

One Implementation

Asset Management

Issue Management

Scenarios

Parking

Event Management

Multi-Mode Optimization

Transit

Safety

AI Edge Sensor  
FlowCube

Decade long Strategic Partner

38 year-young Company

Amsterdam, Stockholm, Copenhagen, etc.

Solution delivering World-Class Mobility

Market Leader in Northern Europe

Multi-Modal Traffic Flow

Emergency Service

Transit

Vision Zero

Citizen Advocacy

Autonomous Vehicles

Curb Management

Truck Route

Para Transit

School buses


Business Advocacy

Vulnerable Road Users

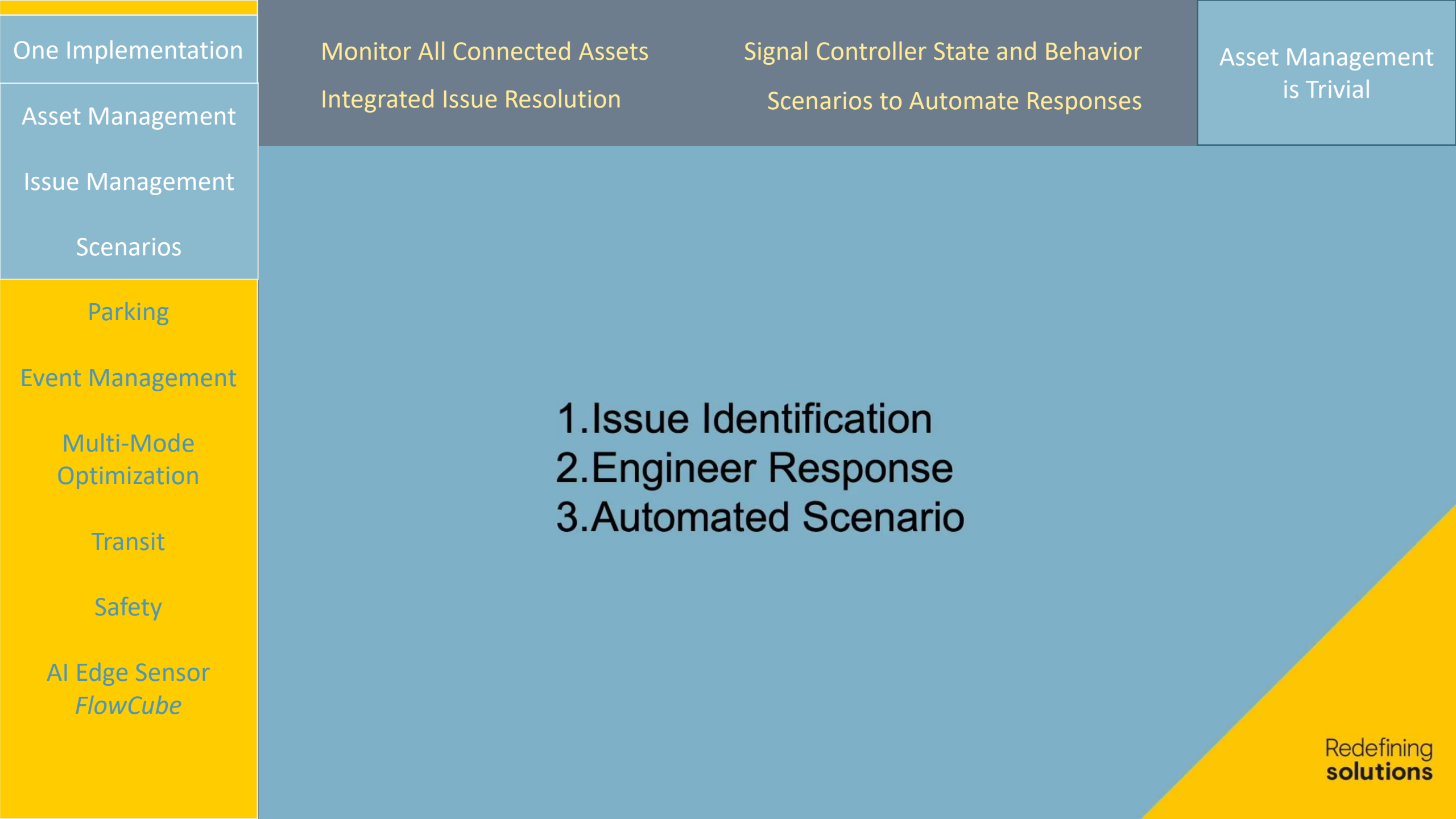
Micro-Mobility

Parking

Transportation and Transit



Complex Priorities



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Monitor All Assets

