A. Elements of Good Prioritization

Asset Management Peer Exchange: Elements of Good Prioritization

Lina Chapman - Systems Evaluation and Program Development Unit Supervisor
Bradley Sharlow, AICP - Asset Management Section Manager
Bureau of Transportation Planning
Michigan Department of Transportation
July 8-9, 2023 - Boston, MA – sponsored by FHWA & AASHTO

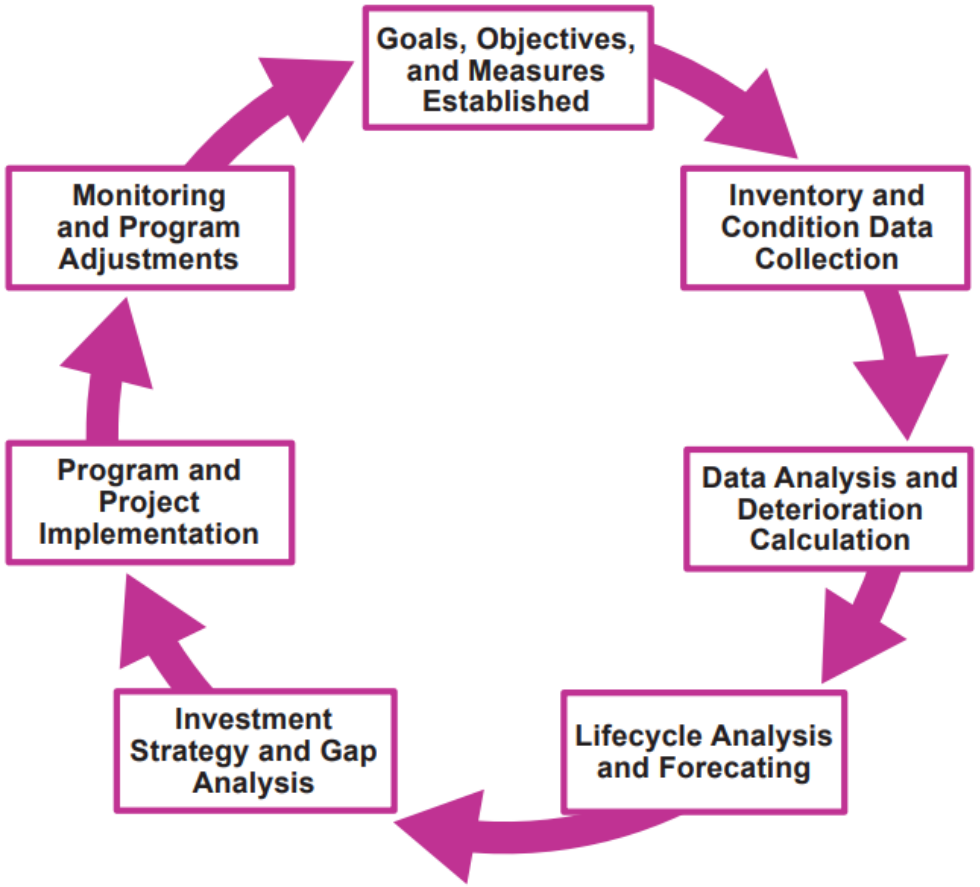
MDOT
Michigan Department of Transportation

MDOT-Owned Transportation Assets

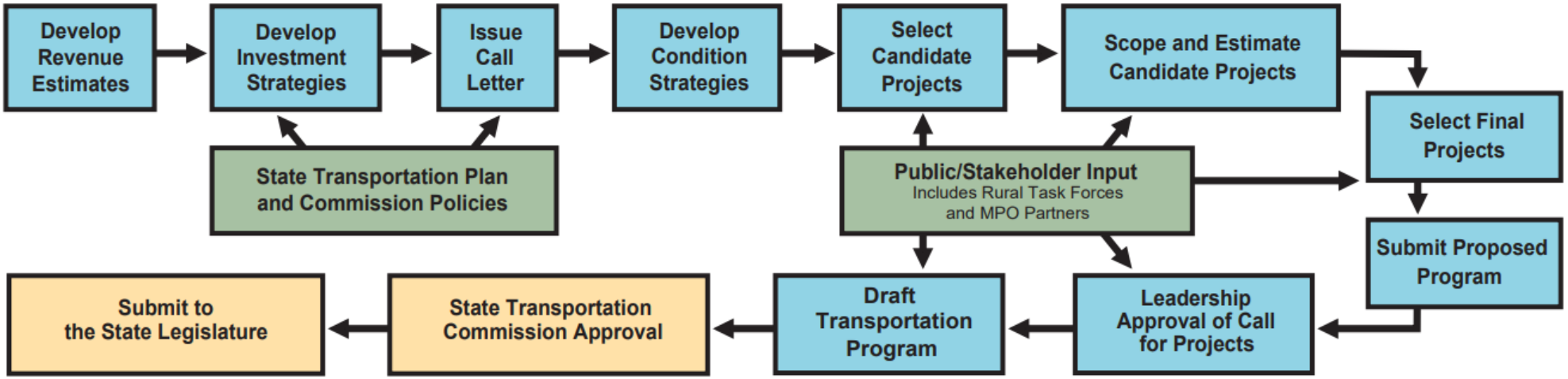
- 27,864 lane miles of pavement
- 4,492 bridges spanning 48M ft^2
- 3,200 traffic signals
- 665 miles of rail line
- 247 carpool parking lots
- 4 intercity bus terminals
- 4 airports

MDOT
Michigan Department of Transportation

MDOT's Asset Management Approach



MDOT
Michigan Department of Transportation



Highway Call for Projects (CFP)

- Internal process that defines strategic direction and funding targets for major capital programs:
  - Road, bridge, transportation systems management & operations (TSMO), roadside facilities
- Designed to ensure progress toward goals and achievement of performance targets
- Develop the annual Five-Year Transportation Program

MDOT
Michigan Department of Transportation

Target Allocation & Strategic Direction for R&R

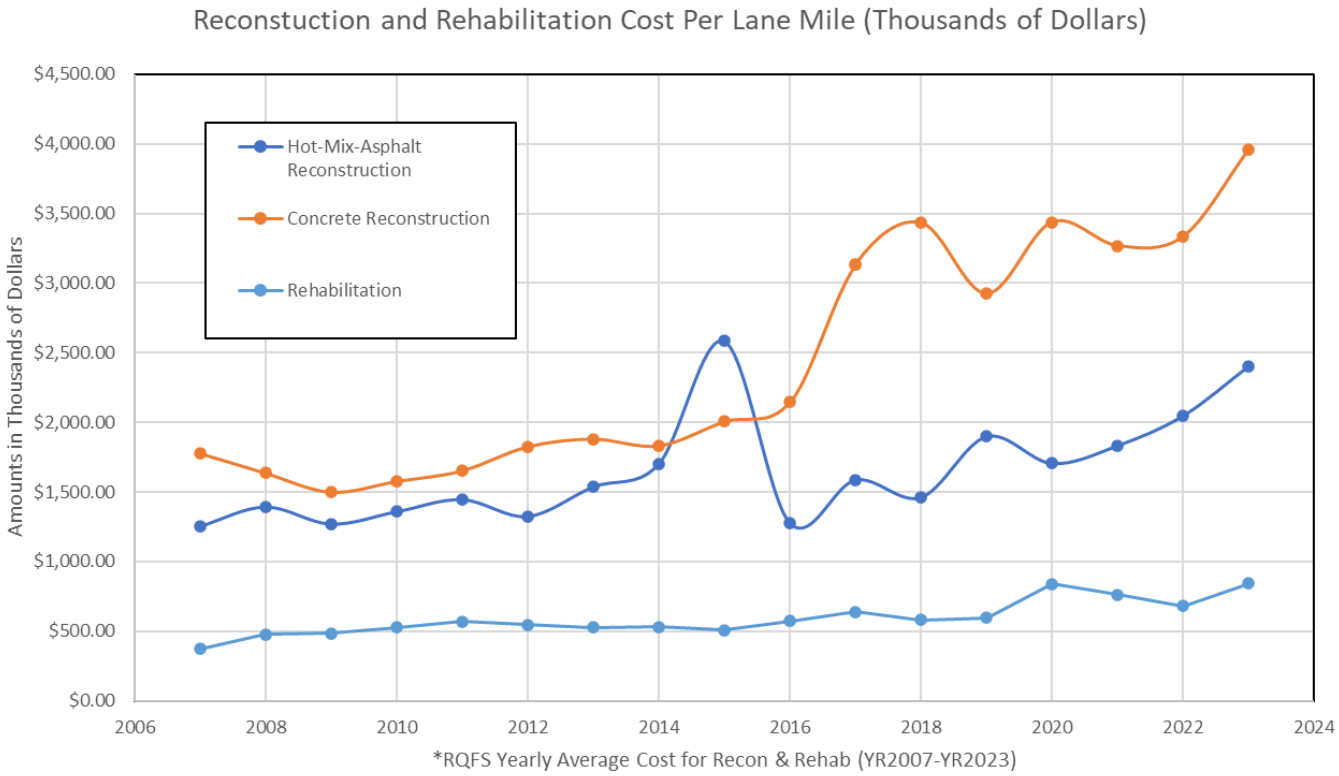
2029 R&R TARGET ALLOCATION FORMULA

			Bay	Grand	Metro	North	Southwest	Superior	University	Statewide
Cost										
25%	10.0%	% Lanemiles - Urban over 50K Pop.	6.7%	7.2%	71.3%	0.0%	6.6%	0.0%	8.1%	100.0%
	10.0%	TAMP (I & II) Cost	13.8%	11.3%	18.8%	11.3%	15.7%	9.9%	19.3%	100.0%
	5.0%	TAMP (III & IV) Cost	15.1%	11.4%	16.2%	10.1%	15.6%	11.7%	19.8%	100.0%
Condition										
50%	6.0%	% PCM=Fair or Poor TAMP I	13.8%	12.4%	29.1%	6.5%	8.4%	1.1%	28.7%	100.0%
	3.5%	% PCM=Fair or Poor TAMP II	18.7%	17.6%	21.9%	4.8%	7.5%	0.0%	29.4%	100.0%
	3.5%	% PCM=Fair or Poor TAMP III	14.9%	9.5%	27.6%	10.4%	7.1%	17.1%	13.3%	100.0%
	2.0%	% PCM = Fair or Poor TAMP IV	19.2%	17.7%	2.1%	17.2%	13.7%	15.4%	14.7%	100.0%
	14.0%	% RSL <=7 - TAMP I	17.7%	5.9%	30.9%	9.9%	9.7%	3.2%	22.6%	100.0%
	8.0%	% RSL <=7 - TAMP II	23.6%	20.7%	23.8%	3.2%	2.8%	0.0%	26.0%	100.0%
	8.0%	% RSL <=7 - TAMP III	16.5%	10.5%	25.5%	9.9%	6.7%	18.5%	12.4%	100.0%
	5.0%	% RSL <=7 - TAMP IV	24.4%	16.3%	1.7%	12.6%	12.9%	14.8%	17.3%	100.0%
Usage										
25%	5.0%	% VMT RSL<=7	15.9%	12.3%	34.6%	5.2%	7.5%	3.4%	21.1%	100.0%
	7.0%	% Commercial VMT RSL <=7	13.3%	11.6%	24.8%	4.2%	13.3%	3.5%	29.3%	100.0%
	7.0%	% Lanemiles RSL <=7 Comm AADT 5,000	4.4%	11.0%	36.0%	0.0%	11.6%	0.0%	36.9%	100.0%
	6.0%	% Lanemiles RSL <=7 AADT 50,000+	8.6%	4.1%	62.8%	0.0%	3.4%	0.0%	21.1%	100.0%
			Bay	Grand	Metro	North	Southwest	Superior	University	Statewide
		2029 Resulting New Target with Updated Data (millions)	$83.71	$63.13	$179.80	$37.29	$53.69	$32.19	$121.68	$571.50
	$571.50		14.6%	11.0%	31.5%	6.5%	9.4%	5.6%	21.3%	100.0%
		2028 Target	$94.75	$70.02	$202.61	$36.97	$68.43	$36.54	$137.19	**$646.50**
		Percent Change	-11.7%	-9.8%	-11.3%	0.9%	-21.5%	-11.9%	-11.3%	
		Numerical Change	($11.04)	($6.89)	($22.81)	$0.33	($14.74)	($4.34)	($15.50)	($75.00)
		FINAL 2029 Target After Metro Re-Distribution to I-94 Modernization Project (millions)	**$83.71**	**$63.13**	**$127.80**	**$37.29**	**$53.69**	**$32.19**	**$121.68**	**$519.51**

Region	Interstate (Tier 1) Minimum	Non-Interstate Freeway (Tier 2) Minimum
Bay	44%	15%
Grand	22%	31%
Metro	64%	12%
North	25%	5%
Southwest	63%	6%
Superior	5%	0%
University	54%	22%

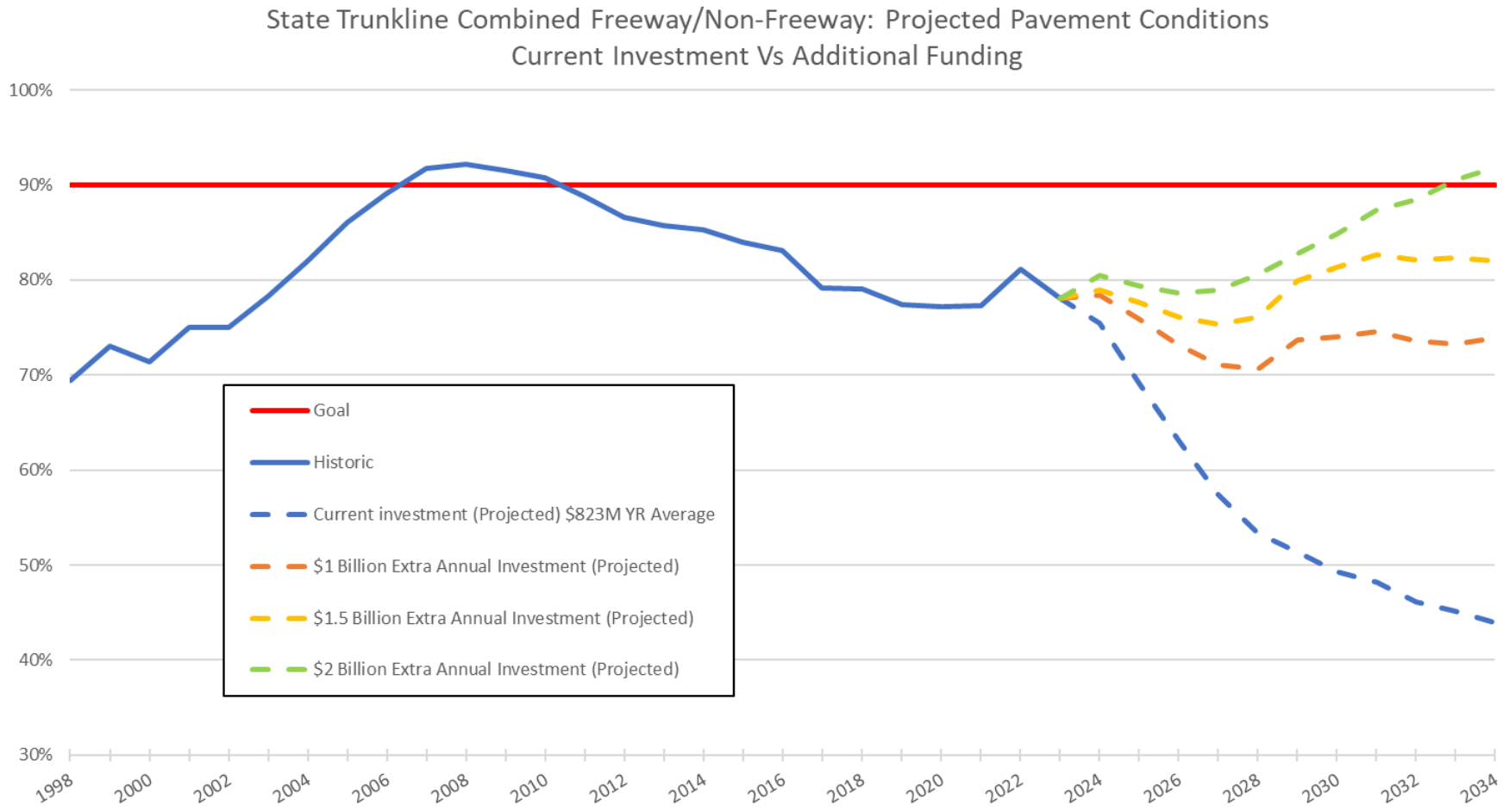
MDOT
Michigan Department of Transportation

Region Perspective: Biggest Challenges



- How to address declining pavement condition while non-pavement items are growing within the R&R program
- Inflationary pressures and buying power

MDOT
Michigan Department of Transportation



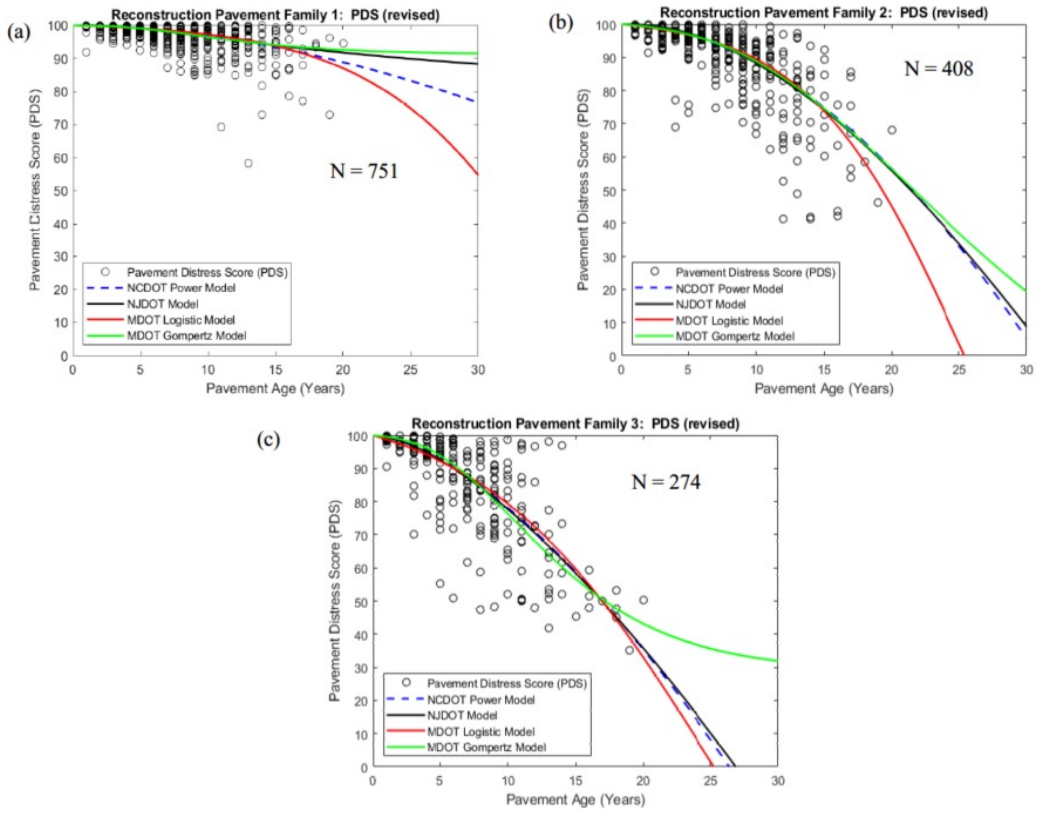
Source: MDOT, BTP, SSMS, as of March 29, 2023

