

Table of Contents:

- Section 1: Executive Summary – Page 1
- Section 2: System Status Update – Page 3
- Section 3: System Peak Time Mobility – 4
- Section 4: Corridor Updates – N/A
- Section 5: Quarterly Highlights – N/A

Section 1: Executive Summary

Most Significant Impact Events

Planned Event		
Date: N/A	Location: Various	Event Detail: No planned events during Q1 2022 had significant impacts to traffic.
Unplanned Event		
Date:	Location:	Event Detail:

Operator Summary

January – March 2022 had a **total of 184 incidents** impacting mainlines of major arterials within St Charles County. Of these incidents, **99 occurred during the weekday commuter peak times**. The GGL operator performed signal timing adjustments to facilitate diversions and **mitigate congestion and backups for 15 of these incidents**.









Top 5 Arterial Congestion Locations – January – March 2021 vs. 2022









	Arterial Congestion Locations 2021	Base Impact	Average Queue Length (miles)	Average Daily Duration	Total duration
1	WB Mexico Rd @ Cave Springs Rd/ Muegge Rd	11,126	0.30	6 h 47 m	25 d 17 h 39 m
2	NB Wentzville Pkwy @ W Pearce Blvd	9,184	0.15	12 h 48m	48 d 13 h 30 m
3	NB 5 th St @ I-70	6,879	0.34	3 h 47 m	14 d 8 h 33 m
4	NB Mid Rivers Mall Dr @ Central School Rd	6,634	0.40	3 h 10 m	12 d 1 h 9 m
5	NB Harvester Rd @ MO 364 SOR	6,563	0.37	3 h 15 m	12 d 8 h 8 m

	Arterial Congestion Locations 2022	Base Impact	Average Queue Length (miles)	Average Daily Duration	Total duration
1	NB 5 th St @ I-70	11,502	0.33	6h 21 m	24 d 2 h 57 m
2	NB Wentzville Pkwy @ W Pearce Blvd	9,731	0.16	13 h 6 m	49 d 15 h 40 m
3	Bryan Rd SB @ I-70 WB	8,409	0.16	9 h 54 m	37 d 13 h 18 m
4	NB Harvester Rd @ MO 364 SOR	8,336	0.37	4 h 10 m	15 d 19 h 23 m
5	NB Mid Rivers Mall Dr @ Central School Rd	7,538	0.45	3 h 22 m	12 d 18 h 22 m

Source: RITIS with HERE probe speed data for major arterial corridors only for all days. Locations ranked on 'Base Impact': the aggregation of queue length over time for segments ending at noted location in mile minutes.

Section 2: System Status Update

Device Type	No.		% Reliable		Trend
	Last	This	Last	This	
 Signals Communicating on TCS	351	353	99%	99%	
 CCTV's working	180	221	85%	81%	
 Bluetooth Devices Reporting	62	67	61%	68%	
 Intersections on TDMS	140	140	87%	87%	

Device Type	No.		% Reliable		Trend
	Last	This	Last	This	
 Cellular & Radio Devices	38	38	95%	95%	
 DMS Boards	4	4	100%	100%	
 Traffic Count Stations	6	6	67%	67%	
 Fiber Optic Cable	63.0 mi	63.0 mi	100%	100%	

GGL Device Efforts

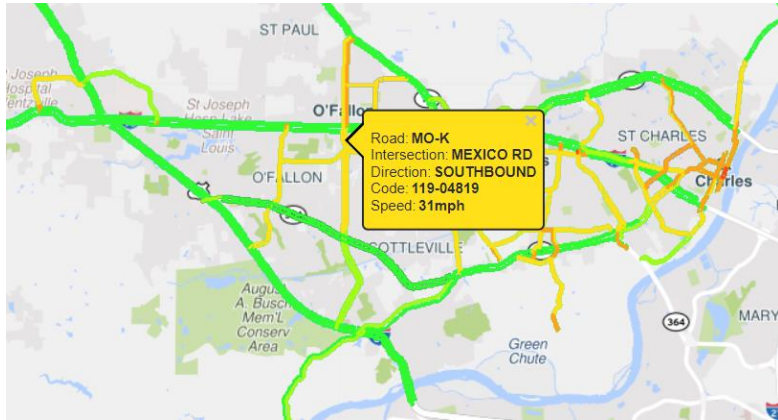
- Set up, configured new BlueTOAD and Video Detection Systems installed on GGL Phase 5 Construction
- 195 controllers programmed for Preemption, 92 vehicles equipped with on-board units

