

# Transportation Asset Management Webinar Series

## Webinar 13: Review of TAM Resources Available to Practitioners

Sponsored by FHWA and AASHTO

With support from the FHWA TAM Expert Task Group

**Submit questions and comments using the webinar's Q&A feature**



**Webinar 13 — December 10, 2014**

# FHWA-AASHTO Asset Management Webinar Series

- Sharing knowledge is a critical component of advancing asset management practice
- This is the thirteenth webinar in a series that has run since 2012
- Webinars are held every two months, on topics such as mitigating and adapting to climate change risks, developing transportation asset management plans, and more
- We welcome ideas for future webinar topics and presentations
- Submit your questions using the webinar's Q&A feature
- Next webinar: **Linking the TAM Guide to the Planning Process**  
– *February 11, 2015 2:00 EST*

# Welcome

- FHWA is pleased to sponsor this webinar on transportation asset management resources in cooperation with the AASHTO Sub-Committee on Asset Management and with support from the FHWA TAM Expert Task Group
- Today's webinar kicks off our second set of 12 TAM webinars
- Since 2012, these webinars have provided an opportunity to connect with the asset management community and to bring people together around a series of important topics
- All of the webinars in the series can be accessed online at:

<http://tam.transportation.org/Pages/Webinars.aspx>

# TAM Resources

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- Many resources available via FHWA, AASHTO, and TRB
  - ...we will hear about four key resources today
- More resources to come
  - ...as transportation agencies build stronger TAM programs
- MAP-21 requirements related to TAM will also help promote the development of resources
  - ...and encourage their use by TAM practitioners

# TAM Resources

- FHWA Office of Asset Management is committed to supporting agencies in strengthening TAM programs and advancing TAMP development
  - By continuing to support the development and use of resources such as those we will be hearing about today
  - And also through education and capacity-building efforts such as this webinar
- Visit the FHWA asset management web site where additional information and resources are always available:  
<http://www.fhwa.dot.gov/asset/>

# Webinar Overview

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- Today's presentations include four examples of TAM resources available to practitioners
- Presenters will help show how each resource can add value and help agencies build stronger TAM programs
- Presentations will also provide a general introduction to these resources, targeted to TAM practitioners

# Learning Objectives

- Building working knowledge of four key TAM resources available to practitioners
- Beginning to apply this knowledge in order to answer:
  - How can agencies make use of these resources to strengthen TAM programs?
  - What benefits can agencies expect by utilizing these resources to support their TAM program and TAMP development?
- **SHARE LESSONS LEARNED, IDEAS, KNOWLEDGE!!!**

# Webinar Agenda

- 2:00 Webinar introduction and overview**  
Matt Hardy (AASHTO) and Steve Gaj (FHWA)
- 2:20 TAM Implementation Guide**  
Matt Hardy
- 2:35 TAMP Builder and TAM Portal**  
Perry Lubin (Spy Pond Partners, LLC)
- 2:50 Enterprise Risk Management Guide**  
Gordon Proctor (Gordon Proctor and Associates)
- 3:05 TAM Gap Analysis Tool**  
Katie Zimmerman (Applied Pavement Technology, Inc.)
- 3:20 Q&A and wrap up**



AASHTO's  
Transportation Asset Management Guide:  
A Focus on Implementation  
The background image shows a highway construction scene with a large blue concrete mixer truck on the left and a white paver machine on the right. In the distance, there are highway signs for I-150, with exits for Mahomet and Urbana. The scene is set against a backdrop of a clear blue sky and some greenery.

**Matthew Hardy, AASHTO**

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**Thank You!**

Transportation Asset Management Expert Task Group (TAM ETG)  
Federal Highway Administration  
AASHTO Subcommittee on Asset Management  
TRB Transportation Asset Management Committee

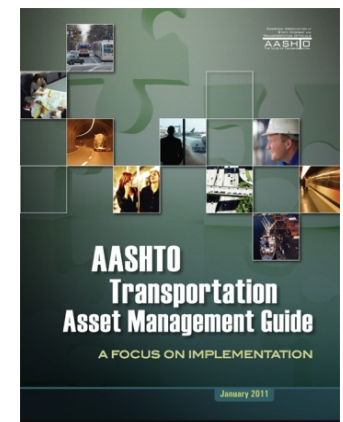
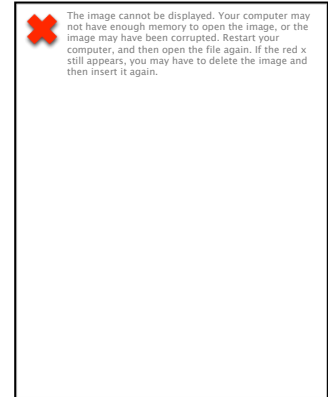
# Overview



- Developed under NCHRP 08-69A in 2008
- Builds on 2002 AASHTO TAM Guide
- Project Panel included 11 state and federal transportation professionals
- Consultant Team led by AECOM and Spy Pond Partners
- Released in January 2011

- Available at:

[https://bookstore.transportation.org/item\\_details.aspx?id=1757](https://bookstore.transportation.org/item_details.aspx?id=1757)



# Connection to the 2002 Guide



AASHTO 2002 Transportation Asset Management Guide

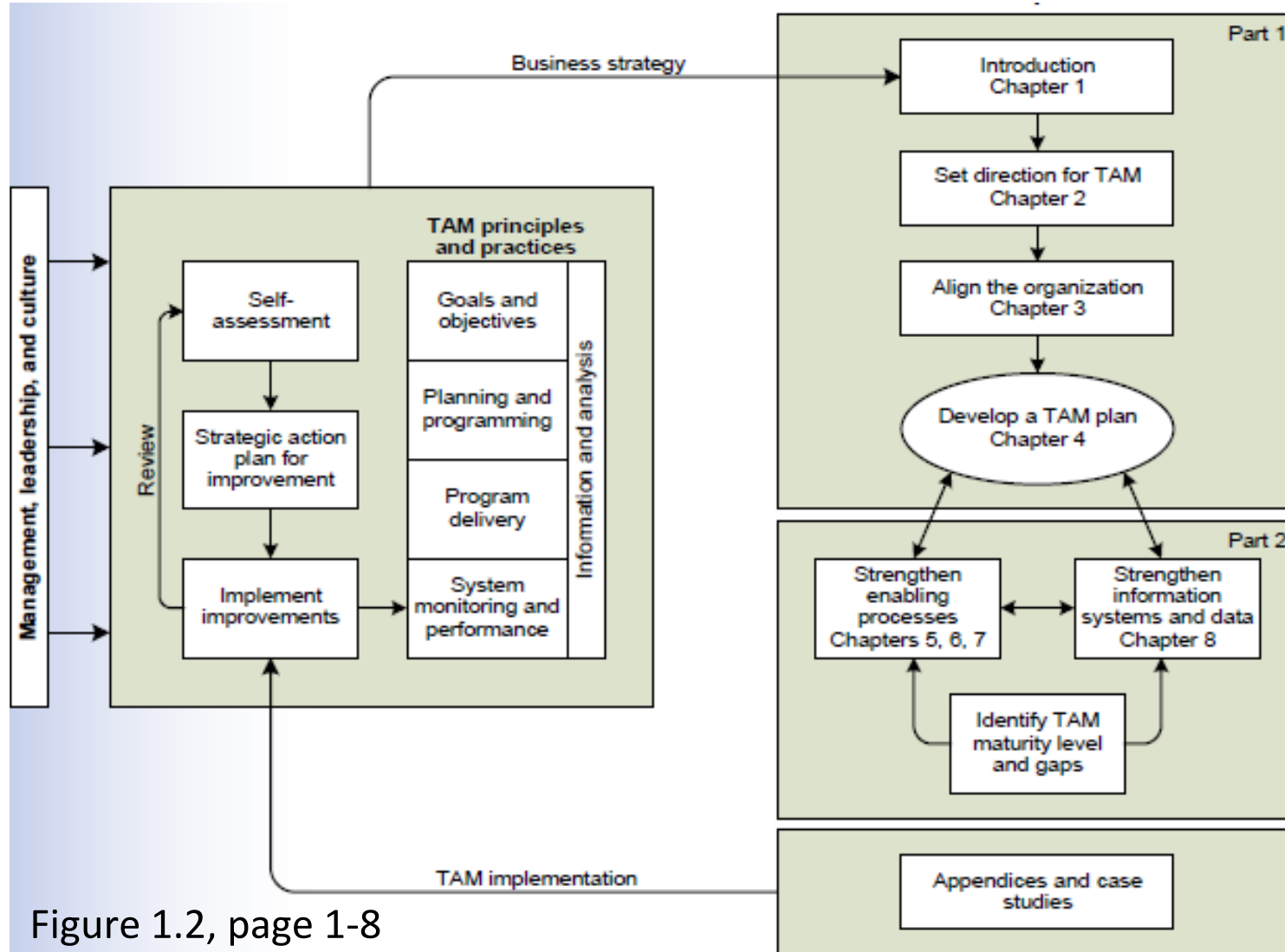
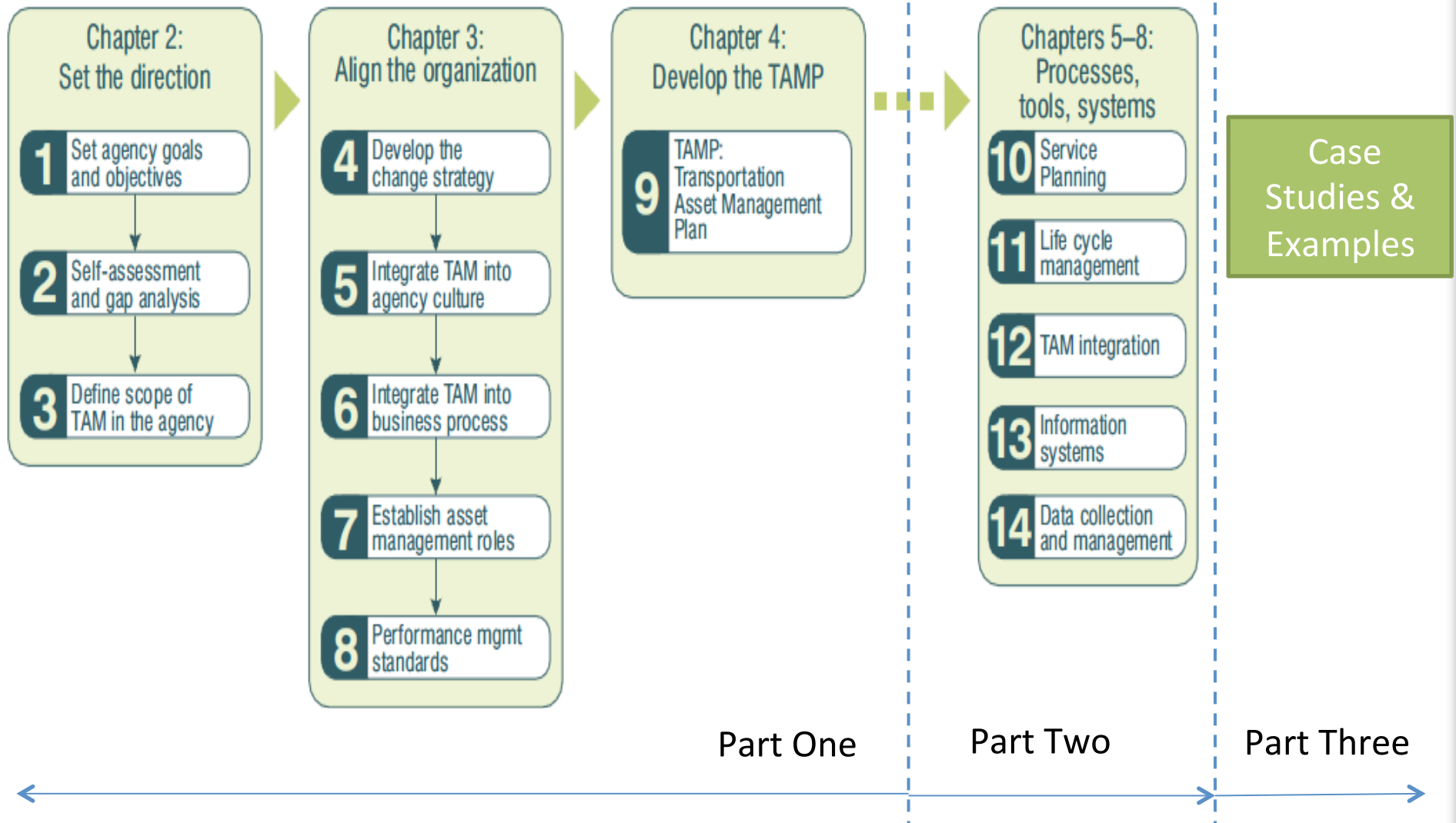


Figure 1.2, page 1-8

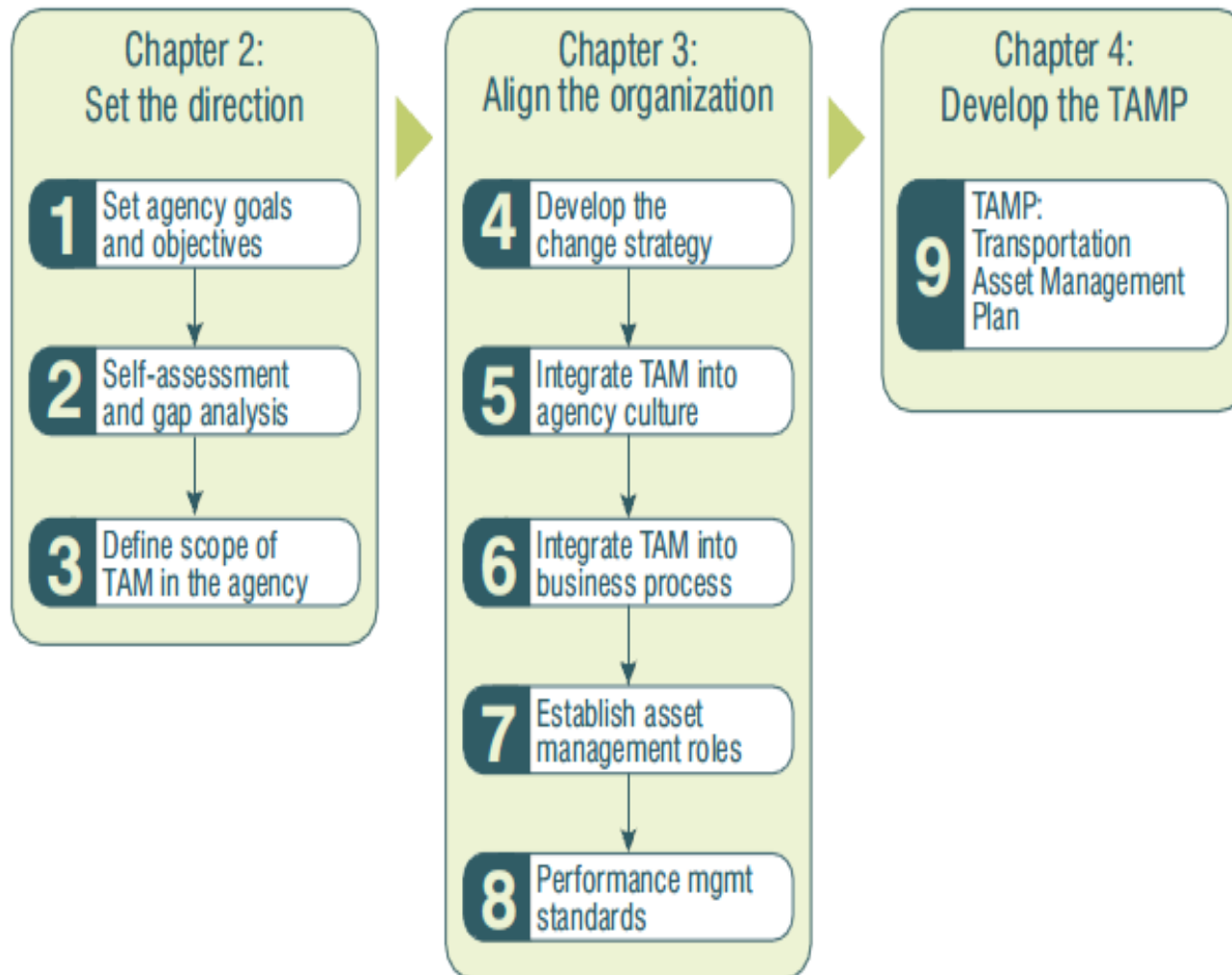
AASHTO 2011 Transportation Asset Management Guide – A Focus on Implementation

