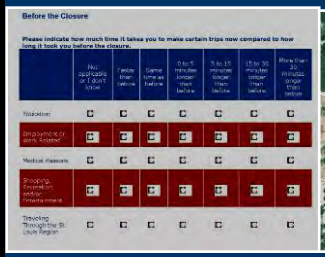
The New I-64 Economic and Regional Mobility Study

Annual Report 2008

Jan 2008- Dec 2008

HDR



Appendix

Online Survey	1,362	
Motorist Assist	3,472	
Mailed Survey	776	
	5,610	Total people surveyed regarding Western Closure

Traffic Response

64move

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	skipped	47	6.2	6.2	6.2
	-	32	4.2	4.2	10.5
	--	10	1.3	1.3	11.8
	?	81	10.7	10.7	22.5
	+	325	43.0	43.0	65.6
	++	260	34.4	34.4	100.0
	Total	755	100.0	100.0	
		708			

64decision

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	63	8.3	8.3	8.3
-	27	3.6	3.6	11.9
--	7	.9	.9	12.8
?	95	12.6	12.6	25.4
+	232	30.7	30.7	56.2
++	331	43.8	43.8	100.0
Total	755	100.0	100.0	

Motorist Assist

64move

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	265	8.7	8.7	8.7
-	181	6.0	6.0	14.7
--	60	2.0	2.0	16.7
?	553	18.3	18.3	35.0
+	1137	37.5	37.5	72.5
++	833	27.5	27.5	100.0
Total	3029	100.0	100.0	
	2764			

64decision

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	314	10.4	10.4	10.4
-	91	3.0	3.0	13.4
--	48	1.6	1.6	15.0
?	534	17.6	17.6	32.6
+	894	29.5	29.5	62.1
++	1148	37.9	37.9	100.0
Total	3029	100.0	100.0	

Total 3784

How satisfied are you with how well you are managing to move around the St. Louis area with the closure of I-64?

Very Dissatisfied	70	Total Dissatisfied	283	10.0%
Dissatisfied	213	Total Satisfied	2555	90.0%
No Opinion	634		2838	
Satisfied	1462			
Very Satisfied	1093			
	3472			
	3472			

How satisfied are you with the decision to complete the work by closing I-64 for 2 years instead of taking 6-8 years to finish otherwise?

Very Dissatisfied	55	Total Dissatisfied	173	6.2%
Dissatisfied	118	Total Satisfied	2605	93.8%
No Opinion	629		2778	
Satisfied	1126			
Very Satisfied	1479			
	3407			

Frequencies

[DataSet1] D:\Heartland\Projects and Proposals\MoDOT\I-64 Project\Mailed Survey\I-64 All Mailed Surveys.sav

Frequency Table

Mailing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	First Mailing	776	100.0	100.0	100.0

the closure has changed where I shop

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	66	8.5	9.0	9.0
	Agree	128	16.5	17.4	26.4
	Disagree	222	28.6	30.2	56.6
	Strongly Disagree	247	31.8	33.6	90.2
	No Opinion	72	9.3	9.8	100.0
	Total	735	94.7	100.0	
Missing	System	41	5.3		
Total		776	100.0		

the closure has changed where I shop

	Frequency	Percent
Strongly Disagree	247	37.3%
Disagree	222	33.5%
Agree	128	19.3%
Strongly Agree	66	10.0%
Total	663	

the closure has changed where I shop

Total Disagree	469	70.7%
Total Agree	194	29.3%
Total	663	

the closure has changed where I buy gas

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	23	3.0	3.1	3.1
	Agree	34	4.4	4.6	7.7
	Disagree	262	33.8	35.5	43.2
	Strongly Disagree	332	42.8	44.9	88.1
	No Opinion	88	11.3	11.9	100.0
	Total	739	95.2	100.0	
Missing	System	37	4.8		
Total		776	100.0		

the closure has changed where I buy gas

	Frequency	Percent
Strongly Disagree	332	51.0%
Disagree	262	40.2%
Agree	34	5.2%
Strongly Agree	23	3.5%
Total	651	

the closure has changed where I buy gas

Total Disagree	594	91.2%
Total Agree	57	8.8%
Total	651	

the closure has changed where I bank

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	15	1.9	2.0	2.0
	Agree	14	1.8	1.9	3.9
	Disagree	261	33.6	35.5	39.5
	Strongly Disagree	363	46.8	49.4	88.8
	No Opinion	82	10.6	11.2	100.0
	Total	735	94.7	100.0	
Missing	System	41	5.3		
Total		776	100.0		

the closure has changed where I bank

	Frequency	Percent
Strongly Disagree	363	55.6%
Disagree	261	40.0%
Agree	14	2.1%
Strongly Agree	15	2.3%
Total	653	

the closure has changed where I bank

Total Disagree	624	95.6%
Total Agree	29	4.4%
Total	653	

the closure has changed how often I eat out

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	42	5.4	5.7	5.7
	Agree	100	12.9	13.6	19.4
	Disagree	230	29.6	31.4	50.8
	Strongly Disagree	289	37.2	39.4	90.2
	No Opinion	72	9.3	9.8	100.0
	Total	733	94.5	100.0	
Missing	System	43	5.5		
Total		776	100.0		

the closure has changed how often I eat out

	Frequency	Percent
Strongly Disagree	289	43.7%
Disagree	230	34.8%
Agree	100	15.1%
Strongly Agree	42	6.4%
Total	661	

the closure has changed how often I eat out

Total Disagree	519	78.5%
Total Agree	142	21.5%
Total	661	

the closure has changed how often I travel to certain areas

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	174	22.4	23.4	23.4
	Agree	244	31.4	32.8	56.3
	Disagree	128	16.5	17.2	73.5
	Strongly Disagree	149	19.2	20.1	93.5

the closure has changed how often I travel to certain areas

	Frequency	Percent
Strongly Disagree	149	21.4%
Disagree	128	18.4%
Agree	244	35.1%
Strongly Agree	174	25.0%

the closure has changed how often I travel to certain areas

Total Disagree	277	39.9%
Total Agree	418	60.1%
Total	695	

	No Opinion	48	6.2	6.5	100.0
	Total	743	95.7	100.0	
Missing	System	33	4.3		
Total		776	100.0		

the closure has changed where I work

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	12	1.5	1.6	1.6
	Agree	14	1.8	1.9	3.5
	Disagree	214	27.6	29.2	32.7
	Strongly Disagree	390	50.3	53.2	85.9
	No Opinion	103	13.3	14.1	100.0
	Total	733	94.5	100.0	
Missing	System	43	5.5		
Total		776	100.0		

the closure has changed where I live

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	10	1.3	1.4	1.4
	Agree	11	1.4	1.5	2.9
	Disagree	206	26.5	28.5	31.4
	Strongly Disagree	417	53.7	57.8	89.2
	No Opinion	78	10.1	10.8	100.0
	Total	722	93.0	100.0	
Missing	System	54	7.0		
Total		776	100.0		

No - I still work the same hours in the same location as I did before the closure

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	569	73.3	100.0	100.0
Missing	System	207	26.7		
Total		776	100.0		

Yes - My hours have shifted

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	61	7.9	100.0	100.0
Missing	System	715	92.1		
Total		776	100.0		

Yes - I now work from another location (home, another office, etc.) more often

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	25	3.2	100.0	100.0
Missing	System	751	96.8		
Total		776	100.0		

Yes - I quit my job and accepted one somewhere else

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	4	.5	100.0	100.0
Missing	System	772	99.5		
Total		776	100.0		

Yes - Other

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	47	6.1	100.0	100.0
Missing	System	729	93.9		
Total		776	100.0		

How well the public has been kept informed about the New I-64 Project

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	348	44.8	45.8	45.8

Total	695

the closure has changed where I work

	Frequency	Percent
Strongly Disagree	390	61.9%
Disagree	214	34.0%
Agree	14	2.2%
Strongly Agree	12	1.9%
Total	630	

the closure has changed where I work

Total Disagree	604	95.9%
Total Agree	26	4.1%
Total	630	

the closure has changed where I live

	Frequency	Percent
Strongly Disagree	417	64.8%
Disagree	206	32.0%
Agree	11	1.7%
Strongly Agree	10	1.6%
Total	644	

the closure has changed where I live

Total Disagree	623	96.7%
Total Agree	21	3.3%
Total	644	

Has the closure of this section of I-64 changed your work habits?

No - I still work the same hours in the same location as I did before the closure	569	73.3%
Yes - My hours have shifted	61	7.9%
Yes - I now work from another location (home, another office, etc.) more often	25	3.2%
Yes - I quit my job and accepted one somewhere else	4	0.5%
Yes - Other	47	6.1%
		91.0%

9.0% skipped question, some probably did not have jobs

How well the public has been kept informed about the New I-64 Project

	Frequency	Percent
Very Dissatisfied	5	0.7%

Total Dissatisfied	37	5.1%

	Satisfied	334	43.0	44.0	89.9
	Dissatisfied	32	4.1	4.2	94.1
	Very Dissatisfied	5	.6	.7	94.7
	No Opinion	40	5.2	5.3	100.0
	Total	759	97.8	100.0	
Missing	System	17	2.2		
Total		776	100.0		

Dissatisfied	32	4.5%	Total Satisfied	682	94.9%
Satisfied	334	46.5%	Total	719	
Very Satisfied	348	48.4%			
Total	719				

The timeliness of the New I-64 Project information being made available

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	278	35.8	36.8	36.8
	Satisfied	376	48.5	49.7	86.5
	Dissatisfied	37	4.8	4.9	91.4
	Very Dissatisfied	6	.8	.8	92.2
	No Opinion	59	7.6	7.8	100.0
	Total	756	97.4	100.0	
Missing	System	20	2.6		
Total		776	100.0		

The timeliness of the New I-64 Project information being made available

	Frequency	Percent			
Very Dissatisfied	6	0.9%	Total Dissatisfied	43	6.2%
Dissatisfied	37	5.3%	Total Satisfied	654	93.8%
Satisfied	376	53.9%	Total	697	
Very Satisfied	278	39.9%			
Total	697				

How alternative travel options have been communicated

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	208	26.8	27.7	27.7
	Satisfied	383	49.4	51.1	78.8
	Dissatisfied	75	9.7	10.0	88.8
	Very Dissatisfied	17	2.2	2.3	91.1
	No Opinion	67	8.6	8.9	100.0
	Total	750	96.6	100.0	
Missing	System	26	3.4		
Total		776	100.0		

How alternative travel options have been communicated

	Frequency	Percent			
Very Dissatisfied	17	2.5%	Total Dissatisfied	92	13.5%
Dissatisfied	75	11.0%	Total Satisfied	591	86.5%
Satisfied	383	56.1%	Total	683	
Very Satisfied	208	30.5%			
Total	683				

The traffic flow within construction work zones (other construction where you may travel)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	120	15.5	16.0	16.0
	Satisfied	358	46.1	47.8	63.8
	Dissatisfied	107	13.8	14.3	78.1
	Very Dissatisfied	42	5.4	5.6	83.7
	No Opinion	122	15.7	16.3	100.0
	Total	749	96.5	100.0	
Missing	System	27	3.5		
Total		776	100.0		

The traffic flow within construction work zones (other construction where you may travel)

	Frequency	Percent			
Very Dissatisfied	42	6.7%	Total Dissatisfied	149	23.8%
Dissatisfied	107	17.1%	Total Satisfied	478	76.2%
Satisfied	358	57.1%	Total	627	
Very Satisfied	120	19.1%			
Total	627				

How understandable and accurate are the construction work zone signs

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	125	16.1	16.9	16.9
	Satisfied	375	48.3	50.7	67.6
	Dissatisfied	126	16.2	17.0	84.6
	Very Dissatisfied	22	2.8	3.0	87.6
	No Opinion	92	11.9	12.4	100.0
	Total	740	95.4	100.0	
Missing	System	36	4.6		
Total		776	100.0		

How understandable and accurate are the construction work zone signs

	Frequency	Percent			
Very Dissatisfied	22	3.4%	Total Dissatisfied	148	22.8%
Dissatisfied	126	19.4%	Total Satisfied	500	77.2%
Satisfied	375	57.9%	Total	648	
Very Satisfied	125	19.3%			
Total	648				

How well you are managing to move around the St. Louis area with the New I-64 Project closure

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	164	21.1	21.8	21.8
	Satisfied	424	54.6	56.3	78.1
	Dissatisfied	93	12.0	12.4	90.4
	Very Dissatisfied	31	4.0	4.1	94.6
	No Opinion	41	5.3	5.4	100.0
	Total	753	97.0	100.0	
Missing	System	23	3.0		
Total		776	100.0		

How well you are managing to move around the St. Louis area with the New I-64 Project closure

	Frequency	Percent			
Very Dissatisfied	31	4.4%	Total Dissatisfied	124	17.4%
Dissatisfied	93	13.1%	Total Satisfied	588	82.6%
Satisfied	424	59.6%	Total	712	
Very Satisfied	164	23.0%			
Total	712				

The decision to complete the work by closing I-64 for 2 years instead of taking 6 to 8 years with lane closures

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	277	35.7	37.0	37.0
	Satisfied	301	38.8	40.2	77.3
	Dissatisfied	56	7.2	7.5	84.8
	Very Dissatisfied	45	5.8	6.0	90.8
	No Opinion	69	8.9	9.2	100.0
	Total	748	96.4	100.0	
Missing	System	28	3.6		
Total		776	100.0		

Your overall level of satisfaction with how the New I-64 Project closure has been handled

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	213	27.4	28.3	28.3
	Satisfied	405	52.2	53.8	82.1
	Dissatisfied	62	8.0	8.2	90.3
	Very Dissatisfied	24	3.1	3.2	93.5
	No Opinion	49	6.3	6.5	100.0
	Total	753	97.0	100.0	
Missing	System	23	3.0		
Total		776	100.0		

TV News

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	590	76.0	100.0	100.0
Missing	System	186	24.0		
Total		776	100.0		

Radio News

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	412	53.1	100.0	100.0
Missing	System	364	46.9		
Total		776	100.0		

Radio Talk Shows

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	135	17.4	100.0	100.0
Missing	System	641	82.6		
Total		776	100.0		

Newspapers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	428	55.2	100.0	100.0
Missing	System	348	44.8		
Total		776	100.0		

Internet sites

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	292	37.6	100.0	100.0
Missing	System	484	62.4		
Total		776	100.0		

Receive information in mail (newsletter, etc.)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	165	21.3	100.0	100.0
Missing	System	611	78.7		
Total		776	100.0		

Project email from MoDOT or I-64 Team

The decision to complete the work by closing I-64 for 2 years instead of taking 6 to 8 years with lane closures

	Frequency	Percent			
Very Dissatisfied	45	6.6%	Total Dissatisfied	101	14.9%
Dissatisfied	56	8.2%	Total Satisfied	578	85.1%
Satisfied	301	44.3%	Total	679	
Very Satisfied	277	40.8%			
Total	679				

Your overall level of satisfaction with how the New I-64 Project closure has been handled

	Frequency	Percent			
Very Dissatisfied	24	3.4%	Total Dissatisfied	86	12.2%
Dissatisfied	62	8.8%	Total Satisfied	618	87.8%
Satisfied	405	57.5%	Total	704	
Very Satisfied	213	30.3%			
Total	704				

What is the best way for MoDOT to get information to you about road improvements and other road and bridge information?

TV News	590	76.0%
Radio News	412	53.1%
Radio Talk Shows	135	17.4%
Newspapers	428	55.2%
Internet Sites	292	37.6%
Receive information in mail	165	21.3%
Project email from MoDOT or I-64 Team	88	11.3%
Project display boards at public gatherings	63	8.1%
Road signs on other roads	305	39.3%
Road signs when I head toward the closed highway	367	47.3%
Word of Mouth (a friend tells me)	137	17.7%
Work	78	10.1%
Call 1-888-ASK-MODOT	64	8.2%
Call 511	45	5.8%
Other	14	1.8%
		410.2%

totals exceed 100% because people could select more than one

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	88	11.3	100.0	100.0
Missing	System	688	88.7		
Total		776	100.0		

Project display boards at public gatherings

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	63	8.1	100.0	100.0
Missing	System	713	91.9		
Total		776	100.0		

Road signs on other roads

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	305	39.3	100.0	100.0
Missing	System	471	60.7		
Total		776	100.0		

Road signs when I head toward the closed highway

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	367	47.3	100.0	100.0
Missing	System	409	52.7		
Total		776	100.0		

Word of Mouth (a friend tells me)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	137	17.7	100.0	100.0
Missing	System	639	82.3		
Total		776	100.0		

Work

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	78	10.1	100.0	100.0
Missing	System	698	89.9		
Total		776	100.0		

Call 1-888-ASK-MODOT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	64	8.2	100.0	100.0
Missing	System	712	91.8		
Total		776	100.0		

Call 511

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	45	5.8	100.0	100.0
Missing	System	731	94.2		
Total		776	100.0		

Other

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	14	1.8	100.0	100.0
Missing	System	762	98.2		
Total		776	100.0		

In a typical week, how often do you commute in the following ways?

Before closure: Driving alone

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	85	11.0	12.1	12.1
	1 to 2 times per week	99	12.8	14.1	26.2
	3 to 4 times per week	83	10.7	11.8	38.0
	most weekdays	143	18.4	20.3	58.3
	almost every day	293	37.8	41.7	100.0

Before closure: Driving alone

	Frequency	Percent
Never	85	12.1%
1 to 2 times per week	99	14.1%
3 to 4 times per week	83	11.8%
most weekdays	143	20.3%
almost every day	293	41.7%

Before closure: Driving alone

Never	85	12.1%
Rarely	99	14.1%
Most days	519	73.8%
Total	703	

	Total	703	90.6	100.0	
Missing	System	73	9.4		
Total		776	100.0		

Total 703

Before closure: Driving with multiple people

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	278	35.8	46.7	46.7
	1 to 2 times per week	194	25.0	32.6	79.3
	3 to 4 times per week	65	8.4	10.9	90.3
	most weekdays	30	3.9	5.0	95.3
	almost every day	28	3.6	4.7	100.0
	Total	595	76.7	100.0	
Missing	System	181	23.3		
Total		776	100.0		

Before closure: Driving with multiple people

	Frequency	Percent
Never	278	46.7%
1 to 2 times per week	194	32.6%
3 to 4 times per week	65	10.9%
most weekdays	30	5.0%
almost every day	28	4.7%
Total	595	

Before closure: Driving with multiple people

Never	278	46.7%
Rarely	194	32.6%
Most days	123	20.7%
Total	595	

Before closure: Riding the bus

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	508	65.5	92.7	92.7
	1 to 2 times per week	20	2.6	3.6	96.4
	3 to 4 times per week	7	.9	1.3	97.6
	most weekdays	6	.8	1.1	98.7
	almost every day	7	.9	1.3	100.0
	Total	548	70.6	100.0	
Missing	System	228	29.4		
Total		776	100.0		

Before closure: Riding the bus

	Frequency	Percent
Never	508	92.7%
1 to 2 times per week	20	3.6%
3 to 4 times per week	7	1.3%
most weekdays	6	1.1%
almost every day	7	1.3%
Total	548	

Before closure: Riding the bus

Never	508	92.7%
Rarely	20	3.6%
Most days	20	3.6%
Total	548	

Before closure: Riding MetroLink (light rail)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	480	61.9	86.5	86.5
	1 to 2 times per week	43	5.5	7.7	94.2
	3 to 4 times per week	11	1.4	2.0	96.2
	most weekdays	11	1.4	2.0	98.2
	almost every day	10	1.3	1.8	100.0
	Total	555	71.5	100.0	
Missing	System	221	28.5		
Total		776	100.0		

Before closure: Riding MetroLink (light rail)

	Frequency	Percent
Never	480	86.5%
1 to 2 times per week	43	7.7%
3 to 4 times per week	11	2.0%
most weekdays	11	2.0%
almost every day	10	1.8%
Total	555	

Before closure: Riding MetroLink (light rail)

Never	480	86.5%
Rarely	43	7.7%
Most days	32	5.8%
Total	555	

Before closure: Biking

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	515	66.4	94.5	94.5
	1 to 2 times per week	18	2.3	3.3	97.8
	3 to 4 times per week	7	.9	1.3	99.1
	most weekdays	2	.3	.4	99.4
	almost every day	3	.4	.6	100.0
	Total	545	70.2	100.0	
Missing	System	231	29.8		
Total		776	100.0		

Before closure: Biking

	Frequency	Percent
Never	515	94.5%
1 to 2 times per week	18	3.3%
3 to 4 times per week	7	1.3%
most weekdays	2	0.4%
almost every day	3	0.6%
Total	545	

Before closure: Biking

Never	515	94.5%
Rarely	18	3.3%
Most days	12	2.2%
Total	545	

Before closure: Walking

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	464	59.8	79.7	79.7
	1 to 2 times per week	69	8.9	11.9	91.6
	3 to 4 times per week	17	2.2	2.9	94.5
	most weekdays	9	1.2	1.5	96.0
	almost every day	23	3.0	4.0	100.0
	Total	582	75.0	100.0	
Missing	System	194	25.0		
Total		776	100.0		

Before closure: Walking

	Frequency	Percent
Never	464	79.7%
1 to 2 times per week	69	11.9%
3 to 4 times per week	17	2.9%
most weekdays	9	1.5%
almost every day	23	4.0%
Total	582	

Before closure: Walking

Never	464	79.7%
Rarely	69	11.9%
Most days	49	8.4%
Total	582	

Before closure: Telecommuting

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	502	64.7	92.3	92.3
	1 to 2 times per week	22	2.8	4.0	96.3
	3 to 4 times per week	5	.6	.9	97.2

