



NCHRP 23-07: Effective Methods for Setting Transportation Performance Targets

TPM Webinar Series

Lessons Learned on Target Setting Methods and Effective Practices, July 21, 2022



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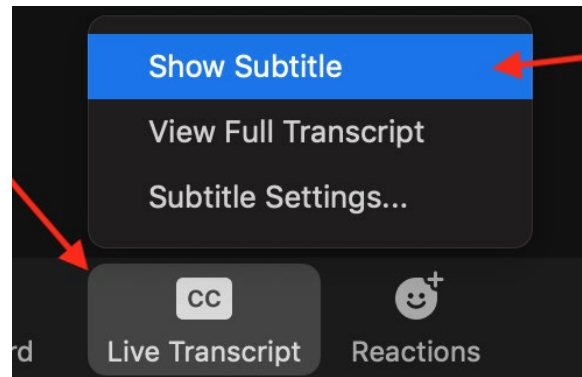


Agenda

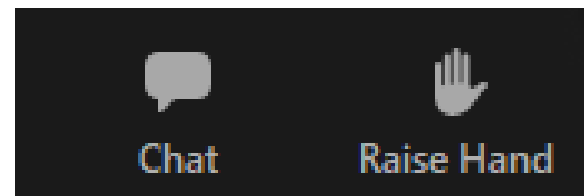
- **Welcome & Overview of Methods**
- **What Makes a Target Setting Method Effective?**
 - Presentation by Deanna Belden, Minnesota DOT + Q&A
 - Presentation by Edgardo Block, Connecticut DOT + Q&A
- **Target Setting Philosophies**
- **Tips for Selecting a Method and Making the Process More Effective**
- **Workshop Series Wrap-up and Conclusion**

Navigating Zoom

To view captions, look for CC at the bottom of the screen:



To ask a question, type the question in the chat or click "Raise Hand" to be called on.

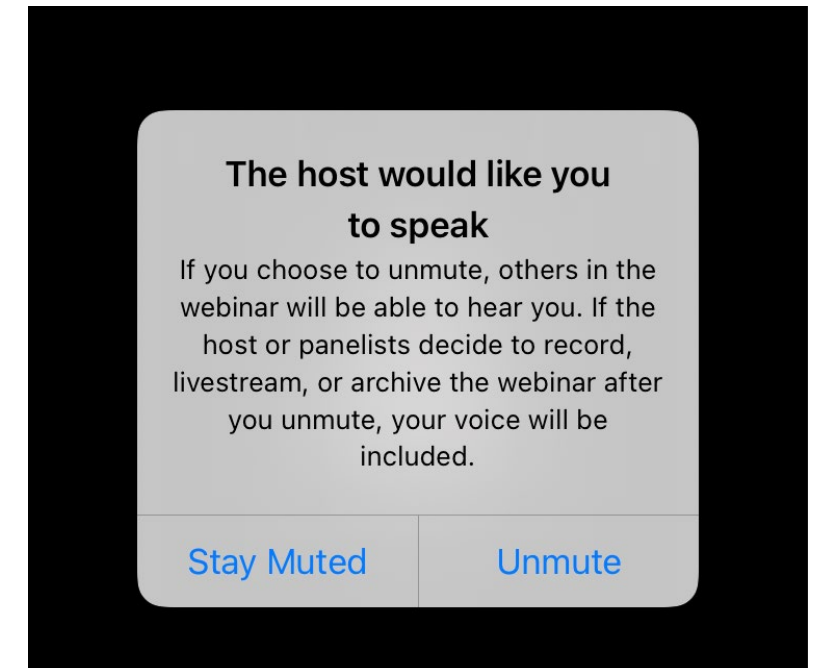


To: Everyone ▾

More ▾

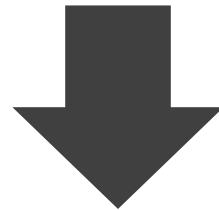
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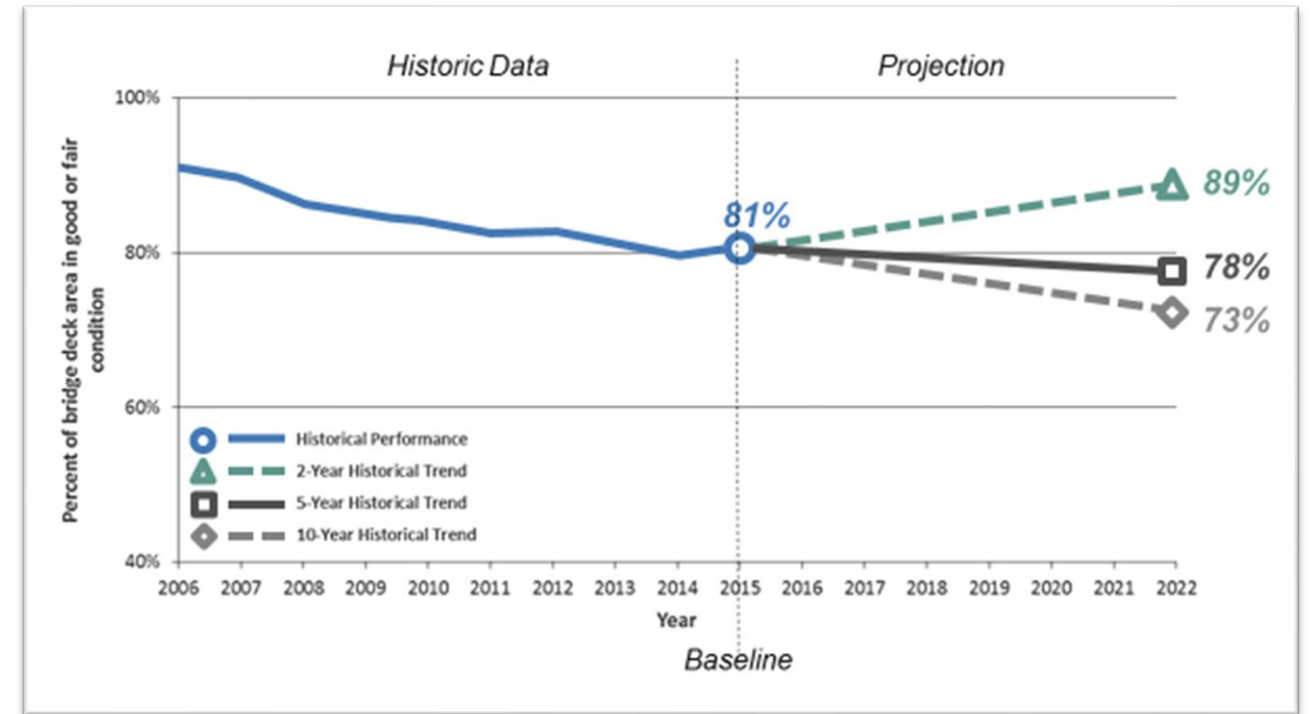


Study Purpose

- State DOTs (in coordination with MPOs) are required to establish targets for each national performance measure.
- Agencies face challenges: Considering both quantitative and qualitative methods; accounting for macro-level trends as well as unforeseen events.








To develop and disseminate a practitioner-ready guidebook on methods for target-setting.



Source: NHI Target Setting course

Performance Measures Explored

 <p>Safety</p>	<ol style="list-style-type: none"> 1. Number of Fatalities 2. Rate of Fatalities 3. Number of Serious Injuries 4. Rate of Serious Injuries 5. Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries
 <p>Pavement Condition</p>	<ol style="list-style-type: none"> 1. Percentage of Pavements of the Interstate System in Good Condition 2. Percentage of Pavements of the Interstate System in Poor Condition 3. Percentage of Pavements of the Non-Interstate NHS in Good Condition 4. Percentage of Pavements of the Non-Interstate NHS in Poor Condition
 <p>Bridge Condition</p>	<ol style="list-style-type: none"> 1. Percentage of NHS Bridges classified as in Good Condition 2. Percentage of NHS Bridges classified as in Poor Condition
 <p>Reliability (Travel Time and Freight)</p>	<ol style="list-style-type: none"> 1. Percent of the person-miles traveled on the Interstate that are reliable 2. Percent of person-miles traveled on the non-Interstate NHS that are reliable 3. Truck Travel Time Reliability (TTTR) Index
 <p>Congestion</p>	<ol style="list-style-type: none"> 1. Annual Hours of Peak Hour Excessive Delay (PHED) Per Capita 2. Percent of Non-Single Occupancy Vehicle (SOV) Travel

Part I. Target Setting Overview and Tips

Introduction to Guidebook

Target Setting Foundations

Practical Application Tips

Part II. A Menu of Target Setting Methods

Target Setting Methods for Safety

Target Setting Methods for Infrastructure Condition

Target Setting Methods for Reliability

Target Setting Methods for Traffic Congestion

Part III. Target Setting for Non-Required Measures

Why Use and Set Targets for Other Measures?

Examples of Performance Measures and Targets

Guidebook Part I: Types of Target Setting Methods Used

- **Policy-Based**
 - E.g., annual decrease of 3%
- **Historical Trends**
 - E.g., based on trend over past 5 years
- **Probabilistic and Risk-based Approaches**
 - E.g., considering potential variability in performance
- **Statistical Models that account for Explanatory Factors**
 - E.g., regression model
- **Other Tools and Models**
 - E.g., pavement management systems

Guidebook Part II: A Menu of Target Setting Methods – Fact Sheets

For each method:

- What It Is
- When to Use It
- What is Needed
- How to Do it
- Advantages
- Limitations
- Examples

PART II. A MENU OF TARGET SETTING METHODS
TARGET SETTING METHODS FOR INFRASTRUCTURE CONDITION

Pavement Method 2: Time-Series Trend

WHAT IT IS
Time-series trend refers to methods that rely only on historical performance data as the basis for the projection and eventual target. In this approach, the agency performs a regression analysis of historic performance and investment data to establish a historic trendline. That trendline is then extrapolated into the future.

WHEN TO USE IT
For pavements, trend analysis is feasible if funding levels and investment types are steady. The feasibility of this approach is reduced as the target setting timeline is extended or as the likelihood of changes in investment level or type increases.

WHAT IS NEEDED
Because of the simplicity of this approach, no special tools are required. The analysis can be performed using common spreadsheets or statistical software.

Time series analysis requires annual investment and performance data. The data should be parsed at the network level relative to the target in question. For pavements, this involves separating both investment and performance data for Interstates from the rest of the NHS network. This can be a challenge as projects may span multiple parts of the network or include investments in more than one asset class.

The primary source for condition data for setting pavement condition targets is the HPMS database. However, since HPMS may not have included cracking data for the entire NHS prior to 2018, states may choose to use a different pavement condition data set. If different condition data is used, it either needs to be correlated to the national performance measures for pavements through analysis, consensus opinion, or assumption.

HOW TO DO IT
Step 1: Select Years of Data
The two primary factors for selecting the years of historic data for asset conditions are availability and relevance. For pavement conditions, only one year of data was available for the NHP measures, so states typically selected IRI for the analysis, or used their own overall condition index as a surrogate. Relevance relates to the relevance of past performance data

AT A GLANCE

- Ease of application:
- Technical robustness:
- Ease of communication:
- Allows for policy preference:

PART II. A MENU OF TARGET SETTING METHODS
TARGET SETTING METHODS FOR INFRASTRUCTURE CONDITION

Pavement Method 4: Pavement Management System-Based

WHAT IT IS
Pavement management systems (PMS) have been commercially available and developed in-house by DOTs for decades. State and local DOTs use these systems to identify appropriate actions to address deterioration of specific pavement sections, develop long-term strategies for managing pavement networks, and forecast future pavement conditions based on expected funding levels and investment priorities.

In this method, agencies use the PMS to forecast pavement conditions using expected funding for NHS pavements. The forecasted conditions two and four years into the future are used to establish pavement condition targets.

WHEN TO USE IT
Setting targets based on PMS forecasts requires confidence in the PMS. Confidence is gained through calibration of the system, which can take several years. In addition to meeting minimum functionality requirements, agencies will want to ensure data quality and document practices, such as through a data quality management plan, to build confidence.

Agencies may be hesitant to employ this method if their PMS lacks the ability to directly calculate the national performance measures for pavement condition. However, there are methods that can overcome this shortcoming, through correlation between different variables.

Because this approach models the expected investments to forecast future conditions, the agency should be confident in both the funding level and work types of those investments. For the agency to achieve conditions reflective of the scenario on which targets are based, actual investments must reflect the treatments selected by the asset management systems in that scenario. This does not mean that the specific pavements selected by the asset management system must receive the exact treatments in the exact years identified by the systems. It does require, however, that the agency's overall mix of treatments, and the conditions of assets to which those treatments are applied be reflective of the selected scenario.

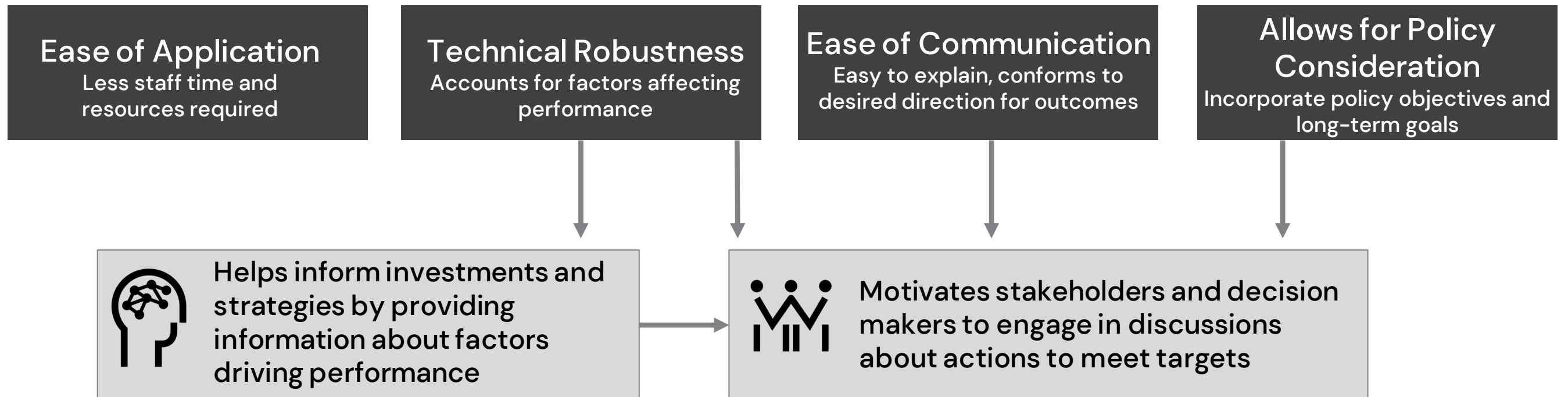
AT A GLANCE

- Ease of application:
- Technical robustness:
- Ease of communication:
- Allows for policy preference:

Guidebook Part II: Non-Required Measures

- Reasons for using performance measures beyond requirements
- Examples of measures and targets in five areas:
 - Accessibility
 - Greenhouse gas emissions
 - Active transportation
 - Transit ridership
 - Customer satisfaction

What Makes a Target Setting Method Effective?



