I-39/90 USH12 to Illinois Project Financial Plan

Initial (SFY 2016) Financial Plan

Wisconsin Department of Transportation

Document Date: August 31, 2016

Data as of March 31, 2016

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Wisconsin Department of Transportation

www.dot.wisconsin.gov

Scott Walker
Governor

Mark Gottlieb, P.E.
Secretary

Office of the Secretary
4802 Sheboygan Avenue, Room 120B
P O Box 7910
Madison, WI 53707-7910

Telephone: 608-266-1113
FAX: 608-266-9912
E-mail: sec.exec@dot.wi.gov

August 31, 2016

Michael Davies, Division Administrator
Federal Highway Administration
525 Junction Road, Suite 8000
Madison, WI 53717

Dear Mr. Davies:

The Wisconsin Department of Transportation (WisDOT) has developed the revised Initial Federal Financial Plan for the I-39/90 USH12 to Illinois Project in accordance with the requirements of Section 106, Title 23, and the financial plan guidance issued by the Federal Highway Administration (FHWA). This plan provides detailed cost estimates to complete the project and estimates of financial resources to be utilized to finance the project fully. The financial plan was developed in accordance with 23USC 106(h).

The data in the Financial Plan provides an accurate accounting of costs incurred to date and includes a realistic estimate of future costs based on the engineers' estimates and expected construction cost escalation factors. While the estimates of financial resources rely upon assumptions regarding future economic conditions and demographic variables, they represent realistic projections of available monies to fully fund the project.

The Financial Plan provides an accurate basis upon which to schedule and fund the I-39/90 USH12 to Illinois Project. The Department will review and update the Financial Plan on an annual basis.

Based on our assessment, the Initial Federal Financial Plan as herein submitted, fairly and accurately presents the financial position of the I-39/90 USH12 to Illinois Project including cash flows and expected conditions for the project's life cycle. The forecasts in the Initial Financial Plan are based on our judgment of the expected project conditions and our expected course of action. Initial Financial Plan are based on our judgment of the expected project conditions and our expected course of action.

The forecasts in the Initial Financial Plan are based on our judgment of the expected project conditions and our expected course of action. We believe that the assumptions underlying the Financial Plan are reasonable and appropriate. Further, we have reviewed all significant information that we believe is relevant and we are satisfied that the documents and records supporting the assumptions are appropriate.

Sincerely,

Mark Gottlieb, P.E.
Secretary

cc: Casey Newman, WisDOT, Budget Director
Lori Platz, FHWA
Pete Clogston, FHWA
Dave Platz, FHWA
Tracey Blankenship, FHWA
Tricia A. Etzler, WisDOT, OPFI

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Table of Contents

Executive Summary

The initial Financial Plan for the I-39/90 USH12 to Illinois Project in Dane and Rock counties of Wisconsin provides information on expended and expected program costs (including engineering, right of way (ROW), utilities, construction and agency costs) as well as funding information, project risks and scheduling information. Please note that all dates within this document are in calendar year (CY) unless otherwise noted. The Department is committed to fully fund the project in accordance with the proposed schedule and will seek to obtain needed funding in the subsequent biennial budgets. Future legislation may impact the Department's ability to fund the project in accordance with the proposed schedule. A schedule contingency has been incorporated into the initial Financial Plan. The anticipated completion date of the project, including the schedule contingency, is May 2023.

This project funds the mainline reconstruction and expansion from the Illinois State Line, in Rock County through the USH-12/18 and I-39/90 interchange in Dane County. This project does not include improvements to the USH-12/18 and I-39/90 Beltline Interchange (BIC). This project includes nine interchange reconstructions, with an expected cost of $1,361.9 million (M) in Year of Expenditure (YOE).

The project is in the Statewide Transportation Improvement Program (STIP) and sections of the project in the Rock (Beloit; Janesville) and Dane (Madison) counties Transportation Improvement Programs (TIP) as appropriate. The project will be financed through a combination of State, Federal and Local funds. Construction began in 2013 and to date has been only State funded with the exception of small, peripheral contracts. WisDOT has identified sufficient funding for the project to the end of State Fiscal Year (SFY) 2017. The Wisconsin Constitution prevents the current Legislature from committing future legislatures to a particular course of action, therefore the specific source of funds for completing the corridor and future phases cannot be identified at this time. The Governor and Legislature will decide the most appropriate funding sources on a biennial basis, through the state budget process.

A cost estimate review (CER) was performed for the project in December 2014 and was amended in July of 2015 following adjustments that were required as a result of state budget restrictions. The final report reflecting the amended results was dated July 15, 2015. At the time of the CER this project was scheduled with three phases, with phase 1 being the current I-39/90 project; phase 2 included the BIC work and phase 3 included work on USH-12/18 west of the BIC, if necessary to achieve functional performance of the BIC. Phases 2 and 3 are now being considered as a separate project from a Federal perspective based on separate environmental documentation and operational independence.

This Federal Financial Plan has been developed in accordance with information available as of March 31, 2016. Changes to financing streams are likely, based on funds provided in the 2015-2017 biennial budget. Those changes will be reflected in the Financial Plan update for FY 2017.

Please see Appendix A–Acronym Appendix for definitions of all acronyms used in this document.

Description of Project Scope

I-39/90 is an integral part of the National Highway System (NHS) and a major corridor with national and regional significance. This section of I-39/90 also serves as a major local corridor to both Dane and Rock Counties. Built in the late 1950s and early 1960s, it plays a vital role to Wisconsin's economic future by serving as a major transportation route for freight, commuters, health care patients, retail customers to major commercial areas, as well as many tourists to reach recreational destinations across Wisconsin.

Currently I-39/90 is experiencing traffic slowdowns and backups, particularly during peak travel times. Without corrective action, future travelers will experience deteriorating driving conditions in the corridor with significantly reduced speeds and worsening congestion. Crashes and other traffic events will routinely result in extensive backups and excessive delays.

Since being built, WisDOT has rehabilitated or replaced pavement, ramps, bridges, interchanges and other structures; however, these corridor components are near the end of their useful life. Reconstruction is needed to address safety concerns, congestion, long term pavement, and structure needs.

This 45 mile project extends from the Illinois State Line, in Rock County to Madison, in Dane County and averages over 60,000 vehicles per day. By 2040, the traffic volume is expected to reach 65,000 to 78,000 vehicles per day. It is also a federal truck route with approximately 25 to 28 percent of its total traffic volume consisting of heavy trucks.

The project will address roadway and interchange deficiencies between the Illinois State Line, in Rock County and the USH-12/18 and I-39/90 BIC located in southeast Madison, in Dane County. This project will reconstruct the current four lanes divided interstate into a six lanes divided interstate extending from the Illinois State Line, in Rock County through the USH-12/18 and I-39/90 interchange, in Dane County. One exception is between STH-11 (Avalon Rd.) and the STH-26 interchange in Janesville (6 miles) in Rock County, where the Interstate will be eight lanes divided. There will be nine interchanges reconstructed, over 100 structures will be rehabilitated or replaced, new Intelligent Transportation Systems (ITS) added and miles of alternate routes repaved or reconstructed.

Temporary widening and ITS work started in 2013. Mainline construction will start in 2016, and is expected to finish construction in Fall 2022.

A CER was performed for the project in December 2014 and was amended in July of 2015 following adjustments that were required as a result of state budget restrictions. The final report reflecting the amended results was dated July 15, 2015. At the time of the CER this project was scheduled with three phases, with phase 1 being the current I-39/90 project. Phase 2 included the BIC work and phase 3 included work on USH-12/18 west of the BIC, if necessary to achieve functional performance of the BIC. The Phase 1 CER results are still valid and incorporated into this report.

It has since been determined that the BIC portion will now be a separate project from FHWA's perspective. The BIC project will have its own environmental document and Financial Plan.

The cost of expanding the I-39/90 mainline lanes through the BIC are included in this plan to ensure functional performance of the BIC at an acceptable level of operation until the BIC project is completed.

Detailed Description

For design purposes, WisDOT divided the project into three segments. The South, Central, and North Segments were selected to create manageable design projects and are not representative of changes in traffic volume, roadway typical section, or any other unique roadway characteristics. Each segment was also further divided into individual construction projects. The segments and projects are described below and are displayed in **Figure 1.1.**

The South Segment extends approximately twelve miles along I-39/90 from the Illinois State Line North to CTH-O, South of Janesville, in Rock County. It proceeds through the Beloit urban area and is identified in the 2015-2018 TIP of the State Line Area Transportation Study (SLATS), which is located in the Beloit Area Metropolitan Planning Organization (MPO).

Interchanges, in Rock County to be reconstructed include:

- I-43 / STH-81
- CTH-S (Shopiere Rd.)
- STH-11 (Avalon Rd.)

The Central Segment extends approximately thirteen miles along I-39/90 from CTH-O, South of Janesville, north to the Dane/Rock County line. It proceeds through the Janesville urban area and is identified in the 2015-2020 TIP of the Janesville Area MPO.

Interchanges, in Rock and Dane counties to be reconstructed include:

- USH-14
- STH-26
- STH-59

The North Segment extends approximately twenty-one miles along I-39/90 from the Dane/Rock County line north through the USH-12/18 interchange in the Madison urban area. These projects are identified in the 2015-2019 TIP of the Madison Area MPO.

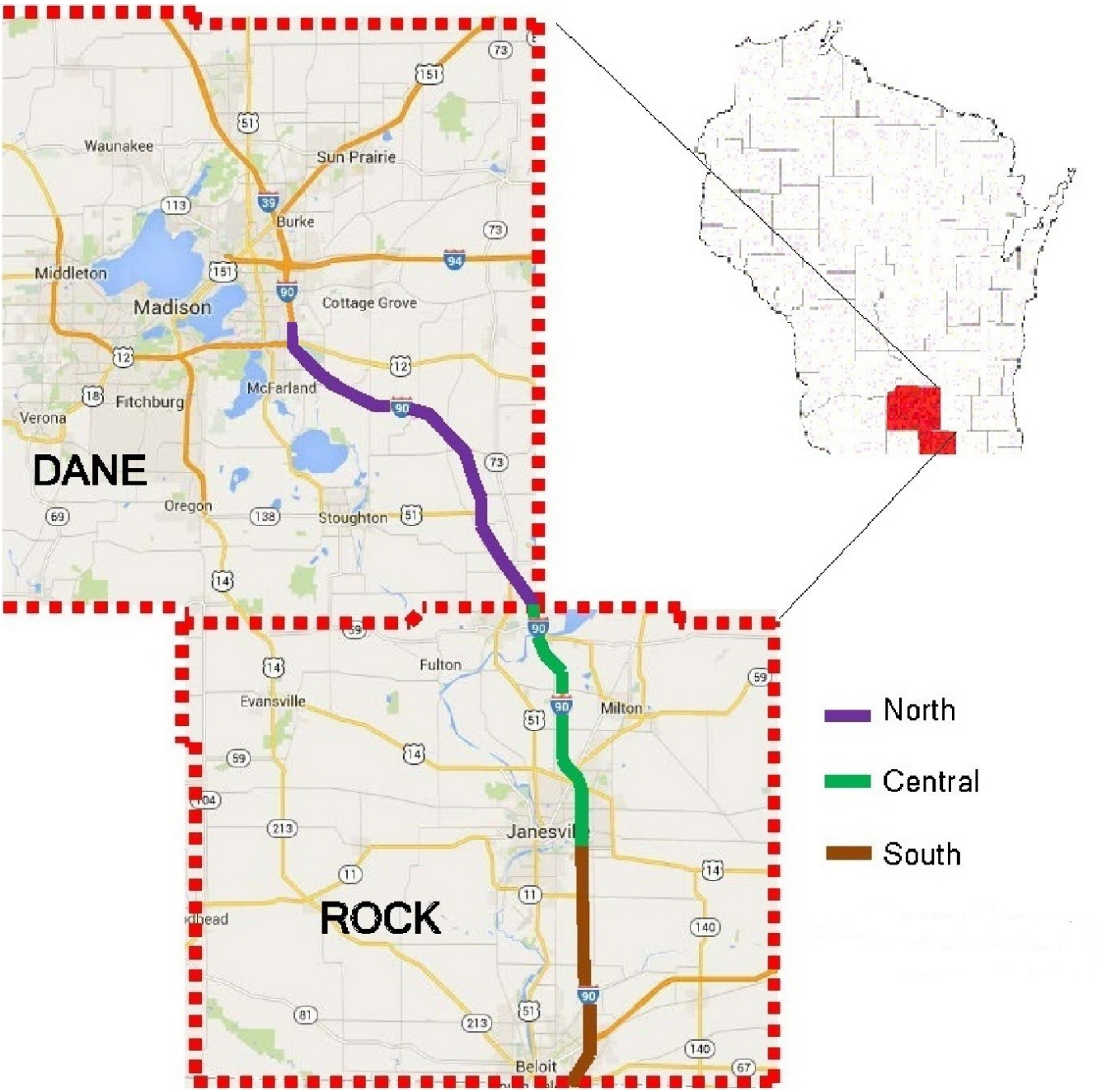
Interchanges, in Dane County to be reconstructed include:

- USH-51 / STH-73
- USH-51
- CTH-N

Maps

The I-39/90 USH12 to Illinois Project in Rock and Dane counties, shown in **Figure 1.1** below, is separated into three segments (South, Central, and North) for design purposes.