# Guide Layout



# Guide Structure: Part 1

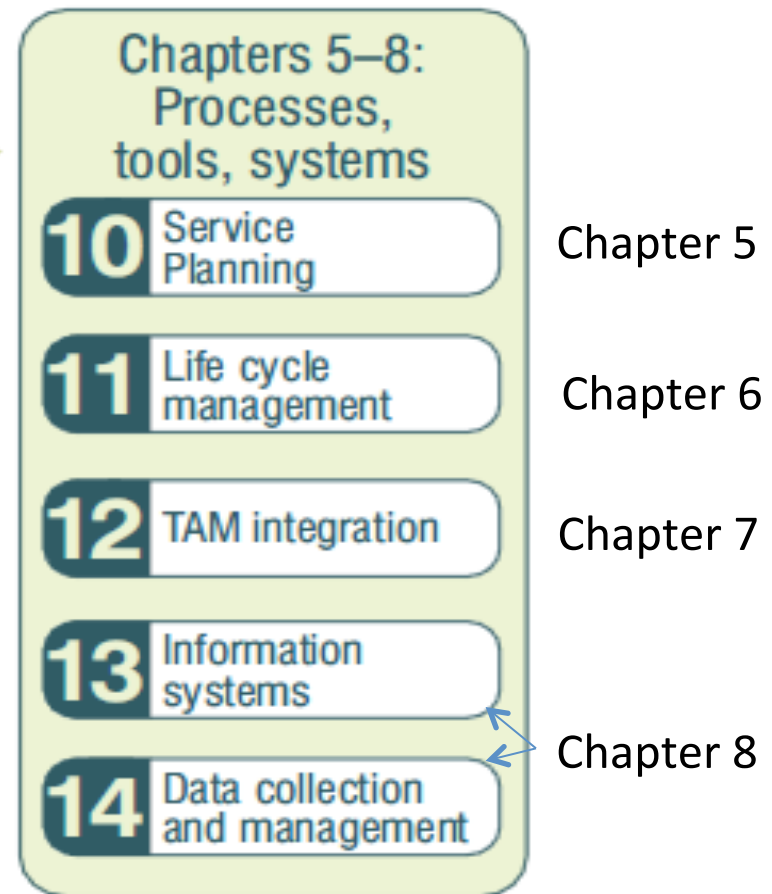
- Getting Started & Developing the TAMP



# Guide Structure: Part 2



- Processes, Tools, & Data to Support TAM



# Guide Structure: Part 3



- Case Studies & Examples
  - Gap Analysis Spreadsheet (UPDATED)
  - Colorado Case Study
  - Missouri Case Study
  - New Zealand Case Study
  - Wyoming Case Study
  - Glossary
  - References

# Chapter Overview



Content

Chapter 1  
An Overview  
to the Guide

- Why TAM? (Section 1.1)  
Community and political needs  
TAM is a business model
- About the Guide (Section 1.2)  
Aims  
Audience  
Implementation steps  
Using the guide
- Guide Structure (Section 1.3)  
Chapter-by-chapter summary
- TAM Concepts (Section 1.4)  
Understanding asset management  
TAM benefits  
TAM and agency funding  
Life-cycle asset management  
Effective TAM in practice  
TAM evolution

## Summary

This chapter introduces the *AASHTO Transportation Asset Management (TAM) Implementation Guide* and describes how it is intended to be used. The *AASHTO Transportation Asset Management Guide*, published in 2002, establishes definitions and a strategic framework for asset management. This guide, the *AASHTO TAM Implementation Guide*, focuses on the practical steps for successful implementation.

The guide is relevant to all levels in the organization, from elected officials to executive and senior management to practitioners.

The guide presents limited theory, which is addressed thoroughly in other publications, many of which the guide references. Rather, it focuses on approaches that an agency can take and on the lessons that come from the practical experience of agencies that are implementing asset management today.

Throughout the guide, emphasis areas summarizing key content for executive and senior management are prefaced by "For the executive." Similarly, a summary of what middle management and practitioners can expect to get from the guide is prefaced by "For practitioners."

Summary

The early chapters of this guide focus on leadership of TAM implementation, goal and objective setting, creating alignment within the organization, and documentation of the asset management plan. These are the most important chapters for the executive and senior management. While the remaining chapters are more technically oriented, an appreciation of each of the topic areas is valuable in understanding the wide scope of TAM's business processes, systems, and data requirements.

TAM is a business model, a decision support system, and a management approach which can be used across an agency to deliver corporate goals and objectives. TAM is not just a tool or "an end in itself."

Key TAM terms and concepts in practice are explained, and the guide shows how asset management adds value by integrating and enhancing agency activities.

Ultimately this guide is about organizational change and building a culture that supports continuous improvement and that is focused and measured based on performance of its mission. The *AASHTO TAM Implementation Guide* fills in the gaps between an agency's mission as the public understands it, and the nuts and bolts of mission accomplishment by means of transportation assets.

## For the Executive

Successful implementation of Transportation Asset Management (TAM) is fundamentally about good management, effective leadership, and achieving the right organizational culture. It does not happen overnight, and requires consistent direction, focus, and attention over time. This guide describes the key tasks as a "step-by-step" sequence that an agency can pick up and act upon.

While this guide is primarily targeted at state DOTs, it is also relevant to any agency managing transportation assets—highways, local roads networks, or transit facilities.

- An agency using this guide to implement TAM should involve all levels within the organization, from the executive through those involved in program delivery. Ideally, TAM should be an accepted way of doing business at all levels.
- The guide addresses key questions confronting agencies today, including how TAM can help with
  - cross-silo or multi-modal programming, transcending ingrained funding and operational "silos";
  - setting cross-silo goals and objectives to deliver better outcomes, reduce costs, and maintain or improve service standards; and managing resources provided by other agencies and allocated within "silos," such as federal funds.

The last point links closely to the question of optimal use of the pool of funds available to an agency. As different funding sources are often specifically allocated to different activities by formulas, an agency needs to make a strong business case to the funding provider if it wants more flexibility in making re-allocations and trade-offs. Political decisions may also need to be made. TAM can support the business case and the political environment, by providing better information and greater certainty based on an assessment of all the relevant factors, such as service standards, asset condition and performance, future demand, engineering needs, economic analysis, and financial planning.

## For Practitioners

As well as providing a wide perspective of TAM through the early chapters, the guide offers the practitioner a wealth of practical information and guidance. Its modular structure, particularly for Chapters 5 to 8, is intended to provide the reader an easy to access list of topic areas to assist with day-to-day problem solving, direction, or further study.

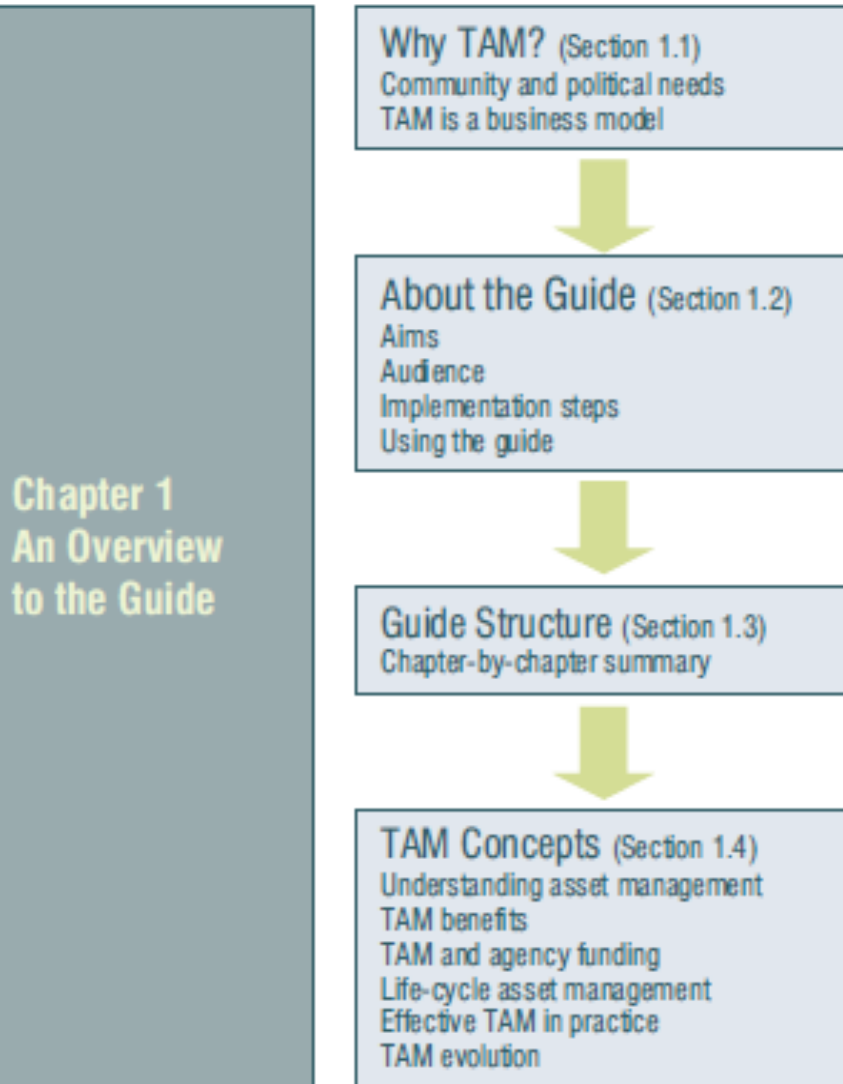
TAM helps in better managing assets; provides support for decision making; provides the tools to make the right choices consistently, efficiently, and in a timely manner; and both encourages and provides the tools for planning, programming, and budgeting.

Practitioner Information

Executive Information



# Chapter 1 Content



# Chapter 1 Summary

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# Chapter 1 – Executive Information

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# Chapter 1 – Practitioner Information



## **For Practitioners**

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# AASHTO TAMP Builder and AASHTO TAM Portal

*via NCHRP Project 08-36 (116)  
and NCHRP Project 08-36 (125)*

*Wednesday, December 10, 2014*

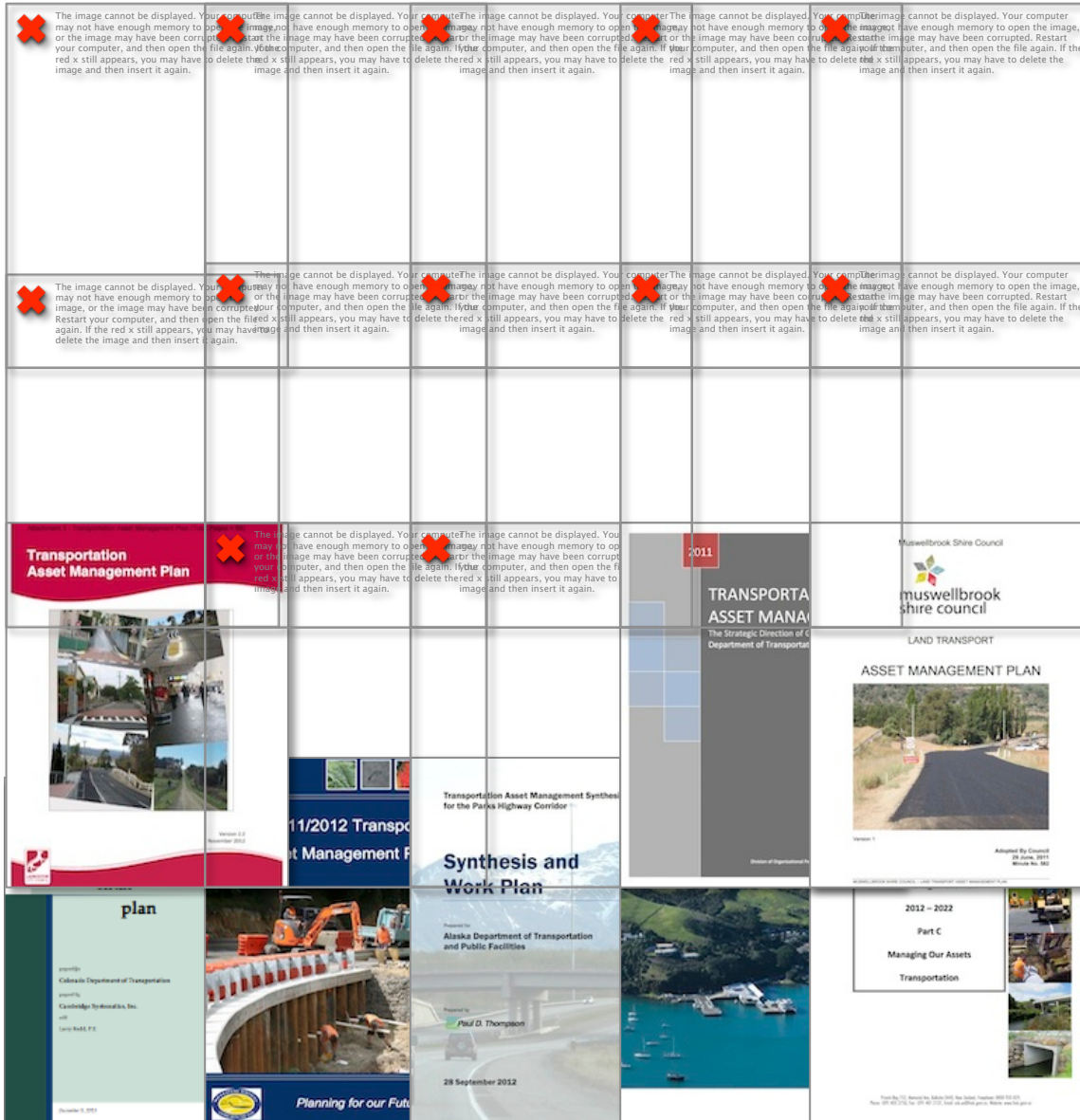
Spy Pond Partners, LLC

# AASHTO TAMP Builder



A web tool that makes it easier to develop your TAMP – using available TAMPs

# AASHTO TAMP Builder



TAMPs are out there — and many more are on the way

# AASHTO TAMP Builder



The TAMP Builder helps you develop your own TAMP by answering questions like...

