

Incident Management

Overall, in June, there were 1358 incidents impacting traffic or in the lane, a slight decrease from June 2008. These incidents included stalls, crashes, abandoned vehicles and vehicle fires. In addition to the vehicle related incidents, the following significant incidents impacted traffic patterns.

1. **On July 3rd** – multiple crashes westbound I-270 during AM rush hour period impacted traffic from around Rte.367 to West Florissant Road.
2. **On July 3rd** - a major crash involving a tractor trailer on westbound I-64 at the Missouri River, closing the westbound lanes, impacted the PM rush hour period.
3. **On July 10th** – multiple crashes on southbound I-270 impacted traffic from I-64 to Rte.21 during the PM rush hour period.
4. **On July 15th** – a multiple fatal crash on eastbound I-64 approaching I-270, closing all lanes for several hours, caused delays for the region during the PM rush hour period.
5. **On July 21st** – during the AM and PM rush hour periods, a major police incident in Maplewood impacted our operations due to multiple I-64 Traffic Response trucks assisting with traffic control to secure the crime scene.
6. **On July 30th** – a crash involving a tractor trailer on westbound I-270 at McDonnell, closed all lanes, impacting traffic during PM rush hour period.

With traffic volumes relatively stabilized, incidents are the main contributing factor that impacts the freeways.

Freeway Management

A continuing concern that had been monitored was the northbound and southbound I-270 ramps to westbound I-64. Despite early efforts to reconfigure the ramps for additional ramp capacity, some motorists navigating the ramps were having difficulties. Further study of the vehicle counts was completed and the decision to reconfigure the ramps back to pre-closure status was done in mid May. Additional observations are showing that the queues for both northbound and southbound exits lanes have seen marginal changes. The southbound lanes experienced little to no impact, whereas the northbound ramp seems to be backing up slightly further, just south of the Clayton Road overpass.

The Variable Speed Limits (VSL) along I-270 and I-255 were fully functional since May 22, 2008. Although the VSLs have been utilized for both recurring and non-recurring congestion, the actual results on performance and impact of the VSL system is not yet available.

In general, however, traffic patterns have changed due to the onset of the summer season and other possible factors such as gas prices. The AM rush hour period has seen a decrease in volumes, where the PM rush hour period has not seen a noticeable change.

The following segments are a representation of the traffic volume changes and travel times during the AM and PM rush periods. Attached are detailed charts for each interstate. **Travel times remain relatively the same across the months. All increases in the average upper limit are attributed to incidents.**

Summary of Morning Rush Period:

Segment	Hourly Volume Change							Before	Jan	Feb	Mar	Apr	May	June	July
	Jan	Feb	Mar	April	May	June	July								
I-270 westbound at Chain of Rocks	30%	15%	30%	20%	10%	-20%	-25%	4099	5231	4694	5376	4876	4554	3253	3173
I-270 northbound from I-55 to I-44	10%	5%	5%	5%	10%	10%	10%	4620	4990	4989	4966	4876	5072	5160	5126
I-270 northbound from I-44 to I-64	25%	20%	20%	20%	15%	-5%	-15%	4778	5953	5800	5840	5652	5521	4348	4070
I-255 eastbound at Jefferson Barracks	80%	70%	75%	85%	85%	75%	85%	1088	1976	1856	1885	2853	2009	3292	2015
I-70 eastbound from I-270 to I-170	15%	10%	-5%	10%	-5%	45%	15%	3236	3759	3610	3049	3516	3064	4704	4669
I-70 eastbound from I-170 to downtown	-5%	-15%	-10%	0%	-5%	-10%	-20%	4421	4113	3780	3677	3976	4244	4086	3628
I-44 eastbound from I-270 to downtown	-20%	-20%	-25%	-25%	-15%	-10%	-15%	3590	2902	2948	2727	2703	3098	3222	3045

