

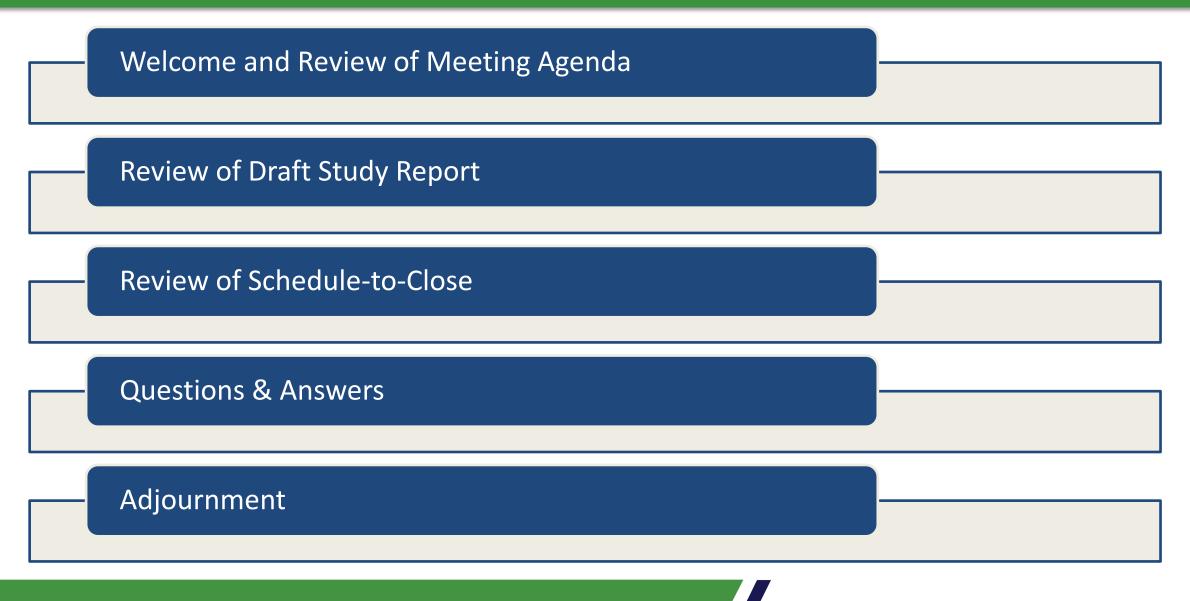
**CSVT Special Impact Study** 

**Public Officials Briefing September 13, 2021** 

# NOW WHAT?



## Today's Agenda



CSVT Special Impact Study

## Review of CSVT Study Process

### The Need for CSVT

- Improvement of regional north-south mobility and accommodation of future growth
  - Alleviate congestion
  - Areas near Northumberland were identified as one of the top truck bottlenecks in the state
- Need for a planning study of CSVT impacts has been well-recognized:
  - Muncy Area Corridor Access Management Plan (2015)
  - Muncy-Montoursville Multi-Municipal Comprehensive Plan (2017)
  - Muncy Creek Multi-Municipal Comprehensive Plan (2017)
  - US 15 South Multi-Municipal Comprehensive Plan (2017)
  - Lycoming County Comprehensive Plan Update (2018)
  - WATS Long Range Transportation Plan Update (2018)
  - SEDA-COG Long Range Transportation Plan Update (2021)

## **Study Purpose and Methodology**

What is the CSVT?