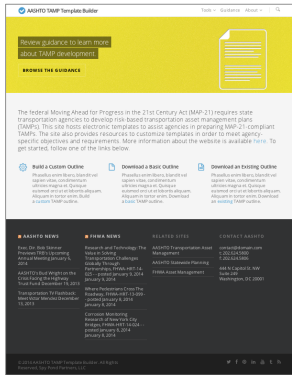


# Using the TAMP Builder

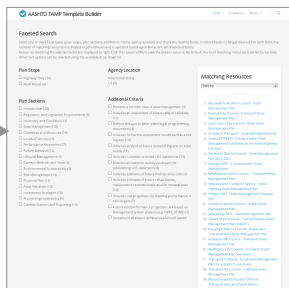
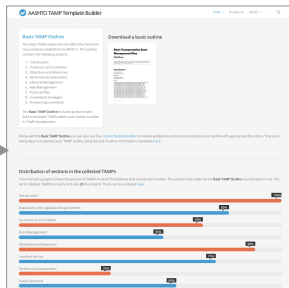
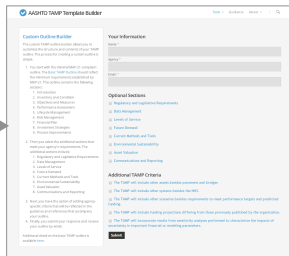
- How can I find examples of specific TAMP sections that meet my agency's needs?
- How can I identify existing TAMPs created by peer agencies?
- Where can I find a basic outline in order to get started developing my agency's TAMP?

# TAMP Builder Concept

## TAMP Builder Home Page



## Sub-pages



## Site functions

Build a custom TAMP outline

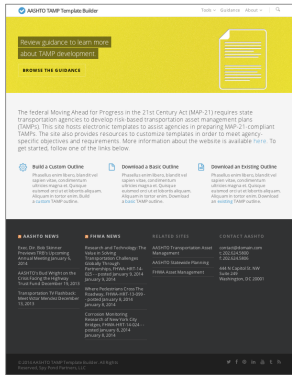
Download a basic TAMP outline

Access an existing TAMP

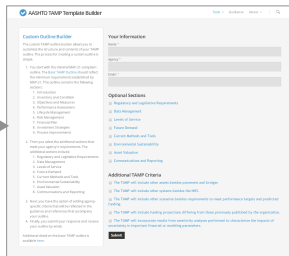
The TAMP Builder site has three basic functions

# TAMP Builder Concept

## TAMP Builder Home Page

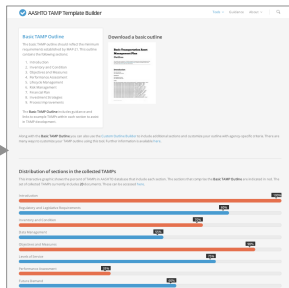


## Sub-pages

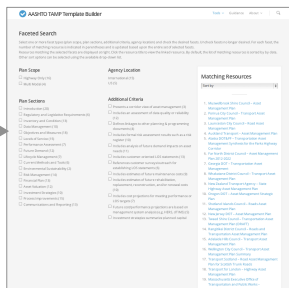


## Site functions

Build a custom TAMP outline

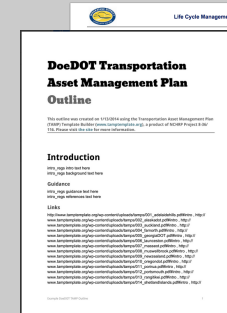


Download a basic TAMP outline

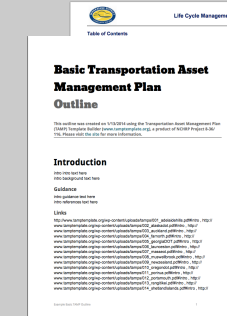


Access an existing TAMP

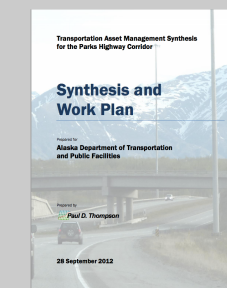
## Products



Custom TAMP outline with guidance linked to existing TAMPs



Basic TAMP outline with guidance linked to existing TAMPs



Existing TAMP that meets your specific search criteria




# Finding examples of TAMP chapters

**AASHTO TAMP Builder** Tools ▾ Guidance About ▾ | 🔍

Welcome to the AASHTO  
Transportation Asset Management  
Plan Builder.

[EXPLORE THE SITE](#)

The federal Moving Ahead for Progress in the 21st Century Act (MAP-21) requires state transportation agencies to develop risk-based transportation asset management plans (TAMPs). This site hosts electronic templates to assist agencies in preparing MAP-21-compliant TAMPs. The site also provides resources to customize templates in order to meet agency-specific objectives and requirements. More information about the website is available [here](#). To get started, follow one of the links below.

-  **Build a Custom Outline**  
The custom TAMP outline builder allows you to easily modify the structure and contents of your TAMP outline by answering a few simple questions. Build a [custom](#) TAMP outline.
-  **Download a Basic Outline**  
The Basic TAMP Outline reflects the minimum requirements established by MAP-21 and includes guidance and links to example TAMPs. Download a [basic](#) TAMP outline.
-  **Download an Existing TAMP**  
Existing TAMPs are stored in an easily-searchable database. You can enter your specific search criteria and view all matching TAMPs. Download an [existing](#) TAMP.

# Finding examples of TAMP chapters

The screenshot shows the AASHTO TAMP Builder web application. The header includes the logo and name 'AASHTO TAMP Builder' on the left, and navigation links for 'Tools', 'Guidance', and 'About' on the right, along with a search icon. The main content area is divided into two columns. The left column features a section titled 'Using the Custom Outline Builder' with a paragraph explaining its purpose and a numbered list of steps. The right column is titled 'Your Information' and contains three input fields: 'Name' (filled with 'Hyun-A Park'), 'Agency' (filled with 'ExDOT'), and 'Email' (filled with 'hpark@exdot.gov'). Below this is a section titled 'Optional Sections' with a list of checkboxes, some of which are checked.

**AASHTO TAMP Builder** Tools ▾ Guidance About ▾ | 🔍

### Using the Custom Outline Builder

The custom TAMP outline builder allows you to customize the structure and contents of your TAMP outline. The process for creating a custom outline is simple.

1. You start with the minimal MAP-21-compliant outline. The [Basic TAMP Outline](#) should reflect the minimum requirements established by MAP-21. This outline contains the following sections:
  1. Introduction
  2. Inventory and Condition
  3. Objectives and Measures
  4. Performance Assessment
  5. Lifecycle Management
  6. Risk Management
  7. Financial Plan
  8. Investment Strategies
  9. Process Improvements
2. Then you select the additional sections that meet your agency's requirements. The additional sections include:
  1. Regulatory and Legislative Requirements
  2. Data Management
  3. Levels of Service

### Your Information

Name \*  
Hyun-A Park

Agency \*  
ExDOT

Email \*  
hpark@exdot.gov

### Optional Sections

- Regulatory and Legislative Requirements
- Data Management
- Levels of Service
- Future Demand
- Current Methods and Tools
- Environmental Sustainability
- Asset Valuation
- Communications and Reporting

# Finding examples of TAMP chapters

The screenshot shows the AASHTO TAMP Builder website. At the top left is the logo with a checkmark and the text "AASHTO TAMP Builder". To the right are navigation links: "Tools", "Guidance", and "About". A search icon is in the top right corner. The main content area is divided into two columns. The left column contains a list of steps: "7. Asset Valuation", "8. Communications and Reporting", "3. Next, you have the option of adding agency-specific criteria that will be reflected in the guidance and references that accompany your outline.", and "4. Finally, you submit your response and receive your outline by email." Below this list is a link: "Additional detail on the basic TAMP outline is available [here](#)." The right column contains two checkboxes with blue text: " The TAMP will include funding projections differing from those previously published by the organization." and " The TAMP will incorporate results from sensitivity analyses performed to characterize the impacts of uncertainty in important financial or modeling parameters." Below these is a blue "Submit" button.

SITE STATS	LATEST DOCUMENTS	RELATED SITES	CONTACT AASHTO
As of April 23rd, 2014 the database includes 20 documents: 5 domestic TAMPs 15 international TAMPs	Porirua City Council – Transport Asset Management Plan Launceston City Council – Road Asset Management Plan	AASHTO Transportation Asset Management AASHTO Statewide Planning FHWA Asset Management	contact@domain.com t: 202.624.5800 f: 202.624.5806 444 N Capitol St. NW

# Finding examples of TAMP chapters

The screenshot shows the AASHTO TAMP Builder website. At the top left is the logo 'AASHTO TAMP Builder' with a checkmark icon. At the top right are navigation links: 'Tools', 'Guidance', 'About', and a search icon. The main content area features a large 'Thank You!' message in bold, followed by the text 'Your custom TAMP outline will be delivered to the email address you provided.' Below this is a blue button labeled 'BACK TO THE HOME PAGE'. The footer is dark grey and contains four columns of information: 'SITE STATS', 'LATEST DOCUMENTS', 'RELATED SITES', and 'CONTACT AASHTO'. The 'SITE STATS' column lists document counts as of April 23rd, 2014. The 'LATEST DOCUMENTS' column lists three recent documents. The 'RELATED SITES' column lists three external links. The 'CONTACT AASHTO' column provides contact information including email, phone, and fax numbers, and a physical address. At the bottom left of the footer is the copyright notice: '© 2014 AASHTO TAMP Builder. All Rights Reserved, Spy Pond Partners, LLC'. At the bottom right are social media icons for Twitter, Facebook, Pinterest, LinkedIn, YouTube, Tumblr, and RSS.

**AASHTO TAMP Builder** Tools ▾ Guidance About ▾ | 🔍

**Thank You!**  
Your custom TAMP outline will be delivered to the email address you provided.

[BACK TO THE HOME PAGE](#)

**SITE STATS**

As of April 23rd, 2014 the database includes  
20 documents:

- 5 domestic TAMPs
- 15 International TAMPs
- 16 highway-only TAMPs
- 4 multimodal TAMPs

**LATEST DOCUMENTS**

- Porirua City Council – Transport Asset Management Plan
- Launceston City Council – Road Asset Management Plan
- Auckland Transport – Asset Management Plan

**RELATED SITES**

- AASHTO Transportation Asset Management
- AASHTO Statewide Planning
- FHWA Asset Management

**CONTACT AASHTO**

contact@domain.com  
t: 202.624.5800  
f: 202.624.5806

444 N Capitol St. NW  
Suite 249  
Washington, DC 20001

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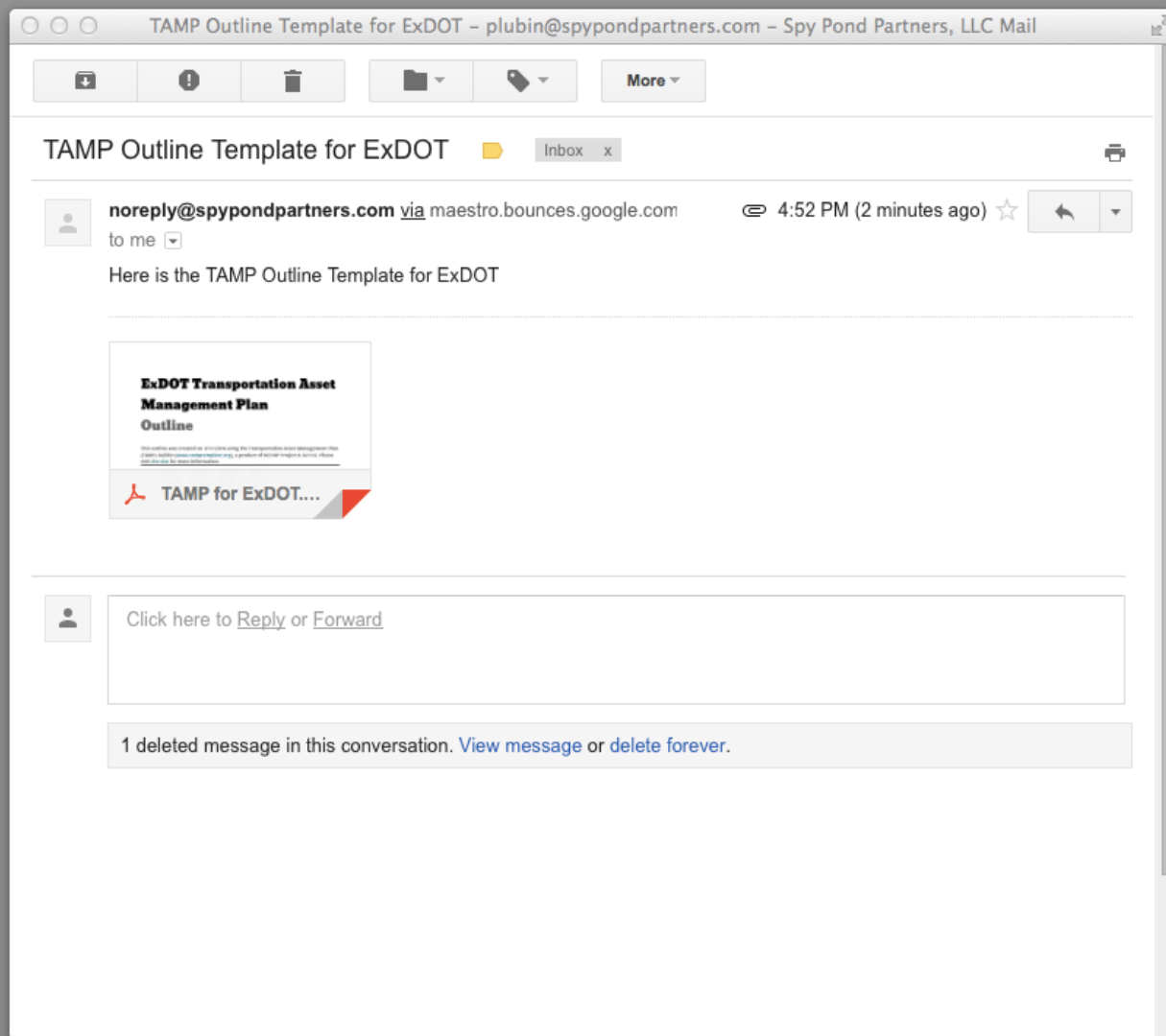
[Twitter](#) [Facebook](#) [Pinterest](#) [LinkedIn](#) [YouTube](#) [Tumblr](#) [RSS](#)

# Finding examples of TAMP chapters





# Finding examples of TAMP chapters



# Finding examples of TAMP chapters

The screenshot displays a Google Drive interface. On the left, the 'My Drive' sidebar is visible, showing a list of folders and files, including 'TAM', 'MnD', 'TES', and 'MinT'. The main content area shows a PDF document titled 'ExDOT Transportation Asset Management Plan Outline'. The document content includes:

## ExDOT Transportation Asset Management Plan Outline

This outline was created on 3/11/2014 using the Transportation Asset Management Plan (TAMP) Builder ([www.tamplate.org](http://www.tamplate.org)), a product of NCHRP Project 8-36/116. Please visit the site for more information.

### Introduction

The Introduction section of your TAMP orients your reader to the purpose, goals and contents of the document. It includes an overview of your agency's mission and goals, and a high level description of your agency's assets and their role in serving your customers, creating vital communities, and supporting the economy. You may want to include an executive summary as part of your Introduction section.

### Background

The introductory section allows the reader to quickly review the purpose of your TAMP, understand the mission and goals of your agency, find a snapshot of the assets that your agency manages, and learn what can be found inside the document. The section should orient your readers so that they can easily find a particular section of the document, if that is what they are seeking. It also provides details about other relevant documents and how they might be linked to the TAMP. Finally, the introductory section includes an overview of the process for developing the TAMP, and ongoing implementation and

At the bottom of the document viewer, the file name 'TAMP for ExDOT.pdf' is shown, along with a 'View all' button and a '1 of 12' indicator. The right sidebar shows a list of recent activity, including 'You uploaded an item' and 'You edited an item'.

