

### Monitor Aggressively, Manage Proactively

#### GuidePost

- Early results of the I-270 additional lane impact on mobility are expected in January 2013
- AM Arterial mobility remained fairly stable for the seventh month in a row except for seasonal variances on Route's 100 and 30
- PM Peak shows a decline in mobility along Route 141 in both directions
- Freeway mobility remained varied with slight improvements along NB I-270 and declining continued low mobility along SB I-270 and EB/WB I-64/I-70
- Blanchette Bridge Project Traffic Summary is on pages 16-20
- Optimizations of Route D and Route 115 resulted in \$752,089 in annual fuel cost savings



An additional lane opened on Northbound I-270 between I-44 and Route 100 on December 19, 2012

#### Mobility Snapshot

Blanchette Area Avg. Incident Clearance Time

Month	Min:Sec
September	29:10
October	25:34
November	27:42
December	19:41



#### Freeway Mobility

Continued Decline Overall



#### Arterial Mobility

December 2011 → 1.74 min/mile avg.  
December 2012 → 1.74 min/mile avg.



#### Major Incidents

November: 5 → December: 7  
2012 Total → 65 Monthly Avg. → 5.4



#### Average Incident Duration Nov → Dec

Lane Clearance 27:11 → 28:11(mm:ss)



#### Major Impact Work Zones

November: 1 → December: 1



#### Moderate Impact Work Zones

November: 3 → December: 0



#### Mobility Comparison:

December 2011 → 2012

Increase in major impact work zones, Decrease in minor impact work zones, Major incidents increased, Arterial Mobility stable, Freeway mobility worsened – especially around the Blanchette Bridge.

#### ZONING IN

- 2011 vs. 2012 TMS Work Zone Comparison: December 2011: 328 December 2012: 392
- TMC observed work zones breakdown: 192
  - ◆ Major Impact on Travel: 1 – 0.5%
  - ◆ Moderate Impact on Travel: 0 – 0.0%
  - ◆ Minor Impact on Travel: 191 – 99.5%
- SL District Work Zone Inspections:
  - ◆ November 2012: 31%
  - ◆ December 2012: 38%
  - ◆ Goal: 50%
- SL District Mobility Rating:
  - ◆ November 2012: 98%
  - ◆ December 2012: 97%
  - ◆ Goal: 91%
- Visibility levels:
  - ◆ November 2012: 98%
  - ◆ December 2012: 95%
  - ◆ Goal: 91%
- Work zone crashes in December: 5

\*Impact Levels described in Data Key

TMC Observed Work Zones December 2012	
Level of Travel Time Impact	Number of Work Zones
Major Impact	1
Moderate Impact	0
Minor Impact	191
Total	192

**Major Impact (15 Minutes or Above Additional Travel Time)**

**12/14 (Friday) Overnight Westbound I-70 Mississippi River Bridge Project – Two Left Lanes**

- Setting Girders for the new Mississippi River Bridge
- Traffic was stopped for up to 15 minutes at various times past St. Louis Avenue
- Traffic queued to the McKinley Bridge
- All mitigation efforts were in full use during these closures

**Moderate Impact (10-14 Minutes Additional Travel Time)**

\*\*\*\* No Moderate Impacts\*\*\*\*

**Work Zone Related Crashes**

**12/4 (Tuesday) 8:13 AM Eastbound I-70 past Fifth Street -- All Lanes Closed**

- Total closure for Blanchette Bridge demolition
- Crash inside of the closed lane, no injuries or additional impact to traffic all lanes opened at 9:03 am
- Key personnel contacted, all work zone signage and mitigation efforts were in full use during this closure

**12/5 (Wednesday) 7:49 AM Eastbound I-70 at Earth City Expressway -- All Lanes Open**

- Minor two vehicle crash with Fire and EMS response no reported injuries
- Moved to the shoulder with all lanes open at 8:26 am
- Jim Connell notified and observed from the TMC
- Key personnel contacted, all work zone signage and mitigation efforts were in full use during this closure

**12/11 (Tuesday) 3:49 PM Westbound I-70 past Fifth Street -- Three Right Lanes Closed**

- Minor two vehicle crash moved to the shoulder with all lanes cleared at 3:58 pm
- No injuries reported
- Jim Connell notified
- Key personnel contacted, all work zone signage and mitigation efforts were in full use during this closure

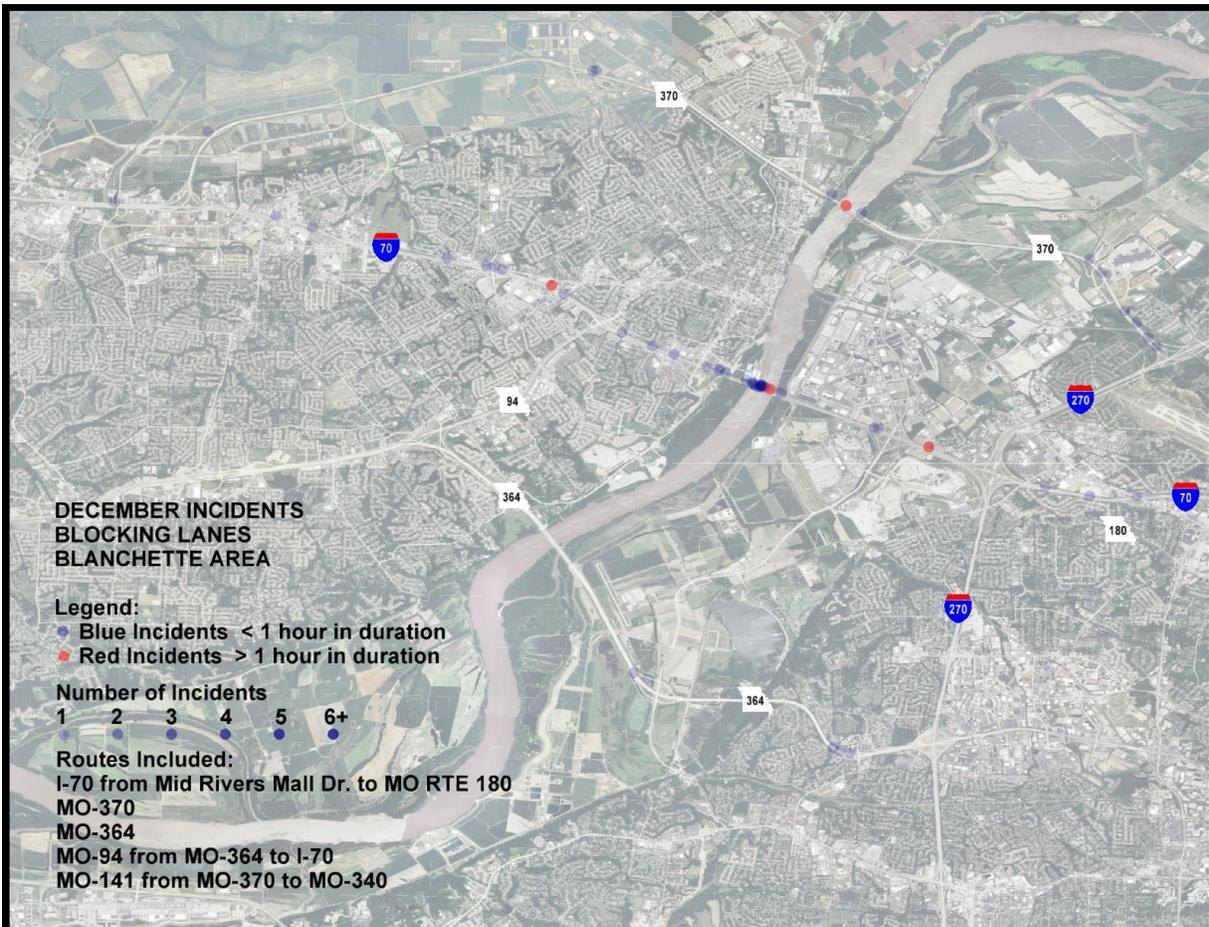
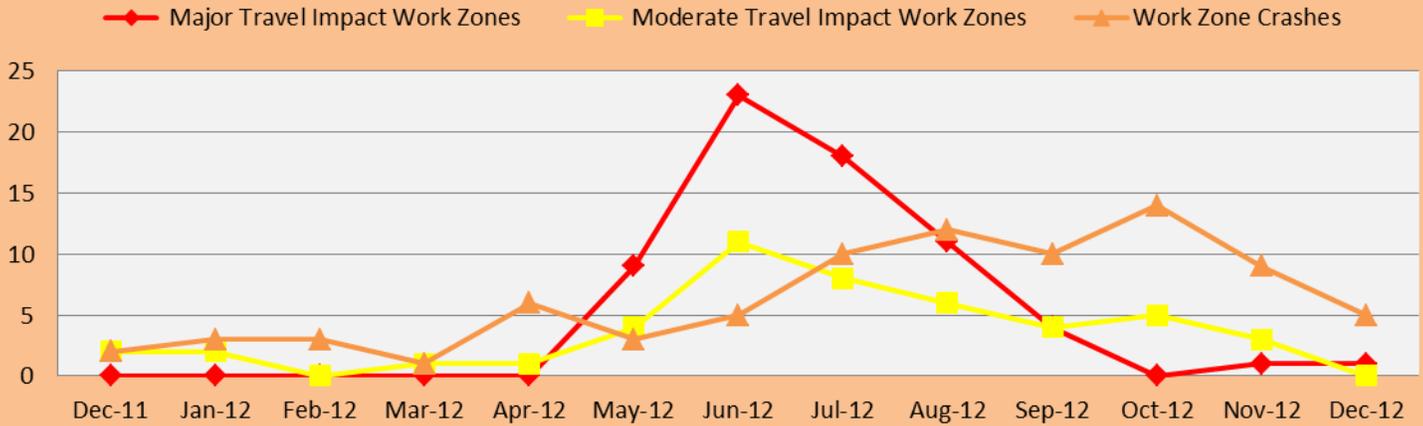
**12/15 (Saturday) 4:25 AM Westbound I-70 on Blanchette Bridge – All Lanes Open**

- Minor two vehicle crash on the Blanchette Bridge blocked the two right lanes
- No injuries or state damage reported, all lanes cleared at 5:07 am
- Key personnel contacted, all work zone signage and mitigation efforts were in full use during this closure

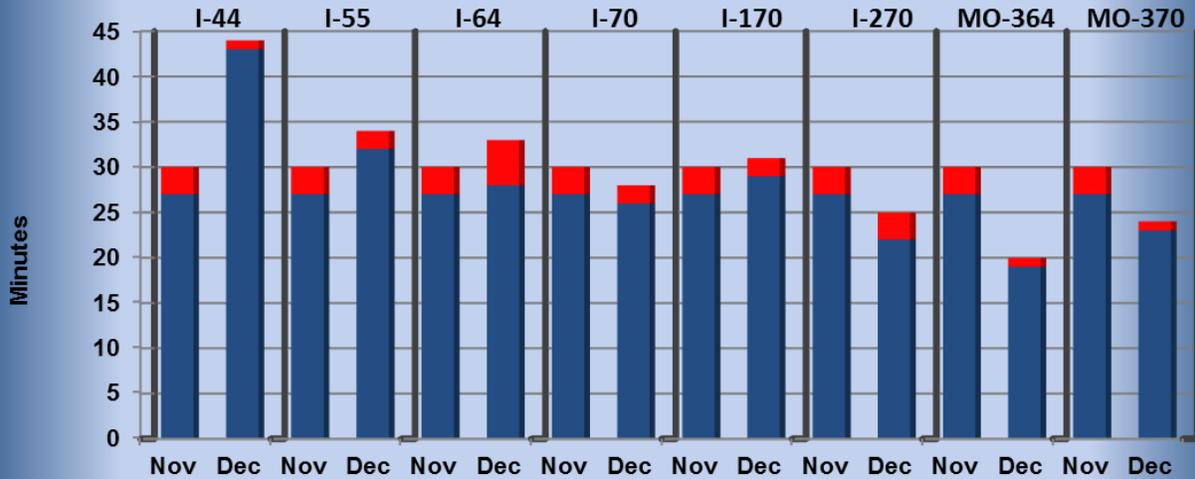
## 12/15 (Saturday) 7:30 AM Westbound I-70 past Broadway -- Two Left Lanes Closed

- Vehicles seen on camera backing up the I-70 Westbound ramp from the PSB to get to Memorial Drive exit
- St. Louis Police reported four minor incidents associated with this traffic backup
- All incidents were in the depressed section with no injuries
- Key personnel were contacted, all work zone signage and mitigation efforts were in full use during this closure