*Based on Remaining Service Life (RSL)

MDOT
Michigan Department of Transportation

Research and IT Projects

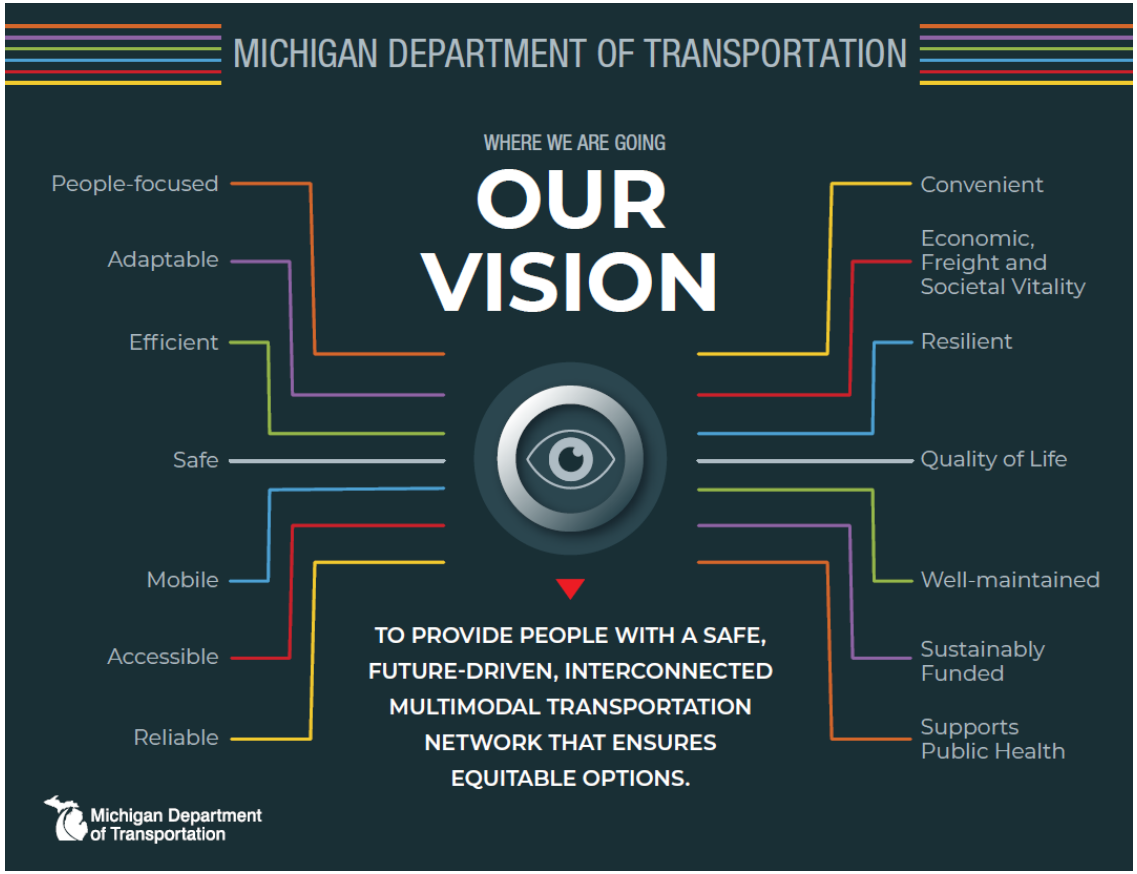
- Pavement Performance Curve Project – ETA Dec ‘23
  - Identify a replacement for Distress Index (DI) = Pavement Distress Score (PDS)
  - Recommendations to model and forecast life cycle, RSL, and federal pavement condition measures (IRI, Rut/Fault, Cracking %)
- Multi-Objective Decision Analysis (MODA) – starts Oct ‘23
  - Develop a performance-based approach to inform decision-making based on multiple objectives, including condition and long-range goals
  - Categorize all highway assets, investment options, goals and metrics, and recommend weights for each
- Project Identification Tool (PIT) – ETA Spring ‘24
  - Pavement project prioritization and optimization
  - Will utilize above research to forecast PCM for the network



MDOT
Michigan Department of Transportation

State Long Range Transportation Plan: Michigan Mobility 2045 (MM2045)

- Integrated freight, rail, active transportation, and transit plans
- MM2045 vision has become MDOT's vision
- Emphasizes the need for AM, right-sizing, resiliency, and sustainable long-term funding across modes and assets to meet future needs of all people
- Core Strategies:
  - Manage resources responsibly
  - Advance TAM to optimize transportation investments



MDOT Michigan Department of Transportation

MDOT's Asset Management Vision:

To integrate asset management practices and systems into everyday business operations and decision making to provide the desired level of service in a sustainable way, while managing risk, at the lowest lifecycle cost.

Michigan Transportation Asset Management (MiTAM)

- A strategic effort to bring asset management to all business areas, including planning, design, construction, operations, and maintenance.
- Develop an enterprise asset management system that links all assets together in one tool to measure/compare different assets within a geographic area to determine the best investment decisions to meet the department's vision.
- Transportation Asset Steering Committee

MDOT
Michigan Department of Transportation

Transportation Asset Management Council (TAMC)

- Formed under Michigan State Law: Public Act 499 of 2002 to promote asset management practices among all 600+ road agencies
- Utilizes Pavement Surface Evaluation and Rating (PASER) for collecting condition data on the federal-aid network
- Requires Local Asset Management Plans – new in 2018
  - All local agencies with 100+ miles of certified roads
  - Must be updated every 3 years
- Michigan Infrastructure Council (MIC) AM Champion Program

MDOT
Michigan Department of Transportation

MDOT
Michigan Department of Transportation

Mission:

Serving and connecting people, communities, and the economy through transportation.

For more information on Asset Management (michigan.gov)

DEPARTMENT OF TRANSPORTATION

Project Prioritization and Selection

TAM Peer Exchange
July 8, 2023

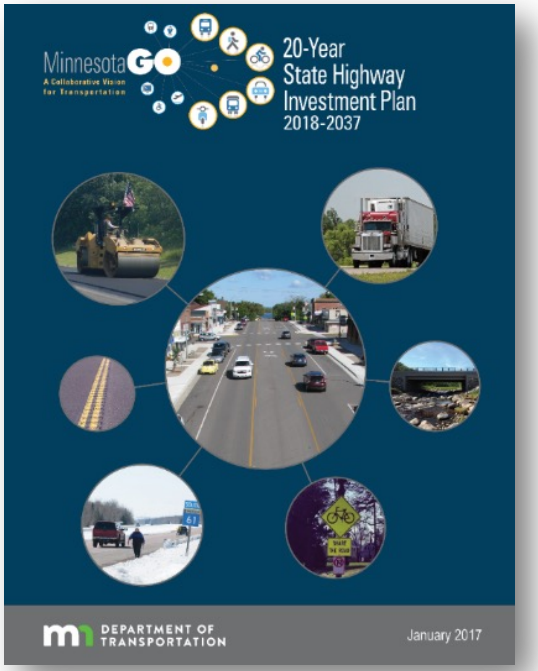
Context and Background

Governance and Funding

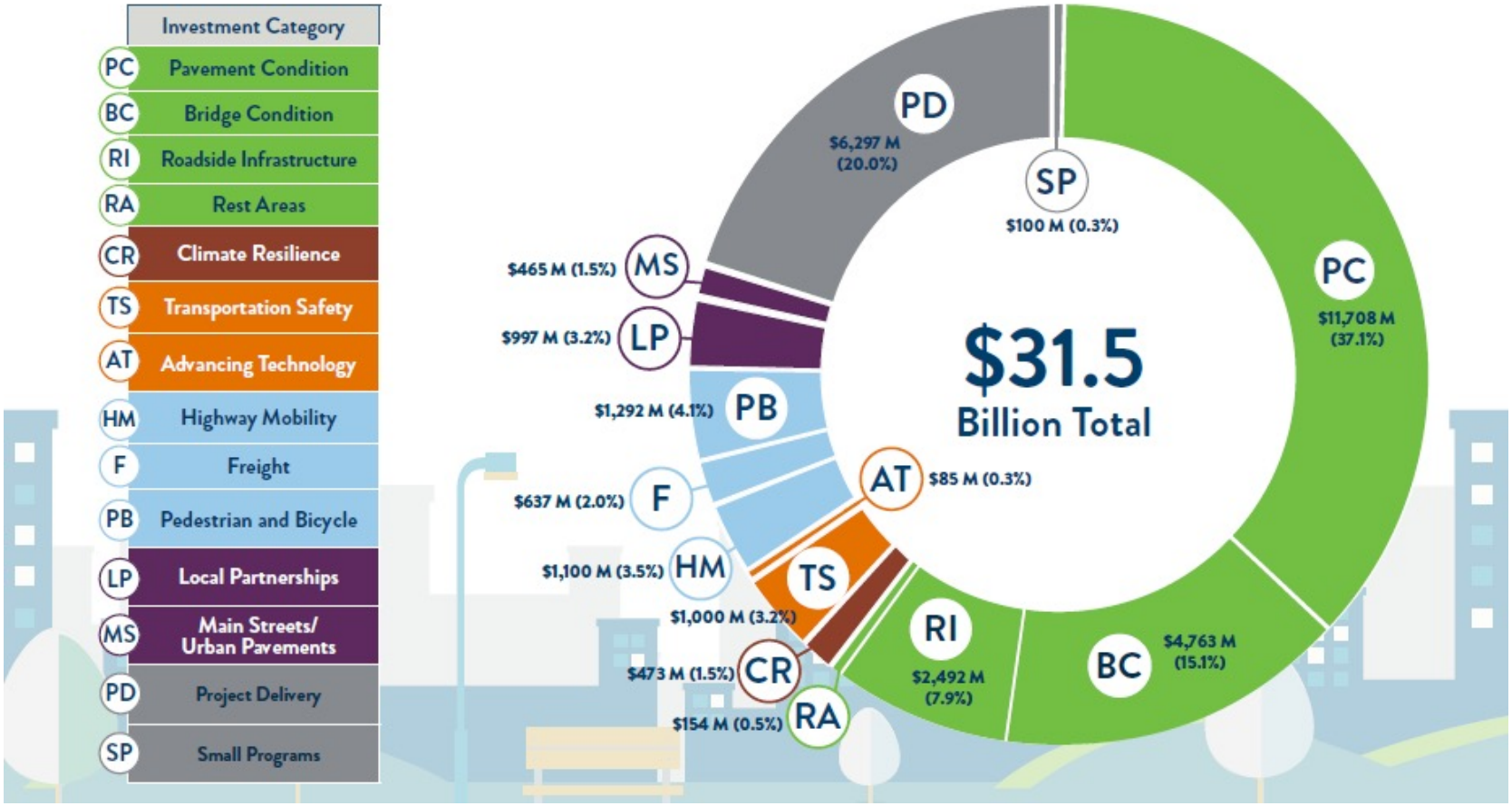
- Commissioner appointed by Governor, no board or commission
- Constitutionally dedicated/restricted funding
  - Set percentages listed in the state constitution to dedicated funds for state highways, county highways, municipal streets, and transit

Performance-Based Planning

- Used performance-based planning since 2003
- 20-Year Highway Investment Plan (MnSHIP)
  - Fiscally constrained, risk and performance-based
  - Not project specific
- 10-Year Capital Highway Investment Plan
  - Project specific
  - Explicitly tracks outcomes / investment compared to MnSHIP
  - Updated annually



20-Year Investment Plan



How We Talk About Selecting Projects

"It's like making sausage"

"It's complicated"

"We get in a room and after lots of shouting, we come out with a list of projects"

"We're in preservation mode"

Policy and Scoring

DEPARTMENT OF TRANSPORTATION

Project Selection Policy

- Policy adopted in November 2018
- Applies to almost all state highway construction projects
  - Exempted some preventive maintenance, emergency repairs, etc.
  - First implemented with the 2020-2023 STIP & 2020-2029 Capital Highway Investment Plan (CHIP)

Use of Scores & Transparency

- MnDOT posts:
  - Criteria and methodology for all project selection processes
  - Scores for all projects selected and evaluated but not selected
- The score assigned to candidate projects is a key factor in project selection, but other factors are considered in addition to the score.
  - When a high scoring project is not selected or when a lower scoring project is selected, MnDOT provides a short explanation of the reasoning

Selection Categories

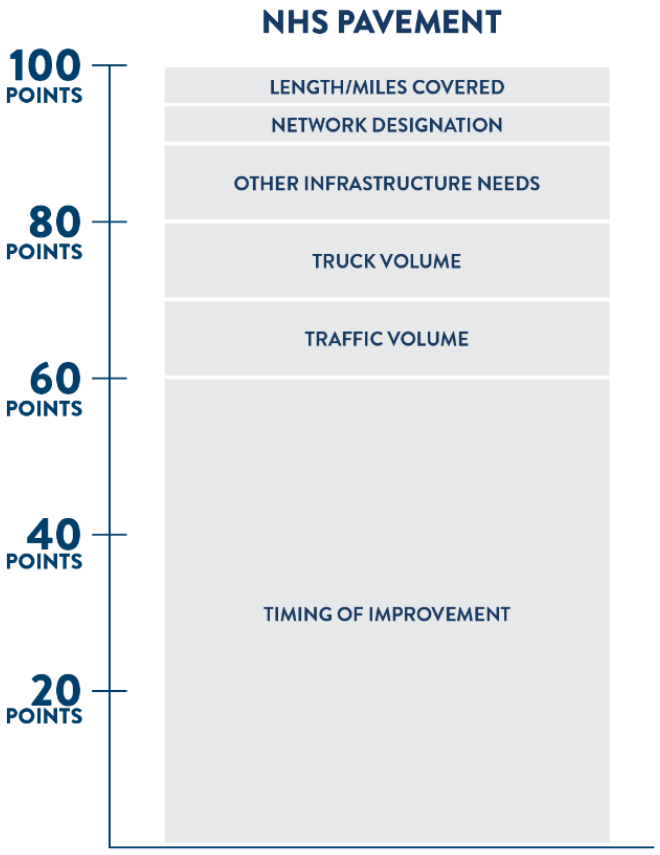
SCORED/SELECTED
WITHIN EACH DISTRICT

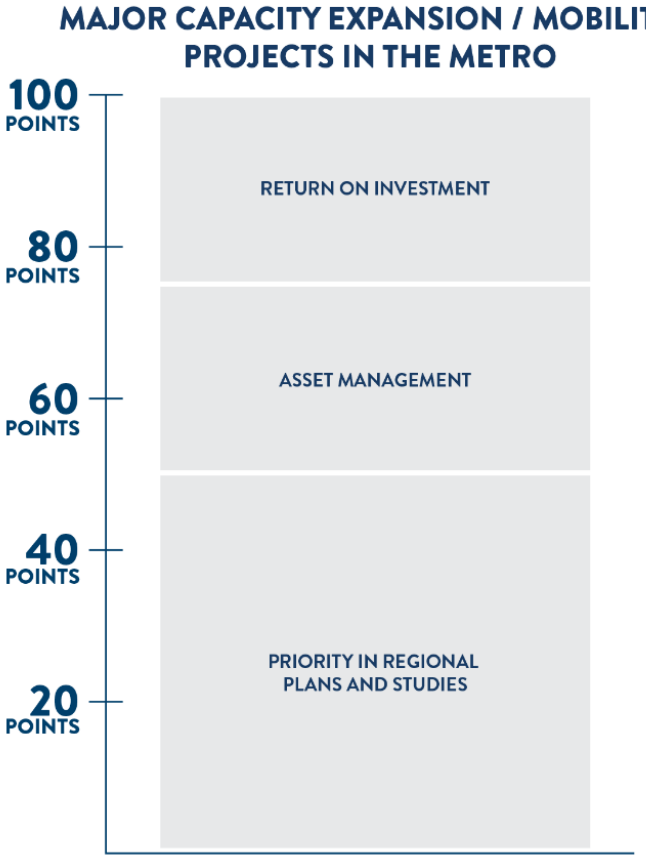
- Pavement
  - NHS
  - Non-NHS
  - Urban
- Non-NHS bridges and culverts
- Mobility/capacity expansion
- Standalone:
  - Safety
  - Bicycle and pedestrian
- Local Partnership Program

SCORED/SELECTED **STATEWIDE**

- NHS bridges and culverts & ped bridges
- Specialty/competitive programs:
  - Corridors of Commerce
  - Highway Freight Program
  - Highway Safety Improvement Program
  - Historic Roadside Properties
  - ITS
  - Railway-Highway Crossings
  - Safety Rest Areas
  - Standalone Noise Barriers
  - Transportation Economic Development
  - Weigh Station Capital Improvements

Examples

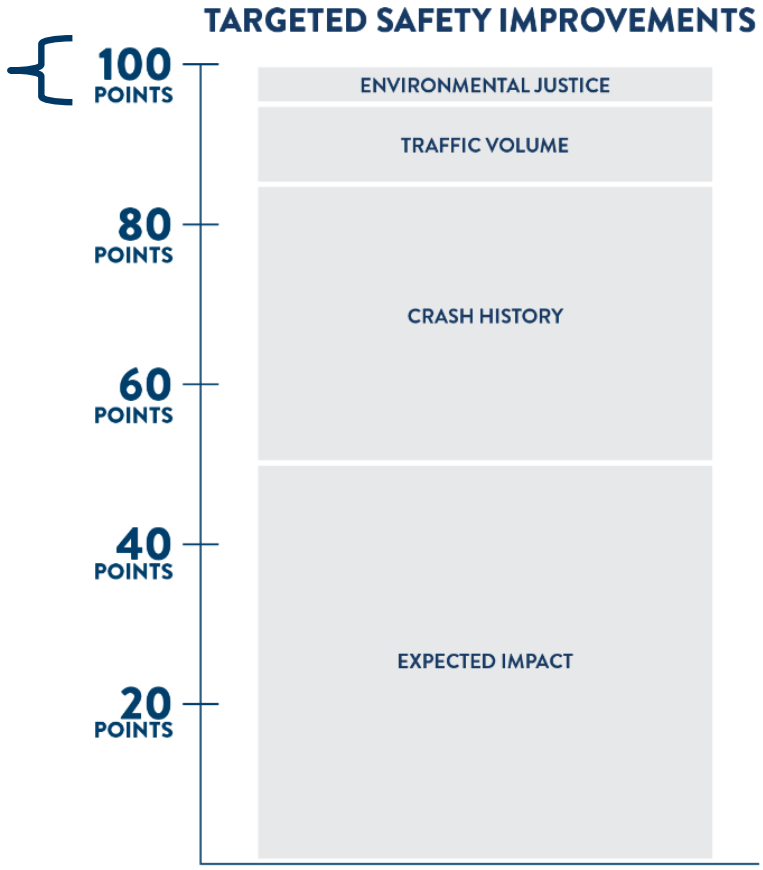

NHS PAVEMENT
100 POINTS
80 POINTS
60 POINTS
40 POINTS
20 POINTS
LENGTH/MILES COVERED
NETWORK DESIGNATION
OTHER INFRASTRUCTURE NEEDS
TRUCK VOLUME
TRAFFIC VOLUME
TIMING OF IMPROVEMENT


MAJOR CAPACITY EXPANSION / MOBILITY PROJECTS IN THE METRO
100 POINTS
80 POINTS
60 POINTS
40 POINTS
20 POINTS
RETURN ON INVESTMENT
ASSET MANAGEMENT
PRIORITY IN REGIONAL PLANS AND STUDIES

Examples: Environmental Justice

Included EJ in score (based on census data of adjacent tracts) in some categories

Currently several efforts underway to study equity that may inform revisions/additions



Score Included in STIP & CHIP

District 7 Projects for Years 2025-2030 of the 10-Year CHIP

#	ROUTE	COUNTY	DESCRIPTION	LENGTH (MI)	COST RANGE	PROJECT SELECTION CATEGORY*	SCORE*
2026							
7	I 90	NOBLES	Resurface WB lanes from Adrian to Rushmore	8.7	$5.5 M-$7.5 M	NHS Pavement	83
8	I 90	NOBLES	Rehabilitate I-90 bridges in Nobles County	0.3	$3.0 M-$4.0 M	NHS Bridge	80
9	US 14	BLUE EARTH	Repair CSAH 82/CSAH 3 to two miles east of Eagle Lake	6.4	$4.9 M-$6.7 M	NHS Pavement	80
10	MN 22	FARIBAULT	Resurface from I-90 to Wells	9.9	$3.0 M-$4.0 M	Non-NHS Pavement	76
11	MN 109	FARIBAULT	Reconstruct Highway 22 in Wells	2.4	$6.8 M-$9.2 M	Urban Pavement	75

*State highway projects include a project score and project selection program based on MnDOT's new project selection policy. Projects which were selected and included in

Candidate Lists Online

How the projects scored

The construction costs shown on this list represent a very rough estimate based on limited information available at the time selection decisions were made. Actual construction and delivery costs will change over time as projects go from a concept through the project development process and are eventually constructed. View more detailed scores (Excel).

