

# The New I-64 Economic and Regional Mobility Study

## Quarterly Report #7

July 2009- September 2009

HDR

**Before the Closure**

Please indicate how much time it takes you to make certain trips now compared to how long it took you before the closure.

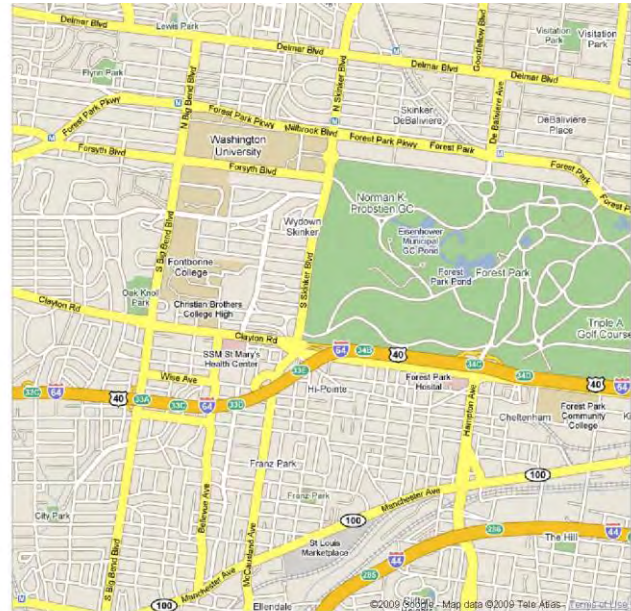
	Less than half of 15 minutes	Between 1/2 and 1 hour	1 to 5 minutes	5 to 15 minutes	15 to 30 minutes	More than 30 minutes
Traveling through the closure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Traveling around the closure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Traveling to work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Traveling to school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Traveling to shopping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Traveling to medical appointments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Traveling to other destinations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>




# 1. Executive Summary

On December 14, 2008, the eastern closure began with the closure of I-64 between I-170 and Kingshighway Boulevard. On December 15, 2008, the western closure of the New I-64 was opened to traffic. Partners again implemented their regional command center operations to ensure that any traffic flow conditions were addressed and responded to as the public adjusted to the change in closure along I-64.

This quarterly report assesses the period July 2009 through September 2009 that includes the 19<sup>th</sup>, 20<sup>th</sup> and 21<sup>th</sup> months of the I-64 closure, evaluating the three key areas of **Communications** (MoDOT's provision of information to the public, and the public's response to the project), **Mobility** (the effects of the closure on travel behavior, choices, and traffic flow), and **Economics** (the effects of the closure on businesses within the corridor as well as the economic health of the region). With the eastern closure now in place for several months; the study will begin to focus attention on potential differences between the eastern and western closures. In the 3<sup>rd</sup> Quarter of 2009, the research team found the following information:



Communications (pp. 2-4)	Mobility (pp. 5-21)	Economics (pp. 22-29)
<p>Surveys indicate that the overall satisfaction level remains high</p> <p>The Eastern Closure appears to be having more of an impact on travel behavior based on responses from “where I shop”, “how often I travel to certain areas” and “how well I managing to move around St. Louis</p> <p>TV News, Internet, Radio News and Roadway Signs still are the leading way to get information on the construction project</p> <p>Information from Motorist Assist and I-64 Traffic Response on the two survey questions still remains higher than online surveys when asked the same question</p>	<p>Traffic volumes continue to be higher on the designated interstate routes and adjacent arterials. Daily volumes are up on Interstates 44, 64, 170 and 270 in certain sections.</p> <p>Average speeds are down slightly along certain corridors. The range varies from being plus (up) 362% on I-44 eastbound in pm peak period to being negative (down) 10% on I-70 westbound in the pm peak period.</p> <p>Travel times are up slightly on certain interstate and adjacent arterials and correspond similar to measurements denoted in average speeds above since, these measurements are based on the average speed</p>	<p>Both corridor and non-corridor wages where lower in the 1<sup>st</sup> Quarter of 2009</p> <p>Unemployment in the St. Louis area is tracking very similar to the national trends in both 2008 and the first several months of 2009.</p> <p>The change in sales from the 1<sup>st</sup> quarter to the 2<sup>nd</sup> quarter of this year saw a slight increase for both corridor and non-corridor similar to the previous three years. The 2<sup>nd</sup> quarter of 2009 was \$490 million less than 2<sup>nd</sup> quarter of 2008</p> <p>The taxable sales during 2<sup>nd</sup> quarter of 2009, when indexed to the 2<sup>nd</sup> quarter of 2005 fell below 1.0 for corridor and St. Louis County; St. Louis City and non-corridor had a index higher than 1.0</p>



In this quarter, we obtained respondent input via a new online survey and mail-in surveys from recipients of Motorist Assistance and I-64 Traffic Response services. We will continue to assess information received during the eastern closure and compare it to the western closure information received in 2008. This comparison will show any consistency or inconsistency in the two data sets.

During the 3<sup>rd</sup> Quarter of 2009, 1,266 people have been surveyed to measure their opinions about the closure and how it may have changed their behavior. Two survey instruments were utilized in this research. The first, an online survey, was a detailed instrument designed specifically for this project. For the second instrument, two key questions were also added to the motorist assist surveys distributed by MoDOT operators after providing traffic assistance to motorists in need.

People access the online survey through MoDOT's New I-64 website. 97 responses were generated in July (35), August (34), and September (28). 82 of these responses were by first-time visitors to the survey. 4 people had taken the survey before and another 11 people were not sure if they had taken the survey before. Online respondents tended to be Caucasian (85.6%) and a plurality (39.5%) made between \$60,000 and \$120,000 annually.

Motorist Assist respondents tend to be less affluent than most respondents. People in this income bracket are less likely to respond to mail surveys and online surveys, so two key questions were added to the standard surveys already distributed by motorist assist operators to ensure that the most important questions were asked of the lower income segment. 1,169 responses were obtained from the motorist assist programs (1,015 through MoDOT's Motorist Assist program and 154 through the I-64 Traffic Response program).

**Both survey methods indicate that the overall satisfaction level remains high even though the Eastern Closure appears to be having more of an impact on behavior (those indicators shown in darker blue-green in table below) than the Western Closure did.**

### **Online Survey**

Based on the online data, the Eastern Closure is having a greater impact on respondent behavior than that of the Western Closure. "Satisfaction with how well managing to move around the St. Louis area with the closure" is noticeably different. Despite this reported increased impact, overall satisfaction with MoDOT remains very high – almost identical to the results received during the Western Closure. The Table below shows all responses received from online surveys for both the 2008 Western Closure and 2009 Eastern Closure for side-by-side comparison.

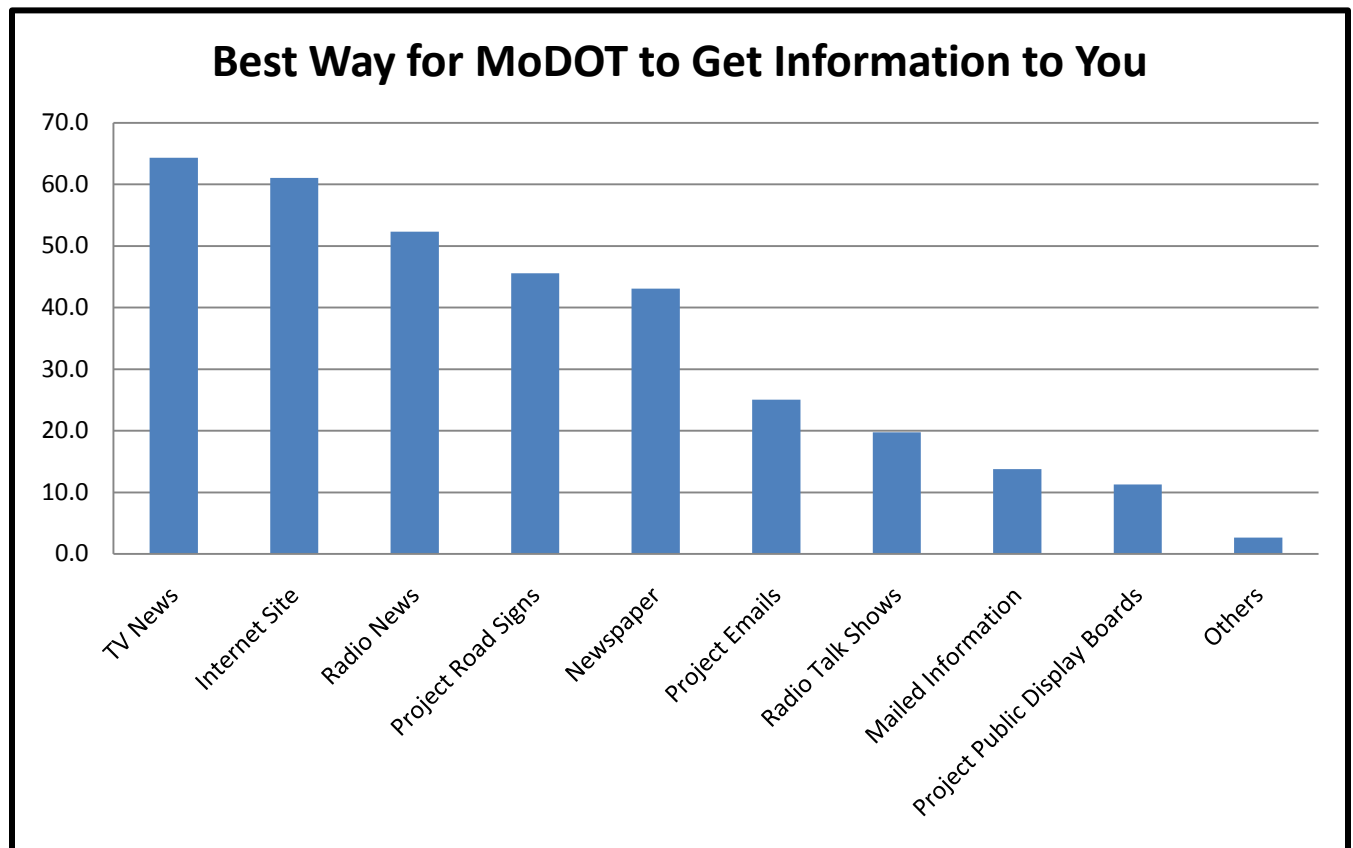
<b>Key Public Indicators - Online Comparison of Both Closures</b>	<b>Western Closure</b>	<b>Eastern Closure</b>	<b>Total</b>
Overall level of satisfaction with how the I-64 closure has been handled	76.7%	77.3%	76.8%
Satisfaction with how well the public kept informed about the new I-64 project	88.7%	86.7%	88.3%
Satisfaction with how well managing to move around the St. Louis area w/ the closure	69.7%	58.7%	67.5%
Satisfaction with timeliness of information being made available	87.5%	87.0%	87.4%
Agreement with “the closure has changed where I shop”	41.5%	46.9%	42.6%
Agreement with “the closure has changed how often I travel to certain areas”	73.3%	79.4%	74.5%
Satisfaction with decision to complete the work by closing I-64 for 2 years instead of 6-8 years w/ lane closures	76.5%	82.7%	77.7%
<i>Survey responses</i>	<i>1,362</i>	<i>342</i>	<i>1704</i>

Respondents are less satisfied with their ability to move around the St. Louis area. It was noticed they were more likely to state that the Eastern Closure has changed where they shop and how often they travel to certain areas. These responses could be the results of several different factors like the adjacent alternative transportation network, adjacent land use (commercial, business complex, residential, recreation, healthcare, etc.), lower response rate, second year of construction, etc. The project team will continue to monitor these changes in upcoming reports.

The best ways to reach online respondents is unchanged from the previous year as demonstrated in the following table:

<b>Best Way for MoDOT to Get Information to You</b>	<b>Western Closure</b>	<b>Eastern Closure</b>	<b>Total</b>
TV News	62.4%	72.1%	64.3%
Internet Site	60.2%	64.6%	61.1%
Radio News	51.2%	56.7%	52.3%
Road Signs	43.2%	55.2%	45.6%
Newspaper	43.0%	43.3%	43.1%
Project email from MoDOT or I-64 Team	24.2%	28.5%	25.1%
Radio Talk Shows	19.8%	19.7%	19.8%
Receive Information in Mail	13.1%	16.5%	13.8%
Project Display Boards at Public Events	10.8%	13.1%	11.3%
Other	2.6%	2.9%	2.7%

The following chart presents the total column to graphically indicate the best way to reach these respondents based on the on-line survey tool.



