

# **AASHTO COMMITTEE ON PERFORMANCE-BASED MANAGEMENT PEER EXCHANGE: BUSINESS AS UN-USUAL**

Sponsored by Federal Highway Administration (FHWA)

Dates: Monday, September 11, 2023, Noon – 5:30 PM  
Tuesday, September 12, 2023, 7:45 AM – Noon

Location: Auditorium  
Colorado DOT  
2829 Howard Pl.  
Denver, CO 80204

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# Business as UN-Usual

The 2023 American Association of State Highway & Transportation Officials (AASHTO) Committee on Performance-Based Management (CPBM) Peer Exchange will focus on how transportation agencies are implementing and sustaining performance management in their agencies in light of federal Transportation Performance Management (TPM) requirements. The purpose of the peer exchange is to provide participants an opportunity to share their experiences with Performance Management Form (PMF) reporting, internal and external collaboration and coordination, and aligning performance management with other agency activities and to discuss related best practices.

## Background and Context

Agencies have been practicing transportation performance management for decades to maximize the life and effectiveness of their transportation system, enhance safety and demonstrate wise stewardship of transportation funds.

Federal Transportation Performance Management (TPM) and other related provisions that apply to State Departments of Transportation (State DOTs), Metropolitan Planning Organizations (MPOs) and transit agencies were initiated in the Moving Ahead for Progress in the 21st Century Act (MAP-21) and reaffirmed in subsequent legislation. These requirements have established a national focus for transportation with goals and measures

related to safety, asset management, multimodal mobility and air quality, and transit.

As part of the federal requirements, states are required to meet biennial reporting requirements related to targets and progress. Key TPM implementation dates are available on FHWA's website:

<https://www.fhwa.dot.gov/tpm/rule/timeline.pdf>.

Targets are quantitative performance goals expressed as a value for a measure, to be achieved within a timeline. Four-year targets may be adjusted at the mid-point of a Performance Period. 2-year targets may not be adjusted. State DOTs are required to coordinate with MPOs to ensure consistency to the maximum extent practicable.

## Peer Exchange Overview

This peer exchange will provide a forum for agencies to share and discuss TPM implementation practices, including PMF reporting, coordination and collaboration, and alignment of performance management with other activities. Participants will discuss successes, learnings, and the future of TPM. The primary goal of this peer exchange is to advance the state of the TPM practice, particularly by sharing lessons learned and identifying capacity-building needs. Participants will also learn about resources that are available to support federal TPM reporting.

Agencies will share how they are they are making good investment decisions, using technology, getting more sophisticated with data, and organizing their organizations for performance management. The

elements of good performance management will be a focus.

As part of the workshop, the participating agencies will prioritize TPM implementation initiatives. supporting entities such as FHWA, AASHTO, and TRB.

The peer exchange is organized around the following core activities:

- **Share the critical elements** of performance management, including the best examples of people, processes, tools, and other resources
- **Learn from FHWA and other agencies** about resources and tools for federal TPM reporting
- **Discuss the ingredients** for good performance management practices
- **Develop a vision** of what the future will look like for performance management and related activities within state DOTs
- **Prioritize initiatives** for future activities for FHWA, AASHTO, and TRB to undertake

## AASHTO CPBM Peer Exchange Agenda

Sponsored by the AASHTO and FHWA

**Dates: Monday, September 11, 2023, 12:00 PM – 5:30 PM**

**Tuesday, November 12, 2023, 7:45 AM – Noon**

**Location: Denver, CO (@ CDOT Headquarters)**

State DOTs and other public sector agencies will gather at a peer exchange to focus on improving transportation performance management in their agencies in light of federal requirements and to advance performance management practice. Agencies will share how they are coordinating with both internal and external stakeholders for target establishment, improving biennial federal reporting, and better integrating TPM and transportation asset management (TAM) in their agencies.

### Peer Exchange Purpose:

- Advance the state of the performance management practice, including sharing lessons learned about Federal PMF Reporting, internally coordinating for performance management, and aligning performance management and 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
- Share the experience of recent TPM implementation, including the best examples of how agencies are advancing national goals and agency targets through performance-based planning and programming
- 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

## A G E N D A

### Day 1 – Monday, September 11, 2023

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#### Introductions

- Noon – 1:00 pm    Lunch available for participants
- 1:00 - 1:30 pm    Welcome, Opening Remarks  
 Peer Exchange Overview and Objectives  
 - FHWA, AASHTO, CPBM Leadership

#### A. Elements of Good Performance Management

Good performance management is a complex set of related activities. It involves people, processes, tools, and financial resources. Agencies will discuss what elements are the most important in advancing performance management practice in times of “Business as UN-Usual.



- 1:30 - 2:30 PM    *Agency 1: Deanna Belden, Minnesota DOT – Emerging Performance Measures*  
*Agency 2: Louis Feagans, Indiana DOT – Using artificial intelligence to drive performance*  
*Agency 3: Alejandra Garcia Acevedo, Colorado DOT – Discretionary grant opportunities and performance management*  
*Agency 4: Rick Scott, Vermont Agency of Transportation – Improving resilience to address climate change*
- 2:30 – 3:00        Large Group Discussion
- 3:00 - 3:15 PM    Break

### **B. Coordinating Across Stakeholders**

Having effective performance management requires coordination across planning, programming, budgeting, and monitoring both internally and externally. This session will focus on how to improve coordination through a small group exercise.

- 3:15 - 4:45 PM    Small Group Exercise.

### **C. Biennial Federal PMF Reporting**

Agencies have had several cycles of federal TPM reporting. This session will start with a presentation of the basics of TPM reporting, followed by a facilitated discussion of how to improve processes. What can be done better on the PMF Form? What resources can help states with meeting the requirements?

- 4:45 – 5:15        *TPM Federal Reporting Basics – Nelson Hoffman FHWA presentation & discussion*
- 5:15 - 5:25        State DOT feedback

### **Day 1 Wrap Up**

- 5:25 – 5:30        Summary of Day 1 Discussion, Ideas to Consider, Overview of Tuesday's Agenda

**Day 2 – Tuesday, September 12, 2023****Breakfast and Day 2 Overview**

- 8:15 - 8:30            Coffee and Conversation  
 8:30 – 8:45            Recap Monday’s Agenda and Overview of Tuesday’s Agenda

**D. Aligning Performance Management & Asset Management**

TAM is a more mature area of practice in most transportation agencies. Better alignment between TAM and TPM programs will bring better performance outcomes for transportation customers and ensure these two disciplines are not working at cross-purposes within agencies. Participants will be invited to share their understanding, challenges, progress made, and ideas for improvements related to TPM and TAM alignment using the fishbowl format.

