Iowa DOT Transportation Systems Management and Operations (TSMO) Internal Training and Communications Plan October 2017

1. Purpose of this Document

Iowa DOT is developing a structured, programmatic approach to implementing transportation systems management and operations (TSMO) throughout the DOT. The purpose of this training and communications plan is to provide a framework for providing sustained TSMO training and communications within the agency. The plan builds on best practices and starts to builds an organizational culture needed to support an effective TSMO program. It is intended to provide guidance and education to help employees understand:

- What is Iowa DOT's TSMO program
- How TSMO can benefit their office
- What are key elements of an effective TSMO program
- What steps or activities are required to sustain Iowa DOT's TSMO program
- What TSMO means to daily job functions

It will provide useful guidance to give direction that will increase the consistency and quality of TSMO across the organization, while being flexible to reflect the different needs of districts, offices, and employees based on their unique contexts and existing capabilities (not a prescriptive approach).

This plan lays out a proposed framework for the training and related communications.

FHWA is also developing a primer on TSMO program planning to help State DOTs, MPOs, and regional operations organizations understand key elements for developing an effective TSMO program plan. Primer materials will be integrated into training and communications materials as they become available.

What is involved in Iowa DOT's TSMO Program?

As shown in Figure 1, TSMO program planning at Iowa DOT includes three levels of considerations:

- 1. Strategic-level
- 2. Programmatic-level
- 3. Action/deployment-level



Figure 1. Key Components of TSMO Program Planning

2. Elements of TSMO Training

Table 1 highlights the proposed basic and advanced TSMO training. The training is intended to reach all levels of the organization. The training does not build, meaning you only take one level, not all of them. Each level will automatically contain the same information as the levels above it. The TSMO subcommittee has proposed audiences, but management of each business unit can determine which training is appropriate for each employee.

TSMO Training levels	Proposed audiences
New Employee Orientation	All new employees
Duration: 30 minutes	
Format: Webinar logged in Iowa DOT	
Description: Provide a brief overview of TSMO at a very high level.	
TSMO 101 On-Line or in-person Training	Office of:
Duration: 2 hours	Location & Environment
Duration: A series of about 4-30 minute modules that cover the basics of	Driver & Identification Services
TSMO	Aviation
Format: Webinar or in-person training with scored quizzes	Rail Transportation
Description: Preliminary list of modules include: Introduction to TSMO, the	Organizational Improvement
role of the TMC, How TSMO impacts how we plan projects, How TSMO	Right of way
impacts how we design projects, How TSMO impacts how we manage the	Local Systems
transportation network	Contracts
	Program Management
	Operations & Finance Division
	Information Technology Division
	Bureau of Investigation & Identity Protection
	Field staff – clerical
TSMO 201 Advanced On-Line or in-person Training	Office of:
Duration: 3 hours+ - A series of about 6-30 minute modules that cover the	Research and Analytics
basics of TSMO	Transit
Traffic Critical projects, Traveler information at Iowa DOT, ITS Field Device	Vehicle and Motor Carrier Services
Design, ITS Communications Design, ITS Maintenance, Planning for TSMO, ITS	Design
Data Management – Provide overview of how District TSMO staff are	Bridges & Structures
expected to coordinate activities with central office including: budgeting,	Contracts
planning and operations, TSMO project design, Traffic Incident Management,	Systems Planning
Emergency Management, MDST coordination, etc.	Construction & Materials (Ames)
	Program Management
	Construction & Maintenance field staff.
	Engineering operations technicians
TSMO 301 - Basic Iowa Operations Academy	Office of
Duration: 2-4 days	Strategic Communications
Format: Combination of Lectures, Group Exercises, and at least one field visit	Motor Vehicle Enforcement
Description: In depth training on all aspects of TSMO including presentation	Systems Operations Bureau
by national subject matter experts. Potentially work with University of	District Engineers
Maryland to be modeled after National Ops. Academy Training could extend	Assistant District Engineers
to other partners outside DOT.	District maintenance managers
	District operations managers

Table 1. Proposed training opportunities and target audiences

New OTO Employee Orientation	Office Traffic Operations new
Duration: 24 hours	employees
Format: ½ Immersion and ½ self-guided tutorial	
Description: Immersion training including visits to TMC, Statewide EOC,	
Emergency Support Center, Maintenance Garage, Safety Service Patrol Ride	
along, Snow Removal Ride along (as weather permits) and CTRE	

NEED TO ADDRESS CONTINUING EDUCATION WHEN NEW EMPLOYEES ARE BROUGHT INTO A WORK UNIT – PAST THE NEW EMPLOYEE ORIENTATION PIECE

3. Communications

TSMO Videos

Develop and distribute both internal and external videos relative to TSMO.

TSMO Blog

Provide periodic, on-going updates of activities and successes with TSMO.

TSMO Business Case

Routinely update and promote the business case for TSMO using the latest information available including wide area economic, travel forecasts, incidents, and sources of congestion data.

TSMO FAQs

Develop a series of short FAQs related to TSMO:

- The Basics of TSMO
- The Building Blocks of TSMO
- TSMO at Iowa DOT
- Moving Beyond Current Iowa DOT TSMO Program
 - Organizational Integration
 - Emerging Technologies
 - o Decision Support Systems and Big Data Analytics
 - o Performance Based Management
 - TSMO Workforce Development
 - Partnering with Industry