Lessons Learned from Experience

Minnesota DOT

Deanna Belden

Connecticut DOT

Edgardo Block



Lessons Learned on Target Setting Methods and Effective Practices

NCHRP 23-07 Workshop

July 21, 2011

Deanna Belden



Minnesota's transportation system has a lot of pieces.

Our system is made up of roads, bridges, sidewalks, trails, airports, railroads, waterways and more. The people who build, maintain and use them are also part of the system.



Measuring performance helps us understand if our system is meeting our goals.

The agencies that manage our transportation system set goals for each piece. "Performance measures" are how we track them to make sure the system works how we expect.



Knowing which goals we meet and where we fall short drives how we invest in and operate our system.

Everything we do involves tradeoffs — costs vs. benefits, long-term vs. short-term and more. Performance data helps us make our decisions wisely.

Initiated: 1990s

Minnesota was one of the first states to establish performance measures and continues to be a leader in using performance to inform decisions.

STATE



TWO WAYS TO MEASURE

FEDERAL

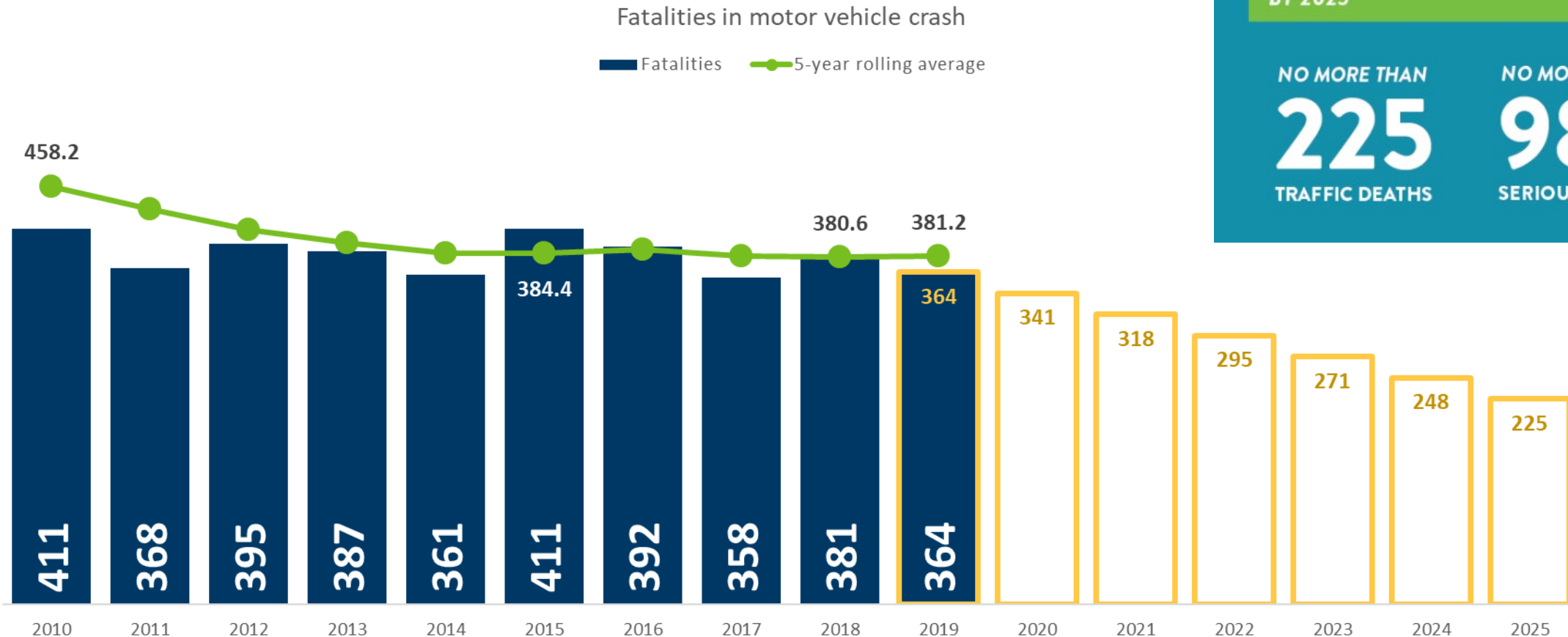


Initiated: 2012

Legislation to set national performance measures passed in 2012. States were first required to report on them in 2017.

Traffic Safety Methodology – Policy based

Measure progress from 2019 to 2025
Strategic Highway Safety Plan (SHSP) goal



MINNESOTA TRAFFIC SAFETY GOAL

0 DEATHS &
SERIOUS INJURIES

Long-term goal is to eliminate deaths and serious injuries on MN roadways

BY 2025

NO MORE THAN
225
TRAFFIC DEATHS

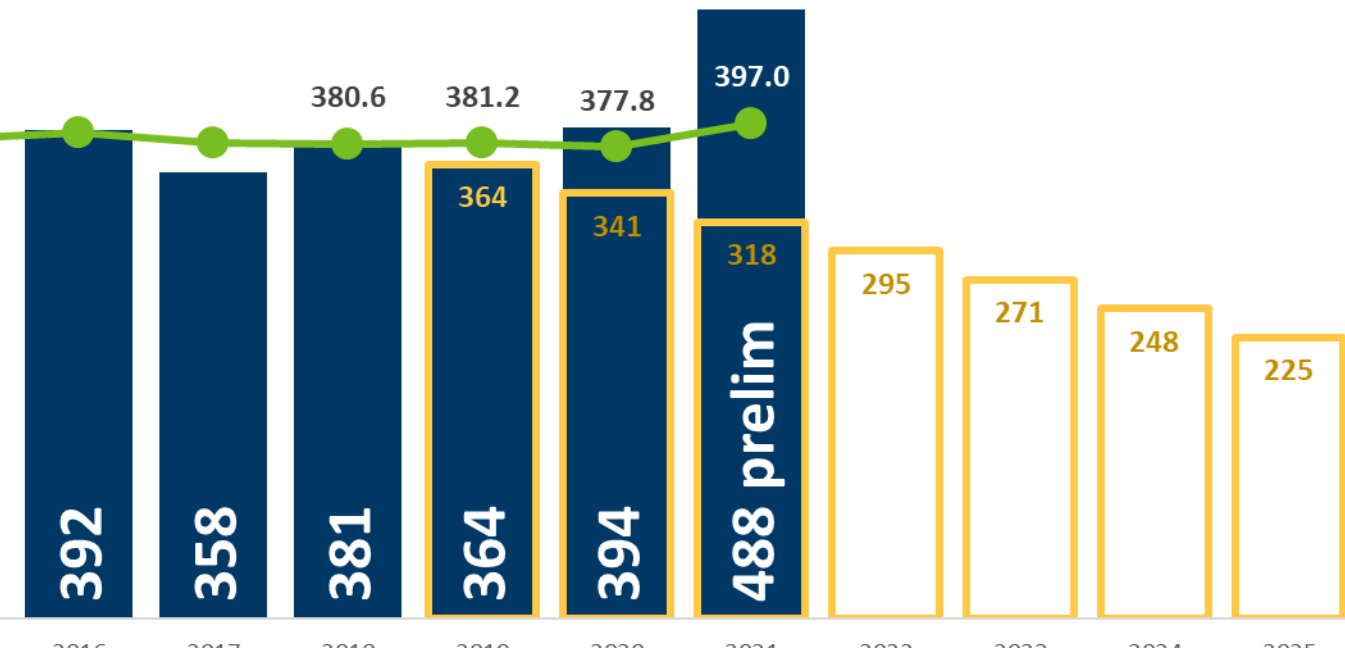
NO MORE THAN
980
SERIOUS INJURIES

Traffic Safety Methodology – Policy based

2017-2021 annual percent change: +7%

Fatalities in motor vehicle crash

Fatalities 5-year rolling average

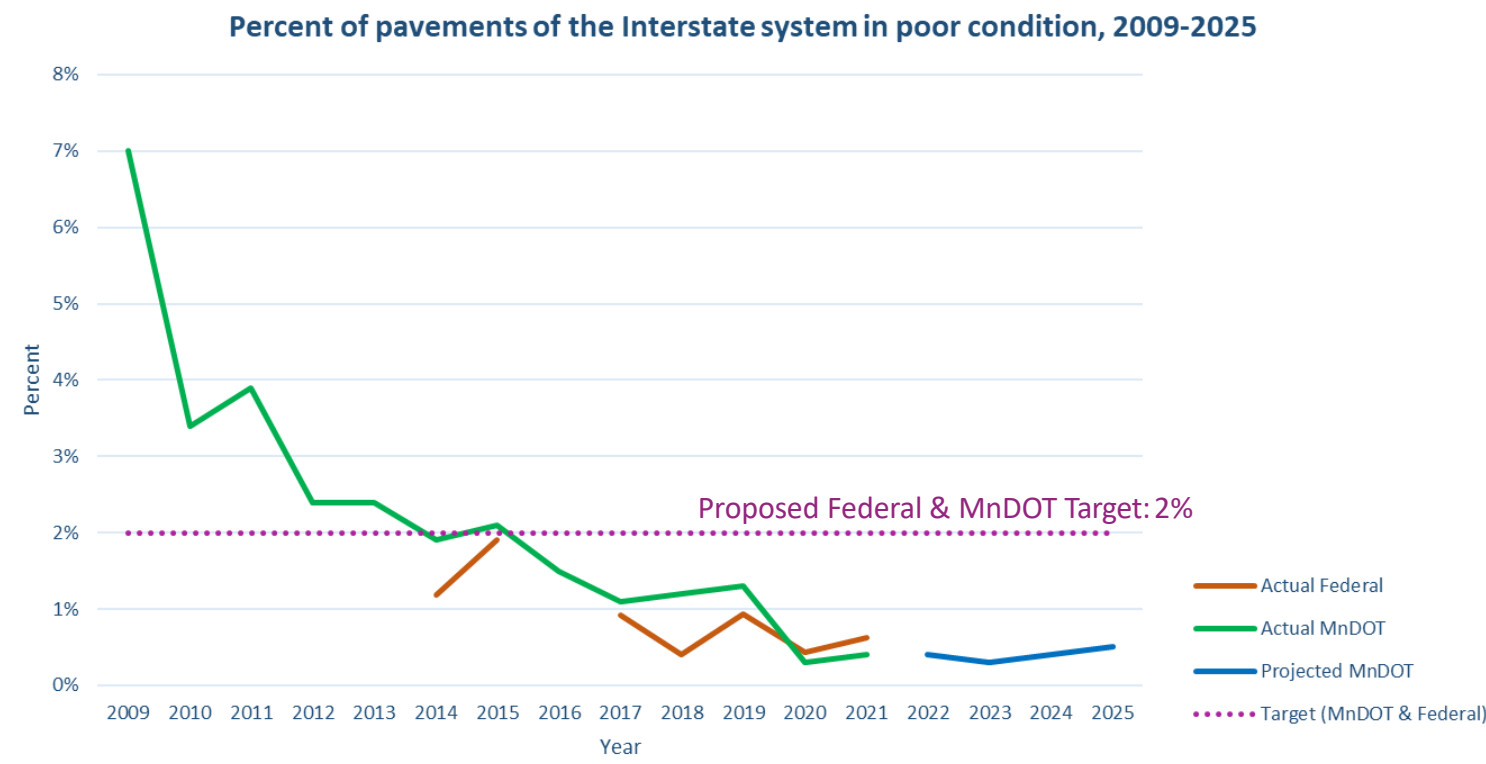
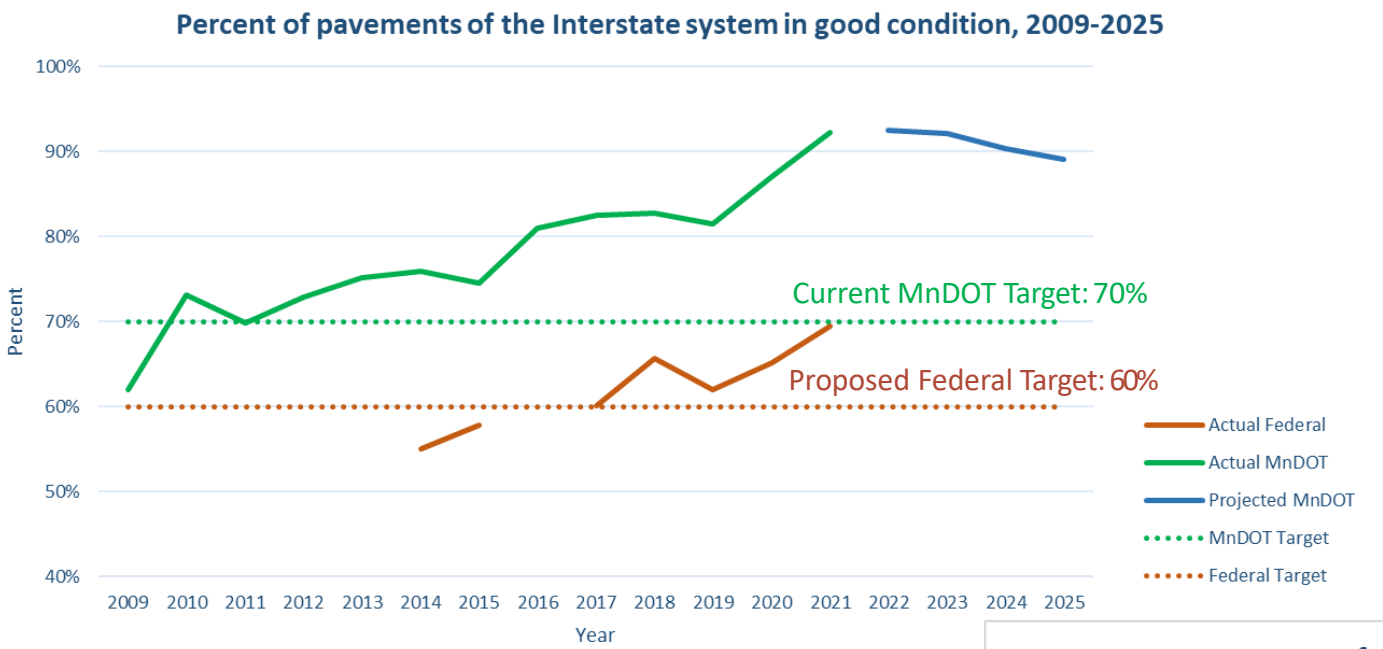


