



TSMO Overview

Transportation Systems Management & Operations (TSMO)

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Definition

FHWA Definition of TSMO:

An integrated program to optimize the performance of existing multimodal infrastructure through implementation of systems, services, and projects to preserve capacity and improve the security, safety, and reliability of our transportation system.



VTrans Strategic Plan

MISSION

Provide for the **safe and efficient** movement of people and goods.

VISION

A **safe, efficient** and multimodal transportation system that promotes Vermont's **quality of life and economic wellbeing**



TSMO Mission & Goals

TSMO MISSION

VTrans will improve the reliability of the existing transportation system by managing delays and disruptions

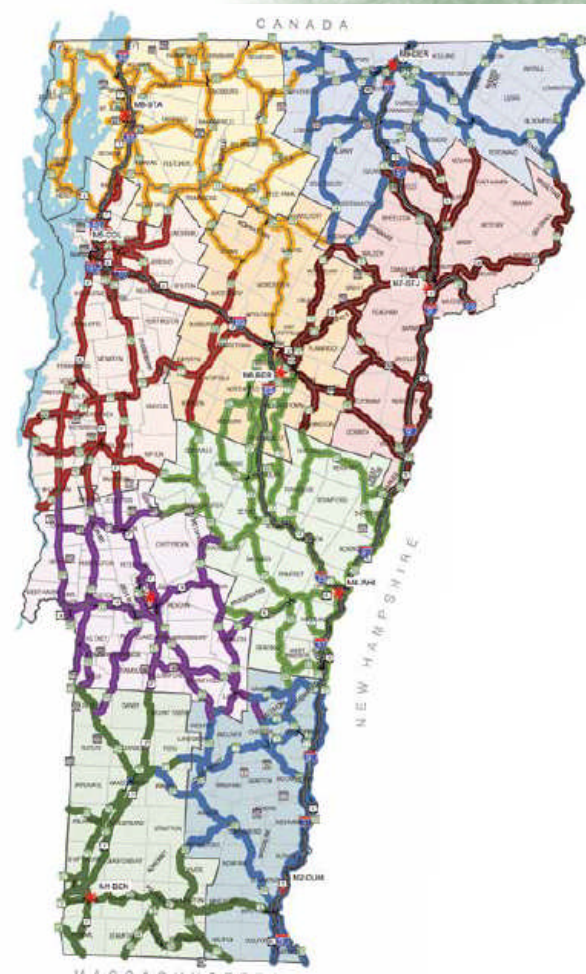
GOALS

Improve reliability:

- During **typical operating conditions** and **challenging weather**.
- For work zones, special events and other **planned disruptions**.
- For **unanticipated incidents** that cause short and long term disruptions



Key TSMO Principles

- Customer focused
- Utilize existing foot print
 - Efficiency
 - Preserving capacity
- Balanced with Safety
- Multimodal
- Cross-jurisdictional





Strategic Plan & TSMO

Vtrans Strategic Plan Goal	Related Objective	TSMO Relationship	
Goal 1: Provide a safe and resilient transportation system that supports the Vermont economy.	Reduce the number of major crashes		Support
	No unplanned road closures or restrictions due to conditions within VTrans' control		Support
	Increase the resilience of the transportation network to floods and other extreme weather and events.		Support
Goal 2: Preserve, maintain and operate the transportation system in a cost effective and environmentally responsible manner.	Minimize the environmental impacts of the transportation system.		Support
Goal 3: Provide Vermonters energy efficient, travel options.	Minimize traveler delay		PRIMARY
	Increase use of walking, biking, transit, rail, and Travel Demand Management options		Support
	Increase use of State and Municipal Park & Ride facilities		Support
Goal 4: Cultivate and continually pursue innovation, excellence and quality customer service.	Information given to customers is accurate and comprehensive		Support
	Staff are competent, fair, polite and sympathetic to customers' needs		Support
	Staff deliver the outcome as promised and manage any problems		Support
Goal 5: Develop a workforce to meet the strategic needs of the Agency	Recruit excellent, qualified and diverse employees.		Dependent
	Retain and develop excellent and diverse employees		Dependent
	Implement succession planning		Dependent

Objectives for Typical Operating Conditions

- **Every Day**
 - Provide timely and accurate traveler information
 - Optimize the operation of existing traffic controls (signals, signs, lines) to reduce delay
 - Reduce single occupancy vehicle use through Transportation Demand Management
- **Challenging Weather**
 - Use technology to better manage snow and ice control



Objectives for Anticipated Travel Disruptions

- **Work Zone & Special Events**

- Provide timely and accurate traveler information
- Minimize delay increase from a network/corridor perspective
- Prevent crashes
- Traffic Management Plans will accommodate bike, pedestrians, transit and commercial vehicles



- **Special Event Specific**

- Plan for all events affecting state system
 - Minimize the cost to the public/VTrans



