AASHTO Committee on Performance-Based Management (CPBM) Peer Exchange

Sponsored by FHWA, AASHTO, the TPM Pooled Fund, and the AASHTO TPM Technical Service Program

Day 1
Monday, September 11, 2023

AASHTO CPBM Introduction

Christos Xenophontos, Rhode Island DOT
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Jean Wallace, Minnesota DOT
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Peer Exchange Purpose

- Advance the state of performance management practice, including sharing lessons learned about Federal PMF Reporting, coordinating for performance management, & aligning performance management & asset management
- Discuss the ingredients for implementing and sustaining good TPM practices
- Gain knowledge of the resources that are available to support TPM monitoring, advancing, and building capacity related to consistency determination

Peer Exchange Purpose

- Share the experience of recent TPM implementation, including the best examples of how agencies are advancing national goals and agency targets
- Discuss what the next generation of performance management will look like at state DOTs and MPOs and prioritize future initiatives for FHWA, AASHTO, and TRB

Peer Exchange Agenda - Day 1

1:00 **Welcome, Opening Remarks.**

- Gary Vansuch, Colorado DOT.
  - Host State Welcome and Building Safety
- Jean Wallace, Minnesota DOT.
- Mshadoni Smith-Jackson, FHWA.
- Susan Howard, AASHTO.

1:30 **A. Elements of Good Performance Management: Agency Presentations.**

- Deanna Belden, Minnesota DOT.
- Louis Feagans, Indiana DOT.
- Alejandra Garcia Acevedo, Colorado DOT.
- Rick Scott, Vermont Agency of Transportation.

2:30 **Large Group Discussion.**

3:00 **Break.**

Peer Exchange Agenda - Day 1

3:15 **B. Coordinating Across Stakeholders: Small Group Exercise.**

4:45 **C. Biennial Federal PMF Reporting: FHWA Presentation.**

- Mshadoni-Smith Jackson

5:15 **State DOT Feedback.**

5:25 **Day 1 Wrap Up.**

- Jean Wallace, Vice Chair, AASHTO CPBM

Peer Exchange Agenda - Day 2

8:15 **Coffee & Conversation.**

8:30 **Recap Monday's Agenda & Overview of Tuesday's Agenda.**

- Christos Xenophontos, Chair, AASHTO CPBM.

8:45 **D. Aligning Performance Management & Asset Management: Fishbowl Exercise.**

- Making good investment decisions.
- Technology.
- Getting more sophisticated with data.
- Aligning performance management with other disciplines.

9:45 **Break.**

10:00 **E. Performance Management Vision for the Future.**

- Pairs exercise with Post-Its.

10:30 **F. How Can We Improve Practice?**

- Small Group Ideas Generation.
- Group Report Outs.
- Prioritization Exercise.

11:45 **Peer Exchange Wrap Up.**

- Christos Xenophontos, Chair, AASHTO CPBM.

FHWA Introduction

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AASHTO Introduction

Susan Howard

AASHTO

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A. Elements of Good Performance Management

- Good performance management is a complex set of related activities, involving:
  - People
  - Processes
  - Tools
  - Financial Resources
- During this session, agencies will discuss what elements are the most important in advancing performance management practice in this time of “Business as UN-Usual”

Emerging Performance Measures

Deanna Belden
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Emerging Performance Measure Areas

- Accessibility/Destination Access
- Equity
- Resilience
- Carbon/Greenhouse Gas Reduction
- Public Value Creation
- Health

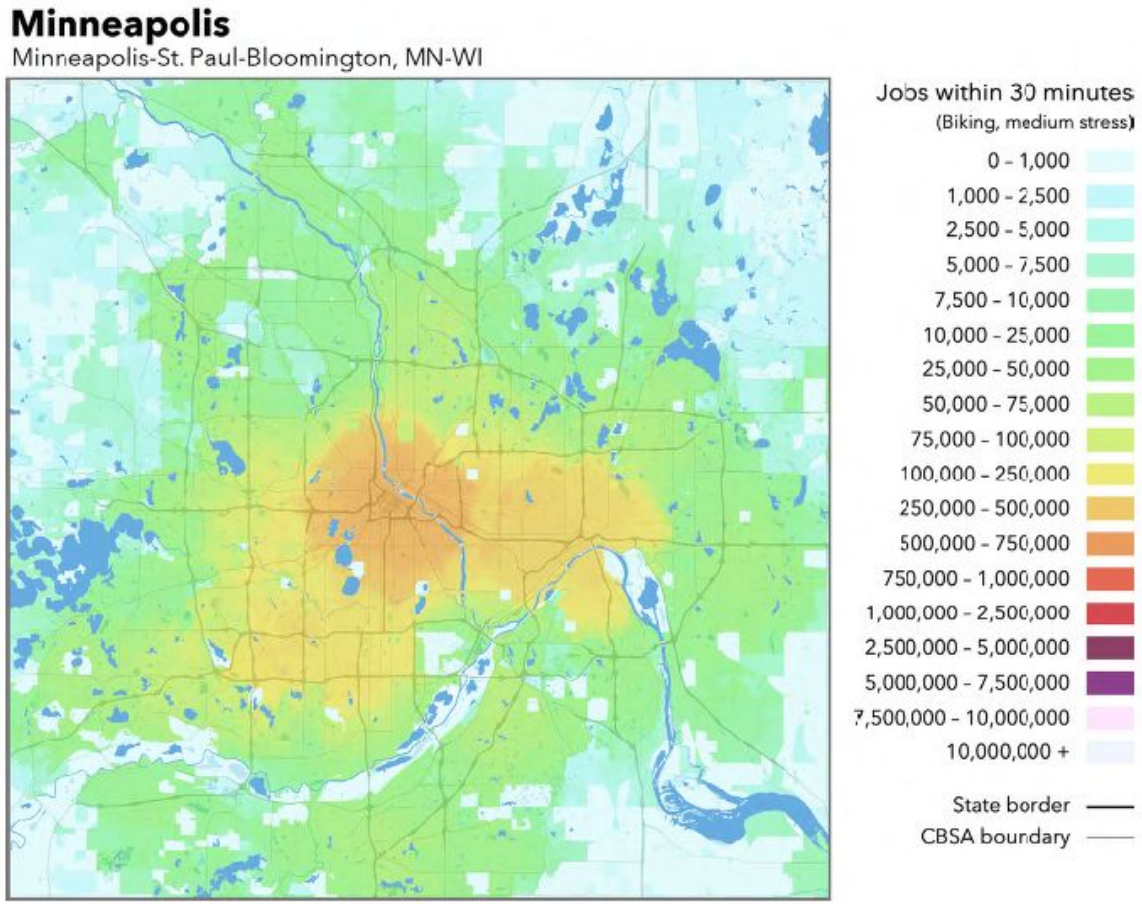
Accessibility/Destination Access

Multimodal accessibility measures the ease of **reaching priority destinations**

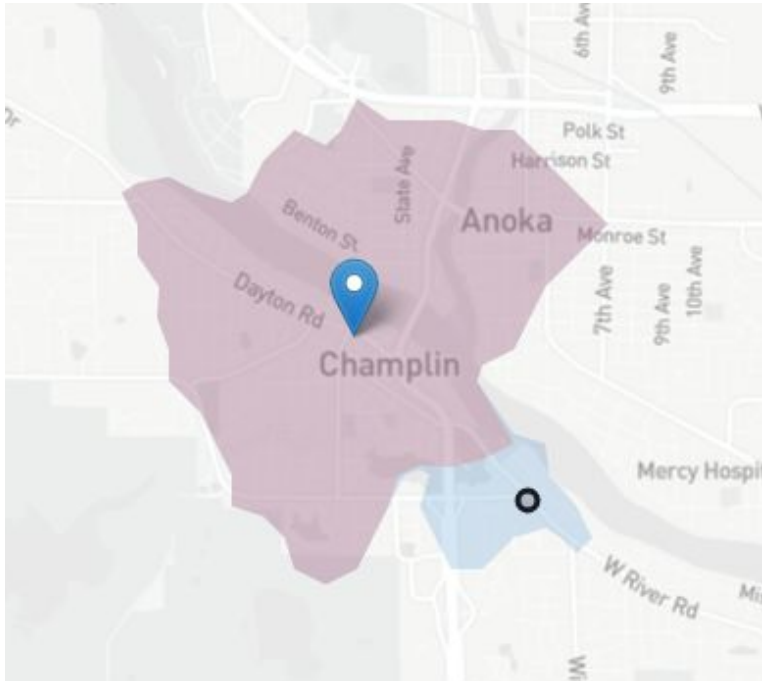
(Ex. How many jobs, grocery stores, or pharmacies are reachable in 30 minutes by walking, biking, transit or vehicle?)

