

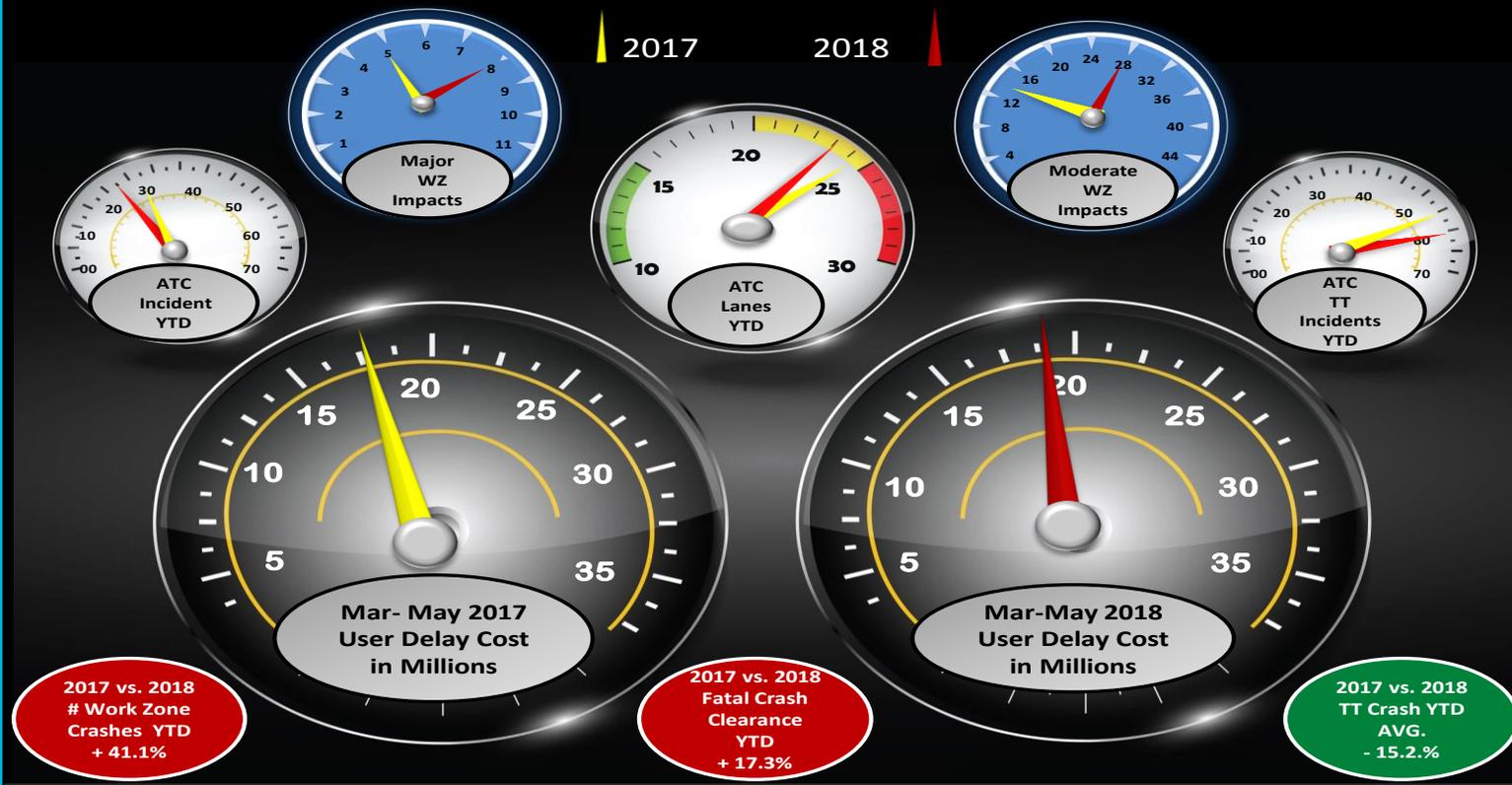


# ST. LOUIS DISTRICT MOBILITY

QUARTERLY REGIONAL MOBILITY REPORT ■ MARCH / APRIL / MAY 2018 | EDITION NO. 03

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User Delay Cost: Passenger Vehicle \$17.67 Commercial Vehicle \$68.09  
Sources Texas Transportation Institute & American Transportation Research Institute

### March thru May 2017 Grand Total and Average

<b>Delay cost:</b> Total \$18,341,317.39 Per VMT \$0.01	<b>Vehicle Miles traveled (VMT)</b> Total: 2,162,301,004 miles Passenger: 1,946,070,903 miles Commercial: 216,230,100 miles
<b>Hours of delay:</b> Person-hours: 833,456h 34m 6s Vehicle hours: 680,372h 42m 32s	<b>Delay per VMT: 0.0189 mins/mile</b>

### March thru May 2018 Grand Total and Average

<b>Delay cost:</b> Total \$19,463,977.44 Per VMT \$0.01	<b>Vehicle Miles traveled (VMT)</b> Total: 2,109,855,879 miles Passenger: 1,898,897,291 miles Commercial: 210,988,588 miles
<b>Hours of delay:</b> Person-hours: 893,420h 6m 12s Vehicle hours: 729,332h 32m 0s	<b>Delay per VMT: 0.0207 mins/mile</b>



# EXECUTIVE SUMMARY

ST. LOUIS DISTRICT ■ QUARTERLY REGIONAL MOBILITY REPORT ■ MARCH / APRIL / MAY 2018



## ZONING IN

New quarterly report consistent with seasonal traffic patterns

Average time to clear lanes improved from a year ago by 38 seconds

There were 14 fatal crashes this quarter a 17% increase from 2017 to 2018

Work zone crashes increased by 41% from 2017 to 2018

Westbound US 40 @ I-70 (Wentzville) moved into the top spot, Eastbound I-64 @ I-44/I-55/US 40 moved down a spot from # 1 in 2017 to # 2 and Eastbound I-70 @ I-64/I-55/US 40 dropped out of the top 5 congestion spots for March / April / May 2018

### TMS Work Zones:

March	2018:	221
April	2018:	290
May	2018:	355

### Work Zone Impact Breakdown:

<span style="color: red;">■</span>	Major:	8 – 1.4%
<span style="color: yellow;">■</span>	Moderate:	28 – 4.8%
<span style="color: green;">■</span>	Minor:	546 – 93.8%

**WORK ZONE CRASHES: 24**

## Most Significant Impact Events

### Planned Event

<b>Date:</b> Daily Work Zone	<b>Location:</b> Westbound I-44 at Grand Boulevard	<b>Event Detail:</b> Bridge work with 23 minutes of additional travel time during non-peak period
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### Unplanned Event

<b>Date:</b> 4-23	<b>Location:</b> I-70 EB Before MO 370 and On Ramp From Mid Rivers Mall Drive	<b>Event Detail:</b> Overturned tractor trailer with tanker fire and state damage
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# EXECUTIVE SUMMARY

ST. LOUIS DISTRICT ■ QUARTERLY REGIONAL MOBILITY REPORT ■ MARCH / APRIL / MAY 2018



## Top 5 Congestion Locations / March – May 2017 vs. 2018

\*Locations ranked on Base Impact (The aggregation of Queue Length over time for congestion originating at each location in mile minutes)

	Congestion Locations 2017	*Base Impact	Average Queue Length Miles	Average Daily Duration	Total Duration
1	EB I-64 @ I-44/I-55/US40	30,760.26	2.09	3h 09 m	10d 19h 04m
2	EB I-64 @ Big Bend Boulevard	25,541.26	3.45	1h 23m	4d 17h 30m
3	EB I-70 @ I-64 /I-55/US 40	21,395.76	0.62	7h 01m	23d 23h 52m
4	WB I-64 @ Clayton Ave / Oakland Ave	19,522.84	2.29	1h 40m	5d 17h 35m
5	SB I-270 @ MO100 Manchester Road	19,208.02	1.46	2h 36m	8d 21h 20m

	Congestion Locations 2018	*Base Impact	Average Queue Length Miles	Average Daily Duration	Total Duration
1	WB US 40 @ I-70 (Wentzville)	22,929.80	2.82	1h 29m	5d 16h 26m
2	EB I-64 @ I-44/I-55/US40	22,883.22	1.47	2h 49m	10d 20h 17m
3	SB I-270 @ MO100 Manchester Road	21,947.14	1.46	2h 41m	10d 06h 58m
4	WB I-64 @ Clayton Ave / Oakland Ave	21,703.42	2.38	1h 36m	6d 03h 43m
5	EB I-64 @ Big Bend Boulevard	21,195.38	3.00	1h 15m	4d 18h 58m

## Average Incident Duration Comparison / 2017 vs. 2018

Month	Average Incident Duration (Minutes : Seconds)	2017	2018
March	Lane Clearance	24:55	23:40
April	Lane Clearance	23:53	23:28
May	Lane Clearance	24:24	24:09
March	Incident Clearance	28:59	27:14
April	Incident Clearance	28:05	28:11
May	Incident Clearance	29:42	27:28



# FREEWAY MANAGEMENT

ST. LOUIS DISTRICT ■ QUARTERLY REGIONAL MOBILITY REPORT ■ MARCH / APRIL / MAY 2018

Overall AM Mobility DECREASED

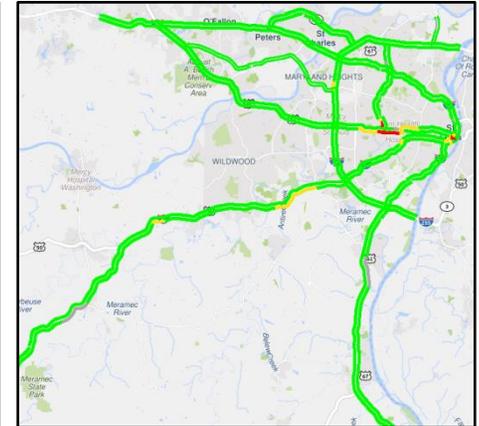
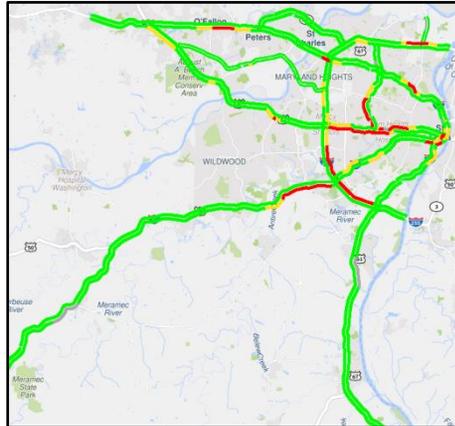
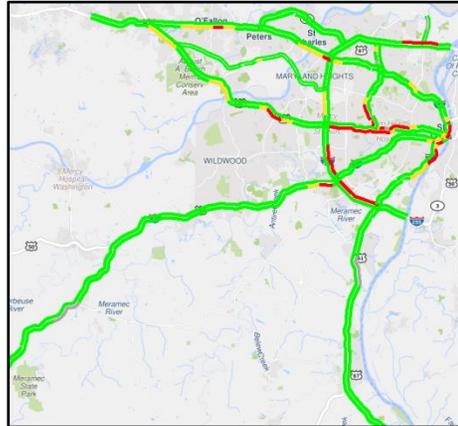
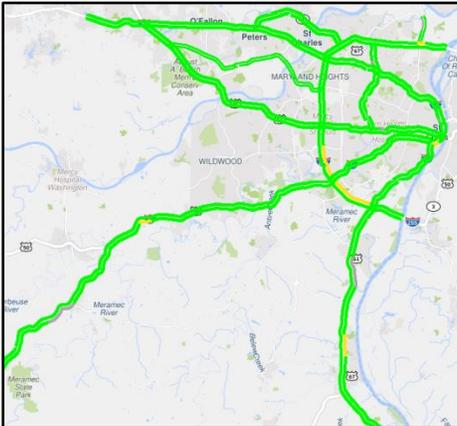
## AM Peak Period Mobility March/April/May 2017

6 am – 7 am

7 am – 8 am

8 am – 9 am

9 am – 10 am



**LEGEND (Speed Index)**  
 High Mobility (.90+) █  
 Medium Mobility (.80-.90) █  
 Low Mobility (< .80) █

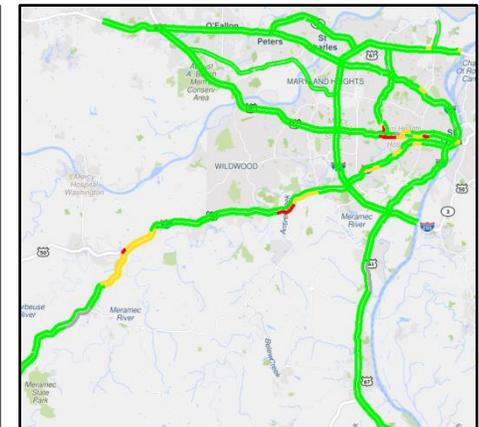
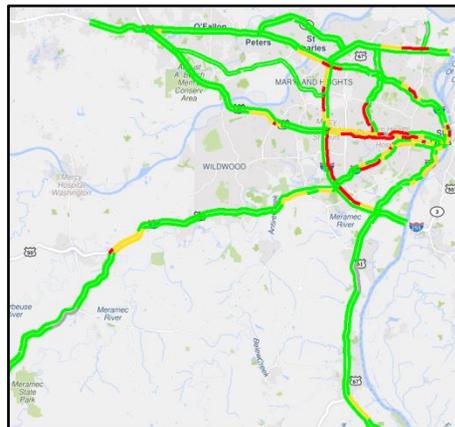
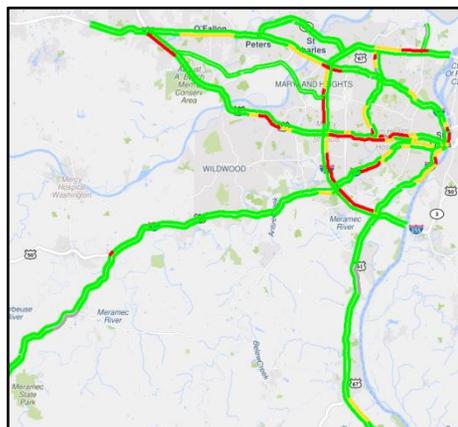
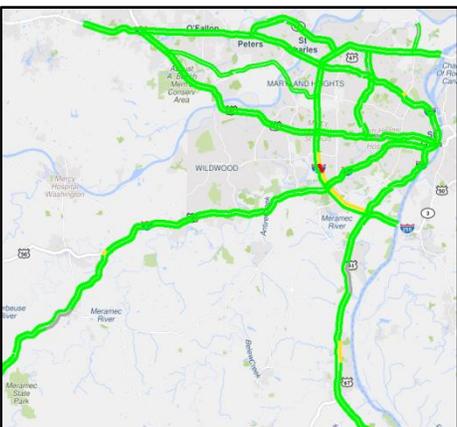
## AM Peak Period Mobility March/April/May 2018