Scenario	2023 Target	Annual Pct Change
A. Maintain SHSP Method	317.6	-55%
B. Maintain 2022 Targets	352.4	-36%
C. 0% Annual Reductions	444.4	0%
D. Project 2017-21 Trends	464.4	+7%

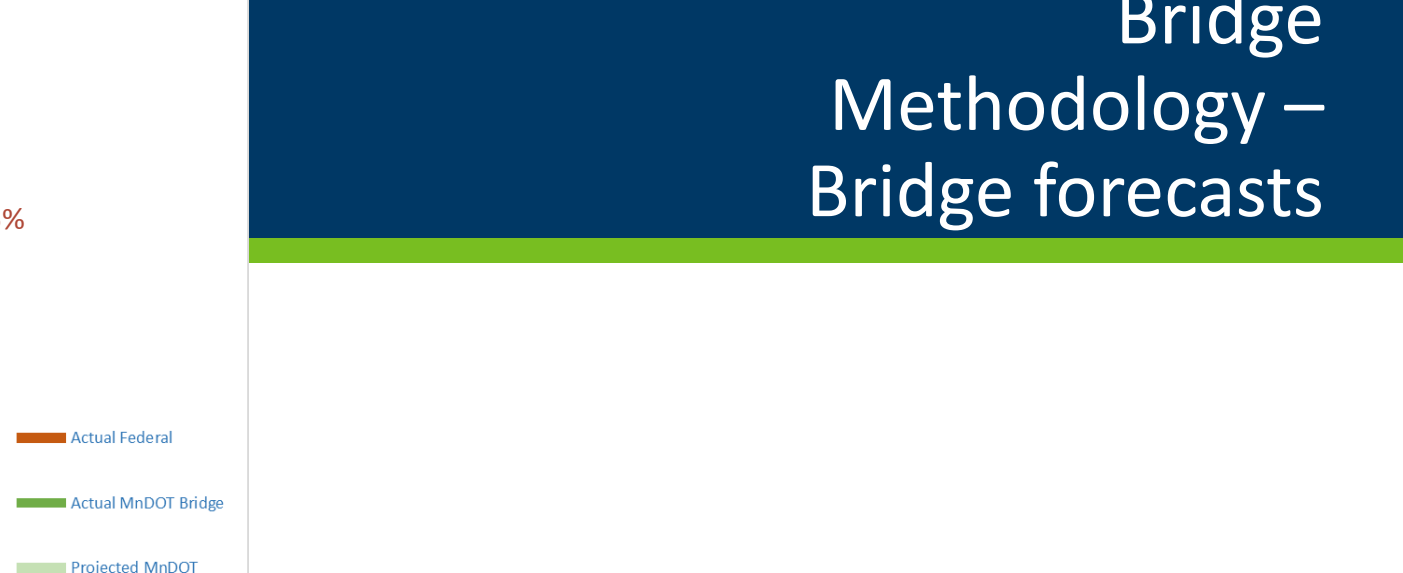
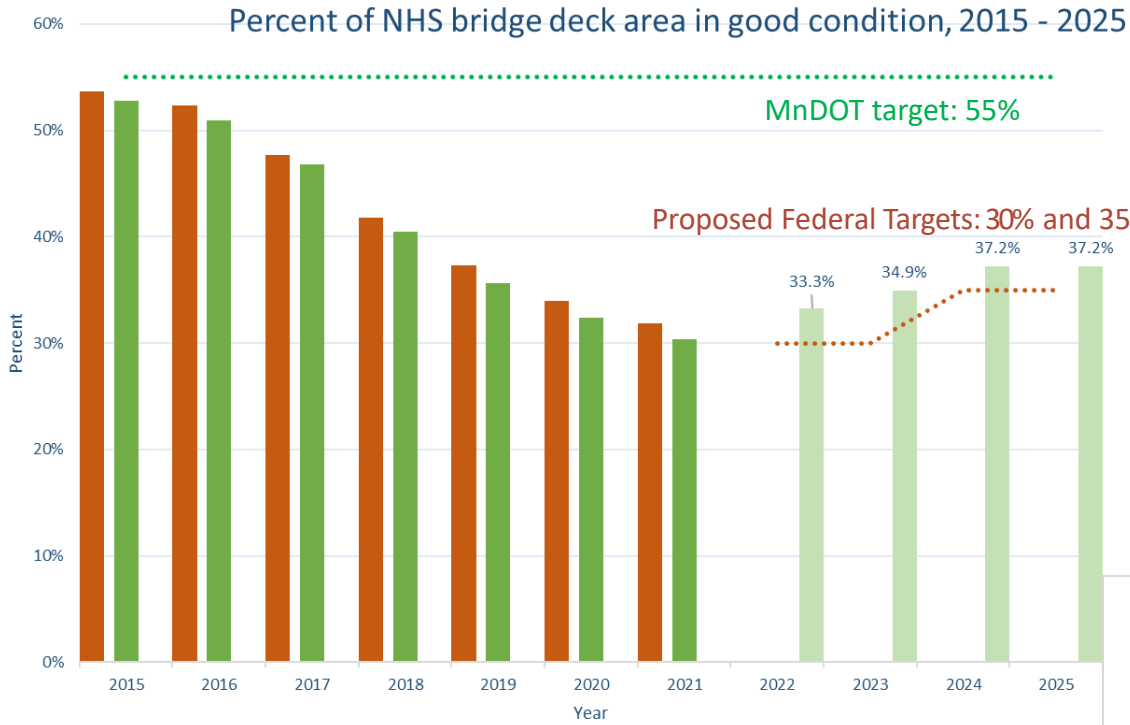
Recommendation:

- 352.4 fatalities
- 2023 Target = 2022 Target

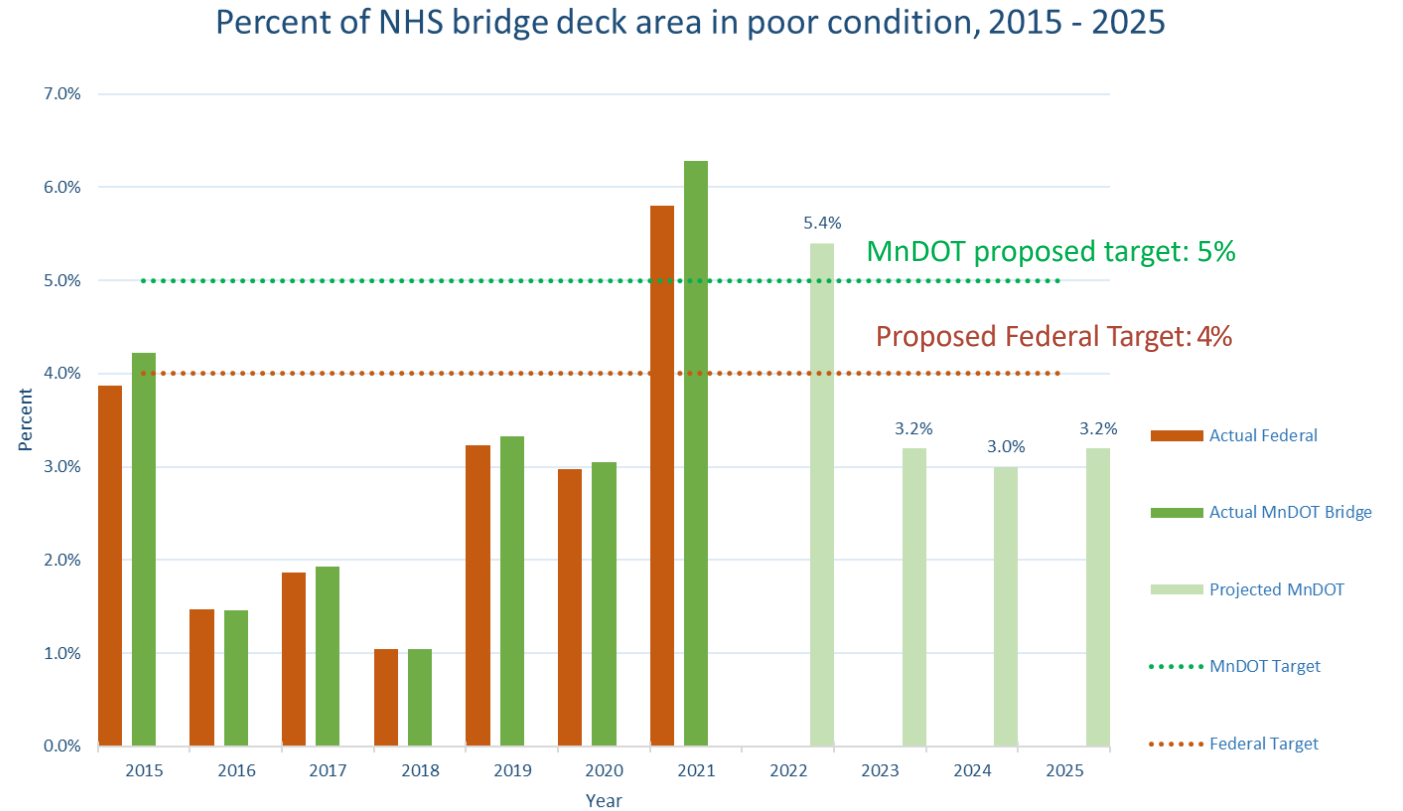
Pavement Methodology – Pavement Model/Interpolation



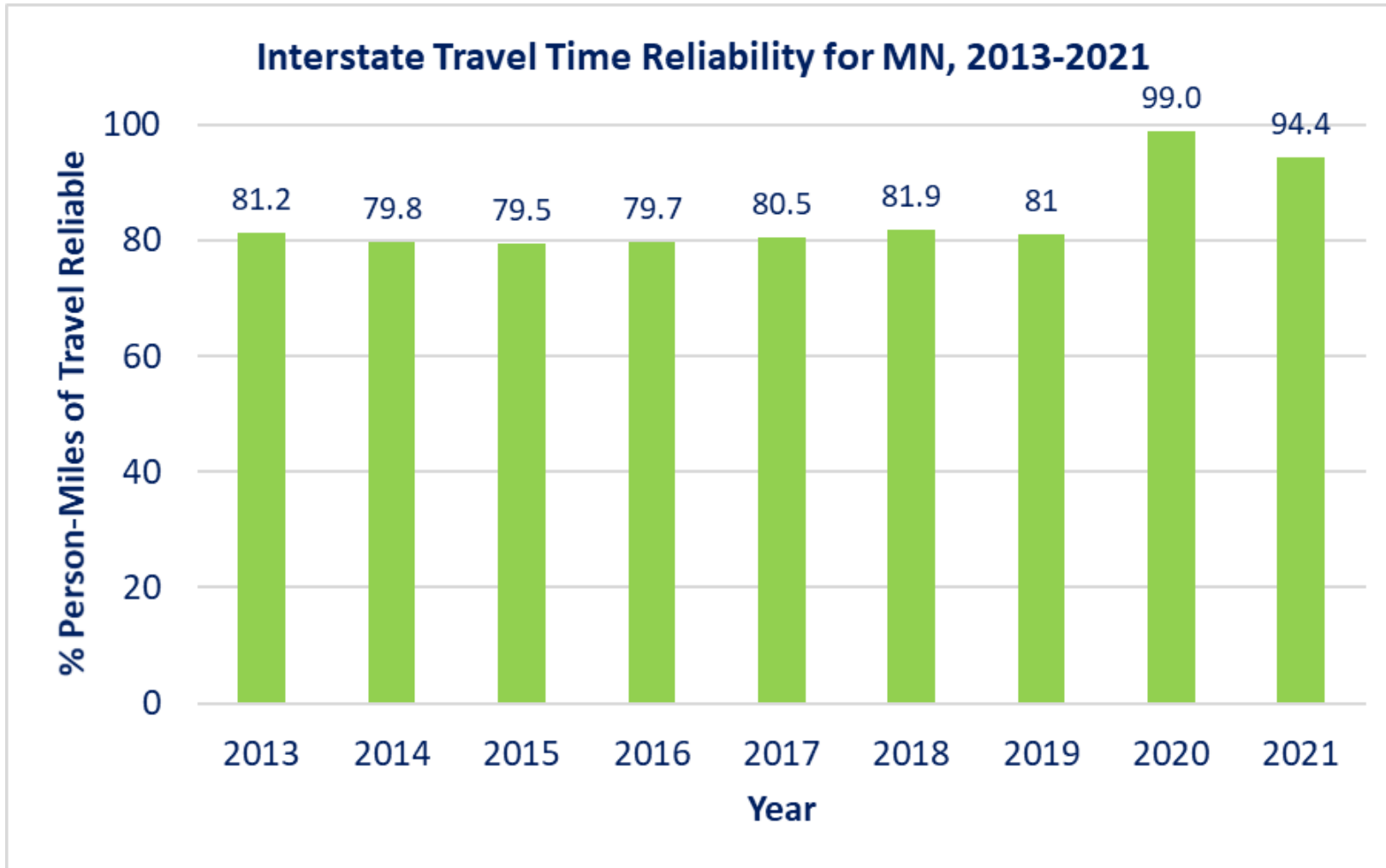
- MnDOT’s pavement model predicts condition for state measure based on ride
- Use relationship between state and federal measure to estimate appropriate federal targets



- State and federal bridge condition measures are very close
- Use prediction from bridge forecasts to set federal targets



