

# **NCHRP Project 20-07/392**

## **A Plan for an AASHTO Operations Guide**

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**STSMO Annual Meeting**  
**September 13, 2017**



**AASHTO**

# Agenda

- Project background and purpose
- Project Scope
- Stakeholder Input
- Project Status
- Guide Outline
- Development Plan and Roadmap
- Next Steps

# Project Background and Purpose

- Need sprang out of focus on TSM&O within State DOTs
  - Need for guidance on operations related activities
  - Guidance on operations related project development
  - Explore implications to highway design standards
  - Operational strategies that should be “standard features”
- Objectives
  - Investigate focus and topics for Operations Guide
  - Develop a plan and roadmap for activities leading to the Guide



# Project Scope

- Comprehensive literature review
- Operations practitioner workshop
- Interviews
- Panel Webinar
- Annotated Outline
- Development Plan
  - Includes a Roadmap

# Stakeholder Input

- Workshop August 2, 2016 in Denver
  - In conjunction with AASHTO STSMO Meeting
- Interviews September through December
- Panel Meeting
- Document reviews

# Input from Workshop

- Broad set of needs identified
- Structured to evolve over time
  - Incremental development
- Emphasis on new technologies
  - But inclusive of traditional approaches as well
- Include project development, design processes
- Include “soft side” strategies
- Branding is important



# Input Received - Interviews

- Important to include information about TSMO technical strategies
  - Lessons learned
  - Eventually best practice
  - Include TSMO supporting features and systems
- Overall structure valid and helpful
  - Introduction
  - Incorporating operational strategies in project development
  - Internal processes and capabilities
  - TSMO technical strategies



# Input Received - Interviews

- Important cross-cutting areas to include
  - Workforce development
  - Data and data management
  - Relationship to highway safety
  - Reflect lessons from TSMO program planning efforts
  - Multi-modal
  - Practical design concepts
- Key coordination
  - AASHTO Subcommittee on Design
  - AASHTO safety committee



# Input Received - Panel

- Confirmed previous input
- Highlight foundational strategies and components
  - Things needed to be successful in TSM&O
- Valuable resource documents
- Recognize stand alone TSM&O projects and TSM&O incorporated into other projects

# Input Received – Document Review

- Revised structure of the Guide
  - Significant revision of the tactics section
- Revised some terminology
- Provided additional background information
- Added Operational Performance Monitoring

# Project Status

- Literature Review – complete
- Workshop – complete
- Interviews and Outreach – complete
- Panel Webinar – complete
- Annotated outline – complete
- Roadmap and Development Plan – complete

# Guide Outline

	CHAPTER NAME	CONTENT
1	<b>Introduction</b>	<ul style="list-style-type: none"><li>- Background on TSM&amp;O</li><li>- Supporting TSM&amp;O Efforts</li><li>- Business case for TSM&amp;O</li><li>- Need for the guide</li><li>- Relationship to other resources</li><li>- Organization of the guide</li></ul>
	<b>PART 1</b>	<b>TSM&amp;O Program</b>
2	<b>TSM&amp;O Description</b>	<ul style="list-style-type: none"><li>- What is a TSM&amp;O program?</li><li>- TSM&amp;O Program and Strategic Plans</li><li>- Operational strategies</li><li>- Performance monitoring</li></ul>
3	<b>TSM&amp;O Foundational Components</b>	<ul style="list-style-type: none"><li>- Operational Performance Monitoring</li><li>- Managing Recurring Situations – Traffic Management</li><li>- Managing Non-recurring Situations</li></ul>



# Guide Outline

	CHAPTER NAME	CONTENT
4	<b>Internal Processes to Support Organizations</b>	<ul style="list-style-type: none"><li>- Organizational, institutional, and business process capabilities</li><li>- Summarizes application of CMM and CMF</li></ul>
5	<b>Incorporating Operational Strategies into the Project Development Process (Process Oriented)</b>	<ul style="list-style-type: none"><li>- Project purpose and need. Consideration of how operational strategies help achieve them</li><li>- Incorporation of operational strategies into the project development process</li></ul>
6	<b>Incorporating Operational Strategies into the Project Development Process (Project Oriented)</b>	<ul style="list-style-type: none"><li>- Strategies Supporting Operations Considered for Capital Projects</li><li>- Typical Designs for Operational Features and Strategies</li><li>- SHRP2 L07 “Design Guide for Addressing Nonrecurrent Congestion”</li></ul>
7	<b>TSM&amp;O Funding Source Overview</b>	<ul style="list-style-type: none"><li>- Dedicated Local Funding</li><li>- Federal Funding Sources</li></ul>