6 am – 7 am

7 am – 8 am

8 am – 9 am

9 am – 10 am





# FREEWAY MANAGEMENT

ST. LOUIS DISTRICT ■ QUARTERLY REGIONAL MOBILITY REPORT ■ MARCH / APRIL / MAY 2018

## Highlighted Corridor

I-44  
MO 47 to I-55

Comparing AM March/April/May 2017 to  
AM March/April/May 2018

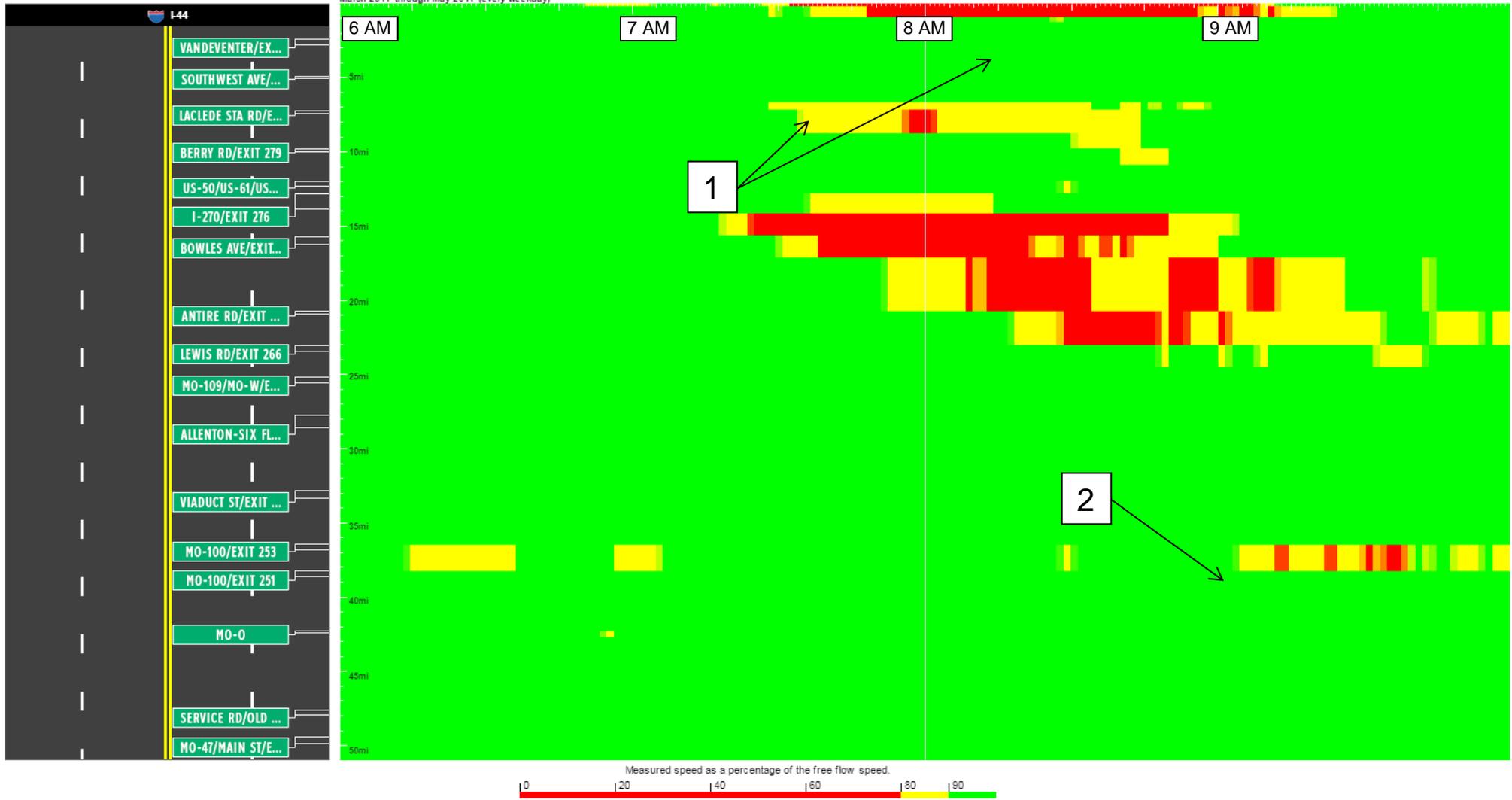
AM Eastbound I-44 Mobility DECREASED 2017 → 2018

AM Westbound I-44 Mobility DECREASED 2017 → 2018



## AM Eastbound 2017

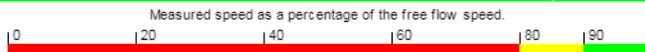
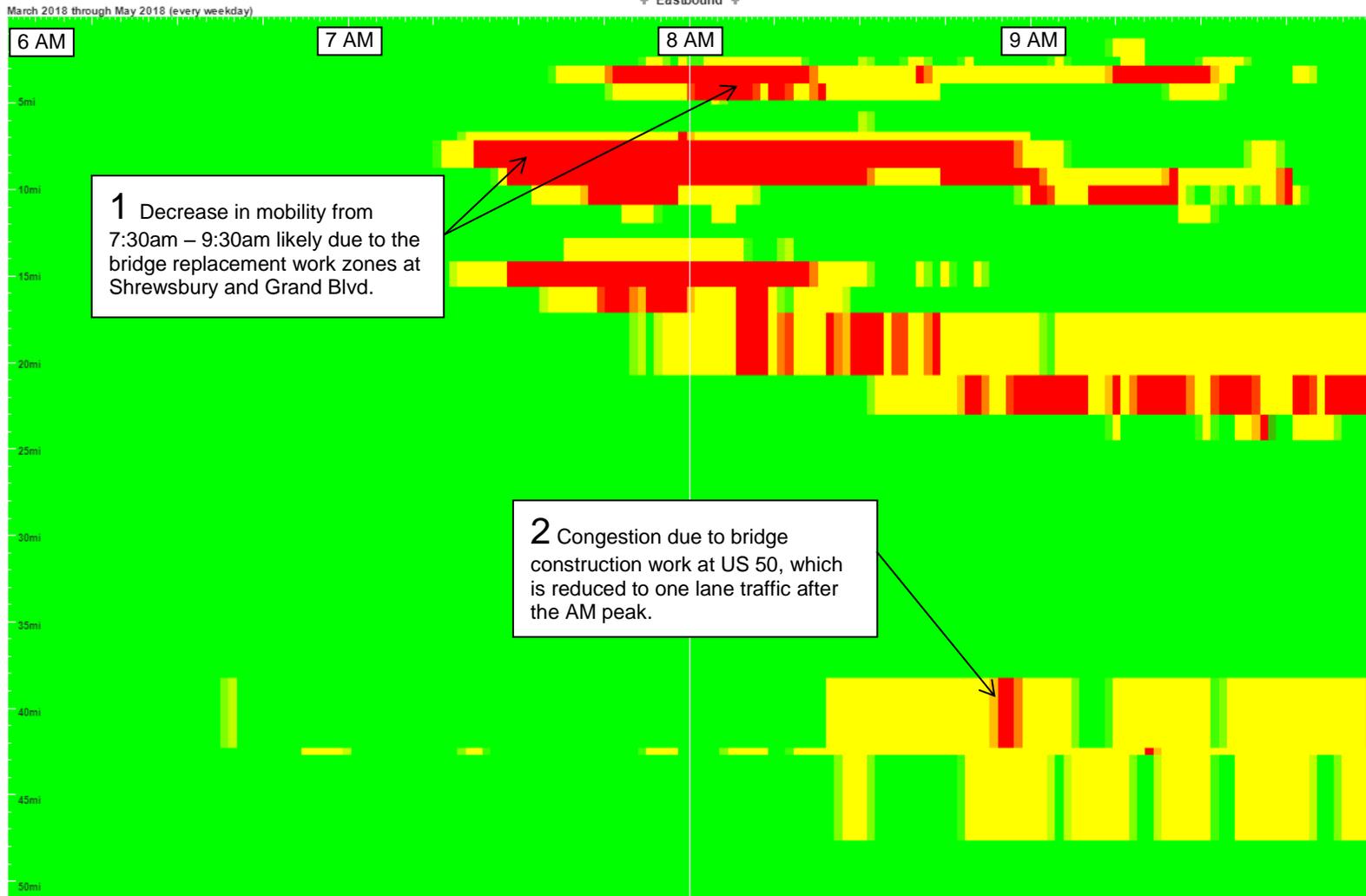
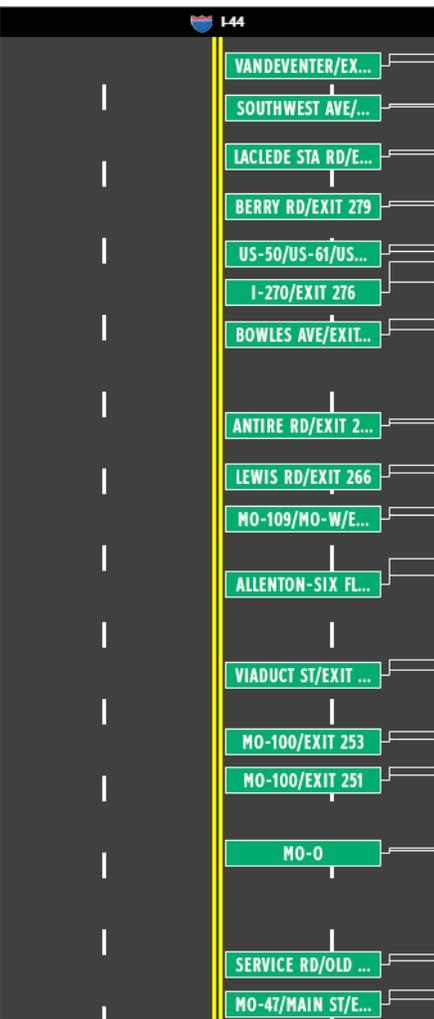
Congestion on I-44 Eastbound between MO-47/Main St/Exit 240 and I-55/Exit 290 using HERE data  
Averaged by 2 minutes for March 2017 through May 2017 (every weekday)





## AM Eastbound 2018

Congestion on I-44 Eastbound between MO-47/Main St/Exit 240 and I-55/Exit 290 using HERE data  
Averaged by 2 minutes for March 2018 through May 2018 (every weekday)



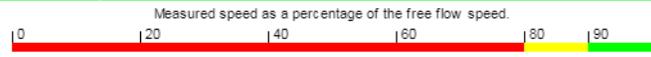
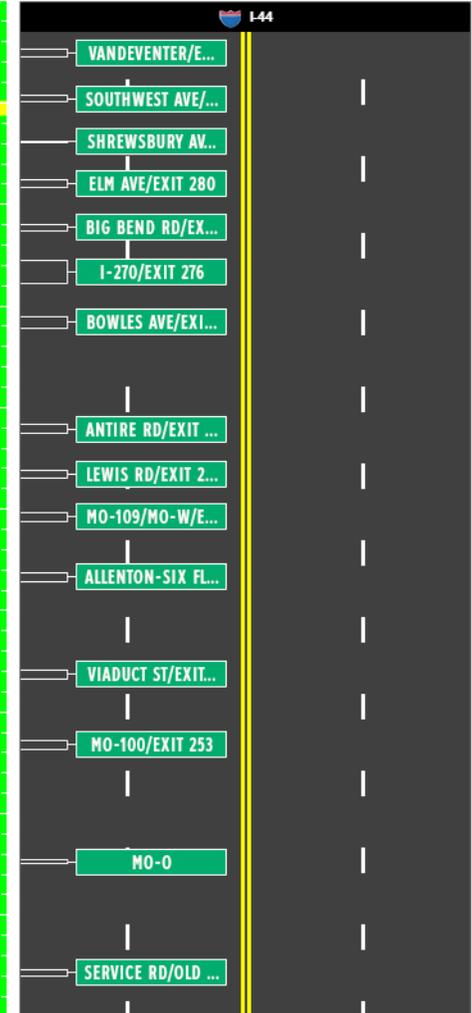
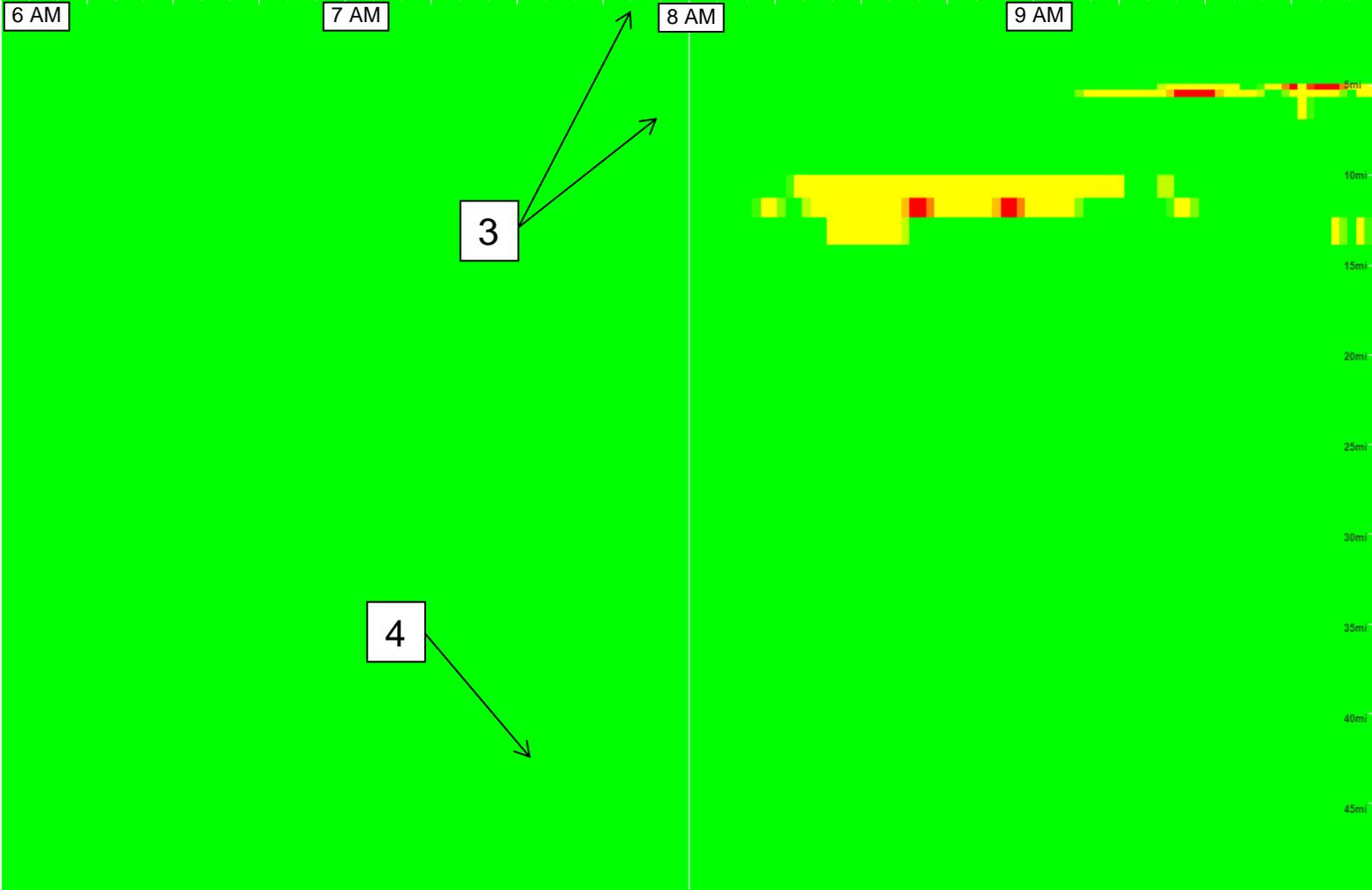


## AM Westbound 2017

Congestion on I-44 Westbound between I-55/Exit 290 and MO-47/Main St/Exit 240 using HERE data  
 Averaged by 2 minutes for March 2017 through May 2017 (every weekday)

Westbound

March 2017 through May 2017 (every weekday)



