

Building a Digital Infrastructure to Manage and Operate Special Events

Coachella Valley, California



2026 ITE Western District Annual Meeting
Bellevue, Washington

June 30, 2026



Building a Digital Infrastructure to Manage and Operate Special Events



Coachella Valley Association of Governments

9 incorporated cities

300,000 – 600,000 residents



SAN JACINTO MOUNTAINS



SANTA ROSA MOUNTAINS



JOSHUA TREE NATIONAL PARK





02. PALM SPRINGS PRIDE



01. PALM SPRINGS VILLAGE FEST



03. PALM SPRINGS
FESTIVAL OF LIGHTS



04. DAY CLUB



05. SPLASH HOUSE



06. McCORMICK'S EXOTIC
CAR AUCTION



07. WHITE PARTY



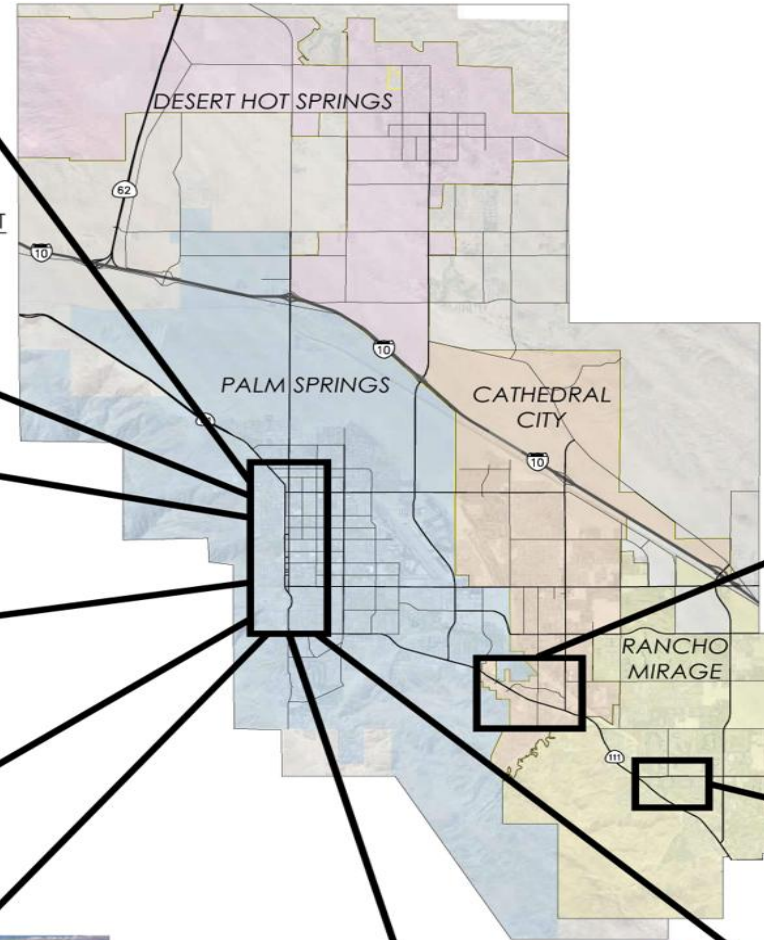
08. THE DINAH EVENT
& MUSIC FESTIVAL



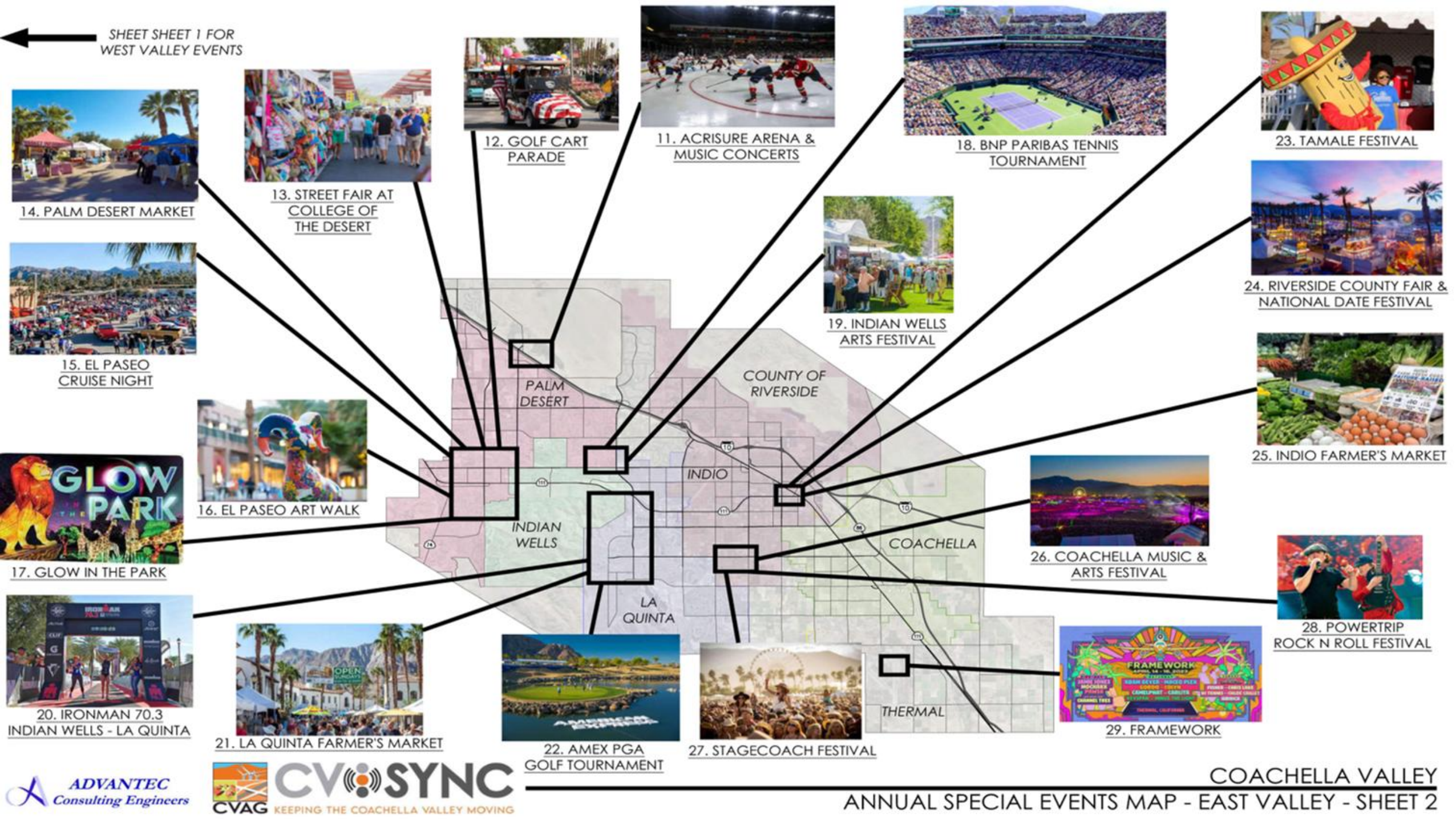
09. CATHEDRAL CITY HOT AIR
BALLOON FESTIVAL



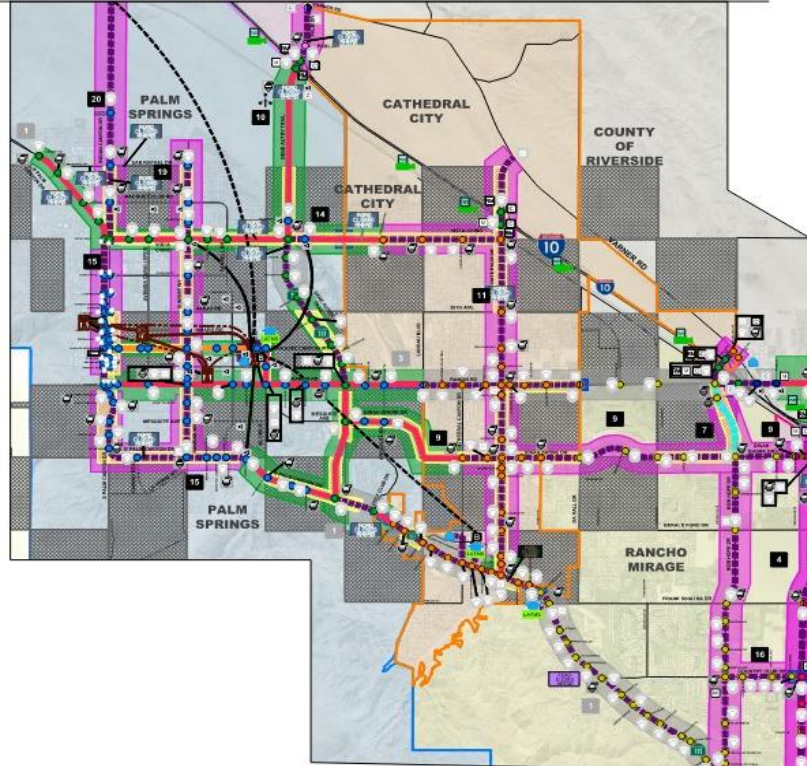
10. RANCHO MIRAGE
FARMER'S MARKET



SHEET SHEET 2 FOR
EAST VALLEY EVENTS →



SEE BELOW LEFT



- ✓ +600 Smart Intersections
- ✓ +26 Smart Corridors
- ✓ 1 RTMC
- ✓ 13 TOC
- ✓ +12,000 ITS Elements
- ✓ 12 Agencies
- ✓ 1 Event Promoter

