

Transportation Asset Management Webinar Series

Webinar 65

Communicating Transportation Asset Management

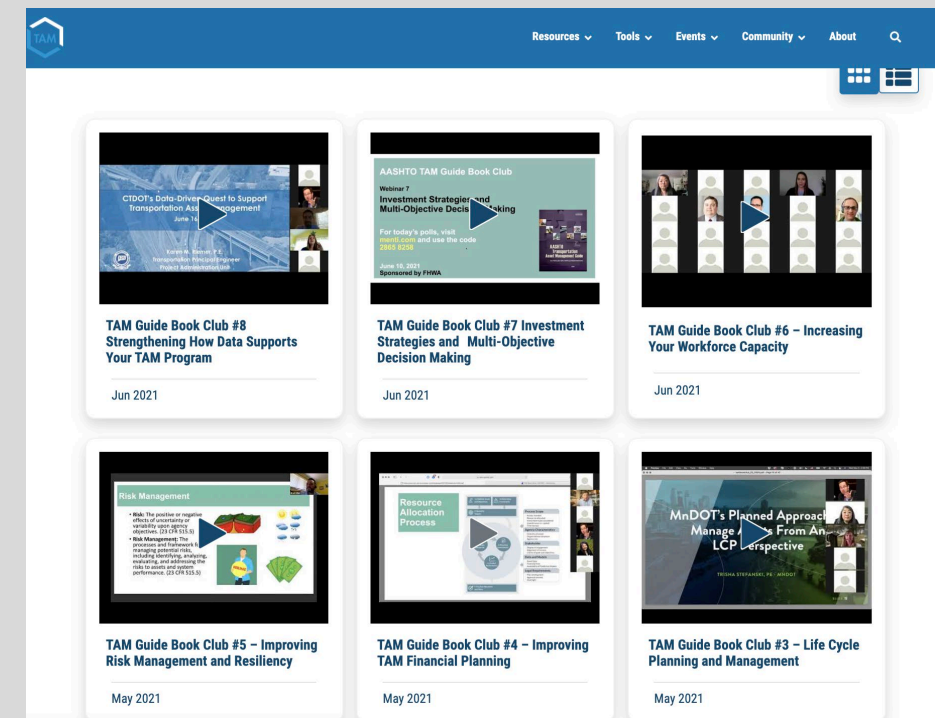
Sponsored by FHWA and AASHTO



October 18, 2023

FHWA/AASHTO Asset Management Webinar Series

- This is the 65th in a webinar series that has been running since 2012
- Webinars are held every two months, on topics such as off-system assets, asset management plans, asset management and risk management, and more
 - 3rd Wednesdays, 2PM Eastern
- We welcome ideas for future webinar topics and presentations
- Submit your questions using Zoom’s chat feature



Welcome

FHWA and the AASHTO Sub-Committee on Asset Management are pleased to sponsor this webinar series

- Sharing knowledge is a critical component of advancing asset management practice

Webinar Objectives

- Highlight what state DOTs are doing to communicate with various audiences regarding their Transportation Asset Management programs
- Exchange best practices for communicating about TAM
- Raise awareness about the importance of communication regarding TAM results

Webinar Agenda

2:00 Welcome, Overview, and Agenda

Anna McLaughlin, AASHTO
Tashia Clemmons, FHWA
Diane Gurtner, Spy Pond Partners

2:10 Speaker 1

Shaker Rabban and Trisha Stefanski,
Minnesota DOT

2:25 Speaker 2

Chris Whipple, Utah DOT

2:40 Speaker 3

Stephanie Shippee, Connecticut DOT

2:55 Speaker 4

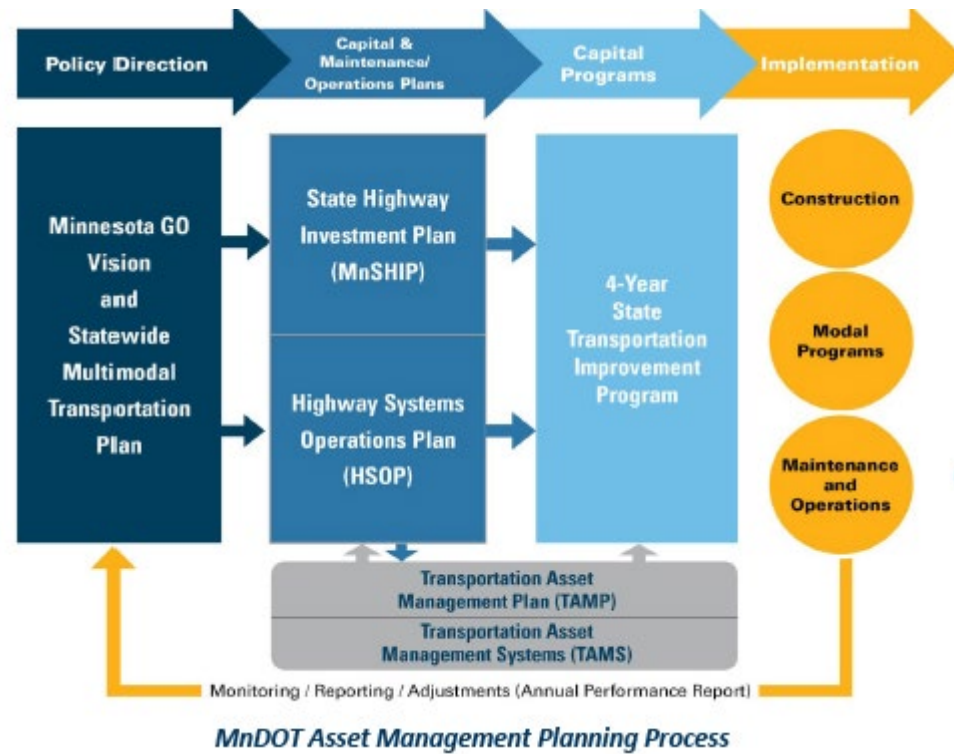
Michael Weakley, Ohio DOT (Recorded)

3:10 Q&A

Diane Gurtner, Spy Pond Partners

3:20 Discussion and Wrap-up

Diane Gurtner, Spy Pond Partners



MnDOT Methods In Communicating TAM

Shaker Rabban, Asset Management Planning Director
 Trisha Stefanski, P.E. Manager of Asset Management Program Office

Quick 15 Minutes!

Part One: Enterprise Asset Mgmt Development

- Transportation Asset Management Plan **2014**
- Transportation Asset Management System **2015**
- Asset Management Program Office **2015**

Part Two: State Statute 174.03 **2021**

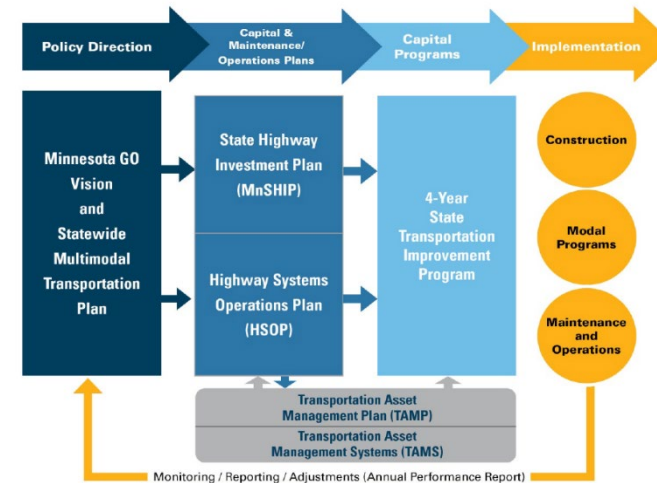
Part Three: Asset Management Strategic Imp. Plan **2021**

Part Four: The Future of TAM COMM

TAMP 2014, 2018, 2022

Long List of Asset Classes and Working Groups

- Minnesota has long history of performance-based planning
- MnDOT Creation of “Asset Management Framework” 2012 – AASHTO guide “Focus on Implementation”
- 2014 “Pilot State” for TAMP Preparation
 - NY, LA, MN
 - Towers, OSS, Culverts, Storm Tunnels
- 2018 Added Asset Classes
 - Buildings, ITS, signals, highway lighting



Transportation Asset Management System

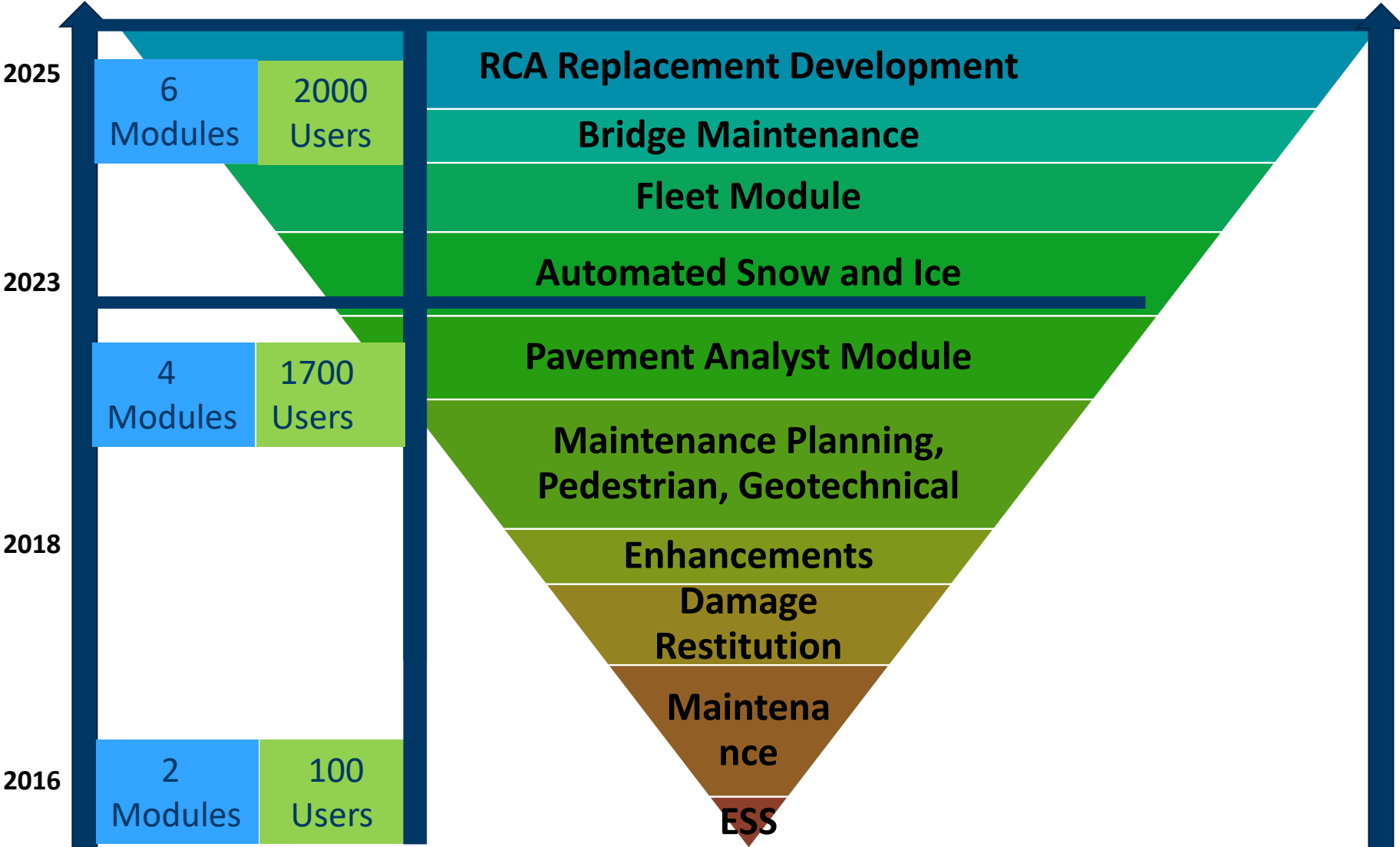
2013 Ray Starr, Assistant State Traffic Engineer, NEED to replace AFMS (Automated Facilities Management System).

- AFMS Kaizen Event -> April 8-11, 2013; need for integrated software.
- The program was written with software that is no longer able to be maintained and the cost of updated it or rewriting the program would have been expensive.