# Guide Outline

	CHAPTER NAME	CONTENT
	<b>PART 2</b>	<b>Tactical Layer</b>
<b>8</b>	<b>Fundamental Tactics</b>	<ul style="list-style-type: none"><li>- High-level description of traditional ITS and traffic management tactics</li><li>- Examples: Traffic Signal Systems, Ramp Management and Control</li><li>- References</li></ul>
<b>9</b>	<b>Active and Advanced Tactics</b>	<ul style="list-style-type: none"><li>- High-level description of active and advanced tactics</li><li>- Examples: ATM, ICM</li><li>- References</li></ul>
<b>10</b>	<b>Emerging Tactics</b>	<ul style="list-style-type: none"><li>- Discussion of emerging tactics, such as connected vehicles</li><li>- References</li></ul>

# Development Plan and Roadmap

- Introduction to the development of the Guide
  - Background
  - Development Methodology
  - Purpose and Objectives for Developing an Operations Guide
  - Intended Audiences for the Guide
  - Operations Guide Development Plan Summary
- Program Area 1 – Program Management
  - Program Area Description
  - Program Area Objectives
  - Projects

# Development Plan and Roadmap

- Program Area 2 – Initial Version of the Operations Guide Development
  - Program Area Description
  - Program Area Objectives
  - Initial Guide Technical Development
- Program Area 3 – Future Technical Development
  - Program Area Description
  - Program Area Objectives
  - Projects



