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Provide Outstanding
Customer Service \& Deliver
Transportation Services of Great Value

## FREEWAY MANAGEMENT

Operate a Reliable and
Convenient Transportation
System
Use Resources Wisely \&
Advance Economic
Development

## WORK ZONE

MANAGEMENT
Keep Roads and Bridges in
Good Condition

## INCIDENT MANAGEMENT 18-41

Keep Customers and
Ourselves Safe


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

July thru August 2017 Grand Total and Average

Delay cost: Total \$21,074,678 Hours of delay Person-hours: $967,353 \mathrm{~h} \mathrm{14m}$ Vehicle hours: 789,676h 6 m

Vehicle Miles traveled (VMT) Total: 2,158,723,580 miles Passenger: 1,942,851,222 miles Commercial: $215,872,358$ miles Delay per VMT: 0.0219 mins $/ \mathrm{mile}$

## July thru August 2018 Grand Total and Average

Delay cost:
Total \$20,812,971
Hours of delay
Person-hours: 955,340h 32m
Vehicle hours: 779,869h 49m

Vehicle Miles traveled (VMT)
Total: 2,193,742,842 miles Passenger: $1,974,368,558$ miles Commercial: 219,374,284 miles Delay per VMT: 0.0213 mins/mile


## Most Significant Impact Events

|  | Planned Event |
| :--- | :--- |
| Date: 7-9 | Location: Southbound I-270 at Dorsett <br> Event Detail: Stage 3 with all traffic moved to the SB lanes. Additional travel times up to 15 minutes during non-peak hours |
| Location: Westbound I-70 at I-64  <br> Event Detail: Tractor trailer load of batteries shifted and spilled battery acid  <br> Date: 7-13  |  |

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## EXECUTIVE SUMMARY

ST. LOUIS DISTRICT ■ QUARTERLY REGIONAL MOBILITY REPORT ■ JUNE / JULY / AUGUST 2018

Top 5 Congestion Locations / June - August 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 | $\qquad$ | Average Daily Duration | Total Duration |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | EB I-64 @ I-44/I-55/US40 | 55,372.73 | 1.32 | 6h 49 m | 26d 3h 23m |
| 2 | SBI-270 @ MO100 Manchester Road | 29,653.49 | 1.39 | 3h 41m | 14d 02h 54m |
| 3 | WB I-64 @ Clayton Ave / Oakland Ave | 24,370.33 | 2.28 | 1h 59m | 7d 15h 55m |
| 4 | EB I-64 @ Big Bend Boulevard | 23,539.35 | 3.05 | 1h 18m | 4d 23h 52m |
| 5 | WB US 40 @ I-70 (Wentzville) | 20,742.96 | 2.66 | 1h 25 m | 5d 11h 0m |


|  | Congestion Locations 2018 | *Base <br> Impact | Average Queue Length Miles | Average Daily Duration | Total Duration |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | WB US 40 @ I-70 (Wentzville) | 35,838.63 | 2.72 | 2h 20 m | 8d 23h 52m |
| 2 | WB I-64 @ Clayton Ave / Oakland Ave | 26,164.83 | 2.32 | 1h 59m | 7d 15h 38m |
| 3 | SB I-270 @ Dorsett Road | 25,412.28 | 1.31 | 3h 30m | 13d 10h 3m |
| 4 | WB I-44 @ US 50 Exit 247 | 22,840.92 | 3.17 | 1h 16m | 4d 21h 26 m |
| 5 | EB I-64 @ Big Bend Boulevard | 21,331.30 | 3.05 | 1h 15m | 4d 19h 58m |

Average Incident Duration Comparison / 2017 vs. 2018

| MonthAverage Incident Duration <br> (Minutes : Seconds) | 2018 |  |  |
| :---: | :---: | :---: | :---: |
|  | Lane Clearance | 2017 | $22: 18$ |
| July | Lane Clearance | $24: 43$ | $24: 55$ |
| August | Lane Clearance | $29: 30$ | $26: 01$ |
| June | Incident Clearance | $26: 41$ | $27: 14$ |
| July | Incident Clearance | $28: 35$ | $25: 35$ |
| August | Incident Clearance | $34: 24$ | $30: 34$ |

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## DECREASE in Overall AM Mobility

AM Peak Mobility June/July/August 2017 vs 2018 *

( $40-80 \%$ of free-flow speed
$\square>80-70 \%$ of free-flow speed
$\square<60 \%$ of free-flow speed

Regional \% of free-flow speed hourly breakdown**:

|  | $\underline{2017}$ |  | $\underline{2018}$ |
| :--- | :--- | :--- | :--- |
| 6 AM | $\underline{100 \%}$ | $\rightarrow$ | $100 \%$ |
| 7 AM | $97.7 \%$ | $\rightarrow$ | $95.9 \%$ |
| 8 AM | $96.5 \%$ | $\rightarrow 95.7 \%$ |  |
| 9 AM | $100 \%$ | $\rightarrow$ | $99.9 \%$ |

## 2018

* 8am hour shown
**Regional \% of free-flow speed is the averaged \% of free-flow speeds for all directions of all freeways within the St. Louis District. This provides a high-level measurement of overall regional mobility for each peak hour.