### **Motorist Assist**

Two key questions were asked in mail-in surveys given out by MoDOT's Motorist Assist program as another way of obtaining information. The change measured since the Eastern Closure has been minor, but in accordance with that of the other methods. People are finding it slightly more difficult to move around, but are still quite satisfied, especially with the decision to close I-64 for two years instead of six to eight years with lane closures. The following table shows the comparison made between the Western and Eastern closures:

Key Public Indicators - Motorist Assist Comparison of Both Closures	Western Closure	Eastern Closure	Total
Satisfaction with how well managing to move around the St. Louis area w/ the closure	90.0%	89.5%	89.8%
Satisfaction with decision to complete the work by closing I-64 for 2 years instead of 6-8 years w/ lane closures	93.8%	95.9%	94.7%
<i>Survey responses</i>	3,837	2870	6707

### 3. Mobility

In this quarter, we obtained traffic data for both freeway and arterials. This information shows both baseline and quarterly traffic data for easy comparison of any changes in traffic conditions. Traffic data collected includes traffic volumes, speeds and travel times along various routes near the I-64 construction project.

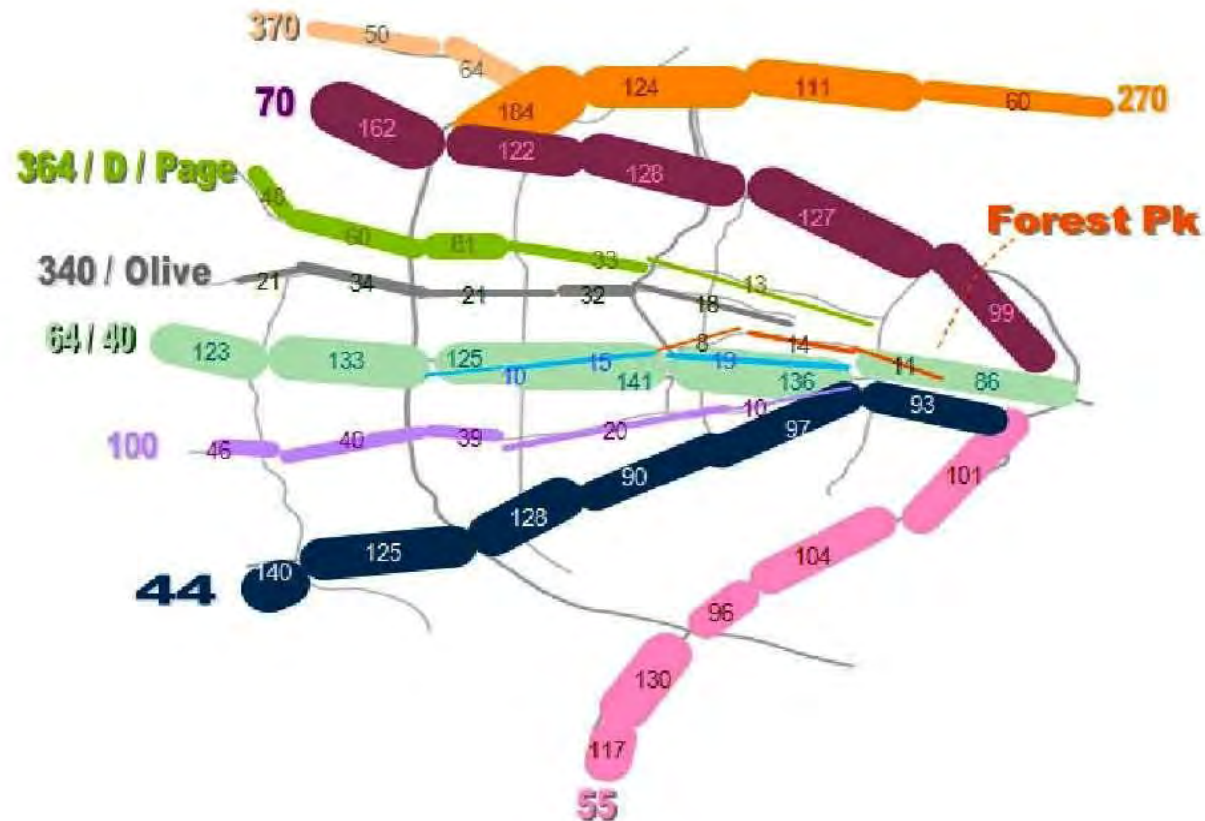
Sections by traffic volumes, average speed and travel times have been developed. The tables and graphs will be introduced with a short summary of what has been observed.

#### **Freeways**

We continue to notice increases in daily traffic volumes along I-44, I-70 and I-270 when compared to the baseline traffic volume data. Also, daily traffic volumes on I-64 west of I-270 are greater than the baseline (pre-construction) level. The four graphs show baseline and July through September, 2009 traffic volumes:



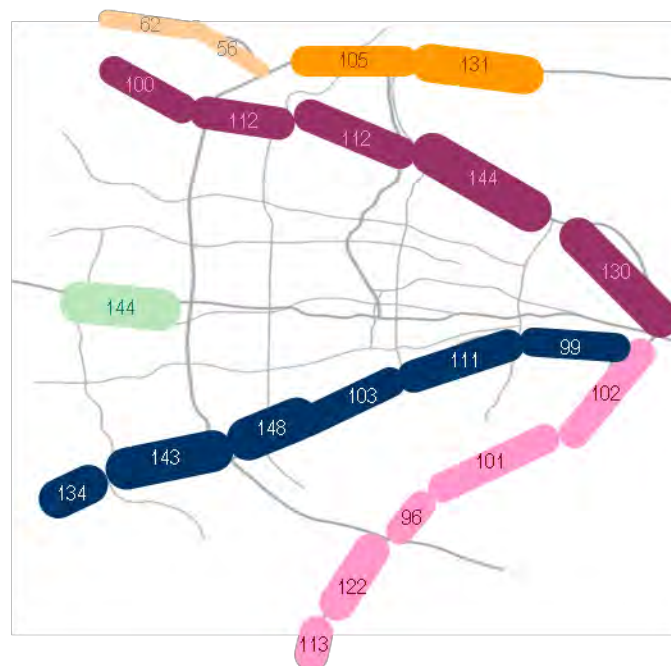
# EW Baseline



East-West Corridors Baseline Traffic Volume Graph

7/1/2009 to 9/30/2009

*I-64 STUDY EAST- WEST CORRIDORS  
TRAFFIC VOLUMES JULY THROUGH SEPTEMBER*



**East-West Corridors 2009 3<sup>rd</sup> Quarter Traffic Volume Graph**



# NS Baseline



North-South Corridors Baseline Traffic Volume Graph

7/1/2009 to 9/30/2009

*I-64 STUDY NORTH – SOUTH CORRIDORS  
TRAFFIC VOLUMES JULY THROUGH SEPTEMBER*



**North-South Corridors 2009 3<sup>rd</sup> Quarter Traffic Volume Graph**

The following table shows daily traffic volumes, and average speeds and travel times information for the PM Peak periods. These selected sites were selected early in the study to designate some control sites to monitor that could potentially experience changes during the construction along I-64 corridor. These freeways were designated and signed with construction signing as alternate routes for potentially impacted traffic. By consistently monitoring the same sites, we can get a general understanding on how traffic is moving in the region. Index indicates how the 3<sup>rd</sup> quarter of 2009 traffic conditions compares to baseline traffic conditions in 2007. Green highlighted index values show an increase in traffic condition measurement while the red highlighted index values show a decrease in traffic condition measurement.

### I-64 Study Update - Freeway Information - Quarter 3 July - September 2009

Route	Location	Volume (vehicles/day)			Index	
		Aug-Dec '07	Jul-Sept '07	Jul-Sept '09	Jul-Sept '09/	
					Aug-Dec '07	Jul-Sept '07
I-44	East of I-270	125,057	125,234	142,775	1.142	1.140
I-44	West of Mississippi Ave	92,641	92,457	99,266	1.072	1.074
I-55	South of Union Rd	96,447	96,623	96,108	0.996	0.995
I-55	South of Broadway	101,093	100,196	101,769	1.007	1.016
I-170	North of Page Ave	107,862	107,379	121,409	1.126	1.131
MO 370	West of Taussig Ave	61,167	63,008	61,707	1.009	0.979
I-70	East of Airfield Dr	118,242	128,571.8	111,713	0.945	0.869
I-70	East of Adelaide	119,620	117,844	130,076	1.087	1.104
I-270	At Ladue	210,012	209,558.7	190,653	0.908	0.910