Measures either from a given point OR a defined area

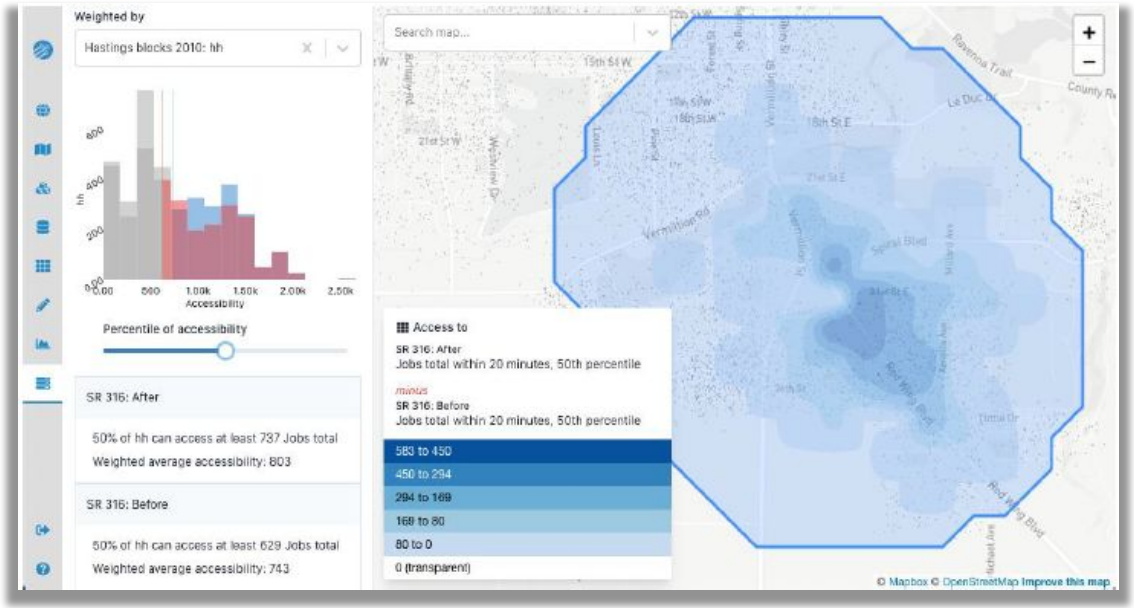
Accessibility Analysis



Accessibility to jobs within 30 minutes

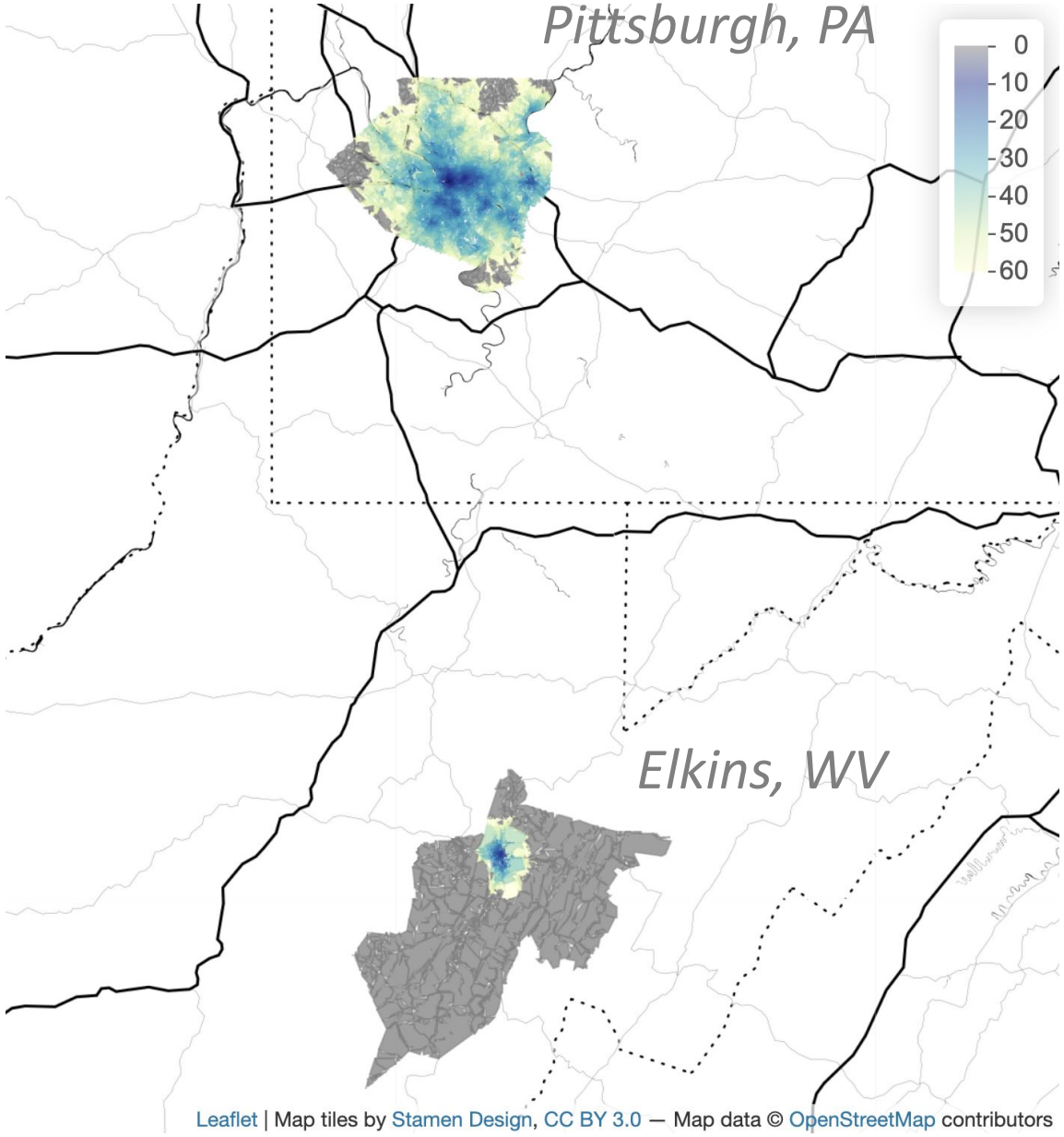


Change in Access



Access in Appalachia

- Non-work destinations
- Travel time to choice
  - E.g., biking to 3rd High school
- Access to:
  - rural health care
  - freight infrastructure
  - education
  - entertainment



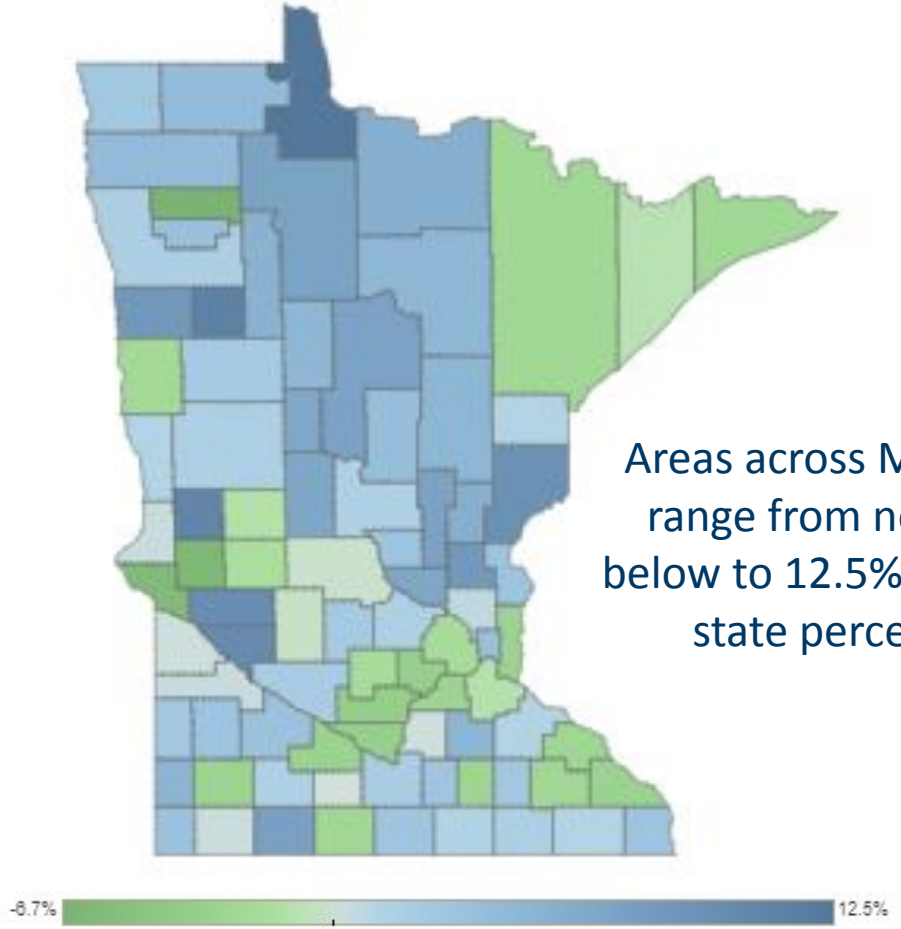
Equity first performance measures

Question Based

Iterative

Prioritizes people

Combined Transportation and Housing Costs
Basic cost as a percent of median income
Percent different from State



Areas across Minnesota range from nearly 7% below to 12.5% above the state percentage

Other equity measurement examples

- East-West Gateway Council of Governments (St. Louis region) conducted a Transportation Equity Assessment as part of the region's long-range transportation plan update
  - Equity has also been elevated as a regional Guiding Principle and integrated into performance-based project selection for the long-range plan
- Atlanta Regional Commission has integrated equity into the region's Transportation Improvement Program project evaluation framework
- District Department of Transportation (DDOT) has an Equity Assessment Tool, which is being used to evaluate projects, programs, and services

Resilience

- Lots of work happening with asset management planning, risk and resilience
- As an emerging area, we are proposing research titled “Implementing Effective Resilience Performance Management” for communities
  - Seek to disentangle attempts to date and clarify what it means to have an effective, outcome-based, high-level performance management approach to resilience

Carbon/GHG reduction

Areas of interest include

- Carbon reduction strategies and measures of effectiveness
- GHG Assessment and Reduction Targets in Transportation Planning (EDC-7)
- Methods for evaluating and measuring carbon/GHG emissions
    - Task force proposed research problem statement

Public Value Creation

- The private sector's bottom line of success is shareholder value; the public sector's measure is public value
  - Concept put forward by Mark Moore from Harvard in 1995
- Proposed as a technical committee topic for the upcoming cycle of the World Road Association
  - Public Value Creation by Transport Agencies
- Task force proposed research last year and this year
  - Understanding, Creating and Measuring Public Value; lessons learned from public agencies

Advancing Asset Management at INDOT

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Indiana
Department of Transportation

Asset Lifecycle Strategies

Pavement

December 2020

Indiana
Department of Transportation

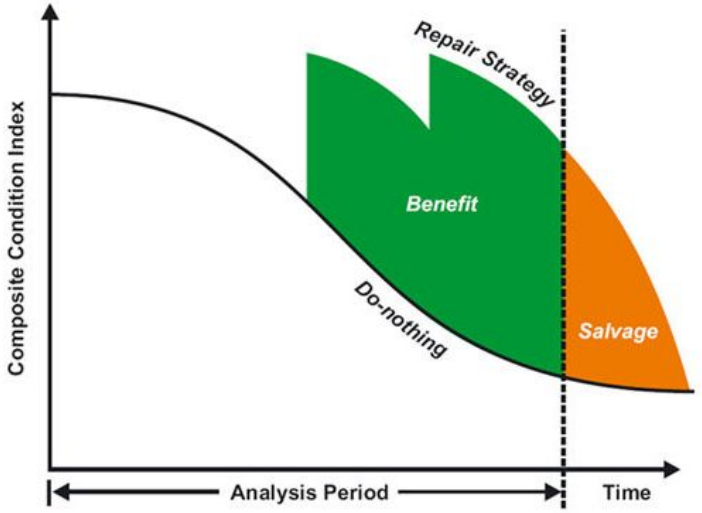
Asset Lifecycle Strategies

Bridges

January 2021

Bridge and Pavement Modeling

- Deighton Total Infrastructure Management System (dTIMS)
- Models pavement and bridge conditions and needs long term plan into the future
  - Deterioration
  - Committed projects
- Optimizes output based on
  - Incremental benefit cost
    - Compared to “do nothing”
  - Pavement quality index and Bridge quality index
  - Analyzes every PK and bridge in the state
    - Generates list of strategies