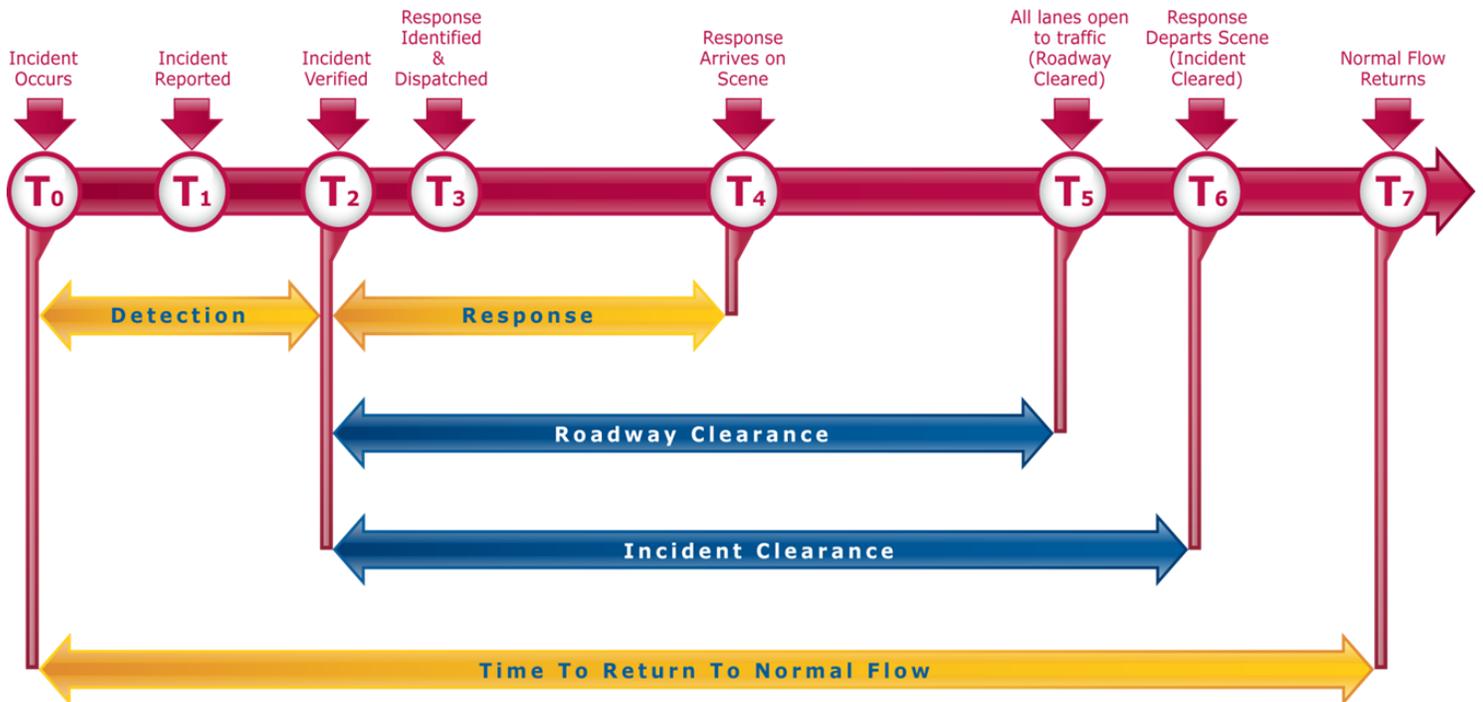
## Year to Date Work Zone History

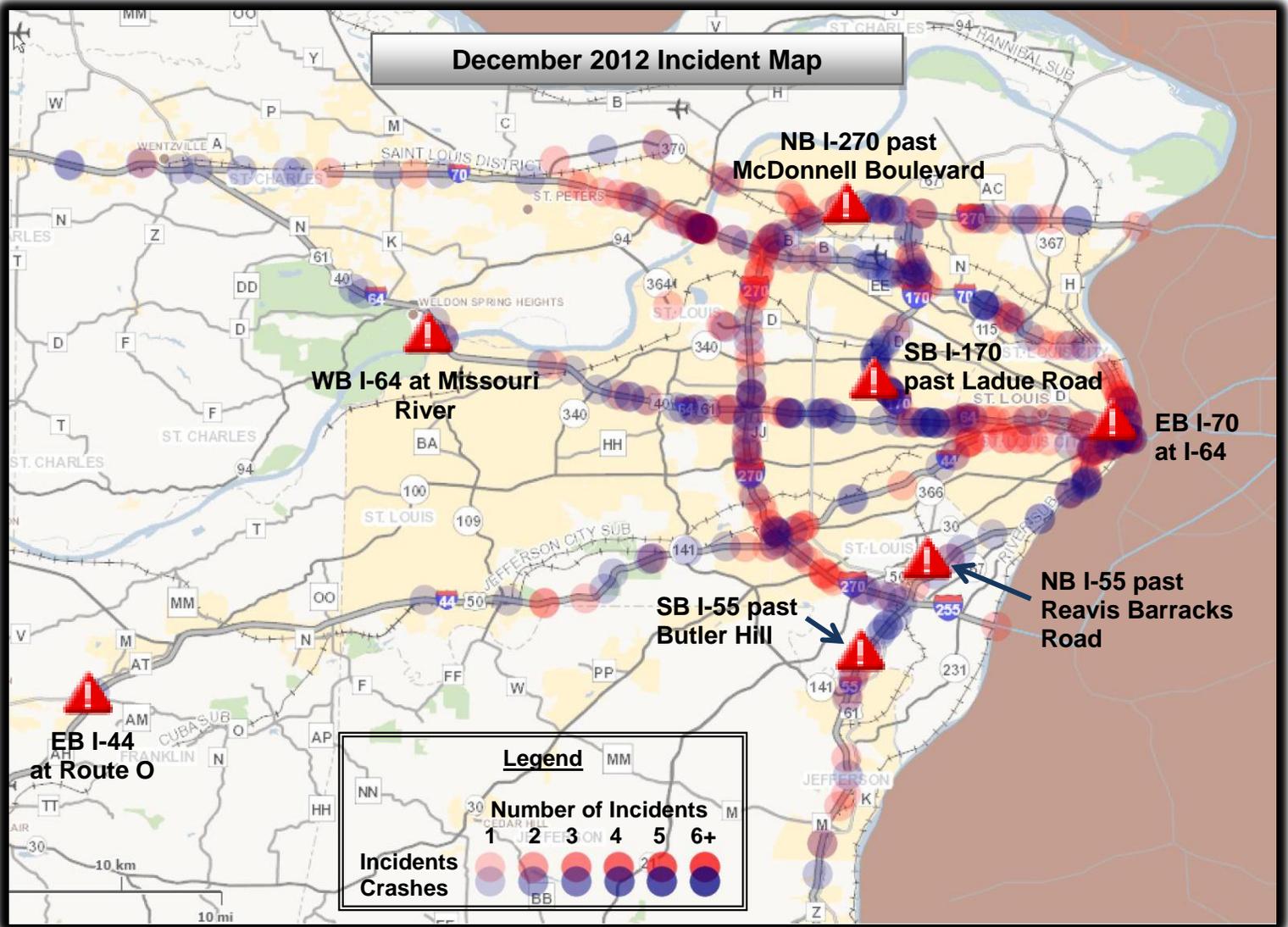


## November 2012 vs. December 2012 Incidents Summary



- Average Time for Backup to Clear =  $T_6 - T_5$
- Average Time to Clear Incident from Lanes =  $T_5 - T_2$





Interstate	Number of Incidents		
	October	November	December
I-70	116	143	109
I-270	93	73	105
I-64	69	70	87
I-55	58	48	49
I-44	47	44	47
I-170	30	22	29
Mo-370	10	23	13
Mo-364	1	6	4
<b>Total</b>	<b>415</b>	<b>429</b>	<b>443</b>

- Denotes Location of Major Impact Traffic Incidents
  - The incident details and mitigation actions along with the results are outlined on page 7
  - Please note that traffic engineering assumptions were made when describing the approximate number of vehicles and people impacted.
  - These estimates provide a simple method to describe the impact on the motoring public.

**Number of Major Impact Incidents**  
**November 2012 vs. December 2012**  
 5                      7

## Major Impact Traffic Incidents and Mitigation

### 12/5/12 (Wednesday)

- **Time:** 8:17 am – 10:39 am \*\*\*Rush Hour Event\*\*\*
- **Location:** St. Louis County - Southbound I-55 past Butler Hill Road
- **Event:** A crash involving a tractor trailer and a car
- **Action:** Transportation Management Center posted web-based and text message alerts, displayed advanced messaging on roadside message boards informing motorists of the crash and lane closures. MoDOT Emergency Response, St. Louis County Police, Mehlville Fire and EMS, and tow responded to the scene.
- **Estimated Initial Impact:** Blocked the right lane at 8:17 am
- **Result:** Two right lanes and right shoulder blocked at 8:22 am and remained closed until 10:39 am when all lanes were opened and the incident cleared without a queue.
- **Duration:** 2 hours 21 minutes

### 12/8/12 (Saturday)

- **Time:** 5:10 am – 3:24 pm \*\*\*Fatality\*\*\*
- **Location:** Franklin County - Eastbound I-44 at Route O
- **Event:** A fatal crash involving a Tractor Trailer and two cars led to multiple secondary crashes
- **Crash # 1 -** Tractor trailer hauling U.S. Mail ran off the road, hit the median guard cable steered back on the road and flipped the truck and trailer; the cab struck the right side guardrail. The driver was killed; the passenger crawled out of the cab and was able to walk. (Photo below)
- **Crash #2 -** Same location as above: car drives into overturned tractor trailer, driver was injured, no passengers.
- **Crash #3 -** Same location as above: SUV tries to avoid crashes #1 & 2, hits median guard cable and Tractor Trailer. Driver was injured, no passengers.
- **Crash #4-** Just west of lane closure for crash #2 (at/over Route 50) blocking right lane. A heavy duty tandem axle truck pulling trailer hauling equipment was involved. The truck struck the right guardrail, damaging the rail, trailer separated from truck. Non-injury secondary crash.
- **Action:** Transportation Management Center posted web-based and text message alerts, displayed advanced messaging on roadside message boards informing motorists of the closure. MoDOT Incident Management Coordinator, Emergency Responders were dispatched to the scene. US postal inspectors and employees, Grey Summit Maintenance, Fire, EMS, MSHP and tow responded to the scene.
- **Estimated Initial Impact:** Closed all lanes of Eastbound I-44 at Highway 50 with a queue of 4 to 5 miles with 2,640 vehicles and 3,170 motorists experiencing additional travel time and 34 vehicles per minute adding to the queue. Problems occurred while clearing the queue and were associated with the inability to turn double trailers around, all others backing to exit 247.
- **Result:** Interstate remained closed for accident reconstruction, cargo pickup of US mail, to upright overturned truck and removal of vehicles. Eastbound MO Route 30 was messaged as an alternate route. Mail cargo cleanup was completed at 11:30 am.
- **Duration:** 10 hours 14 minutes



## Major Impact Traffic Incidents and Mitigation

### 12/11/12 (Tuesday)

- **Time:** 7:40 pm – 10:07 pm
- **Location:** St. Charles County – Westbound I-64 at Missouri River
- **Event:** A crash of a tractor trailer on the Boone Bridge
- **Action:** Transportation Management Center posted web-based and text message alerts, displayed advanced messaging on roadside message boards informing motorists of the closure. MoDOT Emergency Responders, MoDOT Bridge Inspector, and electricians were dispatched to the scene. MSHP, tow responded to the scene.
- **Estimated Initial Impact:** Closed two westbound lanes of I-64. Undetermined damage to bridge with exposed wires and broken conduit and minor fluid spills from tractor trailer.
- **Result:** No structural or electrical damage to the bridge occurred. Minor damage on the railing identified. All fluid spills were cleaned up by MoDOT Emergency Responders. Traffic was backed up five miles with approximately 3,960 vehicles, 4,750 motorists experiencing additional travel time.
- **Duration:** 2 hours 27 minutes

### 12/13/12 (Thursday)

- **Time:** 4:11 am – 7:04 am
- **Location:** St. Louis County – Southbound I-170 past Ladue Road
- **Event:** A single vehicle crash with median wall damage
- **Action:** Transportation Management Center posted web-based and text message alerts, displayed advanced messaging on roadside message boards informing motorists of the closure. MoDOT Emergency Responders, Ballas and Normandy Maintenance personnel, Clayton Police and tow responded to the scene.
- **Estimated Initial Impact:** Damage occurred to a 28 foot section of the median wall closing the left lane and left shoulder. Traffic queued 1 mile to Delmar Boulevard.
- **Result:** Traffic was diverted onto Forest Park Parkway. Driver arrested for DWI, vehicle was towed. Temporary traffic control was established with a TMA and repairs to median wall took place.
- **Duration:** 2 hours 53 minutes

### 12/14/12 (Friday)

- **Time:** 5:37 pm – 7:41 pm
- **Location:** St. Louis City – Eastbound I-70 at I-64
- **Event:** A stalled tractor trailer caught fire waiting for a tow
- **Action:** Transportation Management Center posted web-based and text message alerts, displayed advanced messaging on roadside message boards informing motorists of the closure. MoDOT Emergency Responders, St. Louis City Police and Fire, and tow responded to the scene.
- **Estimated Initial Impact:** Right lane and right shoulder closed for emergency response
- **Result:** Right lane and right shoulder blocked for emergency response with additional travel times during event
- **Duration:** 2 hours 4 minutes

## Major Impact Traffic Incidents and Mitigation

### 12/18/12 (Tuesday)

- **Time:** 4:52 am – 7:13 am
- **Location:** St. Louis County – Northbound I-55 past Reavis Barracks
- **Event:** A single vehicle crash involving an SUV
- **Action:** Transportation Management Center posted web-based and text message alerts, displayed advanced messaging on roadside message boards informing motorists of the closure. MoDOT Emergency Responders, St. Louis County Police, MSHP, and tow responded to the scene.
- **Estimated Initial Impact:** Right lane and right shoulder closed for emergency response
- **Result:** Right lane and right shoulder blocked for emergency response with additional travel times during event
- **Duration:** 2 hours 20 minutes

### 12/18/12 (Tuesday)

- **Time:** 10:07 am – 3:14 pm **\*\*\*Fatality\*\*\***
- **Location:** St. Louis County – Northbound I-270 at McDonnell Boulevard
- **Event:** A multi-vehicle rear-end crash involving two cars and a tow vehicle
- **Action:** Transportation Management Center posted web-based and text message alerts, displayed advanced messaging on roadside message boards informing motorists of the closure. EOC and Motor Carriers were notified of total closure. MoDOT Emergency Responders, Hazelwood Police and Fire, Robertson Fire, Florissant EMS, MSHP, an accident reconstruction team and tow responded to the scene. The signals at I-270 eastbound ramps and McDonnell Boulevard were set to free operation and the left turn movement was placed on max recall with a green time of 60 seconds. The min times were also removed from the opposing thru movements on McDonnell. The signal at I-270 westbound ramps and McDonnell was also set to free operation. Motorist Assist personnel placed static “Incident Ahead” signs back to St. Charles Rock Road and worked with other responders to relieve traffic queue throughout the event.
- **Estimated Initial Impact:** I-270 Northbound was closed past the off-ramp to McDonnell Boulevard; therefore traffic was directed onto the off-ramp and across the intersection to the on-ramp to get back onto the highway. Two of the three left turn lanes were used to cross over the intersection, as there are no striped thru lanes here. Traffic backed up near MO 370 with adjusted timings in place.
- **Result:** All lanes closed at onset with traffic diverted up and over at McDonnell Boulevard. Effects of signal changes were minimal due to a police officer directing traffic for most of the closure. All lanes on I-270 closed at 11:03 am to start accident reconstruction and body removal. Right lane intermittently opened and closed during cleanup. Lanes opened one at a time until the accident was cleared. Signals were set back to normal timing plan at 3:07 pm. All lanes opened and incident cleared at 3:14 pm with no queue. The cumulative time with all lanes closed was 3 hours 30 minutes
- **Duration:** 5 hours 7 minutes