Before closure: Telecommuting

	Frequency	Percent
Never	502	92.3%
1 to 2 times per week	22	4.0%
3 to 4 times per week	5	0.9%

Before closure: Telecommuting

Never	502	92.3%
Rarely	22	4.0%
Most days	20	3.7%

	most weekdays	4	.5	.7	98.0
	almost every day	11	1.4	2.0	100.0
	Total	544	70.1	100.0	
Missing	System	232	29.9		
Total		776	100.0		

most weekdays	4	0.7%
almost every day	11	2.0%
Total	544	

Total	544

After closure: Driving alone

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	108	13.9	15.4	15.4
	1 to 2 times per week	111	14.3	15.8	31.2
	3 to 4 times per week	66	8.5	9.4	40.6
	most weekdays	140	18.0	19.9	60.5
	almost every day	277	35.7	39.5	100.0
	Total	702	90.5	100.0	
Missing	System	74	9.5		
Total		776	100.0		

After closure: Driving alone

	Frequency	Percent
Never	108	15.4%
1 to 2 times per week	111	15.8%
3 to 4 times per week	66	9.4%
most weekdays	140	19.9%
almost every day	277	39.5%
Total	702	

After closure: Driving alone

Never	108	15.4%
Rarely	111	15.8%
Most days	483	68.8%
Total	702	

After closure: Driving with multiple people

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	294	37.9	49.0	49.0
	1 to 2 times per week	193	24.9	32.2	81.2
	3 to 4 times per week	56	7.2	9.3	90.5
	most weekdays	30	3.9	5.0	95.5
	almost every day	27	3.5	4.5	100.0
	Total	600	77.3	100.0	
Missing	System	176	22.7		
Total		776	100.0		

After closure: Driving with multiple people

	Frequency	Percent
Never	294	49.0%
1 to 2 times per week	193	32.2%
3 to 4 times per week	56	9.3%
most weekdays	30	5.0%
almost every day	27	4.5%
Total	600	

After closure: Driving with multiple people

Never	294	49.0%
Rarely	193	32.2%
Most days	113	18.8%
Total	600	

After closure: Riding the bus

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	510	65.7	92.6	92.6
	1 to 2 times per week	21	2.7	3.8	96.4
	3 to 4 times per week	5	.6	.9	97.3
	most weekdays	5	.6	.9	98.2
	almost every day	10	1.3	1.8	100.0
	Total	551	71.0	100.0	
Missing	System	225	29.0		
Total		776	100.0		

After closure: Riding the bus

	Frequency	Percent
Never	510	92.6%
1 to 2 times per week	21	3.8%
3 to 4 times per week	5	0.9%
most weekdays	5	0.9%
almost every day	10	1.8%
Total	551	

After closure: Riding the bus

Never	510	92.6%
Rarely	21	3.8%
Most days	20	3.6%
Total	551	

After closure: Riding MetroLink (light rail)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	481	62.0	87.0	87.0
	1 to 2 times per week	40	5.2	7.2	94.2
	3 to 4 times per week	9	1.2	1.6	95.8
	most weekdays	12	1.5	2.2	98.0
	almost every day	11	1.4	2.0	100.0
	Total	553	71.3	100.0	
Missing	System	223	28.7		
Total		776	100.0		

After closure: Riding MetroLink (light rail)

	Frequency	Percent
Never	481	87.0%
1 to 2 times per week	40	7.2%
3 to 4 times per week	9	1.6%
most weekdays	12	2.2%
almost every day	11	2.0%
Total	553	

After closure: Riding MetroLink (light rail)

Never	481	87.0%
Rarely	40	7.2%
Most days	32	5.8%
Total	553	

After closure: Biking

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	516	66.5	94.5	94.5
	1 to 2 times per week	16	2.1	2.9	97.4
	3 to 4 times per week	9	1.2	1.6	99.1
	most weekdays	3	.4	.5	99.6
	almost every day	2	.3	.4	100.0
	Total	546	70.4	100.0	
Missing	System	230	29.6		
Total		776	100.0		

After closure: Biking

	Frequency	Percent
Never	516	94.5%
1 to 2 times per week	16	2.9%
3 to 4 times per week	9	1.6%
most weekdays	3	0.5%
almost every day	2	0.4%
Total	546	

After closure: Biking

Never	516	94.5%
Rarely	16	2.9%
Most days	14	2.6%
Total	546	

After closure: Walking

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	450	58.0	80.1	80.1

After closure: Walking

	Frequency	Percent
Never	450	80.1%

After closure: Walking

Never	450	80.1%

		Frequency	Percent	Valid Percent	Cumulative Percent
	1 to 2 times per week	57	7.3	10.1	90.2
	3 to 4 times per week	21	2.7	3.7	94.0
	most weekdays	7	.9	1.2	95.2
	almost every day	27	3.5	4.8	100.0
	Total	562	72.4	100.0	
Missing	System	214	27.6		
Total		776	100.0		

	Frequency	Percent
1 to 2 times per week	57	10.1%
3 to 4 times per week	21	3.7%
most weekdays	7	1.2%
almost every day	27	4.8%
Total	562	

Rarely	57	10.1%
Most days	55	9.8%
Total	562	

After closure: Telecommuting

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	493	63.5	91.3	91.3
	1 to 2 times per week	21	2.7	3.9	95.2
	3 to 4 times per week	8	1.0	1.5	96.7
	most weekdays	5	.6	.9	97.6
	almost every day	13	1.7	2.4	100.0
	Total	540	69.6	100.0	
Missing	System	236	30.4		
Total		776	100.0		

After closure: Telecommuting

	Frequency	Percent
Never	493	91.3%
1 to 2 times per week	21	3.9%
3 to 4 times per week	8	1.5%
most weekdays	5	0.9%
almost every day	13	2.4%
Total	540	

After closure: Telecommuting

Never	493	91.3%
Rarely	21	3.9%
Most days	26	4.8%
Total	540	

In a typical week before the closure, how often did you travel on that section?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	59	7.6	7.9	7.9
	Very Rarely	212	27.3	28.3	36.2
	Once a Week	124	16.0	16.6	52.8
	Two to Three Times a Week	182	23.5	24.3	77.1
	Most Weekdays	54	7.0	7.2	84.4
	Almost Every Day	117	15.1	15.6	100.0
	Total	748	96.4	100.0	
Missing	System	28	3.6		
Total		776	100.0		

In a typical week before the closure, how often did you tra

	Frequency	Percent
Never	59	9.4%
Very Rarely	212	33.6%
Once a Week	124	19.7%
Two to Three Times a V	182	28.8%
Most Weekdays	54	8.6%
Almost Every Day	631	

In a typical week before the closure, how often did you travel on that section?

Never	59	9.35%
Rarely	212	33.60%
Most days	360	57.05%
Total	631	

Please indicate how long it takes you to make most trips now compared to before the closure

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	At least 10 minutes faster	20	2.6	2.8	2.8
	5 to 10 minutes faster	21	2.7	2.9	5.7
	I have not noticed much difference	286	36.9	40.1	45.8
	5 to 10 minutes longer	148	19.1	20.7	66.5
	At least 10 minutes longer	239	30.8	33.5	100.0
	Total	714	92.0	100.0	
Missing	System	62	8.0		
Total		776	100.0		

Please indicate how long it takes you to make most trips

	Frequency	Percent
At least 10 minutes fast	20	2.8%
5 to 10 minutes faster	21	2.9%
I have not noticed much	286	40.1%
5 to 10 minutes longer	148	20.7%
At least 10 minutes long	239	33.5%
Total	714	

Please indicate how long it takes you to make most trips now compared to before the closure

Faster	41	5.7%
No Difference	286	40.1%
Longer	387	54.2%
Total	714	

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	314	40.5	41.6	41.6
	Female	441	56.8	58.4	100.0
	Total	755	97.3	100.0	
Missing	System	21	2.7		
Total		776	100.0		

Gender

Male	314	41.6%
Female	441	58.4%
	755	

American Indian

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	12	1.5	100.0	100.0
Missing	System	764	98.5		
Total		776	100.0		

To what ethnic groups do you belong?

American Indian	12	1.6%
Asian	7	0.9%
Black or African-American	124	16.3%
Hispanic or Latino	9	1.2%
White or Caucasian	596	78.3%
Other	13	1.7%
	761	

Asian

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	7	.9	100.0	100.0
Missing	System	769	99.1		
Total		776	100.0		

Black or African American

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	124	16.0	100.0	100.0
Missing	System	652	84.0		
Total		776	100.0		

Hispanic or Latino

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	9	1.2	100.0	100.0
Missing	System	767	98.8		
Total		776	100.0		

White or Caucasian

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	596	76.8	100.0	100.0
Missing	System	180	23.2		
Total		776	100.0		

Other

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	13	1.7	100.0	100.0
Missing	System	763	98.3		
Total		776	100.0		

VisitZip

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	51110	1	.1	.2	.2
	53122	1	.1	.2	.3
	55555	1	.1	.2	.5
	62005	1	.1	.2	.6
	62010	1	.1	.2	.8
	62012	1	.1	.2	.9
	62017	1	.1	.2	1.1
	62021	1	.1	.2	1.2
	62029	1	.1	.2	1.4
	62060	1	.1	.2	1.5
	62101	1	.1	.2	1.7
	62106	1	.1	.2	1.8
	62112	1	.1	.2	2.0
	62116	1	.1	.2	2.2
	62117	1	.1	.2	2.3
	62125	1	.1	.2	2.5
	62129	2	.3	.3	2.8
	62131	1	.1	.2	2.9
	62132	1	.1	.2	3.1
	62138	1	.1	.2	3.2
	62139	1	.1	.2	3.4
	62141	1	.1	.2	3.5
	62234	1	.1	.2	3.7
	63001	1	.1	.2	3.8
	63005	4	.5	.6	4.5
	63006	1	.1	.2	4.6
	63010	2	.3	.3	4.9
	63011	5	.6	.8	5.7
	63017	22	2.8	3.4	9.1
	63019	1	.1	.2	9.2
	63021	5	.6	.8	10.0
	63026	4	.5	.6	10.6
	63031	1	.1	.2	10.8
	63033	2	.3	.3	11.1
	63042	3	.4	.5	11.5
	63043	7	.9	1.1	12.6
	63044	4	.5	.6	13.2
	63074	1	.1	.2	13.4
	63100	1	.1	.2	13.5

	63101	21	2.7	3.2	16.8
	63102	16	2.1	2.5	19.2
	63103	22	2.8	3.4	22.6
	63104	10	1.3	1.5	24.2
	63105	53	6.8	8.2	32.3
	63106	14	1.8	2.2	34.5
	63107	2	.3	.3	34.8
	63108	19	2.4	2.9	37.7
	63109	20	2.6	3.1	40.8
	63110	29	3.7	4.5	45.2
	63111	13	1.7	2.0	47.2
	63112	5	.6	.8	48.0
	63113	5	.6	.8	48.8
	63114	6	.8	.9	49.7
	63115	5	.6	.8	50.5
	63116	19	2.4	2.9	53.4
	63117	35	4.5	5.4	58.8
	63118	11	1.4	1.7	60.5
	63119	9	1.2	1.4	61.8
	63120	3	.4	.5	62.3
	63121	2	.3	.3	62.6
	63122	15	1.9	2.3	64.9
	63123	11	1.4	1.7	66.6
	63124	9	1.2	1.4	68.0
	63125	9	1.2	1.4	69.4
	63126	4	.5	.6	70.0
	63127	3	.4	.5	70.5
	63128	1	.1	.2	70.6
	63129	5	.6	.8	71.4
	63130	29	3.7	4.5	75.8
	63131	16	2.1	2.5	78.3
	63132	6	.8	.9	79.2
	63133	3	.4	.5	79.7
	63135	4	.5	.6	80.3
	63136	5	.6	.8	81.1
	63137	10	1.3	1.5	82.6
	63138	1	.1	.2	82.8
	63139	16	2.1	2.5	85.2
	63141	26	3.4	4.0	89.2
	63142	1	.1	.2	89.4
	63143	14	1.8	2.2	91.5
	63144	12	1.5	1.8	93.4
	63145	6	.8	.9	94.3
	63146	10	1.3	1.5	95.8
	63147	8	1.0	1.2	97.1
	63155	2	.3	.3	97.4
	63167	2	.3	.3	97.7
	63301	4	.5	.6	98.3
	63302	1	.1	.2	98.5
	63303	3	.4	.5	98.9
	63321	1	.1	.2	99.1
	63366	1	.1	.2	99.2
	63367	1	.1	.2	99.4
	63385	2	.3	.3	99.7
	63390	1	.1	.2	99.8
	64045	1	.1	.2	100.0
	Total	650	83.8	100.0	
Missing	System	126	16.2		
Total		776	100.0		

AgeGroup

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 to 25	33	4.3	4.4	4.4
	26 to 40	155	20.0	20.9	25.3
	41 to 65	413	53.2	55.6	80.9
	Over 65	142	18.3	19.1	100.0
	Total	743	95.7	100.0	
Missing	System	33	4.3		
Total		776	100.0		

AgeGroup

18 to 25	33	4.4%
26 to 40	155	20.9%
41 to 65	413	55.6%
Over 65	142	19.1%
Total	743	100.0%

HomeZip

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	63101	19	2.4	2.5	2.5
	63102	16	2.1	2.1	4.5
	63103	22	2.8	2.8	7.4
	63104	32	4.1	4.1	11.5
	63105	72	9.3	9.3	20.8
	63106	13	1.7	1.7	22.5
	63107	2	.3	.3	22.7
	63108	40	5.2	5.2	27.9
	63109	54	7.0	7.0	34.8
	63110	30	3.9	3.9	38.7
	63111	25	3.2	3.2	41.9
	63112	17	2.2	2.2	44.1
	63113	11	1.4	1.4	45.5
	63115	17	2.2	2.2	47.7
	63116	37	4.8	4.8	52.5
	63117	53	6.8	6.8	59.4
	63118	25	3.2	3.2	62.6
	63119	4	.5	.5	63.1
	63120	13	1.7	1.7	64.8
	63123	43	5.5	5.5	70.3
	63125	20	2.6	2.6	72.9
	63130	54	7.0	7.0	79.9
	63133	2	.3	.3	80.1
	63136	7	.9	.9	81.0
	63137	14	1.8	1.8	82.8
	63139	57	7.3	7.4	90.2
	63143	57	7.3	7.4	97.5
	63147	19	2.4	2.5	100.0
	Total	775	99.9	100.0	
Missing	System	1	.1		
Total		776	100.0		

Totals of Shared Questions for Both Online Surveys

Respondents	
Survey 1	1040
Survey 2	322
Total	1362

Have you taken this survey before?	
No	1257
Yes	54
I'm not sure	41
Total	1352

In a typical week before the closure (before January 2, 2008), how often did you travel on the closed section of I-64 (Highway 40)?

Never	7	2.2%
Rarely	100	31.1%
Most days	215	66.8%
Total	322	

The closure has changed where I shop

Strongly Agree	231	18.1%
Agree	297	23.3%
Disagree	393	30.9%
Strongly Disagree	352	27.7%
Total	1273	
Total Agreement	528	**41.5%**
Total Disagreement	745	**58.5%**

The closure has changed where I buy gas

Strongly Agree	128	10.7%
Agree	118	9.8%
Disagree	423	35.3%
Strongly Disagree	529	44.2%
Total	1198	
Total Agreement	246	**20.5%**
Total Disagreement	952	**79.5%**

The closure has changed where I bank

Strongly Agree	103	8.4%

First Online Survey

Frequency Table

QSurvey

		Frequency	Percent	Percent	Percent
Valid	Brief	241	23.2	23.2	23.2
	Medium	165	15.9	15.9	39.0
	Detailed	634	61.0	61.0	100.0
	Total	1040	100.0	100.0	

QRepeat

		Frequency	Percent	Percent	Percent
Valid	No	978	94.0	95.0	95.0
	Yes	31	3.0	3.0	98.0
	I'm not sure	21	2.0	2.0	100.0
	Total	1030	99.0	100.0	
Missing	System	10	1.0		
Total		1040	100.0		

The closure has changed where I shop

		Frequency	Percent	Percent	Percent
Valid	Strongly Agree	165	15.9	16.0	16.0
	Agree	220	21.2	21.3	37.2
	No Opinion	52	5.0	5.0	42.3
	Disagree	313	30.1	30.3	72.5
	Strongly Disagree	284	27.3	27.5	100.0
	Total	1034	99.4	100.0	
Missing	System	6	.6		
Total		1040	100.0		

The closure has changed where I buy gas

		Frequency	Percent	Percent	Percent
Valid	Strongly Agree	91	8.8	9.0	9.0
	Agree	85	8.2	8.4	17.5
	No Opinion	67	6.4	6.7	24.1
	Disagree	336	32.3	33.4	57.5
	Strongly Disagree	428	41.2	42.5	100.0
	Total	1007	96.8	100.0	
Missing	System	33	3.2		
Total		1040	100.0		

The closure has changed where I bank

		Frequency	Percent	Percent	Percent
Valid	Strongly Agree	45	4.3	4.4	4.4

Second Online Survey

Frequency Table

Have you taken this survey before?

		cy	Percent	Percent	Percent
Valid	No	279	86.6	86.6	86.6
	Yes	23	7.1	7.1	93.8
	I'm not sure	20	6.2	6.2	100.0
	Total	322	100.0	100.0	

In a typical week before the closure (before January 2, 2008), how

		Frequen	Percent	Valid	Cumulative
Valid	Never	7	2.2	2.2	2.2
	Very rarely	45	14.0	14.0	16.1
	Once a week	55	17.1	17.1	33.2
	Two to three times	67	20.8	20.8	54.0
	Most weekdays	49	15.2	15.2	69.3
	Almost every day	99	30.7	30.7	100.0
	Total	322	100.0	100.0	

The closure has changed where I shop

		cy	Percent	Percent	Percent
Valid	Strongly Agree	66	20.5	20.6	20.6
	Agree	77	23.9	24.0	44.5
	No Opinion	30	9.3	9.3	53.9
	Disagree	80	24.8	24.9	78.8
	Strongly Disagree	68	21.1	21.2	100.0
	Total	321	99.7	100.0	
Missing	System	1	.3		
Total		322	100.0		

The closure has changed where I buy gas

		cy	Percent	Percent	Percent
Valid	Strongly Agree	37	11.5	12.7	12.7
	Agree	33	10.2	11.3	24.0
	No Opinion	34	10.6	11.6	35.6
	Disagree	87	27.0	29.8	65.4
	Strongly Disagree	101	31.4	34.6	100.0
	Total	292	90.7	100.0	
Missing	System	30	9.3		
Total		322	100.0		

The closure has changed my attendance to events like a baseball

		cy	Percent	Percent	Percent
Valid	Strongly Agree	58	18.0	18.2	18.2

Agree	66	5.4%
Disagree	458	37.4%
Strongly Disagree	597	48.8%
Total	1224	
Total Agreement	169	**13.8%**
Total Disagreement	1055	**86.2%**

The closure has changed where I eat out

Strongly Agree	174	14.4%
Agree	302	25.1%
Disagree	347	28.8%
Strongly Disagree	382	31.7%
Total	1205	
Total Agreement	476	**39.5%**
Total Disagreement	729	**60.5%**

The closure has changed how often I travel to certain areas

Strongly Agree	475	36.7%
Agree	474	36.6%
Disagree	169	13.1%
Strongly Disagree	176	13.6%
Total	1294	
Total Agreement	949	**73.3%**
Total Disagreement	345	**26.7%**

The closure has changed where I work

Strongly Agree	58	4.8%
Agree	50	4.2%
Disagree	348	29.0%
Strongly Disagree	743	62.0%
Total	1199	
Total Agreement	108	**9.0%**
Total Disagreement	1091	**91.0%**

The closure has changed where I live

Strongly Agree	57	4.6%
Agree	48	3.8%
Disagree	320	25.6%
Strongly Disagree	824	66.0%
Total	1249	
Total Agreement	105	**8.4%**
Total Disagreement	1144	**91.6%**

	Agree	20	1.9	2.0	6.4
	No Opinion	84	8.1	8.3	14.7
	Disagree	358	34.4	35.2	49.9
	Strongly Disagree	510	49.0	50.1	100.0
	Total	1017	97.8	100.0	
Missing	System	23	2.2		
Total		1040	100.0		

The closure has changed where I eat out

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	124	11.9	12.4	12.4
	Agree	225	21.6	22.5	34.9
	No Opinion	73	7.0	7.3	42.2
	Disagree	267	25.7	26.7	69.0
	Strongly Disagree	310	29.8	31.0	100.0
	Total	999	96.1	100.0	
Missing	System	41	3.9		
Total		1040	100.0		

The closure has changed how often I travel to certain areas

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	357	34.3	34.8	34.8
	Agree	360	34.6	35.1	70.0
	No Opinion	36	3.5	3.5	73.5
	Disagree	129	12.4	12.6	86.0
	Strongly Disagree	143	13.8	14.0	100.0
	Total	1025	98.6	100.0	
Missing	System	15	1.4		
Total		1040	100.0		

The closure has changed where I work

		Frequency	Percent	Valid	Cumulative
Valid	Strongly Agree	43	4.1	4.3	4.3
	Agree	35	3.4	3.5	7.8
	No Opinion	70	6.7	7.0	14.8
	Disagree	273	26.3	27.4	42.2
	Strongly Disagree	576	55.4	57.8	100.0
	Total	997	95.9	100.0	
Missing	System	43	4.1		
Total		1040	100.0		

The closure has changed where I live

		Frequency	Percent	Valid	Cumulative
Valid	Strongly Agree	38	3.7	3.7	3.7
	Agree	35	3.4	3.4	7.1
	No Opinion	63	6.1	6.2	13.3
	Disagree	255	24.5	25.0	38.3
	Strongly Disagree	631	60.7	61.7	100.0
	Total	1022	98.3	100.0	
Missing	System	18	1.7		

	Agree	46	14.3	14.4	32.6
	No Opinion	28	8.7	8.8	41.4
	Disagree	100	31.1	31.3	72.7
	Strongly Disagree	87	27.0	27.3	100.0
	Total	319	99.1	100.0	
Missing	System	3	.9		
Total		322	100.0		

The closure has changed where I eat out

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	50	15.5	16.4	16.4
	Agree	77	23.9	25.3	41.8
	No Opinion	25	7.8	8.2	50.0
	Disagree	80	24.8	26.3	76.3
	Strongly Disagree	72	22.4	23.7	100.0
	Total	304	94.4	100.0	
Missing	System	18	5.6		
Total		322	100.0		

The closure has changed how often I travel to certain areas

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	118	36.6	37.2	37.2
	Agree	114	35.4	36.0	73.2
	No Opinion	12	3.7	3.8	77.0
	Disagree	40	12.4	12.6	89.6
	Strongly Disagree	33	10.2	10.4	100.0
	Total	317	98.4	100.0	
Missing	System	5	1.6		
Total		322	100.0		

The closure has changed where I work

		Frequency	Percent	Valid	Cumulative
Valid	Strongly Agree	15	4.7	4.9	4.9
	Agree	15	4.7	4.9	9.8
	No Opinion	33	10.2	10.8	20.7
	Disagree	75	23.3	24.6	45.2
	Strongly Disagree	167	51.9	54.8	100.0
	Total	305	94.7	100.0	
Missing	System	17	5.3		
Total		322	100.0		

The closure has changed where I live

		Frequency	Percent	Valid	Cumulative
Valid	Strongly Agree	19	5.9	6.0	6.0
	Agree	13	4.0	4.1	10.0
	No Opinion	29	9.0	9.1	19.1
	Disagree	65	20.2	20.4	39.5
	Strongly Disagree	193	59.9	60.5	100.0
	Total	319	99.1	100.0	
Missing	System	3	.9		

Total		1040	100.0		

Total		322	100.0		

Has the closure of this section of I-64 changed your work habits?

