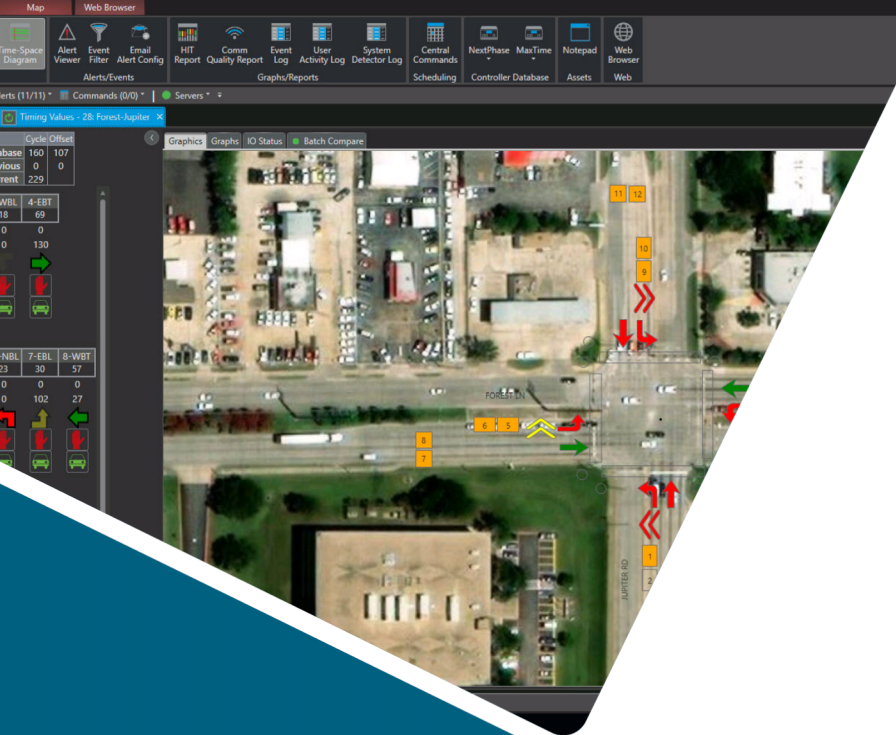


LEARN • COLLABORATE • SHARE • ENERGIZE



Kimley»»Horn

# SMART CITIES

TECHNOLOGY FORUM

## Kadence New Corridors

»»KITS

A Kimley-Horn Software Solution

»»Kadence

A Kimley-Horn Software Solution

»»Traction

A Kimley-Horn Software Solution

# Agenda

- Kadence overview
- New corridors

# Kadence Overview



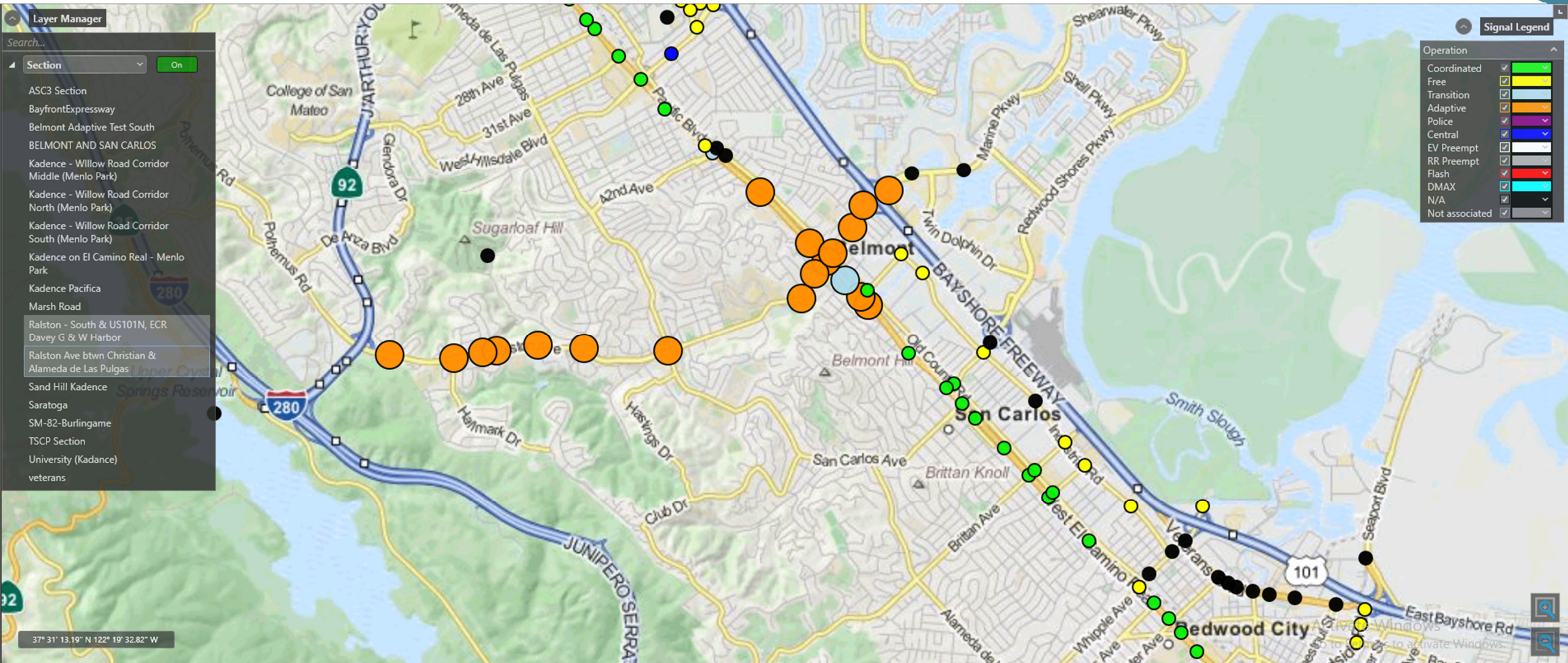
# Advantages of Kadence

- Scalable to hundreds or even thousands of signals
- Supports existing hardware and firmware
- Detection agnostic
- No hardware required in the cabinet
- Fully integrated into KITS, core ATMS features available to Kadence users

The background is a solid teal color. It features several thick, dark teal lines that intersect to form a geometric pattern. One line is vertical, another is horizontal, and a third is diagonal. These lines create a grid-like structure with various sized rectangular and triangular sections.