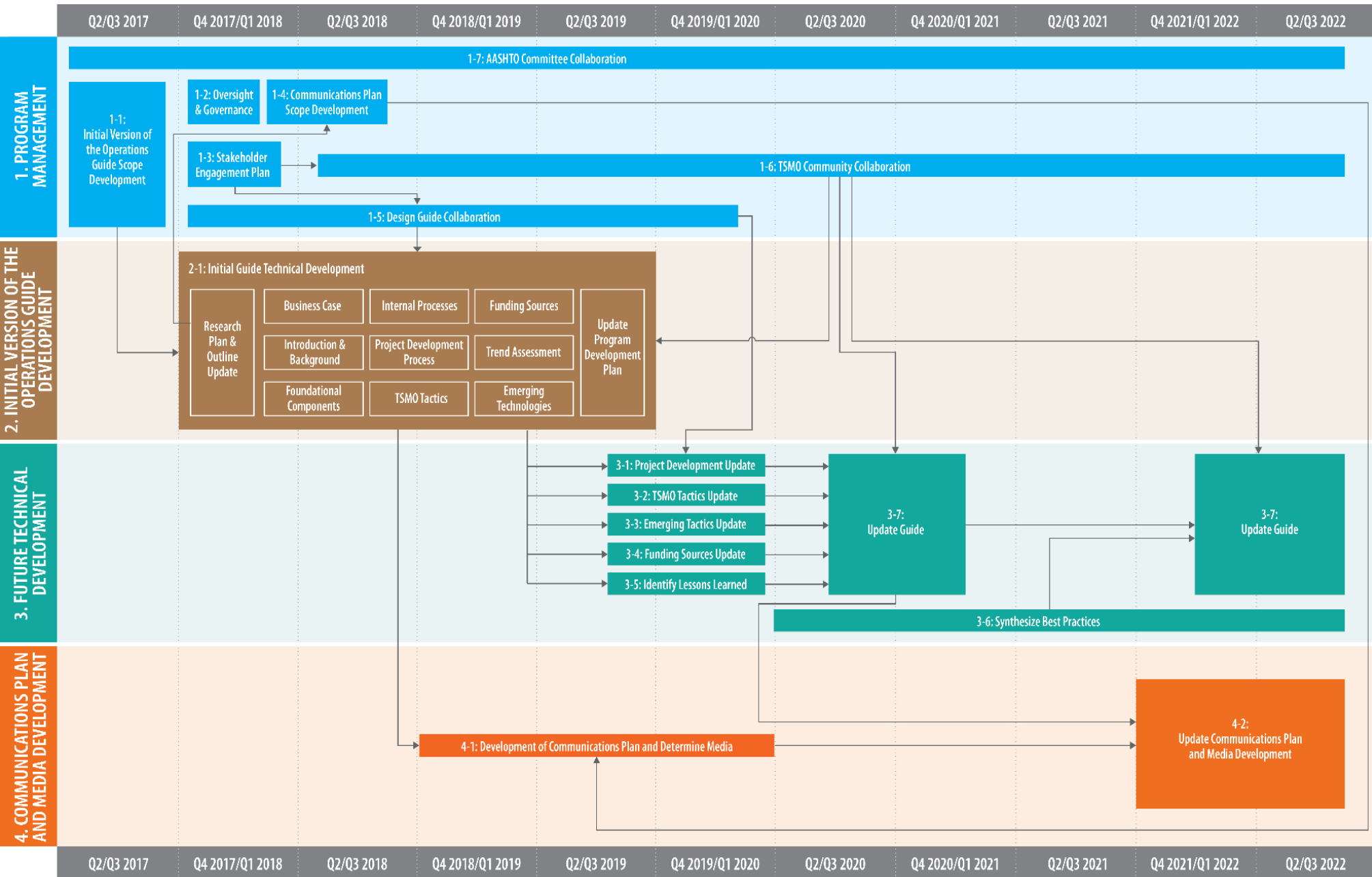


# Development Plan and Roadmap

- Program Area 4 – Communications Plan and Media Development
  - Program Area Description
  - Program Area Objectives
  - Initial Guide Technical Development
- Attachment A – Transportation Operations Guide Annotated Outline