Objectives for Unanticipated Travel Disruptions

- **Short Term and** (crash, sink hole) & **Long Term Incidents** (flood, unexpected bridge closure, transit strike)
 - Provide timely and accurate traveler information
 - Develop/improve situational awareness of real time operating conditions
 - Minimize time to deploy response/mitigation
 - Minimize duration of travel restrictions and closures
 - Reduce potential for secondary crashes
 - Integrate ICS and TSMO





TSMO

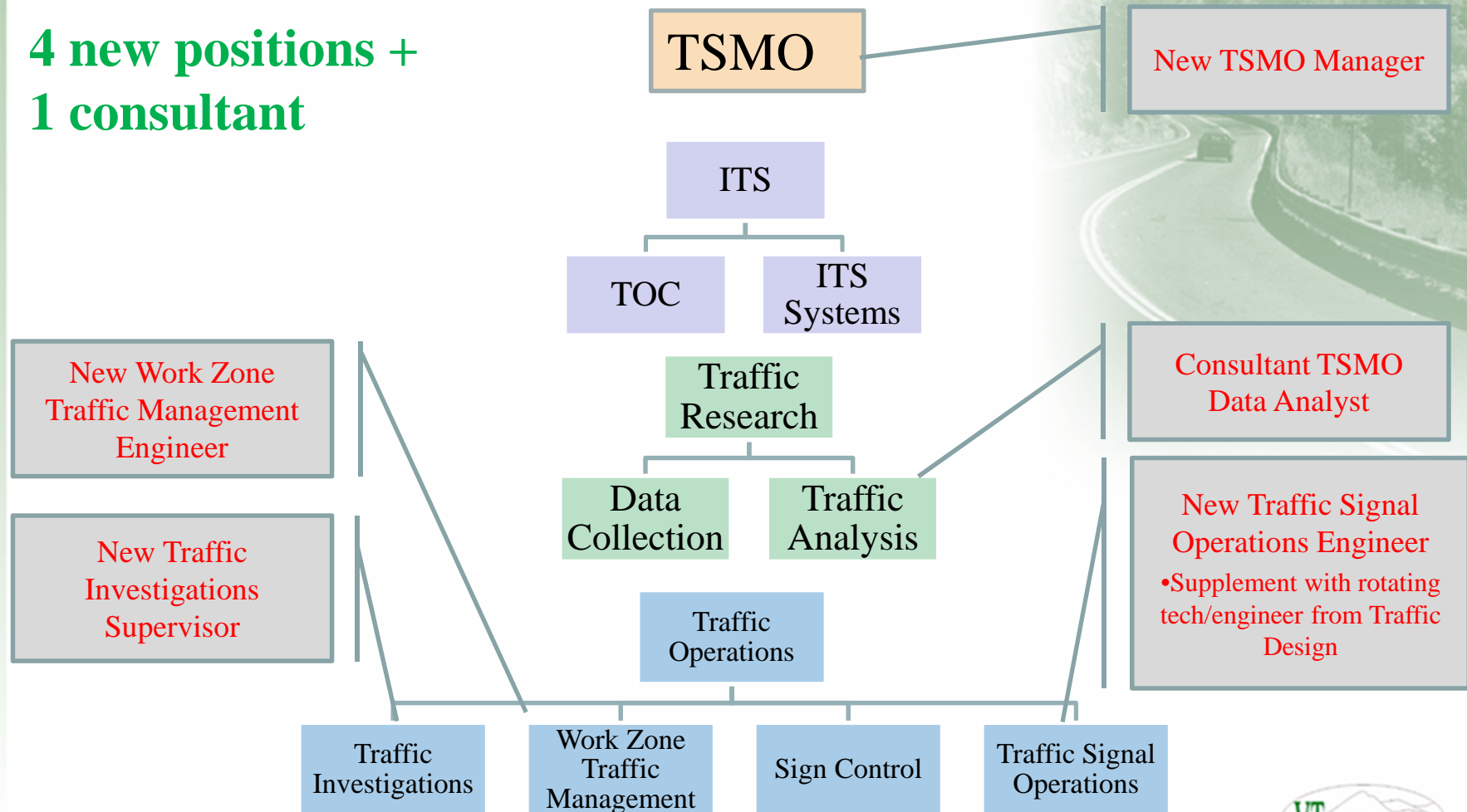
Goals and Objectives Summary

Objective	Goal by Operating Scenario		
	Every Day /Challenging Weather	Anticipated Disruption	Unanticipated Disruption/ Incident
Provide timely and accurate traveler information	✓	✓	✓
Optimize the operation of existing traffic controls	✓		
Reduce single occupancy vehicle use through Transportation Demand Management	✓		
Use technology to better manage snow and ice control	✓		
Minimize delay increase from a network/corridor perspective	✓	✓	
Reduce potential for crashes	✓	✓	✓
Traffic Management Plans will accommodate bike, pedestrians, transit and commercial vehicles		✓	
Plan for all events affecting state system		✓	
Minimize the cost to the public/VTrans		✓	
Develop/improve situational awareness of real time operating conditions	✓	✓	✓
Minimize time to deploy response/mitigation			✓
Minimize duration of travel restrictions and closures		✓	✓
Integrate ICS and TSMO			✓

