

Section 1 – I-80/I-99 Interchanges Project

1.1 Introduction

The Centre County Long Range Transportation Plan (LRTP) 2044 adopted on September 22, 2015 included three projects in Chapter X listed under a special category entitled “Projects for Future Consideration”. The projects in this category are high-priority, high-cost projects that fall outside the limits of the fiscally constrained project list in the Plan. However, this designation is used to reflect the CCMPO’s high priority for advancing the project when fiscal resources become available.

One of the projects is the I-80/I-99 Interchanges project, which includes the construction of a new I-80/I-99 High Speed Interchange, a new I-80/Route 26 Local Access Interchange, and completion of the Route 26 (Jacksonville Road) Betterment between the two interchanges. Together, the three improvements will replace the existing I-80 Exit 161 (Bellefonte) Interchange.

In June 2018, the U.S. Department of Transportation awarded \$35.1 million to PennDOT from the federal Infrastructure for Rebuilding America (INFRA) discretionary grant program for the “I-80 and I-99 Interstate Connection”, which is comprised of the three projects listed above. The CCMPO was subsequently informed that PennDOT is committing the remaining funding needed for the High Speed and Local Access Interchanges from discretionary sources of federal and state funds (commonly referred to in Pennsylvania as “spike” funding). Funding for the two new interchanges will be included on PennDOT’s 2019-2022 Interstate Management TIP and the Commonwealth of Pennsylvania’s Twelve Year Transportation Program. The CCMPO previously committed funding from the 2019–2022 Centre County TIP for the Route 26 (Jacksonville Road) Betterment project.

The purpose of this LRTP update is to include the funding package for I-80/I-99 Interchanges project in the Centre County LRTP 2044.

1.2 I-80 and I-99 Interstate Connection Project

PennDOT is developing the I-80/I-99 Interchanges project to replace the functionally obsolete I-80 Exit 161 (Bellefonte) Interchange located in Marion and Spring Townships, 2 miles north of the Borough of Bellefonte.