## FREEWAY MANAGEME <br> ST. LOUIS DISTRICT ■ QUARTERLY REGIONAL MOBILITY REPORT ■ JUNE / JULY / AUGUST 2018

## Highlighted Corridor AM Summary

I-270
I-255/l-55 to Riverview

Comparing AM June/July/August 2017 vs 2018

AM NB/EB l-270 Overall Mobility DECREASED 2017 - 2018
AM WB/SB I-270 Overall Mobility DECREASED 2017 - 2018

## Active Work Zones During Report Period

- SB I-270 between I-70 and Dorsett, 3 lanes (Bridge Rehabilitation at Fee Fee Creek)
- NB I-270 between I-70 and Dorsett, 3 lanes (Bridge Rehabilitation at Fee Fee Creek)
- NB I-270 at McKelvey, 1 lane (McKelvey Bridge Painting)


## AM 2017 NB/EB I-270

NB/EB I-270 between I-55/I-255 and Riverview Dr.
Averaged by 2 minutes for June 2017 through August 2017 (Every weekday)


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## FREEWAY MANAGENLD

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## AM 2018 NB/EB I-270

NB/EB I-270 between I-55/l-255 and Riverview Dr.
Averaged by 2 minutes for June 2018 through August 2018 (Every weekday)


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## AM 2017 WB/SB I-270

WB I-270 between Riverview Dr. and MO-180 and SB I-270 between I-55/I-255 and I-70
Averaged by 2 minutes for June 2017 through August 2017 (Every weekday)


## AM 2018 WB/SB I-270

WB I-270 between Riverview Dr. and MO-180 and SB I-270 between I-55/I-255 and I-70
Averaged by 2 minutes for June 2018 through August 2018 (Every weekday)
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## INCREASE in Overall PM Mobility

PM Peak Mobility June/July/August 2017 vs 2018 *
$>80 \%$ of free-flow speed70-80\% of free-flow speed
60-70\% of free-flow speed< 60\% of free-flow speed

Regional \% of free-flow speed hourly breakdown**:

|  | $\underline{2017}$ | $\underline{2018}$ |
| :--- | :--- | :--- |
| 3 PM | $\underline{95.6 \%} \rightarrow$ | $94.9 \%$ |
| 4 PM | $87.6 \%$ | $\rightarrow 88.6 \%$ |
| 5 PM | $85.2 \%$ | $\rightarrow 86.4 \%$ |
| 6 PM | $98.6 \%$ | $\rightarrow$ |

* 5pm hour shown
**Regional \% of free-flow speed is the averaged \% of free-flow speeds for all directions of all freeways within the St. Louis District. This provides a high-level measurement of overall regional mobility for each peak hour.


## Highlighted Corridor PM Summary

> I-270

## I-255/I-55 to Riverview

## Comparing PM June/July/August 2017 vs 2018

```
PM NB/EB I-270 Overall Mobility INCREASED 2017 >- 2018, but
    mobility DECREASED during the 3pm - 4pm hour for 2018.
```

PM WB/SB l-270 Overall Mobility INCREASED $2017 \boldsymbol{\rightarrow}$ 2018, but mobility DECREASED during the 2pm - 3pm hour for 2018.

## Active Work Zones During Report Period

- SB I-270 between I-70 and Dorsett, 3 lanes (Bridge Rehabilitation at Fee Fee Creek)
- NB I-270 between I-70 and Dorsett, 3 lanes (Bridge Rehabilitation at Fee Fee Creek)
- NB I-270 at McKelvey, 1 lane (McKelvey Bridge Painting)

FREEWAY MANAGENE논
ST. LOUIS DISTRICT ■ QUARTERLY REGIONAL MOBILITY REPORT ■ JUNE / JULY / AUGUST 2018
PM 2017 NB/EB I-270
NB/EB I-270 between I-55/I-255 and Riverview Dr. Averaged by 2 minutes for June 2017 through August 2017 (Every weekday)


Congestion (\%)

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## PM 2018 NB/EB I-270

NB/EB I-270 between I-55/I-255 and Riverview Dr.