# New Corridors

# Belmont, CA – Ralston Ave

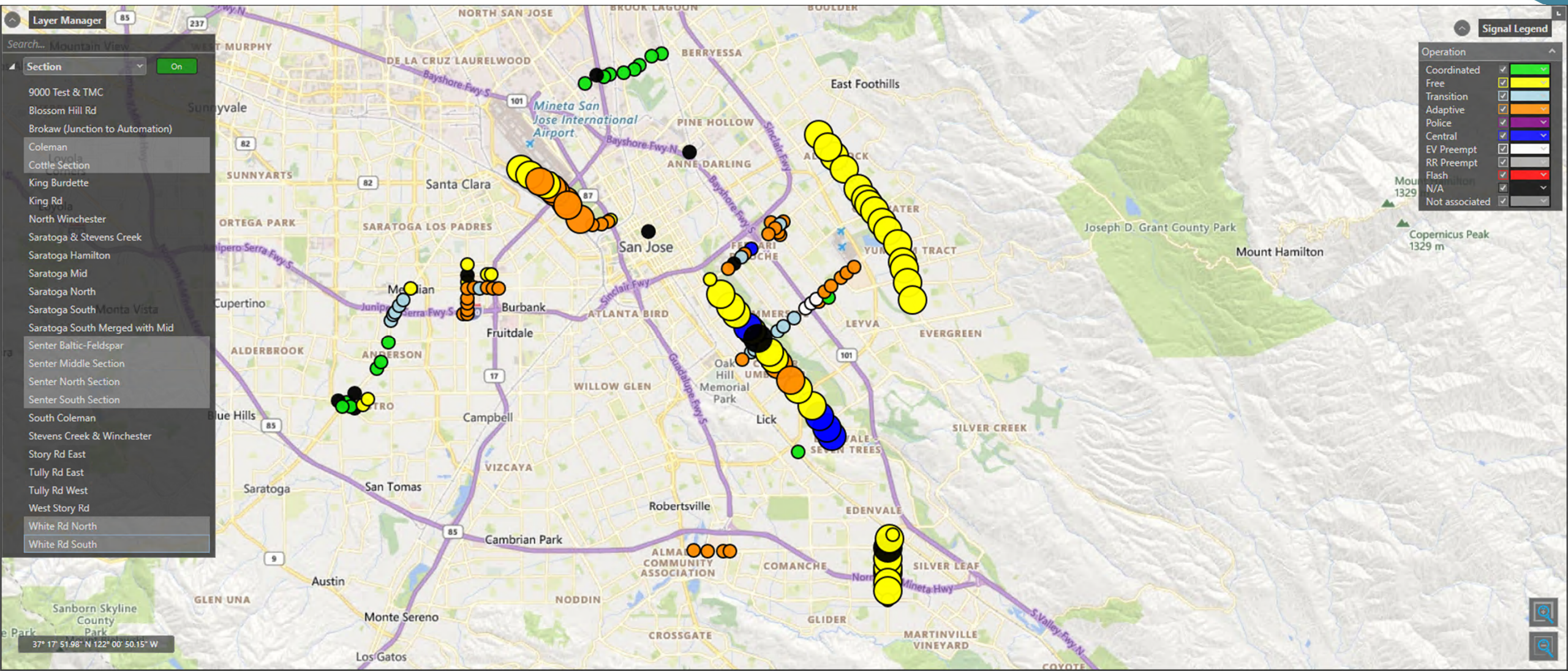


# Belmont, CA – Ralston Ave

- New adaptive corridor implemented within existing KITS deployment
- Mix of D4 and Caltrans TSCP controllers
- Intersects El Camino Real, a major corridor in San Mateo County



