane non-divided urban principal arterial on the National Highway System. This 1.2-mile segment is located on the north side of the Beloit Urbanized Area, with 53 percent of the corridor in the Town of Beloit and 47 percent in the City of Beloit. Cranston Road serves as a major regional corridor, connecting predominantly residential areas on the west end to the WIS 81 commercial corridor on the east, including several of the region's major employers located in the City's industrial park (Frito Lay, Hormel) and the Gateway Business Park (Staples, Pratt Industries, Amazon). Recent ADT counts (2019), along the proposed segment of Cranston Road, range between 6,000 and 8,900 vehicles per day.

The proposed segment is a concrete roadway constructed in 1989 which has documented maintenance concerns, including transverse joint deterioration and multiple areas of slab settlement. A review of the crash history for the last four years indicates 31 crashes in the corridor, three involving bicycles and eight speed related. The 2045 LRTP crash analysis found the intersection at Prairie to be rated the 7th highest in the MPA between 2017 to 2019. A recent 2020-2021 Multimodal Local Supplement (MLS) grant application was unsuccessful in obtaining funding for this project.

This improvement involves a proposed reconditioning to urban arterial design standards. A "Road Diet" will be evaluated to allow for the installation of on-road bicycle lanes with a center two-way left-turn lane to accommodate the multiple retail and residential driveways. This cross section will provide needed traffic calming and enhance pedestrian crossing safety as Robinson Elementary School is located in corridor. The addition of bike lanes will connect existing paths on Park and Prairie Avenues and is included in the region's bike and pedestrian plan. Sidewalk gaps on the north side of Cranston Road from Riverside Drive to Park Avenue will be evaluated and addressed. The project will be coordinated with the Canadian Pacific Railroad to potentially upgrade the Cranston Road crossing to meet current design standards. At minimum, the crossing ride will be improved.

It is believed that milling of the concrete surface will eliminate the need for some joint repairs and improve the roadway's ride and the corridor's appearance to help stimulate the revitalization of the aging retail developments along this section of Cranston Road. Delaying these improvements could potentially result in the need to perform a complete reconstruction, which would likely be cost prohibitive to the Town of Beloit and the City of Beloit. Furthermore, the project addresses a number of LRTP goals and objectives, including supporting investments in environmental justice areas.

The estimated cost of the improvement, in 2021 dollars, is \$3,211,000. The local match is expected to be split between the Town of Beloit (53%) and the City of Beloit (47%).

Project Programming and Phasing

The project is divided into two phases. Phase 1 includes the segment from Park Avenue to Prairie Avenue and is programmed for FY 2025 (2024-2029 Program Cycle). Phase 2 includes the segment from Riverside Drive to Park Avenue and is programmed for FY 2027 (2026-2031 Program Cycle).

Phase 1, Park Avenue to Prairie Avenue, is approximately 0.8-miles in length and is programmed for FY 2025. For the purposes of the LRTP fiscal constraint analysis, this segment is assumed to represent 67% of



the overall cost. Applying a three percent inflation to the segment results in a YOE of just under \$2.4 million. The \$1.9 million in federal funding, and \$500,000 in local match, would cover the 80/20 funding requirement. This project would utilize all of the available FY 25 federal funding.

Phase 2, Riverside Drive to Park Avenue, is approximately 0.4-miles in length and is programmed for FY 2027. For the purposes of the LRTP fiscal constraint analysis, this segment represents the remaining 33% of the project cost. Applying a three percent inflation to the segment results in a YOE of just under \$1.3 million. Approximately \$1.0 million of the available \$1.9 million in federal funding would be used for FY 2027. This would result in a balance of approximately \$900,000, which would be used for a proposed project along Liberty / 4th / Portland (project details follow). The Town of Beloit (53%) and the City of Beloit (47%) would again cover the \$500,000 required local match.

Liberty Avenue / 4th Street / Portland Avenue (Project 3 on Figure 1)

The 2040 LRTP first identified the possibility of removing the traffic signals at 4th Street and Liberty Avenue and curve 4th Street into Liberty Avenue allowing a free flow movement along WI-81. This improvement could help to relieve peak hour congestion, including peak school hour traffic, and make truck turning movements more efficient. Potential improvements have also been discussed to reconfigure 4th Street to one lane in each direction, between Grand Avenue and Liberty Avenue. The primary objective of this improvement would be to slow traffic and create a more pedestrian-friendly environment.

The 2045 LRTP analysis found the Liberty Avenue corridor to have six intersections ranked in the top 20 crash locations. Portland Avenue also provides important east-west network connectivity across the Rock River, and enhancing east-west connectivity is an important regional transportation issue. This was supported through public input and stakeholder meetings which highlighted the challenges of traveling from areas west of the river to employment opportunities in downtown Beloit and areas to the east. Additionally, the public indicated a need to address quality of life issues, including enhancing alternative modes of transportation to access downtown, reduce speeding, and in general improve overall safety.

While specific improvements will be determined, it is envisioned that the project would focus on enhancing overall safety within the corridor. Furthermore, portions of this project may coincide with implementation of the High School master plan. Recommended infrastructure investments to Liberty Avenue and/or 4th Street corridors should be reviewed alongside the adopted master plan recommendations.

Project Programming and Phasing

The project is programmed for FY 2027 (2026-2031 Program Cycle) and would utilize approximately \$900,000 of the available federal funding. A required 20 percent local match of approximately \$232,000 would be required. It is also anticipated that a small amount of remaining funding from FY 2029 could potentially be used for this project. After programming the BT extension (project details below) in FY 2029 there would be a federal funding balance remaining of approximately \$60,000.



BT Extension (Projects 4 and 5 on Figure 1)

This project would involve the construction of a new roadway from the intersection of CTH BT and CTH-S (Shopiere Road) to WI-81 (Milwaukee Road) via Winchester Drive. This project could potentially divert some traffic from Cranston Road between Shopiere Road and Milwaukee Road as it would complete a new north-south connection that would then turn into Inman Parkway (providing another continuous east-west facility in the developing area of the MPA as Cranston Road currently functions as the only east-west connection between White Avenue and Hart Road west of I-39/90). One of the top intersection crash locations identified through this process was at Milwaukee Avenue and Cranston Road, and the completion of BT could potentially draw some traffic away from this intersection and provide a more direct route for motorists traveling east-west in the northern portion of the study area.