Actions to inform travelers

Based on Occupancy Rules

Reduce Traffic Seeking Parking

Fill Garages, Reduce Travel Time

Scenario

Actief

Beschikbaar

Concept / Historie

Fout

Verkeersregelinstantiatietype

Verkeersregelinstantiatie

Toeritdoseerinstallatie

Inzinkbare paal

Waarschuwbord

Verwijslocatie status

Operationeel

Waarschuwing

Gedoofd

Inwinfout

Storing

Inactief

Verwijslocatie type

Verwijslocatie

Grafisch display

VRI - Verkeersregelinstantiatie

Inactief

Regelen

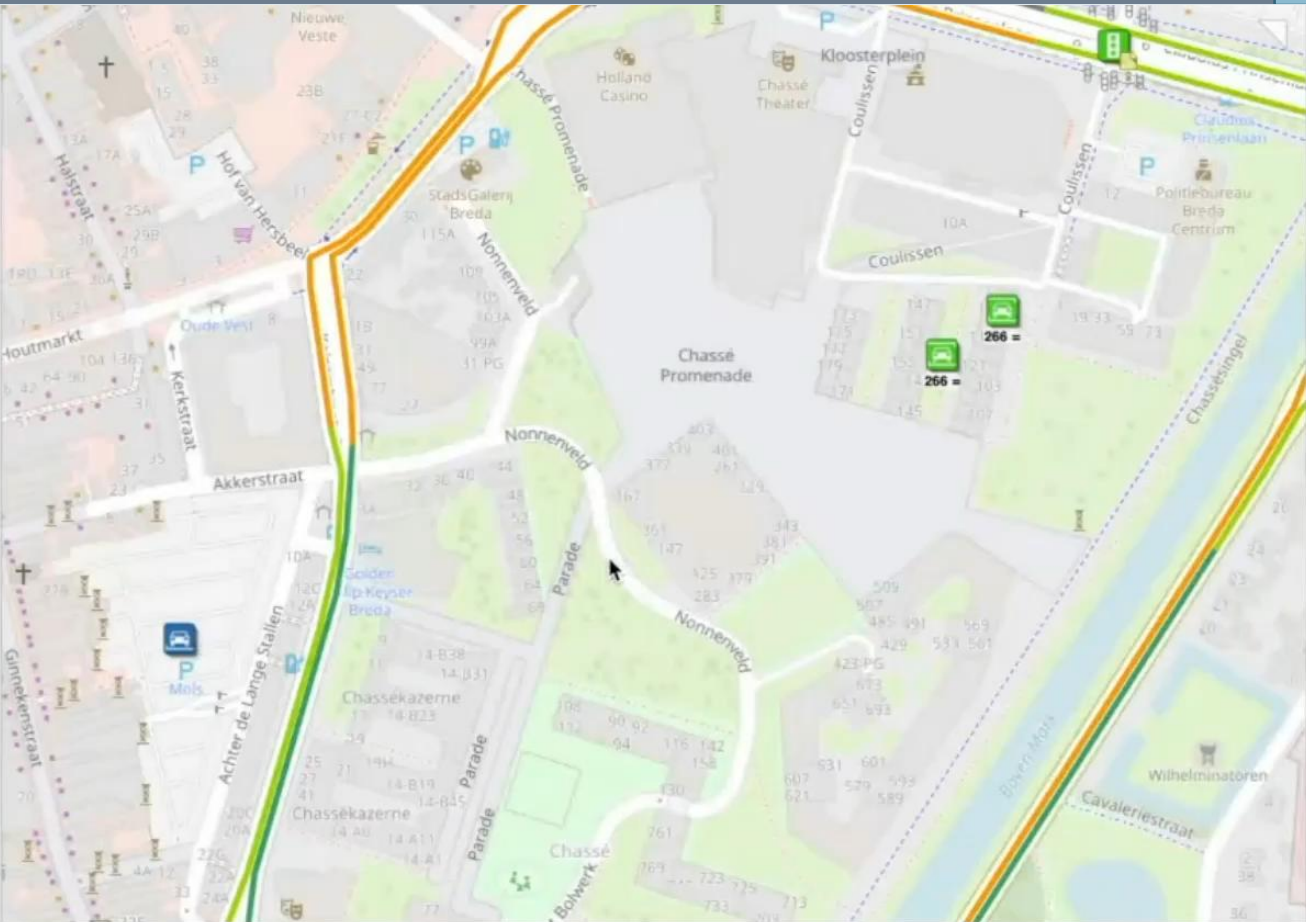
Regelen + niet urgente storing

Niet regelen (bedieningspaneel)

Niet regelen (applicatie, klok)

Niet regelen (autonome bewaker)

Onbekend



Nieuwe storingen

Filter: (geen)

Filters wijzigen...

