

ST. LOUIS DISTRICT MOBILITY

MARCH/APRIL 2016

GUIDEPOST

- FREEWAY MOBILITY WAS FAIRLY CONSISTENT IN THE AM COMPARED TO PREVIOUS MONTHS AND DECLINED IN THE PM
- MOBILITY IN BOTH PEAKS ALONG 1-44, I-64, I-70 AND I-270 WERE IMPACTED BY RECURRING INCIDENT HOT SPOTS, MERGING NEAR INTERCHANGES AND INCREASES IN NUMBER OF WORK ZONES
- BOTH ARTERIAL PEAKS STILL SLOW NEAR INTERSECTIONS WITH INTERSTATES AND MAJOR ROUTES
- ARTERIAL TRAVEL CONTINUES TO BE BETTER IN AM PEAK THAN PM
- WORK ZONE CRASHES SIGNIFICANTLY INCREASED AND DESPITE THE LOW IMPACT ON MOBILITY SHOULD SERVE AS A CONSTANT REMINDER OF THE IMPORTANCE OF WORK ZONE SAFETY
- ST. LOUIS DISTRICT TOPPED THE 1000 RESPONDERS TRAINED IN TRAFFIC INCIDENT MANAGEMENT MARK IN LATE APRIL

ZONING IN

TMS WORK ZONES

RECOVERY OF A SEMI-TRUCK HANGING OVER THE SIDE OF THE DISCOVERY BRIDGE ON ROUTE 370 IMPACTED MOBILITY THROUGH THE APRIL 6, 2016 EVENING RUSH.

MOBILITY SNAPSHOT



FREEWAY MOBILITY

MARCH TO APRIL COMPARISON: AM CONSISTENT / PM DECLINED



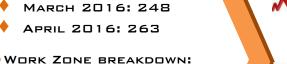
FREEWAY AVERAGE 24 HOUR VOLUMES

MAR 2015 \rightarrow MAR 2016: -3.76% APR 2015 \rightarrow APR 2016: -4.08%



MAJOR INCIDENTS

MARCH 2016: 5 -> APRIL 2016: 8



MAJOR: 3-1.3%

MODERATE: 1-0.4%

MINOR: 233-98.3%

WORK ZONE CRASHES: 20



LANE CLEARANCE: 25:59 → 31:17 INCIDENT CLEARANCE: 31:26 → 36:17 (MIN: SEC)







TMC Observed Work Zones March - April 2016

Mar	ch	April			
Level of Travel Time Number of Work Impact Zones		Level of Travel Time Impact	Number of Work Zones		
Major Impact	Major Impact 0		3		
Moderate Impact	0	Moderate Impact	1		
Minor Impact 109		Minor Impact	124		
Total 109		Total	128		

^{*}Impact Levels described in Data Key

SL Mobility Rating:

Mar 2016: 95% Apr 2016: 89% Goal: 91%

SL Visibility levels:

Mar 2016: 94% Apr 2016: 93% 91% Goal:

Major Impact

(15 Minutes or Above Additional Travel Time)

4/15, 4/16, 4/17 (Friday - Sunday) Northbound I-55 at Route Z - Right Lane Closed

- Bridge resurfacing
- RITIS data recorded an average additional travel time of 34 minutes each day
- All mitigation efforts were in use
- A zipper merge was used to reduce the queues

Moderate Impact (10-14 Minutes Additional Travel Time)

4/13 (Wednesday) AM Eastbound I-44 at Route O – Right Lane Closed

- On-call emergency pavement repair
- RITIS data recorded an additional travel time of 14 minutes for a 10 minute window with additional travel times less than 10 minutes throughout the rest of the day
- All mitigation efforts were in use

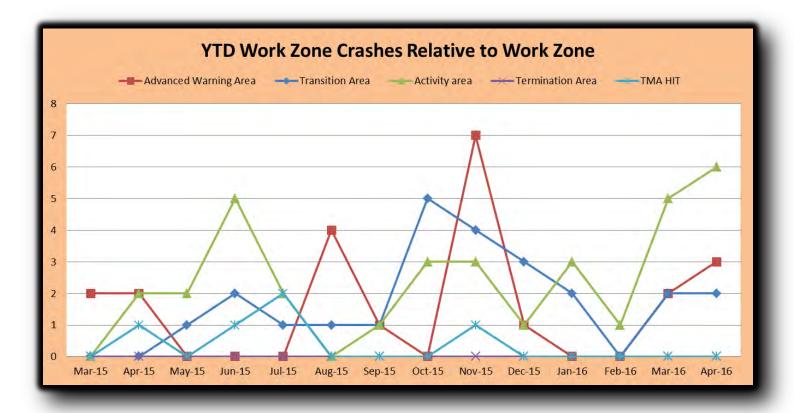
Work Zone Related Crashes with Mobility Impact

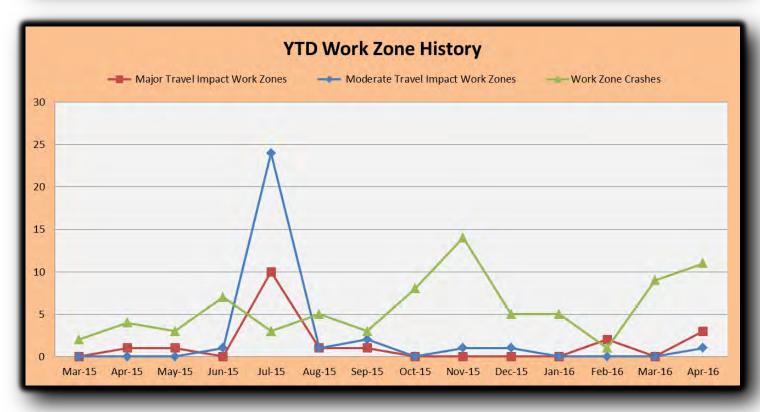
*****None*****





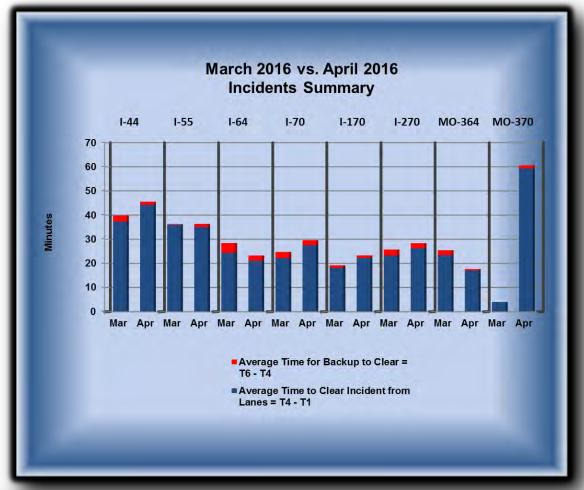


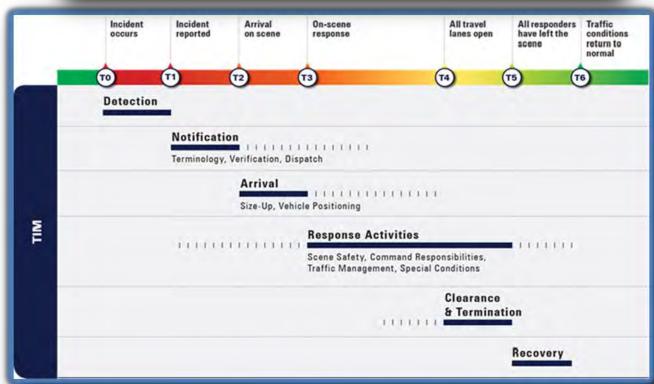






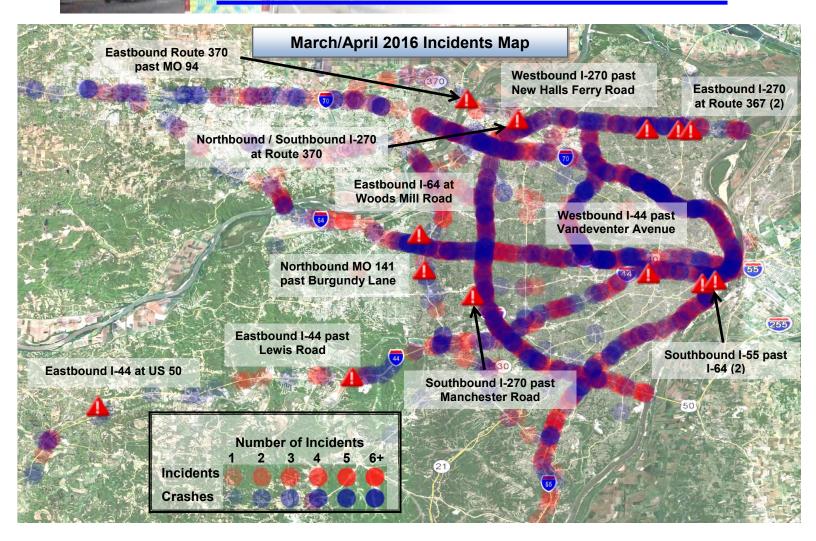






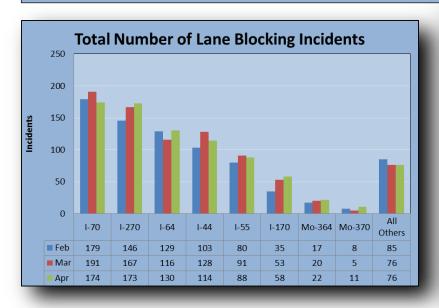


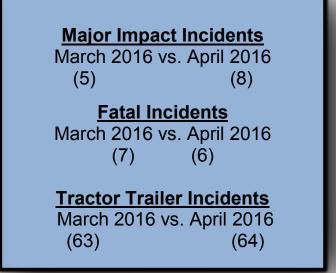




Denotes Location of Major Impact Traffic Incidents

Total Number of Incidents: February: 782 / March: 847 / April: 846

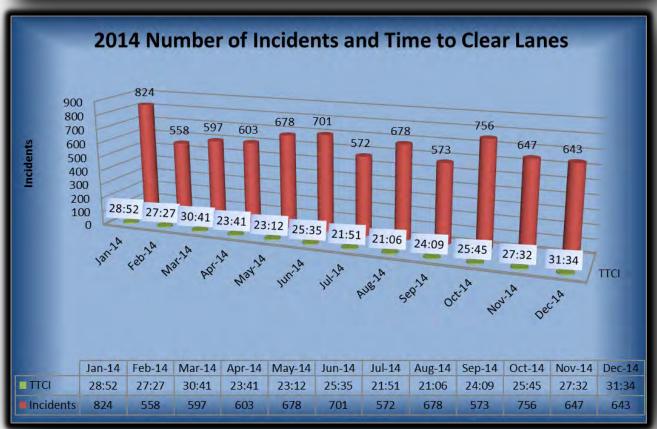






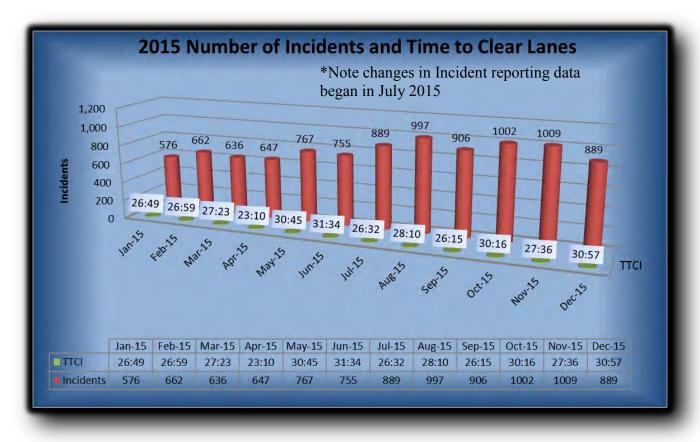


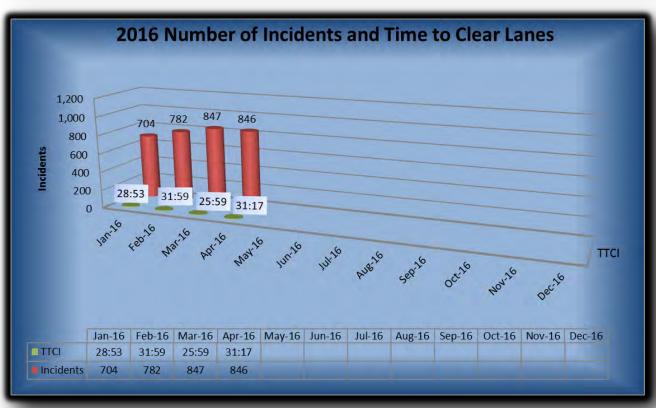
	Lane Blocking Incidents by Freeway March and April 2016									
Interstate	Month	Number of Incidents	Average Time to Clear Incident from Lanes = T4 - T1	Average Time for Backup to Clear = T6 - T4	Freeway Miles	Incidents per Mile				
I-44	Mar	128	37:32	02:54	33	3.88				
I-44	Apr	114	44:28	01:28	33	3.45				
I-55	Mar	91	36:01	00:24	23	3.96				
I-55	Apr	88	35:10	01:27	23	3.83				
I-64	Mar	116	24:39	04:06	40	2.90				
I-64	Apr	130	21:07	04:06	40	3.25				
I-70	Mar	191	22:23	02:54	38	5.03				
I-70	Apr	174	27:56	02:08	38	4.58				
I-170	Mar	53	18:20	01:02	11	4.82				
I-170	Apr	58	22:29	01:04	11	5.27				
I-270	Mar	167	23:29	02:48	36	4.64				
I-270	Apr	173	26:28	02:10	36	4.81				
MO-364	Mar	20	23:42	02:04	11	1.82				
MO-364	Apr	22	17:08	00:57	11	2.00				
MO-370	Mar	5	04:00	00:00	13	0.38				
MO-370	Apr	11	59:32	01:27	13	0.85				
Total	Mar/Apr	1541	27:46	01:56	410	3.76				

