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PM 2017 WB/SB I-270
WB I-270 between Riverview Dr. and MO-180 and SB I-270 between I-55/I-255 and I-70
Averaged by 2 minutes for June 2017 through August 2017 (Every weekday)


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## FREEWAY MANAGEMI2

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## PM 2018 WB/SB I-270

WB I-270 between Riverview Dr. and MO-180 and SB I-270 between I-55/I-255 and I-70
Averaged by 2 minutes for June 2018 through August 2018 (Every weekday)


## WORK ZONE MANAGEMENT

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TMC Observed Work Zones

|  | June 2018 | July 2018 | August 2018 |
| :---: | :---: | :---: | :---: |
| Level of Travel Time <br> Impact | Number of <br> Work Zones | Number of <br> Work Zones | Number of <br> Work Zones |
| Major Impact | 1 | 1 | 0 |
| Moderate Impact | 2 | 2 | 0 |
| Minor Impact | 222 | 204 | 211 |
| Total | 225 | 207 | 211 |

SL Mobility Rating:

- Jun 2018: 94\%
- Jul 2018: 92\%
- Aug 2018: 93\%

SL Visibility levels:

- Jun 2018: 91\%
- Jul 2018: 91\%
- Aug 2018: 94\%


## Additional Travel Time Impacts through Work Zones

Major Impact (15 Minutes or Above):
Moderate Impact (10-14 Minutes): $\qquad$
(6/5) Eastbound I-64 at $14^{\text {th }}$ Street (Bridge work)

- Bridge work with one Eastbound lane closed
- All mitigation efforts were in use
- RITIS data recorded additional travel times up to 29 minutes during non-peak hours
(7/9) Southbound I-270 at Dorsett
- Stage 3 with all traffic moved to the Southbound lanes
- All mitigation efforts were in use
- RITIS data recorded additional travel times up to 15 minutes during non-peak hours INCIDENT MANAGEMENT
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|  | Incident occurs | Incident reported | Arrival on scene | On-scene response | All travel lanes open | All responders have left the scene | Traffic conditions return to normal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Detection |  |  |  |  |  |  |  |
| $\frac{5}{2}$ | Notification <br> Terminology, Verification, Dispatch |  |  |  |  |  |  |
|  | Arrival <br> Size-Up, Vehicle Positioning |  |  |  |  |  |  |
|  | Response Activities <br> Scene Safety, Command Responsibilities, Traffic Management, Special Conditions |  |  |  |  |  |  |
|  | Clearance \& Termination |  |  |  |  |  |  |
|  | Recovery |  |  |  |  |  |  |

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June / July / August 2018 Incidents Summary


- Average Time for Backup to Clear = T6 - T4
$■$ Average Time to Clear Incident from Lanes = T4 - T1

Total Number of Incidents: / June: 974 / July: 902 / August: 990

Total Number of Lane Blocking Incidents


Major Impact Incidents
June July August
(1)
(3)
(3)

Fatal Incidents June July August
(5) (2)
(6)

Tractor Trailer Incidents June July August (51) (54) (58)

Lane Blocking Incidents by Freeway June, July, August 2018

| Interstate | Month | Number of Incidents | Average Time to Clear Incident <br> from Lanes <br> T4-T1 | Average Time for <br> Backup to Clear $=$ T6 <br> T4 | Freeway Miles |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

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2017-2018 Number of Incidents and Time to Clear Lanes
Time to Clear Lanes



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| 2018 Tractor Trailer Incidents by Route |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2018 | I-44 | I-55 | I-64 | I-70 | I-170 | I-255/I-270 | $\begin{gathered} \text { Route } \\ 364 \end{gathered}$ | 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 | 10 | 4 | 8 | 20 | 0 | 8 | 0 | 1 | 0 | 51 |
| Jul | 14 | 6 | 9 | 13 | 1 | 7 | 0 | 2 | 2 | 54 |
| Aug | 13 | 6 | 4 | 16 | 1 | 14 | 0 | 1 | 3 | 58 |
| Sep |  |  |  |  |  |  |  |  |  |  |
| Oct |  |  |  |  |  |  |  |  |  |  |
| Nov |  |  |  |  |  |  |  |  |  |  |
| Dec |  |  |  |  |  |  |  |  |  |  |


| Yearly Total | 85 | 38 | 42 | 113 | 6 | 81 | 0 | 7 | 13 | 385 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

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June 2018 - August 2018 Tractor Trailer Incidents Map