Project Overview

Study Process Study Schedule



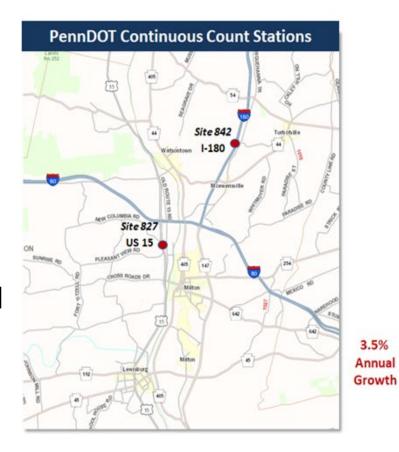


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# **Existing Conditions**

### **Traffic Demand**

- Volumes on US 15 and PA 147/I-180 historically consistent and stable
  - Higher volumes near town and urban centers
- Highest demand on US 15 near Shamokin Dam (accessing US 11, PA 61, and local destinations)



#### I-180 Average Daily Annual Traffic (AADT)

Year	Avg. Volume	Avg. Truck Volume	Truck %
2021*	13,786	3,460	25.1
2020*	13,561	3,370	24.9
2019	15,241	3,218	21.1
2018	15,024	3,049	20.3

#### US-15 Average Daily Annual Traffic (AADT)

Year	Avg. Volume	A	g. Truck Volume	Truck %
2021*	19,033		2,781	14.6
2020*	18,379			
2019	23,758		3,487	14.7
2018	23,067	28%	3,263	14.1
2017	21,200	Annual -	2,181	10.3
2016	20,503	Growth	1,595	7.8
2015	20,803		1,634	7.9

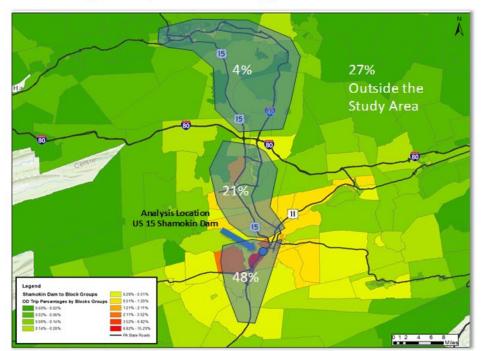
Annual -

**Statewide Truck VMT has** grown by just over 5% in the same time period

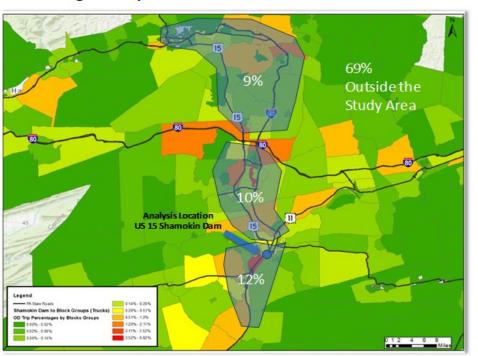
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## **Traffic Demand – Origins and Destinations**

#### Percentage of Trip Ends - Passenger Cars



#### Percentage of Trip Ends - Commercial Trucks

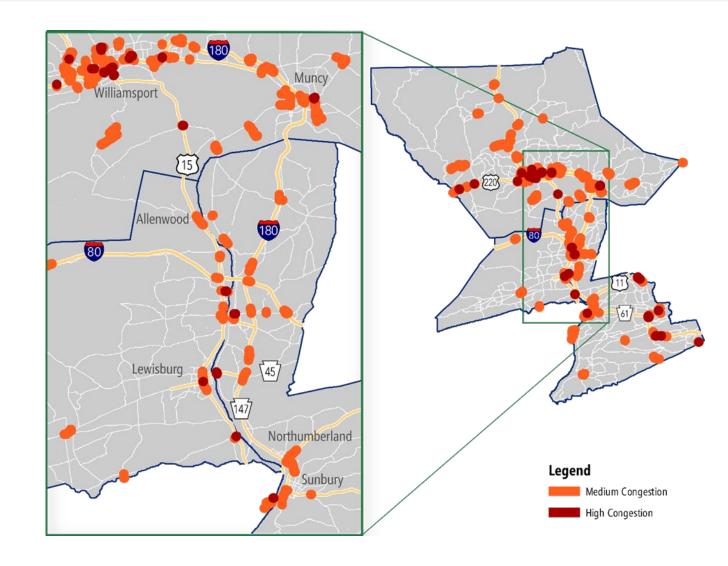


	Trip Origins or Destinations for Travelers on US 15 in Shamokin Dam			
Vehicle Type	Local to Shamokin Dam	Other Areas Along US 15 / I-180 Corridor	Outside Study Area	
Passenger Cars	48%	25%	27%	
Trucks	12%	19%	69%	

