# CIOWADOT TRANSPORTATION SYSTEMS MANAGEMENT & OPERATIONS PLAN UPDATE

## What's TSMO?

Transportation Systems Management and Operations (TSMO) comprises integrated strategies to optimize the performance of existing infrastructure through the implementation of multimodal and intermodal, cross-jurisdictional systems, services, and projects designed to preserve capacity and improve security, safety, and reliability of the transportation system.

## **Challenges to Iowa's Transportation System**

## \$465 MILLION

was the cost of congestion to **urban lowans** in 2017

## 9.4 MILLION GALLONS

of extra fuel burned

## \$336 PER MOTORIST

of cost (car repairs, extra fuel consumption, etc.) due to deteriorated roads

#### Traffic fatalities

- Outdated systems & processes
- · Changing workforce
- Maintaining mobility
- Growing the economy
- Tech disruption
- Increasingly distracted drivers
- Aging infrastructure

## Pre-2013 | Informal TSMO activities

**2013** | Initial Iowa DOT TSMO Assessment

2016 | First official TSMO Plan published

**2017** | Traveler info Service Layer Plan published

**2018** | TIM, ITS, Communication, Work Zone Mgmt. Service Layer Plans published

**2019** | Emergency Mgmt. & Cooperative Automated Transportation (CAT) Service Layer Plans published

**2020** | TMC Service Layer Plan published

2022 | TSMO Plan Update

## **TSMO Solutions**

The projects, services, and activities listed below promote TSMO throughout lowa. They are organized by Capability Maturity Model (CMM) dimensions.



#### Collaboration

Integrate TSMO into Multi-Disciplinary Safety Team (MDST) Meetings

Enhance Multi-Disciplinary/Multiagency TSMO Training and Capacity Building

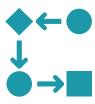
Integrate TSMO into MPO & RPA Plans

**Enhance Joint Traffic Ops Performance Agreements** 

**Enhance TSMO Communication with Local Orgs** 

Establish TSMO Policy Stakeholder Group with **External Partners** 

**Develop and Maintain Open Contracts** Clearinghouse



#### **Culture**

Add Access Management to TSMO Processes Add Maintenance Operations to TSMO Processes Share TSMO & ITS Benefits Within/Beyond Iowa DOT

Integrate TSMO into Existing Conferences & Meetings in Iowa



#### **Performance Measurement**

**Develop Ops-Oriented Resiliency Index** Develop B/C Estimates for Key TSMO Applications Increase Frequency of Performance Reporting



#### **Business Processes**

Integrate TSMO into DOT Iowa Policies & Guidance Integrate TSMO Deployment Planning & 5-Year TIP **Develop District-Level TSMO Plans** Ensure Adequate Access to Funding for TSMO Projects through Existing/New Budget Categories Streamline TSMO Procurement Processes **Establish Innovative Funding Team** 



### **Organization & Staffing**

Increase Direct Iowa DOT Staffing in TMC Develop a TSMO Training Rotation Program Conduct System Ops Division Staffing Assessment **Enhance GIS Capabilities & Resources to Support** Ops



## **Systems & Technology**

Improve Traveler Info for Transit & Ride Share Improve Connectivity/Interoperability between State & Locally Managed Systems

**Establish ITS Configuration Control Board** Establish Systems Engineering Guidelines & Repository

Develop Approaches to Better Leverage Ops Data Implement Integrated Corridor Management Concepts

**Expand Statewide Video Sharing Strategy**