Last updated December 2019

Score	District	Bridge number	Route	Key intersection or closest landmark	Work type	Year planned (FY)	High level construction cost estimate for planning purposes	Comments
100	Metro	9600N	MN77 Northbound	Minnesota River/Blackdog Road	Reoverlay deck surface	2025	$3,800,000	
97	Metro	27855	I-94	Highway 55	Overlay deck surface	2025	$4,500,000	
90	6	9009	MN 30	North Bridge Root River	Replace	2021	$1,900,000	Coordinated with bridge 9008
90	Metro	9700	US 10	Rum River	Replace	2022	$61,000,000	
90	Metro	9217E	I-494 Eastbound	Minnesota River	Reoverlay deck surface	2023	$7,300,000	
90	Metro	9217W	I-494 Westbound	Minnesota River	Reoverlay deck surface	2023	$6,800,000	
90	Metro	9600S	MN 77 Southbound	Minnesota River/Blackdog Road	Reoverlay deck surface	2025	$3,800,000	
88	1	69816	Lake Ave	Over I-35	Overlay deck surface	2020	$2,000,000	Coordinated with a city of Duluth project on Superior Street.
87	3	71012	MN 25	Mississippi River	Overlay deck surface	2024	$2,500,000	
85	1	69808	I-535	Over Garfield Ave and railroad	Redeck	2028	$3,700,000	
81	6	9040	US 63	Mississippi River and Canadian Pacific Rail	Replace	Not Selected	$39,000,000	Complex project that requires coordination with railroad

- Website has multiple ways to navigate:
  - By district
  - By type of project or program

DEPARTMENT OF TRANSPORTATION

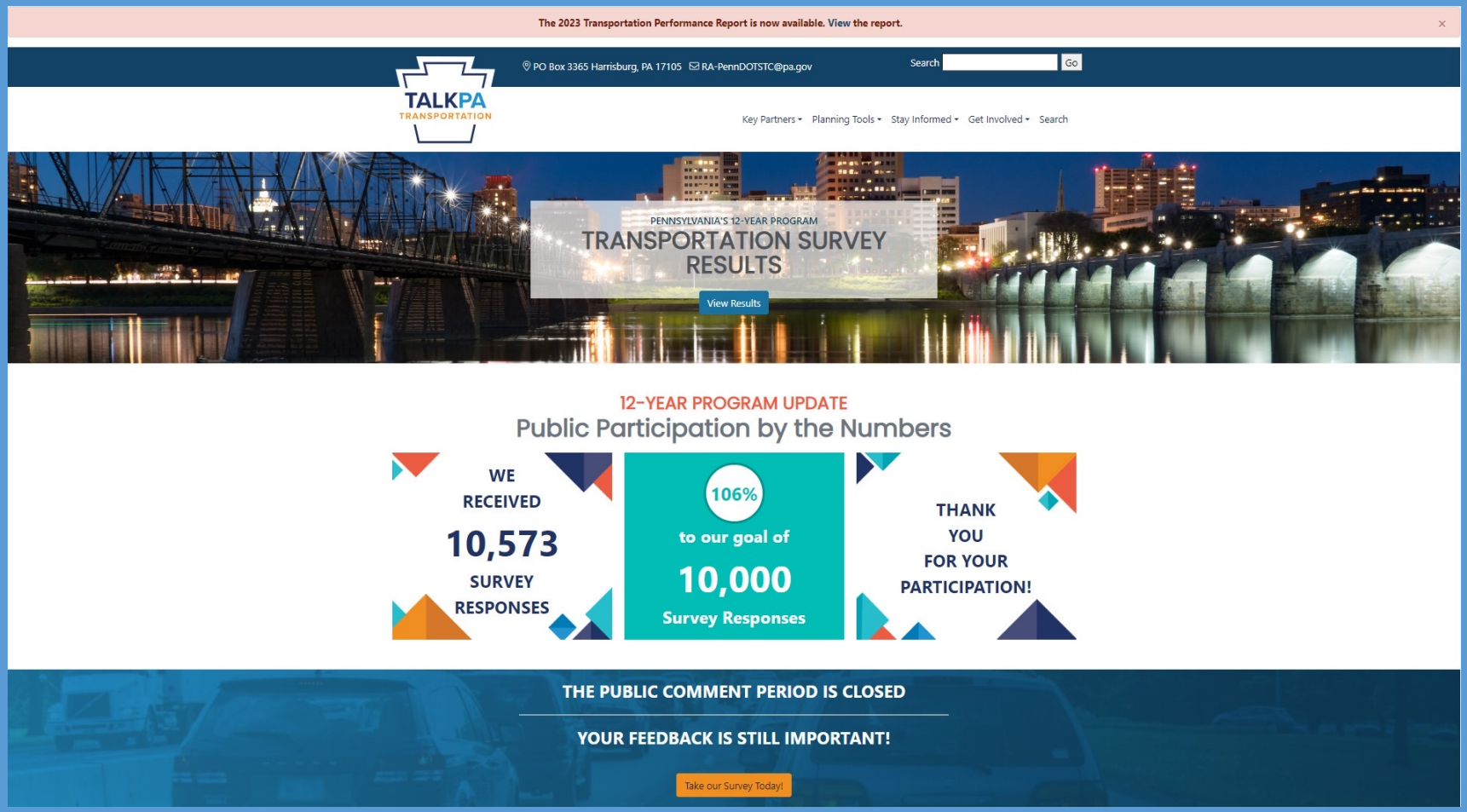
www.mndot.gov/projectselection

Shaker Rabban
Asset Management Planning Director
Shaker.rabban@state.mn.us

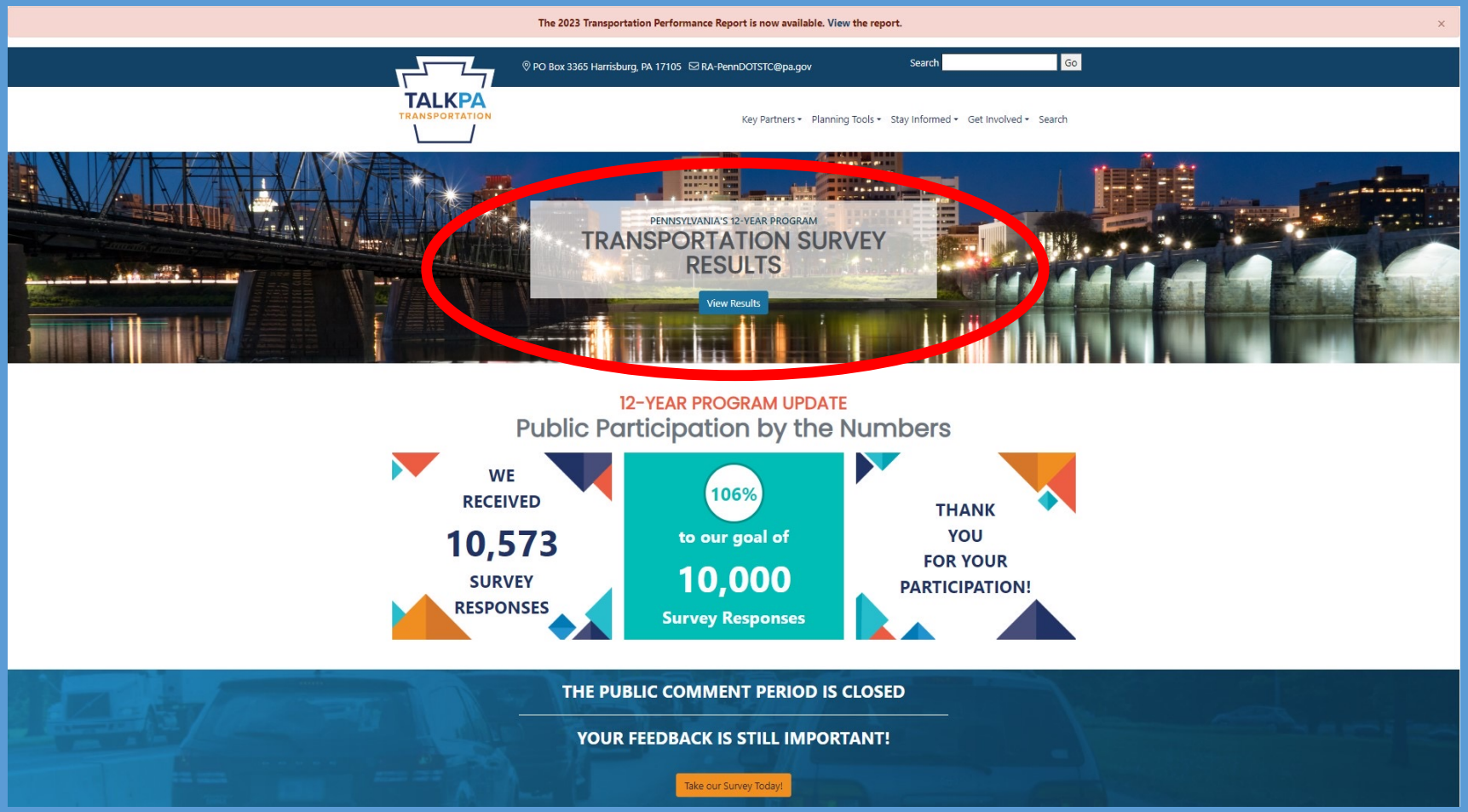
pennsylvania
DEPARTMENT OF TRANSPORTATION