No - I still work the same hours in the same location as I did before the closure	887	65.1%
Yes - My hours have shifted	297	21.8%
Yes - I now work from another location more often	84	6.2%
Yes - I quit my job and accepted one somewhere else	34	2.5%
Yes - other	123	9.0%
		104.6%

No - I still work the same hours in the same location as I did before the closure

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	681	65.5	100.0	100.0
Missing	System	359	34.5		
Total		1040	100.0		

No - I still work the same hours in the same location as I did before the closure

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	206	64.0	100.0	100.0
Missing	System	116	36.0		
Total		322	100.0		

Yes - My hours have shifted

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	219	21.1	100.0	100.0
Missing	System	821	78.9		
Total		1040	100.0		

Yes - My hours have shifted

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	78	24.2	100.0	100.0
Missing	System	244	75.8		
Total		322	100.0		

Yes - I now work from another location (home, office, etc.) more often

		Frequency	Percent	Valid	Cumulative
Valid	1	59	5.7	100.0	100.0
Missing	System	981	94.3		
Total		1040	100.0		

Yes - I now work from another location (home, another office,

		Frequency	Percent	Valid	Cumulative
Valid	1	25	7.8	100.0	100.0
Missing	System	297	92.2		
Total		322	100.0		

Yes - I quit my job and accepted one somewhere else

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	27	2.6	100.0	100.0
Missing	System	1013	97.4		
Total		1040	100.0		

Yes - I quit my job and accepted one somewhere else

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	7	2.2	100.0	100.0
Missing	System	315	97.8		
Total		322	100.0		

Yes - other

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	88	8.5	100.0	100.0
Missing	System	952	91.5		
Total		1040	100.0		

Yes - other

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	35	10.9	100.0	100.0
Missing	System	287	89.1		
Total		322	100.0		

In a typical week before the closure (before January 2, 2008), how often did

		Frequency	Percent	Valid	Cumulative
Valid	Never	29	2.8	2.8	2.8
	Very rarely	205	19.7	19.7	22.5
	Once a week	158	15.2	15.2	37.7
	Two to three times a week	171	16.4	16.4	54.1
	Most weekdays	142	13.7	13.7	67.8
	Almost every day	335	32.2	32.2	100.0
	Total	1040	100.0	100.0	

Never	29	2.8%
Rarely	363	34.9%
Most Days	648	62.3%
Total	1040	

Now that I-64 construction is underway, have you shifted your commute time to work and/or school?

Now that I-64 construction is underway, have you shifted your

Yes - I now leave a little earlier (1 to 10 minutes earlier)	44	13.7%
Yes - I now leave earlier (more than 10 minutes earlier)	116	36.1%
Yes - I now leave a little later (1 to 10 minutes later)	8	2.5%
Yes - I now leave latter (more than 10 minutes later)	23	7.2%
No - I have not changed my commuting schedule to work	92	28.7%
No - This question is not applicable to me	38	11.8%
	321	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes - I now leave a	44	13.7	13.7	13.7
	Yes - I now leave earlier (more than	116	36.0	36.1	49.8
	Yes - I now leave a little later (1 to 10	8	2.5	2.5	52.3
	Yes - I now leave latter (more than 10	23	7.1	7.2	59.5
	No - I have not changed my	92	28.6	28.7	88.2
	No - This question	38	11.8	11.8	100.0
	Total	321	99.7	100.0	
Missing	System	1	.3		
Total		322	100.0		

Manchester Road

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I have not tried this alternative yet	361	34.7	47.8	47.8
	I have tried this alternative and would	209	20.1	27.7	75.5
	I have tried this	185	17.8	24.5	100.0
	Total	755	72.6	100.0	
Missing	System	285	27.4		
Total		1040	100.0		

Clayton Road

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I have not tried this alternative yet	325	31.3	43.2	43.2
	I have tried this alternative and would	196	18.8	26.0	69.2
	I have tried this	232	22.3	30.8	100.0
	Total	753	72.4	100.0	
Missing	System	287	27.6		
Total		1040	100.0		

Ladue Road

		Frequency	Percent	Valid	Cumulative
Valid	I have not tried this	361	34.7	47.8	47.8
	I have tried this	148	14.2	19.6	67.3
	I have tried this	247	23.8	32.7	100.0
	Total	756	72.7	100.0	
Missing	System	284	27.3		
Total		1040	100.0		

Olive Boulevard

		Frequency	Percent	Percent	Percent
Valid	I have not tried this alternative yet	342	32.9	46.0	46.0
	I have tried this	226	21.7	30.4	76.3
	I have tried this	176	16.9	23.7	100.0
	Total	744	71.5	100.0	
Missing	System	296	28.5		
Total		1040	100.0		

Page Avenue

		Frequency	Percent	Valid	Cumulative
Valid	I have not tried this alternative yet	437	42.0	59.1	59.1
	I have tried this	195	18.8	26.4	85.5
	I have tried this alternative and would	107	10.3	14.5	100.0
	Total	739	71.1	100.0	
Missing	System	301	28.9		
Total		1040	100.0		

I-44

		Frequency	Percent	Valid	Cumulative
Valid	I have not tried this	324	31.2	42.5	42.5
	I have tried this	335	32.2	44.0	86.5
	I have tried this alternative and would NOT recommend it	103	9.9	13.5	100.0
	Total	762	73.3	100.0	
Missing	System	278	26.7		
Total		1040	100.0		

I-55

		Frequency	Percent	Valid	Cumulative
Valid	I have not tried this	619	59.5	83.9	83.9
	I have tried this	78	7.5	10.6	94.4
	I have tried this	41	3.9	5.6	100.0
	Total	738	71.0	100.0	
Missing	System	302	29.0		
Total		1040	100.0		

I-70

		Frequency	Percent	Valid	Cumulative
Valid	I have not tried this	475	45.7	62.7	62.7
	I have tried this	191	18.4	25.2	87.9
	I have tried this	92	8.8	12.1	100.0
	Total	758	72.9	100.0	
Missing	System	282	27.1		
Total		1040	100.0		

How well the public has been kept informed about the New I-64 Project

Very Satisfied	587	46.3%
Satisfied	539	42.5%
Dissatisfied	99	7.8%
Very Dissatisfied	44	3.5%
Total	1269	
Total Satisfied	1126	**88.7%**
Total Dissatisfied	143	**11.3%**

How well the public has been kept informed about the New I-64 Project

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	491	47.2	47.4	47.4
	Satisfied	401	38.6	38.7	86.2
	No Opinion	50	4.8	4.8	91.0
	Dissatisfied	65	6.3	6.3	97.3
	Very Dissatisfied	28	2.7	2.7	100.0
	Total	1035	99.5	100.0	
Missing	System	5	.5		
Total		1040	100.0		

How well the public has been kept informed about the New I-64

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	96	29.8	29.9	29.9
	Satisfied	138	42.9	43.0	72.9
	No Opinion	37	11.5	11.5	84.4
	Dissatisfied	34	10.6	10.6	95.0
	Very Dissatisfied	16	5.0	5.0	100.0
	Total	321	99.7	100.0	
Missing	System	1	.3		
Total		322	100.0		

The timeliness of the information being made available

Very Satisfied	515	41.4%
Satisfied	574	46.1%
Dissatisfied	111	8.9%
Very Dissatisfied	44	3.5%

The timeliness of the information being made available

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	426	41.0	41.5	41.5
	Satisfied	433	41.6	42.2	83.7
	No Opinion	62	6.0	6.0	89.8
	Dissatisfied	79	7.6	7.7	97.5

The timeliness of the information being made available

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	89	27.6	28.3	28.3
	Satisfied	141	43.8	44.8	73.0
	No Opinion	35	10.9	11.1	84.1
	Dissatisfied	32	9.9	10.2	94.3

Total	1244	
Total Satisfied	1089	**87.5%**
Total Dissatisfied	155	**12.5%**

How alternative travel options have been communicated

Very Satisfied	391	33.4%
Satisfied	535	45.7%
Dissatisfied	166	14.2%
Very Dissatisfied	78	6.7%
Total	1170	
Total Satisfied	926	**79.1%**
Total Dissatisfied	244	**20.9%**

The traffic flow within construction work zones (other construction where you may trave

Very Satisfied	216	19.8%
Satisfied	504	46.2%
Dissatisfied	243	22.3%
Very Dissatisfied	128	11.7%
Total	1091	
Total Satisfied	720	**66.0%**
Total Dissatisfied	371	**34.0%**

How understandable and accurate are the construction work zone signs

Very Satisfied	231	20.2%
Satisfied	630	55.1%
Dissatisfied	200	17.5%
Very Dissatisfied	82	7.2%
Total	1143	
Total Satisfied	861	**75.3%**
Total Dissatisfied	282	**24.7%**

How well are you managing to move around the St. Louis area with the closure of I-64

Very Satisfied	293	23.8%
Satisfied	564	45.9%
Dissatisfied	251	20.4%
Very Dissatisfied	122	9.9%
Total	1230	
Total Satisfied	857	**69.7%**
Total Dissatisfied	373	**30.3%**

The decision to complete the work by closing I-64 for 2 years instead of taking 6-8 year

Very Satisfied	606	49.6%
Satisfied	329	26.9%
Dissatisfied	123	10.1%

	Very Dissatisfied	26	2.5	2.5	100.0
	Total	1026	98.7	100.0	
Missing	System	14	1.3		
Total		1040	100.0		

How alternative travel options have been communicated

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	325	31.3	32.1	32.1
	Satisfied	428	41.2	42.3	74.3
	No Opinion	105	10.1	10.4	84.7
	Dissatisfied	114	11.0	11.3	96.0
	Very Dissatisfied	41	3.9	4.0	100.0
	Total	1013	97.4	100.0	
Missing	System	27	2.6		
Total		1040	100.0		

The traffic flow within construction work zones (other construction where you may travel)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	175	16.8	17.0	17.0
	Satisfied	393	37.8	38.2	55.2
	No Opinion	205	19.7	19.9	75.1
	Dissatisfied	177	17.0	17.2	92.3
	Very Dissatisfied	79	7.6	7.7	100.0
	Total	1029	98.9	100.0	
Missing	System	11	1.1		
Total		1040	100.0		

How understandable and accurate are the construction work zone signs

		Frequency	Percent	Valid	Cumulative
Valid	Very Satisfied	171	16.4	16.7	16.7
	Satisfied	481	46.3	46.9	63.6
	No Opinion	163	15.7	15.9	79.5
	Dissatisfied	163	15.7	15.9	95.4
	Very Dissatisfied	47	4.5	4.6	100.0
	Total	1025	98.6	100.0	
Missing	System	15	1.4		
Total		1040	100.0		

How well are you managing to move around the St. Louis area with the

		Frequency	Percent	Valid	Cumulative
Valid	Very Satisfied	239	23.0	23.3	23.3
	Satisfied	438	42.1	42.7	66.0
	No Opinion	84	8.1	8.2	74.2
	Dissatisfied	190	18.3	18.5	92.7
	Very Dissatisfied	75	7.2	7.3	100.0
	Total	1026	98.7	100.0	
Missing	System	14	1.3		
Total		1040	100.0		

The decision to complete the work by closing I-64 for 2 years instead of

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	451	43.4	43.7	43.7
	Satisfied	262	25.2	25.4	69.0
	No Opinion	101	9.7	9.8	78.8

	Very Dissatisfied	18	5.6	5.7	100.0
	Total	315	97.8	100.0	
Missing	System	7	2.2		
Total		322	100.0		

How alternative travel options have been communicated

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	66	20.5	20.8	20.8
	Satisfied	107	33.2	33.6	54.4
	No Opinion	56	17.4	17.6	72.0
	Dissatisfied	52	16.1	16.4	88.4
	Very Dissatisfied	37	11.5	11.6	100.0
	Total	318	98.8	100.0	
Missing	System	4	1.2		
Total		322	100.0		

The traffic flow within construction work zones (other construction where you may travel)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	41	12.7	13.0	13.0
	Satisfied	111	34.5	35.2	48.3
	No Opinion	48	14.9	15.2	63.5
	Dissatisfied	66	20.5	21.0	84.4
	Very Dissatisfied	49	15.2	15.6	100.0
	Total	315	97.8	100.0	
Missing	System	7	2.2		
Total		322	100.0		

How understandable and accurate are the construction work zone

		Frequency	Percent	Valid	Cumulative
Valid	Very Satisfied	60	18.6	19.0	19.0
	Satisfied	149	46.3	47.2	66.1
	No Opinion	35	10.9	11.1	77.2
	Dissatisfied	37	11.5	11.7	88.9
	Very Dissatisfied	35	10.9	11.1	100.0
	Total	316	98.1	100.0	
Missing	System	6	1.9		
Total		322	100.0		

How well are you managing to move around the St. Louis area

		Frequency	Percent	Valid	Cumulative
Valid	Very Satisfied	54	16.8	17.1	17.1
	Satisfied	126	39.1	40.0	57.1
	No Opinion	27	8.4	8.6	65.7
	Dissatisfied	61	18.9	19.4	85.1
	Very Dissatisfied	47	14.6	14.9	100.0
	Total	315	97.8	100.0	
Missing	System	7	2.2		
Total		322	100.0		

The decision to complete the work by closing I-64 for 2 years

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Satisfied	155	48.1	48.7	48.7
	Satisfied	67	20.8	21.1	69.8
	No Opinion	28	8.7	8.8	78.6

Very Dissatisfied	164	13.4%
Total	1222	
Total Satisfied	935	**76.5%**
Total Dissatisfied	287	**23.5%**

Your overall level of satisfaction with how the I-64 closure has been handled

Very Satisfied	440	35.1%
Satisfied	522	41.6%
Dissatisfied	154	12.3%
Very Dissatisfied	139	11.1%
Total	1255	
Total Satisfied	962	**76.7%**
Total Dissatisfied	293	**23.3%**

		Frequency	Percent	Valid	Cumulative
	Dissatisfied	98	9.4	9.5	88.3
	Very Dissatisfied	121	11.6	11.7	100.0
	Total	1033	99.3	100.0	
Missing	System	7	.7		
Total		1040	100.0		

Your overall level of satisfaction with how the I-64 closure has been handled

		Frequency	Percent	Valid	Cumulative
Valid	Very Satisfied	338	32.5	32.7	32.7
	Satisfied	406	39.0	39.3	72.0
	No Opinion	75	7.2	7.3	79.3
	Dissatisfied	116	11.2	11.2	90.5
	Very Dissatisfied	98	9.4	9.5	100.0
	Total	1033	99.3	100.0	
Missing	System	7	.7		
Total		1040	100.0		

Before coming to this survey, did you know that the section of I-64

		Frequency	Percent	Valid	Cumulative
Valid	Yes	784	75.4	98.4	98.4
	No	13	1.3	1.6	100.0
	Total	797	76.6	100.0	
Missing	System	243	23.4		
Total		1040	100.0		

When did you learn that I-64 was going to be closed between Ballas Road

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	January 2008	14	1.3	1.8	1.8
	December 2007	31	3.0	3.9	5.6
	Before December	703	67.6	88.1	93.7
	I'm not sure	50	4.8	6.3	100.0
	Total	798	76.7	100.0	
Missing	System	242	23.3		
Total		1040	100.0		

Detailed overall satisfaction question concerning closure vs. 6 to 8 years

Very Satisfied	560	54.5%
Satisfied	249	24.2%
Dissatisfied	112	10.9%
Very Dissatisfied	106	10.3%
Total	1027	
Total Satisfied	809	**78.8%**
Total Dissatisfied	218	**21.2%**

Detailed overall satisfaction question concerning closure vs. 6 to 8 years

		Frequency	Percent	Valid	Cumulative
Valid	Very Satisfied	393	37.8	49.4	49.4
	Satisfied	182	17.5	22.9	72.3
	No Opinion	58	5.6	7.3	79.6
	Dissatisfied	83	8.0	10.4	90.1
	Very Dissatisfied	79	7.6	9.9	100.0
	Total	795	76.4	100.0	
Missing	System	245	23.6		
Total		1040	100.0		

How effective are the temporary lane additions in shoulder areas along I-44, I-70, I-270, and Page?

Total Effective	206	**70.3%**
Total Ineffective (Worse)	53	**18.1%**
Total No Difference	34	**11.6%**
Total	293	

		Frequency	Percent	Valid	Cumulative
	Dissatisfied	25	7.8	7.9	86.5
	Very Dissatisfied	43	13.4	13.5	100.0
	Total	318	98.8	100.0	
Missing	System	4	1.2		
Total		322	100.0		

Your overall level of satisfaction with how the I-64 closure has

		Frequen	Percent	Valid	Cumulative
Valid	Very Satisfied	102	31.7	31.8	31.8
	Satisfied	116	36.0	36.1	67.9
	No Opinion	24	7.5	7.5	75.4
	Dissatisfied	38	11.8	11.8	87.2
	Very Dissatisfied	41	12.7	12.8	100.0
	Total	321	99.7	100.0	
Missing	System	1	.3		
Total		322	100.0		

The alternative to closing parts of I-64 (Highway 40) for two years

		Frequen	Percent	Valid	Cumulative
Valid	Very Satisfied	167	51.9	52.8	52.8
	Satisfied	67	20.8	21.2	74.1
	No Opinion	26	8.1	8.2	82.3
	Dissatisfied	29	9.0	9.2	91.5
	Very Dissatisfied	27	8.4	8.5	100.0
	Total	316	98.1	100.0	
Missing	System	6	1.9		
Total		322	100.0		

How effective are the temporary lane additions in shoulder areas along I-44, I-70, I-270, and Page?

		Frequen	Percent	Valid	Cumulative
Valid	Very Effective	97	30.1	30.4	30.4
	Slightly Effective	109	33.9	34.2	64.6
	No difference	22	6.8	6.9	71.5

	Slightly Ineffective	27	8.4	8.5	79.9
	Very ineffective (Worse)	26	8.1	8.2	88.1
	I Have Not Noticed	12	3.7	3.8	91.8
	No Idea	26	8.1	8.2	100.0
	Total	319	99.1	100.0	
Missing	System	3	.9		
Total		322	100.0		

How effective are the permanent traffic signal timing and interconnection?

Total Effective	188	**65.5%**
Total Ineffective (Worse)	38	**13.2%**
Total No Difference	61	**21.3%**
Total	287	

How effective are the permanent traffic signal timing and

		Frequen	Percent	Valid	Cumulative
Valid	Very Effective	108	33.5	34.0	34.0
	Slightly Effective	80	24.8	25.2	59.1
	No difference	31	9.6	9.7	68.9
	Slightly Ineffective (Worse)	18	5.6	5.7	74.5
	Very ineffective	20	6.2	6.3	80.8
	I Have Not Noticed	30	9.3	9.4	90.3
	No Idea	31	9.6	9.7	100.0
	Total	318	98.8	100.0	
Missing	System	4	1.2		
Total		322	100.0		

How effective is the traveler's information displayed on interstates and available on 511?

Total Effective	178	**62.7%**
Total Ineffective (Worse)	32	**11.3%**
Total No Difference	74	**26.1%**
Total	284	

How effective is the traveler's information displayed on interstates

		Frequen	Percent	Valid	Cumulative
Valid	Very Effective	72	22.4	22.6	22.6
	Slightly Effective	106	32.9	33.2	55.8
	No difference	56	17.4	17.6	73.4
	Slightly Ineffective	12	3.7	3.8	77.1
	Very ineffective	20	6.2	6.3	83.4
	I Have Not Noticed	18	5.6	5.6	89.0
	No Idea	35	10.9	11.0	100.0
	Total	319	99.1	100.0	
Missing	System	3	.9		
Total		322	100.0		

How effective is the I-64 Traffic Response services on non-interstate roads to assist motorists and emergency response staff in early clearance of incidents?