- 8:45 - 9:45            Fishbowl Exercise – Format will be 10 minutes around each of several sub-themes:
- Making good investment decisions
  - Technology
  - Getting more sophisticated with data
  - Aligning performance management with other disciplines
- 9:45 – 10:00            Break

**E. Performance Management Vision for the Future**

- 10:00 – 10:30        Pairs exercise with Post-Its

**F. How Can We Improve Practice?**

The ultimate goal is for agencies to pull all elements together to have a well-aligned performance management program that agency stakeholders understand and follow. In the first part of this session, the sessions from the peer exchange will be used to break into small groups to develop ideas for how practice can improve in a transportation agency. Each group will present their ideas, followed by a large group brainstorming on how to advance practices.

- 10:30 - 11:00        Small group ideas generation  
 11:00 - 11:30        Group Report Outs  
 11:30 – 11:45        Prioritization exercise

A prioritization exercise will be conducted on which ideas should be advanced for AASHTO and FHWA consideration. Use World Café approach.

**Peer Exchange Wrap-Up**

11:45 – Noon Discussion of Key Issues and Future Activities, Summary of Peer Exchange

## Additional Resources

### AASHTO Resources

- [AASHTO Committee on Performance-Based Management Website](#)
- [Transportation Management Hub](#)
- [TPM Portal](#)

### FHWA Resources

- [FHWA Transportation Performance Management Website](#)
- [FHWA TPM Guidance on PMF Reporting](#)
- [FHWA Website – How TPM and Asset Management Work Together](#)

### Links to relevant archived TPM Webinar Recordings and Other Materials

- [TPM Webinar #18 - FHWA & State DOT Roundtable](#)
- [TPM Webinar #16 - Caltrans' Performance Management Framework](#)
- [TPM Webinar #12 - Target Setting](#)
- [TPM Webinar #10 - Resiliency and the IIJA](#)
- [TPM Webinar #6 - What's New? The Future of Transportation Performance Management](#)
- [TPM Webinar #5 - The Intersection of Risk and Performance Management](#)

**Participant Roster**  
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**September 11 - 12, 2023**  
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## Setting the Context

### ***Topic 1. Biennial Reporting Cycle for PM2 and PM3 Through the Performance Management Form (PMF)***

#### **Question 1. My agency has experienced staff with a good understanding of the PMF requirements.**

**Summary of results.** In the poll responses, 14 of 31 respondents agreed or strongly agreed that their agency has experienced staff with a good understanding of the PMF requirements, whereas 6 strongly disagreed. Another 7 respondents were neutral on this topic and 4 indicated that this topic was not applicable, or they did not know.

#### **Question 2. My agency used the PMF Input Fields documents (posted on the FHWA TPM website early in 2022).**

**Summary of results.** In the poll responses, 13 of 33 respondents agreed or strongly agreed that their agency used the PMF Input Fields Documents, whereas 1 strongly disagreed. Another 2 respondents were neutral on this topic and 12 indicated that this topic was not applicable, or they did not know.

#### **Question 3. My agency understood what was required to report in the PMF.**

**Summary of results.** In the poll responses, 27 of 35 respondents agreed or strongly agreed that their agency understood what was required to report in the PMF, whereas 1 strongly disagreed. Another 2 respondents were neutral on this topic and 6 indicated that this topic was not applicable, or they did not know.

#### **Question 4. My agency did not experience difficulty using the PMF system to report.**

**Summary of results.** In the poll responses, 11 of 31 respondents agreed or strongly agreed that their agency did not experience difficulty using the PMF system to report, whereas 5 disagreed. Another 2 respondents were neutral on this topic and 13 indicated that this topic was not applicable, or they did not know.

#### **Question 5. What can FHWA or State DOTs do to further improve PMF reporting?**

##### **Summary of 17 open-ended responses:**

- More dialogue with local office
- Improve the coordination with HPMS and PM2
- Provide monthly updates to your program specialists in the office
- Succession planning
- Longer entry time (more than 30 days)
- Coordination with PM2/3
- Provide virtual training session
- Improve HPMS
- Form is clunky with lots of unnecessary repetition. Text fields are too narrow the the needed information
- Earlier data, especially for CMAQ Emissions
- Understanding that if a system is in good repair, it does not require a higher goal
- Enough historical data to come to a consensus
- FHWA to ensure that state DOTs document to coordination with MPOs

- More communication
- Converting state metric to NHPP metric
- Update state data on the TPM website sooner
- User friendliness; clear definition of things

**Question 6. What are your biggest challenges related to PMF reporting?****Summary of 12 open-ended responses:**

- Buy-in from stakeholders
- Calculating the LOTTR and TTTR metrics
- Short entry time, especially if there are data issues. It's not feasible to coordinate new targets with MPOs in 30 days
- Dealing with our state FHWA division
- State reported results don't reflect actual conditions on locally owned NHS
- The actual PMF work takes longer than expected even when State DOT is prepared. Questions are more difficult to give good answers to given the role of federal measures
- Keeping leaders in the know of responses to why targets weren't met while not having to get in the weeds
- State and federal measures are vastly different
- Intolerance of declining performance even with strong validating data/extenuating circumstances
- Lagging data – ACS hasn't been available in time to use for Non-SOV
- Enough historical data to come to a consensus
- Questions should be more straightforward in language

**Question 7. What additional tools or resources would be most helpful to understand the PMF reporting process?****Summary of 10 open-ended responses:**

- Keep doing the webinars offered during the last 2 reporting cycles
- Q&A session
- Make clear how much text is expected for the open-ended questions. I've heard of some very short answers being accepted. Which would be much easier
- Webinars
- Fix HPMS issues to streamline reporting
- Dedicated webpage where past webinar recordings are available
- Data released prior to September 1 so we can ensure everything matches and have those issues work out prior to PMF entry
- Keep doing Office Hours
- Guidebook on how state DOTs collect pavement condition on locally owned NHS for MPOs

**Topic 2. Coordination and Collaboration****Question 1. My agency has a documented process for performance management.**

**Summary of results.** In the poll responses, 17 of 30 respondents agreed or strongly agreed that their agency has a documented process for performance management, whereas 3 disagreed. Another 8 respondents were neutral on this topic and 2 indicated that this topic was not applicable, or they did not know.

**Question 2. We have an agency-wide policy on TPM target-setting across measure areas – safety, pavement, bridge, reliability, freight, and CMAQ (if applicable).**

**Summary of results.** In the poll responses, 5 of 24 respondents agreed or strongly agreed that their agency has a documented process for performance management, whereas 7 disagreed or strongly disagreed. Another 3 respondents were neutral on this topic and 3 indicated that this topic was not applicable, or they did not know.

**Question 3. My state's performance management process has been documented and agreed upon by MPOs, State DOT, and public transportation operator(s).**

**Summary of results.** In the poll responses, 19 of 26 respondents agreed or strongly agreed that their agency has a documented process for performance management, whereas 3 disagreed or strongly disagreed. Another 2 respondents were neutral on this topic and 1 indicated that this topic was not applicable, or they did not know.