☒ Verberg storingen van niet-toegewezen objecten

Identificatie	Tijdstip	Objecttype	Object	Categorie
f1c2f92a-748b-400a-8...	ma 4 nov 2024 16:18:00	IVERA-apparaat	K086 - TLC086 / 091	IVERA I/O (IVERA-apparaat)
da1dd59c-6ef2-4117-...	ma 4 nov 2024 16:05:34	IVERA-apparaat	K008 - TLC008 / 043	IVERA I/O (IVERA-apparaat)
e8920d1a-78d5-4a1c-...	ma 4 nov 2024 15:54:22	IVERA-apparaat	K012 - TLC012 / k311	IVERA I/O (IVERA-apparaat)
c3f6b4c1-423c-40ef-b...	ma 4 nov 2024 14:39:24	IVERA-apparaat	K086 - TLC086 / 091	IVERA I/O (IVERA-apparaat)





Gemeente  
Amsterdam

One Implementation

Over 120,000 People

Divert Non-Event Traffic

Green Towards Available Parking

Integrated Control Across Jurisdictions

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## Regional Flow Optimization

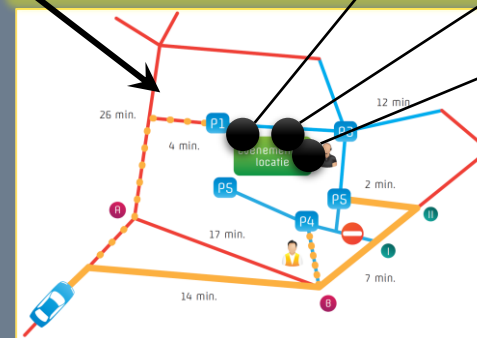
Alternative routes to approach the event area over the freeways



Multi-jurisdictional:

- Rijkswaterstaat (Dutch Highways Agency)
- City of Amsterdam
- Province of Noord-Holland
- National Police
- Fire Department

## Local Micro Control



Ziggo Dome music hall



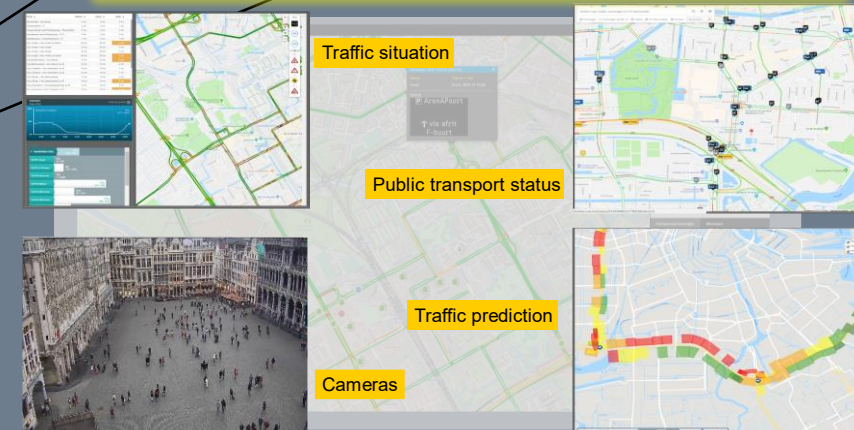
Johan Cruijff ArenaA Soccer  
stadium & music hall



AFAS Live music hall



## Integrated Traffic Management



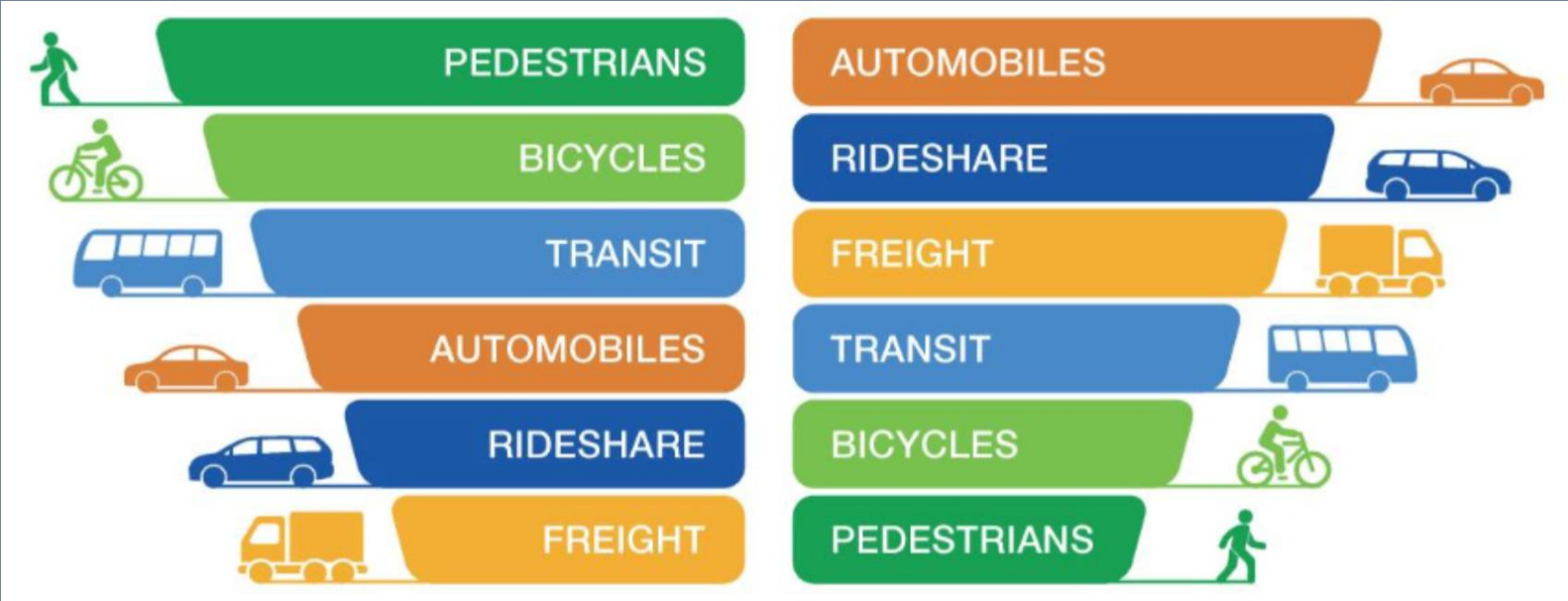
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Service Citizens and Businesses with Mobility services
Continuous Tuning