Figure 1.1: I 39/90 USH12 to Illinois Project Location



Maps—NEPA Summary

National Environmental Policy Act
In July of 2008 WisDOT submitted the Environmental Assessment (EA) with no significant impacts indicated by the Initial Assessment documentation to the FHWA, as required by the environmental process. The FHWA responded to WisDOT on October 19th, 2010 with the Finding of No Significant Impact (FONSI).

In 2013, FHWA and WisDOT's Central Office Environmental Process and Document Section determined that a re-evaluation of the original I-39/90 mainline EA/FONSI was required. The I39 mainline EA Re-evaluation and Supplementation of the EA document was approved and signed by FHWA with an effective date of October 30, 2014. The document reaffirms FHWA's October 19th, 2010 FONSI.

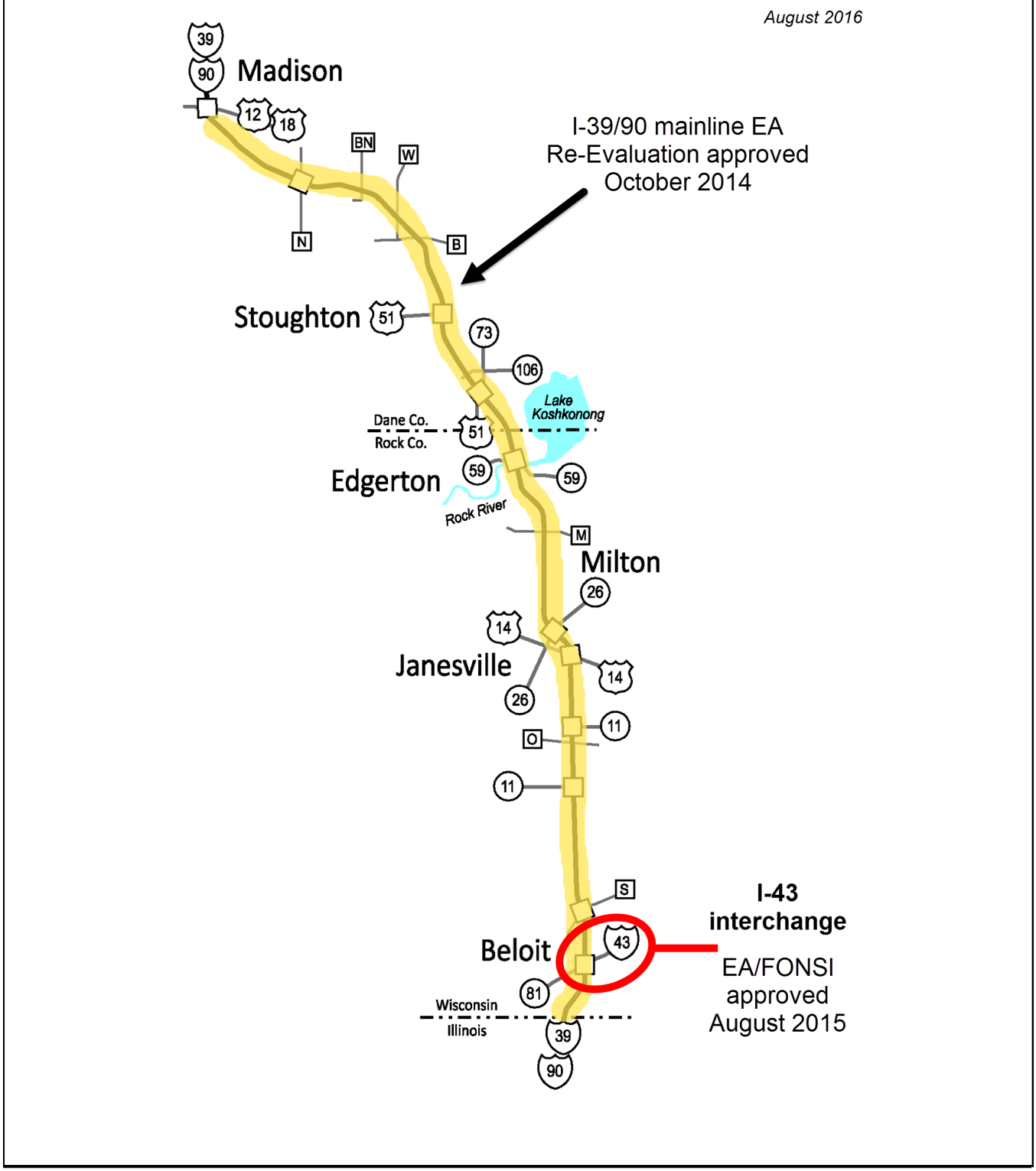
A separate, stand-alone, EA was completed for the I-39/90 and I-43/STH-81 system interchange and FONSI approval was acquired on August 28, 2015. A separate EA was prepared for the I-43/STH-81 interchange because the proposed full build-out design differed from the preferred alternative in the October 19, 2010 I-39/90 mainline EA/FONSI. The original scope of the I-43/STH-81 interchange was limited to bringing the interchange up to current design standards and ensuring local access was still maintained for the city of Beloit. However, as detailed design progressed, the city of Beloit has expanded their plans for the area east of the interchange known as the Gateway Business Park, in Rock County. This requires more efficient local access with broader operational considerations. In addition, the slip ramp proposed as part of the original EA/FONSI, which provided this local access, is no longer considered acceptable by FHWA.

All of the project NEPA actions are complete. Separate environmental documentation was also completed for alternate routes that have independent utility as described in the following section.

A map of environmental documents along the I-39/90 Corridor is displayed in **Figure 1.2.**

Maps—NEPA Summary

Figure 1.2: I 39/90 USH12 to Illinois Project Environmental Documentation Map



Description of Alternate Route Improvements

The I-39/90 project team also has several alternate route reconstruction projects; these projects have independent utility, but they were advanced as a result of the I-39/90 project and are therefore funded with I-39/90 project funds. These alternate routes have individual environmental documents and are State and Locally funded.

CTH-G/Townline Rd & Inman Parkway (CTH-BT), in Rock County

The CTH-G reconstruction project extends from Huebbe Parkway in the City of Beloit to STH-11 in the City of Janesville and is approximately six miles in length. Inman Parkway is new construction and will extend approximately 1.4 miles from CTH-G to CTH-S (between Hart Rd and the CTH-S Interchange). These projects were under construction in 2015 and will be completed in spring 2016.

Meier Road

New road construction that extends approximately 1.5 miles from Savannah Road to Femrite Drive. This will also consist of a new overpass over USH-12/18 and is anticipated to be constructed in 2020.

Hart Road

Reconstruction that extends approximately 1.5 miles from CTH-S to CTH-X. Construction is scheduled to begin in 2016.

USH-51

Extending from the I-39/90 and USH-51/STH-73 Interchange south approximately 1.3 miles to the Dane/Rock County line. Construction was completed in 2015.

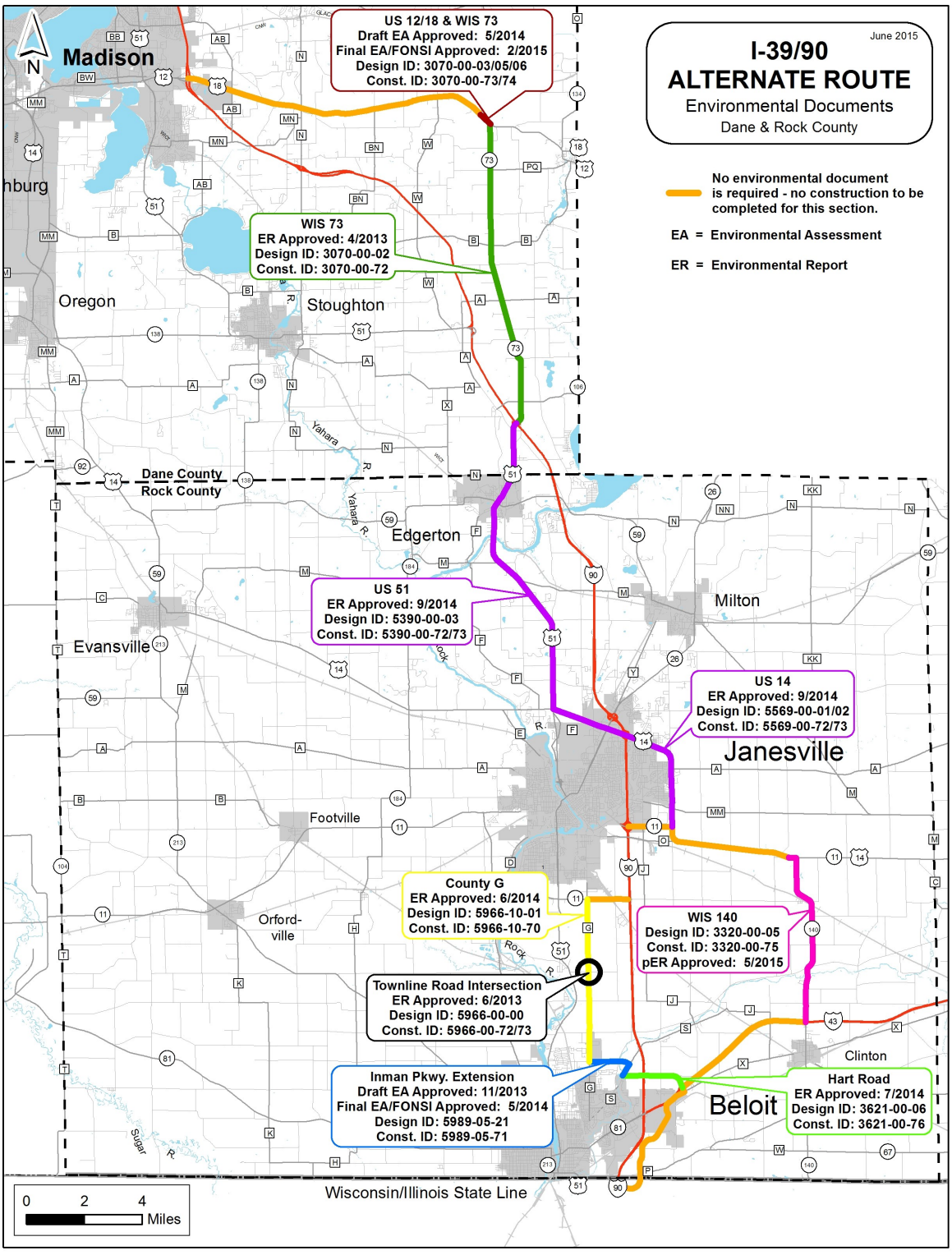
The I-39/90 project team is also managing a number of alternate route reconstruction projects that are not included in the project estimate derived from the CER. These I-39/90 alternate routes are not an integral part of the project, but are anticipated to be used for incident and congestion management. They are improvements that were already scheduled to be completed as part of a different funding program and are covered under a separate environmental document.