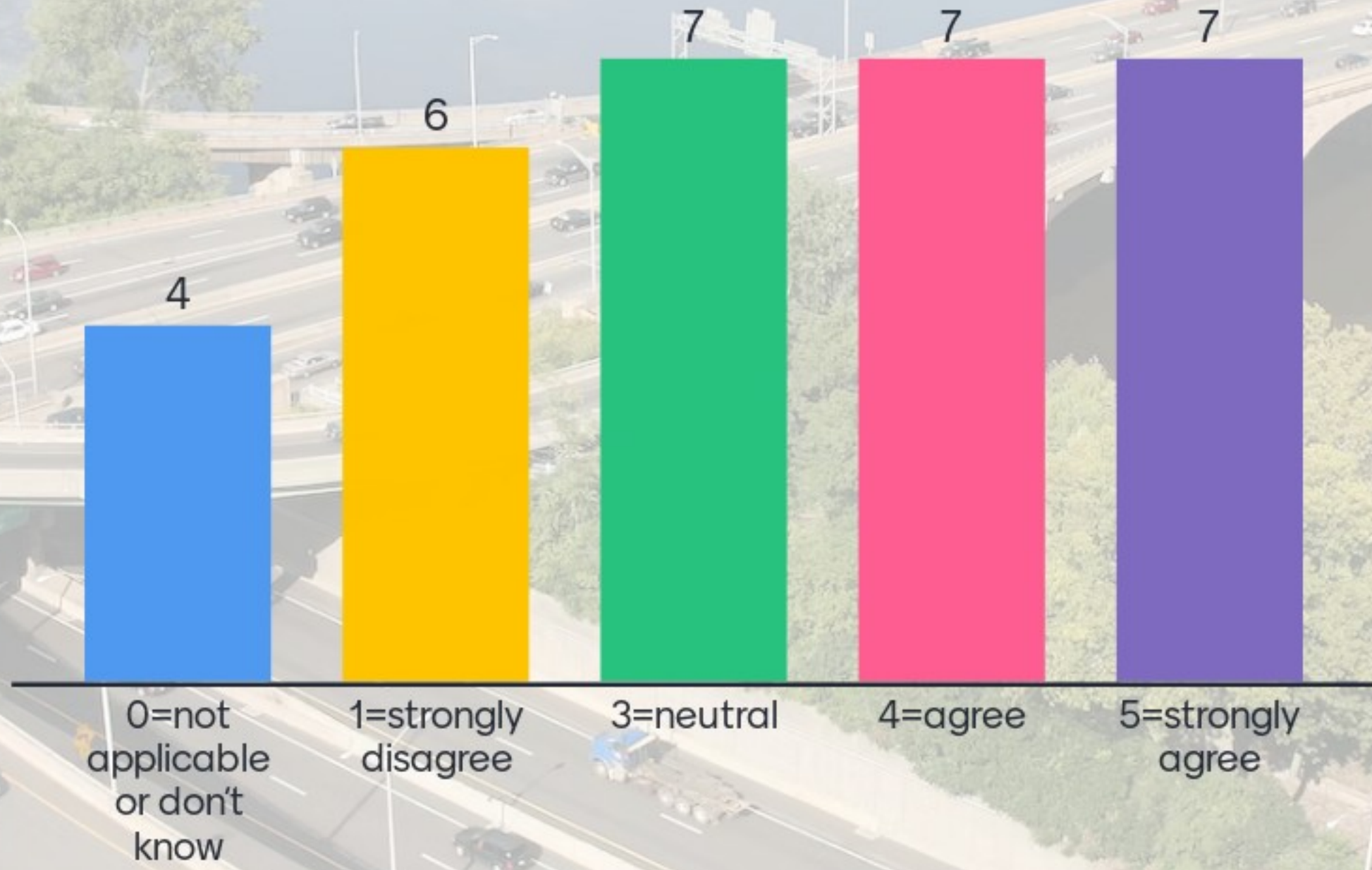


An aerial photograph showing a complex multi-level highway interchange on the left side of the frame. To the right, a large stone arch bridge spans across a wide river. The surrounding area is lush with green trees, and some buildings are visible in the distance under a clear sky with light clouds. The text is overlaid in the center of the image.