•				Incidents With Lanes Blocked Over 2 Hours March 2016		
					Duration	Mobility
#	Date & Time Day of \	Veek Route	Location	Description	HH/MM	Impact
1	3/1/2016 15:08 Tuesday	I-44 EB	MM 179	Single vehicle crash in the median // Investigation and recovery from the eastbound lane 10f 2 lanes // no queue	2:05	Minor
2	3/10/2016 7:17 Thursda	y I-270 SB	PAST MANCHESTER RD	Two vehicle fatal crash car vs. tractor trailer // entrapments // reconstruction // 5 of 5 lanes closed // queue 4.8 mile to Olive	4:45	Major
3	3/11/2016 15:10 Friday	I-70 WB	ON RAMP FROM JENNINGS STATION RD	Two vehicle crash with recovery of overturned vehicle in ditch // delay waiting on tow // ramp closed during recovery	2:08	Minor
4	3/14/2016 15:42 Monday	I-270 EB	AT MO 367	Single ejection, single fatal // 3 of 3 lanes closed // Traffic detoured to New Halls Ferry // 8-mile queue	3:01	Major
5	3/17/2016 2:16 Thursda	y E 30 MO	BIRDIE LANE	Traffic control at 2386 HWY 30 for a house fire with fatalities // Road closed for 4 hours traffic detoured	3:17	Minor
6	3/20/2016 9:54 Sunday	I-44 EB	PAST MO 100 EAST	DOD Trailer with broken axle // 1 of 1 lane closed // no queue // load secured vehicle moved off road for repairs	2:09	Minor
7	3/20/2016 14:09 Sunday	I-44 WB	BEFORE HAMPTON AVE	Two vehicle accident in work zone// damage to barrier wall // adjust the lane drop to fix wall // 2of 4 lanes closed no queue	2:04	Minor
8	3/22/2016 22:19 Tuesday	I-64 WB	TO CLAYTON RD	Police pursuit // Single vehicle crash with electrical pole and multiple wires knocked down // exit closed // no queue	3:48	Minor
9	3/23/2016 15:24 Wedne	iday I-55 SB	PAST I-64 WB	Overturned flat bed tractor trailer // closed ramp 2 of 2 lanes// traffic forced to divert // no queue	2:07	Major
10	3/24/2016 0:58 Thursda	y I-44 WB	TO VANDEVENTER AVE	Three vehicle fatal crash // closed the I-44 WB ramp to Vandeventer avenue // traffic diverted // no queue	3:50	Minor
11	3/24/2016 1:44 Thursda	y I-55 NB	BEFORE DANBY RD	Vehicle crash into bridge structure// bridge inspection no damage // 1 of 4 lanes closed	4:28	Minor
12	3/24/2016 23:59 Thursda	y I-55 SB	MM 35	Tractor trailer struck bridge pier // inspection and cleanup // impacted both directions // 1 of 2 lanes closed // no queue	2:04	Minor
12	3/25/2016 0:04 Friday	I-55 NB	MM 34.6	Crews freed the Tractor Trailer from NB direction // 2 of 2 lanes closed // Traffic taken Up and over at Route 162 overpass	2:52	Minor
13	3/25/2016 19:42 Friday	I-55 SB	PAST I-64 WB	Overturned tractor trailer// Off- loaded trailer cleaned up oil spill // 2 of 2 lanes closed // traffic forced to divert // no queue	3:24	Major
14	3/26/2016 15:32 Saturda	y I-44 EB	PAST LEWIS RD	Fatal pickup crash striking tree off-road and catching fire // 2 of 3 lanes closed // traffic diverted at Route 109 // 3.5 mile queue	2:56	Major
15	3/27/2016 1:10 Sunday	I-55 SB	AT MO 141	Four vehicle crash with fire and entrapment // 4 of 4 lanes closed over the event duration //no queue	2:10	Minor
16	3/28/2016 13:46 Monday	N TELEGRAPH RD	BARRACKSVIEW RD	Two vehicle fatal crash // car struck motorcycle during funeral procession 2 of 2 lanes closed // traffic diverted// no queue	2:35	Minor
16	3/28/2016 14:06 Monday	S TELEGRAPH RD	BARRACKSVIEW RD	One lane closed in southbound direction for crash investigation	2:16	Minor
17	3/28/2016 21:50 Monday	I-55 SB	PAST I-64 WB	Overturned tractor trailer carrying blocks Of zinc // 2 of 2 lanes closed // traffic forced to divert EB I-44 and I-70 // no queue	3:09	Minor
18	3/30/2016 11:08 Monday	I-70 EB	PAST CYPRESS RD	Large asphalt spill in roadway // 4 of 5 lanes closed// lanes progressively opened // no queue	2:11	Minor
19	3/30/2016 13:28 Wedne	day I-44 WB	MM 174.0	Tractor trailer crash closed 2 of 2 lanes // lanes progressively opened // no reported queue	2:11	Minor
20	3/30/2016 19:11 Wedne	day I-55 NB	AT LOUGHBOROUGH AVE	ER personnel clipped by vehicle // 1 of 4 lanes closed //	2:15	Minor
21	3/31/2016 6:33 Wedne	day I-44 WB	MM 99.0	Tractor trailer crash closed 1 of 2 lanes // no reported queue	2:29	Minor
	3/31/2016 18:48 Thursda	,	MM 42.0	Two vehicle crash // 2 of 2 lanes closed // traffic diverted // no report of queue	3:22	Minor
23	3/31/2016 22:17 Thursda	y I-44 WB	PAST BUS 44 SIX FLAGS RD	Tractor trailer fire // // traffic diverted off at Six flags Road // lanes progressively opened // no queue	6:18	Minor

					Incidents With Lanes Blocked Over 2 Hours April 2016		
						Duration	Mobility
#	Date & Time	Day of Week	Route	Location	Description	HH/MM	Impact
1	4/2/2016 7:50	Saturday	I-44 EB	BEFORE BIG BEND BLVD	Stalled dump truck with tire issues // 1 of 5 lanes closed // delayed response by heavy tow // no queue	2:17	Minor
2	4/3/2016 15:22	Sunday	I-270 WB	PAST NEW HALLS FERRY RD	Three vehicle fatal crash with air evacuation// 5 of 5 lanes closed // one lane opened to relieve queue // 2 mile queue to Route 367	2:44	Major
3	4/3/2016 20:28	Sunday	I-44 WB	ON RAMP FROM EXIT 72	Fuel spill closed on ramp to Westbound I-44 // no queue	3:37	Minor
4	4/5/2016 14:00	Tuesday	I-70 EB	ON RAMP FROM MO 141	Tractor trailer fell over on its side // Tow lifted the trailer and tractor (both were intact) //Ramp closed // no queue	2:55	Minor
5	4/6/2016 12:33	Wednesday	MO 370 EB	PAST MO 94	Tractor trailer overturned cab of truck dangled off of bridge // 3 of 3 lanes closed // Lanes progressively opened // 1 mile queue	7:15	Major
6	4/7/2016 9:39	Thursday	100 MO	BUCHHEIT LN CRD	MoDOT maintenance worker fatally struck during bridge flushing operation // all lanes closed for investigation // no queue	2:56	Minor
7	4/9/2016 10:08	Saturday	MO 141 NB	PAST I-70	Two vehicle crash with 2 injuries // 3 of 3 lanes closed //Traffic detoured to the other side of the intersection // no queue	2:19	Minor
8	4/9/2016 14:20	Saturday	MO 141 NB	PAST BURGUNDY LN	Two vehicle fatal crash // two ejections // 2 of 2 lanes closed // traffic backed up to Manchester About one mile	5:03	Major
10	4/9/2016 21:00	Saturday	I-170 SB	BEFORE SCUDDER AVE	Fatal crash car vs motorcycle //5 of 5 lanes closed // Traffic diverted to Airport Road // lanes progressively opened // no queue	2:55	Minor
11	4/9/2016 23:34	Saturday	E 70 OR	OUTER ROAD	Fatal two car crash SUV vs. car //ejection with injured trapped under the vehicle // outer road closed // no queue	3:45	Minor
12	4/12/2016 16:46	Tuesday	US 67 SB	PAST NEW TOWNE RD	Single vehicle crash // utility pole knocked down // 2 of 2 lanes closed // Ameren provided traffic control //no reported queue	6:05	Minor
13	4/13/2016 6:49		I-70 EB	TO LUCAS & HUNT RD	Oil debris on the exit ramp // ramp closed for cleanup // required multiple loads of oil dry // no queue	2:34	Minor
14	4/13/2016 13:06	Wednesday	E SOUTH HWY DR CST	MRAZ LN CST	Overturned truck full of GM auto brackets // outer road closed // traffic diverted onto Mraz // no queue	6:43	Minor
15	4/13/2016 18:16		I-70 EB EXPRESS LANES	AT CARRIE AVE	Two vehicle crash car vs. motorcycle // closed express lanes // no queue	3:15	Minor
16	4/14/2016 13:57		I-44 EB	AT US 50	Multiple vehicle work zone crash // Tractor trailer fire // full closure both directions // traffic diverted to Route 109 // 12 mile queue	6:35	Major
17	4/15/2016 0:12		I-55 SB	PAST I-64 WB	Overturned Tractor trailer crash // 2 of 2 ramp lanes closed // traffic diverted // no queue	3:16	Minor
18	4/15/2016 16:17		W CC RT	EATHERTON RD CST	Head on collision SUV vs. motor home // full closure // reconstruction // 50 minute queue		
19	4/18/2016 7:56	Monday	I-270 SB	AT MO 370	Two vehicle crash with a trailer hauling pesticides //15 to 20 gallon leak //closed 2 of 5 lanes // 3.5 mile queue 15 min	2:18	Major
19	1 -1	Monday	I-270 NB	AT MO 370	Environmental clean up from pesticide spill // 2 of 4 lanes closed// no queue	2:52	Major
20	4/19/2016 9:51		I-55 SB	AT I-255	Oil based paint debris spilled from vehicle // 5 of 5 lanes closed for cleanup // no queue	3:16	Minor
21	4/20/2016 17:37		I-270 SB	TO I-70 EB	Two vehicle crash // closed ramp from SB I-270 to EB I-70 // traffic forced to divert // no queue	2:31	Minor
22	4/21/2016 22:22	Thursday	I-44 EB	MM 78.0	Single vehicle crash // 2 of 2 lanes closed and traffic diverted to Exit 77 Kansas Expressway // no queue	2:07	Minor
23	4/25/2016 15:55	Monday	I-270 EB	BEFORE MO 367	Multi-vehicle crash // closed 3 of 3 lanes // 8 mile traffic backup past McDonnell // 50 minute queue	2:50	Major
24	4/26/2016 16:23		I-55 NB	PAST BUTLER HILL RD	Multi-vehicle crash // 1 down the embankment and a tractor trailer fuel spill of 40 gallons // closed 2 of 5 lanes // no queue	2:01	Minor
25	4/27/2016 0:36	Wednesday	I-44 EB	BEFORE MADISON	Single vehicle crash with median wall damage // closed 1 of 4 lanes for repair // no queue	2:34	Minor
26	4/27/2016 8:31	Wednesday	I-44 WB	PAST VANDEVENTER AVE	Fatal multi-vehicle crash past work zone lane drop // closed 4 of 4 lanes // reconstruction // queue of 2.5 miles	3:00	Major
27	4/28/2016 4:57		US 67 SB	AT ROSE HILL AVE	A vehicle hit electric pole closing 2 of 2 lanes // traffic forced to divert // no queue	4:34	Minor
28	4/28/2016 18:04		I-64 EB	AT WOODS MILL RD	Multi-vehicle crash // closed 4 of 4 lanes //3 mile queue	2:35	Major
	4/28/2016 18:40		I-55 SB	MM 32.0	Fatal tractor trailer fire // closed 2 of 2 lanes // lanes progressively opened and closed to relieve queue and remove burned vehicle	8:41	Minor
30	4/30/2016 0:56		I-44 EB	MM 15.0	Tractor trailer crash into a bridge structure //bridge inspection no damage // closed 1 of 2 lanes // no queue	9:06	Minor
31	4/30/2016 4:35	Saturday	I-70 WB	AT I-170	Tractor trailer and car crash // tractor trailer leaked fuel into sewer and creek // 2 of 3 lanes closed for cleanup // no queue	4:05	Minor