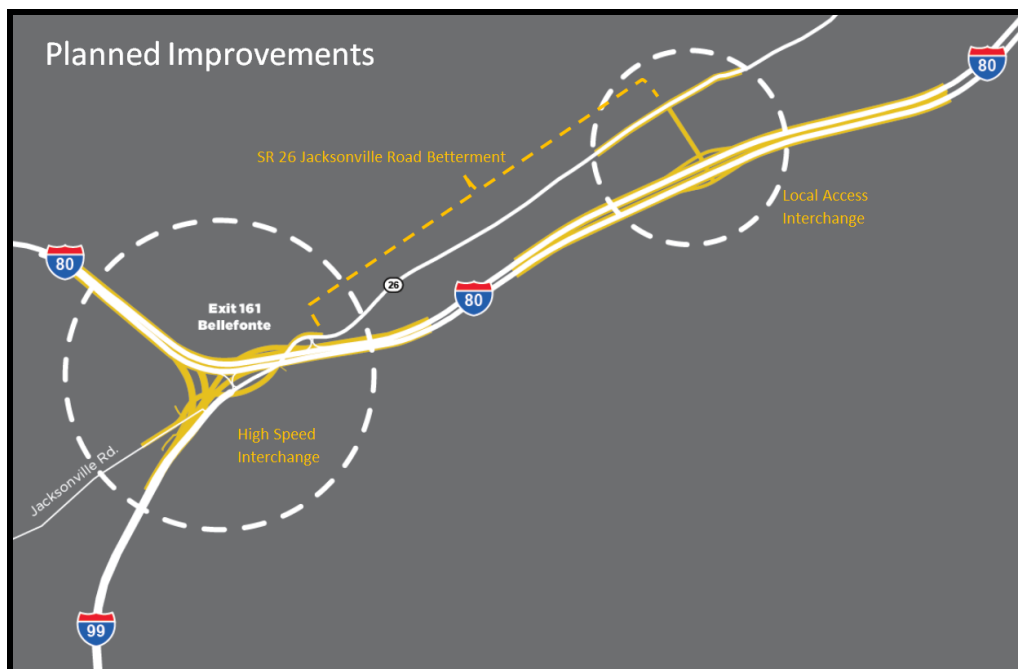
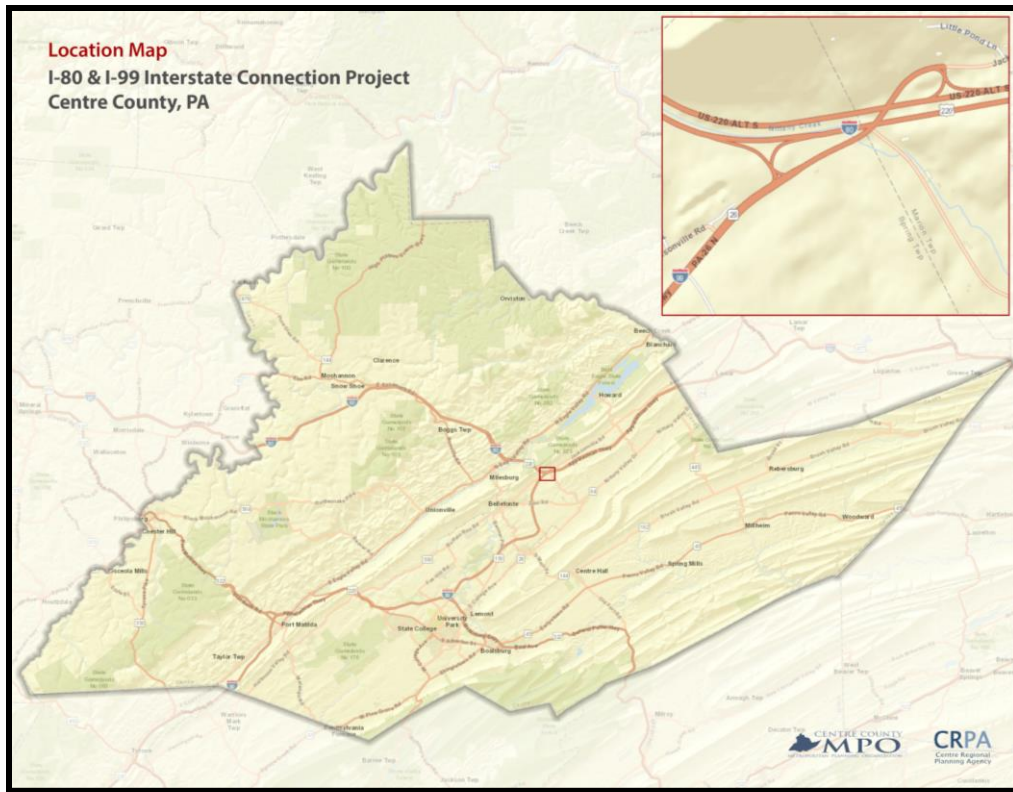
PennDOT initiated preliminary design work on the two new interchanges in 1999. Environmental clearance was obtained for the I-80/Route 26 Local Access Interchange in 2001, and for the I-80/I-99 High Speed Interchange in 2002. Right of way was subsequently acquired for the two interchanges. However, final design work on the project was stopped in 2004 because of a lack of funding statewide to complete large scale, high-cost projects of this type, and the project has been inactive since that time.

With the allocation of INFRA and other federal and state funds, PennDOT is now able to address the safety, congestion, traffic operations and freight traffic flow challenges facing the existing Exit 161 Interchange, by constructing the following improvements:

- I-80/Route 26 Local Access Interchange – new diamond-type interchange to maintain access between I-80 and Route 26, near Shay Lane 2.5 miles north of existing Exit 161.
- I-80/I-99 High Speed Interchange – new high-speed interchange providing free-flow, direct connections between I-80 and I-99, at the location of the existing Exit 161. No local access will be provided at this location.

- Route 26 (Jacksonville Road) Betterment – Reconstruction and minor widening of Route 26 between the two new interchanges

A Location Map of the project area, and an illustration of the planned improvements are provided below.