# I. 2022 Biennial Reporting Cycle for PM2 and PM3 through the Performance Management Form (PMF)

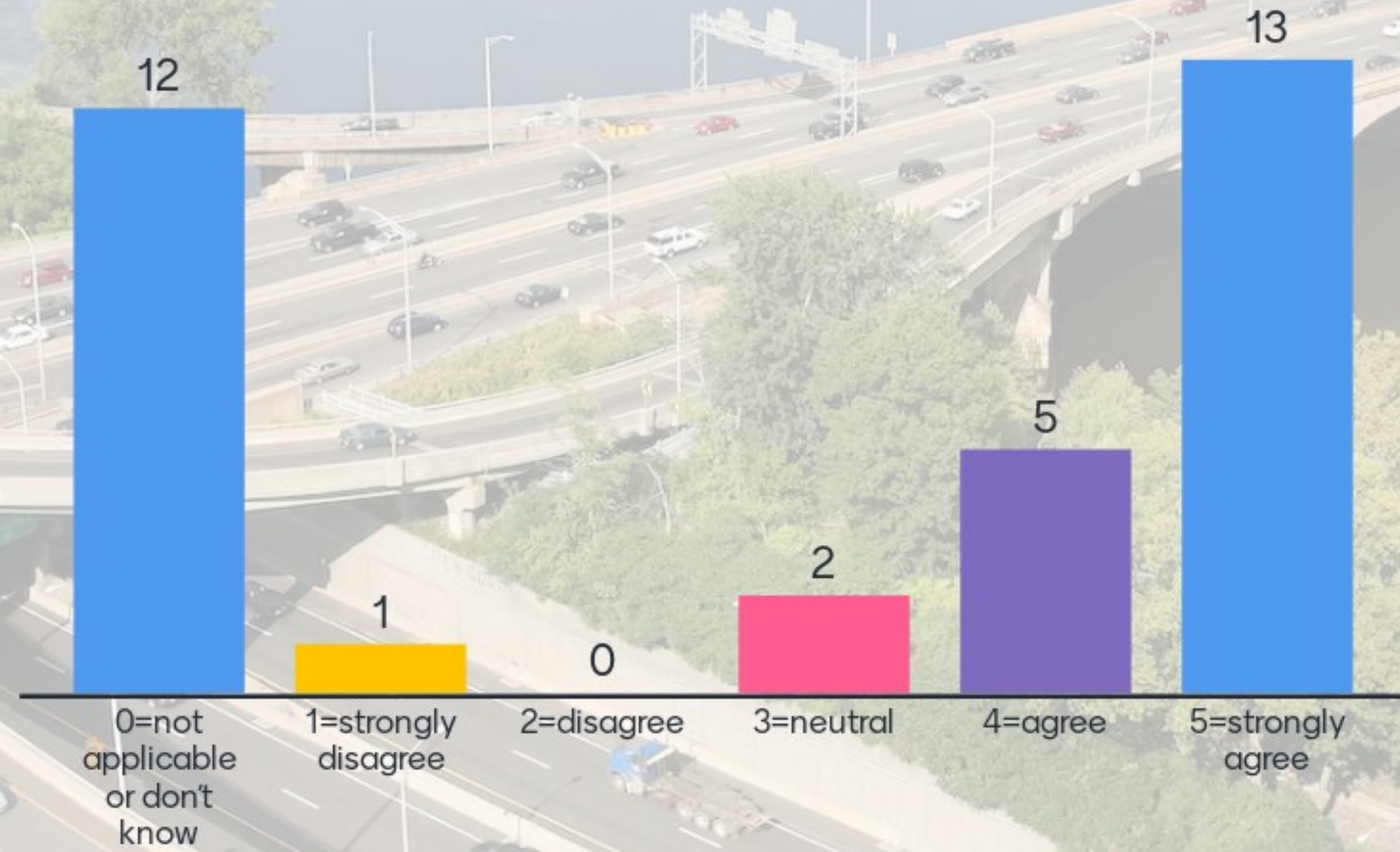


# 1. My agency has experienced staff with a good understanding of the PMF reporting requirements.



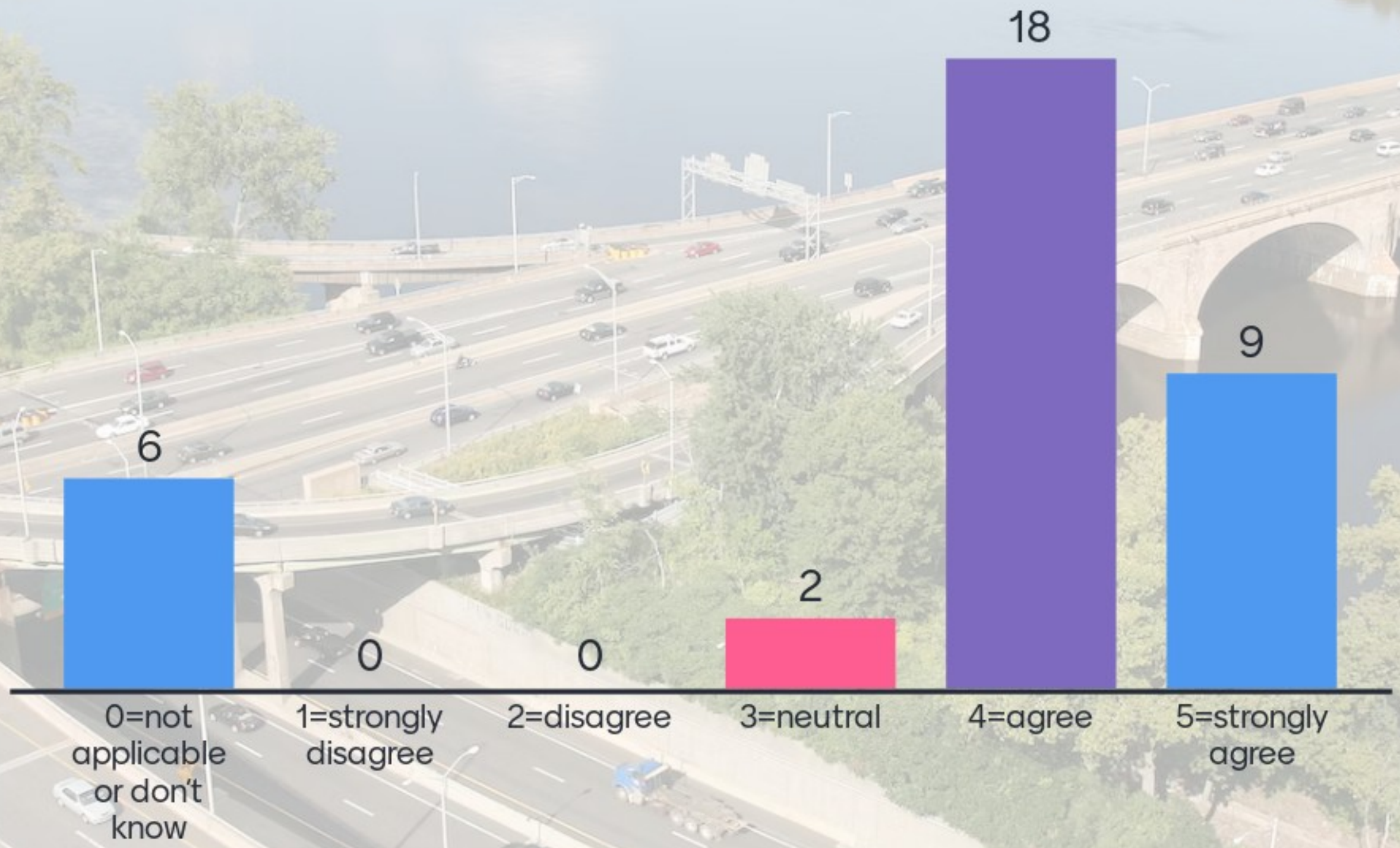


## 2. My agency used the PMF Input Fields documents (posted on the FHWA TPM website early in 2022).



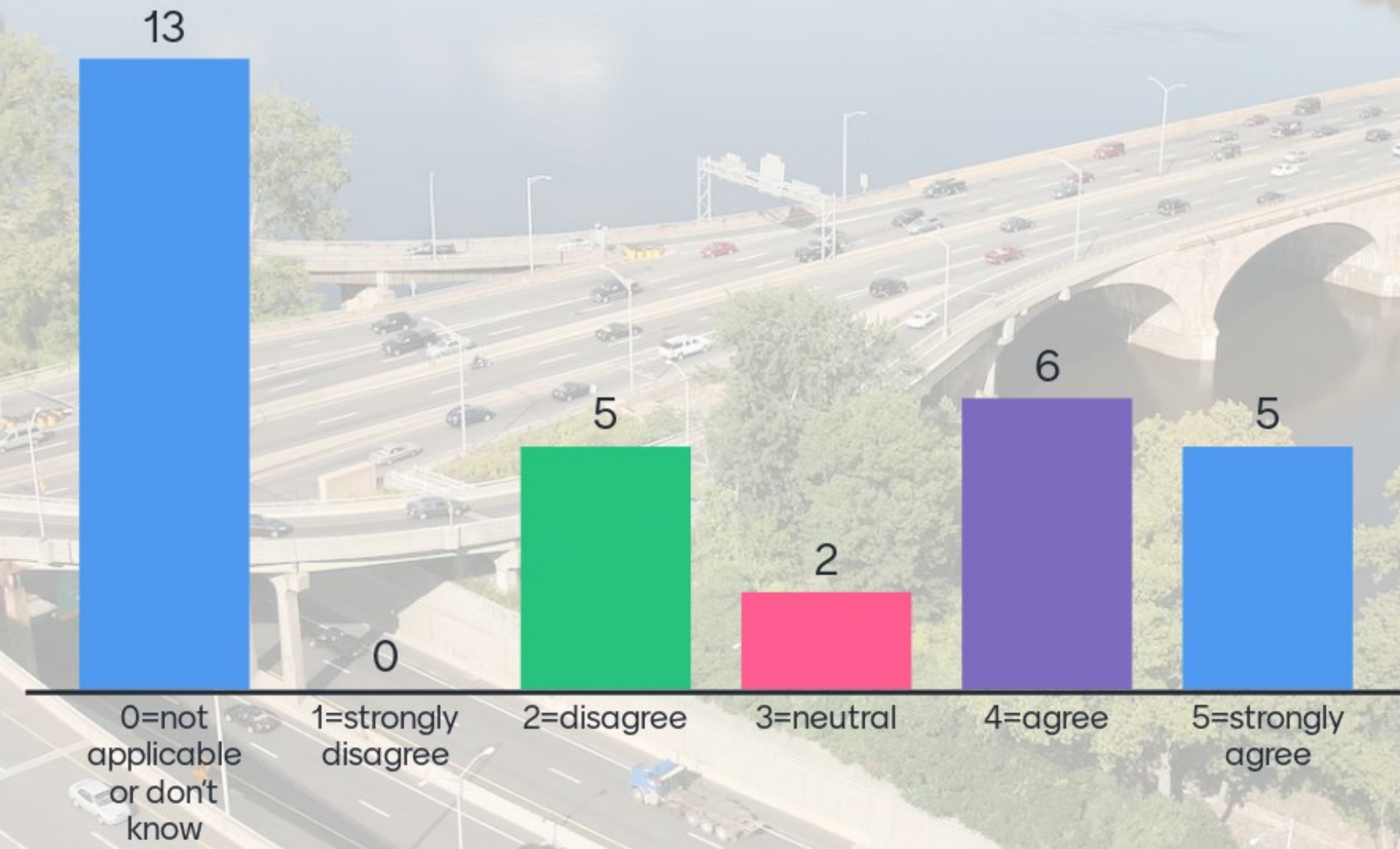


# 3. My agency understood what was required to report in the PMF.





# 4. My agency did not experience difficulty using the PMF system to report.





## 5. What can FHWA or State DOTs do to further improve PMF Reporting?

17 Responses

More dialogue with local office.

Succession planning

Provide virtual training session

Improve the coordination with HPMS and PM2

Longer entry time (more than 30 days)

improve HPMS

provide monthly updates to your program specialists in the office

Coordination with PM2/3

Form is clunky with lots of unnecessary repetition. Text fields are too narrow for the needed information.



## 5. What can FHWA or State DOTs do to further improve PMF Reporting?

17 Responses

Earlier data, especially for CMAQ Emissions

FHWA to ensure that state DOTs document the coordination with MPOs

Update state data on the TPM website sooner

Understanding that if a system is in good repair, it does not require a higher goal.

More communication

User friendliness; clear definition of things

enough historical data to come to a consensus

Converting State Metric to NHPP metric.



## 6. What are your biggest challenges related to PMF reporting?

12 Responses

Buy in from stakeholders

Dealing with our state FHWA division.

Keeping leaders in the know of responses to why targets weren't met while not having to get in the weeds.

Calculating the LOTTR and TTTR metrics

State reported results don't reflect actual conditions on locally owned NHS

State and federal performance measures are vastly different

Short entry time, especially if there are data issues. It's not feasible to coordinate new targets with MPOs in 30 days.

The actual PMF work takes longer than expected even when State DOT is prepared. Questions are more difficult to give good answers to given the role of federal measures..

Intolerance of declining performance even with strong validating data/extenuating circumstances



