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TRB Webinar: Integrating Performance, Asset, and Risk Management is Value- Add

August 23, 2022

1:30 – 3:00 PM

AUGUST 2022 UPDATE

AICP Credit Information

1.5 American Institute of Certified Planners Certification Maintenance Credits

You must attend the entire webinar

Log into the American Planning Association website to claim your credits

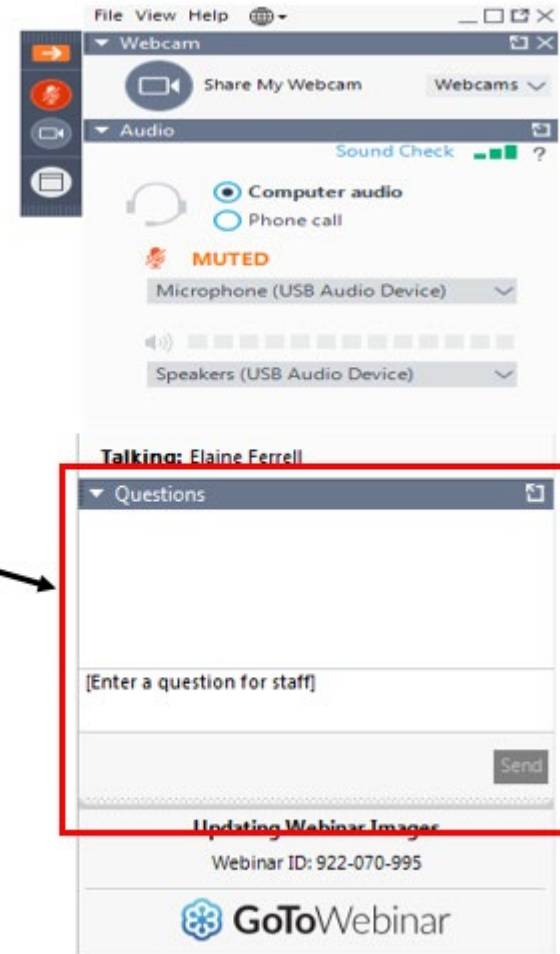
Contact AICP, not TRB, with questions

Learning Objectives

- Identify the five core elements of integrating performance, risk, and asset management
- Develop a roadmap for effective integration
- Assess the maturity of their agency in terms of integration

Questions and Answers

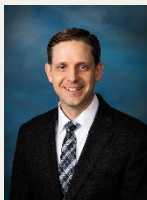
- Please type your questions into your webinar control panel
- We will read your questions out loud, and answer as many as time allows



Today's presenters



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Integrating Performance, Asset, and Risk Management is Value- Add

Key Findings from NCHRP 08-113: Integrating
Effective Transportation Performance, Risk and Asset
Management Practices

Presented by: Mara Campbell, Principal Investigator
August 2022

Agenda

- 1. Why Integrate?**
 - 2. Fundamental Agency Questions for Integration**
 - 3. The Integration Framework – 5 Key Areas**
 - 4. Integration Maturity Assessment**
 - 5. Developing a Roadmap**
 - 6. Using the Integration Guidance**
 - 7. Key Integration Observations**
-

Why Integrate ? How Does an Agency Benefit?

- More comprehensive and trustworthy **decision-making** process
- Advance **capital improvement planning** with more complete data
- Improve **system performance and resiliency** with a more holistic risk consideration
- Enhance agency structure and management efficiency with data transparency and an **agency culture of cooperation and collaboration**
- Reduce data or effort redundancies and make better decisions that **optimize agency position**
- Allow all parts of the organization to **move in the same direction**

“A proven way to **raise morale**, reduce costs of maintaining the transportation network, and improve customer service.”

VTrans Asset Manager

“We need to clearly **stretch and maximize** taxpayer dollars.”

MnDOT Systems Planner

“We own \$6B worth of assets and spend \$100M per year on replacement. If we can't **maximize performance under uncertainty** for the whole lifecycle, we'll be wasting a lot of money”

TriMet Director

Fundamental Questions when Integrating Management Practices in your Transportation Agency:

How can your agency develop a **less siloed**, more collaborative environment?

Is your agency able to access and share **data across the enterprise** and are data and process owners identified and understood?