# Finding examples of TAMP chapters

## What to include

The following may be included in the Regulatory and Legislative Requirements Section of your TAMP:

- Description of Federal, state and any other requirements related to TAMP development, updating and reporting

## References

- FHWA's MAP-21 Asset Management Questions and Answers available on FHWA's website at <http://www.fhwa.dot.gov/map21/qandas/qaassetmgmt.cfm>

## Links to Example TAMPs

- [002\\_alaskadot.pdf#regs](#)

Example ExDOT TAMP Outline

3

- [004\\_farnorth.pdf#regs](#)
- [005\\_georgiaDOT.pdf#regs](#)
- [006\\_launceston.pdf#regs](#)
- [008\\_muswellbrook.pdf#regs](#)
- [017\\_tweedshire.pdf#regs](#)

TAMP for ExDOT.pdf  
1 of 12

Open

# Finding examples of TAMP chapters

## 4.8 Statutory Requirements

Statutory requirements impact on the way in which Far North District Council operates to meet its obligations to its customers. The key legislation relating to the management of transportation assets are listed below:

### 4.8.1 National

- **Land Transport Management Act 2003**, which requires council to:
  - Provide a integrated approach to land transport funding and management,
  - Improve social and environmental responsibility in funding, planning and management of land transport
  - Improve long term planning and investment in land transport
  - Ensure land transport funding is cost effective
  - Improve flexibility of funding including enabling land transport infrastructure to be built on a tolled or public/private partnership basis or combination of these
  - The LTMA also requires the Council to consult with a wide range of parties when developing the annual land transport programme and requires that the programme is consistent with the Regional Land Transport Strategy (RLTS).
- **Traffic Regulations Act 1976 and Land Transport (Road User) Rules** – this legislation details Road Rules and Regulations to be adhered to and monitored. This affects the

Far North District Council

November 15, 2012

Transportation Activity

OVERVIEW OF THE ASSETS

PART C 4-46

operation and use of transportation assets e.g. signage, speed limits, parking restrictions, installation of traffic signals (if appropriate in the future), and school patrols.

- **National Standards for Transport** - Council refers to the relevant documents contained with Transit New Zealand Standards and Guidelines Manual SP/M/021 Version 2 – August 2005 (Now NZTA). This document contains up-to-date standards and guidelines in current use throughout New Zealand, including international documents.




# Finding existing TAMPs from peer agencies

**AASHTO TAMP Builder** Tools ▾ Guidance About ▾ | 🔍

Use this site to build a MAP-21-compliant transportation asset management plan.

**GET STARTED NOW**

The federal Moving Ahead for Progress in the 21st Century Act (MAP-21) requires state transportation agencies to develop risk-based transportation asset management plans (TAMPs). This site hosts electronic templates to assist agencies in preparing MAP-21-compliant TAMPs. The site also provides resources to customize templates in order to meet agency-specific objectives and requirements. More information about the website is available [here](#). To get started, follow one of the links below.

-  **Build a Custom Outline**  
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-  **Download an Existing TAMP**  
Existing TAMPs are stored in an easily-searchable database. You can enter your specific search criteria and view all matching TAMPs. Download an [existing](#) TAMP.

# Finding existing TAMPs from peer agencies

**AASHTO TAMP Builder** Tools Guidance About

## Faceted Search

Select one or more facet types (plan scope, plan sections, additional criteria, agency location) and check the desired facets. Uncheck facets no longer desired. For each facet, the number of matching recourse is indicated in parentheses and is updated based upon the entire set of selected facets.

Resources matching the selected facets are displayed at right. Click the resource title to view the linked resource. By default, the list of matching resources is sorted by by date. Other sort options can be selected using the available drop-down list.

As of **March 11th, 2014** the set of collected TAMPs includes **20** documents. There are **5** domestic TAMPs and **15** international TAMPs.

### Modal Scope

- Highway Only (16)
- Multimodal (4)

### Asset Scope

- Includes other assets (20)

### Agency Location

- International (15)
- US (5)

### Plan Sections

- Introduction (20)
- Regulatory and Legislative Requirements (6)
- Inventory and Condition (13)
- Data Management (10)

### Publication Date

2005 — 2012

Reset

### Additional Criteria

- Presents a corridor view of asset management (3)
- Includes an assessment of data quality or reliability (12)
- Defines linkages to other planning & programming documents (4)
- Includes formal risk assessment results such as a risk register (10)

### Matching Resources

Sort by [dropdown] RESET ALL

1. [Porirua City Council – Transport Asset Management Plan](#)
2. [Launceston City Council – Road Asset Management Plan](#)
3. [Auckland Transport – Asset Management Plan](#)
4. [Alaska DOT&PF – Transportation Asset Management Synthesis for the Parks Highway Corridor](#)
5. [Far North District Council – Asset Management Plan 2012-2022](#)
6. [Muswellbrook Shire Council – Asset Management Plan](#)
7. [Georgia DOT – Transportation Asset Management](#)
8. [Whakatane District Council – Transport Asset Management Plan](#)
9. [New Zealand Transport Agency – State Highway Asset Management Plan](#)

# Finding existing TAMPs from peer agencies

**AASHTO TAMP Builder** Tools ▾ Guidance About ▾ | 🔍

## Faceted Search

Select one or more facet types (plan scope, plan sections, additional criteria, agency location) and check the desired facets. Uncheck facets no longer desired. For each facet, the number of matching recourse is indicated in parentheses and is updated based upon the entire set of selected facets.

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As of **March 11th, 2014** the set of collected TAMPs includes **20** documents. There are **5** domestic TAMPs and **15** international TAMPs.

### Modal Scope

Highway Only (3)

### Asset Scope

Includes other assets (3)

### Agency Location

International (1)  
US (2)

### Plan Sections

Introduction (3)  
 Regulatory and Legislative Requirements (1)  
 Inventory and Condition (1)  
 Data Management (3)  
 Objectives and Measures (3)

### Publication Date

2011 — 2012

### Additional Criteria

Presents a corridor view of asset management (1)  
 Includes an assessment of data quality or reliability (3)  
 Defines linkages to other planning & programming documents (1)  
 Includes formal risk assessment results such as a risk register (1)  
 Includes analysis of future demand impacts on asset

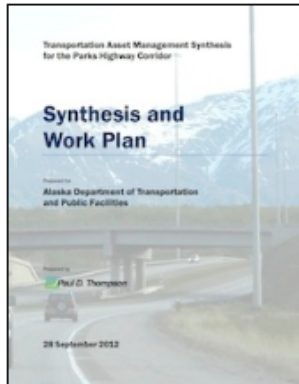
### Matching Resources

Date (Newest)

1. [Porirua City Council – Transport Asset Management Plan](#)
2. [Alaska DOT&PF – Transportation Asset Management Synthesis for the Parks Highway Corridor](#)
3. [Oregon DOT – Asset Management Strategic Plan](#)

# Finding existing TAMPs from peer agencies

## Alaska DOT&PF – Transportation Asset Management Synthesis for the Parks Highway Corridor



Published: 2012

The Alaska DOT&PF – Transportation Asset Management Synthesis for the Parks Highway Corridor is available [here](#).

Document overview

Document summary

**This document includes the following sections:** Data Management, Introduction, Levels of Service, Objectives and Measures, Performance Assessment, Regulatory and Legislative Requirements.

**This document meets the following additional criteria:**

- Asset valuation included
- Future cost/performance projections are based on management system analysis (e.g. HERS, dTIMS)
- Includes an assessment of data quality or reliability
- Includes cross-asset resource allocation method
- Includes customer-oriented LOS statements
- Presents a corridor view of asset management.

**The modal scope of this document is:** [Highway Only](#).

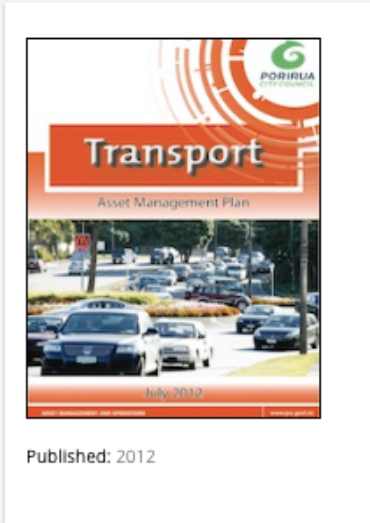
**The asset scope of this document is:** [Includes other assets](#).

**External link:**



# Finding existing TAMPs from peer agencies

## Porirua City Council – Transport Asset Management Plan



Published: 2012

The Porirua City Council – Transport Asset Management Plan is available [here](#).

Document overview

Document summary

**This document includes the following sections:** Asset Valuation, Data Management, Financial Plan, Future Demand, Introduction, Levels of Service, Objectives and Measures, Risk Management.

**This document meets the following additional criteria:**

- Asset valuation included
- Defines linkages to other planning & programming documents
- Includes an assessment of data quality or reliability
- Includes analysis of future demand impacts on asset needs
- Includes cost projections for meeting performance or LOS targets
- Includes current asset age or remaining life information
- Includes current asset condition information
- Includes customer-oriented LOS statements
- Includes estimates of future maintenance costs
- Includes estimates of future rehabilitation, replacement, reconstruction, and/or renewal costs
- Includes formal risk assessment results such as a risk register
- References customer surveys/outreach for establishing LOS statements.

**The modal scope of this document is:** [Highway Only](#).

**The asset scope of this document is:** [Includes other assets](#).

**External link:** <http://www.pcc.govt.nz/DownloadFile/Publications/Asset-Management-Plans/PCC-Asset-Management-Plan---Transport>

# Finding existing TAMPs from peer agencies

The screenshot displays the AASHTO TAMP Builder interface. At the top left, the logo for 'AASHTO TAMP Builder' is visible. On the top right, there are navigation links for 'Tools', 'Guidance', and 'About', along with a search icon. The main content area features the title 'Porirua City Council – Transport Asset Management Plan'. Below the title, a text block states: 'The Porirua City Council – Transport Asset Management Plan is available [here](#).' Underneath this text are two buttons: 'Document overview' and 'Document summary'. The 'Document summary' button is highlighted in blue. To the left of the text is a thumbnail image of the document cover, which includes the Porirua City Council logo, the title 'Transport Asset Management Plan', and a photograph of a road with cars. Below the thumbnail, it says 'Published: 2012'. The 'Document summary' text reads: 'Document summary: The TAMP covers the whole-life cost approach, life cycle delivery, asset knowledge systems, the organizational structure, risk, and financial requirements associated with asset management. The plan details the relationship between the TAMP and other agency planning documents, distinguishing the asset management plan as a document that links Council inputs, such as community outcomes, levels of service, regional plans, and growth projections, with other planning efforts.'

# Finding a basic outline to get started




The screenshot shows the AASHTO TAMP Builder website. At the top left is the logo "AASHTO TAMP Builder" with a checkmark icon. To the right are navigation links for "Tools", "Guidance", and "About", along with a search icon. The main content area has a yellow background. On the left, there is a text box that says "Review guidance to learn more about TAMP development." Below this is a button labeled "BROWSE THE GUIDANCE". On the right, there is a white icon of a document with horizontal lines. Below the yellow section, there is a paragraph of text explaining the purpose of the site. At the bottom, there are three columns of content, each with an icon and a title: a gear icon for "Build a Custom Outline", a document icon for "Download a Basic Outline", and another document icon for "Download an Existing TAMP". Each column contains a short description of the service.

**AASHTO TAMP Builder** Tools ▾ Guidance About ▾ | 🔍

Review guidance to learn more about TAMP development.

**BROWSE THE GUIDANCE**

The federal Moving Ahead for Progress in the 21st Century Act (MAP-21) requires state transportation agencies to develop risk-based transportation asset management plans (TAMPs). This site hosts electronic templates to assist agencies in preparing MAP-21-compliant TAMPs. The site also provides resources to customize templates in order to meet agency-specific objectives and requirements. More information about the website is available [here](#). To get started, follow one of the links below.

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# Finding a basic outline to get started

The screenshot displays the AASHTO TAMP Builder website. The main content area is titled "Basic TAMP Outline" and includes a list of sections: Introduction, Inventory and Condition, Objectives and Measures, Performance Assessment, Lifecycle Management, Risk Management, Financial Plan, Investment Strategies, and Process Improvements. To the right, there is a "Download a basic outline" button and a preview of the "Basic Transportation Asset Management Plan Outline" document. Below this, a paragraph explains that the outline includes guidance and links to example TAMPs. Further down, a section titled "Distribution of sections in the collected TAMPs" features a horizontal bar chart showing the percentage of TAMPs in the database that include each section. The chart indicates that 100% of TAMPs include the Introduction, 80% include Regulatory and Legislative Requirements, 70% include Inventory and Condition, and 55% include Data Management. The sections corresponding to the Basic TAMP Outline (Introduction, Inventory and Condition, and Data Management) are highlighted in red in the original image.

**Basic TAMP Outline**

The **Basic TAMP Outline** should reflect the minimum requirements established by MAP-21. This outline contains the following sections:

1. Introduction
2. Inventory and Condition
3. Objectives and Measures
4. Performance Assessment
5. Lifecycle Management
6. Risk Management
7. Financial Plan
8. Investment Strategies
9. Process Improvements

The **Basic TAMP Outline** includes guidance and links to example TAMPs within each section to assist in TAMP development.

Along with the **Basic TAMP Outline** you can also use the **Custom Outline Builder** to include additional sections and customize your outline with agency-specific criteria. There are many ways to customize your TAMP outline using this tool. Further information is available [here](#).

### Distribution of sections in the collected TAMPs

Most of the TAMPs in the AASHTO database contain a number of sections that are not included in the basic outline. This interactive graphic shows which sections are common and which are rare - It charts the percent of TAMPs in the database that include each section. In this graphic, the sections that comprise the **Basic TAMP Outline** are indicated in red. As of **April 23rd, 2014** the set of collected TAMPs includes **20** documents. These can be accessed [here](#).

Section	Percentage of TAMPs
Introduction	100%
Regulatory and Legislative Requirements	80%
Inventory and Condition	70%
Data Management	55%

# Finding a basic outline to get started

## **Basic Transportation Asset Management Plan Outline**

This outline was created on 3/19/2014 using the Transportation Asset Management Plan (TAMP) Builder ([www.tamplate.org](http://www.tamplate.org)), a product of NCHRP Project 8-36/116. Please visit [the site](#) for more information.

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### **Introduction**

The Introduction section of your TAMP orients your reader to the purpose, goals and contents of the document. It includes an overview of your agency's mission and goals, and a high level description of your agency's assets and their role in serving your customers, creating vital communities, and supporting the economy. You may want to include an executive summary as part of your Introduction section.

### **Background**

The introductory section allows the reader to quickly review the purpose of your TAMP, understand the mission and goals of your agency, find a snapshot of the assets that your agency manages, and learn what can be found inside the document. The section should orient your readers so that they can easily find a particular section of the document, if that is what they are seeking. It also provides details about other relevant documents and how they might be linked to the TAMP. Finally, the introductory section includes an overview of the process for developing the TAMP, and ongoing implementation and updating activities. TAMP development is an iterative process, and therefore it can be challenging to present the relevant sections in final form, in a linear manner and without reference to other sections. An executive summary can be used as a strategy for providing an overview of the final findings, conclusions and recommendations for the plan. An executive summary can be included as part of the introduction, or stand alone as its own section.