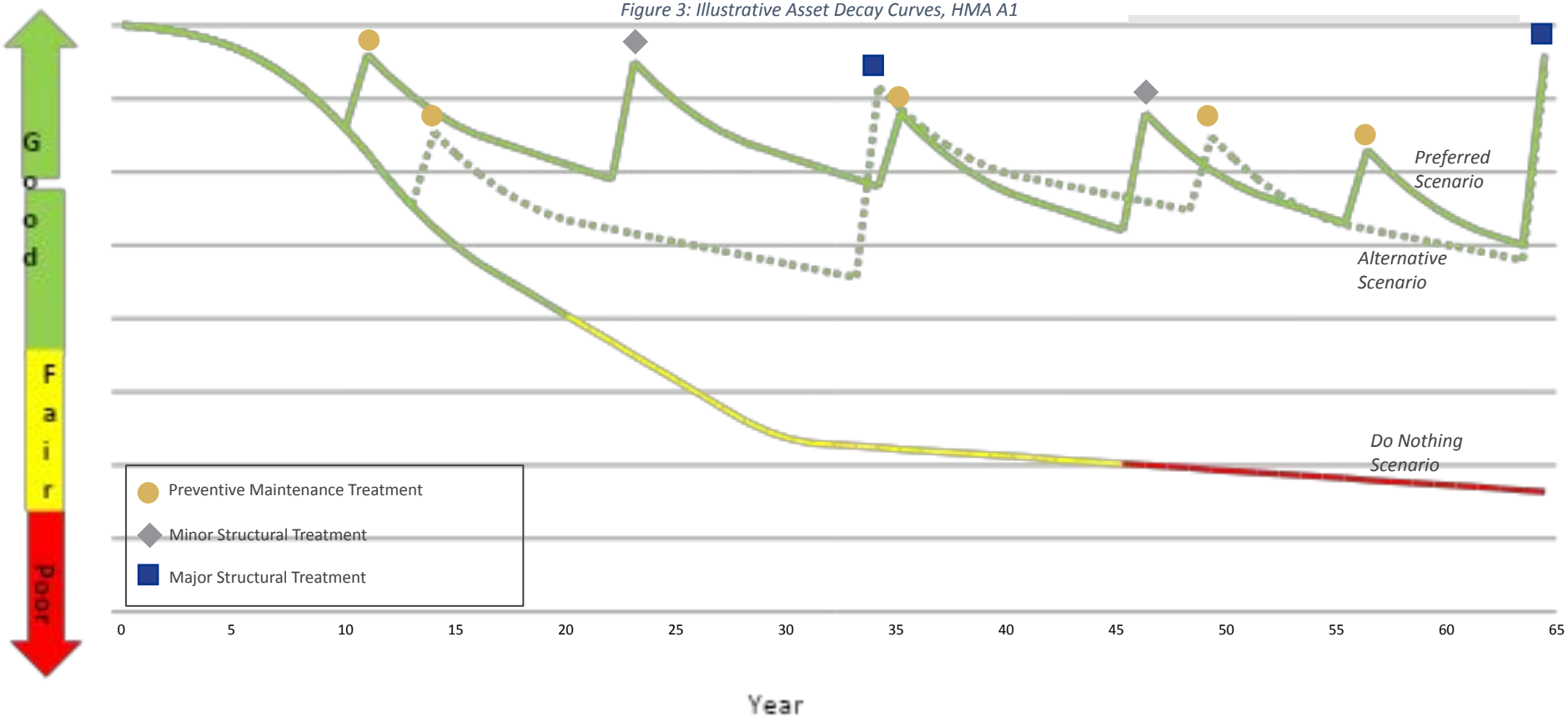


dTIMS does this for every section of pavement (PK) in Indiana

Lifecycle Strategy Financial Optimization – HMA A1

The following presents an illustrative asset lifecycle deterioration curve for HMA type pavement within A1 category roads, comparing the preferred, alternative, and do-nothing scenario against the impacts of each treatment scenario on the pavement's condition over the asset's lifecycle.

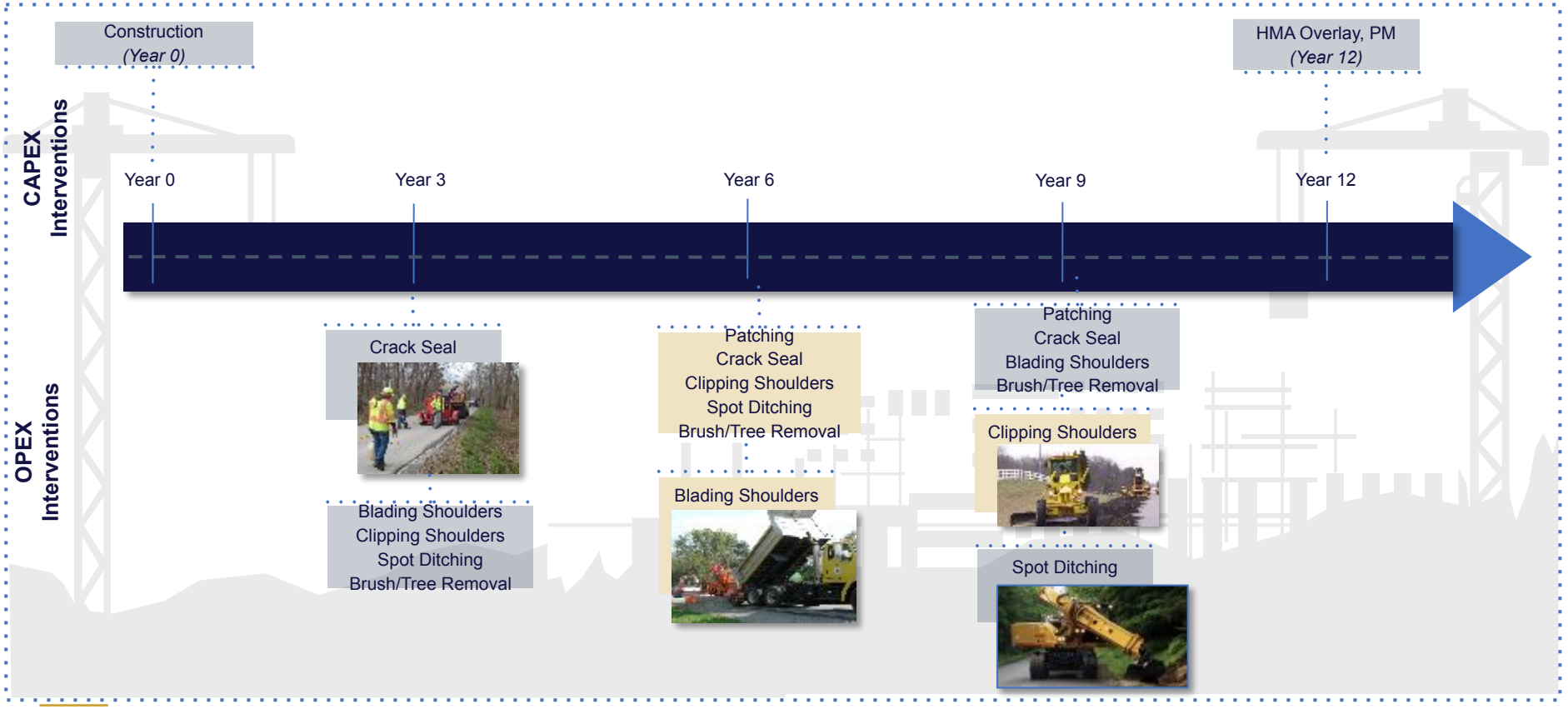
Figure 3: Illustrative Asset Decay Curves, HMA A1



Lifecycle Strategy – Pavement Maintenance Cycles

The following table presents INDOT's planned maintenance activities for A2 roadway category pavement, depicted over a 12-year maintenance cycle, beginning and ending with resurfacing treatments. Operating interventions are depicted below the timeline graphic, and capital interventions are depicted above the timeline graphic. For detailed maintenance cycles, please refer to the Appendix.

Figure 12: Pavement Maintenance Cycles, A2

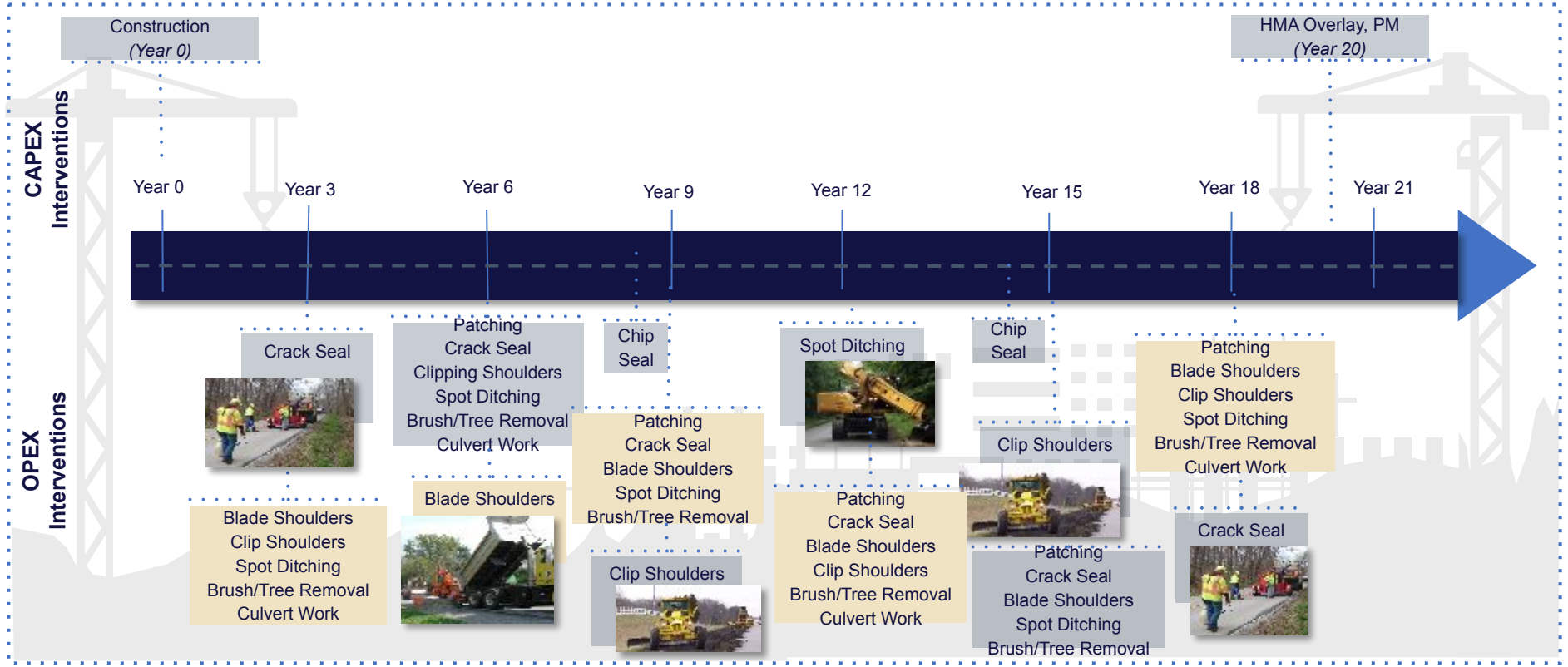


The purpose of the graphic is to depict maintenance strategies over a 12-year maintenance cycle. The graphic above is not intended to show all CAPEX and OPEX interventions over the course of the asset lifecycle. Note that beyond the first 12 years, the OPEX intervals may become more frequent than approximately every three years.

Lifecycle Strategy – Pavement Maintenance Cycles

Operating and capital investments are derived from the application of the preferred lifecycle strategy for bridge and pavement assets. The following table presents INDOT's planned maintenance activities for C2 roadway category pavement, depicted over a 20-year maintenance cycle, beginning and ending with resurfacing. Operating interventions are depicted below the timeline graphic, and capital interventions are depicted above the timeline graphic. For detailed maintenance cycles, please refer to the Appendix.