Total Effective	129	**53.1%**
Total Ineffective (Worse)	21	**8.6%**
Total No Difference	93	**38.3%**
Total	243	

How effective is the I-64 Traffic Response services on non-

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Effective	62	19.3	19.6	19.6
	Slightly Effective	67	20.8	21.1	40.7
	No difference	47	14.6	14.8	55.5
	Slightly Ineffective (Worse)	13	4.0	4.1	59.6
	Very ineffective	8	2.5	2.5	62.1
	I Have Not Noticed	46	14.3	14.5	76.7
	No Idea	74	23.0	23.3	100.0
	Total	317	98.4	100.0	
Missing	System	5	1.6		
Total		322	100.0		

TV News	850

TV News

		Frequency	Percent	Valid	Cumulative
Valid	1	622	59.8	100.0	100.0

TV News

		Frequen	Percent	Valid	Cumulative
Valid	1	228	70.8	100.0	100.0

Missing	System	418	40.2			
Total		1040	100.0			

Missing	System	94	29.2			
Total		322	100.0			

Radio News 698 **51.2%**

Radio News

		Frequency	Percent	Valid	Cumulative
Valid	1	506	48.7	100.0	100.0
Missing	System	534	51.3		
Total		1040	100.0		

Radio News

		Frequen	Percent	Valid	Cumulative
Valid	1	192	59.6	100.0	100.0
Missing	System	130	40.4		
Total		322	100.0		

Radio Talk Shows 269 **19.8%**

Radio Talk Shows

		Frequency	Percent	Valid	Cumulative
Valid	1	202	19.4	100.0	100.0
Missing	System	838	80.6		
Total		1040	100.0		

Radio Talk Shows

		Frequen	Percent	Valid	Cumulative
Valid	1	67	20.8	100.0	100.0
Missing	System	255	79.2		
Total		322	100.0		

Newspapers 585 **43.0%**

Newspapers

		Frequency	Percent	Valid	Cumulative
Valid	1	449	43.2	100.0	100.0
Missing	System	591	56.8		
Total		1040	100.0		

Newspapers

		Frequen	Percent	Valid	Cumulative
Valid	1	136	42.2	100.0	100.0
Missing	System	186	57.8		
Total		322	100.0		

Internet Sites 820 **60.2%**

Internet Sites

		Frequency	Percent	Valid	Cumulative
Valid	1	605	58.2	100.0	100.0
Missing	System	435	41.8		
Total		1040	100.0		

Internet Sites

		Frequen	Percent	Valid	Cumulative
Valid	1	215	66.8	100.0	100.0
Missing	System	107	33.2		
Total		322	100.0		

Receive information in mail (newsle 179 **13.1%**

Receive information in mail (newsletter, etc.)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	117	11.3	100.0	100.0
Missing	System	923	88.8		
Total		1040	100.0		

Mail

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	62	19.3	100.0	100.0
Missing	System	260	80.7		
Total		322	100.0		

Project email from MoDOT or I-64 T 330 **24.2%**

Project email from MoDOT or I-64 Team

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	225	21.6	100.0	100.0
Missing	System	815	78.4		
Total		1040	100.0		

Email from MoDOT or I-64 Team

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	105	32.6	100.0	100.0
Missing	System	217	67.4		
Total		322	100.0		

Project display boards at public gath 147 **10.8%**

Project display boards at public gatherings

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	97	9.3	100.0	100.0
Missing	System	943	90.7		
Total		1040	100.0		

Project display boards at public gatherings

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	50	15.5	100.0	100.0
Missing	System	272	84.5		
Total		322	100.0		

Road signs 195 **60.6%**

Road signs when I was headed toward the closed highway

Road signs

Word of Mouth (a friend tells me)	108	**10.4%**
Work	104	**10.0%**
Call 1-888-ASK-MODOT	44	**4.2%**
Call 511	53	**5.1%**
Other	35	**2.6%**
GatewayGuide.com	233	**28.4%**
MoDOT's website (MoDOT.org and/	437	**53.3%**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	394	37.9	100.0	100.0
Missing	System	646	62.1		
Total		1040	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	195	60.6	100.0	100.0
Missing	System	127	39.4		
Total		322	100.0		

Road signs on other roads

		Frequency	Percent	Percent	Percent
Valid	1	289	27.8	100.0	100.0
Missing	System	751	72.2		
Total		1040	100.0		

Word of Mouth (a friend tells me)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	108	10.4	100.0	100.0
Missing	System	932	89.6		
Total		1040	100.0		

Work

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	104	10.0	100.0	100.0
Missing	System	936	90.0		
Total		1040	100.0		

Call 1-888-ASK-MODOT

		Frequency	Percent	Valid	Cumulative
Valid	1	44	4.2	100.0	100.0
Missing	System	996	95.8		
Total		1040	100.0		

Call 511

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	53	5.1	100.0	100.0
Missing	System	987	94.9		
Total		1040	100.0		

Other

		Frequency	Percent	Valid	Cumulative
Valid	1	18	1.7	100.0	100.0
Missing	System	1022	98.3		
Total		1040	100.0		

Other

		Frequen	Percent	Valid	Cumulative
Valid	1	17	5.3	100.0	100.0
Missing	System	305	94.7		
Total		322	100.0		

GatewayGuide.com

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	187	18.0	100.0	100.0
Missing	System	853	82.0		
Total		1040	100.0		

GatewayGuide.com

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	46	14.3	100.0	100.0
Missing	System	276	85.7		
Total		322	100.0		

MoDOT's website (MoDOT.org and/or MoDOT.gov)

		Frequency	Percent	Valid	Cumulative
Valid	1	304	29.2	100.0	100.0

MoDOT's website

		Frequen	Percent	Valid	Cumulative
Valid	1	133	41.3	100.0	100.0

The New I-64 site (TheNewI64.org)	584	**71.2%**
Metro (MetroStLouis.org)	115	**14.0%**
DontGetStuck.org	28	**3.4%**
GetAroundSTL.com	38	**4.6%**
MidMetro4.com	20	**2.4%**
Post-Dispatch website (STLToday.c	437	**53.3%**
Post 4 Traffic Online (post4trafficonl	145	**17.7%**
Radio AM 550 website (KTRS.com)	36	**4.4%**

		Frequency	Percent	Valid Percent	Cumulative Percent
Missing	System	736	70.8		
Total		1040	100.0		

The New I-64 site (TheNewI64.org)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	414	39.8	100.0	100.0
Missing	System	626	60.2		
Total		1040	100.0		

Metro (MetroStLouis.org)

		Frequency	Percent	Valid	Cumulative
Valid	1	84	8.1	100.0	100.0
Missing	System	956	91.9		
Total		1040	100.0		

DontGetStuck.org

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	20	1.9	100.0	100.0
Missing	System	1020	98.1		
Total		1040	100.0		

GetAroundSTL.com

		Frequency	Percent	Valid	Cumulative
Valid	1	27	2.6	100.0	100.0
Missing	System	1013	97.4		
Total		1040	100.0		

MidMetro4.com

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	14	1.3	100.0	100.0
Missing	System	1026	98.7		
Total		1040	100.0		

Post-Dispatch website (STLToday.com)

		Frequency	Percent	Valid	Cumulative
Valid	1	327	31.4	100.0	100.0
Missing	System	713	68.6		
Total		1040	100.0		

Post 4 Traffic Online (post4trafficonline.com)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	119	11.4	100.0	100.0
Missing	System	921	88.6		
Total		1040	100.0		

Radio AM 550 website (KTRS.com)

		Frequency	Percent	Valid	Cumulative
Valid	1	18	1.7	100.0	100.0
Missing	System	1022	98.3		
Total		1040	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Missing	System	189	58.7		
Total		322	100.0		

The New I-64 site

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	170	52.8	100.0	100.0
Missing	System	152	47.2		
Total		322	100.0		

Metro (MetroStLouis.org)

		Frequency	Percent	Valid	Cumulative
Valid	1	31	9.6	100.0	100.0
Missing	System	291	90.4		
Total		322	100.0		

DontGetStuck.org

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	8	2.5	100.0	100.0
Missing	System	314	97.5		
Total		322	100.0		

GetAroundSTL.com

		Frequency	Percent	Valid	Cumulative
Valid	1	11	3.4	100.0	100.0
Missing	System	311	96.6		
Total		322	100.0		

MidMetro4.com

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	1.9	100.0	100.0
Missing	System	316	98.1		
Total		322	100.0		

Post-Dispatch website

		Frequency	Percent	Valid	Cumulative
Valid	1	110	34.2	100.0	100.0
Missing	System	212	65.8		
Total		322	100.0		

Post 4 Traffic Online

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	26	8.1	100.0	100.0
Missing	System	296	91.9		
Total		322	100.0		

Radio AM 550 site

		Frequency	Percent	Valid	Cumulative
Valid	1	18	5.6	100.0	100.0
Missing	System	304	94.4		
Total		322	100.0		

Radio AM 1120 website (KMOX.cor	101	**12.3%**
TV Channel 2 website (MyFOXSTL.	198	**24.1%**
TV Channel 4 website (KMOV.com)	199	**24.3%**
TV Channel 5 website (KSDK.com)	355	**43.3%**
Other	54	**6.6%**

Radio AM 1120 website (KMOX.com)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	70	6.7	100.0	100.0
Missing	System	970	93.3		
Total		1040	100.0		

Radio AM 1120 site

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	31	9.6	100.0	100.0
Missing	System	291	90.4		
Total		322	100.0		

TV Channel 2 website (MyFOXSTL.com)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	137	13.2	100.0	100.0
Missing	System	903	86.8		
Total		1040	100.0		

TV 2 site

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	61	18.9	100.0	100.0
Missing	System	261	81.1		
Total		322	100.0		

TV Channel 4 website (KMOV.com)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	145	13.9	100.0	100.0
Missing	System	895	86.1		
Total		1040	100.0		

TV 4 site

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	54	16.8	100.0	100.0
Missing	System	268	83.2		
Total		322	100.0		

TV Channel 5 website (KSDK.com)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	261	25.1	100.0	100.0
Missing	System	779	74.9		
Total		1040	100.0		

TV 5 site

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	94	29.2	100.0	100.0
Missing	System	228	70.8		
Total		322	100.0		

Other

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	40	3.8	100.0	100.0
Missing	System	1000	96.2		
Total		1040	100.0		

Other

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	14	4.3	100.0	100.0
Missing	System	308	95.7		
Total		322	100.0		

What information on the I-64 Project website do you find most useful?

Commuter Alternatives (Transit/Carpooling Options)	15	**2.6%**
Construction Zone (Ongoing Closures)	143	**24.6%**
Map My Trip	32	**5.5%**
Newsroom	17	**2.9%**
Project Overview	90	**15.5%**
Traffic Impacts (Today's Closures)	159	**27.4%**
Web cams and/or Photo Gallery	91	**15.7%**
None of the Above	34	**5.9%**
Total	581	100.0%

What information on the I-64 Project website do you find most useful?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Commuter	14	1.3	3.4	3.4
	Construction Zone (Ongoing Closures)	84	8.1	20.4	23.8
	Map My Trip	22	2.1	5.3	29.1
	Newsroom	17	1.6	4.1	33.3
	Project Overview	64	6.2	15.5	48.8
	Traffic Impacts	120	11.5	29.1	77.9
	Web cams and/or	68	6.5	16.5	94.4
	None of the Above	23	2.2	5.6	100.0
	Total	412	39.6	100.0	
Missing	System	628	60.4		
Total		1040	100.0		

What information on the I-64 Project website do you find most

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Commuter	1	.3	.6	.6
	Construction Zone (Ongoing Closures)	59	18.3	34.9	35.5
	Map My Trip	10	3.1	5.9	41.4
	Project Overview	26	8.1	15.4	56.8
	Traffic Impacts	39	12.1	23.1	79.9
	Web cams and/or	23	7.1	13.6	93.5
	None of the Above	11	3.4	6.5	100.0
	Total	169	52.5	100.0	
Missing	System	153	47.5		
Total		322	100.0		

Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not applicable or I	463	44.5	75.7	75.7
	Faster than before	6	.6	1.0	76.6
	Same time as before	58	5.6	9.5	86.1
	0 to 5 minutes longer	25	2.4	4.1	90.2
	5 to 15 minutes longer	26	2.5	4.2	94.4
	15 to 30 minutes	20	1.9	3.3	97.7
	More than 30 minutes	14	1.3	2.3	100.0
	Total	612	58.8	100.0	
Missing	System	428	41.2		
Total		1040	100.0		

Employment or Work Related

		Frequency	Percent	Valid	Cumulative
Valid	Not applicable or I	44	4.2	7.1	7.1
	Faster than before	77	7.4	12.4	19.4
	Same time as before	107	10.3	17.2	36.6
	0 to 5 minutes longer	67	6.4	10.8	47.4
	5 to 15 minutes longer	142	13.7	22.8	70.1
	15 to 30 minutes	116	11.2	18.6	88.8
	More than 30 minutes	70	6.7	11.2	100.0
	Total	623	59.9	100.0	
Missing	System	417	40.1		
Total		1040	100.0		

Medical Reasons

		Frequency	Percent	Valid	Cumulative
Valid	Not applicable or I	289	27.8	47.7	47.7
	Faster than before	6	.6	1.0	48.7
	Same time as before	107	10.3	17.7	66.3
	0 to 5 minutes longer	38	3.7	6.3	72.6
	5 to 15 minutes longer	69	6.6	11.4	84.0
	15 to 30 minutes	69	6.6	11.4	95.4
	More than 30 minutes	28	2.7	4.6	100.0
	Total	606	58.3	100.0	
Missing	System	434	41.7		
Total		1040	100.0		

Shopping, Recreation, and/or Entertainment

		Frequency	Percent	Valid	Cumulative
Valid	Not applicable or I	88	8.5	14.3	14.3
	Faster than before	13	1.3	2.1	16.4
	Same time as before	167	16.1	27.2	43.6
	0 to 5 minutes longer	84	8.1	13.7	57.3
	5 to 15 minutes longer	138	13.3	22.5	79.8
	15 to 30 minutes	91	8.8	14.8	94.6
	More than 30 minutes longer than before	33	3.2	5.4	100.0
	Total	614	59.0	100.0	
Missing	System	426	41.0		
Total		1040	100.0		

Traveling Through the St. Louis Region

		Frequency	Percent	Valid	Cumulative
Valid	Not applicable or I	103	9.9	16.5	16.5

	Faster than before	15	1.4	2.4	18.8
	Same time as before	106	10.2	16.9	35.8
	0 to 5 minutes longer	59	5.7	9.4	45.2
	5 to 15 minutes longer	151	14.5	24.1	69.3
	15 to 30 minutes	127	12.2	20.3	89.6
	More than 30 minutes longer than before	65	6.3	10.4	100.0
	Total	626	60.2	100.0	
Missing	System	414	39.8		
Total		1040	100.0		

Before the closure

Driving alone

		Frequency	Percent	Valid	Cumulative
Valid	Never	23	2.2	3.7	3.7
	A few times	29	2.8	4.6	8.3
	Once a week	20	1.9	3.2	11.4
	Twice a week	9	.9	1.4	12.9
	Most weekdays	161	15.5	25.6	38.5
	Almost every day	387	37.2	61.5	100.0
	Total	629	60.5	100.0	
Missing	System	411	39.5		
Total		1040	100.0		

Driving with multiple people

		Frequency	Percent	Percent	Percent
Valid	Never	274	26.3	44.4	44.4
	A few times	142	13.7	23.0	67.4
	Once a week	35	3.4	5.7	73.1
	Twice a week	79	7.6	12.8	85.9
	Most weekdays	40	3.8	6.5	92.4
	Almost every day	47	4.5	7.6	100.0
	Total	617	59.3	100.0	
Missing	System	423	40.7		
Total		1040	100.0		

Riding the bus

		Frequency	Percent	Percent	Percent
Valid	Never	579	55.7	94.3	94.3
	A few times	21	2.0	3.4	97.7
	Once a week	2	.2	.3	98.0
	Twice a week	4	.4	.7	98.7
	Most weekdays	3	.3	.5	99.2
	Almost every day	5	.5	.8	100.0
	Total	614	59.0	100.0	
Missing	System	426	41.0		
Total		1040	100.0		

Riding MetroLink (light rail)

		Frequency	Percent	Percent	Percent
Valid	Never	488	46.9	79.0	79.0
	A few times	104	10.0	16.8	95.8
	Once a week	6	.6	1.0	96.8
	Twice a week	6	.6	1.0	97.7
	Most weekdays	5	.5	.8	98.5

	Almost every day	9	.9	1.5	100.0
	Total	618	59.4	100.0	
Missing	System	422	40.6		
Total		1040	100.0		

Biking

		Frequency	Percent	Valid	Cumulative
Valid	Never	567	54.5	92.2	92.2
	A few times	31	3.0	5.0	97.2
	Once a week	7	.7	1.1	98.4
	Twice a week	3	.3	.5	98.9
	Most weekdays	4	.4	.7	99.5
	Almost every day	3	.3	.5	100.0
	Total	615	59.1	100.0	
Missing	System	425	40.9		
Total		1040	100.0		

Walking

		Frequency	Percent	Valid	Cumulative
Valid	Never	518	49.8	84.9	84.9
	A few times	51	4.9	8.4	93.3
	Once a week	8	.8	1.3	94.6
	Twice a week	13	1.3	2.1	96.7
	Most weekdays	14	1.3	2.3	99.0
	Almost every day	6	.6	1.0	100.0
	Total	610	58.7	100.0	
Missing	System	430	41.3		
Total		1040	100.0		

Telecommuting

		Frequency	Percent	Valid	Cumulative
Valid	Never	499	48.0	81.0	81.0
	A few times	74	7.1	12.0	93.0
	Once a week	21	2.0	3.4	96.4
	Twice a week	9	.9	1.5	97.9
	Most weekdays	9	.9	1.5	99.4
	Almost every day	4	.4	.6	100.0
	Total	616	59.2	100.0	
Missing	System	424	40.8		
Total		1040	100.0		

Before 7:00 AM

		Frequency	Percent	Valid	Cumulative
Valid	1	192	18.5	100.0	100.0
Missing	System	848	81.5		
Total		1040	100.0		

Between 7:00 AM and 9:00 AM

		Frequency	Percent	Valid	Cumulative
Valid	1	419	40.3	100.0	100.0
Missing	System	621	59.7		
Total		1040	100.0		

Between 9:00 AM and 3:00 PM

		Frequency	Percent	Valid	Cumulative
Valid	1	93	8.9	100.0	100.0
Missing	System	947	91.1		
Total		1040	100.0		

Between 3:00 PM and 6:00 PM

		Frequency	Percent	Valid	Cumulative

Valid	1	370	35.6	100.0	100.0
Missing	System	670	64.4		
Total		1040	100.0		

After 6:00 PM

		Frequency	Percent	Valid	Cumulative
Valid	1	125	12.0	100.0	100.0
Missing	System	915	88.0		
Total		1040	100.0		

After closure

In a typical week, how often do you commute by driving alone?

Never	48	5.1%
Rarely	105	11.2%
Most Days	786	83.7%
Total	939	

Driving alone

		Frequency	Percent	Valid	Cumulative
Valid	Never	37	3.6	5.9	5.9
	A few times	36	3.5	5.8	11.7
	Once a week	9	.9	1.4	13.1
	Twice a week	14	1.3	2.2	15.4
	Most weekdays	155	14.9	24.8	40.2
	Almost every day	374	36.0	59.8	100.0
	Total	625	60.1	100.0	
Missing	System	415	39.9		
Total		1040	100.0		

In a typical week, how often do you commute by driving alone?

		Frequen	Percent	Valid	Cumulative
Valid	Never	11	3.4	3.5	3.5
	A few times	27	8.4	8.6	12.1
	Once a week	8	2.5	2.5	14.6
	Twice a week	11	3.4	3.5	18.2
	Most weekdays	87	27.0	27.7	45.9
	Almost every day	170	52.8	54.1	100.0
	Total	314	97.5	100.0	
Missing	System	8	2.5		
Total		322	100.0		

In a typical week, how often do you commute by driving with multiple people?

Never	444	48.2%
Rarely	351	38.1%
Most Days	127	13.8%
Total	922	

Driving with multiple people

		Frequency	Percent	Valid	Cumulative
Valid	Never	314	30.2	51.0	51.0
	A few times	125	12.0	20.3	71.3
	Once a week	25	2.4	4.1	75.3
	Twice a week	71	6.8	11.5	86.9
	Most weekdays	34	3.3	5.5	92.4
	Almost every day	47	4.5	7.6	100.0
	Total	616	59.2	100.0	
Missing	System	424	40.8		
Total		1040	100.0		

In a typical week, how often do you commute by driving with

		Frequen	Percent	Valid	Cumulative
Valid	Never	130	40.4	42.5	42.5
	A few times	80	24.8	26.1	68.6
	Once a week	15	4.7	4.9	73.5
	Twice a week	35	10.9	11.4	85.0
	Most weekdays	14	4.3	4.6	89.5
	Almost every day	32	9.9	10.5	100.0
	Total	306	95.0	100.0	
Missing	System	16	5.0		
Total		322	100.0		

In a typical week, how often do you commute by riding the bus?