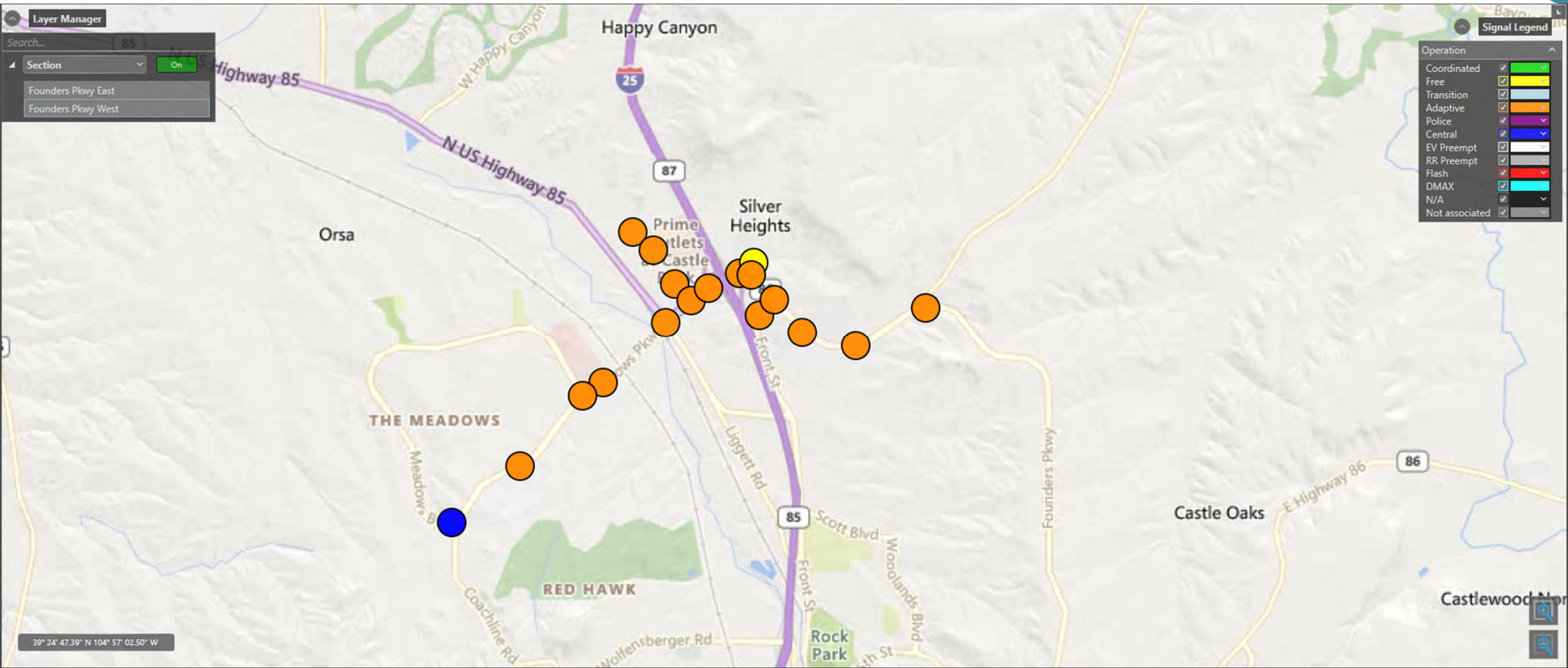
# San Jose, CA – Four New Corridors



# San Jose, CA – Four New Corridors

- Expansion of existing Kadence deployment to 54 new controllers
- D4 controller firmware deployed citywide
- Kadence corridors distributed throughout the City
- Largest Kadence deployment in the country at 129 signals total

# Castle Rock, CO – Founders Parkway



# Castle Rock, CO – Founders Parkway

- First Kadence deployment in Colorado
- VPN tunnel to allow integration of both CDOT and Castle Rock signals
- ASC/3 and Maxtime controller firmware
- Major outlet center adjacent to corridor

# TxDOT Beaumont, TX – US69

TxDOT Advanced Traffic Management System

Admin Home Intersections Adaptive Event Management **Map**

+ Add Device Define  
 Highlight Show Only Navigation Options  
 Select Zoom Zoom To Selection  
 BMT-Lmb Testing Preset Options  
 Refresh Add Delete  
 Status Operation Comm Quality Alerts  
 Plan/Cycle Phase Status Alerts  
 Selection Box Selection Polygon Manual Commands  
 Toggle Clustering Display Options

Intersections (882/1106) Stop Time (0) Alerts (4/4) Commands (0/0) Servers

KITS Map

Layer Manager

- AMA-Ochiltree
- AMA-Randall
- ATL-Bowie
- ATL-Camp
- ATL-Cass
- ATL-Gregg
- ATL-Harrison
- ATL-Marion
- ATL-Morris
- ATL-Panola
- ATL-Titus
- ATL-Upshur
- BMT-Chambers
- BMT-Hardin
- BMT-Jasper
- BMT-Jefferson
- BMT-Liberty
- BMT-Lmb-Adap**
- BMT-Newton
- BMT-Orange
- BMT-Tyler
- BRY-Brazos
- BRY-Burleson
- BRY-Freestone
- BRY-Grimes

Signal Legend

Operation

Coordinated	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Free	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Transition	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Adaptive	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Police	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Central	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
EV Preempt	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
RR Preempt	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Flash	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DMAX	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
N/A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Not associated	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