3/10/2016 (Thursday)

• Time: 7:17 am - 12:02 pm *** Fatality ***

• Location: St. Louis County – Southbound I-270 past Manchester Road

Event: <u>Vehicle Crash</u>

• Estimated Initial Impact: Rush Hour: 4 of 4 travel lanes affected equals (=) 100%

- Incident Details: A two vehicle crash involving a tractor trailer and a small passenger car. The car lost control in the rain, spun out in front of the tractor trailer, which struck the driver's side. The car was then pinned partially under the trailer and into the right guardrail. The driver of the car was pronounced at the hospital. The two other passengers in the car were also injured and transported.
- Action: Des Peres Police, fire and EMS responded, as well as Emergency Response personnel
 who provided traffic control. Command of the scene was turned over to the MSHP who
 completed an accident reconstruction. This resulted in all lanes of the interstate being closed for
 a short time. TMC activated all available DMS boards, and the closure was entered into TMS to
 alert the public. The EOC, Motor Carriers, Communications, and MoDOT Incident Management
 Coordinator were all notified of the closure. Traffic queued back to Olive Blvd., approximately
 4.8 miles, but cleared quickly once lane #3 was released. It took approximately 5 minutes after
 the accident cleared for traffic to return to normal.
- Event Duration: 4 hours 45 minutes

Southbound I-270	Lane 1	Lane 2	Lane 3	Lane 4	Lane 5	Right
past Manchester Road INTERSTATE						Shoulder
INTERSTATE						
Closed Hours/Minutes	0:06	0:06	1:13	4:40	4:40	4:40







3/14/2016 (Monday)

• Time: 3:42 pm - 6:43 pm *** Fatality ***

Location: St. Louis County – Eastbound I-270 at Route 367

• Event: Vehicle Crash

• Estimated Initial Impact: Rush Hour: 3 of 3 travel lanes affected equals (=) 100%

- Incident Details: A tractor trailer traveling in lane #3 changed lanes into lane #2. The vehicle that was in lane #2 then attempted to move into lane #1 when it struck a vehicle already in lane #1. This caused both vehicles to strike the median wall. The vehicle that was changing lanes overturned and the driver was ejected. The driver was transported where he was pronounced at the hospital. The second driver was also transported with minor injuries. The driver of the tractor trailer left the scene without stopping.
- Action: St. Louis County Police responded along with Bellefontaine Neighbors Police, Spanish Lake Fire, and Christian Northeast EMS. Command of the scene was turned over to the MSHP upon their arrival and they completed the reconstruction. Emergency Response personnel provided traffic control and assisted with detouring traffic onto New Halls Ferry Road. The Traffic Engineer was contacted in an attempt to adjust the signals at New Halls Ferry to favor the detoured traffic. The TMC messaged for the event, notified the EOC, and entered the closure into TMS to alert the public. Traffic queued for approximately 8 miles during the incident and was at 5.2 miles when all lanes were reopened.

• Event Duration: 3 hours 1 minute

Eastbound I-270 at Route 367 INTERSTATE	Lane 1	Lane 2	Lane 3	Right Shoulder
Closed Hours/Minutes	3:00	3:00	0:59	0:59







3/23/2016 (Wednesday)

• **Time:** 3:23 pm – 5:30 pm

• Location: St. Louis City – Southbound I-55 past I-64

• Event: Vehicle Crash

• Estimated Initial Impact: Rush Hour: Ramp closed 2 of 2 lanes affected equals (=) 100%

• **Incident Details:** Overturned tractor trailer on the off ramp from Westbound I-64 to Southbound I-55

• **Action:** Emergency Response personnel provided traffic control. St. Louis City Police, Fire and EMS responded. The EOC, IDOT, and the MoDOT Incident Management Coordinator were notified. The TMC messaged for the event and entered it into TMS to notify the public.

• Event Duration: 2 hours 7 minutes











3/25/2016 (Friday)

Time: 7:42 pm – 11:06 pm

Location: St. Louis City – Southbound I-55 past I-64

• Event: Vehicle Crash

• Estimated Initial Impact: Non-Rush Hour: Ramp Closed 2 of 2 lanes affected equals (=) 100%

• **Incident Details:** Overturned tractor trailer on the off ramp from Westbound I-64 to Southbound I-55. Vehicle had to be off loaded before it could be up righted.

 Action: Emergency Response personnel provided traffic control. St. Louis City Police, Fire and EMS responded. There were concerns that the trailer would fall apart if they attempted to lift it without an air bag system. Equipment was requested and delivered which increased the duration of the incident. The EOC, Motor Carriers, IDOT, and the MoDOT Incident Management Coordinator were notified. The TMC messaged for the event and entered it into TMS to notify the public.

• Event Duration: 3 hours 24 minutes

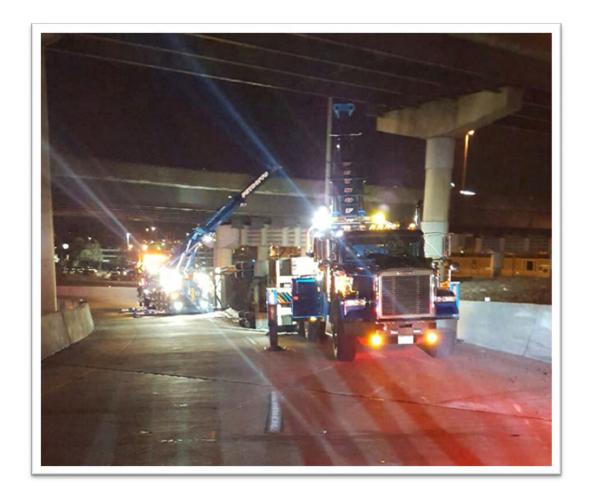








Major Impact Traffic Incidents and Mitigation







3/26/2016 (Saturday)

• Time: 3:31 pm – 6:27 pm *** Fatality ***

• Location: St. Louis County – Eastbound I-44 past Lewis Road

Event: Single Vehicle Crash

• Estimated Initial Impact: Non-Rush Hour: 3 of 3 travel lanes affected equals (=) 100%

• **Incident Details:** A pickup truck traveling eastbound on I-44 ran off the south side of the interstate where it struck a tree before bursting into flames. The driver of the pickup was killed in the accident.

- Action: St. Louis County Police, MSHP, and Eureka Fire and EMS responded. Emergency Response personnel assisted with traffic control. The interstate was briefly closed at the request of the St. Louis County Police, who initially planned to divert traffic off at MO 109. They then released lane #1 and requested Emergency Response assist them with the lane drop at Lewis Road. MSHP took command and completed the reconstruction. The TMC messaged for the incident and notified the MoDOT Incident Management Coordinator. It should be noted approximately 1 hour and 15 minutes into the incident a secondary crash occurred just east of the Six Flags exit. Traffic queued approximately 5 miles during both incidents and traffic took 47 minutes to return to normal once both crashes were cleared.
- Event Duration: 2 hour 56 minutes

Eastbound I-44	Left	Lane 1	Lane 2	Lane 3	Right
past Lewis	Shoulder				Shoulder
INTERSTATE MISSOURI					
Closed Hours/Minutes	0:34	0:34	2:01	2:01	2:09





4/03/2016 (Sunday)

• Time: 3:21 pm - 6:05 pm *** Fatality ***

• Location: St. Louis County – Westbound I-270 past New Halls Ferry Road

• Event: Vehicle Crash

• Estimated Initial Impact: Non-Rush Hour: 5 of 5 travel lanes affected equals (=) 100%

• **Incident Details**: A three vehicle fatal crash involving a tractor trailer and two passenger vehicles.

Action: Ferguson Police, fire and Christian EMS responded, as well as Emergency Response
personnel who provided traffic control. One patient was transported via air ambulance.
Reconstruction was completed by the police. The TMC activated all available DMS boards and
the closure was entered into TMS to alert the public. They also notified IDOT and requested
message boards be activated to inform drivers coming into Missouri of the closure. Traffic
queued back to Route 367 (approximately 2 miles).

• Event Duration: 2 hours 44 minutes

Westbound I-270	Lane 1	Lane 2	Lane 3	Lane 4	Lane 5	Right
past New Halls Ferry Rd						Shoulder
INTERSTATE						
270						
Closed Hours/Minutes	2:44	2:41	2:40	2:40	1:11	1:11

4/06/2016 (Wednesday)

• **Time:** 12:33 pm - 7:48 pm

Location: St. Charles County – Eastbound Route 370 past MO 94

• Event: Multi-Vehicle Crash

• Estimated Initial Impact: Non-Rush Hour: 3 of 3 travel lanes affected equals (=) 100%

Incident Details: Two passenger vehicles and a tractor trailer collided during a rain storm at the
entrance to the Discovery Bridge over the Missouri River. The tractor trailer struck and went
over the right barrier wall. The cab was left hanging over the south side of the bridge still
attached to the overturned trailer.

• Action: St. Charles City Police, fire and EMS responded. MoDOT responded by sending five Emergency Response personnel to provide traffic control. All attempts to upright the trailer without offloading it first were met with negative results. It was hauling liquid soap which began to leak onto the highway. Clearance was delayed due to the complexity of the recovery and offloading of the contents. The closure was extended through the evening rush hour out of concern the vibrations would cause the cab to come loose. The TMC activated all available DMS boards and the closure was entered into TMS to alert the public. The EOC, Area Engineer, Motor Carriers and MoDOT Incident Management Coordinator were all notified of the closure. Traffic was re-routed onto MO 94 and a signal electrician set the signals to assist in traffic flow. The St. Clair Bridge crew was called in to inspect the bridge for any structural damage.







All eastbound lanes were closed from 12:41 pm to 3:43 pm, with one lane open for the remainder of the incident. Traffic queued for approximately one mile.

• Event Duration: 7 hours 15 minutes

Eastbound Route 370 past MO 94	Left Shoulder	Lane 1	Lane 2	Lane 3	Right Shoulder
370					
Route 370					
Closed Hours/Minutes	3:07	3:19	6:50	7:14	7:14









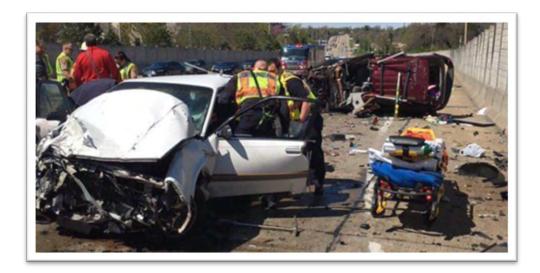




4/09/2016 (Saturday)

- **Time:** 2:19 pm 7:22 pm *** Fatality ***
- Location: St. Louis County Northbound Route 141 past Burgundy Lane
- Event: Vehicle Crash
- Estimated Initial Impact: Non-Rush Hour: 2 of 3 travel lanes effected equals (=) 67%
- Incident Details: An SUV going north on Route 141 struck a southbound sedan trying to turn left onto Burgundy Lane. The SUV overturned and the driver was thrown from the vehicle. The driver was pronounced dead at the scene. A passenger of the SUV was also ejected and transported in critical condition.
- **Action:** Emergency Response personnel provided traffic control. Manchester Police responded with fire and EMS and was assisted by St. Louis City Police. The TMC messaged for the event to notify drivers. Traffic queued approximately 1 mile.
- Event Duration: 5 hours 3 minutes

Northbound Route 141	Lane 1	Lane 2	Lane 3	Right
Past Burgundy Lane				Shoulder
141				
Closed Hours/Minutes	0:00	5:02	5:02	5:03







4/14/2016 (Thursday)

• **Time:** 1:57 pm – 8:32 pm

• Location: Franklin County – Eastbound I-44 at US 50

• Event: Three Vehicle Crash

• Estimated Initial Impact: Non-Rush Hour: 2 of 2 travel lanes affected equals (=) 100%

- Incident Details: The driver of a tractor trailer was attempting to stop for slowing work zone traffic. The tractor trailer traveled into the left lane and the right side of the trailer struck the rear of a second tractor trailer pushing it into a third tractor trailer. The first and second tractor trailers burst into flames, one of which was hauling paint and paint thinner. The crash caused a closure in both eastbound and westbound lanes. The TMC was running advisory messages for the work zone at the time of the incident.
- Action: Responders included MSHP, Franklin County Sheriff's, Fire, EMS, DNR, and several heavy tow companies. MoDOT maintenance units assisted with cleanup and Emergency Response Units assisted with traffic control. Timing plan adjustments were made on Route 100 at Routes AT and Eastbound Route 47 at 3:00 pm for the westbound left turn and returned to normal timing at 3:08 pm when the queue cleared. At 3:38 pm, a Route 47 at I-44 eastbound left turn exit ramp timing change was made, but was immediately changed back. There was no longer a queue. Westbound I-44 lanes reopened about 3:30 pm. Conditions were observed at Route 47 and I-44 until 6:00 pm with no needed changes. On-site personnel were directing traffic around the event using MO 47, US 50 and the outer road. The public was notified of the closure via DMS boards and the incident was entered into TMS. EOC, Motor Carriers, Community Relations, the Area Engineer, all ER supervisors, and the MoDOT Incident Management Coordinator were notified and updated as the incident progressed. Traffic queued approximately 12 miles eastbound and 5 miles westbound. Once cleanup was finished, an inspection of the roadway revealed extensive damage to the surface due to the intensity of the fire. It was determined the area would need to be repaved. At 8:32 pm a contractor took over the event, and the incident was converted to a work zone.