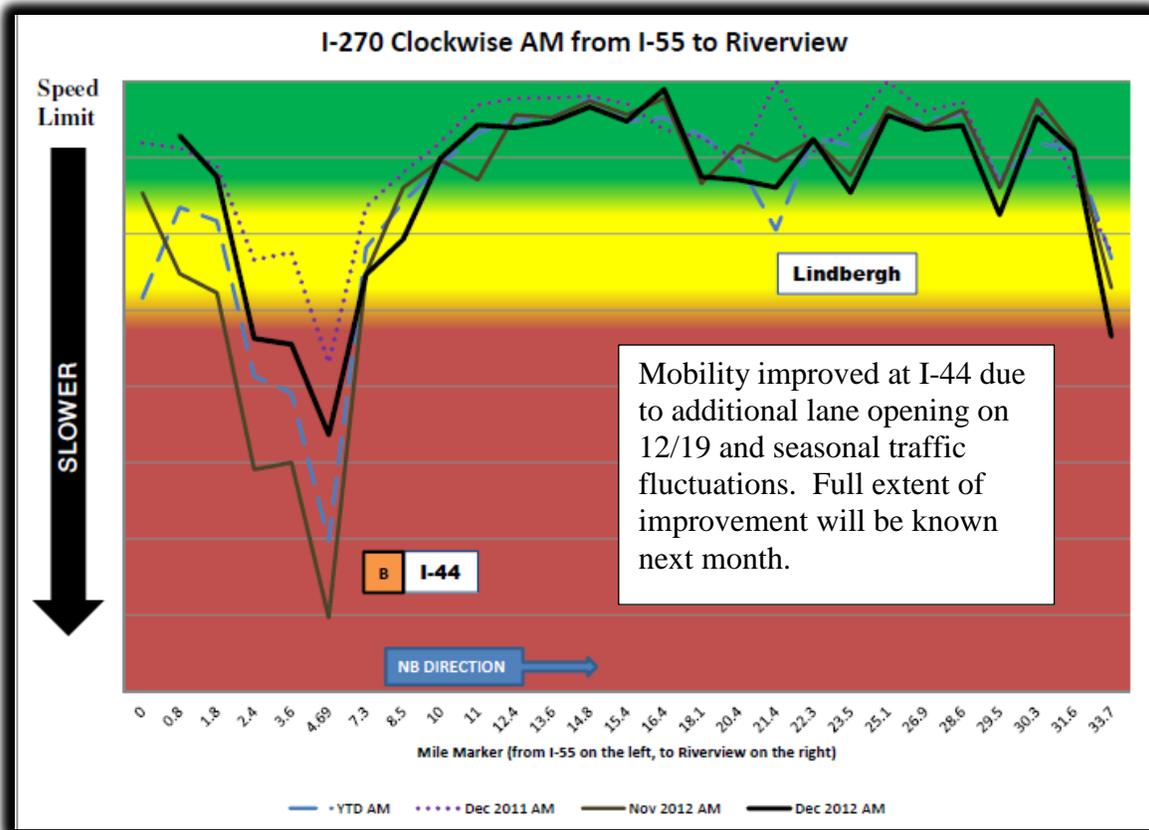
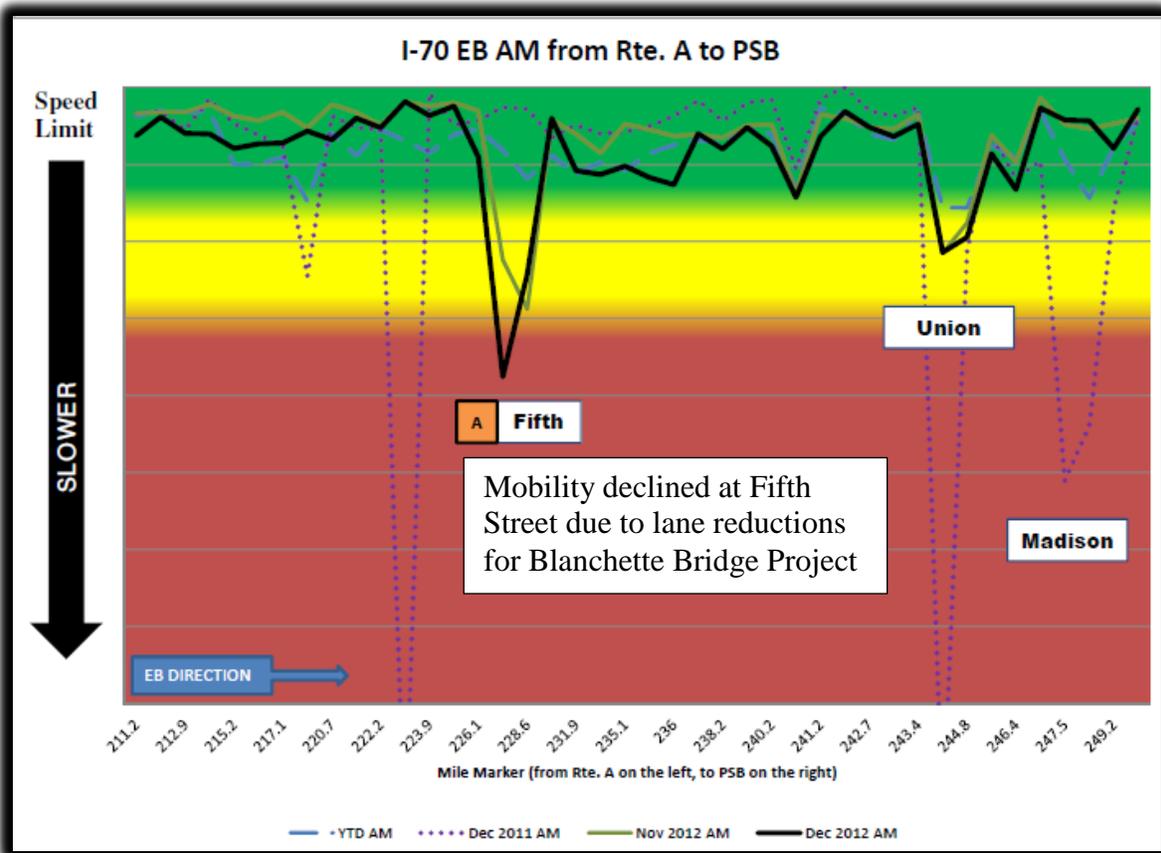
## High/Moderate Impact Traffic Mitigation Events

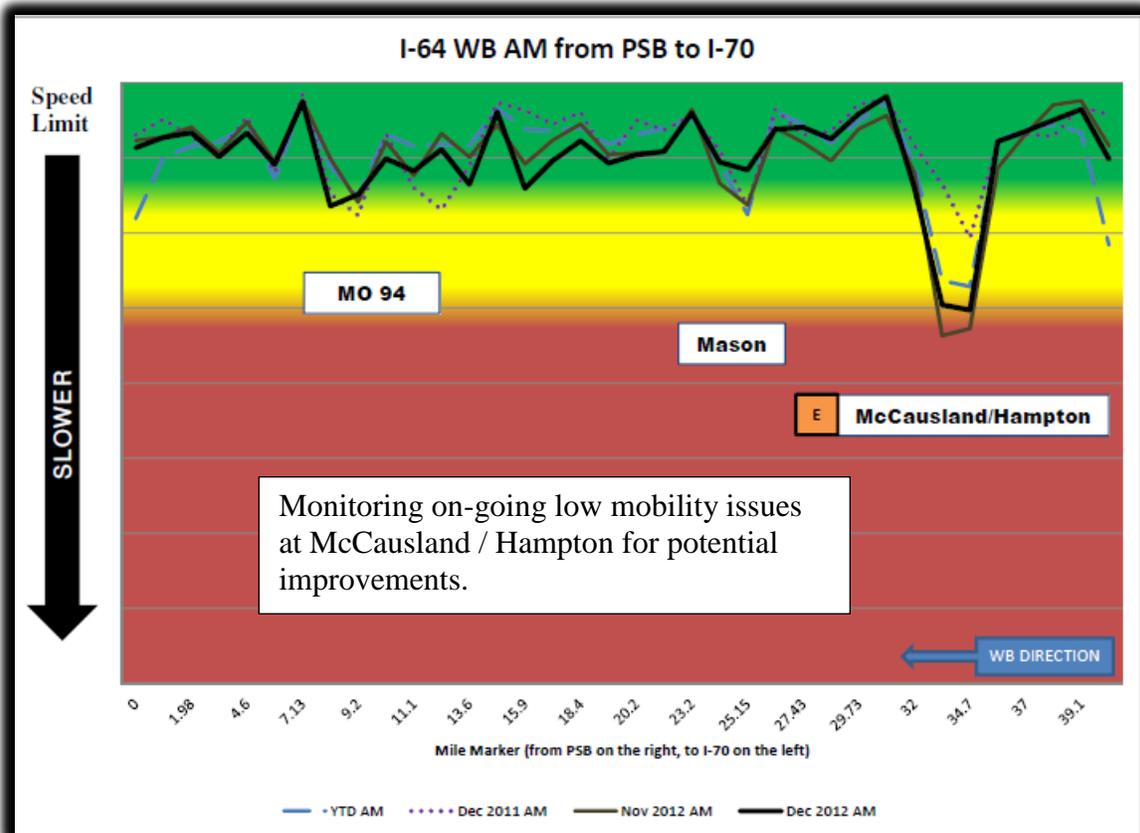
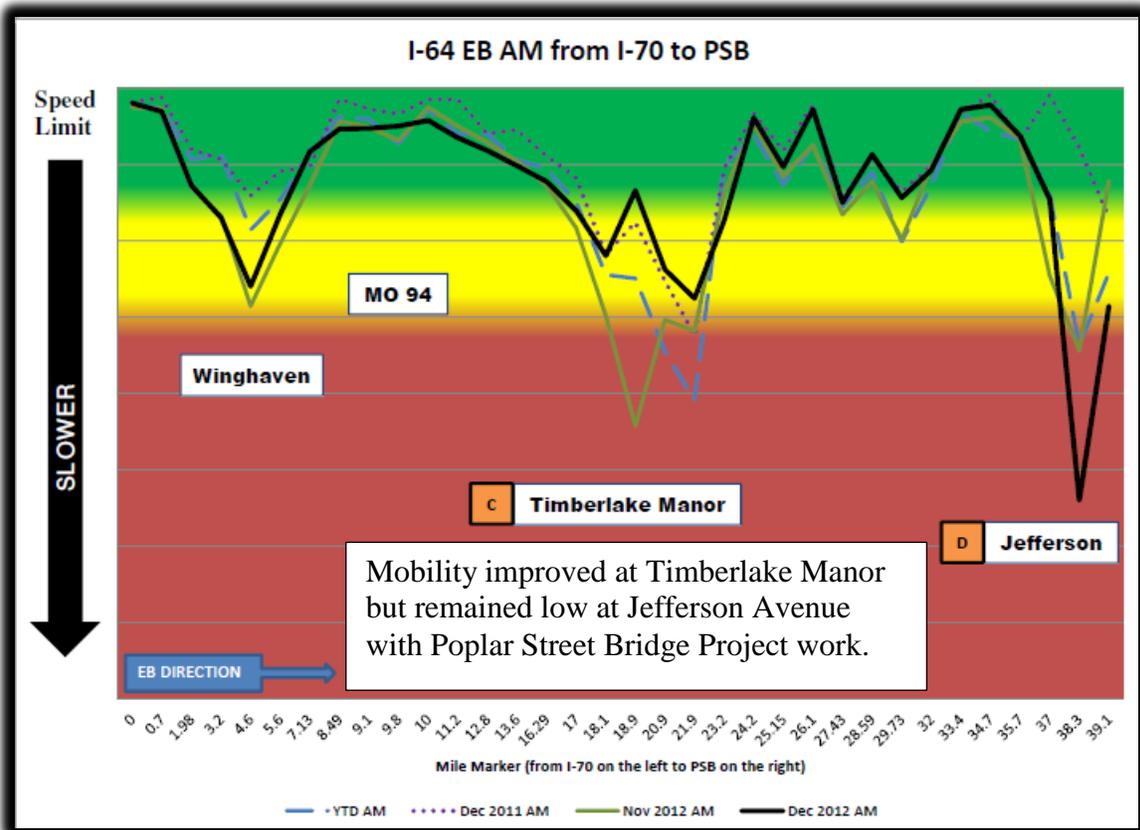
### 12/20/12 (Thursday) PM Rush

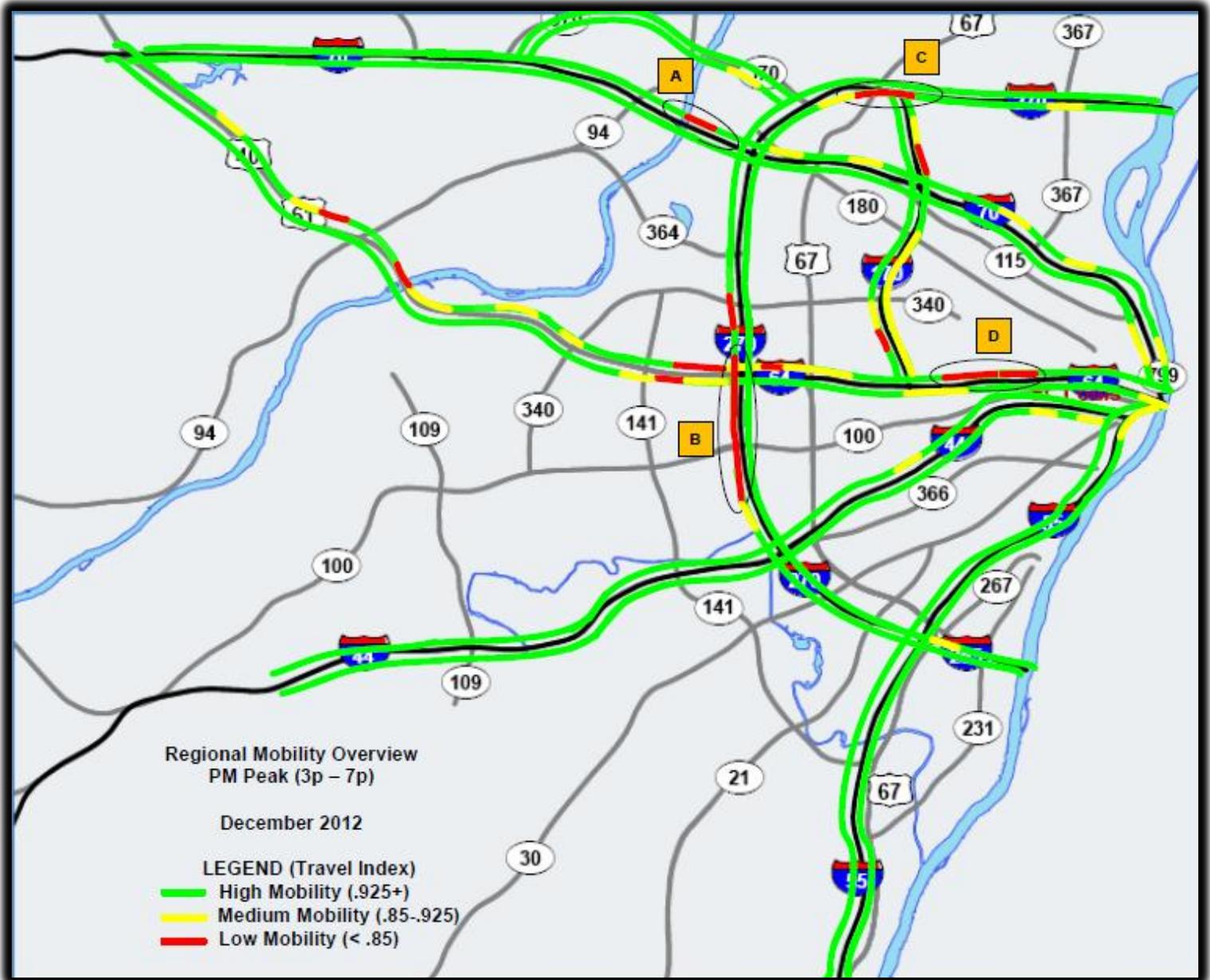
- **Time:** 4:00 pm – 7:37 pm \*\*\*Fatality\*\*\*
- **Location:** St. Louis County - Intersection of US 61 (Lindbergh) and US 21 (Tesson Ferry)
- **Event:** Fatal Crash resulting in full closure of US 61 east of the intersection of US 61/21
- **Action:** Multiple vehicle crash occurred in the eastbound lanes of Lindbergh east of the intersection of Lindbergh Boulevard and Tesson Ferry Road. The crash resulted in a full closure of the eastbound and westbound lanes of Lindbergh east of the intersection. Eastbound traffic on Lindbergh was advised to travel north or south on Tesson Ferry Road. Northbound Tesson Ferry traffic had to continue north on Tesson Ferry Road, unable to turn right onto Lindbergh. The signals at Tesson Ferry Road and Lindbergh Boulevard are an independent system and run in free mode. The max1 times were changed to give additional phase time to help clear the congestion.
- **Result:** The intersection became heavily congested. Queues were seen on southbound Tesson Ferry from Baptist Church Road intersection, northbound Tesson Ferry Road, and eastbound Lindbergh. The section of signals on Tesson Ferry Road south of the intersection, were running in a coordination system. It was determined not to change the timing for this section of signals because the side streets could become congested and there is no video feed to monitor these intersections. The change in max1 times at Tesson Ferry Road and Lindbergh Boulevard gave additional phase time to help clear the congestion. All max 1 times were changed back to normal operation at 7:02 pm.
- **Total Time:** 3 hour 37 minutes