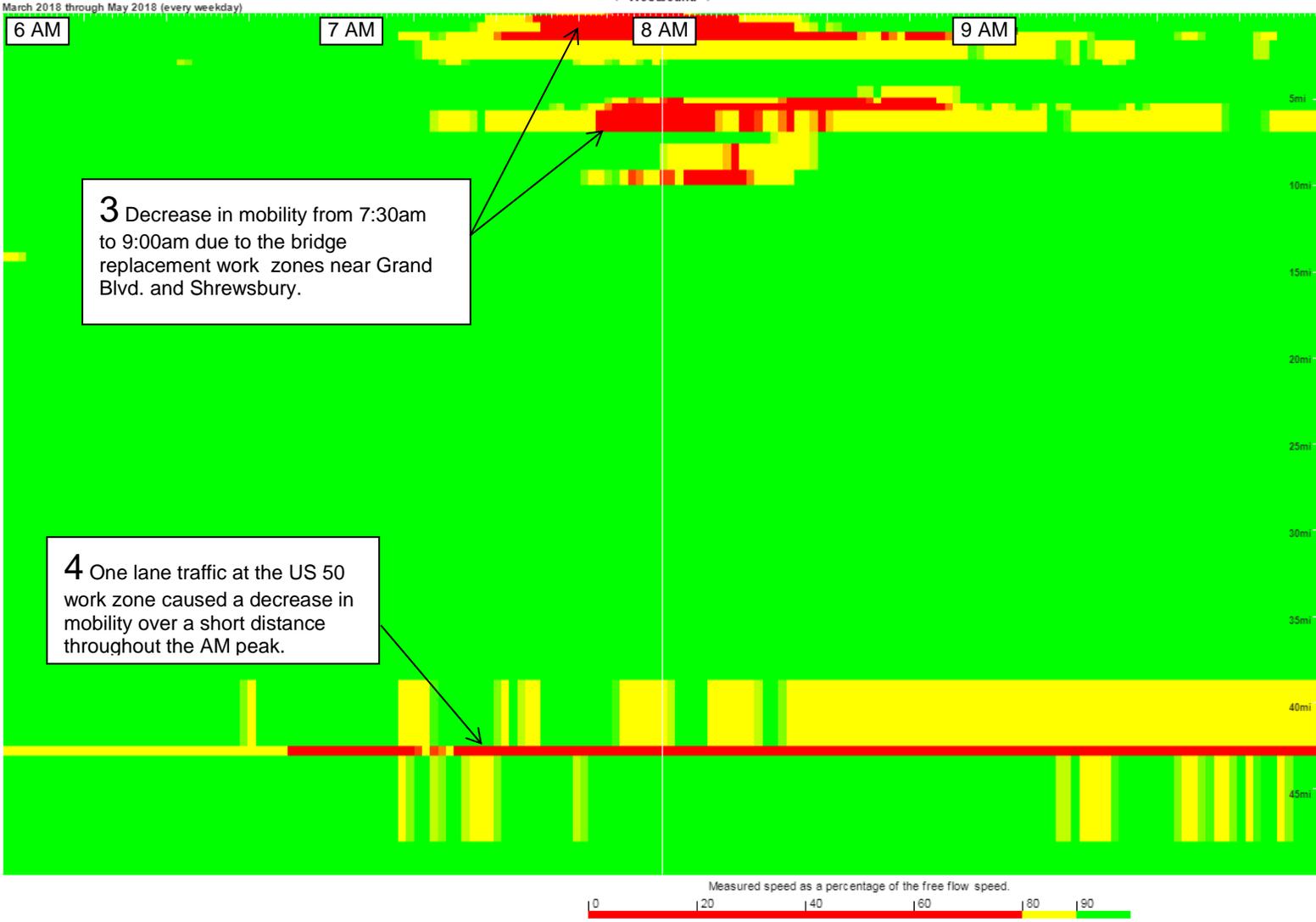


## AM Westbound 2018

Congestion on I-44 Westbound between I-55/Exit 290 and MO-47/Main St/Exit 240 using HERE data

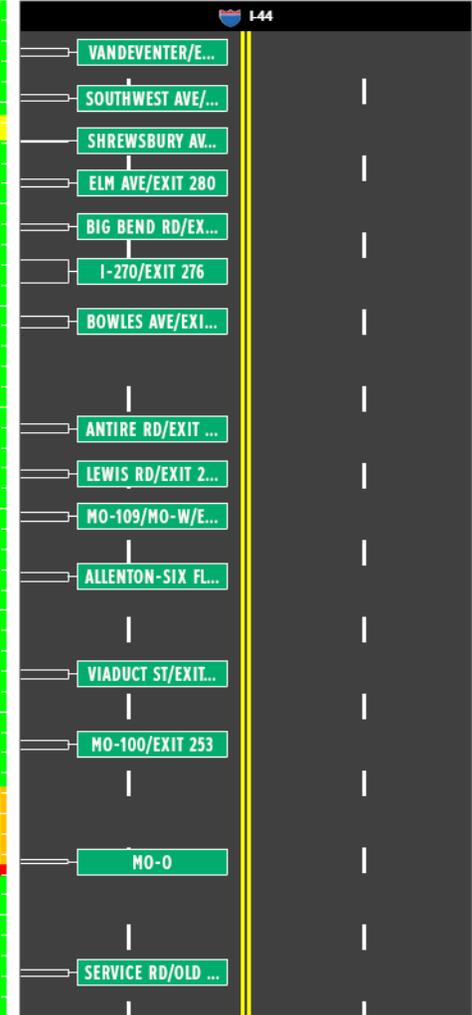
Averaged by 2 minutes for March 2018 through May 2018 (every weekday)

Westbound



**3** Decrease in mobility from 7:30am to 9:00am due to the bridge replacement work zones near Grand Blvd. and Shrewsbury.

**4** One lane traffic at the US 50 work zone caused a decrease in mobility over a short distance throughout the AM peak.





**Overall PM Mobility DECREASED**

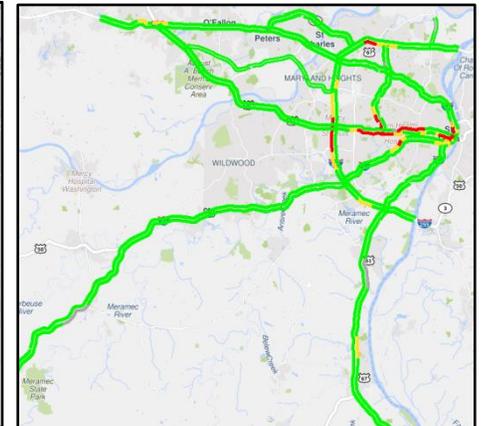
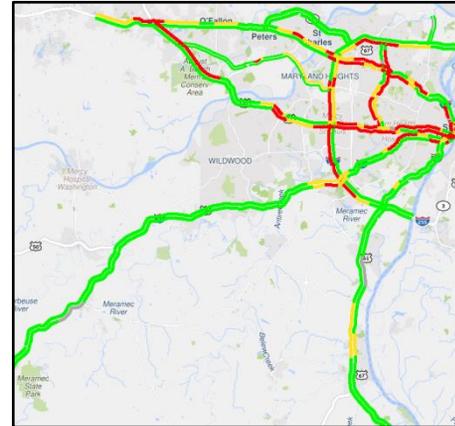
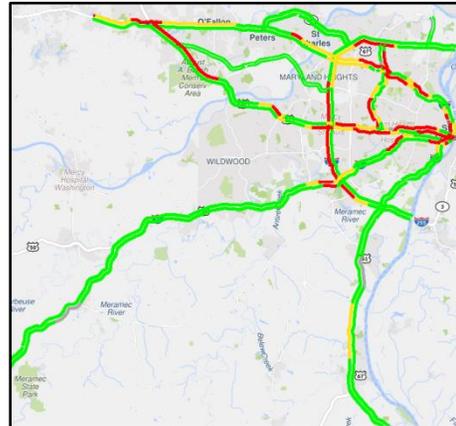
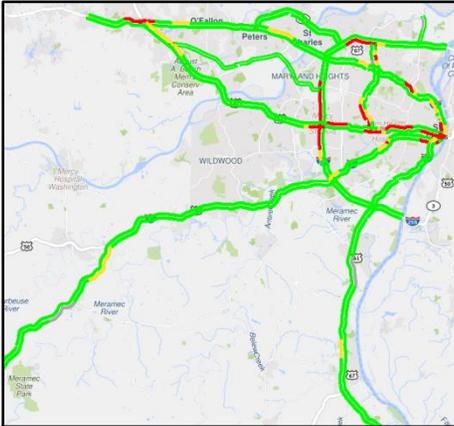
## PM Peak Period Mobility March/April/May 2017

3 pm – 4 pm

4 pm – 5 pm

5 pm – 6 pm

6 pm – 7 pm



**LEGEND (Speed Index)**  
 High Mobility (.90+)  
 Medium Mobility (.80-.90)  
 Low Mobility (< .80)

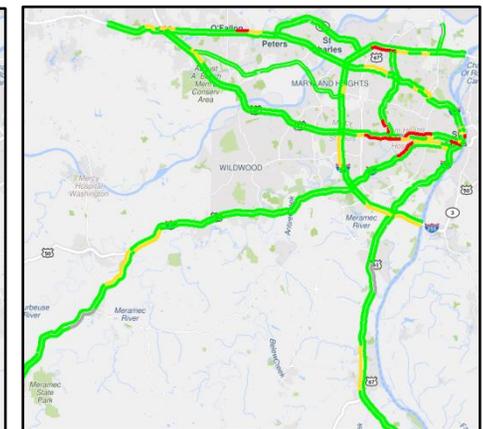
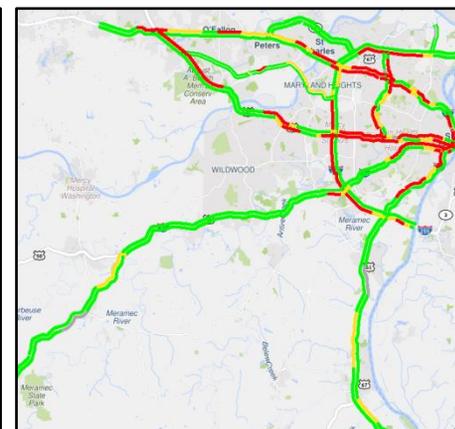
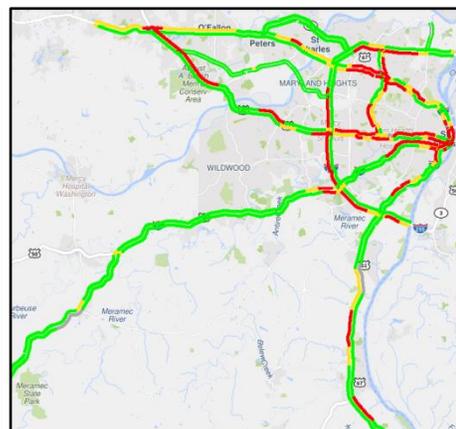
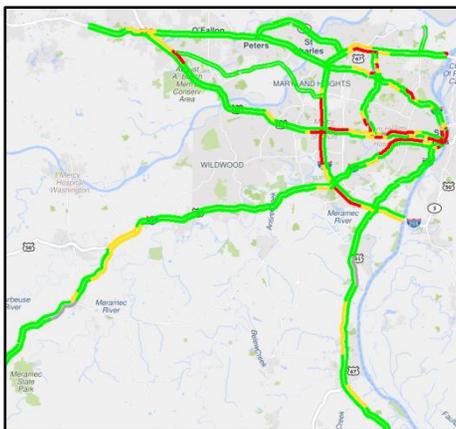
## PM Peak Period Mobility March/April/May 2018

3 pm – 4 pm

4 pm – 5 pm

5 pm – 6 pm

6 pm – 7 pm





## Highlighted Corridor

I-44  
MO 47 to I-55

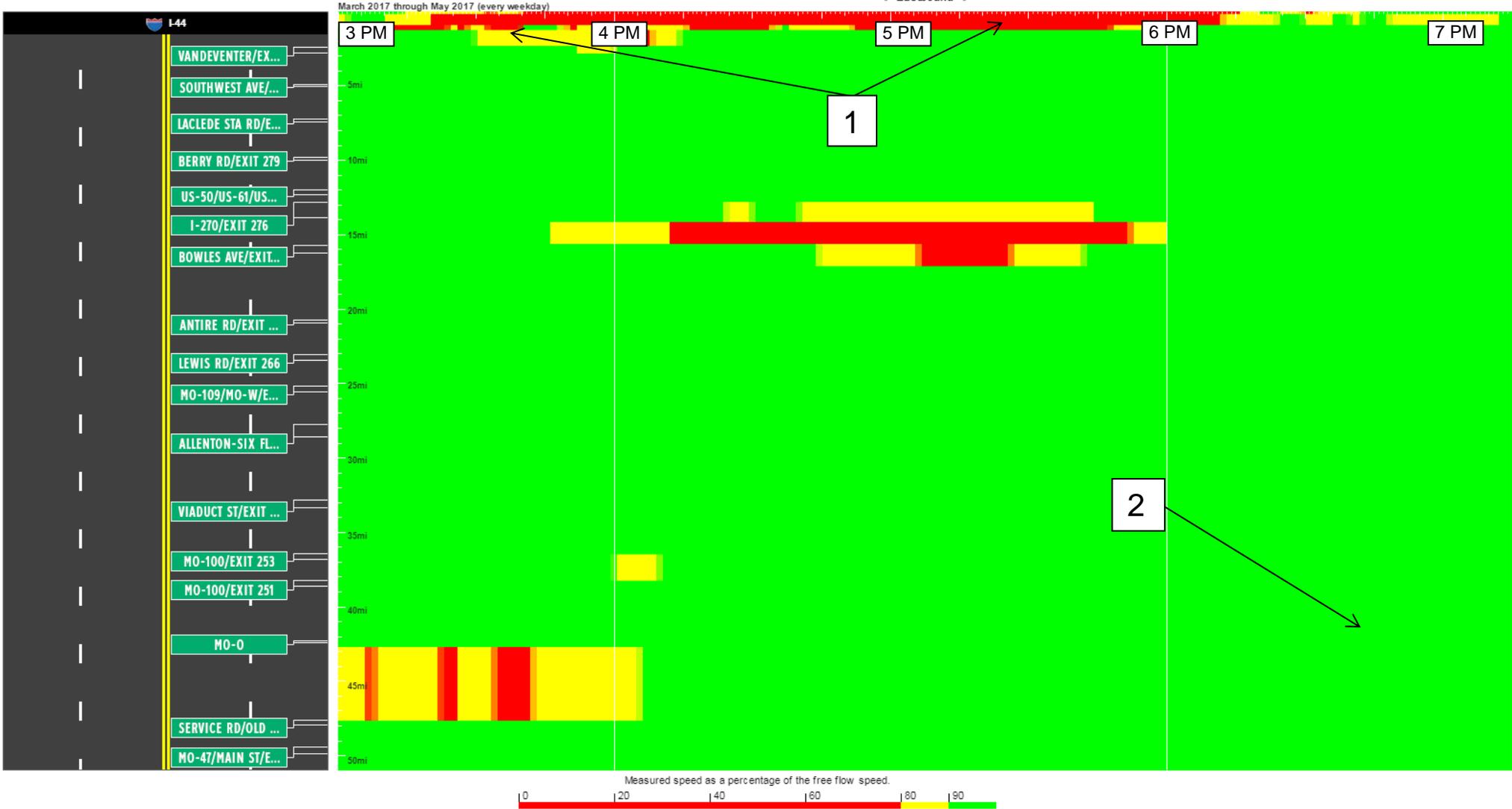
Comparing PM March/April/May 2017 to  
PM March/April/May 2018

