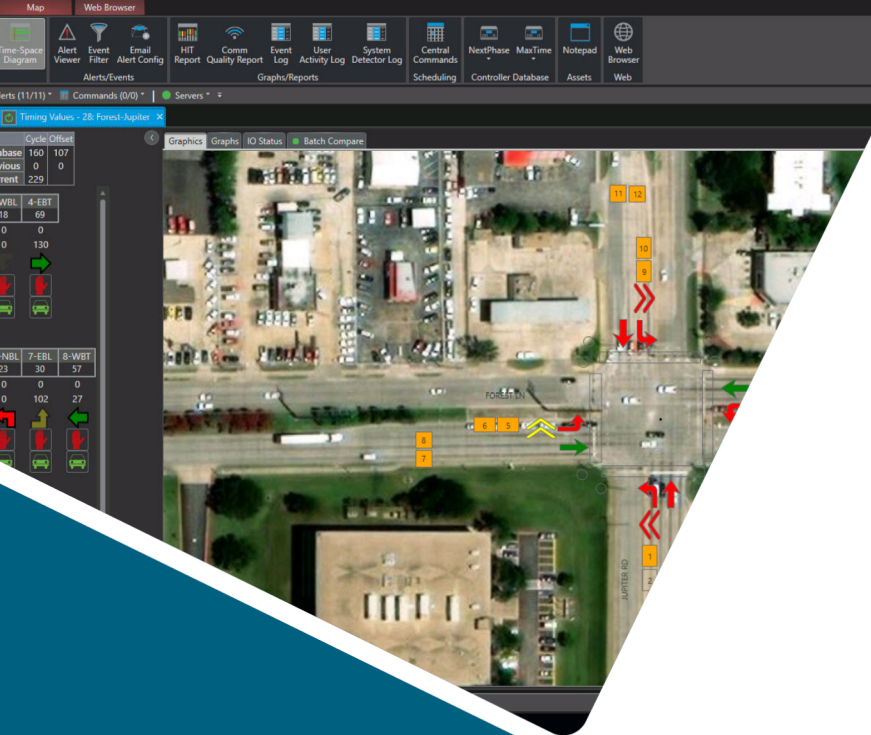


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Kimley»»Horn



TECHNOLOGY FORUM

ADOT / Surprise Central EVP

»»KITS

A Kimley-Horn Software Solution