## PM Peak Changes in December 2012

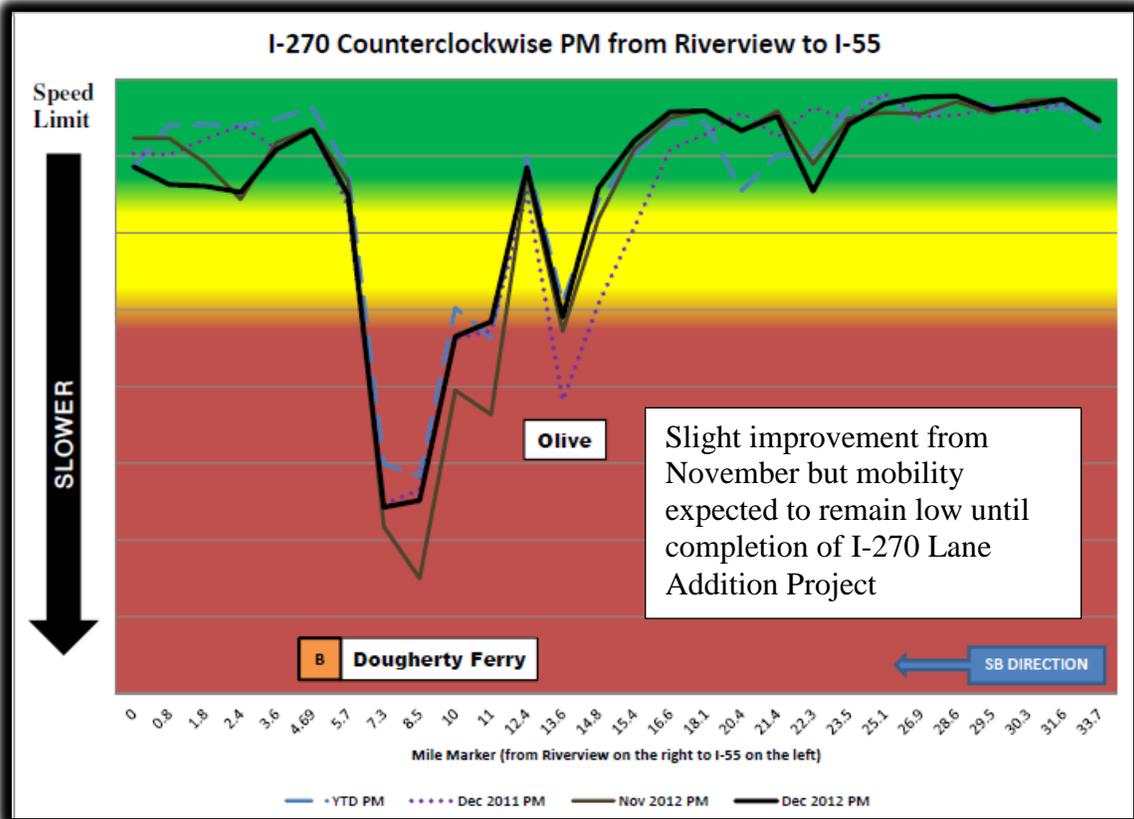
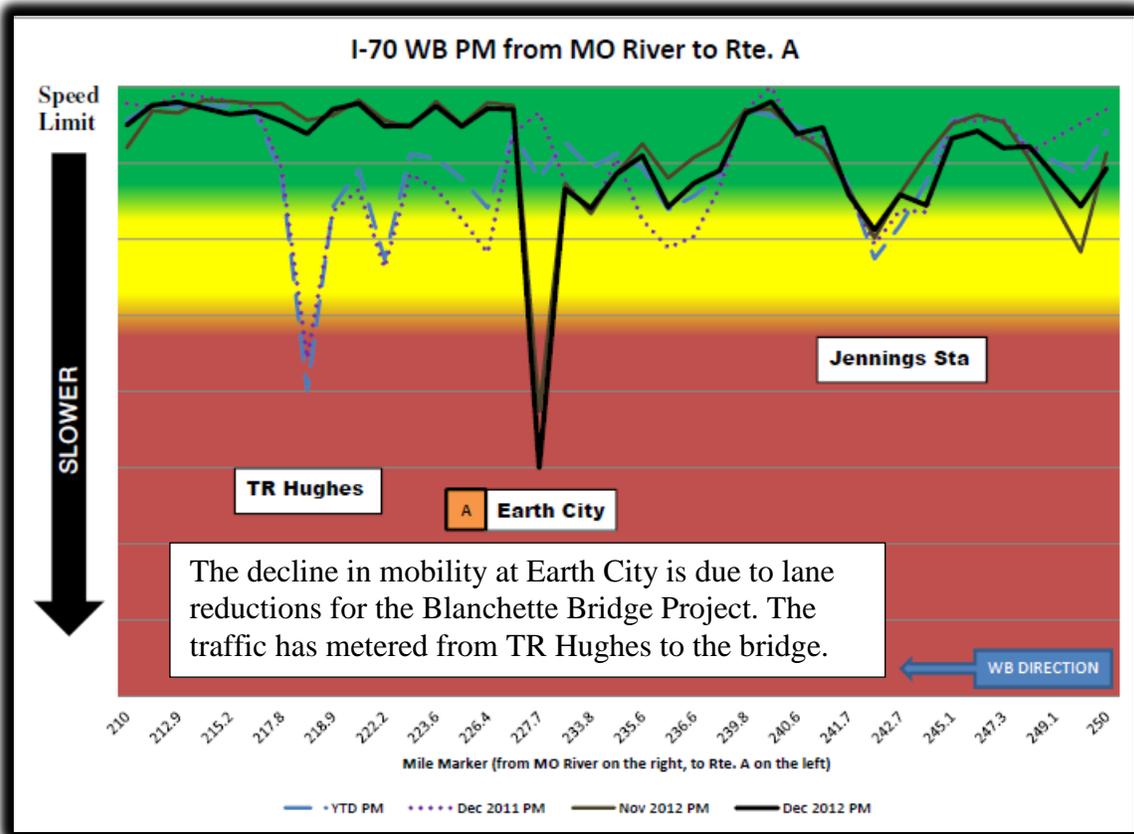
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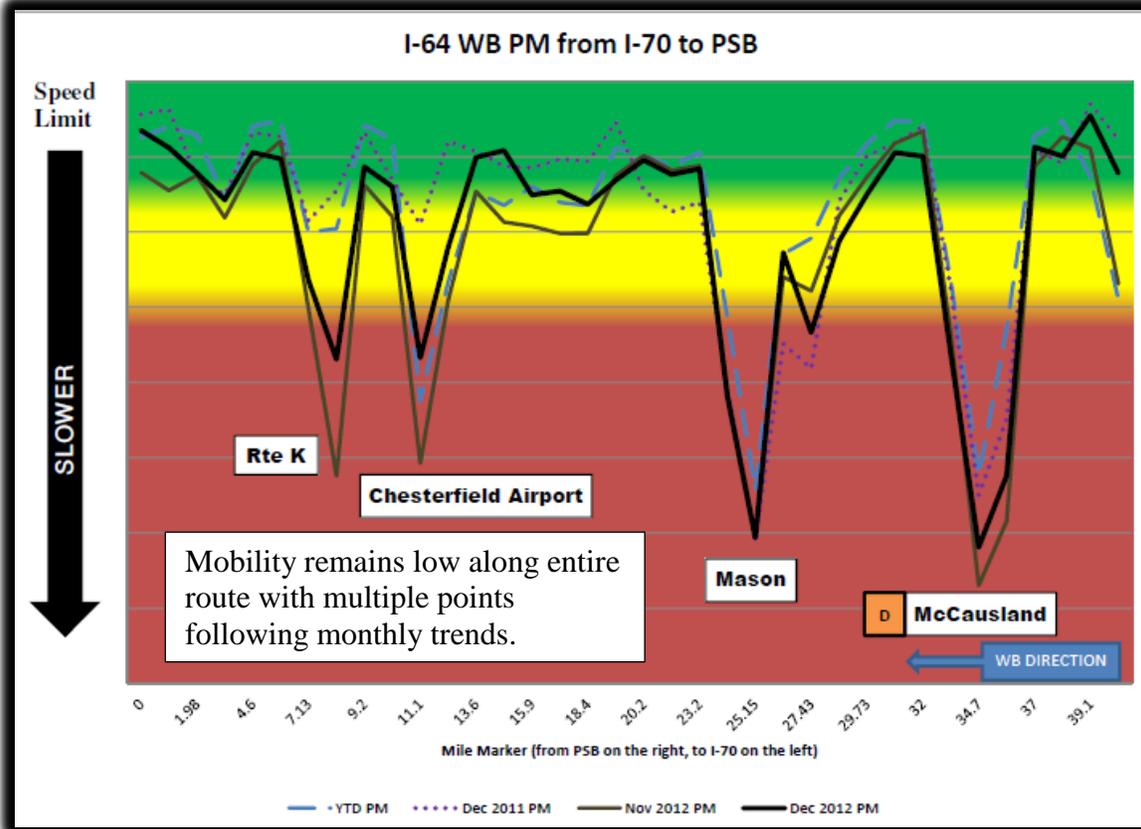
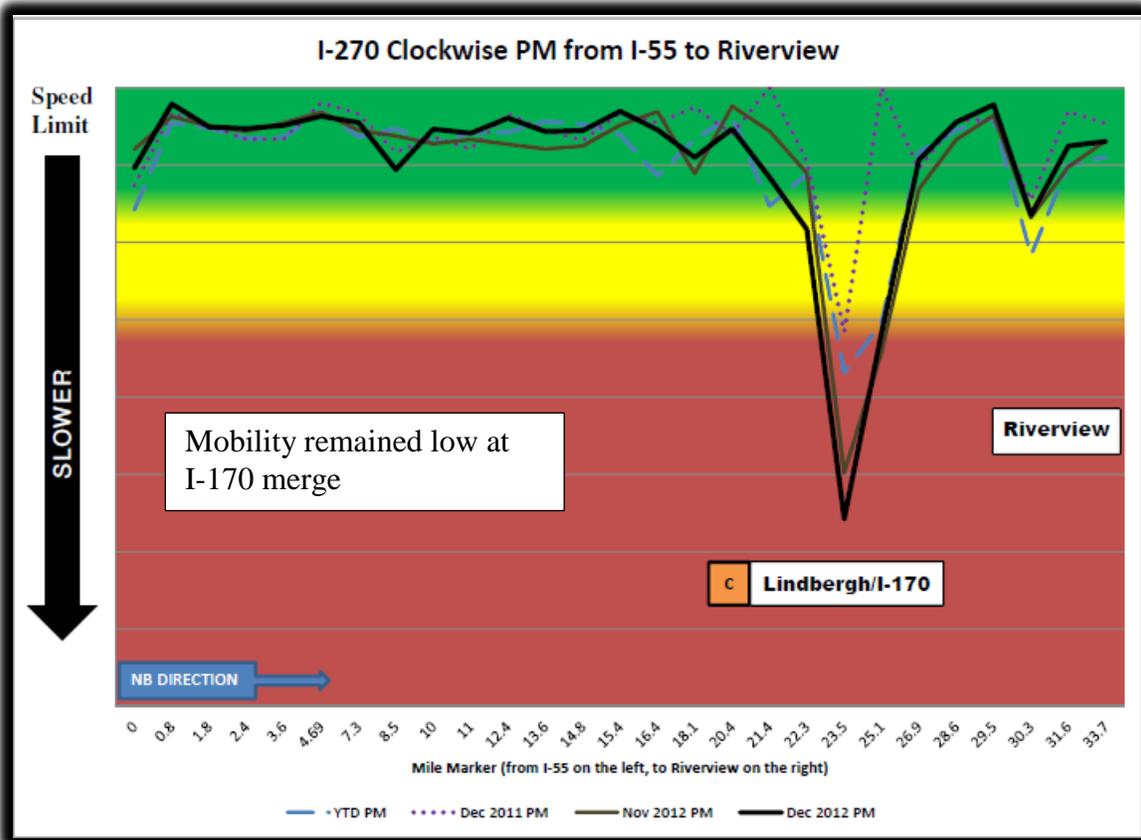
Mobility Declined

B C D

Mobility Remained Low

\*All weekdays are included in speed index calculation





## **Blanchette Bridge Traffic Summary**

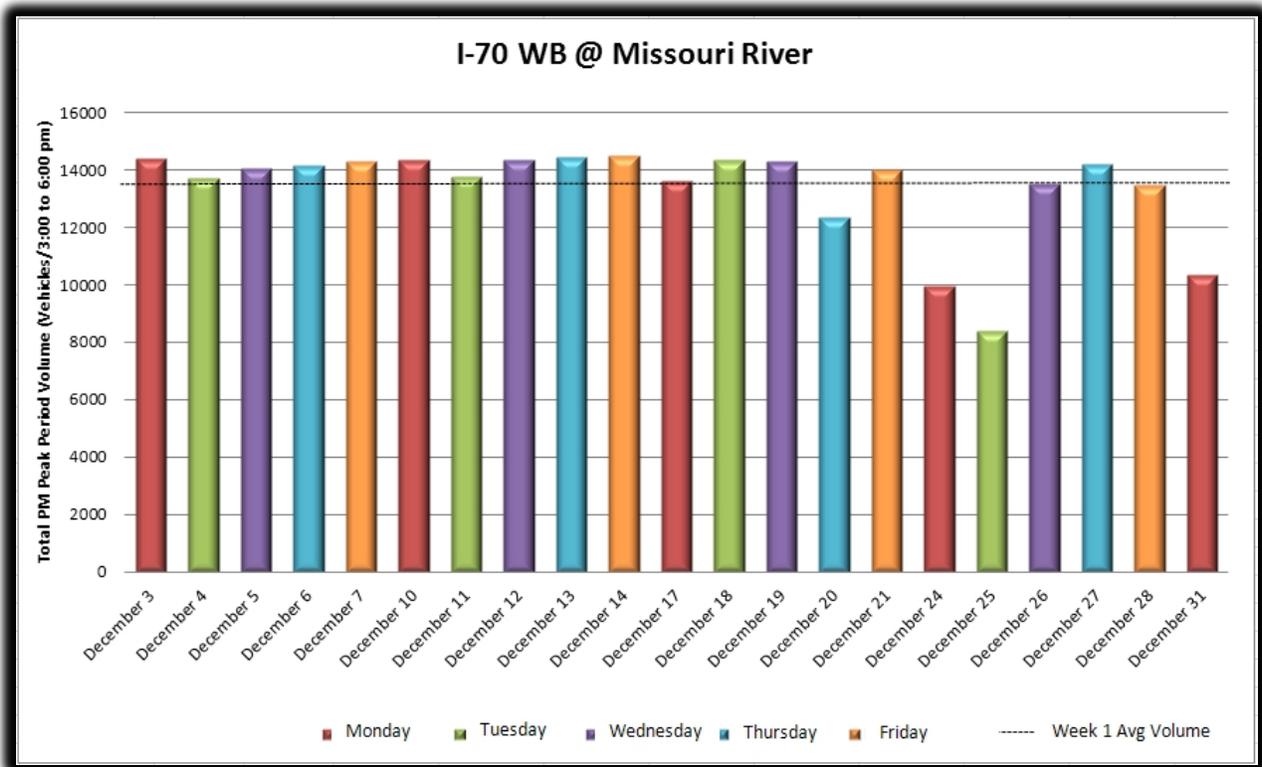
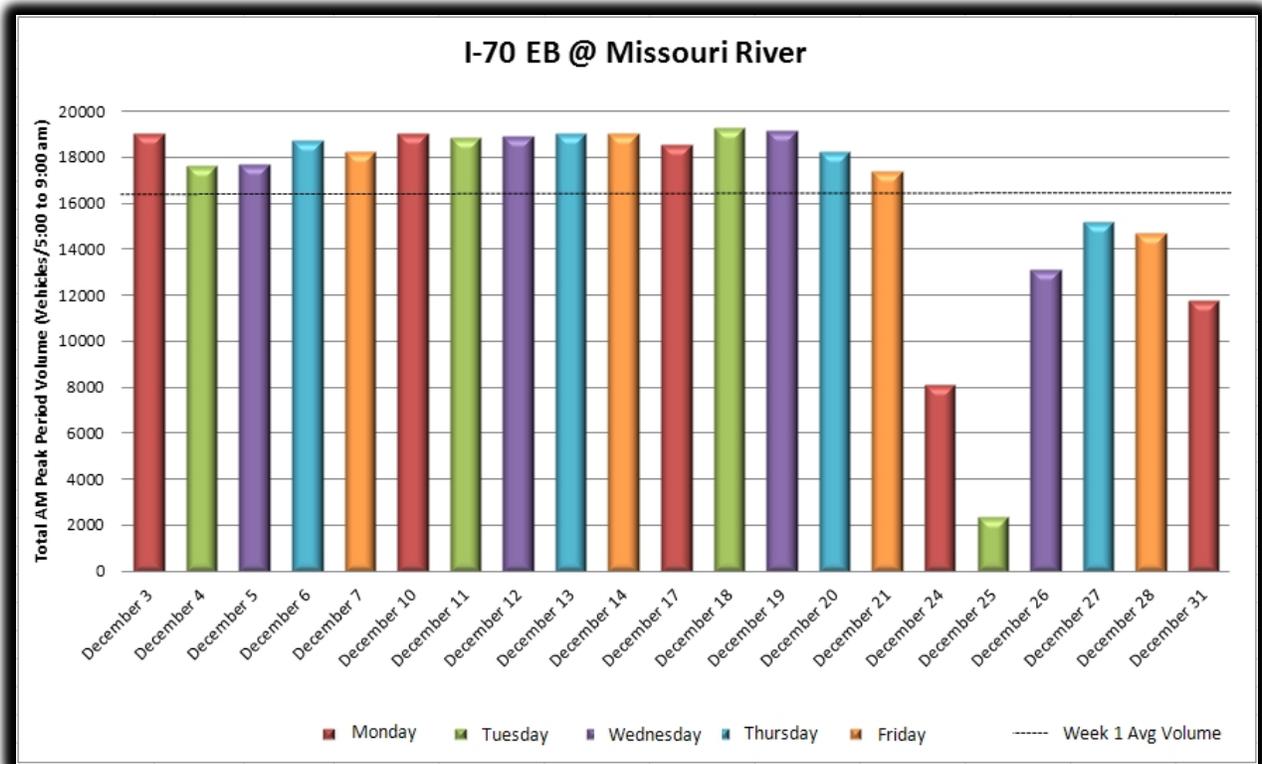
The following pages 16-20, highlight the December 2012 Traffic Summary for routes that cross the Missouri River and are impacted by the Blanchette Bridge Project.

