

A WORKFORCE SHIFT TOWARD TSMO

By: Washington State Department of Transportation (WSDOT)

IN THIS CASE STUDY YOU WILL LEARN:

1. Why and how WSDOT shifted its workforce to align with TSMO goals and delivery.
2. About tools for curriculum, outreach and strategy, as well as staff development to create a TSMO focused workforce.
3. The impact the shift had on WSDOT operations and individual career development.

BACKGROUND

TSMO denotes a paradigm shift for most transportation agencies in how strategies are derived, prioritized, and delivered. Achieving this change requires a workforce that understands the goals of TSMO, can communicate and apply them, and has the tools necessary to implement them throughout their organization. To address technical needs and the cultural shift TSMO signified for WSDOT, several varied approaches of workforce development tools were essential. WSDOT realized the need to meet this challenge and, over the past three years, has been crafting a set of workforce development tools to further TSMO integration within the agency and they have also been establishing partnerships on curriculum, strategy development tools, and individual development plans.

TSMO PLANNING, STRATEGIES AND DEPLOYMENT

TOOL #1 - CURRICULUM

Purpose: Provide overall TSMO Education to WSDOT staff and partners



While the philosophy of TSMO is consistent with the goals of WSDOT, it represents a more formalized way of incorporating

operations into business. Widespread staff training was needed to accomplish this culture shift.

In partnership with the California Department of Transportation (Caltrans), Consortium for Innovative Transportation Education (CITE), and the Federal Highway Administration (FHWA), WSDOT is developing eLearning TSMO curriculums. They are aimed at expanding TSMO knowledge for both public agency and private sector practitioners. While the focus is designed to meet WSDOT staff training needs, courses have been made available for free to anyone in the transportation industry.

Over the past year, WSDOT and the partners consecutively developed four courses:

- TSMO 101: What is this TSMO thing anyway?
- Solving the Mobility Problem
- Integrating TSMO into Your Agency
- Capability Maturity Model - Assessing Agency Capabilities.

Over the next 12 months, three to four additional courses will be developed and made available, including Communicating the Value of TSMO, Managing a Corridor, and Performance Management.

TOOL #2 - OUTREACH AND STRATEGY DEVELOPMENT

Purpose: Provide a tool that facilitates TSMO communications and strategy development



To spread knowledge about TSMO strategies to staff/partners for use in planning/project development, WSDOT developed the TSMOWA.org website. As opposed to an encyclopedia approach listing and defining every TSMO strategy, the underlying concept of the website was based from interactive medical databases to find possible treatments that fit a set of symptoms. Users can start with common conditions/situations to find appropriate transportation strategies.

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Accommodating multiple modes	Capacity & demand	Emergency or unplanned events
Environmental concerns	Incident response & recovery	Integrating technology
Level of safety	Managing access	Near-term improvements
Planned or special events	Providing information to travelers	Travel times

Workforce Course Participation Numbers

TSMOWA.org aims to:

- Educate about TSMO overall
- Encourage thought about the root condition and multiple possibilities that might address it
- Guide discussions about individual strategies
- Allow users to compare various strategies
- Provide further resources

The website allows users to browse by categories, ranging from agency collaboration and coordination to work zone and construction. It also identifies common conditions that cross different categories, settings and context. The common conditions are set up like a medical database, range from accommodating multiple modes to travel times, and prioritize cost, technology and collaboration levels based on that condition. The original site, launched in 2017, piloted the concept. The current website is the second edition. The current site, involved extensive user surveys and testing, a new information architecture design, content redevelopment, and intention on how to expand the site in the future.

TOOL #3 – INDIVIDUAL STAFF DEVELOPMENT

Purpose: Provide individual development supporting technical growth/ advancement

WSDOT also recognized the need to address individual development of TSMO staff. In December 2018, WSDOT began working with the National Operations Center of Excellence (NOCoE) to pilot a

fellowship program with the goals of aiding employees to reach their individual development plan (IDP) goals using resources available through the WSDOT and NOCoE partnership.