Increase Return on Infrastructure
Allocate Green based on Mode Priority

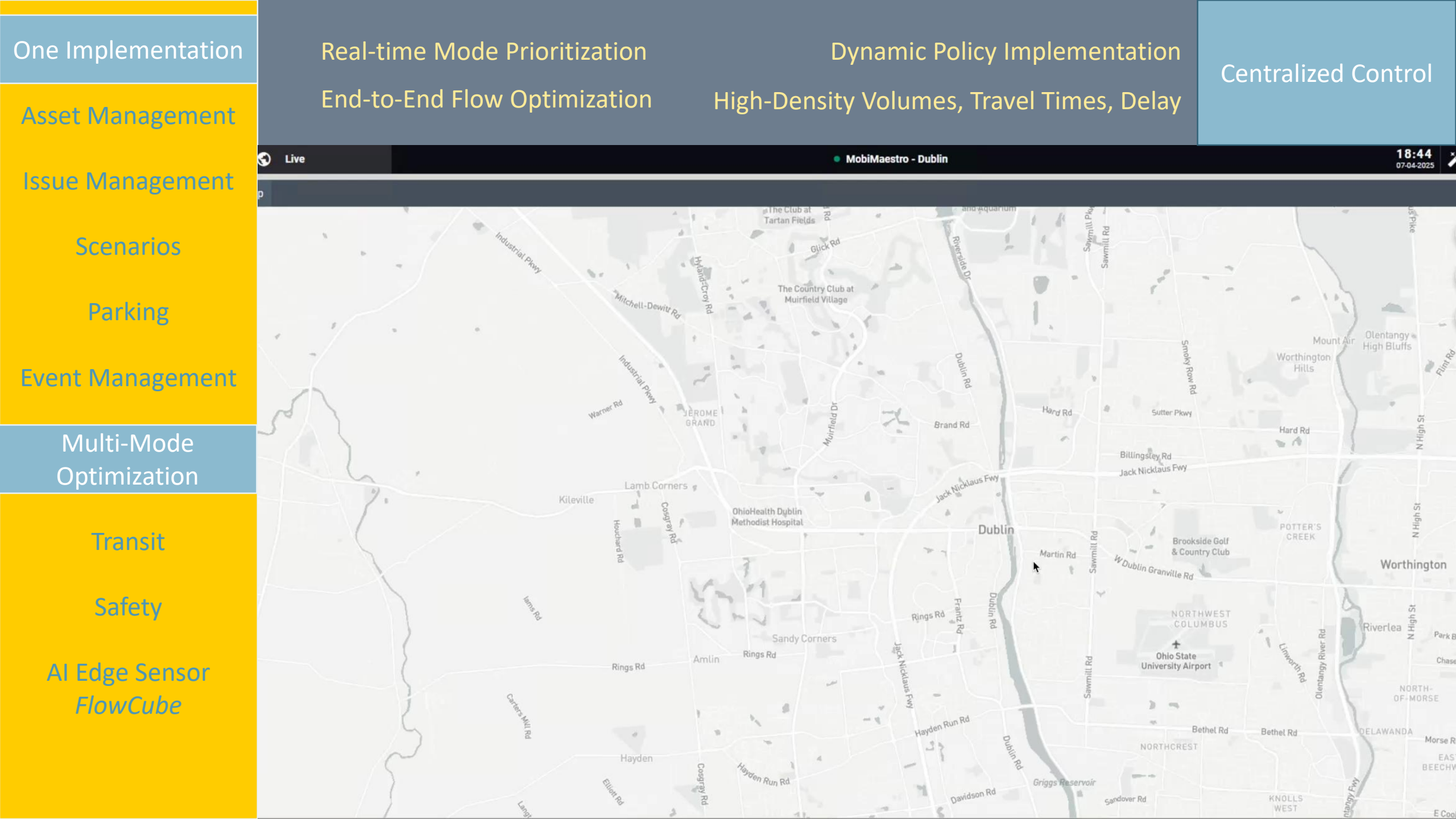
Policy Implementation
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# Envision Dublin (OH) Community Plan