January 2018 - August 2018 Tractor Trailer Incidents Map


| Incidents over Two Hours June / July / August 2018 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \# | Date \& Time | Day of Week | Route | Location | Description | Duration HH/MM |
| 1 | 6/1/2018 23:49 | Friday | I-270 WB | PAST W FLORISSANT AVE | Three-vehicle fatal crash with reconstruction | 3:52 |
| 2 | 6/9/2018 13:27 | Saturday | I-170 NB | AT PAGE AVE | Rocks and mud debris on roadway | 2:26 |
| 3 | 6/12/2018 4:48 | Tuesday | I-44 WB | PAST ARSENAL ST | Stalled tractor trailer with flat tire | 2:03 |
| 4 | 6/13/2018 4:25 | Wednesday | I-70 EB | PAST TUCKER BLVD | Stalled tractor trailer with trailer on its side | 2:04 |
| 5 | 6/13/2018 15:18 | Wednesday | 44 LP | OSAGE ST CST | Railcar lost a wheel and overturned on roadway | 2:16 |
| 6 | 6/14/2018 17:58 | Thursday | W WATSON RD CST | CULVER HILL DR CST | Tree in roadway with live wires underneath | 9:38 |
| 7 | 6/15/2018 9:30 | Friday | I-55 SB | AT I-255 | Tractor trailer lost its shipping container | 2:20 |
| 8 | 6/17/2018 11:58 | Sunday | I-64 WB | AT MISSOURI RIVER | Multi-vehicle fatal crash | 3:42 |
| 9 | 6/21/2018 6:31 | Thursday | I-55 NB | AT POTOMAC ST | Pedestrian struck resulting in a fatality | 2:15 |
| 10 | 6/23/2018 11:29 | Saturday | I-44 WB | ON RAMP FROM ANTIRE RD | Gravel and wet sand debris in roadway | 2:40 |
| 11 | 6/23/2018 17:16 | Saturday | MACKENZIE RD CRD | HEEGE RD CRD | Utility cut patched by Emergency Response | 2:36 |
| 12 | 6/23/2018 22:26 | Saturday | 47 MO | AD RT | Two-vehicle fatal rollover crash with reconstruction | 2:47 |
| 13 | 6/24/2018 3:19 | Sunday | I-44 WB | AT BIG BEND BLVD | Two-vehicle crash with a delay in tow recovery | 2:44 |
| 14 | 6/24/2018 6:22 | Sunday | I-44 WB | AT ELM AVE | Crash reconstruction event | 2:42 |
| 15 | 6/24/2018 9:01 | Sunday | I-64 EB | BEFORE KINGSHIGHWAY BLVD | Stalled truck with a delay in tow recovery | 2:47 |
| 16 | 6/25/2018 11:37 | Monday | I-44 EB | AT ANTIRE RD | Single-vehicle tractor trailer crash; cargo of 23 crates of grapes off-loaded | 6:11 |
| 17 | 6/26/2018 19:14 | Tuesday | I-255 EB | ON RAMP FROM TELEGRAPH RD | Two-vehicle crash with debris and mud on road | 2:25 |
| 18 | 6/28/2018 6:26 | Thursday | 61 US | P RT | Two-vehicle double fatal crash | 3:38 |
| 19 | 6/28/2018 20:57 | Thursday | ADELAIDE AVE CST | HALL ST CST | Roadway light knocked down in roadway | 2:45 |
| 20 | 6/29/2018 20:39 | Friday | I-70 WB | BEFORE ROUTE T/W | Two-vehicle overturned tractor trailer crash | 2:49 |
| 21 | 7/5/2018 3:15 | Thursday | I-64 EB | AT I-44 | Pedestrian fatally struck walking WB in EB lanes across Mississippi River bridge | 4:24 |