Travel Times														
Before	January		February		March		April		May		June		July	
10 min	9-11	min	10-13	min	9-13	min	9-13	min	9-13	min	9-11	min	9-11	min
6 min	6-10	min	6-10	min	6-16	min	6-13	min	6-14	min	6-7	min	6	min
7 min	7-9	min	7-10	min	7-10	min	7-10	min	7-10	min	7-9	min	7-8	min
4 min	4	min	4	min	4	min	4	min	4	min	4	min	4	min
4 min	4	min	4-5	min	4	min	4	min	4	min	4	min	4	min
11 min	11-16	min	11-23	min	11-15	min	10-14	min	10-13	min	11-14	min	11-17	min
16 min	14	min	14-15	min	14-16	min	14-15	min	14	min	14	min	14	min

Summary of Evening Rush Period:

Segment	Hourly Volume Change							Before	Jan	Feb	Mar	Apr	May	June	July
	Jan	Feb	Mar	April	May	June	July								
I-270 eastbound at Chain of Rocks	40%	30%	40%	30%	50%	45%	45%	4398	6148	6082	6034	5764	6518	4983	6281
I-270 southbound from I-64 to I-44	5%	5%	-5%	0%	10%	10%	5%	5366	5629	5053	5230	5256	5799	5618	5638
I-255 eastbound at Jefferson Barracks	-45%	-45%	-40%	0%	-35%	-40%	-45%	2693	1548	1459	1557	2545	1801	1631	1530
I-70 westbound from I-270 to I-170	60%	60%	60%	50%	45%	40%	-15%	2875	5043	5005	5093	4745	4583	4425	4358
I-70 westbound from I-170 to downtown	-20%	-20%	-10%	0%	-35%	-30%	-35%	5357	4409	4198	4128	4297	3555	3630	3489
I-44 westbound from I-270 to downtown	20%	15%	10%	15%	20%	20%	20%	3992	4674	4616	4455	4560	4876	4796	4732

Travel Times														
Before	January		February		March		April		May		June		July	
12 min	12-22	min	13-28	min	12-29	min	12-30	min	12-20	min	12-19	min	12-19	min
9 min	7-19	min	7-23	min	7-26	min	7-23	min	7-21	min	7-24	min	7-22	min
4 min	4	min	4	min	4	min	4	min	4	min	4	min	4	min
4 min	4	min	4-6	min	4-6	min	4-6	min	4	min	4	min	4	min
12 min	11-18	min	11-21	min	11-15	min	11-14	min	11-13	min	11-15	min	11-12	min
16 min	14-16	min	14-16	min	14-25	min	14-16	min	14	min	14-16	min	14	min

I-70 Reversible Lanes

The reversible lanes on I-70 have traditionally operated in the EB direction during the AM hours, and in the WB direction during the PM hours. Their operation was switched on January 8th to mitigate significant travel delays in the WB direction during the AM peak, and in the EB direction during the PM peak. On holidays and snow events, the Reversible Lanes are set in the eastbound direction.

Conclusions:

- Westbound AM volume was 3004 vehicles higher than Eastbound AM volume, an average of 750 vehicles per each hour during the peak rush period.
- Eastbound PM volume was 878 vehicles higher than Westbound PM volume, an average of 220 vehicles per each hour during the peak rush period.
- A decrease in AM and PM volumes on I-70 compared to June 2008.