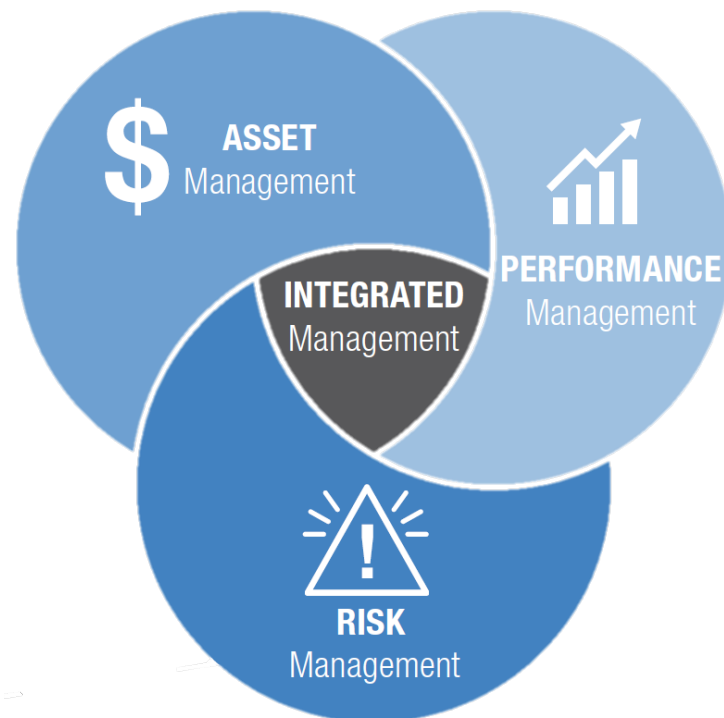
How is **project and operational risk being incorporated** into your agency's investment strategy?

These are some of the realities agencies are facing all over the world as their organizations are becoming more sophisticated and complex.

Integrating Performance, Risk and Asset Management

As transportation agencies mature, recognizing **process, data, and staffing synergies** in the different ways the organization is managed –move to a more holistic perspective.

A synergistic perspective does more than reduce inefficiencies, it drives overall **agency performance** forward.



Available Integrated Management Resources

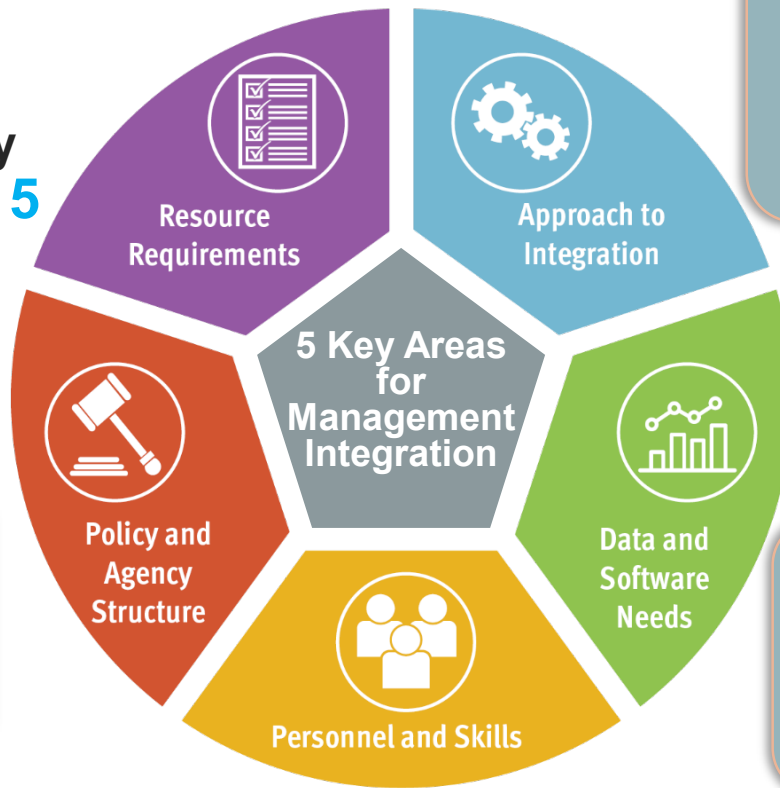
Agencies will soon be able to utilize this NCHRP research to take initial integration steps or identify next steps on their integrated management journey.