Never	867	94.1%
Rarely	39	4.2%
Most Days	15	1.6%
Total	921	

Riding the bus

		Frequency	Percent	Valid	Cumulative
Valid	Never	579	55.7	94.6	94.6
	A few times	15	1.4	2.5	97.1
	Once a week	2	.2	.3	97.4
	Twice a week	5	.5	.8	98.2
	Most weekdays	5	.5	.8	99.0
	Almost every day	6	.6	1.0	100.0
	Total	612	58.8	100.0	
Missing	System	428	41.2		
Total		1040	100.0		

In a typical week, how often do you commute by riding the bus?

		Frequen	Percent	Valid	Cumulative
Valid	Never	288	89.4	93.2	93.2
	A few times	14	4.3	4.5	97.7
	Once a week	1	.3	.3	98.1
	Twice a week	2	.6	.6	98.7
	Most weekdays	2	.6	.6	99.4
	Almost every day	2	.6	.6	100.0
	Total	309	96.0	100.0	
Missing	System	13	4.0		
Total		322	100.0		

In a typical week, how often do you commute by riding MetroLink (light rail)?

Never	756	82.0%
Rarely	138	15.0%
Most Days	28	3.0%
Total	922	

Riding MetroLink (light rail)

		Frequency	Percent	Valid	Cumulative
Valid	Never	506	48.7	82.4	82.4
	A few times	78	7.5	12.7	95.1
	Once a week	5	.5	.8	95.9
	Twice a week	7	.7	1.1	97.1
	Most weekdays	10	1.0	1.6	98.7
	Almost every day	8	.8	1.3	100.0
	Total	614	59.0	100.0	
Missing	System	426	41.0		
Total		1040	100.0		

In a typical week, how often do you commute by riding MetroLink

		Frequen	Percent	Valid	Cumulative
Valid	Never	250	77.6	81.2	81.2
	A few times	42	13.0	13.6	94.8
	Once a week	2	.6	.6	95.5
	Twice a week	4	1.2	1.3	96.8
	Most weekdays	3	.9	1.0	97.7
	Almost every day	7	2.2	2.3	100.0
	Total	308	95.7	100.0	
Missing	System	14	4.3		
Total		322	100.0		

In a typical week, how often do you commute by biking?

Never	848	92.6%
Rarely	58	6.3%
Most Days	10	1.1%
Total	916	

Biking

		Frequency	Percent	Valid	Cumulative
Valid	Never	567	54.5	93.7	93.7
	A few times	23	2.2	3.8	97.5
	Once a week	3	.3	.5	98.0

In a typical week, how often do you commute by biking?

		Frequen	Percent	Valid	Cumulative
Valid	Never	281	87.3	90.4	90.4
	A few times	19	5.9	6.1	96.5
	Once a week	4	1.2	1.3	97.7

	Twice a week	7	.7	1.2	99.2
	Most weekdays	3	.3	.5	99.7
	Almost every day	2	.2	.3	100.0
	Total	605	58.2	100.0	
Missing	System	435	41.8		
Total		1040	100.0		

	Twice a week	2	.6	.6	98.4
	Most weekdays	3	.9	1.0	99.4
	Almost every day	2	.6	.6	100.0
	Total	311	96.6	100.0	
Missing	System	11	3.4		
Total		322	100.0		

In a typical week, how often do you commute by walking?

Never	788	85.9%
Rarely	103	11.2%
Most Days	26	2.8%
Total	917	

Walking

		Frequency	Percent	Valid	Cumulative
Valid	Never	534	51.3	87.8	87.8
	A few times	45	4.3	7.4	95.2
	Once a week	6	.6	1.0	96.2
	Twice a week	8	.8	1.3	97.5
	Most weekdays	9	.9	1.5	99.0
	Almost every day	6	.6	1.0	100.0
	Total	608	58.5	100.0	
Missing	System	432	41.5		
Total		1040	100.0		

In a typical week, how often do you commute by walking?

		Frequen	Percent	Valid	Cumulative
Valid	Never	254	78.9	82.2	82.2
	A few times	40	12.4	12.9	95.1
	Once a week	3	.9	1.0	96.1
	Twice a week	1	.3	.3	96.4
	Most weekdays	4	1.2	1.3	97.7
	Almost every day	7	2.2	2.3	100.0
	Total	309	96.0	100.0	
Missing	System	13	4.0		
Total		322	100.0		

In a typical week, how often do you commute by telecommuting?

Never	721	79.1%
Rarely	161	17.7%
Most Days	29	3.2%
Total	911	

Telecommuting

		Frequency	Percent	Valid	Cumulative
Valid	Never	489	47.0	81.1	81.1
	A few times	60	5.8	10.0	91.0
	Once a week	22	2.1	3.6	94.7
	Twice a week	15	1.4	2.5	97.2
	Most weekdays	11	1.1	1.8	99.0
	Almost every day	6	.6	1.0	100.0
	Total	603	58.0	100.0	
Missing	System	437	42.0		
Total		1040	100.0		

In a typical week, how often do you commute by telecommuting?

		Frequen	Percent	Valid	Cumulative
Valid	Never	232	72.0	75.3	75.3
	A few times	41	12.7	13.3	88.6
	Once a week	17	5.3	5.5	94.2
	Twice a week	6	1.9	1.9	96.1
	Most weekdays	1	.3	.3	96.4
	Almost every day	11	3.4	3.6	100.0
	Total	308	95.7	100.0	
Missing	System	14	4.3		
Total		322	100.0		

Routinely commute in the St. Louis area before 7:00 AM	361	###
Routinely commute in the St. Louis area between 7:00 AM and 9:00 AM	529	###
Routinely commute in the St. Louis area between 9:00 AM and noon	45	###
Routinely commute in the St. Louis area between noon and 3:00 PM	55	###
Routinely commute in the St. Louis area between 3:00 PM and 6:00 PM	593	###
Routinely commute in the St. Louis area after 6:00 PM	236	###

Before 7:00 AM

		Frequency	Percent	Valid	Cumulative
Valid	1	277	26.6	100.0	100.0
Missing	System	763	73.4		
Total		1040	100.0		

Routinely commute in the St. Louis area before 7:00 AM

		Frequen	Percent	Valid	Cumulative
Valid	1	84	26.1	100.0	100.0
Missing	System	238	73.9		
Total		322	100.0		

Between 7:00 AM and 9:00 AM

		Frequency	Percent	Valid	Cumulative
Valid	1	334	32.1	100.0	100.0
Missing	System	706	67.9		
Total		1040	100.0		

Routinely commute in the St. Louis area between 7:00 AM and

		Frequen	Percent	Valid	Cumulative
Valid	1	195	60.6	100.0	100.0
Missing	System	127	39.4		
Total		322	100.0		

Between 9:00 AM and 3:00 PM

		Frequency	Percent	Valid	Cumulative
Valid	1	103	9.9	100.0	100.0
Missing	System	937	90.1		
Total		1040	100.0		

Routinely commute in the St. Louis area between 9:00 AM and

		Frequen	Percent	Valid	Cumulative
Valid	1	45	14.0	100.0	100.0
Missing	System	277	86.0		
Total		322	100.0		

Routinely commute in the St. Louis area between noon and 3:00

		Frequen	Percent	Valid	Cumulative
Valid	1	55	17.1	100.0	100.0
Missing	System	267	82.9		
Total		322	100.0		

Between 3:00 PM and 6:00 PM

		Frequency	Percent	Valid	Cumulative
Valid	1	376	36.2	100.0	100.0
Missing	System	664	63.8		
Total		1040	100.0		

Routinely commute in the St. Louis area between 3:00 PM and

		Frequen	Percent	Valid	Cumulative
Valid	1	217	67.4	100.0	100.0
Missing	System	105	32.6		
Total		322	100.0		

After 6:00 PM

Routinely commute in the St. Louis area after 6:00 PM

		Frequency	Percent	Valid	Cumulative
Valid	1	145	13.9	100.0	100.0
Missing	System	895	86.1		
Total		1040	100.0		

		Frequen	Percent	Valid	Cumulative
Valid	1	91	28.3	100.0	100.0
Missing	System	231	71.7		
Total		322	100.0		
Missing	System	6	1.9		
Total		322	100.0		

Are you male or female?

Male	437	55.2%
Female	355	44.8%
Total	792	

Are you male or female?

		Frequency	Percent	Valid	Cumulative
Valid	Male	437	42.0	55.2	55.2
	Female	355	34.1	44.8	100.0
	Total	792	76.2	100.0	
Missing	System	248	23.8		
Total		1040	100.0		

Please choose your age group

Under 16	2	**0.2%**
16 to 25	119	**10.7%**
26 to 40	419	**37.6%**
41 to 65	547	**49.1%**
Over 65	26	**2.3%**
Total	1113	

Please choose your age group

		Frequency	Percent	Valid	Cumulative
Valid	Under 16	2	.2	.3	.3
	16 to 25	84	8.1	10.6	10.8
	26 to 40	296	28.5	37.2	48.0
	41 to 65	395	38.0	49.6	97.6
	Over 65	19	1.8	2.4	100.0
	Total	796	76.5	100.0	
Missing	System	244	23.5		
Total		1040	100.0		

Please choose your age group

		Frequen	Percent	Valid	Cumulative
Valid	16 to 25	35	10.9	11.0	11.0
	26 to 40	123	38.2	38.8	49.8
	41 to 65	152	47.2	47.9	97.8
	Over 65	7	2.2	2.2	100.0
	Total	317	98.4	100.0	
Missing	System	5	1.6		
Total		322	100.0		

What was your approximate household income in 2007?

Less than $20,000	19	2.0%
$20,000 to $40,000	111	11.5%
$40,001 to $60,000	165	17.1%
$60,001 to $90,000	206	21.3%
$90,001 to $120,000	216	22.4%
$120,001 to $150,000	92	9.5%
$150,001 to $200,000	84	8.7%
More than $200,000	72	7.5%
Total	965	

What was your approximate household income in 2007?

		Frequency	Percent	Valid	Cumulative
Valid	Less than $20,000	14	1.3	1.9	1.9
	$20,000 to $40,000	80	7.7	10.8	12.7
	$40,001 to $60,000	118	11.3	16.0	28.7
	$60,001 to $90,000	141	13.6	19.1	47.8
	$90,001 to $120,000	155	14.9	21.0	68.7
	$120,001 to $150,000	62	6.0	8.4	77.1
	$150,001 to $200,000	61	5.9	8.3	85.4
	More than $200,000	54	5.2	7.3	92.7
	I do not know	54	5.2	7.3	100.0
	Total	739	71.1	100.0	
Missing	System	301	28.9		
Total		1040	100.0		

What was your approximate household income in 2007?

		Frequen	Percent	Valid	Cumulative
Valid	Less than $20,000	5	1.6	1.7	1.7
	$20,000 to $40,000	31	9.6	10.4	12.1
	$40,001 to $60,000	47	14.6	15.8	27.9
	$60,001 to $90,000	65	20.2	21.8	49.7
	$90,001 to	61	18.9	20.5	70.1
	$120,001 to	30	9.3	10.1	80.2
	$150,001 to	23	7.1	7.7	87.9
	More than $200,000	18	5.6	6.0	94.0
	I do not know	18	5.6	6.0	100.0
	Total	298	92.5	100.0	
Missing	System	24	7.5		
Total		322	100.0		

Home Zip Code

		Frequency	Percent	Valid	Cumulative
Valid	6313	1	.1	.1	.1
	30519	1	.1	.1	.2
	40517	1	.1	.1	.3
	48075	1	.1	.1	.4
	62006	1	.1	.1	.5
	62025	2	.2	.2	.7
	62034	2	.2	.2	.9
	62035	1	.1	.1	1.0
	62040	2	.2	.2	1.2
	62062	2	.2	.2	1.4
	62097	1	.1	.1	1.5
	62206	1	.1	.1	1.6
	62208	2	.2	.2	1.8
	62220	1	.1	.1	1.9
	62221	5	.5	.5	2.4
	62223	1	.1	.1	2.5
	62225	1	.1	.1	2.6
	62226	2	.2	.2	2.8
	62232	1	.1	.1	2.9
	62234	4	.4	.4	3.3
	62236	2	.2	.2	3.5

Home Zip Code

		Frequen	Percent	Valid	Cumulative
Valid		24	7.5	7.5	7.5
	40208	1	.3	.3	7.8
	60435	1	.3	.3	8.1
	62034	2	.6	.6	8.7
	62040	1	.3	.3	9.0
	62062	1	.3	.3	9.3
	62095	2	.6	.6	9.9
	62208	4	1.2	1.2	11.2
	62220	1	.3	.3	11.5
	62221	1	.3	.3	11.8
	62226	2	.6	.6	12.4
	62232	1	.3	.3	12.7
	62234	2	.6	.6	13.4
	62269	2	.6	.6	14.0
	62702	1	.3	.3	14.3
	63011	11	3.4	3.4	17.7
	63012	1	.3	.3	18.0
	63017	13	4.0	4.0	22.0
	63021	13	4.0	4.0	26.1
	63025	3	.9	.9	27.0
	63026	8	2.5	2.5	29.5

62239	1	.1	.1	3.6	63031	5	1.6	1.6	31.1
62249	1	.1	.1	3.7	63034	1	.3	.3	31.4
62254	2	.2	.2	3.9	63038	3	.9	.9	32.3
62269	6	.6	.6	4.5	63042	4	1.2	1.2	33.5
62285	1	.1	.1	4.6	63043	4	1.2	1.2	34.8
62294	4	.4	.4	5.0	63050	1	.3	.3	35.1
62298	4	.4	.4	5.4	63051	2	.6	.6	35.7
62983	1	.1	.1	5.5	63052	1	.3	.3	36.0
63005	15	1.4	1.5	7.0	63069	1	.3	.3	36.3
63010	4	.4	.4	7.5	63077	1	.3	.3	36.6
63011	42	4.0	4.2	11.7	63088	2	.6	.6	37.3
63016	1	.1	.1	11.8	63101	1	.3	.3	37.6
63017	58	5.6	5.8	17.6	63103	2	.6	.6	38.2
63020	1	.1	.1	17.7	63104	3	.9	.9	39.1
63021	52	5.0	5.2	23.0	63105	4	1.2	1.2	40.4
63025	5	.5	.5	23.5	63108	12	3.7	3.7	44.1
63026	14	1.3	1.4	24.9	63109	12	3.7	3.7	47.8
63028	4	.4	.4	25.3	63110	4	1.2	1.2	49.1
63031	13	1.3	1.3	26.6	63111	1	.3	.3	49.4
63033	4	.4	.4	27.0	63112	2	.6	.6	50.0
63034	1	.1	.1	27.1	63114	1	.3	.3	50.3
63038	2	.2	.2	27.3	63116	7	2.2	2.2	52.5
63040	5	.5	.5	27.8	63117	9	2.8	2.8	55.3
63042	4	.4	.4	28.2	63118	2	.6	.6	55.9
63043	12	1.2	1.2	29.4	63119	12	3.7	3.7	59.6
63044	3	.3	.3	29.7	63121	2	.6	.6	60.2
63049	5	.5	.5	30.2	63122	7	2.2	2.2	62.4
63051	4	.4	.4	30.6	63123	5	1.6	1.6	64.0
63052	2	.2	.2	30.8	63124	5	1.6	1.6	65.5
63053	1	.1	.1	30.9	63124-1680	1	.3	.3	65.8
63069	3	.3	.3	31.2	63125	1	.3	.3	66.1
63070	1	.1	.1	31.3	63128	1	.3	.3	66.5
63073	2	.2	.2	31.5	63129	2	.6	.6	67.1
63074	5	.5	.5	32.0	63130	12	3.7	3.7	70.8
63077	1	.1	.1	32.1	63131	11	3.4	3.4	74.2
63080	1	.1	.1	32.2	63132	5	1.6	1.6	75.8
63088	4	.4	.4	32.6	63135	1	.3	.3	76.1
63089	1	.1	.1	32.7	63138	1	.3	.3	76.4
63090	1	.1	.1	32.8	63139	16	5.0	5.0	81.4
63101	2	.2	.2	33.0	63141	9	2.8	2.8	84.2
63103	3	.3	.3	33.3	63143	1	.3	.3	84.5
63104	12	1.2	1.2	34.5	63144	7	2.2	2.2	86.6
63105	17	1.6	1.7	36.3	63146	9	2.8	2.8	89.4
63108	12	1.2	1.2	37.5	63301	5	1.6	1.6	91.0
63109	30	2.9	3.0	40.5	63303	3	.9	.9	91.9
63110	8	.8	.8	41.3	63304	6	1.9	1.9	93.8
63111	3	.3	.3	41.6	63334	1	.3	.3	94.1
63112	6	.6	.6	42.2	63366	2	.6	.6	94.7
63113	1	.1	.1	42.3	63367	2	.6	.6	95.3
63114	14	1.3	1.4	43.7	63368	6	1.9	1.9	97.2
63116	22	2.1	2.2	45.9	63376	3	.9	.9	98.1
63117	26	2.5	2.6	48.5	63401	1	.3	.3	98.4
63118	6	.6	.6	49.1	64134	1	.3	.3	98.8
63119	42	4.0	4.2	53.4	65536	1	.3	.3	99.1
63121	2	.2	.2	53.6	65584	1	.3	.3	99.4
63122	35	3.4	3.5	57.1	72589	1	.3	.3	99.7
63123	28	2.7	2.8	59.9		1	.3	.3	100.0

	63124	24	2.3	2.4	62.3
	63125	8	.8	.8	63.1
	63126	6	.6	.6	63.7
	63127	1	.1	.1	63.8
	63128	10	1.0	1.0	64.9
	63129	14	1.3	1.4	66.3
	63130	29	2.8	2.9	69.2
	63131	22	2.1	2.2	71.4
	63132	23	2.2	2.3	73.7
	63133	1	.1	.1	73.8
	63135	3	.3	.3	74.1
	63136	3	.3	.3	74.4
	63137	1	.1	.1	74.5
	63138	1	.1	.1	74.6
	63139	19	1.8	1.9	76.5
	63141	30	2.9	3.0	79.6
	63143	20	1.9	2.0	81.6
	63144	28	2.7	2.8	84.4
	63146	35	3.4	3.5	87.9
	63301	9	.9	.9	88.8
	63303	17	1.6	1.7	90.5
	63304	17	1.6	1.7	92.2
	63341	3	.3	.3	92.5
	63366	13	1.3	1.3	93.9
	63367	8	.8	.8	94.7
	63368	13	1.3	1.3	96.0
	63376	19	1.8	1.9	97.9
	63379	2	.2	.2	98.1
	63381	1	.1	.1	98.2
	63385	7	.7	.7	98.9
	63390	1	.1	.1	99.0
	63640	1	.1	.1	99.1
	63701	1	.1	.1	99.2
	63801	1	.1	.1	99.3
	64068	1	.1	.1	99.4
	64134	1	.1	.1	99.5
	65041	1	.1	.1	99.6
	65453	1	.1	.1	99.7
	65802	1	.1	.1	99.8
	86753	1	.1	.1	99.9
	631414	1	.1	.1	100.0
	Total	993	95.5	100.0	
Missing	System	47	4.5		
Total		1040	100.0		

Total	322	100.0	100.0	

Work (or School) Zip Code

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	636	1	.1	.1	.1
	6310	1	.1	.1	.2
	24019	1	.1	.1	.3
	53108	1	.1	.1	.4
	53114	1	.1	.1	.5
	53141	1	.1	.1	.6
	60311	1	.1	.1	.7
	62025	1	.1	.1	.9
	62040	1	.1	.1	1.0
	62206	2	.2	.2	1.2

Work (or School) Zip Code

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		38	11.8	11.8	11.8
	29613	1	.3	.3	12.1
	40202	1	.3	.3	12.4
	60435	1	.3	.3	12.7
	62206	1	.3	.3	13.0
	62704	1	.3	.3	13.4
	63001	1	.3	.3	13.7
	63005	6	1.9	1.9	15.5
	63010	1	.3	.3	15.8
	63011	2	.6	.6	16.5