## 6. What are your biggest challenges related to PMF reporting?

12 Responses

Lagging data - ACS hasn't been available in time to use for NON-SOV

enough historical data to come to a consensus.

Questions should be more straightforward in language



## 7. What additional tools or resources would be most helpful to understand the PMF reporting process?

10 Responses

Keep doing the webinars offered during the last 2 reporting cycle

Webinars

Data released prior to Sept 1 so we can ensure everything matches and have those issues worked out prior to PMF entry.

Q & A session

Fix HPMS issues to stream line reporting

Keep doing Office Hours

Make clear how much text is expected for the open ended questions. I've heard of some very short answers being accepted. Which would be much easier.

Dedicated webpage where past webinar recordings are available

Guidebook on how state DOTs collect pavement condition on locally owned NHS for MPOs.

**Topic 2. Coordination and Collaboration****Question 1. My agency has a documented process for performance management.**

**Summary of results.** In the poll responses, 17 of 30 respondents agreed or strongly agreed that their agency has a documented process for performance management, whereas 3 disagreed. Another 8 respondents were neutral on this topic and 2 indicated that this topic was not applicable, or they did not know.

**Question 2. We have an agency-wide policy on TPM target-setting across measure areas – safety, pavement, bridge, reliability, freight, and CMAQ (if applicable).**

**Summary of results.** In the poll responses, 5 of 24 respondents agreed or strongly agreed that their agency has a documented process for performance management, whereas 7 disagreed or strongly disagreed. Another 3 respondents were neutral on this topic and 3 indicated that this topic was not applicable, or they did not know.

**Question 3. My state’s performance management process has been documented and agreed upon by MPOs, State DOT, and public transportation operator(s).**

**Summary of results.** In the poll responses, 19 of 26 respondents agreed or strongly agreed that their agency has a documented process for performance management, whereas 3 disagreed or strongly disagreed. Another 2 respondents were neutral on this topic and 1 indicated that this topic was not applicable, or they did not know.