• Event Duration: 6 hour 35 minutes

Eastbound I-44 at US 50 INTERSTATE MISSOURI	Left Shoulder	Lane 1	Lane 2	Right Shoulder
Closed Hours/Minutes	6:35	6:35	6:35	6:35
Westbound I-44 at US 50 INTERSTATE MISSOURI	Left Shoulder	Lane 1	Lane 2	Right Shoulder
Closed Hours/Minutes	1:24	1:24	1:24	1:24

















4/18/2016 (Monday)

• **Time:** 7:55 am - 10:47 am

Location: St. Louis County – Northbound / Southbound I-270 at Route 370

• Event: Vehicle Crash

• Estimated Initial Impact: Rush Hour: 2 of 5 travel lanes affected equals (=) 40%

- **Incident Details**: Crash involving two pickup trucks, one with a trailer carrying a 250 gallon tank of pesticide. The tank broke free and crossed over onto the northbound left lanes and had a small leak of about 10-15 gallons.
- Action: Responders included Bridgeton Police and fire, DNR, tow, and North City Strike
 Maintenance who assisted with the pesticide cleanup. Two Emergency Response Units
 provided traffic control. The TMC activated all available DMS boards to notify the public. The
 EOC and Area Engineer where also notified. Traffic queued northbound for 3.5 miles, for
 approximately 15 minutes of additional travel time. Traffic returned to normal flow at 10:12 am.
 No significant impact was indicated for southbound traffic.

• Event Duration: 2 hours 52 minutes

Southbound I-270 at Route 370 INTERSTATE 270	Lane 1	Lane 2	Lane 3	Lane 4	Lane 5	Right Shoulder
Closed Hours/Minutes	2:17	2:15	0:00	0:00	0:00	0:00
Northbound I-270 at Route 370 INTERSTATE 270	Lane 1	Lane 2	Lane 3	Lane 4	Lane 5	Right Shoulder
Closed Hours/Minutes	2:52	2:45	0:00	0:00	0:00	0:00





4/25/2016 (Monday)

- **Time:** 3:55 pm 5:56 pm
- Location: St. Louis County Eastbound I-270 at Route 367
- Event: Multi-Vehicle Crash
- Estimated Initial Impact: Rush Hour: 4 of 4 travel lanes affected equals (=) 100%
- Incident Details: A multi-vehicle accident closed all lanes of eastbound traffic.
- **Action:** Emergency Response personnel responded to assist with traffic control. The TMC messaged for the event and also entered it into TMS to notify the public. Traffic queued approximately 8 miles past McDonnel Blvd. and took about 50 minutes to return to normal.
- Event Duration: 2 hours 1 minute

Eastbound I-270	Lane 1	Lane 2	Lane 3	RX1	Right
at Route 367					Shoulder
INTERSTATE					
270					
Closed Hours/Minutes	2:01	1:59	0:48	0:03	0:00









4/27/2016 (Wednesday)

• Time: 8:30 am - 11:30 am *** Fatality ***

Location: St. Louis City – Westbound I-44 past Vandeventer Avenue

• Event: Vehicle Crash

• Estimated Initial Impact: Rush Hour: 4 of 4 travel lanes affected equals (=) 100%

- **Incident Details**: It was reported a driver in an SUV had stopped to assess some damage to his vehicle after possibly being involved in a minor accident on the entrance ramp. While outside of his vehicle, the SUV was rear ended by a pickup truck that possibly hydroplaned. This accident occurred at the beginning of a work zone lane drop.
- Action: St. Louis City Police, Fire and EMS responded. Emergency Response personnel assisted with traffic control. At the request of the St. Louis City Police, the highway was shut down for a short time for photos to be taken for the reconstruction. The TMC messaged for the event and also entered it into TMS to notify the public. Notifications were made to the Work Zone Coordinator, ER Supervisor, Community Relations, Area Engineer, and the MoDOT Incident Management Coordinator. Traffic queued for 2.5 miles (an approximate 10 minute delay). Traffic flow returned to normal within seven minutes once the scene cleared.
- Event Duration: 3 hours 0 minutes

Westbound I-44	Left	Lane 1	Lane 2	Lane 3	Lane 4	Right
past Vandeventer Ave	Shoulder					Shoulder
INTERSTATE MISSOURI 4						
Closed Hours/Minutes	1:00	1:00	0:12	2:54	3:00	3:00







4/28/2016 (Thursday)

• Time: 6:04 pm - 8:39 pm

Location: St. Louis County – Eastbound I-64 at Woods Mill Road

• Event: Multi-Vehicle Crash

• Estimated Initial Impact: Non-Rush Hour: 4 of 4 travel lanes affected equals (=) 100%

- Incident Details: A five vehicle chain reaction crash that occurred after two vehicles had slowed due to traffic congestion ahead. A third vehicle failed to slow down and struck the rear of one of the slowed vehicles pushing it into the vehicle in front of it. A fourth vehicle rear ended vehicle three and a fifth vehicle rear ended vehicle four. Two people were trapped and had to be extricated from their vehicles. Four people were transported for injuries sustained.
- Action: MSHP took command of the scene and were assisted by Town & Country and
 Chesterfield Police. Due to the amount of emergency personnel who responded to assist, all
 eastbound lanes of the highway were shut down. Emergency Response personnel responded
 to assist with traffic control. At the request of police, traffic was detoured onto Timberlake Manor.
 The TMC messaged for the event and also entered it into TMS to notify the public of the closure.
 Traffic queued approximately 3 miles.
- Event Duration: 2 hours 35 minutes

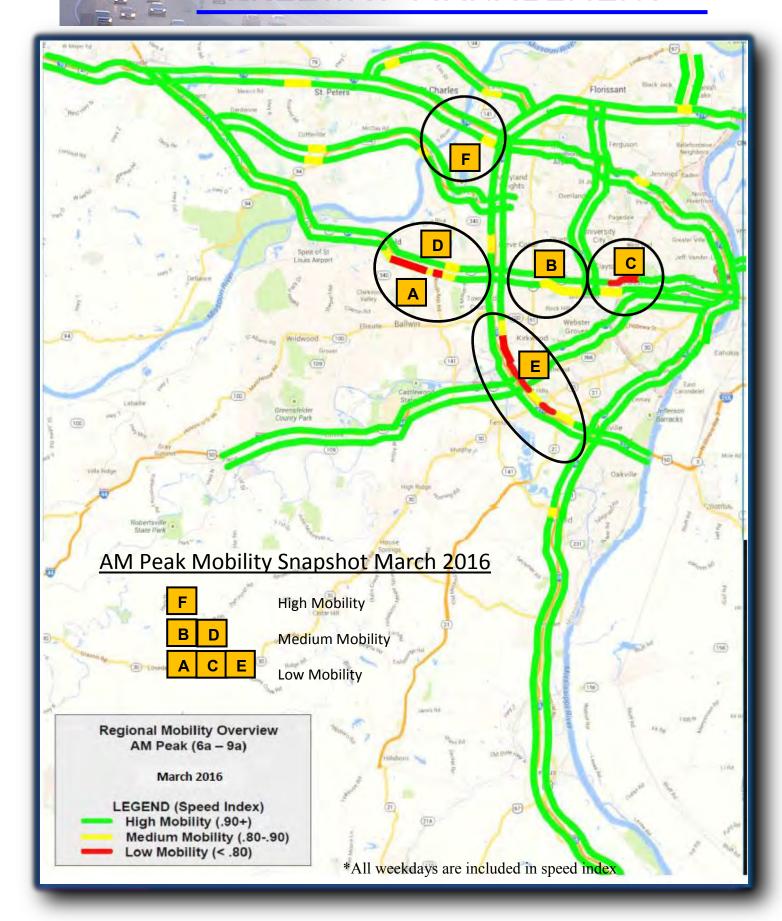
Eastbound I-64 at Woods Mill Rd INTERSTATE MISSOURI 64	Left Shoulder	Lane 1	Lane 2	Lane 3	Lane 4	Right Shoulder
Closed Hours/Minutes	2:35	2:35	2:35	2:28	2:00	1:59