Implemented

6 months ago



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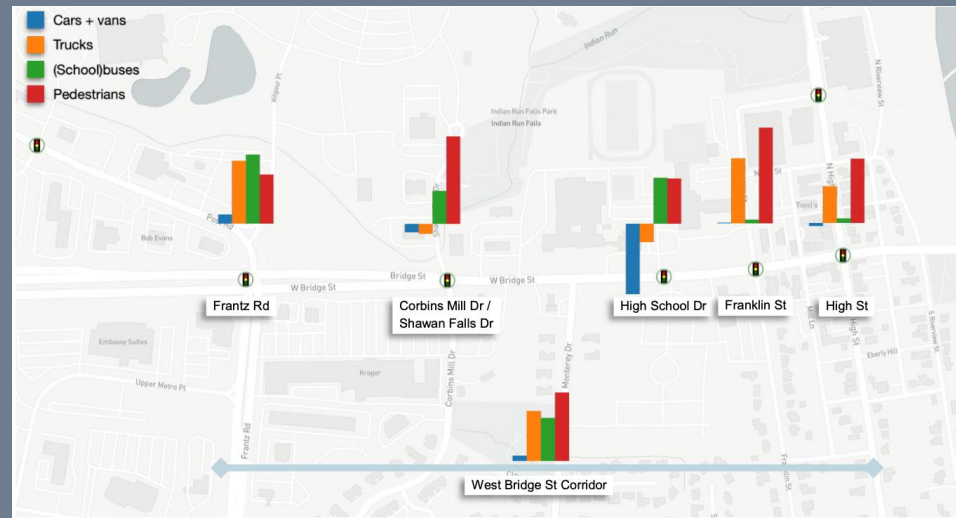
Minimize Delay on all Approaches

Multi-Mode Prioritization

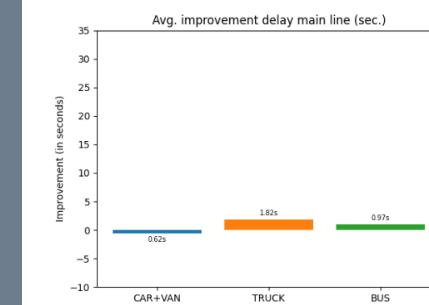
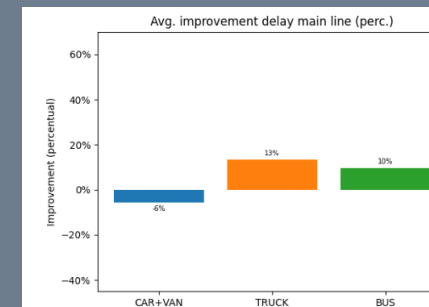
Dynamic Policy Implementation

Measure, Adjust, Optimize

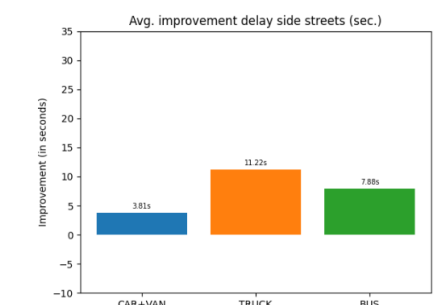
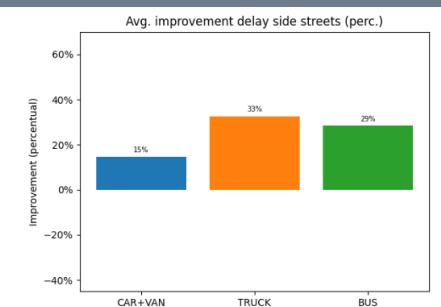
By Approach  
Optimization