62207	1	.1	.1	1.3
62223	3	.3	.3	1.6
62269	2	.2	.2	1.8
63005	19	1.8	2.0	3.9
63010	1	.1	.1	4.0
63011	8	.8	.9	4.8
63012	1	.1	.1	4.9
63017	64	6.2	6.8	11.8
63021	4	.4	.4	12.2
63026	12	1.2	1.3	13.5
63031	1	.1	.1	13.6
63040	1	.1	.1	13.7
63042	14	1.3	1.5	15.2
63043	16	1.5	1.7	16.9
63044	6	.6	.6	17.5
63045	8	.8	.9	18.4
63051	1	.1	.1	18.5
63074	1	.1	.1	18.6
63084	1	.1	.1	18.7
63088	1	.1	.1	18.8
63090	2	.2	.2	19.0
63099	1	.1	.1	19.1
63101	36	3.5	3.9	23.0
63102	39	3.8	4.2	27.2
63103	51	4.9	5.5	32.6
63104	6	.6	.6	33.3
63105	89	8.6	9.5	42.8
63106	4	.4	.4	43.2
63107	3	.3	.3	43.5
63108	17	1.6	1.8	45.3
63109	2	.2	.2	45.6
63110	39	3.8	4.2	49.7
63112	4	.4	.4	50.2
63114	16	1.5	1.7	51.9
63116	2	.2	.2	52.1
63117	23	2.2	2.5	54.5
63118	10	1.0	1.1	55.6
63119	16	1.5	1.7	57.3
63120	3	.3	.3	57.6
63121	11	1.1	1.2	58.8
63122	12	1.2	1.3	60.1
63124	43	4.1	4.6	64.7
63125	2	.2	.2	64.9
63127	5	.5	.5	65.5
63128	6	.6	.6	66.1
63129	2	.2	.2	66.3
63130	15	1.4	1.6	67.9
63131	36	3.5	3.9	71.8
63132	34	3.3	3.6	75.4
63133	2	.2	.2	75.6
63134	4	.4	.4	76.0
63135	1	.1	.1	76.1
63136	8	.8	.9	77.0
63138	1	.1	.1	77.1
63139	14	1.3	1.5	78.6
63141	70	6.7	7.5	86.1
63142	1	.1	.1	86.2
63143	4	.4	.4	86.6
63144	27	2.6	2.9	89.5
63145	1	.1	.1	89.6
63014	1	.3	.3	16.8
63017	16	5.0	5.0	21.7
63021	2	.6	.6	22.4
63026	2	.6	.6	23.0
63031	1	.3	.3	23.3
63033	2	.6	.6	23.9
63034	1	.3	.3	24.2
63043	5	1.6	1.6	25.8
63044	7	2.2	2.2	28.0
63049	1	.3	.3	28.3
63051	1	.3	.3	28.6
63101	11	3.4	3.4	32.0
63102	10	3.1	3.1	35.1
63103	12	3.7	3.7	38.8
63105	28	8.7	8.7	47.5
63106	1	.3	.3	47.8
63108	7	2.2	2.2	50.0
63110	21	6.5	6.5	56.5
63112	4	1.2	1.2	57.8
63114	2	.6	.6	58.4
63116	2	.6	.6	59.0
63117	6	1.9	1.9	60.9
63118	3	.9	.9	61.8
63119	5	1.6	1.6	63.4
63121	6	1.9	1.9	65.2
63122	1	.3	.3	65.5
63123	1	.3	.3	65.8
63124	7	2.2	2.2	68.0
63126	1	.3	.3	68.3
63127	2	.6	.6	68.9
63130	7	2.2	2.2	71.1
63131	9	2.8	2.8	73.9
63132	9	2.8	2.8	76.7
63133	2	.6	.6	77.3
63134	3	.9	.9	78.3
63138	1	.3	.3	78.6
63139	6	1.9	1.9	80.4
6314	1	.3	.3	80.7
63141	21	6.5	6.5	87.3
63141-001	1	.3	.3	87.6
63143	2	.6	.6	88.2
63144	11	3.4	3.4	91.6
63145	1	.3	.3	91.9
63146	7	2.2	2.2	94.1
63155	1	.3	.3	94.4
63166	2	.6	.6	95.0
63167	2	.6	.6	95.7
63301	1	.3	.3	96.0
63367	1	.3	.3	96.3
63368	3	.9	.9	97.2
63376	3	.9	.9	98.1
63401	1	.3	.3	98.4
63501	1	.3	.3	98.8
64081	1	.3	.3	99.1
72859	1	.3	.3	99.4
Boeing	1	.3	.3	99.7
	1	.3	.3	100.0
Total	322	100.0	100.0	

	63146	27	2.6	2.9	92.5
	63147	3	.3	.3	92.8
	63155	2	.2	.2	93.0
	63164	1	.1	.1	93.2
	63166	2	.2	.2	93.4
	63167	4	.4	.4	93.8
	63180	2	.2	.2	94.0
	63301	6	.6	.6	94.7
	63303	4	.4	.4	95.1
	63304	8	.8	.9	95.9
	63317	1	.1	.1	96.0
	63336	1	.1	.1	96.1
	63366	3	.3	.3	96.5
	63367	1	.1	.1	96.6
	63368	13	1.3	1.4	98.0
	63376	6	.6	.6	98.6
	63385	2	.2	.2	98.8
	63390	1	.1	.1	98.9
	63701	2	.2	.2	99.1
	63801	1	.1	.1	99.3
	64068	1	.1	.1	99.4
	64109	1	.1	.1	99.5
	65807	1	.1	.1	99.6
	66260	1	.1	.1	99.7
	68178	1	.1	.1	99.8
	90210	1	.1	.1	99.9
	633026	1	.1	.1	100.0
	Total	935	89.9	100.0	
Missing	System	105	10.1		
Total		1040	100.0		

American Indian	17	1.3%
Asian	32	2.4%
Black or African-American	31	2.3%
Hispanic or Latino	12	0.9%
White or Caucasian	1210	91.0%
Other	27	2.0%
	1329	

American Indian

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	13	1.3	100.0	100.0
Missing	System	1027	98.8		
Total		1040	100.0		

American Indian

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	4	1.2	100.0	100.0
Missing	System	318	98.8		
Total		322	100.0		

Asian

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	23	2.2	100.0	100.0
Missing	System	1017	97.8		
Total		1040	100.0		

Asian

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	9	2.8	100.0	100.0
Missing	System	313	97.2		
Total		322	100.0		

Black or African-American

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	19	1.8	100.0	100.0
Missing	System	1021	98.2		
Total		1040	100.0		

Black or African-American

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	12	3.7	100.0	100.0
Missing	System	310	96.3		
Total		322	100.0		

Hispanic or Latino

Hispanic or Latino

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	10	1.0	100.0	100.0
Missing	System	1030	99.0		
Total		1040	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	.6	100.0	100.0
Missing	System	320	99.4		
Total		322	100.0		

White or Caucasian

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	926	89.0	100.0	100.0
Missing	System	114	11.0		
Total		1040	100.0		

White or Caucasian

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	284	88.2	100.0	100.0
Missing	System	38	11.8		
Total		322	100.0		

Other

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	18	1.7	100.0	100.0
Missing	System	1022	98.3		
Total		1040	100.0		

Other

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	9	2.8	100.0	100.0
Missing	System	313	97.2		
Total		322	100.0		

Crash Analysis of Before and After I-64 Closure
2008 Annual Report

Appendix

July 18, 2009

Missouri S&T

Dr. Hojong Baik and Daxiao Liu

Executive Summary

On January 2, 2008, the Missouri Department of Transportation (MoDOT) closed I-64 for reconstruction purposes. During the planning stages of this reconstruction project, the plan to close all lanes of roadways was met with concern from many aspects, inciting questions from traffic safety engineers and even the general public alike*: Could closing the roadway possibly contribute to more (or less) crashes than before? And, if noticeable changes existed in the number and types of crashes, are the changes due to closing the roadway or other influencing factors?*

This study aims to answer these questions by examining crash data before and after the closure, and by providing objective explanations to the changes if any. To achieve this goal, this study conducts two analyses (i.e., Crash Analysis and Crash Rate analysis). In this report, we describe basic methods applied to the analyses, the data sets acquired for the analyses, and resulting conclusions. This study is an on-going research project, and thus will be continued to extend the analyses with more crash data whenever it is available. The main findings from two analyses are summarized as follow:

Crash Analysis:

The research team evaluated 5-year (2004-2008) crashes data that occurred on 16 different roadways in the vicinity of the I-64 closure. Using the data set, 1-year (i.e., 2008) post-closure crashes are compared to 4-year (2004-2007) pre-closure crashes in various ways. Table 1 and Figures 1-3 show the total number of crashes on each routes investigated. The major findings from the crash analysis are as follow:

1) Compared to year 2007, the number of crashes in 2008 slightly increased in the routes such as I-70 (4%), I-44 (4%), I-55 (5%) and MO 100 (6%) whereas the number decreased in the routes such as I-270, I-170, MO 340, US40/I-64 and MO141. Other routes almost stayed at the level same.
2) It is found that the crash increase on I-70 in 2008 was partly due to the record breaking heavy rain in 2008. This finding is confirmed by figure S-37 (Appendix page 57) showing the increasing trend of the out-of-control crashes on the same highway in 2008.
3) In cases of MO100 or I-70, the increasing trend started before the I-64 closure (i.e., before 2008). So, it is hard to infer whether the I-64 closure causes the crash to increase.
4) Although each route shows its own trend, the overall crashes on all three types of highways (i.e., interstate, MO, and US highways) have decreased in 2008.
5) The observational inspections conducted in this study leads us to a tentative conclusion that there is no strong evidence proving that I-64 closure contributed to the crash increase on the highways that are potentially influenced by the closure. Continuation of

this crash analysis through 2009 and 2010 will provide additional information that will either confirmed the tentative conclusion or provide information that changes this initial conclusion.

Table 1 shows the trend in total crashes for the various highways identified as highways that could be potentially impacted by the I-64 construction project.

Table 1: Total Crashes by year (2004 - 2008)

	Route	2004	2005	2006	2007	2008
Interstate Highway	I-44	1,100	1,061	1,037	1,086	1,126
	I-270	2,103	2,201	2,302	2,287	2,083
	I-64	1,624	1,610	1,494	1,205	717
	I-70	1,907	1,998	2,004	2,072	2,161
	I-170	906	827	904	873	815
	I-55	964	948	963	948	994
	All IS	8,604	8,645	8,704	8,471	7,896
MO Highway	MO366	655	645	652	519	526
	MO30	1,298	1,297	1,049	1,048	941
	MO100	1,179	1,085	1,019	1,086	1,146
	MO115	455	432	382	370	385
	MO180	879	822	721	689	675
	MO340	1,068	935	1,059	1,053	998
	All MO	5,534	5,216	4,882	4,765	4,671
US highway and ExpressWay	MO141	503	566	504	589	503
	RtD	728	682	636	690	699
	US61	853	828	819	791	761
	US67	484	386	396	358	345
	US40	489	536	553	529	344
	All US	3,057	2,998	2,908	2,957	2,652
Overall		17,195	16,859	16,494	16,193	15,219

Index value provides an easy way to display and show trends or changes. An established base year can be used to compare against other years to show increases or decreases from the base year. Example – 100 crashes occurred in the base year and 90 crashes occurred in the next year – the index value would be 0.9 (90 divided by 100) or a 10 percent reduction. Year 2004 is the based year and Figure 1 through 3 shows the resulting index values each highway type group.

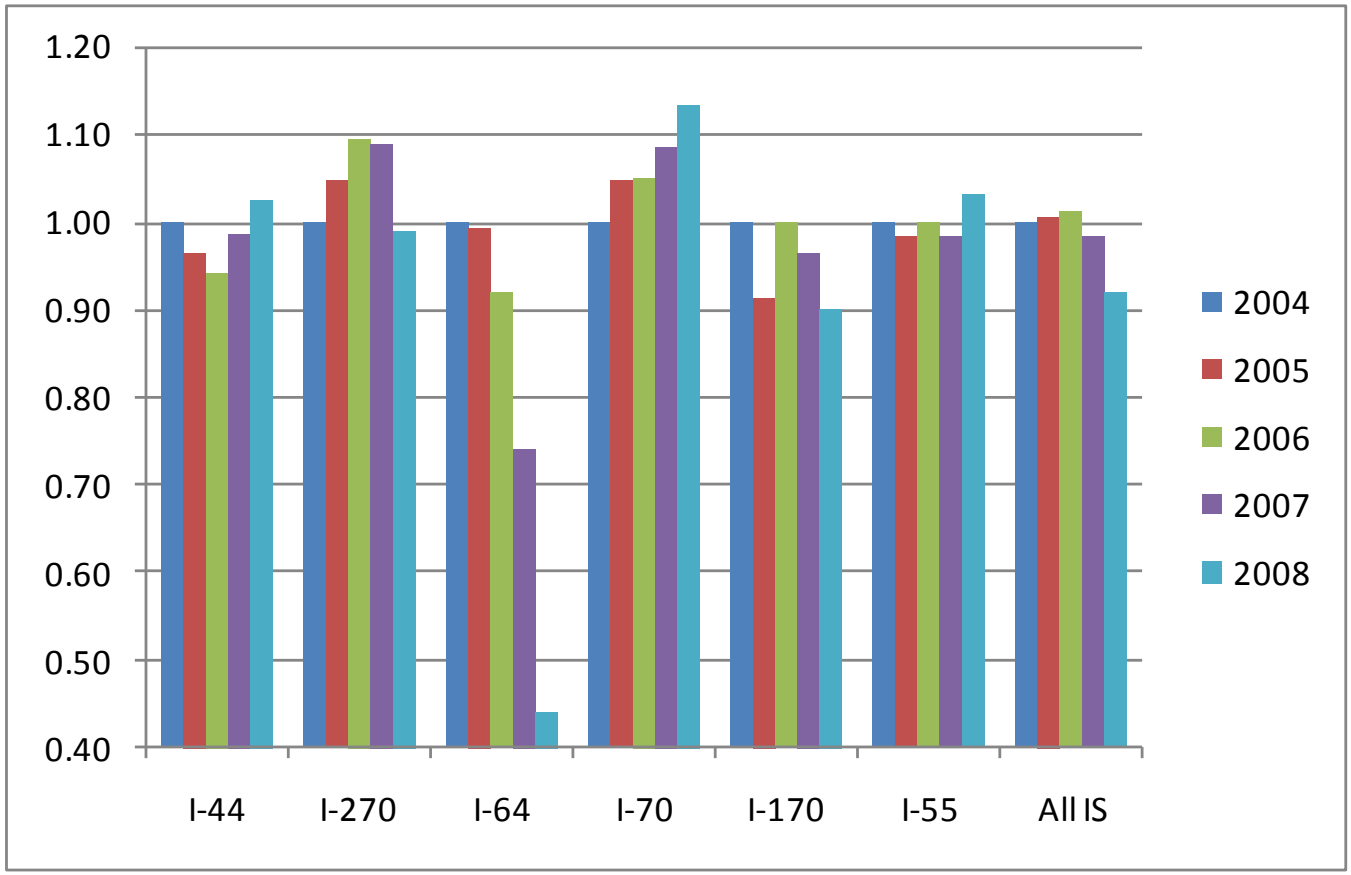


Figure 1: 5-year Crashes, Interstate Highway (2004 through 2008)

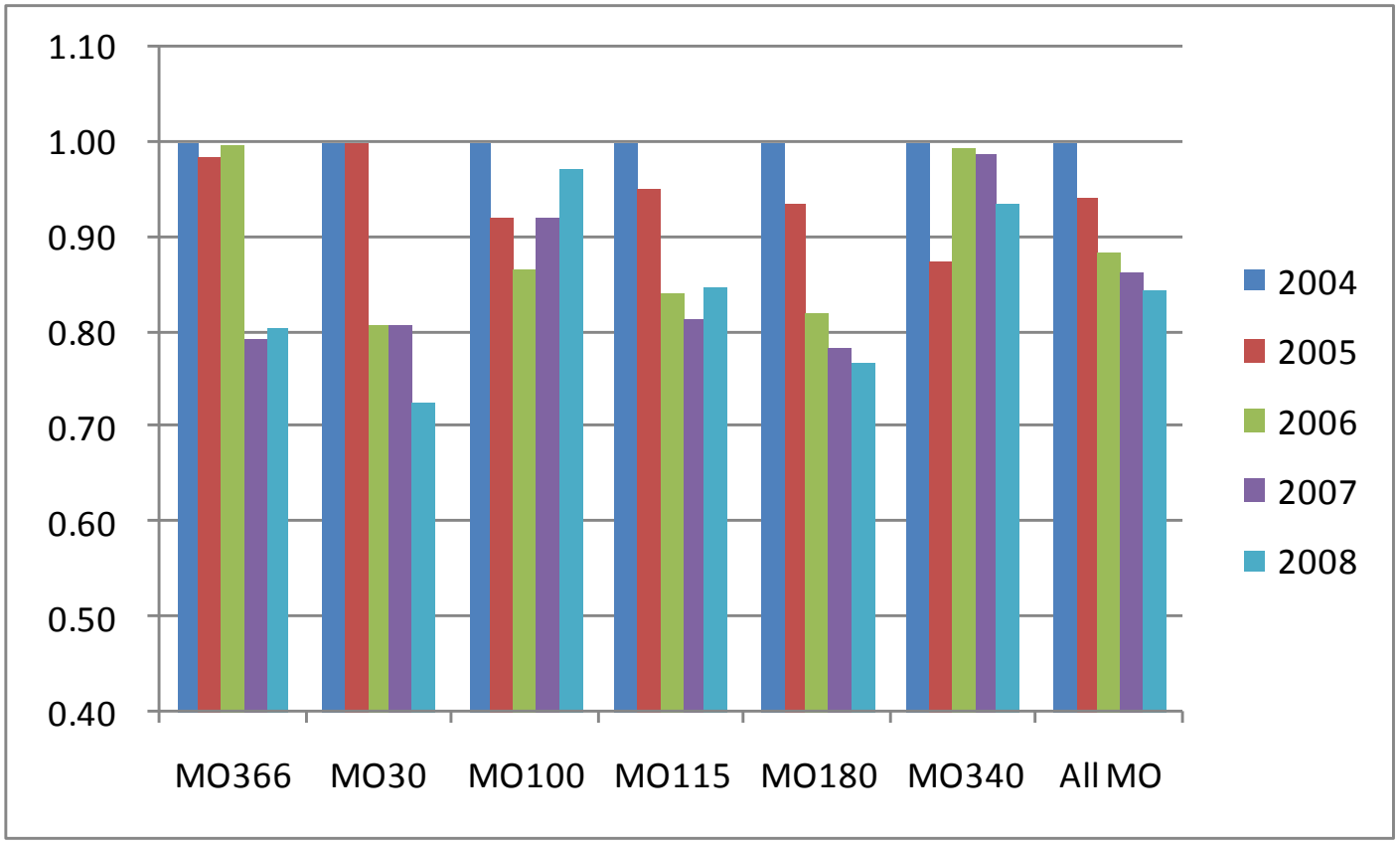


Figure 2: 5-year Crashes, MO Highway (2004 through 2008)

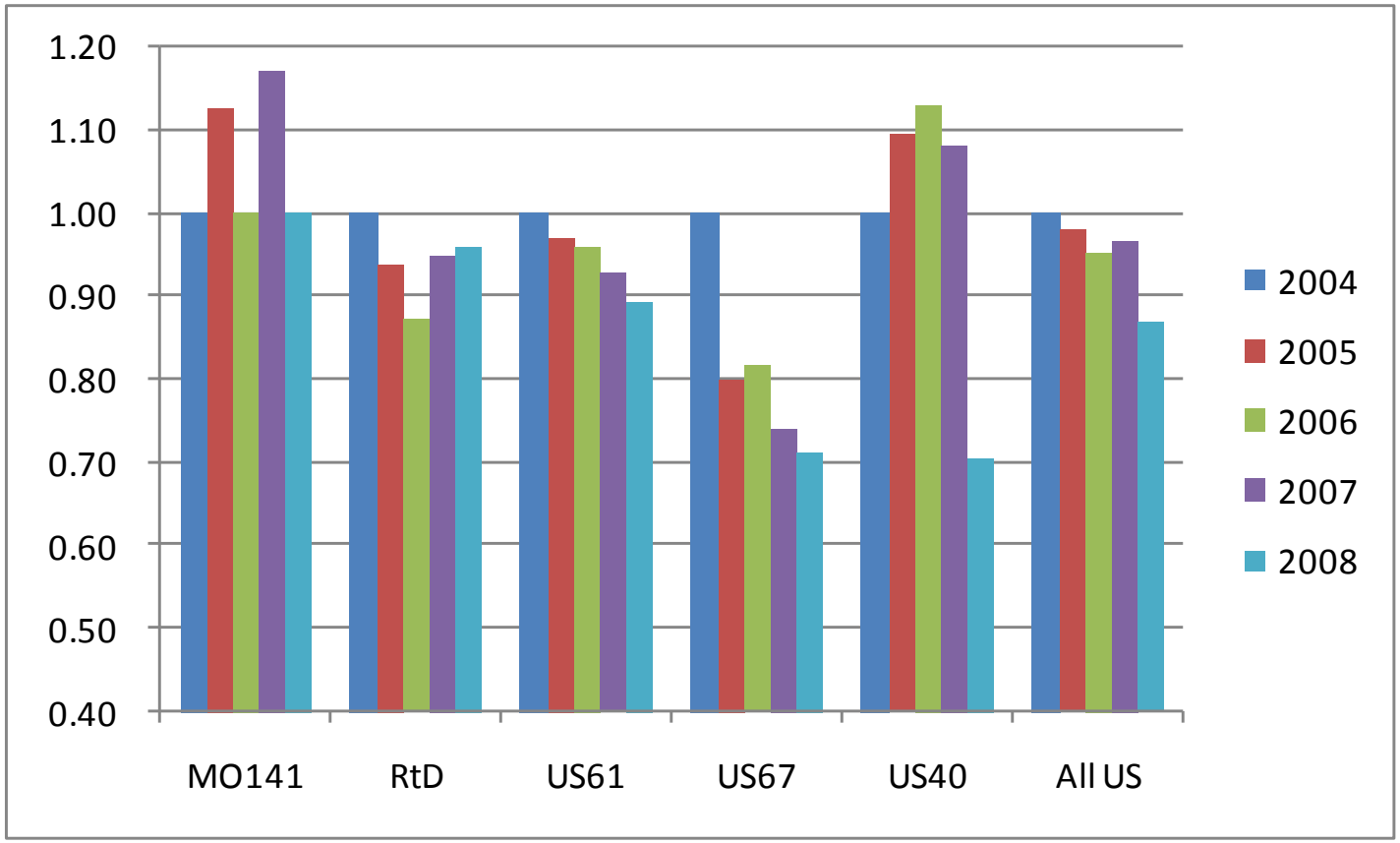


Figure 3: **5-year Crashes, US Routes and Expressways** (2004 through 2008)

Crash Rates Analysis:

The crash rate represents the intensity of crashes relative to total vehicle miles traveled. For example, if roadway A shows a higher crash rate than roadway B, it indicates that roadway A is more vulnerable to crashes than roadway B in case the traffic volume and the roadway lengths of both roadways are same (i.e., under the same condition.) Table 2 and Figures 4 and 5 present the crash rates on the roadway investigated, and the major findings from the crash analysis are as follow:

1) Compared to year 2007, crash rates on most routes either decrease or remain about same in 2008 except for six routes including I-70 (4%), I-55 (6%), MO 366 (4%), MO100 (8%), MO115 (6%) and MO Route D (3%).
2) However, it is hard to conclude that I-64 closure caused the crash rate to increase in year 2008 since either this increasing trend started before the I-64 closure or less the highest crash rate over the four baseline years (2005 through 2007).
3) The I-55 Southbound section showed an increase in 2008, further investigation is recommended when more crash data are available.
4) US-61 shows the highest crash rates over the evaluated years, but the crash rate decreased in 2008 as compared to 2007. Since US-61 is routed over both US-40 and US-67 in the study area, some recent indications have risen that crashes might be logged to the wrong route causing a higher rate for US-61 and lesser for US-40 and US-67.