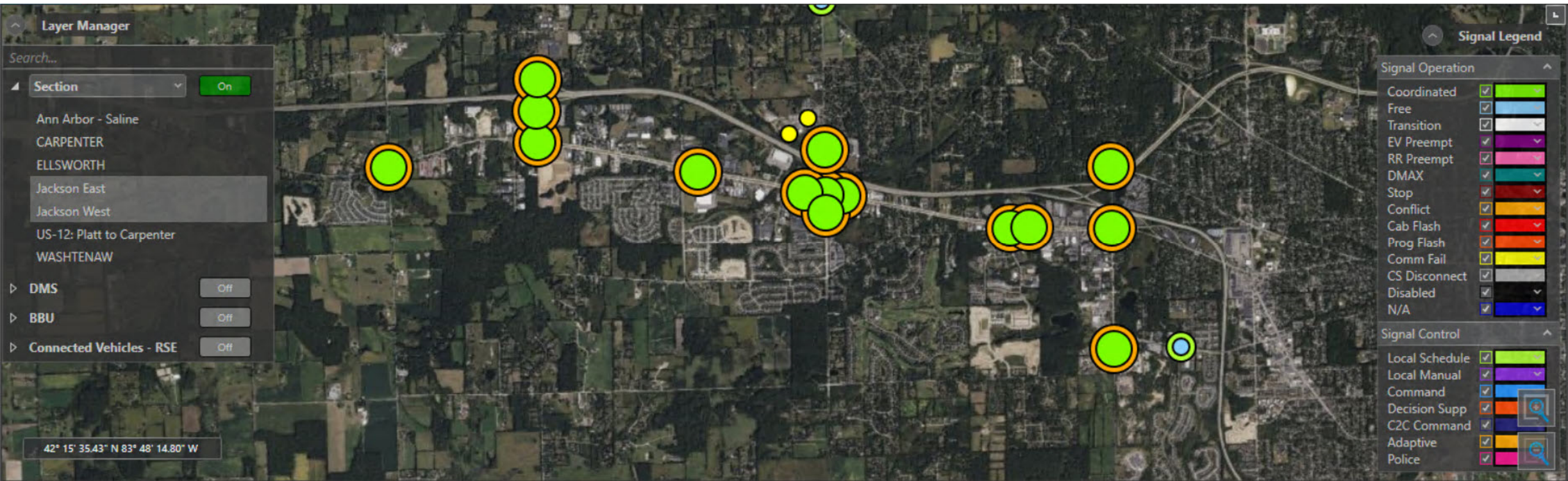
Map showing US Highway 96, Village Creek State Park, and various signal locations (e.g., Lumerton, Seth, Forest Rd, W Chance Rd, FM 421 Rd, FM 3513 Rd).

crobe1-c TRF

# TxDOT Beaumont, TX – US69

- First Kadence deployment within TxDOT KITS system
- SEPAC controller firmware
- Measuring performance with Traction Travel
- Nearby elementary and high school