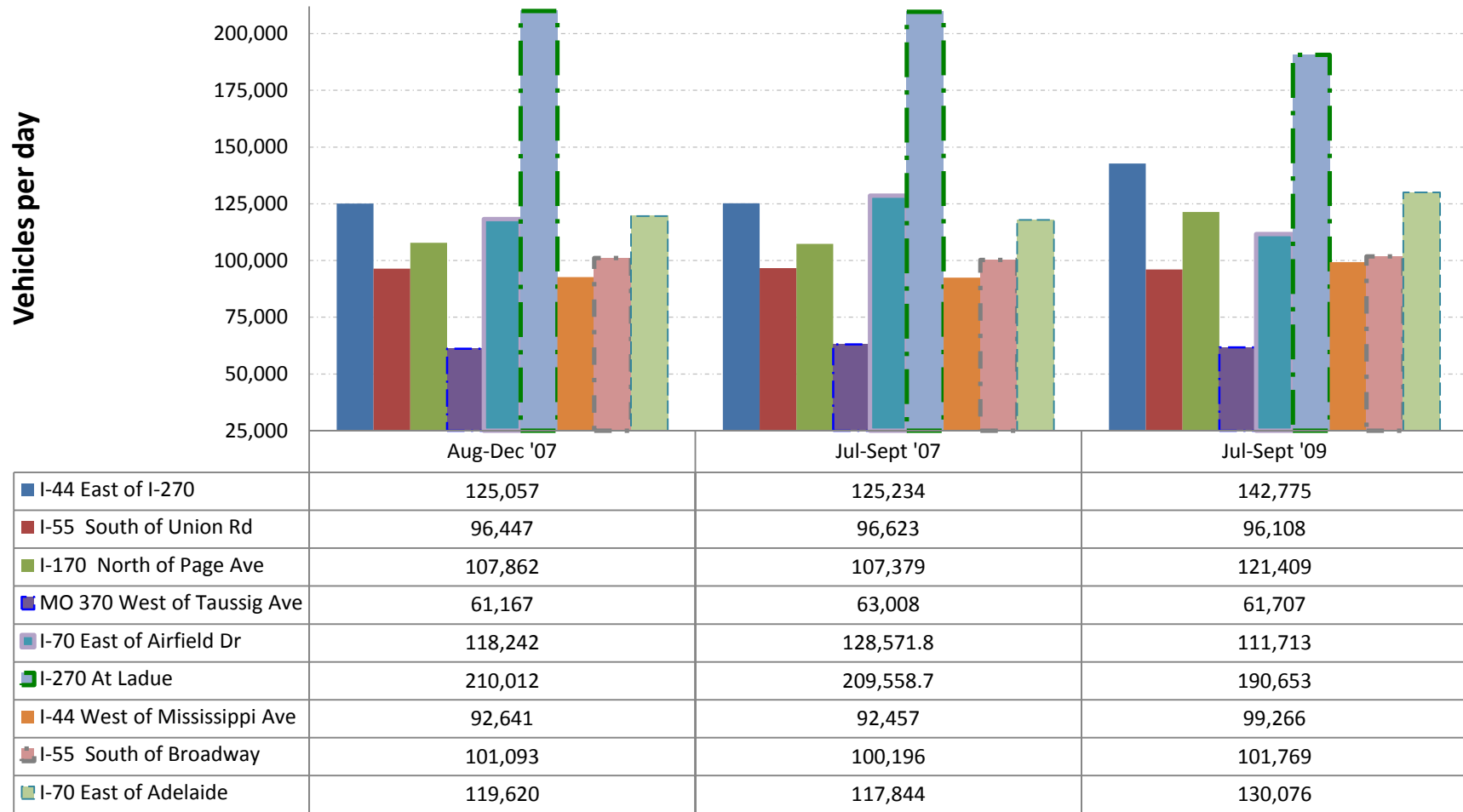
  

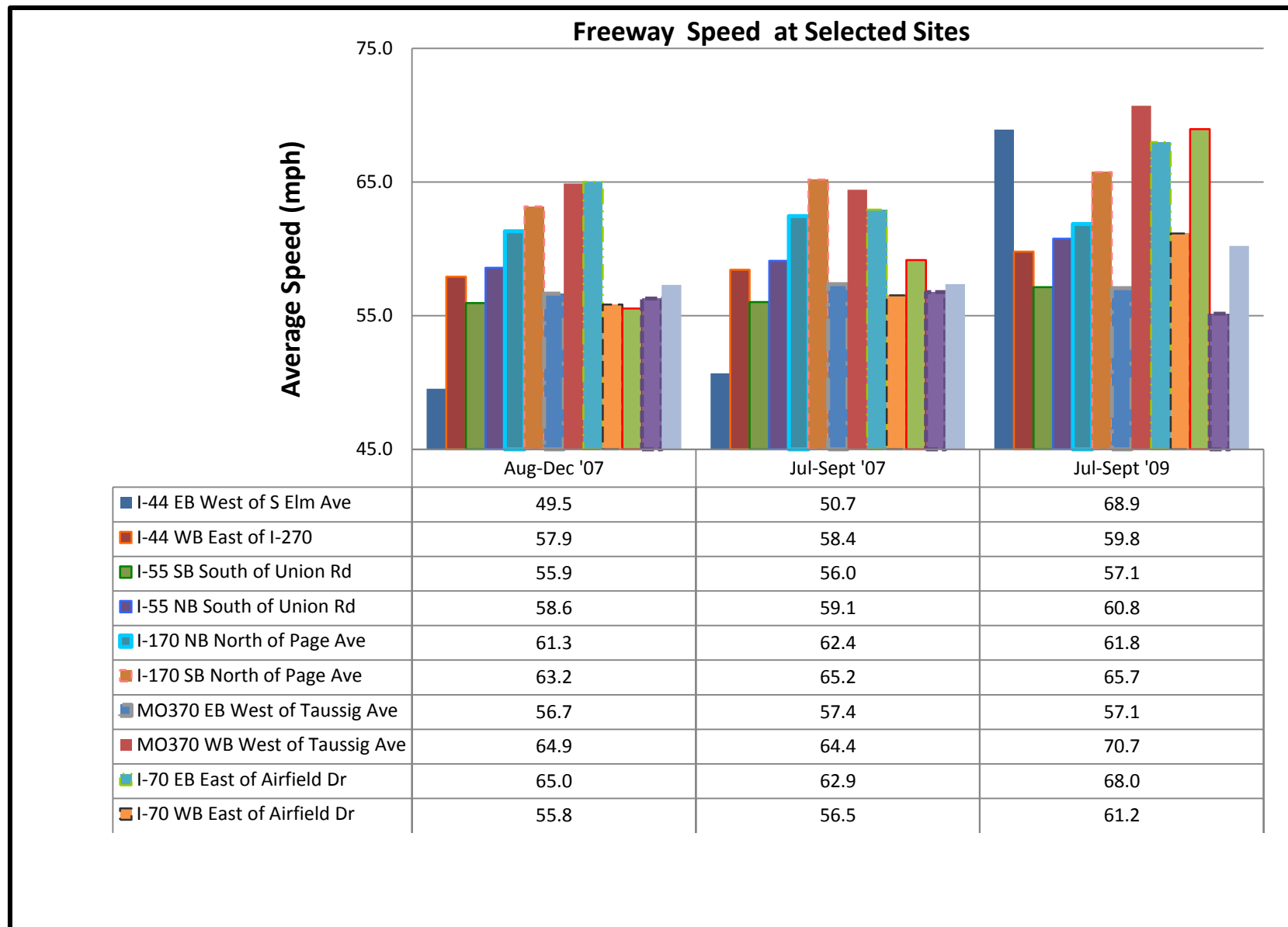
		Speed (mph)			Index	
		Aug-Dec '07	Jul-Sept '07	Jul-Sept '09	Jul-Sept '09/	
					Aug-Dec '07	Jul-Sept '07
I-44 EB	East of I-270	49.5	50.7	68.9	1.392	1.360
I-44 WB	East of I-270	57.9	58.4	59.8	1.033	1.023
I-44 EB	West of Mississippi Ave	57.3	57.4	60.2	1.051	1.050
I-44 WB	West of Mississippi Ave	58.6	59.9	58.0	0.990	0.969
I-55 SB	South of Union Rd	55.9	56.0	57.1	1.021	1.020
I-55 NB	South of Union Rd	58.6	59.1	60.8	1.037	1.028
I-55 SB	South of Broadway	61.9	62.2	62.6	1.011	1.007
I-55 NB	South of Broadway	60.6	63.5	62.8	1.036	0.989
I-170 NB	North of Page Ave	61.3	62.4	61.8	1.009	0.990
I-170 SB	North of Page Ave	63.2	65.2	65.7	1.041	1.009
MO370 EB	West of Taussig Ave	56.7	57.4	57.1	1.007	0.995
MO370 WB	West of Taussig Ave	64.9	64.4	70.7	1.090	1.097
I-70 EB	East of Airfield Dr	65.0	62.9	68.0	1.046	1.080
I-70 WB	East of Airfield Dr	55.8	56.5	61.2	1.095	1.082
I-70 EB	East of Adelaide	60.8	62.2	72.4	1.190	1.163
I-70 WB	East of Adelaide	55.6	56.4	50.9	0.916	0.904
I-270 NB	At Ladue	55.5	59.2	69.0	1.242	1.166
I-270 SB	At Ladue	56.3	56.8	55.1	0.980	0.971

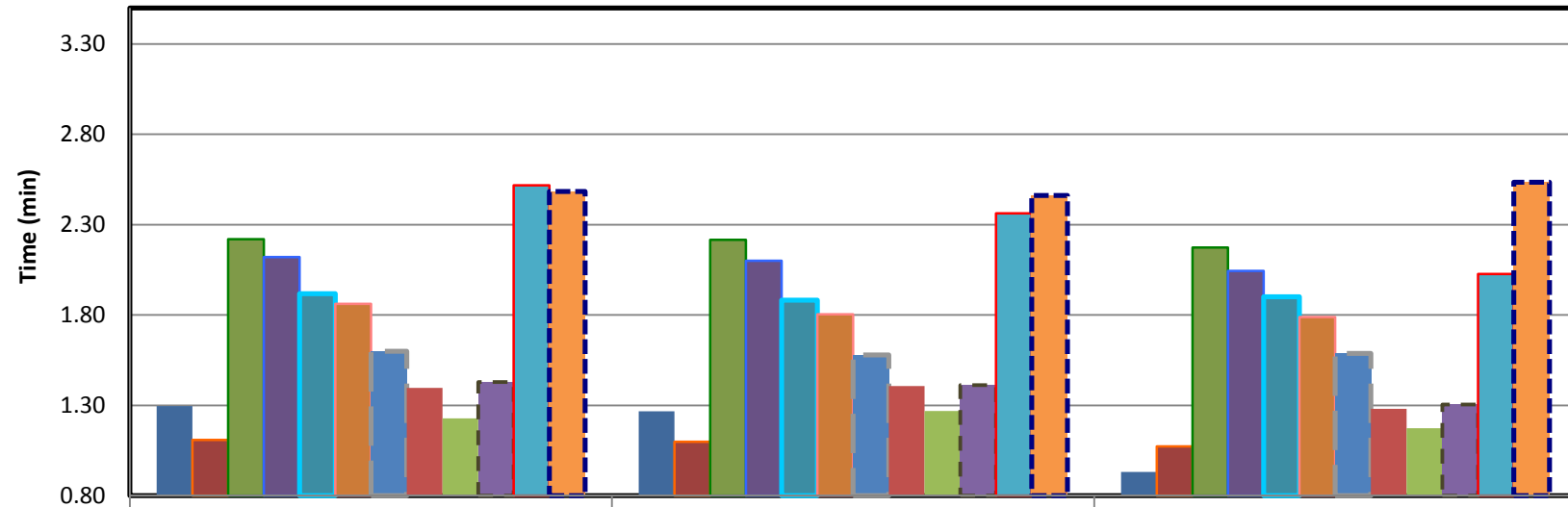
		Travel time (minutes)				Index	
		Distance	Aug-Dec '07	Jul-Sept '07	Jul-Sept '09	Jul-Sept '09/	
						Aug-Dec '07	Jul-Sept '07
I-44 EB		1.07	1.30	1.27	0.93	0.719	0.735
I-44 WB		1.07	1.11	1.10	1.07	0.968	0.977
I-44 EB		2.89	3.02	3.02	2.88	0.952	0.952
I-44 WB		2.89	2.96	2.89	2.98	1.010	1.032
I-55 SB		2.07	2.22	2.22	2.17	0.979	0.981
I-55 NB		2.07	2.12	2.10	2.04	0.964	0.973
I-55 SB		3.87	3.75	3.73	3.71	0.989	0.993
I-55 NB		3.87	3.83	3.66	3.70	0.965	1.011
I-170 NB		1.96	1.92	1.88	1.90	0.991	1.010
I-170 SB		1.96	1.86	1.80	1.79	0.961	0.991
MO370 EB		1.51	1.60	1.58	1.59	0.993	1.005
MO370 WB		1.51	1.40	1.41	1.28	0.918	0.911
I-70 EB		1.33	1.23	1.27	1.17	0.956	0.926
I-70 WB		1.33	1.43	1.41	1.30	0.913	0.924
I-70 EB		4.37	4.32	4.22	3.63	0.840	0.860
I-70 WB		4.37	4.72	4.66	5.15	1.091	1.107
I-270 NB		2.33	2.52	2.36	2.03	0.805	0.858
I-270 SB		2.33	2.48	2.46	2.54	1.021	1.030

## Average Daily Traffic (ADT)





## Travel Time along Selected Sections



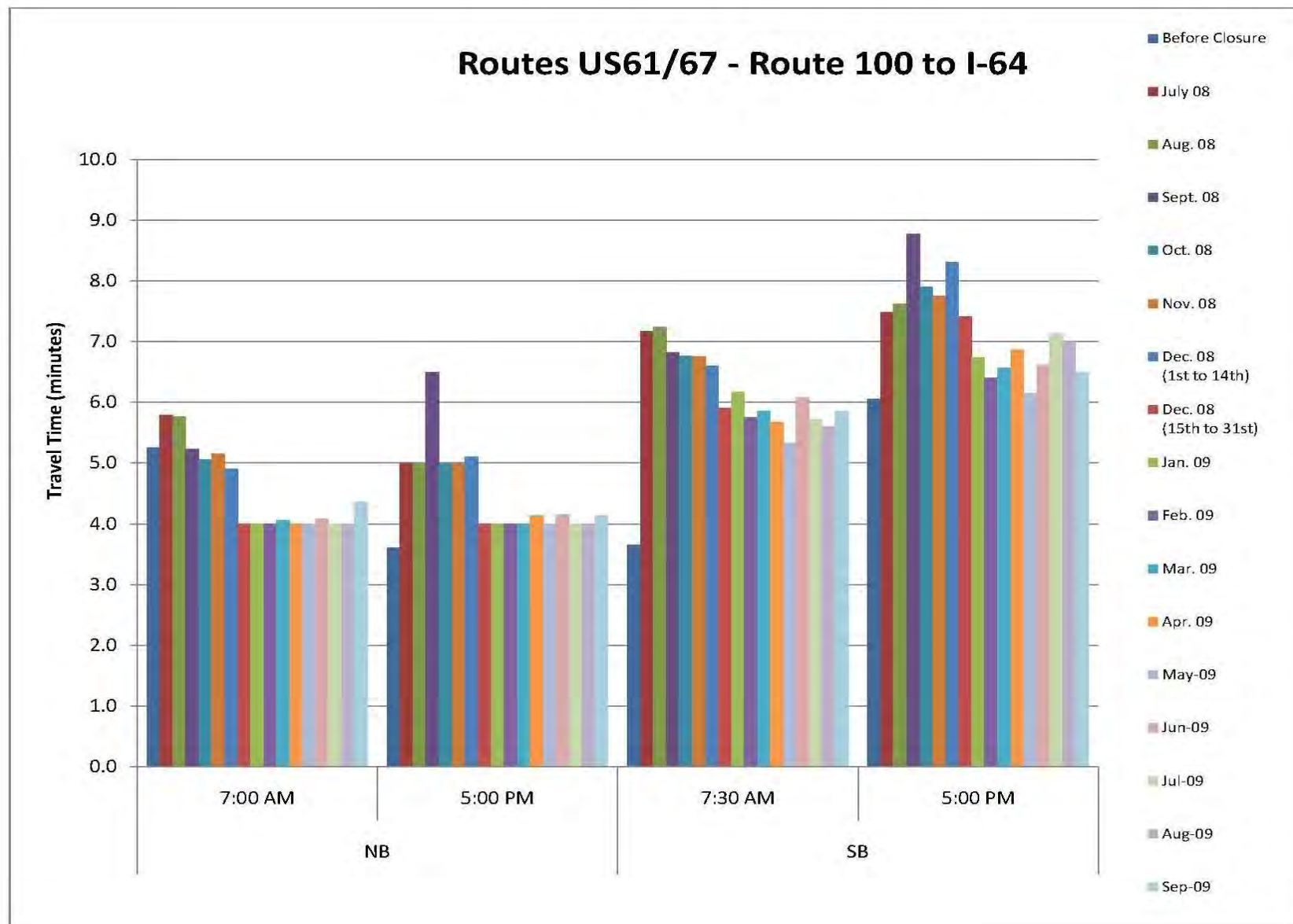
	Aug-Dec '07	Jul-Sept '07	Jul-Sept '09
I-44 EB	1.30	1.27	0.93
I-44 WB	1.11	1.10	1.07
I-55 SB	2.22	2.22	2.17
I-55 NB	2.12	2.10	2.04
I-170 NB	1.92	1.88	1.90
I-170 SB	1.86	1.80	1.79
MO370 EB	1.60	1.58	1.59
MO370 WB	1.40	1.41	1.28
I-70 EB	1.23	1.27	1.17
I-70 WB	1.43	1.41	1.30
I-270 NB	2.52	2.36	2.03
I-270 SB	2.48	2.46	2.54