Travel Time Reliability Methodology – Historical Trends

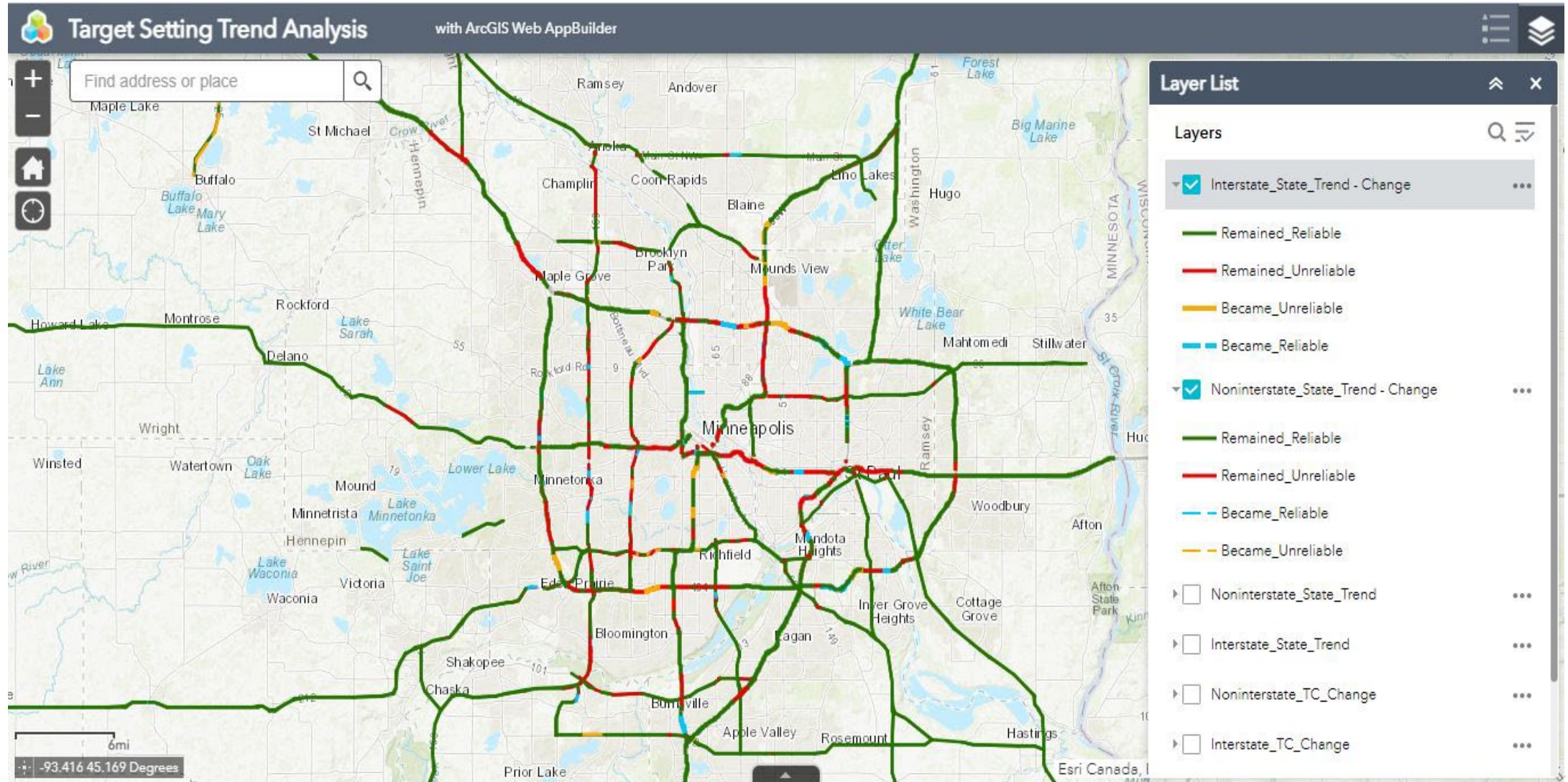


Proposed Federal Targets

Two-year 2023: 82%
Four-year 2025: 82%

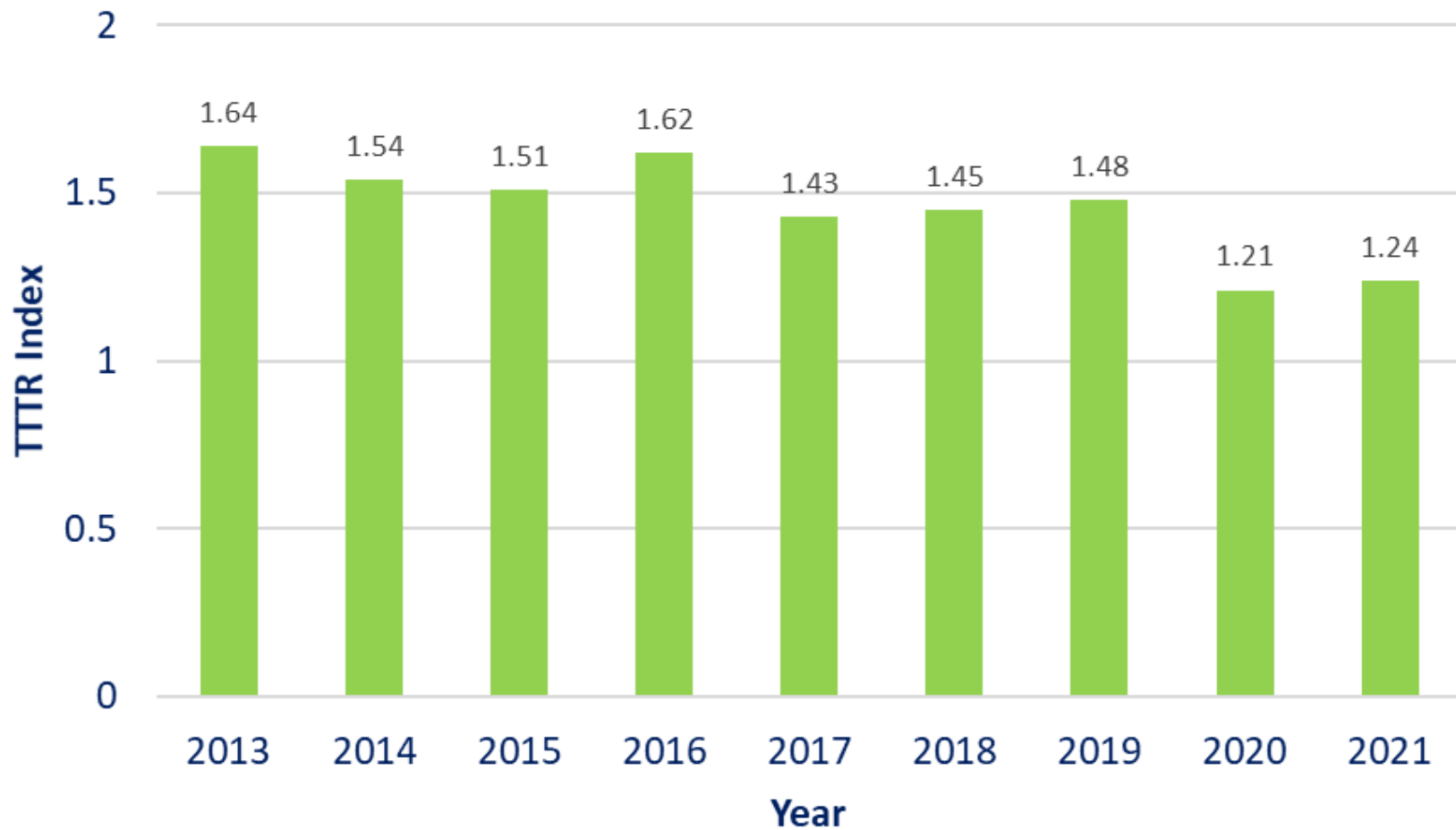
Note: The draft Statewide Multimodal Plan is proposing a combined reliability measure for the NHS

Travel Time Reliability Methodology – Segment Risk Analysis



Travel Time Reliability Methodology – Historical Trends

Truck Travel Time Reliability Index for MN, 2013 - 2021



Proposed Federal Targets

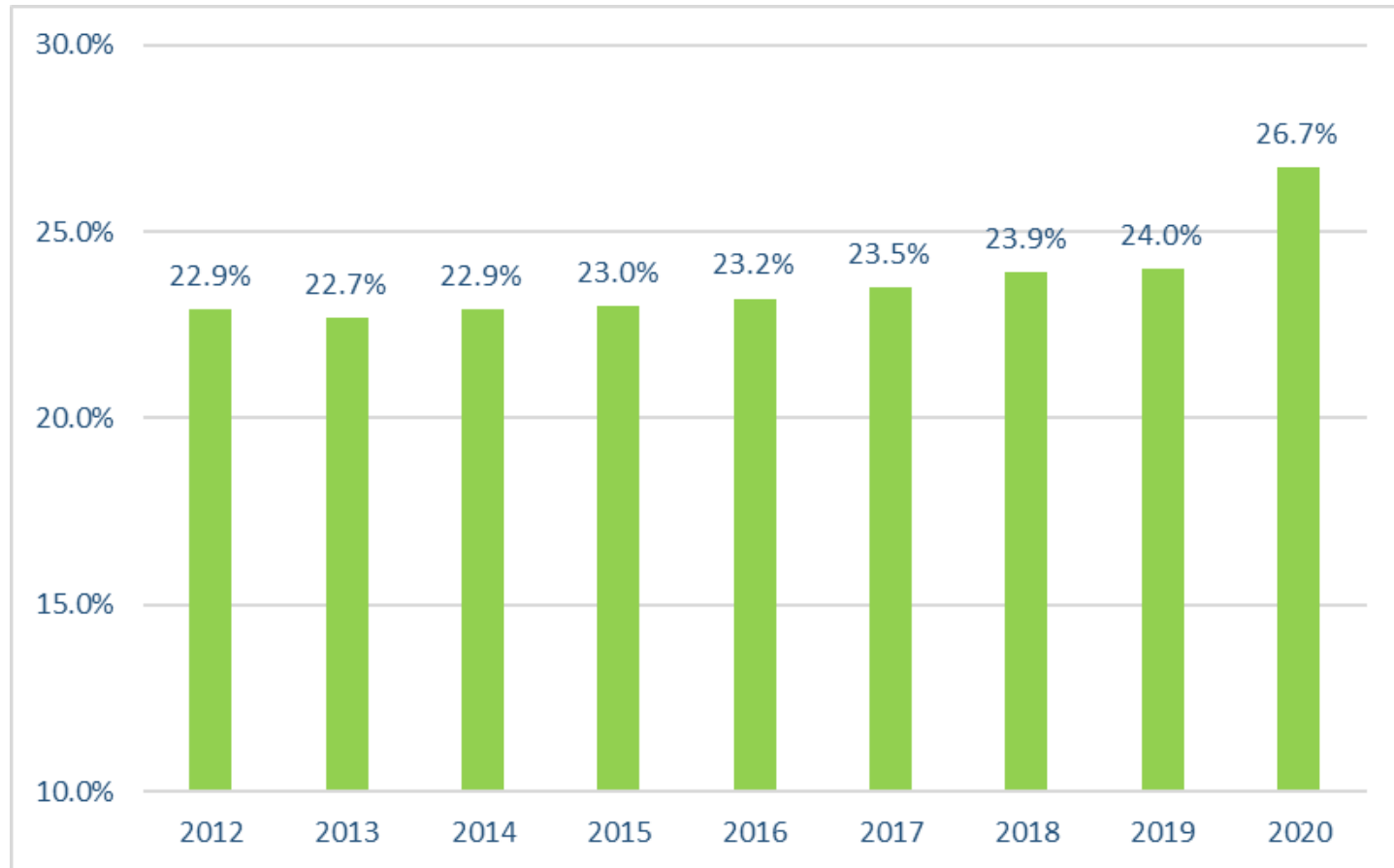
Two-year 2023: 1.4

Four-year 2025: 1.4

Note: The draft Statewide Multimodal Plan is proposing a Truck Travel Time Reliability Index target of ≤ 1.5