STH-73	Extends approximately 9.5 miles from Pierce Road to London Road, north of USH-12/18, near the Village of Deerfield in Dane County. STH-73 reconstruction was completed in 2014 and the STH-73 and USH-12/18 interchange construction was completed in 2015.
USH-14	USH-51 to Racine Street, east of Janesville. Construction was completed in 2015.
USH-51	Extending from the Dane County Line in Edgerton south to USH-14. Construction was completed in 2015.
STH-140	Extending from I-43 to USH-14 east of Janesville and Beloit with construction anticipated in 2016.

A map of all the alternate routes along the I-39/90 Corridor is displayed in **Figure 1.3.**

Description of Alternate Route Improvements

Figure 1.3: I 39/90 USH12 to Illinois Project Alternate Route Map



Schedule Introduction

This section contains major milestones, a milestone timeline, a project overview and a Gantt chart of planned dates and durations for all major lets within the project. Maps of each segment showing project locations are also included.

Major Milestones	
November 26, 2001	Transportation Projects Commission (TPC) approves I-39/90 study
July 29, 2008	Original Draft Environmental Assessment (EA)
July 29 to 31, 2008	Cost Risk Assessment Meeting
December 2, 2008	Cost Risk Assessment (Final Report)
October 19, 2010	Final EA, FONSI issued.
October 19, 2010	Enumeration by TPC with an effective date of FONSI
May 14, 2013	First State funded construction LET
June 13, 2013	CER with FHWA
June 14, 2013	First Let and ITS Let (State funded)
October 30, 2014	EA Re-Evaluation & update of EA; Reaffirmation of 2010 FONSI
December 11, 2014	CER with FHWA
January 20, 2015	I-43 Draft EA
July 15, 2015	Amended CER results received from FHWA
August 28, 2015	I-43 Interchange FONSI
November 8, 2016	First Federally funded construction LET
June 8, 2021	Anticipated last construction LET
November, 2022	Anticipated Construction Complete
Schedule Contingency —> 6 months	
May 2023	Project Complete

In future annual updates, this section will include a revised listing of major milestones and note if project schedules have changed, expanded in scope, etc., since the previous Financial Plan.

Schedule Changes Since July 2015 CER

Since the Cost Estimate Review was amended in July 2015, the I-39/90 team has experienced some shifting of funds within fiscal years, resulting in shifting of projects within fiscal years. Overall, the construction of the entire project was reduced by 6 months, mainly due to advancing the mainline project between CTH AB and WI Southern RR to allow construction completion to occur in fall of 2022 rather than spring of 2023.

While the final completion date was reduced by 6 months, as compared to the July 2015 CER, quite a bit of construction was advanced and delayed between 2016 and 2021. The current project estimate reflects the probabilistic cost estimate at the 70% confidence level; however, should significant schedule changes occur that would result in cost estimate changes, the financial plan will be updated to reflect this.

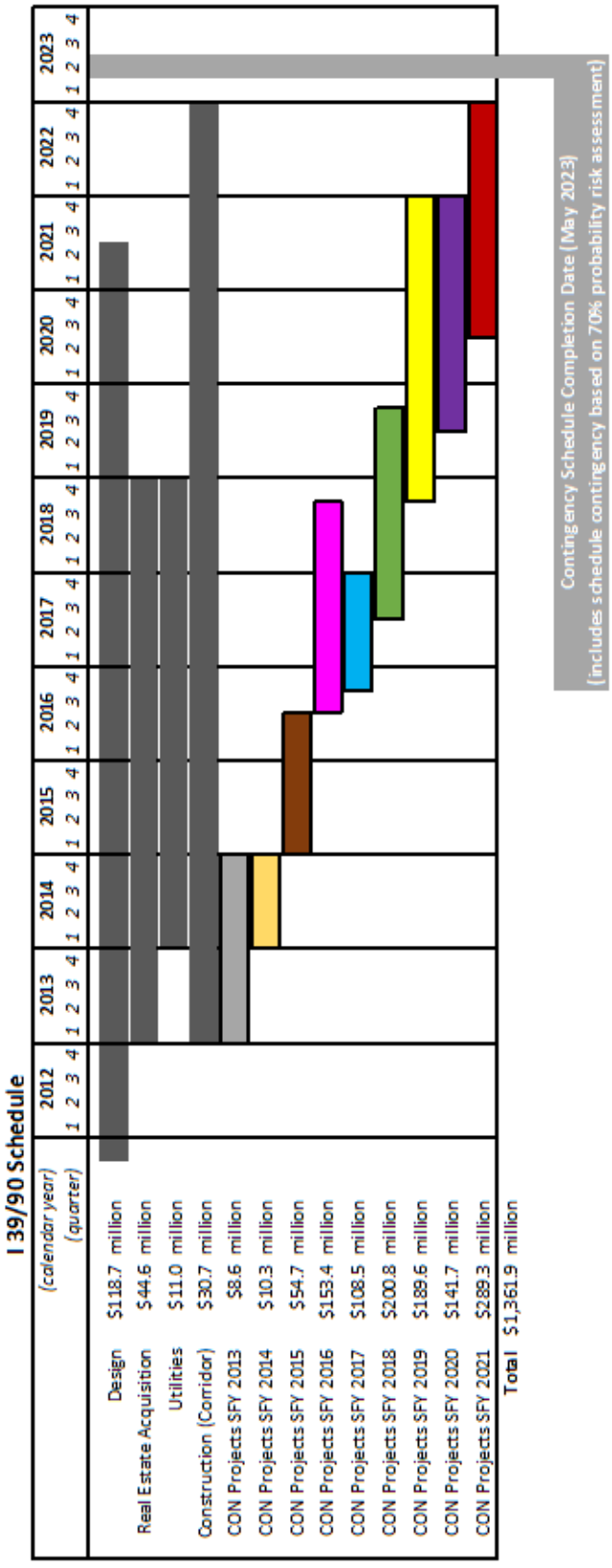
List of schedule changes for remaining projects are as follows:

- Mainline Construction (including bridge overpass projects):
  - North Segment construction 2016 – 2022 (previously 2017 – 2023)
  - Central Segment construction 2019 - 2022 (previously 2017 – 2021)
  - South Segment construction 2016 – 2021 (previously 2017 – 2022)
- Temporary Widening 2016 – 2020 (previously 2016 – 2019)
- I-43 interchange construction 2020 – 2022 (previously 2019 – 2021)
- CTH N interchange construction 2017 (previously 2018)

Figure 2.1 displays the I-39/90 milestone timelines for Design, Real Estate, Utilities and Construction by CY. In addition, as indicated in **Figures 2.1 and 2.2**, the anticipated completion date of the I-39/90 project is November 2022. The 70% confidence level for the I-39/90 project completion, which is based on schedule risks, is May 2023; resulting in a schedule contingency of approximately 6 months. Project completion includes the final acceptance of all construction work.

Figure 2.2 displays the I-39/90 project schedule by SFY and by CY. The final Plans, Specifications and Estimates (PS&E), letting, construction start and construction end month/year are displayed for each construction project. Advanceable dates, if applicable, are also displayed to indicate the time at which a project would be available to let should additional funding become available.

Figure 2.1: Milestone Timeline for Design, Real Estate, Utilities and Construction



Overview of Projects by SFY

Construction activities began in 2013 with the temporary widening in the South Segment and early ITS work. 2014 construction included the reconstruction of the Southbound I-39/90 bridge over Siggelkow Road in the North Segment. Construction activities in 2015 consisted of 3 interchange reconstructions (USH 51/73, CTH S/Shopiere, and STH 11/Avalon Rd) and several temporary routes. The schedule of future work is as follows:

SFY 2016 Lets

North Segment: 2 temporary widenings (Maple Grove Rd. to E. Church Rd.) & (S. Dane County Line to Maple Grove Rd.), 7 bridges (CTH-A, Edgerton Rd., Williams Dr., Church St., CTH-BN, and 2 SB bridges) (All State funded)
Central Segment: Rock River Bridges, Newville Road Bridge, mainline expansion (Knutson Rd. - N. Rock County Line.), temporary widening with tied utility (All State funded)
South Segment: STH-11, Avalon Rd. Interchange, 5 bridges (Hart Rd., Turtle Creek., Woodman Rd., State Line and Creek Rd bridges, Hart Rd. temp route, and 3 temporary widening projects. (All State funded)

SFY 2017 Lets

North Segment: Mainline expansion (S. Dane County Line to E. Church Rd.) (State funded); CTH AB bridge, CTH N interchange, NB and 2 temporary widenings (State and Federal funding)
Central Segment: Manogue Road Overpass (State funded).
South Segment: 1 temporary route (STH 140) (State funded)

SFY 2018 Lets

North Segment: 2 mainline expansion projects with structures (S. Dane County Line to E. Church Rd.), SB, (E. Church Rd. to Church Rd.), NB (Both State and Federal funding)
Central Segment: no projects LET SFY 2018 for this segment.
South Segment: 2 mainline expansion projects (Woodman Rd. - STH-11, Hart Rd to Woodman Rd) (Both State and Federal funding)

SFY 2019 Lets

North Segment: mainline expansion project (Church St. - CTH-AB, NB) (State and Federal funding)
Central Segment: mainline expansion & utility (USH-14 north to Kennedy) (State and Federal funding)
South Segment: No projects LET SFY 2019 for this segment.

SFY 2020 Lets

North Segment: 2 mainline expansion projects (E. Church Rd.—Church St.) (SB), (Church St—CTH-AB) (SB) Meier Road Bridge and Meier Road (Savannah Rd. - Femrite Rd.)
Central Segment: 1 mainline expansion (CTH O - STH-14 Inter. North), 1 temporary widening
South Segment: I-43 Interchange (early work), 1 mainline expansion (STH-11 - CTH-O) (All projects for all segments are State and Federal funding, except the Meier Rd projects which are State funded)

SFY 2021 Lets

North Segment: No projects LET SFY 2021 for this segment.
Central Segment: 1 mainline expansion (Kennedy Rd - Knutson Rd.), I-39 and USH-14 Interchange and USH (Lexington St. to Pontiac Dr.) (Expansion State and Federal funds, interchange & USH-14 State funded)
South Segment: I-43 Interchange (State and Federal funding)

See **Figure 2.2** on pages 12, 13 and 14 for a graphical representation of the schedule and **Figures 2.3-2.5** on page 15-17 for a map of the projects by construction year.