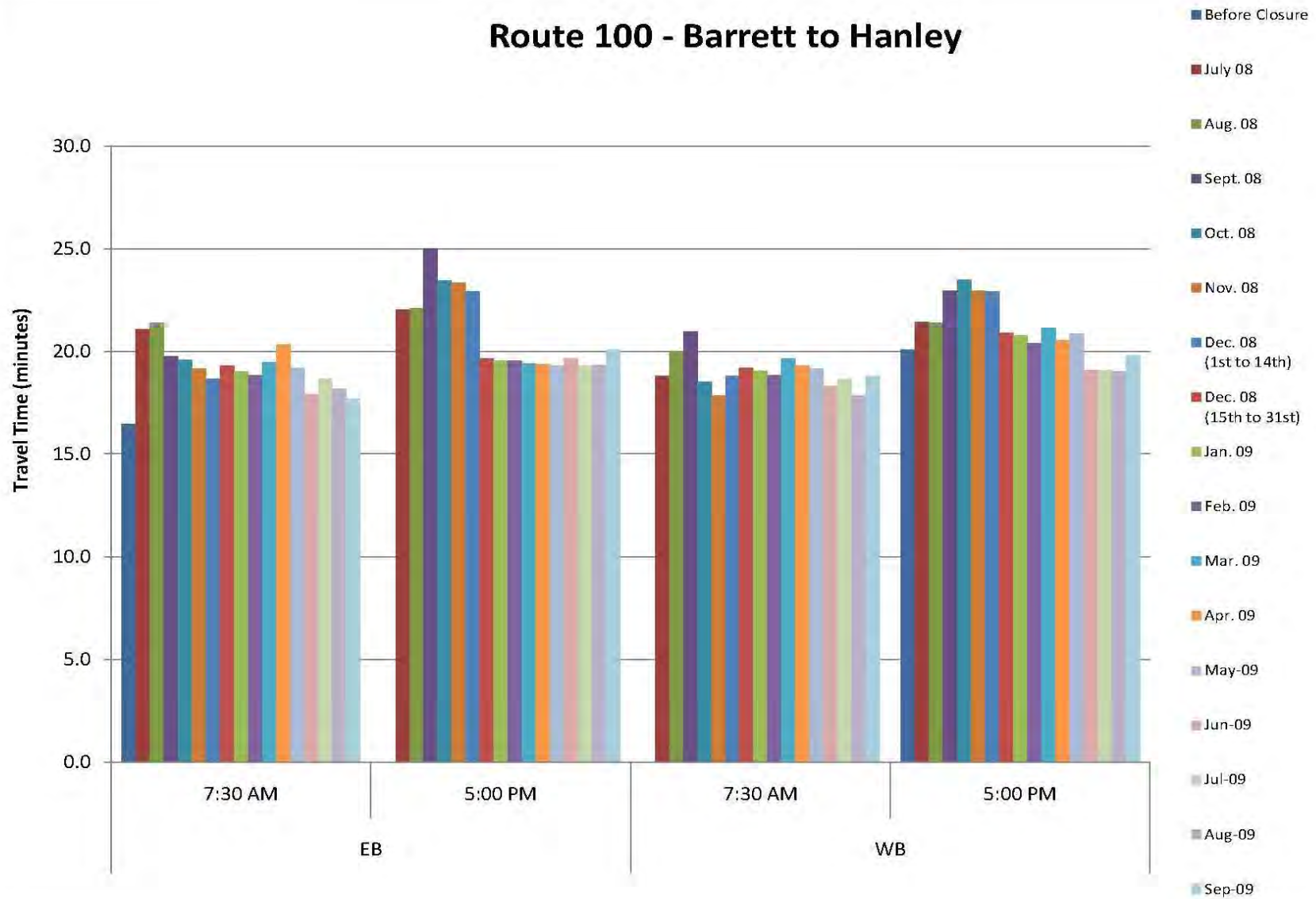
## Arterials

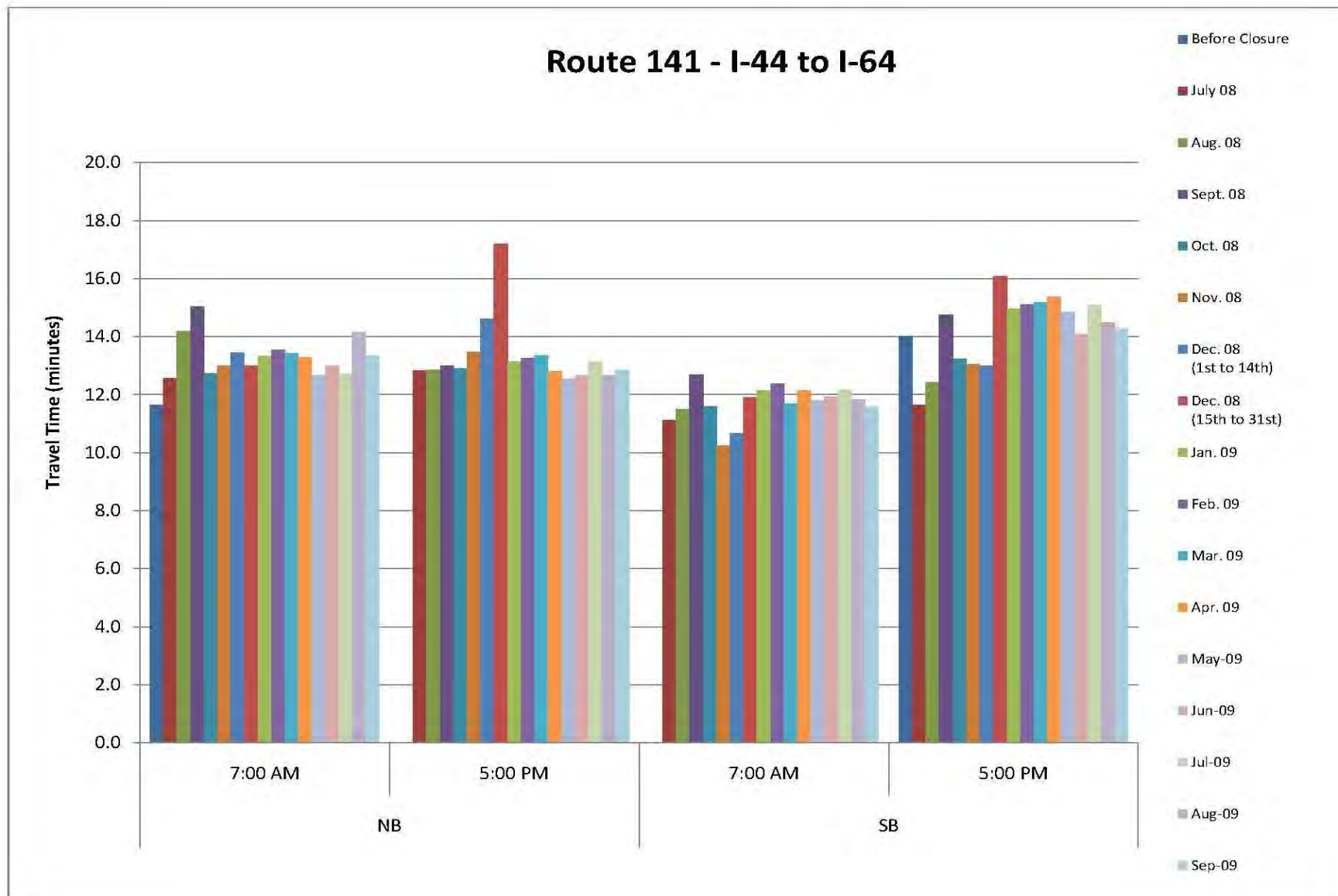
The study team continued to notice a slight increase in travel times along the two corridors being monitored during weekday peak periods. These corridors are major arterials and should provide an indicator of travel along the arterials near the I-64 construction project. The following is a table with average weekday peak periods travel times and their corresponding graphs:

Route	Segment	Direction	Peak Period	Travel Time (Min)																
				Before Closure	July 08	Aug. 08	Sept. 08	Oct. 08	Nov. 08	Dec. 08 (1-14)	Dec. 08 (15-31)	Jan. 09	Feb. 09	Mar. 09	Apr. 09	May-09	Jun-09	Jul-09	Aug-09	Sep-09
US 61/67	100 to I-64	NB	7:00 AM	5.3	5.8	5.8	5.2	5.1	5.2	4.9	4.0	4.0	4.0	4.1	4.0	4.0	4.1	4.0	4.0	4.4
			5:00 PM	3.6	5.0	5.0	6.5	5.0	5.0	5.1	4.0	4.0	4.0	4.0	4.1	4.0	4.2	4.0	4.0	4.1
		SB	7:30 AM	3.7	7.2	7.2	6.8	6.8	6.8	6.6	5.9	6.2	5.8	5.9	5.7	5.3	6.1	5.7	5.6	5.9
			5:00 PM	6.1	7.5	7.6	8.8	7.9	7.8	8.3	7.4	6.7	6.4	6.6	6.9	6.1	6.6	7.1	7.0	6.5
100	Barrett to Hanely	EB	7:30 AM	16.5	21.1	21.4	19.8	19.6	19.2	18.7	19.3	19.0	18.9	19.5	20.3	19.2	17.9	18.6	18.2	17.7
			5:00 PM	–	22.0	22.1	25.0	23.4	23.4	22.9	19.7	19.5	19.6	19.4	19.4	19.3	19.7	19.3	19.3	20.1
		WB	7:30 AM	–	18.8	20.0	21.0	18.5	17.9	18.8	19.2	19.0	18.9	19.6	19.3	19.1	18.3	18.6	17.8	18.8
			5:00 PM	20.1	21.4	21.4	23.0	23.5	23.0	22.9	20.9	20.8	20.4	21.2	20.5	20.9	19.1	19.1	19.0	19.8
MO141	I-44 to I-64	NB	7:00 AM	11.7	12.6	14.2	15.0	12.7	13.0	13.4	13.0	13.3	13.6	13.4	13.3	12.7	13.0	12.7	14.2	13.4
			5:00 PM	–	12.8	12.9	13.0	12.9	13.5	14.6	17.2	13.1	13.3	13.4	12.8	12.6	12.7	13.1	12.7	12.9
		SB	7:00 AM	–	11.1	11.5	12.7	11.6	10.3	10.7	11.9	12.1	12.4	11.7	12.1	11.8	11.9	12.2	11.8	11.6
			5:00 PM	14.0	11.7	12.4	14.8	13.2	13.1	13.0	16.1	15.0	15.1	15.2	15.4	14.9	14.1	15.1	14.5	14.3
D (Page)	I-270 to I-170	EB	7:30 AM	9.8	9.1	10.1	7.6	8.2	8.1	8.4	8.3	7.9	7.9	7.6	7.6	7.7	8.3	9.5	8.0	8.4
			5:00 PM	–	8.7	10.1	9.3	8.9	9.3	8.8	9.4	9.0	9.0	8.6	9.6	9.3	8.8	8.7	9.0	8.9
		WB	7:30 AM	–	11.3	11.7	8.6	7.6	7.9	7.8	7.4	7.2	7.0	7.0	9.0	8.9	8.8	9.3	8.5	8.6
			5:00 PM	10.6	11.2	11.6	8.5	8.7	8.4	8.9	9.3	8.0	7.9	8.0	9.2	9.7	9.7	9.9	11.4	9.6
D (Page)	I-170 to Grand Ave.	EB	7:30 AM	–									17.0	17.2	17.9	17.9	17.9	18.3	18.8	18.4
			5:00 PM	–									19.4	19.4	20.1	19.6	20.0	19.9	17.0	18.9
		WB	7:30 AM	–										20.8	20.0	19.5	20.5	20.0	19.4	20.6
			5:00 PM	–										19.1	18.5	19.0	18.4	18.2	18.3	18.7