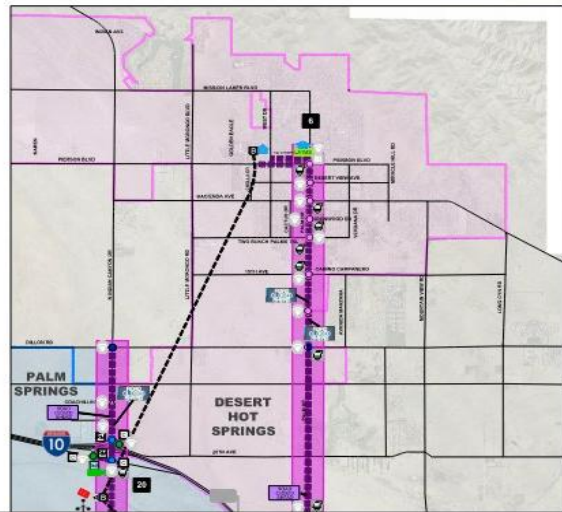
LIST OF TOP 24 CORRIDORS

PHASE I	1	HIGHWAY 111	13	JEFFERSON STREET
	2	WASHINGTON STREET	14	VISTA CHINO
	3	RAMON ROAD	15	PALM CANYON DRIVE
PHASE II	4	MONTEREY AVENUE	16	COUNTRY CLUB DRIVE
	5	COOK STREET	17	MONROE STREET
	6	PALM DRIVE	18	AVENUE 48/DILLON ROAD
	7	BOB HOPE DRIVE	19	SUNRISE WAY
	8	FRED WARING DRIVE	20	INDIAN CANYON DRIVE
	9	DINAH SHORE DRIVE	21	JACKSON STREET
	10	GENE AUTRY TRAIL	22	PORTOLA AVENUE
	11	DATE PALM DRIVE	23	AVENUE 50
	12	INDIO BOULEVARD	24	AVENUE 44

PHASE II (CONTINUED)

GENERAL LEGEND

- SIGNALIZED INTERSECTION
- CORRIDOR RANKING (PHASE I / PHASE II)
- CITY HALL
- OTHER CITY BUILDING
- PHASE I IMPROVEMENTS
- PHASE II IMPROVEMENTS
- PHASE IIB (TRIBAL NATIONS) IMPROVEMENTS
- PHASE II (CORRIDORS FUNDED BY LOCAL AGENCIES) IMPROVEMENTS
- CORRIDOR ENCROACHING TRIBAL NATIONS
- TRIBAL NATIONS
- CVAG BUILDING (RTMC)
- COMMUNICATIONS AND TRAFFIC ELEMENTS LEGEND
- FIBER OPTIC
- FIBER OPTIC - USE PLANNED CABLE
- PROPOSED FIBER OPTIC IN NEW CONDUIT
- PROPOSED FIBER OPTIC IN EXISTING CONDUIT
- LONG RANGE WIRELESS BACK-HAUL
- HIGH FREQUENCY WIRELESS BACK-HAUL
- WIRELESS BRIDGE
- LONG RANGE BACK-HAUL RADIO
- HIGH FREQUENCY BACK-HAUL RADIO
- WIRELESS RADIO (5.8 GHZ)
- CENTER-TO-CENTER INTERTIE LINK
- LOCAL ATMS
- REGIONAL ATMS
- BLUETOOTH/WI FI ARTERIAL MANAGEMENT SYSTEM AND C-V2X ROADSIDE UNIT (RSU)
- CCTV
- MASTER CONTROLLER
- CELL MODEM
- COMMUNICATION HUB CABINET AND GIGABIT FIBER SWITCH
- TRAFFIC MONITORING SYSTEM (TMS)
- FREeway DYNAMIC MESSAGE SIGN (DMS)
- RAMP METER
- PROPOSED DYNAMIC MESSAGE SIGN (DMS)
- PLANNED DYNAMIC MESSAGE SIGN BY OTHERS
- WEATHER STATION

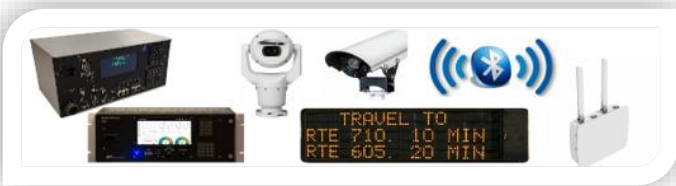


SEE ABOVE LEFT

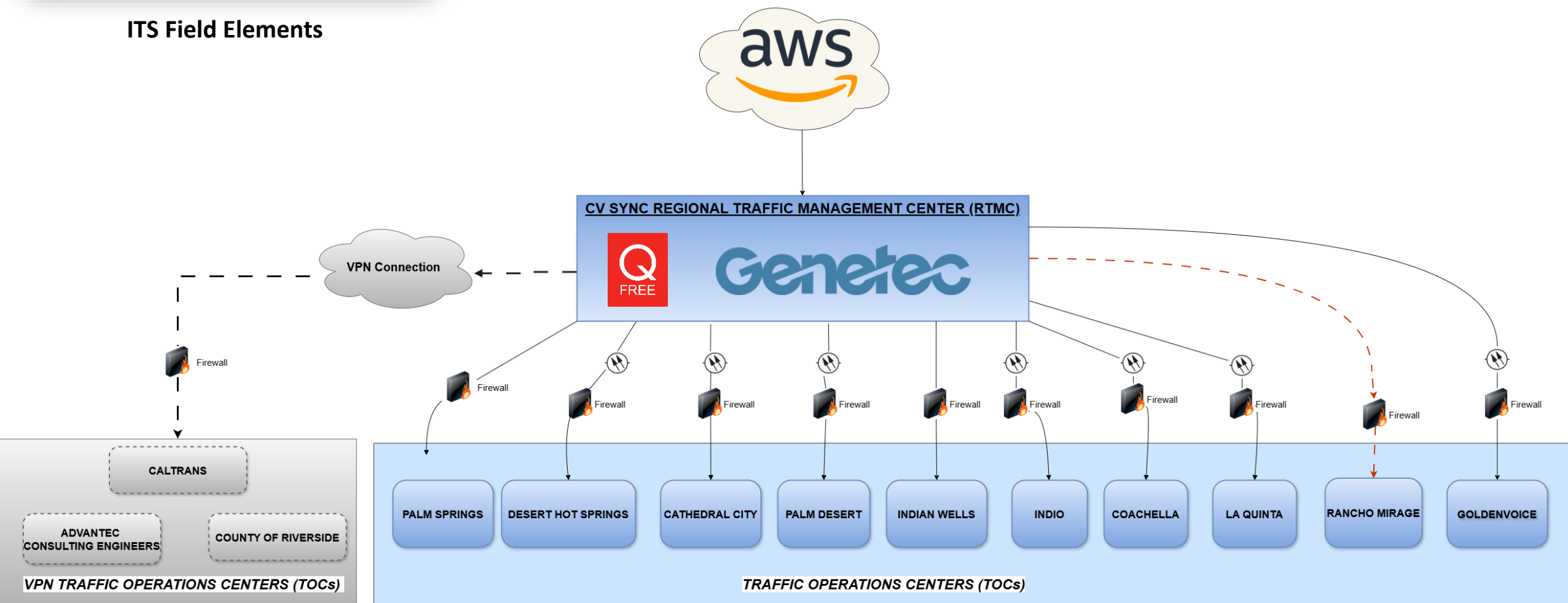
SIGNAL LEGEND	
CATHEDRAL CITY	
COACHELLA	
DESERT HOT SPRINGS	
INDIAN WELLS	
INDIO	
LA QUINTA	
PALM DESERT	
PALM SPRINGS	
RANCHO MIRAGE	
COUNTY OF RIVERSIDE	
CALTRANS DISTRICT 8	