PM Eastbound I-44 Mobility DECREASED 2017 → 2018

PM Westbound I-44 Mobility DECREASED 2017 → 2018

## PM Eastbound 2017

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 Averaged by 2 minutes for March 2017 through May 2017 (every weekday)





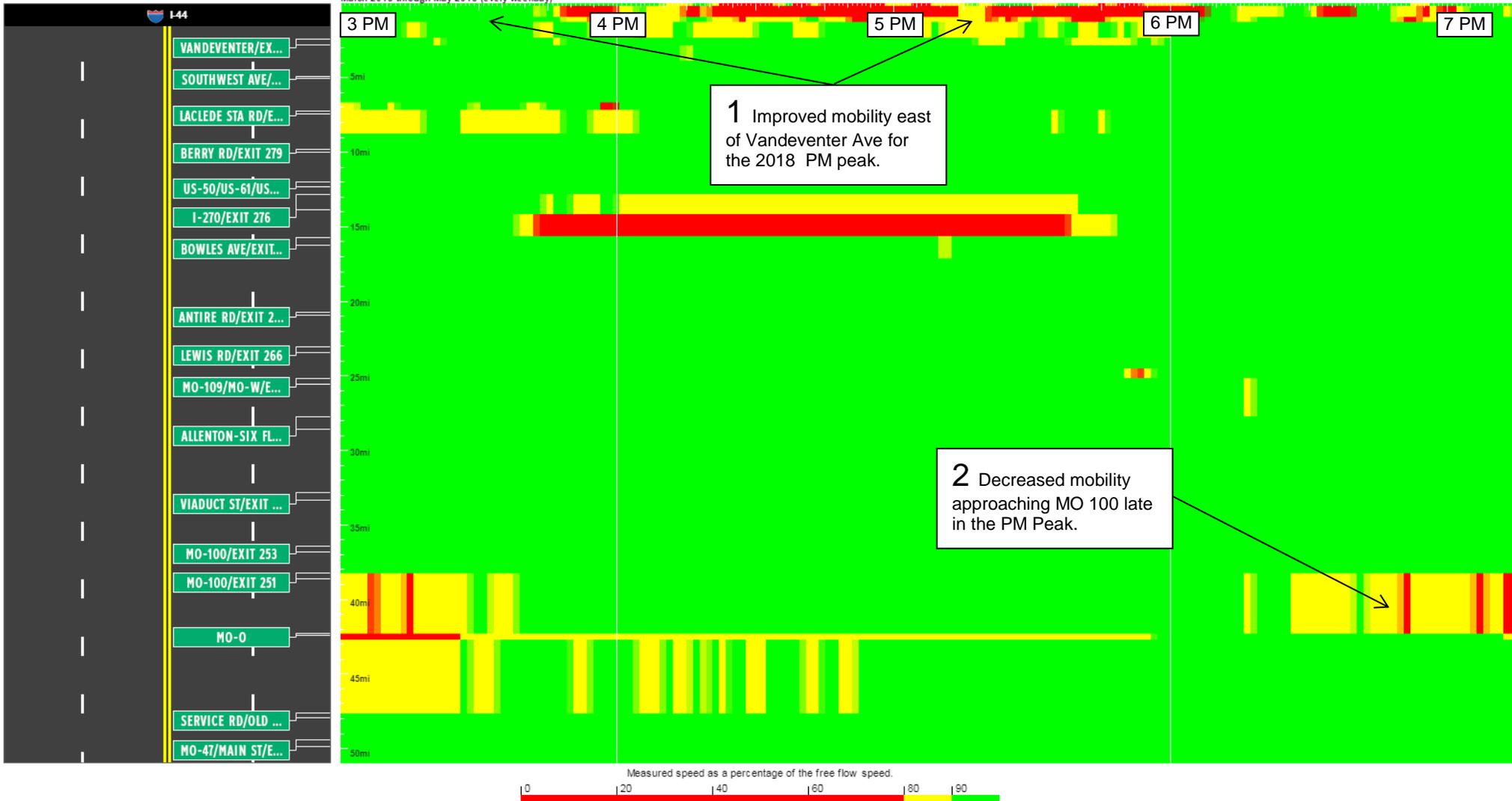
## PM Eastbound 2018

Congestion on I-44 Eastbound between MO-47/Main St/Exit 240 and I-55/Exit 290 using HERE data

Averaged by 2 minutes for March 2018 through May 2018 (every weekday)

↕ Eastbound ↕

March 2018 through May 2018 (every weekday)





# FREEWAY MANAGEMENT

ST. LOUIS DISTRICT ■ QUARTERLY REGIONAL MOBILITY REPORT ■ MARCH / APRIL / MAY 2018



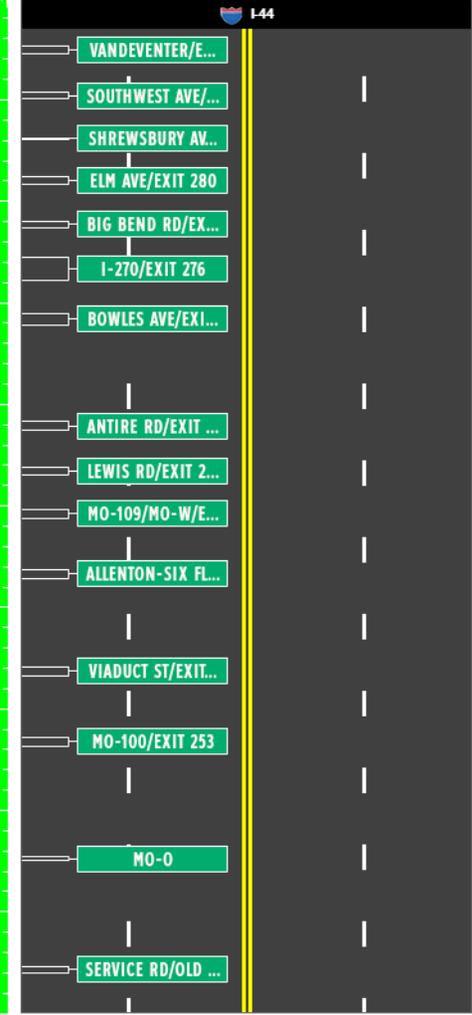
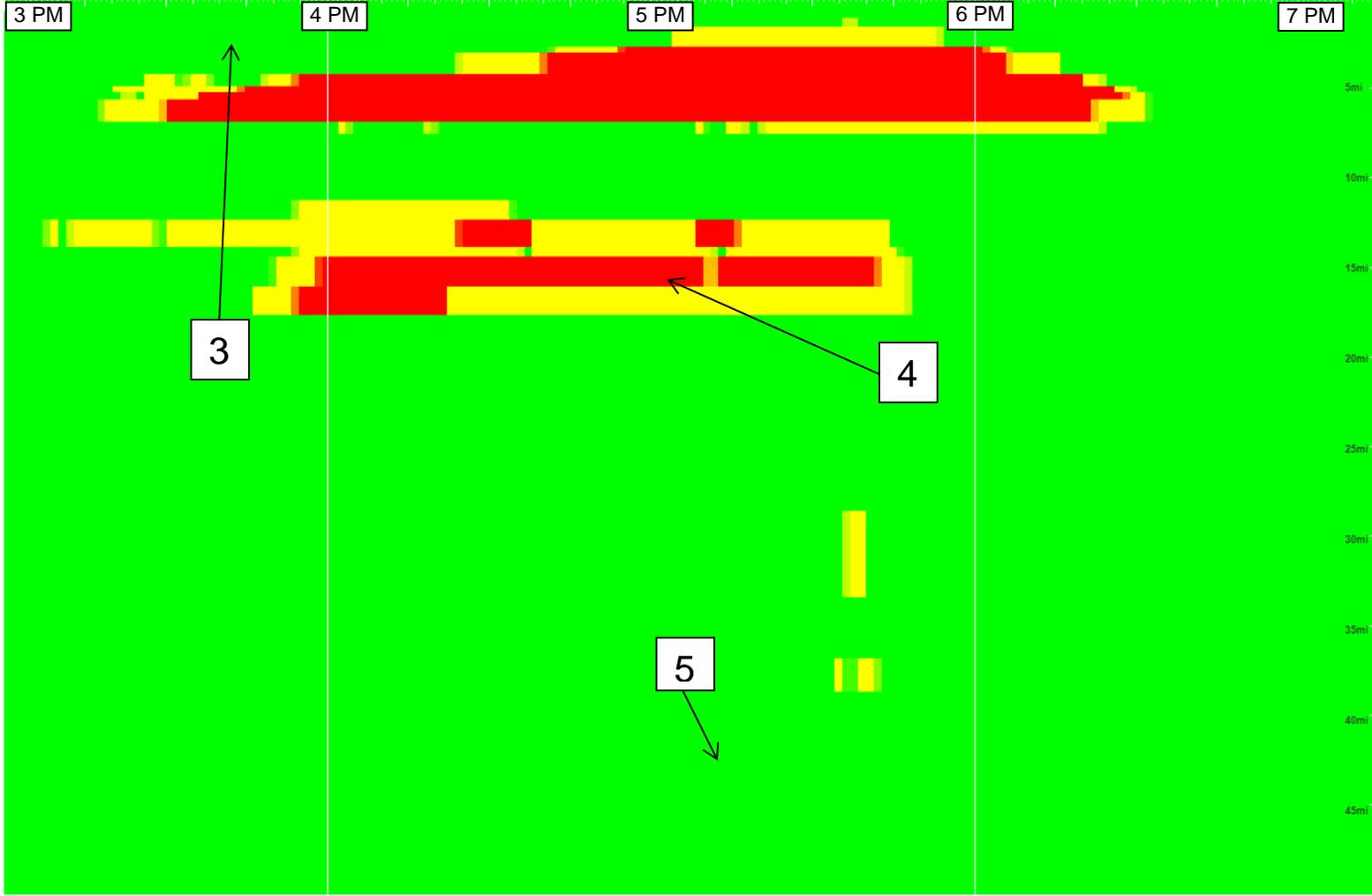
## PM Westbound 2017

Congestion on I-44 Westbound between I-55/Exit 290 and MO-47/Main St/Exit 240 using HERE data

Averaged by 2 minutes for March 2017 through May 2017 (every weekday)

Westbound

March 2017 through May 2017 (every weekday)





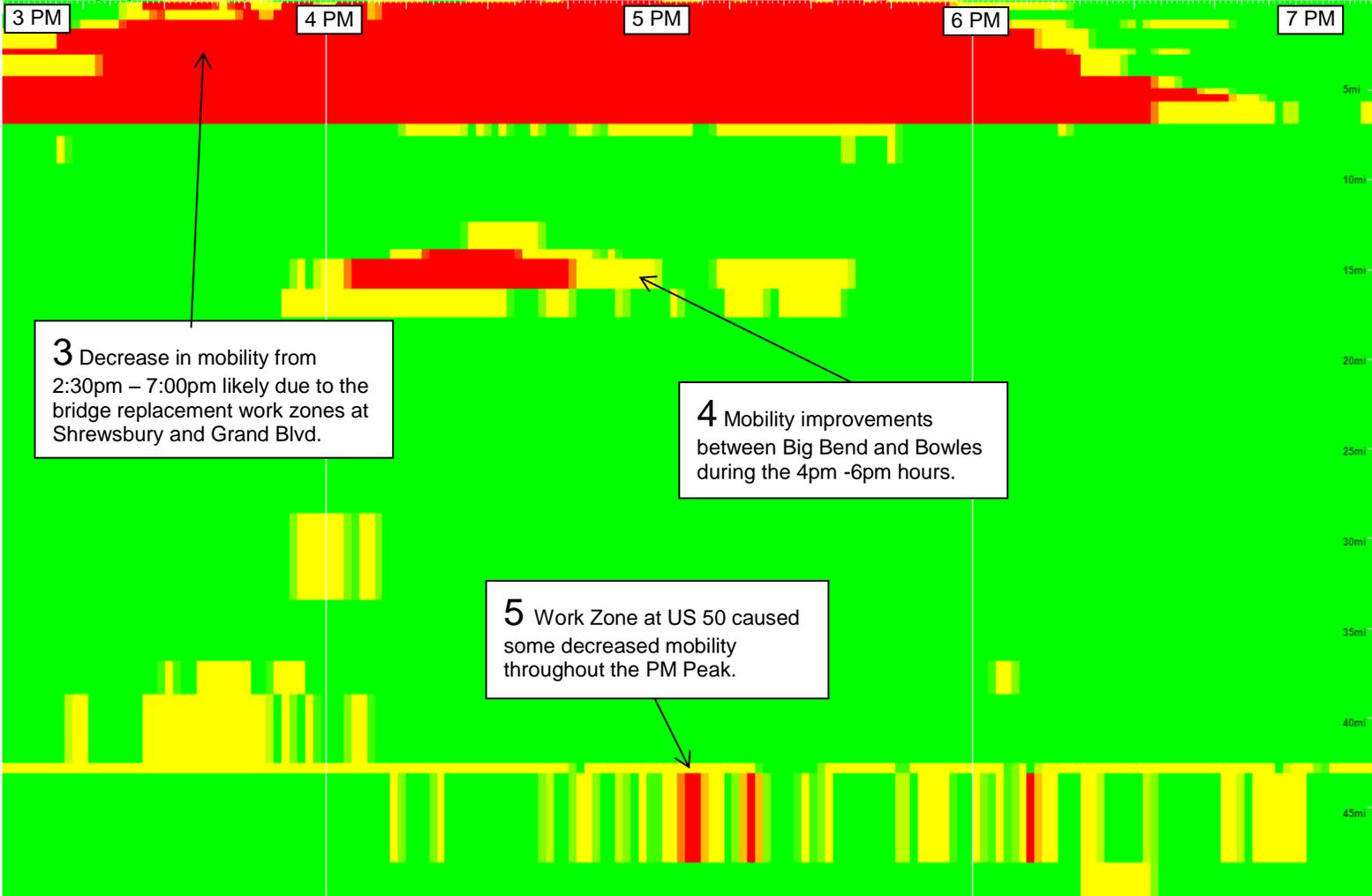
## PM Westbound 2018

Congestion on I-44 Westbound between I-55/Exit 290 and MO-47/Main St/Exit 240 using HERE data

Averaged by 2 minutes for March 2018 through May 2018 (every weekday)

Westbound

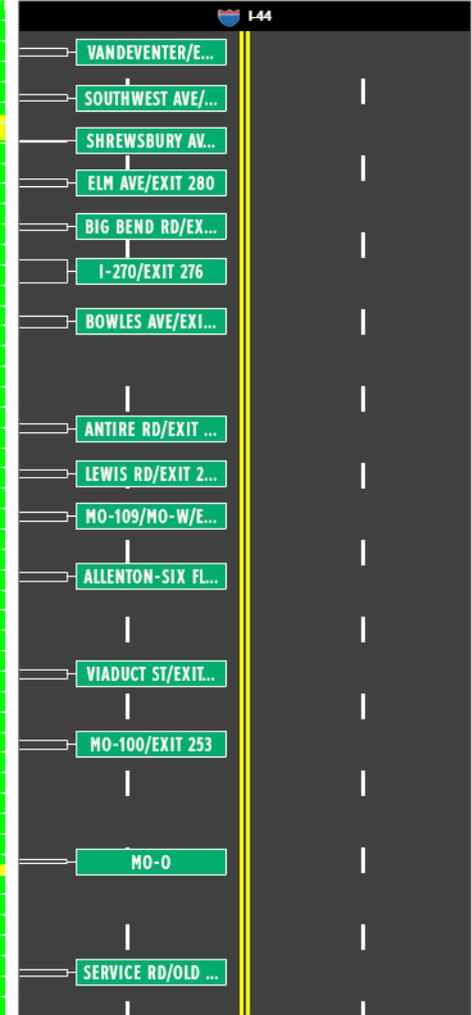
March 2018 through May 2018 (every weekday)



**3** Decrease in mobility from 2:30pm – 7:00pm likely due to the bridge replacement work zones at Shrewsbury and Grand Blvd.

