Ann Arbor Connected Environment 2.0

Jim Sayer, Ph.D.

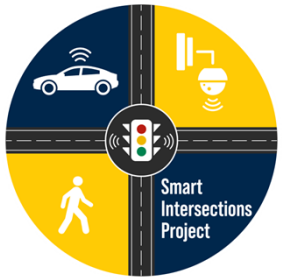

LIQUOR
NO TURN ON RED

Progression of the Connected Environment

SPMD Launched
August 21, 2012

AACVTE Transition started May 11, 2015, Completed March 31, 2019

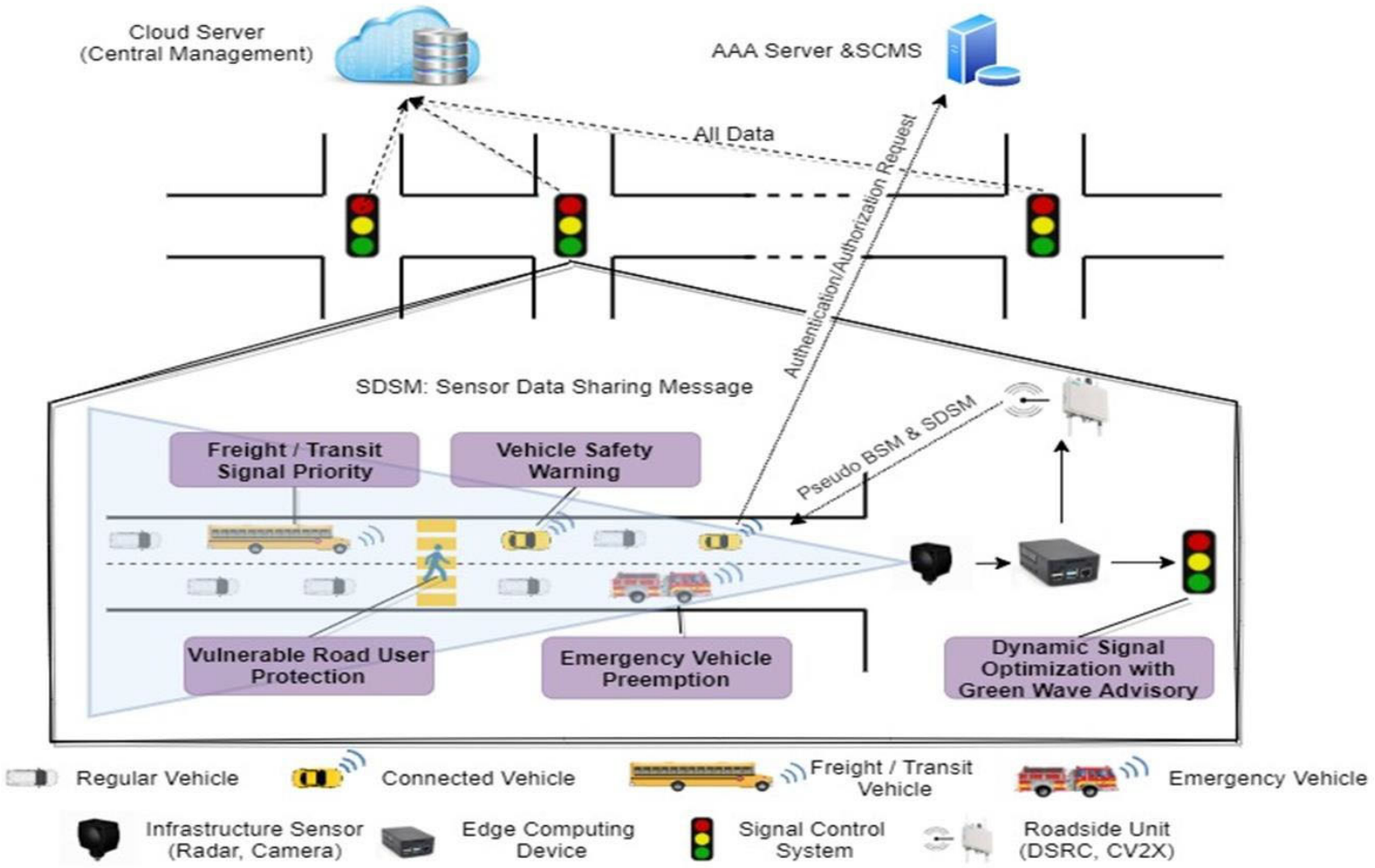
Ann Arbor Connected Environment
2019-2022