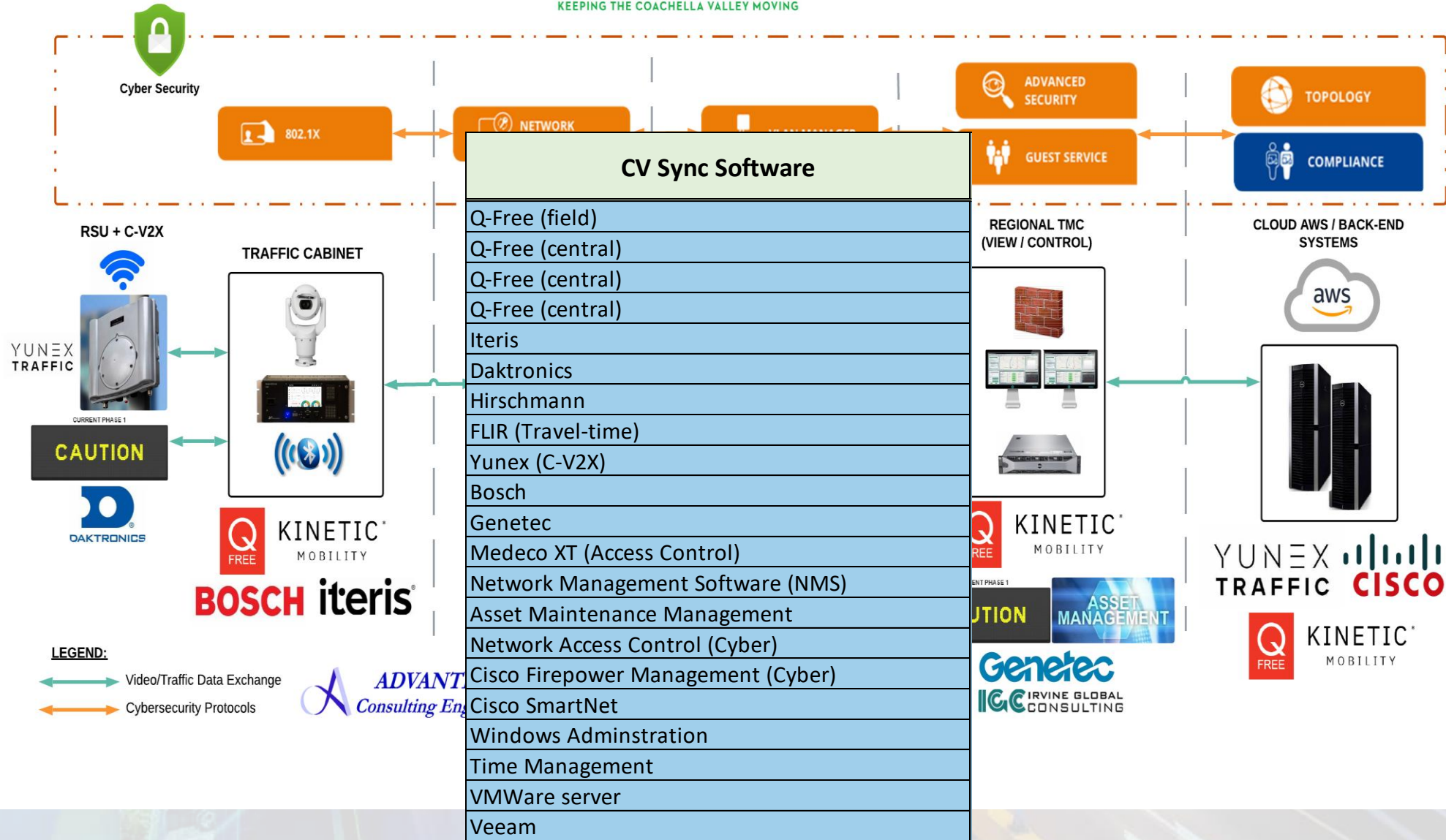
NO SCALE





ITS Field Elements





COACHELLA VALLEY RTMC

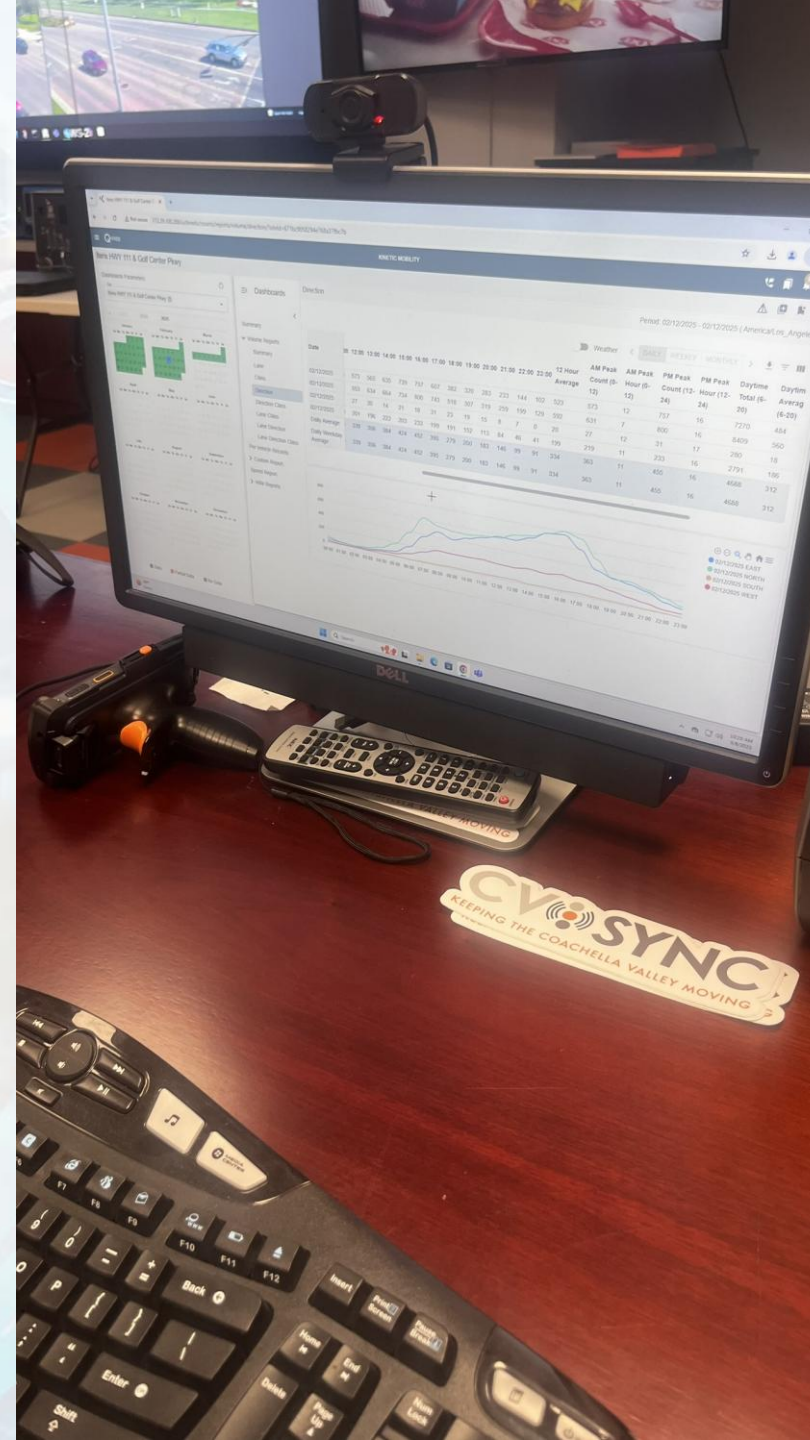




CV: SYNC

KEEPING THE COACHELLA VALLEY MOVING

11:00





Building a Digital Infrastructure to Manage and Operate Special Events

No.	CV SYNC ITS SOFTWARE PROGRAM	Vehicle Volume Counts	Turning Movement Counts	Speed	Travel Time	O/D Data	Traffic Split Data	Average Daily Traffic (ADT)	Arrivals on Red	Yellow and Red Violations	Pedestrian Counts	Bike Counts	Control Delay	SPM
1	ACYCLICA/FLIR	*	NA	✓	✓	*	NA	NA	NA	NA	NA	NA	NA	NA
2	KINETIC MOBILITY (KMOB)*	✓	*	*	*	NA	*	*	*	*	NA	NA	*	*
3	ITERIS CLEAR GUIDE **	NA	✓	✓	✓	✓	NA	*	NA	NA	NA	NA	*	*
4	ITERIS VANTAGE LIVE **	✓	✓	*	NA	NA	NA	*	NA	NA	NA	NA	NA	*
5	BOSCH CLOUD SOFTWARE	*	*	*	NA	NA	NA	NA	NA	NA	*	*	NA	NA

Legend:

NA	Unavailable
✓	Available
*	Available But Not Currently Configured for CVAG

** Software License is exclusive to ADVANTEC's Use
SPM – Signal Performance Measurements

CV SYNC Real-Time Data Management Cloud Dashboard

CYCLE LENGTH RECOMMENDATIONS CALCULATOR FOR CVAG (SaaS)

**CV SYNC Corridor:
Washington St.**

**Corridor Segment:
Washington St & Eisenhower Dr**

Date Range:

Tuesday, 2025/04/01 (0:00 – 23:00)

Source:

Q-Free: KINETIC MOBILITY

Data Type:

Comma Separated Variables File (.CSV)

KEY PERFORMANCE MEASUREMENTS

Hours Analyzed = 24 Hours (0:00 – 23:00)

Optimal Hours = **0 hours (0% efficiency)**

High Volume Hours (≥ 1200 vph) =
1.0 hour @ 7:00 AM **4.2% of time**

Peak Capacity Utilization (capacity 1,800) =
67% (1,202 @ 7:00 AM)

**Bottleneck Analysis: Peak Hours
Washington Street & Avenue 48 (NB)**

AM Period: 5:00 – 10:00

Peak hour = 7:00 -> 1,202 vehicles
Recommended CL = 120 sec

Midday Period: 11:00 – 15:00

Peak hour = 15:00 -> 1,166 vehicles
Recommended CL = 120 sec

PM Period: 16:00 – 20:00

Peak hour = 16:00 -> 1,017 vehicles
Recommended CL = 120 sec

Cycle Length Thresholds

140 sec ≥ 2400 vph **130 sec** ≥ 1500 vph **120 sec** ≥ 600 vph **110 sec** ≥ 300 vph **Free mode** < 300 vph



SIGNALIZED INTERSECTION KPI DASHBOARD SOFTWARE

TITLE



KEY
PERFORMANCE
INDICATORS
(KPIs)

INTERACTIVE
MAP WITH DATA



Coachella Valley Music Festival

SPECIAL EVENT: TRAFFIC OPERATIONS ANALYSIS

Analysis Period:

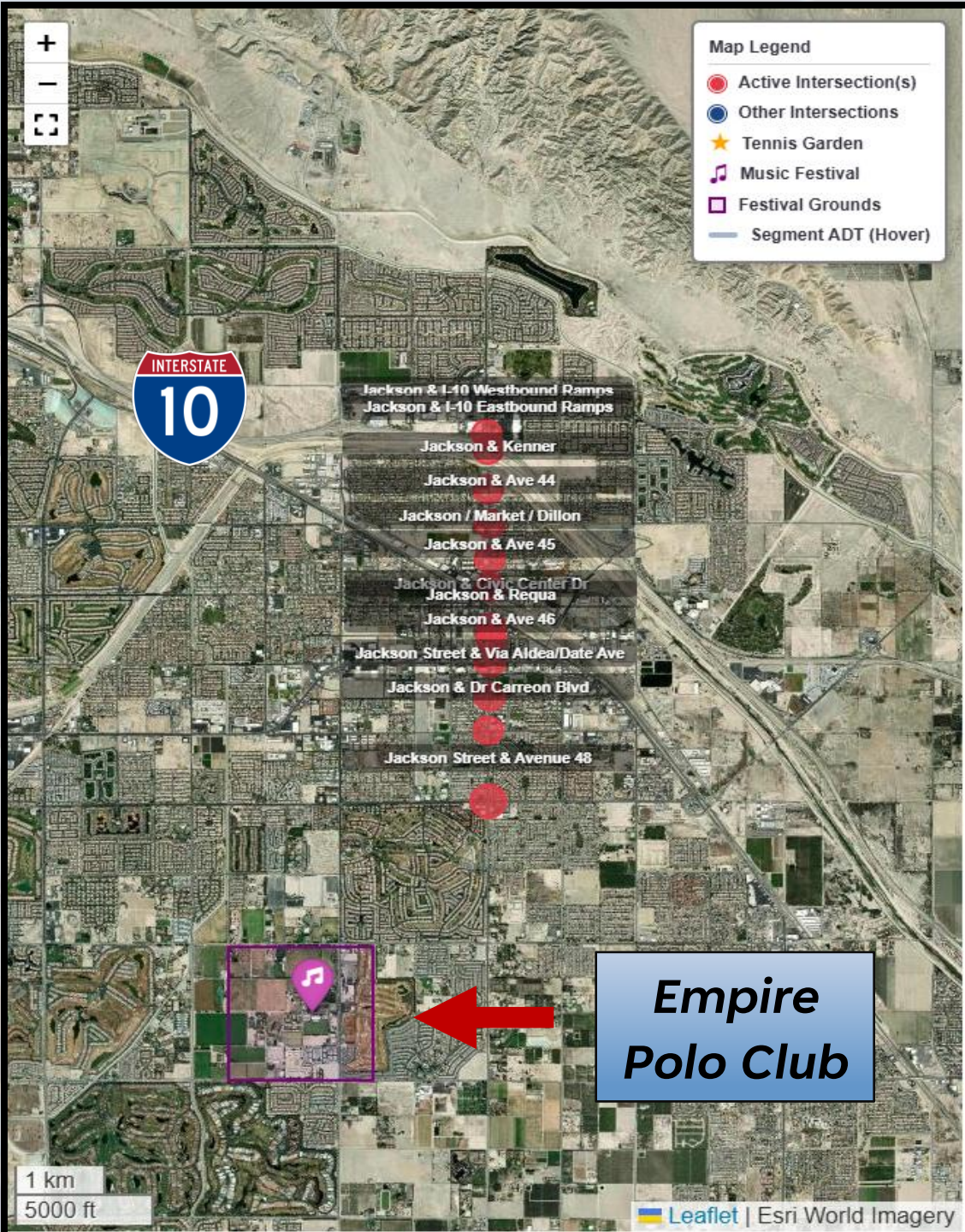
2025: Wednesday, April 9 - Tuesday, April 15

2026: Wednesday, April 8 - Tuesday, April 14



Jackson Street Analysis

ANALYSIS PERIOD	2026: April 8-14 (Wed-Tues) 2025: April 9-15 (Wed-Tues)
CORRIDOR & LIMITS	Jackson Street Avenue 48 to I-10/ Exit 143
AGENCIES	City of Indio • Caltrans D8
INTERSECTIONS (12)	1. Jackson & Ave 48 2. Jackson & Dr. Carreon 3. Jackson / Via Aldea / Date Ave 4. Jackson & Ave 46 5. Jackson & Requa St 6. Jackson & Civic Center Dr 7. Jackson & Ave 45 8. Jackson / Market / Dillon Rd 9. Jackson & Ave 44 10. Jackson & Kenner Avenue 1. Jackson St & I-10 Eastbound Ramps 2. Jackson St & I-10 Westbound Ramps



Jackson Street - 7-Day Traffic Pattern Analysis Matrix

Traffic Pattern Legend

-  Normal traffic conditions
-  Elevated congestion (arrivals / departures)
-  Peak festival congestion

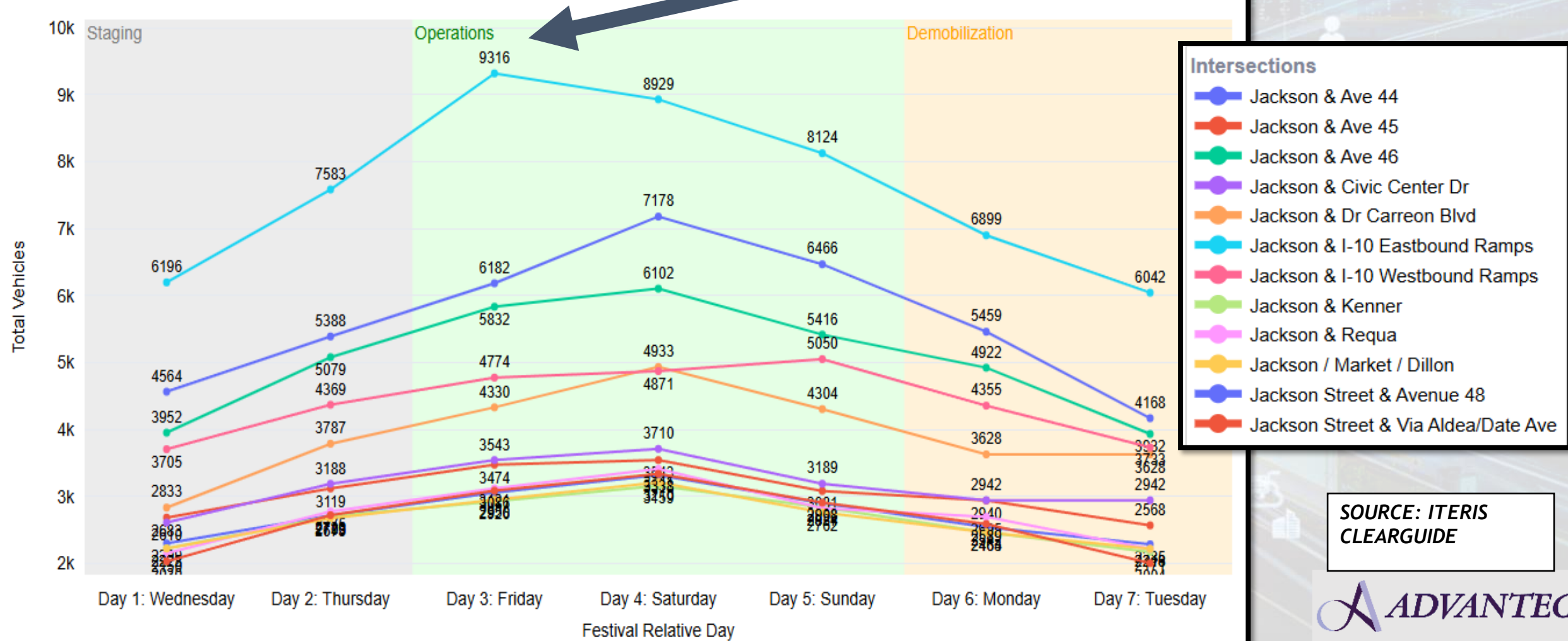
No.	Day	Traffic Pattern
1	Wednesday	Normal Traffic Conditions
2	Thursday	Major Camper Arrival Day
3	Friday	Festival Opening Day + Weekend Traffic
4	Saturday	Festival Traffic Operations Stabilize
5	Sunday	Final Festival Day + Lane Departures
6	Monday	Mass Outbound Congestion
7	Tuesday	Traffic Conditions Normalize

APRIL 2025: COACHELLA'S OPENING WEEK

I-10 EB RAMP HIGHEST VOLUME

Corridor: Jackson Street
Intersection: I-10 Eastbound Interchange
PEAK DAY: FRIDAY, APRIL 11, 2025
VOLUME: 9,316 vehicles

E, W, N, S Total Vehicles per Day
04/09/2025 - 04/15/2025 (Full Week: Wed-Tues)