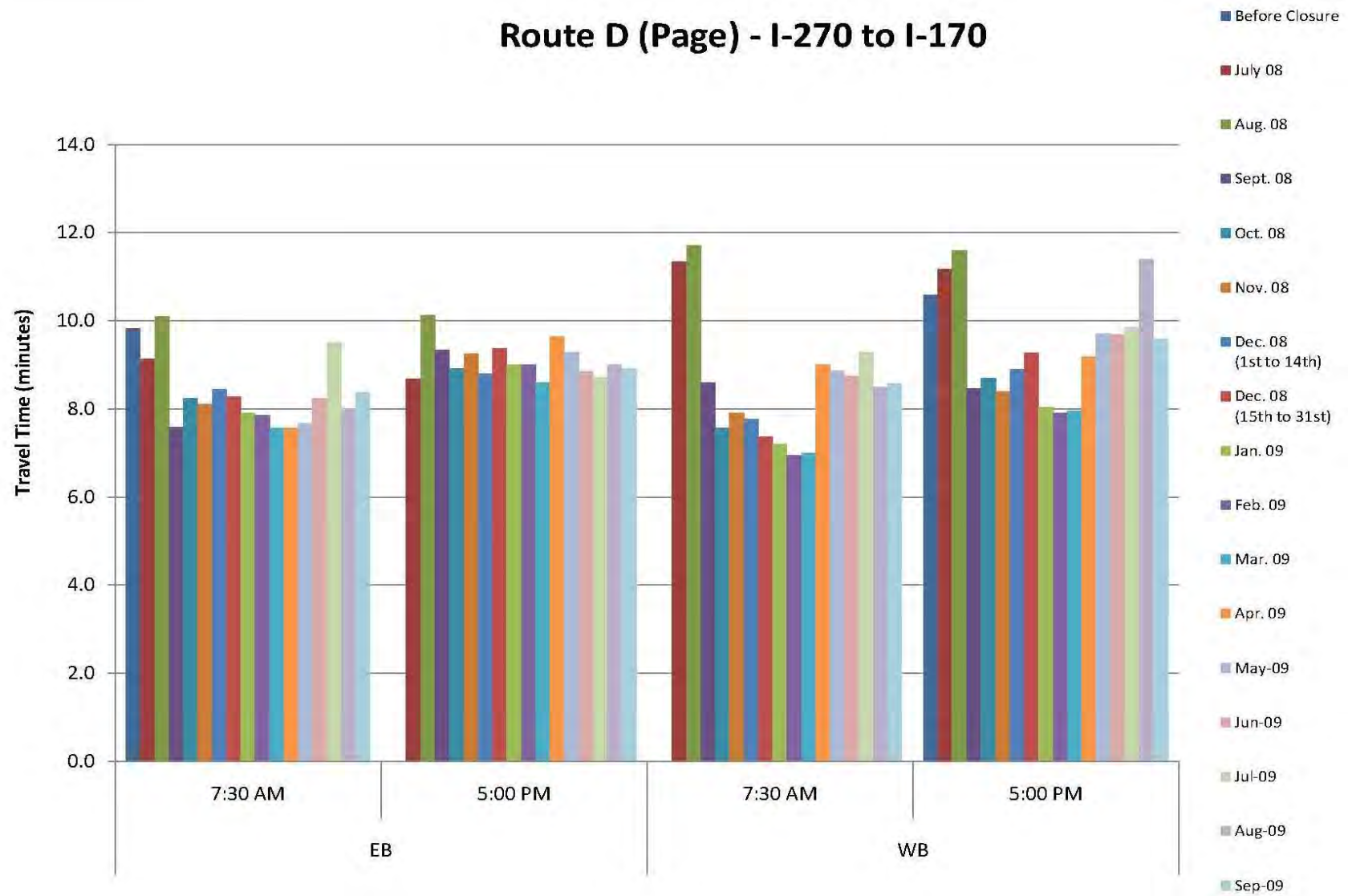


## Route 100 - Barrett to Hanley

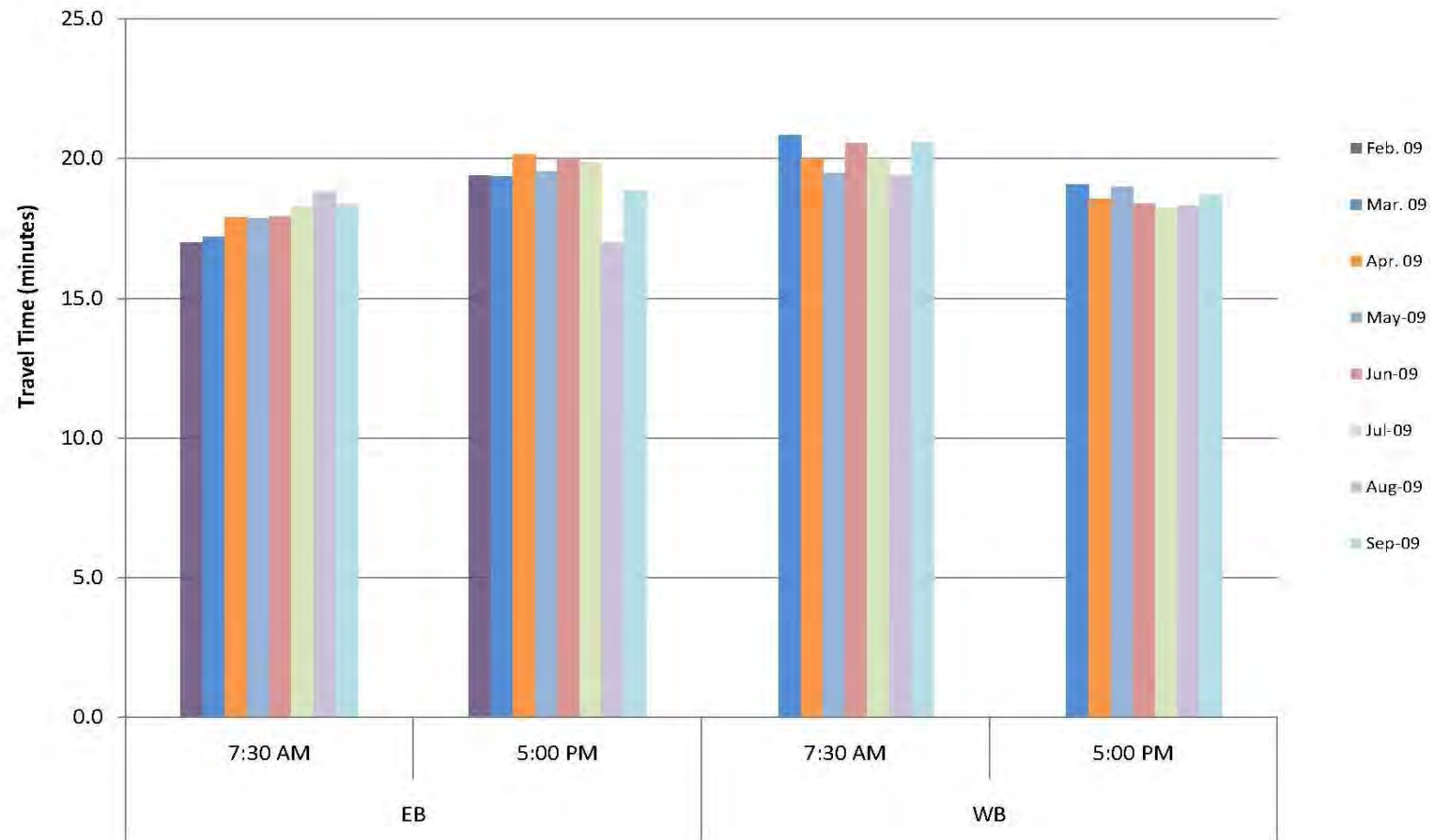




## Route D (Page) - I-270 to I-170



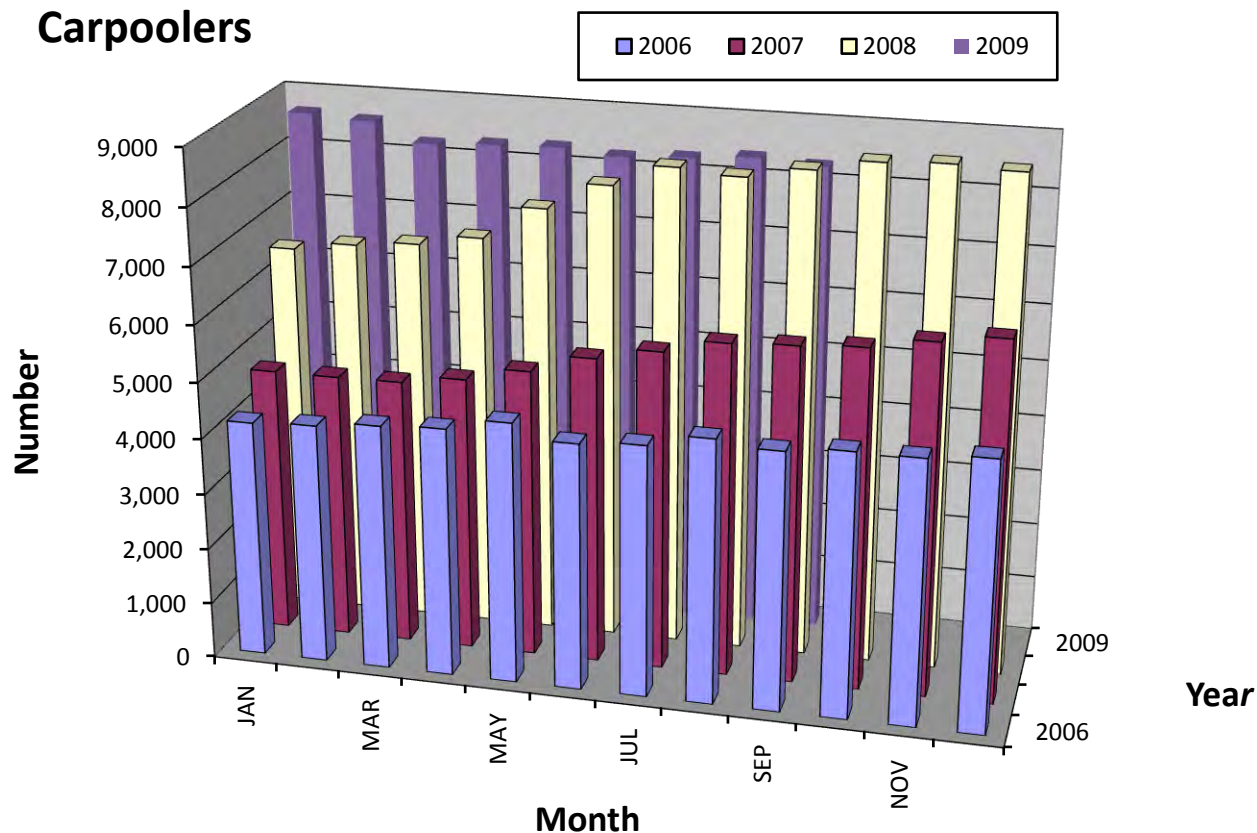
## Route D (Page) - I-170 to Grand



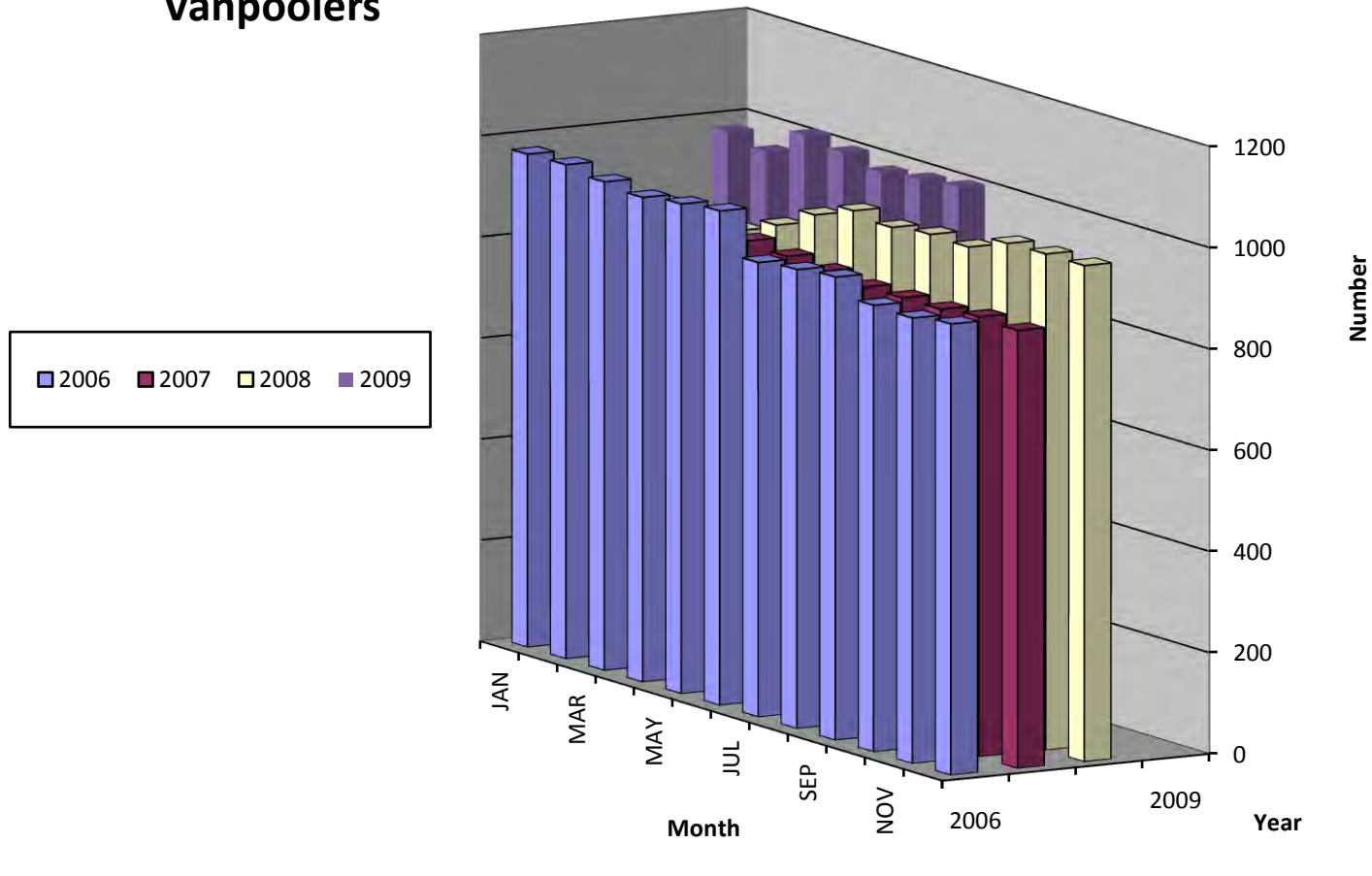


## **Rideshare**

Regional utilization information from Rideshare shows a somewhat stable pattern for both carpooling and vanpooling during this quarter. Carpooling in 2008 and 2009 continues to show a significant increase over base years of 2006 and 2007. Vanpooling has fluctuated over the 3 plus years of evaluation with a low 843 vanpoolers in 2008 and a high of 1018 in 2009. The usage of these regional services can be related to several factors including major roadway construction, economy and higher gas prices. As the study team moves towards the final report, we will use this information along public survey, economic and other mobility information to assess what role it plays in improving regional mobility. The following tables provide a summary of information for carpooling and vanpooling.



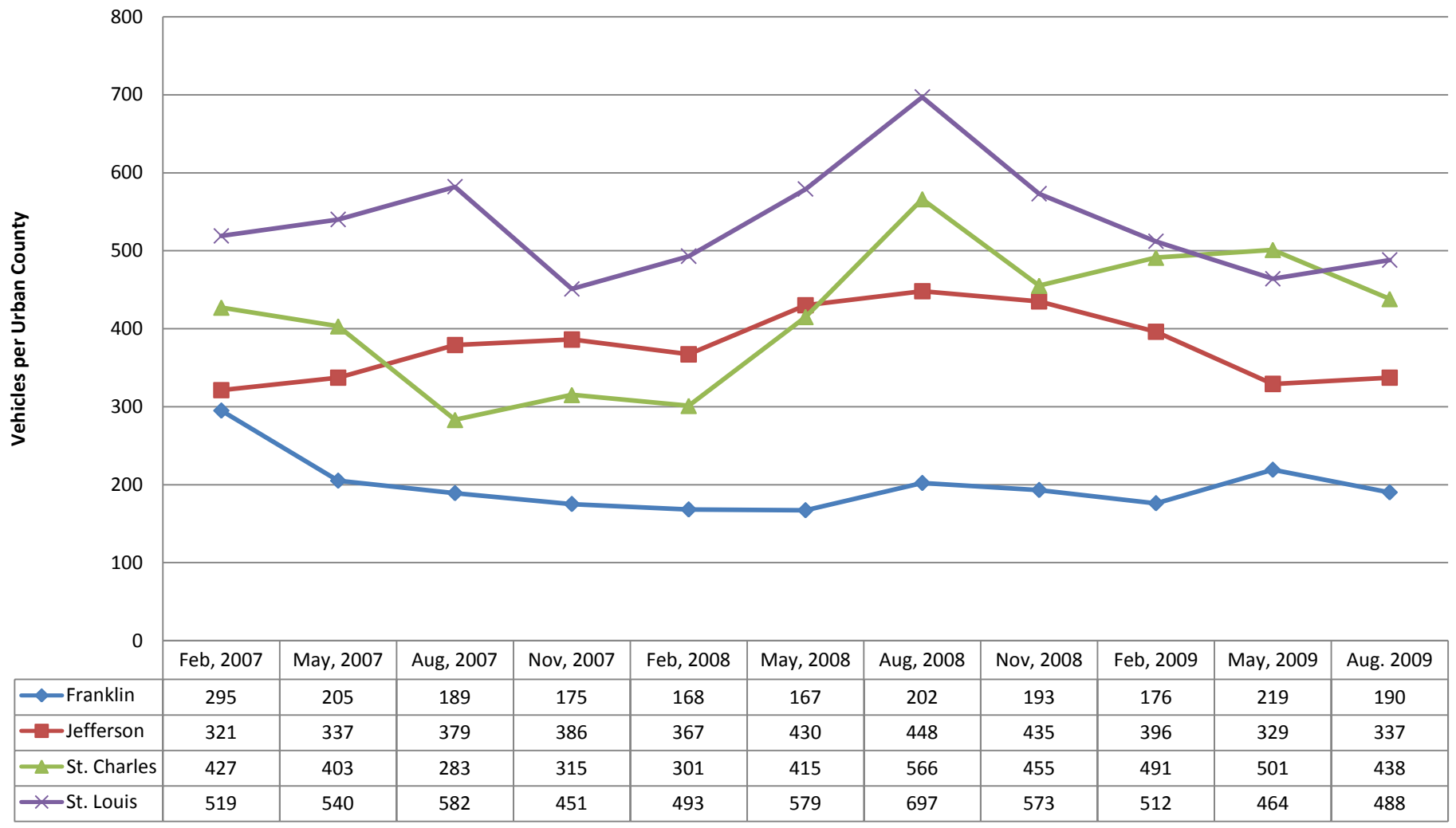
## Vanpoolers



## Park and Ride

Regional utilization information from MoDOT's 35 Urban Area Park and Ride lots show a peak usage in August of 2008 with declining usage trend by urban County since this peak. August 2009 is down 24% usage from the peak in August 2008 and may be attributed to lower gas prices. Factors mentioned in the Rideshare section can also apply to the changes in public use of these park and ride facilities. These factors will assess in a similar manner as the final report is developed. The following table tracks usage from the first quarter in 2007 through the present.