Figure 2.2: Project Schedule Major Lets SFY 2013 through SFY 2016

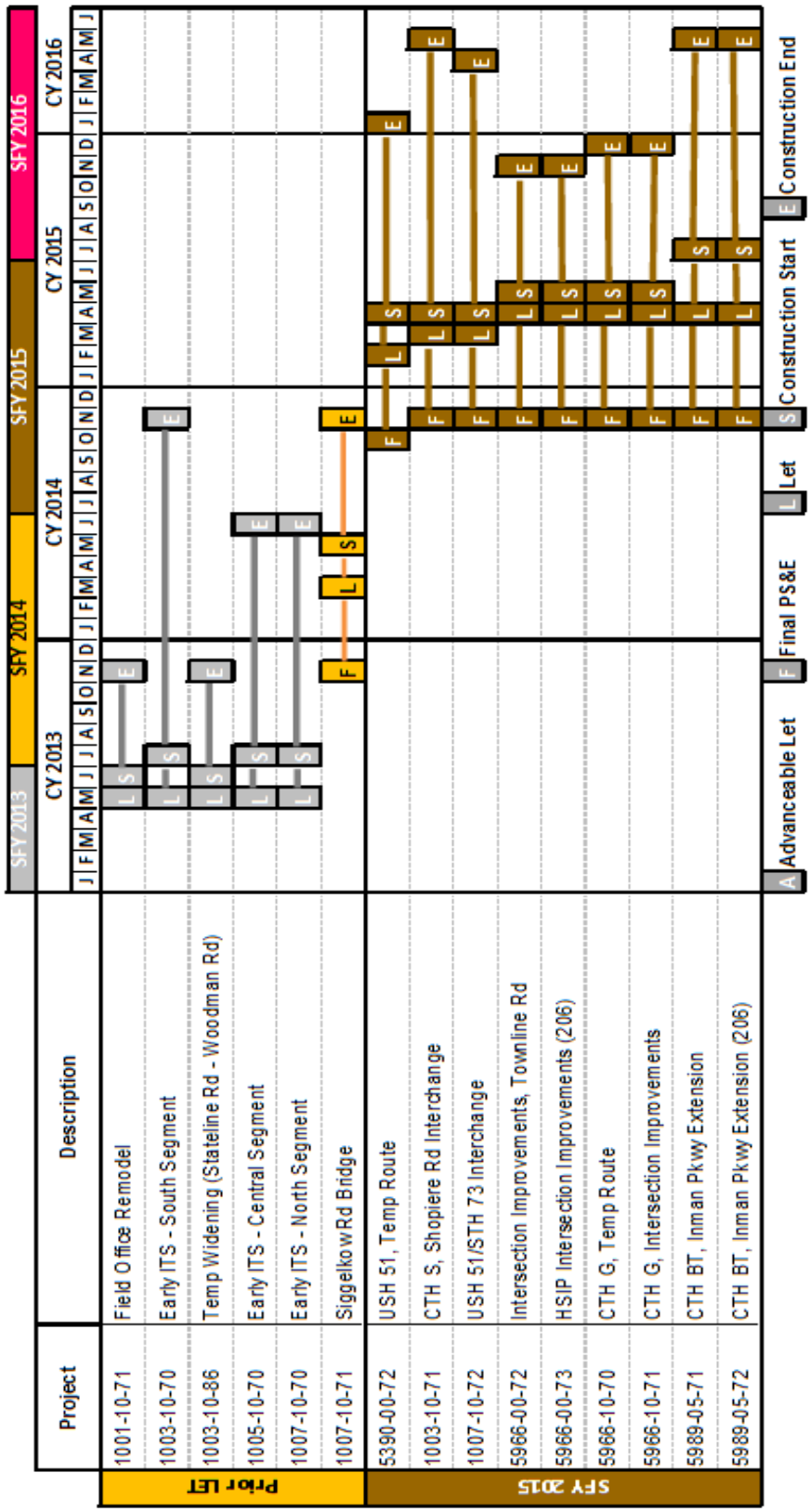


Figure 2.2: Project Schedule Major Lets SFY 2015 through SFY 2020

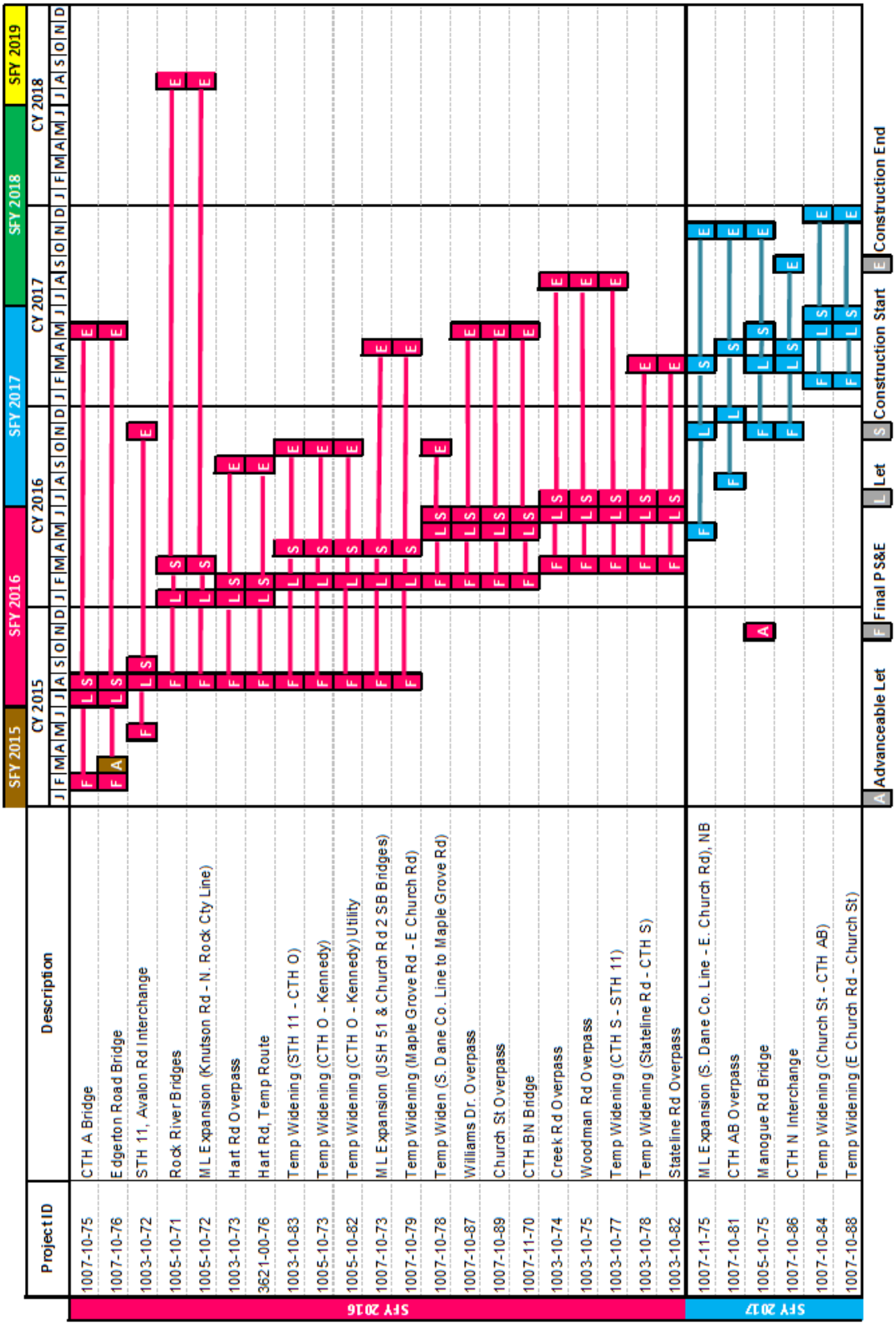


Figure 2.2: Project Schedule Major Lets SFY 2018 through SFY 2021

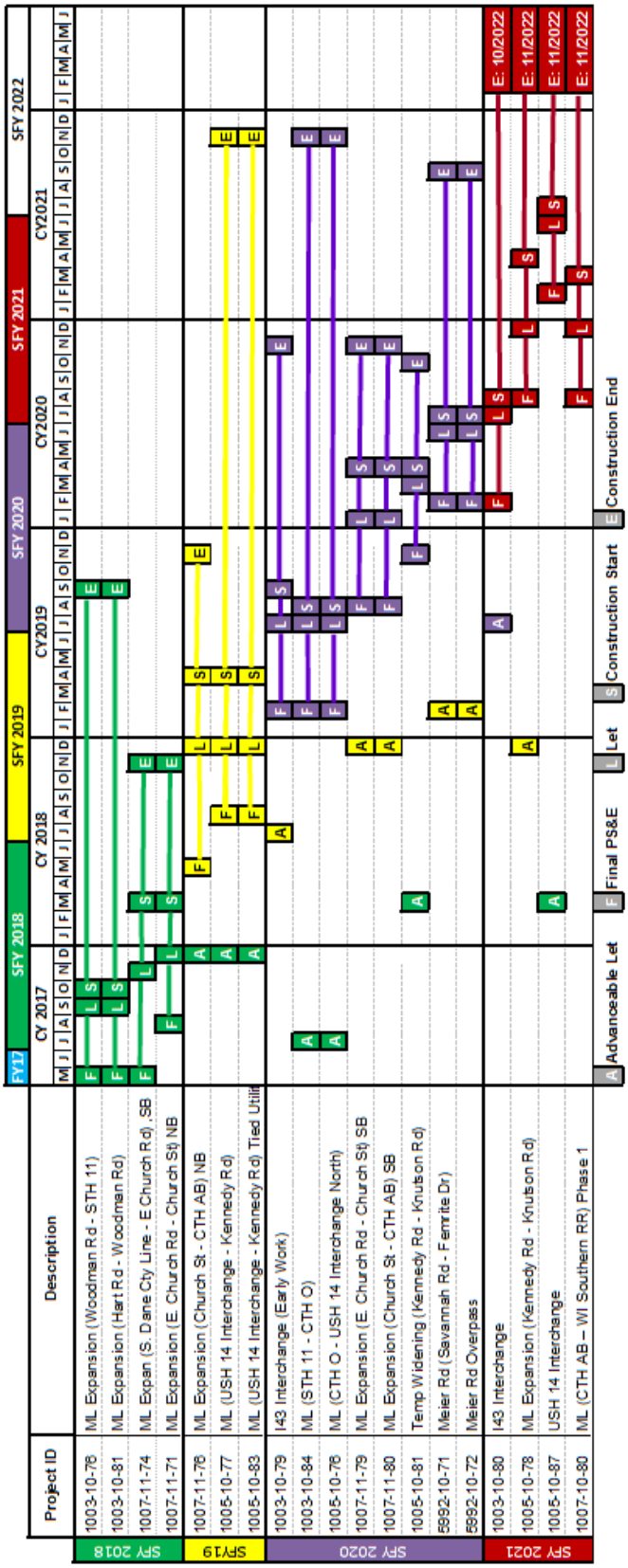


Figure 2.3 South Segment Let and Construction Schedule

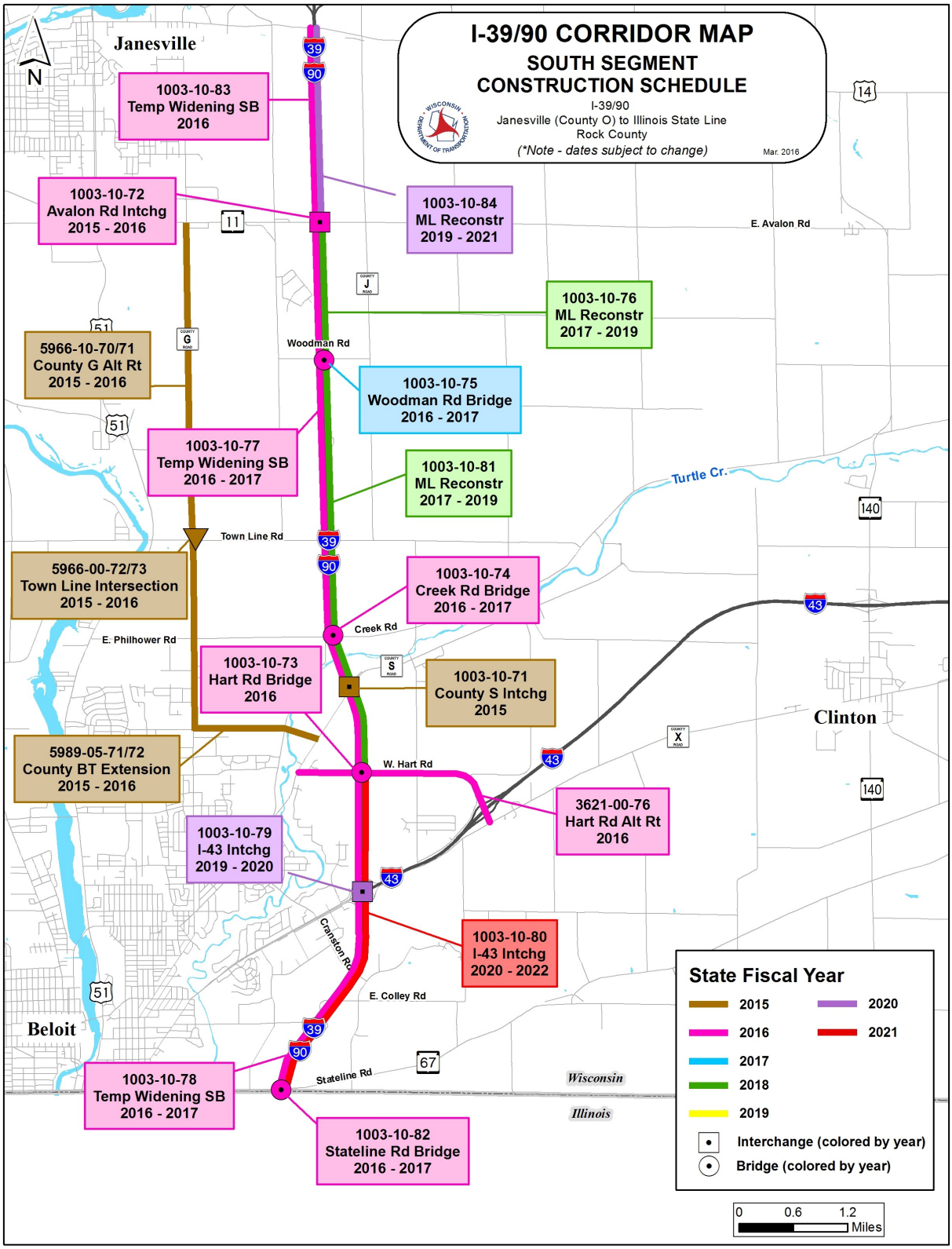


Figure 2.4 Central Segment Let and Construction Schedule

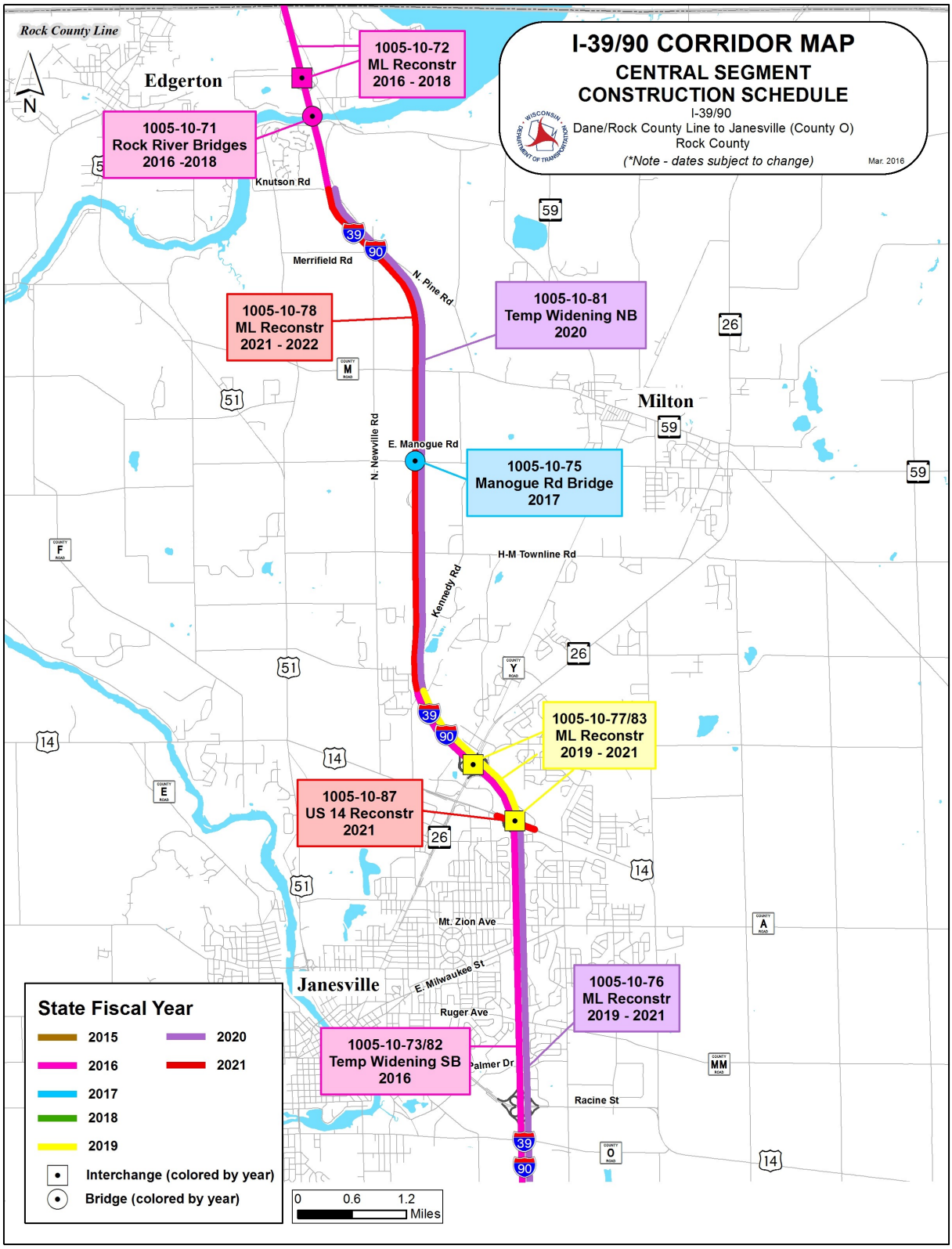
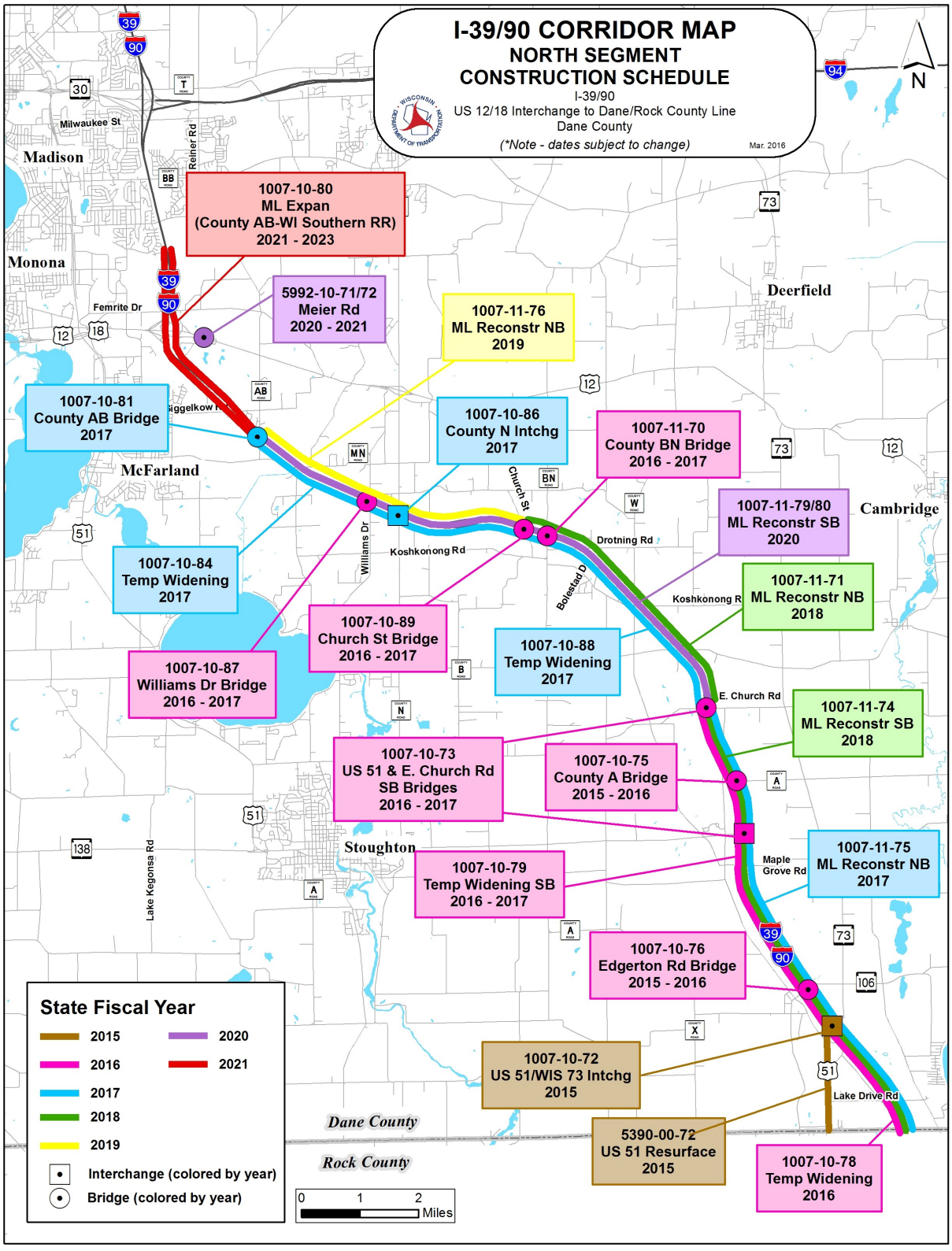


Figure 2.5 North Segment Let and Construction Schedule



Project Cost

Cost Estimate by Cost Element and Construction Contract

Cost estimates for Design, Real Estate, Utilities/Railroad, and Construction are shown in **Figure 3.1** below. These estimates, similar to the construction cost estimates discussed in the next section, are updated on a quarterly basis. The total projected cost of the I-39/90 Project is $1,361.9 M.

Figure 3.1 Cost Estimate by Federal Group Category

Federal Group	Inflated to Year of Expenditure	Risk / Uncertainty	Total
Design	$118,700,000	$0	$118,700,000
Real Estate	$44,600,000	$5,000,000	$49,600,000
Utilities / Railroad	$11,000,000	($2,000,000)	$9,000,000
Construction	$1,144,100,000	$40,500,000	$1,184,600,000
TOTAL	$1,318,400,000	$43,500,000	$1,361,900,000

Cost Estimating Methodology

In developing the cost estimate for the program, the following key assumptions were made:

- A normal Design-Bid-Build development process was assumed. No contingencies are carried for alternative contracting, such as design-build, A + B bidding, or contracting incentives.
- Construction costs were obtained through the fall 2014 biennial estimate submittal. All projects are at various levels of plan development (30%, 60%, 90%) yielding estimates with various levels of design contingencies. With progression toward PS&E, the level of design contingency decreases. Through 30% design, the estimate includes several major contract items such as removals, earthwork and paving items with allowances applied to other items. After 30% design, drainage/storm water and traffic control are identified and the allowances decrease as the project approaches 90%. At 90% design, all contract items are identified.

Inflation

The state of the national economy determines the rate of inflation assumed for the project. The department relies on Global Insights Inc. for the chained price index for state and local gross investment in highways and streets for transportation specific inflation estimates. In developing the initial cost estimate the inflation rates ranged from 2.5 percent to 3.7 percent. This inflation rate was applied based upon the proposed schedule, compounded to the mid-point of the schedule.