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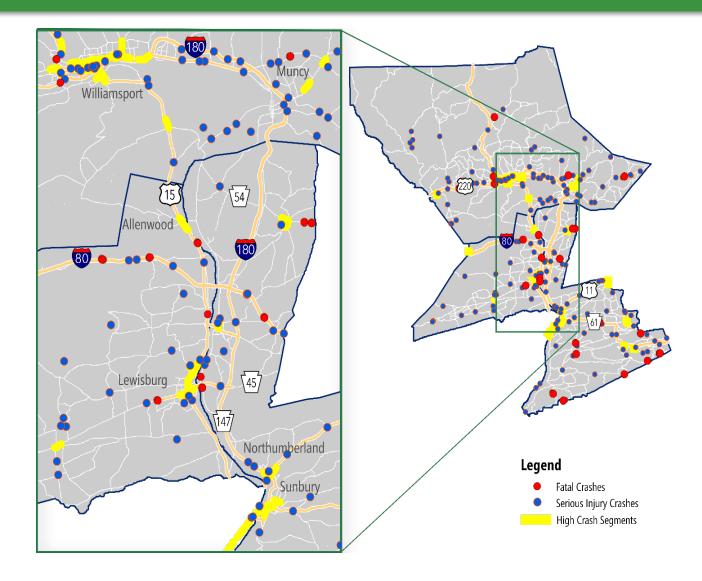
## **Traffic Congestion**

- Comparison of AM/PM peak period travel times to off-peak times (e.g., nighttime)
- Key congestion hotspots include:
  - US 15 in Shamokin Dam
  - US 15 in Lewisburg
  - US 15 in Allenwood (PA 44 Intersection)
  - PA 147 in Sunbury
- Fridays experience most traffic delay



## Highway Safety – Baseline Conditions

- High crash segments identified include:
  - US 15 in Shamokin Dam, Lewisburg, and East Lewisburg
  - US 15 in Allenwood (PA 44 Intersection)
  - US 15 in South Williamsport
  - US 15 near PA 54 Intersection
  - PA 147 in Northumberland
  - PA 54 near Turbotville