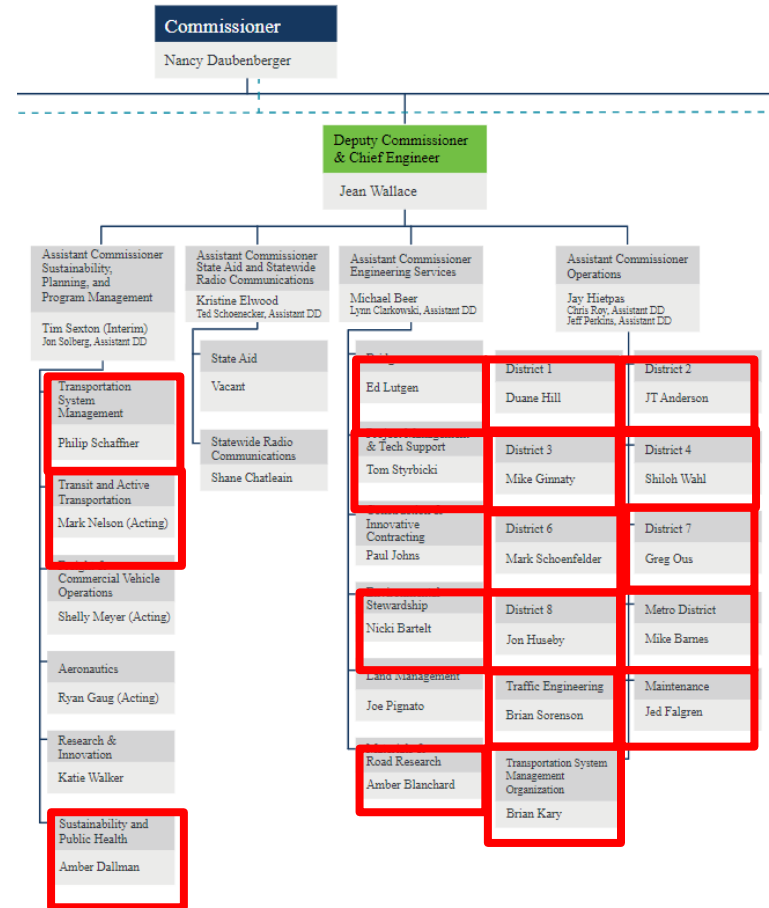
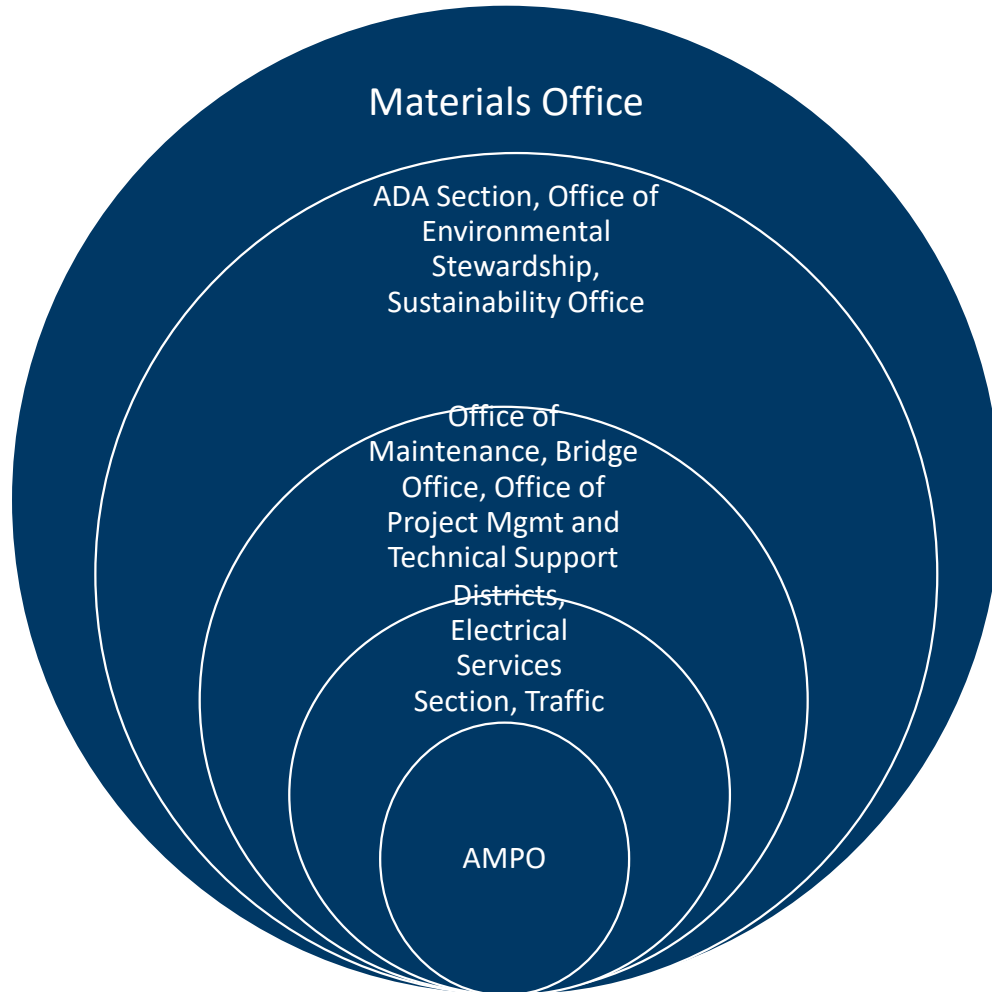
Over the past several years, many of MnDOT's computer programs have become outdated and in need for updating and/or replacing (Signtrack, HydINFRA, etc.).

- An opportunity for, us as a department, move forward with an enterprise solution that would not only answer this issue, but move the department forward towards a common software that could eliminate numerous stand alone products or programs that are currently being used throughout MnDOT... an enterprise asset management software.

TAMS AgileAssets Growth



TAMS Stakeholders



Transportation Asset Management System (TAMS) Decision Making Matrix



Asset Management Program Office

- Divide and Conquer
- Monthly TAMS Stakeholder Meetings
- Numerous Presentations at various Committees
 - Traffic
 - Hydraulics
 - Design Workshop

Asset Management Program Office Target Audiences

Trisha Stefanski Asset Management Program Office Manager

- Deputies – Conferences, Infrastructure Resiliency Council
- Asst Commissioners and District Engineers – AMSC, OPS DIV/SPPM DIV
- MnIT Leadership

Tom Zimmerman Business Liaison TAMS Steward

- District Maintenance Managers & Superintendents – MBMT, OMG
- Office of Maintenance – MBMT, individual meetings
- Office of Finance – Individual Meetings

Michael Cremin Asset Management Project Engineer

- Construction Engineers – PCMG/CMG, construction workshop
- District Design Engineers/Project Mgmt – Design workshop
- Traffic Engineers - TEO
- Pavement Engineers – MEO
- Project Data Management Group - BIM

Douglas Maki Asset Management and Resiliency Engineer

- Metro District – Staff Meetings
- State Aid
- Hydraulic Engineers - Workshops
- Bridge Engineers and Maintenance - TBD
- Sustainability Office – Resiliency Advisory Committee
- Planning - PMG

Part Two: State Statute 174.03

2022 MN State Statute 174.03 – *Requires life cycle assessment and corridor risk assessment as part of asset management programs in each district of the department.*



The screenshot shows the Minnesota Legislature website. At the top, there is a navigation bar with links for House, Senate, Joint, Schedules, Committees, Bills, Law, Multimedia, and Publications. Below this is a banner image of the Minnesota State Capitol building with the text "Office of the Revisor of Statutes". A search bar is visible with the text "Retrieve by number Statutes GO" and a search button. The search results show "2022 Minnesota Statutes > TRANSPORTATION > Chapter 174 > Section 174.03".

[2022 Minnesota Statutes](#) > [TRANSPORTATION](#) > [Chapter 174](#) > Section 174.03

◀ [174.025](#)

2022 Minnesota Statutes

This section has been affected by law enacted during the 2023 Regular Session. [More info...](#)

174.03 DUTIES OF COMMISSIONER.

District Life Cycle Plans

- Life-cycle plans for 6 assets and 8 districts
 - Pavement, bridge, culverts, ERS, curbramps, sidewalks
- Dynamic dashboard with selectable features
- Current vs 10-year conditions, performance trends, and maintenance and capital costs

Ancillary Assets Dashboard

Filters

District (Select all for statewide)	☰	🗑️
D5		
D1		
D2		
D3		
D4		
D6		
D7		
D8		

Asset Class	☰	🗑️
Culverts		
Curb Ramps		
ERS		
Sidewalk		

District Life Cycle Plans

Culverts Asset Output

Current vs 10-year conditions

Condition	Good	Fair
Worst-First approach 10-year condition	39%	58%
Preservation approach 10-year condition	38%	61%
Current condition (2021)	41%	57%

10 - year investment needs

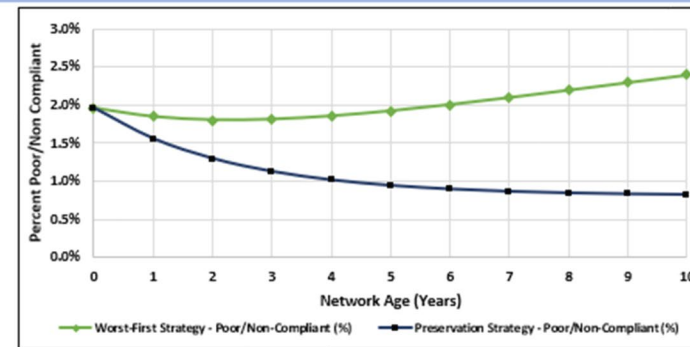
	Worst-First Strategy	Preservation Strategy
Maintenance Costs	\$1,122,000	\$1,201,200
Capital Costs	\$2,122,524	\$1,154,857

20 - year investment needs

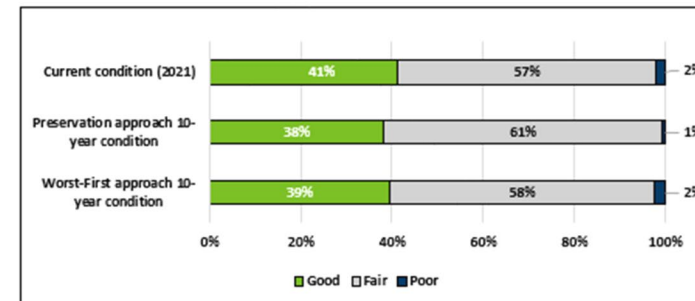
	Worst-First Strategy	Preservation Strategy
Maintenance Costs	\$2,142,000	\$2,293,200
Capital Costs	\$4,864,953	\$1,932,523

Culverts Asset Charts

10-Year Performance Trends



Comparison of current and 10-year projected conditions



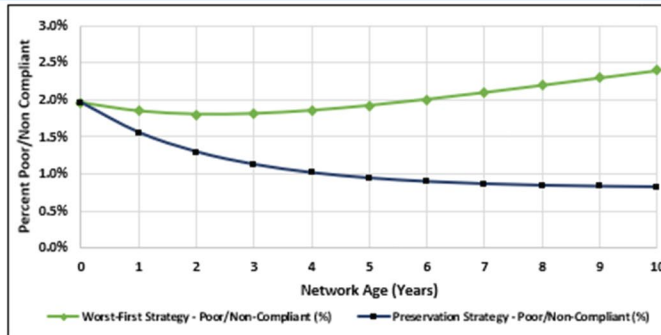
10-year annual investment needs



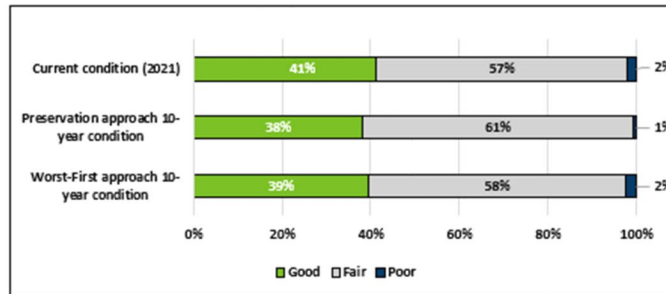
District Life Cycle Plans

Culverts Asset Charts

10-Year Performance Trends



Comparison of current and 10-year projected conditions



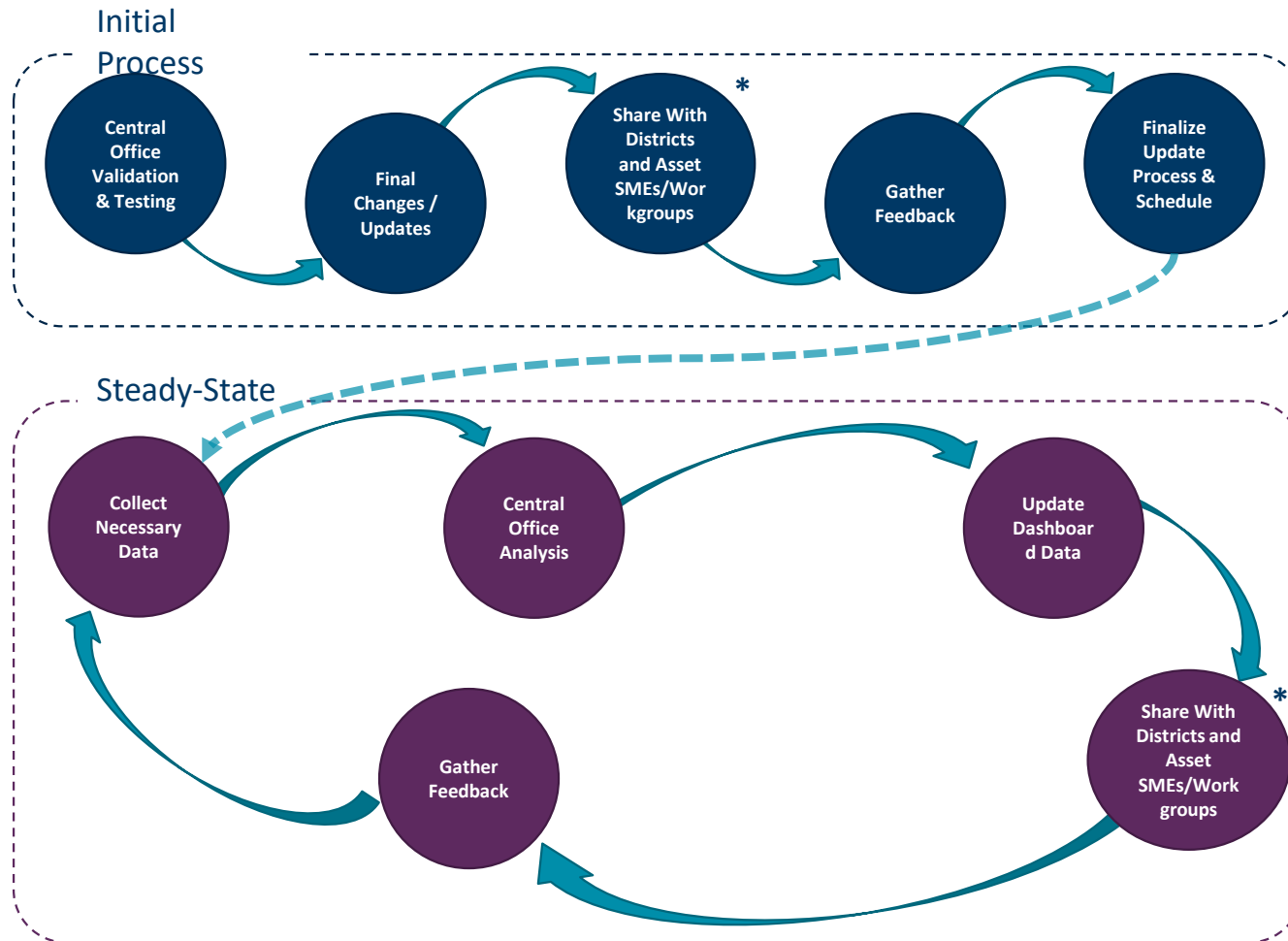
10-year annual investment needs



District Life Cycle Plans

- Ability to forecast condition and need
- Predict bubbles to make proactive programming decisions
- Make cross-trade off decisions
- Determine cost effectiveness of different maintenance and capital strategies