## MoDOT Park-and-Ride Usage



## 4. Economics

### Economics Highlights

The collection, analysis, and tracking of economic data and financial indicators was the focus of this quarter's work effort. To date, MERIC has provided HDR with economic data from the first quarter 2006 through the first quarter of 2009. In addition, taxable sales and commercial real estate data have been compiled up to and including the second-quarter of 2009. Because there is a time lag in available economic data, this quarterly report will only focus on the currently available and collected data.

### Economic Analysis Progress

Current activities to date include:

- Collection of the identified and published economic, demographic, and fiscal data.
- Receipt of ZIP-code-level data from MERIC for the first quarter of 2009. The economic data includes: industry employment, wage, and establishment data tabulations.
- Analysis of first and second quarter 2009 Taxable Sales Data from Missouri Department of Revenue (DOR).
- Receipt and preliminary analysis of industrial and office real estate data from Torto Wheaton Research (TWR).

### Economic Analysis

The major economic information for the I-64 corridor and non-corridor regions of St. Louis City and County for the first quarter of each year from 2006 through 2009 is displayed in Table 1. As there typically is seasonal variation throughout the year, the table below compares the first quarters of 2009. The first quarter of 2009 shows employment for the non-corridor has dipped below 2006 levels. Comparing the last quarter of 2008 with the first quarter of 2009 indicates that both regions combined experienced a loss of 28,630 jobs and \$1.9 billion in wages. The decline in employment, wages, and taxable sales has been the greatest in the non-corridor region.

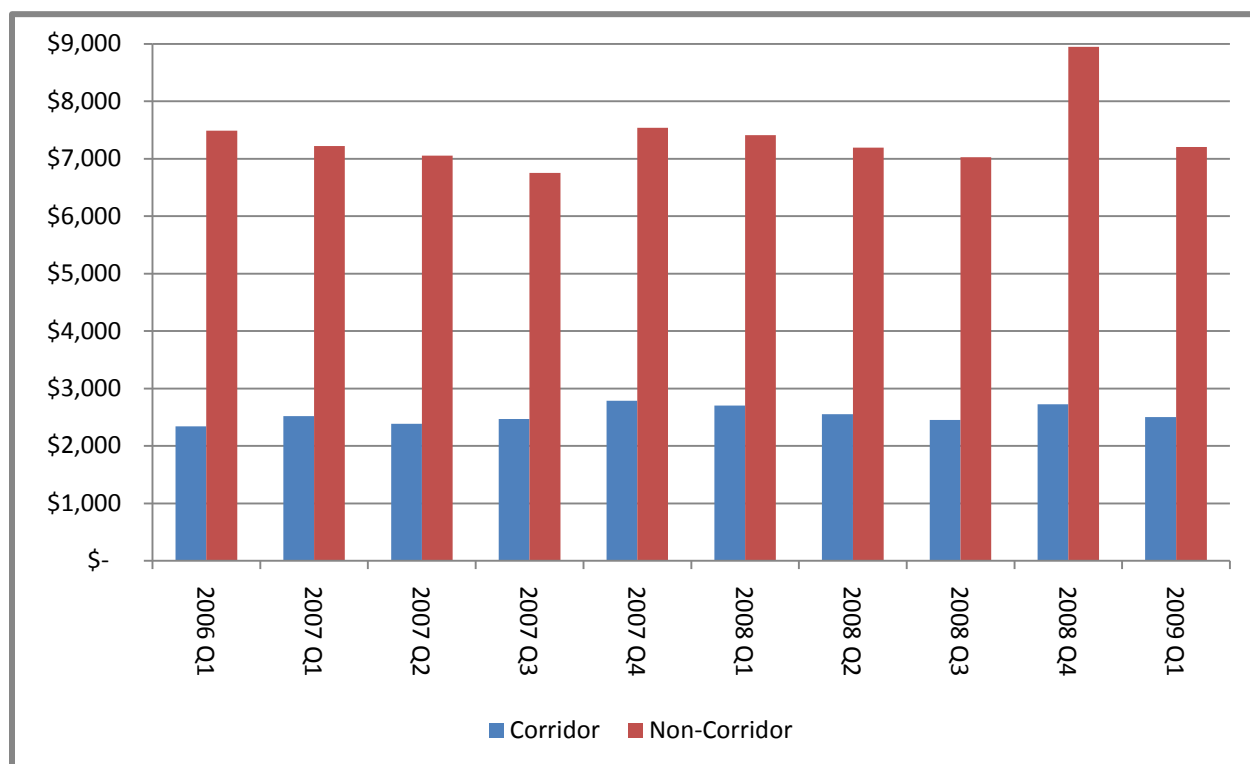
**Table 1: St. Louis I-64 Corridor and Non-Corridor Economic Profile: First Quarter of Each Year**