**4** Mobility improvements between Big Bend and Bowles during the 4pm -6pm hours.

**5** Work Zone at US 50 caused some decreased mobility throughout the PM Peak.





## TMC Observed Work Zones

	March 2018	April 2018	May 2018
<b>Level of Travel Time Impact</b>	<b>Number of Work Zones</b>	<b>Number of Work Zones</b>	<b>Number of Work Zones</b>
<b>Major Impact</b>	<b>1</b>	<b>4</b>	<b>3</b>
<b>Moderate Impact</b>	<b>2</b>	<b>12</b>	<b>14</b>
<b>Minor Impact</b>	<b>162</b>	<b>190</b>	<b>194</b>
<b>Total</b>	<b>165</b>	<b>206</b>	<b>211</b>

◆ Goal: 91%

### SL Mobility Rating:

- ◆ Mar 2018: 92%
- ◆ Apr 2018: 98%
- ◆ May 2018: 93%

### SL Visibility levels:

- ◆ Mar 2018: 92%
- ◆ Apr 2018: 93%
- ◆ May 2018: 93%



## Additional Travel Time Impacts through Work Zones

Major Impact (15 Minutes or Above): #    Moderate Impact (10-14 Minutes): #                      #    #

(Daily) Westbound I-44 – Shrewsbury 4 11

- Two lanes of traffic open westbound
- All mitigation efforts were in use
- RITIS data recorded additional travel times up to 14 minutes during non-peak hours

(Daily) Westbound I-44 – Grand Boulevard 3 11

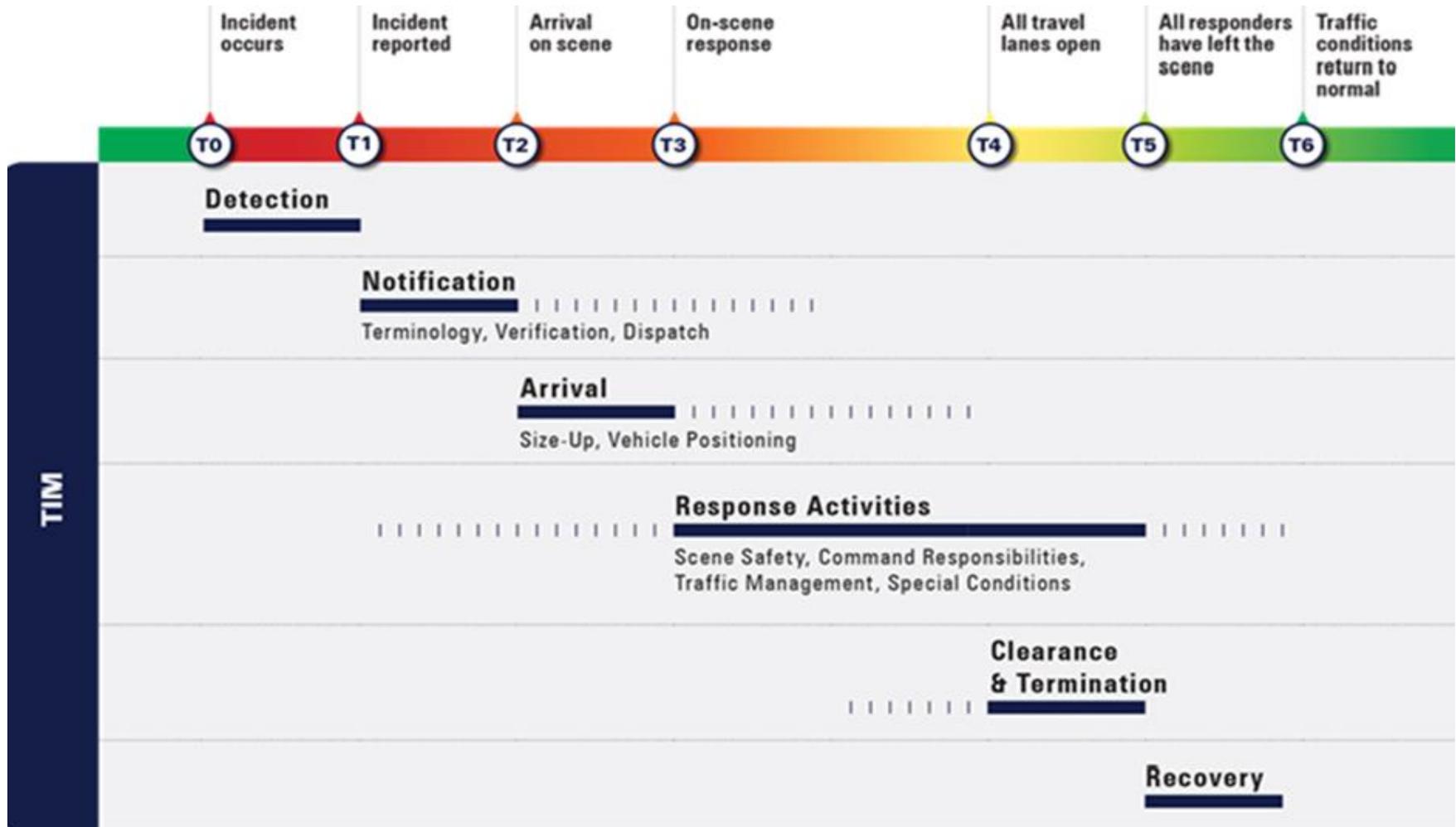
- Two lanes of traffic open westbound
- All mitigation efforts were in use
- RITIS data recorded additional travel times up to 23 minutes during non-peak hours

(4-4) Eastbound I-64 – Vandeventer Avenue 0 1

- Two lanes of traffic open eastbound
- All mitigation efforts were in use
- RITIS data recorded additional travel times up to 14 minutes during non-peak hours

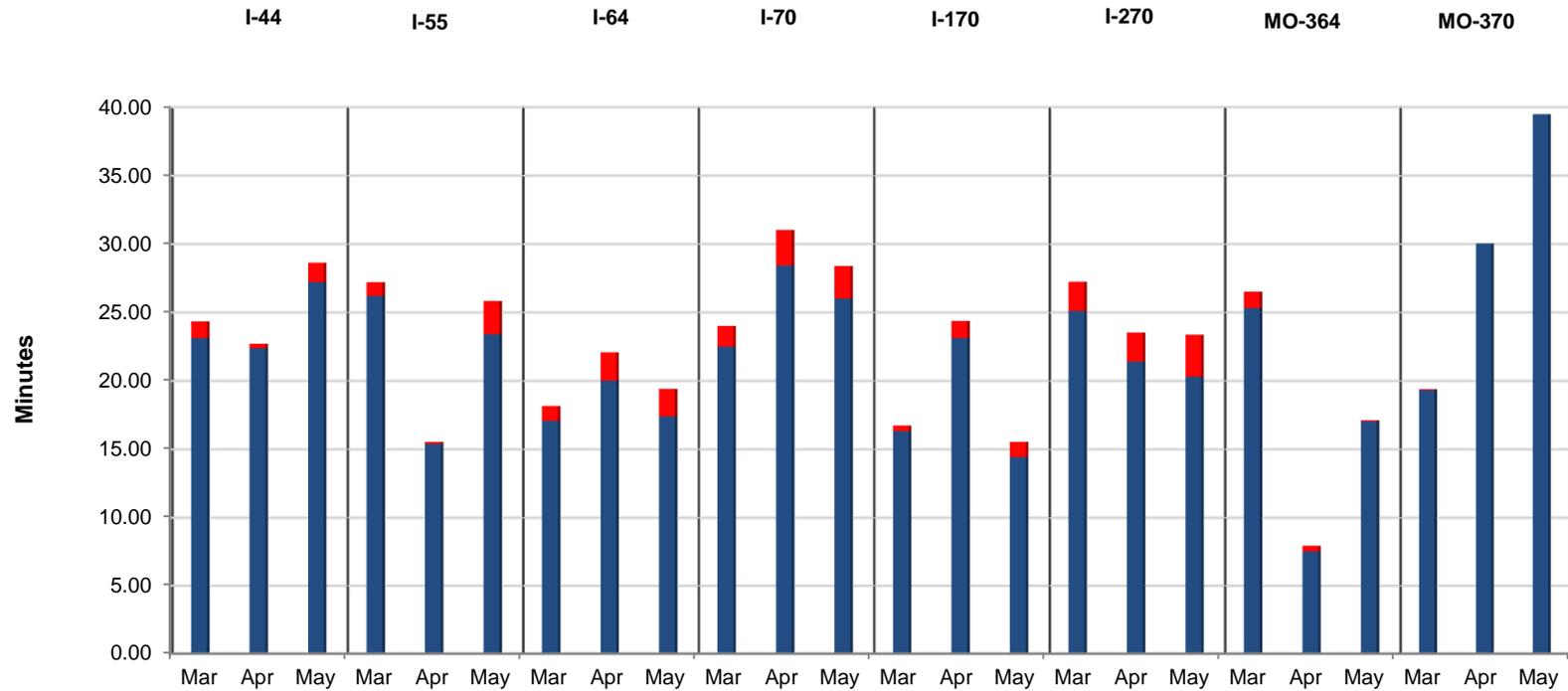
(4-17) Eastbound I-255 – Jefferson Barracks Bridge 1 0

- Emergency joint repair two lanes of three closed
- All mitigation efforts were in use
- RITIS data recorded additional travel times up to 23 minutes during non-peak hours





## March / April / May 2018 Incidents Summary



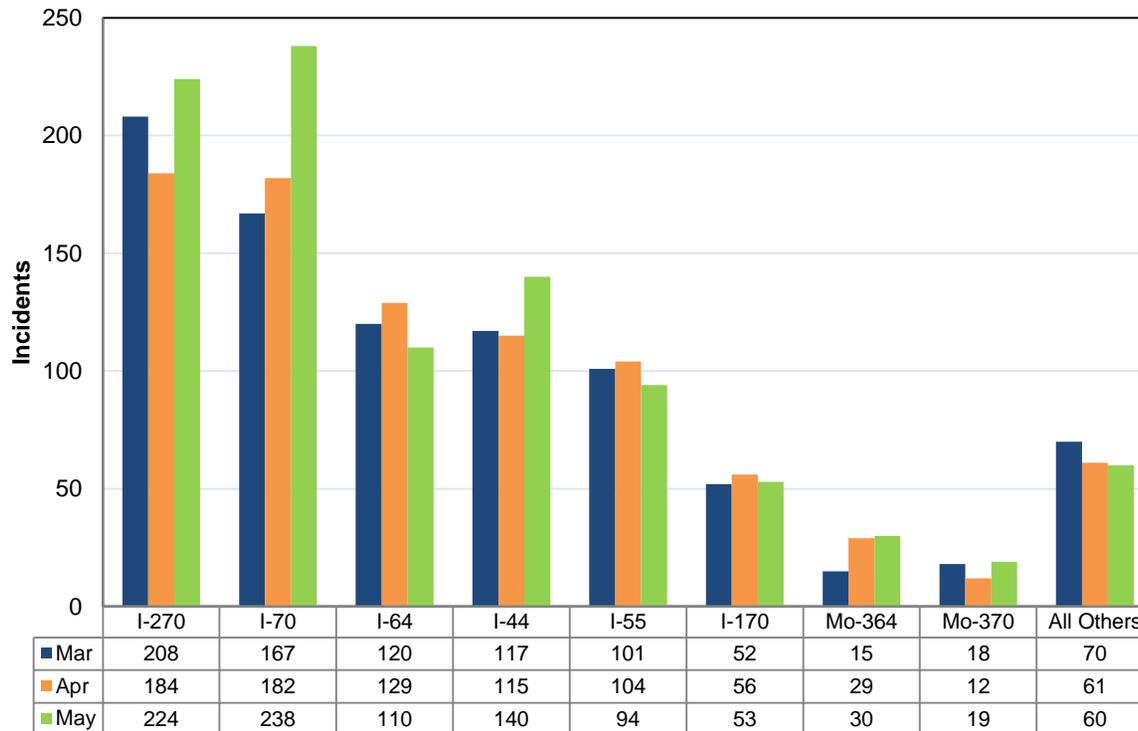
■ Average Time for Backup to Clear = T6 - T4

■ Average Time to Clear Incident from Lanes = T4 - T1



**Total Number of Incidents: / March: 868 / April: 872 / May: 968**

**Total Number of Lane Blocking Incidents**



Major Impact Incidents

March	April	May
(3)	(3)	(2)

Fatal Incidents

March	April	May
(4)	(6)	(4)

Tractor Trailer Incidents

March	April	May
(41)	(47)	(36)



# INCIDENT MANAGEMENT

ST. LOUIS DISTRICT ■ QUARTERLY REGIONAL MOBILITY REPORT ■ MARCH / APRIL / MAY 2018



## Lane Blocking Incidents by Freeway March, April, May 2018

Interstate	Month	Number of Incidents	Average Time to Clear Incident from Lanes = T4 - T1	Average Time for Backup to Clear = T6 - T4	Freeway Miles	Incidents per Mile
I-44	Mar	117	23:13	01:22	33	3.55
I-44	Apr	111	22:38	00:34	33	3.36
I-44	May	140	27:22	01:42	33	4.24
I-55	Mar	101	26:20	01:02	23	4.39
I-55	Apr	76	15:39	00:16	23	3.30
I-55	May	94	23:42	02:43	23	4.09
I-64	Mar	120	25:42	01:07	40	3.00
I-64	Apr	122	17:09	02:07	40	3.05
I-64	May	110	17:40	02:01	40	2.75
I-70	Mar	167	22:51	01:51	38	4.39
I-70	Apr	142	28:44	02:59	38	3.74
I-70	May	238	26:01	02:38	38	6.26
I-170	Mar	52	16:32	00:43	11	4.73
I-170	Apr	32	23:13	01:25	11	2.91
I-170	May	53	14:43	01:12	11	4.82
I-270	Mar	208	25:11	02:14	36	5.78
I-270	Apr	159	21:41	02:13	36	4.42
I-270	May	224	20:31	03:06	36	6.22
MO-364	Mar	15	25:32	01:20	11	1.36
MO-364	Apr	20	07:52	00:43	11	1.82
MO-364	May	30	17:04	00:08	11	2.73
MO-370	Mar	18	19:33	00:07	13	1.38
MO-370	Apr	8	30:05	00:00	13	0.62
MO-370	May	19	39:50	00:00	13	1.46
<b>Total</b>	<b>Mar/Apr/May</b>	<b>2376</b>	<b>22:27</b>	<b>01:24</b>	<b>602</b>	<b>3.95</b>