Communication Process



*Communication

- Who at the district level will be using the tool?
- What are the specific asks of those users when they receive it?
- Share alongside the TAM Strategic plan for context?

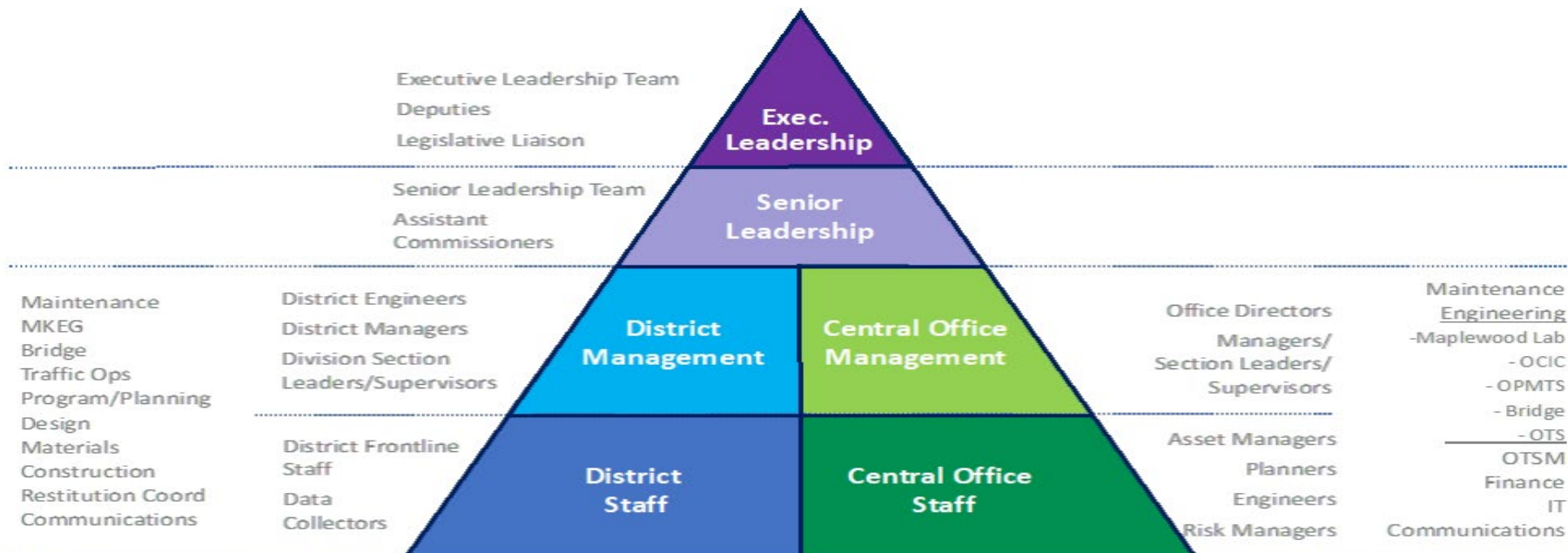
Recommendations:

- Share with central office asset SMEs/workgroups first.
- Include planned update schedule (e.g., Central office will update biannually and share with districts annually)
- Establish primary and secondary points of contact.

Part Three: The AMSIP Communications Plan

AMSIP Included 5 recommendations in the Action Plan

- Communicate roles and develop initial resources
- Initiate District rollout
- Initiate Central Office rollout
- Initiate the MnSHIP and TAMP rollout
- **Conduct on-going communication efforts**

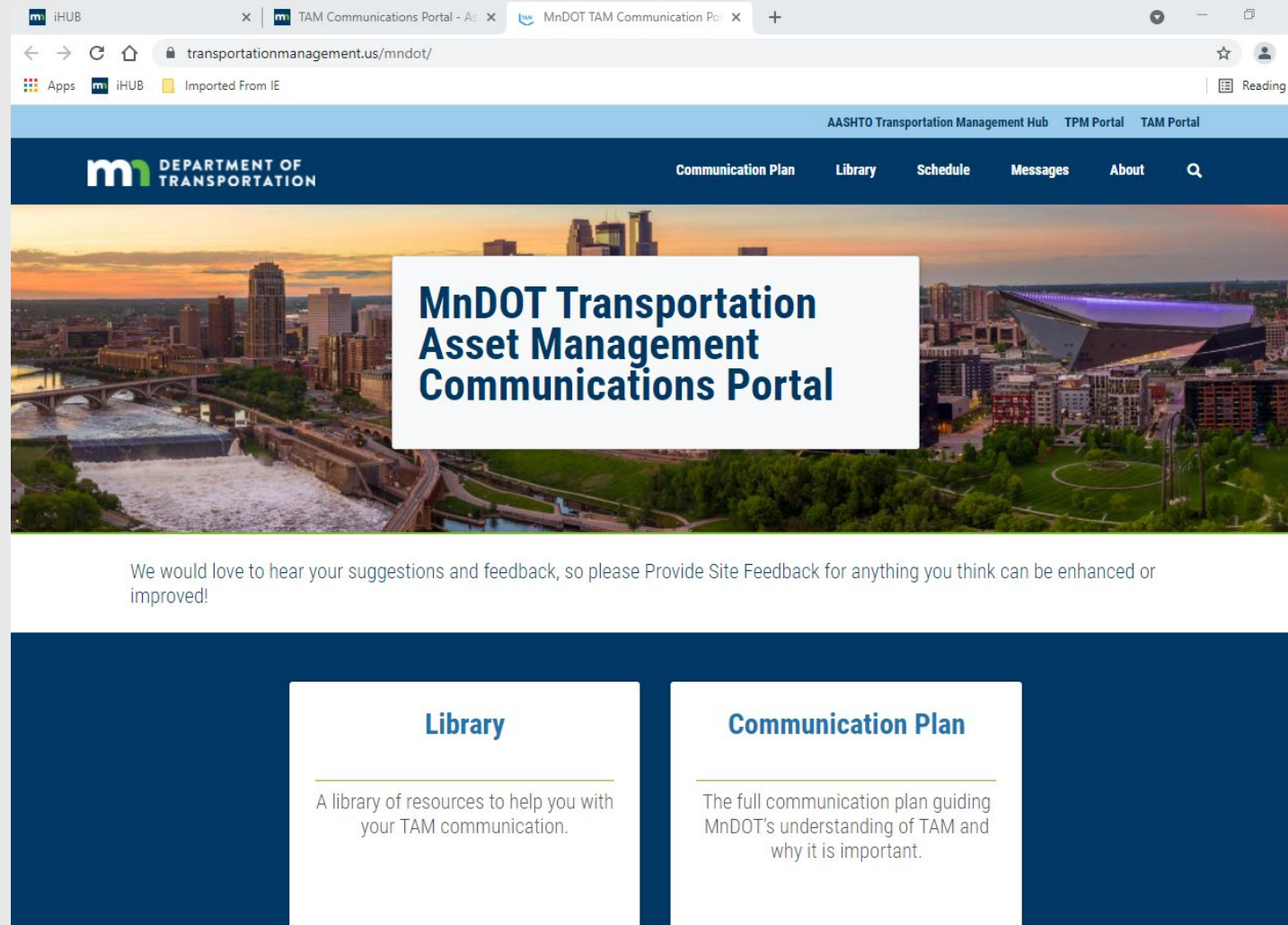


AMSIP Communications Plan










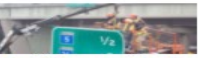


The Approach – Categorize Information Needs:

- **General Asset Management Knowledge** – Messaging that builds general knowledge and support for asset management.
- **TAMS Data** –The importance of quality data and the benefits realized from the use of quality data.
- **Decision Making** – Information that demonstrates the importance of using TAMS data and asset management principles to guide *work planning*, to understand *trade-offs* in budget-setting activities, and to *manage performance, minimize Life-cycle costs* and extend *service life*.
- **TAMP Implementation** – Support the on-going implementation of the TAMP at MnDOT.
- **Coordination With External Stakeholders** – Information for MnDOT’s use in communicating asset management information to external stakeholders.

MnDOT TAM Portal



MnDOT TAM Portal

<p>Flyer/Handout</p>  <p>Asset Management Communications Considerations for Districts</p> <p>Mar 2022</p>	<p>Flyer/Handout</p>  <p>Asset Management for Business Support/Administration Staff</p> <p>Mar 2022</p>	<p>Flyer/Handout</p>  <p>Asset Management for Construction</p> <p>Mar 2022</p>
<p>Flyer/Handout</p>  <p>Asset Management for Project Managers/Design Engineers</p> <p>Mar 2022</p>	<p>Flyer/Handout</p>  <p>Asset Management for Hydraulics</p> <p>Mar 2022</p>	<p>Flyer/Handout</p>  <p>Asset Management for Maintenance & Operations Staff</p> <p>Mar 2022</p>
<p>Flyer/Handout</p>  <p>Asset Management for Maintenance Leaders</p> <p>Mar 2022</p>	<p>Flyer/Handout</p>  <p>Asset Management for Materials Engineering</p> <p>Mar 2022</p>	<p>Flyer/Handout</p>  <p>Asset Management for Planners</p> <p>Mar 2022</p>
<p>Flyer/Handout</p>  <p>Asset Management for Sign Maintenance</p> <p>Mar 2022</p>	<p>Flyer/Handout</p>  <p>Asset Management for District Traffic Engineering Functions</p> <p>Mar 2022</p>	<p>Presentation</p>  <p>What are we doing with all this asset management data?!</p> <p>Feb 2022</p>

Disciplines

- Business/Administrative
- Construction
- Project Mgt & Design
- Hydraulics
- Maintenance Staff
- Maintenance Leadership
- Materials Engineering
- Planners
- Sign Maintenance
- Traffic Engineering

General

- Communications Bullets
- Data Usage “What are we...”

Other

- AMSIP
- Other .ppts
- Other docs

Part Four – Future TAM Communication

- 8 Embedded District AM Specialists
- Cross-Cutting AM Committee
- Monthly AMSC
- TAMP Folios
- TAM Roadmap
- AMSIP Communication Plan



Thank you!

Shaker Rabban - Shaker.rabban@state.mn.us
Trisha Stefanski – trisha.Stefanski@state.mn.us



Communicating TAM at UDOT

AASHTO/TRB TAM Webinar 10-18-23



UDOT TPM Organization



Organizational Management

Develop process improvement methods, tools and training to manage change.



Asset Management

Focus and improve asset management of asset stewards through coordination, processes, and systems.



Performance Management

Develop strategic approaches to achieve performance criterion that align with policy decisions and drive investment strategies.



Asset Risk Management

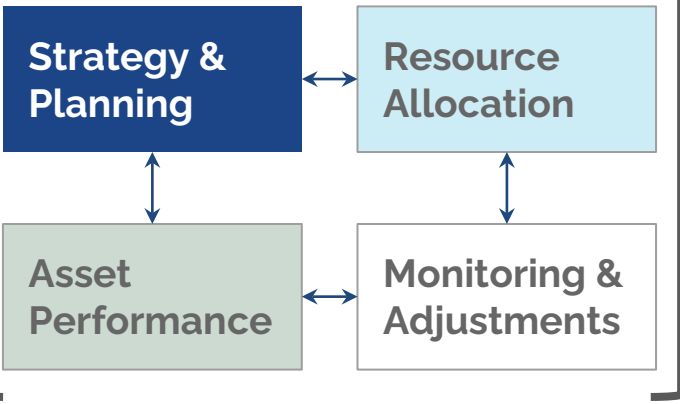
Manage and incorporate risk response strategies at a programmatic level through asset processes and systems.