Inflation Continued
All project costs are adjusted to YOE amounts. Estimated inflation associated with the cost of construction represents approximately 99% of all projected inflation for the project. The total estimated cost of the project including inflation is $1,361,900,000.

Design
The I-39/90 project design is at various levels of completion ranging from 25% to 100% and includes major contract items. Design costs (including NEPA costs), as a percentage of total estimated construction cost, are approximately 9% and include the cost of consultants and WisDOT staff. Along with the costs listed above are the Corridor Team and Program Controls costs, which are typical costs that are part of Major Projects. Anticipated design amendments are included in the base estimate as an allowance.

Real Estate
Real estate estimates include real estate, relocation, delivery costs, administrative contingencies and litigation allowances. Parcels along the I-39/90 corridor that may be affected have been identified and a cost has been estimated by reviewing assessed values, current costs per square foot, and potential improvement impacts. Approximately three hundred acres of additional right-of-way will be required along the I-39/90 project corridor (approximately 45 miles), including approximately five hundred separate parcels. Contingency and litigation budgets were identified using historical percentages experienced from other projects.

Utilities
The current plan layouts for utilities are reviewed by WisDOT and consultant utility staff. Potential utility impacts are identified and coordination with the utilities has commenced. Potentially higher cost impacts are reviewed with the utility company owners, while minor utility relocations are reviewed and a cost assigned based upon past project experience. The estimate includes a contingency for unknown utility costs.

Construction
The estimated cost of construction oversight and management is estimated as a percentage of projected let construction costs. Construction management is estimated to be 8% of let construction costs. Construction costs for the project were estimated, compiled and independently reviewed. This review consisted of identifying risk items and reviewing the methodology of the estimates.

A review of recent construction lettings was also conducted to reflect current materials pricing. Unit costs have also been established reflecting a contingency to account for the unknown complexity of work and unknown scope elements. Unit prices also include integration of information from the private sector and contracting industry, which assists in the validation of unit prices as well as the development of a staging plan.