Project Selection Process

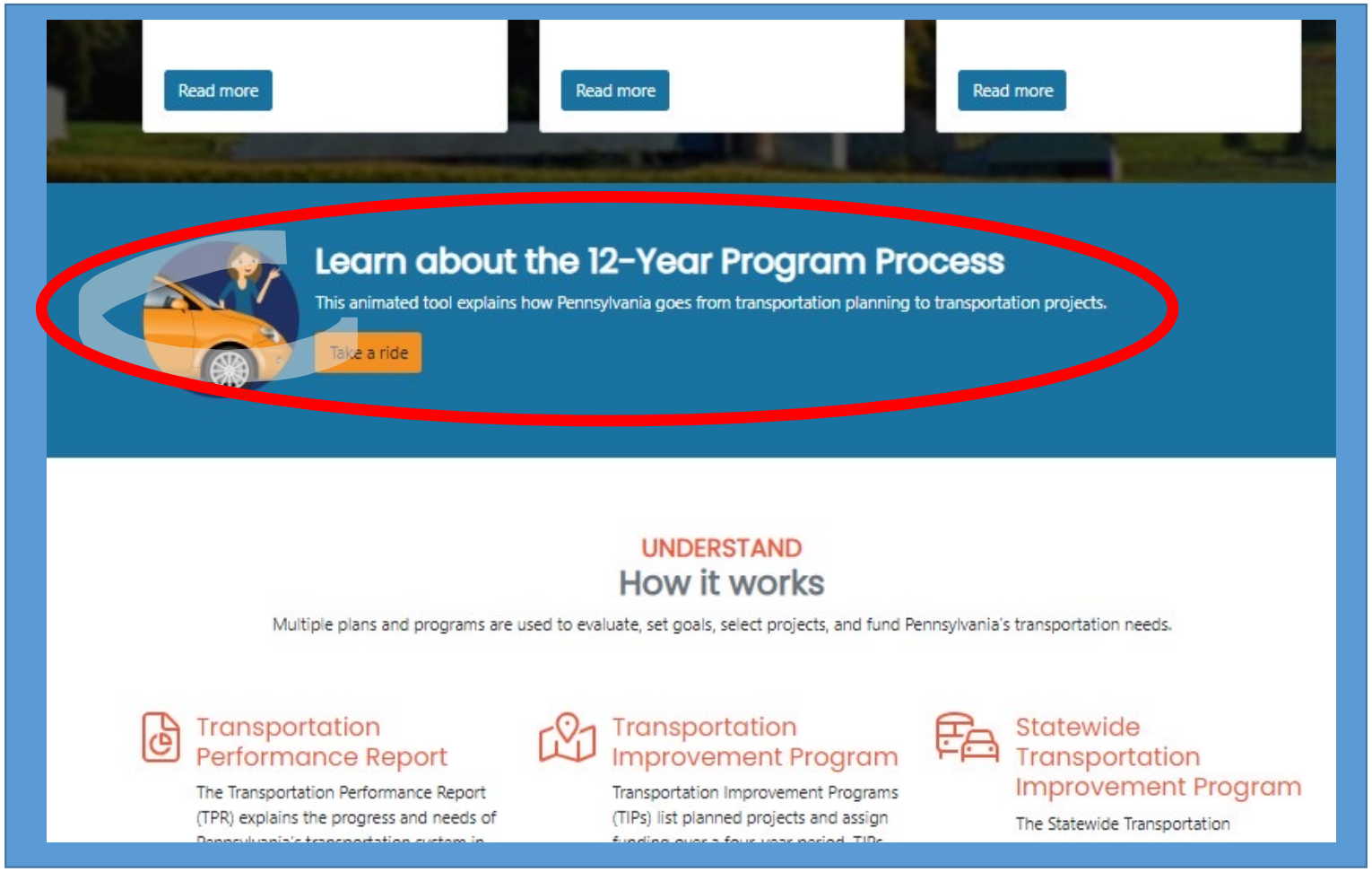
talkPAtransportation.com



talkPAtransportation.com

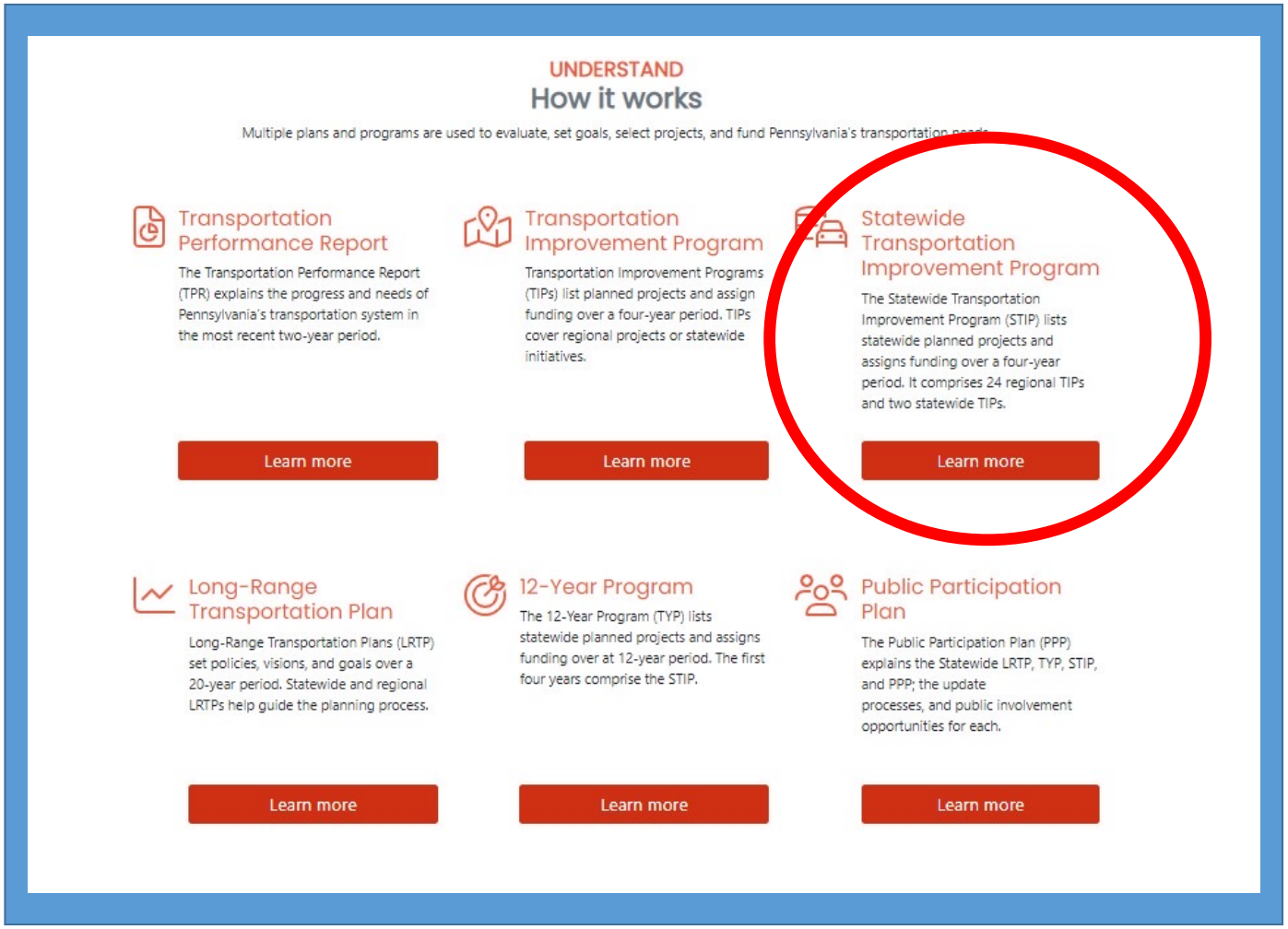


talkPAtransportation.com

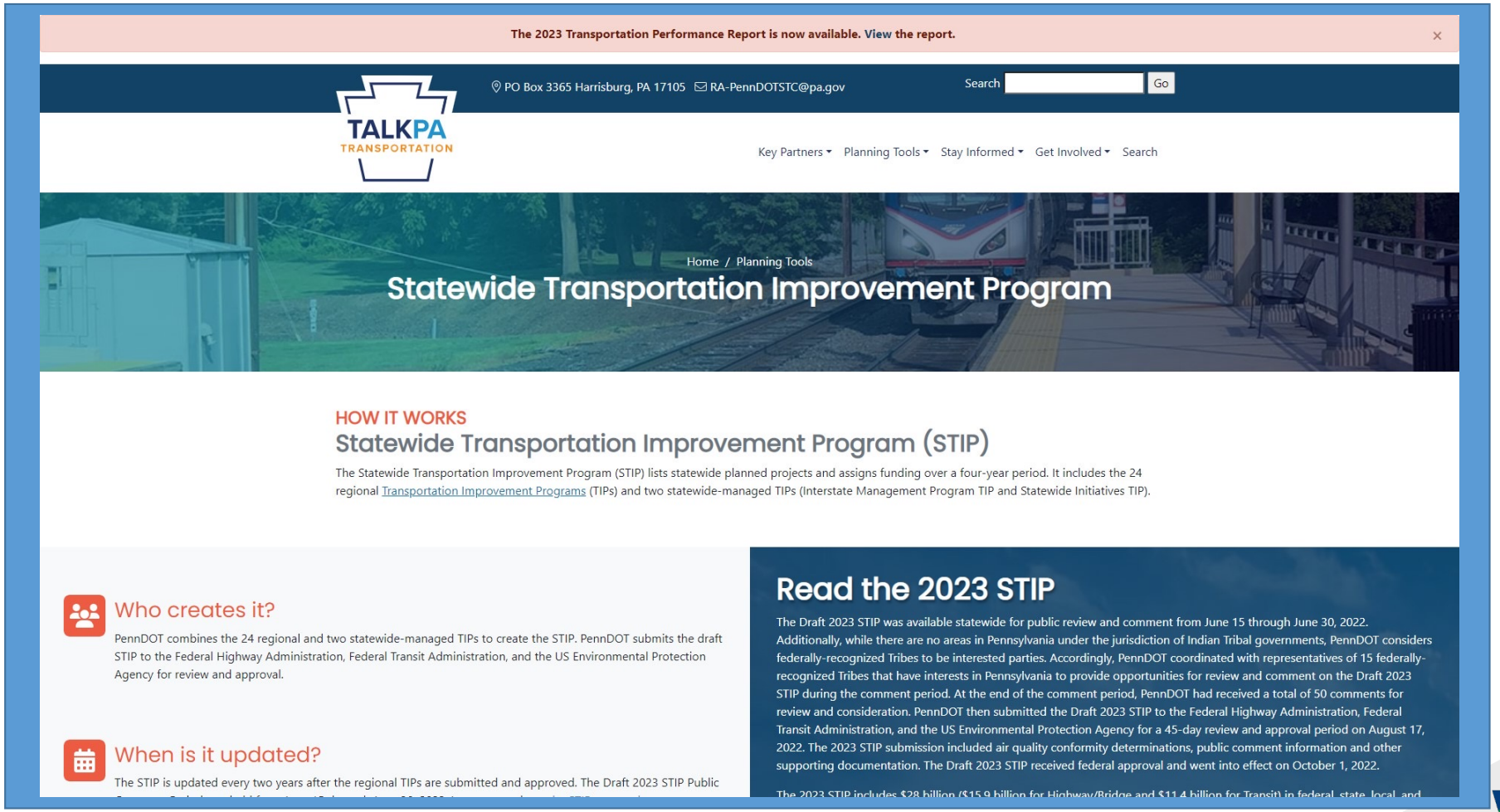


1 Report
2 Listen & Identify Needs
3 Share Information
4 Plan & Prioritize
5 Submit
6 PennDOT Review
7 Endorse & Incorporate
6. PennDOT Review
PennDOT reviews the projects include
that they meet statewide transportatio
projections, and conform to air quality
Continue
Go to specific step
The 12-Year Program Process: From Planning to Projects

talkPAtransportation.com



talkPAtransportation.com



talkPAtransportation.com

Who creates it?

PennDOT combines the 24 regional and two statewide-managed TIPs to create the STIP. PennDOT submits the draft STIP to the Federal Highway Administration, Federal Transit Administration, and the US Environmental Protection Agency for review and approval.

When is it updated?

The STIP is updated every two years after the regional TIPs are submitted and approved. The Draft 2023 STIP Public Comment Period was held from June 15 through June 30, 2022. Learn more about the STIP process here.

What laws and regulations are involved?

- Title 23 Code of Federal Regulations 450
- Title 23 Code of Federal Regulation 924
- Title 49 Code of Federal Regulation 625
- 49 U.S. Code 5303
- Infrastructure Investment and Jobs Act (IIJA), otherwise known as the Bipartisan Infrastructure Law (BIL)
- Pennsylvania Consolidated Statutes Title 74
- Pennsylvania Code Title 67
- 2025 Transportation Program Financial Guidance
- 2025 Transportation Program General and Procedural Guidance

How does it impact the planning process?

The STIP makes up the first four years of the 12-Year Program (TYP).

Public Participation Opportunities

- Participate locally during the regional TIP updates.
- Learn about the STIP process.
- Participate in the 12-Year Program Update (TYP).
- The Draft 2023 STIP Public Comment Period was held from June 15 through June 30, 2022.

Read the 2023 STIP

The Draft 2023 STIP was available statewide for public review and comment from June 15 through June 30, 2022. Additionally, while there are no areas in Pennsylvania under the jurisdiction of Indian Tribal governments, PennDOT considers federally-recognized Tribes to be interested parties. Accordingly, PennDOT coordinated with representatives of 15 federally-recognized Tribes that have interests in Pennsylvania to provide opportunities for review and comment on the Draft 2023 STIP during the comment period. At the end of the comment period, PennDOT had received a total of 50 comments for review and consideration. PennDOT then submitted the Draft 2023 STIP to the Federal Highway Administration, Federal Transit Administration, and the US Environmental Protection Agency for a 45-day review and approval period on August 17, 2022. The 2023 STIP submission included air quality conformity determinations, public comment information and other supporting documentation. The Draft 2023 STIP received federal approval and went into effect on October 1, 2022.

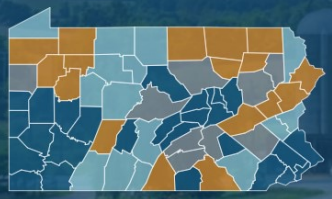
The 2023 STIP includes $28 billion ($15.9 billion for Highway/Bridge and $11.4 billion for Transit) in federal, state, local, and private resources over the four-year period for capital improvements. The STIP consists of a list of prioritized projects/project phases identified for funding by federal fiscal year. The 2023 STIP includes Transportation Improvement Programs (TIPs) as adopted by each Metropolitan Planning Organization (MPO) and Rural Planning Organization (RPO), as well as the TIP for Wayne County, the centrally managed Interstate Management (IM) TIP and the Statewide Initiatives (STWD) TIP.

Read the 2023 STIP (PDF) | View the current 2023 STIP/TYP 5.30.23 (XLS) | Learn about the STIP Process

The 2023 STIP Project List

The 2023 STIP has been broken up by county to make searching easy. Select a county on map to view the regional TIP project lists. The Interstate and Statewide projects are grouped separately and can be viewed here: **Interstate** or **Statewide** Project Lists. Use the toggle below to switch between the TIP (2023-2026) project lists and the full TYP (2023-2034) list.

○ Filter TIP ● Full TYP



Project Funding Estimate ×

Project ID: 613

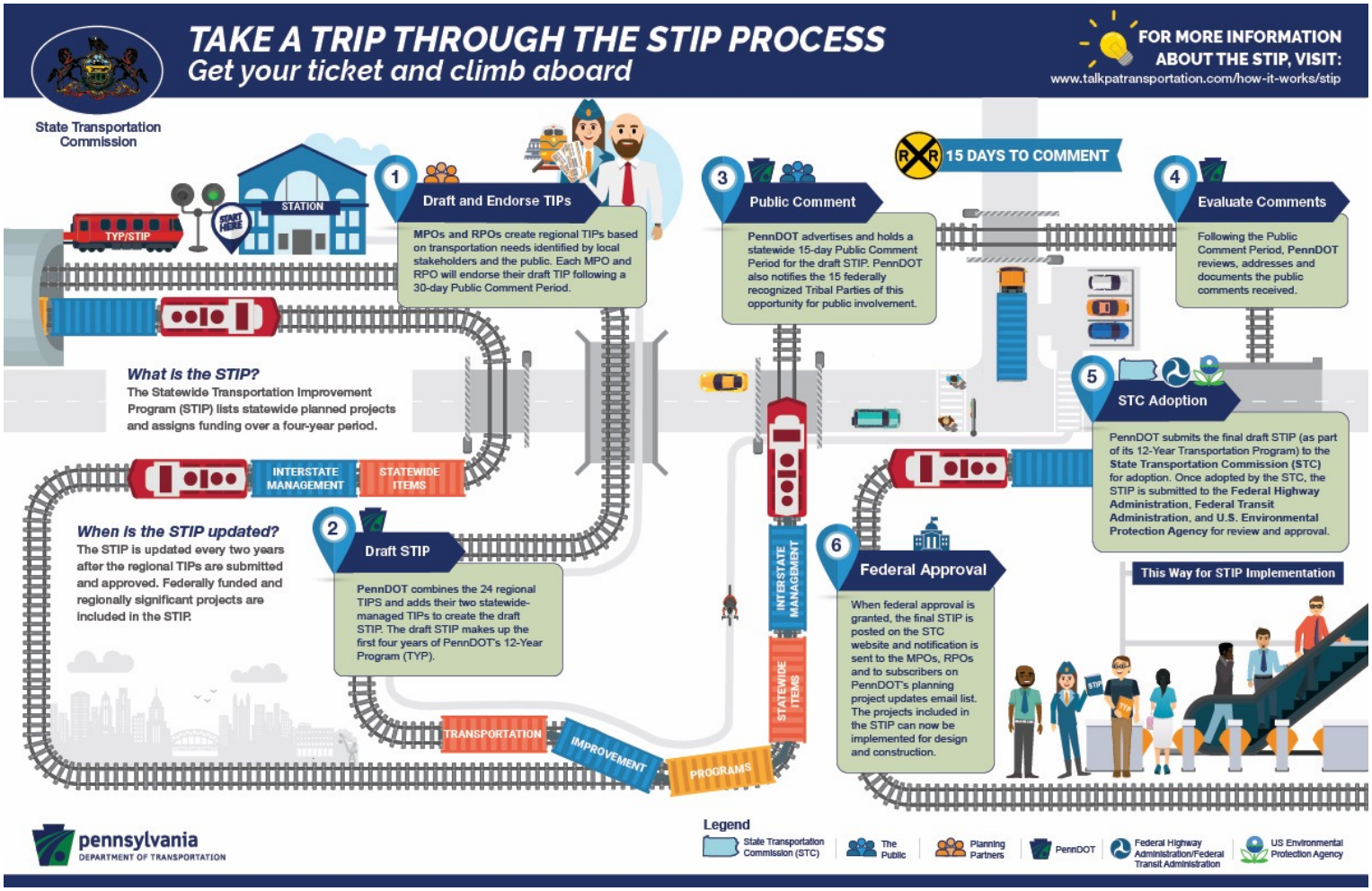
Project Administrator: PENNDOT
Title: Twenty Mile Creek Br
Improvement Type: Bridge Rehabilitation
State Route: 20
Municipality: North East
Air Quality Status: Exempt from Regional Conformity Analysis
Actual Bid Date:
Estimated Bid Date: 1/1/2023
Location: US 20 (East Main Street) Bridge over Twenty Mile Creek in North East Township
Project Description: This project includes the rehabilitation along with a four (4) mile detour of the US 20 (East Main Street) Bridge over Twenty Mile Creek in North East Township. The bridge is 376 feet in length.

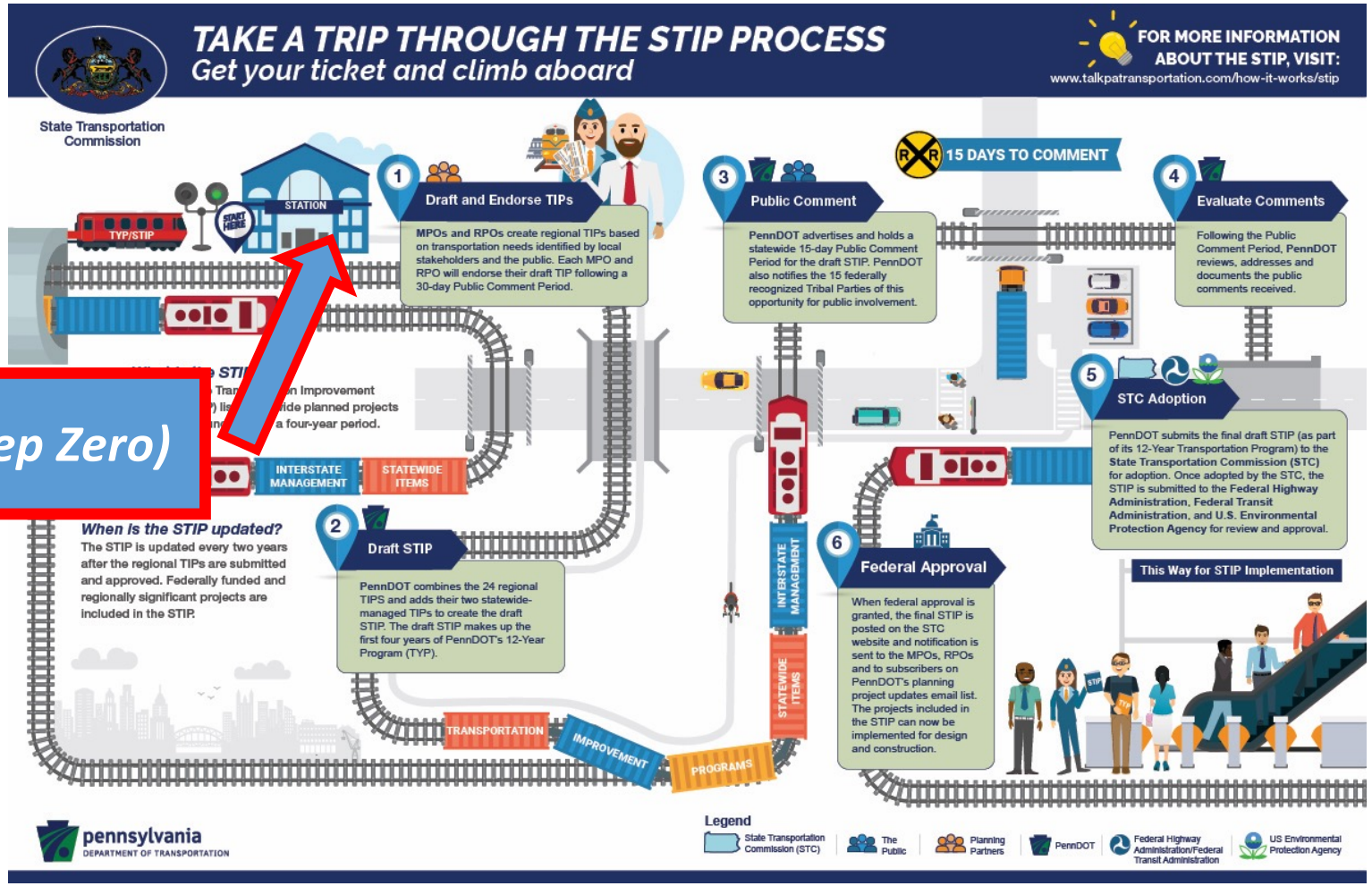
Project Costs (In Thousands)

Fund	2023	2024	2025	2026	2027-2030	2031-2034
State	$1800	$0	$0	$0	$0	$0

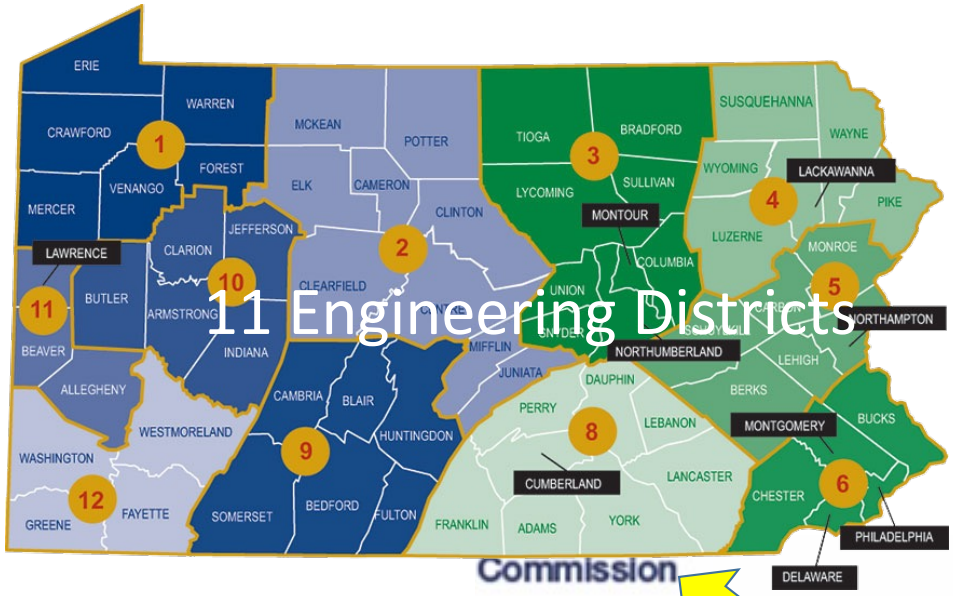
Total FFY 2023-2034 Cost: $1,800

View on OneMap Close

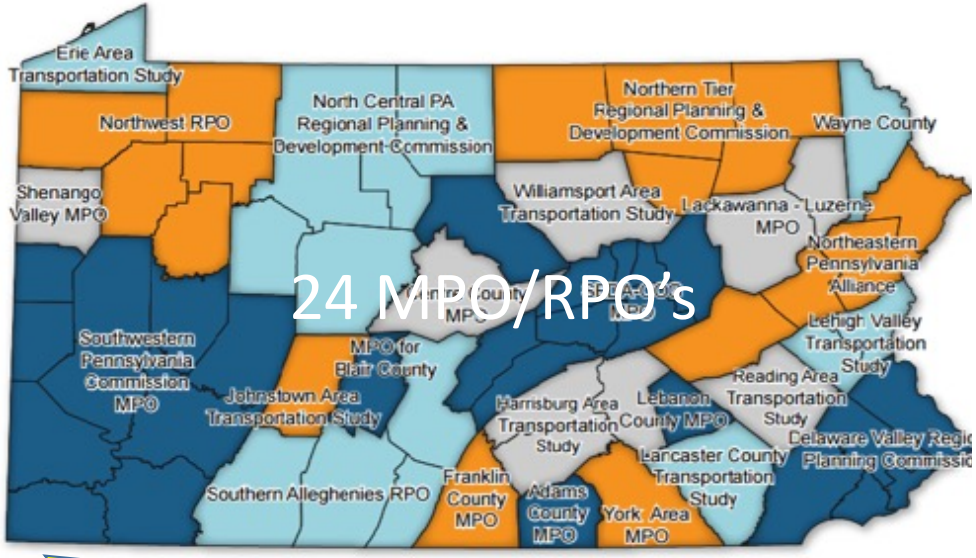

TAKE A TRIP THROUGH THE STIP PROCESS
Get your ticket and climb aboard
FOR MORE INFORMATION ABOUT THE STIP, VISIT:
www.talkpatransportation.com/how-it-works/stip
State Transportation Commission
STATION
TYP/STIP
1 Draft and Endorse TIPs
MPOs and RPOs create regional TIPs based on transportation needs identified by local stakeholders and the public. Each MPO and RPO will endorse their draft TIP following a 30-day Public Comment Period.
3 Public Comment
PennDOT advertises and holds a statewide 15-day Public Comment Period for the draft STIP. PennDOT also notifies the 15 federally recognized Tribal Parties of this opportunity for public involvement.
15 DAYS TO COMMENT
4 Evaluate Comments
Following the Public Comment Period, PennDOT reviews, addresses and documents the public comments received.
What is the STIP?
The Statewide Transportation Improvement Program (STIP) lists statewide planned projects and assigns funding over a four-year period.
INTERSTATE MANAGEMENT
STATEWIDE ITEMS
5 STC Adoption
PennDOT submits the final draft STIP (as part of its 12-Year Transportation Program) to the State Transportation Commission (STC) for adoption. Once adopted by the STC, the STIP is submitted to the Federal Highway Administration, Federal Transit Administration, and U.S. Environmental Protection Agency for review and approval.
When is the STIP updated?
The STIP is updated every two years after the regional TIPs are submitted and approved. Federally funded and regionally significant projects are included in the STIP.
2 Draft STIP
PennDOT combines the 24 regional TIPS and adds their two statewide-managed TIPs to create the draft STIP. The draft STIP makes up the first four years of PennDOT's 12-Year Program (TYP).
6 Federal Approval
When federal approval is granted, the final STIP is posted on the STC website and notification is sent to the MPOs, RPOs and to subscribers on PennDOT's planning project updates email list. The projects included in the STIP can now be implemented for design and construction.
This Way for STIP Implementation
INTERSTATE MANAGEMENT
STATEWIDE ITEMS
TRANSPORTATION IMPROVEMENT PROGRAMS
pennsylvania
DEPARTMENT OF TRANSPORTATION
Legend
State Transportation Commission (STC)
The Public
Planning Partners
PennDOT
Federal Highway Administration/Federal Transit Administration
US Environmental Protection Agency