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## Guinder

| \# | Date \& Time | Day of Week | Route | Location | Description | Duration HH/MM |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 22 | 7/8/2018 23:17 | Sunday | I-270 WB | AT RIVERVIEW DR | Single-vehicle fatal crash with reconstruction | 3:45 |
| 23 | 7/10/2018 15:23 | Tuesday | MO 370 WB | AT MO 94 | Two-vehicle crash involving an overturned dump truck that lost a load of dirt | 3:03 |
| 24 | 7/13/2018 15:29 | Friday | I-70 WB | AT I-64 | Tractor trailer load of batteries shifted and spilled battery acid on roadway | 6:40 |
| 25 | 7/17/2018 0:12 | Tuesday | WATSON RD CST | TRIANON LN CRD | Police investigation | 3:03 |
| 26 | 7/25/2018 14:50 | Wednesday | I-64 EB | AT 6TH ST | Oversize load struck overhead structure | 4:00 |
| 27 | 7/26/2018 9:33 | Thursday | I-64 WB | BEFORE I-170 | Overturned non-hazardous tanker crash | 2:32 |
| 28 | 7/30/2018 1:43 | Monday | I-64 WB | PAST RESEARCH PARK CIR | Overturned tractor trailer crash | 3:50 |
| 29 | 7/30/2018 21:00 | Monday | US 67 NB | AT TROTTER WAY | Single vehicle crash into pedestrian pedestal | 3:08 |
| 30 | 7/31/2018 23:53 | Tuesday | I-44 EB | PAST I-64 | Single vehicle crash with state damage | 2:14 |
| 31 | 8/1/2018 16:38 | Wednesday | I-270 SB | PAST ST CHARLES ROCK RD | Two-vehicle crash with air ambulance rescue | 3:24 |
| 32 | 8/3/2018 14:29 | Friday | I-44 EB | BEFORE MADISON | Overturned dump truck with spilled debris | 2:04 |
| 33 | 8/4/2018 7:45 | Saturday | I-44 WB | PAST ARSENAL ST | Stalled tractor trailer leaking paint | 2:29 |
| 34 | 8/5/2018 2:29 | Sunday | I-270 SB | AT PAGE AVE | Pedestrian fatally struck | 3:50 |
| 35 | 8/7/2018 15:46 | Tuesday | US 67 SB | AT HUNTLEIGH DR | Water main break with pavement buckled | 2:09 |
| 36 | 8/7/2018 15:48 | Tuesday | US 67 NB | AT HUNTLEIGH DR | Emergency vehicles for water main break | 2:00 |
| 37 | 8/8/2018 10:45 | Wednesday | I-44 WB | AT MO 141 | Tractor trailer fire with cargo that was off-loaded | 5:13 |
| 38 | 8/8/2018 23:19 | Wednesday | I-70 EB | PAST HANLEY RD | TMA struck with injuries | 2:22 |
| 39 | 8/10/2018 11:14 | Friday | I-70 EB EXPRESS LANES | AT W FLORISSANT AVE | Single vehicle crash with towing problems | 2:22 |
| 40 | 8/10/2018 13:06 | Friday | I-70 EB | AT ZUMBEHL RD | Single vehicle crash Hot dog scraps spilled on road | 2:13 |
| 41 | 8/10/2018 20:02 | Friday | MANCHESTER RD | TOWER GROVE AVE CST | Very large pothole | 3:45 |
| 42 | 8/13/2018 8:05 | Monday | MANCHESTER RD | BIG BEND RD CST | Tractor trailer crash into power lines | 6:43 |
| 43 | 8/13/2018 9:08 | Monday | I-270 EB/WB | AT MISSISSIPPI RIVER | Jumper on bridge | 2:04 |
| 44 | 8/14/2018 22:39 | Tuesday | I-44 EB | BEFORE MURDOCH AVE | Tractor trailer fire with cargo melted together | 9:05 |


| \# | Date \& Time | Day of Week | Route | Location | Description | Duration HH/MM |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 45 | 8/15/2018 7:58 | Wednesday | 231 MO | DENACRE DR CRD | Two-vehicle fatal crash | 3:42 |
| 46 | 8/15/2018 15:30 | Wednesday | I-55 SB | AT BUTLER HILL RD | Tractor trailer crash | 2:25 |
| 47 | 8/15/2018 20:22 | Wednesday | I-44 EB | TO I-55 SB | Single- vehicle fatal crash with ejection | 2:57 |
| 48 | 8/19/2018 22:19 | Sunday | I-270 EB | TO WEST FLORISSANT AVE | Car hauler fire | 4:33 |
| 49 | 8/20/2018 10:43 | Monday | I-44 WB | ON RAMP FROM I-64 WB | Tractor trailer stalled | 2:27 |
| 50 | 8/21/2018 23:39 | Tuesday | I-44 WB | AT MO 100 | Three-vehicle fatal crash | 8:44 |
| 51 | 8/24/2018 7:29 | Friday | 180 MO | NORMANDY DR CST | Three-vehicle fatal crash | 3:47 |
| 52 | 8/24/2018 14:34 | Friday | I-55 NB | TO ROUTE M | Police chase and investigation | 2:33 |
| 53 | 8/24/2018 15:02 | Friday | I-255 EB | PAST KOCH RD | Jumper on bridge | 2:10 |
| 54 | 8/26/2018 14:31 | Sunday | ROUTE 367 NB | BEFORE PARKER RD | Three-vehicle crash involving an RV | 2:30 |
| 55 | 8/28/2018 13:47 | Tuesday | I-55 SB | BEFORE US 61 | Two-vehicle crash / tractor trailer off roadway | 2:10 |
| 56 | 8/29/2018 6:08 | Wednesday | I-270 EB | TO NEW HALLS FERRY RD | Bus went wrong way up the ramp and got stuck | 2:34 |
| 57 | 8/29/2018 12:51 | Wednesday | I-44 EB | AT REST AREA | Two-vehicle crash with overturned tractor trailer | 3:14 |
| 58 | 8/30/2018 8:43 | Thursday | MO 370 WB | PAST MO 141 | 50 gallons of hydraulic fluid spilled on roadway | 3:47 |
| 59 | 8/31/2018 9:04 | Friday | I-270 SB | BEFORE TESSON FERRY RD | Water main break | 2:58 |
| 60 | 8/31/2018 19:24 | Friday | MO 30 EB | PAST OLD GRAVOIS RD | Double fatal crash motorcycle vs. van | 4:15 |