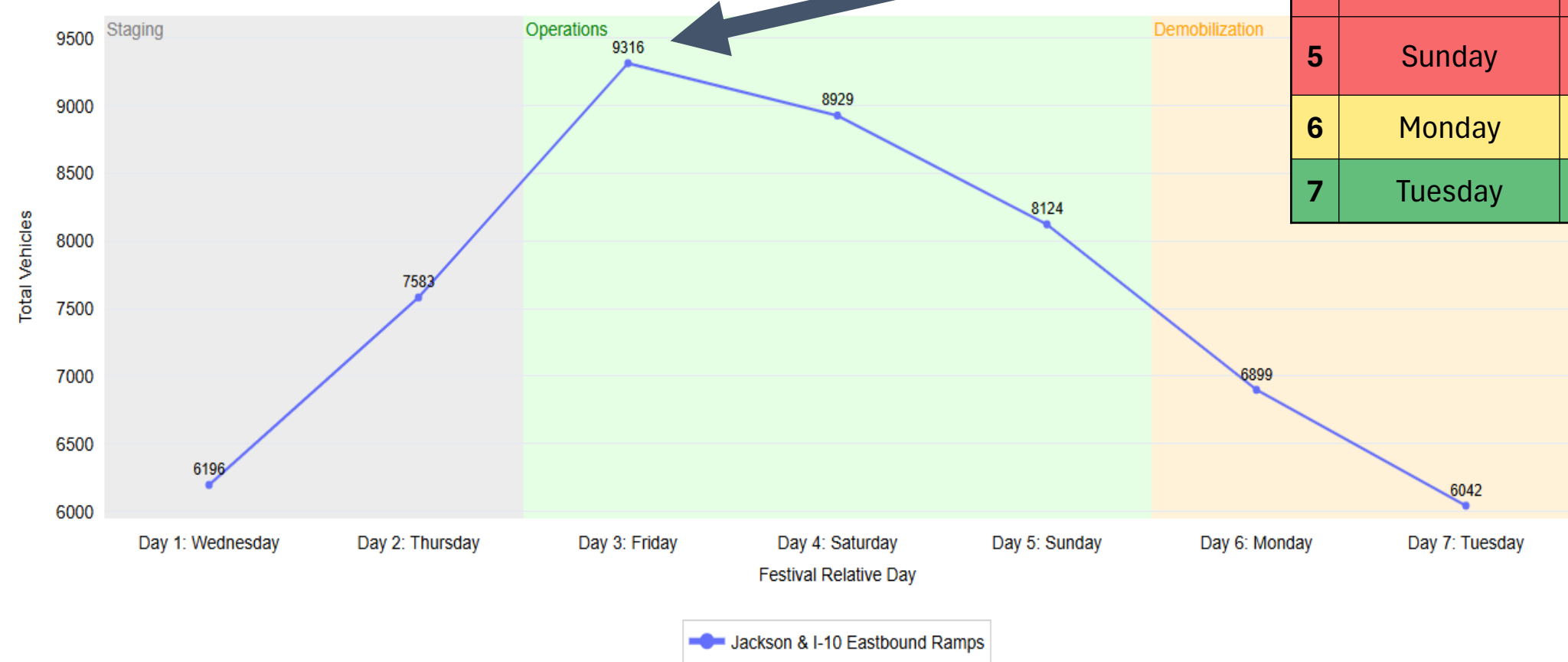
SOURCE: ITERIS
CLEARGUIDE



APRIL 2025: COACHELLA'S OPENING DAY

I-10 EB RAMP HIGHEST VOLUME

E, W, N, S Total Vehicles per Day
04/09/2025 - 04/15/2025 (Full Week: Wed-Tues)



No.	Day	Traffic Pattern
1	Wednesday	Normal Traffic Conditions
2	Thursday	Major Camper Arrival Day
3	Friday	Festival Opening Day + Weekend Traffic
4	Saturday	Festival Traffic Operations Stabilize
5	Sunday	Final Festival Day + Lane Departures
6	Monday	Mass Outbound Congestion
7	Tuesday	Traffic Conditions Normalize

SOURCE: ITERIS
CLEARGUIDE

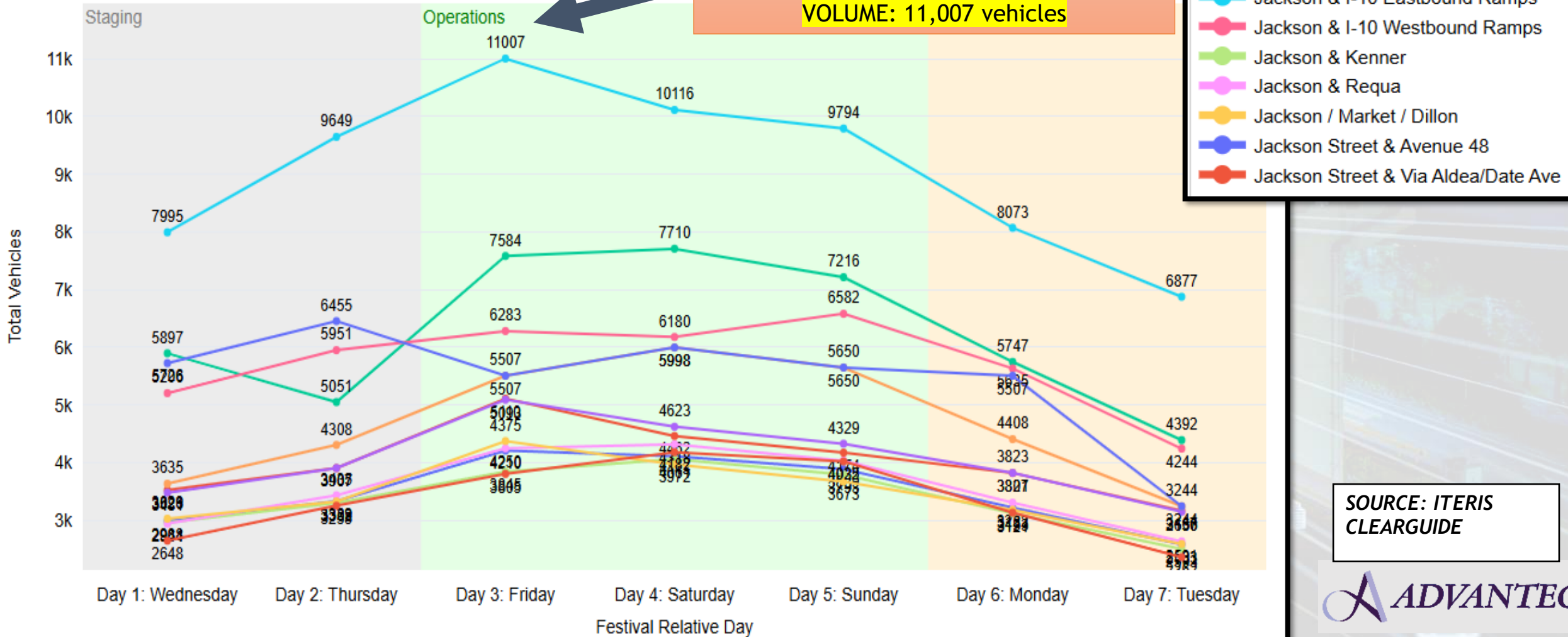


APRIL 2026: COACHELLA'S OPENING WEEK

I-10 EB RAMP CONTINUES WITH HIGHEST VOLUME

E, W, N, S Total Vehicles per Day
04/08/2026 - 04/14/2026 (Full Week: Wed-Tues)

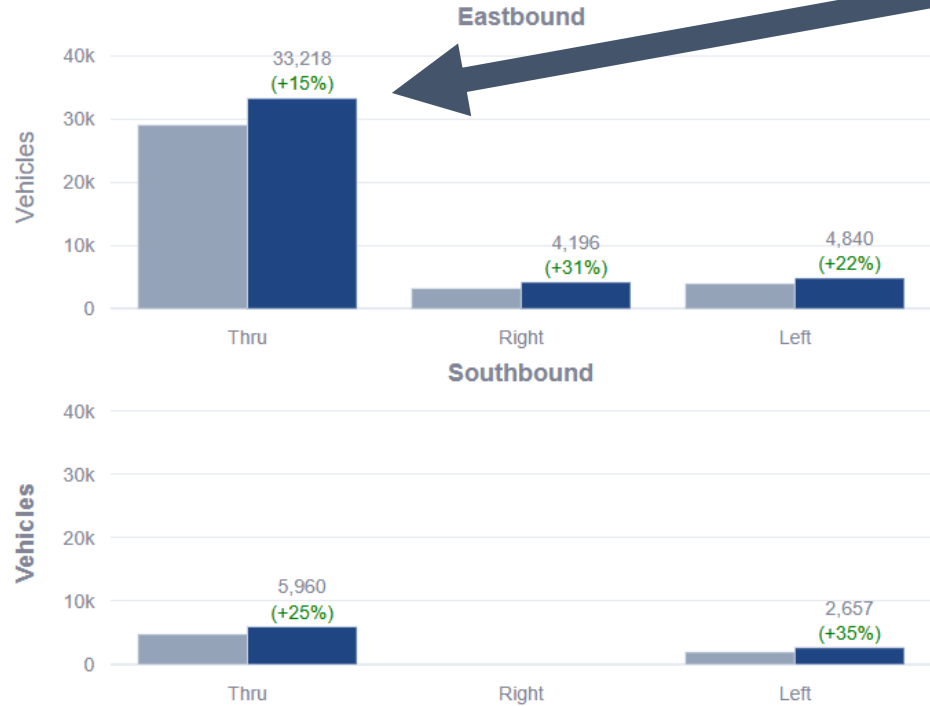
Corridor: Jackson Street
Intersection: I-10 Eastbound Interchange
PEAK DAY : FRIDAY, APRIL 10, 2026
VOLUME: 11,007 vehicles



TRAFFIC ALONG I-10 EB RAMP INCREASED IN 2026

Jackson & I-10 Eastbound Ramps

Movement Comparison: Vehicles | April 9 – April 15, 2025 vs April 8 – April 14, 2026