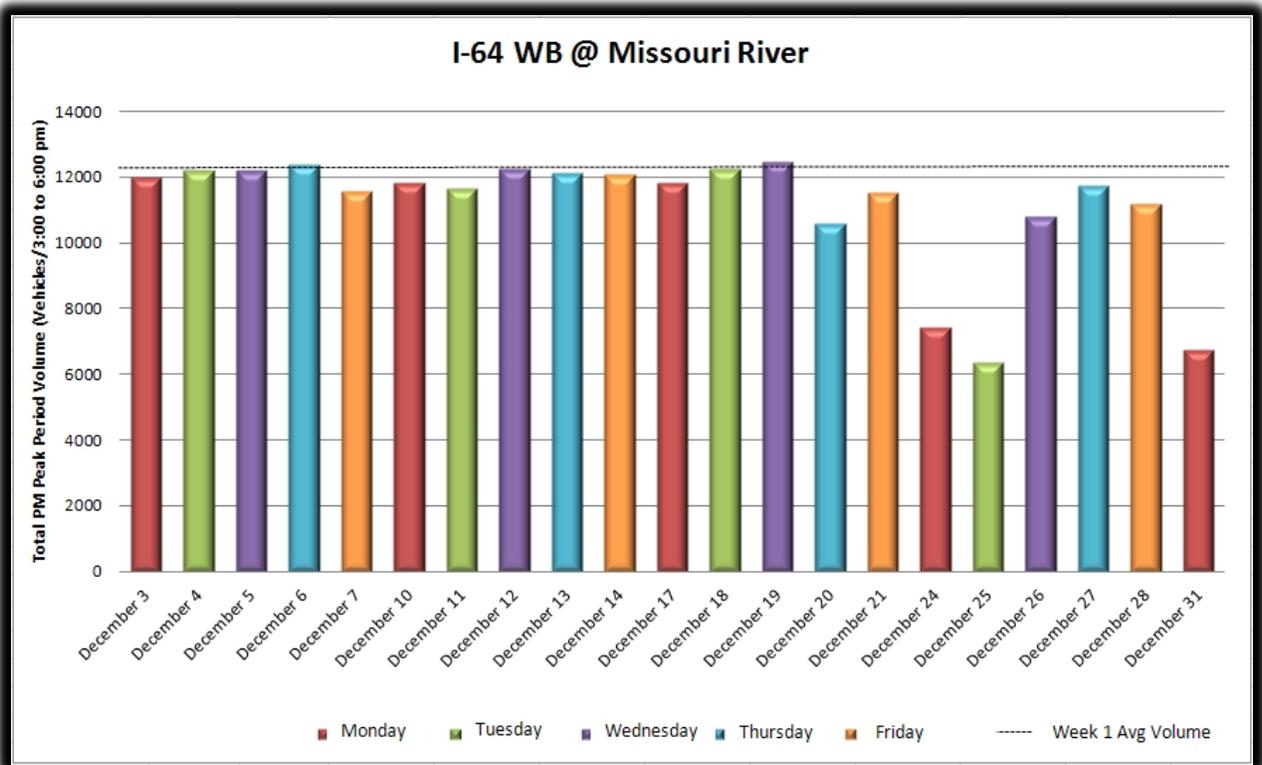
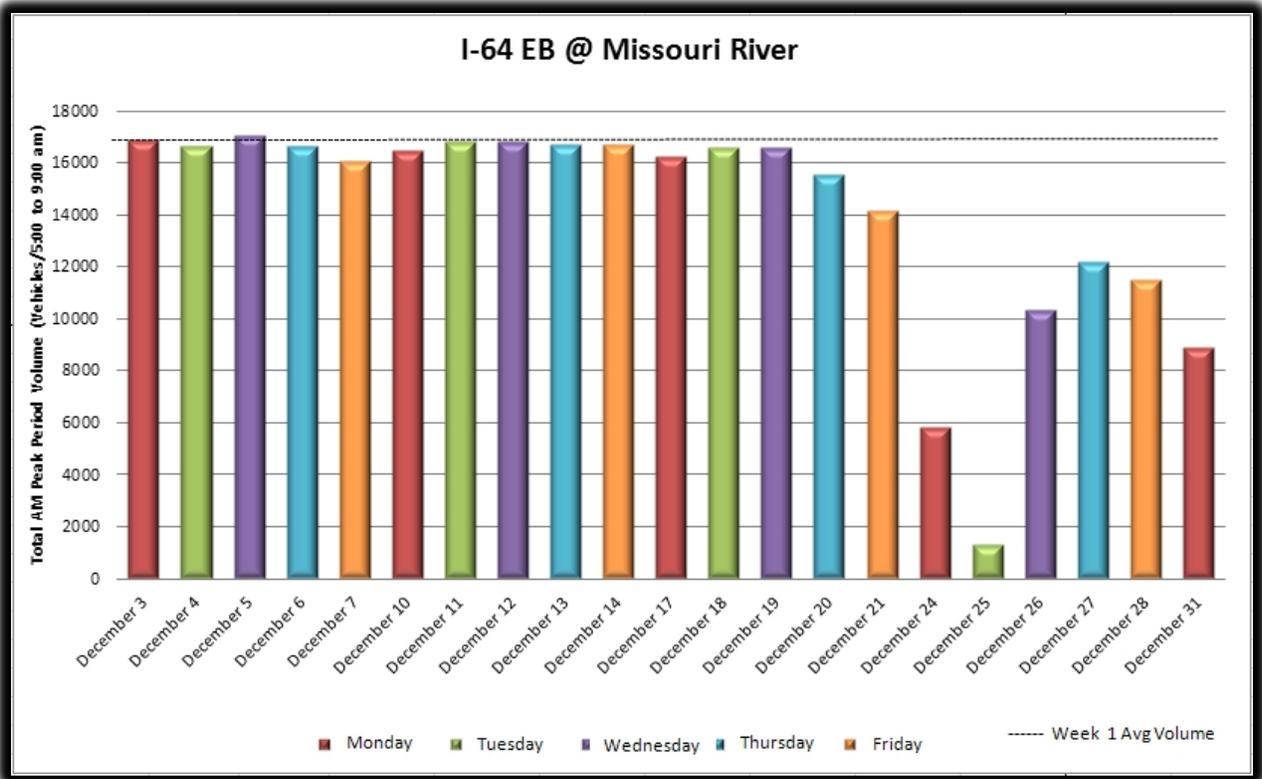
Baseline traffic volumes were established at the onset of the Project week one (November 5th – 9th, 2012) for each route and direction in the peak periods.

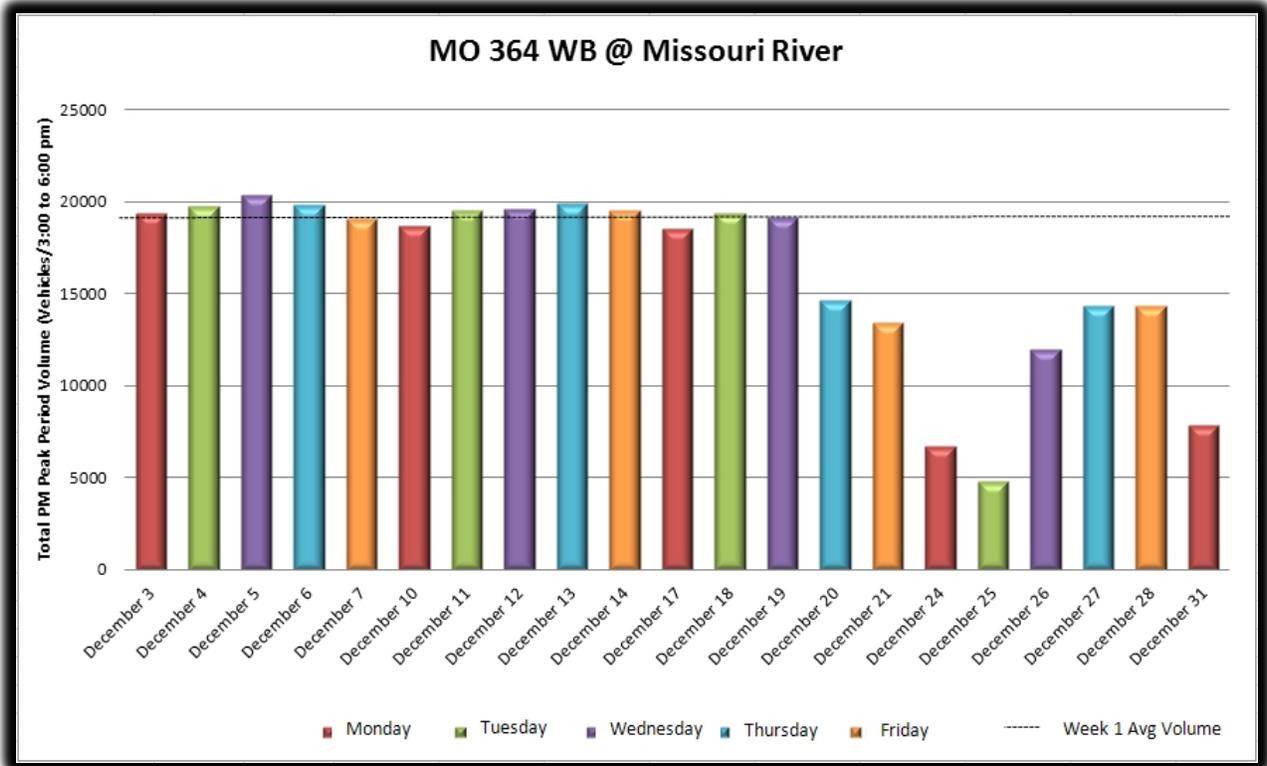
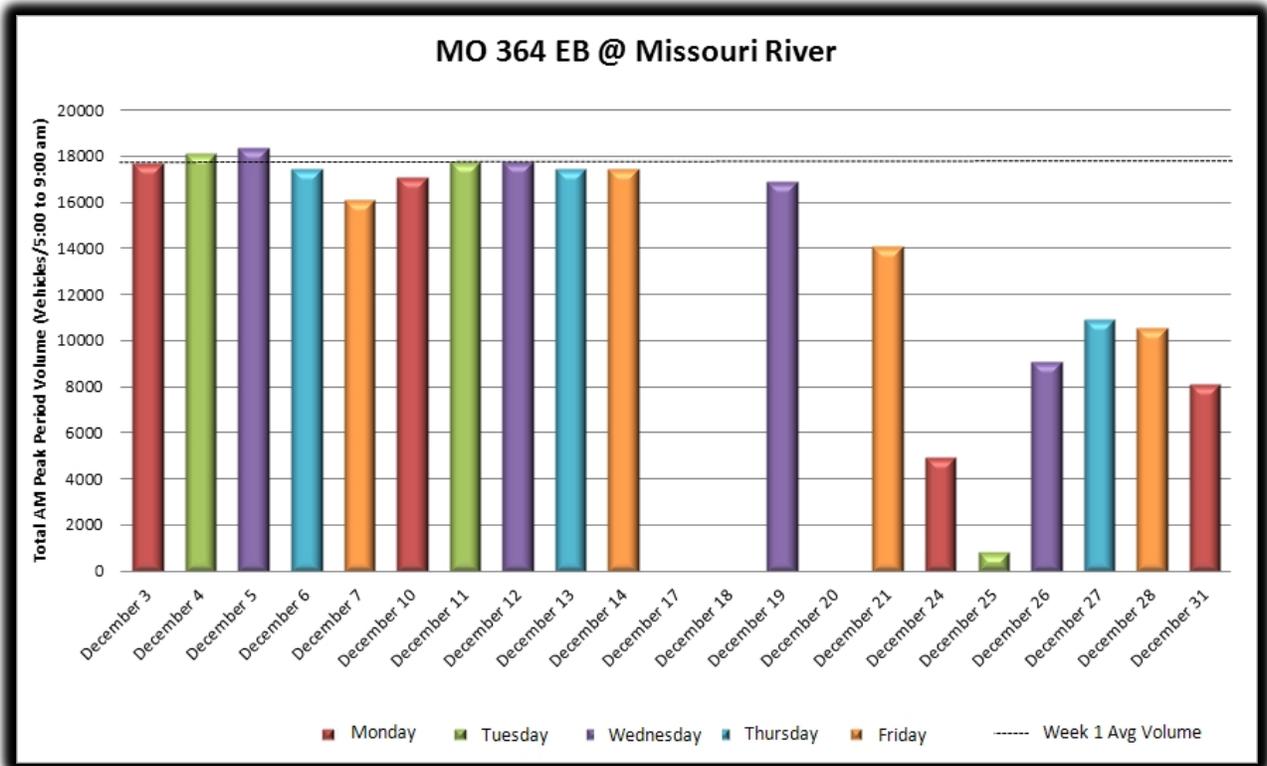
These baselines were established to determine future changes in traffic volumes as the project moves forward.