## **Highway Safety – Areas Most Prone to Safety Impacts**

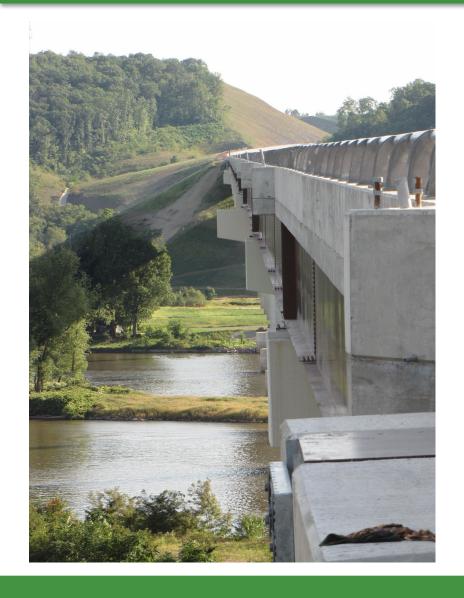




Terminals with Total 5-Year Crashes > 5					
Rank	Interchange	Intersecting Road	Terminal	# of Crashes	
1	US 15/Market Street/Lewisburg	Market Street	I-180 EB & WB Ramps	24	
2	Faxon	Northway Road	I-180 WB Off-Ramp	14	
T-3	Warrensville Road/Third Street	Third Street	I-180 EB Ramps	11	
T-3	Warrensville Road/Third Street	Third Street	I-180 WB Ramps (Third St)	11	
5	PA 87 N/Loyalsock Avenue	Loyalsock Avenue	I-180 EB Ramps	8	
T-6	Watsontown/McEwensville	Susquehanna Trail	I-180 EB Ramps	5	
T-6	Lycoming Mall Road	Lycoming Mall Road	I-180 EB Ramps	5	
T-6	Lycoming Mall Road	Lycoming Mall Road	I-180 WB Ramps	5	
T-6	Faxon	Northway Road	I-180 EB Ramps	5	
	Ran	nps with Total 5-Year Cras	nes > 5		
Rank	Interchange		Ramp	#of Crashes	
1	Faxon	I-180 WB On-Ramp from Northway Road		6	
T-2	I-180/Bellefonte/Bloomsburg	I-80 EB CD-1		3	
T-2	I-180/Bellefonte/Bloomsburg	I-80 WB CD-5		3	
	Speed Change Lanes (SCL) with Total 5-Year Crashes > 5				
Rank	Interchange	Spe	eed Change Lane	# of Crashes	
1	Basin Street	I-180 WB Off-Ramp		9	
2	I-80/Bellefonte/Bloomsburg	I-80 EB CD to I-80 EB		8	
3	Faxon	I-180 WB On-Ramp	I-180 WB On-Ramp		
T-4	I-80/Bellefonte/Bloomsburg	I-80 WB to I-80 WB CD		5	
T-4	Lycoming Mall Road	I-180 EB On-Ramp	I-180 EB On-Ramp		

# Planning For The Future

## **Planning for the Future**



Land Use & Growth Allocations

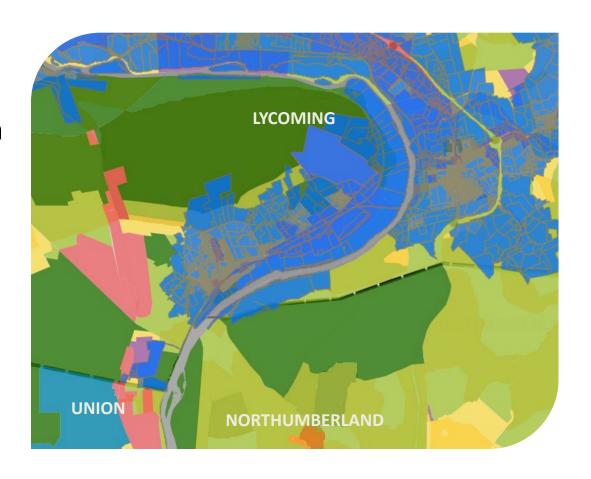
Regional "Build Out" Scenario

Traffic Modeling

Highway
Safety
Opportunities

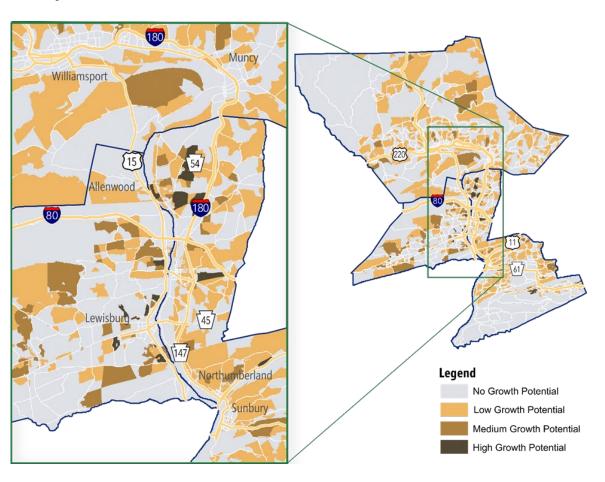
## Land Use and Growth Allocation

- Population and employment growth forecasts
- Proposed/contemplated developments within the study corridor (78)
- Local level insights and proposed infrastructure improvements
- Completion of CSVT-influenced land use projections near I-180 interchanges