Enhance the quality of people's lives through transportation assets that are managed effectively based on risk and return on investment, using the best available information and tools."

- Transportation Performance Management Vision

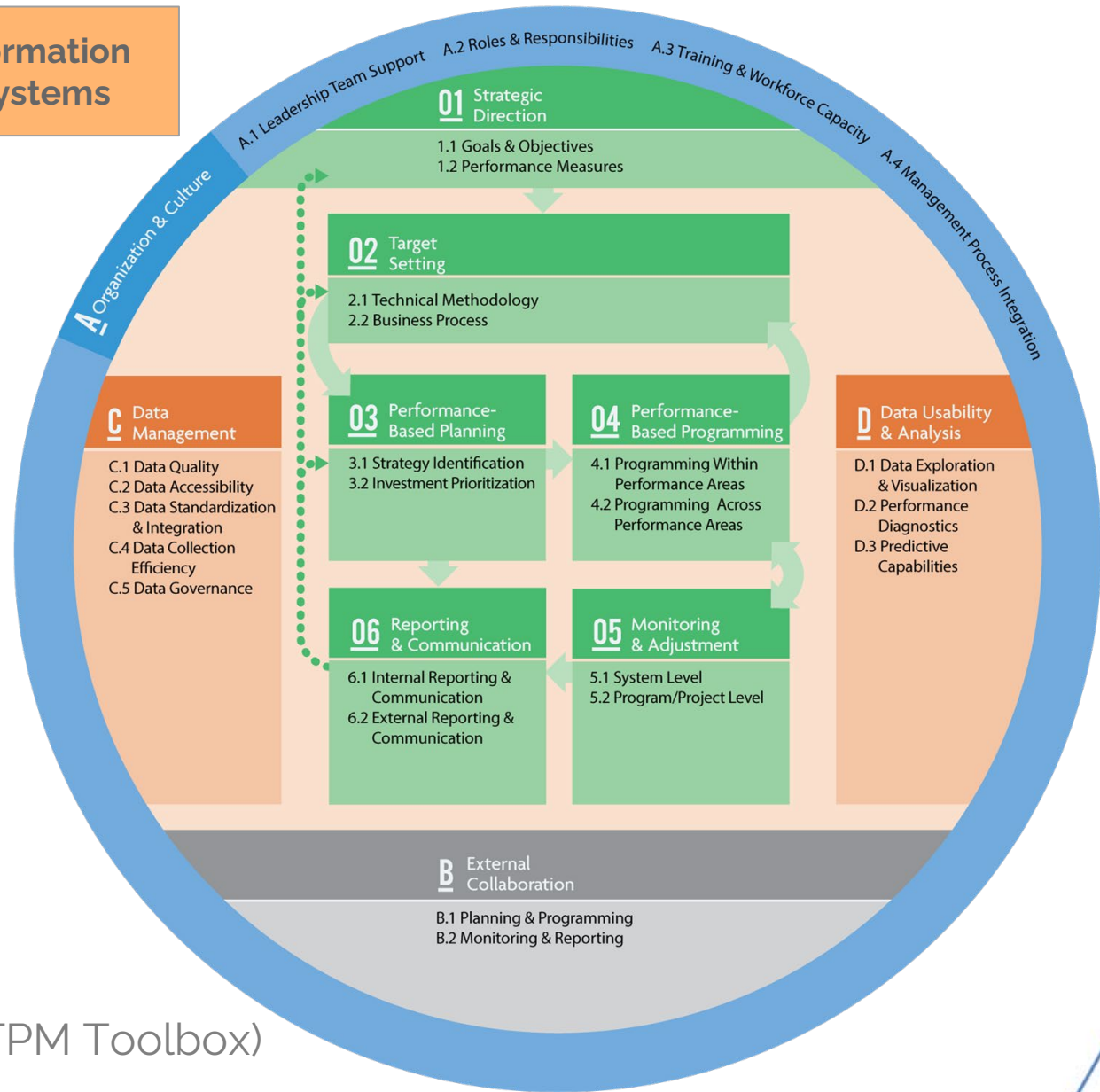
Organization & People



Information & Systems

(AASHTO TAM Guide)

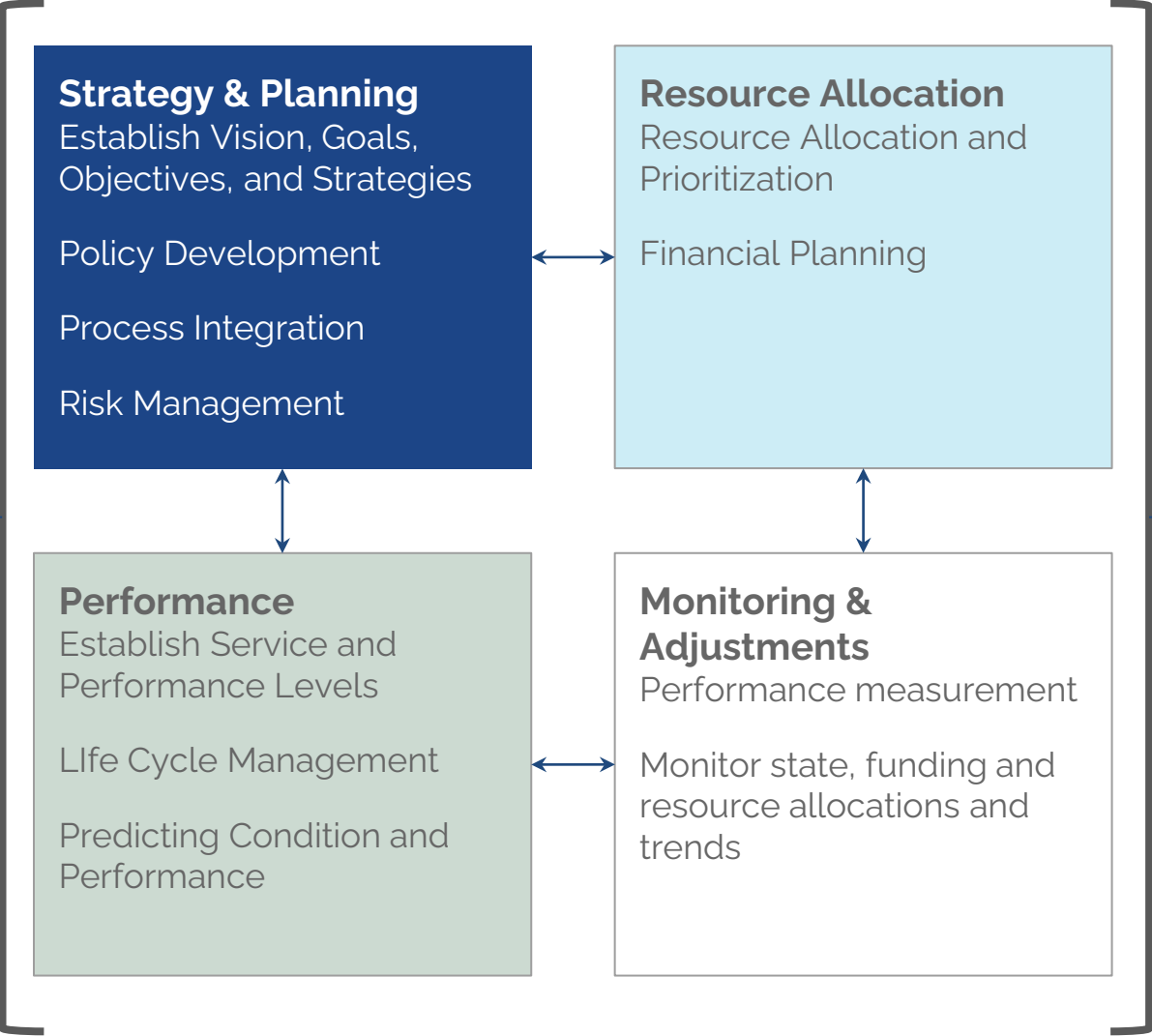
There is a lot of overlap between the two frameworks



(FHWA TPM Toolbox)

transportation performance management (TPM) framework

Organization & People
 Management Process Integration
 Roles, responsibilities, and competencies
 Coordination and Communication



Information & Systems
 Data Management

- Documented Processes
- Efficient Data Collection
- Data Accessibility
- Data Analysis
- Reporting and Visualization
- Data-Driven Program Management

Data Governance

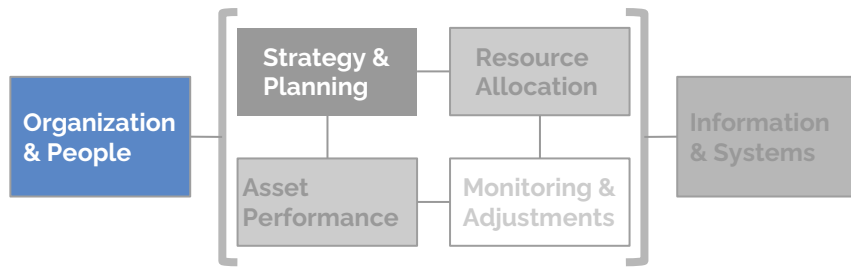
(Integrated framework)

Organization & People

Management Process
Integration

Roles, responsibilities, and
competencies

Coordination and
Communication



Organization & People

Goals, Objectives, and Strategies

Management Process Integration

Baseline

Limited understanding of the scope of asset management.

Little connection of most actions or decisions to the life-cycle of assets.

Objectives

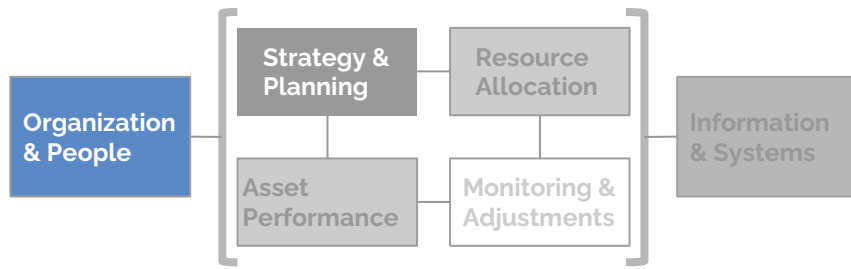
Establish an understanding and support of performance and asset management at all levels (Executive leadership, asset stewards, central and region staff).

Key Results

Hire Communication firm to inform and educate at all levels
Sept 2023.

Create and distribute education and training materials beginning at UDOT Conference (Oct 2023).

Create and present TPM Communications Plan to Exec Leadership by end of Nov 2023.



Organization & People

Goals, Objectives, and Strategies

Define Roles, Responsibilities, and Improve Competencies

Baseline

Many AM responsibilities have been defined, with some significant gaps.

Core group of technical experts will dwindle significantly in the next five years.

Limited knowledge management effort has started, but not established.

Objectives

Identify and close gaps in roles and responsibilities.

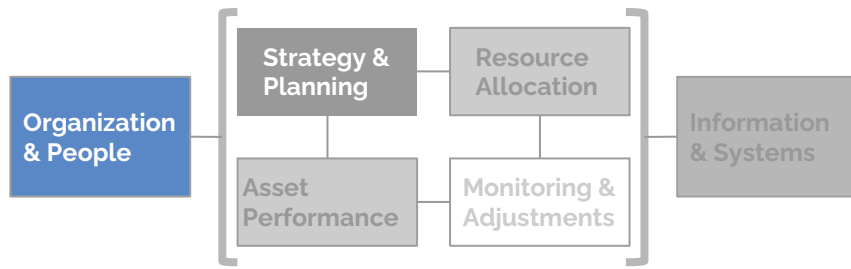
Knowledge management is integrated into data management across the department, beginning with assets.

Key Results

Define the gaps in roles and responsibilities. The resources necessary to close those gaps will be documented by Dec. 2023.

Each group has documented processes and data management by the end of April 2024.

Actively recruit 2 new FTE positions in the TPM group by June 2024.



Organization & People

Goals, Objectives, and Strategies

Coordination and Communication

Baseline

Tools for communicating are limited to weekly newsletter emails and periodic announcements from disparate groups.

There is a level of formal and informal communication between groups.

Objectives

Establish an understanding and support of performance and asset management at all levels (Executive leadership, asset stewards, central and region staff).

Key Results

Hire a Communications firm to inform and educate at all levels Sept 2023.

Create and distribute education and training materials beginning at UDOT Conference (Oct 2023).

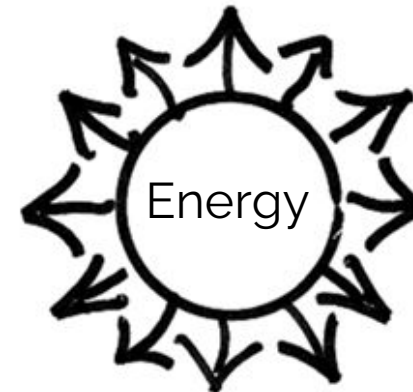
Implement TPM Strategic Communications Plan Oct 2023 to Dec 2024 at all levels of the Department..

Create a Common Vision

Without common goals and objectives, our time and energy are spent in what we deem to be important in our sphere of influence.