Non-SOV Methodology – Historical Trends

Non-Single Occupancy Vehicle Travel for Minneapolis – St. Paul, 2012 - 2020



Proposed Federal Targets

Two-year 2023: 28%

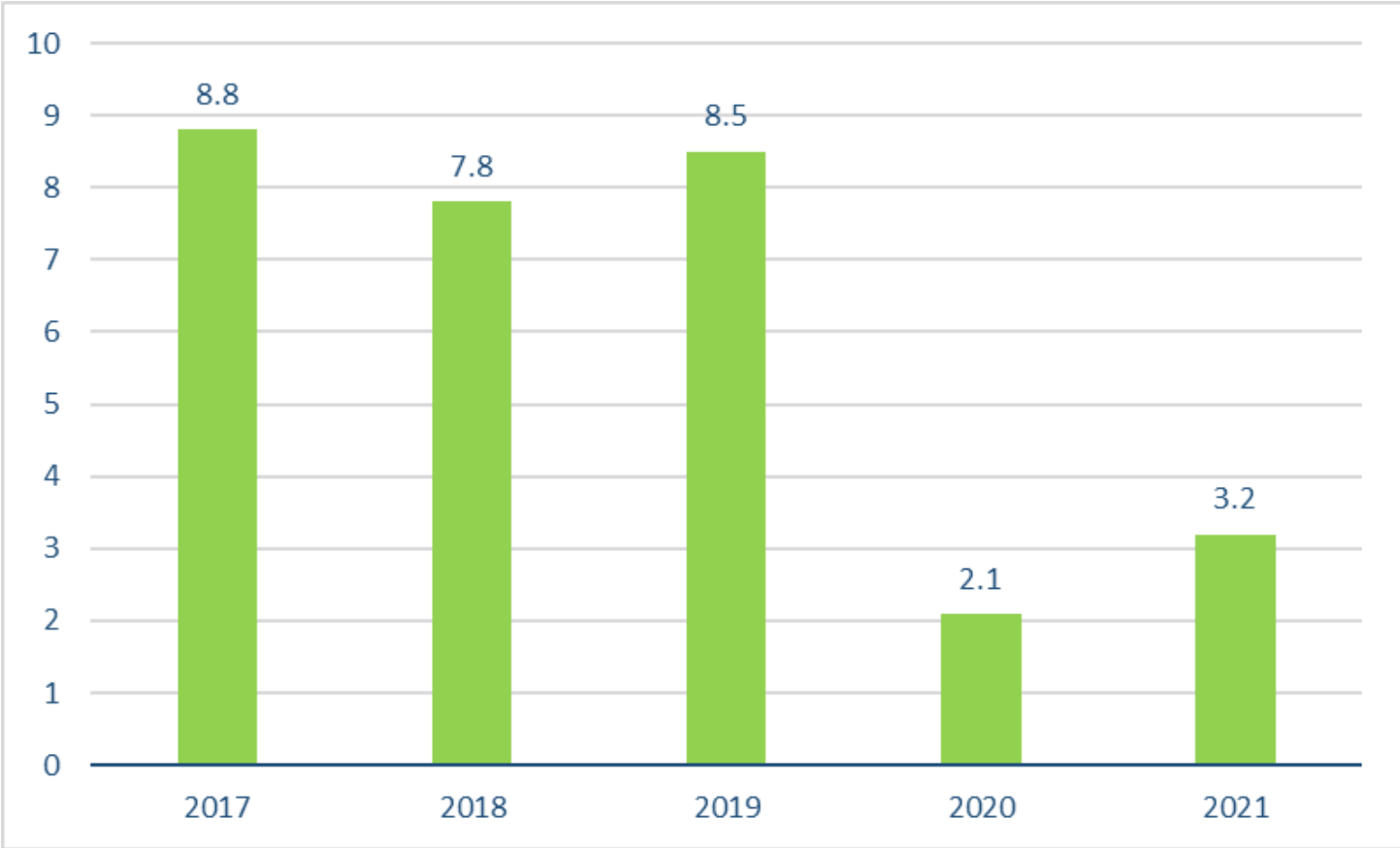
Four-year 2025: 29%

- Targets based on historical trends with some aspiration thrown in

Five-year estimates of non-single occupancy vehicle travel to work

Peak Hour Excessive Delay Methodology – Historical Trends

Peak Hours of Excessive Delay per capita for Minneapolis – St. Paul, 2017 - 2021



Proposed Federal Targets

Two-year 2023: 8.5
Four-year 2025: 8.5

- Risk that short term expected outcome target could become long term policy target

Some Lessons Learned

- Policy based targets are well suited for areas like safety with an aspirational long- term goal
- Best part about the process are the conversations that happen when discussing target setting
- If you have asset management models use them – though they may be better suited for longer term projections
- Trend based target setting may be as good as statistical models for the short term, but its important to understand explanatory factors

Questions?



Thank you!

Target-setting Effective Practices

Lessons learned from the initial performance period at
the Connecticut DOT

Edgardo D. Block, PE, MBA

Performance Management Lead

Connecticut Department of Transportation



Outline

- Relating Actions to Outcomes – “line of sight”
- Framework for assessing ability to forecast outcomes and set targets
- Target-setting method selection considerations
- Two applications of target-setting method selection (pavement, system reliability)
- Forward look at target setting

Relating actions to outcomes (FHWA TPM site)



Transportation Performance Management

Focusing on Performance for Safe, Reliable Journeys

The Federal Highway Administration defines Transportation Performance Management (TPM) as a strategic approach that uses system information to make investment and policy decisions to achieve national performance goals.



Investment Decisions

Using goals, measures, and data to make better informed decisions about how to invest transportation funding.



Aimed at a Better Performing Transportation System

Setting targets, developing plans, reporting results, and being accountable for performance.



For Connected and Productive Communities

Focusing on the efficient delivery of goods and safe, reliable journeys to work, to school, to shopping, to community activities.

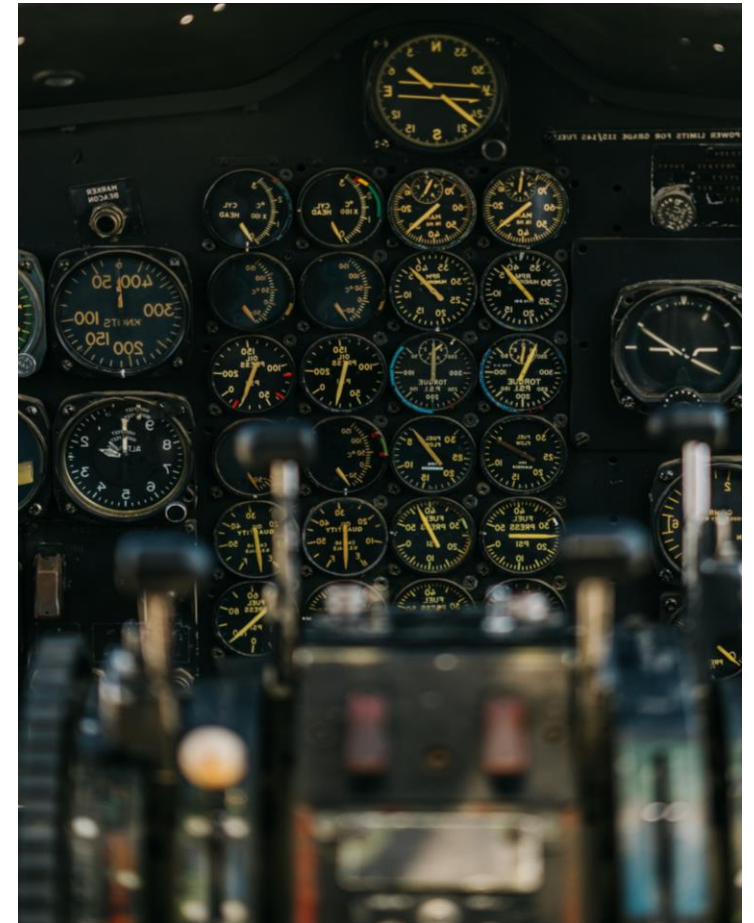
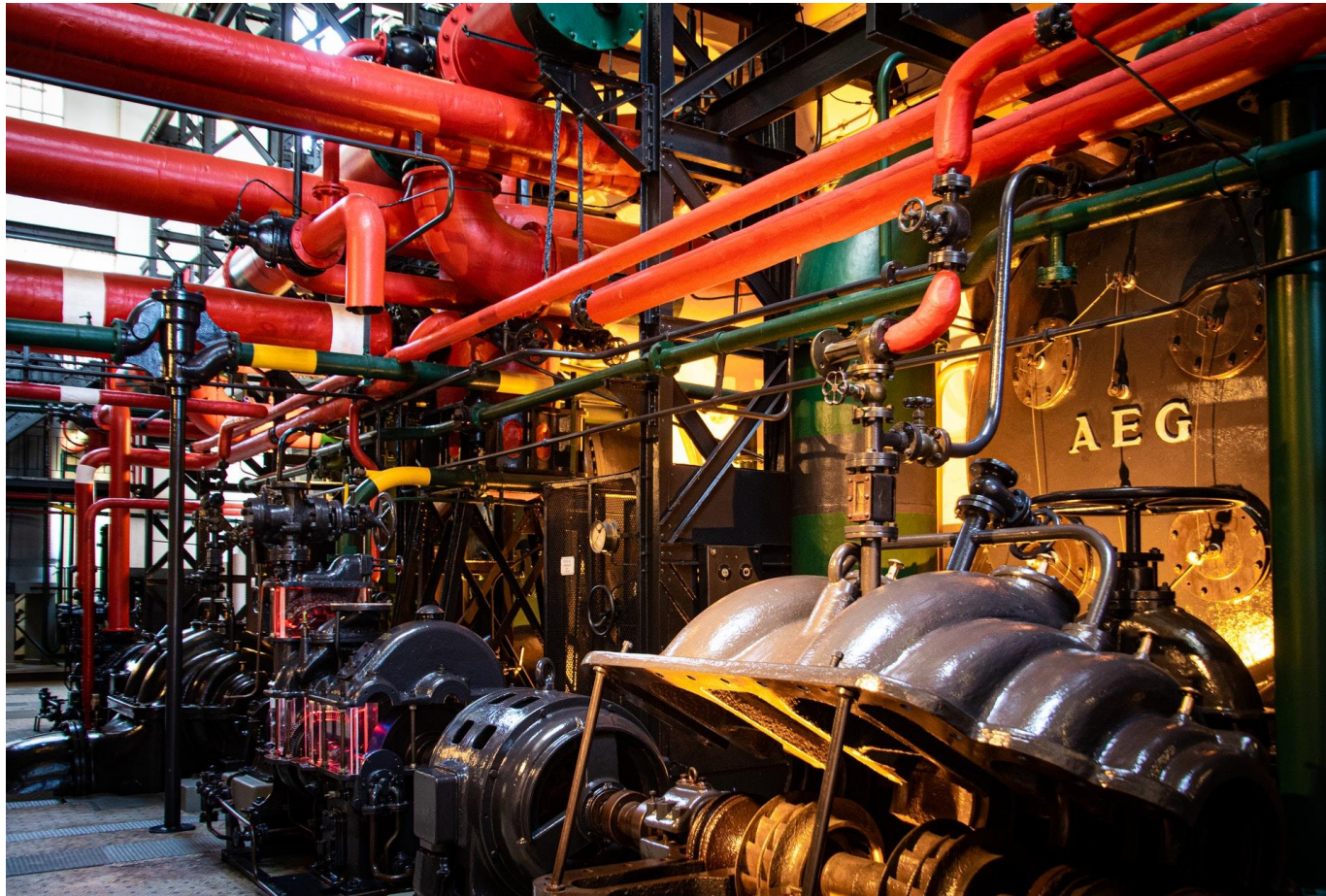
Relating actions to outcomes



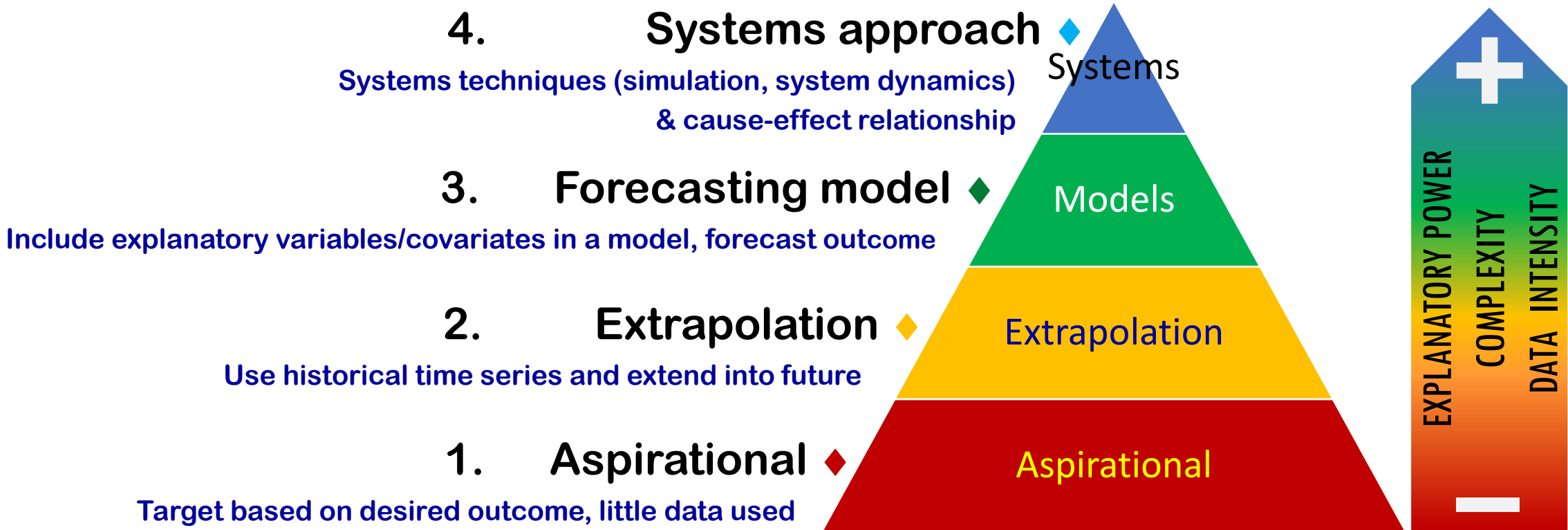
Relating actions to outcomes



Relating actions to outcomes (complexity)



Target-Setting Maturity Model



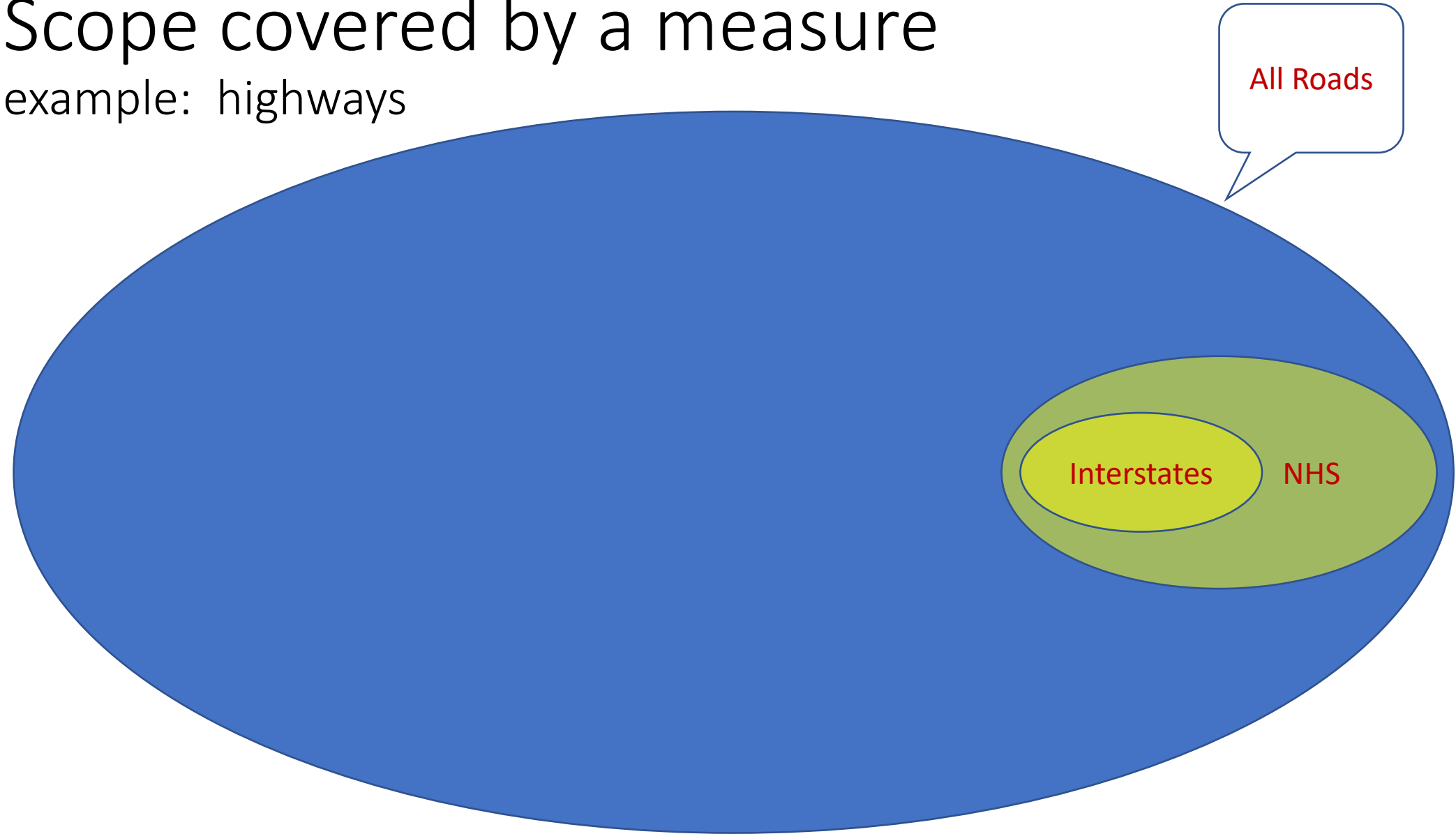
Considerations for selecting a target-setting method