Construction (continued)

Items not quantified were estimated using a percentage of quantified items (pavement, structures, earthwork). Percentages for these items were developed based on the previously constructed projects of similar nature. Adjustments were made to the percentages to reflect the scope and complexity of the project. The bridge unit price per square foot was developed comparing recent bids that included typical pre-stressed concrete girder bridges. For the more complex bridges and retaining walls, recent bids from other projects around the state that contained major steel structures were reviewed.

Quality control for the estimates include a review of the process used to complete the estimates as well as the actual submitted data. After the individual project managers submit their cost estimate with appropriate supporting documentation, the estimates are checked by the I-39/90 Corridor Management Team. The review process assists with creating consistent, accurate and high quality estimates. Construction cost estimates are updated as current information becomes available, with complete estimate reviews semi-annually and as design progresses through 30%, 60%, 90%, and completion of PS&E. The construction cost estimate is assembled by each major construction item and then rolled up for each construction contract. All the construction contracts are rolled up to obtain the project's construction cost and are entered into a spreadsheet with their corresponding construction dates to calculate inflation costs. Project designers may be called in to help address questions about their cost estimate. The construction estimate includes a contract change order budget of 4% of the construction estimates.

Majors Program

With each State Biennial Budget the Wisconsin Legislature establishes funding levels per state fiscal year for the Majors program. After the Legislature sets total program level, WisDOT allocates budgets and expenditure schedules to projects within the Majors Program. The TPC report is published at the beginning of February and August of each year, and includes project costs, budgets, and expenditure schedules per fiscal year until completion for each enumerated Majors Program project.

As of the February 2016 TPC report, fifteen highway projects are currently funded through the Major Highway Development Program. Majors Program reporting includes all project costs, including LETs, real estate (R/E), utilities, consultant engineering, in-house engineering, and change orders. All expenditures for each Majors Program project must be programmed in accordance with the schedules shown in TPC report.

Schedules in the TPC report assume the Majors Program will maintain the current funding level with increases to maintain purchasing power in future years. In the past nine biennial budgets dating back to the SFY 1999-2001 budget, only the SFY 2013-15 (2% decrease from previous biennium) and 2015-17 budgets (5.8% decrease from previous biennium, including contingent bonding) provided a decrease to the Majors Program.

Any identified savings from individual projects in a fiscal year are returned to the Majors Program and are not automatically available to those projects for additional programming. Savings and any carryover from previous years are distributed within the Majors Program based on Bureau of State Highway Program (BSHP) determination of highest need. Budget overruns in each respective fiscal year are to be mitigated within each project. If it is determined that mitigating within the project is not advantageous to overall program goals, BSHP will work with the project team and the Major Projects Programming Committee to develop alternative actions, which may include concessions from other Majors Projects.

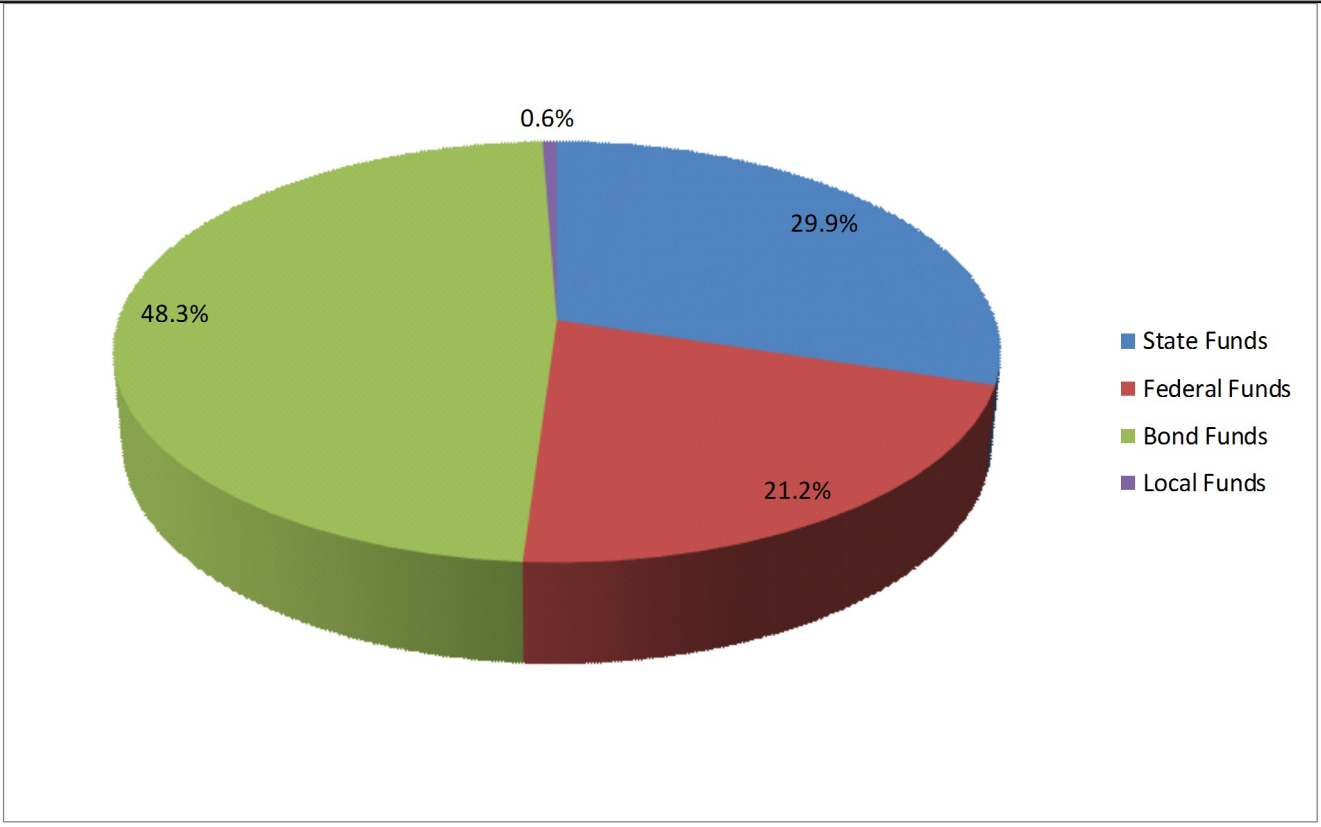
Figure 4.1: Funding Provided for Major Highway Development Program (2015 Wisconsin Act 55)

Type of Funding	FY 16	FY 17	Biennial Total
State Funds	$62,773,300	$68,347,100	$131,120,400
Federal Funds	$78,263,500	$107,477,700	$185,741,200
Transportation Revenue Bonds	$102,363,200	$66,649,000	$169,012,200
General Obligation - Contingent Bonds	$125,000,000	$75,000,000	$200,000,000
Total Majors Program Resources	**$368,400,000**	**$317,473,800**	**$685,873,800**
Estimated I-39/90 Project Costs	$193,100,000	$128,800,000	$321,900,000
Remaining Majors Program Funds	$175,300,000	$188,673,800	$363,973,800

Overall Financial Plan

The I-39/90 USH12 to Illinois Project is funded through State, Local, and Federal transportation program funding. As can be seen in **Figure 4.2** below, the total estimated project cost is funded with approximately 30% State, 21% Federal, 48% Bonding and 1% Local resources.

Figure 4.2: I 39/90 Project Funding by Source



State Funds

The Wisconsin Transportation Fund is the largest source of funding for transportation programs. The fund combines revenues from motor fuel tax, vehicle registration and titling fees, and driver license fees along with several smaller revenue streams collected by the WisDOT and the Department of Revenue. Revenues collected for vehicle registrations and driver licenses are collected by a trustee who redirects funds for the debt service payments on bonds prior to returning what remains for deposit into the Transportation Fund.

The Wisconsin Major Highway Development Program provides for the development and construction of new or significantly altered highway projects with the use of State Revenues, Federal Funds and Bond proceeds. As can be seen in **Figure 4.1**, 2015 Wisconsin Act 55 provides $368,400,000 in SFY 2016 and $317,473,800 in SFY 2017 for the Major Highway Development Program. The cost associated with the I-39/90 USH12 to Illinois Project will be funded through the Major Highway Development Program in future years.

Federal Funds
Federal funds are a key funding component of the I-39/90 USH12 to Illinois Project. Wisconsin anticipates using Federal formula funds from a variety of programs, such as National Highway Performance Program apportionments. The Moving Ahead for Progress in the 21st Century Act (MAP-21), PL 112-141, established the contract authority available to Wisconsin until the Fixing America's Surface Transportation (FAST) Act was signed in December 2015. The FAST Act authorized Federal highway funding through September 30, 2020, but the annual Congressional appropriations process still establishes the obligation limitation percentage each year, which may limit how much contract authority may be obligated on highway projects for a given fiscal year.

The Financial Plan assumes a conservative estimate of Federal Funds to be made available to Wisconsin. For FFY 2016, Wisconsin has received initial obligation authority of $712.5 M for highway programs. It is anticipated that Wisconsin will also receive $20.0 M to $30.0 M in redistribution at the end of FY2016. The Financial Plan for I-39/90 assumes $713.0 M in annual statewide Federal Funds after SFY 2016.

Bond Funds
In November 2015, the Wisconsin Joint Finance Committee approved the motion to permit the Department to access the $350.0 M in Contingent Bonding as provided by 2015 Wisconsin Act 55. The Majors Program received $200.0 M of those funds: $125.0 M in FY16 and $75.0 M in FY17. As of March 31, 2016, approximately $102.1 M in Revenue Bond authority and $88.5 M in Contingent Bond authority has been applied to the I-39/90 USH12 to Illinois Project.

The bond funding component of the Major Highway Development Program comes from State issued Transportation Revenue Bonds (TRB). The State of Wisconsin Building Commission issues debt on behalf of the State as authorized by law. TRBs have been issued by the State since the early 1980s. Wisconsin motor vehicle registration fees and related vehicle fees have been pledged as repayment for these bonds.

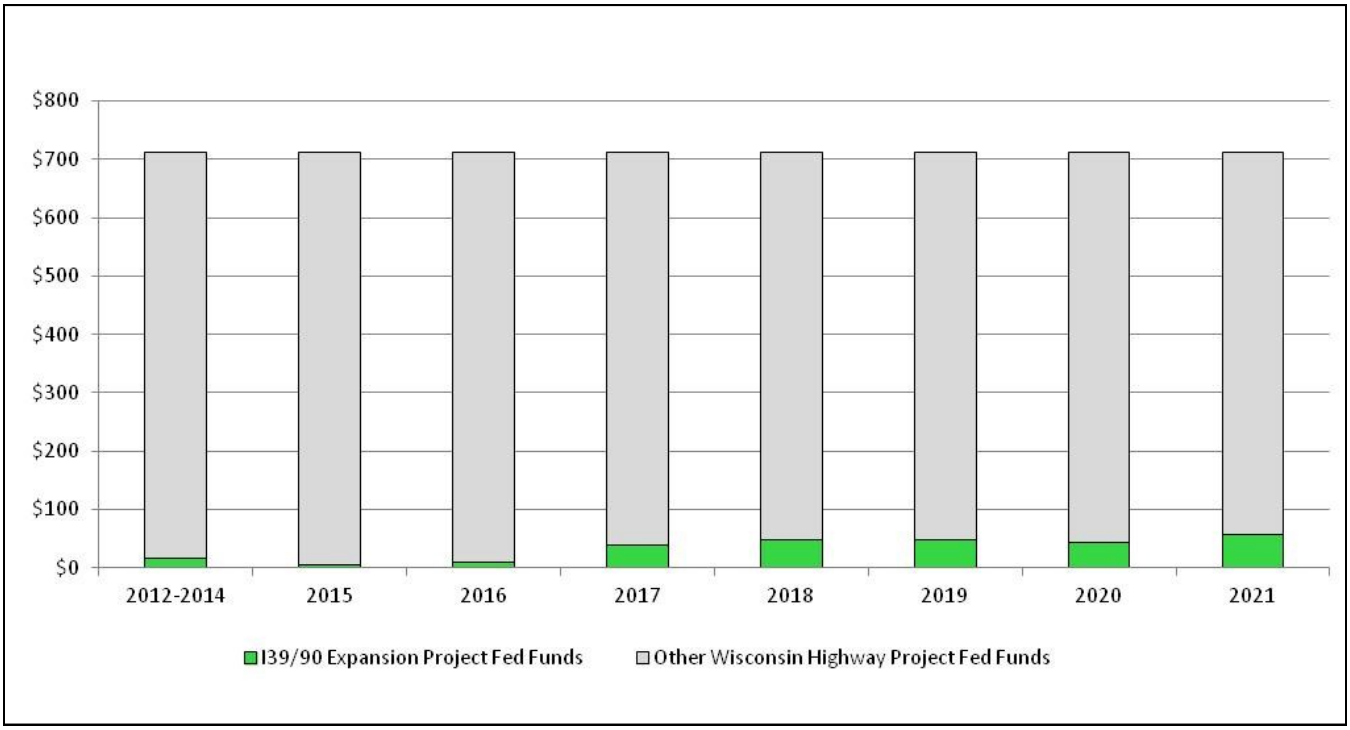
Local Funds
The CTH-G, Townline Road and CTH-BT projects are funded by the Major Highway Development Program and Local program in both design and construction. However, the projects within the Major Highway Development Program receive only State and Local funds. In SFY's 2011 to 2014, between 20% and 40% of the design was locally funded. In SFY 2015, construction is approximately 30% locally funded.