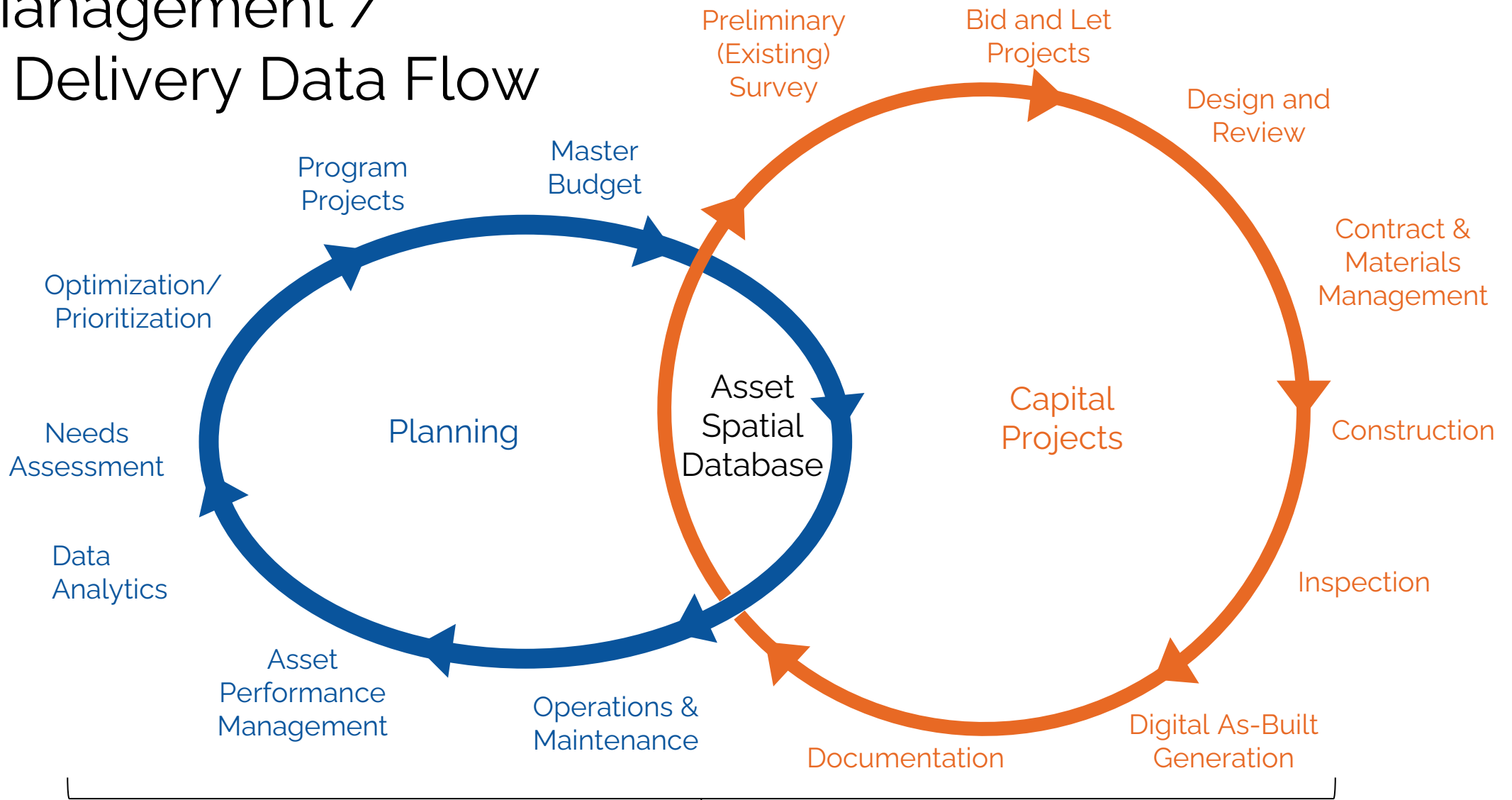
Most are trivial and few are vital.

Asset management provides the framework for making the wisest possible investment of time and energy in order to operate at **our highest point of contribution.**



Source: [Greg McKeown](#)

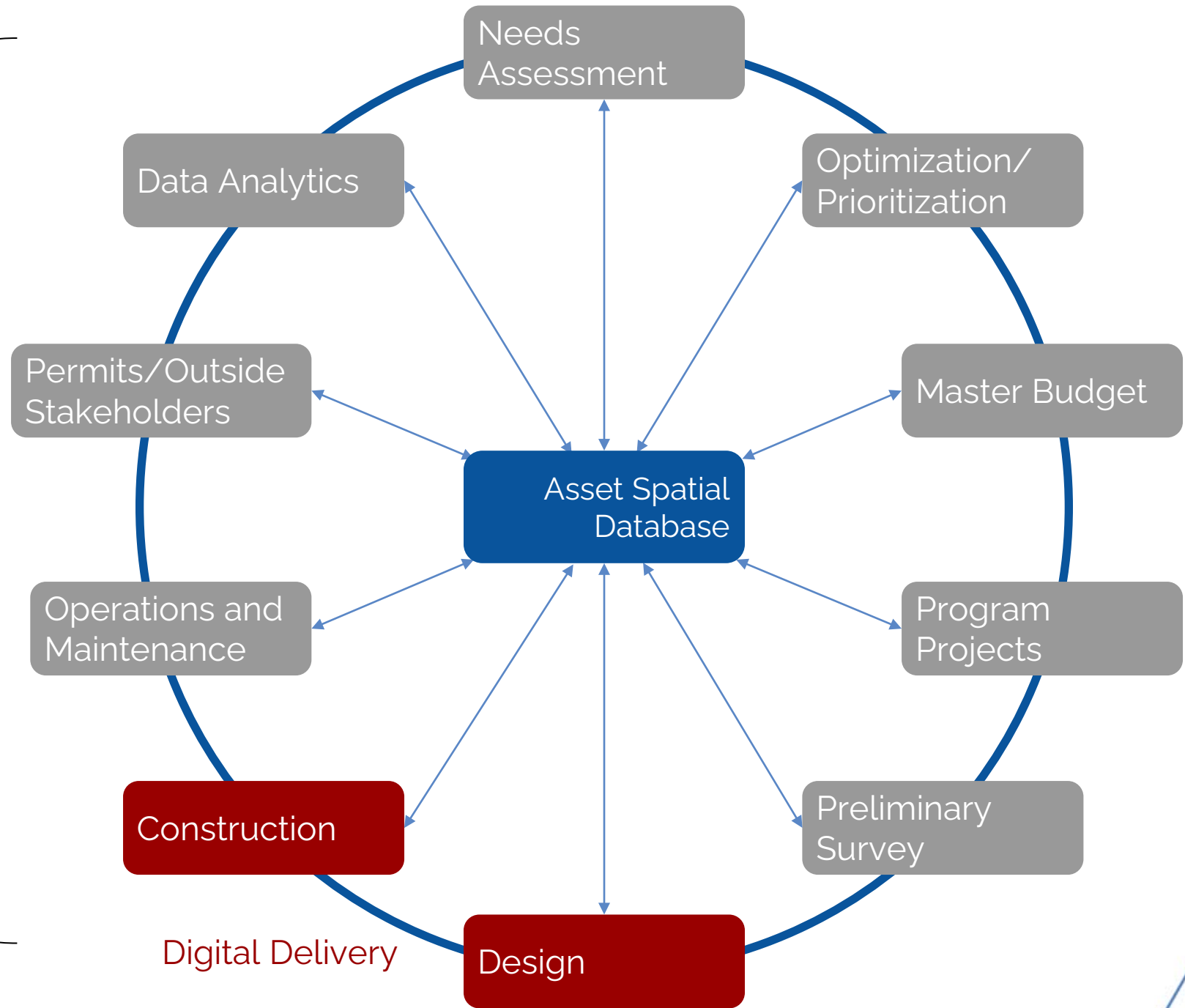
Asset Management / Digital Delivery Data Flow



Data Management/Governance | Risk Management | Monitoring/Adjustments
Auxiliary Asset Data Collection | Reporting

Asset Management Digital Delivery Data Structure

Data Management/Governance
Performance/Risk Management
Monitoring/Adjustments
Auxiliary Asset Data Collection
Reporting



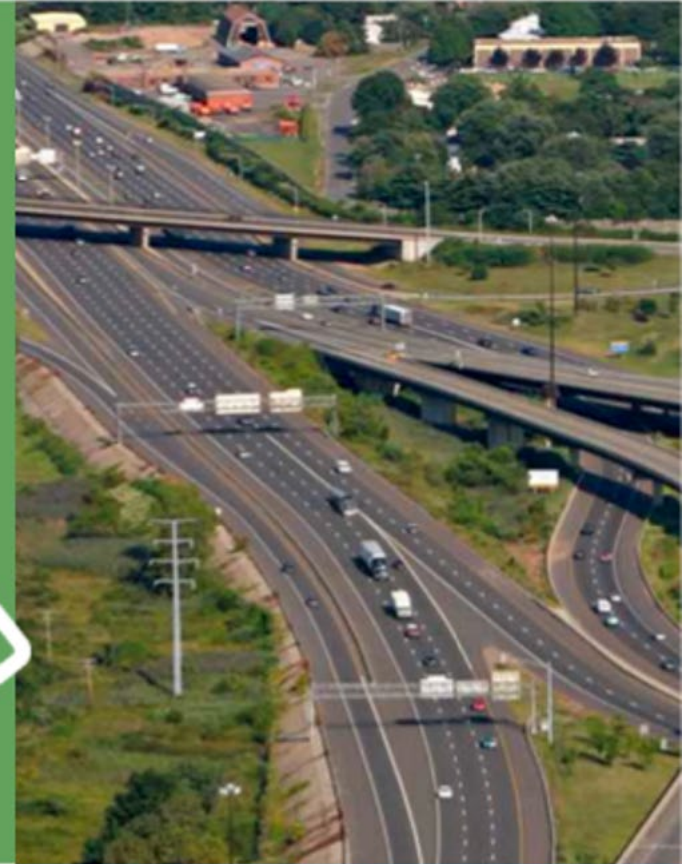
Takeaways

- ◀ Examine your organization and structure your approach with a defined plan.
- ◀ Involve as many as possible in that plan development and execution.
- ◀ The focus isn't always on convincing executive leadership. Often the greatest changes come from developing critical mass.
- ◀ Get help to communicate.
- ◀ Create a common vision. Help people understand how asset management affects what they do.



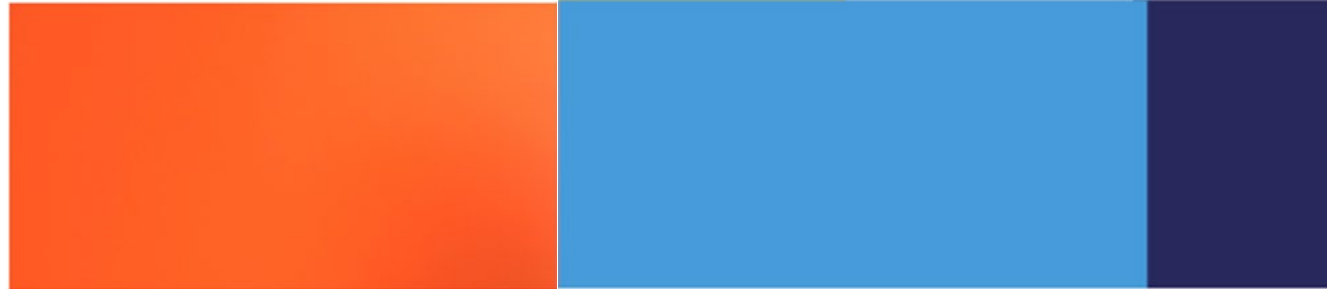
Connecticut Department
of Transportation

Asset Fact Sheets



October 18, 2023

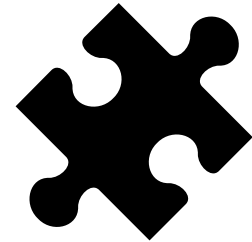
Stephanie Shippee
Transportation Supervising Engineer
CTDOT TAM Group



Fact Sheet History

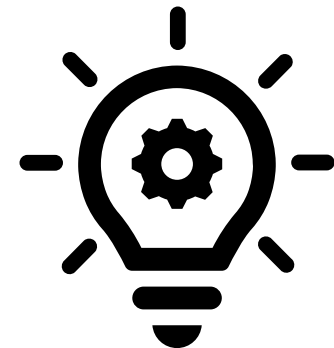
Origins

Challenge: Few people will read the 200+ page TAMP



Solution: Develop Asset Fact Sheets

- Two page summary of each asset in TAM program
 - 11 current assets
- Visually engaging – ideally readers can get the gist from viewing the graphics without reading
- Updated annually
- Key use: making the case for funding to DOT Executives and politicians



Fact Sheet History

2016 to 2023

Bridge Fact Sheet

Inventory Summary

Description	Count	Area (sq ft)
NHS		
On NHS (& NBI)	1,838	24,559,585
Off NHS	3,447	13,584,300
Ownership		
State	3,794	34,110,679
Municipal	1,491	4,033,206
NBI Structures		
NBI	4,235	37,212,417
Non-NBI	1,050	931,467
All Bridges		
Total	5,285	38,143,884

Performance Measures

- % of CTDOT Roadway Bridges in a State of Good Repair
- % of NHS bridges in Good condition [FHWA measure]
- % of NHS bridges in Poor condition [FHWA measure]

Performance History

Connecticut Department of Transportation

Current Condition

NBI Bridge Condition (by count)

NBI Bridge Condition (by deck area)

2016 Draft

Connecticut Department of Transportation

Bridge

NHS-NBI Inventory and Condition

Description

- CTDOT inspects 5,440 roadway bridges, 1,823 of which are National Bridge Inventory (NBI) structures on the National Highway System (NHS).
- 4,054 of these bridges are state maintained; the remaining 1,386 are maintained locally or under another jurisdiction.
- CTDOT defines a bridge as a crossing of at least six feet in length, including culverts. The Federal Highway Administration (FHWA) defines an NBI bridge as a structure measuring more than 20 feet in length.
- CTDOT has a distinct Major Bridge Program for large or expensive-to-replace bridges. 60 structures are currently categorized as Major Bridges.