Primary research objectives were to provide agencies with practical guidance, recommendations, and implementation practices for:

- Integrating performance, risk, and asset management into transportation agencies
- Identifying, evaluating, and selecting appropriate management frameworks
- Recruiting, training, and retaining human capital to support these integrated management functions

The Integration Framework

Shared efforts and challenges consistently fall into one or more of **5 Key Areas**



"Our annual capital planning process is what gets everyone's attention around here. To make a difference, let's call out projects that address **climate resilience**"

"If we had a **cross-silo task force** for integrated asset, performance, and risk management, we could share data and collaborate more"

"Singular assets that are **shared across divisions** allow for actual life-cycle costing, analysis and staffing requirements"

Fitting the Key Areas to YOUR Agency

Each agency is on a unique integration journey, however using the 5 Key Areas as a framework for the discussion can be fruitful:

- **Cross-department conversations** on potential process, effort, or data synergies
- **Identified gaps** in training, organizational structure, etc.
- Immediate and longer-term **ideas for tasks and objectives** to follow-up on
- A more holistic understanding of **agency maturity** in integrating management

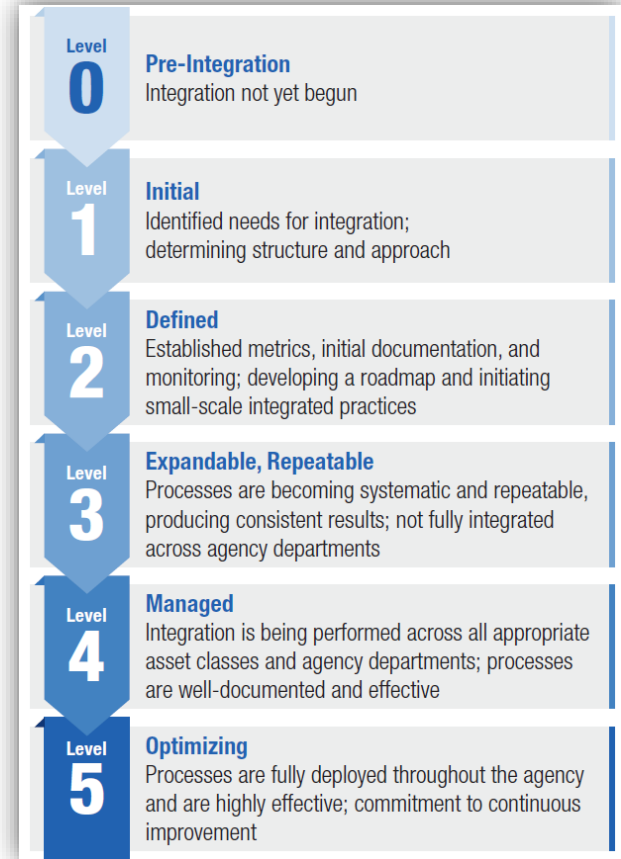


Integration Maturity Assessment

The Integration Maturity Assessment was developed for the Guidance to:

- Enable agencies to self-assess progress in each of the 5 Key Areas
- Standardize (generally) agency maturity assessment metrics

Results from a group of diverse agency staff show where integration efforts are progressing and **highlight where challenges remain.**

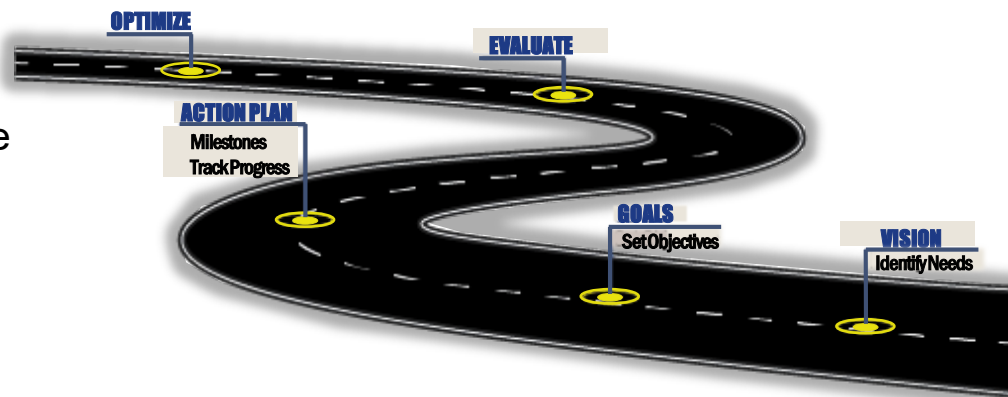


Developing an Integration Roadmap

Making observations of challenges and opportunities from maturity assessment actionable and trackable.