### **What to Include**

The following may be included in the Introduction section of your TAMP:

- Executive Summary (or can stand alone as own section)
- Purpose of the Transportation Asset Management Plan

# Next Steps for the TAMP Builder

- Update with information included in NPRMs
- Update with more TAMPs!!
- Improvements and new features based on your feedback

<http://tamptemplate.org>

# AASHTO TAM Portal



A central location that organizes and provides access to a curated set of high-value TAM resources, news, and event listings.

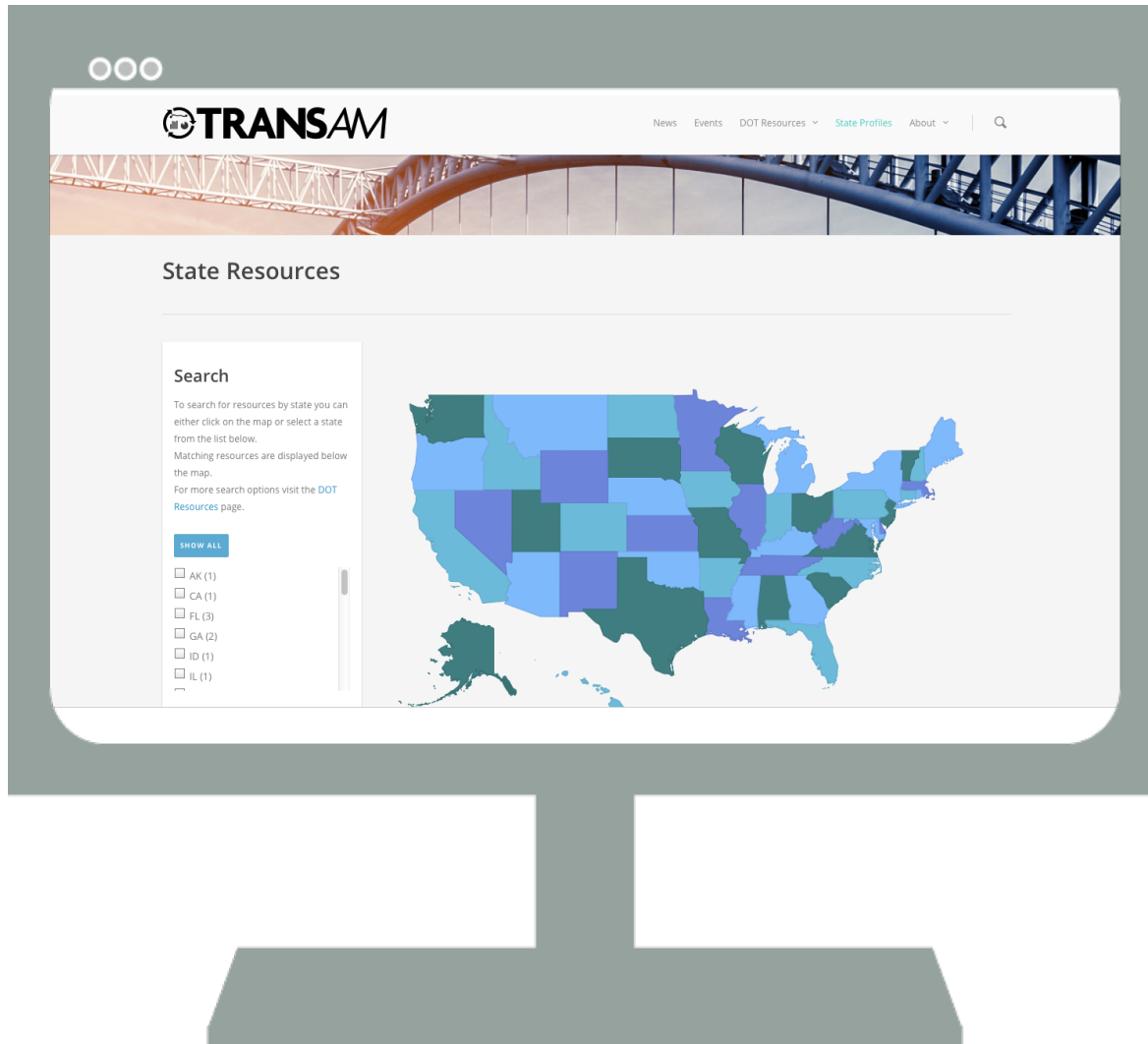
# AASHTO TAM Portal



A searchable database of documents with curated resources indexed by TAM business processes, asset types, audience, and other factors.



# AASHTO TAM Portal



An interactive map to quickly search for resources by state.

# AASHTO TAM Portal



Listings for conferences, meetings, webinars, peer exchanges and other events of interest to the TAM community.

# AASHTO TAM Portal



News and updates from across the TAM community.

# Summary

Available now at:

<http://tamptemplate.org>

<http://tam-portal.com>

**For more info:**

Perry Lubin

[plubin@spypondpartners.com](mailto:plubin@spypondpartners.com)

# Enterprise Risk Management



NCHRP

Enterprise Risk  
Management Guide

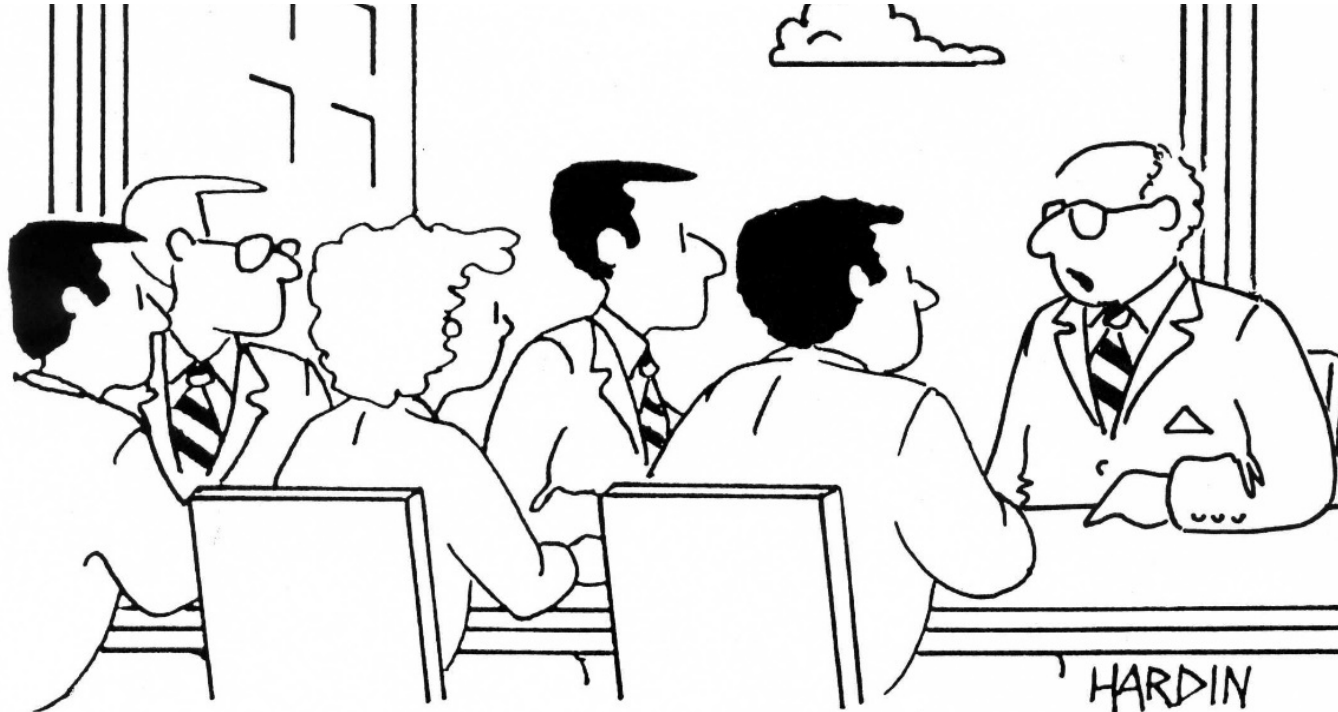
# What Do We Mean by Risk?



- “Risk is the positive or negative effects of uncertainty or variability upon agency objectives.”
- It includes
  - Uncertainty
  - Variability
  - Threats
  - Opportunities



# Opportunity Management



"We've considered every potential risk except the risks of avoiding all risks."

# Risk Management Defined



- “Risk management is the cultures, processes and structures that are directed towards the effective management of potential opportunities and threats.”



# Risk and Performance



- Asset and performance management drive performance
- Risk management is an enabler
- It identifies, mitigates uncertainty to objectives



# Why Manage Risk?



- Risks are inevitable
- If something is inevitable, it's irresponsible to ignore it
- We practice either risk management or crisis management



# MAP-21 Requirements



- Measures for states to assess:
  - IHS and NHS pavements
  - NHS bridges
  - Performance of IHS and NHS
- Risk-based asset management plans
- Safety measures to achieve:
  - Serious injuries per vehicle mile travelled
  - Fatalities per vehicle mile travelled
  - Number of serious injuries
  - Number of fatalities



Federal Funds

Legislature

Model Accuracy

Local Partners

Bid Prices

Project Delivery

Loadings

**10 Year Asset Targets**

- Our plans face uncertainty
- We need to acknowledge that uncertainty



# Risk as Variability



# The Guide: Formalizing Risk

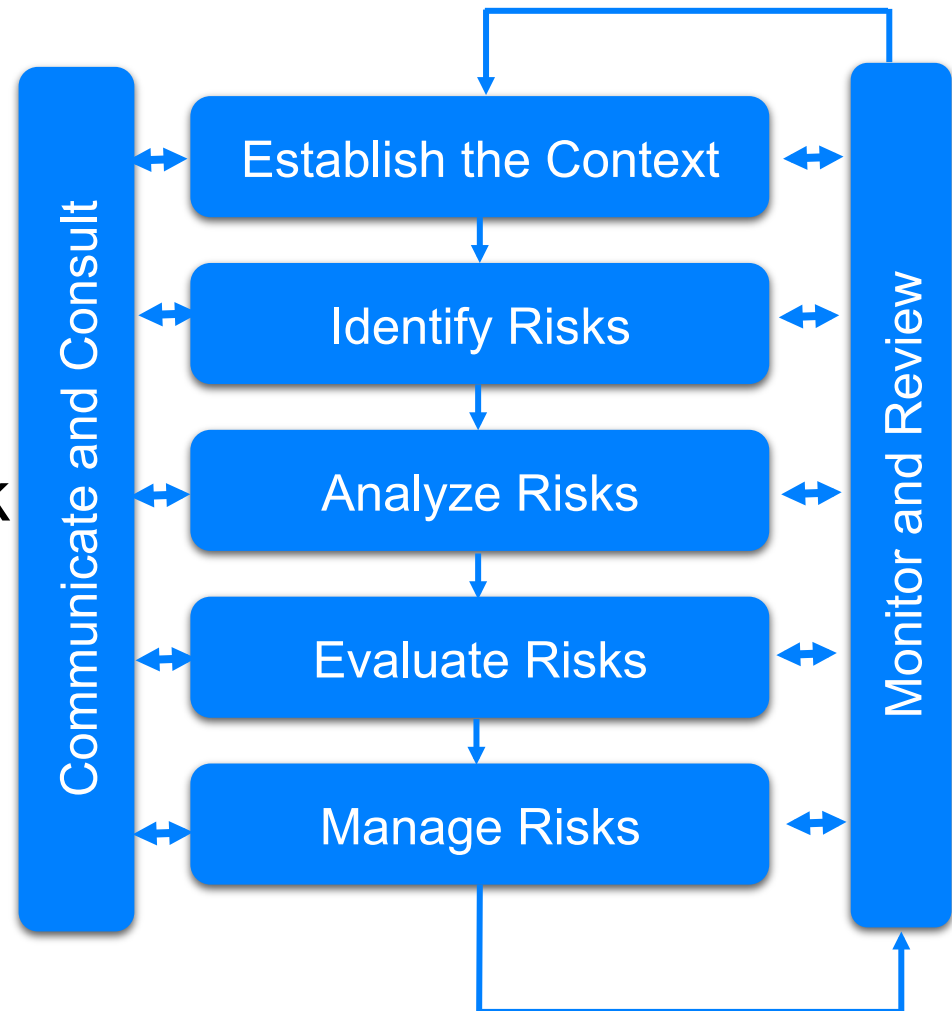


- We all generally manage risks now
- Generally, however, application of risk is episodic or limited to specific projects or tasks
- The guide will support agencies in developing a systematic, comprehensive enterprise risk management program

# Guide Based on ISO



- ISO risk process
  - ISO is International Organization of Standards
  - Based on earlier Australian framework
  - Adopted across Europe and U.S.
  - Guide adopts ISO framework

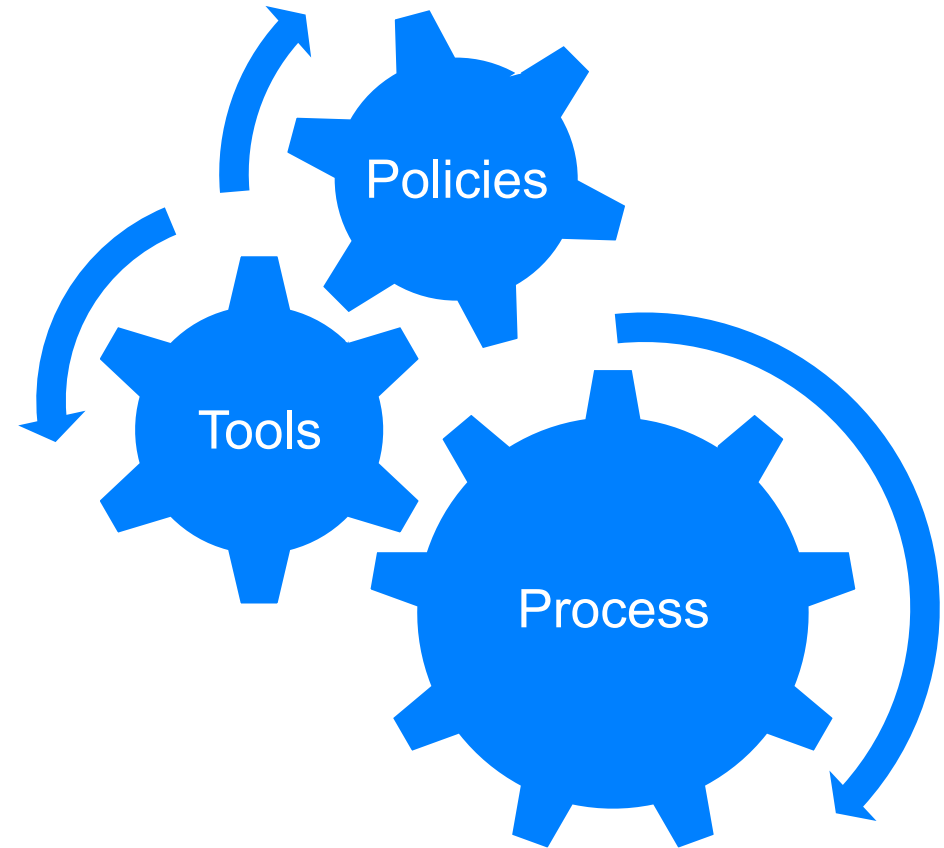




# Elements of the Guide



- Base Enterprise Risk Management in policy
- Give staff the tools
- Create ongoing process to actively manage risks



# Managing Risk at All Levels



- Guide explains how to cascade risk management to all levels of organization
  - Enterprise
  - Program
  - Project
  - Activity