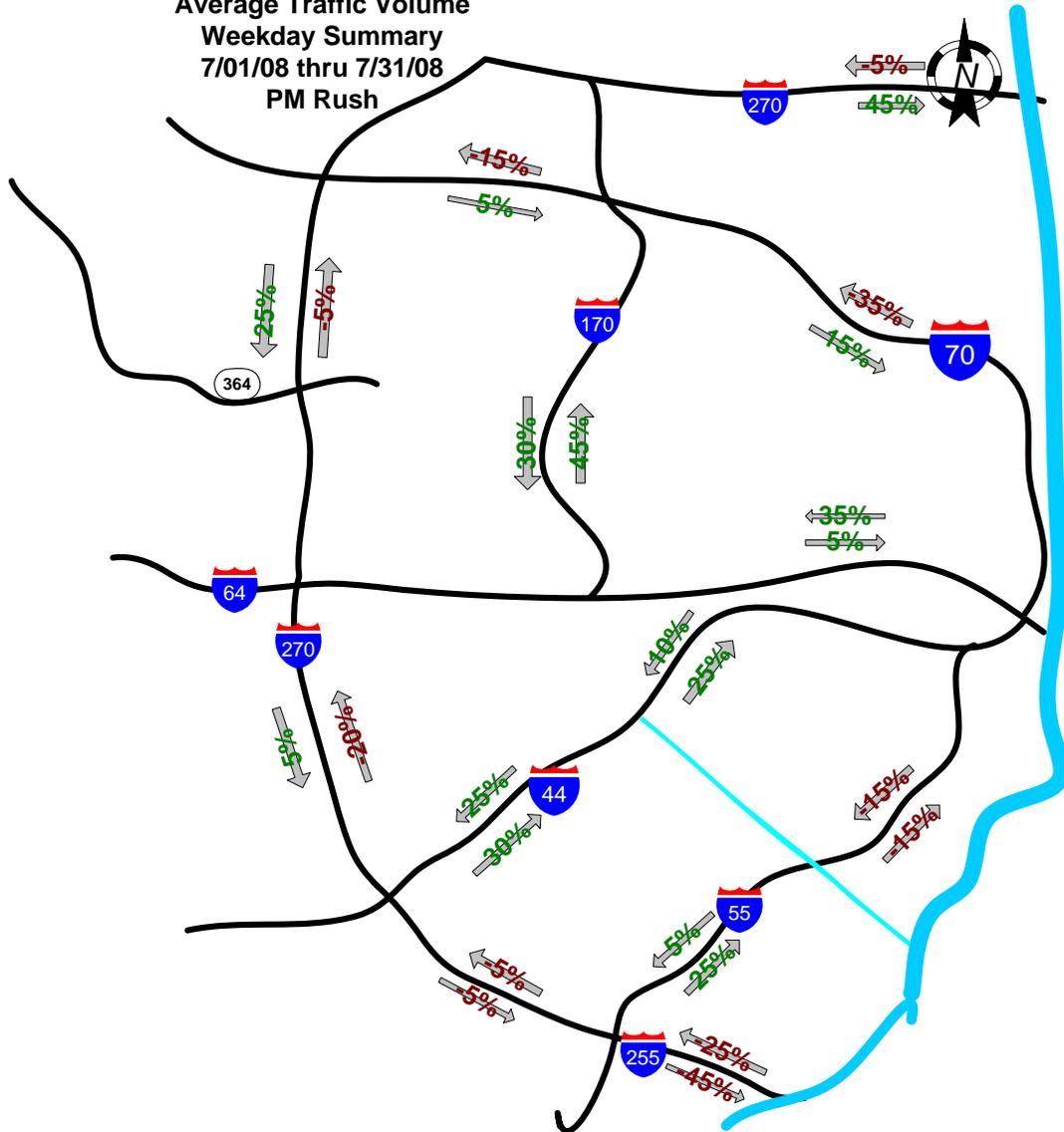
Please note that the volumes compared are totals for the four hour rush periods both in the AM and PM.

Regional Average Traffic Volume Comparisons

Following are map views of the Average Monthly Traffic Volumes (AM and PM Rush periods) compared to average baseline volumes from October 2007. The percentage change was derived using data from MoDOT sensors and Traffic.com sensors.