TAKE A TRIP THROUGH THE STIP PROCESS
Get your ticket and climb aboard
FOR MORE INFORMATION ABOUT THE STIP, VISIT:
www.talkpatransportation.com/how-it-works/stip
State Transportation Commission
STATION
START HERE
TYP/STIP
1 Draft and Endorse TIPs
MPOs and RPOs create regional TIPs based on transportation needs identified by local stakeholders and the public. Each MPO and RPO will endorse their draft TIP following a 30-day Public Comment Period.
3 Public Comment
PennDOT advertises and holds a statewide 15-day Public Comment Period for the draft STIP. PennDOT also notifies the 15 federally recognized Tribal Parties of this opportunity for public involvement.
15 DAYS TO COMMENT
4 Evaluate Comments
Following the Public Comment Period, PennDOT reviews, addresses and documents the public comments received.
5 STC Adoption
PennDOT submits the final draft STIP (as part of its 12-Year Transportation Program) to the State Transportation Commission (STC) for adoption. Once adopted by the STC, the STIP is submitted to the Federal Highway Administration, Federal Transit Administration, and U.S. Environmental Protection Agency for review and approval.
(Step Zero)
INTERSTATE MANAGEMENT
STATEWIDE ITEMS
When is the STIP updated?
The STIP is updated every two years after the regional TIPs are submitted and approved. Federally funded and regionally significant projects are included in the STIP.
2 Draft STIP
PennDOT combines the 24 regional TIPS and adds their two statewide-managed TIPs to create the draft STIP. The draft STIP makes up the first four years of PennDOT's 12-Year Program (TYP).
6 Federal Approval
When federal approval is granted, the final STIP is posted on the STC website and notification is sent to the MPOs, RPOs and to subscribers on PennDOT's planning project updates email list. The projects included in the STIP can now be implemented for design and construction.
This Way for STIP Implementation
TRANSPORTATION IMPROVEMENT PROGRAMS
pennsylvania
DEPARTMENT OF TRANSPORTATION
Legend
State Transportation Commission (STC)
The Public
Planning Partners
PennDOT
Federal Highway Administration/Federal Transit Administration
US Environmental Protection Agency

LOGISTICS

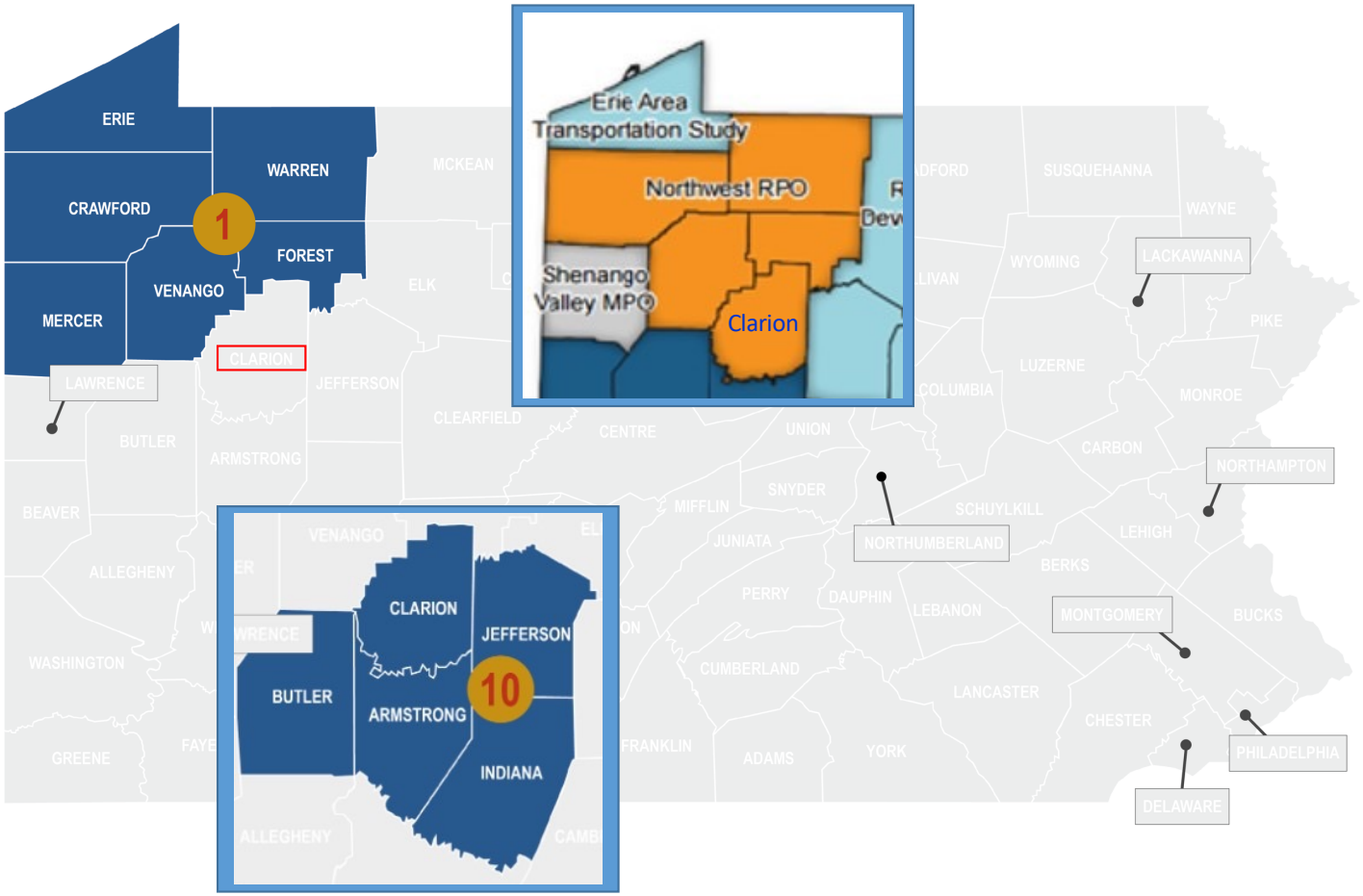


11 Engineering Districts



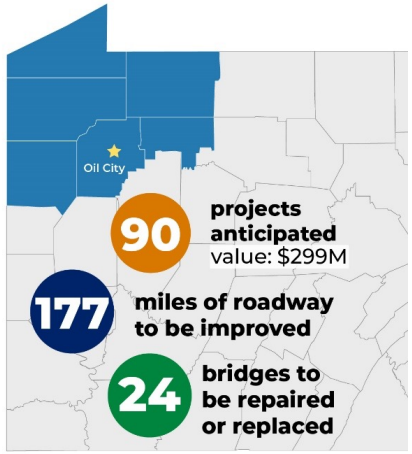
24 MPO/RPO's

LOGISTICS



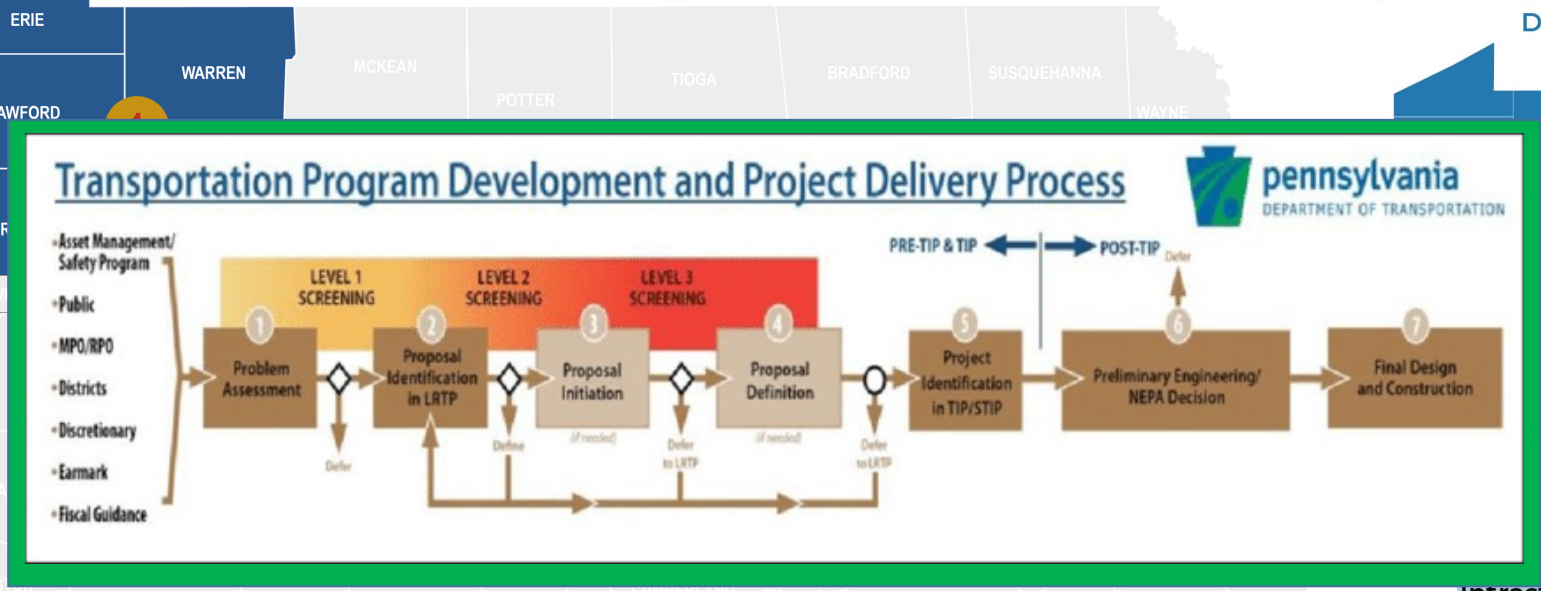
2022 Construction Preview

District 1

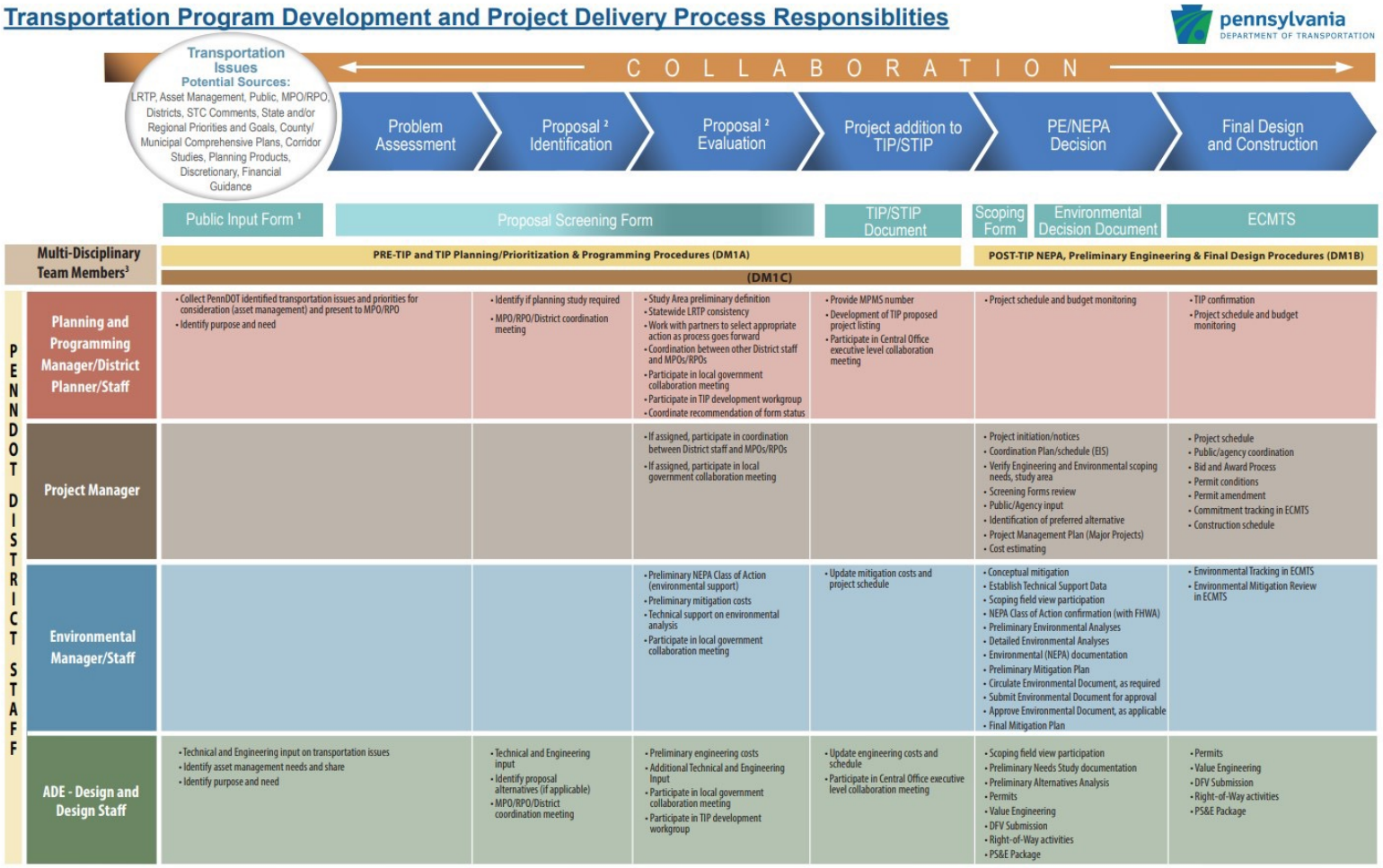


$20.5M more invested locally thanks to the **Bipartisan Infrastructure Law.**

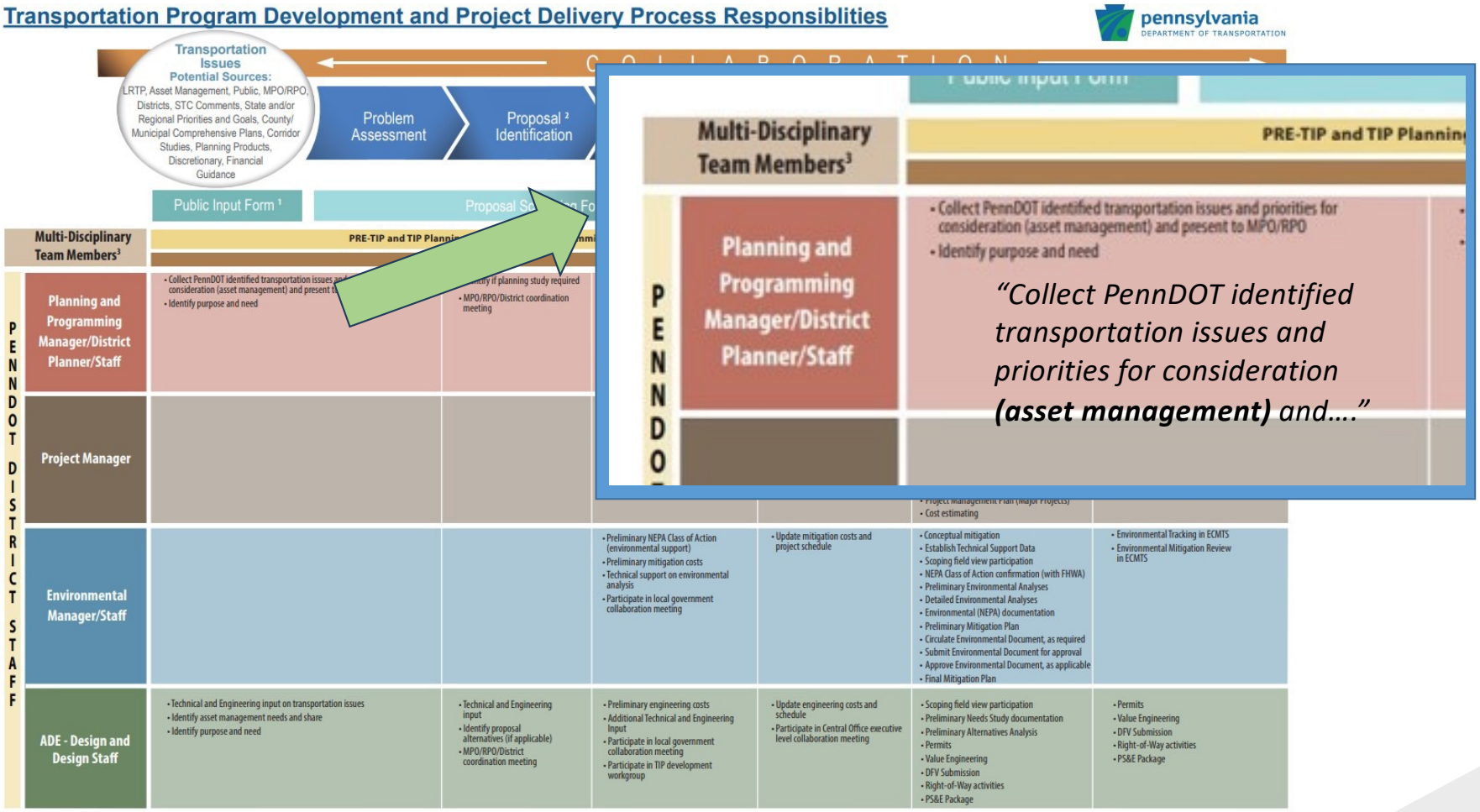
AS-IS TIP PROCESS



AS-IS TIP PROCESS



AS-IS TIP PROCESS



AS-IS TIP PROCESS

pennsylvania
DEPARTMENT OF TRANSPORTATION

Assessment of Highway and Bridge Project Prioritization and Selection Procedures

Report Prepared for:
Pennsylvania Department of Transportation
400 North Street
Harrisburg, Pennsylvania 17120