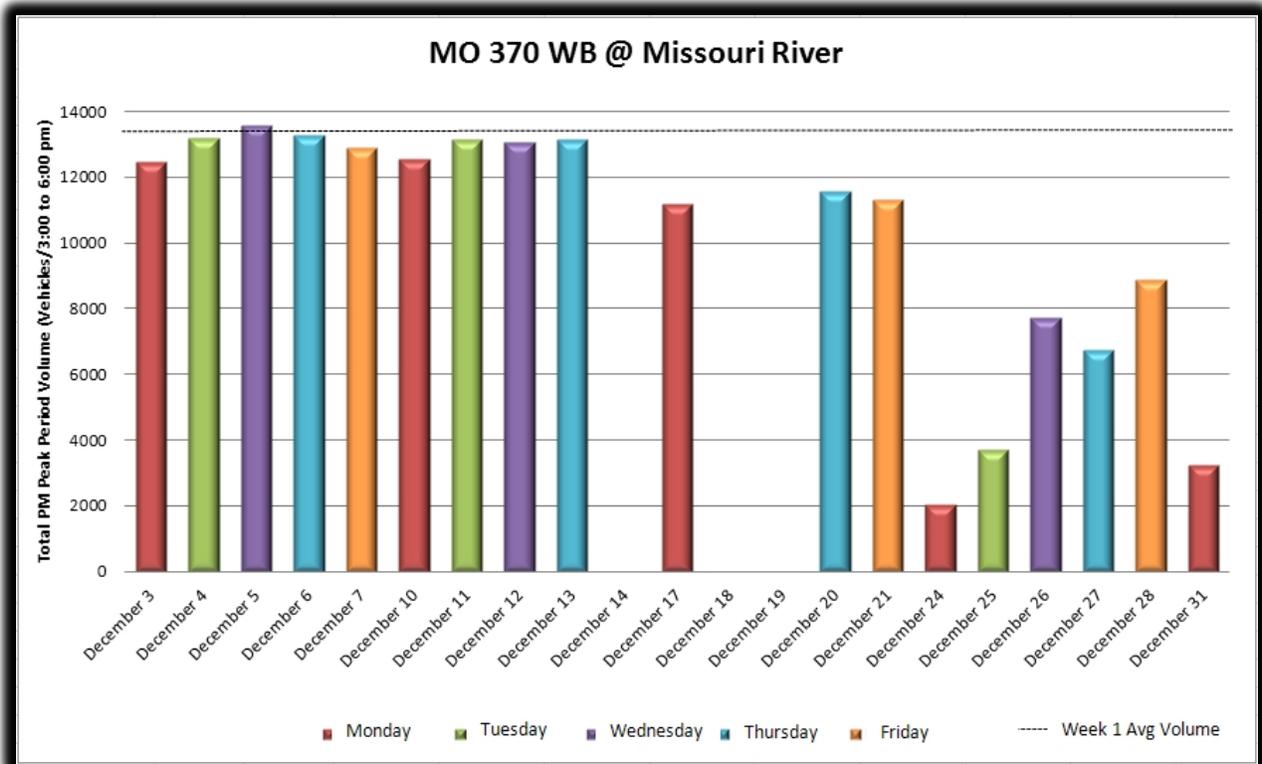
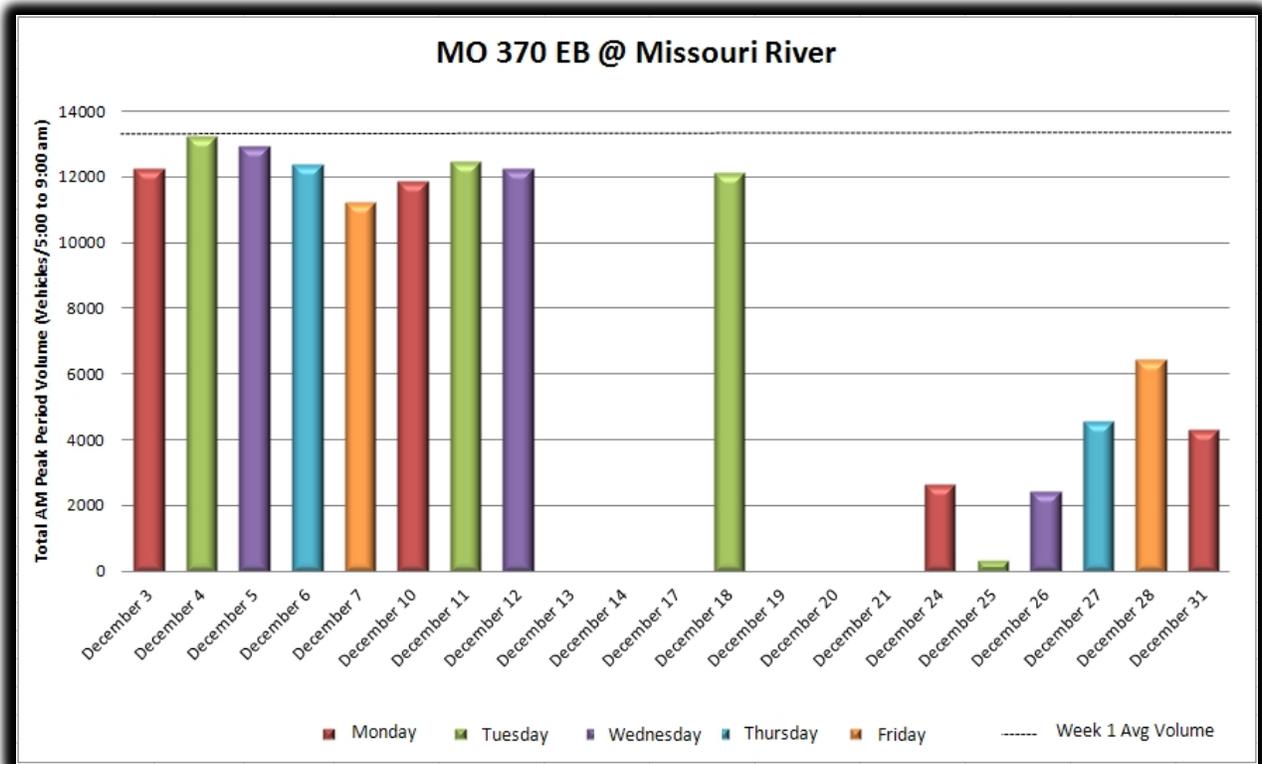
Early first month indications showed a few days of shift in traffic volumes to alternate routes as recommended by the department. As this project continued into the second month the data indicates traffic volumes have normalized.

Please note there are a few dates on some routes and or directions with little or no data due to sensor issues and or light volumes associated with holiday travel.









## Average Rate of Travel on Selected Signalized Routes by Calendar Year Average Travel Time per Mile Arterial Management

The purpose of this measure is to determine how well selected arterials across the region are operating during the peak traffic times. As improvements are made, such as signal timing, equipment upgrades, or access management improvements, this measure will show the effects of those efforts and decisions on the arterial system.

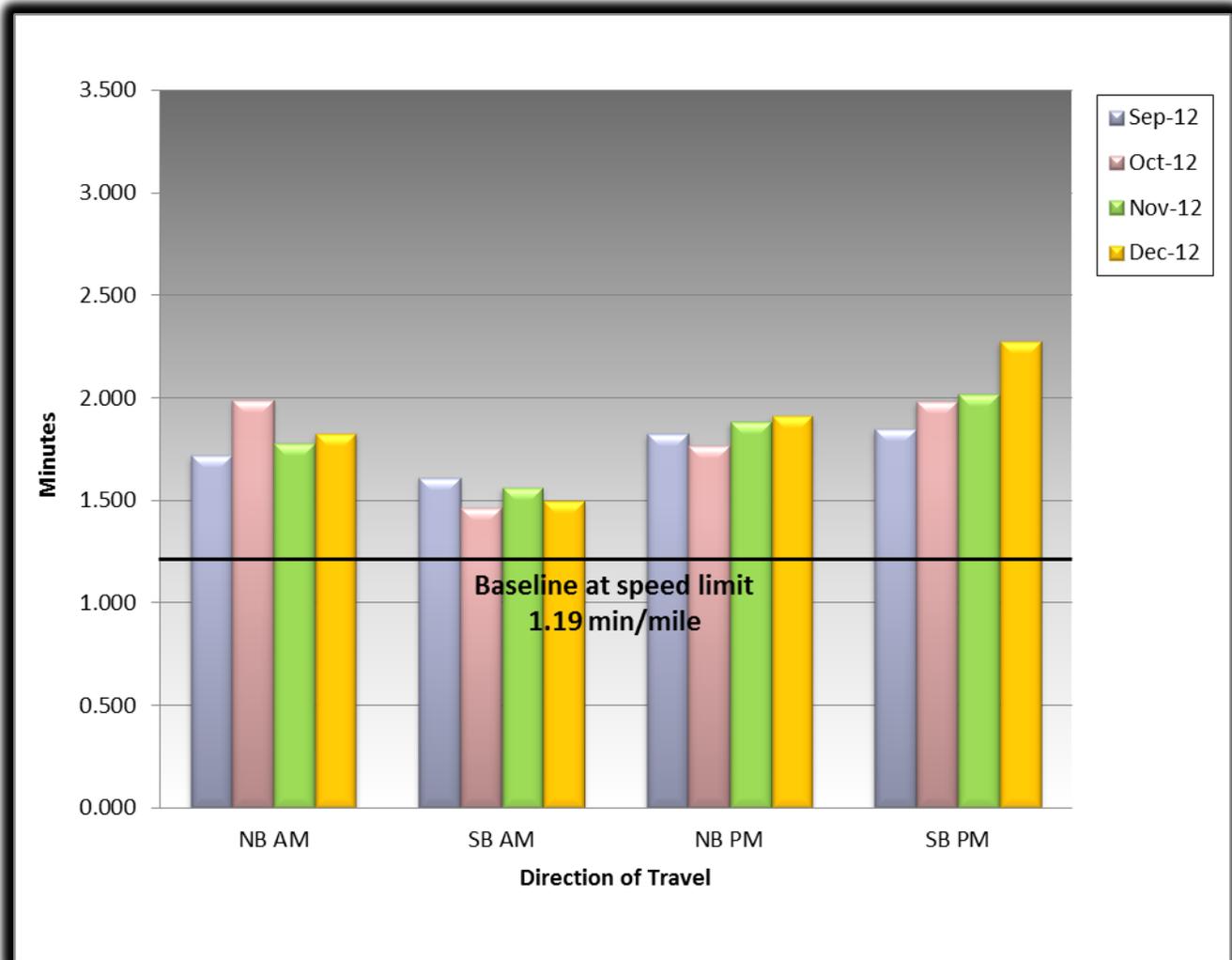
Travel times are measured on various arterial routes. For most routes, data is collected from driving each route multiple times during the A.M. and P.M. peak periods and timing how long it takes to traverse the route. For Rte. 141 and US 67, the Sensys Travel Time system is utilized to determine the travel times and allows a much more comprehensive collection of data. The travel time is compared to the speed limit and the average minutes per mile are calculated. An average minutes per mile based on a perfect run through the corridor is calculated and used as the baseline for comparison. If the actual average minutes per mile are at the baseline, traffic is moving at the speed limits without any stops.

The routes where data was collected include the following:

- Route 141\*, from I-55 to I-64
- Route 30, from Route PP to Weber Hill Road
- Route 100, from Route 340 to Maple Lane
- US 50, from Union West City Limit to Denmark
- US 67\*, from Route 367 to I-270

\* Routes where data was collected using Sensys system.

## Route 141, from I-55 to US 40 St. Louis and Jefferson Counties



The travel times seem to be stable for all directions except the SB PM movement, where there was a notable increase in December and a higher trend compared to the previous two months. Increase traffic volumes are suspected to be the main contributing factor, along with seasonal traffic pattern changes.

This corridor encompasses many systems.

Number of Signals - 41

Length of system - 18.6 miles

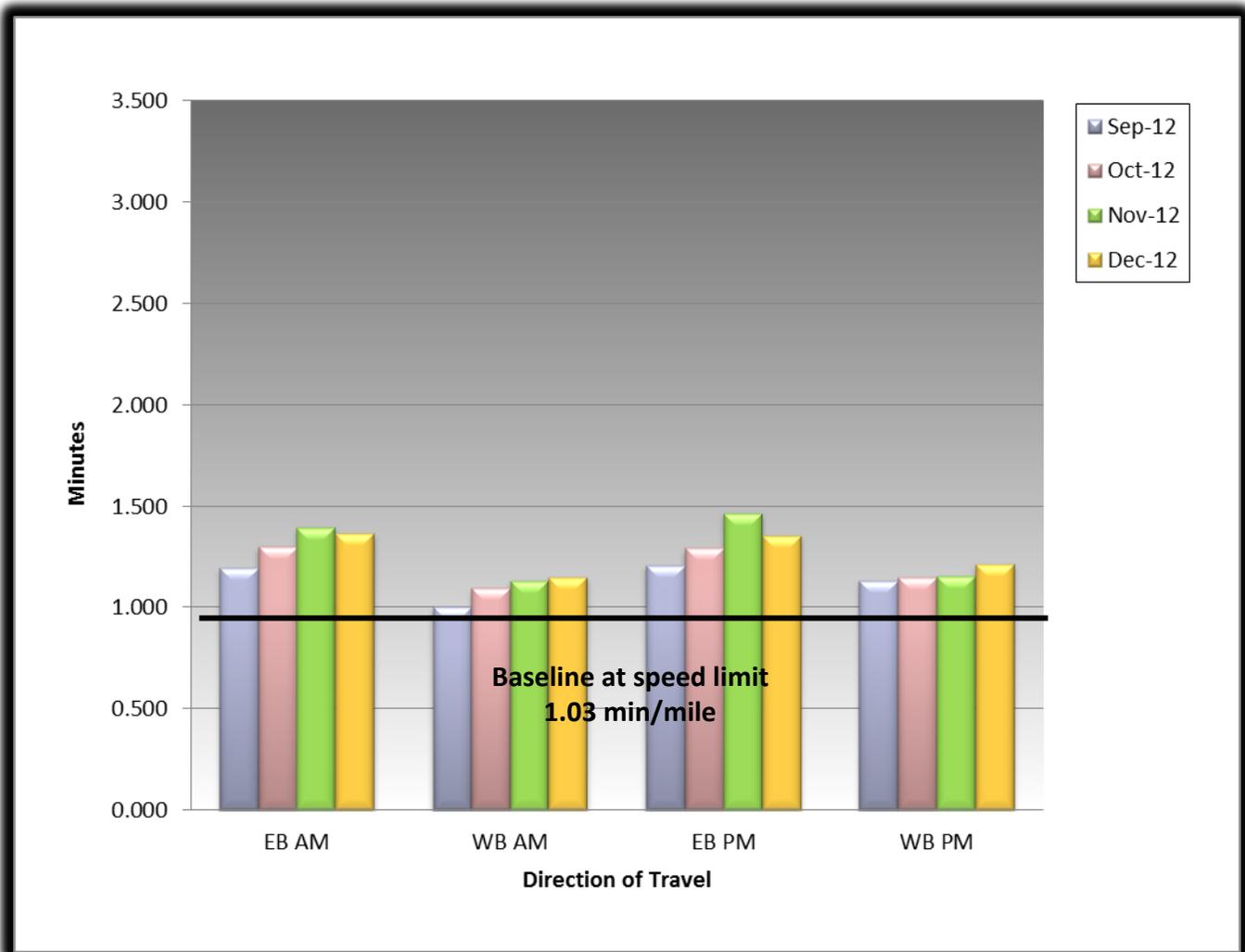
Speed Limit on this corridor varies from 45 mph to 55 mph

Number of Lanes – This is an urban/rural 4-6 lane expressway with signalized crossovers and several grade separated interchanges.

Weighted AADT for length of segment – 35930

This system provides travel time data based on the Sensys Travel Time system.

## Route 30, from Route PP to Weber Hill Road St. Louis and Jefferson Counties



Travel times indicate essentially no change for the AM movements. The PM movements are showing improvement for EB, but slight increase in travel times for WB motorists. Increased seasonal traffic is expected to be a contributing factor for the minor increase, especially around the Gravois Bluffs and Fenton area.