Smart Intersection Project
2021-2024

AACE 2.0
2023-2026

Smart Intersection Project



Partners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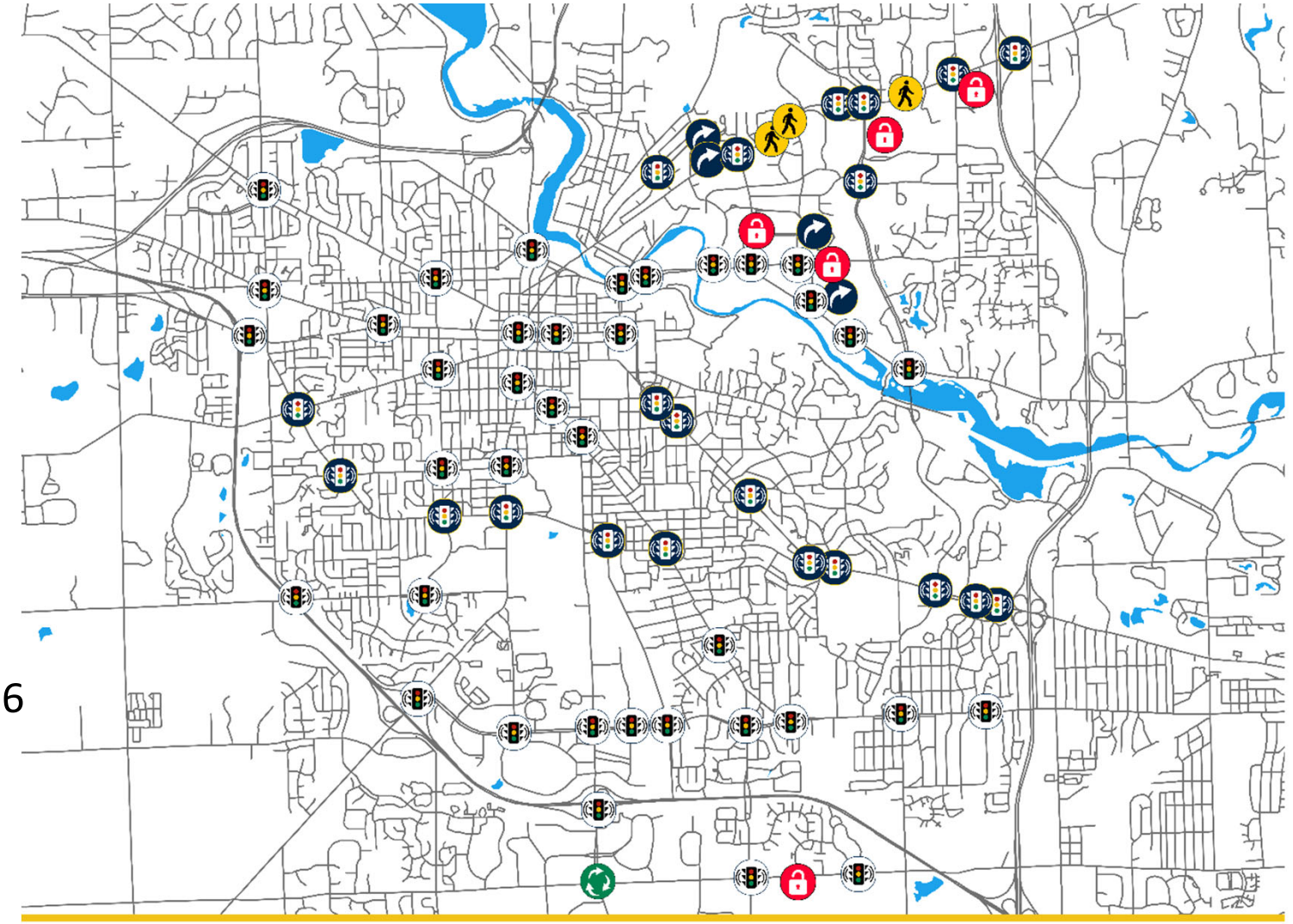
Deputy PM: Mary Lynn Buonarosa
Collaborators
Sub-recipients
Ford
Qualcomm
TOYOTA
CITY OF ANN ARBOR MICHIGAN
Continental
iteris
ECONOLITE
P3M
PURDUE UNIVERSITY
wsp

Ann Arbor Connected Environment 2.0

- A 3-year, $12.7M project
  - $9,859,240 Federal Funds
  - $2,847,185 Cost Share
- High-level objectives
  - Replace the Dedicated Short-Range Communication (DSRC) devices in the Ann Arbor infrastructure with Celluar-V2X (C-V2X) equipment
  - Equip at least 100 vehicles with C-V2X radios
- Leverage the existing efforts – Smart Intersection Project (SIP)
  - Take advantage of the radio testing and development
  - 21 intersections to be equipped
  - Expand on the sensor deployment