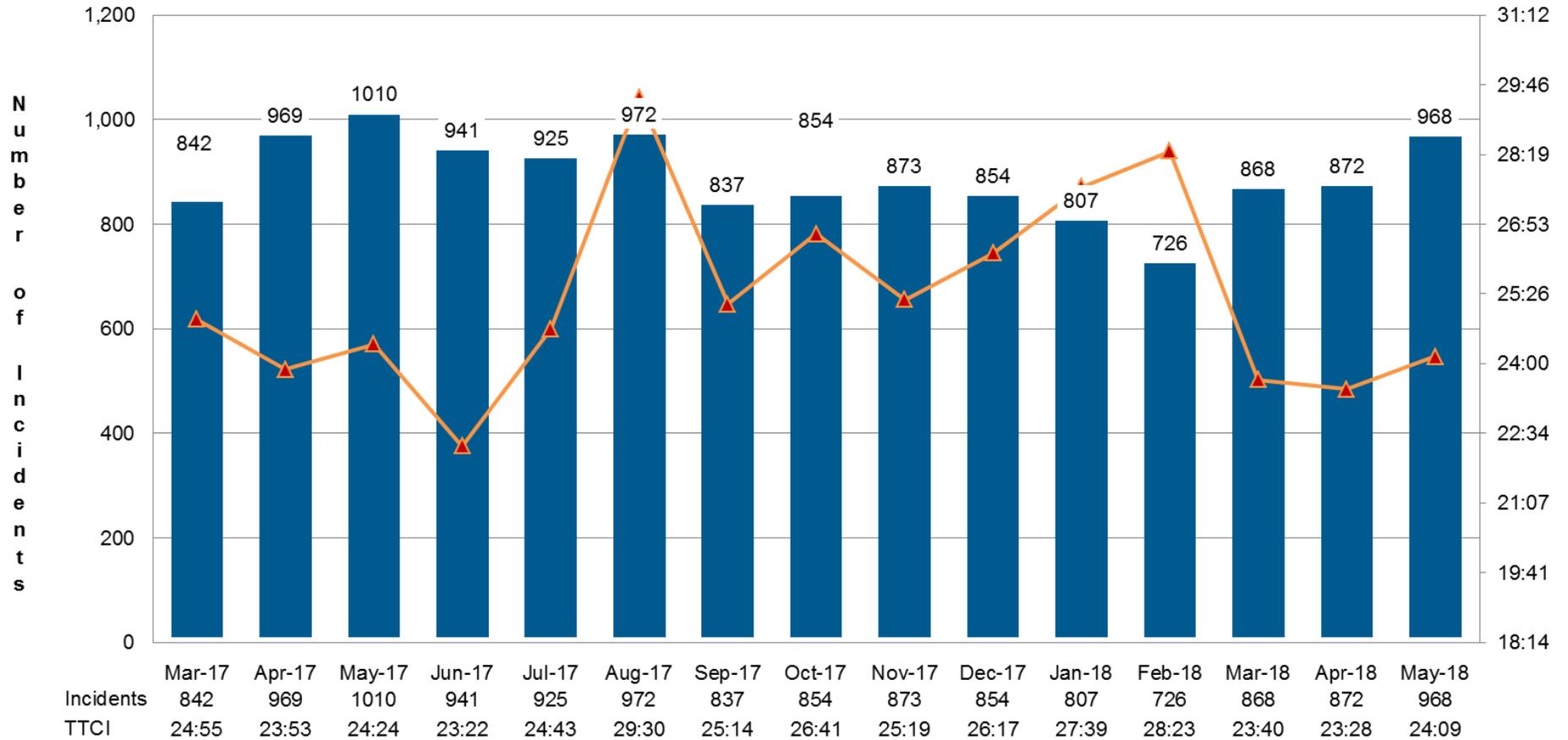
# INCIDENT MANAGEMENT

ST. LOUIS DISTRICT ■ QUARTERLY REGIONAL MOBILITY REPORT ■ MARCH / APRIL / MAY 2018



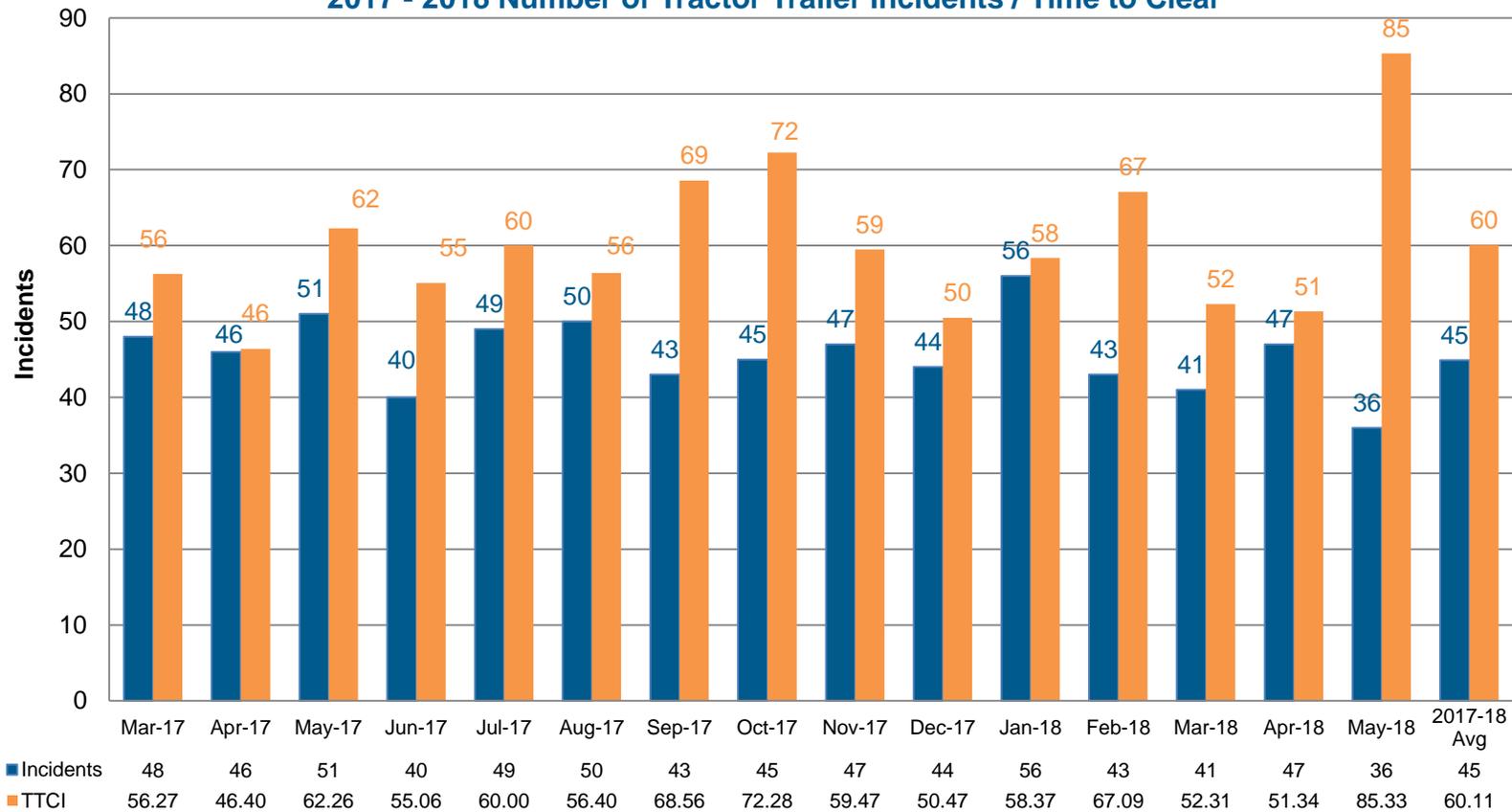
2017 - 2018 Number of Incidents and Time to Clear Lanes

Time to Clear Incidents





2017 - 2018 Number of Tractor Trailer Incidents / Time to Clear





# INCIDENT MANAGEMENT

ST. LOUIS DISTRICT ■ QUARTERLY REGIONAL MOBILITY REPORT ■ MARCH / APRIL / MAY 2018

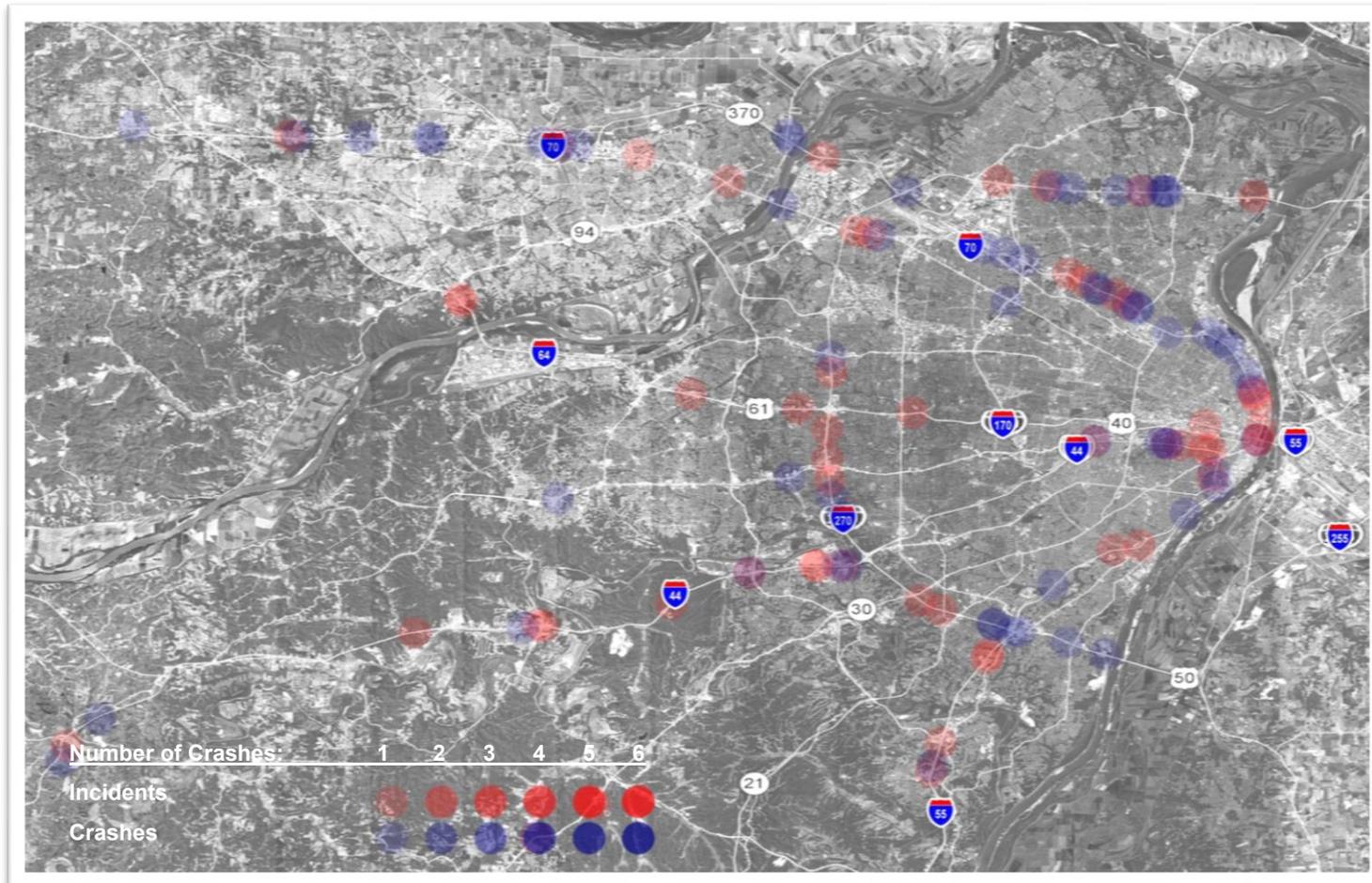


2018 Tractor Trailer Incidents by Route

2018	I-44	I-55	I-64	I-70	I-170	I-255/I-270	Route 364	Route 370	Other	Total
Jan	10	2	8	15	3	16	0	1	1	56
Feb	9	3	4	12	1	11	0	0	3	43
Mar	6	9	1	14	0	10	0	0	1	41
Apr	12	4	5	12	0	9	0	1	3	47
May	11	4	3	11	0	6	0	1	0	36
Jun										
Jul										
Aug										
Sep										
Oct										
Nov										
Dec										
<b>Yearly Total</b>	<b>48</b>	<b>22</b>	<b>21</b>	<b>64</b>	<b>4</b>	<b>52</b>	<b>0</b>	<b>3</b>	<b>8</b>	<b>223</b>