Source: I-80 and I-99 Interstate Connection INFRA grant application

1.3 Fiscal Constraint

PennDOT’s commitment of funding to reactivate and complete the project now allows the project to be transferred from the “Projects for Future Consideration” category of the LRTP 2044 to the Highway and ITS Project List in the Plan.

The table below provides details about discretionary funding committed for the I-80/I-99 Interchanges project.

<i>Estimated Funding Allocation for I-80/I-99 Interchanges Project</i>			
Funding Source	Funding for Projects in 2019-2022	Funding for Projects in 2023-2026	Total Funding 2019-2026
NHPP	\$11,745,000	\$7,188,000	\$18,933,000
Appalachian (APD) Funds	\$30,000,000	\$80,000,000	\$110,000,000
SXF (INFRA Grant)	\$35,110,000	\$0	\$35,110,000
STP	\$1,499,000	\$1,404,000	\$2,903,000
State 581	\$12,132,470	\$1,295,769	\$13,428,239
		Total Project Funding	\$180,374,239
Notes and Assumptions:			
1) In June 2018, PennDOT received a Federal INFRA grant totaling \$35,110,000, which is classified as SXF funding.			
2) PennDOT has committed to funding in the total of \$137,838,000 from the Statewide Interstate Management Transportation Improvement Program (TIP), which will be a combination of state and federal funding from the following sources: Appalachian (APD) funds, National Highway Performance Program (NHPP) funds and State 581 funds			
3) The Centre County Metropolitan Planning Organization (CCMPO) has committed base TIP allocation NHPP and Surface Transportation Program(STP) funds totalling \$7,426,239 to pay for the SR 26 Jacksonville Road Betterment			

1.4 Transportation Project List

The funding timeframes for LRTP projects are divided into five time periods: 2015-2018, 2019-2022, 2023-2026, 2027-2034, and 2035-2044. The new projects and associated funding are now included in the 2019-2022 and 2023-2026 time periods of the Highway and ITS Project List. Funding for the I-80/I-99 Interchanges project is illustrated by project phase in the following table.

Fiscal Constraint Analysis for I-80/I-99 Interchange Projects

Funding Source	Amount
State & Federal Discretionary	\$137,838,000
INFRA Grant	\$35,110,000
MPO TIP Base Allocation	\$7,426,239
TOTAL PROJECT COST	\$180,374,239

MPMS	Project Name	Description	Phase					Estimated Cost
			Preliminary Engineering	Final Design	Utilities	Right of Way	Construction	
2019-2022 Funding Allocation								
3142	I-80/I-99 Section B18 High Speed Interchange	New high-speed interchange providing free-flow, direct connections between I-80 and I-99, at the location of the existing Exit 161. No local access will be provided at this location.		\$1,500,000	\$100,000	\$250,000	\$40,000,000	\$41,850,000
51466	I-80/Route 26 Local Access Interchange	New diamond-type interchange to maintain access between I-80 and Route 26, near Shay Lane 2.5 miles north of existing Exit 161.		\$500,000	\$100,000	\$200,000	\$43,110,000	\$43,910,000
85965	Route 26 Jacksonville Rd. Betterment	Reconstruction and minor widening of Route 26 between the two new interchanges.	\$297,500		\$75,000	\$75,000	\$4,278,970	\$4,726,470
2023-2026 Funding Allocation								
3142	I-80/I-99 Section B18 High Speed Interchange	New high-speed interchange providing free-flow, direct connections between I-80 and I-99, at the location of the existing Exit 161. No local access will be provided at this location.					\$87,188,000	\$87,188,000
85965	Route 26 Jacksonville Rd. Betterment	Reconstruction and minor widening of Route 26 between the two new interchanges.					\$2,699,769	\$2,699,769

1.5 Environmental Justice

Presidential Executive Order 12898 of 1994 declared that “each Federal agency shall make achieving environmental justice (EJ) part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.”

Because the CCMPO participates in the allocation of federal funds for transportation projects and programs, the I-80 /Route 26 Local Access Interchange and I-80/I-99 High Speed Interchange were evaluated for environmental justice considerations. Environmental justice considerations relative to the Route 26 (Jacksonville Road) Betterment component of the project were previously evaluated during development of the Draft 2019-2022 Centre County Transportation Improvement Program (TIP). In addition, the I-80 Exit 161 Interchange Safety Improvements project, which will implement short-term safety improvements at the existing Exit 161 Interchange, is also included on the Draft TIP and was evaluated for environmental justice considerations.