Figure 16: Pavement Maintenance Cycles, C2

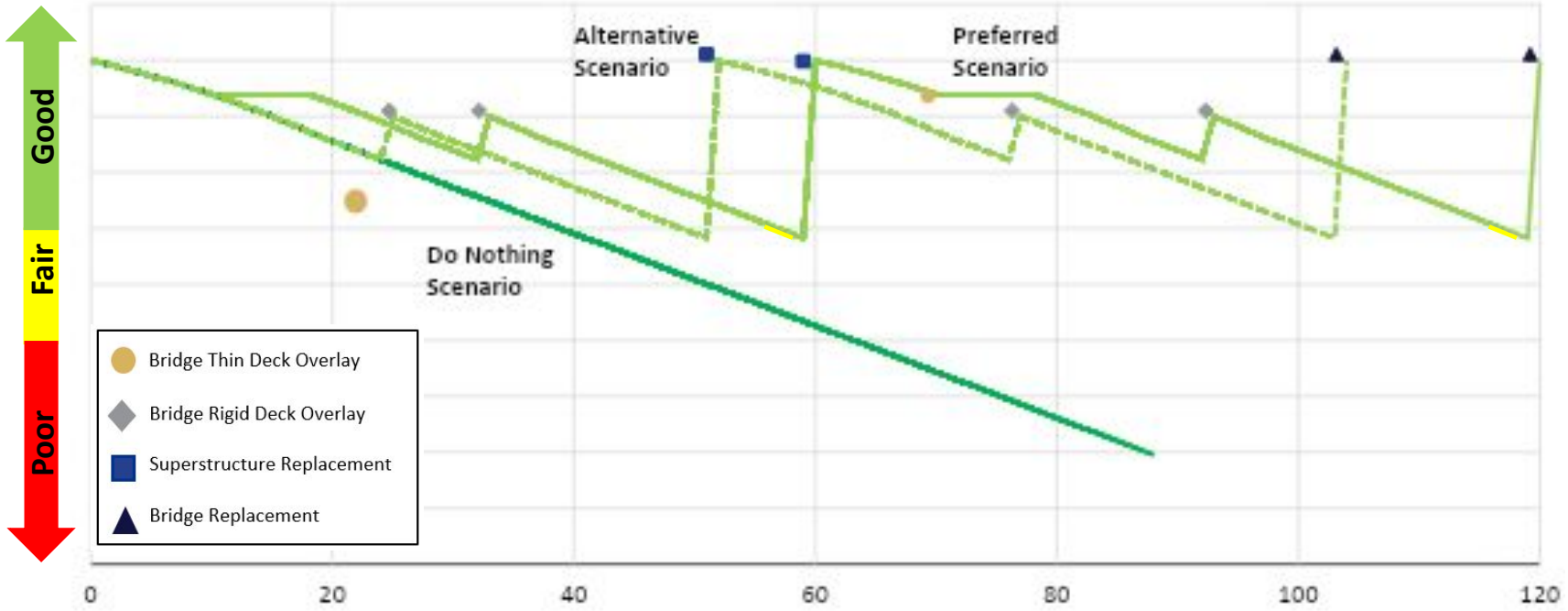


The purpose of the graphic is to depict maintenance strategies over a 20-year maintenance cycle. The graphic above is not intended to show all CAPEX and OPEX interventions over the course of the asset lifecycle. Note that beyond the first 20 years, the OPEX intervals may become more frequent than approximately every three years.

Asset Lifecycle Investment Strategy – Non-Interstate, Deck Condition

The following presents an illustrative deck condition decay curve for a 9,000 ft^2 Non-Interstate bridge, comparing the preferred, alternative, and do-nothing scenario against the impacts of each treatment scenario on the deck condition over the bridge's lifecycle. It is assumed that the bridge is the southern portion of the State, in area with lower traffic volumes, and is subject to relatively-moderate environmental conditions (e.g., free-thaw cycles, salt water intrusion, snow, etc.); thus, treatments are expected to last longer.

Figure 7: Illustrative Bridge Decay Curve, Deck Condition (9,000 ft^2) (southern Non-Interstate)[1]



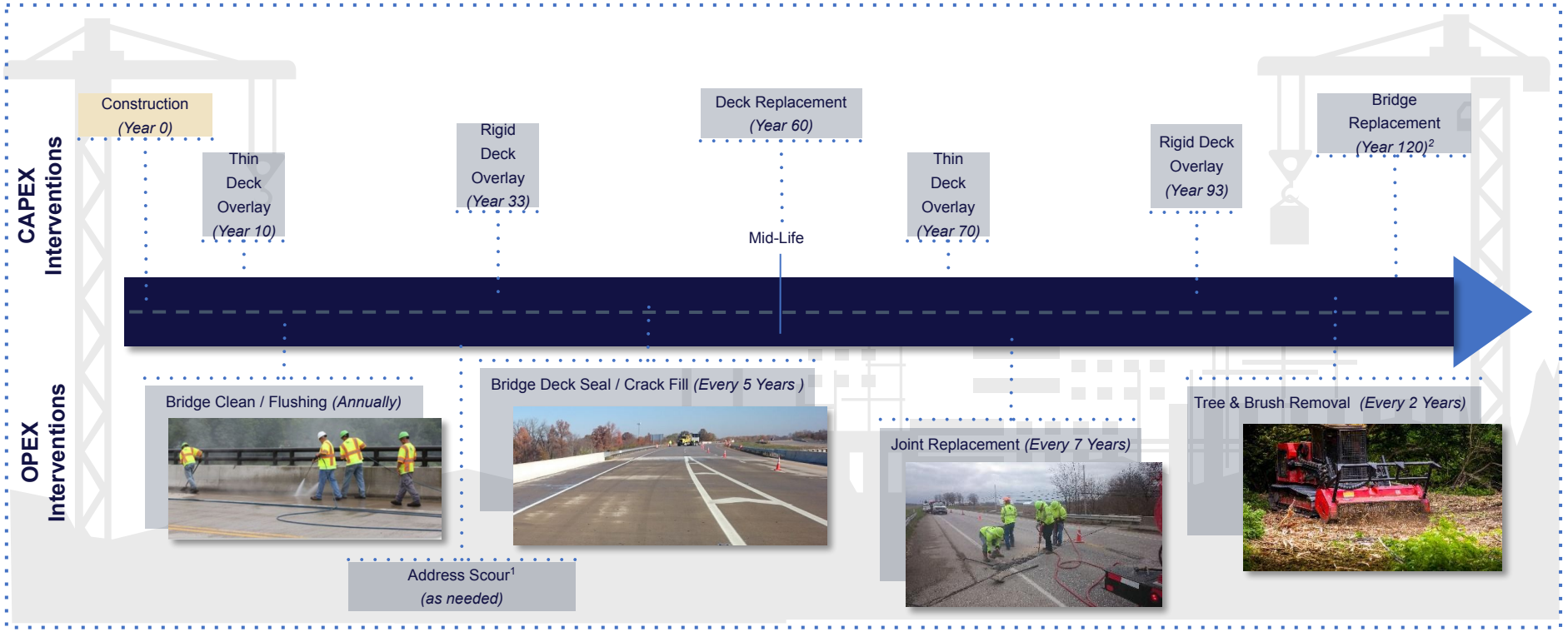
[1]*The FHWA standard design life is 75 years. The above graph assumes a longer lifespan (120 years for the preferred scenario) but assumes the lifespan would not extend any further.*

[2]*Superstructure replacement assumes ancillary rehabilitation work will be conducted on the substructure.*

Lifecycle Strategy – Investment Diagram *(Non-Interstate)*

Operating and capital investments are derived from the application of the preferred lifecycle strategy for bridge assets. The following table presents INDOT's planned capital and operating interventions for an illustrative example Non-Interstate bridge in the southern portion of the State and should not be taken as indicative of all southern Non-Interstate bridges. Capital interventions are depicted above the timeline graphic. The intervals for operating interventions are provided below the timeline graphic.

Figure 12: Non-Interstate Bridge Maintenance Cycles (southern)



[1]*Address Scour treatment can be classified as either OPEX or CAPEX. Scour protection work is performed as-needed based on the results of inspections. For the purpose of the modeling the deterioration curves, this treatment was not included as an CAPEX treatment.*

[2]*The FHWA standard design life is 75 years. The example assumes approximately 120 years for Non-Interstate bridges; however, the actual lifespan is dependent on such factors as the material, results of inspections, and condition of the bridge, noting that the substructure must be in good condition to achieve a longer lifespan.*

Keys to Success for Bundling

Bundling Criteria/Business Rules

Asset Rules and Life-cycle planning

Work Types
- 2-3 similar work types: 2%
- 4-5 similar work types: 4%
- 6-7 similar work types: 6%
- >7 similar work types: 8%

Distance
- 0-10 miles: 6%
- 11-15 miles: 5%
- 16-20 miles: 3%
- 20-30 miles: 2%

Crossing local boundaries will incur a penalty
- 2 locals: -2%
- 3-4 locals: -3%
- 5 locals: -5%

Added penalties for larger distances:
- 30-40 miles: -2%
- > 40 miles: -6%

dTIMS modeling

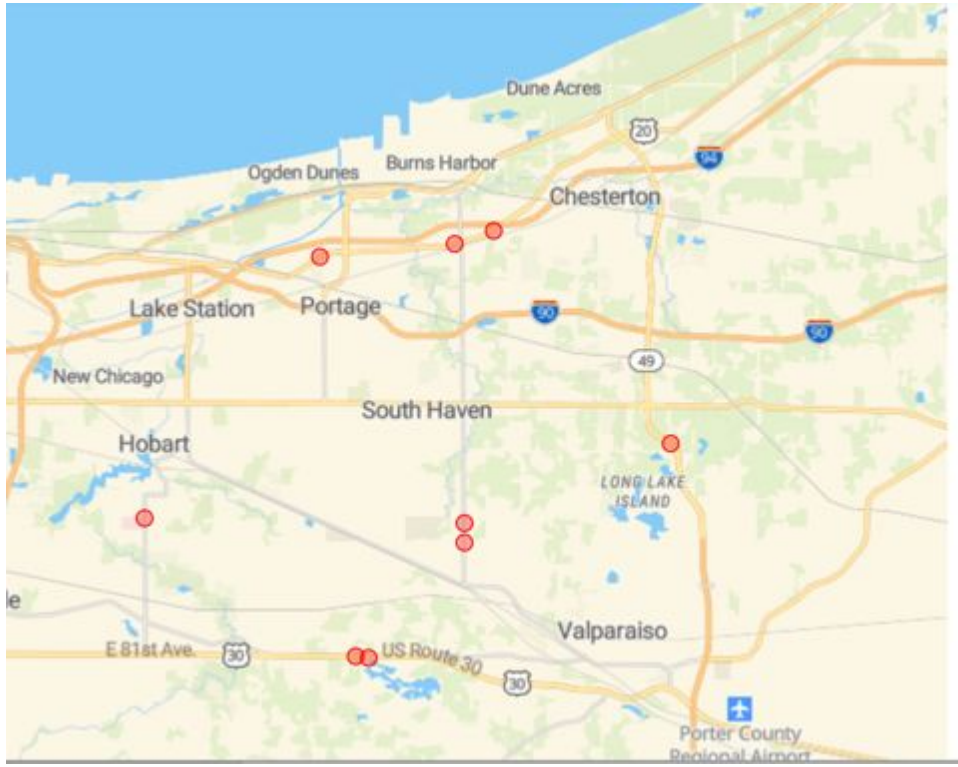
20 year Plan
Interstate Plan
Life Cycle Planning

Key Bundling Criteria

Corridors

Geographic Location

Work Types



INDOT Bundled Projects

Bundle Number 40606 - (14 projects) $1,735,517 - Savings Score: -4 %

DES No.	Work Type	County	Year	Route	Est. Savings
1701442	Small Structure Replacement	Porter	2022	US-20	-$2,232.48
1701332	Small Structure Pipe Lining	Lake	2022	US-30	-$3,991.56
1701444	Small Structure Pipe Lining	Lake	2022	US-231	-$2,812.8
1701454	Small Structure Pipe Lining	Lake	2022	SR-51	-$1,875.2
1701472	Small Structure Pipe Lining	Lake	2022	SR-312	-$5,621.76
1701509	Small Structure Pipe Lining	Lake	2022	US-231	-$11,700

FORO Bundles

Bundle Number	Number of Projects	Score	Bundle Value
198	7	8%	$2,984,384
656	7	9%	$18,147,381
516	4	8%	$3,657,480
824	4	8%	$3,314,985
859	2	8%	$393,286
201	6	8%	$6,241,435

Corridor Bundles

What to Consider…

- Multiple work types on
  - Interstate or high-volume multi-lane routes

    OR
  - City or single highway
- Similar Maintenance of Traffic (MOT)
- Construction time
- Do Not mix interstate with non-interstate

Geographic Bundles

What to consider….