The project would strengthen overall network connectivity, especially given the completion of I-39/90 and I-43 interchange. Adding the extension from BT would tie into Hart Road which would then continue east to connect to I-43. This connection would also support the movement of truck traffic in the northern portion of the MPA.

The estimated cost of the improvement, in 2021 dollars, is just under \$3.8 million. This was based on a 2015 cost estimate of \$3.1 million, which was inflated at 3% annually to arrive at the current year baseline estimate.

Project Programming and Phasing

The project is divided into two phases. Phase 1 includes the segment from CTH S to approximately 200 feet south of Hart Road and is programmed for FY 2029 (2028-2033 Program Cycle). Phase 2 includes the segment from approximately 200 feet south of Hart Road to Winchester Drive and is programmed for FY 2031 (2030-2035 Program Cycle).

Phase 1, CTH S to approximately 200 feet south of Hart Road, is approximately 0.5-miles in length and is programmed for FY 2029. For the purposes of the LRTP fiscal constraint analysis, this segment is assumed to represent 50% of the overall cost. While slightly shorter in distance as compared to the phase 2 segment, phase 1 includes intersection and potential traffic signal improvements at CTH S and also at Hart Road. This proposed approach would then complete the Hart Road intersection improvements, thus requiring only minor modifications once the phase 2 segment construction begins. Applying a three percent inflation to the phase 1 segment results in a YOE of just under \$2.4 million. The \$1.9 million in federal funding, and \$500,000 in local match, would cover the 80/20 funding requirement. This project would utilize all of the available FY 2029 federal funding.

Phase 2, approximately 200 feet south of Hart Road to Winchester Drive, is approximately 0.8-miles in length and is programmed for FY 2031. For the purposes of the LRTP fiscal constraint analysis, this segment represents the remaining 50% of the project cost. Applying a three percent inflation to the segment results in a YOE of slightly over \$2.5 million. The \$2.0 million in federal funding, and \$500,000 in local match, would cover the 80/20 funding requirement. This project would utilize all of the available FY 2031 federal funding. It should be noted that in completing the fiscal constraint analysis for phase 2 that the federal cost was estimated to be approximately \$18,000 over the estimated available funding. For the purposes of the LRTP analysis, this is assumed to be fiscally constrained as the project costs could be adjusted accordingly, or the local match could potentially be increased to offset the difference.



Elmwood Avenue (Projects 6 and 7 on Figure 1)

Elmwood Avenue provides an important east-west regional connection in the northern portion of the SLATS MPA. In addition, this corridor connects to Newark Road/CTH Q which serves as an important Rock River crossing within the region. The 2045 LRTP has continually stressed the importance, from the standpoint of the traveling public as well as accommodating truck traffic, to find opportunities to enhance east-west travel.

The intersection of Elmwood Avenue and Riverside Drive is identified as a top crash intersection as part of the 2045 LRTP. This intersection has also been studied (as part of an ICE study) for a potential realignment to provide a direct connection to Newark Road, and eliminate the one-way pair that exists with Briar Lane, between Riverside Drive and Park Avenue. The improvement between this segment would likely require time to study this corridor in more detail, as well as providing time to address potential right-of-way impacts that exist. The project would also require coordination between the Town and City and could represent a significant cost to the Town in a relatively short timeframe, so this project is pushed further out in the LRTP planning cycle.

Project Programming and Phasing

The project is divided into two phases. Phase 1 includes the segment from Riverside Drive to Park Avenue and is programmed for FY 2033 (2032-2037 Program Cycle). Phase 2 includes the segment from Park Avenue to Prairie Avenue and is programmed for FY 2035 (2034-2039 Program Cycle).

Phase 1, Riverside Drive to Park Avenue, is approximately 0.5-miles in length and is programmed for FY 2033. For the purposes of the LRTP fiscal constraint analysis, this segment is assumed to represent 50% of the overall cost. Applying a three percent inflation to the segment results in a YOE of approximately \$2.6 million. The approximately \$2.1 million in federal funding, and \$500,000 in local match, would cover the 80/20 funding requirement. It should be noted that in completing the fiscal constraint analysis for phase 1 that the federal cost was estimated to be approximately \$96,000 over the estimated available funding. For the purposes of the LRTP analysis, this is assumed to be fiscally constrained as the project costs could be adjusted accordingly, or the local match could be increased to offset the difference. Also, this estimate is for construction only. Any right-of-way needs would be additional local costs.

Phase 2, Park Avenue to Prairie Avenue, is approximately 0.8-miles in length and is programmed for FY 2035. For the purposes of the LRTP fiscal constraint analysis, this segment is assumed to represent 50% of the overall cost. Applying a three percent inflation to the segment results in a YOE of approaching \$2.7 million. The approximately \$2.1 million in federal funding, and \$600,000 in local match, would cover the 80/20 funding requirement. It should be noted that in completing the fiscal constraint analysis for phase 2 that the federal cost was estimated to be approximately \$144,000 over the estimated available funding. For the purposes of the LRTP analysis, this is assumed to be fiscally constrained as the project costs could be adjusted accordingly, or the local match could be increased to offset the difference.



Illinois Portion of the SLATS MPA – Fiscally Constrained Projects

Old River Road (Project 8 on Figure 1)

The project consists of the widening and resurfacing of Old River Road from IL 75 to Roscoe Road while providing an 80,000-pound pavement design, improved shoulders, and multi-use path. An urban section will be constructed east of IL 75 to improve drainage. Minor intersections will also be improved to meet applicable criteria and current ADA standards. This project was also identified as the top project in the 2040 LRTP fiscally constrained plan.

The estimated cost of the improvement, in FY 2024 dollars, is \$3.0 million. Unlike the typical 80/20 split, this project will be funded at a 67/33 split (\$2.0 million federal and \$1.0 million local). This is in accordance to a prior SLATS agreement that the federal contribution for this project will not exceed \$2.0 million.

Note that along with the road project being done through Winnebago County, the Village of Rockton will be completing a sidepath from IL 75 (likely along River Street and Ferry Street) along Old River Road past the Rockton Athletic Fields to Stephen Mack Middle School. This project is possible thanks to a recently awarded ITEP grant through IDOT, totaling nearly \$800,000.