»»Kadence

A Kimley-Horn Software Solution

»»Traction

A Kimley-Horn Software Solution

Agenda

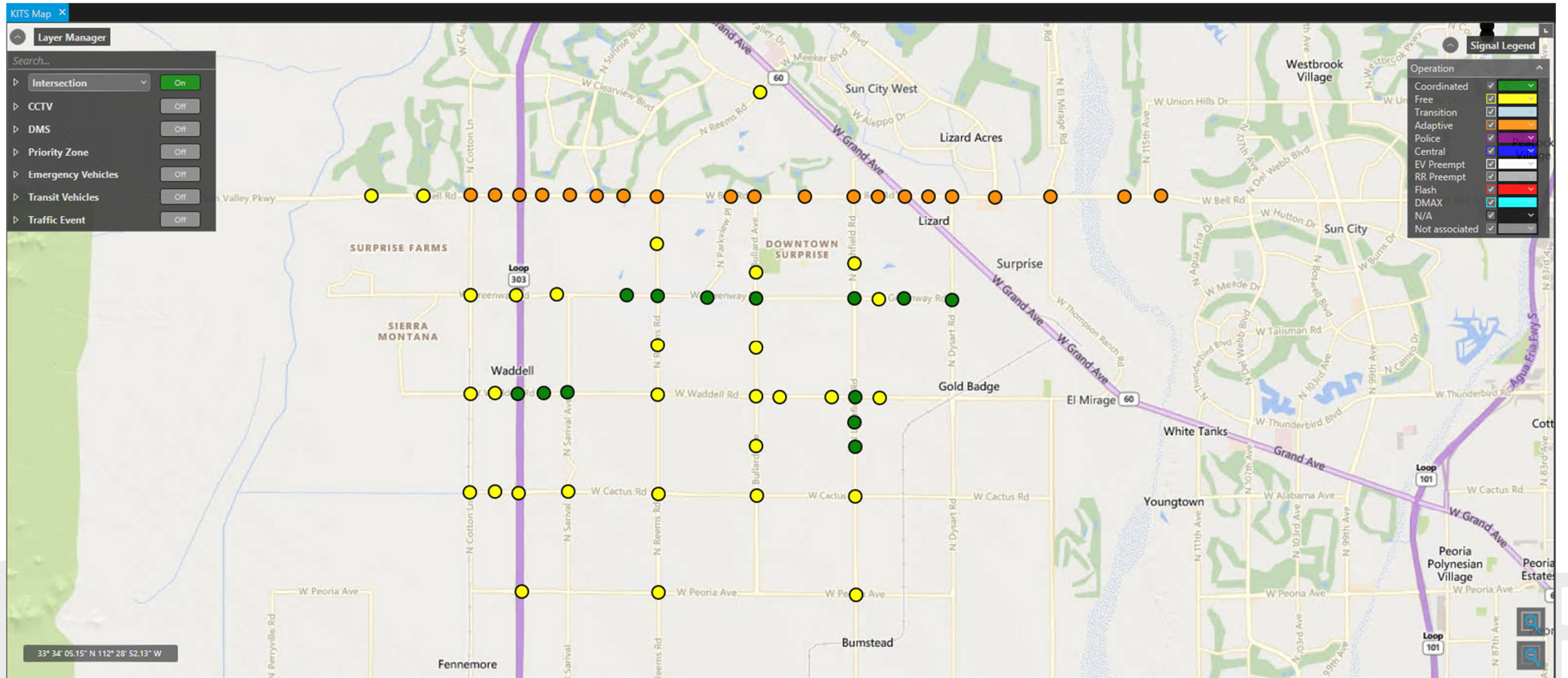
- Project overview
- Stakeholder engagement
- Technical challenges