	1st Quarter 2006		1st Quarter 2007		1st Quarter 2008		1st Quarter 2009	
	Corridor	Non-Corridor	Corridor	Non-Corridor	Corridor	Non-Corridor	Corridor	Non-Corridor
Jobs	187,984	638,837	197,088	622,930	200,772	616,400	193,291	599,290
Number of Establishments	9,493	31,676	9,465	31,362	9,232	31,155	10,114	32,529
Wages (\$ Millions)	\$2,341	\$7,487	\$2,521	\$7,225	\$2,705	\$7,413	\$2,500	\$7,205
Total Taxable Sales (\$ Millions)	\$ 867	\$ 3,958	\$891	\$4,028	\$833	\$3,977	\$776	\$3,726

Source: MERIC and Missouri Department of Revenue

As displayed in Figure 1, the corridor region generates upwards of 23 percent of the total wages of the entire region, totaling \$2.7 billion in the fourth quarter of 2008, dropping to \$2.5 billion in the first quarter of 2009. The much larger non-corridor region generated \$8.9 billion in wages in the fourth quarter of 2008, but has since declined to \$7.2 billion in the first quarter of 2009. These dips are consistent with seasonal trends in the wage data for the previous years, where the wages declined from the first quarter through the third quarter of the year and then recovered in the fourth quarter. However, wages have declined below 2006 levels for the non-corridor and are barely above 2006 wages for the corridor. Fourth quarter wages (2008) were atypical, as there was a significant one time payout of additional compensation in the form of year-end bonuses, profit-sharing, severance pay, and firm buyout payments.

**Figure 1: Total Quarterly Wages by Region in Millions of dollars<sup>1</sup>**



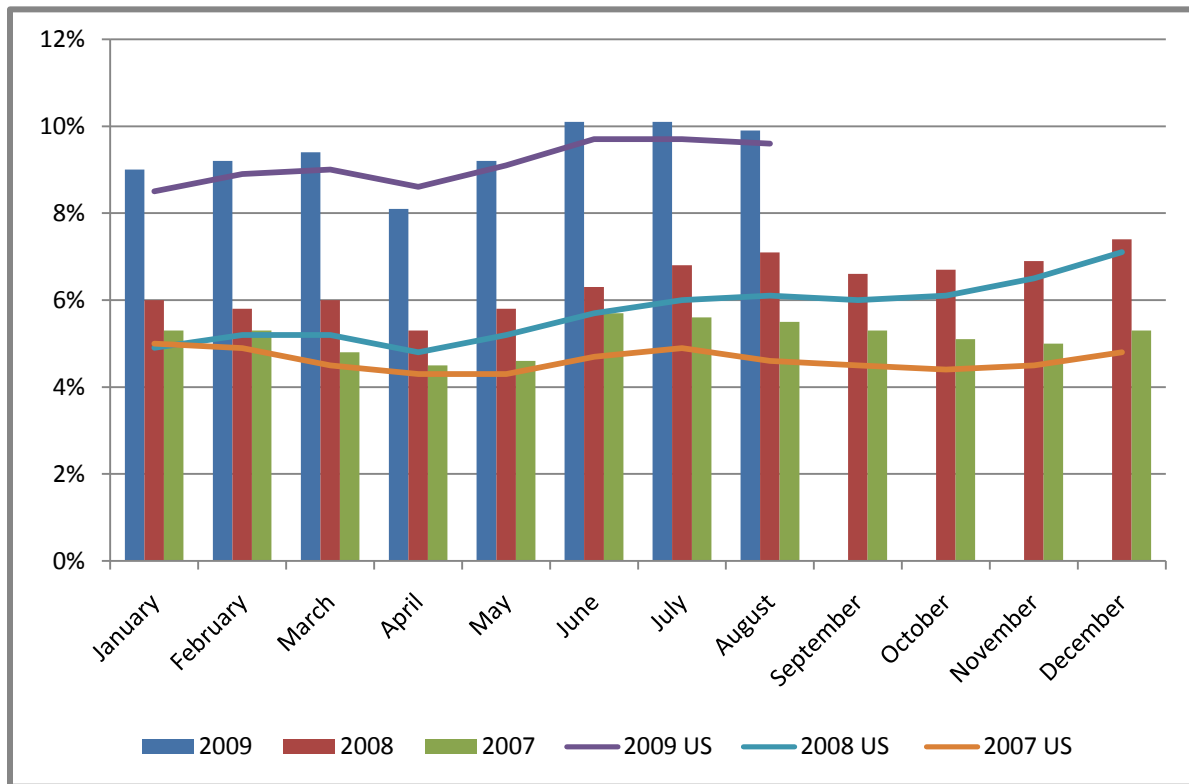
Source: MERIC QCEW

### ***Unemployment***

The total employment for the study area is 792,581 of which 24 percent is concentrated in the corridor region. Traditionally, employment trends for the region show a dip in employment in the first quarter, a small recovery in the second quarter followed by a small contraction in the 3<sup>rd</sup> quarter, and a rebound in the fourth quarter. Throughout 2008, employment levels followed the overall seasonal trends with the exception of the fourth quarter. Despite employment growth in the corridor region, the losses in the non-corridor region resulted in a 0.8 percent decline in overall employment. The decline in employment continued into the first quarter of 2009 for the non-corridor. Figure 2 shows the monthly unemployment trends for the St. Louis, Missouri, metropolitan area for 2007 through August of 2009. The seasonal unemployment trends hold for each year; however, after June of 2007 the unemployment rates are greater compared to the previous year. This steady rise in unemployment has been consistent with national unemployment as reflected in the bars by year shown in the figure.

<sup>1</sup> Data provided only includes first quarter of 2006

**Figure 2: Unemployment Rate: St. Louis, MO Metropolitan Area**



Source: MERIC

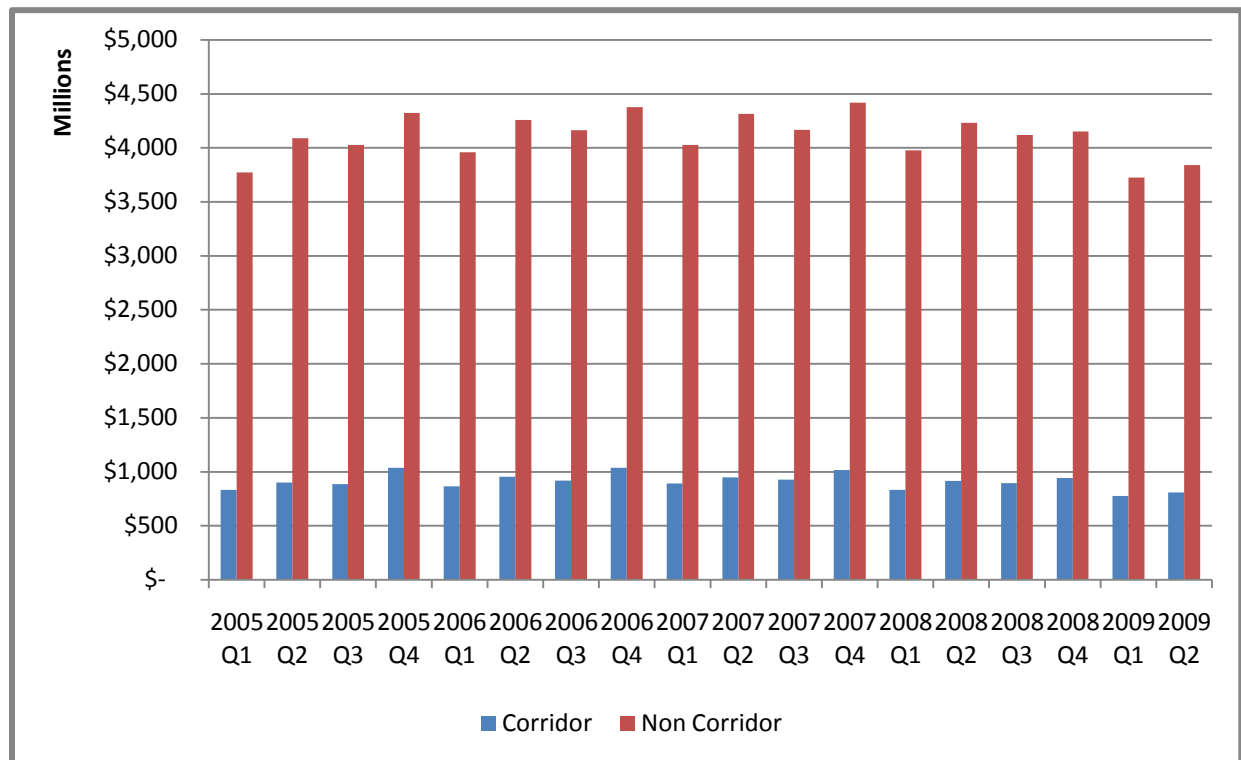
### ***Taxable Sales***

The combined taxable sales for the City and County of St. Louis were \$5.1 billion for the fourth quarter of 2008, and analysis of the first quarter 2009 shows total taxable sales dropping to a combined total of \$4.5 billion. When compared on a year-by-year basis, the first quarter 2009 taxable sales revenues dropped \$349 million dollars from the first quarter of 2008. However, the second quarter of 2009 has shown positive growth, with an additional \$150 million in taxable sales over the first quarter of 2009. It still falls short of the 2008 quarter 2 sales, however.

The graph below shows the total taxable sales for each quarter, from first quarter 2005 to second quarter 2009, in millions of dollars. As Figure 3 indicates, the taxable sales for the non-corridor are roughly four times larger than the taxable sales for the corridor region.