OUTCOMES

- How well does a measure capture the performance goal?
 - Scope
 - Time – alignment with asset life cycles, for example bridges
- What is the State DOT's jurisdictional control over actions to impact performance?
- What is the alignment between the national performance goal and the state's long-range vision?

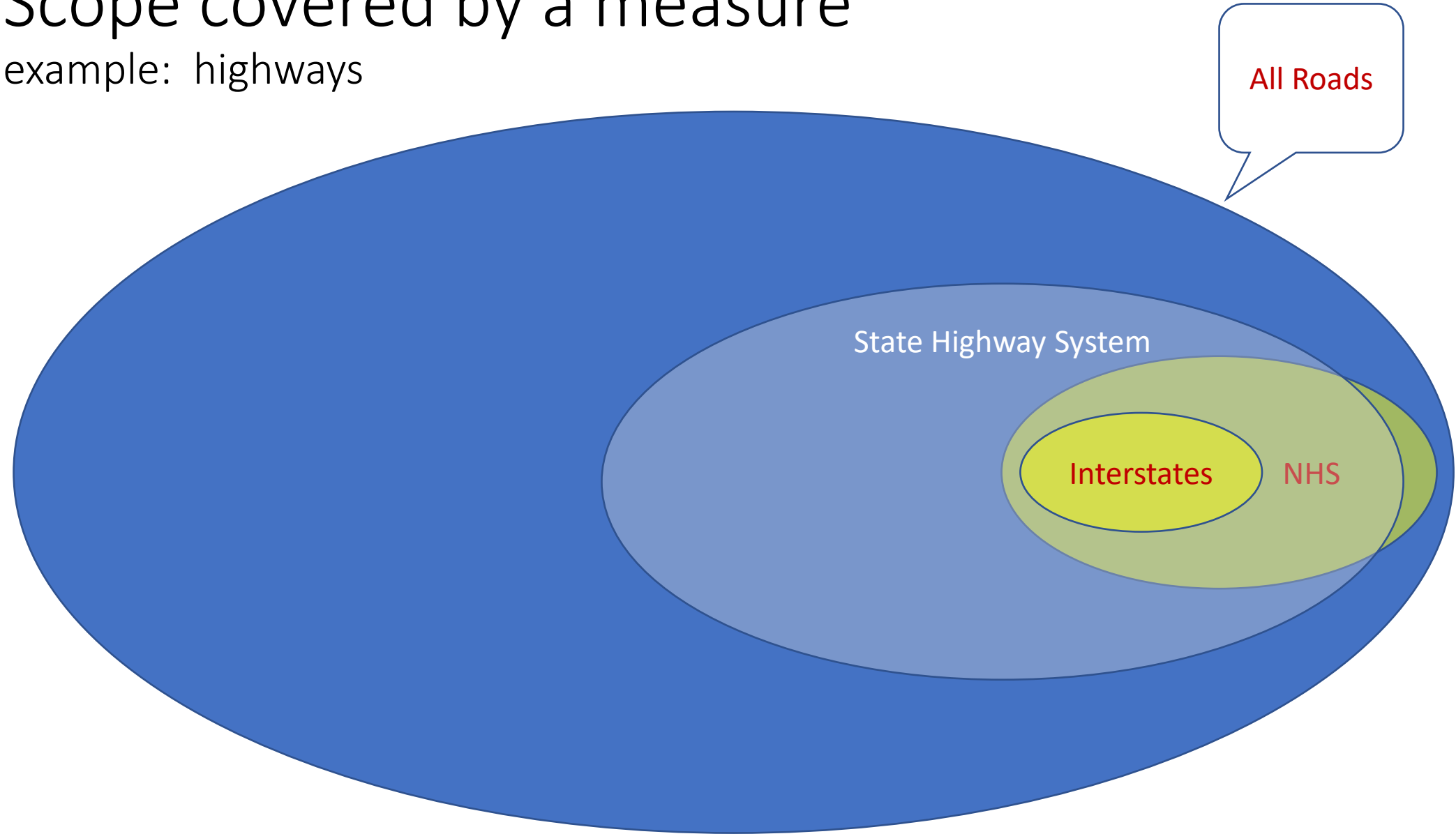
Scope covered by a measure

example: highways



Scope covered by a measure

example: highways

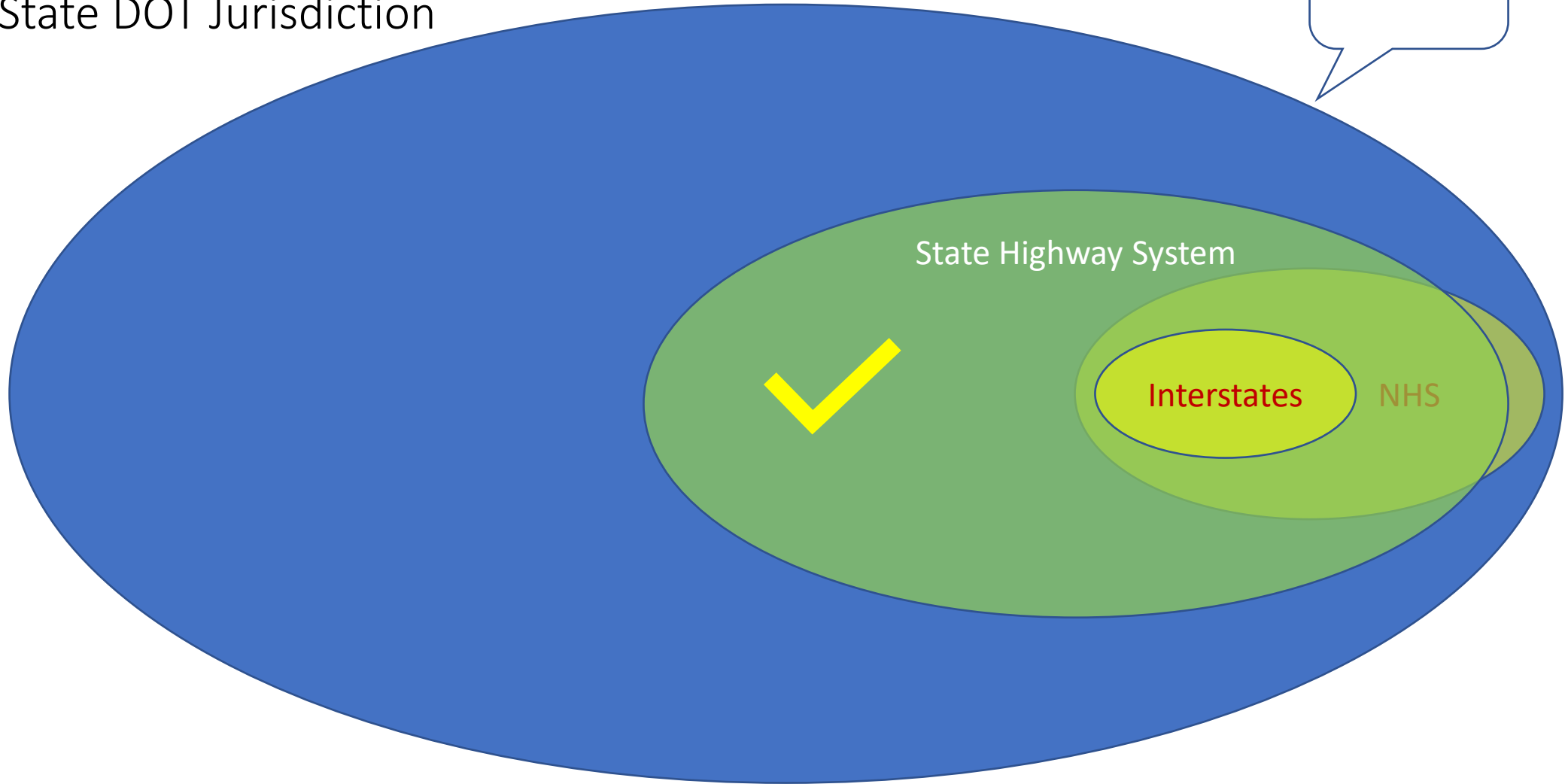


Scope covered by a measure

example: highways

State DOT Jurisdiction

All Roads

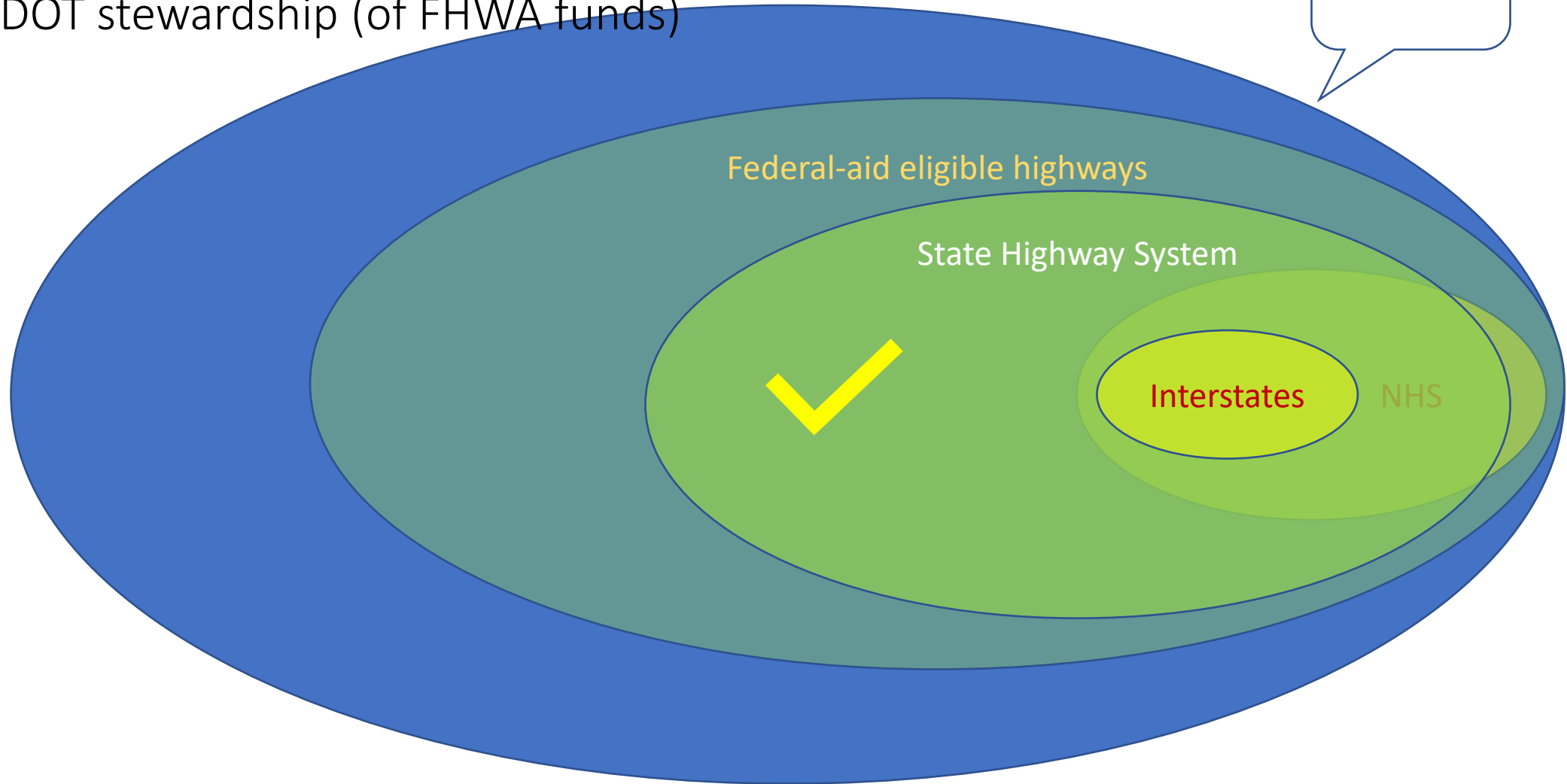


Scope covered by a measure

example: highways

DOT stewardship (of FHWA funds)

All Roads



Scope covered by measures

Performance goal area	Scope
PM1 – Highway Safety	All roadways in the state
PM2 – Infrastructure	NHS (Interstate + Non-Interstate)
PM3	
System reliability	NHS (Interstate + Non-Interstate)
Freight Movement	Interstate
Congestion	Urbanized Areas > 200,000 pop.
Air Quality	CMAQ Program statewide



Section

Report

Project Delivery

Percent of Construction Contracts Completed on Time

Percent of Construction Contracts Completed on Time

What is it?