- 15- to 20-mile radius appears to be most efficient
- Look beyond district boundaries
- Union vs. non-union areas
- Plant locations
- Concurrent versus consecutive work
- Contractors' capacity per season

Work Type Bundles

What to Consider…

Bridge Bundles

- Historic and Railroad Bridge projects should stand alone
- Specialty Equipment
  - Flexible/Thin (Polymeric) Overlays with like project types
- Paint Projects should be bundled with like project types
  - Exception: when complex MOT (e.g. narrow truss bridge with single lane signalized MOT.)
  - Exception: when painting will be required as part of a larger project
- Large culvert/small structures/ 3 sided structures
  - Typically, different than traditional bridge contracts
  - Exception: Bundling small structure, bridges and road projects into a corridor contract has benefits to coordination, mobilization. and MOT.

Additional Benefits for Staff

Build more bundles for consideration

Test all bundling assumptions for accuracy

Instant adjustments of bundling assumptions

Develop and save all “what if” bundling scenarios

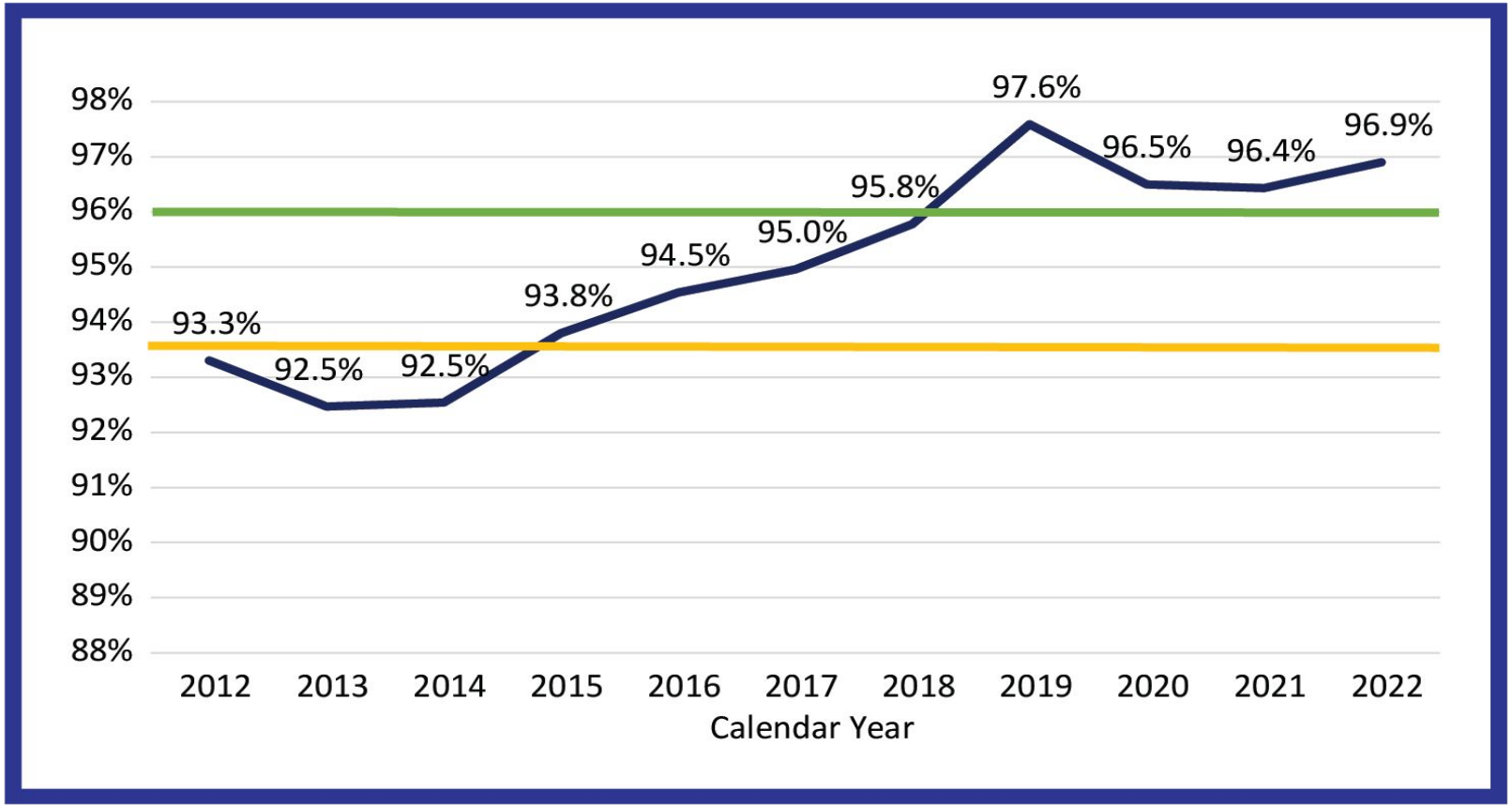
Benefits of AI

FORO
www.teamforo.com

- $aves far more than staff-built bundles
- Fast answers to complex questions
- Finally, smart access to all that stored data
- Removes data analysis drudgery
- Build and save “What ifs?” and scenarios
- Human-centered decision-making!

Conditions – Bridges

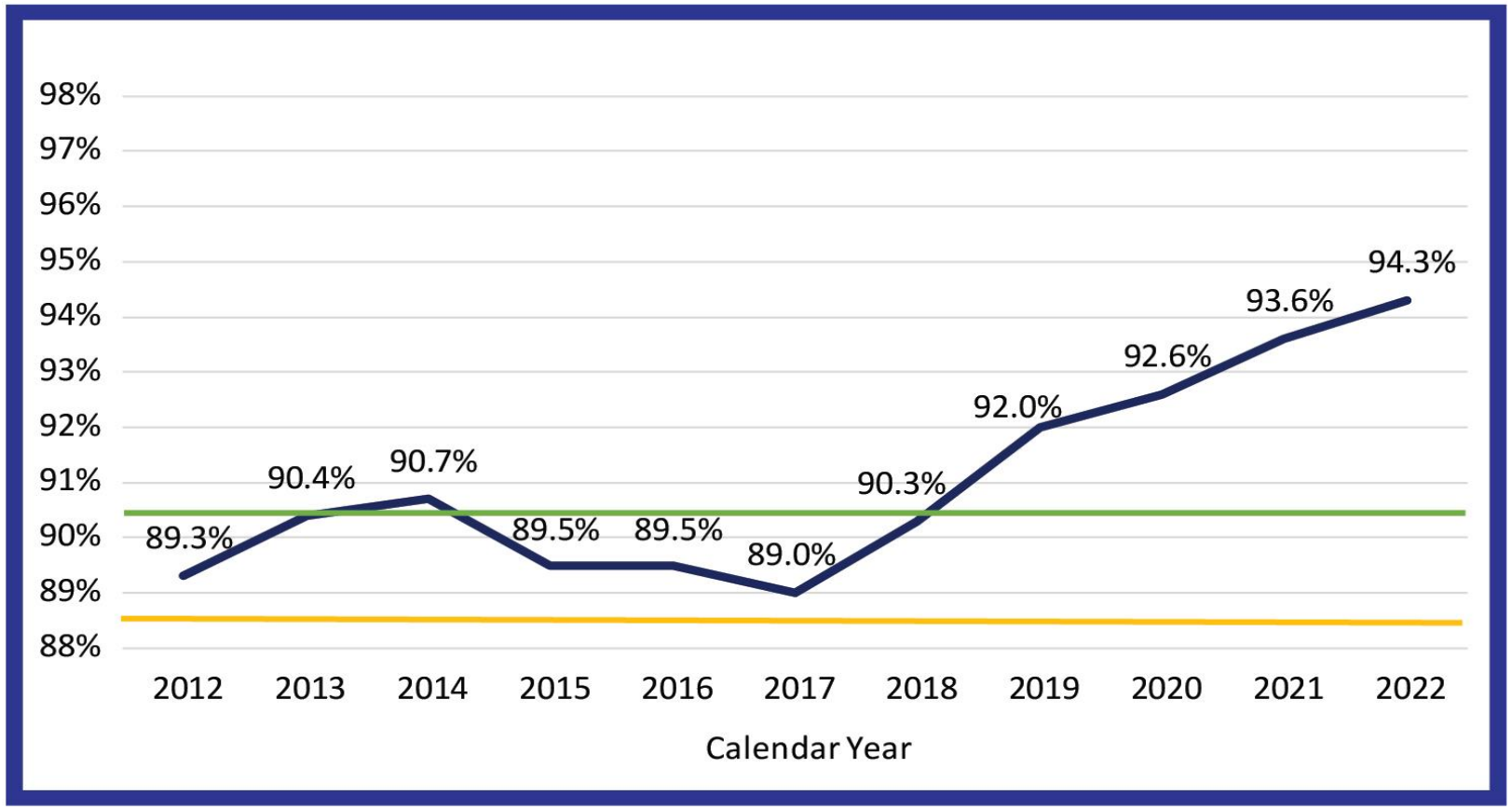
Well-Maintained Bridges



Percentage of bridges with all elements (deck, superstructure, substructure, wearing surface, and culvert) rated at 5 or above on the Federal Highway Administration NBIS bridge rating scale, reported cumulatively.

Conditions – Roads

State-Controlled Roads in Fair or Better Condition



Percentage of state-controlled roads in fair condition or better, based on International Roughness Index, which measures pavement roughness in inches per mile, reported annually.

WHERE ARE WE GOING NEXT

- Adding EJ Scoring (thanks William)
- Resilient/Protect
- Use AI to Analyze Safety Reports
- Adding other assets
  - Small culverts
  - MSE walls
  - Noise Walls
  - ITS and Traffic items

Discretionary Grant Opportunities and Performance Management

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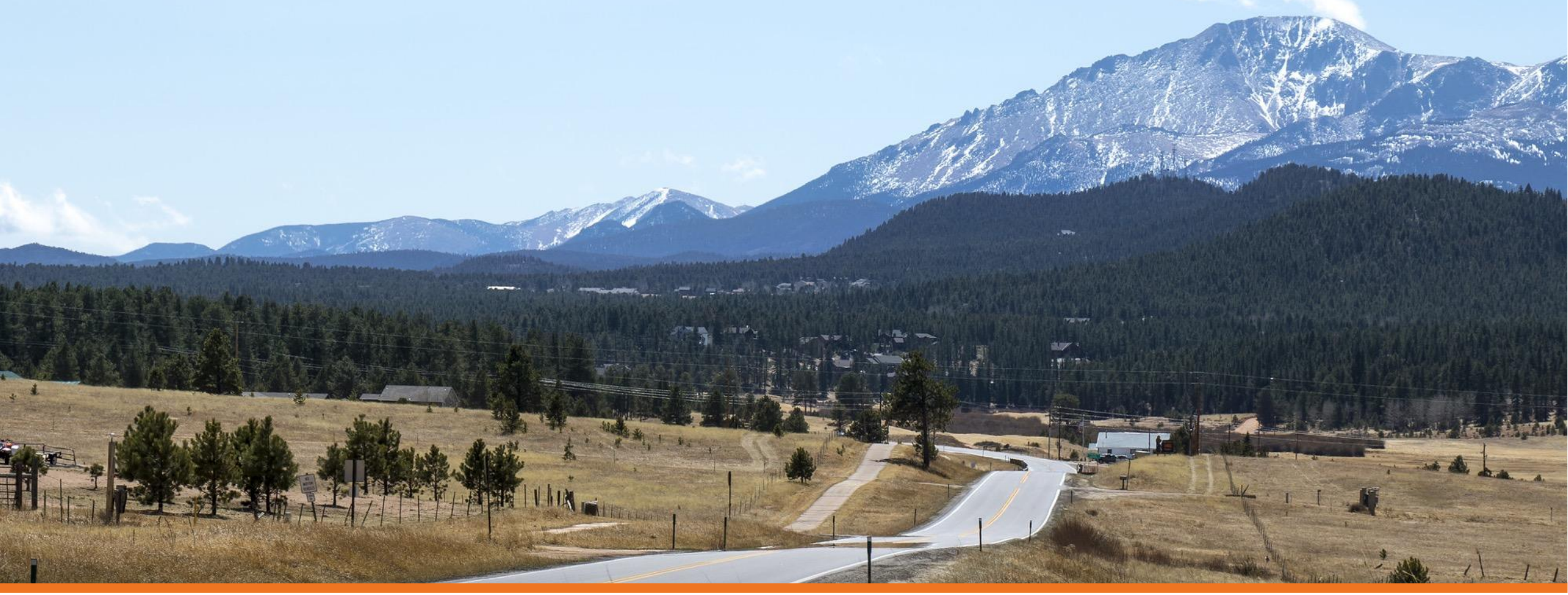