NHS-NBI Inventory and Condition

Federal Requirements

- Good: 3,749,993 ft²** (14.1% of deck area on NHS-NBI bridges is in good condition (371 bridges). [NBI condition ratings of 7, 8, or 9])
- Fair: 20,881,090 ft²** (78.3% of deck area on NHS-NBI bridges is in fair condition (1,399 bridges). [NBI condition ratings of 5 or 6])
- Poor: 2,039,258 ft²** (7.6% of deck area on NHS-NBI bridges is in poor condition (53 bridges). [NBI condition ratings of 0, 1, 2, 3, or 4])

CTDOT-Maintained Inventory and Condition

State Goals

- State of Good Repair: 3,909 bridges** (96.4% of CTDOT-maintained state bridges are in good or fair condition [NBI condition ratings of 5 or higher])
- Poor: 145 bridges** (3.6% of CTDOT-maintained state bridges are in poor condition [NBI condition ratings of 4 or lower])

History

Distribution of NHS Bridges by Decade Built

% Poor NHS Bridges by Deck Area

2023 PDF Fact Sheet

Connecticut Transportation Asset Management Plan

Bridge

Data Years: 2023, 2022, 2021, 2020, 2019, 2018

Description

- CTDOT inspects 5,440 roadway bridges, 1,823 of which are National Bridge Inventory (NBI) structures on the National Highway System (NHS).
- 4,054 of these bridges are state maintained; the remaining 1,386 are maintained locally or under another jurisdiction.
- CTDOT defines a bridge as a crossing of at least six feet in length, including culverts. The Federal Highway Administration (FHWA) defines an NBI bridge as a structure measuring more than 20 feet in length.
- CTDOT has a distinct Major Bridge Program for large or expensive-to-replace bridges. 60 structures are currently categorized as Major Bridges.

State of Good Repair (SOGR)

A bridge for which the condition rating for each of the three major components for a span bridge (Substructure, Deck, and Superstructure) or the structural condition of a culvert is rated at least a 5 on a 0-9 condition scale is classified as being in a SOGR.

Bridge Age

The average NHS-NBI bridge in Connecticut is 56 years old, which is 9 years older than the national average of 47 years. The state has a higher percentage of Poor bridges (by deck area) compared to the national average.

NHS-NBI Inventory and Condition

Federal Requirements

CTDOT-Maintained Inventory and Condition

State Goals

2023 Online Fact Sheet

Fact Sheet History

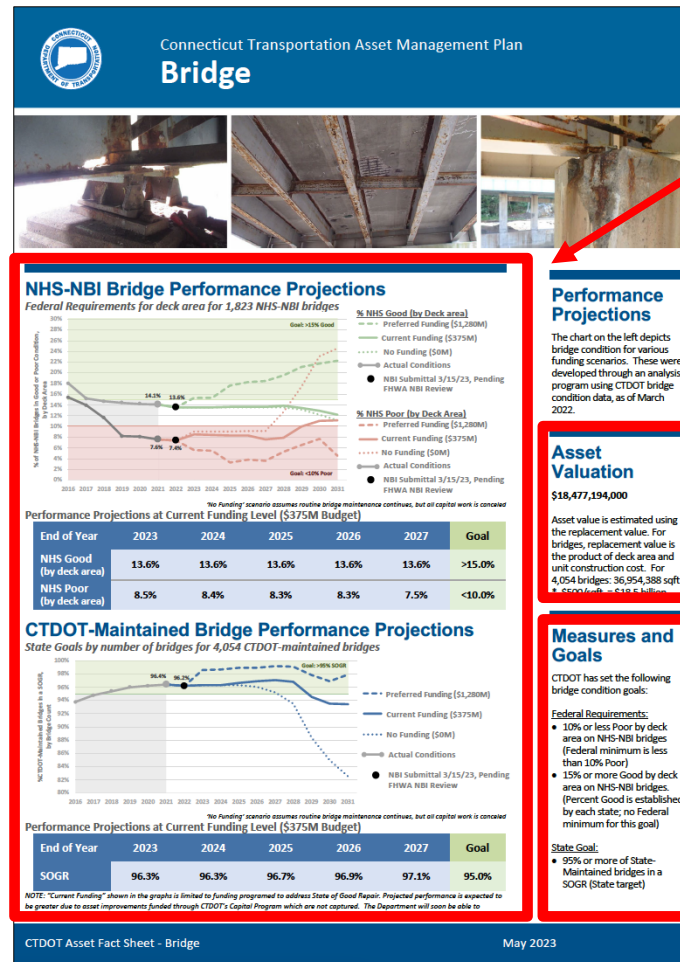
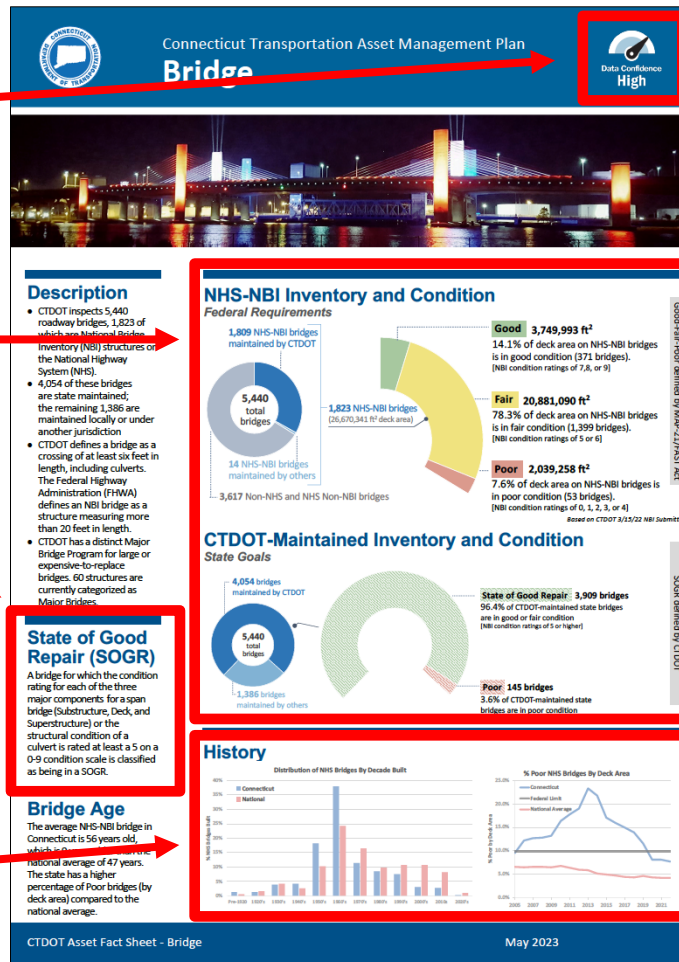
Major Elements

- Data confidence scale

- Inventory & condition

- SGR performance measure definition

- Performance History



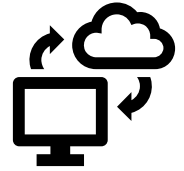
- Performance projections
- Asset valuation
- Performance goals

Online Fact Sheets

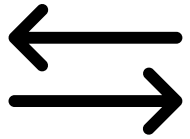
Benefits

Online content is king

Make it easy to communicate and share CTDOT's TAM story
Reaching the broadest audience possible



No space constraints



Ability to scale w/ additional data years
Ability to scale w/ content expansions

Online fact sheets reflect a mature and continually improving TAM Program



Potential for additional functionality

Online Fact Sheet Overview

- Home page with links and thumbnails for each asset
- Dropdown menu to select asset in top right corner

CTDOT's **Highway Asset Fact Sheets** provide an overview of the asset management program and help communicate key information about the eleven asset types included in the TAMP. Each fact sheet provides a graphical summary of current asset inventory and condition, historic trends, future performance projections and targets, and asset value.

Online Fact Sheet Features

- Ability to toggle Fact Sheet Year at top of each page
- Click to download PDF version
- Click to download chart data
- Click buttons to expand for more details

Home Connecticut Transportation Asset Management Plan Bridge Data Confidence High Asset Menu

Data Years: 2023 2022 2021 2020 2019 2018

Download PDF Factsheet

Description

- CTDOT inspects 5,306 roadway bridges, 1,785 of which are National Bridge Inventory (NBI) structures on the National Highway System (NHS).
- 4,016 of these bridges are state maintained; the remaining 1,290 are maintained locally or under another jurisdiction.
- CTDOT defines a bridge as a crossing of at least six feet in length, including culverts. The Federal Highway Administration (FHWA) defines an NBI bridge as a structure measuring more than 20 feet in length.
- CTDOT has a distinct Major Bridge Program for large or expensive-to-replace bridges. Structures are currently categorized as Major Bridges.

NHS-NBI Inventory and Condition

Federal Requirements

Category	Count
NHS-NBI Maintained by Others	14 bridges
NHS-NBI Maintained by CTDOT	1,771 bridges
Non-NHS and NHS Non-NBI bridges	3,521 bridges
Total NHS-NBI bridges	1,785 bridges

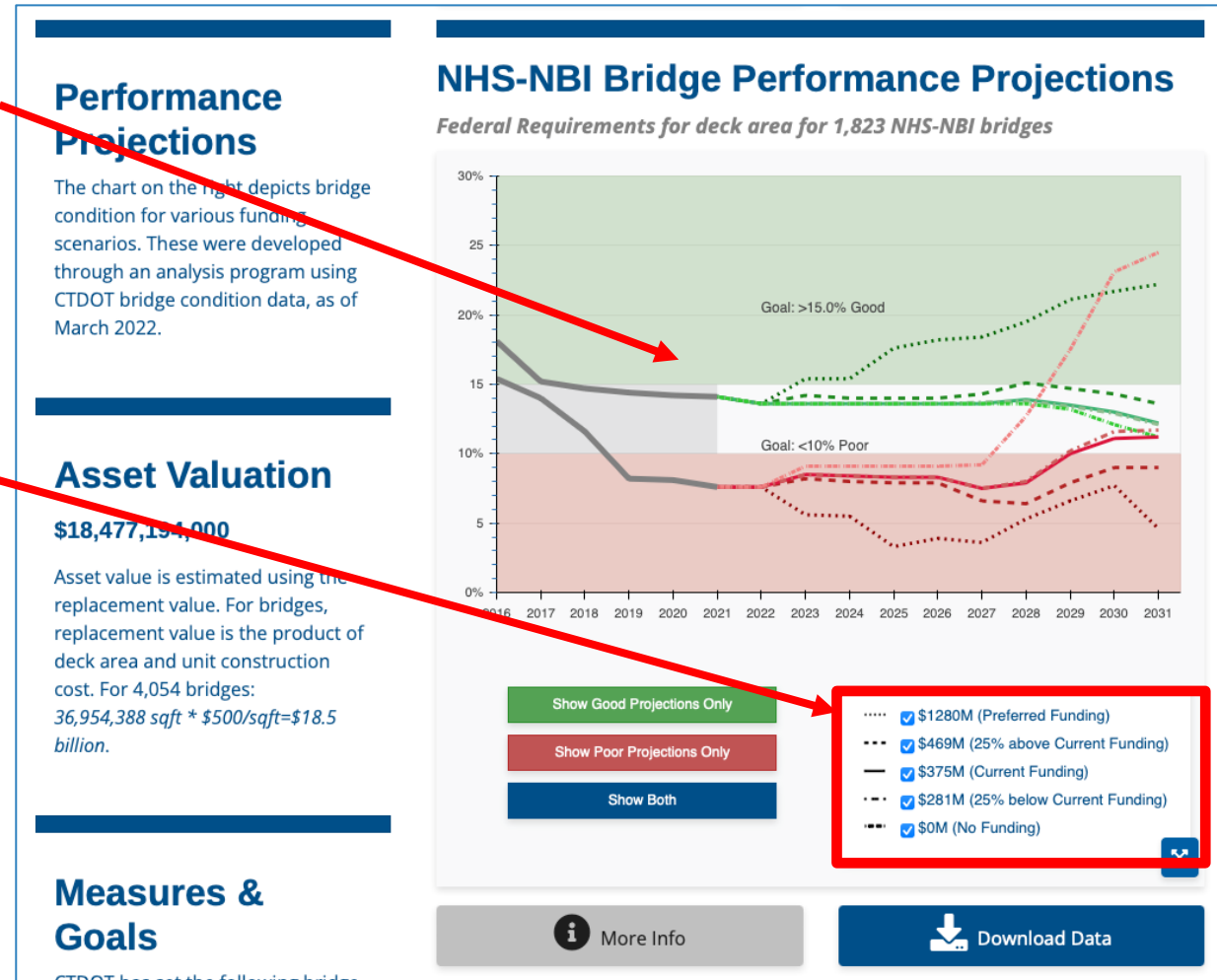
Condition	Sq. ft	Count
Good	3,925,069 sq. ft	102 bridges
Fair	17,584,485 sq. ft	1,261 bridges
Poor	4,761,084 sq. ft	422 bridges

See Key More Info Download Data

Features, cont.

