

Committee on Transportation System Operations (CTSO)

Research Ideas

August 2018

Research Ideas

TITLE:

Develop Crash Modification Factors for
Connected Vehicle Applications

SUBMITTED BY:

Colorado DOT

Research Ideas

TITLE:

Quantify Safety Benefits for Connected Vehicle Applications

SUBMITTED BY:

Colorado DOT

Related Research: US DOT CV Safety Pilot

Research Ideas

TITLE:

Comparison of Land Mobile Radio and Cellular Phones from a Driver Safety Perspective

SUBMITTED BY:

Texas DOT

Research Ideas

TITLE:

Best Practices Related to Communications
for Field Operations

SUBMITTED BY:

Texas DOT

Research Ideas

TITLE:

Quantification of the Air Quality Benefits
Associated with ITS Deployment

SUBMITTED BY:

Utah DOT

Research Ideas

TITLE:

Develop Crash Modification Factors for ITS Applications

SUBMITTED BY:

Utah DOT

Research Ideas

TITLE: Best Practices in Planning for ITS Deployment

SUBMITTED BY:

Utah DOT

Related Research: Enterprise Pooled Fund
– ITS Warrants

Research Ideas

TITLE:

Utilizing Connected & Automated Vehicle (CAVs) Data to Enhance and Optimize Freeway Operations Strategies, Algorithms and Performance Measures

SUBMITTED BY: TRB Freeway Operations Committee

Research Ideas

TITLE:

Determining the Readiness and Effectiveness of Freeway Corridor V2X Applications in Improving Mobility and Safety

SUBMITTED BY: TRB Freeway Operations Committee

Research Ideas

TITLE:

Improving Priced Managed Lanes with
TSMO Strategies

SUBMITTED BY: TRB Freeway
Operations Committee

Research Ideas

TITLE:

Artificial Intelligence (AI) and Machine Learning for Operations

SUBMITTED BY:

TRB RTSMO Committee

Research Ideas

TITLE:

Big and Diverse data Sets and Sources

SUBMITTED BY:

TRB RTSMO Committee

Related Research: NCHRP 08-119

Developing Data Standards and Guidance
for Transportation Planning and Traffic
Operations - Phase 1

Research Ideas

TITLE:

Data from CAVs to Support Performance Management

SUBMITTED BY:

TRB RTSMO Committee

Research Ideas

TITLE: Experimental Implementation of Big Data Analytics for Traffic Incident Management Problem

SUBMITTED BY:

TRB RTSMO Committee

Related Research: NCHRP 17-75, *Leveraging Big Data to Improve Traffic Incident Management*