This system was optimized in 2009 and is scheduled again in 2013.

Number of Signals - 11

Length of system - 9.2 miles

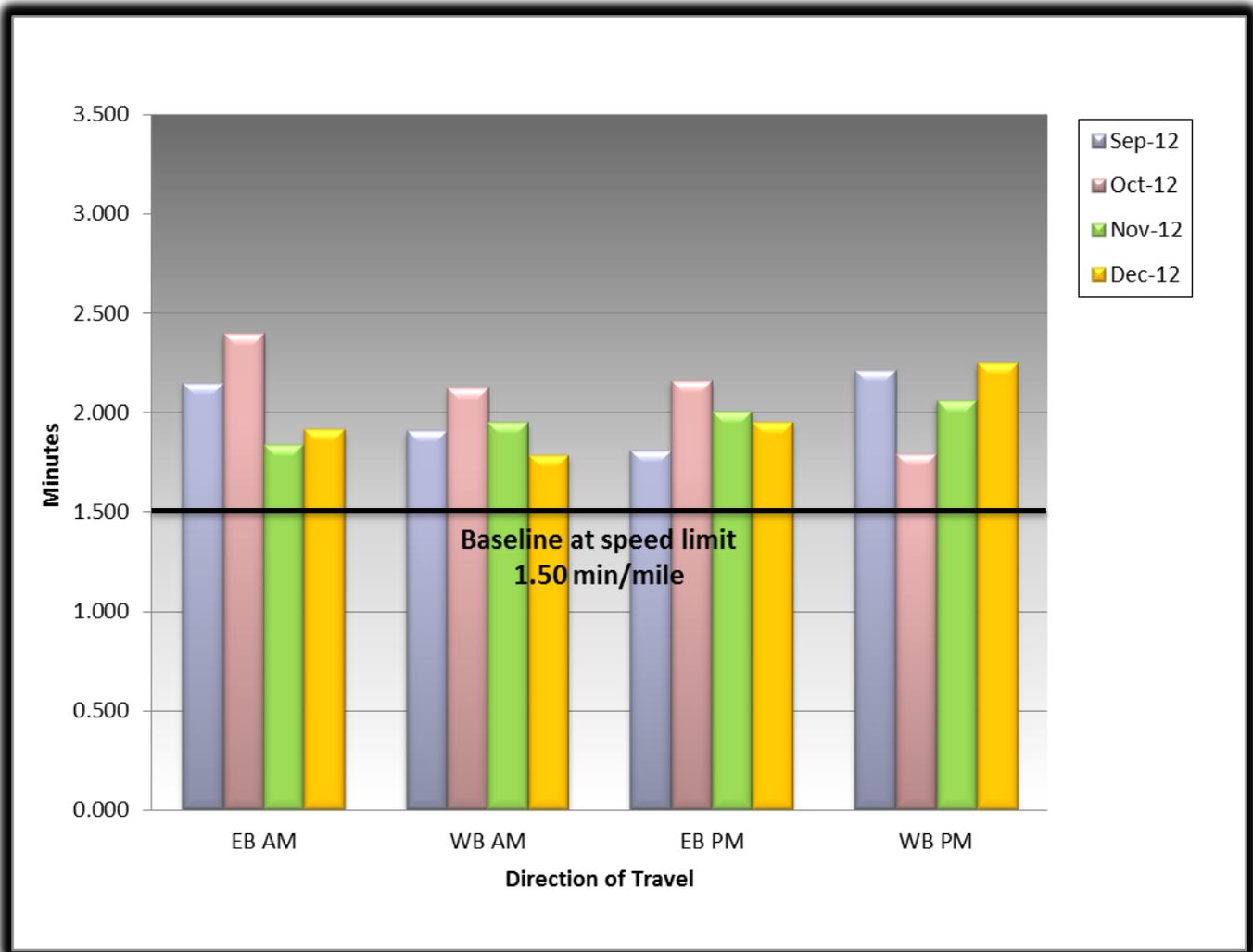
Speed Limit varies from 50 mph and 60 mph

Number of Lanes - this is a rural four lane expressway with signalized crossovers

Weighted AADT for length of segment – 38150

A portion of this system is currently under construction to install a Sensys Travel Time system (Weber Hill to Rte.141 ~ 3mi)

## Route 100, from Route 340 to Maple Lane St. Louis County



Travel times continue to fluctuate for this corridor due to varying circumstances. Along with routine driver behavior changes and emergency vehicle preemption, seasonal and holiday traffic patterns contributed to the travel time variances along this corridor.

The corridor is in its final optimized configuration upon completion of the plans in May. We are awaiting the final report.

Number of Signals - 8

Length of system - 4.2 miles

Speed Limit is 40 mph

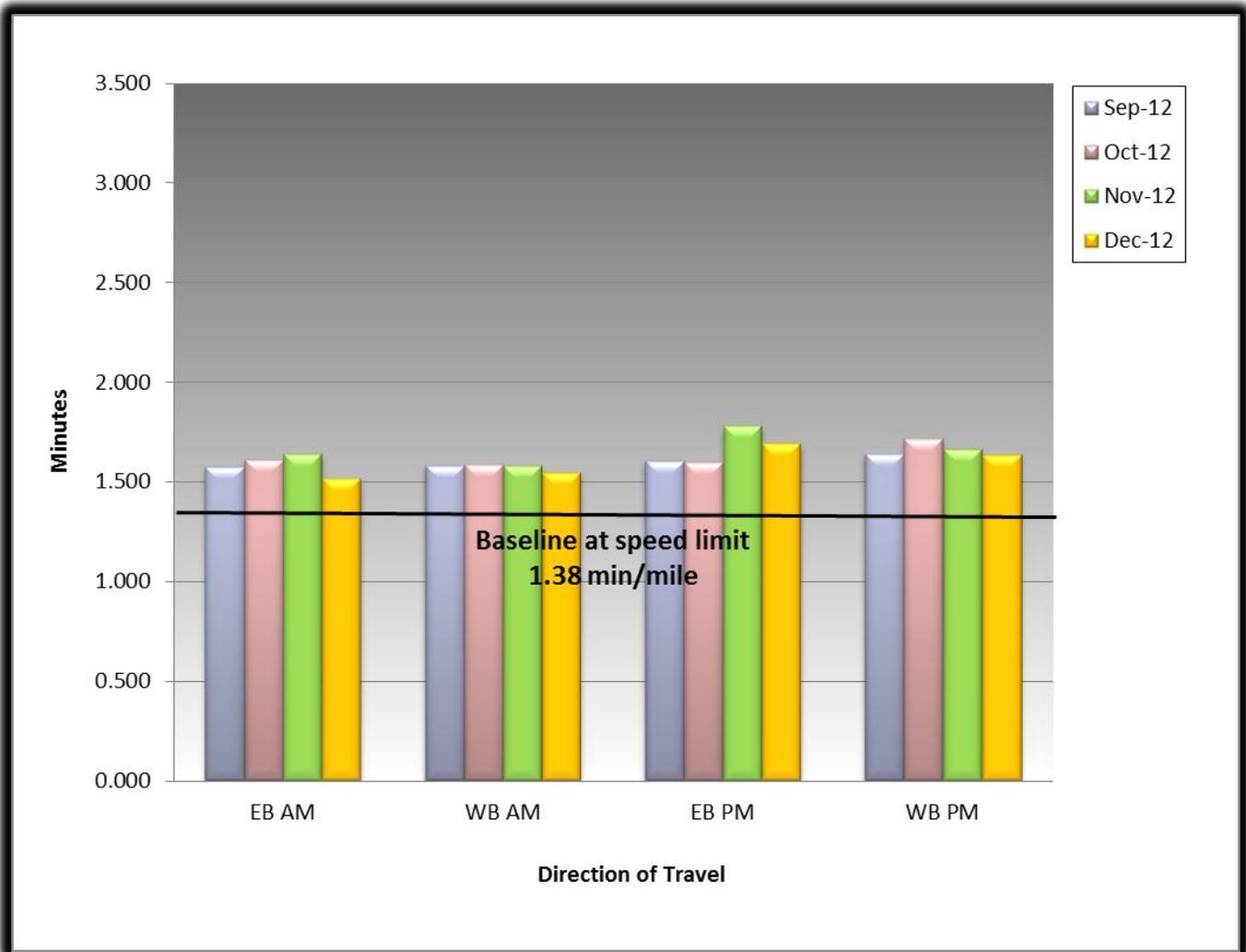
Number of Lanes - this is a five lane section with a two way left turn lane.

Weighted AADT for length of segment - 39500

AM peak flow is eastbound. PM peak flow is westbound.

This system is currently under construction to install a Sensys Travel Time system.

## US 50, from Union West City Limit to Denmark Franklin County



Travel times continue to be stable with the exception of EB this month. Both AM and PM show a minor decrease in travel time, likely due to winter school break.

This system had signal optimization timings implemented in early July 2011. Additional reviews on corridor progression are planned for the future.

Number of Signals - 6

Length of system - 6.3 miles

Speed Limit varies between 40 mph and 50 mph

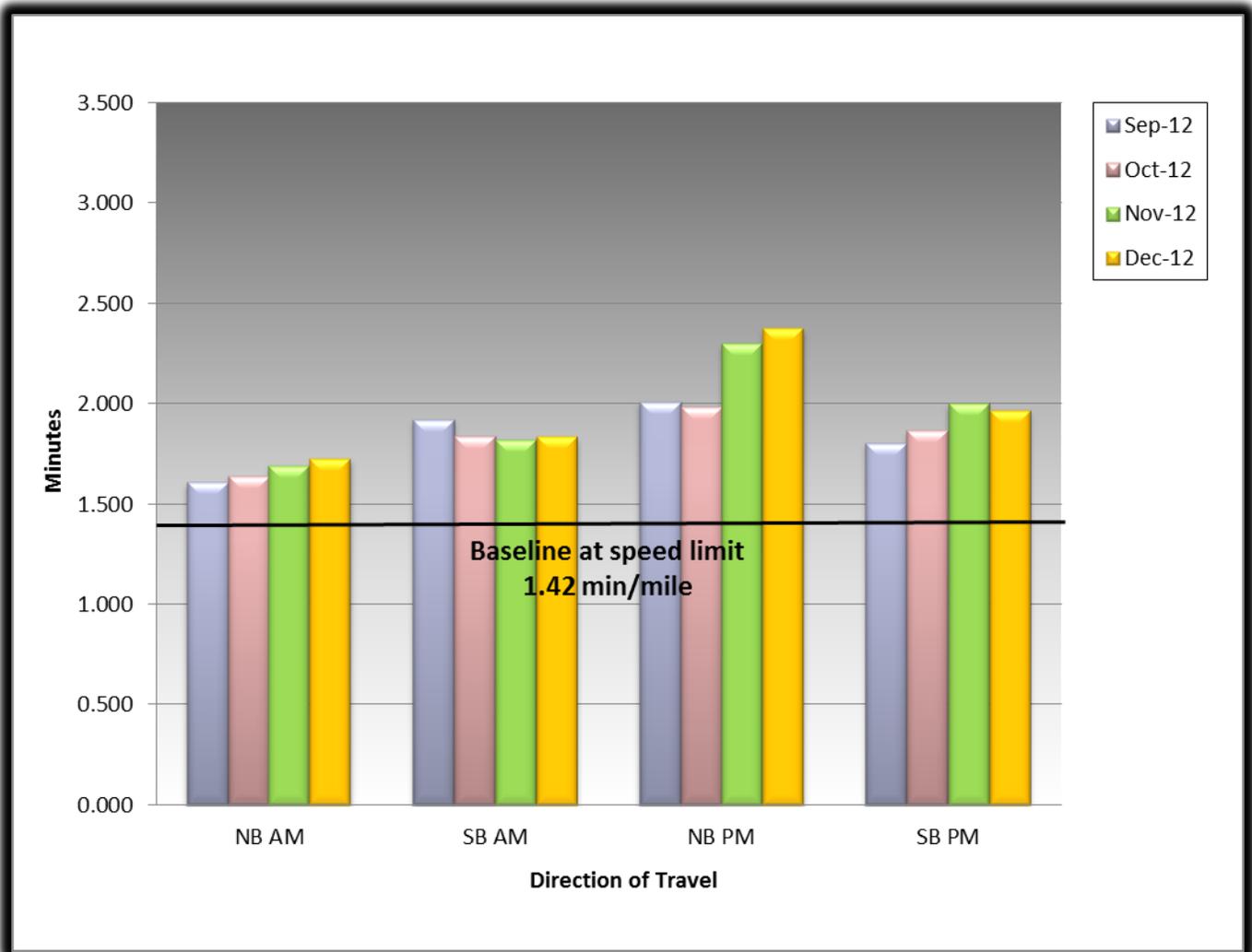
Number of Lanes - this was just recently upgraded to a five lane section.

Weighted AADT for length of segment - 16850

AM peak flow is eastbound. PM peak flow is westbound.

No current plans to install Sensys Travel Time system.

## US 67, from Route 367 to I-270 St. Louis County



AM travel times are relatively consistent with last month with minimal increase or decrease. The PM travel times have remained higher than September and October in both directions. Seasonal travel patterns are suspected to be the contributing factor for the increase, but will be watched for potential trends.

Optimization on this system was recently complete in 2012.

Number of Signals - 19

Length of system - 8.3 miles

Speed Limit varies between 40 mph and 45 mph

Number of Lanes - this is a five lane section with a two way left turn lane.

Weighted AADT for length of segment – 25450

Since June 2011, this system has been providing travel time data based on the Sensys Travel Time system.

## Optimization Reports

### Route 115, St. Louis County: 10 Signals from Route U (Lucas & Hunt Road) thru I-70 South Outer Road

July 2012 implementation showed quantitative improvements all around. Delay reductions of nearly 50% reveal a dramatic increase in the efficiency of the system. The Eastbound PM fared the best improvements with a travel time reduction of 23% with a 76 % reduction in stops and a 55% delay reduction. Additionally, all signals now operate at Level-of-Service C (LOS C)\* or better throughout the day.

\***Level-of-Service C** describes at or near free-flow operations. Ability to maneuver through lanes is noticeably restricted and lane changes require more driver awareness. Minimum vehicle spacing is about 220 foot (67m) or 11 car lengths. At LOS C most experienced drivers are comfortable, roads remain safely below but efficiently close to capacity, and posted speed is maintained. Minor incidents may still have no effect but localized service will have noticeable effects and traffic delays will form behind the incident. This is the targeted LOS for some urban and most rural highways.

Travel Time	- 15.4%
Stops	- 15.8%
Average Speed	+ 14.5%
Delay	- 45.2 %
Fuel Savings	- 98,695 gal/yr.
<b>Fuel Cost Savings</b>	<b>\$336,846/yr.**</b>
Total Emissions***	20,083 lb./yr.