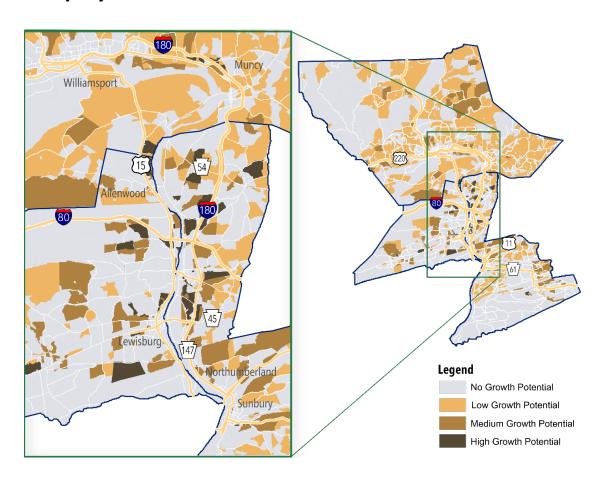


## Regional "Build-Out" Scenario

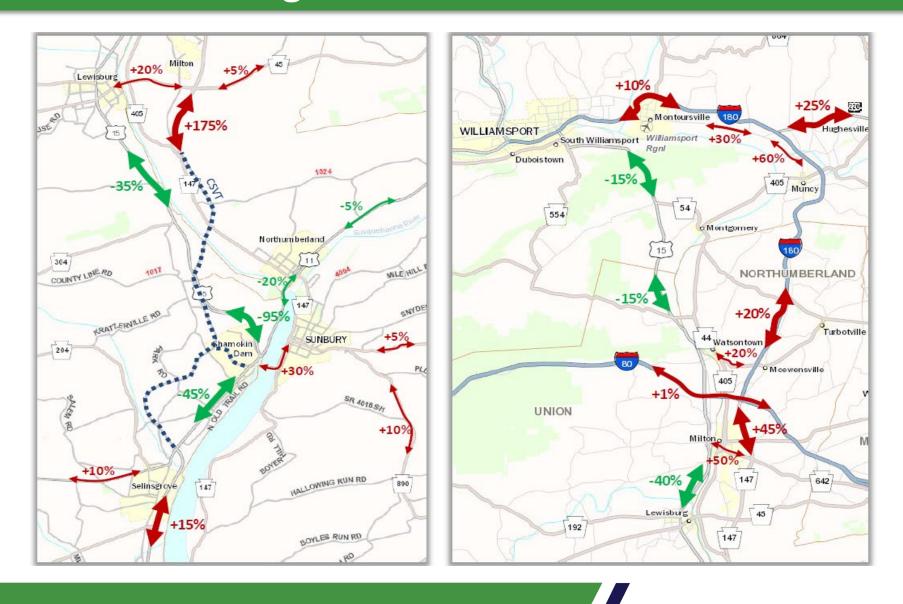
#### **Population Growth Potential**



#### **Employment Growth Potential**



## **Traffic Modeling: Volumes and Levels of Diversion**



## **Highway Safety Opportunities**

Feature Type	Interchange	Feature Description
Terminal	US 15/Market Street/Lewisburg	I-180 EB & WB Ramps
Speed Change Lane	Basin Street	I-180 WB Off-Ramp
Terminal	Warrensville Road/Third Street	I-180 WB Ramps (Third St)
Ramp	Faxon	I-180 WB On-Ramp from Northway Road
Speed Change Lane	I-80/Bellefonte/Bloomsburg	I-80 WB to I-80 WB CD
Speed Change Lane	Lycoming Mall Road	I-180 EB On-Ramp
Speed Change Lane	I-80/Bellefonte/Bloomsburg	I-80 EB CD to I-80 EB
Speed Change Lane	Faxon	I-180 WB On-Ramp