# Responsibilities Assigned



- Strategic Risks
  - CEO, Senior Staff, Commission
- Program Risk
  - Program Managers such as Safety, Pavement, Bridge, IT
- Project Risks
  - Major Project Managers
- Activity Risks
  - Activity managers such as winter operations, data collection, maintenance functions

Table 1 Levels of risk management

Risk Levels	Owners	Types of risks
Strategic Risks	CEO Senior staff Board or commission	Financial risks to agency income
		Operational risks caused by lack of staffing, training or poor performance
		External risks caused by political or outside social issues
		Overall preparedness for disaster response
		Information risks that create department-wide impacts such as outdated management systems
Program Risks	Leaders of major programs such as safety, pavement, bridge, maintenance, IT, project-delivery, human resources	Major regulatory or legal compliance risks
		Performance or operational risks caused by lack of training, execution, resources to effectively deliver the program
		Information risks caused by poor data in the program or inadequate analysis
		Financial risks caused by increasing input or labor prices
		Stakeholder risks caused by contractors, vendors essential to the programs
Project Risks	Project managers	Major project risks if they exceed the level where they can affect an entire program
		Risks to the cost, scope, schedule or quality of projects
		Project impacts upon neighborhoods, environmental compliance
Activity Risks	Activity managers	Performance risks caused by lack of training, equipment, execution
		Cost increases impinging on activity performance
		Risks to execution caused by outside events such as extreme weather

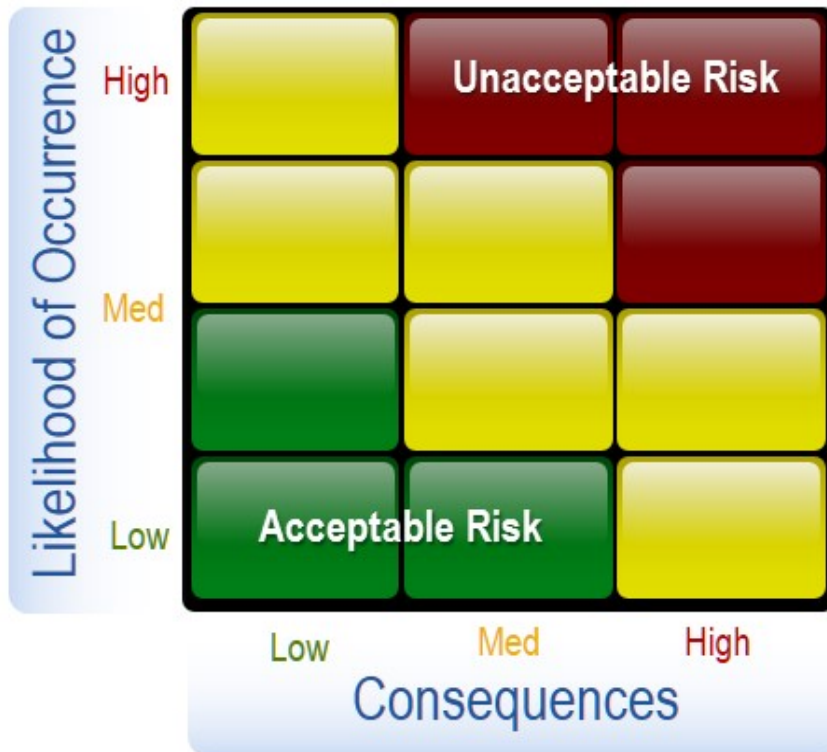
# Tools for Risk Identification



- Provides strategies to identify risks
- Risks come in many forms
- Guide helps to identify, categorize risks
- This feeds understanding of risks



# Risk Analysis Tools

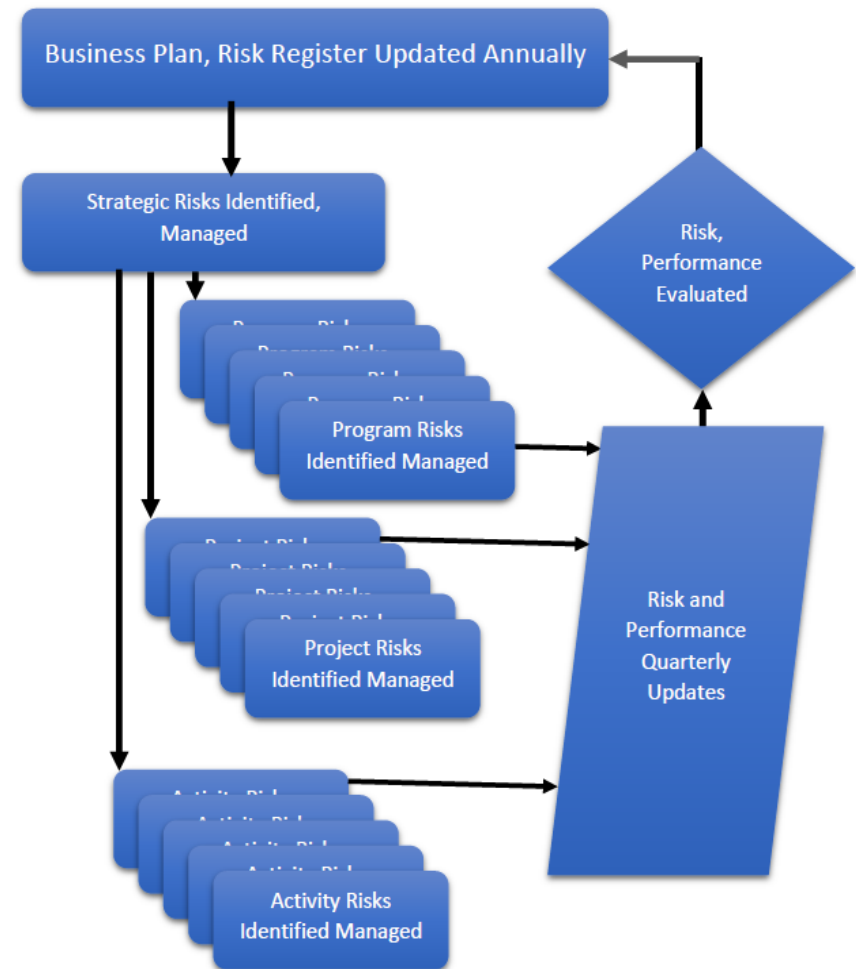


- Guide provides scales for scoring the likelihood and consequence of risks
- Creates common scoring system so disparate risks can be compared

# Cascades Risk Process



- Guide explains how to cascade a process to assess and monitor risks at all levels
- Provides feedback loops to leadership to manage all enterprise risks



# Schedule for the Guide



- Expected as a web document mid-February 2015
- Timing intended to support States' MAP-21 risk efforts
- A quick guide will be provided for executives
- Full guide for practitioners
  - What is risk?
  - How to create a risk program?
  - How to sustain it?

# Phase II




- Second phase will provide additional risk tools
  - Will examine off-the-shelf software for more detailed measurement of risk
  - Will allow more quantified analysis of risk probabilities
  - Will include case studies of risk here and abroad
  - Will assess the state of the practice
  - Due August 2015



# Thank you



Gordon Proctor & Associates  
Starlsis Corp.  
Jeff Roorda & Associates.



# Transportation Asset Management (TAM) Gap Analysis Tool

Developed Under NCHRP 08-90

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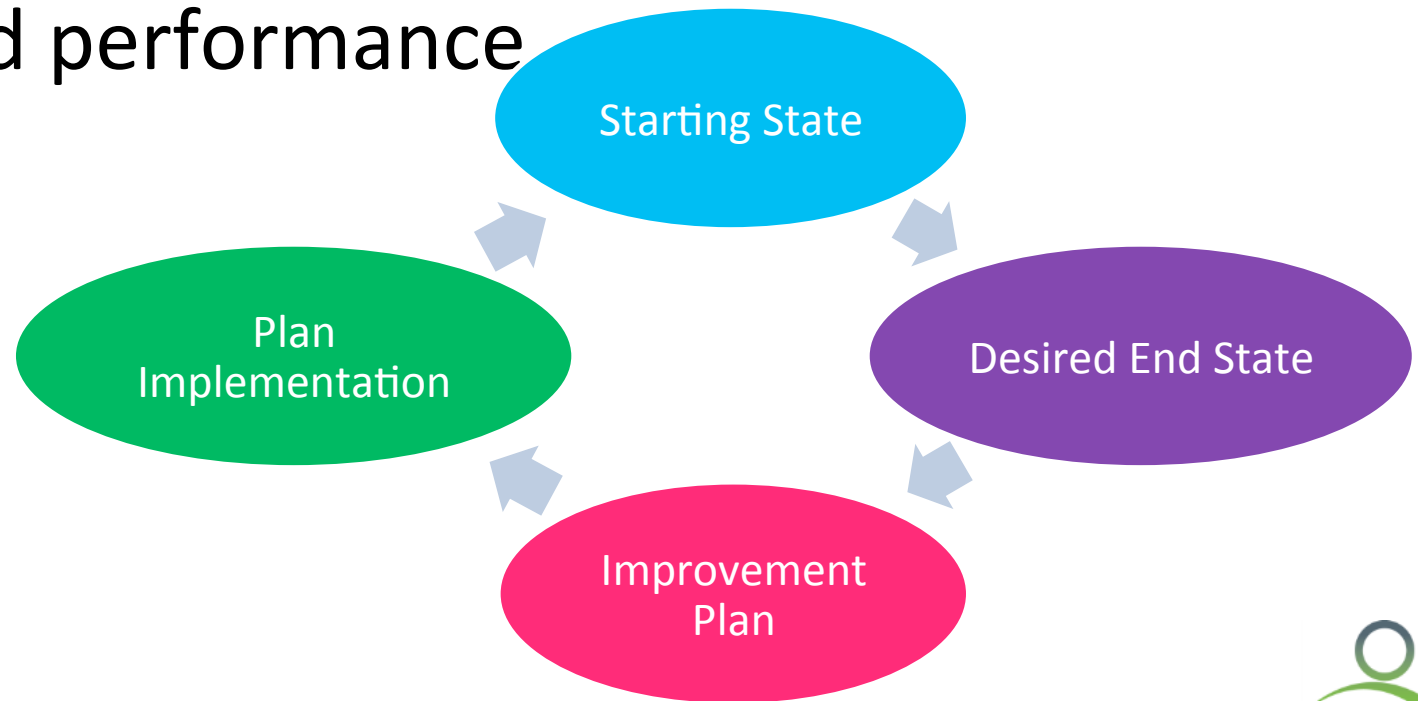
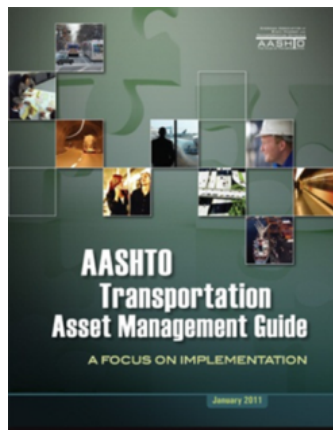
Presented by: Katie Zimmerman, P.E.



providing engineering solutions to improve pavement performance

# Overview - Background

- *AASHTO TAM Guide – A Focus on Implementation* includes a Gap Analysis Tool
  - Provided a framework for identifying and prioritizing gaps between current and desired performance



# Overview – Project Objectives

---

- NCHRP 08-90 sought to:
  - Develop a more useful tool
  - Retain the spreadsheet format
  - Improve the functionality, user-friendliness, and flexibility
  - Incorporate federal legislative requirements



# How A Gap Analysis Tool Can Help

Where are you today?

Where do you want to be?

What gaps exist between the two?



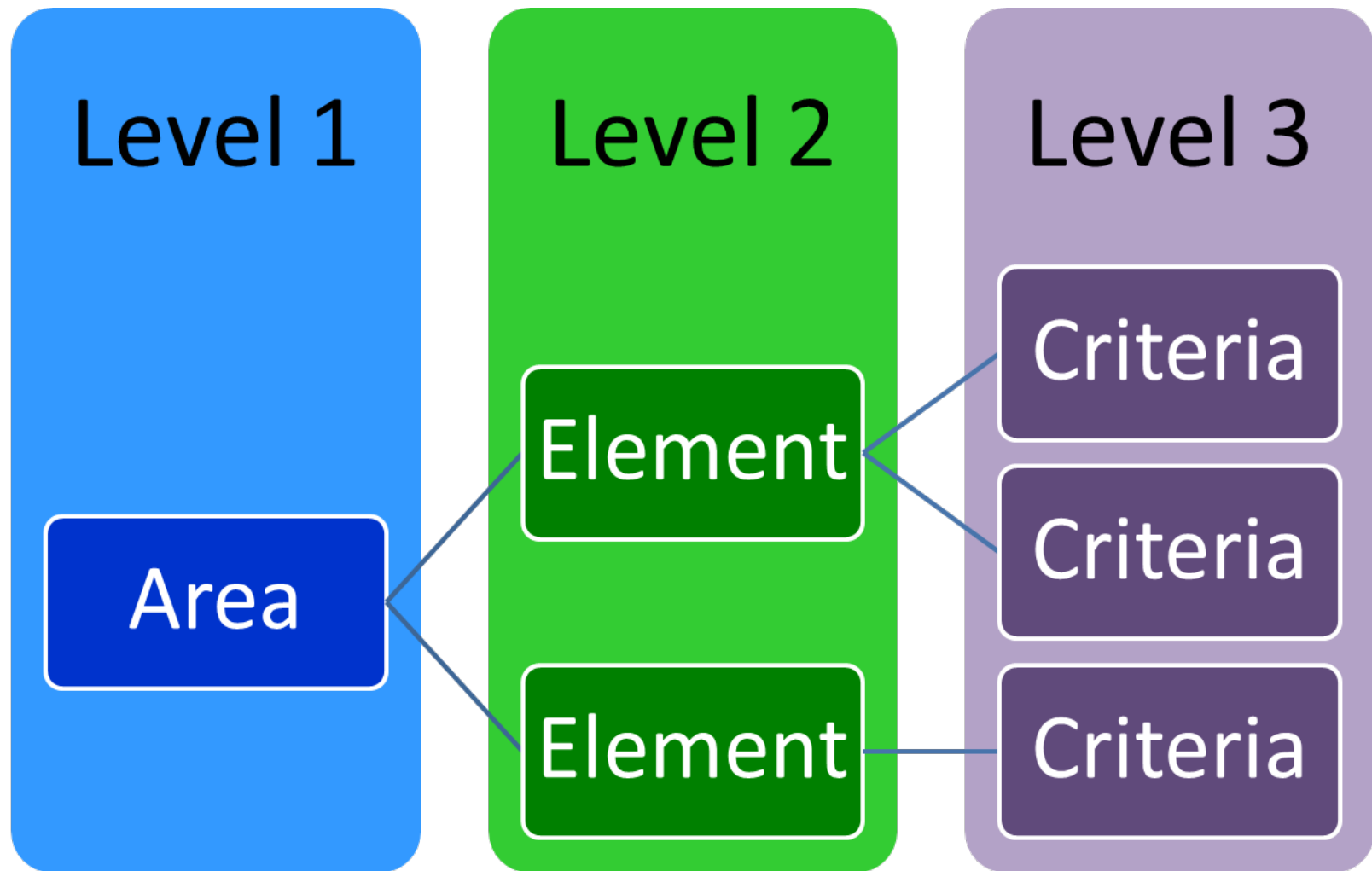
# Gap Analysis Rating Areas

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- Evaluate agency performance against best practice in 8 areas:
  - Policy goals & objectives
  - Asset management practices
  - Planning, programming, & project delivery
  - Data management
  - Information systems
  - Transparency & outreach
  - Results
  - Workforce capacity & development