Thru

April 9 – April 15, 2025: 28,987 vehicles

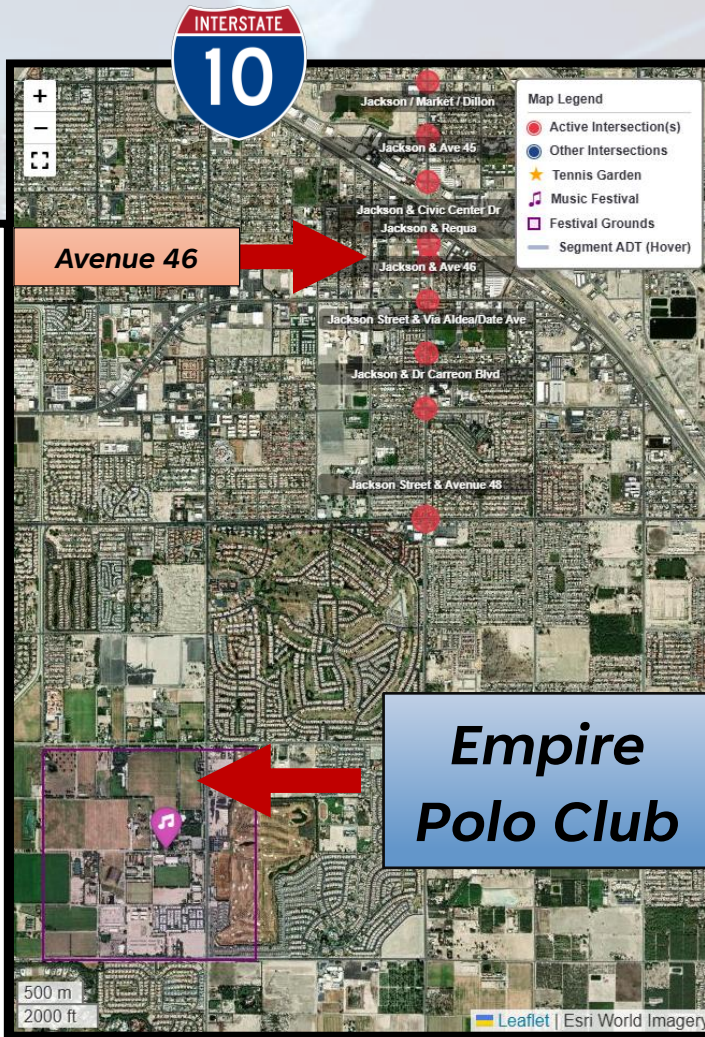
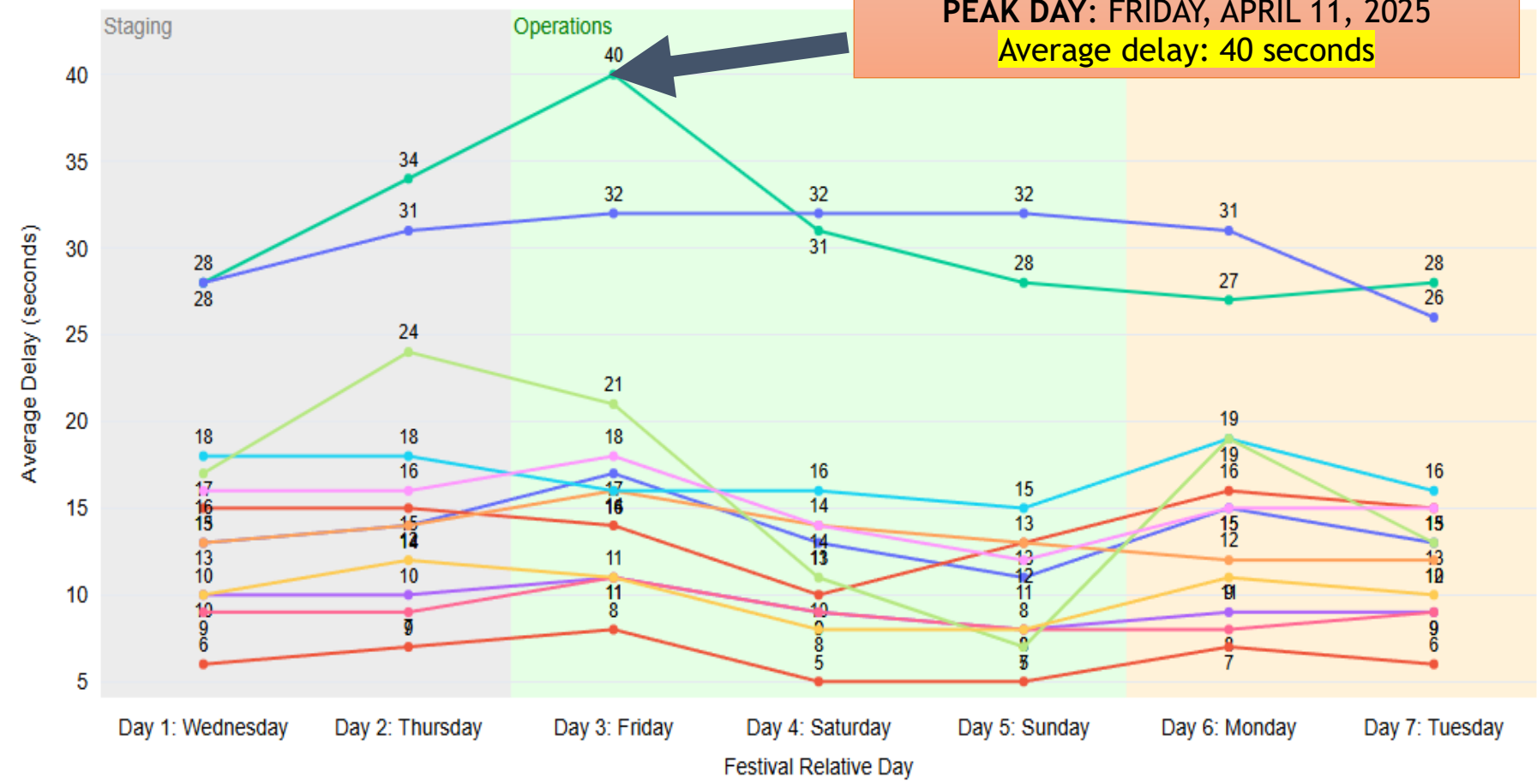
April 8 – April 14, 2026: 33,218 vehicles

Movement	2025 Vehicle Volume	2026 Vehicle Volume	Change
Thru	28,987	33,218	+4,231
Thru	9,584	11,751	+2,167
Thru	4,782	5,960	+1,178
Right	3,207	4,196	+989
Left	3,960	4,840	+880
Left	1,962	2,657	+695
Right	607	889	+282

SOURCE: ITERIS
CLEARGUIDE

APRIL 2025: AVENUE 46 EXPERIENCED THE HEAVIEST DELAYS

E, W, N, S Average Delay (seconds) per Day
04/09/2025 - 04/15/2025 (Full Week: Wed-Tues)



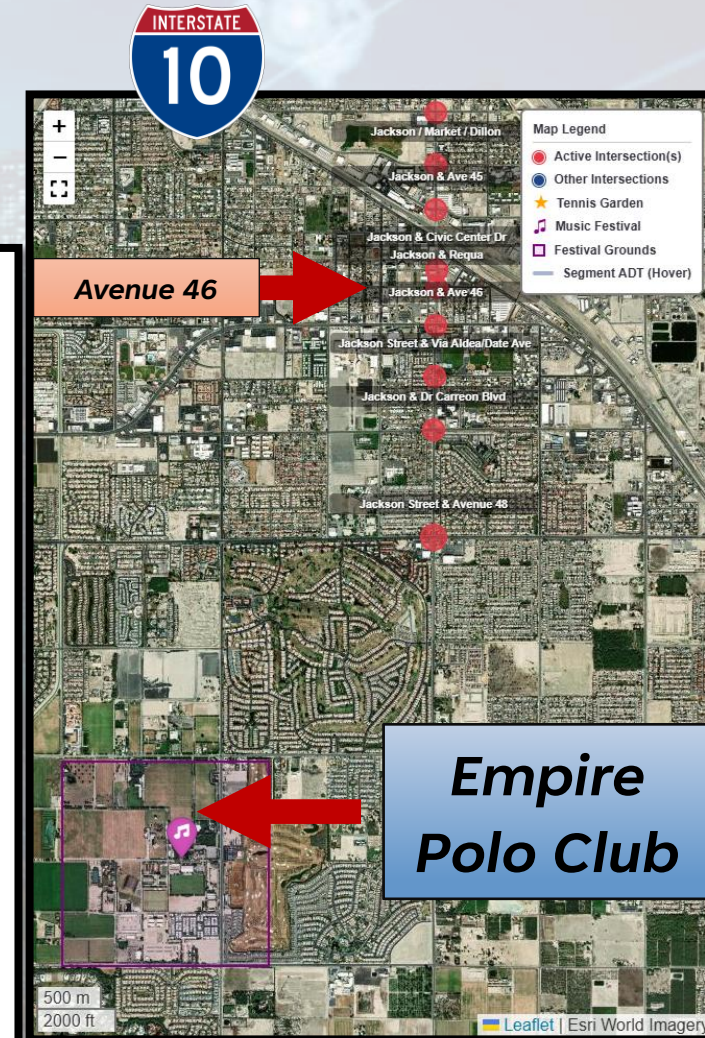
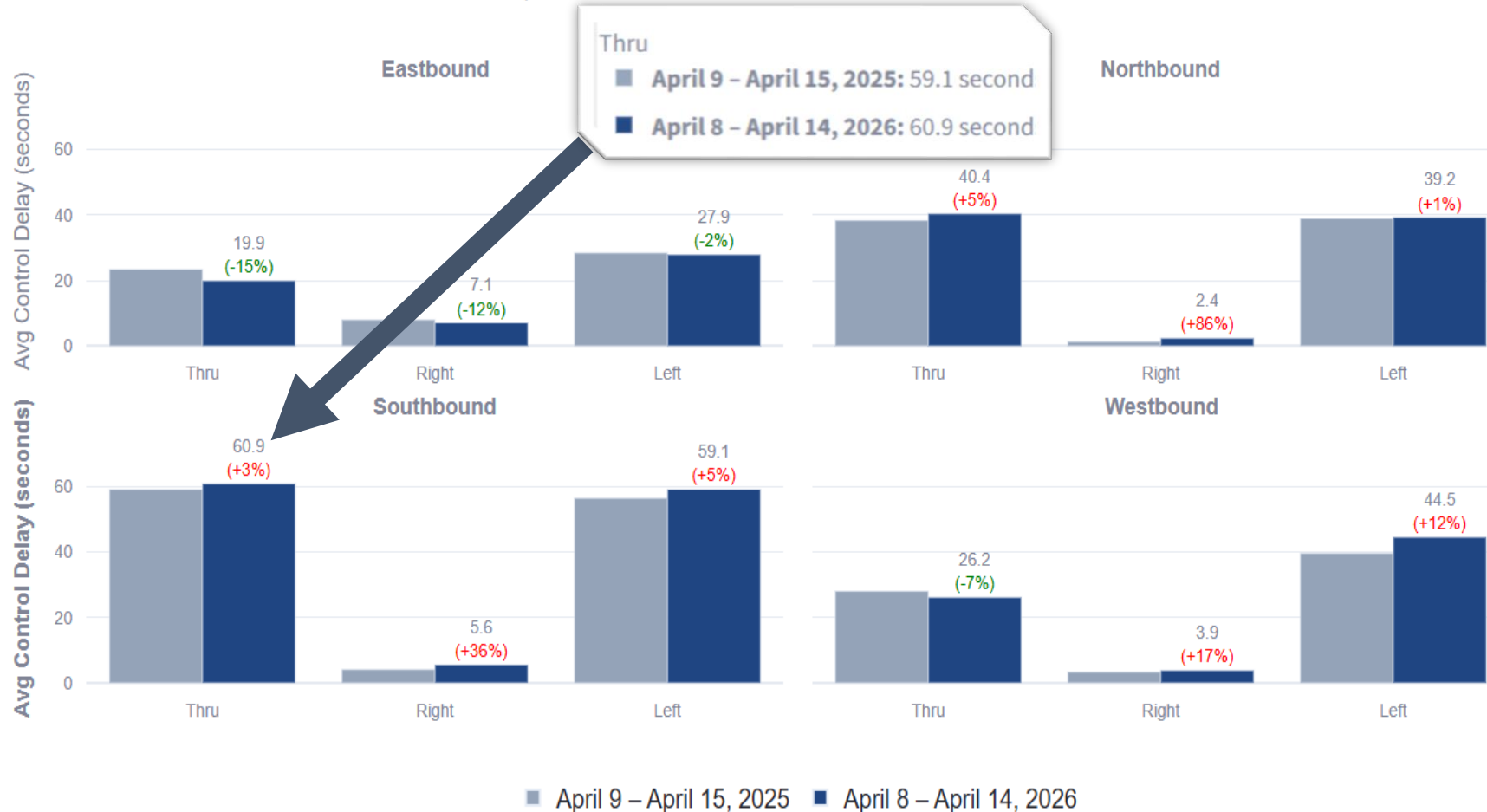
SOURCE: ITERIS
CLEARGUIDE