Project Programming and Phasing

Old River Road is programmed in the TIP for FY 2024. The project will result in a funding deficient of \$325,000 which will be paid off in FY 2026. The federal budget would also begin to rebuild in FY 2026.

Gardner Street (Project 9 on Figure 1)

Gardner Street in South Beloit is a major east-west roadway in the northern portion of Illinois. The corridor serves as a primary entry into downtown South Beloit (and Beloit) and is also a significant freight generating corridor. A recent statewide IDOT truck bottleneck identified a portion of Gardner Street as a top truck bottleneck location. This corridor has land that is available to accommodate future growth and the improvement would also support redevelopment.

A corridor study would be proposed to be conducted in the short-term to identify specific multimodal investments. While project details are not currently determined, it is likely that this roadway would require a reconditioning. In addition, it would also likely include curb repairs and potentially raised medians to enhance safety for the traveling public.

Project Programming and Phasing

The project would be divided into two phases, with specific project limits to be determined. For the purpose of the LRTP fiscal constraint analysis, phase 1 is estimated to be programed in FY 2028 and phase 2 in FY 2032.

Phase 1 would have approximately \$1.0 million in federal funding available, with \$250,000 required for the local match (FY 2028). This would result in a federal funding deficient of approximately \$450,000 which would be paid off in FY 2031. This approach is similar to the funding approach used for Old River Road. Phase 2 would have approximately \$800,000 in federal funding available, with \$200,000 required for the local match (FY 2032). This would result in a federal funding deficient of approximately \$310,000 which would be paid off in FY 2034.



Operations and Maintenance

SLATS is required to consider operations and maintenance (O&M) costs as part of the LRTP planning process. Federal regulation 23 CFR 450.326(j) states, "For purposes of transportation operations and maintenance, the financial plan shall contain system-level estimates of costs and revenue sources that are reasonably expected to be available to adequately operate and maintain Federal-aid highways (as defined by 23 U.S.C. 101(a)(6)) and public transportation (as defined by title 49 U.S.C. Chapter 53).

SLATS relied on system-level estimates from the respective municipalities to arrive at an annual O&M estimate, which ranged between \$3,000,000 and \$4,000,000. This estimate was developed based on information provided to SLATS by each municipality (based on local budgets and CIPs, which is the approach that SLATS also uses to prepare O&M estimates for the TIP). Typically, O&M budgets vary by year and as such the estimates were analyzed by five-year time bands through the year 2045. For the purpose of this analysis, SLATS assumed an average annual O&M expense of \$3,500,000 in 2021. This was inflated using a 3.0% inflation rate, similar to the rate applied to the fiscally constrained projects. In total, it is estimated that through the horizon year 2045 that the municipalities will spend over \$127 million for O&M expenses. The O&M projections are summarized in **Table 3**.

TABLE 3. O&M PROJECTIONS FOR MUNICIPALITIES

O&M Forecast	2021 - 2025	2026 - 2030	2031- 2035	2036 - 2040	2041 - 2045
Total (Five-Year Period)	\$ 18,581,975	\$ 21,541,602	\$ 24,972,621	\$ 28,950,112	\$ 33,561,114
Annual Average	\$ 3,716,395	\$ 4,308,320	\$ 4,994,524	\$ 5,790,022	\$ 6,712,223

Source: SLATS Partner Agencies.

SLATS is committed to working with each municipality to ensure that there is a sufficient O&M revenue for federal-aid highways in the future. However, SLATS also recognize that while municipalities may plan for maintenance on a particular street or streets, priorities, needs and even budgets can change. As such, it is recognized that O&M estimates developed for the LRTP may not necessarily reflect what municipalities do or are able to do in reality.

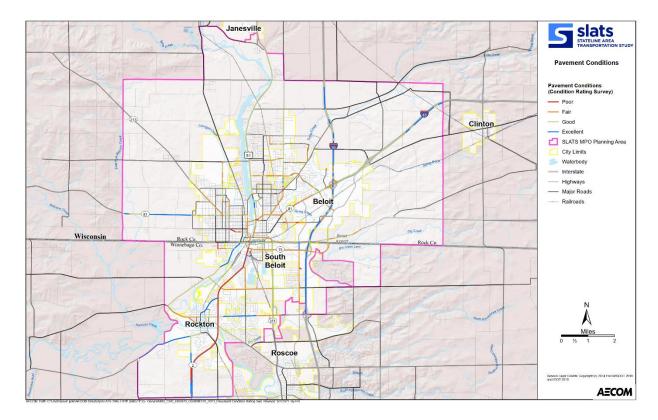
Pavement Condition

Maintaining pavement in a state of good repair is critical to supporting safety for the traveling public, and to help facilitate the efficient movement of freight throughout the region. It is also an important element for tracking progress toward meeting transportation performance measures. Recent pavement condition data was used to identify roadway segments that may by next in line for potential maintenance. Segments identified as 'poor' are likely to be short-term needs while segments identified as 'fair' may need to be programmed in the mid-term (approximately five to ten years). **Figure 2** displays pavement conditions within the SLATS MPA. Following the figure is a summary of 'poor' and 'fair' segments.

With regard to the fiscally constrained projects, portions of Cranston and Elmwood have segments identified as 'fair' pavement conditions. In fact, current pavement condition on Cranston is a primary reason this roadway was identified as the next project to be programmed. Gardner Street is also classified as 'fair' pavement condition.



FIGURE 2. PAVEMENT CONDITIONS



Additional roadway segments worth noting includes the following:

- IL 251 The segment of IL 251, within the SLATS MPA, was repaved in 2020 and is no longer in 'poor' condition.
- IL 2 (Blackhawk Boulevard) IDOT is currently planning improvements between Prairie Hill Road and State line and these improvements will address this segment of 'poor' pavement. The segment of IL 2, south of Prairie Hill Road is an area that will be addressed in the short-term. The section from roughly Latham Road to Roscoe Road will be reconstructed as a 4-lane road (currently programed in FY23). The section from Roscoe Road to Prairie Hill Road is scheduled for pavement replacement, originally in 2022, but is now pushed out beyond the current TIP with no year determined at this time.
- **Gardner Street** From IL 251 to Gateway Boulevard is identified in 'fair' condition. Given the heavy truck traffic that uses this corridor, it is likely that the pavement will need to be addressed in the short-term. The segment from IL 251 to Blackhawk Boulevard will be addressed as part of the fiscally constrained project.
- **Colley Road** From Milwaukee Road to Willowbrook Road is identified as in 'fair/poor' condition. This is a roadway that will require improvements in the short-term to accommodate increased traffic that will be generated by the new casino.
- **Prairie Avenue** From Philhower Road to White Avenue is shown for the most part in 'fair' condition. This stretch includes a small segment identified as 'poor,' near the intersection of Shopiere Road. The segment south of Huebbe to Cranston was completed a few years ago (last STBG-U project) and the segment north of Huebbe to Philhower was completed approximately 5 to 7 years ago; however, this segment is likely due for crack sealing repairs. The segment south of Cranston has not been improved.
- **Milwaukee Road / White Avenue Corridor** From just west of Cranston to across the Portland Avenue bridge, this is corridor is for the most part identified as 'fair' pavement. There are a few segments that are identified in 'poor' condition. Some segments in one direction have been repaired in recent years, with additional segments planned for repair, potentially in the next couple of years.

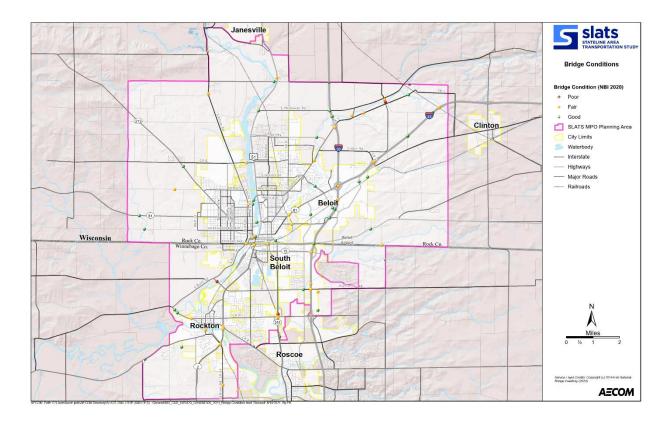


- **Broad Street / 4th Street Corridor** This stretch is identified as 'fair' condition. As this stretch facilitates east-west movements through the downtown Beloit area this might be considered a short-term to mid-term improvement.
- **Willowbrook Road** From Gardner Street south to the SLATS MPA boundary. This could potentially be a programmed project in the outer years of the LRTP to support development as it occurs along the corridor.
- Prairie Hill Road From IL 2 to IL 251 is identified as 'fair' condition.
- Madison Road From Liberty Avenue to just west of Burton Street, this segment is identified as 'fair' pavement.

Bridge Condition

Maintaining bridges in a state of good repair is another critical element to supporting safety for the traveling public. Well maintained bridges are also important in facilitating the efficient movement of freight throughout the region and also serve to provide important bicycle and pedestrian accommodations. It is also an important element for tracking progress toward meeting transportation performance measures. Recent bridge condition data is displayed in **Figure 3**.

FIGURE 3. BRIDGE CONDITIONS



From an O&M standpoint, the bridges that are currently identified in 'poor' condition are programmed in the SLATS 2021 - 2024 TIP. These include the following:

- I-39/90 and I-43/WIS 81 Interchange At the time this LRTP was prepared, this interchange was nearing completion for a full reconstruction to accommodate system-to-system interstate movements and a new diverging diamond interchange at WIS 81.
- **CTH-J** Improvements are planned for the bridge over Turtle Creek, in Shopiere, in 2021-2022. Estimated cost is approximately \$1.5 million.



- **Prairie Hill Road** The bridge over Rock River is scheduled for replacement by Winnebago County in 2022. Estimated cost is approximately \$5.5 million.
- IL 251 A bridge replacement is planned near Rockton Road later than 2025. Estimated cost is approximately \$12.0 million.

Public Transportation

Public transportation service relies on consistent, secure funding sources and sufficient revenue to support the continuing operation and regular vehicle/bus (capital improvements) replacement. Federal, State, and local revenues are the primary mechanism for funding BTS and SMTD operations and capital improvements. Financial data was obtained from BTS, SMTD, SLATS Transit Plan, and the current TIP to conduct a fiscal constraint analysis through the horizon year 2045. It should be noted that this analysis assumes no significant changes in service through the horizon year. Furthermore, the analysis assumes that revenues and expenditures must balance on an annual basis. If the transit agency costs exceed revenues than service changes, such as eliminating routes or reducing service hours, must be implemented to reduce costs. Or, additional funding sources must be identified to continue the current level of service.

BTS Operating Budget

In 2020, BTS incurred total operating expenses of \$1,962,498 (**Table 4**). **Table 5** displays the projected 2021 budget which very close reflects the 2020 budget. Approximately 62% of funding for 2020 and 2021 was from federal assistance, through 5307 emergency relief funding and CARES Act/COVID-19 funding. **Table 6** summarizes the projected 2022 budget. The federal funding projected for 2022 is \$622,512, which represents approximately 32% of total operating expenses (\$1,946,256), and approximately half of the federal funding received in 2020 and projected for 2021. The 2022 projected expenses were compared to the 2017 operating expenses in the SLATS Transit Plan and the total amount, and percentages, were found to be very close. In total, the 2022 budget is approximately \$50,000 less than the 2017 expenses.

TABLE 4. BTS OPERATING EXPENSES (2020)

Funding Source	Operating Funds Expended	Percent of Total
Fare Revenues	\$66,953	3.41%
Local Funds	\$112,722	5.74%
State Funds **	\$503,768	25.67%
Federal Assistance***	\$1,205,000	61.40%
Other Funds	\$74,055	3.77%
Total Operating Funds Expended	\$1,962,498	100.00%

Source: BTS

** Includes State operating grant of \$482,050 + State Paratransit supplement of \$21,718

TABLE 5. BTS OPERATING EXPENSES (2021 PROJECTED)

	(,,
Funding Source	Operating Funds Expended	Percent of Total
Fare Revenues	\$62,893	3.18%
Local Funds	\$47,775	2.42%
State Funds **	\$509,391	25.76%
Federal Assistance***	\$1,236,027	62.50%
Other Funds	\$121,691	6.15%
Total Operating Funds Expended	\$1.977.777	100.00%