COLORADO
Department of Transportation

Discretionary grant opportunities and performance management

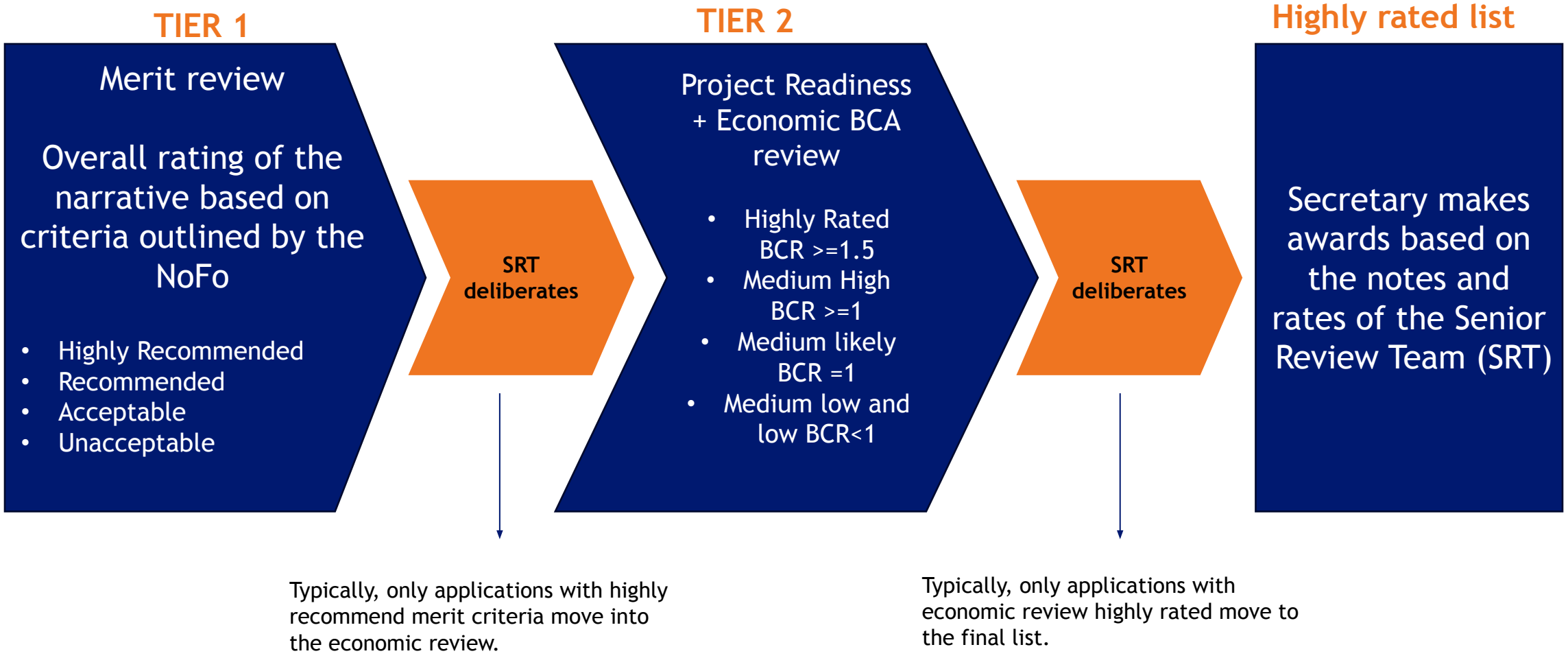
September 8, 2023

Performance management into grant applications

The use of performance management indicators, data, and tools to contribute to the success in the evaluation process of grant applications.

Grants evaluation process	BCA requirements and guidelines	Data and indicators	Methodology and tool incorporation
IIJA programs in general have the same evaluation process for eligible applications	NoFo and USDOT BCA guidance set the rules	Sources and types depend on the program and project	The economic methodology and the use of tools e.g. Risk and Resilience Tool

Grants evaluation process



Typically, only applications with highly recommend merit criteria move into the economic review.

Typically, only applications with economic review highly rated move to the final list.

BCA requirements and PM resources

BCA guidance and requirements

a. Guidance

1. Methodological framework for a BCA: Present value (discount rates, base year, analysis period, etc.).
2. Rules to construct assumptions
3. Types of benefits recommended (commonly accepted) – related to some of the national performance measures
4. Key parameter values: time, crashes, vehicle occupancy values.

b. Requirements

1. Planning and Engineering documents that point to the impacts expected -> these will frame the analysis and assumptions
2. Description of the assumption
3. Technical Memo with description of calculations and Data sources
4. Unlocked spreadsheet (Transparent, reproductible, thoughtful and well-reasoned model)

Data

1. Safety: historical state crash listings
2. Asset condition: asset inventories and reports
3. Traffic
   - Travel Demand Model inputs
   - Online Transportation Information System (OTIS)
   - VMT, AADT, % Trucks, etc. (FHWA annual stats, OTIS)
   - Project studies and specific counts
4. Emissions: MOVES3 Software
5. Maintenance and Operation Costs: Internal SAP Database for maintenance costs.
6. Transit: ridership data from Bustang or other transit services from partner applicants
7. Residual value: asset expected service life from CDOT's design guidance and TAMP.
8. Total costs: project's team estimation or project's studies/reports
9. Resilience: CDOT's Risk and Resilience (RnR) estimation tool
10. Detour: CDOTs Detour identification tool

Example Project - CO 7 PROTECT Grant Application

Methodology and tool incorporation: Bridge replacement

Analysis of 6 years of annual crash data

- Emission factors for the area/county
- Analysis for annual ridership data and mode shift
- Forecast from partner's BRT and transit study.

Traffic data (AADT, VMT, Mode share, etc.)

Service Life from CDOT's Bridge Design Manual

BCA framework: PM resources enhance economic benefits and makes them solid

Costs	
Project Capital Costs	$19,837,975
Total Costs	**$19,837,975**
Benefits	
Crash Cost Savings	$28,243,314.82
Operations and Maintenance Costs Savings	$73,428.21
Emissions Savings	$3,433.23
Resilience Benefits	$12,726,051.42
Construction Work Zone Delay	**-$6,579,661.64**
Residual	$1,418,074.40
Total Benefits	**$35,884,640**
Benefit/Cost Ratio	**1.81**
Net Present Value	**$16,046,665**

All values are present in 2022 dollars and the analysis period is over 30 years discounted at 7% except for CO2 (discounted at 3%).

Project's engineer estimation

- Internal SAP historical data for 5 year for the current bridges M&O
- The estimated M&O costs for the new bridge

- Inputs from RnR tool (vulnerability and likelihood factors)
- Owner's costs (based on current/future asset condition and characteristics)
- Users Costs(estimated with RnR inputs, USDOT parameters and traffic data)
- Recurrence interval determined by engineers/studies/reports

Resiliency in the Face of Climate Change: July 2023 Flooding Event

VT-14, Williamstown, VT

Rick Scott
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(WORKING COPY) CPBM Peer Exchange PresentationFINAL.mp4

TPM

U.S. Department of Transportation Federal Highway Administration

AASHTO The Voice of Transportation

"Who" is Vermont?

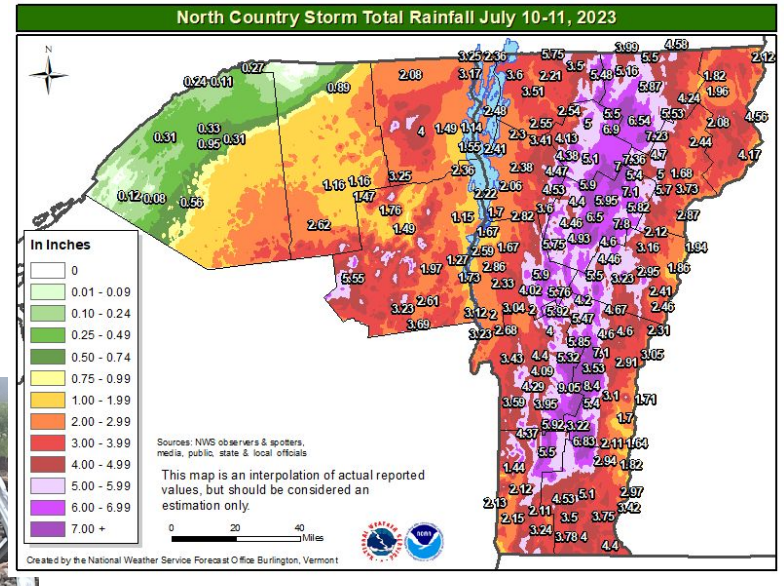
- Population: ~650,000
- VTrans maintains roughly 3200 miles of Interstate/U.S./State Routes
  - Interstates: 2.1 - I-89, I-91, & (a little) I-93
  - U.S.Routes: 5 - US-2, US-4, US-5, US-7, & US-302
- VTrans maintains roughly 4000 bridges
- VTrans maintains roughly 48,000 small culverts (under 6 feet)

July 2023 Flooding Event

- Prior to event, series of gentle rains had saturated the ground.
- July 7th - Localized flooding in the Killington area put VTrans on alert.
- July 10th-11th - 48 hours of heavy rain, in the range of 3" to 9" inches, resulting in significant:
  - Inundation
  - Scouring/Washouts
  - Landslides