- Analysis of locations using AASHTO and PennDOT guidance to understand interchange features that are experiencing higher than expected crashes
- Ranked based on greatest opportunity for a return on investment (greatest to least excess crash cost)

## Implementation and Next Steps

## What is the Implementation Plan?

- A framework for the MPOs, PennDOT, and stakeholders in what needs to be accomplished to prepare for CSVT's impacts
- Includes essential step of monitoring conditions when CSVT opens to traffic and addressing the uncertain impacts
  - Encourages local government stakeholders and the public to assist
- Requires regular and routine stakeholder participation and involvement
  - Creates a new task force that will meet regularly to administer the study report implementation
  - Will serve as liaison to the MPOs and PennDOT

## **Implementation Plan Elements**

#### **Plan Structure**

- Recommendation Identifier and Name
- Description
- Lead Entity
- Estimated Cost Planning Level/Order of Magnitude
- Timeframe for Implementation

#### **Additional Details**

- Issues and Concerns
- PennDOT Notes (Traffic Safety and Traffic Operations)
- Implementation Steps and Considerations
  - Support Partners, Potential Funding Sources

Recommendation Description	Lead Entity	Estimated Cost	Timeframe
TS-1 Pavement Markings – Entire I-180/PA 147 Update pavement markings at exit and entrance ramps and gores to meet current PennDOT and MUTCD Standards. Add painted chevrons in selected gore areas.	PennDOT	\$	2 years

- **Issues/Concerns:** Excess crashes per HSM analyses have been identified at <u>a number of</u> entrance and exit ramps and along speed change lanes in the existing condition: specifically, at Interchanges 26, 17 and at the I-80 Interchange. Additional traffic on this corridor and motorists unfamiliar with the area <u>as a result of</u> the CSVT project will benefit from positive guidance provided by updated pavement markings at all interchanges.
- Recommendation Details: Increase width of solid white edge and lane lines at gores of entrance and exit ramps to 8" in keeping with PennDOT standards depicted in PennDOT Publication 111. Similarly, upgrade all auxiliary lane pavement markings along merge lanes and along auxiliary lanes to meet Pub. 111 details (8" skips). Add or revise gore stripes at interchanges that have experienced excess crashes (26, 17, and I-80 interchange) to meet MUTCD requirements for chevron shape and orientation. This will encourage motorists to align with and stay in acceleration lanes prior to merging.
- Implementation:
  - Considerations: Upgrades to interchanges that have experienced excess crashes should occur in the near term. Updating of entire corridor should occur concurrent
    with or prior to the implementation of the CSVT project.
  - Support Partners: PennDOT
  - o Potential Funding Sources: Maintenance budget, concurrent with annual (bi-annual?) striping maintenance or concurrent with resurfacing projects.
- PennDOT Notes:
  - Existing gores appear to be 8" lines as per Pub 111. Gore areas could benefit from adding 'Chevron' small paint pavement marking configuration. However, a review of MUTCD requirements indicate that some of the wider paint lines and painted chevrons in the neutral gore area are optional.
  - Unless there is prominent crash pattern at a particular location, markings will be reviewed for upgrades during future resurfacing and reconstruction projects and the cost funded by those projects. As such, TO-1 could be removed from this report.