The I-80/I-99 High Speed Interchange and I-80/Route 26 Local Access Interchange were subsequently evaluated using the same process for the other projects in the interchange area that are on the Draft TIP. The results of the evaluation are illustrated in the following table.

**Centre County Long Range Transportation Plan (LRTP) 2044 - 2018 Update
I-80/I-99 Interchanges Project
Environmental Justice Impact Assessment**

High EJ Population	Significant Benefit Expected
Moderate EJ Population	Minor Benefit Expected
No Significant EJ Population	No Benefit or Burden Expected
	Minor Burden Expected
	Major Burden Expected

MPMS	Roadway and Bridge Projects	Municipality	EJ Pop.	Impact	Justification
3142	I-80/I-99 Section B18 High Speed Interchange	Marion Twp. Spring Twp.			Construction of new high-speed interchange providing free-flow, direction connections between I-80 and I-99 will reduce recurrent congestion and improve safety for travelers. Environmental clearance has been obtained for the project, and right of way has already been acquired. No significant EJ population.
51466	I-80/Route 26 Section A18 Local Access Interchange	Marion Twp.			Construction of new local access interchange to maintain access between I-80 and Route 26 (Jacksonville Road) will improve safety for travelers. Environmental clearance has been obtained for the project, and right of way has already been acquired. No significant EJ population. Amish population should benefit from improvement.
85965	Route 26 Jacksonville Rd. Betterment	Marion Twp.			Minor widening, shoulder improvements, and repaving will improve safety for vehicle and non-vehicular travel. No significant EJ population. Amish population should benefit from improvement.

Section 2 – Safety Performance Measures

2.1 Introduction

The federal *Moving Ahead for Progress in the 21st Century Act (MAP-21)* bill, its successor, the *Fixing America's Surface Transportation (FAST) Act*, and associated federal rulemaking require PennDOT, MPOs, Rural Planning Organizations (RPOs), and transit operators to address performance based planning in Long Range Transportation Plans and Transportation Improvement Programs. Federal regulations also require those entities to approve performance measures and performance targets for several topic areas. One of those topic areas is safety.

Federal rulemaking formally implemented safety performance measures and the establishment of targets in 2016. As required, targets for measuring safety performance were established by PennDOT in 2017. On November 28, 2017, the CCMPO voted unanimously to support the safety performance measure targets established by PennDOT.

The purpose of this section in the LRTP 2044 – 2018 Update is to ensure that the LRTP is in compliance with all federal regulations implemented since the LRTP was adopted in 2015.

2.2 Safety Performance Measures and Targets

The LRTP 2044 adopted on September 22, 2015 listed 21 performance measures in Chapter VII – Implementation Strategies and Performance Measures. Four of the performance measures addressed safety:

- Total Crashes or Crash Rate (crashes per million vehicle miles traveled)
- Total Fatalities and Fatality Rate (fatalities per million vehicle miles traveled)
- Total Serious Injuries and Serious Injury Rate (serious injuries per million vehicle miles traveled)
- Miles between Preventable Crashes [public transportation only]

The table below illustrates the safety performance measure targets established by the CCMPO in November 2017.

Centre County MPO Safety Targets			
Performance Measure	Baseline 2012- 2016	Target 2014- 2018	Actual 2014- 2018
Number of fatalities	14.6	17.2	TBD
Rate of fatalities per 100 million vehicle miles traveled (VMT)	1.08	1.24	TBD
Number of serious injuries	37.8	41.3	TBD
Rate of serious injuries per 100 million VMT	2.802	2.979	TBD
Number of non-motorized fatalities and serious injuries	6.2	9.8	TBD

Four of the five federal performance measures were originally included in LRTP 2044. One new federal performance measure is now being incorporated into the LRTP 2044 based on the CCMPO's action in 2017 to establish targets for this measure:

- Number of non-motorized fatalities and serious injuries

2.3 Actions to Implement Safety Performance Measures

The 2019-2022 Centre County TIP includes four roadway safety improvement projects that are intended to help improve the performance of the roadway system relative to the five federal safety performance measures. The four roadway improvement projects with need and purpose focused on improving safety are carryover projects from the previous 2015-2018 and 2017-2020 TIPs. The projects were initially identified as candidates in 2015 using a three-step process:

1. Using PennDOT crash data to identify locations (clusters) with a high number of crashes and fatalities.
2. Conducting an in-house review of candidate locations with District 2-0 and CCMPO staff.
3. Conducting a field view of candidate locations with Federal Highway Administration (FHWA), District 2-0, CCMPO staff, and municipal officials from the subject locations.

PennDOT and CCMPO staff then prepared recommendations for new project starts, with consideration to the estimated effectiveness of countermeasures to mitigating crashes, and to the fiscal constraints for the 2015-2018 TIP. Recommendations were presented to the CCMPO Technical and Coordinating Committees.

In November 2015, the Coordinating Committee approved the allocation of funding on the 2015-2018 TIP to complete feasibility studies or preliminary engineering for the following projects:

Project	Improvement Focus
Route 26/45 Intersection	Serious injury crashes
Route 64/550 Intersection	Serious injury crashes Fatal crashes
I-80 Exit 161 (Bellefonte) Interchange ramps	Serious injury crashes

In February 2017, as part of a process to repurpose unallocated federal earmarked funds, the CCMPO Coordinating Committee approved the allocation of funds on the 2017-2020 TIP to one additional roadway safety project that was originally evaluated in the 2015 effort:

Project	Improvement Focus
Route 26/150 Intersection	Serious injury crashes Fatal crashes

A fifth carryover roadway project on 2019-2022 TIP will address a high priority, high-crash location, the intersection of Routes 144 and 322 in the Village of Potters Mills, Potter Township. The Route 322 Potters Mills Gap project will result in the construction of a new highway on new alignment that will bypass a high volume of through traffic around the existing Route 144/322 intersection.

Three of the five projects are included on the project list in Chapter X of the LRTP 2044:

- a. Route 322 Potters Mills Mills Gap project
- b. Route 26/45 Intersection
- c. Route 64/550 Intersection

The I-80 Exit 161 Interchange ramps project is directly related to safety needs intended to be addressed in the long-term by the I-80/I-99 Interchanges project. The LRTP 2044 also includes a Safety Line Item in each of the time periods in the project list in the Plan.

All five projects are advancing through PennDOT's project development process or are under construction. No new safety improvement projects were included on the 2019-2022 TIP.

PennDOT, the CCMPO, municipalities and local stakeholders have also advanced infrastructure and programmatic efforts to address safety for nonmotorized travel. Examples include:

- Signal and crosswalk improvements to improve pedestrian safety are being incorporated into the State Route (SR) 3014 (Business Route 322 – Atherton Street) Drainage/Repaving project at the SR 3007 (Park Avenue) intersection. This location has exhibited a high number of crashes and near misses involving pedestrians and bicyclists, including one pedestrian fatality.
- Education programs and bike light giveaways sponsored by the CentreBike bicycle advocacy group.
- Elements of driver training curriculum at the State College Area School District that focuses on Pennsylvania's law requiring drivers to provide 4 ft. clearance when passing bicyclists.
- Public relations activities focused on educating residents and vehicle operators about Pennsylvania's 4 ft. bicycle passing law. Activities include posting messages on dynamic message signs in various roadway locations, and exterior advertising on CATA transit buses.

In 2018, the CCMPO will initiate a major update to LRTP 2044. The new LRTP is scheduled to be adopted in June 2020, concurrently with the adoption of the 2021-2024 TIP. A new cycle for identifying and evaluating safety improvement projects is planned to occur as part of the development of the new LRTP and 2021-2024 TIP.

2.4 Monitoring and Reporting about Safety Performance Measure Targets

The CCMPO will partner with PennDOT in monitoring safety conditions and reporting on progress being made to reach the targets established in 2017, consistent with the timeframes required in federal regulations.