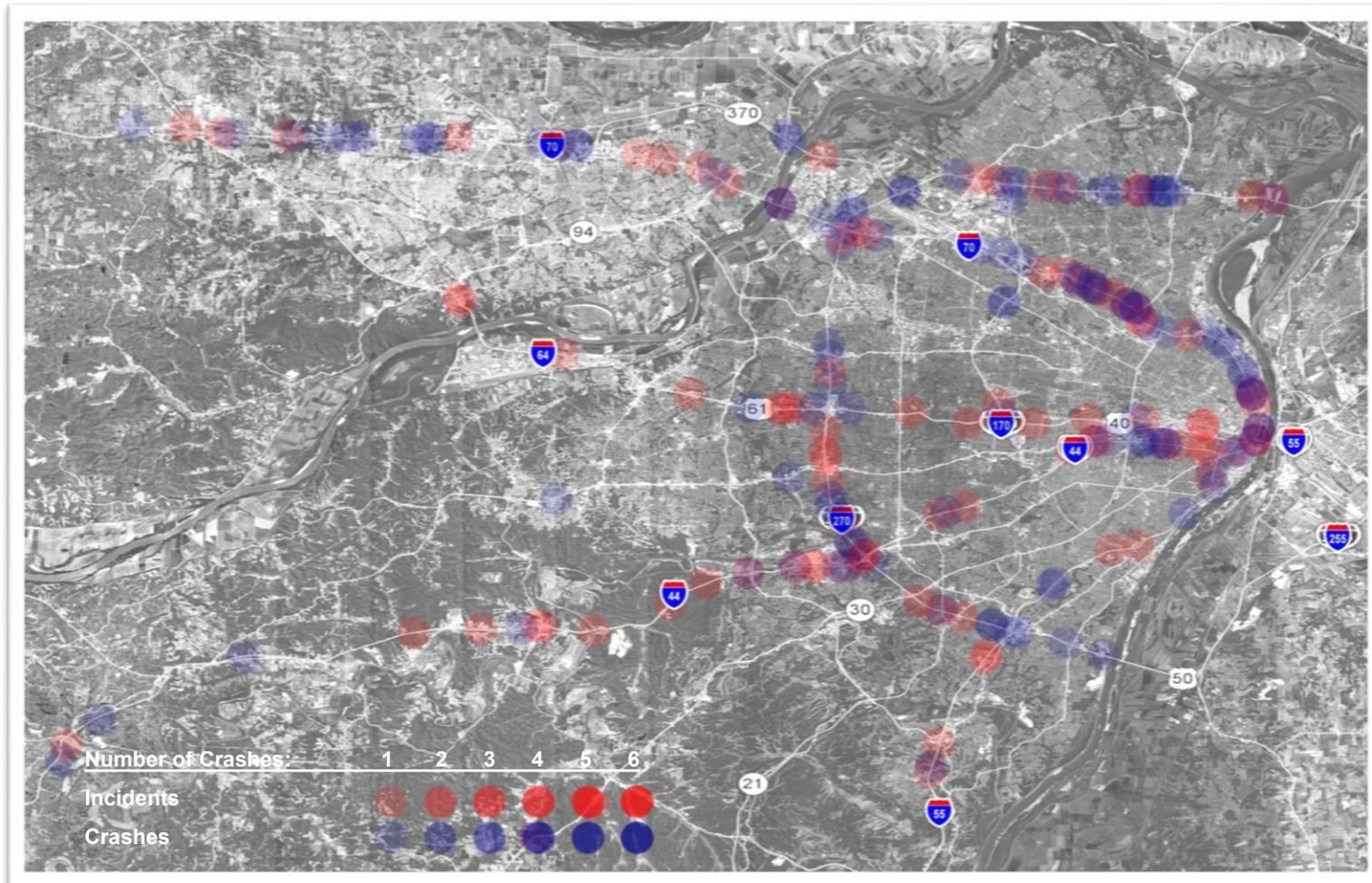


*March 2018 – May 2018 Tractor Trailer Incidents Map*





*January 2018 – May 2018 Tractor Trailer Incidents Map*





# INCIDENT MANAGEMENT

ST. LOUIS DISTRICT ■ QUARTERLY REGIONAL MOBILITY REPORT ■ MARCH / APRIL / MAY 2018



## Incidents over Two Hours March / April / May 2018

Incidents in red denote high mobility impact

#	Date & Time	Day of Week	Route	Location	Description	Duration HH/MM
1	3/3/2018 1:23	Saturday	I-270 EB/WB	PAST / BEFORE ELIZABETH AVE	Fatal crash with vehicle fire	3:52
2	3/10/2018 2:36	Saturday	I-255 EB/WB	AT TELEGRAPH RD	Overtured tractor trailer/ fire / fuel Leak	7:45
3	3/13/2018 8:08	Tuesday	US 67 SB/NB	PAST MONTEBELLO RD	Two-vehicle fatal crash	3:09
4	3/16/2018 8:55	Friday	21 MO	SUSON HILLS DR CRD	Two-vehicle fatal crash	2:59
5	3/21/2018 8:12	Wednesday	I-44 EB	AT MO 141	Tractor trailer lost load of copper wire	3:57
6	3/22/2018 8:42	Thursday	I-55 NB	AT I-255	Tractor trailer crash into median wall / oil and fuel spill / large debris	2:37
7	3/27/2018 4:48	Tuesday	I-44 WB	PAST I-270	Overtured tandem tractor trailer with fuel spill	2:33
8	3/27/2018 20:36	Tuesday	I-70 EB	PAST ROUTE T/W	Large pothole caused multiple flat tires	2:28
9	3/30/2018 1:59	Friday	47 MO	KOMMER LOOP CRD	Two-vehicle fatal crash	2:55
10	4/3/2018 17:06	Tuesday	I-64 WB	AT MARKET ST	Concrete falling from overpass	3:08
11	4/4/2018 20:20	Wednesday	MO-30 CST	HIGH RIDGE BLVD CRD	Lane closure/traffic control for Signals	4:01
12	4/5/2018 16:29	Thursday	I-44 WB	AT ROUTE AH	Two-vehicle fatal crash	2:26
13	4/5/2018 19:29	Thursday	HIGH RIDGE BLVD CRD	MO-30 CST	Lane closure/traffic control for Signals	2:05
14	4/6/2018 19:07	Friday	I-70 EB	AT ST LOUIS AVE	Single-vehicle fatal crash	3:09
15	4/6/2018 19:30	Friday	I-70 EB	ON RAMP FROM MO 115	Emergency Vehicles	2:47
16	4/10/2018 6:41	Tuesday	I-44 WB	PAST VANDEVENTER AVE	TMA struck while fixing a drainage plate	2:44
17	4/11/2018 6:16	Wednesday	GRAVOIS RD CST	LYNCH ST CST	Medical waste debris across all WB lanes	3:14
18	4/11/2018 16:58	Wednesday	267 MO	WILL DR CRD	Fatal crash resulted in gas station fire	2:04
19	4/12/2018 1:35	Thursday	I-70 WB	PAST MO 141	Single-vehicle crash down embankment	2:45
20	4/12/2018 12:06	Thursday	109 MO	I-44 EB MO	Two-vehicle crash with critical injuries	2:49
21	4/12/2018 12:26	Thursday	I-64 EB	AT MO 364 EB	Fatal crash vehicle under tractor trailer	3:07
22	4/13/2018 22:16	Friday	EB Page AVE	SIMS AVE CST	Fatal pedestrian strike	2:19



# INCIDENT MANAGEMENT

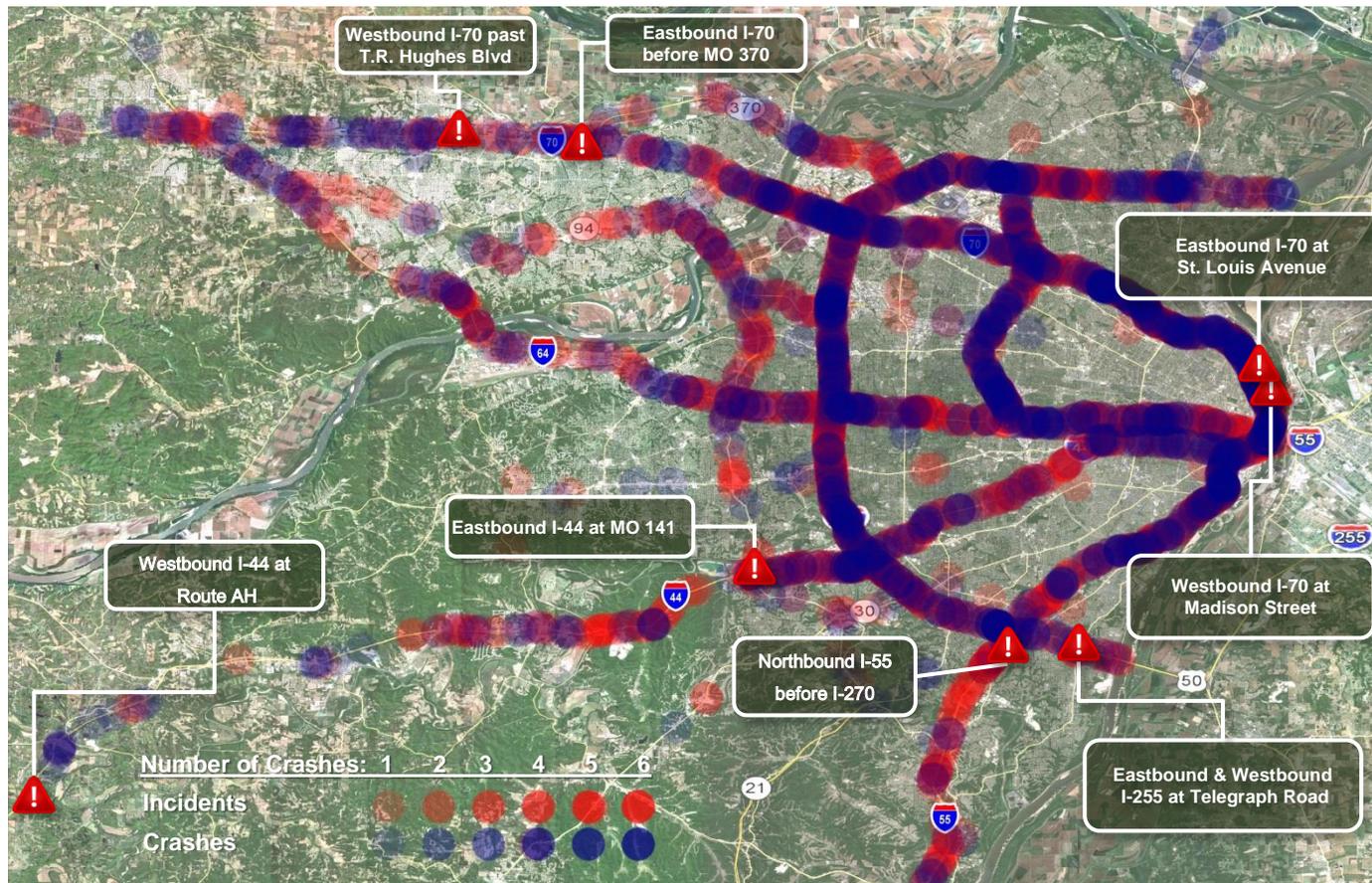
ST. LOUIS DISTRICT ■ QUARTERLY REGIONAL MOBILITY REPORT ■ MARCH / APRIL / MAY 2018



#	Date & Time	Day of Week	Route	Location	Description	Duration HH/MM
23	4/18/2018 3:23	Wednesday	MO 141 SB	TO CLAYTON RD/WOODS MILL RD	Fatal pedestrian strike	2:49
24	4/23/2018 4:03	Monday	I-70 EB	Before MO 370 and ON RAMP FROM MID RIVERS MALL DR	Overtuned tractor trailer / tanker fire	2:24
25	5/6/2018 2:40	Sunday	I-44 EB	BEFORE MADISON	Single vehicle crash with broken axle	2:01
26	5/7/2018 9:01	Monday	I-70 EB	BEFORE I-170	Two-vehicle crash tractor trailer vs car	2:01
27	5/15/2018 17:18	Tuesday	I-44 EB	AT PARK AVE	Unknown white Powder debris in roadway	2:10
28	5/16/2018 16:37	Wednesday	P RT	GROTHE RD CST	Tractor trailer struck an electric pole On detour route for Route P and US 61	3:34
29	5/16/2018 22:28	Wednesday	I-70 WB	PAST ZUMBEHL RD	Fatal pedestrian strike	2:13
30	5/18/2018 11:22	Friday	I-70 WB	AT ADELAIDE AVE	A crane on a flatbed struck bridge girder	4:18
31	5/18/2018 11:36	Friday	MO 370 EB	AT I-270 WB	Jackknifed tractor trailer with diesel spill	6:46
32	5/19/2018 22:13	Saturday	ROUTE 367 / EB I-270	PAST I-270 / TO MO 367	Two-vehicle fatal crash with ejection	4:32
33	5/23/2018 16:59	Wednesday	I-70 WB	PAST TR HUGHES BLVD	Multi-Vehicle Crash with Secondary & Stall	1:39
34	5/24/2018 17:07	Thursday	I-270 WB	TO OLD HALLS FERRY RD	Crane spilled 100 gallons of hydraulic fluid	6:00
35	5/27/2018 22:00	Sunday	I-70 EB	PAST JENNINGS STA RD	Motorcycle crash with reconstruction	2:38
36	5/28/2018 22:23	Monday	A RT	MEXICO CT CRD	Pavement blowup with debris	3:49
37	5/30/2018 17:23	Wednesday	I-70 WB	AT MADISON	Two-vehicle crash with multiple injuries	2:31
38	5/30/2018 23:10	Wednesday	I-55 NB	PAST ARSENAL ST	Fatal pedestrian strike	3:27
39	5/31/2018 3:39	Thursday	I-44 WB	PAST ROUTE WW/AB MO 30 ST CLAIR	Tractor trailer carrying paint caught on fire	10:19



## March/April/May 2018 Incidents with Mobility Impact Map



Denotes Location of Major Impact Traffic Incidents



# INCIDENT MANAGEMENT

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## Major Impact Traffic Incidents and Mitigation

### 3/10/2018 (Saturday)

- **Time:** 2:36 am – 10:21 am
- **Location:** St. Louis County – Eastbound & Westbound I-255 at Telegraph Road
- **Event Type:** Single Vehicle Accident
- **Estimated Initial Impact:** Non Rush Hour: 3 of 3 eastbound travel lanes affected equals (=) 100% & 5 of 5 westbound travel lanes affected equals (=) 100%
- **Incident Details:** The driver of a pickup truck struck the guardrail on the right shoulder of the highway, pushing it into the traffic lanes. That driver then fled the scene. A short time later, the right side of a tractor trailer struck the debris and began to overturn. As it was overturning, the left side of the vehicle struck the concrete median wall and caught fire. A saddle tank on the tractor trailer also ruptured, spilling an excess of 70 gallons of diesel fuel. The fuel traveled down the roadway approximately one mile and into storm drains of the highway before it could be contained. Further, debris from this accident landed into westbound lanes which resulted in a secondary crash. Only minor injuries were reported.
- **Action Taken:** The St. Louis County Police, Mehlville Fire & EMS, and the MSHP responded to work the incident. All lanes of I-255 were closed both east and westbound. TMC operators entered the incident into ATMS, which generated an entry into TMS to alert the public of the closure. They activated appropriate DMS boards, and dispatched an Emergency Response Unit to assist with traffic control. Traffic was diverted off onto Telegraph Road for both directions. The eastbound traffic was able to do an up and over, while the westbound traffic was allowed to due U-Turns at Barracksview Road, then back onto Westbound I-255. Notifications were made to MoDOT EOC, Incident Management Coordinator, AE and community relations, and a SLadminText was sent to keep command staff apprised of the incident. The Department of Natural Resources was contacted with regard to the fuel spill and they coordinated the cleanup through an environmental restoration company. The tractor trailer had been hauling strawberries. In an effort to speed up cleanup, the health department was contacted and subsequently condemned the load. Westbound I-255 was reopened at 4:20 am, while it was an additional six hours before the eastbound direction was reopened. Duration of the incident was extended due to the nature of the incident, the police investigation, and the large cleanup involved.
- **Event Duration:** 7 hour and 45 minutes

	Eastbound I-255 at Telegraph Road	Left Shoulder	Lane 1	Lane 2	Lane 3	Right Shoulder
	Closed Hours/Minutes	7:45	7:45	7:45	7:45	7:45



	<b>Westbound I-255 At Telegraph Road</b>	<b>Left Shoulder</b>	<b>Lane 1</b>	<b>Lane 2</b>	<b>Lane 3</b>	<b>Lane 4</b>	<b>Lane 5</b>	<b>Right Shoulder</b>
	<b>Closed Hours/Minutes</b>	1:32	1:32	1:32	1:32	1:32	1:32	1:32





## Major Impact Traffic Incidents and Mitigation

3/21/2018 (Wednesday)

- **Time:** 8:12 am – 12:09 pm
- **Location:** St. Louis County – Eastbound I-44 at MO 141
- **Event Type:** Debris/Lost Load
- **Estimated Initial Impact:** Rush Hour: 2 of 3 travel lanes affected equals (=) 66%
- **Incident Details:** The side of a tractor trailer split open spilling approximately 44,000 lbs. of copper wire on the interstate. The tractor trailer was in lane #2 and the copper wire spilled onto lane #3.
- **Action Taken:** The TMC entered the incident into ATMS and activated available DMS boards within two minutes. St. Louis City Police responded, as did MoDOT Emergency Response who provided assistance with traffic control. It took the tow company almost an hour to respond, which contributed to the duration of the incident. Notifications were made to AE, MoDOT Maintenance Supervisor, Communications, and the SLAdmin text was sent. The TMC continued to monitor the incident throughout, pushing DMS boards further out as needed. Traffic queued approximately 7 miles. However, the queue cleared quickly once all lanes were reopened which was well past the morning rush hour.
- **Event Duration:** 3 hour and 57 minutes

	Eastbound I-44 at MO 141	Left Shoulder	Lane 1	Lane 2	Lane 3	Right Shoulder
Closed Hours/Minutes		0:00	0:00	2:55	3:57	3:57





# INCIDENT MANAGEMENT

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## Major Impact Traffic Incidents and Mitigation