Section 3: System Peak Time Mobility

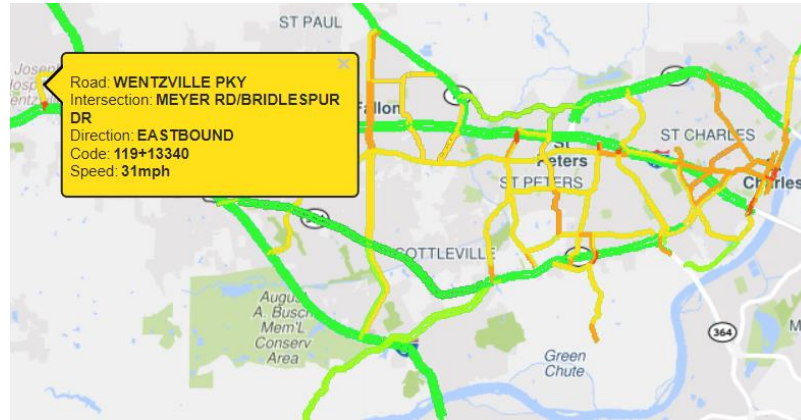
AM Weekdays Peak Period Mobility Summary View: Q1 2021 vs Q1 2022

Overall AM Peak Mobility:
Slight Decrease

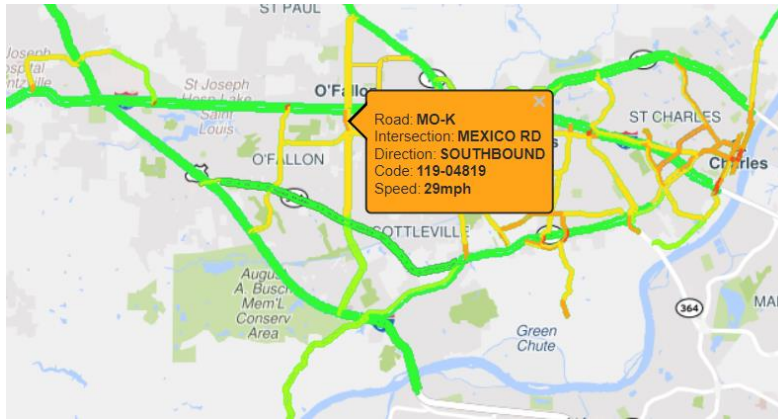
2021 6-7 AM



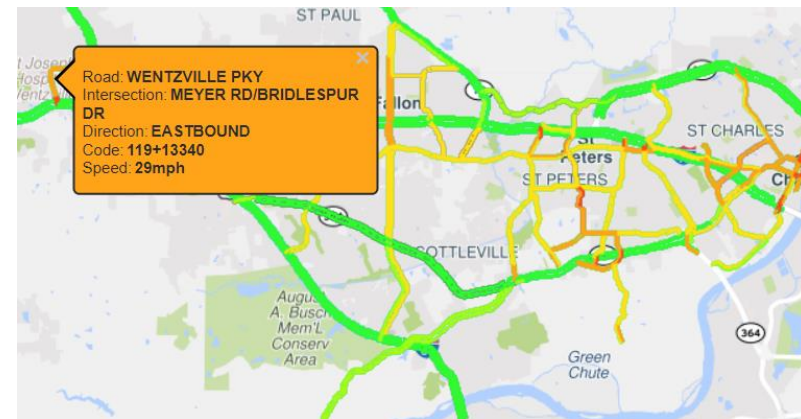
2021 7-8 AM



2022 6-7 AM



2022 7-8 AM

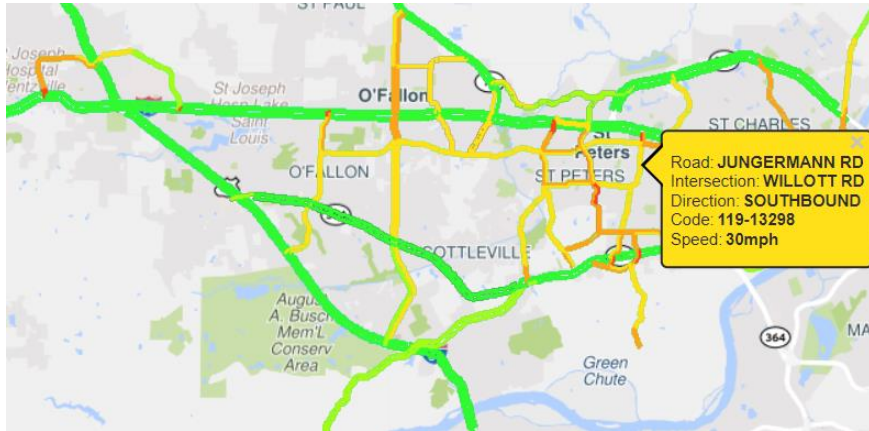


LEGEND			
Comparison Index: Measured Speed / Historic Avg. Speed			
█	High Mobility (.90+)	█	Low Mobility (.50 - .70)
█	Medium Mobility (.70 - .90)	█	Restricted Mobility (< .50)

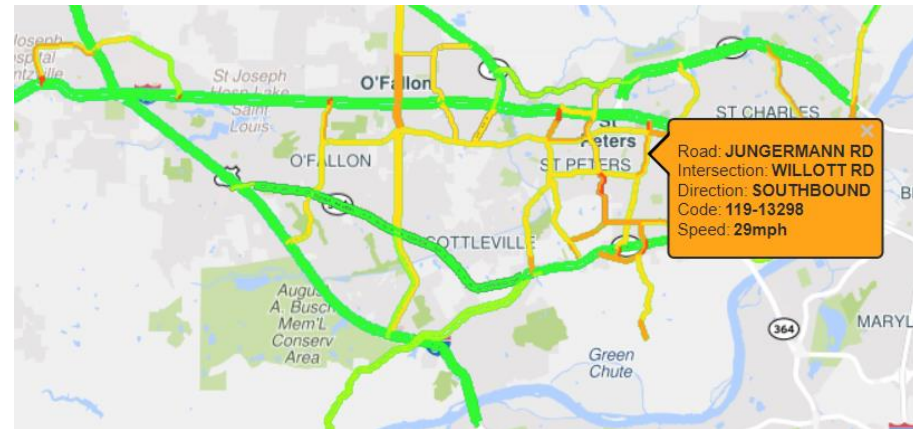