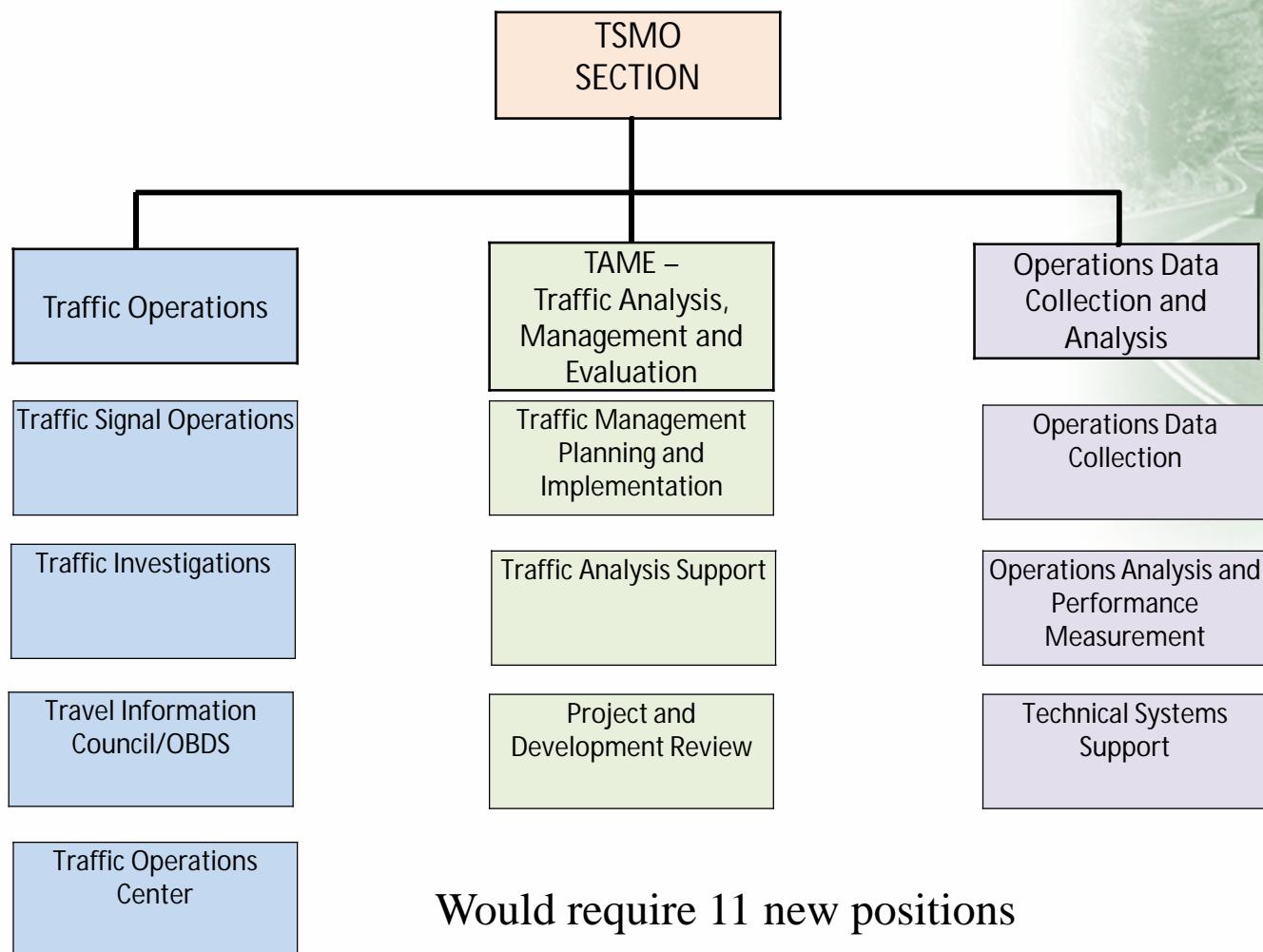


TSMO Section Organization (Interim)

4 new positions +
1 consultant



TSMO Section Organization (Future)



Would require 11 new positions
(7 more than the existing TSMO)

Implementation

- **Interim TSMO Section takes effect Jan 11, 2015**
 - 4 new positions have been advertised (interviews have begun)
- Refine TSMO objectives and develop performance measures
- Support on-going efforts throughout VTrans
 - Tri-state ATMS
 - TIMS training
 - TMP training/implementation
 - Corridor planning, time based project mapping
 - District contingency planning
 - Accelerated project delivery/construction
- Tell the TSMO story
 - Incorporate into VTrans annual report and fact book
 - Improve communications with public and stakeholders
 - Improve internal situational awareness using mapping/database tools