Report Prepared by:
Spy Pond Partners, LLC
37 Broadway
Arlington, Massachusetts 02474

with

Michael Baker International
4431 North Front Street
Harrisburg, Pennsylvania 17110

February 28, 2023

Spy Pond Partners, LLC

Updated March 8, 2022

PENNSYLVANIA 2023 TRANSPORTATION PROGRAM FINANCIAL GUIDANCE

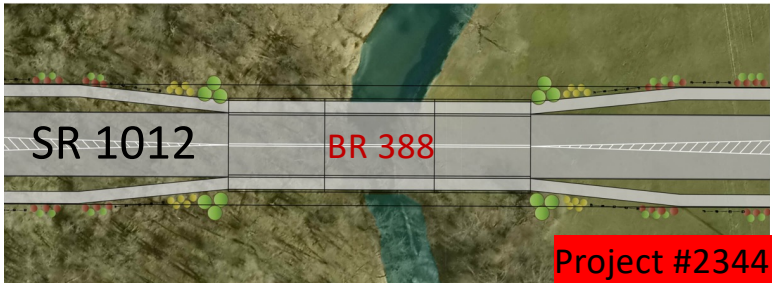
INTRODUCTION 1

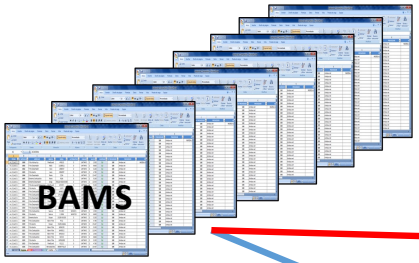
2023 TRANSPORTATION PROGRAM UPDATE 1

FUNDING 3
Highway and Bridge Funding Distribution 3
Public Transit Funding Distribution 8

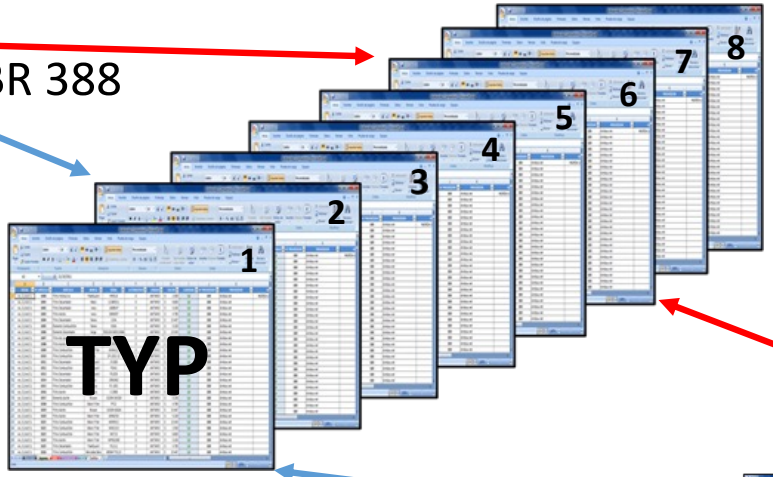
APPENDICIES
Appendix 1: Available Funds – Highway and Bridge 11
Appendix 2: Highway and Bridge Base Funding Allocations for Each Region 13
Appendix 3: Rapid Bridge Replacement Program 28
Appendix 4: Asset Management Factor 30
Appendix 5: 2023 Financial Guidance Formula Summary 32
Appendix 6: State Transit Funding 33
Appendix 7: Federal Transit Funding 38
Appendix 8: Federal and State Transit Funding by Region 43

SHOULD-BE TIP PROCESS

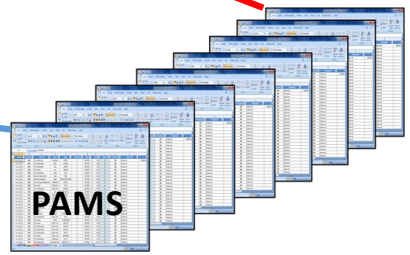




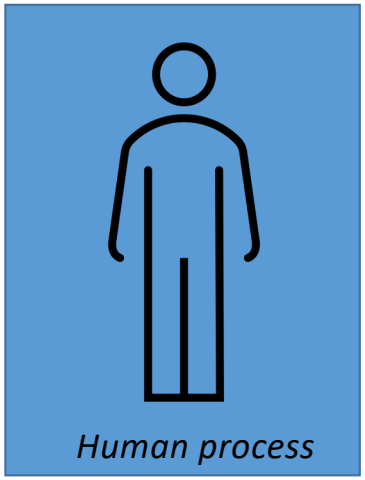
BR 388



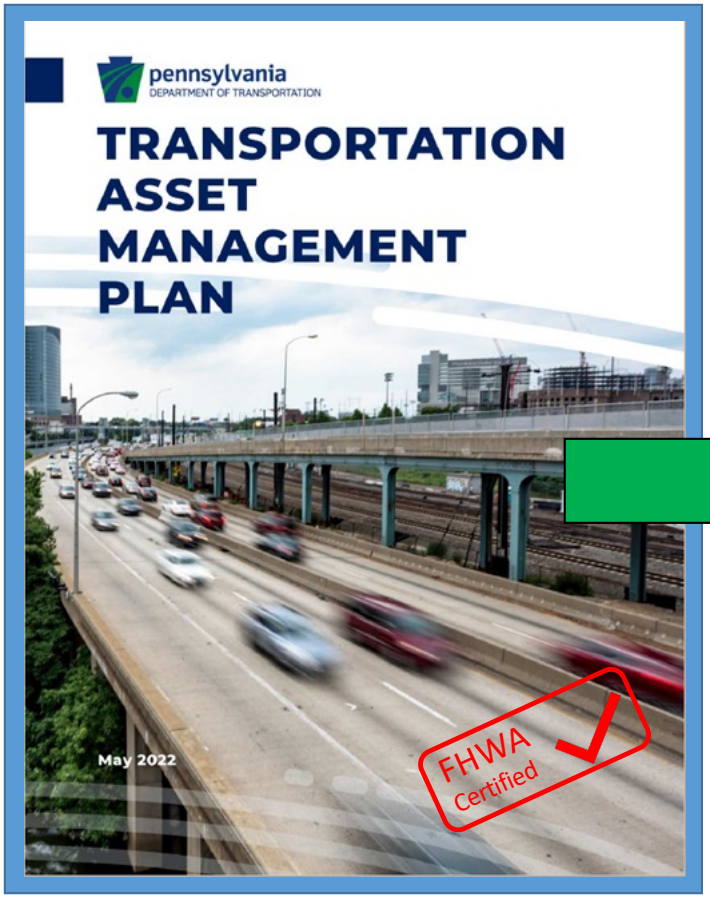
SR 1012

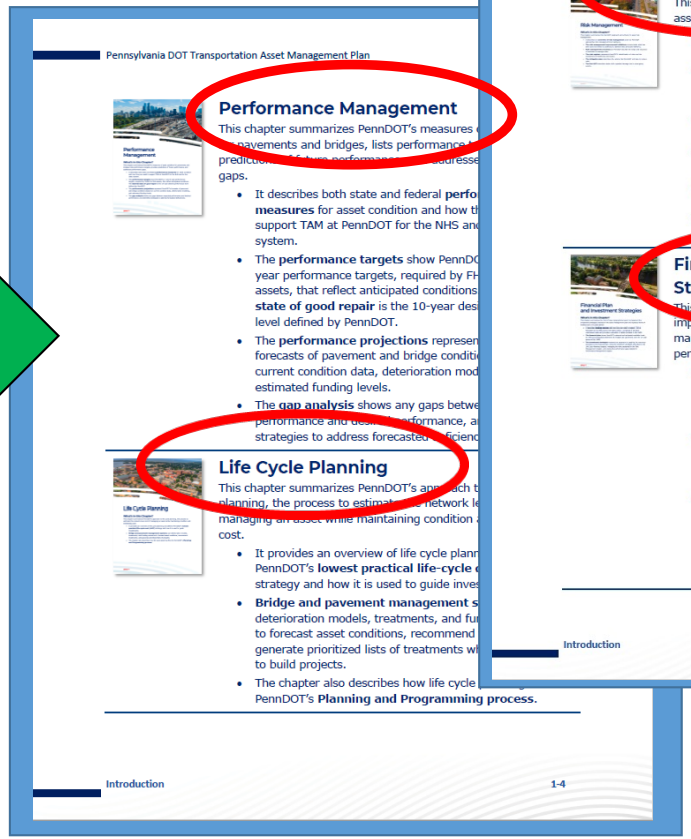


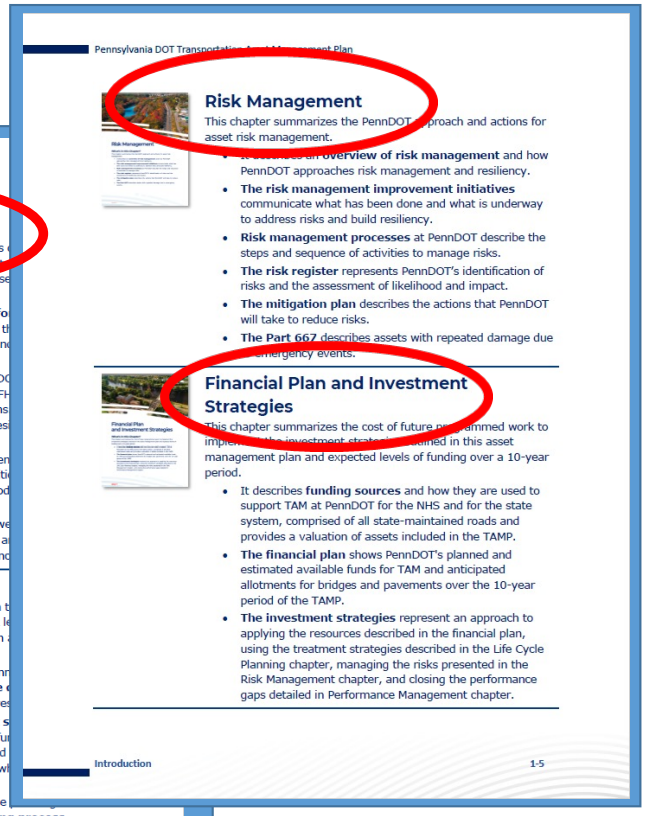
SR 1012



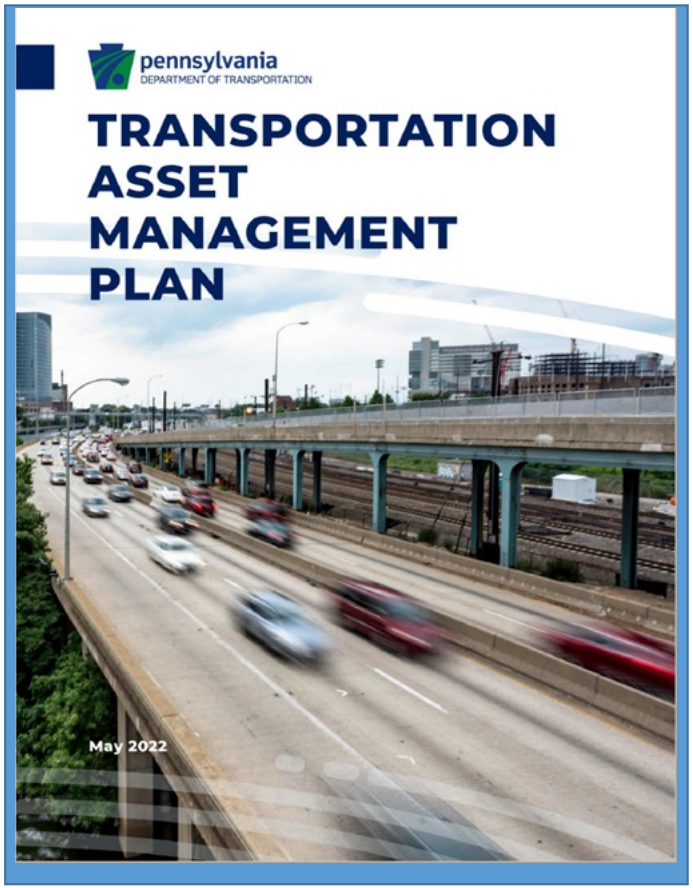
TO-BE PROCESS







TO-BE PROCESS



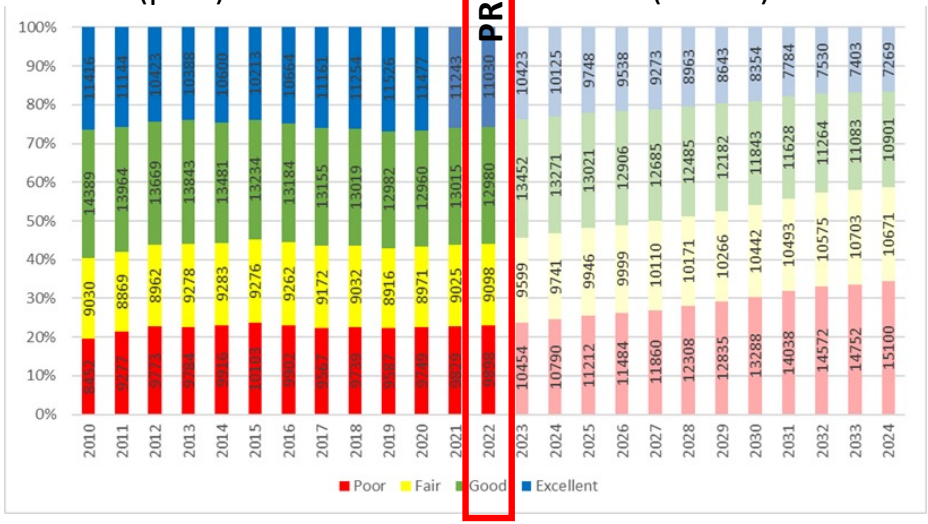
Bridge

(past)

PRESENT

(future)

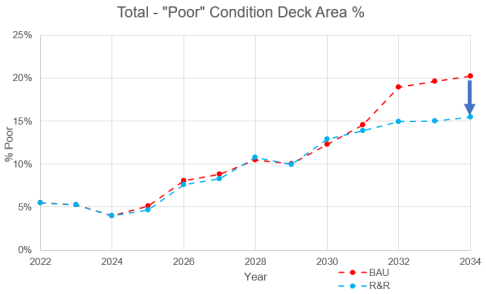
Pavement



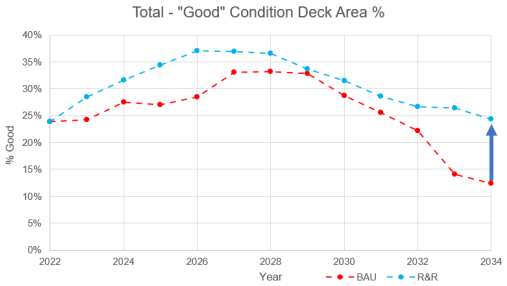
TO-BE PROCESS

BRIDGE PLANNING – TIP UPDATE

- HATs TYP – Business As Usual vs Revised & Rescoped



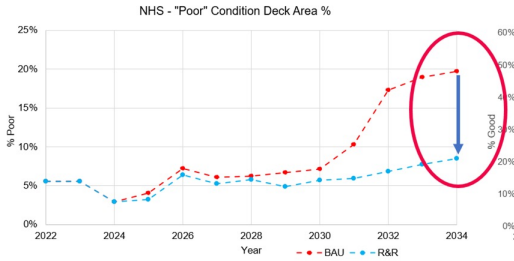
Base 31% reduction in “Poor” bridges at same funding levels



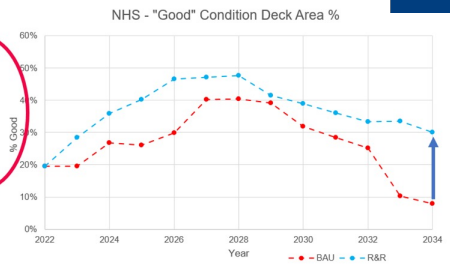
Base 96% increase in “Good” bridges at same funding levels

BRIDGE PLANNING – TIP UPDAT

- HATs TYP – Business As Usual vs Revised & Rescoped

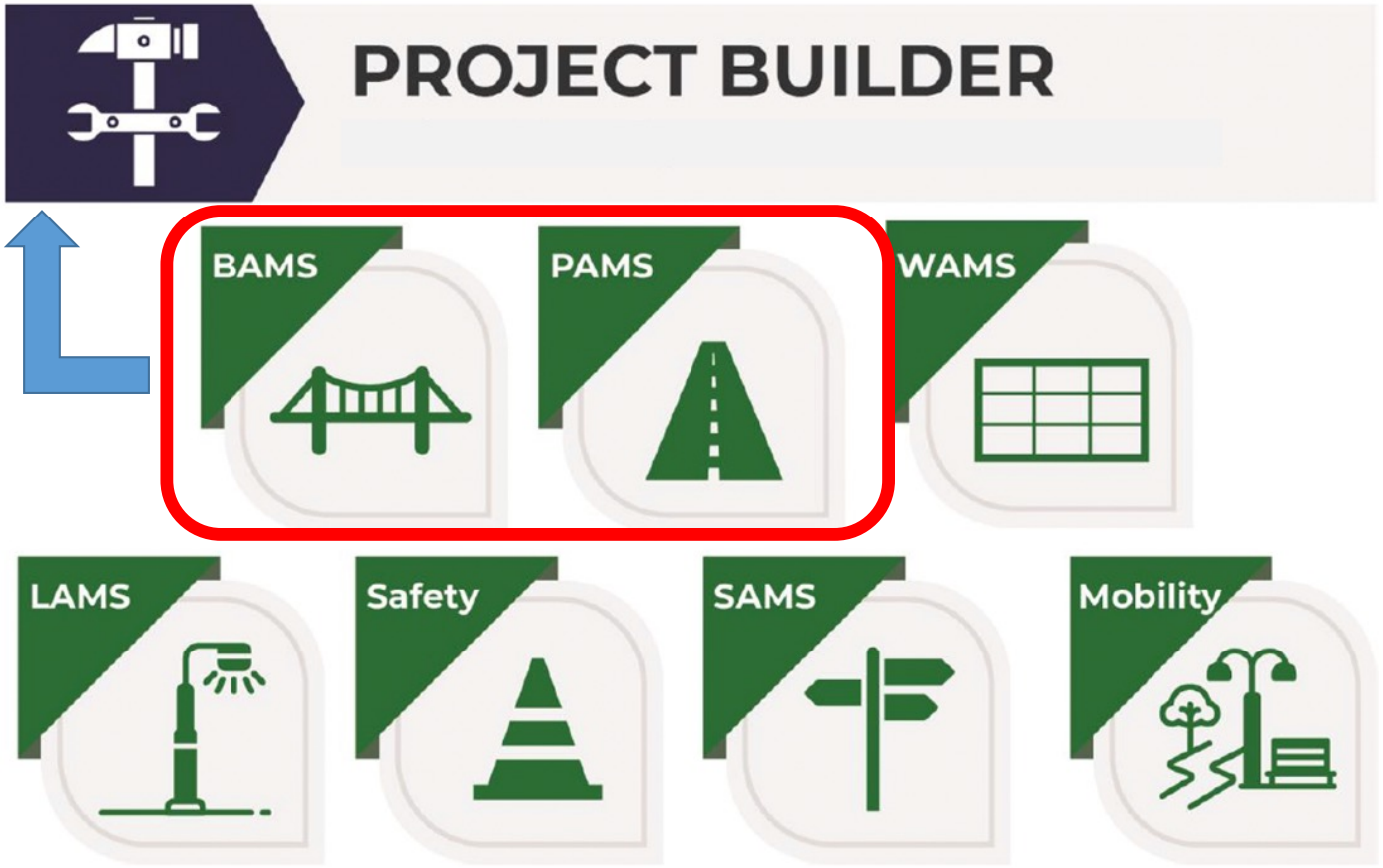


Base 57% reduction in “Poor” NHS bridges at same funding levels

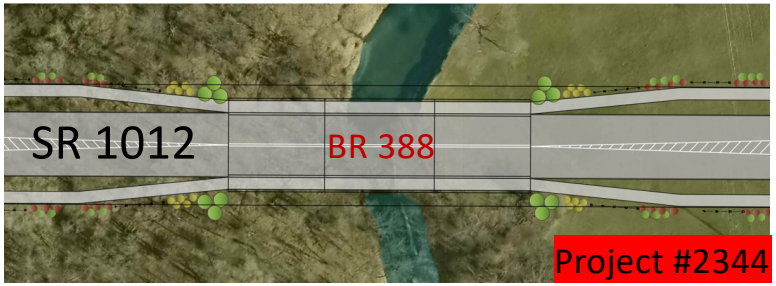


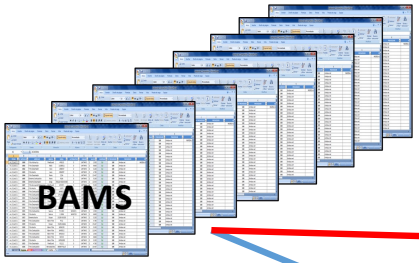
Base 276% increase in “Good” NHS bridges at same funding levels