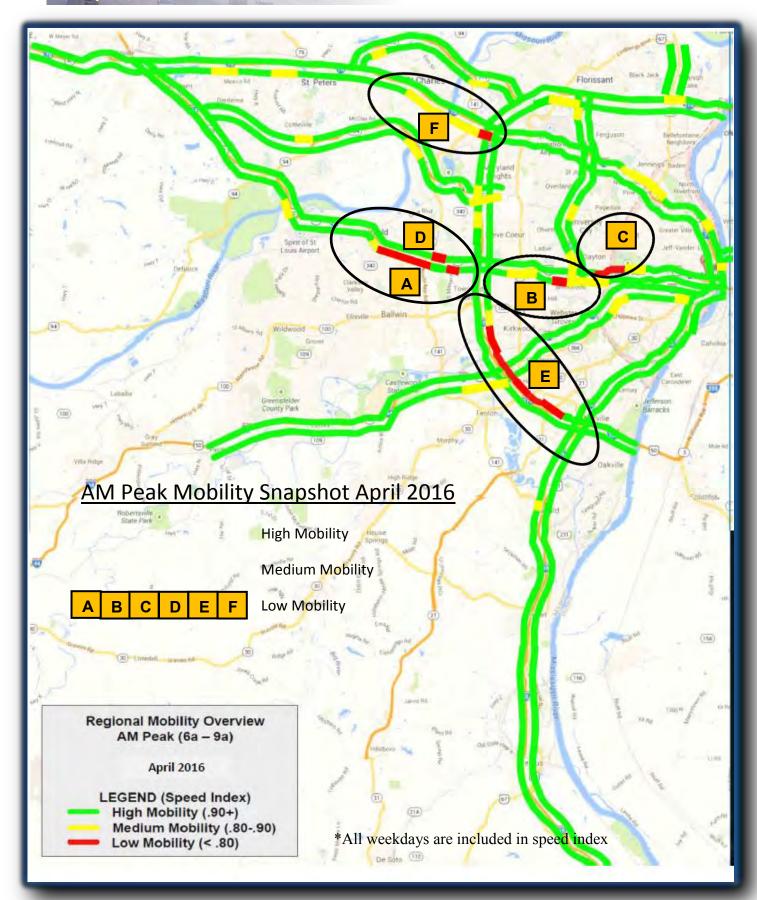






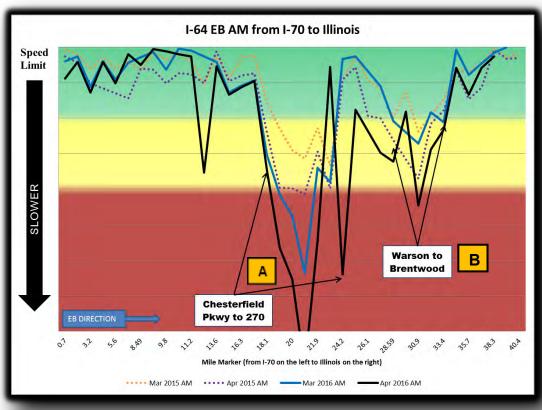


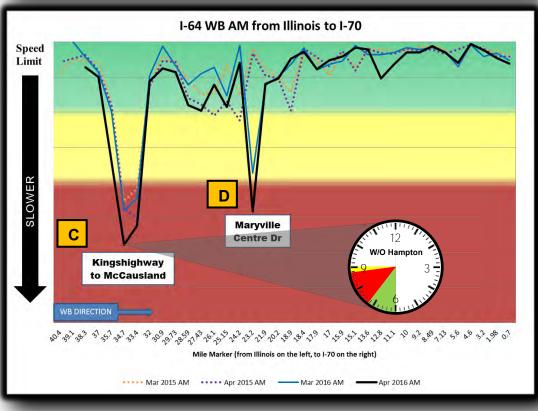






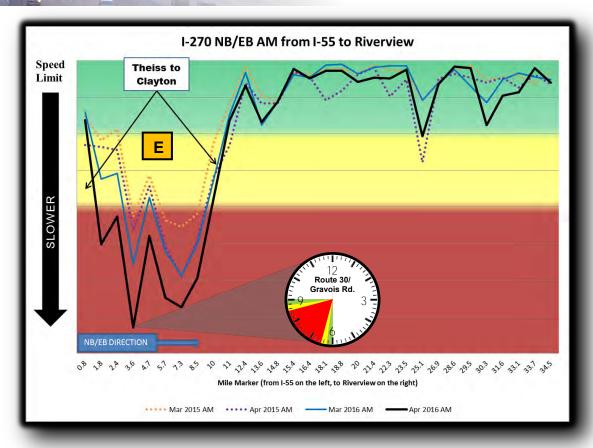


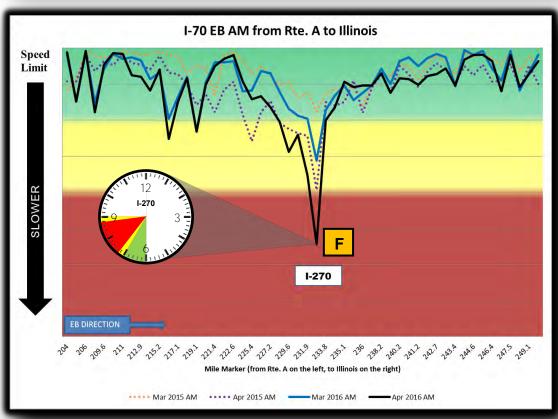






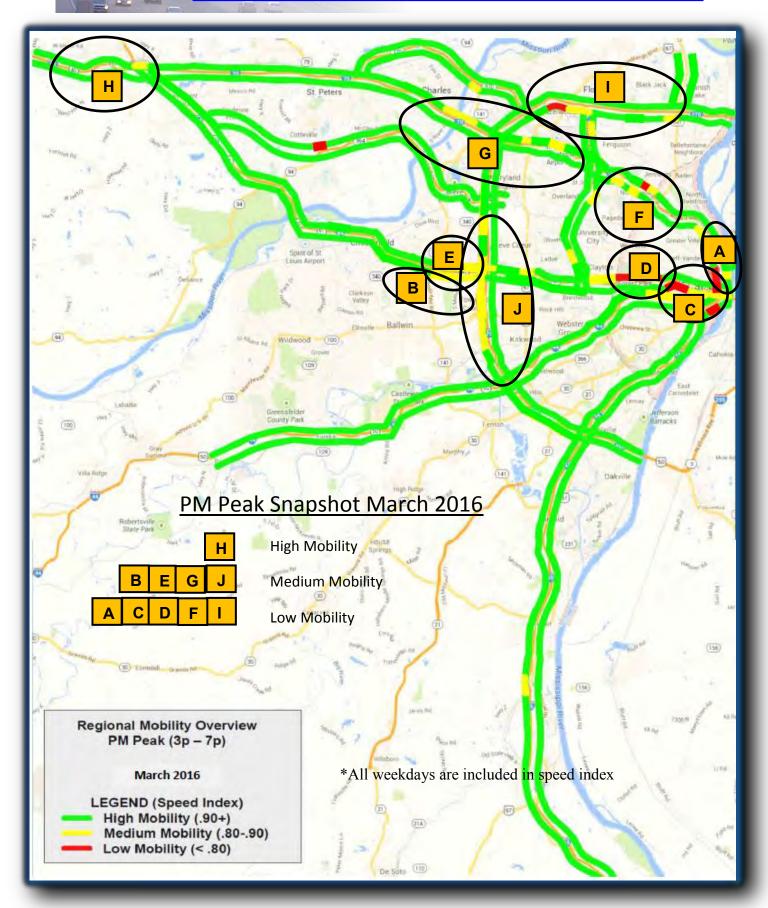






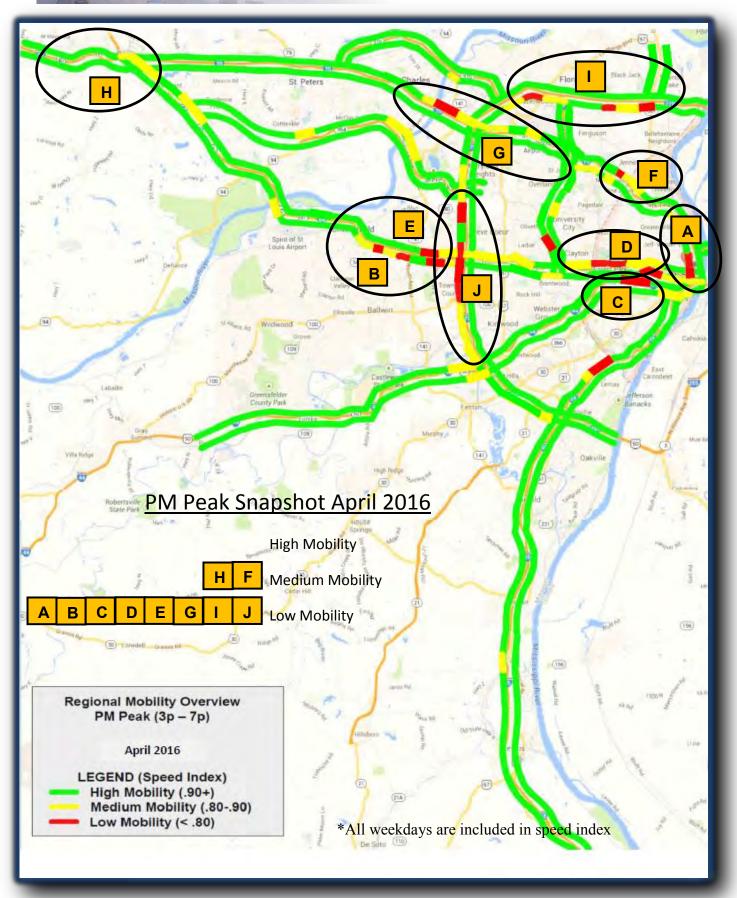






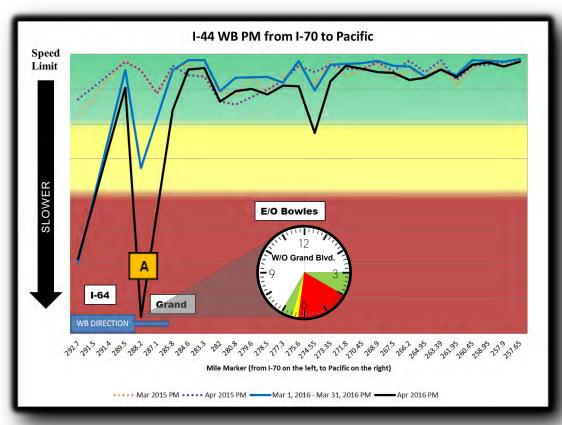


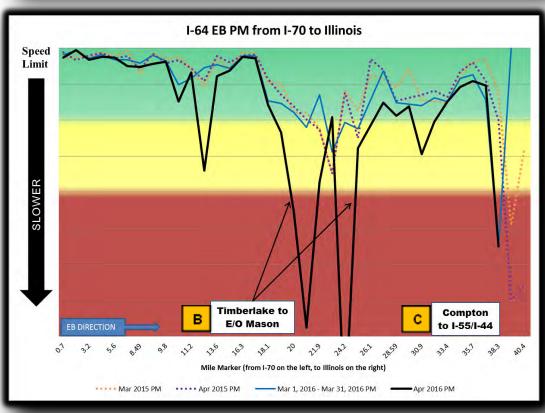






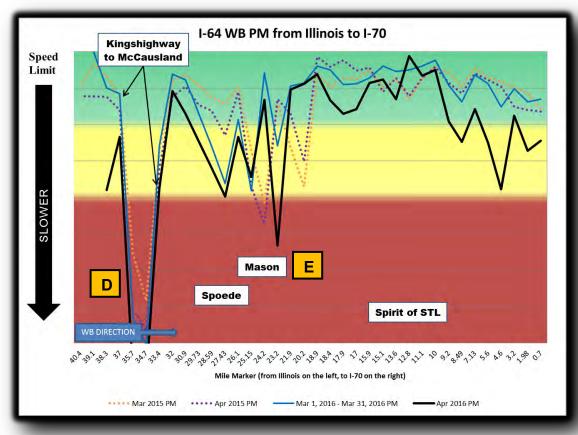


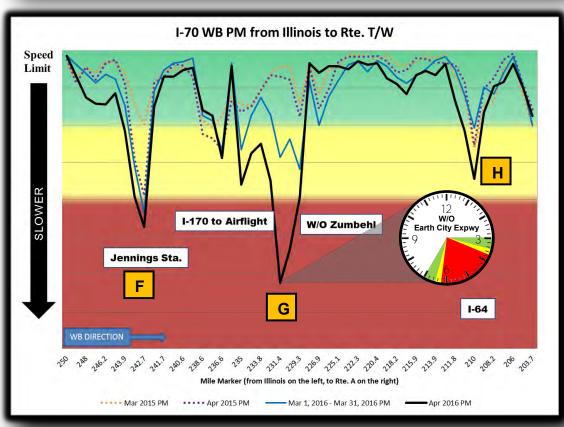






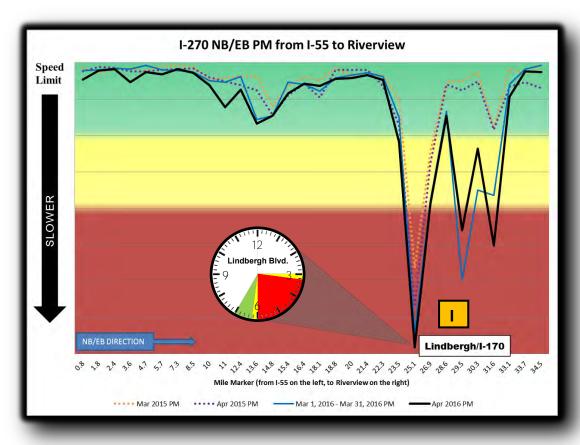


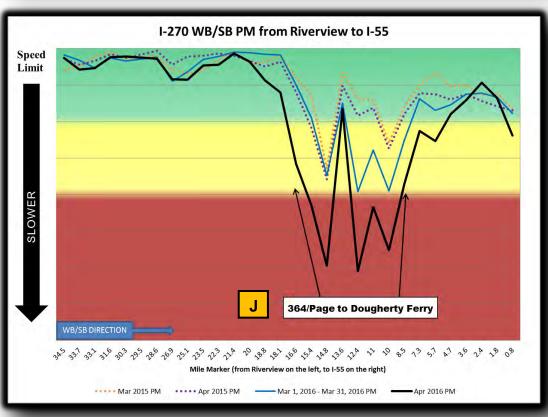






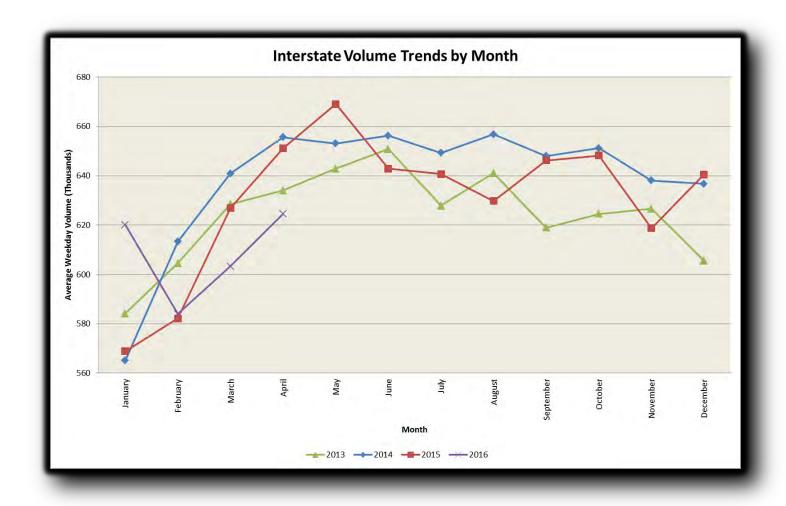








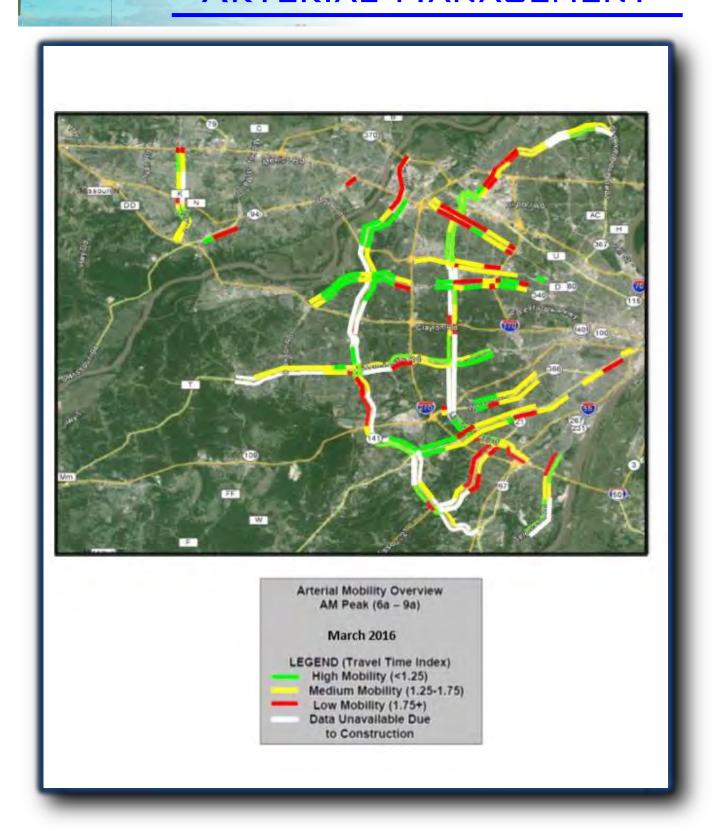








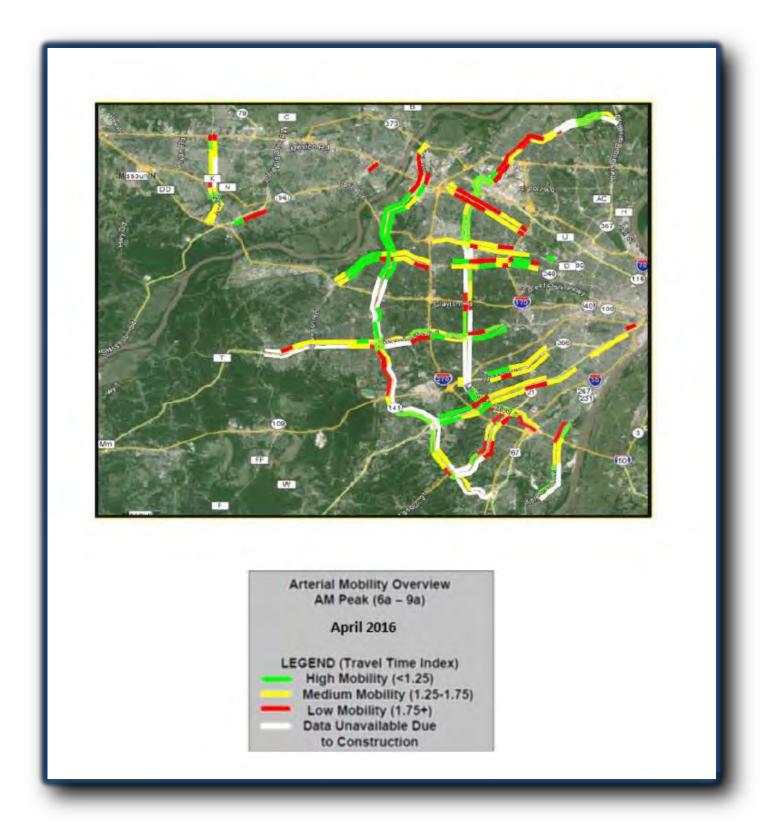
ARTERIAL MANAGEMENT







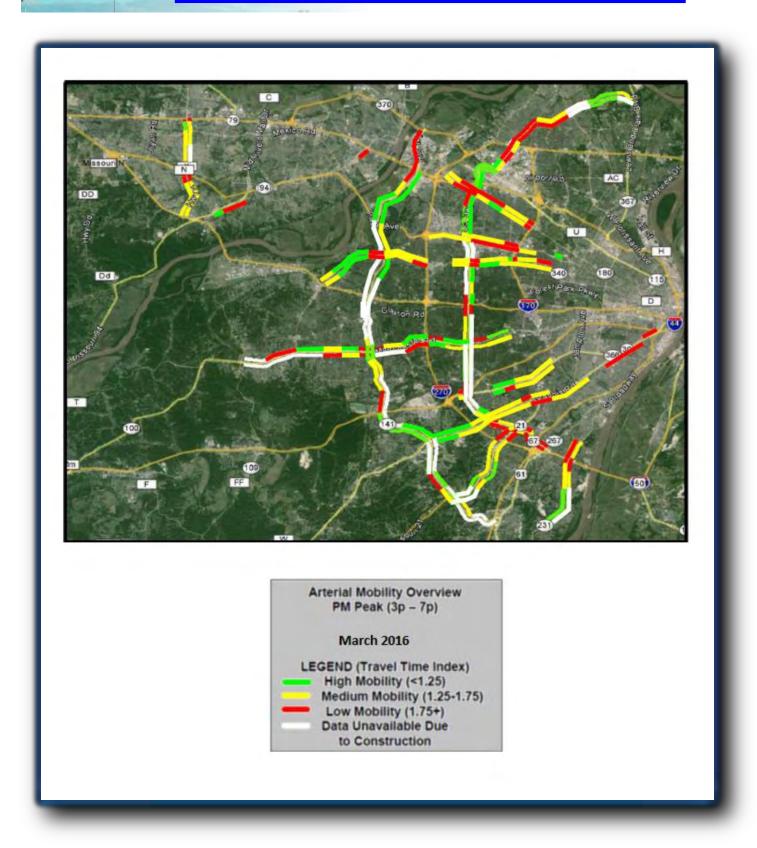
ARTERIAL MANAGEMENT







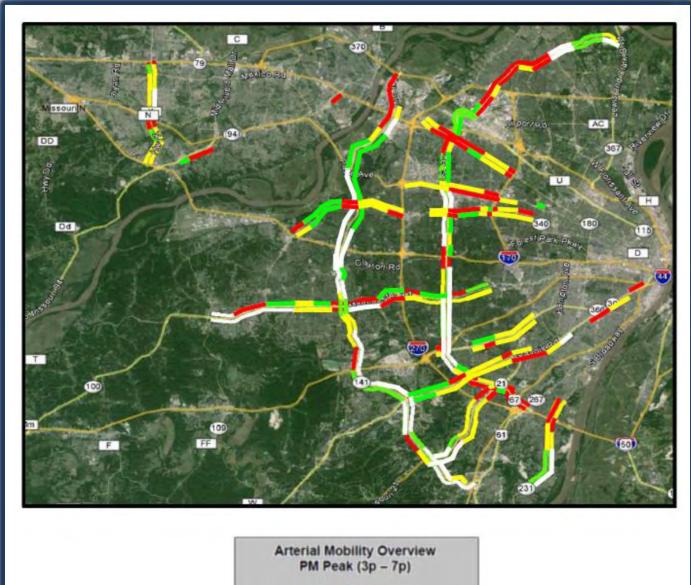
ARTERIAL MANAGEMENT

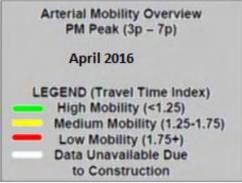






ARTERIAL MANAGEMENT











Performance Measures Quarterly Report

January - March 2016











CUSTOMER SATISFACTION (not used this period)

SYSTEM HEALTH

MANAGED INCIDENTS

AVERAGE LEVEL-OF-SERVICE

see last page for a description of each measure **grey arrows represent the prior period value

Summary of Intelligent Transportation System (ITS) Devices

	Device Type	No. Devices	% Reliable	Trend	Device Type	No. Devices	% Reliable	Trend
1	Traffic Signals Communicating with Central Software	328	92%	Stable	(A) Cellular Devices	80	100%	*
T	Closed Circuit Television (CCTV)	31	70%	Stable	Dynamic Message Signs	1	0%	NA
*	Bluetooth Devices	78	85%	Stable	Traffic Count Stations	0	0%	NA
1	Fiber Optic System (miles)	13.25	100%	•				

terly Public Survey Results (920 Respondents as of May 6, 2016

Are you familiar with the Gateway Green Light program?

Yes (29%) No (71%)

- Rate your overall impression with your ability to travel easily throughout St. Charles County.

Congested (16%) Somewhat Congested (76%) No Congestion (8%)

- How often are you impacted by construction projects in the area of St. Charles County in which you live?

Often (22%) Somewhat Often (39%) Not Often (39%)

- How likely are you to factor in available travel time information related to the routes you travel?

Likely (68%) Occasionally (28%) Never (4%)

January - March 2016

GGL Quarterly Report





Work Zones

Whenever additional travel time is reported, this additional time shall be evaluated using this chart and adequate mitigation measures should begin within the parameters of this chart. TMC and field personnel are partners in the mitigation of traffic and notification of additional travel times should trigger the appropriate response from both parties.

Chart is designed to be an additional travel time reference to establish parameters for gauging the travel impact through work zones and to provide guidance for taking mitigation actions. Travel times can be collected or reported via Blue Toad technology, field personnel, call reports, ITS, TMC cameras, etc.