## **Study Recommendations**

Traffic Safety (TS)

Traffic
Operations
(TO)

Transportation Enhancements (TE)

Land Use (LU)

Economic
Development
(ED)

Planning and Administration (PA)

## **Traffic Safety**

TS-1	Pavement Markings – Entire I-180/PA 147 Corridor
TS-2	Signing at I-80/I-180/PA 147 Interchange
TS-3	Susquehanna Trail Interchange Countermeasures (Exit 1/I-180)
TS-4	Warrensville Road/3 <sup>rd</sup> Street Interchange (Exit 23/I-180)
TS-5	Westbound On-Ramp at Faxon Interchange (Exit 25/I-180)
TS-6	Westbound Off-Ramp Speed Change Lanes at Basin St. Interchange (Exit 26/I-180)
TS-7	US 15 South/Market St. Interchange (Exit 27A/I-180)

## **Traffic Operations**

TO-1	Regional Wayfinding Signage for Trucks
TO-2	Wayfinding Signage for Regional Travelers
TO-3	US 15 Traffic Signal Re-timing
TO-4	Intersection Improvements near PA 45/CSVT Interchange
TO-5	Intersection and Capacity Enhancements on Industrial Park Road
TO-6	Intersection Improvements and Timing Updates near PA 642/CSVT Interchange
TO-7	Intersection Improvements at PA 54/Susquehanna Trail Intersection
TO-8	Intersection Improvements at PA 405

## **Traffic Operations (cont'd.)**

TO-9	Improvements on Lycoming Mall Drive and Lycoming Mall Road
TO-10	US 220 Improvements
TO-11	CSVT Emergency Access
TO-12	Traffic Signal Upgrade and Replacement
TO-13	Address Increasing Truck Travel In Communities Throughout Study Area
TO-14	Support Transportation Improvements to Improve Pedestrian and Vehicular Circulation

## **Transportation Enhancements**

TE-1	Shamokin Dam Bicycle and Pedestrian Improvements	
TE-2	Market Street Corridor Improvements	
TE-3	Support Existing Transit Demonstration Projects and Reevaluate Fixed Route Service	

## **Land Use**

LU-1	Locations for Future Travel and Truck Rest Areas
LU-2	US 15 and US 522 Traffic Calming and Corridor Re-envisioning
LU-3	SEDA-COG CEDS Update
LU-4	County Comprehensive Plan Updates
LU-5 (A-D)	Multi-Municipal Comprehensive Planning
LU-6	Preparation of Access Management Plans and Implementation of Existing Plans/Studies
LU-7	Preparation of Corridor Master Plans
LU-8	Transfer of Development Rights Programs
LU-9	Municipal Land Use Ordinance Updates and New Ordinance Development

## **Economic Development**

ED-1	Infrastructure Expansion and Maintenance
ED-1A	Sewer Line Upgrade/Maintenance in South Williamsport and Duboistown Boroughs (Lycoming County)
ED-1B	Implementation of Eighth Street/Vincent Avenue Sewer Regionalization Project (Delaware and Lewis Townships, Northumberland County)
ED-1C	Sewer Extension in Turbot Township (Northumberland County)
ED-1D	Sewer Extension in Kelly Township (Union County)
ED-1E	Consider conducting a central water and sewer feasibility study in Union Township (Union County)
ED-1F	Conduct a feasibility study to assess upgrades to sewer pump station in West Milton
ED-1G	Support implementation of MS4 Projects

## **Economic Development**

ED-2	Redevelopment of Underutilized Properties
ED-2A	Lycoming Mall Highest and Best Use Analysis
ED-2B	City of Williamsport Economic Development Study
ED-3	Developing Connections – Sidewalks and Trails

## Planning and Administration

PA-1	Maintain CSVT Study Management Team as an Implementation Task Force
PA-2	Coordinate and Track Progress on the Implementation of Existing Studies
PA-3	Maintain the CSVT Study Project Webmap

# Project Schedule-to-Close

## **Project Schedule-to-Close**

#### **September 13**

- Public Officials Briefing 4:00pm
- Public Meeting 6:00pm

#### **November 8**

WATS MPO Presentation and Acceptance

#### **November 19**

SEDA-COG MPO Presentation and Acceptance

#### 2022

Implementation Begins



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## **Questions & Answers**



CSVT Special Impact Study

# WHAT'S NEXT!



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## Thank You!

**Public Officials Briefing September 13, 2021**