Wisconsin State Statute 84.295(4m) declares that the state shall pay 90% of eligible costs of the relocation or replacement of any municipal utility facilities required by the construction of any freeway undertaken by the Department. The approximate cost of affected municipal utilities is being refined as design progresses; however, to date, approximately $190,000 has been identified as local utility costs in SFY's 2016 and beyond.

Figure 4.3 shows the funding provided to the Majors Program by revenue source, as well as the portion of the Majors Program funding going to the I-39/90 USH12 to Illinois Project.

As displayed in **Figure 4.3**, using these conservative assumptions, sufficient Federal Formula Funds will be available for other highway projects in Wisconsin. Planned funding for the project is consistent with Wisconsin's fiscally constrained STIP and the relevant TIP.

Figure 4.3: Estimated Federal Funds for I 39/90 Project and Other Highway Projects



WISDOT may not spend funds without an appropriation established by State law. Wisconsin law provides for continuing base spending authority in its appropriations if the budget bill is not adopted by July of the odd-numbered years.

Figure 4.4 summarizes the assumptions, risks, and potential mitigation strategies for the Federal and State revenue sources.

Figure 4.4: Summary of Key Revenue Assumptions, Risks, and Mitigation

Revenue Source	Assumption and Justification	Discussion / Potential Risk	Risk Mitigation
Federal Funds	Assumes a conservative estimate in Federal Aid Formula Funding available to Wisconsin through annual appropriation process.	The Fixing America's Surface Transportation (FAST) Act was signed into law in December 2015. The FAST Act authorizes Federal Highway funding through September 30, 2020 and WisDOT is able to reference the contract authority estimates in the FAST Act in its future highway program planning. However, FAST Act funds are still subject to annual appropriations and contract authority levels may be impacted by a planned 2020 funding rescission of $7.6 B that was included in the FAST Act or by other rescissions that could be instituted by Congress.	State funds will be used if Federal funds are unavailable for the project.
State Funds	Assumes sufficient State funds available to complete the project. Wisconsin relies on fuel taxes and vehicle registration fees for transportation revenues. These two sources represent 89% of expected State Transportation Fund revenues in the next two SFYs.	WISDOT continues to note the importance of this project in its biennial budget requests.	2015 Wisconsin Act 55 (Wisconsin' biennial budget for 2015-17) provides sufficient funding for the Major Highway Development Program and the I-39/90 USH12 to Illinois Project.

Financing Issues

WISDOT has employed bond funds in the financing of transportation projects in Wisconsin since the early 1980s. Expertise for entering and selling bonds on the market is provided by the Wisconsin Department of Administration, Capital Finance Office. After consultation with WisDOT on size, structure and timing of bond proceeds, the Capital Finance Office will aggregate requests from all State Agencies into semiannual State of Wisconsin bond sales.

Bond proceeds were first placed on the I-39/90 project in July 2011. The average True Interest Costs of the TRBs sold since 2011 has been 3.49%.

In addition to interest costs, WisDOT is also assessed a fee for services rendered by Capital Finance of one point on par. For example, the last bond sale was valued at $330.0 M. The Capital Finance assessment was $300,000.

The estimated total financing costs the I-39/90 project are $264.0 M based on current schedule and anticipated revenue stream.

Additionally, 2015 Wisconsin Act 55 specified that if the amount approved for use in 2016-17 is reduced due to additional revenue in 2015-16, the major's program will reduce the level of Contingent General Obligation bonds and increase the State Funds, in an equal amount, applied to this plan.

WisDOT expects to have sufficient revenue available to complete the reconstruction of the I-39/90 USH12 to Illinois Project in Dane and Rock Counties. The I-39/90 project is funded through WisDOT's Majors Program. With each State Biennial Budget the Wisconsin Legislature establishes funding levels per SFY for the Majors program. After the Legislature sets total program level, WisDOT allocates budgets and expenditure schedules to projects within the Majors Program.

The data in **Figures 6.1, 6.2**, and **6.3** are based on the current allocation to the I-39/90 project. This assumes the Majors Program will maintain the current funding level with increases to maintain purchasing power in future years. If future budgets do not provide the Majors Program increased funding to accommodate purchasing power, delays to the I-39/90 project are possible.

Figure 6.1 presents the anticipated sources and uses of project funds for the reconstruction of the I-39/90 USH12 to Illinois Project including any State, Federal, and State Bond funding already approved for the project.

Figure 6.1: Anticipated Uses and Sources of Funds for the I 39/90 Project

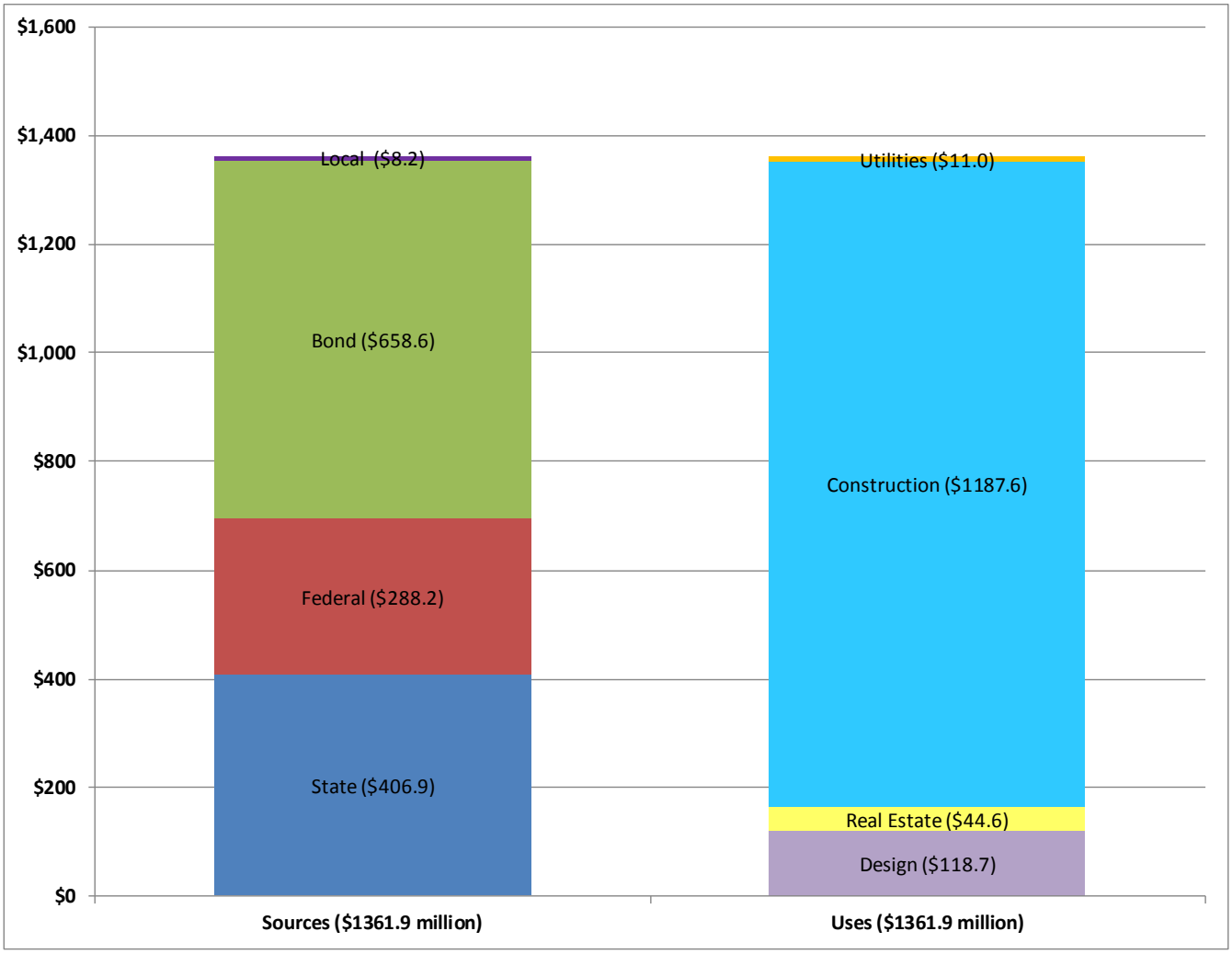
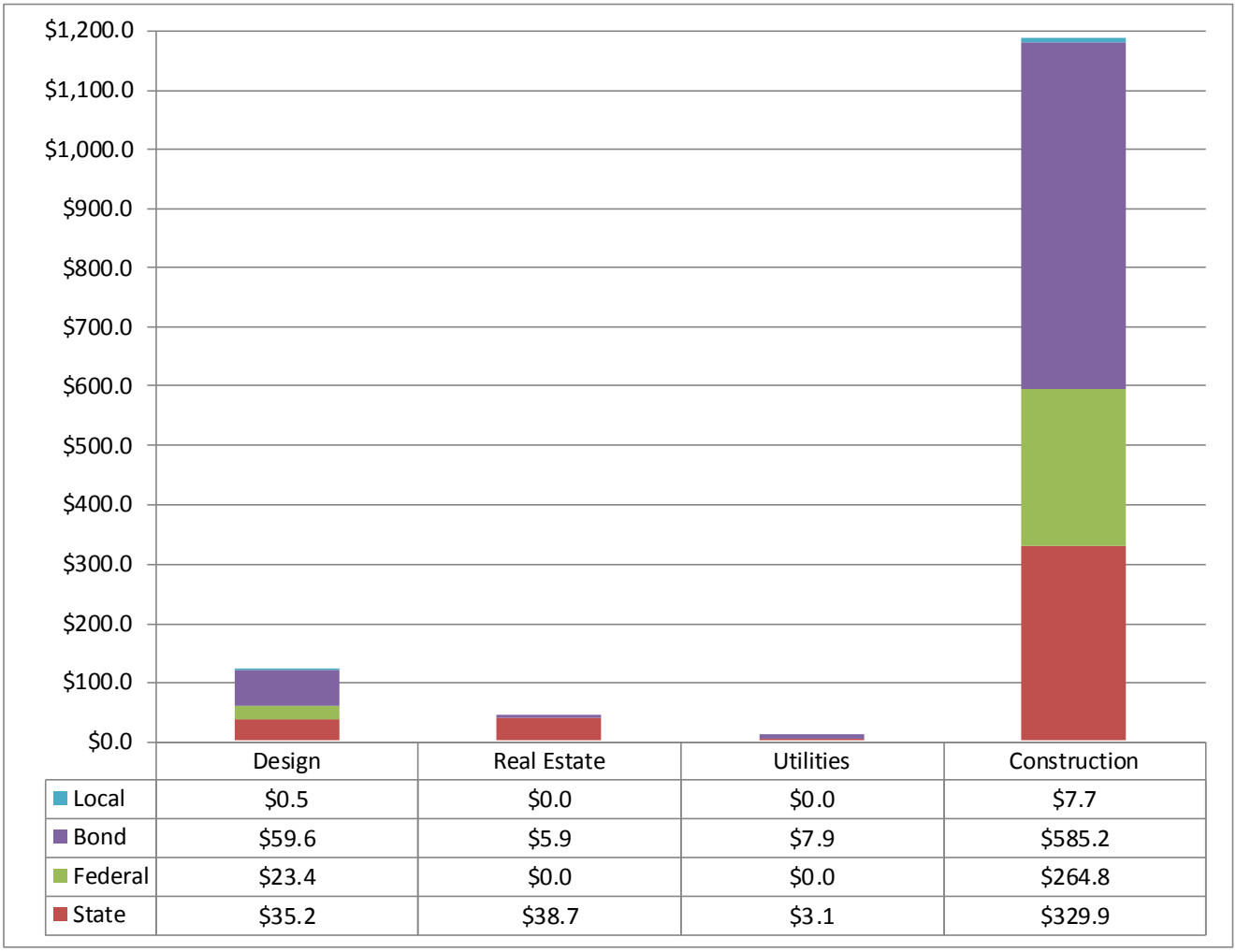


Figure 6.2 identifies the anticipated funding for the I-39/90 USH12 to Illinois Project by type of work, as well as a projection regarding the source of funds for the work identified.