Source: BTS

** Includes State operating grant of \$486,337 + State Paratransit supplement of \$23,054

^{***} Includes Federal 5307 Emergency Relief funding of \$622,512 + CARES Act/COVID funding of \$613,515



^{***} Includes Federal 5307 funding + CARES Act funding

TABLE 6. BTS OPERATING EXPENSES (2022 BUDGETED)

Funding Source	Operating Funds Expended	Percent of Total
Fare Revenues	\$108,100	5.55%
Local Funds	\$560,019	28.77%
State Funds **	\$519,694	26.70%
Federal Assistance	\$622,512	31.98%
Other Funds	\$136,101	6.99%
Total Operating Funds Expended	\$1,946,426	100.00%

Source: BTS

Table 7 displays the projected annual operating expenses anticipated through the LRTP horizon year 2045. These projections are based on the 2022 budget expenses identified by BTS (**Table 6**) and they assume a 1.0% annual increase. **Table 8** provides a summary of average expenses broken down by timeframes through the year 2045. In total, assuming no major service changes, BTS would need an estimated \$52 million to cover operating expenses through the year 2045.

TABLE 7. BTS OPERATING EXPENSES (PROJECTED, 2022-2045)

	Beloit Transit System											
Year		Federal		State		Local	ioit :	Fares		Other		Total
2022	\$	622,512	\$	519,694	\$	560,019	\$	108,100	\$	136,101	\$	1,946,426
2023	Ė	628,737	\$	524,891	\$	565,619	\$	109,181	\$	137,462	\$	1,965,890
2024	\$	635,024	\$	530,140	\$	571,275	\$	110,273	\$	138,837	\$	1,985,549
2025	\$	641,375	\$	535,441	\$	576,988	\$	111,376	\$	140,225	\$	2,005,405
2026	Ė	647,788	\$	540,796	\$	582,758	\$	112,489	\$	141,627	\$	2,025,459
2027	\$	654,266	\$	546,204	\$	588,586	\$	113,614	\$	143,044	\$	2,045,713
2028	\$	660,809	\$	551,666	\$	594,471	\$	114,750	\$	144,474	\$	2,066,170
2029	\$	667,417	\$	557,182	\$	600,416	\$	115,898	\$	145,919	\$	2,086,832
2030	\$	674,091	\$	562,754	\$	606,420	\$	117,057	\$	147,378	\$	2,107,700
2031	\$	680,832	\$	568,382	\$	612,485	\$	118,227	\$	148,852	\$	2,128,777
2032	\$	687,641	\$	574,065	\$	618,609	\$	119,410	\$	150,340	\$	2,150,065
2033	\$	694,517	\$	579,806	\$	624,795	\$	120,604	\$	151,844	\$	2,171,566
2034	\$	701,462	\$	585,604	\$	631,043	\$	121,810	\$	153,362	\$	2,193,282
2035	\$	708,477	\$	591,460	\$	637,354	\$	123,028	\$	154,896	\$	2,215,214
2036	\$	715,561	\$	597,375	\$	643,727	\$	124,258	\$	156,445	\$	2,237,366
2037	\$	722,717	\$	603,349	\$	650,165	\$	125,501	\$	158,009	\$	2,259,740
2038	\$	729,944	\$	609,382	\$	656,666	\$	126,756	\$	159,589	\$	2,282,338
2039	\$	737,244	\$	615,476	\$	663,233	\$	128,023	\$	161,185	\$	2,305,161
2040	\$	744,616	\$	621,631	\$	669,865	\$	129,304	\$	162,797	\$	2,328,213
2041	\$	752,062	\$	627,847	\$	676,564	\$	130,597	\$	164,425	\$	2,351,495
2042	\$	759,583	\$	634,125	\$	683,330	\$	131,903	\$	166,069	\$	2,375,010
2043	\$	767,179	\$	640,467	\$	690,163	\$	133,222	\$	167,730	\$	2,398,760
2044	\$	774,851	\$	646,871	\$	697,065	\$	134,554	\$	169,407	\$	2,422,747
2045	\$	782,599	\$	653,340	\$	704,035	\$	135,899	\$	171,101	\$	2,446,975
Total (2022 - 2045)	\$	16,791,306	\$	14,017,948	\$	15,105,653	\$	2,915,832	\$	3,671,116	\$	52,501,853

Source: AECOM, LRTP projections.



^{**} Includes State operating grant of \$496,064 + State Paratransit supplement of \$23,630

TABLE 8. BTS OPERATING EXPENSES (PROJECTED ANNUAL AVERAGE, 2022-2045)

		Beloit Transit System										
Year	Federal		State		Local		Fares			Other		Total
2021 - 2025	\$	631,912	\$	527,542	\$	568,475	\$	109,732	\$	138,156	\$	1,975,818
2026 - 2030	\$	660,874	\$	551,720	\$	594,530	\$	114,762	\$	144,488	\$	2,066,375
2031 - 2035	\$	694,586	\$	579,864	\$	624,857	\$	120,616	\$	151,859	\$	2,171,781
2036 - 2040	\$	730,017	\$	609,442	\$	656,731	\$	126,768	\$	159,605	\$	2,282,564
2041 - 2045	\$	767,255	\$	640,530	\$	690,231	\$	133,235	\$	167,746	\$	2,398,997

Source: AECOM, LRTP projections.

Stateline Mass Transit District Operating Budget

SMTD provides demand-response transit service in South Beloit, Rockton, Rockton Township, Roscoe, and Roscoe Township in northern Illinois. SMTD contracts with RMTD to provide all operations, administrative support, and grant management assistance. **Table 9** summarizes SMTD's projected annual revenues for 2022 to 2045. Operating revenues include passenger fares and operating subsidies (federal, state, and local), as well as interest income and incidental contributions from Rockton Township (included in 'Other' category). These projections were based on actual SMTD data from 2018 (from the SLATS Transit Plan) with a 1.0% annual inflation factor used to project 2022 baseline estimates, as well as annual estimates through the year 2045.