\*\* Based on \$3.41 per gallon

\*\*\* VOC, CO, NO gases

### Route D, St. Louis County: 14 Signals from Walton Road thru Schuetz Road

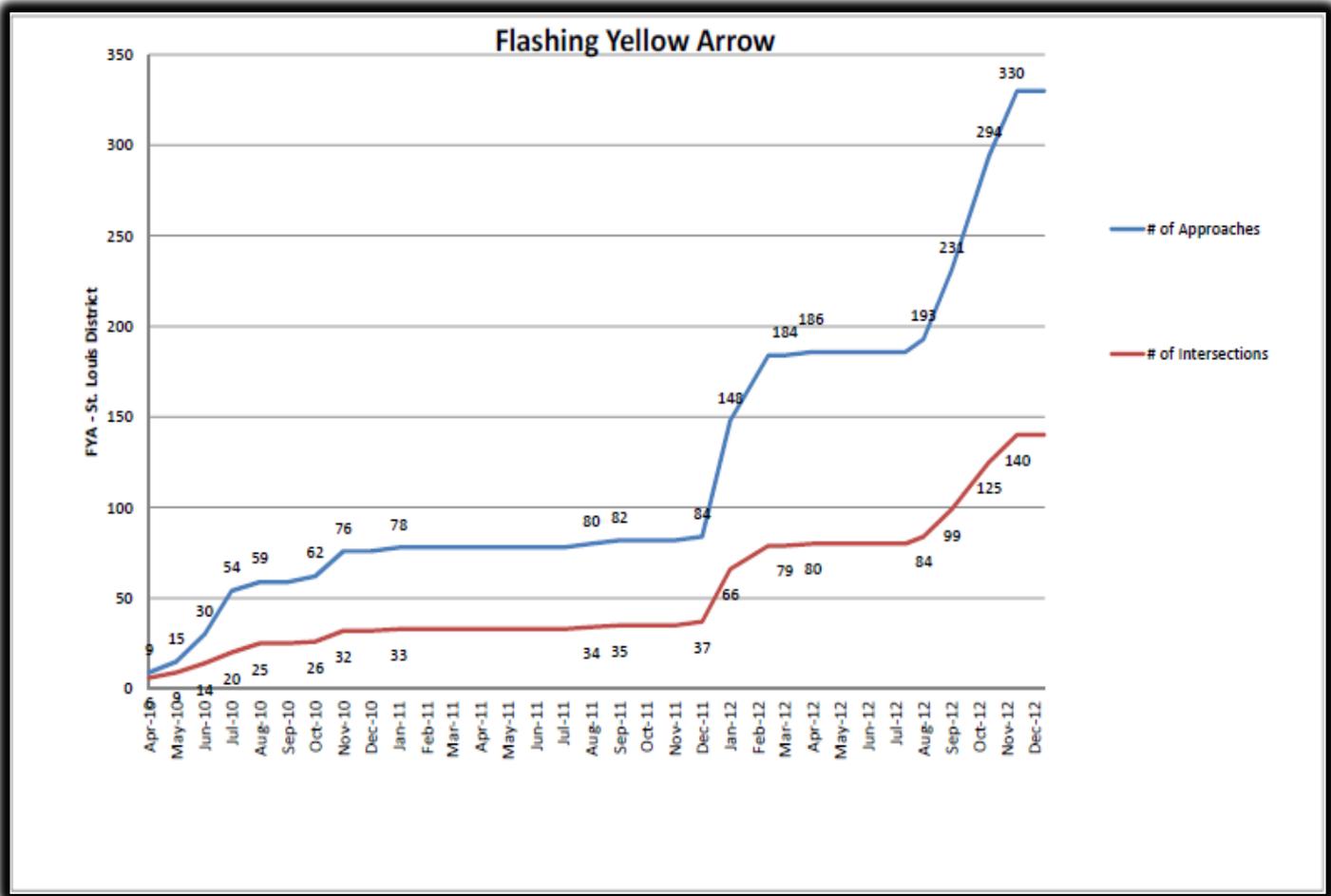
An October 2012 implementation resulted in significant improvements. The route was broken up east and west of Lindbergh Boulevard for best results. The heavy AM peak fared best with a 26% reduction in travel time, a 76% reduction in stops, and a 64% delay reduction. Mainly satisfactory levels of service now exist at all intersections along corridor.

Travel Time	- 6.4%
Stops	- 27.7%
Average Speed	+ 7.8%
Delay	- 11.1 %
Fuel Savings	- 121,665 gal/yr.
<b>Fuel Cost Savings</b>	<b>\$415,243/yr.*</b>
Total Emissions**	34,547 lb./yr.

\* Based on \$3.41 per gallon

\*\* VOC, CO, NO gases

Total Fuel Cost Savings = \$752,089.00
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Flashing Yellow Arrow signals are currently at 330 approaches as of December 2012. This brings the number of intersections containing Flashing Yellow Arrows to 140. The work planned and funded under this Flashing Yellow Arrow Project concluded in November 2012. Future increases will not occur until project funding becomes available.

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

## 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 – Lane closures < 30 minutes**

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.

## Definitions

**511** – Gateway Guide’s phone line for automated call-in travel information in the St. Louis Metro Area

**511 Floodgate Message** – Road closure message sent from the TMC that is read at the beginning of a 511 call and posted to the banner on the website

**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

**Average Minutes per Mile** – Number of minutes for a vehicle to travel one mile of roadway averaged over a section of roadway

**BlueTOAD** - a (Bluetooth Travel-time Origination and Destination) traffic monitoring system to collect high quality high density travel times by sampling a portion of actual travel times

**CFI** – Continuous Flow Intersection, at grade intersection configured to move turning vehicles conflicting with through movements out of the main intersection.

**DMS** - Dynamic Message Signs

**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

**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 at the central office in Jefferson City

**ER** – MoDOT’s Emergency Response units that provide emergency assistance during nights and weekends typically not covered by Motorist Assist units

**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

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

**IDOT** - Illinois Department of Transportation

**KCScout** – 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

**MMU** – Conflict monitor hardware installed at a signal system

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

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

**Peak Average** – Daily speed sensor readings over an entire weekday rush 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

**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

**VDS** – Video Detection System, signal equipment used to detect vehicles at an intersection

**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	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	234	RTE 180/ST. CHARLES ROCK RD (BRIDGETON)
US 67 SOUTH (BRIDGETON)	235A	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	238B	I-170 NORTH (BERKELEY)
I-170 SOUTH (BERKELEY)	238C	238C	I-170 SOUTH (BERKELEY)
NORTH HANLEY (BERKELEY)	239	239	NORTH HANLEY (BERKELEY)
RTE N/FLOISSANT RD (COOL VALLEY)	240A	240A	RTE N/FLOISSANT RD (COOL VALLEY)
BERMUDA DR (NORMANDY)	240B	240B	BERMUDA DR (NORMANDY)
RTE U/LUCAS AND HUNT RD	241B	241B	RTE U/LUCAS AND HUNT RD
JENNINGS STATION RD (PINE LAWN)	242C	242C	JENNINGS STATION RD (PINE LAWN)
ST. LOUIS CITY		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	244A	UNION (ST. LOUIS)
KINGSHIGHWAY (ST. LOUIS)	244B	244B	KINGSHIGHWAY (ST. LOUIS)
SHREVE (ST. LOUIS)	245A	245A	SHREVE (ST. LOUIS)
WEST FLOISSANT AVE (ST LOUIS)	245B	245B	WEST FLOISSANT 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	248A	SALISBURY (ST LOUIS)
BRANCH (ST LOUIS)	248B	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 DISTRICT 6 WESTBOUND  
I-70 DISTRICT 6 EASTBOUND

## I-70 St. Charles County Mile Markers

RTE A (WENTZVILLE)	212	I-70 DISTRICT 6 EASTBOUND I-70 DISTRICT 6 WESTBOUND	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		217	RTE K/RTE M (O'FALLON)
T.R. HUGHES BLVD (O'FALLON)	218		218	T.R. HUGHES BLVD (O'FALLON)
RTE 79 (ST. PETERS/O'FALLON)	220		220	RTE 79 (ST. PETERS/O'FALLON)
RTE C/MID RIVERS MALL DR (ST. PETERS)	222		222	RTE C/MID RIVERS MALL DR (ST. PETERS)
SPENCER RD OVERPASS (ST. PETERS)	223		223	SPENCER RD OVERPASS (ST. PETERS)
RTE 370 (ST. PETERS)	224		224	RTE 370 (ST. PETERS)
CAVE SPRINGS (ST. CHARLES)	225		225	CAVE SPRINGS (ST. CHARLES)
ZUMBEHL RD (ST. CHARLES)	227		227	ZUMBEHL RD (ST. CHARLES)
HAWK'S NEST OVERPASS (ST. CHARLES)	227		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)

## I-270 Mile Markers

3	KOCH RD	I-255 WESTBOUND	I-255 EASTBOUND	KOCH RD	3
2	SR 231 (TELEGRAPH RD)			SR 231 (TELEGRAPH RD)	2
1C	US61-67			US61-67	1B
1B	<b>I-55 NORTH</b>			<b>I-55 NORTH</b>	1B
1	<b>I-55 SOUTH</b>			<b>I-55 SOUTH</b>	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.)			<b>I-44 EAST</b>	5
5	<b>I-44 WEST</b>			<b>I-44 WEST</b>	5
				BIG BEND RD.	7
8	DOUGHERTY FERRY RD.	I-270 DISTRICT 6 COUNTER CLOCKWISE FROM RIVERVIEW DR. TO I-55	I-270 DISTRICT 6 CLOCKWISE FROM I-55 TO RIVERVIEW DR.	DOUGHERTY FERRY RD.	8
10	SR 100 (MANCHESTER RD.)			SR 100 (MANCHESTER RD.)	10
12	I-64 EAST/WEST/US 40-61 NORTH/SOUTH			I-64 EAST/WEST/US 40-61 NORTH/SOUTH	12 A/B
13	SR AB (LADUE RD)			SR AB (LADUE RD)	13
14	SR 340 (OLIVE BLVD)			SR 340 (OLIVE BLVD)	14
16	SR D (PAGE AVE.) EAST			SR D (PAGE AVE.) EAST	16A
16	SR 364 WEST			SR 364 WEST	16B
17	DORSETT RD			DORSETT RD	17
20	<b>I-70 WEST/EAST</b>			<b>I-70 WEST</b>	20B
				<b>I-70 EAST</b>	20A
20C	SR 180 (ST. CHARLES ROCK RD)		SR 180 (ST. CHARLES ROCK RD)	20C	
22	MISSOURI BOTTOM RD/370 WEST		SR 370 WEST	22D	
23	MCDONNELL BLVD		MCDONNELL BLVD	23	
25A	US 67 SOUTH		US 67 NORTH	25A	
25B	US 67 NORTH		US 67 SOUTH	25B	
26	HANLEY/GRAHAM RD.		<b>I-170 SOUTH (EXIT LEFT)</b>	26A	
26	<b>I-170 SOUTH</b>		HANLEY/GRAHAM	26B	
27	NEW FLORISSANT RD		NEW FLORISSANT RD	27	
28	WASHINGTON/ELIZABETH RD.		ELIZABETH/WASHINGTON	28	
29	WEST FLORISSANT RD		WEST FLORISSANT RD	29	
30	SR AC HALLS FERRY RD		SR AC NEW HALLS FERRY RD	30	
			NEW HALLS FERRY RD.	30A	
31A	<b>SR 367 SOUTH</b>		<b>SR 367 SOUTH</b>	31A	
31B	<b>SR 367 NORTH</b>		<b>SR 367 NORTH</b>	31B	
32	BELLEFONTAINE RD		BELLEFONTAINE RD	32	
33	LILAC AVE.		LILAC AVE.	33	
34	RIVERVIEW DR.		RIVERVIEW DR.	34	

## I-64 Mile Markers

<b>I-70 WEST EXIT RIGHT/EAST EXIT LEFT</b>	1		1A	<b>I-70 WEST</b>
			1B	<b>I-70 EAST</b>
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	MO K
			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
			24	MASON RD
<b>I-270 SOUTH</b>	25A		25A	<b>I-270 SOUTH</b>
<b>I-270 NORTH</b>	25B		25B	<b>I-270 NORTH</b>
SR JJ (BALLAS RD)	26		26	MO JJ (BALLAS RD)
SPOEDE RD	27		27	SPOEDE RD
US 61-67	28A		28A	US 61-67
			28B	CLAYTON RD
MCKNIGHT RD	30		30	MCKNIGHT RD
BRENTWOOD/HANLEY RD	31B		31A	<b>I-170 NORTH</b>
<b>I-170 NORTH</b>	31A		31B	HANLEY RD/BRENTWOOD BLVD
BELLEVUE AVE	33B			
BIG BEND	33A		33A	BIG BEND BLVD
MCCAUSLAND	33C			<b>ST. LOUIS CITY</b>
<b>ST. LOUIS CITY</b>			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	<b>I-44 WB/I-55 SB/ I-70 WB</b>

I-64 DISTRICT 6 EASTBOUND  
I-64 DISTRICT 6 WESTBOUND

## 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
<b>I-255 EAST</b>	196A		196A	<b>I-255 EAST</b>
<b>I-270 NORTH</b>	196B		196B	<b>I-270 NORTH</b>
US67/LINDBERGH	197		197	US67/LINDBERGH
REAVIS BARRACKS RD	199		199	REAVIS BARRACKS RD
UNION RD	200		200	UNION RD
BAYLESS	201A		201A	BAYLESS
WEBER RD	201B		201B	WEBER RD
ST. LOUIS CITY			ST. LOUIS CITY	
GERMANIA (ST. LOUIS)	202B		202B	GERMANIA (ST. LOUIS)
LOUGHBOROUGH AVE (ST. LOUIS)	202C		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
<b>I-44 WEST (ST. LOUIS)</b>	207		207	<b>I-44 WEST (ST. LOUIS)</b>
7TH ST/PARK AVE (ST. LOUIS)	208		208	7TH ST/PARK AVE (ST. LOUIS)

I-55 DISTRICT 6 NORTHBOUND  
 I-55 DISTRICT 6 SOUTHBOUND

## I-44 Mile Markers

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

## I-170 Mile Markers

I-64 WEST/US 40-61	1A	I-170 DISTRICT 6 SOUTHBOUND I-170 DISTRICT 6 NORTHBOUND		
I-64 EAST/US 40-61	1B			
				1C
				GALLERIA PARKWAY
BRENTWOOD BLVD	1D			
FOREST PARK PARKWAY	1E			1E
LADUE RD	1F			1F
DELMAR	2			2
EAST/3B WEST SR 340 (OLIVE BLVD)	3A			3
SRD/SR 364 (PAGE AVE)	4			4
SR 180 (ST. CHARLES ROCK RD)	5			5
SR 115 (NATURAL BRIDGE RD)	6			6
I-70 EAST (EXIT LEFT)	7A			7A
I-70 WEST (EXIT RIGHT)	7B			7B
				7C
				LAMBERT ST. LOUIS AIRPORT
SCUDDER	8			8
AIRPORT RD	9A			9A
				9B
			9C	
			10A	
			10B	

## SR 364 Mile Markers

		SR 364 WESTBOUND SR 364 EASTBOUND	11B	HARVESTER RD
			12	HERITAGE CROSSING/JUNGS STATION RD
SR94 EAST/ST. CHARLES	13		13	SR 94 EAST/MUEGGE RD
ARENA PKWY/UPPER BOTTOM RD	14		14	UPPER BOTTOM/ARENA
MARYLAND HEIGHTS EXPRESSWAY	17		17	MARYLAND HEIGHTS EXPRESSWAY
BENNINGTON PL	19			
			21	BENNINGTON PL
I-270 SOUTH	22A			
I-270 NORTH	22B			

## SR 370 Mile Markers

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

## SR 21 Mile Markers

RT B	164.8	SR 21 NORTHBOUND SR 21 SOUTHBOUND	164.8	RT B
RT BB	165.4		165.4	RT BB
STADIUM DR UNDERPASS	166.4		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		171.4	GLADE CHAPEL RD OVERPASS
OLD HWY 21 (GOLDMAN)	172.6		172.6	OLD HWY 21 (GOLDMAN)
KLABLE RD OVERPASS	174.2		174.2	KLABLE RD OVERPASS
SCHENK RD OVERPASS	175.2		175.2	SCHENK RD OVERPASS
HEADS CREEK	176.4		176.4	HEADS CREEK
RT MM	177.7		177.7	RT MM
W. FOUR RIDGE RD OVERPASS	179		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