Major and Moderate impacts trigger an IAR (Immediate Action Required) event. IAR means work zone user and TMC partner together to take immediate actions to reduce or eliminate distress. During an IAR event mitigation procedures can range from increased driver notification up to and including removal of work zone. Additional mitigation procedures may require involvement of administration through use of the work zone resolution ladder.

Level of Impact	Additional Travel Time Expected	Mitigation Actions
Major (Red) <u>IAR Event</u> SEVERE DISTRESS PRESENT Return of roadway to free flow traffic	15 minutes or above TMC and field personnel take all steps possible up to and including removal of lane closure to achieve free flow threshold	Immediate Action Required Supervisory mitigation assistance is required using the St. Louis District Work Zone Resolution Ladder as a tool to restore free flow
is Priority #1		traffic threshold
Moderate (Yellow) IAR Event CAUTIONARY STAGE: Action required by Field/ TMC to prevent escalation to a major event	10 – 14 minutes TMC increases driver messaging. Field begins efforts to restore free flow traffic	TMC and field shall reach a consensus on mitigation success within 15 minutes or less. If a consensus cannot be reached, mitigation should be scaled upwards in accordance with the St. Louis District Work Zone Resolution Ladder







Incident Levels

Major Impact Traffic Incident - Road closure > 2 hours



Major traffic incidents are typically traffic incidents involving hazardous materials, fatal traffic crashes involving numerous vehicles, and other natural or man-made disasters. These traffic incidents typically involve closing all or part of a roadway facility for a period exceeding 2 hours.

Moderate Impact Traffic Incident - Blocked travel lanes/closure 30 min - 2 hours

Moderate traffic impact incidents typically affect travel lanes for a time period of 30 minutes to 2 hours, and usually require traffic control on the scene to divert road users past the blockage. Full roadway closures might be needed for short periods during traffic incident clearance to allow traffic incident responders to accomplish their tasks.

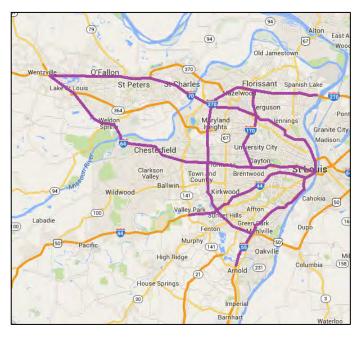
Minor Impact Traffic Incident – <u>Lane closures < 30 minutes</u>

Minor traffic incidents are typically disabled vehicles and minor crashes that result in lane closures of less than 30 minutes. On-scene responders are typically law enforcement and towing companies, and occasionally highway agency service patrol vehicles.



Worst Time to Travel Clocks

- The clocks found on the speed charts depict the progression of travel speeds during the commute peak period at the worst congestion location along the route.
- For example, the clock on the left depicts conditions worsening at a particular location beginning at 6:30 a.m. with the slowest speeds between 7 a.m. and 8:15 a.m. Conditions improved at 8:45 a.m.