Source: RITIS using HERE speed probe data.
6-7 AM: Several slight decreases – various routes
7-8 AM: Slight decreases on Wentzville Pkwy.

AM Weekday Peak Period Mobility Summary View: Q1 2021 vs Q4 2022

2021 8-9 AM



2022 8-9 AM



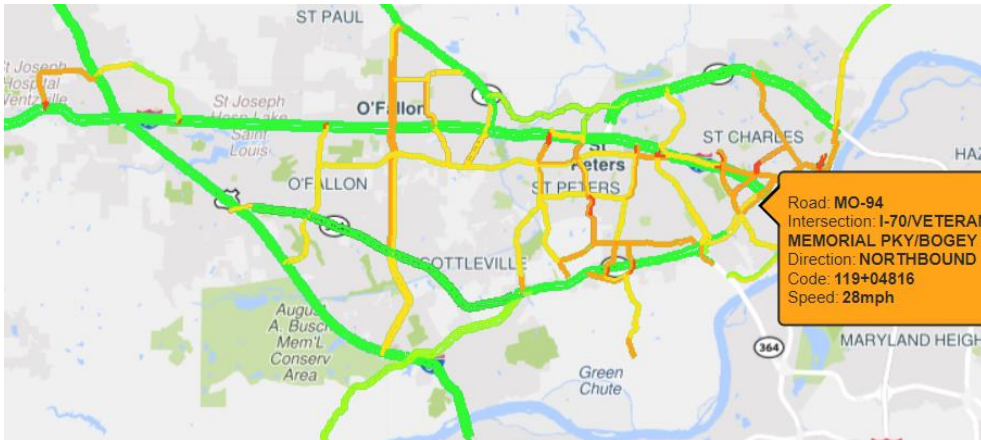
LEGEND			
Comparison Index: Measured Speed / Historic Avg. Speed			
	High Mobility (.90+)		Low Mobility (.50 - .70)
	Medium Mobility (.70 - .90)		Restricted Mobility (< .50)

Source: *RITIS using HERE speed probe data.*
8-9 AM: Decrease on 94 eastbound at Pralle and Zumbuhl.