Project Overview

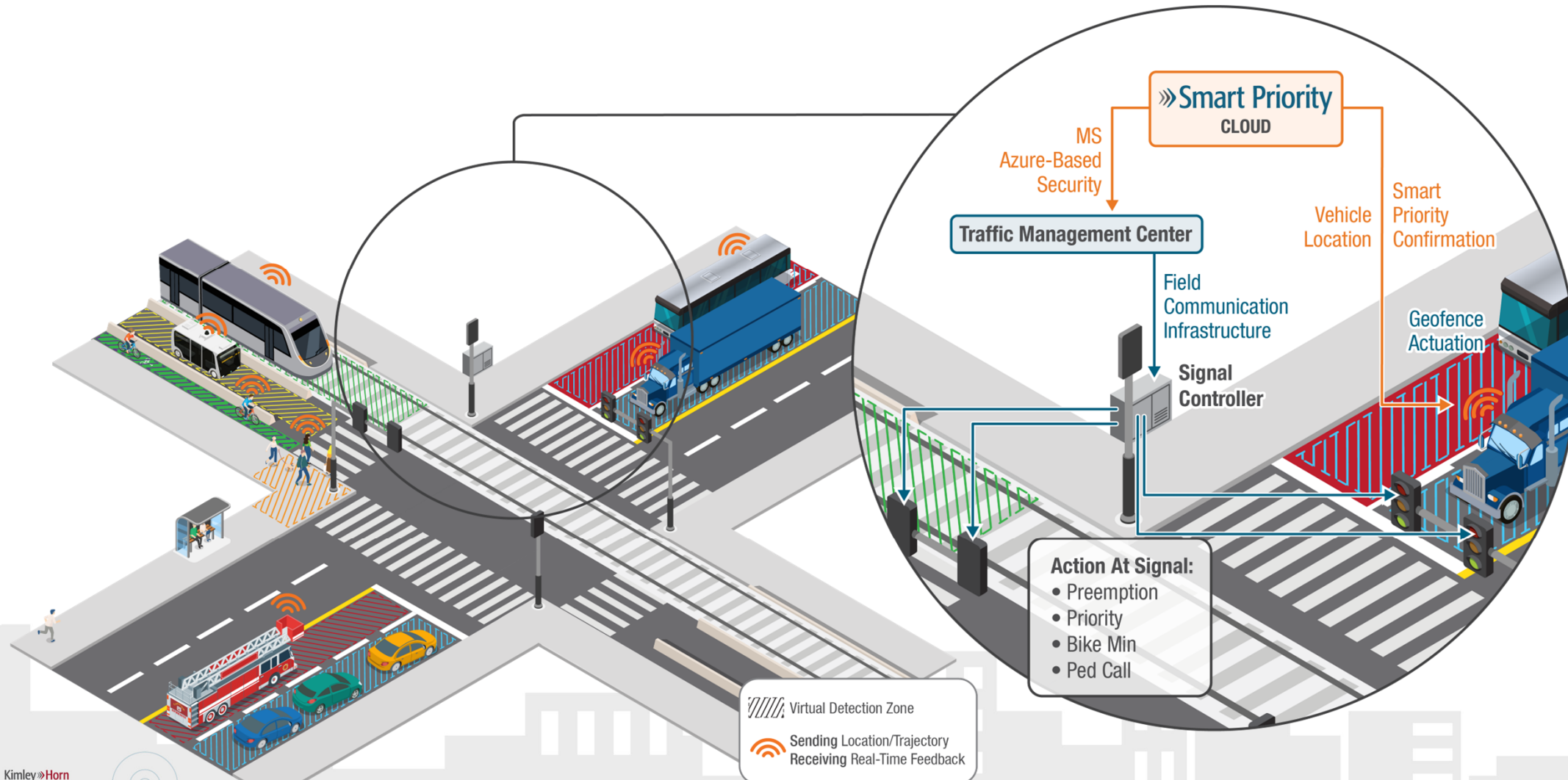
Centralized EVP within City of Surprise

- Provide EVP to 35 fire trucks within City of Surprise
- EVP capabilities primarily leveraged through KITS
- Leverage existing infrastructure where possible
 - New devices may be needed to supplement existing feeds
- “Get Ready Mode” feature will propagate “Free” commands to start ped clearances early

City of Surprise Traffic Signals



EVP Transmission Via Traction Priority



The background is a solid teal color with several abstract, darker teal lines. One line is vertical, another is horizontal, and a third is diagonal, creating a grid-like structure. A fourth line is a thick, dark teal shape that resembles a stylized 'Y' or a branching path, intersecting the other lines.

Stakeholder Engagement

Partnership is Key

- ADOT – administration of the project and oversight to ensure compliance with federal funding
- City of Surprise – recipient of the system and owners/operators of Surprise traffic signals
- Surprise Fire Department – receives the primary benefit of the system, fire trucks get to emergencies faster
- AVL/GPS device providers – integration of AVL/GPS equipment for real-time tracking of fire trucks
- Vehicle outfitters – expertise in installing new equipment if needed