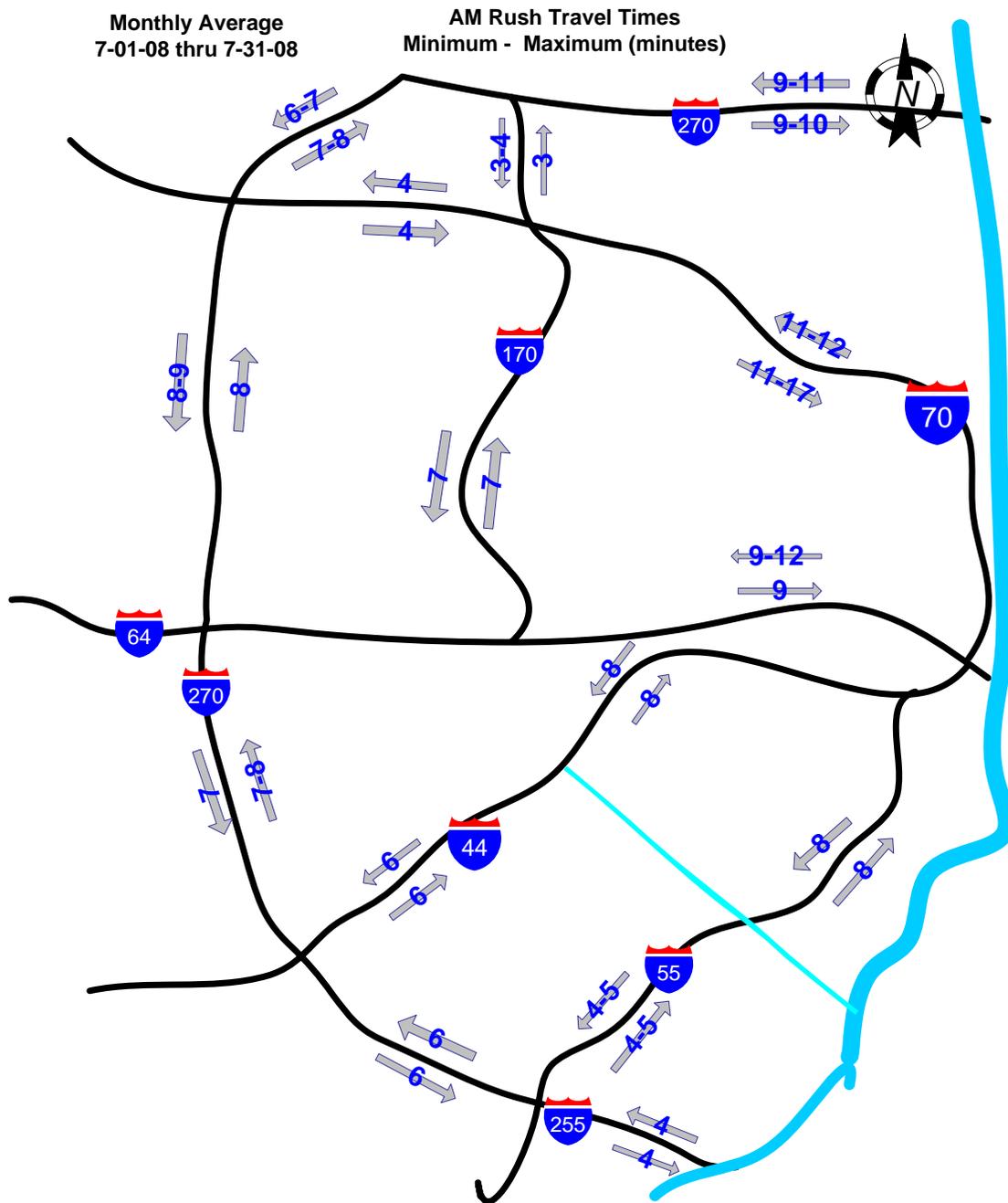


Average Traffic Volume
 Weekday Summary
 7/01/08 thru 7/31/08
 PM Rush



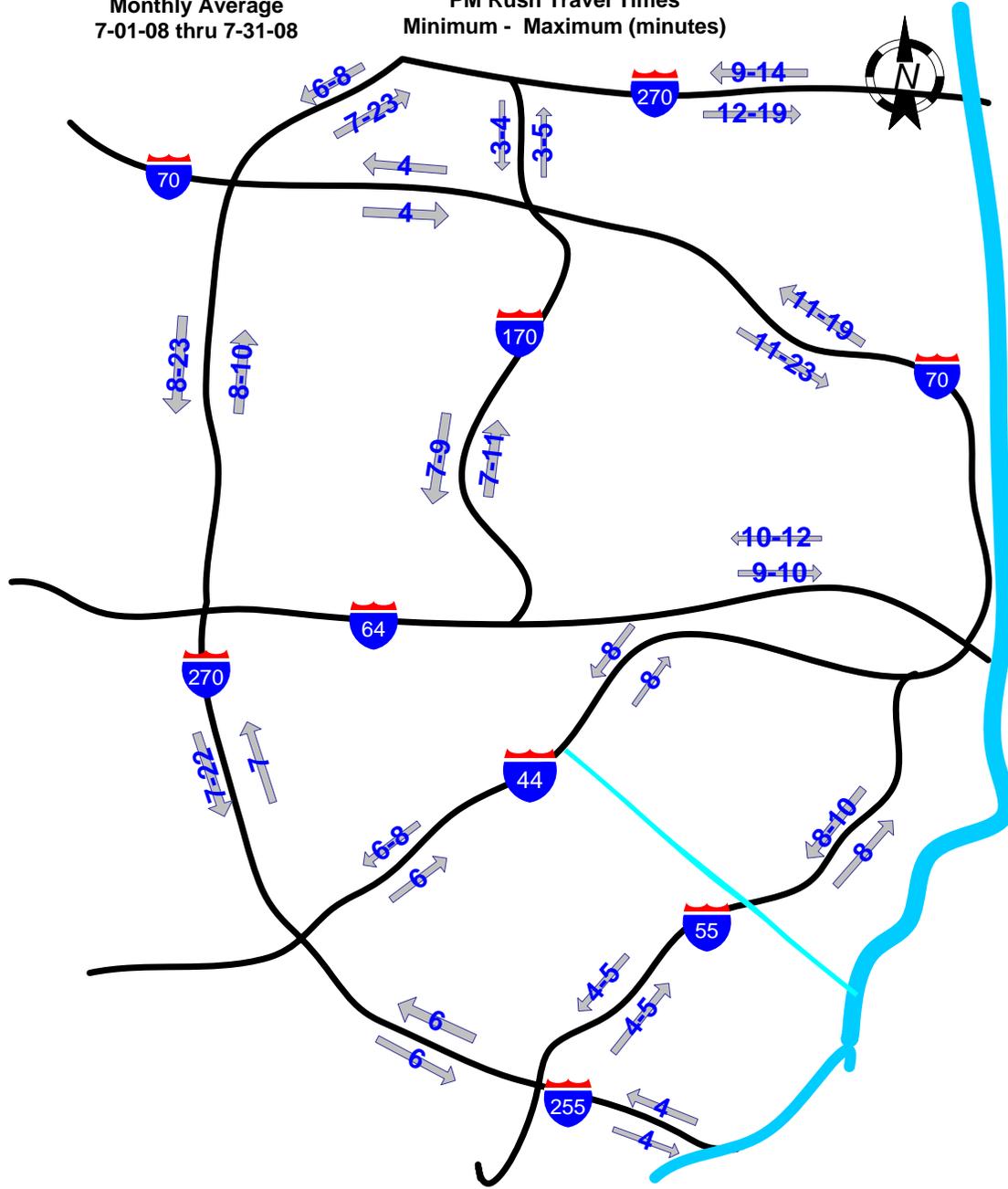
Regional Travel Times

Following are maps that depict the Average Travel Time experienced throughout the month of March. There is a map for the AM Rush Period and the PM Rush Period.