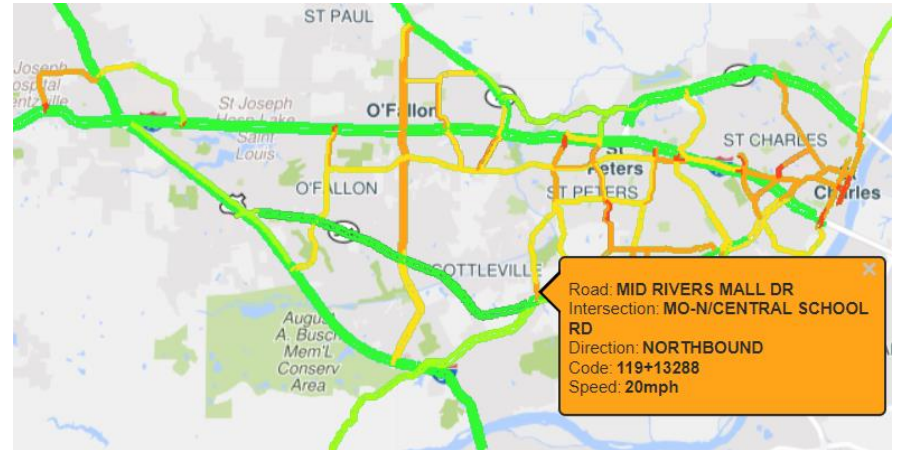
PM Weekday Peak Period Mobility Summary View: Q1 2021 vs Q1 2022