VT-155 Mount Holly, VT

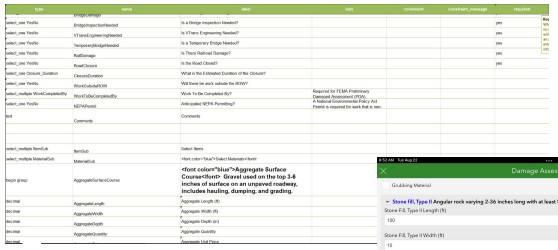
VT-100, Bridgewater, VT

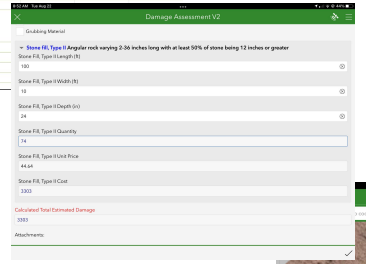


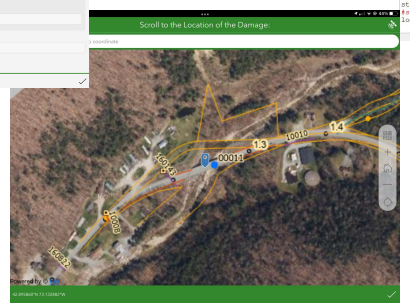
Landslide on VT-62, Barre, VT

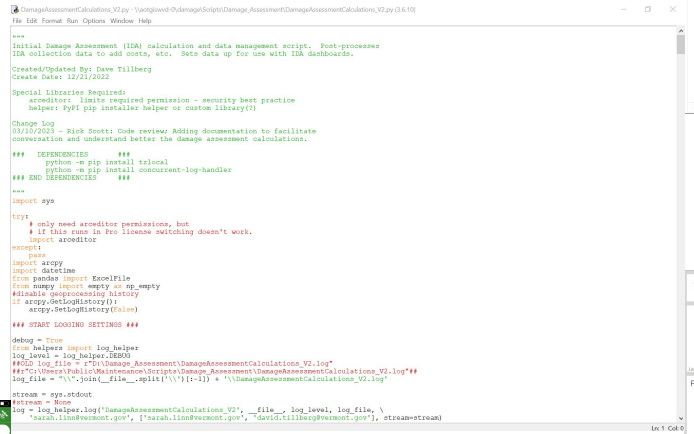
VTrans Emergency Response

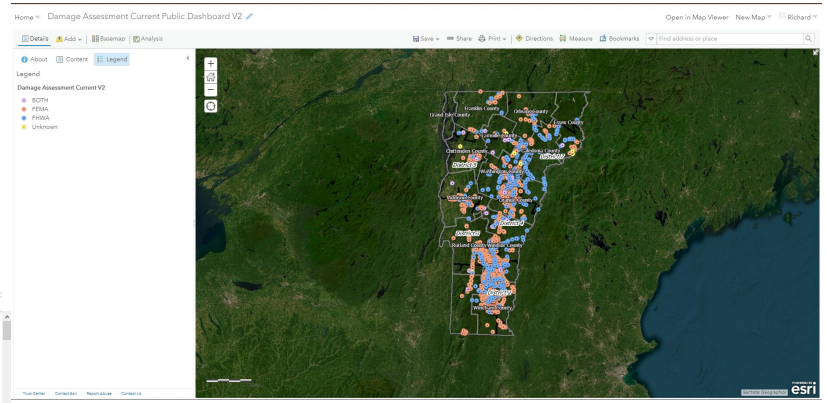
- Starts with VTrans' Initial Damage Assessment (IDA)
  - ESRI Survey123
  - Post-processing w/ Python geoprocessing
  - Damage Estimate Dashboard & Map