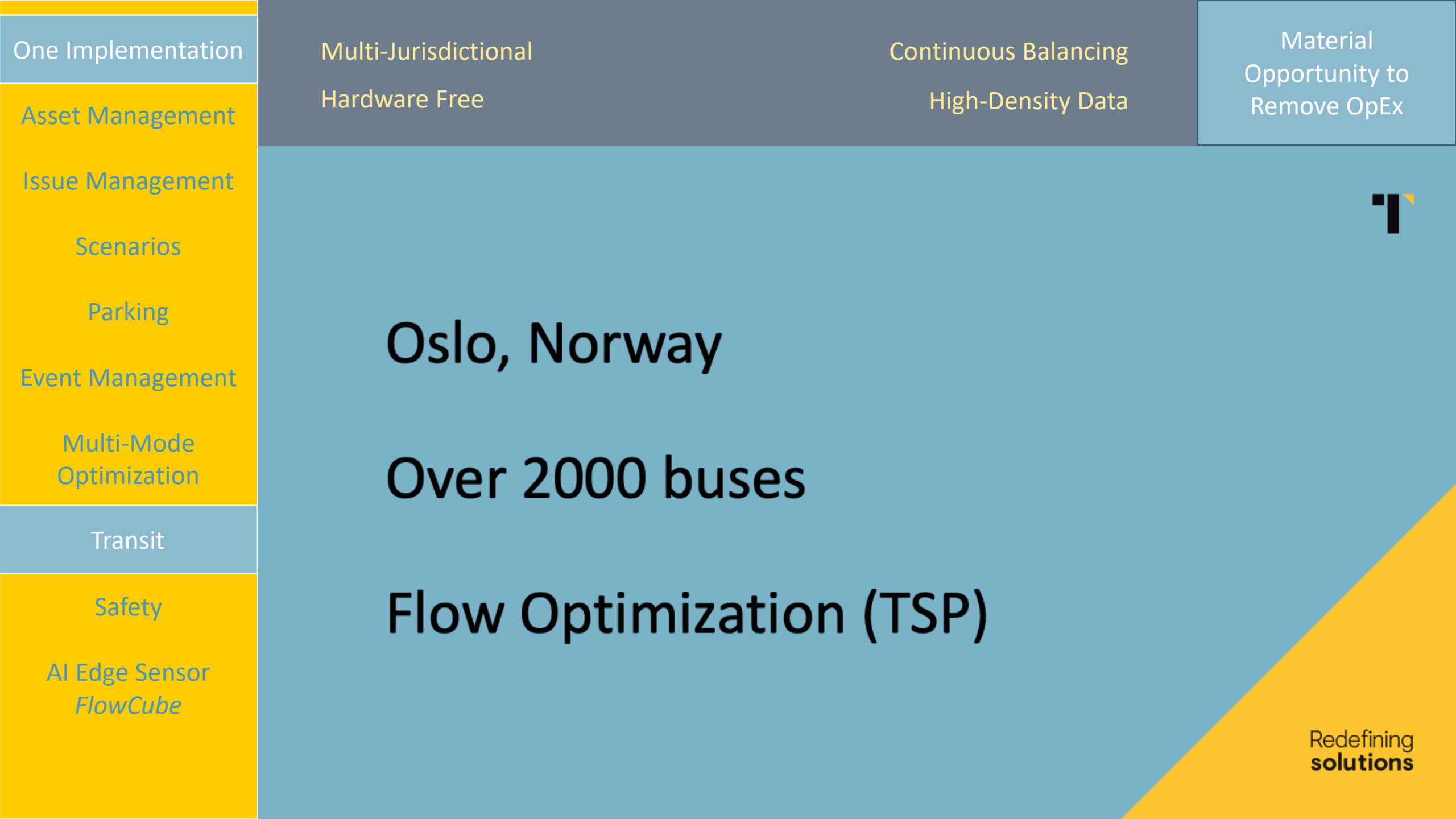
### Main Line



### Side Streets