Courtney Sell, a regional staff traffic engineer, was selected as the first program fellow. Courtney and her manager met with NOCoE to discuss the goals of her IDP, how NOCoE/WSDOT might be able to support those goals, and set up a timeline/milestones with outcomes to achieve for the fellowship. It was determined they would work together to achieve the following milestones:

- Participate in a national peer exchange and practice public speaking skills;
- Attend a TSMO-focused out-of-state conference; and
- Write a NOCoE newsletter guest message regarding her experience.

COMMUNICATIONS PLANNING AND EXECUTION

Intending to engage numerous audiences, the TSMO workforce development tools were marketed both internally and externally. Efforts included:

- **Statewide TSMO working group** – The group was utilized to guide, develop, and deploy the curriculums. They assisted in selecting topics for course development, reviewing course content, and engaging staff in course enrollment.

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Course	Number of Students Enrolled	Percent WSDOT Staff	Percent non WSDOT Staff
TSMO 101: What is this TSMO Thing Anyway?	102	54%	48%
Solving the Mobility Problem	29	10%	90%
Integrating TSMO into Your Agency	24	25%	75%
Capability Maturity Model: Assessing Agency Capabilities	8	100%	0%

TSMO Common Conditions from tsmowa.org

- **Executive endorsement** – TSMO workforce development tools were highlighted in an all-staff email series titled – “Did you know?” distributed by the WSDOT Chief of Staff.
- **Internal distribution** – Regional and divisional management were sent information packages to share with their staff, encouraging discussion.
- **Conferences** – TSMO workforce development tools were agenda items at numerous statewide WSDOT conferences.
- **In-person training** – The eLearning curriculum was used to deliver several in-person training sessions, including a two-day regional operations forum, a one-day training at the annual ITS Washington Conference, and several regional one-hour training sessions.
- **NOCoE newsletter** – Two articles were developed and distributed in the NOCoE newsletter regarding the overall workforce development efforts of WSDOT and the Individual Development Plan (IDP).
- Based on national interest in the eLearning curriculum, WSDOT secured additional federal funding to continue course development.
- In just the first three months of the redesigned site, over 800 new users have visited the site.
- Nationwide interest in the website has been realized.
- After the initial visit, users return to the site and their session lengths and site exploration lengthen and are more expansive.
- The website has led to key conversations within the agency on how content can be expanded in subject areas such as maintenance, performance management, and freight.
- The Transit Regional Mobility Grant application process requires using the TSMOWA website to identify how their application and associated strategy aligns with the TSMO philosophy.
- WSDOT’s first IDP fellow, Courtney Sell, achieved all three established goals:

- She participated in the NOCoE Maintenance and Operations Peer Exchange, presenting on how WSDOT is using a regional bus on a shoulder project to increase capacity within the existing pavement.
- She attended the ITS America Annual Meeting, focusing her attendance on cybersecurity.
- She wrote a guest newsletter article for NOCoE regarding what she learned at the peer exchange and about her experience as a whole with the NOCoE fellowship pilot.

OUTCOMES, BENEFITS AND LEARNINGS

WSDOT’s multipronged TSMO workforce development efforts have increased the TSMO capacity within the WSDOT agency, its partners, and nationwide. With a better overall staff understanding of TSMO, it has set the stage for successful TSMO Program Plan development, which WSDOT will begin in early November. While the program plan is under development, staff have tools that can be used immediately in conversations regarding which strategy is the “right” strategy and why. WSDOT can also support TSMO staff development both technically and for career advancement.

Key metrics that support this conclusion include:

- There is expressed interest in using the suite of TSMO courses to create a TSMO certification, with additional interest by management in requiring certification completion for promotional considerations.

FURTHER INFORMATION

NOCoE Knowledge Center: <https://transportationops.org/knowledge-center>