Table 2: All Crash Rate (Both Directions)

		2004	2005	2006	2007	2008
Interstate Highway	I-44	162	157	150	156	157
	I-270	154	161	165	162	155
	I-64	226	226	207	169	119
	I-70	196	205	215	218	226
	I-170	217	199	215	206	193
	I-55	153	151	143	139	147
MO Highway	MO366	392	396	406	321	335
	MO30	568	579	465	466	427
	MO100	553	521	498	530	572
	MO115	645	611	647	633	673
	MO180	461	441	444	424	425
	MO340	516	471	465	462	433
US highway and ExpressWay	MO141	350	404	353	412	359
	RtD	407	388	364	396	409
	US40	100	110	120	116	77
	US67	346	290	325	294	268
	US61	900	894	800	833	818

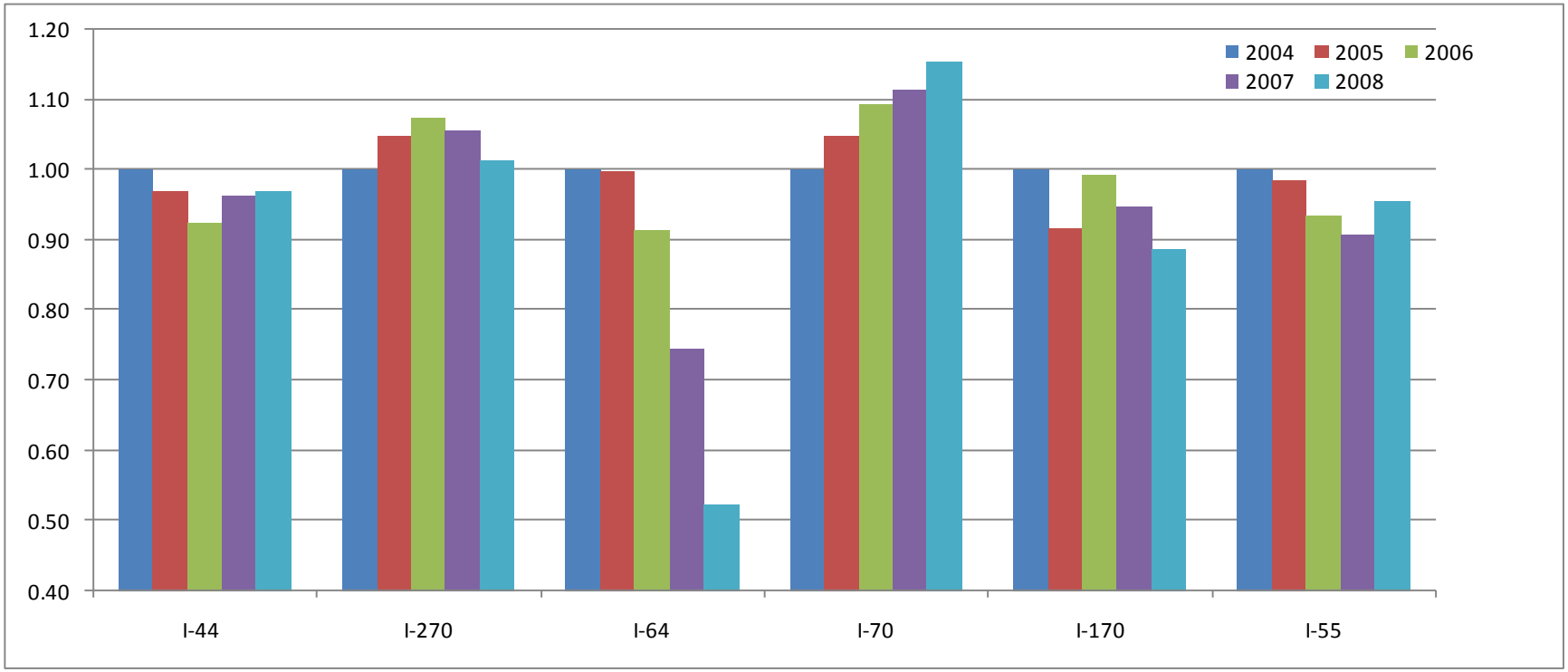


Figure 4: 5-year Relative Crash Rate, Interstate Highway (Both Directions, Base year: 2004)

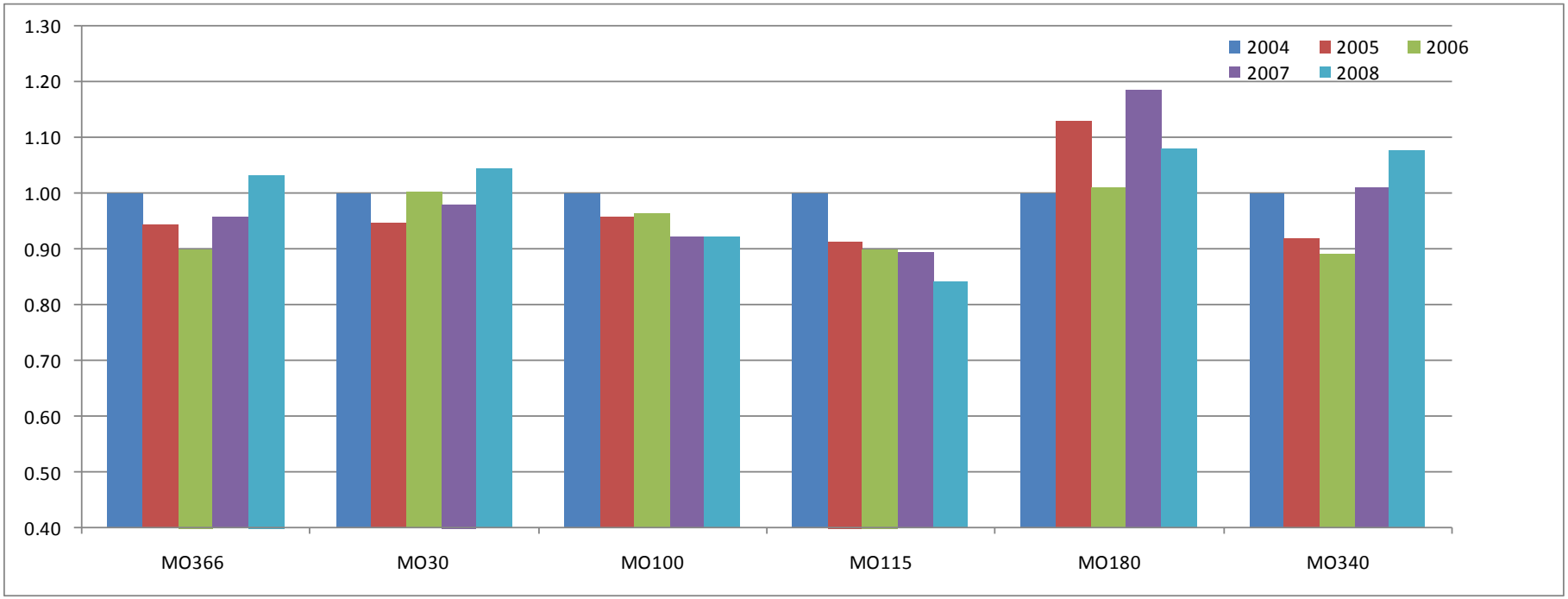


Figure 5: 5-year Relative Crash Rate, MO Highway (Both Directions, Base year: 2004)

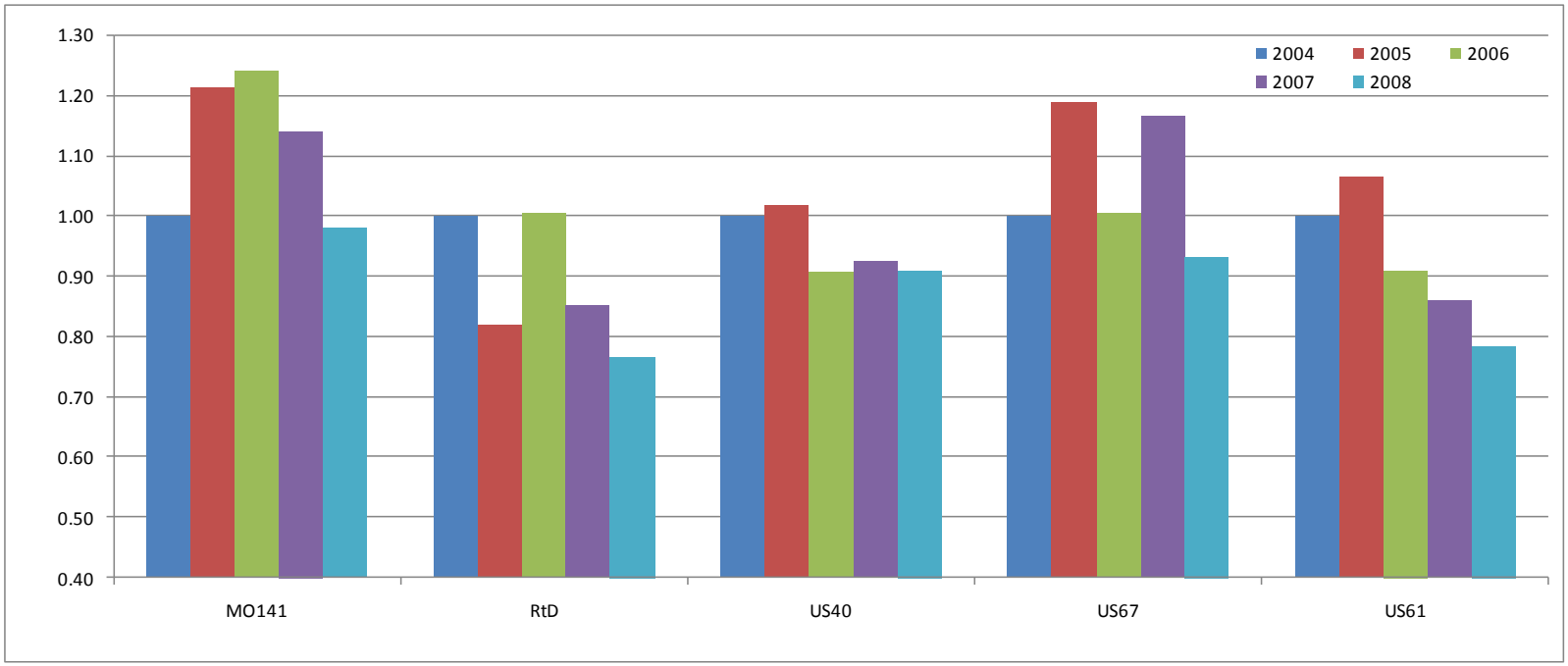


Figure 6: 5-year Relative Crash Rate, US Highway and Expressway (Both Directions, Base year: 2004)

Table of Contents

List of Tables

List of Figure

1 Introduction

1.1 Main goal and objectives of this study

On January 2, 2008, the Missouri Department of Transportation (MoDOT) closed I-64 for reconstruction purposes. During the planning stages of this reconstruction project, the plan to close all lanes of roadways was met with concern from many aspects, inciting questions from traffic safety engineers and even the general public alike*: Could closing the roadway possibly contribute to more (or less) crashes than before? And, if noticeable changes existed in the number and types of crashes, are the changes due to closing the roadway or other influencing factors?*

This study aims to answer these questions by examining crash data before and after the closure, and by providing objective explanations to the changes if any. In other words, this study will decide whether the I-64 project impact the crashes during the construction period. In order to achieve the goal, we set two objectives: 1) to examine crash data collected from roadways in the vicinity of the I-64 closure area, and 2) identify analytical evidences proving any impacts of I-64 closure on the crashes.

1.2 Methodology

The crash analysis is considered as a complicate and challenging task. This is mainly because there are multiple factors are involved in crashes. For instance, the contributing factors could be roadway, congestion, weather, human error or combination of these factors. In order to investigate the multifaceted contributing factors efficiently, following three procedural steps are set up in this study:

Step 1 (data acquirement): As the first step of the analysis, the crash data will be obtained from MoDOT's Transportation Management System (TMS) database for selected roadways whose traffic patterns could potentially be influenced by I-64 closure. In addition to the crash data, annual average daily traffic (AADT) is also acquired to identify any causal relationship between traffic volume and crashes.

Step 2 (develop a data retrieving tool): This study develops a computer programming tool that can efficiently and promptly extract the information required for the analysis from the crash data. The tool is also designed to effectively represent the extracted data in a various formats such as graphs and tables so that it can provide the analysts with a flexible tool for examining the multifaceted crash data.

Step 3 (analyzing the crash data): Adopting observational before-after analysis methods, this step examines the data extracted from the crash data using the tool developed in step 2 from different angles. For example, the crash data is extracted in a chronological sequence with different influencing factors such as cause, severity type, weather, etc, and then examined to identify any evidence proving the impact of I-64 closure on the crashes on roadway around the construction area.

This crash analysis is an on-going task. The results reported in this study are based on 5-year crash data that includes 4-year of before and 1-year of after the I-64 closure data. In order to include more data points after the closure, the analysis will be repeated when full set of 2009 crash data is available. In the meantime, literature reviews will be carried out and more scientific before-after analysis methods will be tested to the data sets.

2 Data Collection

2.1 Crash Data

MoDOT provided the research team with the crash data and the traffic volume data for 17 roadways selected by the team. Table S1 summarizes the list of roadways and data sets that are to be acquired. Besides crash data, AADT is also requested to investigate potential relationship between crashes and traffic volume. In order to find historical trend in cashes, all data is obtained for 5-year time period (i.e., 2004-2008). In the table, cells in green indicate the routes and data sets that are analyzed and included in this study and other data sets in pink are to be analyzed in the near future.

Table S1: Crash and AADT data collected

Route	From	To	Crash Data	AADT
I-44	Route 141	I-55	2004 through 2008	2004 through 2008
I-55	St. Louis County	Illinois State Line	2004 through 2008	2004 through 2008
I-64	St. Louis County	I-55	2004 through 2008	2004 through 2008
I-70	St. Louis County	I-55	2004 through 2008	2004 through 2008
I-170	i-270	I-64	2004 through 2008	2004 through 2008
I-270	370	I-55	2004 through 2008	2004 through 2008
30	St. Louis County	I-55	2004 through 2008	2004 through 2008
61-67	I-55	I-270	2004 through 2008	2004 through 2008
100	Route 141	Chouteau Avenue	2004 through 2008	2004 through 2008
115	I-70	Kingshighway Blvd.	2004 through 2008	2004 through 2008
141	I-44	Route 340	2004 through 2008	2004 through 2008
180	I-270	Kingshighway Blvd.	2004 through 2008	2004 through 2008
340	Route 141	Skinker Parkway	2004 through 2008	2004 through 2008
364 - D	St. Louis County	Skinker Parkway	2004 through 2008	2004 through 2008
366	I-44	Route 30	2004 through 2008	2004 through 2008
Clayton Road	Route 141	Skinker Blvd.	2004 through 2008	2004 through 2008
Forest Park Parkway	I-170	Kingshighway Blvd.	2004 through 2008	2004 through 2008
Hanley Road	Paage Avenue	Manchester Road	2004 through 2008	2004 through 2008
Ladue Road	Route 141	I-170	2004 through 2008	2004 through 2008

(Green: routes included in this study, pink: routes to be included in the near future.)

Table S2 shows an example of the crash data provided by MoDOT. As seen in the table, each crash record includes information on the location by a route log mile system, direction, time, severity, cause, surface, light, weather, etc. Using the data sets provided, a data dictionary is developed for each categorical field such as severity type, cause, weather, light, etc. Then, the data dictionaries are used as basic information in developing the data extraction tool.

Table S2: Crash Data on I-44 (Sample)

County	Desg	Travelway	Dir	Cont Log	Accident Class	Accident Date	Severity Ratin	Image #	Intersection #	Log Unit	Intrsc	Intrchg	Grpd	Light Cond	Road Surf Co	Weather Conc	Tway Id	Property Dam	Day of Week	Time
ST. LOUIS	IS	44	E	272.383	REAR END	9/4/2006	PROPERTY DAMAGE ONLY	60099048	307719	14.173	Y	Y		DAYLIGHT	WET	CLOUDY	9	OTHER	MON	1452
ST. LOUIS	IS	44	E	272.387	BACKING	7/19/2006	PROPERTY DAMAGE ONLY	3060005461	307719	14.177	Y	Y		DAYLIGHT	DRY	CLEAR	9	NONE	WED	1100
ST. LOUIS	IS	44	E	272.391	REAR END	8/6/2004	PROPERTY DAMAGE ONLY	40094826	307719	14.181	Y	Y		DAYLIGHT	DRY	CLEAR	9	NONE	FRI	640
ST. LOUIS	IS	44	E	272.396	REAR END	3/21/2004	PROPERTY DAMAGE ONLY	40032463	307719	14.186	Y	Y		DAYLIGHT	DRY	CLEAR	9	NONE	SUN	1225
ST. LOUIS	IS	44	E	272.397	REAR END	6/22/2006	MINOR INJURY	60064432	307719	14.187	Y	Y		DAYLIGHT	WET	RAIN	9	NONE	THU	1700
ST. LOUIS	IS	44	E	272.399	REAR END	12/9/2004	PROPERTY DAMAGE ONLY	40149538	307719	14.189	Y	Y		DAYLIGHT	DRY	CLEAR	9	NONE	THU	737
ST. LOUIS	IS	44	E	272.403	REAR END	12/18/2005	PROPERTY DAMAGE ONLY	50139513	307719	14.193	Y	Y		DAYLIGHT	DRY	CLOUDY	9	NONE	SUN	1125
ST. LOUIS	IS	44	E	272.404	REAR END	4/26/2005	PROPERTY DAMAGE ONLY	50050215	307719	14.194	Y	Y		DAYLIGHT	DRY	CLEAR	9	NONE	TUE	835
ST. LOUIS	IS	44	E	272.406	REAR END	2/18/2004	PROPERTY DAMAGE ONLY	40026233	307719	14.196	Y	Y		DAYLIGHT	DRY	CLEAR	9	NONE	WED	930
ST. LOUIS	IS	44	E	272.406	REAR END	3/19/2004	PROPERTY DAMAGE ONLY	40032443	307719	14.196	Y	Y		DAYLIGHT	DRY	CLEAR	9	NONE	FRI	645
ST. LOUIS	IS	44	E	272.406	REAR END	3/22/2004	PROPERTY DAMAGE ONLY	40032535	307719	14.196	Y	Y		DAYLIGHT	DRY	CLEAR	9	NONE	MON	1325
ST. LOUIS	IS	44	E	272.406	REAR END	6/1/2004	PROPERTY DAMAGE ONLY	40074040	307719	14.196	Y	Y		DAYLIGHT	DRY	CLEAR	9	NONE	TUE	1515
ST. LOUIS	IS	44	E	272.406	REAR END	7/8/2004	PROPERTY DAMAGE ONLY	40084142	307719	14.196	Y	Y		DARK W/ STREET LIGHTS ON	DRY	CLEAR	9	NONE	THU	2115
ST. LOUIS	IS	44	E	272.406	REAR END	3/2/2005	PROPERTY DAMAGE ONLY	50032008	307719	14.196	Y	Y		DAYLIGHT	DRY	CLEAR	9	NONE	WED	805
ST. LOUIS	IS	44	E	272.406	OUT OF CONTROL	7/4/2005	PROPERTY DAMAGE ONLY	50081177	307719	14.196	Y	Y		DAYLIGHT	WET	CLOUDY	9	NONE	MON	1430
ST. LOUIS	IS	44	E	272.406	REAR END	8/13/2005	PROPERTY DAMAGE ONLY	50093364	307719	14.196	Y	Y		DARK W/ STREET LIGHTS OFF	WET	CLOUDY	9	NONE	SAT	2127
ST. LOUIS	IS	44	E	272.406	PASSING	9/26/2006	PROPERTY DAMAGE ONLY	60099480	307719	14.196	Y	Y		DARK W/ STREET LIGHTS ON	DRY	CLEAR	9	NONE	TUE	543
ST. LOUIS	IS	44	E	272.406	BACKING	2/12/2007	PROPERTY DAMAGE ONLY	70026787	307719	14.196	Y	Y		DAYLIGHT	DRY	CLOUDY	9	NONE	MON	720
ST. LOUIS	IS	44	E	272.406	REAR END	1/31/2007	PROPERTY DAMAGE ONLY	70036507	307719	14.196	Y	Y		DAYLIGHT	DRY	CLEAR	9	NONE	WED	658
ST. LOUIS	IS	44	E	272.406	REAR END	4/3/2007	MINOR INJURY	70051925	307719	14.196	Y	Y		DAYLIGHT	DRY	CLEAR	9	NONE	TUE	814
ST. LOUIS	IS	44	E	272.406	REAR END	5/7/2007	MINOR INJURY	70062486	307719	14.196	Y	Y		DAYLIGHT	DRY	CLEAR	9	NONE	MON	1555
ST. LOUIS	IS	44	E	272.406	REAR END	5/23/2007	PROPERTY DAMAGE ONLY	70067866	307719	14.196	Y	Y		DAYLIGHT	DRY	CLEAR	9	NONE	WED	1355
ST. LOUIS	IS	44	E	272.406	REAR END	6/25/2007	PROPERTY DAMAGE ONLY	70079777	307719	14.196	Y	Y		DAYLIGHT	DRY	CLOUDY	9	NONE	MON	1255
ST. LOUIS	IS	44	E	272.406	REAR END	8/10/2007	PROPERTY DAMAGE ONLY	70099522	307719	14.196	Y	Y		DAYLIGHT	DRY	CLEAR	9	NONE	FRI	1810
ST. LOUIS	IS	44	E	272.406	REAR END	2/23/2008	PROPERTY DAMAGE ONLY	80023215	307719	14.196	Y	Y		DAYLIGHT	WET	CLEAR	9	NONE	SAT	1505
ST. LOUIS	IS	44	E	272.406	REAR END	2/26/2008	MINOR INJURY	80023257	307719	14.196	Y	Y		DAYLIGHT	DRY	CLOUDY	9	NONE	TUE	1630
ST. LOUIS	IS	44	E	272.406	PASSING	5/3/2008	PROPERTY DAMAGE ONLY	80061502	307719	14.196	Y	Y		DAYLIGHT	DRY	CLOUDY	9	NONE	SAT	1100
ST. LOUIS	IS	44	E	272.406	OUT OF CONTROL	8/4/2008	MINOR INJURY	80112531	307719	14.196	Y	Y		DAYLIGHT	DRY	CLEAR	9	NONE	MON	915
ST. LOUIS	IS	44	E	272.406	REAR END	8/22/2008	PROPERTY DAMAGE ONLY	80114781	307719	14.196	Y	Y		DAYLIGHT	DRY	CLEAR	9	NONE	FRI	745
ST. LOUIS	IS	44	E	272.406	REAR END	9/9/2008	MINOR INJURY	80126635	307719	14.196	Y	Y		DAYLIGHT	DRY	CLEAR	9	NONE	TUE	700
ST. LOUIS	IS	44	E	272.406	DEER	10/18/2008	PROPERTY DAMAGE ONLY	80134538	307719	14.196	Y	Y		DARK W/ STREET LIGHTS ON	DRY	CLEAR	9	NONE	SAT	100
ST. LOUIS	IS	44	E	272.406	REAR END	3/17/2004	PROPERTY DAMAGE ONLY	1040017412	307719	14.196	Y	Y		DAYLIGHT	DRY	CLEAR	9	NONE	WED	650

It should be noted that when a crash happened at an interchange (or intersection) of a roadway is reported, it could be reported at either of the intersecting roadways. To avoid any practical confusion, MoDOT applies a hieratical rule that entitles the primary road to the roadway which is higher in the highway system hierarchy, and the secondary to the other roadway. For example, if a crash happened at the interchange of I-44 E and MO 141 E, it is reported on I-44 as the primary roadway and MO141 as a secondary roadway. Depending on what type of roadway is used in the analysis, two different results can be obtained. For the consistency and a realistic view of what is happening, this report includes crashes occurring on the mainline roadway to mainline roadway and crashes occurring within the interchanges to the secondary roadway.