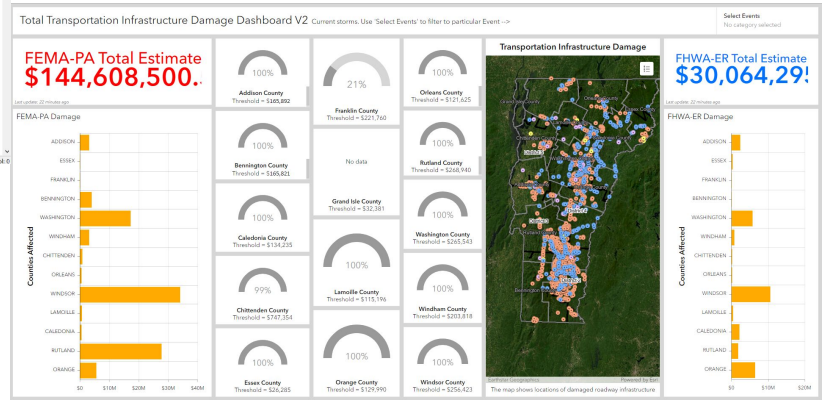




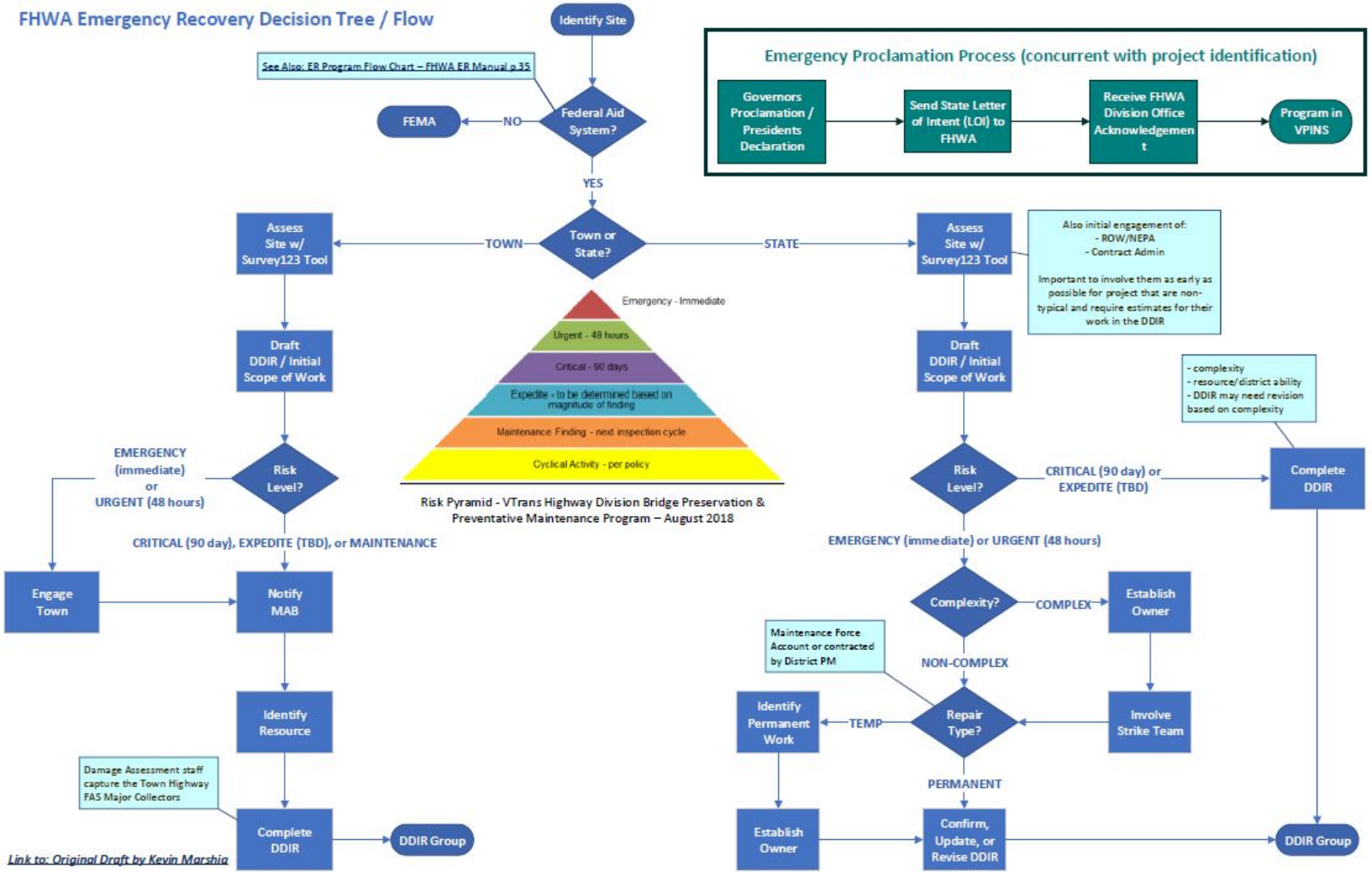


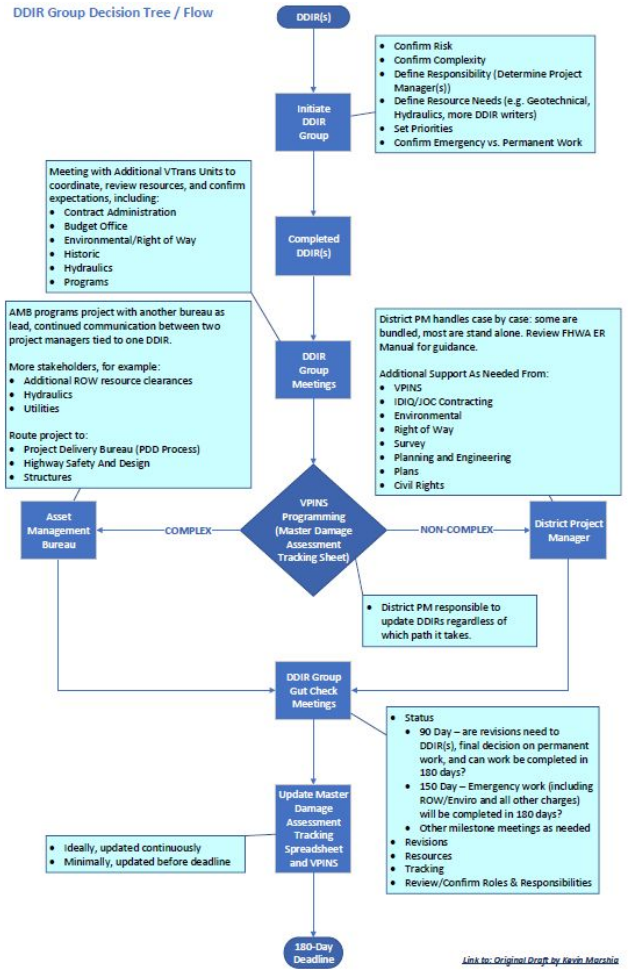






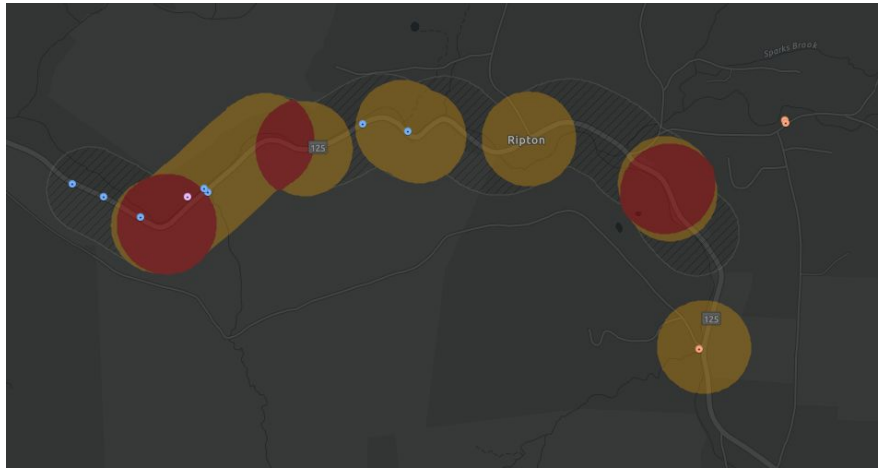
VTrans DDIR Process

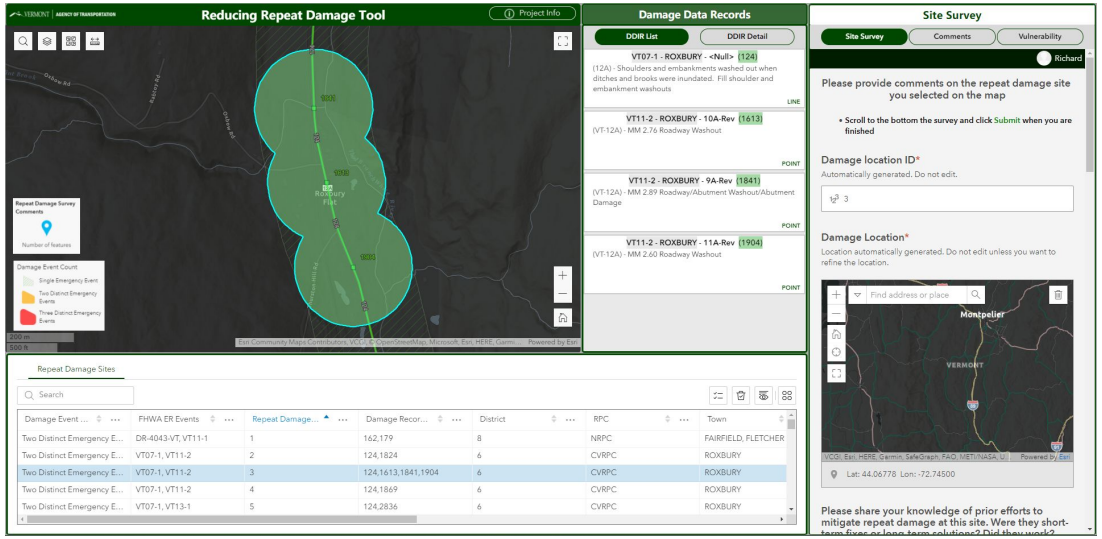




Resiliency Strike Team

- Lead by ICS Recovery Unit Leaders
- Includes:
  - Regional Command Staff (from Maintenance Districts)
    - District Project Managers, General Managers, and Technicians
    - Other Staff assigned to ICS
  - Design Staff
    - Structures
    - Highway Safety & Design
    - Municipal Assistance
    - Hydraulics
  - Etc.

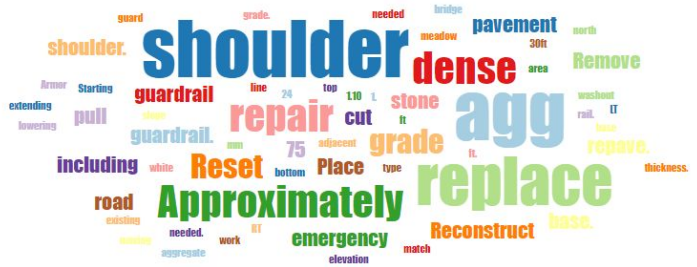




Resiliency Assessment

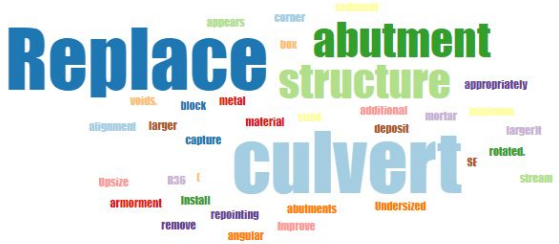
- Site ID
- Is additional resiliency roadway work required?
- Additional Roadway Work (required)
- Is additional resiliency structure work required?
- Additional Structure Work (required)
- Is additional resiliency slope work required?
- Additional Slope Work (required)
- Is additional resiliency hydraulics work required?
- Additional Hydraulics Work (required)

Additional Roadway Work (required) * Word cloud



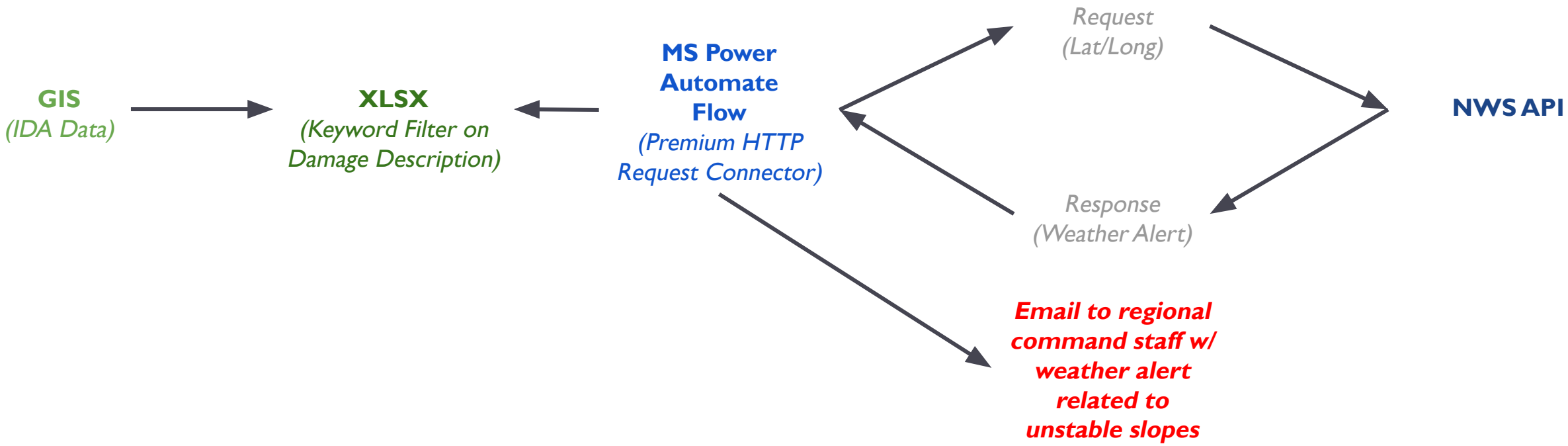
Additional Slope Work (required) * Word cloud

Additional Structure Work (required) * Word cloud



Additional Hydraulics Work (required) * Word cloud

IDA Example Usage: Unstable Slope Notifications



Thank you!

Questions?

B. Coordinating Across Stakeholders

- Having effective performance management requires coordination across:
  - Planning
  - Programming
  - Budgeting
  - Monitoring
- This session will focus on how to improve internal and external coordination for performance management

Small Group Exercise Instructions

1. Each table will be assigned a TPM performance area:
   - Safety (Group 1)
   - Infrastructure condition/asset management (Group 2 & 3)
   - Congestion reduction (Group 4)
   - System reliability (Group 5)
   - Freight movement and economic vitality (Group 6)
   - Environmental sustainability (Group 7)
2. Designate a presenter to share the exercise results
3. Designate a scribe to capture the information that will be presented

Small Group Exercise Instructions

4. Each person in the group should select one of the following roles
   - State DOT Executive
   - State DOT Engineering Lead
   - State DOT Planning Lead
   - State Finance/Budget Lead
   - State DOT Data/IT Lead
   - FHWA Division Lead
   - MPO Lead
   - OR identify additional roles specific to the performance area

Small Group Exercise Instructions

5. Review the performance objective for your group
    - **Safety:** To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
    - **Infrastructure Condition:** To maintain the highway infrastructure asset system in a state of good repair.
    - **Congestion Reduction:** To achieve a significant reduction in congestion on the National Highway System.
    - **System Reliability:** To improve the efficiency of the surface transportation system.
    - **Freight Movement and Economic Vitality:** To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
    - **Environmental Sustainability:** To enhance the performance of the transportation system while protecting and enhancing the natural environment.

Small Group Exercise Instructions

6. Each stakeholder lists their top three concerns or objective (use the worksheet that is provided) and shares with the group
7. Document areas of alignment and difference
8. Discuss how the collective group is going to meet the performance objective and document the approach and strategies to collaborate effectively (use the worksheet that is provided)
9. Present the following
    - Areas of alignment
    - Areas of difference
    - Your group's approach and strategies to collaborate effectively

C. Biennial PMF Reporting

- Agencies have had several cycles of federal TPM reporting.
- This session will include:
  - Basics of TPM reporting
  - What we've learned
  - Resources to help DOTs
  - How FHWA is using the information
- Followed by a discussion and State DOT feedback

Day 1 Wrap Up

- Noteworthy performance management practices
- Coordinating for performance management
- Lessons Learned about Biennial PMF Reporting
- Resources available to support performance management
- Most critical needs

Ideas to Consider Going Into Day 2

- Reflect on how we can build upon successes and replicate or expand leading practices
- Think about how we can overcome missteps and put those lessons into practice
- Consider your vision for performance management into the future
- Consider ways FHWA, AASHTO, and the TSP can be of assistance to you going forward

AASHTO Committee on Performance-Based Management (CPBM) Peer Exchange

Sponsored by FHWA, AASHTO, the TPM Pooled Fund, and the AASHTO TPM Technical Service Program

Day 2
Tuesday, September 12, 2023

Day 2 Overview

7:45 **Breakfast & Conversation.**

8:15 **Recap Monday's Agenda & Overview of Tuesday's Agenda.**

- Christos Xenophontos, Chair, AASHTO CPBM.

8:30 **D. Aligning Performance Management & Asset Management: Fishbowl Exercise.**

9:15 **E. How Can We Improve Practice? Small Group Ideas Generation.**

10:00 **Break.**

10:15 **Prioritization: World Café Exercise.**

11:45 **Peer Exchange Wrap Up.**

- Mshadoni Smith-Jackson, FHWA, & Christos Xenophontos, Chair, AASHTO CPBM.

D. Aligning Performance Management & Asset Management

- Fishbowl Exercise
  - Generate intimate dialogue by having one person talk at a time.
  - Speakers are seated in the front of the room while the rest of the participants sit at tables and observe.
  - Once a speaker is done making point, they move out of the fishbowl and another participant becomes a speaker.
- Topics (each topic will be time-boxed to 10 minutes)
  - Decision-Making for Good Investment Choices.
  - Technology and Performance Management.
  - Getting more Sophisticated with Data.
  - Aligning Performance Management with Other Agency Disciplines.

E. Performance Management Vision for the Future

- Pairs exercise
  - Pair up with another peer exchange participant.
  - Capture your “Vision for the Future of Performance Management.”
  - Capture one idea per Post-It.
  - Think outside the box, quantity over quality! The team with the most Post-It wins bragging rights.
- The ideas you capture will be used in the next session.

F. How Can We Improve Practice?

- Objective: To pull all the elements together for a well-aligned and forward thinking performance management program.
- This session will include:
  - Small group ideas generation
  - Group report outs
  - Prioritization exercise

Small Group Ideas Generation

1. Break into small groups
2. Designate a presenter to share the exercise results
3. Designate a scribe to capture the information that will be presented
4. Capture ideas for how to improve the practice of performance management within transportation agencies
   - Use the visioning exercise ideas you captured on Post-Its to help refine your “stretch” thoughts into practical ideas
   - Now that we have thoughts about what we want performance management to look like in the future, how do we get there and what will it take?

Group Report Outs & Prioritization

5. Each group reports out on your ideas to improve the practice of performance management
6. Thinking about all of the ideas we've discussed, which ones
   - Will make the biggest difference
   - Are the most urgent
   - Require a coordinated effort

Peer Exchange Wrap Up & Next Steps

- Lessons learned about aligning performance management with asset management and other disciplines
- Performance management vision for the future
- Improving performance management practice
- How AASHTO CPBM, FHWA, and the TSP may be able to help
- Next steps

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TPM

U.S. Department of Transportation
Federal Highway Administration

AASHTO
The Voice of Transportation

Enjoy the rest of the meeting!