TO-BE PROCESS

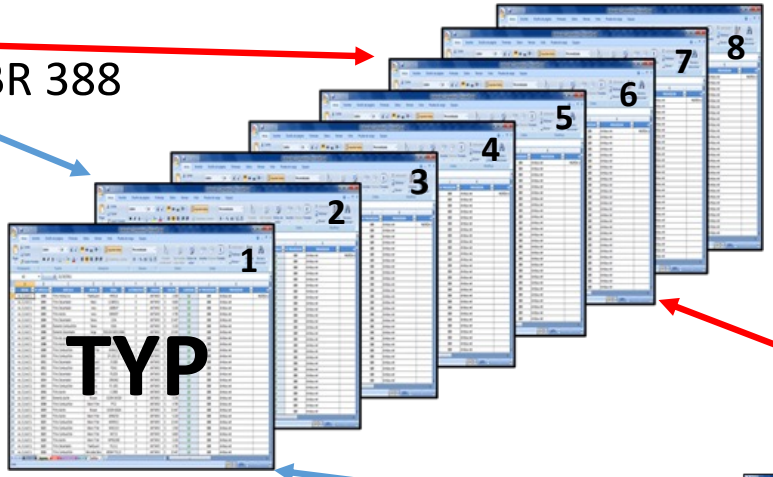


SHOULD-BE PROCESS

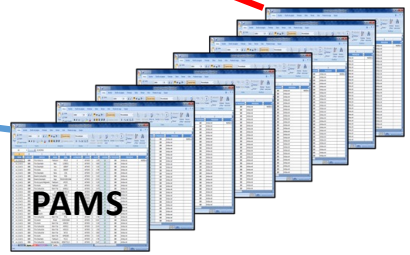




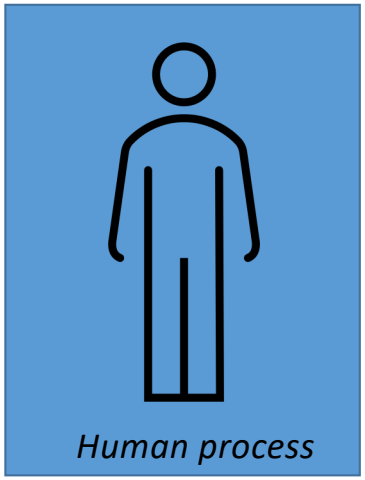
BR 388



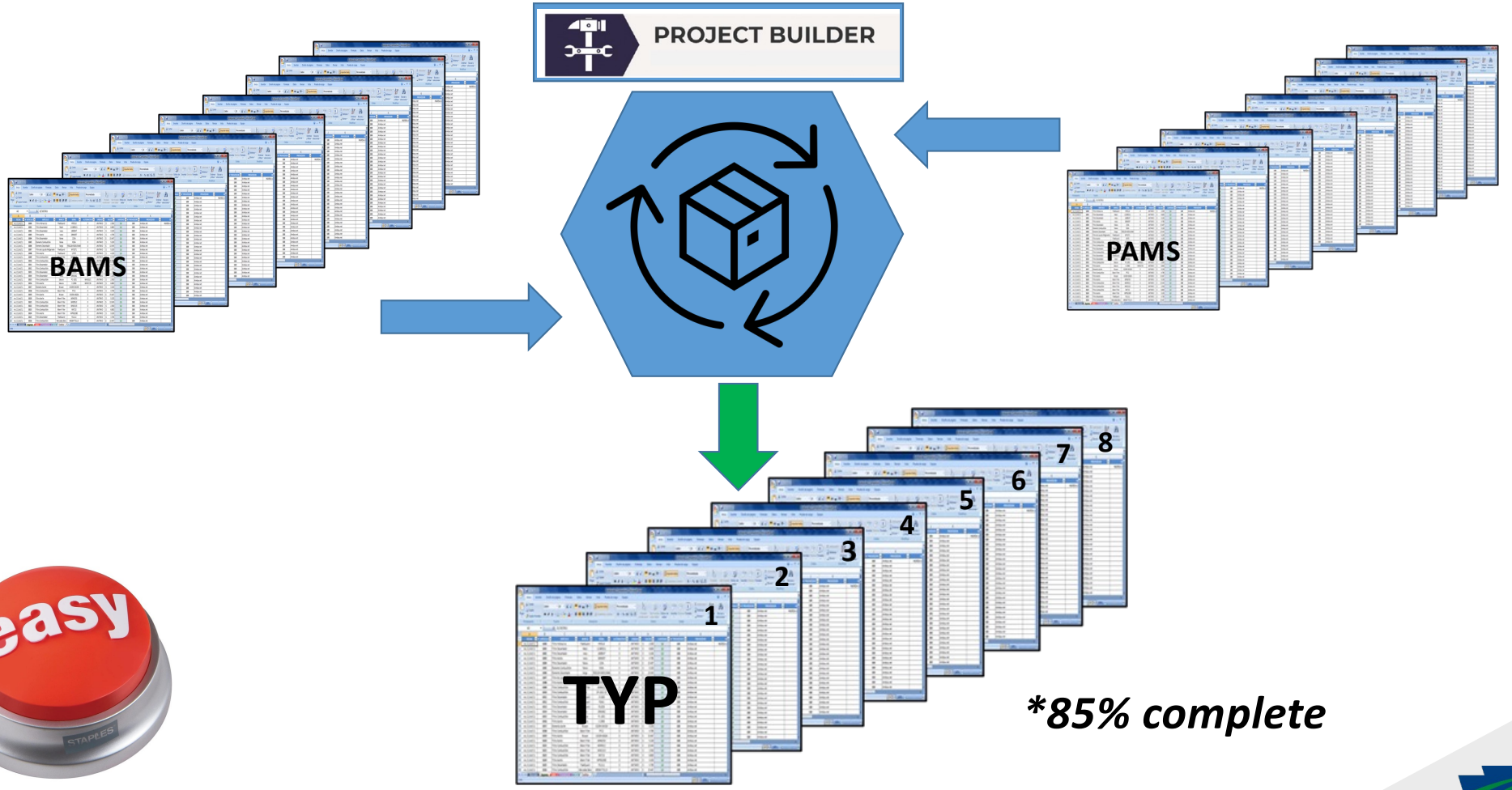
SR 1012



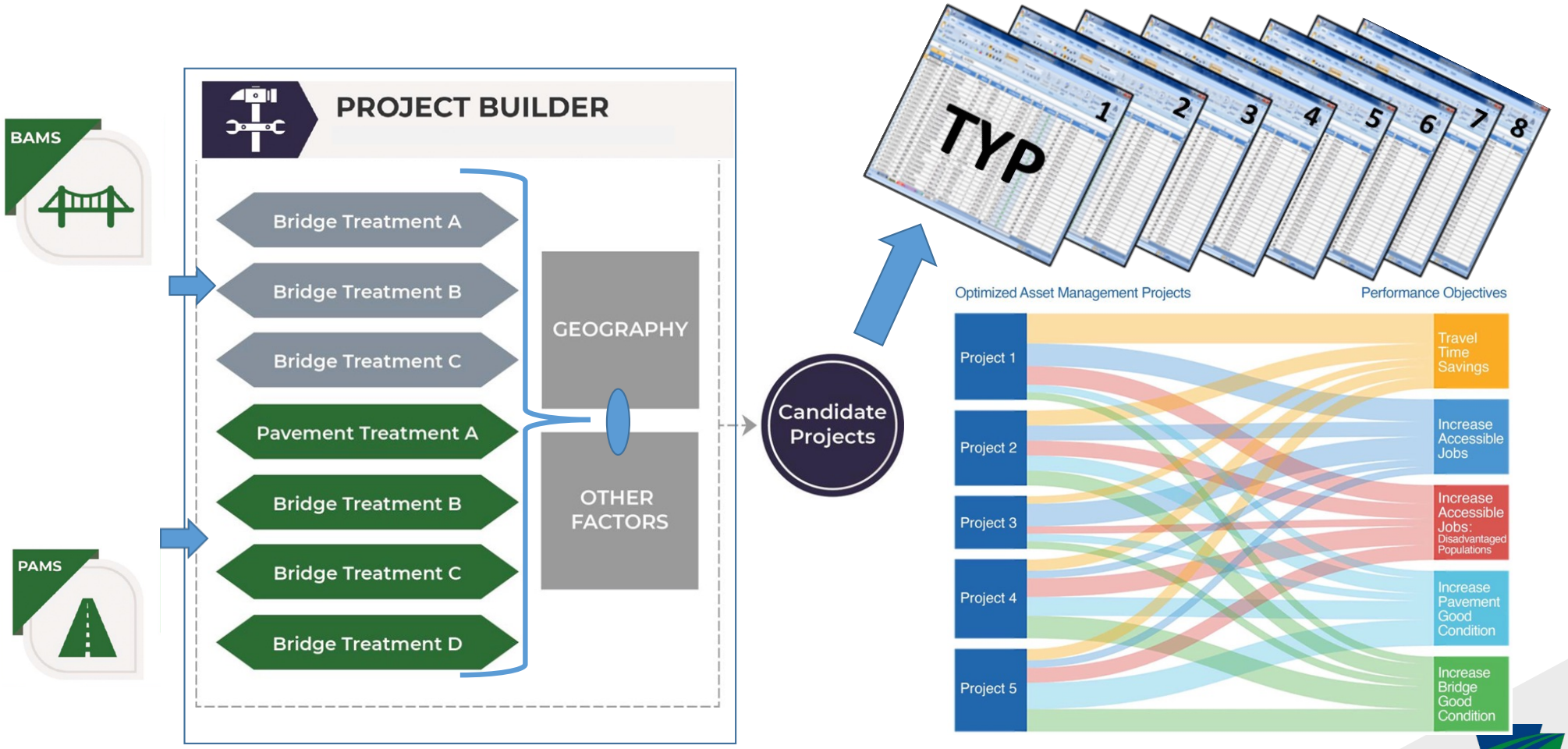
SR 1012



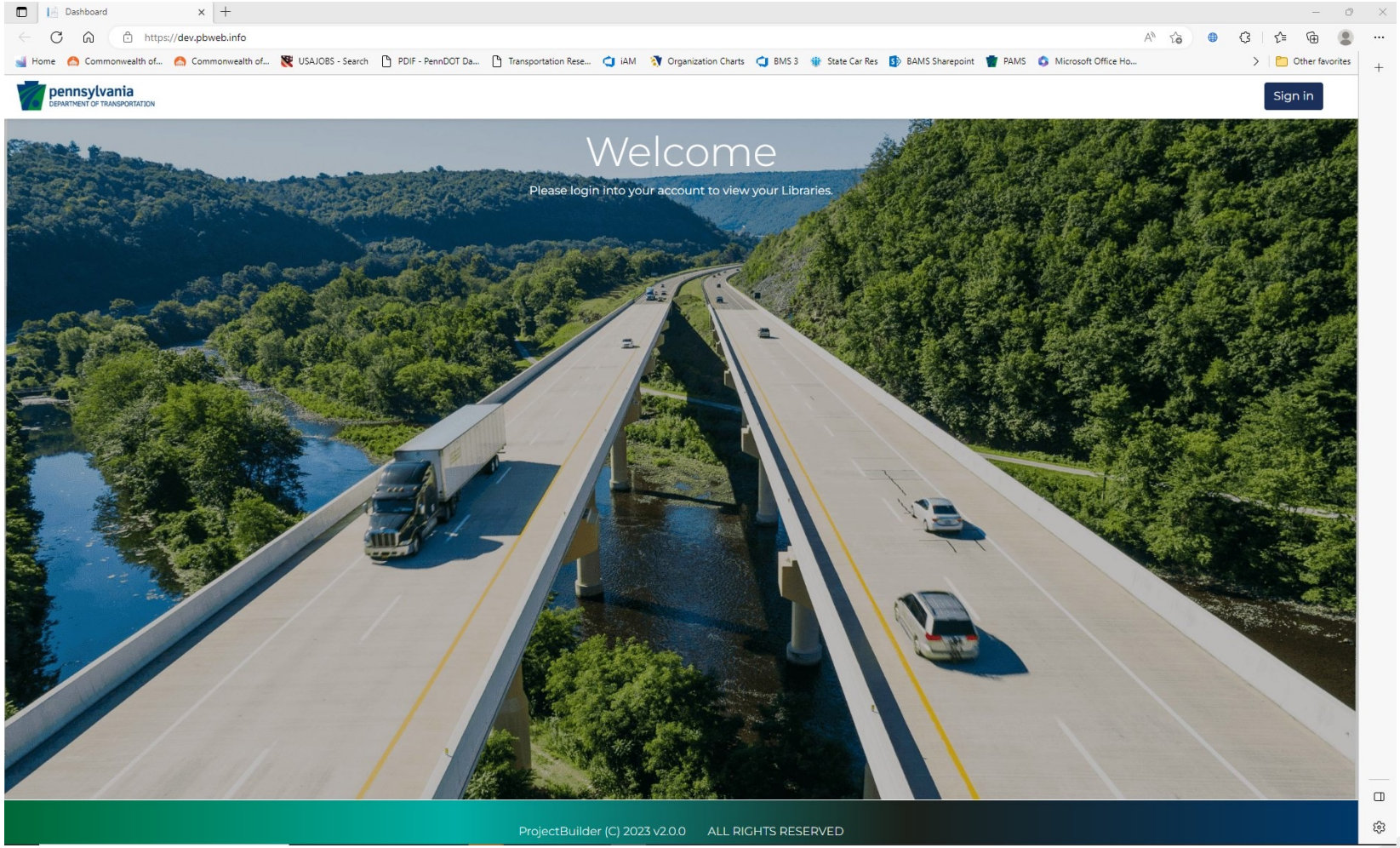
TO-BE PROCESS



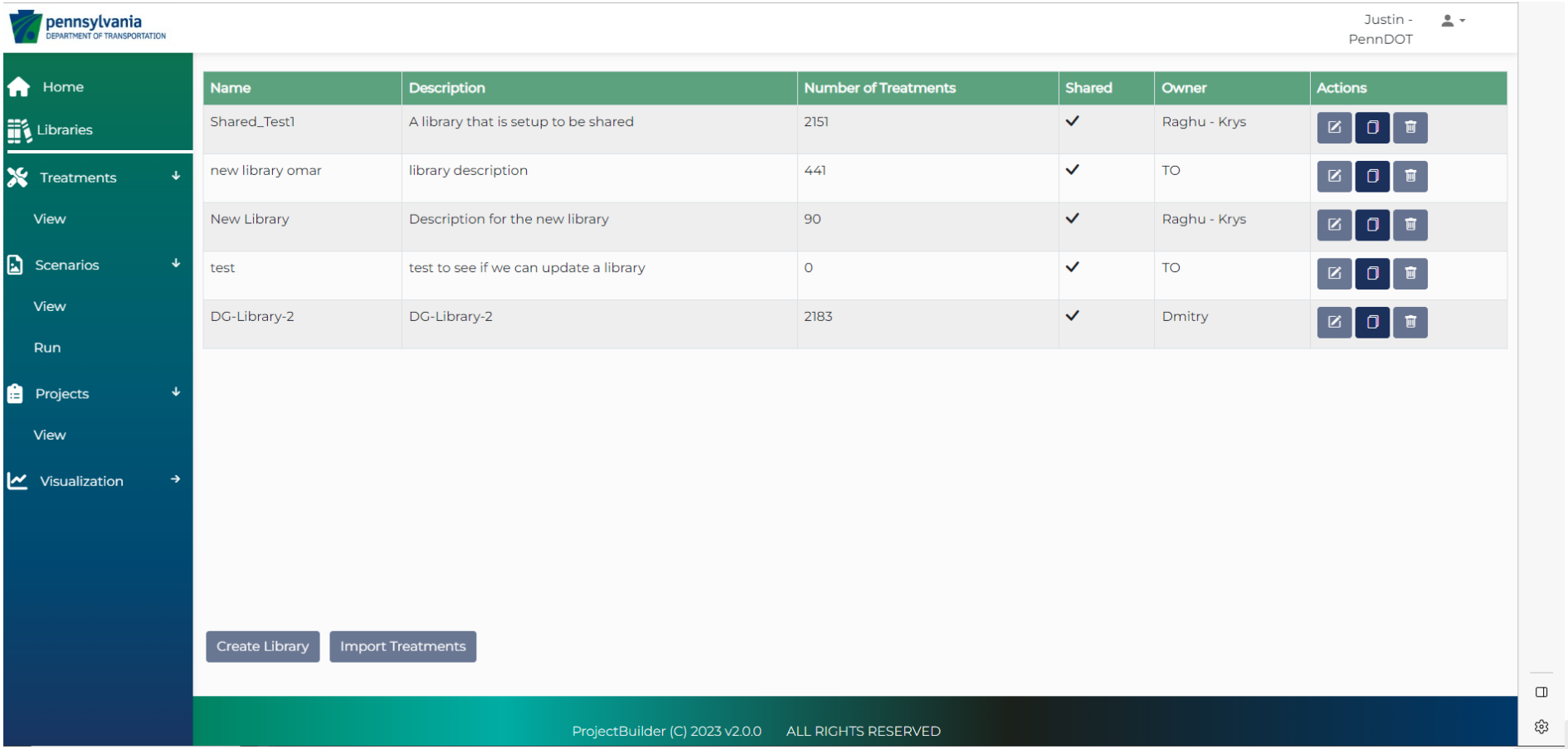
TO-BE PROCESS



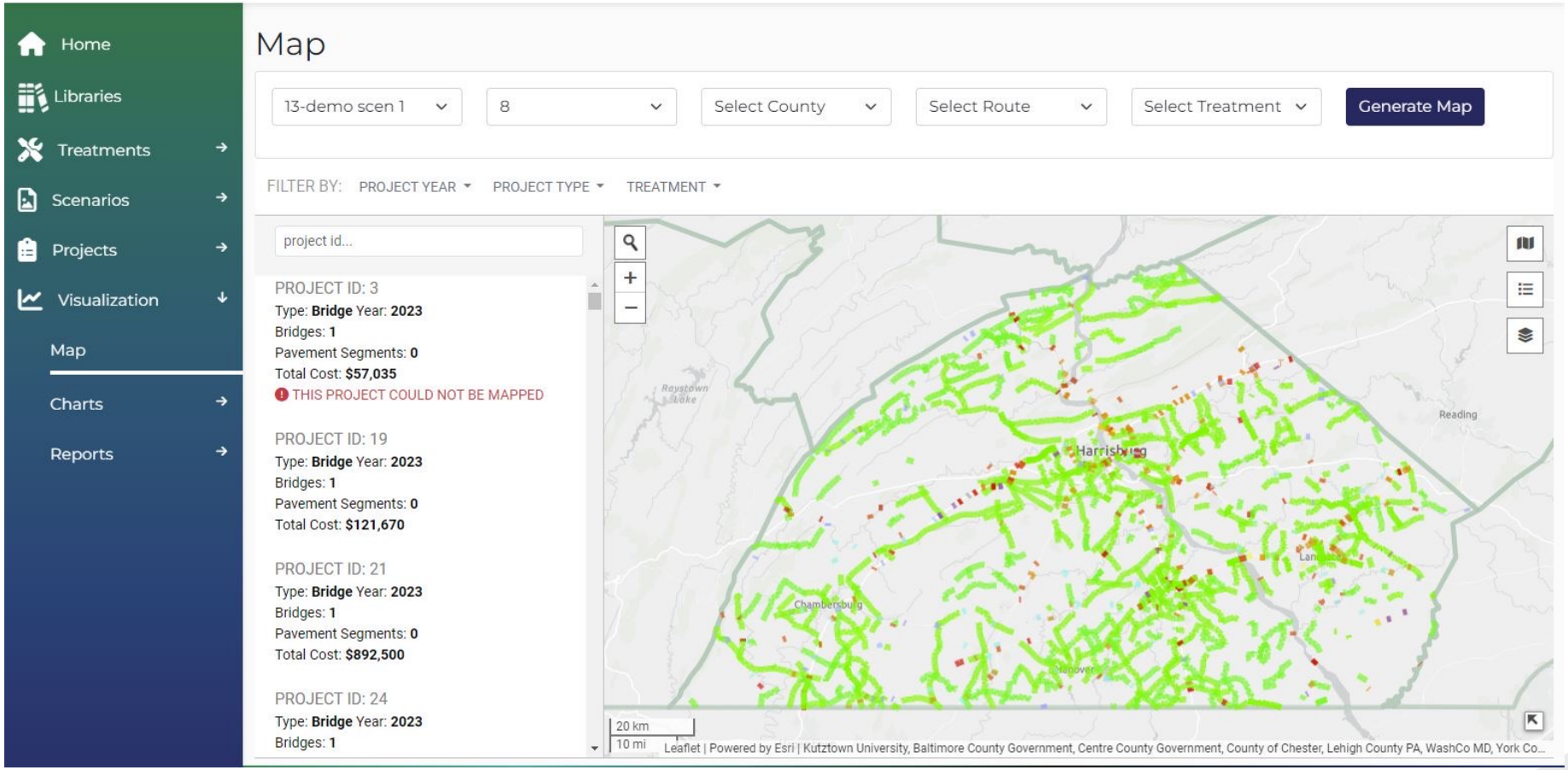
TO-BE PROCESS



TO-BE PROCESS

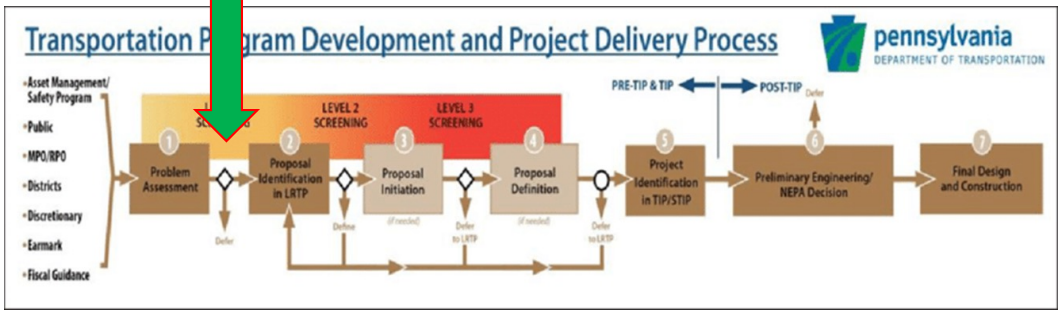


TO-BE PROCESS

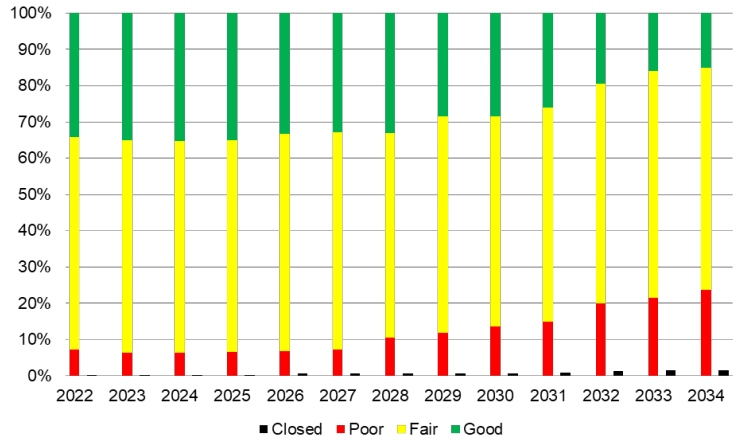


TO-BE PROCESS

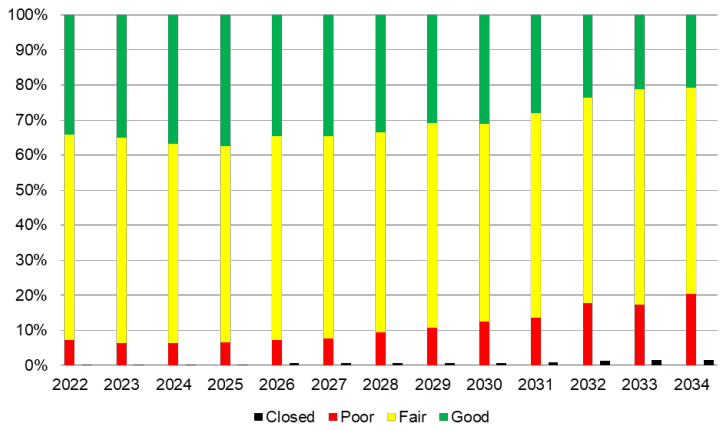
PROJECT BUILDER



Original



Revised



Questions?

jbruner@pa.gov

Code: http://repo.iam-demo.net

FHWA/AASHTO Asset Management Peer Exchange

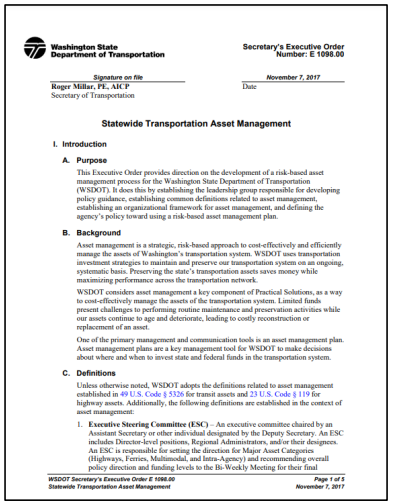
Jonathan Fok
Asset Management Specialist
July 8-9, 2023

Roger Millar, Secretary of Transportation
Amy Scarton, Deputy Secretary of Transportation

WSDOT's Executive Order for Asset Management

- The Statewide Transportation Asset Management Executive Order (1098.00) provides direction on the development of a risk-based asset management process for the Washington State Department of Transportation (WSDOT).

- It does this by:
  - Establishing the leadership group responsible for developing policy guidance;
  - Establishing common definitions related to asset management;
  - Establishing an organizational framework for asset management; and
  - Defining the agency's policy toward using a risk-based asset management plan.



Washington State Department of Transportation

Secretary's Executive Order
Number: E 1098.00

Signature on file
Roger Millar, PE, AICP
Secretary of Transportation

November 7, 2017
Date

Statewide Transportation Asset Management

I. Introduction

A. Purpose

This Executive Order provides direction on the development of a risk-based asset management process for the Washington State Department of Transportation (WSDOT). It does this by establishing the leadership group responsible for developing policy guidance, establishing common definitions related to asset management, establishing an organizational framework for asset management, and defining the agency's policy toward using a risk-based asset management plan.

B. Background

Asset management is a strategic, risk-based approach to cost-effectively and efficiently manage the assets of Washington's transportation system. WSDOT uses transportation investment strategies to maintain and preserve our transportation system on an ongoing, systematic basis. Preserving the state's transportation assets saves money while maximizing performance across the transportation network.