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## INCIDENT MANAGEMENT

June/July/August 2018 Incidents with Mobility Impact Map

! Denotes Location of Major Impact Traffic Incidents

## Major Impact Traffic Incidents and Mitigation

## 6/21/2018 (Thursday)

- Time: 6:31 am - 8:46 am ***Fatal***
- Location: St. Louis City - Northbound I-55 at Potomac
- Event Type: Single Vehicle Accident involving a pedestrian
- Estimated Initial Impact: Rush Hour: 4 of 4 Northbound travel lanes affected equals (=) $100 \%$
- Incident Details: Passenger vehicle struck pedestrian while victim was filling a pickup truck's fuel tank with a portable container. Victim pronounced on scene.
- Action Taken: TMC confirmed incident via CCTV. St. Louis City PD was already on scene with a single right lane closed. ER was dispatched to the scene. Once St. Louis City Fire arrived, police began to close all lanes. The TMC then called PD to learn the details of the incident and more ER personnel were dispatched to the scene to set up a detour onto the 4500 S Broadway exit. Accident reconstruction crew arrived on scene at 6:46 am. TMC operators entered event into ATMS, activated appropriate DMS boards and notifications were made to MoDOT Communications, EOC, Motor Carrier Services and Area Engineer. A MoDOT traffic signal engineer was on site at the TMC and adjusted signals at the detour, as well as coordinated with St Louis City Signals via telephone. Signal was changed from 60 second cycle length to 100 second cycle length detour plan 74 for both l-55 at 4500 Broadway northbound and southbound. When it was noticed that the ramp phase was not getting enough time, I-55 at 4500 Broadway northbound was put into manual free override and max time for the northbound off-ramp was changed from 30 seconds to 80 seconds. I- 55 at 4500 Broadway southbound mainline Broadway was changed from 60 to 40 and the southbound off-ramp was changed from 30 to 20 . Timing plans changed for I-55 at Carondelet and l-55 at Loughborough from a 90 second cycle length to 120 second cycle length detour plan 74. At 8:45 am, the signals were changed back to normal timing. Traffic queued 4.5 miles. Lengthy event time was due to accident reconstruction.
- Event Duration: 2 hours and 15 minutes

|  | Northbound l-55 at Potomac | Left Shoulder | Lane 1 | Lane 2 | Lane 3 | Lane 4 | Right Shoulder |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Closed Hours/Minutes | 2:12 | 2:12 | 2:12 | 2:13 | 2:15 | 2:15 |

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## Major Impact Traffic Incidents and Mitigation

## 7/10/2018 (Tuesday)

- Time: 3:23 pm-6:06 pm
- Location: St. Charles County - Westbound MO 370 at MO 94
- Event Type: Two-vehicle crash with injuries
- Estimated Initial Impact: Rush Hour: 2 of 3 travel lanes affected equals (=) $66 \%$
- Incident Details: Overturned dump truck and passenger vehicle had 2 right lanes closed at the on ramp from MO 94. Dump truck had a full load of dirt.
- Action Taken: TMC confirmed incident via CCTV. St. Charles City PD was already on scene with 2 right lanes closed and ER was dispatched arriving shortly after St. Charles City Fire and EMS. Messaging was activated on MO 370, I-270 and MO 141 for one lane traffic. TMC contacted St. Charles City PD and asked if they could close the on-ramp from MO 94 before another incident occurred and they complied. It took two heavy tows to get the dump truck up righted. The dump truck company sent a crew and loader to clean the highway. Incident page was sent. Traffic queued 4.5 miles. Lengthy event time was due to difficulty up righting the dump truck and clearing dirt from highway.
- Event Duration: 3 hours and 3 minutes

| $\mathbf{3 7 0}$ <br> Route 370 | Westbound MO 370 at <br> MO 94 | Lane 1 | Lane 2 | Lane 3 | Lane 4 | Right <br> Shoulder |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Closed Hours/Minutes | $0: 00$ | $2: 10$ | $2: 43$ | $2: 43$ | $2: 43$ |  |



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## Major Impact Traffic Incidents and Mitigation