### 3/22/2018 (Thursday)

- **Time:** 8:42 am – 11:19 am
- **Location:** St. Louis County – Northbound I-55 before I-270
- **Event:** Single Vehicle Accident
- **Estimated Initial Impact:** Rush Hour: Northbound 4 of 4 travel lanes affected equals (=) 100% and Southbound 5 of 5 travel lanes affected equals (=) 100%
- **Incident Details:** A tractor trailer traveling on the entrance ramp from Eastbound I-255 to Southbound I-55 across a grassy median to the left, striking the edge of the roadway when it became airborne and traveled across all southbound lanes of I-55. The tractor trailer struck and went over the concrete median wall, where the tractor portion came to a rest in lanes #1 and #2 of Northbound I-55 and the flatbed trailer end came to a rest in the #1 and #2 lanes of Southbound I-55. The driver was transported to a local hospital with serious injuries. Approximately 100 feet of the median barrier wall was damaged in the incident.
- **Action:** St. Louis County Police, and Mehlville Fire and EMS responded, as did the MSHP who took command of the scene. The TMC operators entered the incident into ATMS and activated appropriate DMS boards within two minutes. They also entered it into TMS to notify the public of the closure. Two Emergency Response Units and a supervisor were dispatched to assist with traffic control. Both northbound and southbound traffic was diverted onto I-270/I-255 as a detour. Once the debris was cleared from the lanes, emergency responders were able to start opening lanes. It took four large tow trucks to remove the tractor trailer, which contributed to the duration of the incident. The EOC, Communications, EOC, Motor Carriers, and the MoDOT Incident Management Coordinator were all notified. Further, an incident alert message was sent to keep management apprised of the situation. The maintenance superintendent was contacted and responded to assess the damaged barrier wall. Northbound traffic queued approximately two miles and southbound approximately one mile. However, traffic quickly returned to normal once all lanes were reopened.
- **Event Duration:** 2 hours and 37 minutes

	Northbound I-55 before I-270	Left Shoulder	Lane 1	Lane 2	Lane 3	Lane 4	Right Shoulder	
		Closed Hours/Minutes	2:37	2:37	2:37	1:16	0:35	0:35
	Southbound I-55 past I-270	Left Shoulder	Lane 1	Lane 2	Lane 3	Lane 4	Lane 5	Right Shoulder
		Closed Hours/Minutes	0:58	0:58	0:57	0:54	0:49	0:03





## Major Impact Traffic Incidents and Mitigation

### 4/5/2018 (Thursday)

- **Time:** 4:29 pm – 6:56 pm \*\*\* Fatalities \*\*\*
- **Location:** Franklin County – Westbound I-44 at RT AH
- **Event Type:** Motor Vehicle Accident
- **Estimated Initial Impact:** Rush Hour: 1 of 2 travel lanes affected equals (=) 50%
- **Incident Details:** The TMC was contacted by the St. Clair Police Department who advised they were working a fatal crash on the interstate. An unoccupied tractor trailer was parked on the right shoulder of the interstate when the driver of a small pickup truck traveled off the roadway and struck the rear of the towed unit. Both the driver and passenger of the pickup truck were fatally injured in the crash.
- **Action Taken:** The St. Clair PD, Fire and EMS District, and the MSHP responded to work the incident. It was initially reported that both lanes were closed. However, the TMC was able to confirm with the MSHP that the left lane was open and traffic was still able to pass. The TMC entered the incident into ATMS and activated the appropriate DMS boards within 2 minutes. Due to the distance and lack of available units, the ER Supervisor advised not to send an Emergency Response Unit to assist. However, the incident was monitored via CCTV and DMS boards were adjusted accordingly. The duration was extended due to the police investigation and reconstruction. Traffic queue was estimated to be four miles.
- **Event Duration:** 2 hour and 26 minutes

	Westbound I-44 at Route AH	Left Shoulder	Lane 1	Lane 2	Right Shoulder
		Closed Hours/Minutes	0:00	0:00	2:26





## Major Impact Traffic Incidents and Mitigation

### 4/6/2018 (Friday)

- **Time:** 7:07 pm – 10:16 pm \*\*\* Fatality \*\*\*
- **Location:** St. Louis City – Eastbound I-70 at St. Louis Avenue
- **Event Type:** Motor Vehicle Accident w/ Rollover
- **Estimated Initial Impact:** Non Rush Hour: 3 of 3 travel lanes affected equals (=) 100%
- **Incident Details:** TMC operators were contacted by St. Louis City Police regarding an accident in which they were requesting assistance with traffic control. An SUV attempted to change lanes into a lane already occupied by a tractor trailer. The driver overcorrected and lost control of the vehicle. The SUV overturned and struck the side of the tractor trailer. The SUV was occupied by seven passengers, five of which were children. Several children were ejected from the vehicle, and a five year old was pronounced on scene. The other passengers were transported to local hospitals, with a second child listed in critical condition. The driver of the tractor trailer remained on scene and was not injured.
- **Action Taken:** TMC operators confirmed the incident via CCTV, entered it into ATMS and immediately activated appropriate DMS boards and a floodgate. St. Louis City Police, Fire and EMS were already on scene and had closed all lanes of traffic. The TMC dispatched two Emergency Response Units and the supervisor to assist with traffic control. Traffic was diverted off onto Salisbury Avenue and a traffic engineer was able to adjust signal timing at Salisbury to favor the detoured traffic. The EOC and Communications were notified of the closure. Duration was extended due to the number of patients involved, police investigation and reconstruction of the accident. Traffic queued an estimated 2.5 miles at the height of the incident, but eased as time progressed and the detour was in place.
- **Event Duration:** 3 hour and 9 minutes

	Eastbound I-70 at St. Louis Avenue	Left Shoulder	Lane 1	Lane 2	Lane 3	Right Shoulder
Closed Hours/Minutes		3:09	3:09	3:09	3:05	3:34



## Major Impact Traffic Incidents and Mitigation

### 4/23/2018 (Monday)

- **Time:** 4:03 am – 6:27 am
- **Location:** St. Charles County – Eastbound I-70 before MO 370
- **Event Type:** Single Vehicle Accident w/ Rollover and Fire
- **Estimated Initial Impact:** Rush Hour: 4 of 4 travel lanes affected equals (=) 100%
- **Incident Details:** While monitoring scanner traffic, TMC operators heard units being dispatched to a report of an overturned tractor trailer that was on fire. A check of the CCTV's revealed it to be a tanker truck that was fully engulfed with flames shooting several stories high. The driver of the tanker truck had been attempting to enter Eastbound I-70 from Veteran Memorial Parkway (SOR), and somehow lost control of the vehicle. The driver struck the concrete barrier wall separating the mainline from the outer road, and then overturned onto the outer road. The tanker was hauling thousands of gallons of ethanol, a highly flammable gasoline additive, which immediately ignited and engulfed the vehicle. The driver was able to escape with relatively minor injuries and was transported to a local hospital.
- **Action Taken:** St. Peters Police, Mid-County Fire and St. Charles County EMS responded along with the MSHP. Eastbound lanes of the mainline were closed due to the intensity of the fire. The TMC entered the incident into ATMS and immediately activated DMS boards and a floodgate. Traffic was diverted onto Mid Rivers Mall Drive to the North Outer Road. The decision was made by fire personnel to allow the ethanol to burn itself out. This was viewed as the safer option as the liquid burns extremely hot and attempting to put it out would cause excessive runoff as well as put fire fighters in danger of it reigniting. The TMC notified EOC, Communications, and the AE, and also sent out the SLAdmin text to keep district management informed of the incident. The maintenance superintendent and supervisor responded to assess the damage. It was determined the South Outer Road and



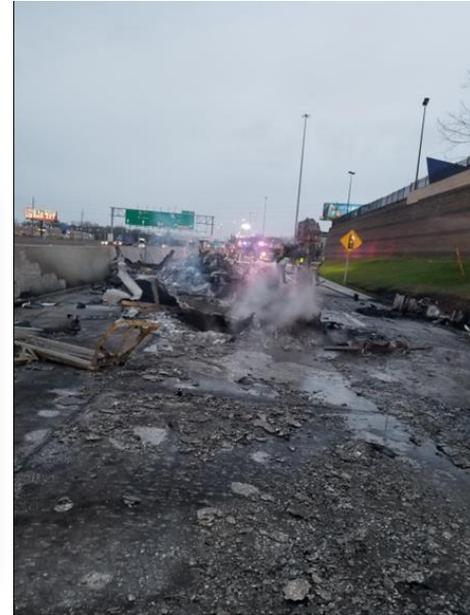
entrance to Veterans Memorial Parkway from Eastbound I-70 would remain closed due to the extensive repairs that would need to be made. The heat of the fire disintegrated the tanker truck, caused several slabs of roadway to crumble and melted 120 feet of guardrail and an attenuator. An ITS box and pole were destroyed and an 85 foot high mast light pole was damaged. The Eastbound I-70 mainline was reopened just as morning rush hour was beginning.

- **Event Duration:** 2 hour and 24 minutes

	Eastbound I-70 at before MO 370	Lane 1	Lane 2	Lane 3	Lane 3	Right Shoulder
Closed Hours/Minutes		2:15	2:24	2:24	2:24	2:24









# INCIDENT MANAGEMENT

ST. LOUIS DISTRICT ■ QUARTERLY REGIONAL MOBILITY REPORT ■ MARCH / APRIL / MAY 2018



## Major Impact Traffic Incidents and Mitigation

### 5/23/2018 (Wednesday)

- **Time:** 4:59 pm – 7:15 pm
- **Location:** St. Charles County – Westbound I-70 past T.R. Hughes Blvd.
- **Event Type:** A.) Multi-Vehicle Accident; B.) Secondary Accident; C.) Secondary Stalled Vehicle
- **Estimated Initial Impact:** A.) Rush Hour: 2 of 4 travel lanes affected equals (=) 50%;
- B.) Rush Hour: 3 of 4 travel lanes affected equals (=) 75%; C.) Non Rush Hour: 1 of 4 travel lanes affected equals (=) 25%
- **Incident Details:** TMC personnel spotted a backup on CCTV on Westbound I-70 past T.R. Hughes. Operators observed a tractor trailer on the left shoulder at an angle with the back end of the towed unit on the white line of the left lane. Police were already present and were holding lane #1. Additionally, there was a tractor trailer and a dump truck on the right shoulder with police behind them, taking lane #4. It appeared the three commercial vehicles had been involved in a collision. When the Emergency Responder arrived, he positioned behind the police vehicle in Lane #1. Just a few minutes after he arrived, a tanker truck and another tractor trailer collided side-on, while the tanker truck was trying to merge to the right. This resulted in a rupture of the tank and fuel leaked across all lanes. By this time, the vehicles that were originally on the right shoulder had cleared and eventually, the secondary accident vehicles took their spots on the right shoulder. PD, EMS and Fire pulled in behind them and took lane #4 again. The tanker was still leaking as it was repositioned and continued to leak small amounts as it sat on the right shoulder. Our Emergency Responders held lanes #1 and #2 as they tried to clean up the fuel that had accumulated there while the trucks were waiting to be relocated. When tow hooked up to the tanker truck to haul them away a passenger vehicle that had been sitting in the 10 mile queue ran out of fuel and stalled in the #2 lane.
- **Action Taken:** O'Fallon Police & Fire, St. Charles County EMS, and MSHP all responded to work these incidents. A.) After locating the initial crash, TMC operators entered it into ATMS and activated appropriate DMS boards within three minutes. As soon as an available Emergency Respond Unit freed up, he was dispatched to assist with traffic control. The Traffic Engineer on the operations floor for the evening immediately began working with the signals in an attempt to move traffic trying to exit off of Westbound I-70. At 5:12 pm, two heavy tows for the right shoulder vehicles arrived and they were cleared. A separate heavy tow responded for the tractor trailer on the left shoulder at 5:30 pm. At 5:33 pm, the secondary accident occurred and an additional Emergency Response Unit was dispatched to assist with that incident. TMC personnel regularly adjusted the DMS boards to keep drivers informed. At 5:48 pm, the tractor trailer on the left shoulder was finally cleared from the scene, the O'Fallon unit that was behind them, moved back to assist with the secondary accident. The initial incident formally ended at 5:48 pm, when the tow truck pulled the tractor trailer from the left shoulder/lane. The traffic queue prior to the secondary accident was estimated to be 6 miles.
- B.) This incident occurred at 5:33 pm, in the #2 lane directly next to the Emergency Response Unit that was holding lane #1. A lane drop had been set up and a tanker truck tried to merge to the right when it collided into the side of another tractor trailer. As noted above, as a result of this collision the tanker truck's fuel tank was ruptured and it began leaking diesel fuel onto the roadway. Almost immediately, the tractor trailer involved in the secondary accident moved to the right shoulder and MSHP pulled behind it taking the lane #4. At 5:38 pm, the tanker truck was moved to the right shoulder/lane behind the tractor trailer. O'Fallon FD arrived with EMS and moved in behind the vehicles on the right shoulder/ lane #4. The Emergency Response Unit continued to hold lanes #1 and #2 for the leaked fuel. An additional Emergency Response Unit and Supervisor arrived to assist with the fuel spill cleanup. At 6:59 pm, two heavy tow trucks arrived to recover the secondary accident vehicles. At 7:05 pm, the fuel was sufficiently soaked up and an ER unit moved to lane #4 for additional traffic control while the tow operator loaded the tanker truck. It was then noticed that a passenger vehicle had



stalled in the #2 lane. ER units were able roll backwards to attend to the stalled vehicle (see next secondary). The secondary accident cleared at 7:15 pm.

- C.) A passenger vehicle stalled in the #2 lane, after running out of gas from sitting in the queue. Emergency Response was able to roll backwards and provide them with enough fuel to get off the highway. Although all three incidents cleared within an hour and 39 minutes, it resulted in a 10 mile queue and took 26 minutes for traffic to return to normal.
- **Event Duration:** 1 hour and 39 minutes

	Westbound I-70 past T.R. Hughes Boulevard	Left Shoulder	Lane 1	Lane 2	Lane 3	Lane 3	Lane 4	Right Shoulder
<b>Closed Hours/Minutes</b>								
A.		0:49	0:49	0:00	2:24	0:00	0:26	0:26
B.		1:32	1:32	2:24	1:32	0:00	1:39	1:39
C.		0:00	0:00	2:24	0:04	0:00	0:00	0:00





## Major Impact Traffic Incidents and Mitigation

### 5/30/2018 (Wednesday)

- **Time:** 5:23 pm – 7:54 pm
- **Location:** St. Louis City – Westbound I-70 at Madison Street
- **Event Type:** Two-Vehicle Accident
- **Estimated Initial Impact:** Rush Hour: 4 of 4 travel lanes affected equals (=) 100%
- **Incident Details:** A pickup truck and a passenger vehicle collided, resulting in the pickup truck coming to a stop partially in lane #1 and the passenger vehicle in the right lane. Several people were transported to local hospitals with serious injuries, including a child who was critically injured.
- **Action Taken:** TMC operators began noticing a traffic backup via the congestion layer on ATMS. It was around the same time they were notified of a full closure on Westbound I-70 at Madison by the Emergency Response Unit working the city route. The ER Unit had been monitoring city scanner traffic and relayed the information while responding to assist. TMC operators verified the accident via CCTV and observed St. Louis City Police, Fire and EMS already on scene, with all lanes of traffic stopped. They entered the incident into ATMS and immediately activated appropriate DMS boards. This entry auto populated an entry into TMS to notify the public of the closure. In total, two Emergency Response Units and a Supervisor responded to assist with traffic control. Traffic was diverted off onto Madison. The TMC notified EOC, Communications Staff, and the MT Superintendent. The IM and SLAdmin text alert were sent and updated to keep district management informed of the closure. Traffic queued 6.5 miles at the height of the incident, but eased as the diversion was put into place.
- **Event Duration:** 2 hour and 31 minutes

	Westbound I-70 at Madison	Left Shoulder	Lane 1	Lane 2	Lane 3	Lane 4	Right Shoulder
Closed Hours/Minutes		2:31	2:31	2:31	2:31	2:31	2:31