2023 – 2026



Smart Intersection Site

Intersection Site

Pedestrian Mid-Block Crosswalk

Testing Site without Security Enabled

Roundabout

Curve Speed Warning

ANN ARBOR CONNECTED ENVIRONMENT 2.0

What is Different this Time

- Support OEMs and Tier 1s to implement the 5G Automotive Alliance U.S. V2I Deployment Guide day-1 applications
  - Red Light Violation Warning, Emergency Vehicle Signal Preemption, etc.
- New to infrastructure ITE Connected Intersection Guideline
- Develop a cloud-base data repository
- Misbehavior detection and revocation
- Additional sensing at as many intersections possible
- Conduct outreach, education and workforce development

Partners


UMTRI


Ford


Qualcomm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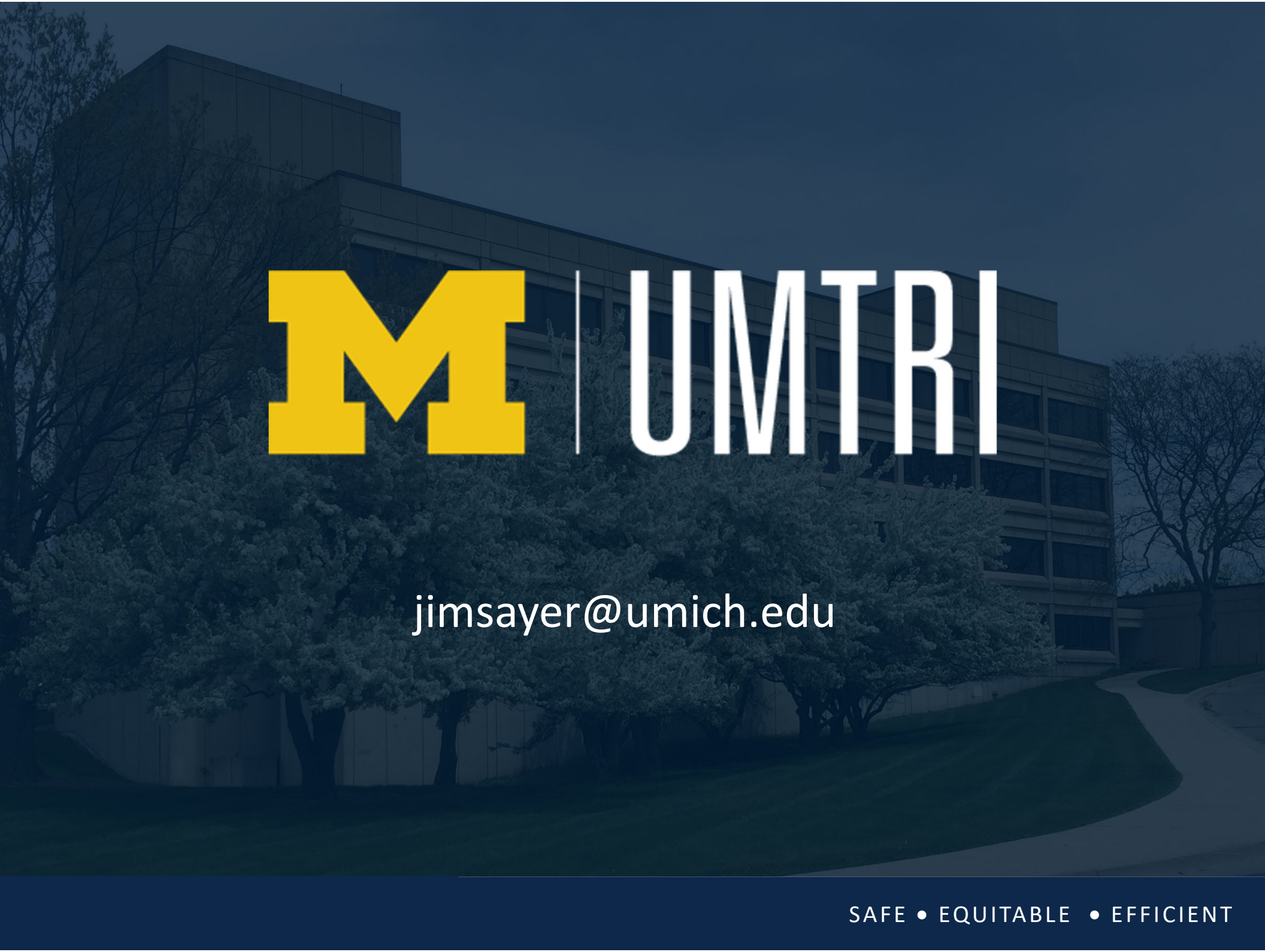
A Community of Transportation Professionals


INTEGRAL
BLUE
COMMUNICATIONS ENGINEERING & SYSTEMS INTEGRATION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