# Washtenaw, MI – Jackson Corridor

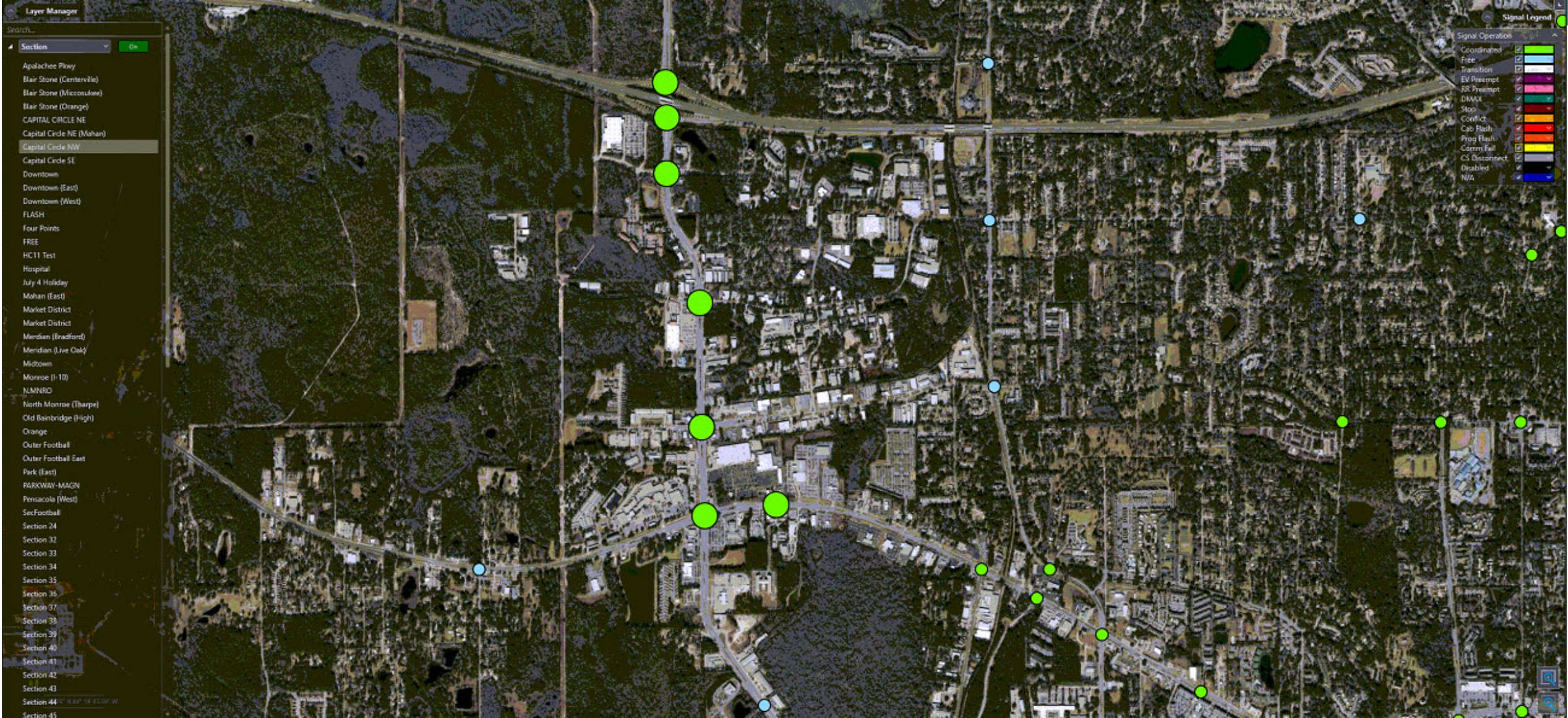


# Washtenaw, MI – Jackson Corridor

- First Kadence deployment within Washtenaw KITS system
- ASC/3 and EOS controller firmware
- Unique signal configurations at “Michigan Lefts”
- Spaced out signals on multiple intersecting corridors



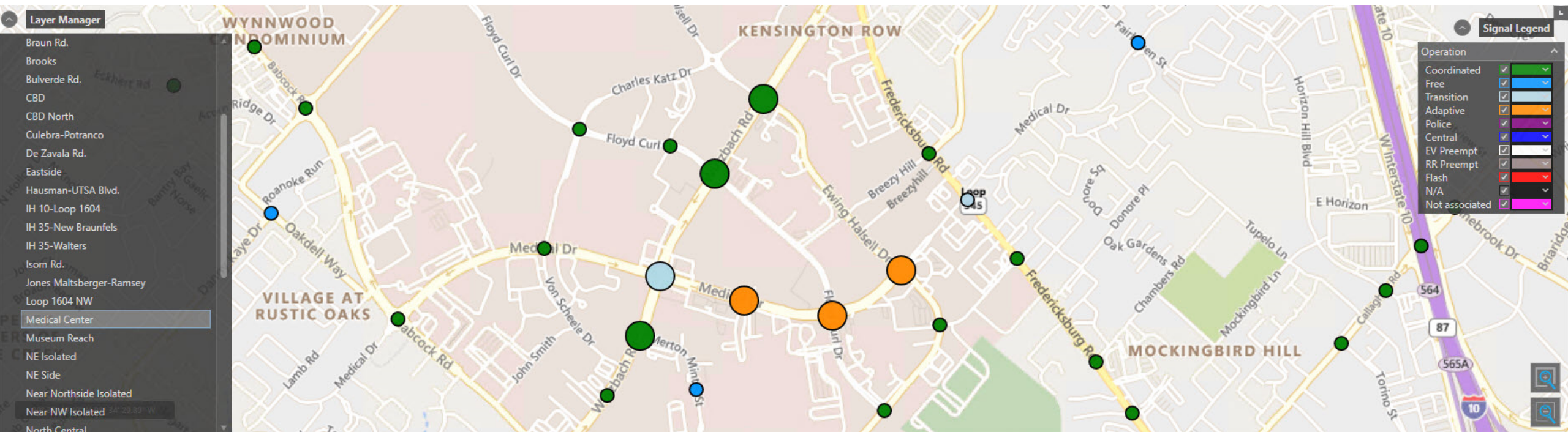
# Tallahassee, FL – Capital Circle



# Tallahassee, FL – Capital Circle

- First Kadence deployment within Tallahassee KITS system
- Maxtime controller firmware
- Unique detection challenges – many signals don't have stop bar detection on coordinated phases

# San Antonio, TX – Medical Center



# San Antonio, TX – Medical Center

- First Kadence deployment within San Antonio KITS system
- Maxtime controller firmware
- Signals laid out around hospital complex

**Thank You!**