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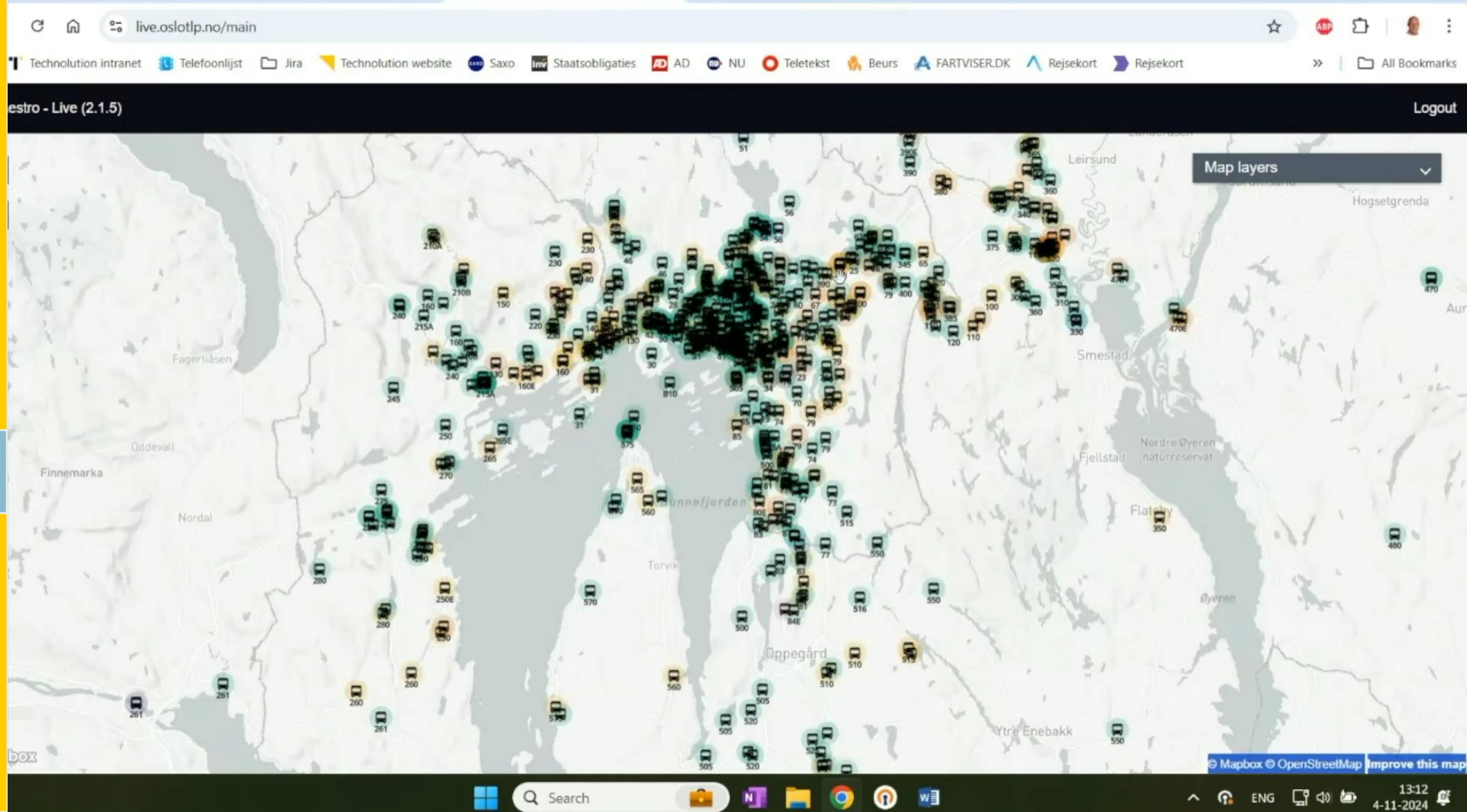
Safety