TABLE 9. SMTD OPERATING REVENUES (PROJECTED, 2022-2045)

			St.	ateline Mass	Trai	neit Dietrict		
Year	Federal	State	310	Local	IIai	Fares	Other	Total
2022	\$ 287,498	\$ 549,028	\$	84,029	\$	31,652	\$ 3,675	\$ 955,882
2023	\$ 290,373	\$ 554,518	\$	84,869	\$	31,969	\$ 3,712	\$ 965,441
2024	\$ 293,277	\$ 560,063	\$	85,718	\$	32,288	\$ 3,749	\$ 975,095
2025	\$ 296,210	\$ 565,664	\$	86,575	\$	32,611	\$ 3,787	\$ 984,846
2026	\$ 299,172	\$ 571,321	\$	87,441	\$	32,937	\$ 3,825	\$ 994,695
2027	\$ 302,163	\$ 577,034	\$	88,315	\$	33,267	\$ 3,863	\$ 1,004,642
2028	\$ 305,185	\$ 582,804	\$	89,198	\$	33,599	\$ 3,902	\$ 1,014,688
2029	\$ 308,237	\$ 588,632	\$	90,090	\$	33,935	\$ 3,941	\$ 1,024,835
2030	\$ 311,319	\$ 594,519	\$	90,991	\$	34,275	\$ 3,980	\$ 1,035,083
2031	\$ 314,432	\$ 600,464	\$	91,901	\$	34,617	\$ 4,020	\$ 1,045,434
2032	\$ 317,577	\$ 606,468	\$	92,820	\$	34,964	\$ 4,060	\$ 1,055,889
2033	\$ 320,753	\$ 612,533	\$	93,748	\$	35,313	\$ 4,101	\$ 1,066,448
2034	\$ 323,960	\$ 618,658	\$	94,686	\$	35,666	\$ 4,142	\$ 1,077,112
2035	\$ 327,200	\$ 624,845	\$	95,633	\$	36,023	\$ 4,183	\$ 1,087,883
2036	\$ 330,472	\$ 631,093	\$	96,589	\$	36,383	\$ 4,225	\$ 1,098,762
2037	\$ 333,776	\$ 637,404	\$	97,555	\$	36,747	\$ 4,267	\$ 1,109,750
2038	\$ 337,114	\$ 643,778	\$	98,530	\$	37,115	\$ 4,310	\$ 1,120,847
2039	\$ 340,485	\$ 650,216	\$	99,516	\$	37,486	\$ 4,353	\$ 1,132,056
2040	\$ 343,890	\$ 656,718	\$	100,511	\$	37,861	\$ 4,396	\$ 1,143,376
2041	\$ 347,329	\$ 663,285	\$	101,516	\$	38,239	\$ 4,440	\$ 1,154,810
2042	\$ 350,802	\$ 669,918	\$	102,531	\$	38,622	\$ 4,485	\$ 1,166,358
2043	\$ 354,310	\$ 676,618	\$	103,556	\$	39,008	\$ 4,530	\$ 1,178,022
2044	\$ 357,853	\$ 683,384	\$	104,592	\$	39,398	\$ 4,575	\$ 1,189,802
2045	\$ 361,432	\$ 690,218	\$	105,638	\$	39,792	\$ 4,621	\$ 1,201,700
Total (2022 - 2045)	\$ 7,754,819	\$ 14,809,184	\$	2,266,547	\$	853,766	\$ 99,139	\$ 25,783,455

Source: AECOM, LRTP projections.



Table 10 provides a summary of average expenses broken down by timeframes through the year 2045. In total, assuming no major service changes, STMD would need approximately \$26 million to cover operating expenses through the year 2045.

TABLE 10. SMTD REVENUES (PROJECTED ANNUAL AVERAGE, 2022-2045)

		Stateline Mass Transit District									•	
Year	Federal		State		Local		Fares		Other			Total
2021 - 2025	\$	291,839	\$	557,318	\$	85,298	\$	32,130	\$	3,731	\$	970,316
2026 - 2030	\$	305,215	\$	582,862	\$	89,207	\$	33,603	\$	3,902	\$	1,014,789
2031 - 2035	\$	320,784	\$	612,594	\$	93,758	\$	35,317	\$	4,101	\$	1,066,553
2036 - 2040	\$	337,147	\$	643,842	\$	98,540	\$	37,118	\$	4,310	\$	1,120,958
2041 - 2045	\$	354,345	\$	676,685	\$	103,567	\$	39,012	\$	4,530	\$	1,178,138

Source: AECOM, LRTP projections.

Capital Improvements - Projected Fleet Replacement

Capital improvements are also factored into the transit financial analysis. The major component of capital asset management deals primarily with fleet maintenance/vehicle replacement. Per Federal Transit Administration (FTA) rolling stock useful life policy guidelines, large, heavy-duty buses have a minimum useful life of at least 12 years or 500,000 miles. Six of BTS's buses exceed FTA's minimum useful life age threshold and three exceed the mileage threshold. No vehicles for SMTD exceed these thresholds, with the oldest vehicles purchased in 2016. **Table 11** summarizes the current vehicle fleet for BTS and SMTD.

TABLE 11. BTS AND SMTD FLEET SUMMARY

Vacu	Make / Madel	Overstitu	A ===	Average	Over age (12	Over mileage
Year	Make / Model	Quantity	Age	Mileage	years)	(500,000)
BTS						
2002	Gillig 35" Low Floor	1	19	411,726	1	0
2006	Gillig 35" Low Floor	2	15	537282	2	2
2007	Gillig 35" Low Floor	3	14	507,817	3	1
2011	Gillig 35" Low Floor	1	10	379,452	0	0
2014	Gillig 35" Low Floor	2	7	310,369	0	0
2019	Gillig 35" Low Floor	1	2	89,180	0	0
2020	Gillig 35" Low Floor	1	1	36,580	0	0
		11	9.7	324,629	6	3
SMTD						
2016	Ford Starcraft	5	5	198,451	0	0
2018	Ford Starcraft	1	3	90,376	0	0
2019	Ford Eldorado Aeroelite	2	2	26,570	0	0
	·	8	3.3	105,132		

Source: AECOM, LRTP projections.

Using the current BTS and SMTD fleet information, a vehicle replacement schedule was developed for the purpose of the LRTP analysis (**Table 12**). This analysis relies primarily on attempting to replace vehicles every 12 years; however, as witnessed by the current BTS fleet inventory more than half of the buses



exceed this threshold and may require a more aggressive replacement schedule in the short-term to try to retire the aging vehicles.