APRIL 2025: AVENUE 46 HEAVIEST DELAYS CAME FROM SOUTHBOUND THROUGH TRAFFIC

Jackson & Ave 46

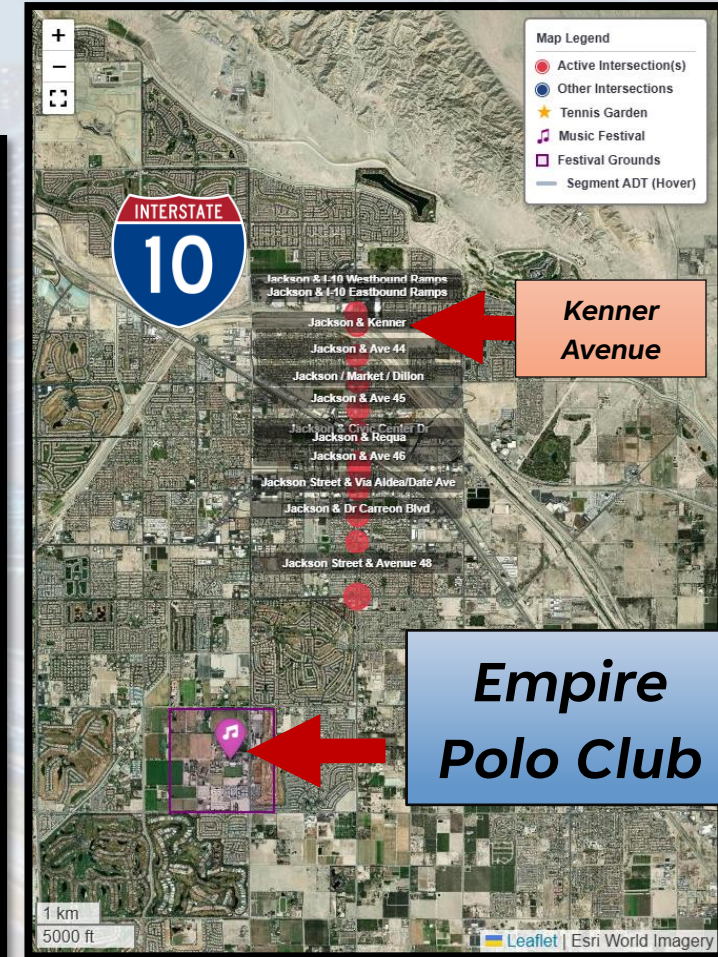
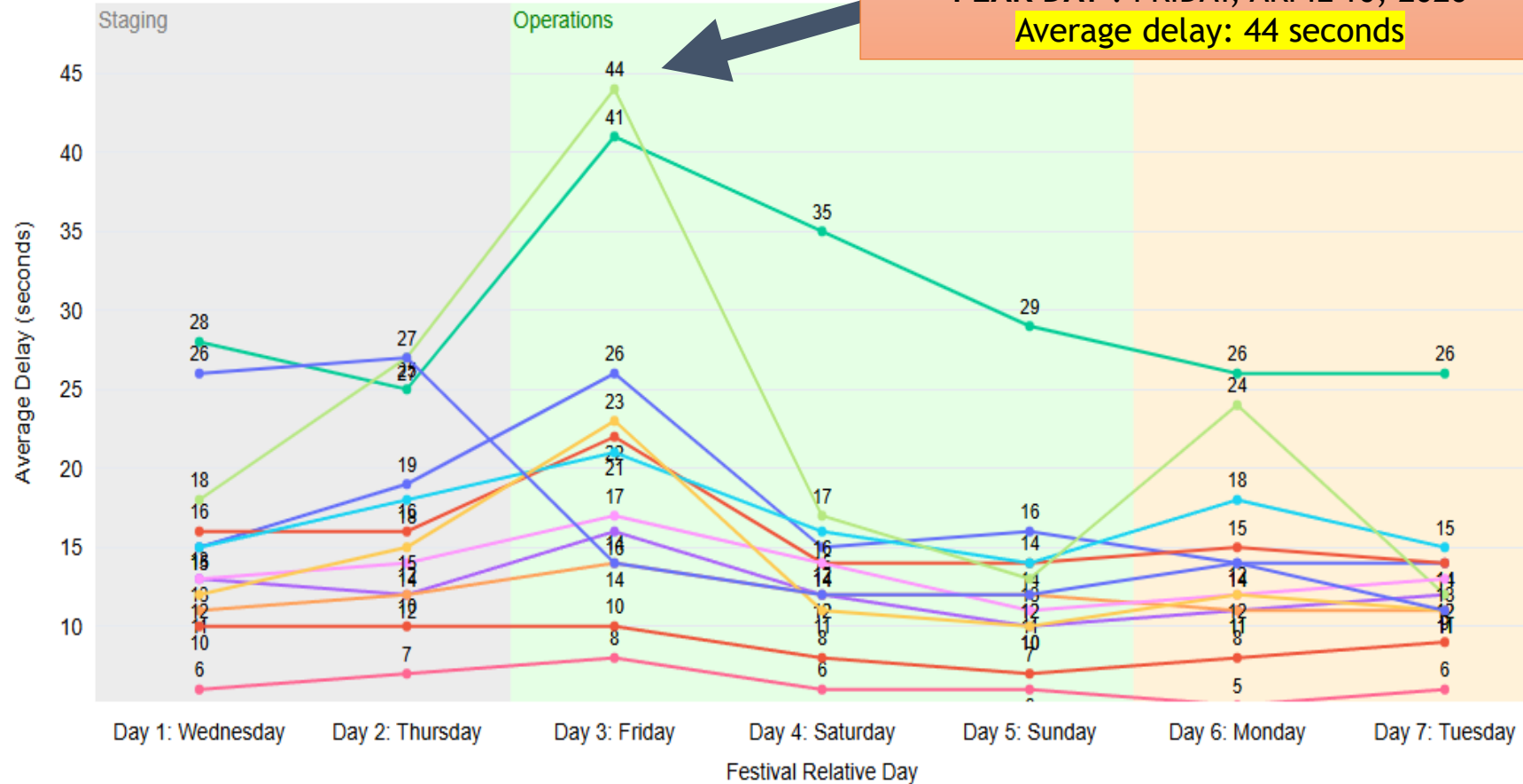
Movement Comparison: Avg Control Delay (seconds) | April 9 – April 15, 2025 vs April 8 – April 14, 2026



SOURCE: ITERIS
CLEARGUIDE

APRIL 2026: KENNER AVENUE EXPERIENCED THE HEAVIEST DELAYS

E, W, N, S Average Delay (seconds) per Day
04/08/2026 - 04/14/2026 (Full Week: Wed-Tues)