AI Edge Sensor  
*FlowCube*

Multi-Jurisdictional  
Hardware Free

Continuous Balancing  
High-Density Data

Shorter, Reliable  
Trips Result in  
Ridership



Implement Transit First Policy

Benefit Driven

Return on Investment < 2years

Self-Sustaining Programs

Material Opportunity to Remove OpEx

## Let's Race!

Simulation generated with SFMTA  
PoC Connected Corridor Data  
11am – 12pm



### Reference Day

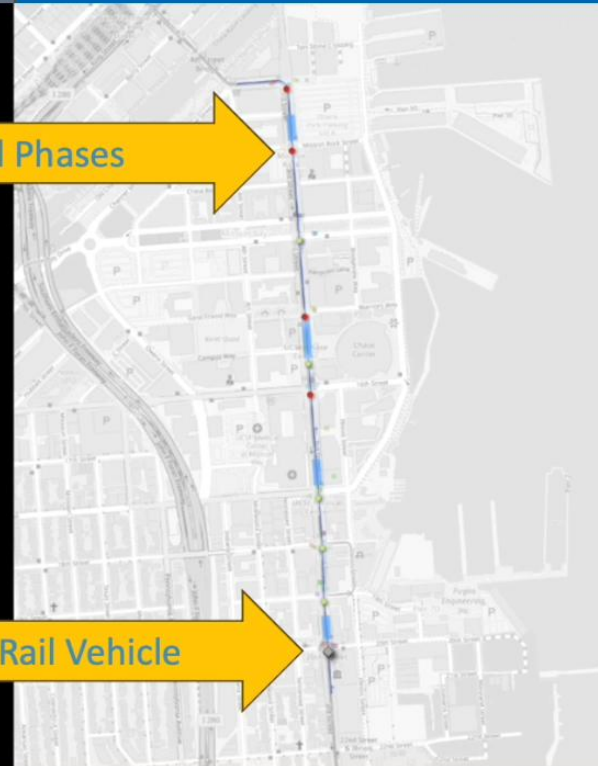
Signal Phases

Light Rail Vehicle

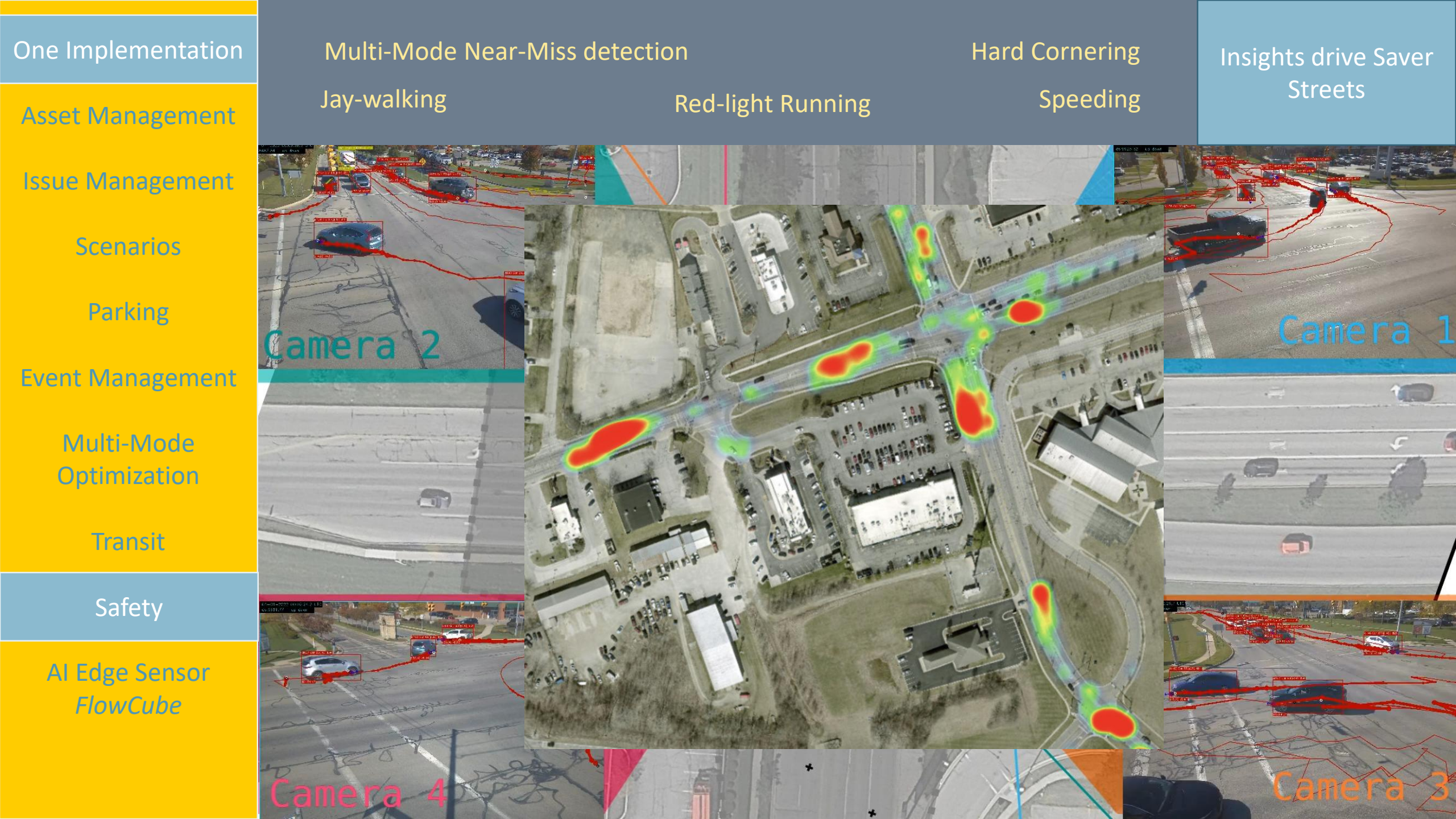
### Test Day TNL Technology

Same Dwelling

Light Rail Vehicle









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FlowCube

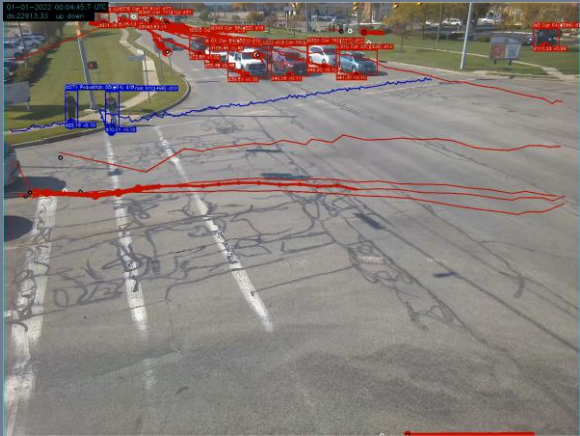
AI Edge Sensor  
FlowCube

Multi-Mode  
Highly Accurate

Remote Configuration  
Volumes, Speeds, Path

Privacy  
Cellular or IT Network

World-Class  
AI Sensor



AI Edge Sensor: FlowCube



97.3% Accuracy



# Redefining **solutions**

TNL