

# SLATS 2045 Long Range Transportation Plan

## Overview of Recommended (Fiscally Constrained) Roadway/Freight Projects

### Introduction

The purpose of this memo is to summarize the fiscally constrained roadway/freight projects that are recommended for the SLATS 2045 LRTP. Developing a cost feasible plan is a critical component of the transportation planning process, and a federal requirement. This memo summarizes the fiscal constraint analysis, assumptions, and the recommended projects, including a discussion of SLATS 2045 LRTP project programming and phasing.

### Methodology

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 Technical Advisory Committee (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.

### Projected Revenues

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 less 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 1 (attached at the end of this memo).

### *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 programming cycle as the gap between revenues and construction costs widen.

### [Project Programming and Phasing](#)

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. The following are the recommended fiscally constrained projects for the SLATS 2045 LRTP. Table 1, at the end of this memo, 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. Figure 1, also at the end of this memo, displays the location of the projects.

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. The SLATS 2045 LRTP fiscally constrained projects are displayed on the following page. An overview of each project follows.

## *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 / 4<sup>th</sup> 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.

## *Wisconsin Projects*

### Cranston Road

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 7<sup>th</sup> 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 / 4<sup>th</sup> / 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

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 an 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, a significant part of this project moving forward hinges on the completion of the High School master plan. Any infrastructure investments to Liberty Avenue and/or 4<sup>th</sup> Street corridors should be consistent with the final 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

This project would involve the construction of a new roadway to extend BT from 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 strength overall network connectivity, especially given the completion of I-39/90 and I-43 interchange. Adding the BT extension 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

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 Brair 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 Projects*

#### Old River Road

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 current TIP for FY 2024. The project will result in a funding deficient of \$325,000 which would be paid off in FY 2026. The annual federal budget would also begin to rebuild in FY 2026.

#### Gardner Street

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.

### Conclusion

It is important to reiterate that the project phasing is flexible. As such we are asking the Technical Advisory Committee (TAC) and Policy Board members to consider the recommended programming and phasing as summarized in this memo. If there are questions, or comments, please direct them to TJ Nee by Friday, August 13<sup>th</sup>. The project team will present a brief overview of the LRTP development process, including a discussion of the fiscally constrained project analysis, at the August 16<sup>th</sup> SLATS meeting. One of the action items at this meeting will be to confirm the proposed project programming/phasing. The project team will be finalizing the draft LRTP through the end of August at which time the draft plan will be made available for a 30-day public review period (tentatively schedule to be begin August 30<sup>th</sup>). The project team will then report back to the TAC and Policy Board at the next MPO meeting (scheduled for October 4<sup>th</sup>), where the final plan is scheduled for adoption.



Figure 1. Fiscally Constrained Projects