Technical Challenges

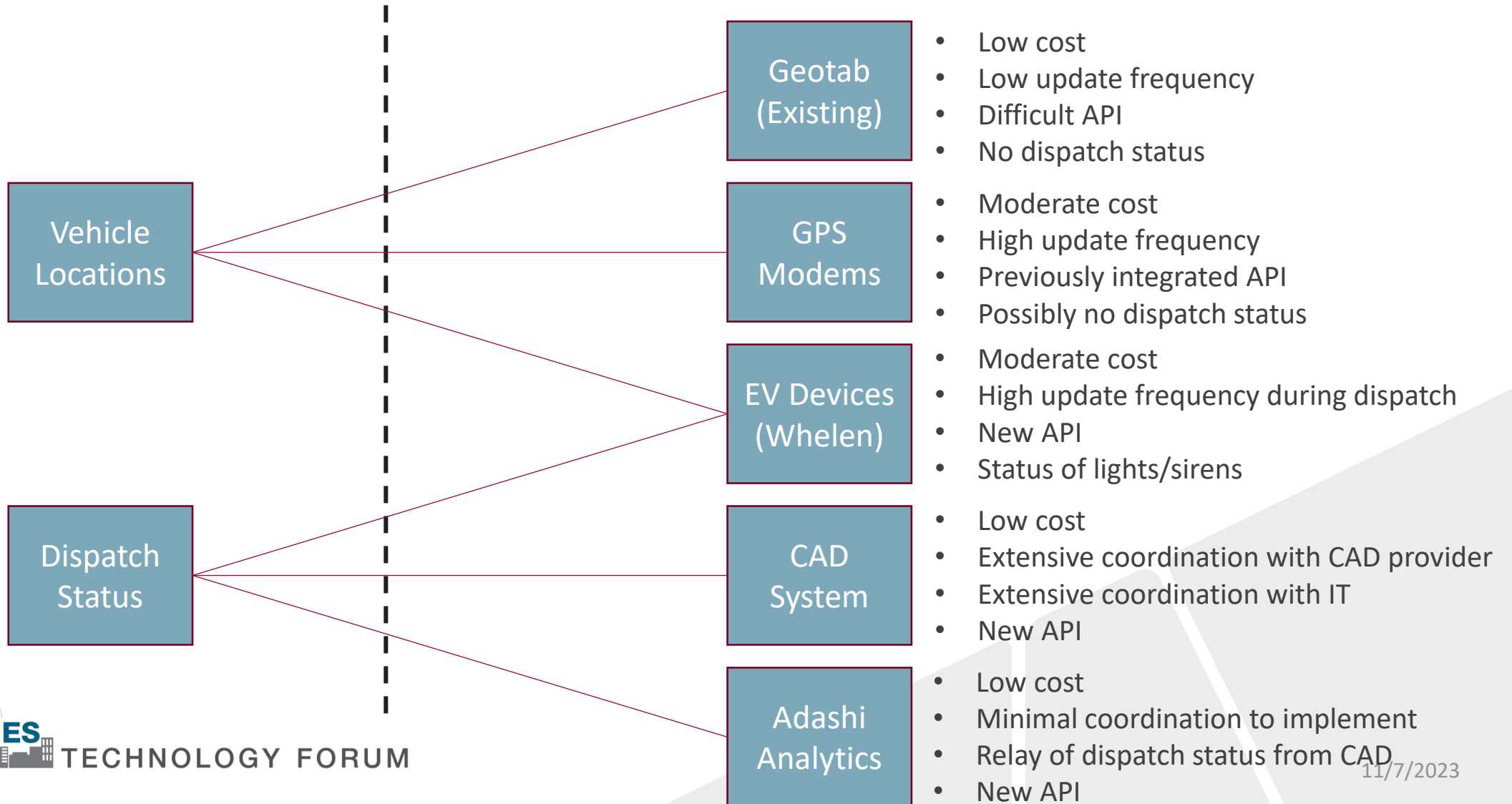
Accurate Vehicle Tracking is Complicated!

- Not all AVL equipment is designed to provide once per second vehicle location updates
 - Many solutions are capped at providing updates once every 10-30 seconds, which is too slow for TSP and EVP
- Extensive coordination with AVL vendors is recommended
- Different GPS equipment has different capabilities
- Testing and real-world validation of feed accuracy is a must

Challenge Solving Process

What do we need?

What are our options?



Thank You!