The focus area for calculating the average 24 hour volumes was revisited in 2015 and consolidated to the more urban interstates of the St. Louis District. For example, data is generated from detectors on I-44 east of MO 141 (previously included all available in the District).





DATA KEY

Definitions

ACTRA – Traffic signal management software program

Alert – Email message sent regarding an incident or event on the roadway

Arterial - Missouri State Highway Numbered Routes, not fully access controlled

Arterial Device – ITS equipment located along MoDOT arterials

Defined Sensor – A single sensor with an individual ID focused on a particular roadway; multiple defined sensors may be located at one physical sensor location

DMS – Dynamic Message Signs along highway displaying incident and travel time information

DNR – Department of Natural Resources

Driver messaging – Messages placed on DMS boards to alert drivers of incidents ahead of their direction of travel

EOC – Emergency Operations Center operated by MoDOT in Jefferson City

EMS – Emergency Medical Services

ER – MoDOT's Emergency Response units that provide emergency assistance, incident management and traffic control to mitigate incidents and restore free flow traffic within the St. Louis region

Freeway Device – ITS device located along a MoDOT freeway, such as interstates and other fully access controlled highways

Gatewayguide.com – Gateway Guide's website for local St. Louis area traffic information

GGL – Gateway Green Light is the St. Charles County regional integrated corridor management for a cooperative multi-jurisdictional effort to better manage and coordinate travel on the interstates (I-70, I-64), state routes (MO 94, MO 364, MO 370, US 61) and local arterials through the installation of Intelligent Transportation Systems (ITS) in Cottleville, Dardenne Prairie, Lake St. Louis, O'Fallon, St. Charles, St. Peters, and Wentzville.

GuidePost – Area of report highlighting important mobility topics for the month

IDOT – Illinois Department of Transportation

KC Scout – Gateway Guide's counterpart for the greater Kansas City Metropolitan area, a collaboration involving both MoDOT and the Kansas DOT

Mobility – Ease of movement over roadway, through system, and or work zone

MRB - Mississippi River Bridge under construction north of downtown St. Louis

MSHP - Missouri State Highway Patrol

Observed Work zone – Work zone tracked by traffic cameras at the TMC







Peak Average – Daily speed sensor readings over an entire weekday average commute period averaged for an entire month

PSB – Poplar Street Bridge

Regional Mobility Overview – Map depicting congestion areas based on speed index ratings derived from speed sensor readings

SL – Designation for the St. Louis District

Speed Index – a ratio of the speed at which vehicles travel during a period to the speed at free-flow conditions

Stats to Watch – Area of report highlighting interesting trends for the report month, or data to be closely followed

STLtraffic – Email group consisting of Gateway Guide personnel and Gateway Guide's media partners, messages sent to the group are also posted on Twitter

TMC – Traffic Management Center (also referred to as Gateway Guide)

TMC Alert – Email alert sent to an internal group of Gateway Guide personnel

TMS – Traveler Map System is MoDOT's internal software for entering work zones and road conditions to populate the Traveler Information Map at www.traveler.modot.org/map

Travel Time Index – A ratio of the actual time to travel a corridor compared to travel time at posted speed limit without stops used

Visibility – Concerning placement of traffic signs, signals, devices, barricades and warning lights for safety within work zone or construction area to help motorist and workers move within a work zone safely; Clearly visible and legible, distinguishable to approaching traffic during day and night, aligned with road user's line of vision, and positioned as to not obstruct other applicable traffic control devices. Must meet MUTCD standards for condition and must be covered, turned or properly stowed when not in use.

Zoning In – section of report highlighting important construction topics for the report month





I-70 Mile Markers

ST. CHARLES COUNTY					ST. CHARLES COUNTY
5TH ST SOUTH (ST. CHARLES)	229A			229A	5TH ST SOUTH (ST. CHARLES)
5TH ST NORTH (ST. CHARLES)	229B		1	229B	5TH ST NORTH (ST. CHARLES)
ST. LOUIS COUNTY					ST. LOUIS COUNTY
BLANCHETTE BRIDGE	230			230	BLANCHETTE BRIDGE
EARTH CITY EXPRESSWAY SOUTH	231A			231A	EARTH CITY EXPRESSWAY SOUTH
EARTH CITY EXPRESSWAY NORTH	231B			231B	EARTH CITY EXPRESSWAY NORTH
I-270	232			232	I-270
MCKELVEY RD OVERPASS (BRIDGETON)	233			233	MCKELVEY RD OVERPASS (BRIDGETON)
RTE 180/ST. CHARLES ROCK RD (BRIDGETON	234		ı	234	RTE 180/ST. CHARLES ROCK RD (BRIDGETON
US 67 SOUTH (BRIDGETON)	235A		ı	235A	US 67 SOUTH (BRIDGETON)
US 67 NORTH (BRIDGETON)	235B			235B	US 67 NORTH (BRIDGETON)
CYPRESS RD (BRIDGETON)	235C			235C	CYPRESS RD (BRIDGETON)
AIRFLIGHT (ST. ANN)	236			236	AIRFLIGHT (ST. ANN)
MCDONNELL OVERPASS (BERKELEY)	237			237	MCDONNELL OVERPASS (BERKELEY)
LAMBERT AIRPORT (BERKELEY)	238A	_ !	 -	238A	LAMBERT AIRPORT (BERKELEY)
I-170 NORTH (BERKELEY)	238B	-70	-70	238B	I-170 NORTH (BERKELEY)
I-170 SOUTH (BERKELEY)	238C	DIS	SIG	238C	I-170 SOUTH (BERKELEY)
NORTH HANLEY (BERKELEY)	239	TRICT	TRICT	239	NORTH HANLEY (BERKELEY)
RTE N/FLORISSANT RD (COOL VALLEY)	240A		CT 6	240A	RTE N/FLORISSANT RD (COOL VALLEY)
BERMUDA DR (NORMANDY)	240B	6 E/		240B	BERMUDA DR (NORMANDY)
RTE U/LUCAS AND HUNT RD	241B	ΛSΤ	EST	241B	RTE U/LUCAS AND HUNT RD
JENNINGS STATION RD (PINE LAWN)	242C	EASTBO	. B0	242C	JENNINGS STATION RD (PINE LAWN)
ST. LOUIS CITY		UND	WESTBOUND		ST. LOUIS CITY
GOODFELLOW (ST. LOUIS)	243A			243A	GOODFELLOW (ST. LOUIS)
RIVERVIEW/BIRCHER (ST. LOUIS)	243B			243B	RIVERVIEW/BIRCHER (ST. LOUIS)
UNION (ST. LOUIS)	244A		ı	244A	UNION (ST. LOUIS)
KINGSHIGHWAY (ST. LOUIS)	244B		ı	244B	KINGSHIGHWAY (ST. LOUIS)
SHREVE (ST. LOUIS)	245A			245A	SHREVE (ST. LOUIS)
WEST FLORISSANT AVE (ST LOUIS)	245B			245B	WEST FLORISSANT AVE (ST LOUIS)
NORTH BROADWAY (ST. LOUIS)	246A			246A	NORTH BROADWAY (ST. LOUIS)
ADELAIDE (ST LOUIS)	246B			246B	ADELAIDE (ST LOUIS)
GRAND (ST. LOUIS)	247			247	GRAND (ST. LOUIS)
SALISBURY (ST LOUIS)	248A		ı	248A	SALISBURY (ST LOUIS)
BRANCH (ST LOUIS)	248B		ı	248B	BRANCH (ST LOUIS)
MADISON (ST LOUIS)	249A			249A	MADISON (ST LOUIS)
PINE ST OVERPASS (ST LOUIS)	250			250	PINE ST OVERPASS (ST LOUIS)
CHESTNUT ST OVERPASS (ST LOUIS)	250			250	CHESTNUT ST OVERPASS (ST LOUIS)
MARKET ST OVERPASS (ST. LOUIS)	250			250	MARKET ST OVERPASS (ST. LOUIS)
WALNUT ST OVERPASS (ST LOUIS)	250			250	WALNUT ST OVERPASS (ST LOUIS)







I-70 St. Charles County Mile Markers

RTE A (WENTZVILLE)	212		212	RTE A (WENTZVILLE)
LAKE ST. LOUIS BLVD (LAKE ST. LOUIS)	214		214	LAKE ST. LOUIS BLVD (LAKE ST. LOUIS)
BRYAN RD (O'FALLON)	216	_	216	BRYAN RD (O'FALLON)
RTE K/RTE M (O'FALLON)	217	-70 -70	217	RTE K/RTE M (O'FALLON)
T.R. HUGHES BLVD (O'FALLON)	218	DIS	218	T.R. HUGHES BLVD (O'FALLON)
RTE 79 (ST. PETERS/O'FALLON)	220	1	220	RTE 79 (ST. PETERS/O'FALLON)
RTE C/MID RIVERS MALL DR (ST. PETERS)	222	RC RC	222	RTE C/MID RIVERS MALL DR (ST. PETERS)
SPENCER RD OVERPASS (ST. PETERS)	223	Г 6 V	223	SPENCER RD OVERPASS (ST. PETERS)
RTE 370 (ST. PETERS)	224	E AS	224	RTE 370 (ST. PETERS)
CAVE SPRINGS (ST. CHARLES)	225	STE	225	CAVE SPRINGS (ST. CHARLES)
ZUMBEHL RD (ST. CHARLES)	227	O Ö	227	ZUMBEHL RD (ST. CHARLES)
HAWK'S NEST OVERPASS (ST. CHARLES)	227	UND	227	HAWK'S NEST OVERPASS (ST. CHARLES)
RTE 94 (ST. CHARLES)	228		228	RTE 94 (ST. CHARLES)
5TH ST SOUTH (ST. CHARLES)	229A		229A	5TH ST SOUTH (ST. CHARLES)
5TH ST NORTH (ST. CHARLES)	229B		229B	5TH ST NORTH (ST. CHARLES)





DATA KEY

I-270 Mile Markers

	<u>U Mille Markers</u>				
3	KOCH RD	I-255	1-255	KOCH RD	3
2	SR 231 (TELEGRAPH RD)	WESTBOUND	EASTBOUND	SR 231 (TELEGRAPH RD)	2
1C	US61-67	OUND	OUND	US61-67	1B
1B	I-55 NORTH			I-55 NORTH	1B
1	I-55 SOUTH			I-55 SOUTH	1A
2	SR 21 (TESSON FERRY RD.)			SR 21 (TESSON FERRY RD.)	2
3	SR 30 (GRAVOIS RD.)			SR 30 (GRAVOIS RD.)	3
5	I-44 EAST/SR 366 (WATSON RD.)			I-44 EAST	5
5	I-44 WEST		^	I-44 WEST	5
			÷	BIG BEND RD.	7
8	DOUGHERTY FERRY RD.	v	1-270	DOUGHERTY FERRY RD.	8
10	SR 100 (MANCHESTER RD.)	1-2		SR 100 (MANCHESTER RD.)	10
12	I-64 EAST/WEST/US 40-61 NORTH/SOUTH		DISTRICT	I-64 EAST/WEST/US 40-61 NORTH/SOUTH	12 A/B
13	SR AB (LADUE RD)	SIC.	îc T	SR AB (LADUE RD)	13
14	SR 340 (OLIVE BLVD)	DISTRICT	တ	SR 340 (OLIVE BLVD)	14
16	SR D (PAGE AVE.) EAST	CT 6	COUNTER	SR D (PAGE AVE.) EAST	16A
16	SR 364 WEST		Z	SR 364 WEST	16B
17	DORSETT RD	00	罗	DORSETT RD	17
20	I-70 WEST/EAST	CLOCKWISE	CLOCKWISE	I-70 WEST	20B
		ISE	S	I-70 EAST	20A
20C	SR 180 (ST. CHARLES ROCK RD)		¥ S	SR 180 (ST. CHARLES ROCK RD)	20C
22	MISSOURI BOTTOM RD/370 WEST	FROM		SR 370 WEST	22D
23	MCDONNELL BLVD	I-55	FROM	MCDONNELL BLVD	23
25A	US 67 SOUTH	5 TO	≥	US 67 NORTH	25A
25B	US 67 NORTH	꼰	RYE	US 67 SOUTH	25B
26	HANLEY/GRAHAM RD.	VERVIEW	ERVIEW	I-170 SOUTH (EXIT LEFT)	26A
26	I-170 SOUTH	₹VE	Ε×	HANLEY/GRAHAM	26B
27	NEW FLORISSANT RD	×	DR.	NEW FLORISSANT RD	27
28	WASHINGTON/ELIZABETH RD.	DR.	₹. 70	ELIZABETH/WASHINGTON	28
29	WEST FLORISSANT RD			WEST FLORISSANT RD	29
30	SR AC HALLS FERRY RD	 V	I-55	SR AC NEW HALLS FERRY RD	30
			^	NEW HALLS FERRY RD.	30A
31A	SR 367 SOUTH		i	SR 367 SOUTH	31A
31B	SR 367 NORTH			SR 367 NORTH	31B
32	BELLEFONTAINE RD			BELLEFONTAINE RD	32
33	LILAC AVE.			LILAC AVE.	33
				RIVERVIEW DR.	34