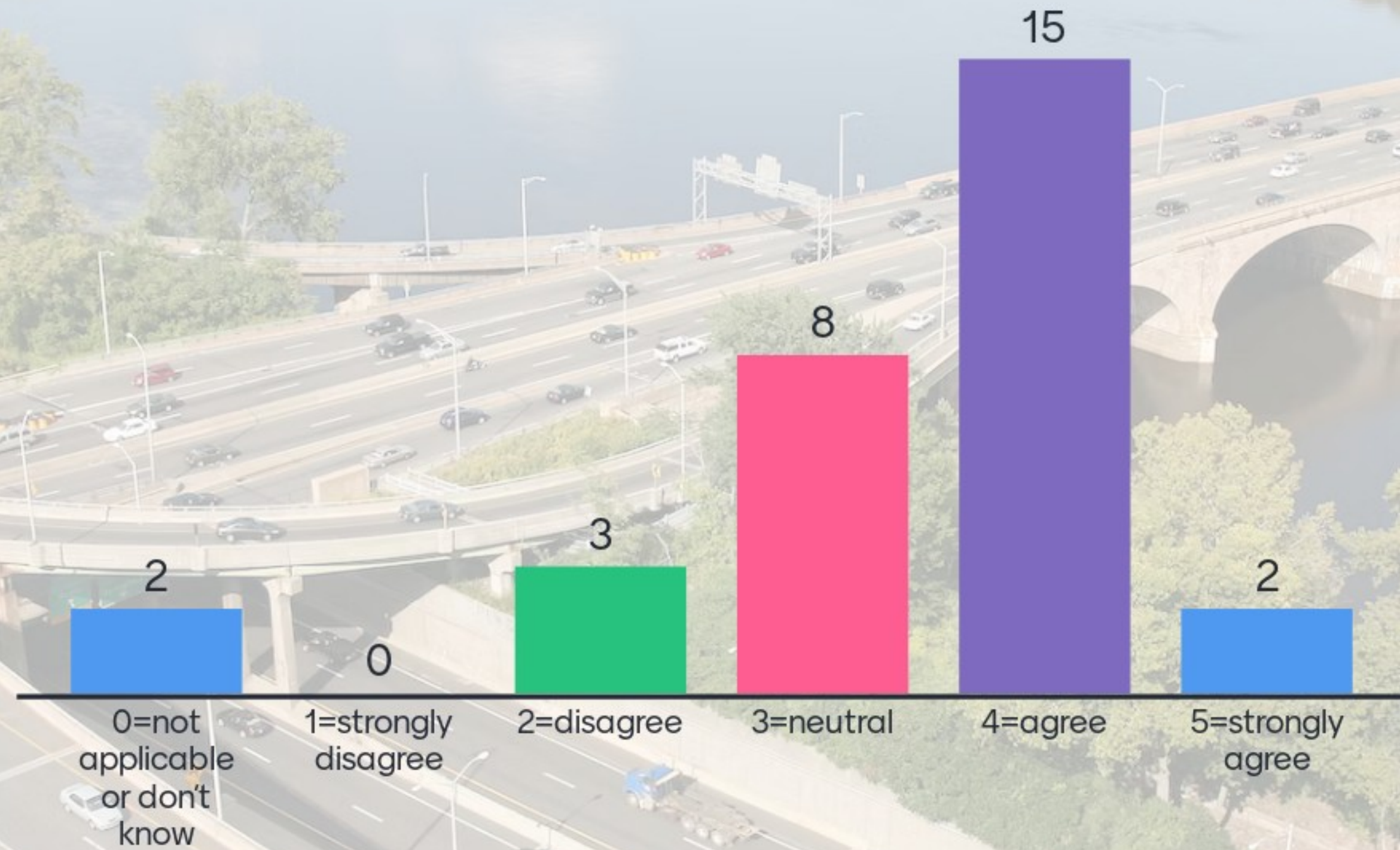


An aerial photograph showing a complex highway interchange on the left side of the frame, with multiple levels of overpasses and ramps. To the right, a large stone arch bridge spans across a wide river. The bridge has several prominent arches and is filled with traffic. The surrounding area is lush with green trees, and some buildings are visible in the distance under a clear sky with light clouds.