## 7/13/2018 (Friday)

- Time: 3:29 pm-10:09 pm
- Location: St. Charles County - Westbound I-70 at I-64
- Event Type: Stalled tractor trailer with battery acid spill
- Estimated Initial Impact: Rush Hour: 3 of 3 travel lanes affected equals (=) $100 \%$
- Incident Details: Tractor Trailer carrying batteries suddenly stopped and the load shifted. As a result, batteries were damaged and battery acid began leaking out of trailer.
- Action Taken: TMC personnel spotted a full closure on Westbound I-70 before I-64. Wentzville PD arrived on scene and closed the highway until the Department of Natural Resources could arrive, assess and clean the battery acid. ER was dispatched. TMC personnel activated DMS boards within 3 minutes. Initially, only the closest boards were activated. The Wentzville Supervisor informed maintenance that TMA's and possibly materials to clean the acid would be needed. At that same time, Communications was notified, so they could try to warn motorists via Social Media. MSHP confirmed that they were contacting the Department of Natural Resources. At $3: 38 \mathrm{pm}$, more DMS were added, to give further advanced warning for motorists. At 3:40 pm TMC personnel pushed out the DMS board usage even further, advising motorists to use l-64, if possible. At $3: 45 \mathrm{pm}$, a floodgate was activated. Around this time, a detour was established (Northbound Route A to Southbound US 61 back down to Westbound I-70). PD put signals on flash at US 61 @ Route A, despite traffic engineers adjusting signals from the TMC. As ER arrived on the scene, they set up back at Route A. For several hours, there was very little change to the situation. Multiple DNR units arrived to help, but very little progress was made. At approximately 9:45 pm, the truck was drug off to a grassy field, past the interchange where DNR was able to neutralize the acid. When that was successful, all lanes were re-opened at 10:09 pm . The worst of the queue was observed at 10 miles on I-64 and 10 miles on I-70 ( 20 miles combined).
- Event Duration: 6 hours and 40 minutes

| INTERSTATE |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Clossorin |  |  |  |  |  |  |
| Closed Hours/Minutes | Westbound I-70 at <br> I-64 | Left <br> Shoulder | Lane 1 | Lane 2 | Lane 3 | Right <br> Shoulder |

 INCIDENT MANAGEMENT
ST. LOUIS DISTRICT ■ QUARTERLY REGIONAL MOBILITY REPORT ■ JUNE / JULY / AUGUST 2018

## Major Impact Traffic Incidents and Mitigation

## 7/25/2018 (Wednesday)

- Time: 2:50 pm - 6:50 pm
- Location: St. Louis City - Eastbound I-64 at $6^{\text {th }}$ Street
- Event Type: Oversized load struck overhead structure
- Estimated Initial Impact: Rush Hour: 2 of 2 travel lanes affected equals (=) 100\%
- Incident Details: Oversize/Overweight Tractor Trailer, carrying pipes and tubing became snagged on the underside of the double-deck overpass at 6th Street.
- Action Taken: ER notified TMC that the lane \#1 of I-64 was closed for an Oversize/Overweight Semi that was stuck under the overpass. One minute later, the lane \# 2 was also closed. TMC personnel activated appropriate DMS boards to advise motorists of the situation. Communications, EOC, Motor Carriers, AE, TE, Bridge Superintendent and Engineer, were advised. AE coordinated with PD to make Jefferson the alternate route. Lanes remained closed for the pipes to be cut down to remove vehicle. The bridge was inspected with no damage noted. All lanes were re-opened $6: 23$ pm with a 27 minute queue.
- Event Duration: 4 hours and 0 minutes


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## Major Impact Traffic Incidents and Mitigation

## 8/1/2018 (Wednesday)

- Time: $4: 38 \mathrm{pm}-8: 02 \mathrm{pm}$
- Location: St. Louis County - Southbound I-270 past St. Charles Rock Road
- Event Type: Two-vehicle crash
- Estimated Initial Impact: Rush Hour: 3 of 3 travel lanes affected equals (=) $100 \%$;
- Incident Details: Pickup rear-ended a tractor trailer hard enough to dislodge rear axle. Passenger of pickup injured requiring medical evacuation.
- Action Taken: TMC operator via CCTV saw police and fire arrive on scene for a vehicle crash blocking all lanes. The incident was entered into ATMS, messaging activated and four ER operators dispatched. Two operators were at the scene and two operators diverted traffic at the exit to St. Charles Rock Road. Messaging was on I-270, MO 370 and US 67 . The DMS at I -270 east of McDonnell was used to advise I-70 traffic to use Westbound MO 370. Arch Helicopter was dispatched to scene. EOC, MCS and communications were notified. Three tows were on scene to aid in separating and transporting vehicles. A traffic engineer adjusted signals for St. Charles Rock Road and MO 141. ER set up a work zone in the 2 right lanes for the tractor trailer and tows. The 2 left lanes were reopened at 7:30 pm with no queue remaining. All lanes reopened at 8:02 pm
- Event Duration: 3 hours and 24 minutes

|  | Westbound l-270 past <br> St. Charles Rock Road | $\begin{gathered} \text { Left } \\ \text { Shoulder } \end{gathered}$ | Lane 1 | Lane 2 | Lane 3 | Right Shoulder |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Closed Hours/Minutes |  | 2:49 | 2:49 | 2:48 | 3:24 | 3:24 |



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## Major Impact Traffic Incidents and Mitigation

## 8/13/2018 (Monday)

- Time: 9:08 am - 11:12 am
- Location: St. Louis City - Eastbound / Westbound I-270 at Mississippi River
- Event Type: Emergency Vehicles
- Estimated Initial Impact: Non- Rush Hour: 2 of 2 travel lanes affected equals (=) $100 \%$
- Incident Details: The TMC operators received a call from St. Louis City police about a pedestrian across the Chain of Rocks Bridge attempting suicide.