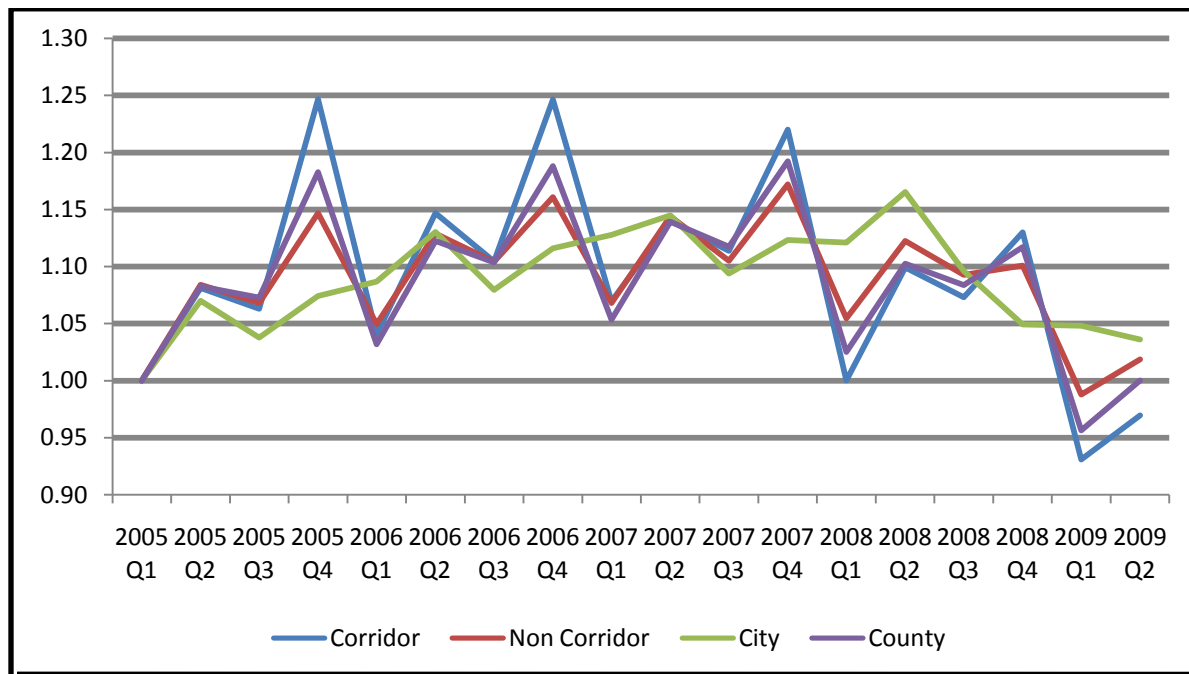
**Figure 3: Taxable Sales by Region**



*Source: Department of Revenue*

The seasonal taxable sales patterns are best seen in the taxable sales growth index in Figure 4. The index demonstrates quarterly taxable sales growth by region in the study area using the first quarter of 2005 as the baseline indicator. When quarters have a number greater than one, it shows an increase when compared to the first quarter of 2005. When quarters have a numbers less than one, it shows a decrease when compared to the first quarter of 2005. Each year, sales follow a quarterly cycle where the lowest sales take place in the first quarter of the calendar year, the second and third quarter show some degree of recovery, and then the final quarter of the year has the largest sales, which are traditionally boosted by holiday spending. The overall growth for all regions followed a similar pattern, maintaining a consistent level of positive growth until 2007, where the fourth quarter 2007 growth fell short of the previous years, and was followed by a significant drop in taxable sales in first quarter 2008. Although sales did recover over the course of 2008, they remained below 2006 levels; with the exception of the City of St. Louis in the second quarter 2008. Taxable sales dipped for the first portion of 2009 below 2005 levels, but since have shown positive growth.

**Figure 4: Taxable Sales Growth Index by Region**



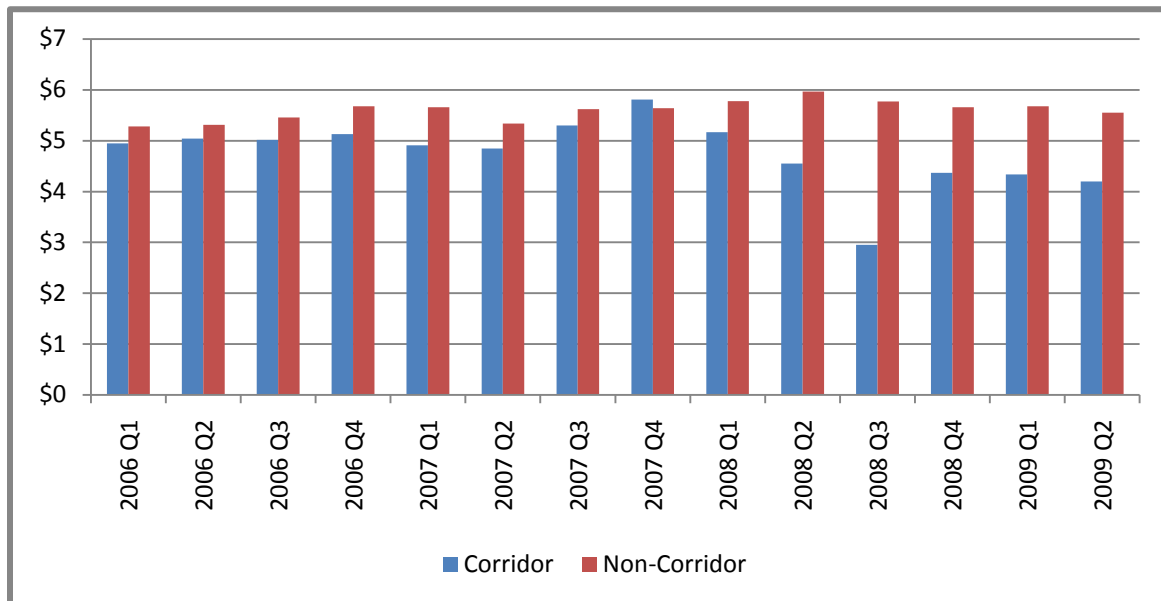
*Source: Department of Revenue*

### ***Real Estate***

TWR created a custom real estate database for the corridor and non-corridor regions, as well as the St. Louis metropolitan area. The data, based at the ZIP code level, provides vacancy rates, net and gross asking rent prices, the number of buildings, total stock, completions, net absorption, and availability rates for industrial and office real estate. Since the St. Louis metropolitan real estate market rates are mostly quoted in gross terms, over 95% for vacant office space, this analysis will focus on gross asking rates.

The TWR industrial data for gross asking price per square foot shows the gross asking price for industrial space peaked in the first half of 2008 for the non-corridor, whereas the corridor peaked in the last quarter of 2007, as shown in Figure 5. Industrial stock has not grown in the corridor area since the beginning of 2007, while the non-corridor region is showing a steady annual growth of 0.8% since 2000. In terms of total industrial stock, the non-corridor region has over 6.5 times the amount of industrial stock found in the corridor region. The figure also shows that prior to the second quarter of 2008, gross asking rents between both regions were within \$0.75 per square foot for industrial space, but following the second quarter of 2008 rates between the two regions widened to a difference of at least \$1.29 per square foot. The variation in prices for the corridor region in 2008 and the first half of 2009 is an indication of greater vacancies that are likely related to the economic downturn.

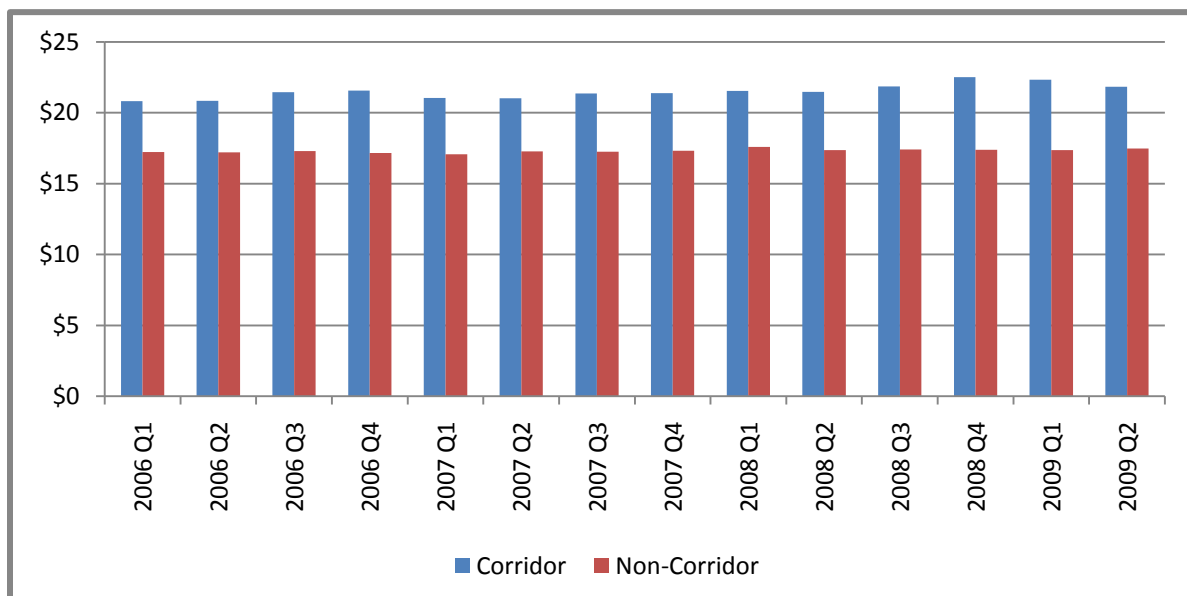
**Figure 5: Gross Industrial Asking Rent per square foot**



Source: TWR

While the non-corridor region has been established as the leading industrial real estate market, the corridor region is better suited for office real estate. Although the non-corridor region has an additional 10 million square feet of office space, the corridor region has higher asking rents and lower vacancy rates. The gross asking price for office space per square foot for the corridor has shown positive growth through most of 2008, with a slight dip in the second quarter of 2009, whereas the non-corridor office asking rent prices have remained relatively flat with limited variation in asking rents as illustrated in Figure 6.

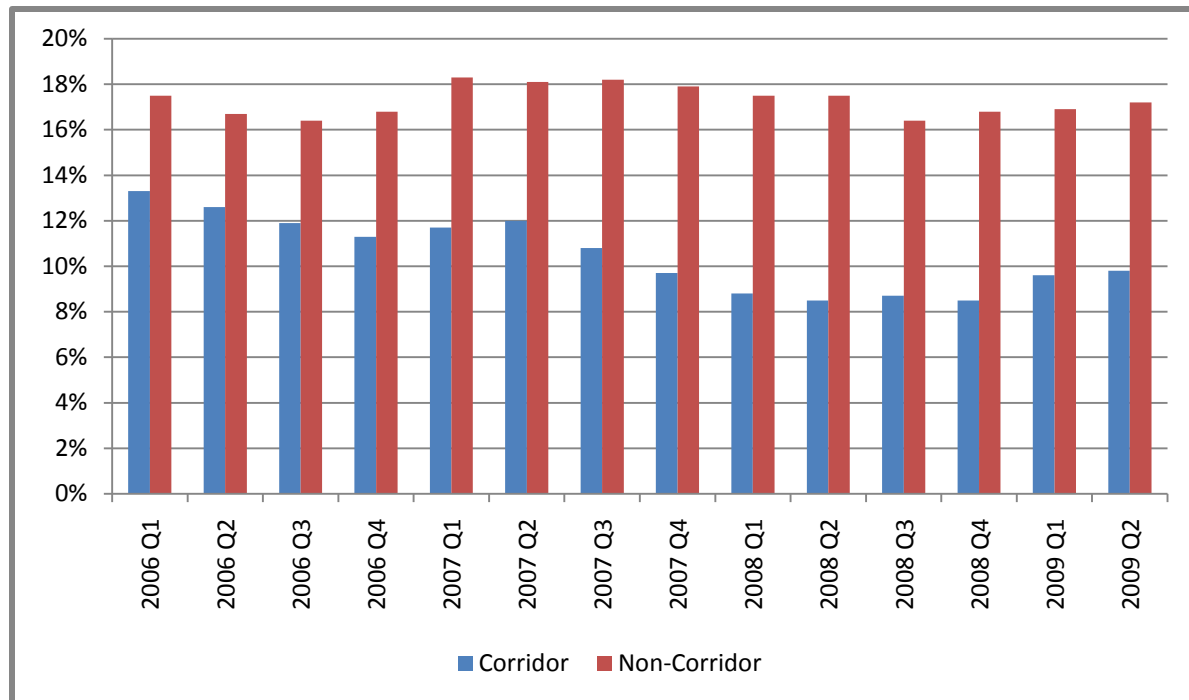
**Figure 6: Gross Office Asking Rent per square foot**



Source: TWR

In terms of office vacancies, the lowest office vacancy rates for both regions occurred during the middle of 2008, but began to rise at the end of 2008 through the second quarter of 2009. Since 2007, the corridor region's vacancy rate has been on average 7.7 percentage-points lower than the non-corridor region, as seen in Figure 7. The lower gross asking rents for office space are likely impacting the overall vacancy rates within both regions as they have not gone above first quarter 2006 levels.

**Figure 7: Quarterly Office Space Vacancy Rates by Region**



Source: TWR

### Conclusions and Future Steps

Thus far it is difficult to isolate the impacts of I-64 on the St. Louis economy from the larger national economic conditions. Additional analysis of the 2009 economic and fiscal data will help assess the implications of the I-64 closure and the overall economic health of the region.

The assessment of economic cost attributable to changes in traffic, travel delay, and vehicle miles traveled (VMT) due to the western closure of I-64 will begin as additional data becomes available. The data and analysis in subsequent quarters will provide a better understanding of the magnitude of the transportation costs and their impact on productivity and competitiveness. Further analysis will offer insight on the project's effect on retail sales, customers and visitors, particularly among Corridor businesses. Finally, it will help to ascertain the extent to which national economic conditions are influencing the results.

### Appendix A: Communications Data

- Online Survey Summary
- Online Responses