Overall PM Peak Mobility: DECREASE

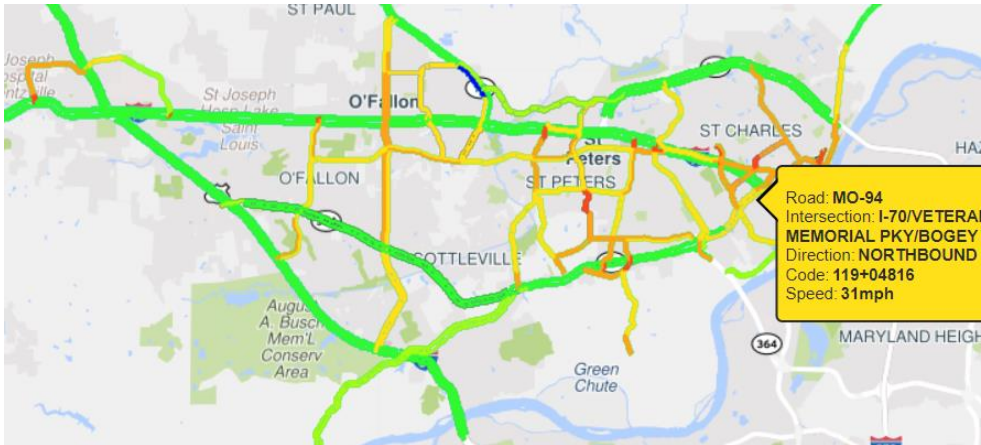
2021 3-4 PM



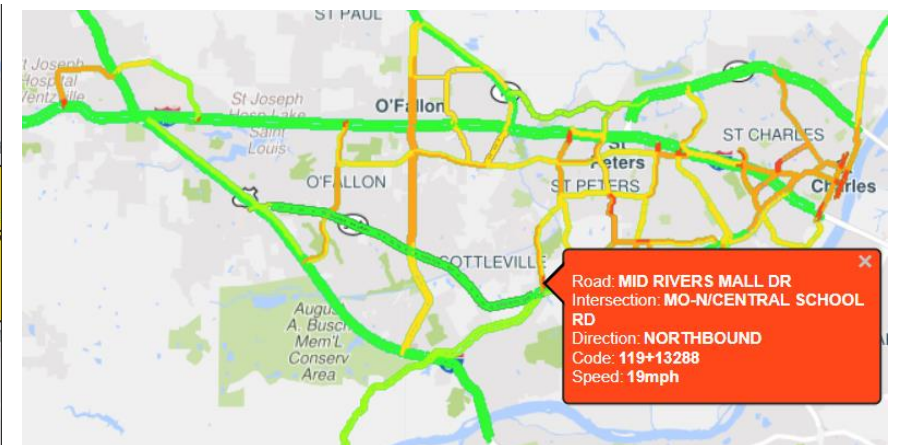
2021 4-5 PM



2022 3-4 PM



2022 4-5 PM

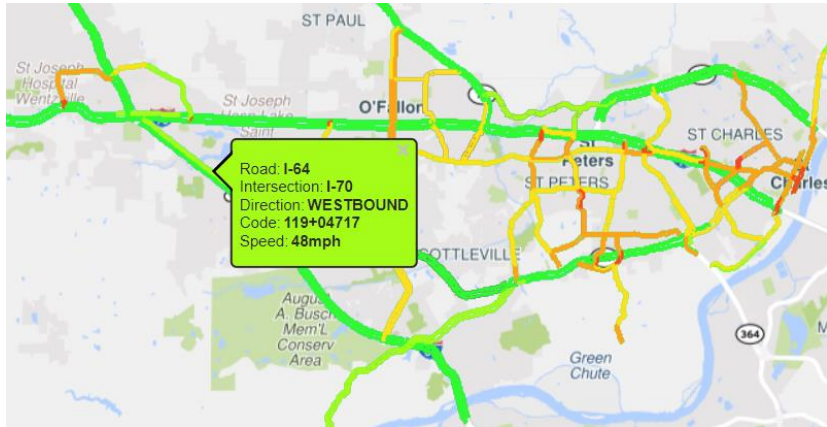


LEGEND			
Comparison Index: Measured Speed / Historic Avg. Speed			
	High Mobility (.90+)		Low Mobility (.50 - .70)
	Medium Mobility (.70 - .90)		Restricted Mobility (< .50)

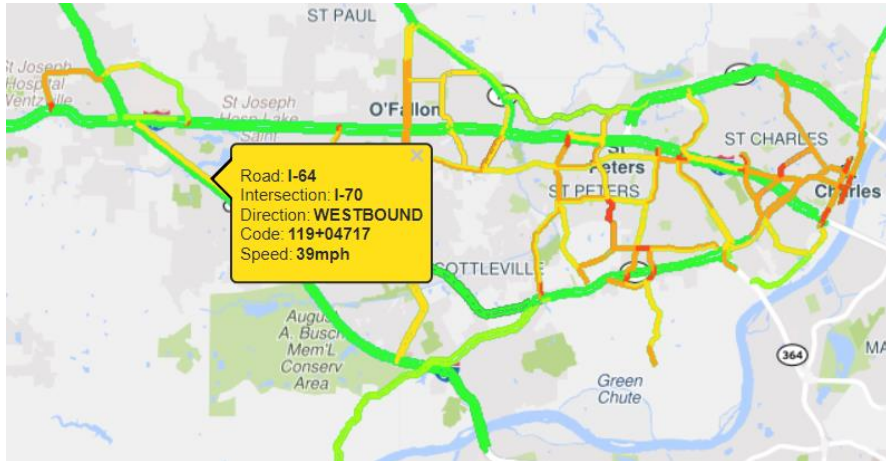
Source: RITIS using HERE speed probe data.
3-4 PM: Slight increase MO 94 NB toward I-70.
4-5 PM: Decreases on Bryan Rd and Mid Rivers Mall Dr.