▪ Mouse over chart for tooltips

▪ Click checkboxes to toggle view of each funding scenario line



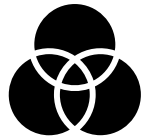
Potential for Future Improvements

- **High level summary on home page that includes all assets**
- **Cross asset comparisons / visualizations**
- **Comparisons / visualizations across time periods**
- **Improved UX design (e.g. collapsible sidebars)**

Lessons Learned

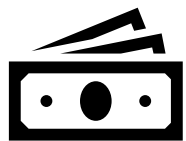
Challenges

Finding the right level of detail for wide audience



Varying levels of data and asset management maturity among assets

Annual update process requires strong coordination with asset stewards



Fact sheets only tell part of the story – they don't include non-TAM funding

Summary

- Distilling complex topics to simple communication is valuable!
- Adding 'immature' assets to TAM program can increase visibility and drive improvement
- Public fact sheets can inspire positive competition between assets
- Communication resources for execs and politicians are critical for funding



Fact Sheet Link: <https://enhanced-ctdot-factsheet.herokuapp.com>

Fact Sheets in Action

- **CT Mirror launched a four part series on climate change and flooding**
- **First article cited and included screenshots from Drainage Culverts fact sheet**
- **Example of public-facing communication on TAM and resiliency**

CT Mirror article link: <https://ctmirror.org/2023/10/08/ct-stormwater-flooding-climate-change-drainage-manual/>

ctmirror Connecticut's Nonprofit Journalism.

TRENDING Bridgeport Election Lawsuit Prospect Medical Holdings

There are 40 active projects and another couple of dozen somewhere in the design phase.

Drainage Culvert Inventory and Condition

~11,100 culverts not mapped (estimated)

20,235 total culverts (estimated)

2,687 culverts inspected

~6,400 culverts mapped but not inspected (estimated)

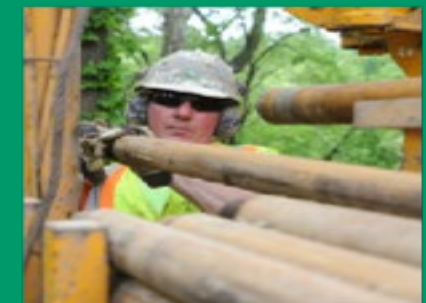
Condition	Count	Percentage
Good	1,370 Culverts	61.9% are in Good condition
Fair	540 Culverts	24.4% are in Fair condition
Poor	304 Culverts	13.7% are in Poor condition
Unable to Assess	473 Culverts	

CTDOT

DOT has its own MS4 parameters for how much drainage to plan for. It also monitors recommendations from a number of national organizations for how to incorporate climate changes

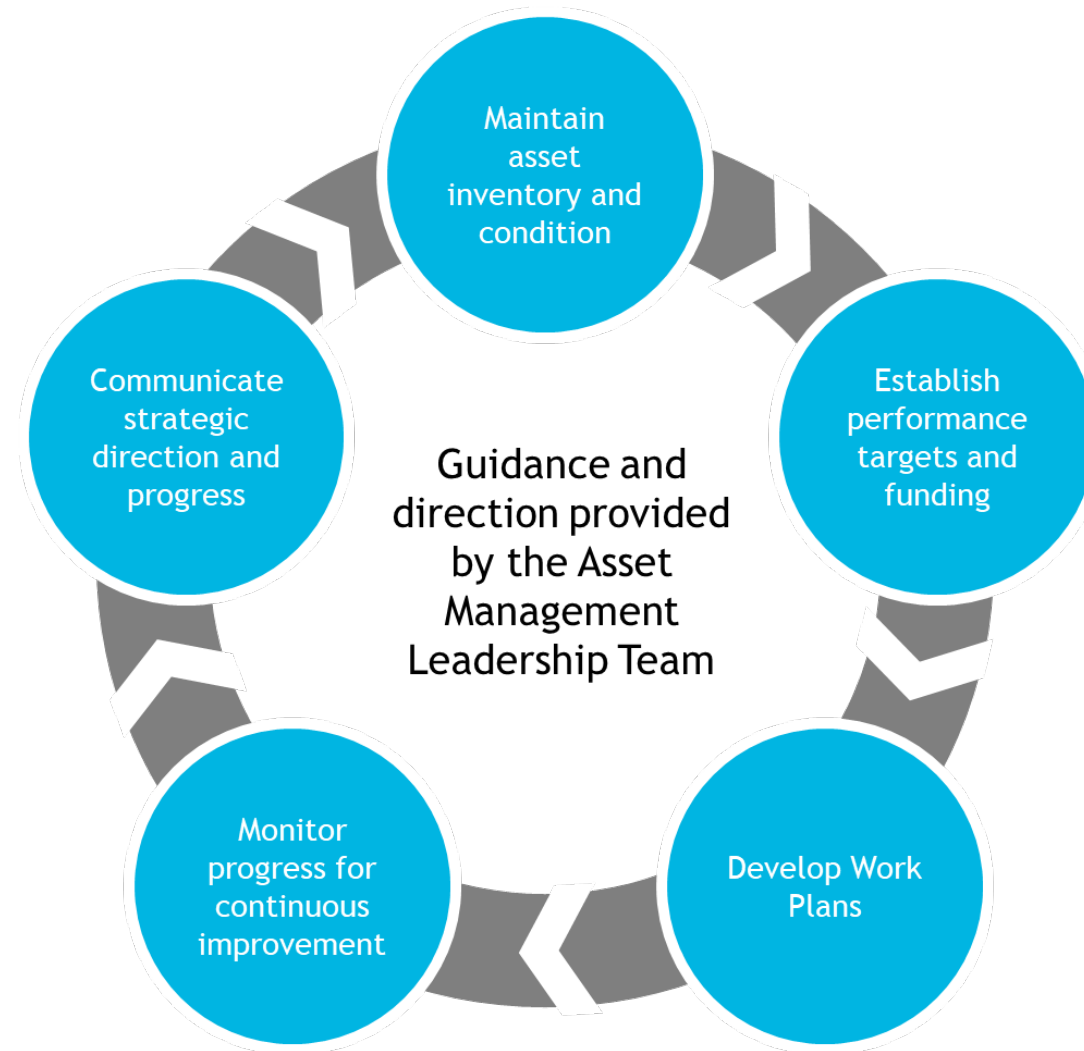
open "https://ctmirror.org" in a new tab

TAM WEBINAR 65: COMMUNICATING TRANSPORTATION ASSET MANAGEMENT



OHIO DEPARTMENT OF
TRANSPORTATION

TRANSPORTATION ASSET MANAGEMENT



TRANSPORTATION ASSET MANAGEMENT

Website Updates

OHIO DEPARTMENT OF TRANSPORTATION

Welcome to the Transportation Asset Management Page | Asset Enhancement Request Form | DGN to GIS | TAM DST | ODOT TMS | EDIT LINKS

Search this site

Transportation Asset Management Home

- TAM Audit Group
- Asset Management Leadership Team (AMLT)
- Collector Program
- District TAM Coordinators
- TAMC Collector (Districts)
- Emergency Relief
- Transportation Asset Management Plan (TAMP)
- Transportation Analytics
- TAM DST

EDIT LINKS

INTERSTATE 71

Transportation Asset Management, as defined by the Ohio Department of Transportation, is a systematic and strategic investment decision process for operating, maintaining, upgrading and expanding physical assets effectively over their life cycle that is based on quality data and well-defined objectives.

Transportation Asset Management (TAM) is a mission-critical activity at ODOT that requires the participation of many ODOT

TRANSPORTATION ASSET MANAGEMENT

Communication Plan

Communication	High Level/Granular	Objective of Communication	Audience	Medium	Frequency	Deliverable
Monthly TAM Coordinator Meeting	Granular	Give/get Updates to District TAM Coordinators	District TAM Coordinators	Teams Meeting	Monthly	Meeting Notes
AMLT Meetings	Granular	Forum for DBOs to get updates from districts. Forum for districts to ask questions to DBO	District TAM Coordinators, DBOs, District SMEs, CO SMEs, CO System Owners	Teams Meeting	Quarterly	Meeting Notes
TAM/TSMO Meetings	High Level	To keep Assistant Directors and Deputy Directors up to date on asset management activities	Assistant Directors, Deputy Directors (Planning, Operations, Engineering, Construction), TSMO, Technical Services	Teams Meeting	Bi-monthly	Powerpoint
Tier 1 TAM Dashboard	High Level	This dashboard will give current high level information on inventory, inspection and condition of each tier 1 asset	Everyone at ODOT	PowerBI Dashboard	Daily	None
Annual Asset Report(s)	High Level	These reports will be one pagers on the inventory, inspection, and condition of each asset	Everyone at ODOT	PDF posted on website	Annual	PDF
Newsletters	High Level	Give the agency update on asset management activities	Everyone at ODOT	PDF sent through email	Quarterly	Newsletter
TAM Workshop	Granular	To get asset management staff together to give updates on asset management and ensure we are aligned with agency strategic directives	DBOs, TAM Coordinators, District SMEs, District Workplan Coordinators, HMAs, CPAs	In person	Every 2 years	Report
DBO TAM Workshop	Granular	To get feedback from DBOs and ensure roles are clarified	Asset DBOs	In person	As needed	Report
DGO Staff Meetings	High Level	Update internal office on asset management activities	Office of Data Governance	In person	Monthly	Powerpoint
Introduction Meetings	High Level	Introduce TAM program to offices around central office to ensure the agency understands our mission and goals	Any Office that deals with Asset Management (maintains or uses data)	In person/Teams	As needed	Powerpoint
District Visits	Granular	Introduce TAM program to districts. Ensure district and CO goals and visions are aligned	TAM Coordinators, HMA, CPA, DDD, District Staff	In person	As needed	

TRANSPORTATION ASSET MANAGEMENT

Newsletter

Transportation Asset Management Program

Michael Weakley - Michael.Weakley@dot.ohio.gov

What is Transportation Asset Management?

Transportation Asset Management (TAM) is a systematic and strategic investment decision process for operating, maintaining, upgrading and expanding physical assets effectively over their life cycle that is based on quality data and well-defined objectives.

The TAM Program's mission is to make use of asset data to support sustainable, data-driven planning and investment decisions.

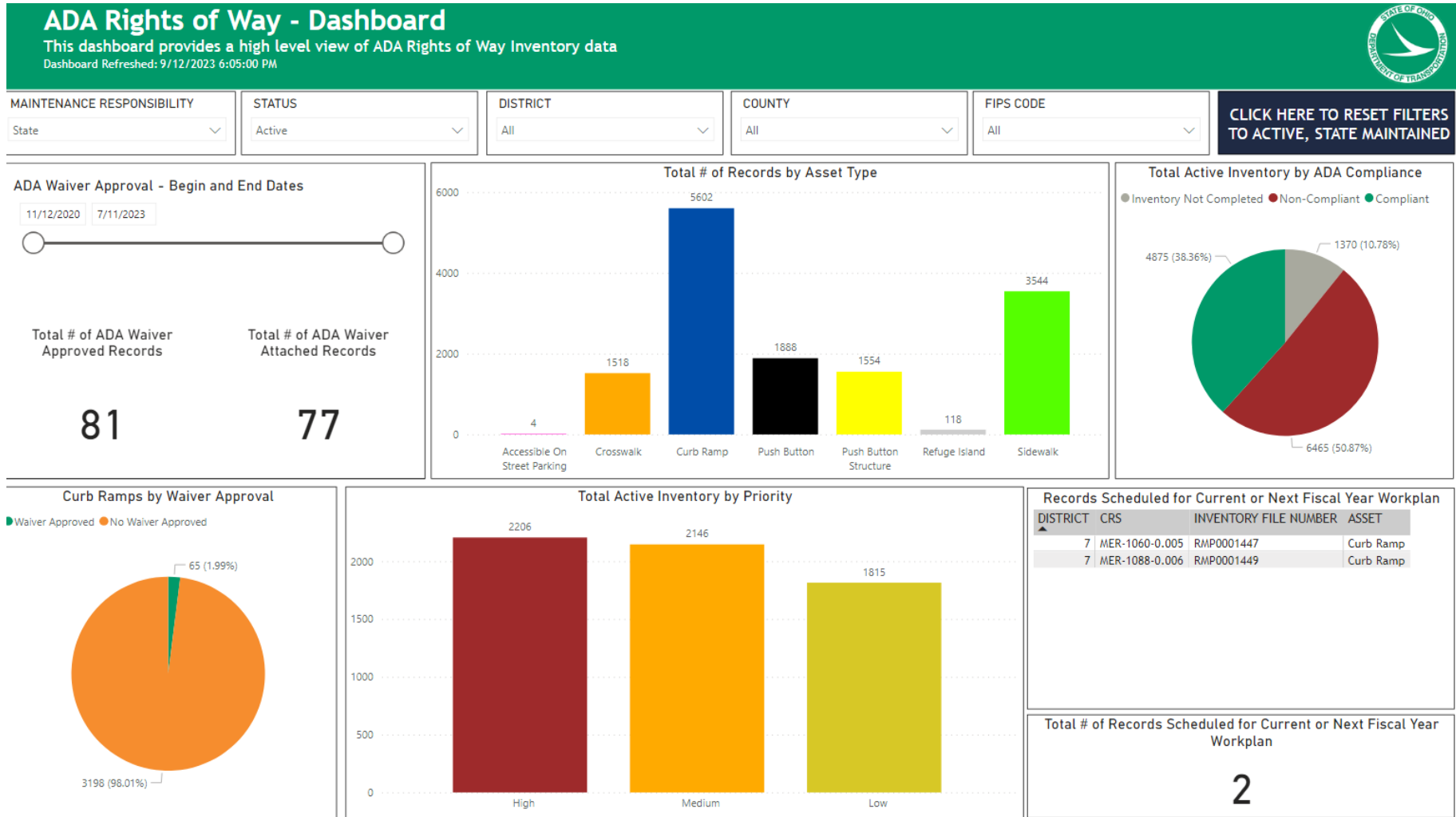
ODOT owns \$116 billion worth of roadway assets on Ohio's transportation system, which include pavements, bridges, culverts, signs, guardrails, and many more. TAM is unique because it crosses over many sections at ODOT. A successful TAM Program involves planning, design, construction, and operations.