Monthly Average
7-01-08 thru 7-31-08

PM Rush Travel Times
Minimum - Maximum (minutes)



Arterials

The following segments are a representation of the traffic volume changes and travel times during the AM and PM rush periods. On the arterials, the peak travel times are from 7:30 – 8:30 during the AM peak and 4:30 to 5:30 during the PM peak.

Volumes

Summary of Morning Rush Period Volumes:			
Segment	Volume percent change	Peak Hr Vol	
		Before	July
Route 141 North of I-44	-10%	7400	6800
Page at Schuetz	10%	7300	8100
Olive at Ballas	60%	3100	5000
Manchester at Lindbergh	10%	3300	3600
Southbound Lindbergh at Manchester	350%	900	3100
Northbound Lindbergh at Manchester	-45%	2400	1100

Summary of Evening Rush Period Volumes:			
Segment	Volume percent change	Peak Hr Vol	
		Before	July
Route 141 North of I-44	-15%	8900	7600
Page at Schuetz	10%	8900	10100
Olive at Ballas	15%	6500	7600
Manchester at Lindbergh	15%	2600	3000
Southbound Lindbergh at Manchester	-55%	4300	1900
Northbound Lindbergh at Manchester	-70%	2300	700

Travel Times

Summary of Morning Rush Period Travel Times				
Segment	Travel Times at 7:30 AM		Travel Times at 6:30 AM	Time Saved by Shifting 1 hour
	Before	July	July	
	Route 141 – 44 to 40/64	14 min	13 min	11 min
Page – 270 to 170	13 min	12 min	10 min	2 min
Olive – 141 to 170	22 min	16 min	13 min	3 min
Manchester – 141 to Hanley	25 min	19 min	17 min	2 min
SB Lindbergh – 70 to 44	25 min	23 min	22 min	1 min
NB Lindbergh – 44 to 70	29 min	25 min	23 min	2 min

Summary of Evening Rush Period Travel Times				
Segment	Travel Times at 4:30 PM		Travel Times at 3:30 PM	Time Saved by Shifting 1 hour
	Before	July	July	
Route 141 – 40/64 to 44	19 min	13 min	12 min	1 min
Page – 170 to 270	13 min	10 min	8 min	2 min
Olive – 170 to 141	20 min	18 min	17 min	1 min
Manchester – Hanley to 141	39 min	25 min	23 min	2 min
SB Lindbergh – 44 to 70	33 min	24 min	23 min	1 min
NB Lindbergh – 70 to 44	29 min	26 min	24 min	2 min

St. Louis County Roads

Morning Rush Period

- Morning
 - Morning rush period is from 6:30 AM to 9:30 AM
 - Morning rush hour is from 8:00 AM to 9:00 AM
- **Clayton Road at Lay Road** – eastbound increased by 19% from 1,100 to 1,310 vehicles during the peak hour and westbound increased by 112% from 510 to 1,080 vehicles during the peak hour.
- **Ladue Road at Warson Road** – eastbound increased by 134% from 380 to 890 vehicles during the peak hour and westbound increased 77% from 450 to 795 vehicles during the peak hour.

Evening Rush Period

- Evening
 - Evening rush period is from 3:30 PM to 6:30 PM
 - Evening rush hour is from 5:00 PM to 6:00 PM
- **Clayton Road at Lay Road** – eastbound increased by 54% from 810 to 1,250 vehicles during the peak hour and westbound increased 49% from 930 to 1,385 vehicles during the peak hour.
- **Ladue Road at Warson Road** – eastbound increased by 46% from 570 to 835 vehicles during the peak hour and westbound increased by 98% from 410 to 810 vehicles during the peak hour.

24-hour volume changes

- **Clayton Road at I-270** - increased by 28% from 11,500 to 14,670 vehicles per day.
- **Clayton Road at Lay Road** - increased 104% from 15,660 to 31,940 vehicles per day.
- **Ladue Road at Warson Road** - increased by 100% from 11,100 to 22,160 vehicles per day.

NOTE: The differences between this summary and the summaries for January, February, March, April, May, and June were negligible.