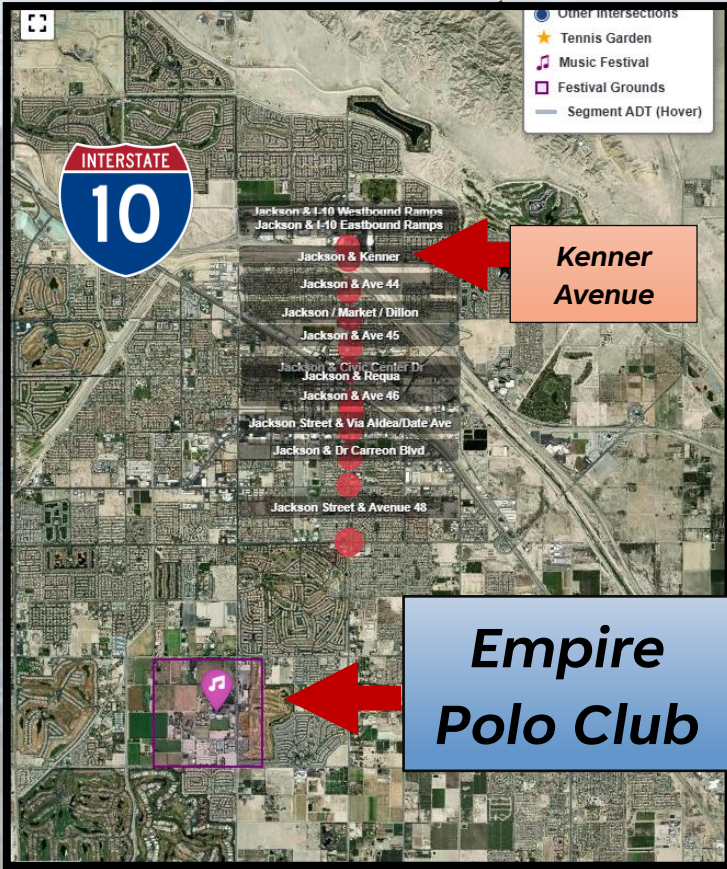
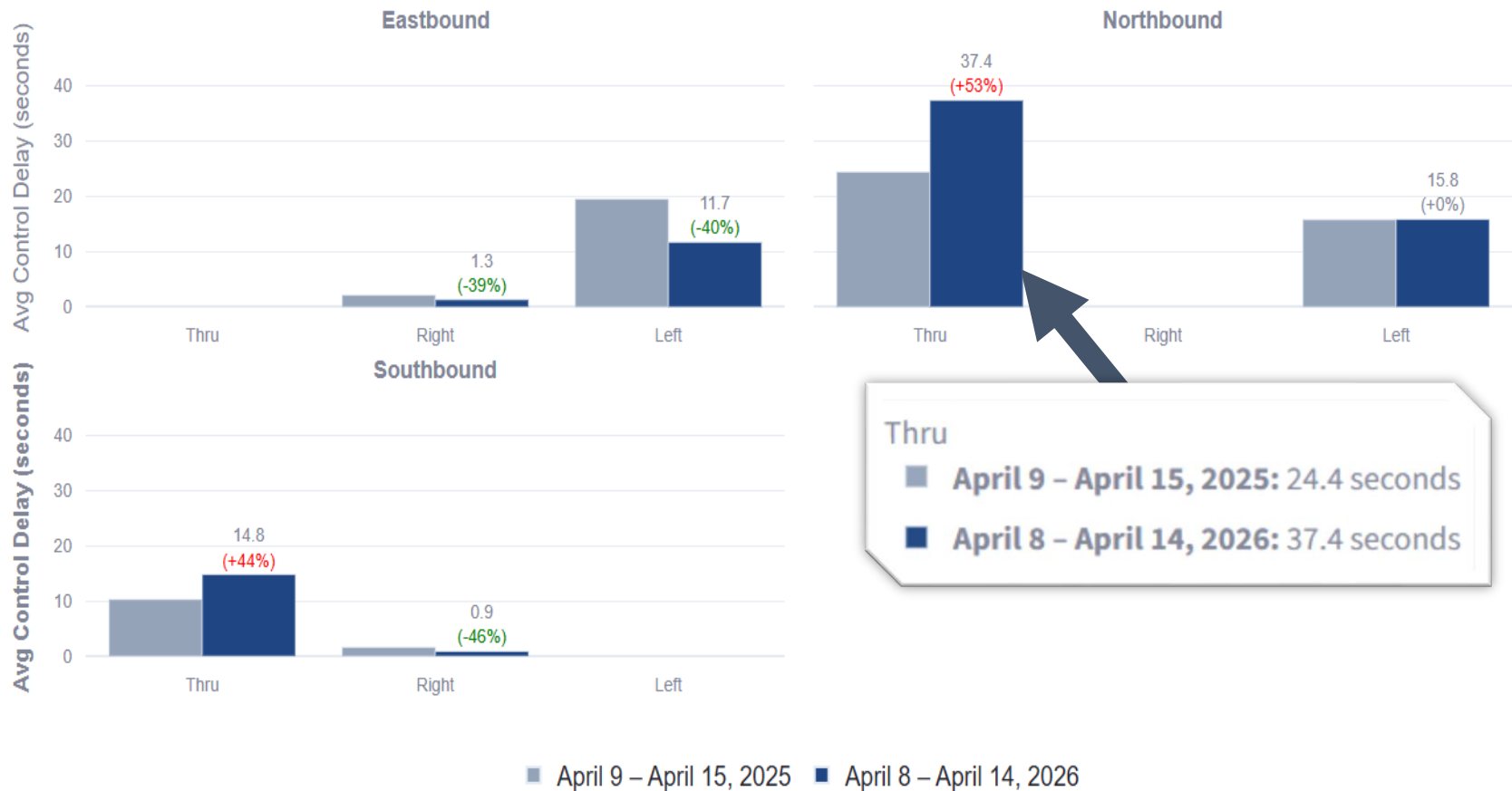


SOURCE: ITERIS
CLEARGUIDE

APRIL 2026: KENNER AVENUE HEAVIEST DELAYS CAME FROM NB THROUGH TRAFFIC

Jackson & Kenner

Movement Comparison: Avg Control Delay (seconds) | April 9 – April 15, 2025 vs April 8 – April 14, 2026



SOURCE: ITERIS
CLEARGUIDE

INTERSECTION DELAY HOTSPOT:

JACKSON STREET & AVENUE 46 - WB LEFT-TURN MOVEMENTS

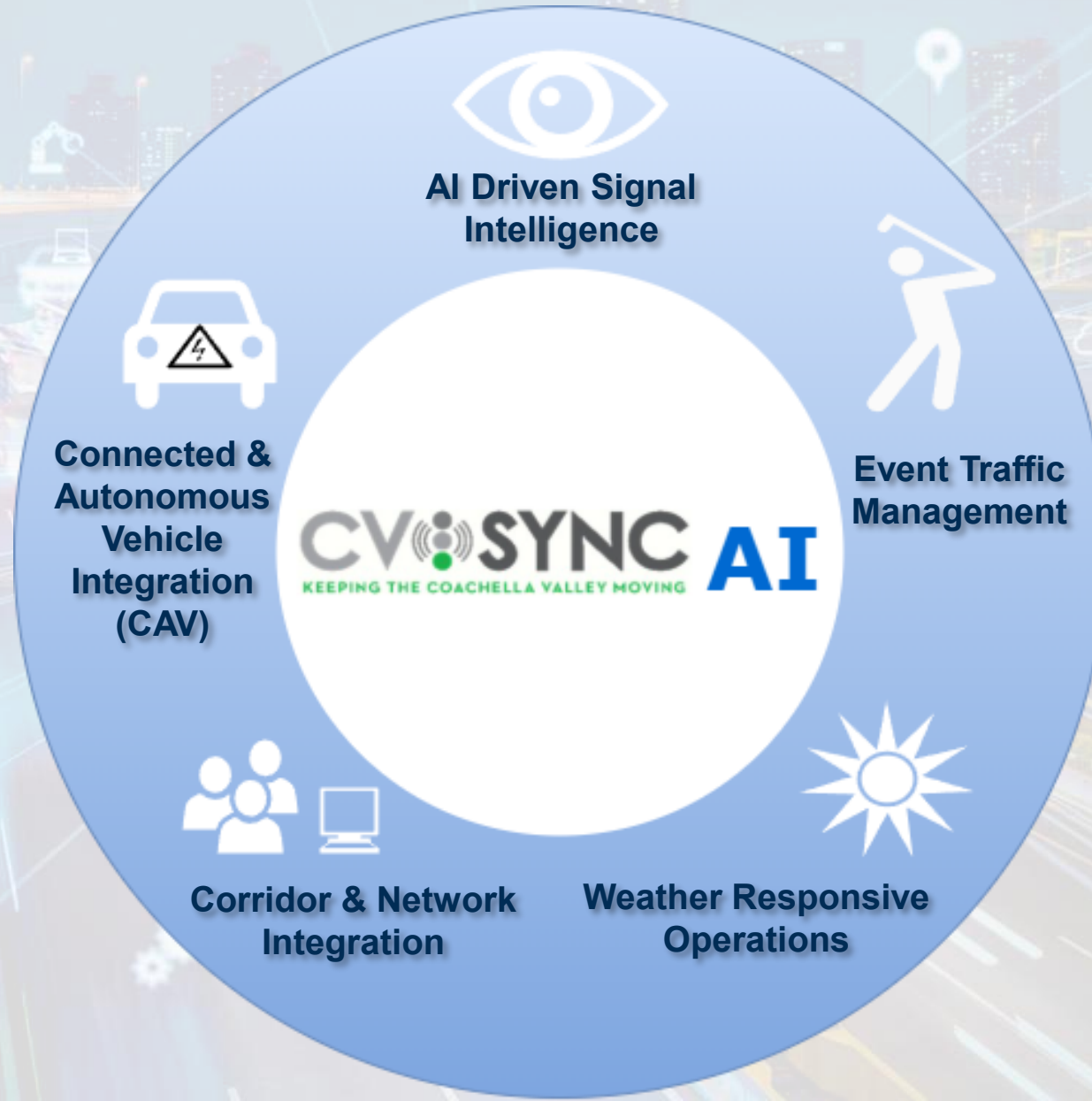
SOURCE: ITERIS
CLEARGUIDE

Corridor: Jackson Street
Intersection: Jackson Street & Avenue 46
Avg Delay Increased by
+4.9 seconds in 2026



Approach	Movement	2025 Delay	2026 Delay	Change
Westbound	Left	39.7	44.5	+4.9
Southbound	Left	56.4	59.1	+2.7
Northbound	Thru	38.3	40.4	+2.0
Southbound	Thru	59.1	60.9	+1.8
Southbound	Right	4.1	5.6	+1.5
Northbound	Right	1.3	2.4	+1.1
Westbound	Right	3.3	3.9	+0.6
Northbound	Left	38.9	39.2	+0.3
Eastbound	Left	28.4	27.9	-0.5
Eastbound	Right	8.0	7.1	-0.9

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**FOR MORE INFORMATION,
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