To manage our assets, we have to know where they are located. The Collector Program is ODOT's asset inventory and inspection system for all assets except pavements and bridges. There are 1.5 million inventory and inspection records in the Collector Program. In 2023, there have been 60,000 inventory records and 32,000 inspection records entered in by our district and county forces.

TAM Updates

- The 2023 TAMP Consistency Report was submitted and has been approved by FHWA
- TAM Tier 1 Summary Report - Developing a report to communicate inventory, inspection, condition, and maintenance asset information
- Other Asset inventory-based funding has been locked for FY25
- Bi-weekly Inspection and Maintenance Condition Rating Apps have been updated
- Sign updates have been completed for Field Apps
- Sign Reports, Dashboard, and Web App updates will be completed by the end of September
- Barrier Inspection reports will be completed by the end of September

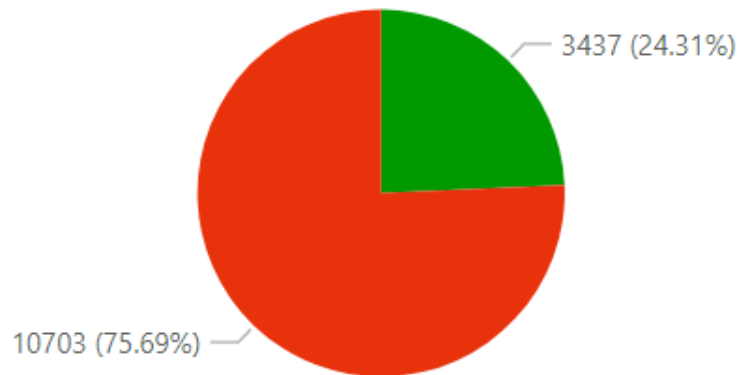
ASSET DASHBOARDS



PROGRAM LEVEL DASHBOARDS

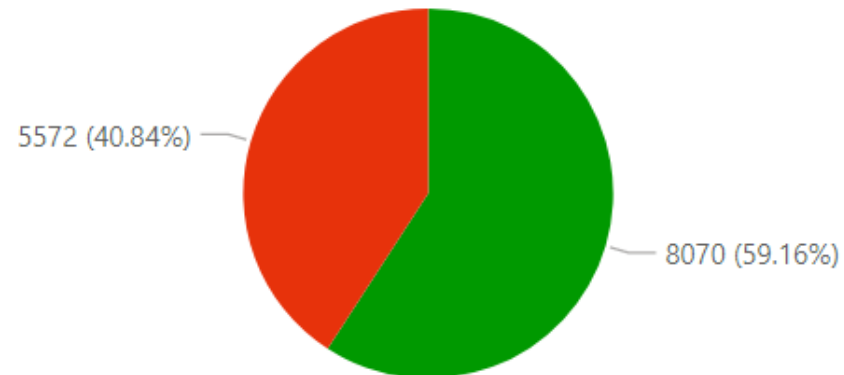
Bridges

● Inspected This Calendar Year ● Not Inspected This Calendar Year



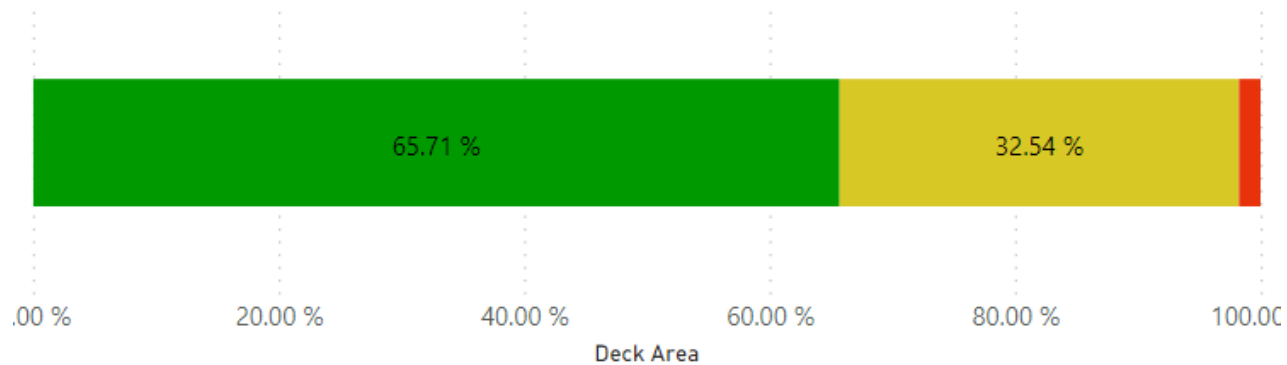
Conduits

● Inspected This Calendar Year ● To Be Inspected



Bridges

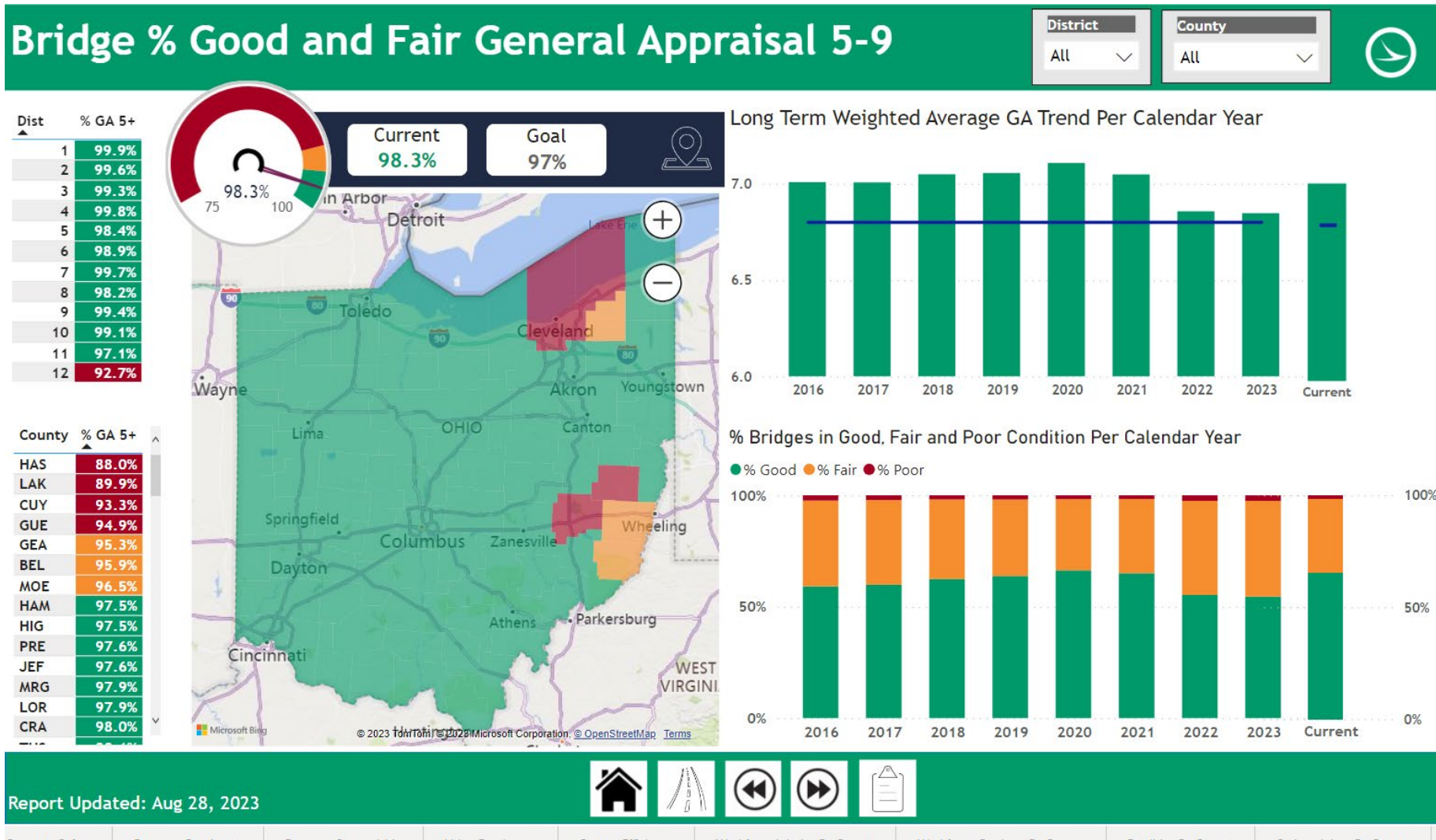
● Good ● Fair ● Poor



PROGRAM LEVEL DASHBOARDS

Transportation Asset Management (TAM) Tier 1 Assets - Summary Report														
Report generated: 9/1/2023		Meets Goal	Does Not Meet Goal	Goal Not Defined	For more information on asset data click the TAM Tier 1 Dashboard link below TAM Tier 1 Dashboard									
Pavements														
	State Goal	State	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12
Inventory														
Total Lane Miles	11/A	49,766	3,492	3,906	4,777	5,066	3,762	4,953	4,714	4,665	3,876	4,038	3,384	3,133
Inspection Completed This Calendar Year														
Inspection Completed (%)	11/A	37%	0%	64%	59%	46%	13%	25%	32%	9%	52%	82%	52%	0%
Average Condition														
General PCR	80	84	88	86	83	88	81	84	87	84	82	82	80	82
Priority PCR	85	87	89	89	81	88	85	89	90	87	87	83	86	86
Urban PCR	11/A	80	82	82	79	81	82	80	81	79	79	81	71	80
Preventative Maintenance This Fiscal Year														
Treatments Scheduled (mi)	11/A													
Treatments Completed (mi)	11/A	4,813	488	183	365	114	1,061	184	241	283	261	997	564	72
Source: Warehouse														
Pavement Inspection Data is based on mileage that has been rated in 2023. Note: There is a delay between the inspections and the data being uploaded to the warehouse														
Treatments Scheduled information will be available in FY 2025														
Treatments Completed information is in lane miles														
Bridges														
	State Goal	State	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12
Inventory														
Total Bridges	N/A	14,325	829	919	1,368	1,405	1,100	1,520	1,366	1,509	1,228	1,223	971	888
Inspection Completed This Calendar Year														
Inspection Completed	11/A	6,753	432	395	584	733	446	890	468	765	667	540	435	398
Inspection Completed %	11/A	70.09%	87.63%	65.51%	63.55%	72.94%	66.57%	72.89%	79.59%	72.65%	77.56%	65.22%	61.97%	57.43%
Routine Inspection Overdue	11/A	662	0	3	143	4	4	207	38	12	4	44	145	58
Current Condition														
Good/Fair	97%	98.30%	99.91%	99.61%	99.26%	99.78%	98.35%	98.86%	99.66%	98.25%	99.41%	99.13%	97.10%	92.73%
Poor	3%	1.70%	0.09%	0.39%	0.74%	0.22%	1.65%	1.14%	0.34%	1.75%	0.59%	0.87%	2.90%	7.27%
Preventative Maintenance This Calendar Year														
Maintenance Needed	11/A	5,787	114	253	389	620	318	889	446	1,026	478	285	487	462
Maintenance Completed	11/A	4,010	438	235	337	583	268	398	343	184	225	512	252	235

CRITICAL SUCCESS FACTORS



THANK YOU!

Michael Weakley, GISP
TAM Program Manager
ODOT Office of Data Governance
614-644-8648

Michael.Weakley@dot.ohio.gov

<https://www.transportation.ohio.gov/programs/asset-management>

Q&A and Discussion

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Save the Dates!

A bimonthly webinar series, Wednesdays at 2:00 PM EST

Next Webinar

Wednesday, December 20, 2023– 2:00 PM EST

Beyond Pavements and Bridges (how agencies are integrating other assets)

More to follow!



For more information or to register:

<https://www.tam-portal.com>