WSDOT considers asset management a key component of Practical Solutions, as a way to cost-effectively manage the assets of the transportation system. Limited funds present challenges to performing routine maintenance and preservation activities while our assets continue to age and deteriorate, leading to costly reconstruction or replacement of an asset.

One of the primary management and communication tools is an asset management plan. Asset management plans are a key management tool for WSDOT to make decisions about where and when to invest state and federal funds in the transportation system.

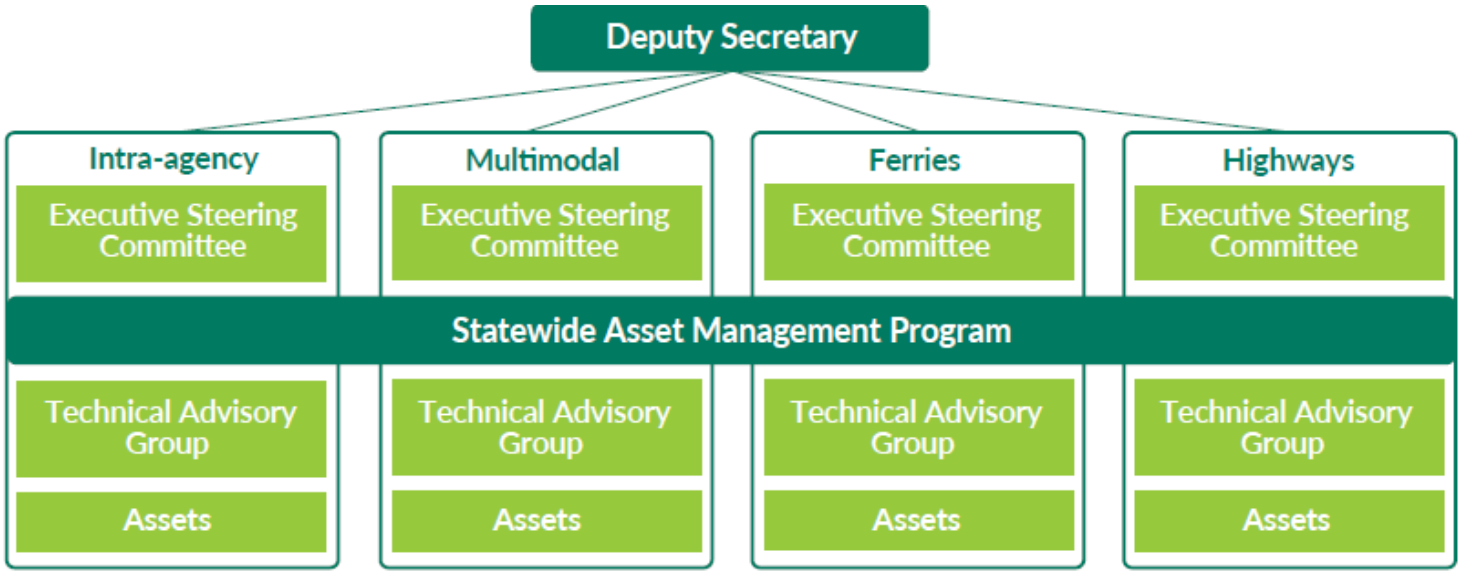
C. Definitions

Unless otherwise noted, WSDOT adopts the definitions related to asset management established in 49 U.S. Code § 5326 for transit assets and 23 U.S. Code § 119 for highway assets. Additionally, the following definitions are established in the context of asset management:

1. **Executive Steering Committee (ESC)** – An executive committee chaired by an Assistant Secretary or other individual designated by the Deputy Secretary. An ESC includes Director-level positions, Regional Administrators, and/or their designees. An ESC is responsible for setting the direction for Major Asset Categories (Highways, Ferries, Multimodal, and Intra-Agency) and recommending overall policy direction and funding levels to the Bi-Weekly Meeting for their final

WSDOT Secretary's Executive Order E 1098.00
Statewide Transportation Asset Management
Page 1 of 5
November 7, 2017

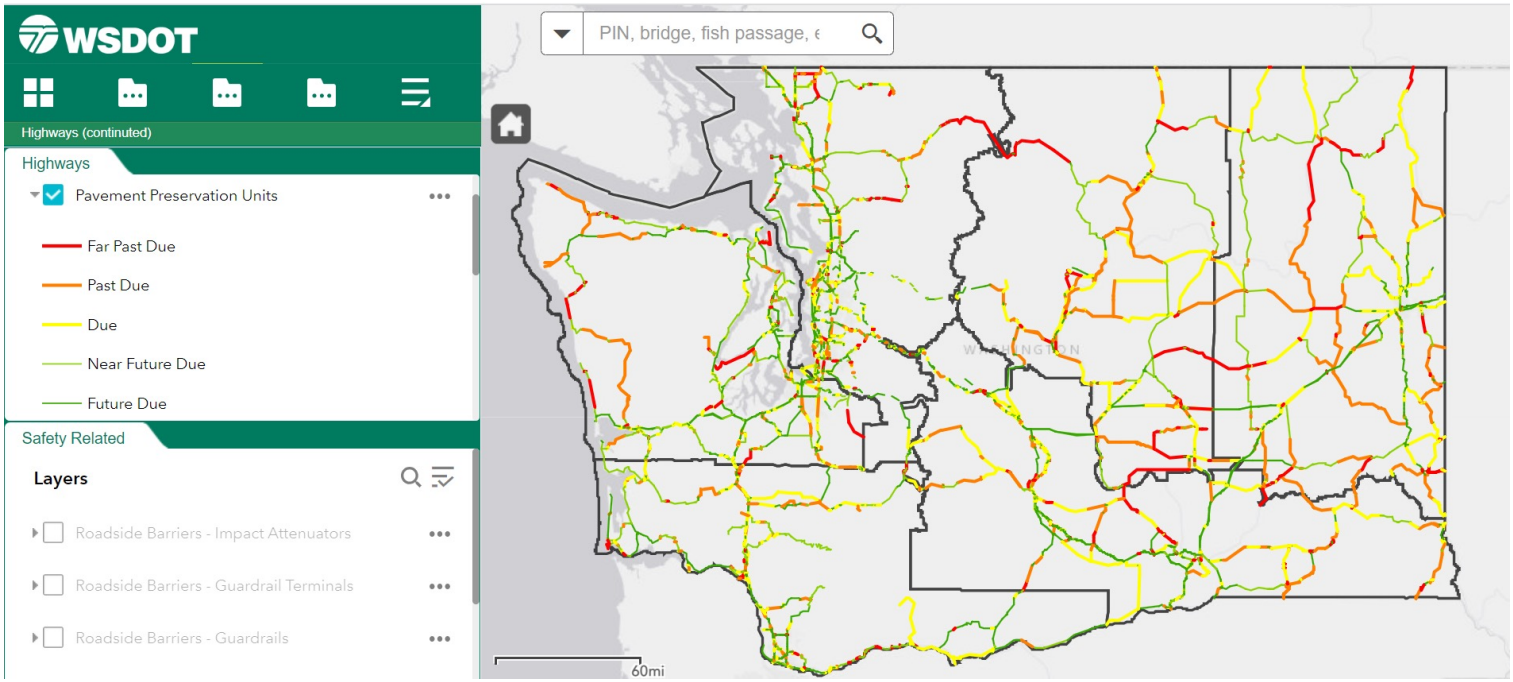
Statewide Transportation Asset Management Organization Structure



WSDOT Data Systems to Support Asset Management

- WSDOT has several Asset Management systems:
  - Pavement Management System (WSPMS)
  - Bridge Engineering Information System (BEISt)
  - Capital Facilities Management System (CAFM)
  - Fleet Equipment Management System (FEMS)
  - Others
- WSDOT has several Maintenance Management systems:
  - Highway Activity Tracking System (HATS)
  - Maintenance Productivity Enhancement Tool (MPET)
  - Others
- WSDOT has several Financial Management systems:
  - Transportation Executive Information System (TEIS)
  - Program Management System (CPMS)
  - Others

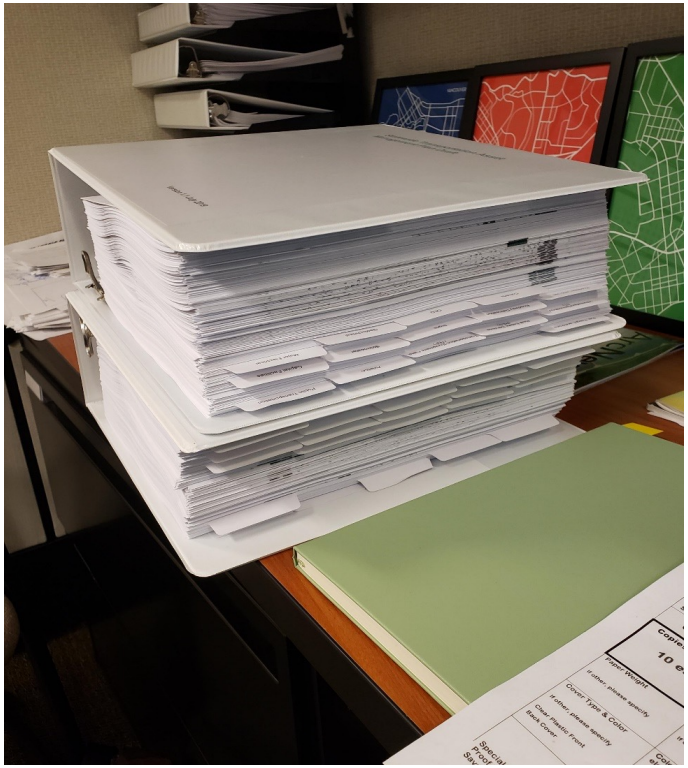
WSDOT Asset Management GIS Application



Next Steps

- WSDOT is continuing to document our current business processes to determine gaps through the Asset Management Plans
  - Many asset classes beyond Pavement and Bridge have less mature data to be able to inform a more robust analysis for communicating needs

- WSDOT is continuing to strengthen the connection between asset management planning and asset management implementation
  - Incorporating more assets (and asset attributes) into the Asset Management GIS Application beyond Pavement and Bridge

Questions?

Jonathan Fok
Washington State DOT (WSDOT), Asset Management Specialist
fokjona@wsdot.wa.gov