

# TSMO

Project Prioritization for Operations & Safety

## 2025 Mid-Colonial District Annual Meeting Annapolis, MD | April 24, 2025

Session 4A Regatta Ballroom A

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# Project Manager

## ANTHONY CASTELLONE, PE, PTOE

- ▶ 40 Yrs Exp / District One Resident
- ▶ Professional Traffic Ops Engineer
- ▶ ITE TSMO Executive Council, 2013 –20
  - CAV Standing Committee w/ Raj Ponnaluri
- ▶ 12+ Yrs FDOT, FL Municipal Experience
  - Metro-Dade Neighborhood Traffic Management Program
- ▶ PM / Pine Island Rd PD&E
  - Shared Use Path & Complete Streets
- ▶ HAWKS => Pedestrian Hybrid Beacons

### TSMO Experience

```

    graph TD
      A[FDOT ICE Level 1] --- B[FDOT Cortez Rd D/B]
      A --- C[PM - Winter Haven Timing]
      C --- D[FDOT PM Pine Island Feasibility, PD&E]
  
```

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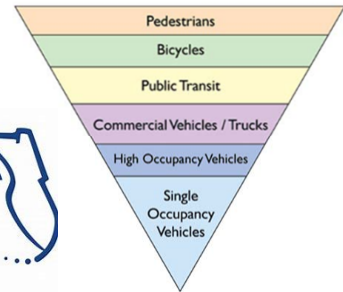
# Transportation Systems Management & Operations

The Transportation Systems Management and Operations (TSM&O) Program endeavors to provide a **safe** statewide transportation system that promotes the efficient movement of people and goods, supports the state's economic competitiveness, prioritizes Florida's environment and natural resources, and preserves the quality of life and connectedness of the state's communities.

## Transportation Systems Management and Operations

### Areas

- ▶ Management/Deployments
- ▶ ITS Communications
- ▶ ITS Software & Architecture



Source: City of Bellingham, Washington, 2016.



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# Determining Needs: Safe System Approach

## THE SAFE SYSTEM APPROACH VS. TRADITIONAL ROAD SAFETY PRACTICES

### Traditional

- Prevent crashes
- Improve human behavior
- Control speeding
- Individuals are responsible
- React based on crash history

### Safe System

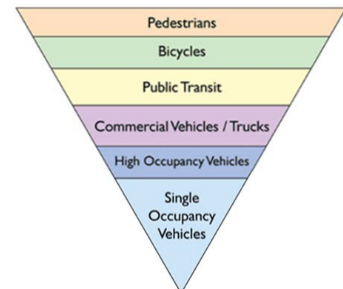
- Prevent deaths and serious injuries
- Design for human mistakes/limitations
- Reduce system kinetic energy
- Share responsibility
- Proactively identify and address risks

Whereas traditional road safety strives to modify human behavior and prevent all crashes, the Safe System approach also refocuses transportation system design and operation on anticipating human mistakes and lessening impact forces to reduce crash severity and save lives.

Source: FHWA 2020b.

### Stakeholders

- ▶ City's
- ▶ County's
- ▶ FDOT Districts



Source: City of Bellingham, Washington, 2016.



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## Safety Project: Cortez Road Design/Build



- ▶ Install 5 Pedestrian Hybrid Beacon (PHB) signals and 2 CCTV
- ▶ Includes ADA and lighting upgrades
- ▶ Safety improvements include:
  - Installation of raised, enhanced lighting
  - Landscaped medians for access management
  - Integration of the CCTV's into FDOT/Manatee County's Regional Traffic Management Center (RTMS)
  - High friction surface treatment to provide better gripping surface for vehicles to reduce skidding



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## Multi-Modal: Signal Retiming



- ▶ Multi-Modal Data Collection
- ▶ Existing Conditions & Observations
- ▶ Field Inventory
- ▶ Implementation
- ▶ Signal Retiming Results
- ▶ Complaint Resolution
- ▶ B/C Ratio



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