The percentage of construction contracts completed on time is a fundamental measure that indicates how the Department is gauging and managing the estimated time f...

How are we doing?

The trend of construction contracts completed on-time has decreased since the previous year and is close to the level reported for CY19. The Department achieved a...

Additional Info on Project Delivery

[National Perf Dashboard](#)

Latest Update: Quarter 1, 2022

Accessed: 4/22/22

Trend analysis

Percent of construction contracts completed on time are computed from the projects accepted each quarter. A two-year moving average is used to eliminate seasonal variability in the timing of the completion of projects and to focus on underlying trends. Data is compiled by the Division of Central Construction - Quality Assurance Unit on a yearly basis. Source: Bureau of Engineering & Construction, Division of Central Construction.

What are we doing?

The Department has implemented a Best Practices/Lessons Learned initiative to address causes of project delays to prevent recurring issues. Alternate project delivery methods such as Design-Build (DB), Construction Manager-At-Risk (CM@R), and Construction Manager / General Contractor (CMGC) may yield time savings when compared to the traditional Design-Bid-Build (DBB). The additional delivery methods involve input from the contracting community which lends additional knowledge regarding time needed to complete projects. The results from these are vet to be determined as use is in the initial stages on a

Target Year

[Learn More](#)

About CTDOT's Measure

This measure tracks the number of projects completed within schedule. Using a percentage of all contracts allows for comprehensive program management regardl...

Relation between CTDOT & National Measure

The CTDOT plans to keep managing and reporting on this important bottom-line measure of project delivery.

About the National Measure

(No corresponding national measure for performance management.)

Target Comment

Please see "Relation between CTDOT & National Measure" description.

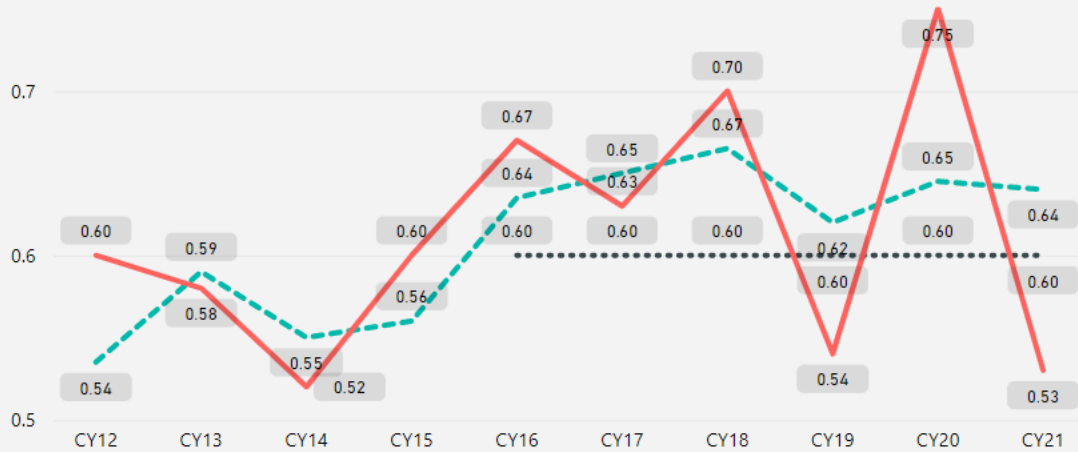
CTDOT Measure



National Performance Measure



● Agg. Result ● Agg. Target ● Result



Alignment of State DOT and National Measures

Considerations for selecting a target-setting method

ACTIONS

- Does the organization have a structure that allows focus by performance area on a system-wide basis?
 - Asset management (pavement, bridge, other assets)
 - Management systems for each performance area –
 - **Congestion, system reliability, freight movement**
 - **Air quality**
 - **Highway safety**
- Is there a performance-based planning process for identifying needs, strategic action, and prioritization of interventions?
- Are there programs for delivering projects in each performance area?

Considerations for selecting a target-setting method

ACTIONS (continued)

- What is the project delivery capability in the state?
 - Design process, timeline, and resources
 - Construction administration capability
 - Contractor capabilities
- Can the impact of projects on performance be assessed?

Considerations for selecting a target-setting method

RISKS

- Likelihood and impact
 - What is the probability of executing the actions required to achieve targets?
 - What is the probability of actions delivering expected performance?
 - What are the consequences of not achieving performance?
 - **Impacts on actual performance**
 - **CFR impacts of not meeting targets**

Example: Infrastructure (Pavement Condition)

- Outcomes

- ✓ Pavement metrics are comprehensive (capture condition well, can be predicted)
- ✓ State has jurisdiction over most of the applicable highways (NHS)
- ✓ Reasonable alignment between state and national goals (through asset management plans)

- Actions

- ✓ Pavement management and Asset management units
- ✓ There are programs to deliver projects in this area, sized to capabilities of agency and contracting partners
- ✓ Pavement condition evaluation captures impact of interventions

Example: Infrastructure (Pavement Condition)

- Risks

- ✓ Confident in ability to deliver pavement projects on schedule
- ✓ Impact of projects on pavement metrics well defined
- ✓ Pavement management system can project future conditions

Target-Setting Maturity Model:

Pavement

4. Systems approach ♦
Systems techniques (simulation, system dynamics)
& cause-effect relationship

3. Forecasting model ♦

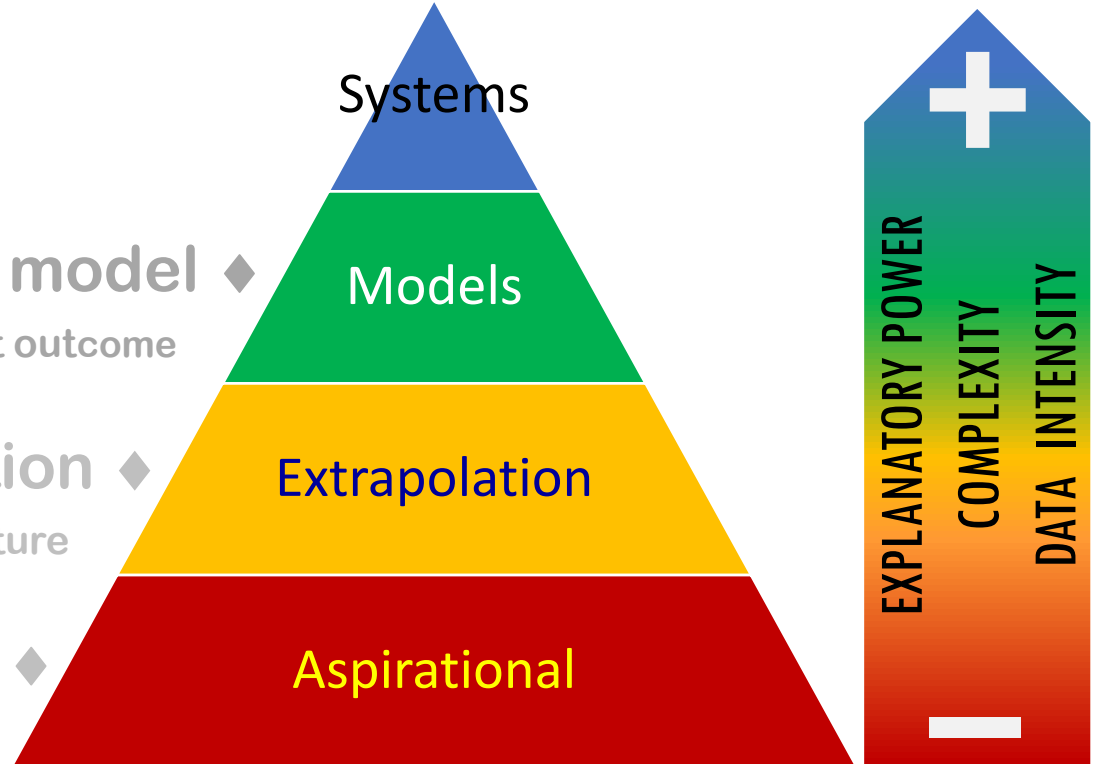
Include explanatory variables/covariates in a model, forecast outcome

2. Extrapolation ♦

Use historical time series and extend into future

1. Aspirational ♦

Target based on desired outcome, little data used



Systems approach in pavement condition

- Use pavement management system to project condition in terms of national performance measures
 - Make investments at the project scale and over the appropriate time frames for the pavement asset
 - Account for planned interventions over the performance period (4 years)
 - Express performance in terms of the national performance metrics
 - Add capability of capturing performance projections at the right scale (0.10-mile segments (required by CFR))
- Follow the TAMP and let the performance target be the output of the execution of the TAMP

Example: System Reliability

- Outcomes

- Performance measure is new to state DOT
- ✓ State DOT has jurisdiction over most of the applicable highways (NHS)
 - **However, this is not true for many factors influencing performance: economic trends, commuting patterns, travel demand, land use policy, etc.**
- Alignment between state goals and national goals is emerging but not well developed

- Actions

- ✓ Planning and Engineering units generally focus on corridors and projects
- There is no dedicated program focused on affecting this measure on a systematic basis (there are programs for operational improvements, signal timing, and specific measures to improve mobility)
- ✓ NPMRDS allows measurement of impacts

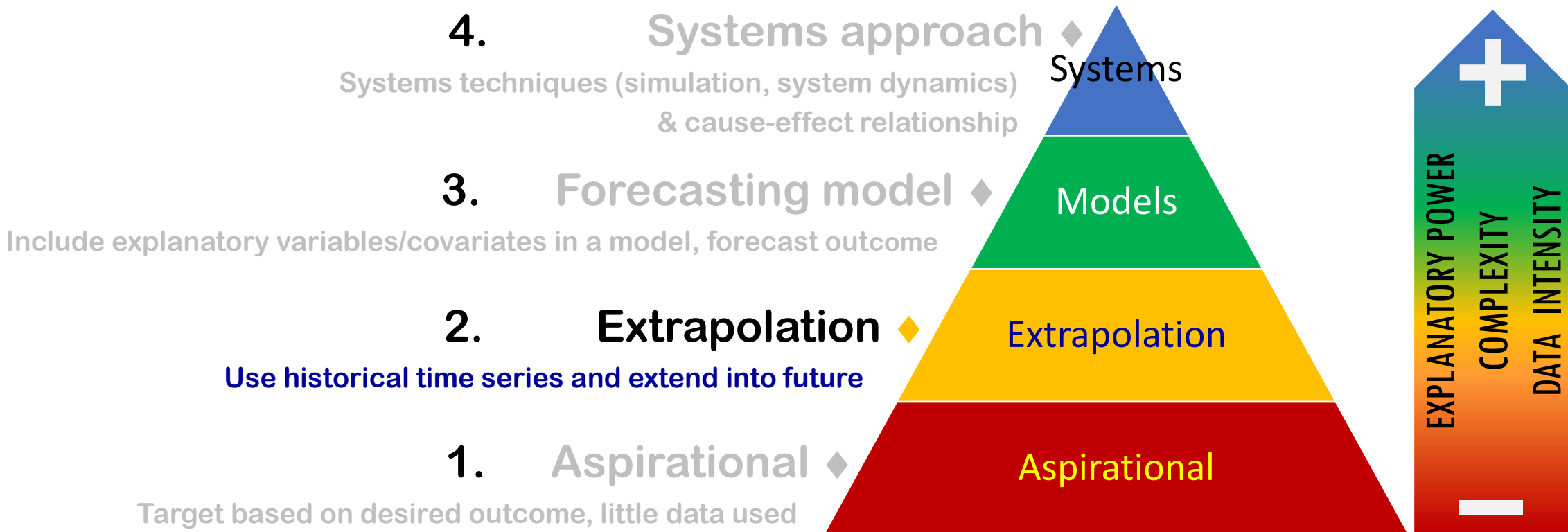
Example: System Reliability

- Risks

- With no dedicated reliability program, project delivery is based on individual program delivery timelines
- ✓ Impact of projects on reliability is complex
- Reliability predictive ability is limited at the present time (at CTDOT)

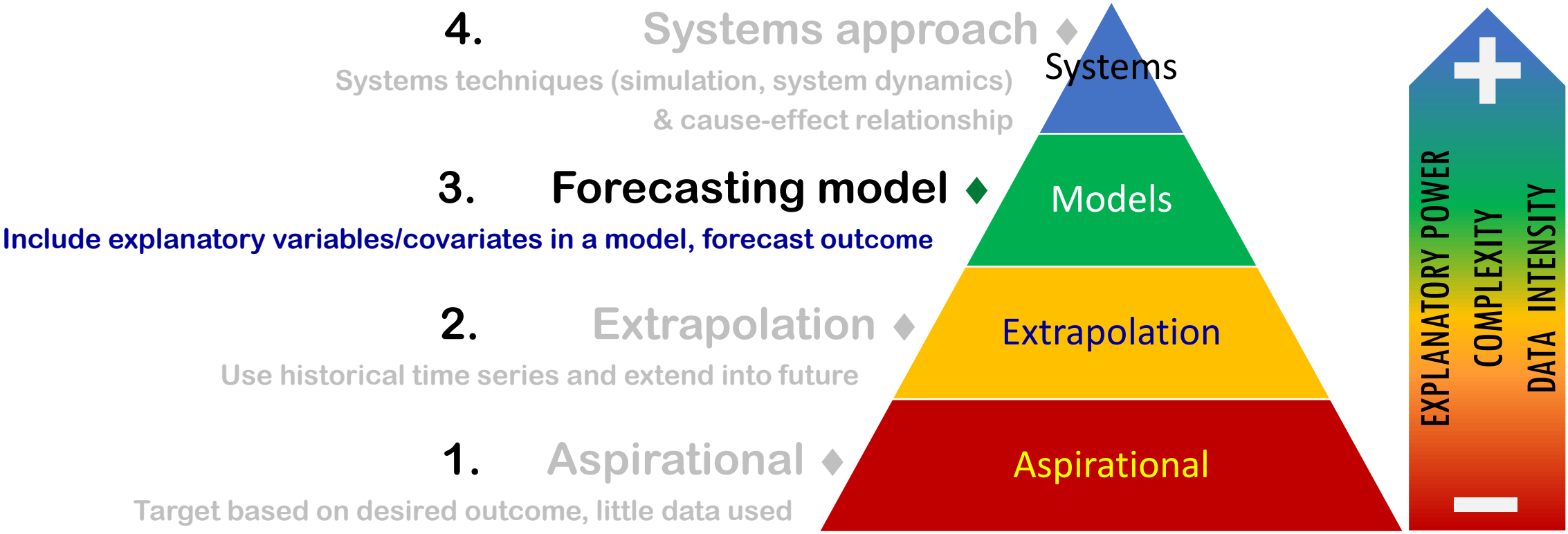
Target-Setting Maturity Model

(initial target setting)



Target-Setting Maturity Model

(future target setting)



Why move from extrapolation to a forecasting model in system reliability?