Roadmap development includes:

- **Vision statement** consistent with enterprise strategic direction
- Time-bound **goals** that break down the vision into actionable components
- **Strategies** and an **action plan** that achieve those goals
- Clear strategy to **evaluate** progress, re-assess maturity and **optimize** efforts



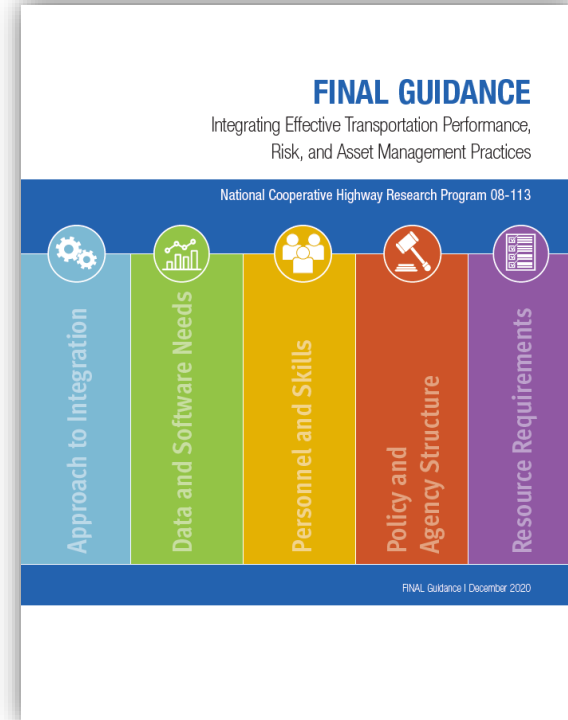
A Guidance for Integrating Management

A Guidance developed around these 5 Key Areas will be available for agencies to reference in their individual efforts – “pre-release in August”

Agencies can understand what they need to do (regardless of progress) and the “Value Add” of integrating management practices

Agencies will understand the “how” of integration:

- ❖ Frameworks for effective integration
- ❖ Strategies to promote organizational and workforce readiness
- ❖ Benefits of integration and common challenges agencies face
- ❖ Checklist to assess level of maturity variations based on existing practices



Guidance Resource Proof of Concept

Guidance was “Test Driven” during workshops with agencies of varying size and situations. The case study examples, common challenges, and implementation ideas from these workshops can help YOUR agency.

Core implementation discussion features when following the Guidance:

- Organized scope of discussion within **Key Areas**
- Identifying gaps and opportunities with the **Integration Maturity Assessment**
- Development of a **Roadmap** to set the vision, identify tasks, and track progress

Key Observations from the Research

Observations that guided conversations and/or were shared between many agencies are included as lessons learned including

- ✓ The critical need for a Champion – someone to drive the change
- ✓ Underlying agency culture has significant impact on integration level-of-effort, complexity, feasibility and success
- ✓ The common need for enterprise standards and data glossaries

- ✓ Champions are the voice of “why” and the force of “how”!
- ✓ Champions have **walk-in privileges** with the people who control bridge and pavement inventories, GIS systems, etc.
- ✓ Champions facilitate the documentation of current practices and the development of a critical path
- ✓ Champions secure financial resources and executive-level endorsement for change to business practices and standard operating procedures
- ✓ Champions ensure that if they leave the organization, others can continue their work.

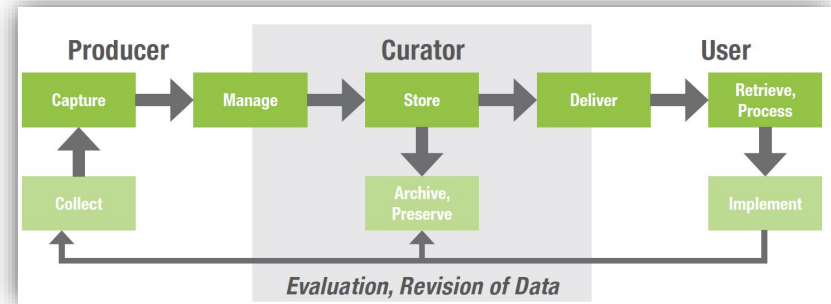
Other Key Observations

- Necessity of **executive level buy-in** and a supportive organizational structure for integration management
- The need to modify or **change agency culture to support a more inclusive working process** and enable integration efforts
- The need to **motivate agencies** to integrate performance, asset, and risk management while recognizing the need for standardized methods of modeling how threats may undermine performance goals or accelerate asset deterioration



Other Key Observations

- The important role of **enterprise standards** to lay the foundation for integrated processes, communications, data and resource sharing
- **Data governance** can play a pivotal role in identifying integration strengths and barriers
- The impact of an **ongoing discussion** of data needs and access support the evolution of an agency's integrated framework
- Identifying and **building policy frameworks** for management area integration that are most effective for transportation agencies



Sample Data Governance Map

Perspective and Testimonial

Patrick Cowley, Utah DOT

An overview of UDOT's journey and how they are using NCHRP 08-113 to help their efforts at integration

Next Steps

Get a copy of the GUIDANCE!