TABLE 12. PROJECTED VEHICLE REPLACEMENT SCHEDULE

Timeframe	Agency	Replacement Vehicles	Average Vehicle Cost	Total Vehicle Cost
	втѕ	5	\$475,000	\$2,375,000
2022 - 2025	SMTD	3	\$75,000	\$225,000
	Total	8	n/a	\$2,600,000
	втѕ	2	\$545,840	\$1,091,679
2026 - 2030	SMTD	6	\$84,495	\$506,972
	Total	8	n/a	\$1,598,651
	втѕ	7	\$602,651	\$4,218,558
2031 - 2035	SMTD	5	\$93,290	\$466,448
	Total	12	n/a	\$4,685,006
	втѕ	4	\$665,376	\$2,661,502
2036 - 2040	SMTD	5	\$102,999	\$514,997
	Total	9	n/a	\$3,176,499
	втѕ	4	\$734,628	\$2,938,513
2041 - 2045	SMTD	3	\$113,720	\$341,159
	Total	7	n/a	\$3,279,672
	BTS	22	n/a	\$13,285,253
Total (2022 - 2045)	SMTD	22	n/a	\$2,054,575
	Total	44	n/a	\$15,339,828

Source: AECOM, LRTP projections.

Note: Average vehicle cost is based on costs in the 2021-2024 TIP. A 2% annual inflation factor was used to estimate the future year average vehicle cost for the respective timeframe.

BTS received two replacement buses in 2021, and the current draft 2022 – 2025 TIP anticipates BTS receiving two replacement buses in 2022, and one every year after through 2027. This would retire the vehicles that are currently over the useful life threshold. SMTD is currently anticipating the addition of three vehicles. Based on this short-term replacement schedule, the outer years of the LRTP were identified for future vehicle replacements. In total, it is estimated that BTS and SMTD would each replace 22 vehicles through the horizon year 2045. Again, this assumes that no changes in current service.

In conclusion, at the time this LRTP was being prepared (August 2021), the Infrastructure Investment and Jobs Act was being debated in Congress and depending on the final outcome of this legislation it could include additional funding to support transit agencies in replacing aging vehicles. In addition, the proposed legislation could significantly increase funding for electric buses. As such, BTS may want to consider developing a plan to transition to an electric fleet. Along with the bus replacement, BTS would also need to identify potential upgrades to the garage/maintenance facility, in addition to addressing the issue of transitioning the current workforce to maintain electric buses.



Potential Funding Sources

Various sources of funding are available for transportation infrastructure projects in the form of formula funds, grants, loans, and other special financing mechanisms. The typical sources of funding—existing or potential—for projects in the SLATS region are discussed in this section.

The Fixing America's Surface Transportation (FAST) Act was signed into law on December 4, 2015, by President Obama. It authorized \$305 billion for fiscal years 2016 to 2020 for highway, safety, public transportation, motor carrier safety, hazardous materials safety, rail, research, technology, and statistics programs. The FAST Act also provided the first dedicated source of federal funding for freight projects.¹

Federal funding for transportation is derived in part from highway excise taxes (i.e., taxes paid when purchases are made on a specific good) on motor fuel and truck-related taxes on truck tires, sales of trucks and trailers, and heavy vehicle use. Excise taxes on gasoline and other motor fuels account for more than 85 percent of all receipts to the Federal Highway Trust Fund (HTF). Tax revenues are deposited into either the Highway Account or the Mass Transit Account of the Federal HTF and then distributed to the states. The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) then distribute funds from the Highway and the Mass Transit Accounts, respectively, to each state through a system of formula grants and discretionary allocations. The FAST Act extended the imposition of highway-user taxes through September 30, 2022, with generally no change to the tax rates as imposed under the Moving Ahead for Progress in the 21st Century Act (MAP-21).

Currently, Congress is debating the Infrastructure Investment and Jobs Act, but no new legislation is in place to replace the FAST Act at the time this LRTP was developed. The following sections describe some federal, state, and local potential funding sources for infrastructure projects. It is important to note that these funding sources could change when the next transportation bill becomes law.

FUNDING SOURCES

<u>Formula Funds</u> |

programs apportion amounts to recipients based on formulas that consider population, miles of roadway, and other metrics

Grants

programs award funding typically through a competitive application and review process

Loans

programs award funding to projects through an application and review process, and the recipient is expected to repay the funding later

Special Funding Mechanisms | other potential vehicles for funding infrastructure projects that may not be currently or fully utilized

Formula Funds

Under the FAST Act, several programs are available for funding infrastructure.² Funding allocations are provided for the following programs (before post-apportionment set asides, penalties, and sequestration):

² Projects can be funded through more than one program.



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¹ The FAST Act, https://www.fhwa.dot.gov/fastact/

- National Highway Performance Program (NHPP): The NHPP provides support for the condition and performance of the National Highway System (NHS), construction of new facilities on the NHS, and ensuring that investments achieve the performance targets established by state asset management plans. Funds are apportioned based on formulas to each state, and states divide the funds among apportioned programs. Eligible activities include reconstruction, resurfacing, restoration, rehabilitation, and preservation of bridges on non-NHS highways; projects that reduce the risk of failure of NHS infrastructure; and subsidies for projects under the Transportation Infrastructure Finance and Innovation Act (TIFIA).³
- **Surface Transportation Block Grant Program**: The program provides flexible spending to states based on apportionment formulas for state and local transportation needs. Eligible projects include the construction of highways, bridges, tunnels, transit capital projects, operational improvements, safety infrastructure projects, parking facilities, recreational trails, bicycle and pedestrian projects, planning and design of roadways and interstates, surface transportation planning, travel demand management strategies, congestion pricing, and numerous others as found in 23 U.S.C. 133(b)(15).⁴
- **Highway Safety Improvement Program (HSIP)**: The HSIP aims to reduce traffic fatalities and injuries on all public roads through a data-driven approach that focuses on performance. Funds are apportioned as a lump sum to the states to divide among programs. Eligible activities include safety projects that are consistent with the State's Strategic Highway Safety Plan (SHSP) and that correct or improve hazardous road locations or features. Eligible projects may include vehicle-to-infrastructure communications equipment, pedestrian hybrid beacons, roadway improvements (including medians) to separate pedestrians and motor vehicles, and other physical projects.⁵
- Railway-Highway Crossings Program: The program provides funds for safety improvements that reduce fatalities, injuries, and crashes at public grade crossings. Funding is apportioned based on formulas and considers the number of public crossings by state. Eligible activities include relocation of highways to eliminate grade crossings and projects that eliminate hazards posed by idling trains on crossings.⁶
- National Highway Freight Program: The program aims to improve the efficient movement of freight on the National Highway Freight Network (NHFN). A lump sum is apportioned by state and then divided among programs at the local level. Eligible activities include projects and programs that contribute to the efficient movement of freight as identified in the state's freight plan. Examples may include ramp metering, truck-only lanes, adding or widening shoulders, adding road capacity to address highway freight bottlenecks, separation of passenger vehicles and commercial vehicles, and other projects.⁷