# Data Structure



# Assessment Areas, Elements, & Criteria

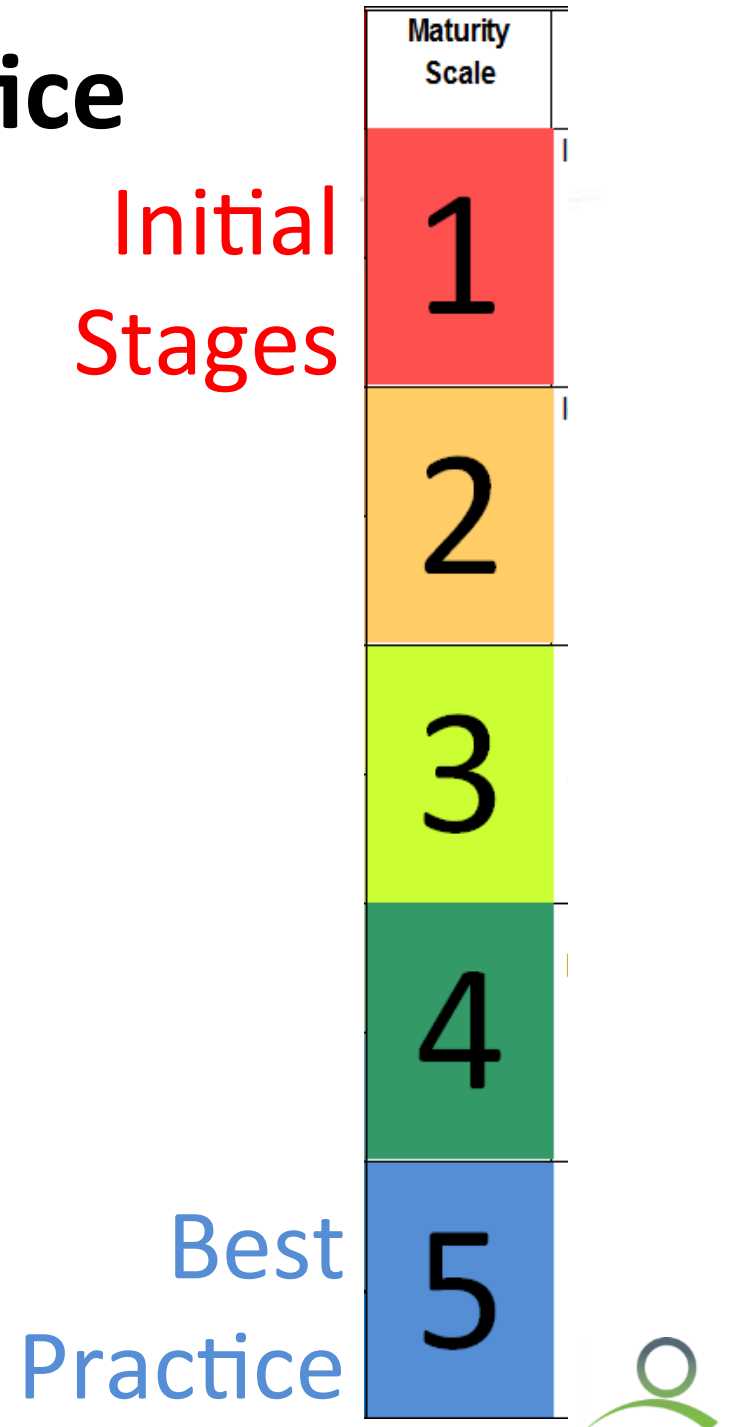
Assessment Areas	Elements (and Criteria(in parenthesis))
1: Policy Goals and Objectives	<ul style="list-style-type: none"> <li>• Goals and Objectives (6)</li> <li>• Agency Policies (6)</li> </ul>
2: Asset Management Practices	<ul style="list-style-type: none"> <li>• TAM Framework (7)</li> <li>• Leadership Support for TAM (5)</li> <li>• Asset Management Plan Development (9)</li> <li>• Lifecycle Management (4)</li> </ul>
3: Planning, Programming, and Project Delivery	<ul style="list-style-type: none"> <li>• Planning and Programming Processes (9)</li> <li>• Performance-Based Management (6)</li> <li>• Resource Allocation (5)</li> <li>• Project Delivery (7)</li> </ul>
4: Data Management	<ul style="list-style-type: none"> <li>• Asset Inventory (9)</li> <li>• Asset Condition and Performance (8)</li> <li>• Data Governance (9)</li> </ul>
5: Information Systems	<ul style="list-style-type: none"> <li>• System Technology and Integration (5)</li> <li>• Decision-Support Tools (4)</li> <li>• System Features (9)</li> </ul>
6: Transparency and Outreach	<ul style="list-style-type: none"> <li>• Transparency and Accountability (4)</li> <li>• Benchmarking (5)</li> <li>• Communication and Outreach (4)</li> </ul>
7: Results	<ul style="list-style-type: none"> <li>• Compliance (4)</li> <li>• Data-Driven Targets (8)</li> <li>• Program and Plan Alignment (3)</li> </ul>
8: Workforce Capacity and Development	<ul style="list-style-type: none"> <li>• Workforce Capacity (5)</li> <li>• Workforce Development (2)</li> </ul>





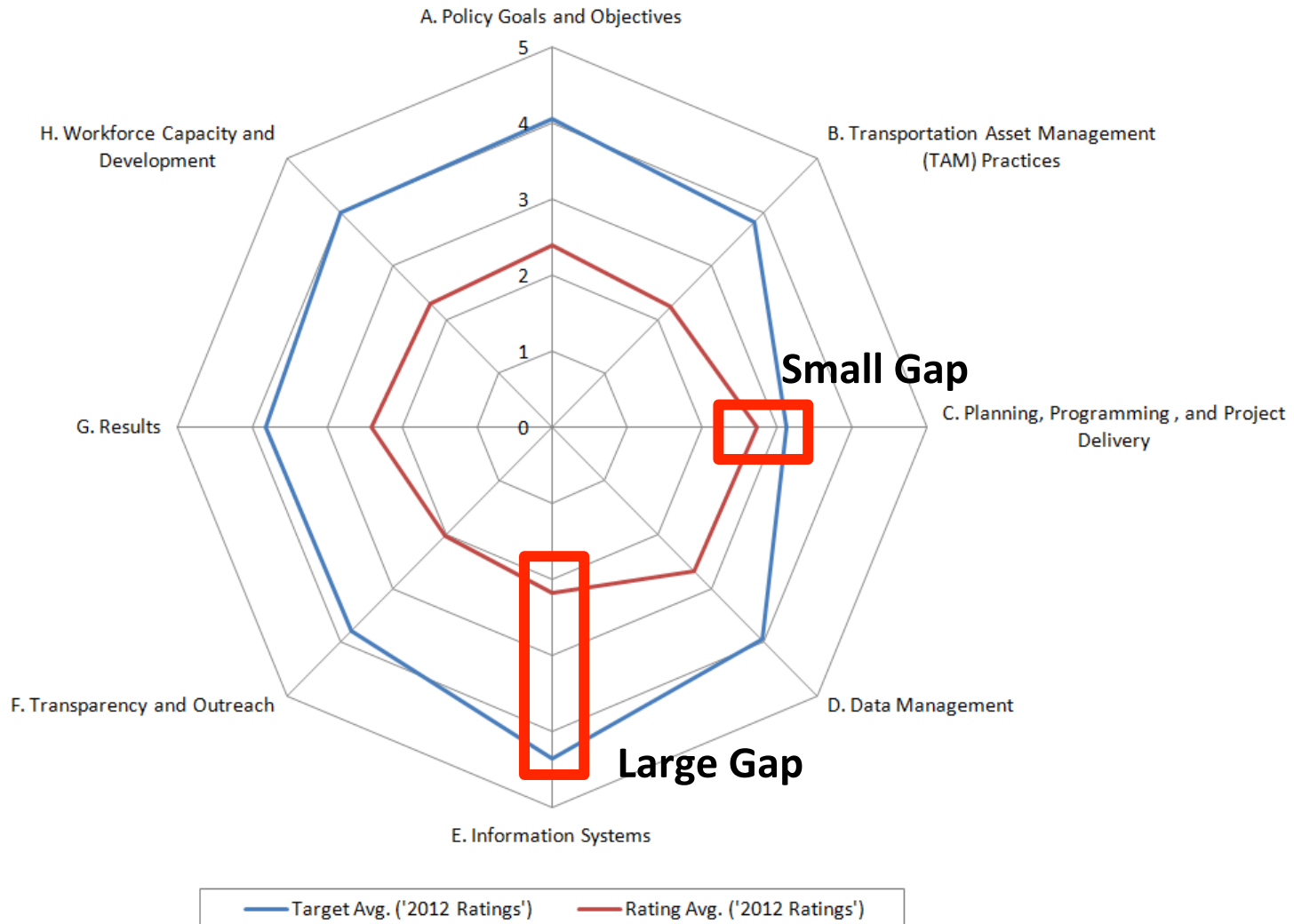
# Comparing to Best Practice

- Example: Agency policies encourage a business-oriented, customer-focused approach to asset management
  - Current rating?
  - Desired rating?



# Outputs Identify Gaps in Practice

**Weighted Target and Rating Score Averages By Rating Set**  
*Assessment Area Items*



# Gaps Inform Your Implementation Plan (taken from the Colorado DOT Draft TAMP)

No.	Title	Category	Gap	Desired State	High-Level Steps Being Taken to Achieve Desired State
4	Establish a Risk Framework to Evaluate Alternative Strategies	Planning and Programming	An overall framework to consider mitigation strategies for various risk events/sites is needed, as well as for comparing and trading off investments across various risk opportunities. Need to merge "risk-based" management with "performance-based" management of assets.	Risk opportunities – a framework to include the opportunities and threats related to uncertain events, and tradeoff the ROI of candidate risk mitigation strategies.	CDOT has engaged a consulting firm to provide tools for characterizing the consequences of various risks, and these tools will be valuable in supporting the larger risk framework.
5	Analyze Budget Tradeoffs Across Programs	Planning and Programming	The type and impact of maintenance work on pavement and bridges and their impact on extending the life of these assets is not clearly understood. There is a need to better understand the investment of capital and the subsequent impact to maintenance.	Capital versus maintenance expenditure tradeoffs are explicitly considered in the preservation of assets like pavements and bridge.	The new Bridge Maintenance Report is assisting bridge analysis, while the Roadway Surface-Surface Treatment project is working to better understand the relationship on the pavement side.
6	Improve Project Scoping and Optimization	Policy Guidance	Disconnect between Statewide Plan and Asset Management. Corridor planning does not recognize that maintenance needs are increasing and funding should be based on the asset need, not on a formula. Continuity between corridor plans and the targets used in asset management as well as ties to the Maintenance program operations are missing.	Corridors defined to support asset management, spanning regions and terrain types; and Maintenance is tied to long-range plans.	New statewide long-range plan is being written and is intended to address corridor ties to asset management considerations.
7	Incorporate Life-Cycle Analysis into Decision-Making	Information and Analysis	The Bridge Program does not currently include preventive maintenance in its life-cycle analysis of bridges, or in the types of projects that are performed.	Ability of the Bridge Program to express performance and life as a function of investment level, including preventive maintenance expenditures.	Staff Bridge is working to incorporate preventive maintenance into its analysis; starting with those elements with the highest ROI. These first two considerations are whether or not a bridge has joints, and whether or not the bridge deck is sealed.

# Sample Implementation Plan Content (taken from the Colorado DOT Draft TAMP)

No.	Gap	Gap Dependencies (Prerequisites, etc.)	Resources Required	Project Lead	Begin Date	Deliver Date
1	Budget Distribution Process (FY 2017)	This capability will be improved by each asset documenting their process and tracking the status	Each asset manager is responsible for documenting how needs are assessed (incorporating risk) and funds are distributed for their asset.	Laurie Freedle/Kevin Henry	Aug 2014	Nov 2015
2	Risk Analysis	None	Staff time to identify, understand and rank risks to CDOT, and identify mitigation strategies	John Vetterling	Jan 2014	Oct 2014
3	Project and Program Delivery Risks	This capability will support the Strategic Management Framework	Managing delivery risks. This is part of the project pipeline and project portfolio management projects.	Richard Zamora	Jun 2014	Oct 2014
4	Establish Risk Framework	This capability will provide context for risk analysis	Staff time to suggest alternatives and SMT time to select and communicate chosen methodologies.	John Vetterling	Ongoing	Jun 2014
5	Analyze Budget Tradeoffs	Follows life cycle; this capability will support the asset budgeting process	CDOT is working towards cross-asset optimization, to better understand how to prioritize spending limited funds for the best overall ROI.	JoAnn Mattson/Laurie Freedle	Apr 2014	Nov 2014
6	Improve Project Scoping and Optimization	None – put this into place ASAP	Staff time to digest asset mgmt. concepts and determine how to apply them at every level, in a holistic manner to programs and projects.	Scott McDaniel/William Johnson	Ongoing	June 2014
7	Incorporate Life-Cycle Analysis	None – do ASAP, since this feeds other capabilities	Each asset manager must incorporate life cycle analysis into their asset management system and improve their understanding of how maintenance activities extend the life cycle of their assets.	JoAnn Mattson	Ongoing	Aug 2014
8	Target-Setting for RB AMP Update	Follows Tradeoff Analysis and supports Budgeting; Adjusted periodically	DTD and Staff Branches will work to make sure they understand direction from the TC and the SMT on this, and document accordingly.	DTD Planning: TBD	Oct 2014	Apr 2015
9	Strategic Management Framework	None – put this into place ASAP	Staff time from asset managers, regions, DTD, OFMB and Staff Branches, address the items listed in the Plan, Do, Check and Act framework.	Maria Sobota	Aug 2013	June 2015
10	TAM Benefits Communication	None – plan to provide communication regularly	Staff time to communicate change; and on the receiving side staff time to understand and implement the changes.	William Johnson	Aug 2013	Jun 2014

# Introduction to the Tool - Features

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- Microsoft Excel development platform
- Form-based user interface
- Dual workbook/user approach
  - Master workbook – used by master user to create surveys, manage data, & view results
  - Rater survey workbook – used by individual raters to rate assigned criteria



# Introduction to the Tool - Organization

## Survey Setup

Customize the rating areas, elements, and criteria that will be evaluated using the "Survey Setup" tab.

## Survey Management

Distribute rating forms to agency personnel so they can evaluate agency performance in one or more of the rating areas. Use the "Survey Management" tab to create your survey groups, distribute the surveys, and aggregate the responses.

## Results

Summarize results using the "Results" tab. Here you can review the results of a survey for one year or you can compare survey sets to evaluate differences.



# Master Workbook

- Add/delete/modify survey criteria
- Determine approach to set target scores
- Define survey groups
- Create/save surveys for each survey group (unique combination of survey criteria)
- Import/monitor survey results
- View/export results

## Survey Setup

Modify the surveys here

## Survey Management

Set up & distribute surveys here

## Results

# Rater Survey

Use the provided controls to edit the survey group list associated with the current survey sheets.