- ✓ Read the GUIDANCE!
- ✓ Use the Maturity Self-Assessment
- ✓ Create a Roadmap
 - ✓ Communicate need for executive buy-in for a push for more effective decision-making
 - ✓ Identify an Integration Champion, they will collect others to the effort and drive these changes.
 - ✓ Give authority and responsibility to the Integration Champion to bring the right people, use the Guidance as a framework and develop a Roadmap
- ✓ Utilize the Maturity Self- Assessment on a periodic bases to identify growth opportunities on a continuous basis

Questions?

THANK YOU!

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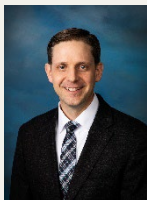
Today's presenters



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Jacobs

Challenging today.
Reinventing tomorrow.



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August 29-31, 2022

[TRB's Tools of the Trade
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September 12-16, 2022

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and Demand Response
Transportation Conference](#)

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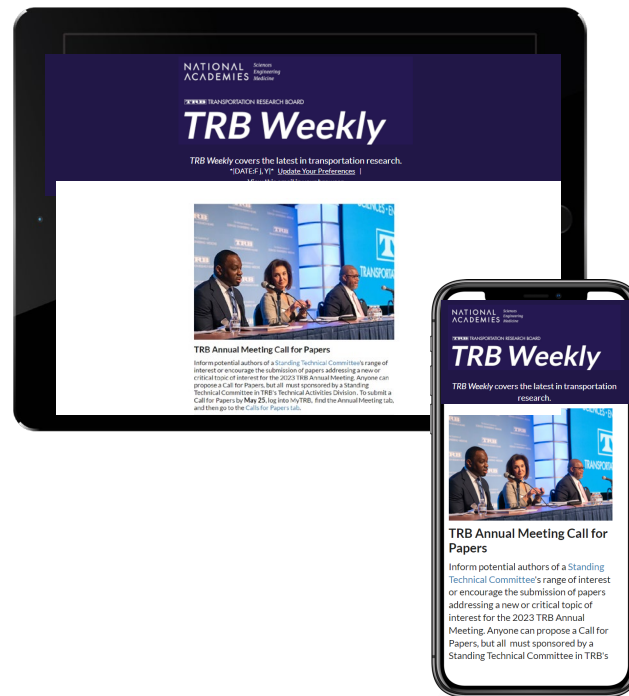


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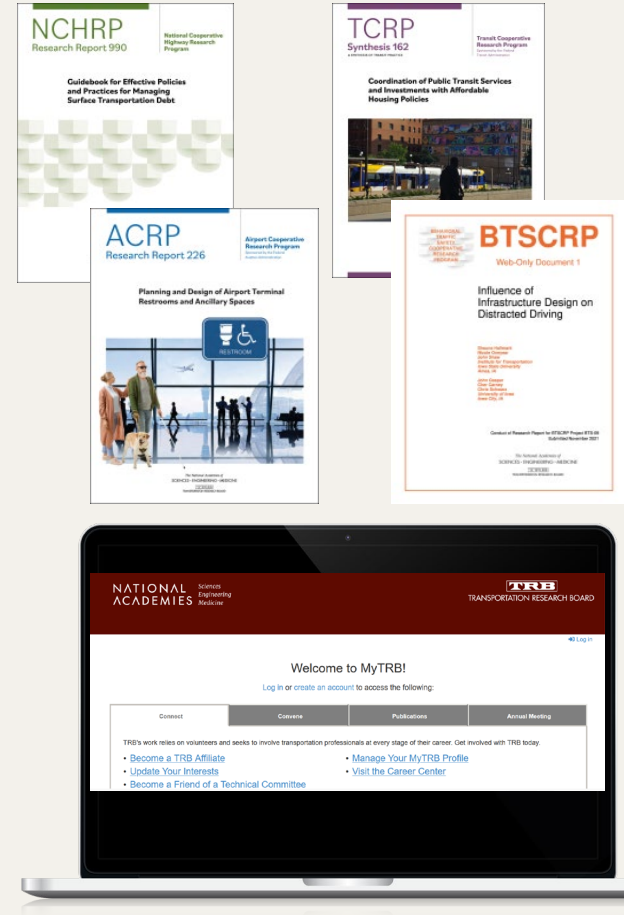


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