- Enable better alignment between actions and outcomes
 - Prioritize investments toward systematic improvement of system reliability
 - Measure impact of investments
- We have sufficient measurement to enable calibration and validation of models (NPMRDS)
- We do not have complete control over performance through our actions (difficult to model using available systems perspective tools)
- Enable a performance-based program that is aligned with the long-range transportation plan for the agency

How to move from extrapolation to a forecasting model (system reliability)?

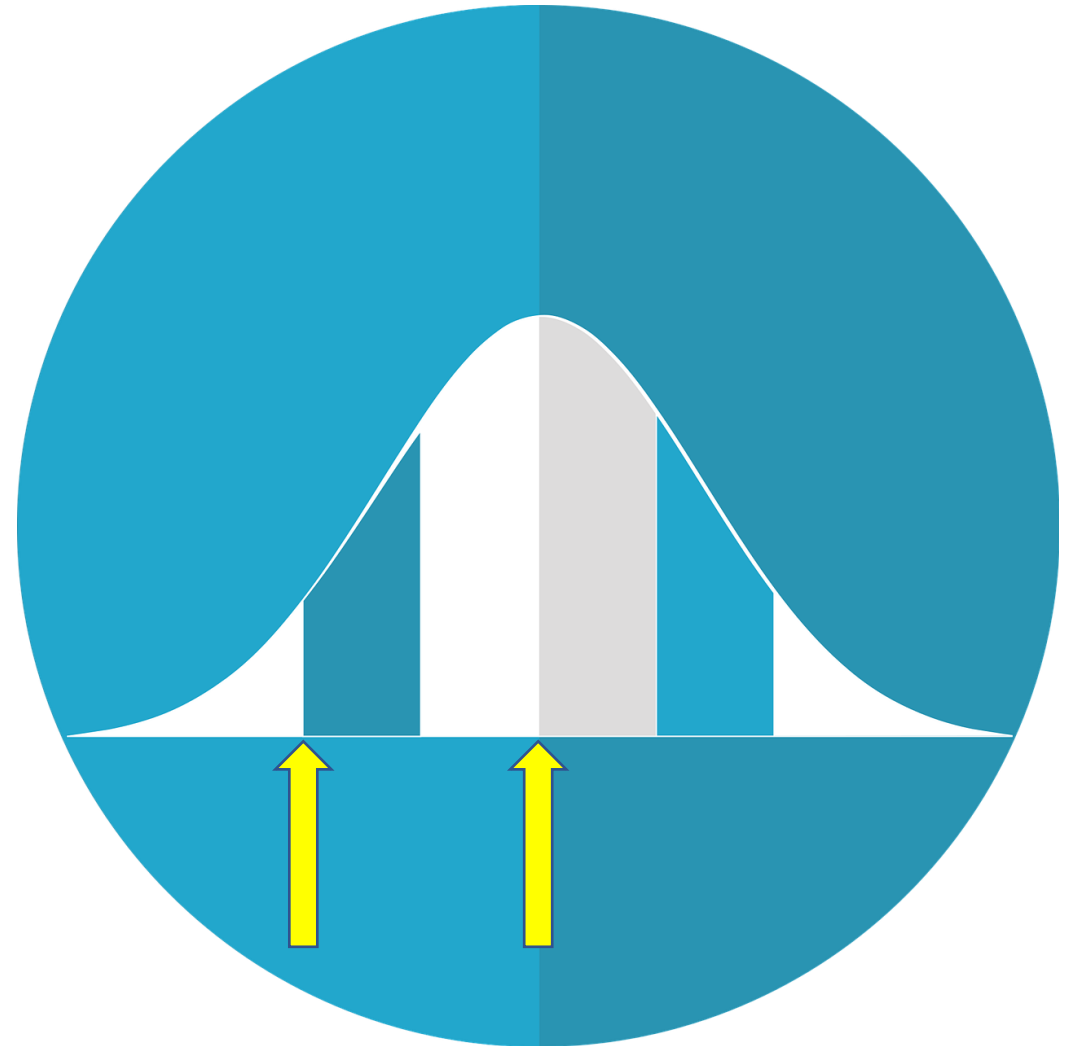
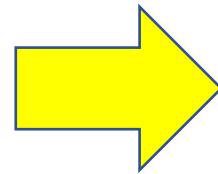
- Use approach that allows incremental improvement
 - State DOTs have varying capabilities in different areas
 - Data availability of covariates and explanatory variables is varied
 - State staffing resources vary over time
- Begin by isolating factors that influence performance
 - Weather (snow events reduce travel times) – data are available
 - Work Zones – data are available
 - Non-recurring congestion – use data mining techniques and travel information data to characterize impacts
 - Account for planned projects (signal timing, for example)

How to move from extrapolation to a forecasting model?

- Break the trend into components incrementally and use appropriate technique
 - There will be a transition period as the models improve predictive ability

Risk: Reliability-based target-setting

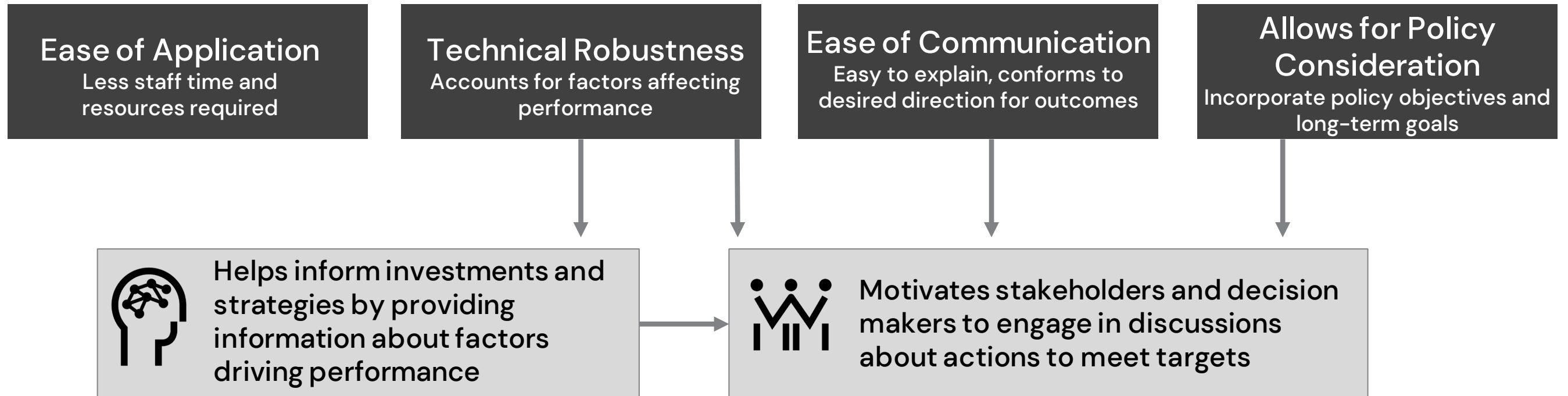
- Forecasting models and systems approaches allow for scenario analysis and probability-based decisionmaking
- Desirable from a risk management perspective



The value of NCHRP 23-07 for target-setting practice

- Leverage the various efforts under way to improve our ability to implement TPM in our respective agencies
- Address gaps and refine the frameworks for building a sustainable roadmap for transportation performance management
- Allow capability assessment and action plans by state DOTs in each performance area

What Makes a Target Setting Method Effective?



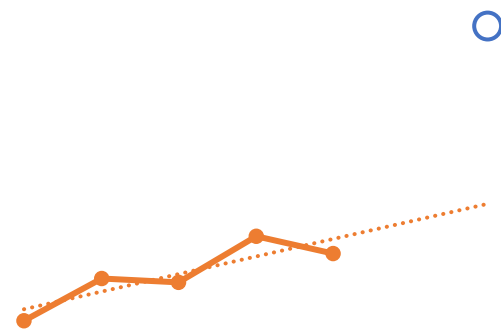
Discussion: Lessons Learned on Effective Target Setting

- What factors do you value most when selecting a target setting method? How do you make tradeoffs between technical robustness/complexity vs. simplicity?
- Does the process of setting targets help your agency to better understand factors driving performance? Does the process motivate discussions about actions to take to improve performance?

Target Setting Philosophies

Conservative

Ensure the agency can attain the target



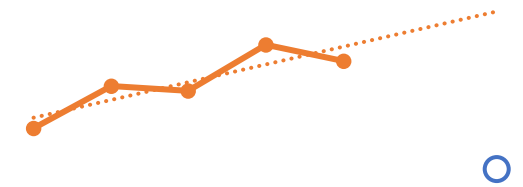
Realistic/ Predictive

Level most likely to occur



Aspirational

Reflect commitment to improved outcomes



↓ Lower is better

Target Setting Philosophies

Realistic/ Predictive

Aspirational

Pros

- Discussions have closer tie to realistic assessment of interventions
- Deeper analysis can lead to understanding of influencing factors
- Dissatisfaction with worsening targets can spur earlier action

- Easier to communicate to and inspire stakeholders
- Aligns with agency vision and other published documents
- Sting of missing the target can spur action

Cons

- Creates appearance that agency wants condition to worsen
- Meeting targets may give a false sense of accomplishment while conditions are worsening

- If everyone knows targets will not be met, there may not be much reaction—and therefore action—when performance results come in

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Discussion: Target Setting Philosophies

- What type of philosophy does your agency generally use? And why?
- Why might you have a different philosophy for different performance areas?
- Have you been able to leverage the chosen philosophy to motivate action on performance and see progress?

Tips for Selecting a Method

- Understand the complexity of methods
 - Weigh the costs of gathering and forecasting additional data against incremental benefits
- Combine results from multiple methods
 - Use multiple methods to assess different forecasts and to inform dialogue about uncertainties and factors affecting the level of the target to be set
- Learn from past experience and experiences of others
 - Explore whether the target setting methods supported agency decisions



Strategies for Making the Target Setting Process More Effective

- **Connect short-term targets to long-term aspirations**
 - Recast short-term targets as checkpoints toward long-term outcomes and to support communication about long-term goals
- **Leverage the target setting process itself to create a sense of shared responsibility**
 - Engage stakeholders in dialogue as a point for deeper discussions about performance outcomes and to focus efforts in a coordinated direction
- **Leverage dissatisfaction with worsening performance**
 - When worsening performance is anticipated, have difficult conversations about why and what can be done



Strategies for Making the Target Setting Process More Effective

- **Ground measures and targets in the most meaningful form**
 - If needed, use state or region-specific measures to best support investment decision making, and translate to national measures
- **Continually improve and make adjustments**
 - Use midpoint conversations to focus on data, why targets are or are not being achieved, and the reasons why



Discussion: Lessons Learned on Selecting a Method

- What have you found to be important to ensure that the target setting process is adding value?
- What lessons can you share with others?



Web-based Workshop Series: Effective Target Setting Methods

Workshop Topic	Date	Agency Presenters
1. Safety	Thursday, June 2, 2022, 2-4 pm Eastern	<ul style="list-style-type: none">• Ida van Schalkwyk, Washington State DOT• Emily Thomas, South Carolina DOT• Mark Bott, Michigan DOT
2. Travel Time and Freight Reliability	Wednesday, June 8, 2022 2-4 pm Eastern	<ul style="list-style-type: none">• Andrea White, Iowa DOT• Sanhita Lahiri and Simona Babiceanu, Virginia DOT
3. Congestion Measures (Non-SOV and Peak Hour Excessive Delay per Capita)	Thursday, June 16, 2022 2-4 pm Eastern	<ul style="list-style-type: none">• Nick Warren, Memphis MPO• Travis Johnson, Charlotte Regional TPO• Eric Randall, Metropolitan Washington COG
4. Bridge Condition	Thursday, June 23, 2022 2-4 pm Eastern	<ul style="list-style-type: none">• Justin Bruner, Pennsylvania DOT• Karen Reimer, Connecticut DOT
5. Pavement Condition	Thursday, June 30, 2022 2-4 pm Eastern	<ul style="list-style-type: none">• Phil Clements, South Dakota DOT• Reid Kiniry, Vermont Agency of Transportation
6. Lessons Learned on Target Setting Methods and Effective Practices	Thursday, July 21, 2022 2-4 pm Eastern	<ul style="list-style-type: none">• Deanna Belden, Minnesota DOT• Edgardo Block, Connecticut DOT

Recordings available at: <https://www.tpm-portal.com/video-library/>

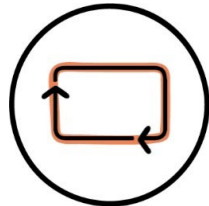
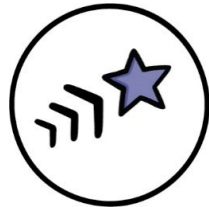
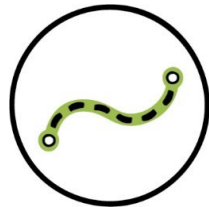


Upcoming In-Person Workshops on Target Setting Methods

- Two workshops:
 - At AMPO Annual Conference
October 25, 2022 – Minneapolis, MN
<https://ampo.org/news-events/ampo-annual-conference/>
 - At AASHTO 2022 Conference on Performance-Based Management, Planning, and Data
During December 5–8, 2022 conference – Providence, RI
<https://www.tpm-portal.com/events/aashto-2022-conference-on-performance-based-management-planning-and-data/>

PEER EXCHANGES TO MAKE TARGETS MATTER

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Anna Batista

Principal Investigator

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For More Information

For more information about NCHRP 23-07, visit:

<https://apps.trb.org/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=4788>

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