## II. Coordination and Collaboration

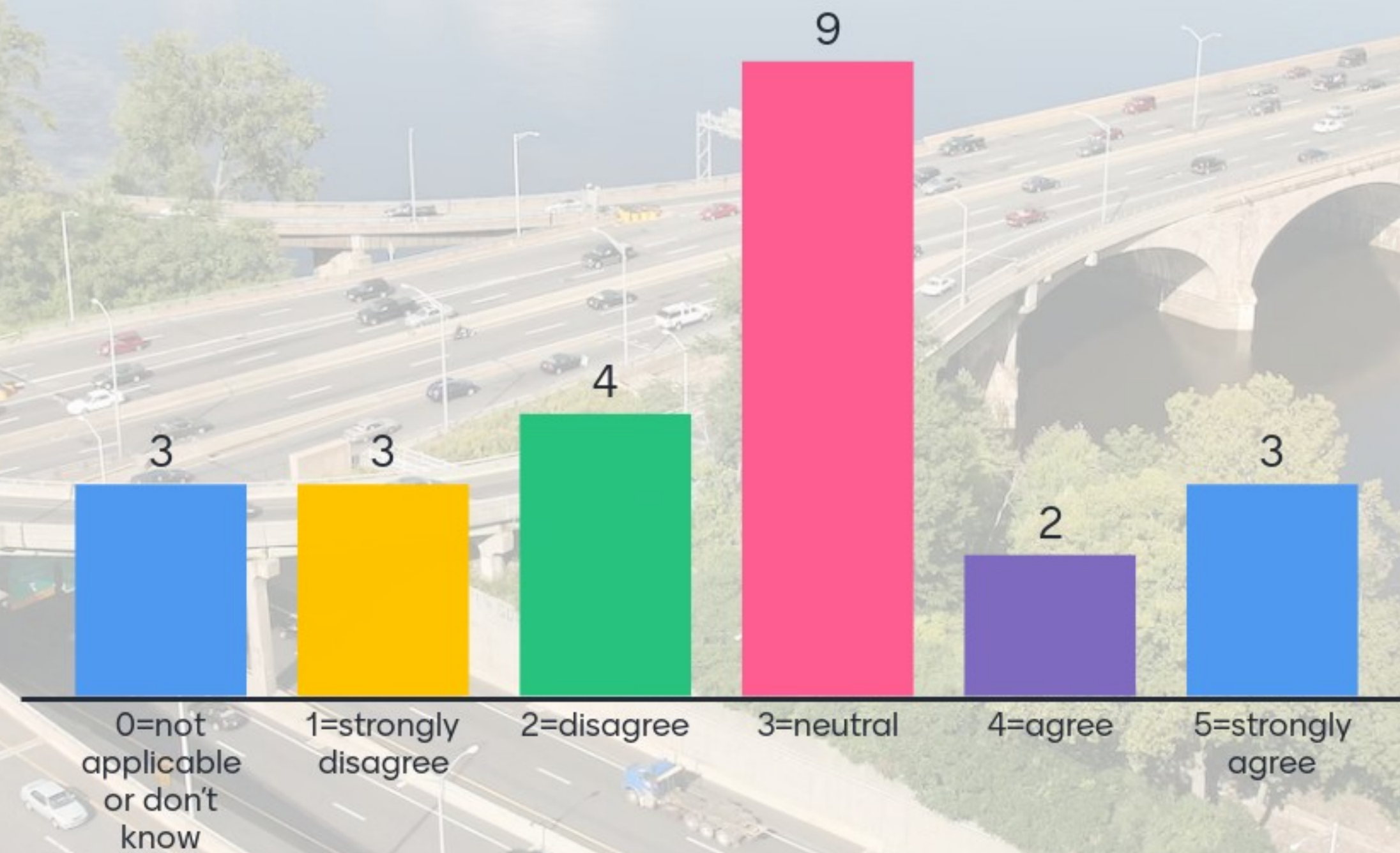


# 1. My agency has a documented internal process for performance management.



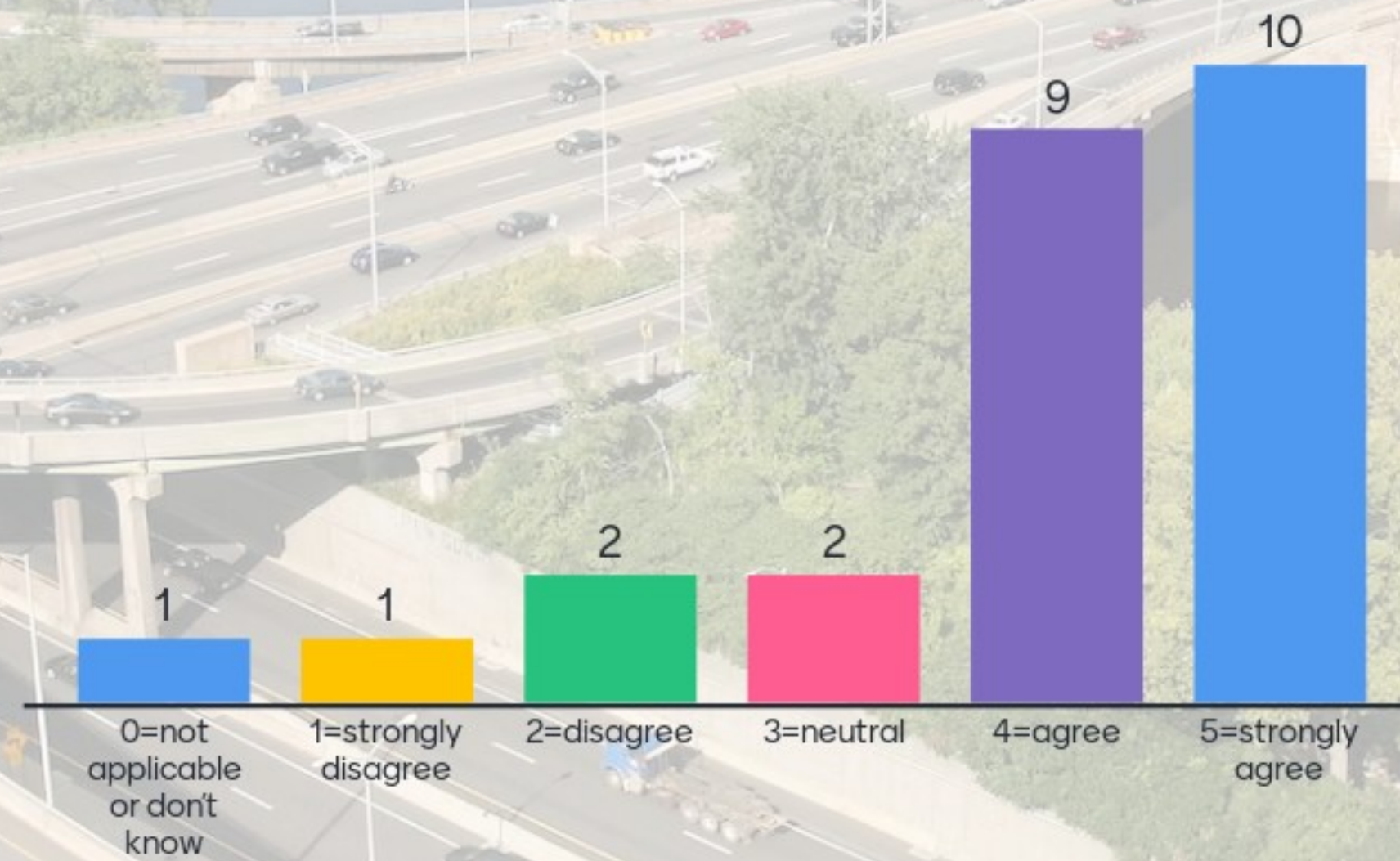


**2. We have an agency-wide policy on TPM target-setting across measure areas - safety, pavement, bridge, reliability, freight, and CMAQ (if applicable).**





**3. My state's performance mgmt coordination process has been documented and agreed upon by MPOs, State DOT, and public transportation operator(s).**





### **Topic 3. Alignment Between Transportation Performance Management (TPM) and Asset Management (TAM)**

#### **Question 1. My state manages performance and asset management in an integrated approach.**

**Summary of 19 Yes/No responses.** In the poll responses, 13 of 19 respondents indicated that their state manages performance and asset management in an integrated approaches and 6 indicated that their state does not manage these activities in an integrated way.

#### **Question 2. If you responded “Yes,” how is it done in your state?**

##### **Summary of 11 open-ended responses:**

- Two disciplines work together in tandem with lots of coordination
- Pulling data from our TAMP process to fulfill TPM requirements
- TAMP includes TPM information and documents how they align
- Coordination efforts internally
- They are in the same division, which eases coordination
- While targets are determined at the executive level, the overall process is informed and monitored by the agency’s TAM committee members, which includes members from each of the performance areas
- Connection through the SLTRP
- No. The TPM measures do not perfectly align with how we prioritize investments. We use similar, but different, measures to prioritize TAM investments
- This is the concepts in the TAMP being put into action to manage a certain performance level
- The FHWA considers the best evidence of (TAMP) implementation is a demonstration that the State DOT funding allocations are reasonably consistent with the investment strategies. Measures demonstrate
- Create legacy knowledge

#### **Question 3. If you responded “No,” why is it not done in your state?**

##### **Summary of 4 open-ended responses:**

- They are addressed on separate parallel paths
- PM2 is done at the state level using in-house created PMS (in Excel)
- Too new, still learning about the process
- It’s majorly because my country is a developing nation, which needs a lot of improvement in the transportation sector

#### **Question 4. What linkages do you see between performance and asset management (conceptual, data, reporting, regulations, etc.)?**

##### **Summary of 10 open-ended responses:**

- They go hand in hand as you need goals to target your assets to know where to spend resources wisely
- AM is one of many PM areas. They all support PBPP processes
- Performance defines the condition you wish your assets to be in. Asset management is how you get there
- Asset management relies on performance management to show progress toward SOGR
- Asset management requires good performance management in order to be effective