PM Weekday Peak Period Mobility Summary View: Q1 2021 vs Q1 2022

2021 5-6 PM



2022 5-6 PM



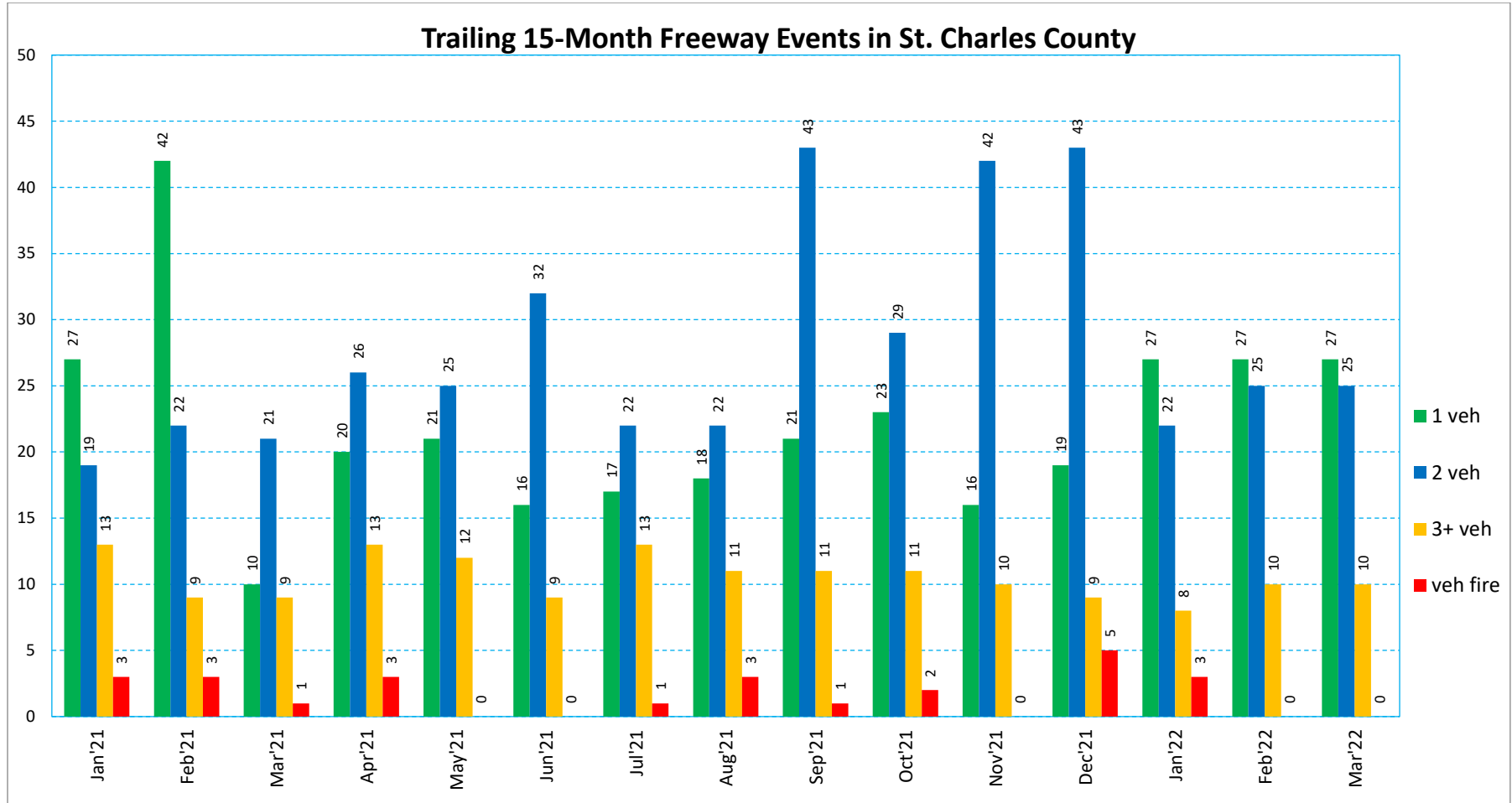
LEGEND			
Comparison Index: Measured Speed / Historic Avg. Speed			
	High Mobility (.90+)		Low Mobility (.50 - .70)
	Medium Mobility (.70 - .90)		Restricted Mobility (< .50)

Source: RITIS using HERE speed probe data.

5-6 PM: Decrease on I-64 WB between MO 364 and I-70.

Managed Incidents

- 1/13/22, PM: I-70 EB before Mid Rivers Mall Dr – multi-vehicle incident blocking multiple lanes. Queue est. 2 miles. AMI signal plans implemented on Salt Lick Rd from I-70 WB to Mexico Rd for approximately 1 hour while the incident and backup cleared.
- 2/3/22, MD: I-70 WB past Bryan Rd – multi-vehicle accident blocking multiple lanes. Queue est. 2.6 miles. AMI signal timing plans implemented at Bryan Rd from W. Terra Ln to Veterans Memorial Pkwy, W. Terra Ln at Hoff Rd, and Lake St. Louis Blvd at I-70 NOR and at I-70 WB. Event active nearly 3 hours due to tractor trailer spill and cleanup. Timing plans remained in place for full duration of closure.
- 3/11/22, PM: I-70 WB past Zumbuhl Rd – 2 vehicle accident blocking right lane. Queue est. 2 miles. AMI signal plans implemented on Zumbuhl Rd from W Clay to Veterans Memorial Pkwy, and downstream signal timing plan at Cave Springs and W Clay adjusted for additional westbound to southbound traffic diverting around incident. Timing plans in place for roughly 40 minutes after incident moved to shoulder and backups lessened.



Events

- *3/12 Irish Fest and Shamrock run, Cottleville – observation only, no timing changes made due to low impact.*
- *3/17 St Patrick's Day, St. Charles Main St – Fifth Street signals set to egress plans after parade.*

Observation/ Monitoring/ Other Traffic Assistance

- *Set up connections for O'Fallon City Hall TMC*