TIFIA

Transportation Infrastructure Finance and Innovation Act (TIFIA): The program provides federal credit assistance to
eligible highway, transit, intercity rail, and some freight rail, intermodal facilities, and port modification projects. Under TIFIA,
states, localities, public authorities, and some private entities can take advantage of three types of financial assistance:
secured loans, loan guarantees, and lines of credit. Eligible projects include transit-oriented development projects and the
capitalization of a rural projects fund within a state infrastructure bank.

⁷ National Highway Freight Program, https://www.fhwa.dot.gov/fastact/factsheets/nhfpfs.cfm



³ National Highway Performance Program, https://www.fhwa.dot.gov/fastact/factsheets/nhppfs.cfm

⁴ Surface Transportation Block Grant Program, https://www.fhwa.dot.gov/fastact/factsheets/stbgfs.cfm

⁵ Highway Safety Improvement Program, https://www.fhwa.dot.gov/fastact/factsheets/hsipfs.cfm

⁶ Railway-Highway Crossings Program, https://www.fhwa.dot.gov/fastact/factsheets/railwayhwycrossingsfst.cfm

Competitive Grants

- Rebuilding American Infrastructure with Sustainability and Equity (RAISE): The RAISE Discretionary Grant program, provides a unique opportunity for the DOT to invest in road, rail, transit, and port projects that promise to achieve national objectives. Previously known as the Better Utilizing Investments to Leverage Development (BUILD) and Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grants, Congress has dedicated nearly \$8.9 billion for twelve rounds of National Infrastructure Investments to fund projects that have a significant local or regional impact.
 - In each competition, DOT receives hundreds of applications to build and repair critical pieces of our freight and passenger transportation networks. The RAISE program enables DOT to examine these projects on their merits to help ensure that taxpayers are getting the highest value for every dollar invested. The eligibility requirements of RAISE allow project sponsors at the State and local levels to obtain funding for multimodal, multi-jurisdictional projects that are more difficult to support through traditional DOT programs. RAISE can fund port and freight rail projects, for example, which play a critical role in our ability to move freight but have limited sources of Federal funds. RAISE can provide capital funding directly to any public entity, including municipalities, counties, port authorities, tribal governments, MPOs, or others in contrast to traditional Federal programs which provide funding to very specific groups of applicants (mostly State DOTs and transit agencies). This flexibility allows RAISE and our traditional partners at the State and local levels to work directly with a host of entities that own, operate, and maintain much of our transportation infrastructure, but otherwise cannot turn to the Federal government for support.
- Infrastructure for Rebuilding America (INFRA): Like the RAISE grant program, INFRA is a competitive grant program. Established under the FAST Act, it aims to fund nationally and regionally significant freight projects. The federal share of the project may not exceed 80 percent, with 60 percent maximum of INFRA grant funds. Eligible projects include highway freight projects on the NHFN, highway or bridge projects that add capacity to an interstate or a national scenic area, grade separation projects, and intermodal, rail, or port freight projects. The minimum award is \$5 million for small projects and \$25 million for large projects. Projects are evaluated based on selection criteria including the results of a BCA and an application narrative. The Biden-Harris Administration intends to award \$905.25 million to 24 projects in 18 states under the INFRA discretionary grant program. These grants advance the Administration's priorities of rebuilding America's infrastructure and creating jobs by funding highway and rail projects of regional and national economic significance that position America to win the 21st century. Further, with this recent round of investment, USDOT prioritized funding to rural areas to address historic underinvestment. Approximately 44 percent of proposed funding will be awarded to rural projects, which exceeds the statutory requirements for rural projects set by Congress at 19%.
- Public Works and Economic Adjustment Assistance Programs: These grant programs administered through the Economic Development Authority (EDA), a bureau within the Department of Commerce, provide investments that support construction, non-construction, technical assistance, and revolving loan fund projects on a competitive merit basis. Eligible applicants must be public or private non-profit organizations acting in cooperation with officials of a political subdivision of a state.
 - Under the American Rescue Plan, EDA was allocated \$3 billion in supplemental funding to assist communities nationwide in their efforts to build back better by accelerating the economic recovery from the coronavirus pandemic and building local economies that will be resilient to future economic shocks. American Rescue Plan funding enables EDA to provide larger, more transformational investments across the nation while utilizing its greatest strengths, including flexible funding to support community-led economic development. With an emphasis on equity, EDA investments made under the American Rescue Plan will directly benefit previously underserved communities impacted by COVID-19.
- **Bus and Bus Facilities Formula Program (49 U.S.C. 5339):** The Bus and Bus Facilities Formula program provides capital assistance for new and replacement buses and related equipment and facilities. Eligible capital projects include the purchasing of buses for fleet and service expansion, bus maintenance and administrative facilities, transfer facilities, bus



malls, transportation centers, intermodal terminals, park-and-ride stations, acquisition of replacement vehicles, bus rebuilds, bus preventive maintenance, passenger amenities such as passenger shelters and bus stop signs, accessory and miscellaneous equipment such as mobile radio units, supervisory vehicles, fare boxes, computers and shop and garage equipment. Funds are allocated on a discretionary basis and through competitive grants, and a minimum 20 percent non-federal match is required. The USDOT Secretary has the discretion to allocate funds, although Congress fully earmarks all available funding.

Furthermore, at the time this LRTP was being prepared (August 2021), the Infrastructure Investment and Jobs Act was being debated in Congress and depending on the final outcome of this legislation it could significantly increase funding for transit agencies to purchase electric buses for replacement and service expansion vehicles. The Biden-Harris Administration has set an ambitious goal to advance electric vehicles and cut greenhouse gas emissions by 2030, further emphasizing the importance being placed on this topic.