# Roadmap for Developing Operations Guide

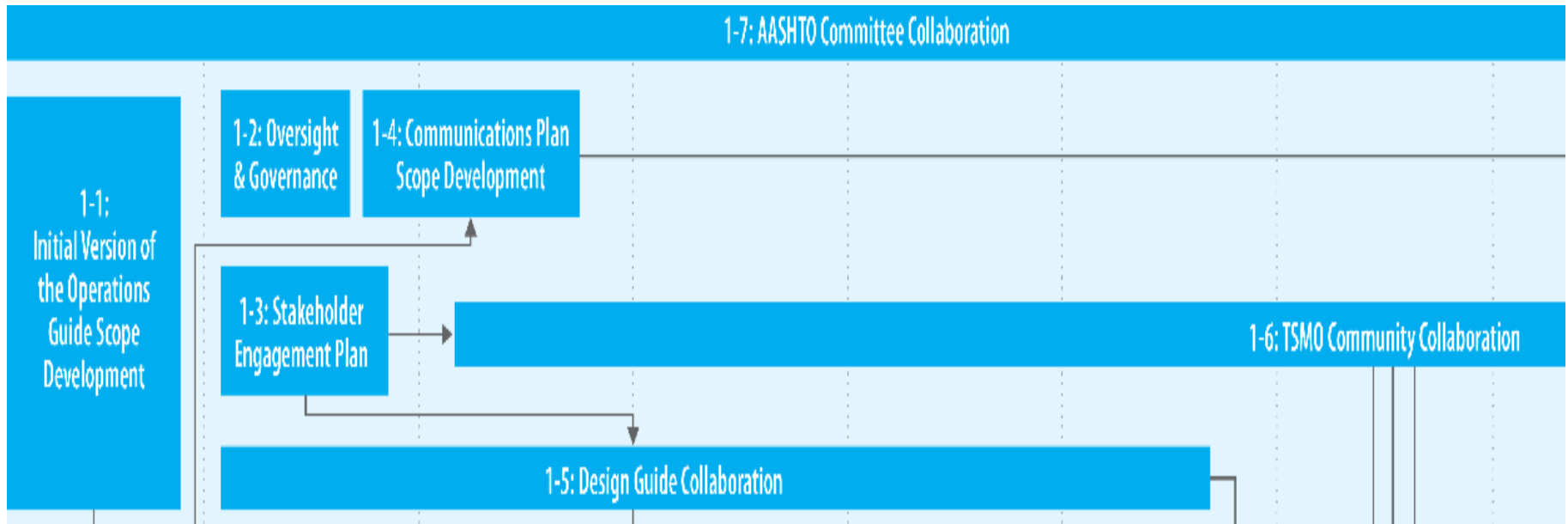


# Next Steps

- Form 03-126 Panel
- Develop Scope
  - Update Roadmap if necessary
- Contract for Initial Development of the Guide



# Program Management

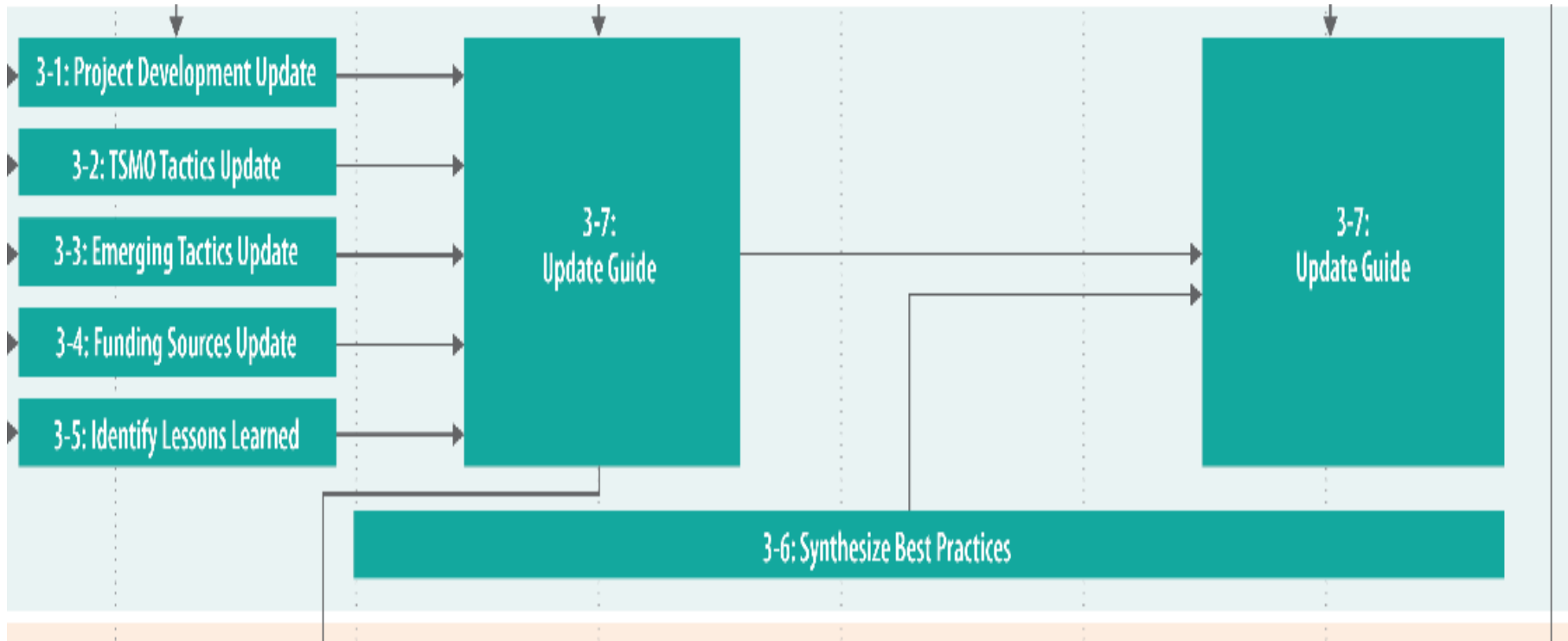


# Initial Guide Development

## 2-1: Initial Guide Technical Development



# Future Technical Development



# Communications Plan and Media Development