The TMC dispatched MoDOT ER to the scene.

- Action Taken: St. Louis City PD, Fire, IDOT and IL PD blocked lanes 1 and 2. ER and Olivette PD arrived on scene and started diverting traffic onto Riverview Drive. Traffic was diverted onto Riverview Drive and was able to take either Eastbound I-70 or county roads to Route 367 across to Illinois. Gateway Green Light Traffic Engineer was notified and began to adjust necessary signal timing for traffic. The EOC, Maintenance Superintendent, Communication Staff, Motor Carriers, and the MoDOT Incident Management Coordinator were all notified. The TMC messaged for the event and entered it into TMS to notify the public of the closure. An incident alert and updates were used to advise management of the closure. Traffic queued approximately $31 / 2$ miles for Eastbound I-270, unknown for Westbound I-270 into Illinois, but Eastbound returned to normal five minutes after all lanes were opened.
- Event Duration: 2 hours and 4 minutes

| 270 | Eastbound I-70 at <br> Mississippi River | Lane 1 | Lane 2 | Right <br> Shoulder |
| :---: | :---: | :---: | :---: | :---: |
| Closed Hours/Minutes | $2: 04$ | $1: 54$ | $2: 04$ |  |


| \|linirsine | Westbound I-70 at <br> Mississippi River | Lane 1 | Lane 2 | Right <br> Shoulder |
| :---: | :---: | :---: | :---: | :---: |
| Closed Hours/Minutes | $1: 57$ | $1: 57$ | $1: 57$ |  |



## Major Impact Traffic Incidents and Mitigation

## 8/21/2018 (Tuesday)

- Time: 11:39 pm-8:23 am ***Fatality ${ }^{* * *}$
- Location: Franklin County - Westbound I-44 before MO 100 W / Washington
- Event Type: Three-vehicle fatal crash
- Estimated Initial Impact: Non-Rush Hour: 2 of 2 travel lanes affected equals (=) $100 \%$
- Incident Details: TMC operators heard report of vehicle accident involving an overturned tractor trailer with a possible fatality over scanner. The accident involved two tractor trailers and one pickup. The overturned tractor trailer was directly under the Highway 100 overpass in a work zone.
- Action Taken: Confirmed incident on camera. MSHP, Franklin County PD, fire and ambulance were already on scene. Emergency Response dispatched and incident entered in ATMS, floodgate and appropriate boards activated and IMs sent. Incident Management Coordiantor, EOC, Community Relations, and WZ Coordinator were notified. ER responded and closed I-44, set out flares and diverted traffic off at Exit 253. Vehicles were just going up and over the highway so MSHP was contacted to block the on ramp. ER went to the exit ramp to help vehicles turn around. MSHP left after vehicles started going the wrong way up the on ramp. ER remained at the diversion point. When the queue became less visible to motorists they started to go up and over again causing near misses as cars were still going wrong way up the on ramp. Franklin County was contacted as MSHP said they had no cars. ER performed traffic control until PD arrived. Special Ops was on standby in Pacific for cleanup and were contacted to bring a TMA and light new flares to assist with traffic control. Gray Summit PD arrived around 2:32 am to help with traffic control. ER returned to the diversion point and relit flares. Three heavy tows responded to clear the scene. The passenger vehicle and the up righted tractor trailer moved to shoulder and the remaining trucks in queue were cleared. At 5 am maintenance and a CBB traffic engineer were notified. The traffic engineer set signals at the l-44@ MO 100/ Gray Summit interchange to pattern 87 to divert traffic off of Westbound I-44 onto MO 100. Timing for MO 100 @ Route AT was also adjusted slightly, putting a max recall on the Southbound Left from MO 100 onto Route AT to aid in getting diverted traffic from MO 100 back to Westbound I-44. Plans and timing changes were effective from 5:25 am- 8:30 am.
- Results: Some delay was incurred by traffic coming westbound on the South Outer Road of I-44, who likely diverted further upstream of the closure, as well as the eastbound off ramp traffic. Neither of these backups reached a point where it seemed timing changes were needed but it should be noted that a review of these plans may be of benefit should a future closure occur at the MO 100/Gray Summit interchange and Westbound I-44.
- Event Duration: 8 hours and 44 minutes