Figure 6.2: Anticipated Funding by Federal Group Category



	Design	Real Estate	Utilities	Construction
Local	$0.5	$0.0	$0.0	$7.7
Bond	$59.6	$5.9	$7.9	$585.2
Federal	$23.4	$0.0	$0.0	$264.8
State	$35.2	$38.7	$3.1	$329.9

Figure 6.3 presents the cash flow estimate by SFY based on when contracts will be encumbered for the work as scheduled. The Department funds a number of highway projects through the Major Highway Development Program in addition to the I-39/90 Project. As a result, any unused funds in the I-39/90 Project in a given year would not be carried over into the next fiscal year but would be available for other projects within the Majors Program.

Figure 6.3 Cash Flow Estimate by SFY										
	Prior to SFY2016	SFY 2016	SFY 2017	SFY 2018	SFY 2019	SFY 2020	SFY 2021	SFY 2022	SFY 2023	TOTAL
State Funds	$90.4	$12.6	$44.6	$68.2	$58.7	$43.3	$79.1	$5.0	$5.0	$406.9
Federal Funds	$23.0	$9.8	$37.1	$51.0	$48.9	$42.8	$67.6	$4.0	$4.0	$288.2
Bond Funds	$59.0	$170.7	$47.1	$84.7	$84.3	$56.7	$143.6	$6.5	$6.0	$658.6
Local Funds	$8.0	$0.0	$0.0	$0.2	$0.0	$0.0	$0.0	$0.0	$0.0	$8.2
Total Resources	**$180.4**	**$193.1**	**$128.8**	**$204.1**	**$191.9**	**$142.8**	**$290.3**	**$15.5**	**$15.0**	**$1,361.9**
Estimated Costs	**$180.4**	**$193.1**	**$128.8**	**$204.1**	**$191.9**	**$142.8**	**$290.3**	**$15.5**	**$15.0**	**$1,361.9**

Notes:

- ◊ Total Paid to Date as of June 30, 2016 is $210.0 M.
- ◊ Federal funds have been expended on minor ITS and other incidental work on the I-39/90 project.

At this time the Wisconsin Department of Transportation does not have legislative authority to enter into a public private partnership, nor does the Wisconsin Department of Transportation have the legislative authority to toll any roadways. The Department has acknowledged, through the work of the Wisconsin Transportation Finance and Policy Commission, that finances over the next ten years will be problematic.

The 2015-2017 Biennial Budget provided the Department $1.0 M to study methods to improve the solvency of the State Transportation Fund. As part of that effort, the Department is currently conducting a study to examine the feasibility of instituting tolls on all or portions of the Interstate Highway system in Wisconsin. The results of the study are due to the State Legislature in January 2017. Implementation of tolling would still require action by the State Legislature and approval by the Federal Government.

Issue Management Procedures

The I-39/90 project has a Project Management Plan with the last update approved on October 28, 2015 and anticipated approval of the revised plan in Fall 2016. Chapter six of the plan documents issues and risk management. The process starts with issue identification. Issues are clearly defined as to what the issues are and who or what the issues affect. This leads to the Issue Management Process, where issues are discussed at monthly segment progress meetings. The I-39/90 Corridor Team uses an issue log to actively manage project issues.

The issues log is a communication tool maintained in the software, Primavera Contract Management, by the program and project controls team. The issue log is updated as information on existing or new issues arise. Each issue is assigned to the appropriate staff member. Project Managers are responsible for the review and discussions regarding the issue log for their respective segment. The corridor issues log is updated at the weekly Mega Management Team (MMT) meeting. Once an issue is brought to the MMT, the team decides if the issue needs more investigation or agrees on a clear resolution. If more investigation is needed, the issue is brought back to the MMT until a clear resolution is agreed upon. Once an issue is resolved the corridor management team should be updated and notified of the resolution at the monthly meeting.

Risk Management Process

In chapter six of the Project Management Plan, risk management follows the Issues section above. The risk assessment process starts with risk identification; members of the I-39/90 Corridor Team are responsible for identifying possible risks. A risk is classified as either a threat or an opportunity. Risk identification is the first step in risk management. The risk management process uses the risk register as a tool to help monitor the status of the risk, implement risk response plans when necessary, and document decisions. Once a risk is identified, an individual risk assessment of the risk is completed. This identifies the anticipated level of risk. The risk response is the process of defining how to minimize the potentially adverse effect of the risk or how to enhance the positive effect of an opportunity. The corridor risks are managed as part of the risk monitoring process. A risk workshop was held on October 31, 2014 for the December 2014 CER. The risk register is maintained and updated during the life of the project.

WisDOT contracts with outside technical experts to provide input on construction estimates. Major areas of cost-risk identified were escalation in material and fuel costs; using higher unit prices for specific items in the cost estimate mitigated these risks. The template is used by designers on the project and is updated on a biannual basis.

The I-39/90 corridor project has been identified as a Project of Division Interest (PoDI) by the FHWA. The focus of being a PoDI allows the FHWA to concentrate resources on the project phases or area that add the most value. The corridor project also had two CER's, the first in July of 2013 and the second in December of 2014. The results of the 2014 CER were amended in July 2015 to reflect project adjustments.

Value Engineering

WisDOT performs Value Engineering (VE) analyses or studies on all federal-aid funded NHS improvements with an estimated total project cost of $50.0 M or more. The VE studies provide recommendations that include potential design improvements, cost savings, incorporation of new materials, construction techniques, and improvement of standards and policies.

WisDOT has performed three VE studies for the I-39/90 USH12 to Illinois Project. The first study was completed for the entire corridor, from the Illinois State Line, in Rock County to Madison, in Dane County. The other two studies were done for specific locations within the corridor.

The first VE study commenced in July 2005 with summary completion in December 2005. The scope of this study examined the needs of the I-39/90 corridor including: roadway capacity, traffic safety, design features, system preservation, movement of goods, and access to tourism.

The second VE study examined the I-39/90 and I-43 interchange. The scope of this study examined new expansion and updating to current standards. The study began in November of 2012 with the summary completed in February of 2013.

The third VE study examined the system level interchanges between STH-26 (Milton Ave.) and USH-14 (Humes Rd.) on the north side of the City of Janesville. The study workshop was done in April 2013 with the summary completion in August 2013. The scope of the study examined new expansion with the collector-distributor roads and updating to current standards.

WISDOT has an ongoing constructability review meeting log to address construction cost estimates, concepts, sequencing, traffic staging and other corridor issues. The first quarterly meeting occurred in late 2014.

FHWA Final Cost Estimate Review

In December of 2014, FHWA and WisDOT staff participated in a CER to review the updated cost and schedule estimates for the I-39/90 Reconstruction and Expansion Project. As part of this review, individual risks to the project were discussed at that meeting and listed in **Figure 8.1**, on following page. In the July, 2015 amended model and report, the risks were not adjusted, thus remain the same in both reports and models.

During the December 2014, CER all contingency's included in the base estimate were removed and replaced with cost and schedule risks that were identified, quantified, and then analyzed in a Monte Carlo simulation. Risk events were quantified by likelihood of occurrence and impact if the risk occurs. The Monte Carlo analysis selected random inputs from these distributions to determine discrete values for a given number of iterations (each iteration represents a scenario). The model runs the simulation through 10,000 iterations and ranks the results to determine the likely range of risk and uncertainty for the project (70% percentile).

Figure 8.1: I 39/90 USH12 to Illinois Project Most Significant Probable Cost Impact Risks

Category	Risk	Description	Mitigation	Most Likely Impact
Design	No significant risks are currently identified			$ 0.0
Real Estate	ROW Litigation	Additional ROW litigation costs over and above what is included in the base estimate.	Monitor litigation costs as they occur.	$ 5.0
Utilities	Less Utility Work	Less Utility Work is necessary than what is in the base estimate.	Continue to monitor as design completes.	($ 2.0)
Construction	Pavement	Mainline and bridges deteriorate sooner than expected, causing need to perform repairs, patching or over-lay on roads for counter directional traffic.	Continue to monitor and address as necessary.	$ 3.0
		Add full depth concrete shoulders throughout the mainline.		$ 7.5
	Soil and Geo-technical Risks	Encounter unexpected subsurface conditions or poor soils.	Monitor need for additional EBS and evaluate the need for additional soil borings if significant amounts of EBS are needed.	$ 7.5
		Use pile load test program to opti-mize foundation design and minimize pile lengths at I-43 Interchange.	Schedule pile load testing	($ 2.0)
	Structure Related Risks	Improvements to existing structures may be needed with the temporary widening projects.	Monitor needs	$ 2.0
		Add polymer overlays to bridges post construction		$15.0
	General Corridor Construction Risks	Additional landscaping/snow fence may be needed.	Continue to monitor and mitigate these risks as they occur.	$ 3.0
		Additional traffic control may be needed.		$ 4.5
				$43.5

Schedule for Future Annual Updates

Records for the I-39/90 USH12 to Illinois Project are kept on a SFY basis. The SFY begins July 1st and ends June 30th, while the Federal Fiscal Year begins October 1st and ends September 30th. The next annual update to this Financial Plan will be submitted by September 30th, 2017, with information as of June 30th, 2017.

Summary of Cost and Funding Changes Since Last Year's Financial Plan

In future annual updates, this section will include:

- ◊ An explanation of the change in total cost or funding from last year's Financial Plan
- ◊ Actions taken to monitor and control cost growth

Cost and Funding Trends Since Initial Financial Plan

In future annual updates, this section will include:

◊ Trends impacting project schedule

Summary of Schedule Changes Since Last Year's Financial Plan

In future annual updates, this section will include:

- ◊ An explanation of the changes in the estimated completion date from last year's Financial Plan
- ◊ Actions taken to monitor and control schedule growth

Schedule Trends Since Initial Financial Plan

In future annual updates, this section will include:

◊ Trends impacting project schedule

BIC	Beltline Interchange
BSHP	Bureau of State Highway Programs
CTH	County Trunk Highway
CY	Calendar Year
EA	Environmental Assessment
EIS	Environmental Impact Statement
FAST	Fixing America's Surface Transportation
FFY	Federal Fiscal Year
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact
GO	General Obligation
I-	Interstate Highway
ITS	Intelligent Transportation Systems
MAP-21	Moving Ahead for Progress in the 21st Century
MMT	Mega Management Team
MPO	Metropolitan Planning Organization
NEPA	National Environmental Protection Act
NHS	National Highway System
NOI	Net Operating Income
OCIP	Owner Controlled Insurance Program
PoDI	Project of Division Interest
PS&E	Plans, Specifications, & Estimates
ROD	Record of Decision
ROW	Right of Way
SFY	State Fiscal Year
STIP	Statewide Transportation Improvement Program
STH	State Trunk Highway
TIP	Transportation Improvement Program
TPC	Transportation Projects Commission
TRB	Transportation Revenue Bonds
USH	United States Highway
WisDOT	Wisconsin Department of Transportation
YOE	Year of Expenditure

39/90
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