Current Survey Group List: \_\_\_\_\_

Survey Name: Survey Name:

ID	'Survey Group' Name
1	Planning and Programming
2	Asset Managers
3	Executive Leadership
4	Safety
5	Finance
6	Districts
7	Maintenance and Operations

Add

Delete

Move Up

Move Down

Edit Name



# Rater Surveys With Status Bars

## Asset Management Gap Analysis - Survey Tool

Use the controls below to provide your scores to all assigned criteria. Use the 'Previous' and 'Next' buttons to move to another group of criteria (i.e., another 'Element'). Assign your ratings in the 'Criteria List' area.

Return To  
'Home' Page

### Current Criteria Categories

Criteria Category	Description	Category Index
Assessment Area	A. Policy Goals and Objectives	1 of 8
Element	A.1. Goals & Objectives	1 of 2

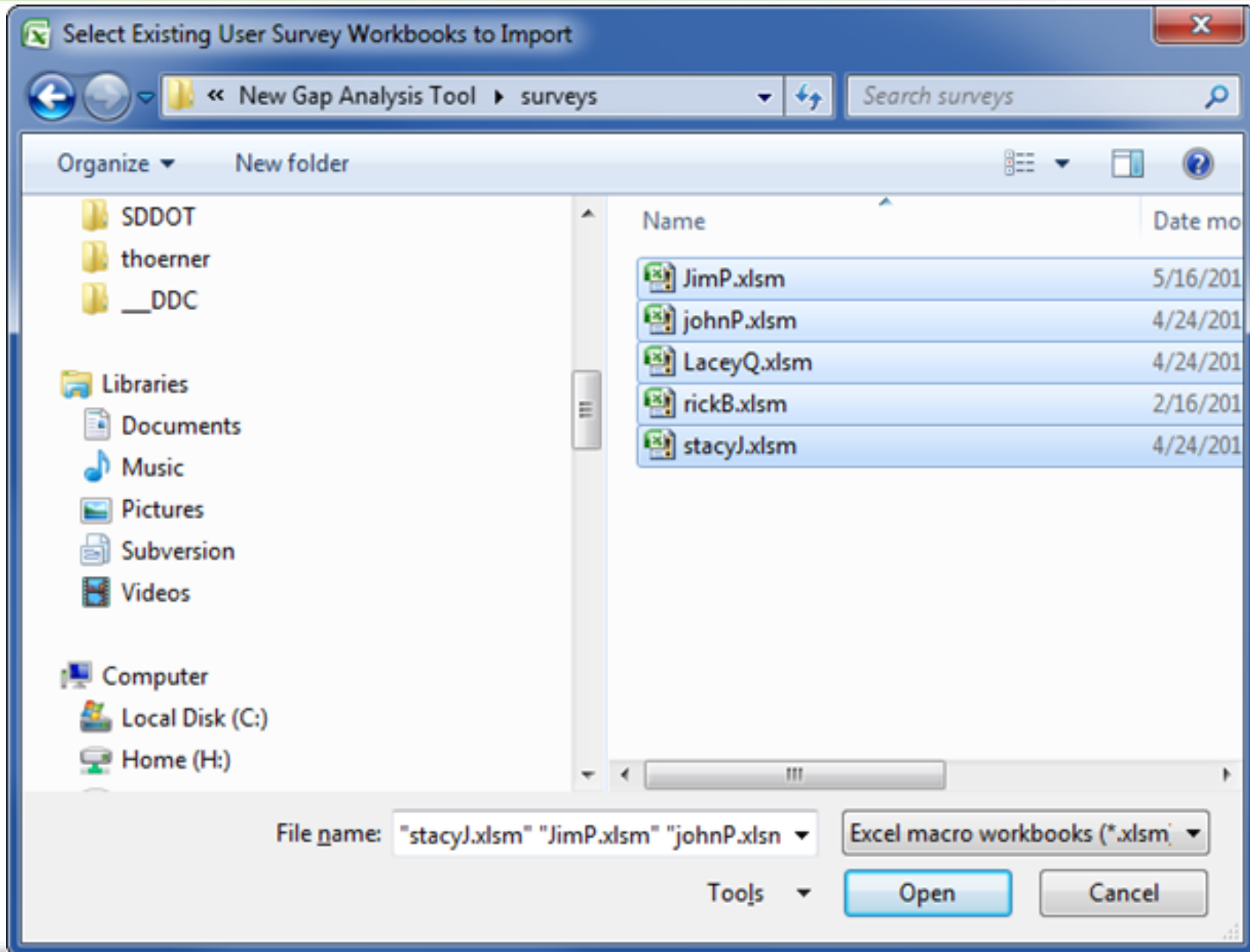
Previous

Next

### Current Detailed Criteria List

Criteria Index	ID	'Criteria' Description	Target Rating	Current Rating	Skip?	Status
1 of 6	A.1.1	Agency goals and objectives are comprehensive, integrated with other statewide policy objectives, and supported by quantitative and measurable performance measures or criteria.	5	4	<input type="checkbox"/>	COMPLETE
2 of 6	A.1.2	Agency goals and objectives consider the costs over the whole life of an asset and encourage strategies to lower life-cycle costs, to reduce agency risk, and to provide long-term benefits.	5	4	<input type="checkbox"/>	COMPLETE
3 of 6	A.1.3	Agency goals and objectives are established based on reliable information on asset condition and public perceptions.	5	3	<input type="checkbox"/>	COMPLETE
4 of 6	A.1.4	Reported system performance is measured against agency goals and objectives.	-	-	<input checked="" type="checkbox"/>	SKIPPED
5 of 6	A.1.5	Agency leadership actively involves political leaders, community leaders, and other policy makers to establish system performance expectations that consider funding constraints, legislated requirements, public interests, and other similar factors.	5	3	<input type="checkbox"/>	COMPLETE
6 of 6	A.1.6	Agency goals and objectives are aligned with asset management policies through the asset management plan.	5	-	<input type="checkbox"/>	INCOMPLETE

# Import Survey Screen



# Results Groups

Manage User-Defined 'Results Group' List

Use the provided controls to edit the results group list associated with the current survey.

Survey Name: Self Assessment

'Results Group' List:

ID	'Results Group' Name	No. Surv. Groups
1	ALL Survey Groups	7
2	Planning and Programming	1
3	Asset Managers	1
4	Executive Leadership	1
5	Safety	1
6	Finance	1
7	Districts	1
8	Maintenance and Operations	1

'Results Group' Details:

'Results Group' Name:  
ALL Survey Groups

'Survey Group' Count:  
7

List of Associated 'Survey Groups':

- Planning and Programming
- Asset Managers
- Executive Leadership
- Safety
- Finance
- Districts
- Maintenance and Operations

Add Move Up Delete Move Down

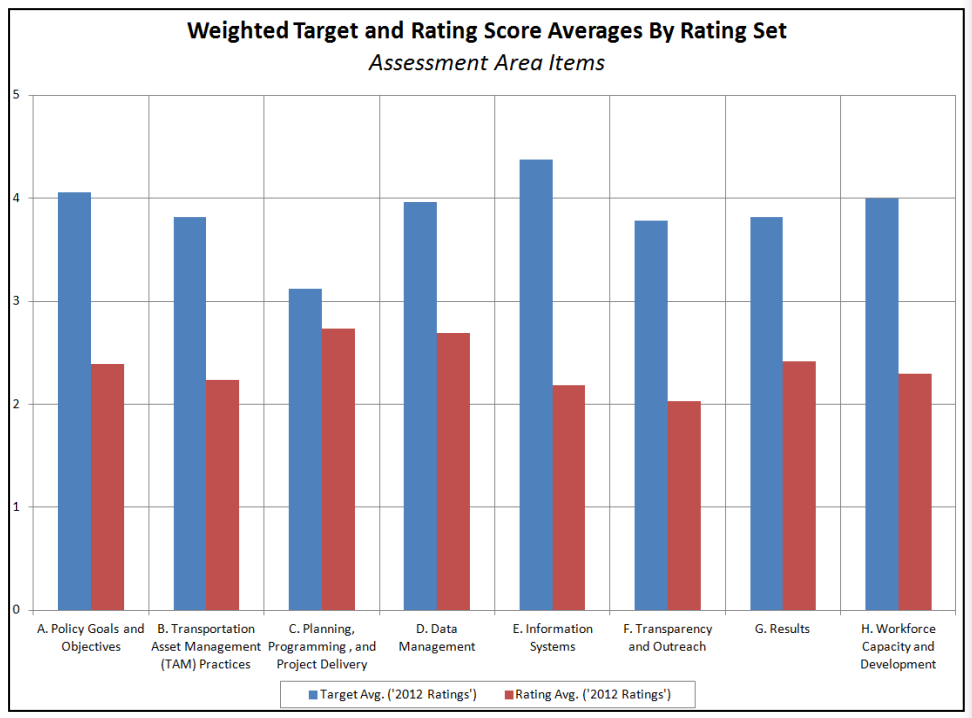
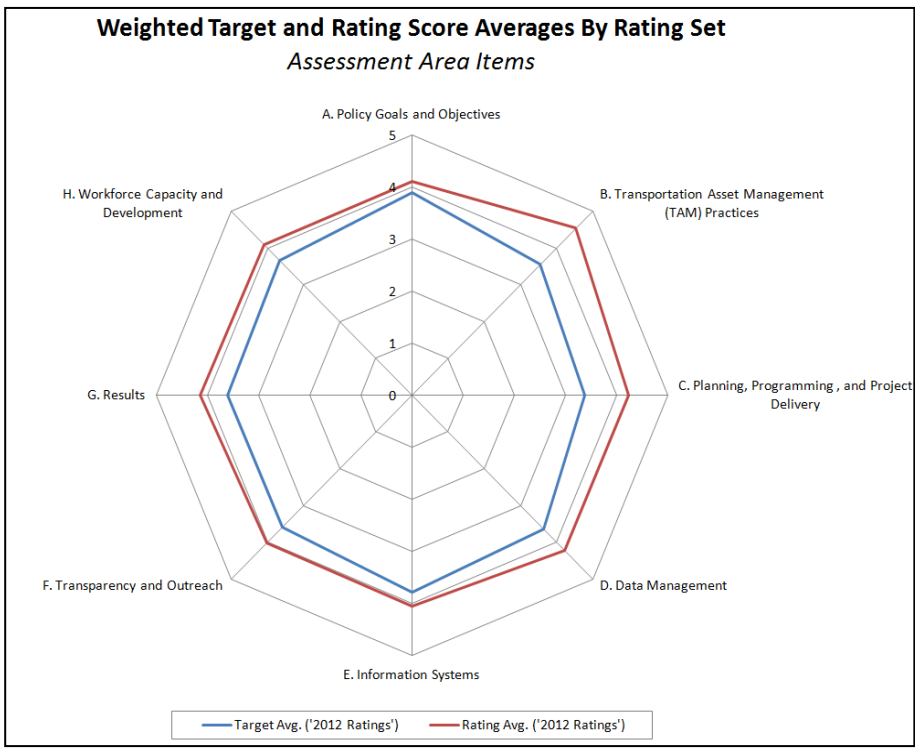
Save Cancel



# Assessing Results

- Graphs
- Spider Charts
- Export Tables

Summary of Results by 'Assessment Area'									
Assessment Area	Count	Rating Set 1: '2012 Ratings'							
		Non-Weighted Values				Weighted Values			
		Target Avg	Target Std Dev	Rating Avg	Rating Std Dev	Gap	Target Avg	Rating Avg	Gap
A. Policy Goals and Objectives	12	3.92	1.08	2.42	0.90	1.50	4.06	2.39	1.67
B. Transportation Asset Management (TAM) Practices	13	3.85	1.14	2.23	1.01	1.62	3.82	2.24	1.58
C. Planning, Programming, and Project Delivery	27	3.15	0.86	2.74	0.76	0.41	3.12	2.73	0.39
D. Data Management	26	3.96	0.66	2.69	0.84	1.27	3.96	2.69	1.27
E. Information Systems	18	4.28	0.75	2.28	0.75	2.00	4.37	2.19	2.19
F. Transparency and Outreach	13	3.77	0.83	2.00	1.00	1.77	3.78	2.03	1.75
G. Results	15	3.67	0.90	2.40	0.99	1.27	3.82	2.42	1.40
H. Workforce Capacity and Development	7	4.00	0.58	2.00	0.82	2.00	4.00	2.30	1.70



# User's Guide Assistance – Survey Setup

- Helps evaluate what portions of the survey should be sent to each group

Assessment Areas	Elements	This Element Evaluates:	At a Minimum, Send This Element to These Groups:
1: Policy Goals and Objectives	1.a. Goals and Objectives	The extent to which agency goals & objectives are based on quality data, are monitored, and are aligned with good asset management practices	<ul style="list-style-type: none"> <li>• Executive leadership</li> <li>• Asset managers</li> <li>• Asset management</li> <li>• Policy</li> <li>• Performance measurement</li> </ul>
	1. b. Agency Policies	The existence and use of policies supporting asset management practices	Same as 1.a.plus: <ul style="list-style-type: none"> <li>• Planning and programming</li> <li>• Finance</li> </ul>



# User's Guide Assistance - Results

Assessment Area	Elements Included	Improvements to Consider	Helpful Resources
Policy Goals and Objectives	<ul style="list-style-type: none"> <li>• Goals and Objectives</li> <li>• Agency Policies</li> </ul>	<ul style="list-style-type: none"> <li>• Review the process used to establish agency goals and look for ways to better incorporate asset management practices</li> <li>• Evaluate whether performance measures are tied to agency objectives</li> <li>• Establish an asset management policy</li> </ul>	<ul style="list-style-type: none"> <li>• Chapter 2, AASHTO <i>Transportation Asset Management Guide – A Focus on Implementation</i></li> <li>• National Highway Institute (NHI) Course 131106A, An Introduction to Transportation Asset Management</li> </ul>
Asset Management Practices	<ul style="list-style-type: none"> <li>• TAM Framework</li> <li>• Leadership Support for TAM</li> <li>• Asset Management Plan Development</li> <li>• Lifecycle Management</li> </ul>	<ul style="list-style-type: none"> <li>• Document existing business processes and look for areas of improvement</li> <li>• Confirm agency objectives for asset management</li> <li>• Establish links between asset management and executive leadership</li> <li>• Prepare/update an asset management plan</li> <li>• Identify strategies for accounting for maintenance trade-offs associated with capital investments</li> </ul>	<ul style="list-style-type: none"> <li>• AASHTO <i>Transportation Asset Management Guide – A Focus on Implementation</i></li> <li>• National Highway Institute (NHI) Course 131106A, An Introduction to Transportation Asset Management</li> <li>• NHI Course 131106B, Developing a Transportation Asset Management Plan</li> <li>• FHWA Asset Management Website (<a href="http://www.fhwa.dot.gov/asset/">http://www.fhwa.dot.gov/asset/</a>)</li> </ul>

# Distribution Through AASHTO

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- Excel Spreadsheet
- User's Guide
- Quick Setup Guide
- Reference Files



# Questions?

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- Contact Katie Zimmerman at:
  - [kzimmerman@appliedpavement.com](mailto:kzimmerman@appliedpavement.com)
  - (217) 398-3977





# Questions?

- Submit your questions using the webinar's Q&A feature

# All webinars available online:

<http://tam.transportation.org/Pages/Webinars.aspx>

## Save the Dates!

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

### Webinar 14

#### **Linking the TAM Guide to the Planning Process**

Wednesday, February 11, 2015 – 2:00 PM EST

### Webinar 15

#### **Lessons Learned from Developing a Transportation Asset Management Plan**

Wednesday, April 8, 2015 – 2:00 PM EST

### Webinar 16

#### **Transportation Asset Management Financial Plans: Part II**

Wednesday, June 10, 2015 – 2:00 PM EST



For more information or to register:  
<http://tam.transportation.org>