PM1 and PM2 metrics      non-obvious

- They have started to become established practice started
- It could help to fund projects at lowest life cycle cost
- Reporting to external stakeholders about the progress toward SOGR and future projections based on legislative funding
- Asset management and performance are inextricably linked, especially if used to communicate system needs if we are to reach our SGR goals, show we are using funds wisely with impact
- Create a combined program with both asset management and performance management for better coordination as well as enforcement/authority to dictate to the districts

#### **Question 5. How would you integrate performance and asset management?**

##### **Summary of 9 open-ended responses:**

- Mature agencies have an organizational approach to staffing and resources
- Rename “target” to be “expected outcome,” and then establish longer-term targets based on SGR and transportation outcomes
- They need to be put together in one office. All the asset managers and the performance managers
- I would reorganize my department to create a division in planning that pulled staff together for better collaboration
- Since not all asset management is performance management, may or may not need total integration. Needs close coordination
- Increase funding so that we can plan to improve the system, not just manage the slow decline of the system... data driven target setting demonstrates improvement
- Having them in the same division (bureau, department, group, etc.) helps with the overlap and the needed coordination
- Integrated TAM and TPM teams within the agency to better facilitate communication and enforcement to the districts
- Good base data and understandable dashboards

#### **Question 6. What tools or resources would be most helpful to understand the benefits of and approach to integration of performance management/asset management?**

##### **Summary of 9 open-ended responses:**

- More peer exchanges
- Funding and best practices for dashboard development
- Good raw data, a system to process, and an agency to carry out the recommendations
- Best practices shared in webinars like this
- Improved internal software for HPMS submittal
- There are a number of NCHRP reports, TAM/TPM assessments, and guides out there that are very good. Showing implementation successes, webinars, peer exchanges
- Dedicated software system for cross-asset allocations to determine longer term funding and conditions (20, 40-year, etc.)
- More info on how other states are structured, including a description of activities by division, plus other committees stood up in support
- This meeting and others like it! State FHWA offices have SMEs in asset management that can provide guidance and federal resources. Seeking out and discussing this topic with MPOs and larger cities

**Question 7. What are the next steps for incorporating resilience into TPM and TAM?**

**Summary of 10 open-ended responses:**

- Define resiliency and measurement development
- The ability to reliably quantify risk mitigation measures in terms of current dollars and future savings to the department
- Tell us how we should measure resilience
- Additional dedicated and sustainable funding for resilience
- Resilience is based on known risks. If risks are addressed in TAM and TPM, then it is just a matter of taking it one step further and addressing the risk
- Better integrate long-term outcomes
- Formalizing the rules (CFR) across performance areas
- Define measurable resilience outcomes
- Need to understand what we are trying to achieve with resilience and develop appropriate measures of success
- Assess resilience needs



An aerial photograph of a complex highway interchange and a bridge crossing a wide river. The interchange features multiple levels of overpasses and ramps with several vehicles, including a yellow school bus. The bridge has multiple arches and carries traffic across the river. The surrounding area is lush with green trees and some buildings are visible in the distance under a clear sky.

# III. Alignment Between Transportation Performance Management (TPM) and Transportation Asset Management (TAM)



# 1. My state manages performance and asset management in an integrated approach.

Yes

13

No

6



## 2. If you responded "Yes," how is it done in your state?

11 Responses

Two disciplines work together in tandem with lots of coordination

Coordination efforts internally

Connection through the SLRTP.

Pulling data from our TAMP process to fulfill TPM requirements.

They are in the same division which eases coordination.

No. The TPM measures do not perfectly align with how we prioritize investments. We use similar, but different, measures to prioritize TAM investments.

TAMP includes TPM information and documents how they align

While targets are determined at the executive level, the overall process is informed and monitored by the agency's TAM committee members, which includes members from each of the performance areas.

This is the concepts in the TAMP being put into action to manage a certain performance level.



## 2. If you responded "Yes," how is it done in your state?

11 Responses

The FHWA considers the best evidence of (TAMP) implementation is a demonstration that the State DOT funding allocations are reasonably consistent with the investment strategies. Measures demonstrate.

create legacy knowledge



### 3. If you responded "No," why is it not done in your state?

4 Responses

They are addressed on separate parallel paths.

too new, still learning about the process

It's majorly because my country is a developing nation which needs a lot of improvement in the transportation sector

PM2 is done at the state level using in-house created PMS (in Excel).



## 4. What linkages do you see between performance and asset management (conceptual, data, reporting, regulations, etc.)?

10 Responses

They go hand in hand as you need goals to target your assets to know where to spend resources wisely.

Asset Management relies on performance management to show progress toward SOGR

It could help to fund projects at lowest life cycle cost...

AM is one of many PM areas. They all support PBPP processes.

Asset management requires good performance management in order to be effective. (Even for non-obvious PM1 and PM3 metrics)

Reporting to external stakeholders about the progress toward SOGR and future projections based on legislative funding

Performance defines the condition you wish your assets to be in. Asset management is how you get there.

They have started to become established practice. Started.

asset management and performance are inextricably linked, especially if used to communicate system needs if we are to reach our SGR goals. show we are using funds wisely and with impact.



#### 4. What linkages do you see between performance and asset management (conceptual, data, reporting, regulations, etc.)?

10 Responses

Create a combined program with both asset management and performance management for better coordination, as well as enforcement/authority to dictate to the districts.



## 5. How would you integrate performance and asset management?

9 Responses

Mature agencies have an organizational approach to staffing and resources.

I would reorganize my department to create a division in Planning that pulled staff together for better collab/coordination.

Having them in the same division (bureau, department, group, etc) helps with the overlap and the needed coordination.

Rename "target" to be "expected outcome", and then establish longer-term targets based on SGR and transportation outcomes.

Since not all asset management is performance management, may or may not need total integration. Needs close coordination

Integrated TAM and TPM team within the agency to better facilitate communication and enforcement to the districts.

They need to be put together in one office. All the asset managers and the performance managers.

Increase funding so that we can plan to improve the system, not just manage the slow decline of the system...data driven target setting demonstrates improvement.

Good base data and understandable dashboards



## 6. What tools or resources would be most helpful to understand the benefits of and approach to integration of performance management/asset management?

9 Responses

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Best practices shared in webinars like this

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## 7. What are the next steps for incorporating resilience into TPM and TAM?

10 Responses

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additional dedicated and sustainable funding for resilience

Formalizing the rules (CFR) across performance areas.

The ability to reliably quantify risk mitigation measures in terms of current dollars and future savings to the dept.

Resilience is based on known risks. If risks are addressed in TAM and TPM, then it is just a matter of taking it one step further and addressing the risk.

Define measurable resilience outcomes.

Tell us how we should measure resilience

Need to understand what we are trying to achieve with resilience and develop appropriate measures of success.

Better integrate long-term outcomes



## 7. What are the next steps for incorporating resilience into TPM and TAM?

10 Responses

Assess resilience needs