DATA KEY

I-64 Mile Markers

I-70 WEST EXIT RIGHT/EAST EXIT LEFT	1			1A	I-70 WEST
				1B	I-70 EAST
PROSPECT RD	1C			1C	PROSPECT RD
LAKE ST. LOUIS BLVD	2			2	LAKE ST. LOUIS BLVD
SR N	4			4	MO N
SR DD/WINGHAVEN	6			6	MO DD/Winghaven
SR K/SR 94	9			9	мо к
				10	MO 94
MISSOURI RESEARCH PARK/TECHNOLOGY DR	12			11	RESEARCH PARK CRL
DANIEL BOONE BRIDGE	13			13	DANIEL BOONE BRIDGE
CHESTERFIELD AIRPORT RD	14			14	SPIRIT OF ST LOUIS BLVD
				16	LONG RD
BOONE'S CROSSING	17			17	BOONE'S CROSSING
CHESTERFIELD PKWY	19A			19A	CHESTERFIELD PKWY
SR 340 (OLIVE/CLARKSON	19B			19B	MO 340 (OLIVE/CLARKSON)
				20	CHESTERFIELD PKWY
TIMBERLAKE MANOR PKWY	21			21	TIMBERLAKE MANOR PKWY
SR 141	22			22	MO 141 (WOODS MILL RD)
MASON RD	23			23	MARYVILLE CENTRE DR
	•	l-64 [-64 D	24	MASON RD
I-270 SOUTH	25A)ISTF	ISTR	25A	I-270 SOUTH
I-270 NORTH	25B	-64 DISTRICT 6 EASTBOUND	-64 DISTRICT 6 WESTBOUND	25B	I-270 NORTH
SR JJ (BALLAS RD)	26	6 EA	WE	26	MO JJ (BALLAS RD)
SPOEDE RD	27	STBC	ЗТВС	27	SPOEDE RD
US 61-67	28A	ÜND	OND	28A	US 61-67
				28B	CLAYTON RD
MCKNIGHT RD	30			30	MCKNIGHT RD
BRENTWOOD/HANLEY RD	31B			31A	I-170 NORTH
I-170 NORTH	31A			31B	HANLEY RD/BRENTWOOD BLVD
BELLEVUE AVE	33B				
BIG BEND	33A			33A	BIG BEND BLVD
MCCAUSLAND	33C				ST. LOUIS CITY
ST. LOUIS CITY				33C	MCCAUSLAND AVE
HAMPTON AVE/OAKLAND AVE	34B			34A	CLAYTON RD/SKINKER BLVD
				34B	HAMPTON AVE
KINGSHIGHWAY	36A			36A	KINGSHIGHWAY
VANDEVENTER AVE	36C			36B	BOYLE
MARKET ST/BERNARD ST	37A				
GRAND AVE	37B				
JEFFERSON AVE	38A			38A	FOREST PARK AVE/GRAND BLVD
CHESTNUT AT 20TH ST	38B			38B	MARKET ST AT 3000 WEST
14TH ST	39B			39A	MARKET ST AT 21ST
11TH ST EXIT LEFT	39C			40A	STADIUM/9TH ST/ TUCKER BLVD
BROADWAY/7TH ST (LAST MISSOURI EXIT)	40B			40C	I-44 WB/I-55 SB/ I-70 WB





I-55 Mile Markers

JEFFERSON COUNTY					JEFFERSON COUNTY	
RTE M	185			185	RTE M	
MAIN ST(IMPERIAL)	186			186	MAIN ST(IMPERIAL)	
RICHARDSON RD (ARNOLD)	190			190	RICHARDSON RD (ARNOLD)	
RTE 141 (ARNOLD)	191			191	RTE 141 (ARNOLD)	
ST. LOUIS COUNTY					ST. LOUIS COUNTY	
MERAMEC BOTTOM RD	193			193	MERAMEC BOTTOM RD	
BUTLER HILL RD	195			195	BUTLER HILL RD	
I-255 EAST	196A			196A	I-255 EAST	
I-270 NORTH	196B	l-55	I-55	196B	I-270 NORTH	
US67/LINDBERGH	197	DIS:	DIS	197	US67/LINDBERGH	
REAVIS BARRACKS RD	199	DISTRICT	6	199	REAVIS BARRACKS RD	
UNION RD	200	6		200	UNION RD	
BAYLESS	201A	SOI		201A	BAYLESS	
WEBER RD	201B	[코	T T	201B	WEBER RD	
ST. LOUIS CITY		SOUTHBOUND	NORTHBOUND	ST. LOUIS CITY		
GERMANIA (ST. LOUIS)	202B	S	Z	202B	GERMANIA (ST. LOUIS)	
LOUGHBOROUGH AVE (ST. LOUIS	202C		U	202C	LOUGHBOROUGH AVE (ST. LOUIS	
BATES (ST. LOUIS)	203			203	BATES (ST. LOUIS)	
BROADWAY (ST. LOUIS)	204			204	BROADWAY (ST. LOUIS)	
GASCONADE (ST. LOUIS)	205			205	GASCONADE (ST. LOUIS)	
ARSENAL (ST. LOUIS)	206C			206C	ARSENAL (ST. LOUIS)	
SIDNEY OVERPASS	206			206	SIDNEY OVERPASS	
GRAVOIS AVE OVERPASS	207			207	GRAVOIS AVE OVERPASS	
I-44 WEST (ST. LOUIS)	207			207	I-44 WEST (ST. LOUIS)	
7TH ST/PARK AVE (ST. LOUIS)	208			208	7TH ST/PARK AVE (ST. LOUIS)	





I-44 Mile Markers

FRANKLIN COUNTY					FRANKLIN COUNTY
PACIFIC	257			257	PACIFIC
ST. LOUIS COUNTY			<u> </u>	261	ALLENTON/SIX FLAGS
ALLENTON/SIX FLAGS	261				ST. LOUIS COUNTY
RTE 109/RTE W	264			264	RTE 109/RTE W
WILLIAMS RD	265		i		
LEWIS RD	266			266	LEWIS RD
	•			269	ANTIRE
RTE 141	272			272	RTE 141
BOWLES	274			274	BOWLES
MRAZ	274				
		4	44	275	SOCCER PARK
I-270 NORTH	276B	4 D	<u>D</u>	276B	I-270 NORTH
I-270 SOUTH	276A	-44 DISTRICT	DISTRICT	276A	I-270 SOUTH
RTE 366/WATSON	277A	RC	$\frac{2}{2}$		
US 67/LINDBERGH	277B	6	တ	277B	US 67/LINDBERGH
BIG BEND	278	EASTBOUND	WESTBOUND	278	BIG BEND
	•	TB	STB	279	BERRY
ELM	280		<u></u>	280	ELM
LACLEDE STATION	282	ē	B		
ST. LOUIS CITY				283	SHREWSBURY
JAMIESON	284A				ST. LOUIS CITY
				284B	ARSENAL
				285	SOUTHWEST
HAMPTON	286				
KINGSHIGHWAY	287			287	KINGSHIGHWAY
GRAND AVE	288			288	GRAND AVE
JEFFERSON AVE	289			289	JEFFERSON AVE
I-55 SOUTH	290A				
18TH ST	290B				
				290C	12TH ST./GRAVOIS





I-170 Mile Markers

I-64 WEST/US 40-61	1A				
I-64 EAST/US 40-61	1B				
				1C	GALLERIA PARKWAY
BRENTWOOD BLVD	1D				
FOREST PARK PARKWAY	1E			1E	FOREST PARK PARKWAY
LADUE RD	1F			1F	LADUE RD
DELMAR	2	1-170	1-170	2	DELMAR
EAST/3B WEST SR 340 (OLIVE BLVD)	3A		_	3	SR 340 (OLIVE BLVD)
SRD/SR 364 (PAGE AVE)	4	DISTRIC	DISTRIC	4	SR D/SR 364 (PAGE AVE)
SR 180 (ST. CHARLES ROCK RD)	5	<u> </u>	1 6	5	SR 180 (ST. CHARLES ROCK RD)
SR 115 (NATURAL BRIDGE RD)	6	16		6	SR 115 (NATURAL BRIDGE RD)
I-70 EAST (EXIT LEFT)	7A	SOUTHBOUND	NORTHBOUND	7A	I-70 EAST (EXIT RIGHT)
I-70 WEST (EXIT RIGHT)	7B	뒾	귚	7B	I-70 WEST (EXIT LEFT)
		ВО	ВО	7C	LAMBERT ST. LOUIS AIRPORT
		N	N N		
SCUDDER	8		U	8	SCUDDEN/N. HANLEY RD
AIRPORT RD	9A			9A	AIRPORT
				9B	BOEING (EXIT LEFT)
				9C	N. HANLEY RD
				10A	I-270 WEST (EXIT RIGHT)
				10B	I-270 EAST (EXIT LEFT)

SR 364 Mile Markers

				11B	HARVESTER RD
		S	S	12	HERITAGE CROSSING/JUNGS STATION RD
SR94 EAST/ST. CHARLES	13	R 36	R 364	13	SR 94 EAST/MUEGGE RD
ARENA PKWY/UPPER BOTTOM RD	14	4 E	4 ×	14	UPPER BOTTOM/ARENA
MARYLAND HEIGHTS EXPRESSWAY	17	AS-	/ES	17	MARYLAND HEIGHTS EXPRESSWAY
BENNINGTON PL	19	ГВС	TBO		
		Š	N	21	BENNINGTON PL
I-270 SOUTH	22A	ם	D		
I-270 NORTH	22B				





SR 370 Mile Markers

			1A	I-70 WESTBOUND
			1B	I-70 EASTBOUND
			1C	SPENCER RD
TRUMAN/CAVE SPRINGS RD	2	l i	2	TRUMAN/CAVE SPRINGS RD
ELM/NEW TOWN BLVD	5	SR SR	5	ELM/NEW TOWN BLVD
N 3RD ST/SR 94	7	370 370	7	N 3RD ST/SR 94
DISCOVERY BRIDGE ST. CHAS CO/ ST. LOUIS CO	8	WEST EAST		DISCOVERY BRIDGE ST. LOUIS CO/ ST. CHAS CO
EARTH CITY EXPRESSWAY	9	BOU	9	EARTH CITY EXPRESSWAY
ST. LOUIS MILLS BLVD	11	BOUND	11	ST. LOUIS MILLS BLVD
MISSOURI BOTTOM RD	12			
I-270 WEST BOUND	12	į		
I-270 EAST BOUND	12			

SR 21 Mile Markers

RT B	164.8	-	164.8	RT B
RT BB	165.4		165.4	RT BB
STADIUM DR UNDERPASS	166.4	H	166.4	STADIUM DR UNDERPASS
RTE A	167.8	-	167.8	RTE A
SAND CREEK	169		169	SAND CREEK
HAYDEN RD	169.2		169.2	HAYDEN RD
GLADE CHAPEL RD OVERPASS	171.4	(0 (0	171.4	GLADE CHAPEL RD OVERPASS
OLD HWY 21 (GOLDMAN)	172.6	SR 2	172.6	OLD HWY 21 (GOLDMAN)
KLABLE RD OVERPASS	174.2	21 N 21 S	174.2	KLABLE RD OVERPASS
SCHENK RD OVERPASS	175.2	OR OU	175.2	SCHENK RD OVERPASS
HEADS CREEK	176.4	불불	176.4	HEADS CREEK
RT MM	177.7	NORTHBOUND SOUTHBOUND	177.7	RT MM
W. FOUR RIDGE RD OVERPASS	179	JND JND	179	W. FOUR RIDGE RD OVERPASS
OLD HWY 21 (SHADY VALLEY)	180.4		180.4	OLD HWY 21 (SHADY VALLEY)
OLD HWY 21 UNDERPASS	182		182	OLD HWY 21 UNDERPASS
WEST ROCK CREEK RD OVERPASS	182.8		182.8	WEST ROCK CREEK RD OVERPASS
OLD HWY 21 OVERPASS	183.2		183.2	OLD HWY 21 OVERPASS
LONDELL RD	184.2		184.2	LONDELL RD
OLD HWY 21	184.5		184.5	OLD HWY 21
SR 141	185.6		185.6	SR 141