The location of each crash is reported using a continuous log system where a crash location is measured from a certain starting point of the roadway within the state to the crash location. It is pointed out that AADT data is reported using a single logging system for both directions, but the crash data is reported using two logging systems that are different by direction. For example, AADT data on I-44 in St. Louis are recorded in miles ranged from 272 to 290 mile for both directions, but crashes on I-44 E are recorded in the same range of 272-290 mile, but crashes on I-44 W is recorded in the range of 0-18 mile. It is believed that adjustment of log system is doable, but mainly due to lack of time, crash rate analysis that requires the AADT information is based on one way in this study. However, the crash analysis that does not require any log information considers all crashes for both directions.

Very few records are found to be incomplete (see Table S3) and are ignored in the analysis assuming that the impact of the elimination is negligible.

Table S3: Missing Record Information in I-55SB BROWSER

1	County	Desg	Travelway	Dir	Cont Log	Accident (	Accident Da	Severity R	Image #	Intersecti	Log Unit	Intrsc	Intrchg	Grpd	Light Conc	Road Surf	Weather (	Tway Id	Property [	Day of We	Time
1994	ST. LOUIS	IS	55	S	12.33	PASSING	10/12/2006	PROPERTY	60111749	313256	4.268	Y	Y		DAYLIGHT	DRY	CLEAR	13	NONE	THU	1220
1995	ST. LOUIS	IS	55	S	12.33	REAR END	12/10/2006	PROPERTY	60138134	313256	4.268	Y	Y		DARK W/ !	DRY	CLOUDY	13	NONE	SUN	1830
1996	ST. LOUIS	IS	55	S	12.33	REAR END	4/20/2007	MINOR IN	70057321	313256	4.268	Y	Y		DAYLIGHT	DRY	CLEAR	13	NONE	FRI	1015
1997	ST. LOUIS	IS	55	S	12.33							Y	Y		DARK W/ !	DRY	CLEAR	13	NONE	FRI	2356
1998	ST. LOUIS	IS	55	S	12.33	PASSING	11/10/2007	PROPERTY	70129340	313256	4.268	Y	Y		DAYLIGHT	DRY	CLEAR	13	NONE	SAT	1259
1999	ST. LOUIS	IS	55	S	12.33	REAR END	11/26/2007	PROPERTY	70129684	313256	4.268	Y	Y		DAYLIGHT	WET	RAIN	13	NONE	MON	1225
2000	ST. LOUIS	IS	55	S	12.33	REAR END	12/22/2007	PROPERTY	70140794	313256	4.268	Y	Y		DAYLIGHT	DRY	CLEAR	13	NONE	SAT	825
2001	ST. LOUIS	IS	55	S	12.33	REAR END	1/25/2008	PROPERTY	80012033	313256	4.268	Y	Y		DARK W/ !	DRY	CLEAR	13	NONE	FRI	2210
2002	ST. LOUIS	IS	55	S	12.33	OUT OF C(	3/18/2008	PROPERTY	80036800	313256	4.268	Y	Y		NOT STAT	WET	CLOUDY	13	NONE	TUE	800
2003	ST. LOUIS	IS	55	S	12.33	REAR END	3/24/2008	PROPERTY	80036910	313256	4.268	Y	Y		DAYLIGHT	WET	CLEAR	13	NONE	MON	900

2.2 AADT Data

Table S4 shows a sample of AADT data obtained from MODOT. As seen in the table, AADT data includes information on segment name, starting and ending continuous logs, direction, year, and AADT traffic counts. Directions for certain road sections are reported as 'U' rather than either 'E', 'W', 'S' or "N' indicating an undivided roadway. In this case, it is assumed that the AADT is equally allocated to both directions.

Table S4: AADT Data

MoDOT

TR50Y1

Missouri Department of Transportation
Transportation Planning
Traffic Information (TR50)
Sort: Year

June 2,2009
10:58:31 AM

2008 AADT

ST. LOUIS COUNTY
IS 270 E (Travelway Id : 6135)

Traffic Information (TR50)
Sort : Year

Description	Continuous Beg Log	Continuous End Log	Dir	Site ID	St Sys	FC	Section	Year	Quantity
IS 55 to MO 21	0.545	2.145	E		IS	IS	1	2008	77,902
			W		IS	IS			64,237
MO 21 to MO 30	2.145	3.915	E	742	IS	IS	1	2008	74,423
			W		IS	IS			71,448
MO 30 to IS 44	3.915	6.128	E		IS	IS	1	2008	80,396
			W		IS	IS			77,200
IS 44 to BIG BEND BLVD	6.128	7.634	E	736	IS	IS	2	2008	73,831
			W		IS	IS			72,574
BIG BEND BLVD to DOUGHER	7.634	8.734	E		IS	IS	2	2008	83,741
			W		IS	IS			82,347
DOUGHERTY FERRY RD to M	8.734	10.260	E		IS	IS	2	2008	78,602
			W		IS	IS			77,290
MO 100 to IS 64	10.260	12.702	E	725	IS	IS	3	2008	84,178
			W		IS	IS			79,379
IS 64 to RT AB	12.702	13.847	E	724	IS	IS	4	2008A	94,920
			W		IS	IS			93,553
RT AB to MO 340	13.847	14.993	E		IS	IS	4	2008	100,940
			W		IS	IS			115,182
MO 340 to MO 364-RT D	14.993	16.810	E	616	IS	IS	5	2008	94,738
			W		IS	IS			87,326
MO 364-RT D to DORSETT RI	16.810	17.937	E		IS	IS	6	2008	82,110
			W		IS	IS			87,471
DORSETT RD to IS 70	17.937	20.315	E	701	IS	IS	6	2008	82,366
			W		IS	IS			88,709

3 Crash Data Analysis Results

3.1 Crash Analysis

In this study, crash data from 2004 through 2007 is used to develop the baseline information. Four years of pre-closure crash data is expected to provide a good base to evaluate and compare to the I-64 construction closure period. For more efficient comparison, all tables and graphs from the tool are grouped into three categories according to the roadway type, i.e.

a) Type 1: Interstate highways including -170, I-270, I-44, I-55, I-64 and I-70,
b) Type 2: Missouri Highways including MO 30, MO 100, MO 115, MO 180, MO 340 and MO 366, and
c) Type 3: US highways and Expressways including US40, MO141, MO Route-D, US61 and US67.

In order to understand a basic picture about the number of crashes trend changing from 2004 to 2008, all crashes happening from 2004 through 2008 on all roadways are summarized. Table S5 and Figures S1-S3 illustrate the total number of crashes by roadway type. In 2008, compared with the 2007 year crash data, the number of crashes on most of the routes didn't change dramatically. Here, the total crashes on I-64 in 2008 are 488 less than those in 2007 (reduced by 40%). Obviously, this reduction is due to the 5-mile re-construction closure. However, it should also be noticed that total crashes on all Interstate highways also decreased by 575 during the same period, and this overall reduction exceeds the reduction on I-64. This indicates that although I-64 closure caused the traffic to spread to other routes, the total regional crashes on major interstate highways around the closure area still decreased.

Compared to year 2007, the number of crashes on 2008 slightly increased in the routes such as I-70, I-44, I-55 and MO 100 whereas the number decreased in the routes such as I-270, I-170, MO 340, US40 and MO141. Other routes almost stayed at the level same. However, it is interesting to observe (in Table S5) that although each route has its own trend, the overall crashes on all three types of highways decreased in 2008 (i.e., after I-64 re-construction closure) compared to the previous year, 2007. The table also reveals that during the 5-year (2004-2008) period, the overall crashes on both MO and US highways have been continuously decreasing, and furthermore total crashes on all routes investigated have been decreasing since 2004. Considering the increasing traffic, this can be considered as a remarkable result.

Table S5: Total Crashes by year (2004 - 2008)

	Route	2004	2005	2006	2007	2008
Interstate Highway	I-44	1,100	1,061	1,037	1,086	1,126
	I-270	2,103	2,201	2,302	2,287	2,083
	I-64	1,624	1,610	1,494	1,205	717
	I-70	1,907	1,998	2,004	2,072	2,161
	I-170	906	827	904	873	815
	I-55	964	948	963	948	994
	All IS	8,604	8,645	8,704	8,471	7,896
MO Highway	MO366	655	645	652	519	526
	MO30	1,298	1,297	1,049	1,048	941
	MO100	1,179	1,085	1,019	1,086	1,146
	MO115	455	432	382	370	385
	MO180	879	822	721	689	675
	MO340	1,068	935	1,059	1,053	998
	All MO	5,534	5,216	4,882	4,765	4,671
US highway and ExpressWay	MO141	503	566	504	589	503
	RtD	728	682	636	690	699
	US61	853	828	819	791	761
	US67	484	386	396	358	345
	US40	489	536	553	529	344
	All US	3,057	2,998	2,908	2,957	2,652
Overall		17,195	16,859	16,494	16,193	15,219

Another way to represent the trend is to use 'relative' values where the total crashes on the base year is set to be '1' and the crashes in the other years are relative to that value. Table S6 shows 5-year 'relative' crashes for routes investigated. (In the table, the base year is 2004.)

Although Table S6 is a reflection of the previous table, the table shows the trend more clearly. As seen in the table, the overall crashes on both US and MO highways have continuously decreased for the past 5 years (20004-2008) resulting in 14% and 16% less crashes in 2008 (compared to 2004) on US and MO highways respectively. The same information is depicted in Figures S1-S3 by roadway type.

Table S6: Relative Crashes by year (2004 - 2008)

	Route	2004	2005	2006	2007	2008
Interstate Highway	I-44	1.00	0.96	0.94	0.99	1.02
	I-270	1.00	1.05	1.09	1.09	0.99
	I-64	1.00	0.99	0.92	0.74	0.44
	I-70	1.00	1.05	1.05	1.09	1.13
	I-170	1.00	0.91	1.00	0.96	0.90
	I-55	1.00	0.98	1.00	0.98	1.03
	All IS	1.00	1.00	1.01	0.98	0.92
MO Highway	MO366	1.00	0.98	1.00	0.79	0.80
	MO30	1.00	1.00	0.81	0.81	0.72
	MO100	1.00	0.92	0.86	0.92	0.97
	MO115	1.00	0.95	0.84	0.81	0.85
	MO180	1.00	0.94	0.82	0.78	0.77
	MO340	1.00	0.88	0.99	0.99	0.93
	All MO	1.00	0.94	0.88	0.86	0.84
US highway and ExpressWay	MO141	1.00	1.13	1.00	1.17	1.00
	RtD	1.00	0.94	0.87	0.95	0.96
	US61	1.00	0.97	0.96	0.93	0.89
	US67	1.00	0.80	0.82	0.74	0.71
	US40	1.00	1.10	1.13	1.08	0.70
	All US	1.00	0.98	0.95	0.97	0.87
Overall		1.00	0.98	0.96	0.94	0.89

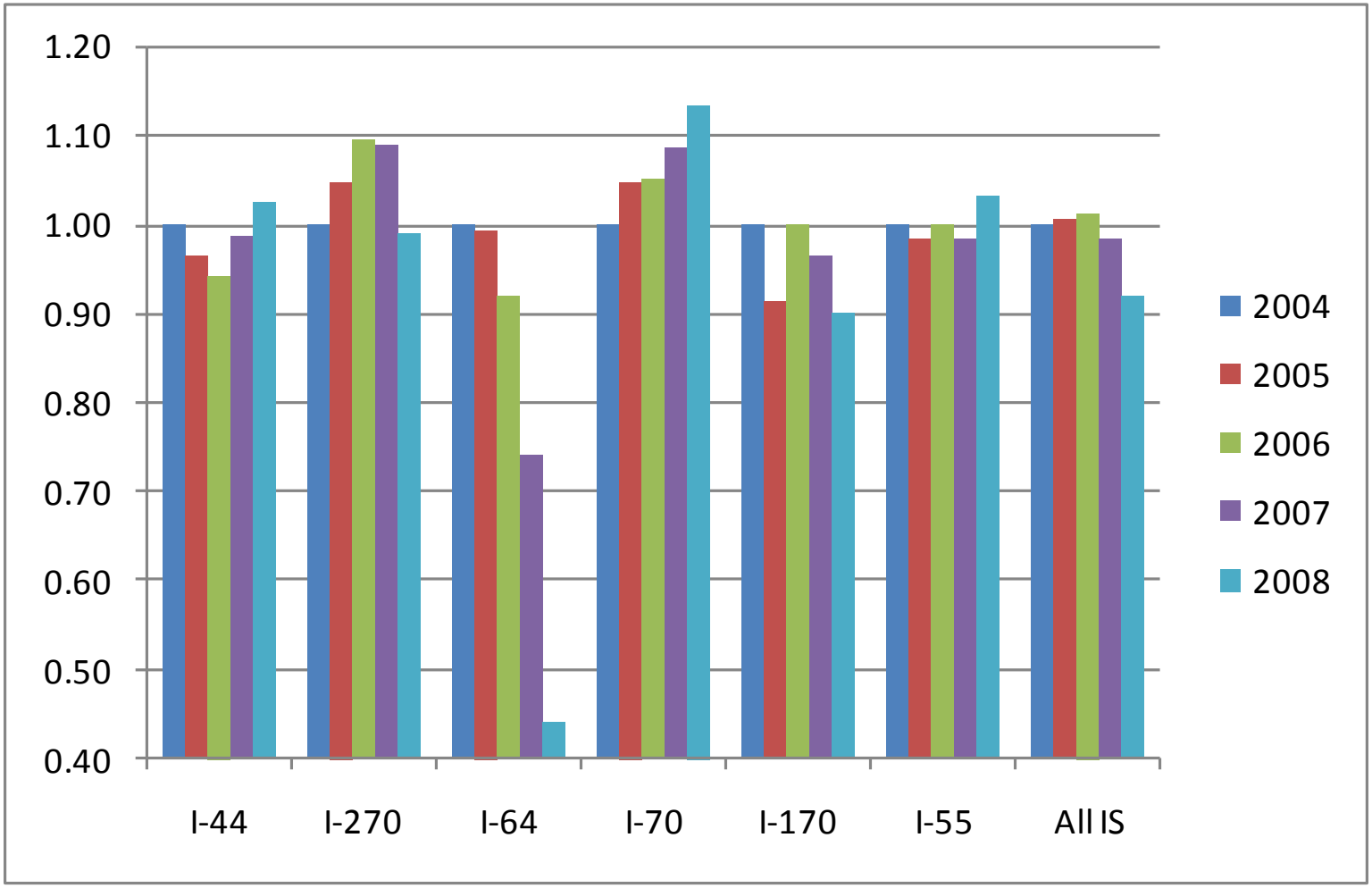


Figure S1: 5-year Crashes, Interstate Highway (2004 through 2008)

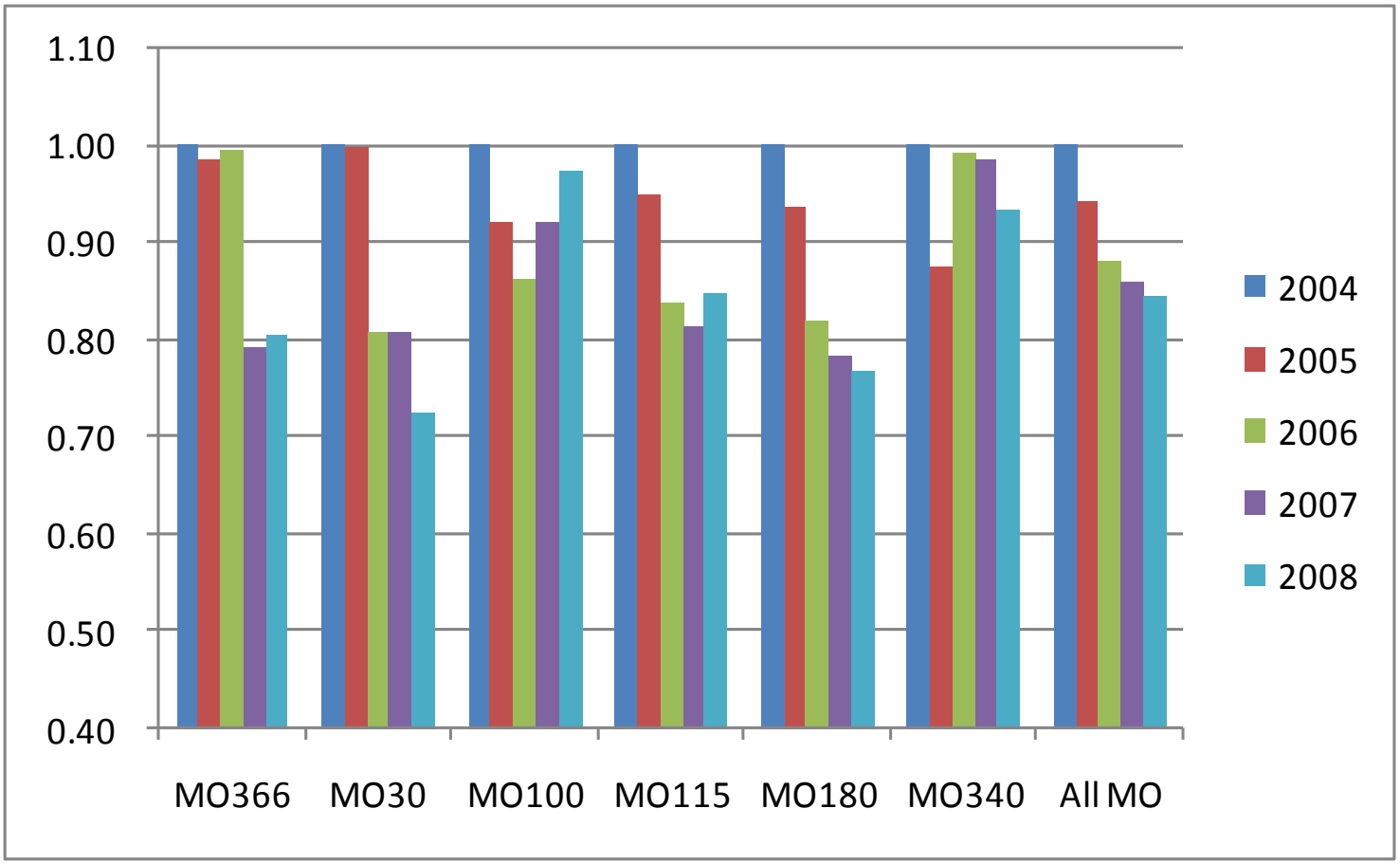


Figure S2: 5-year Crashes, MO Highway (2004 through 2008)

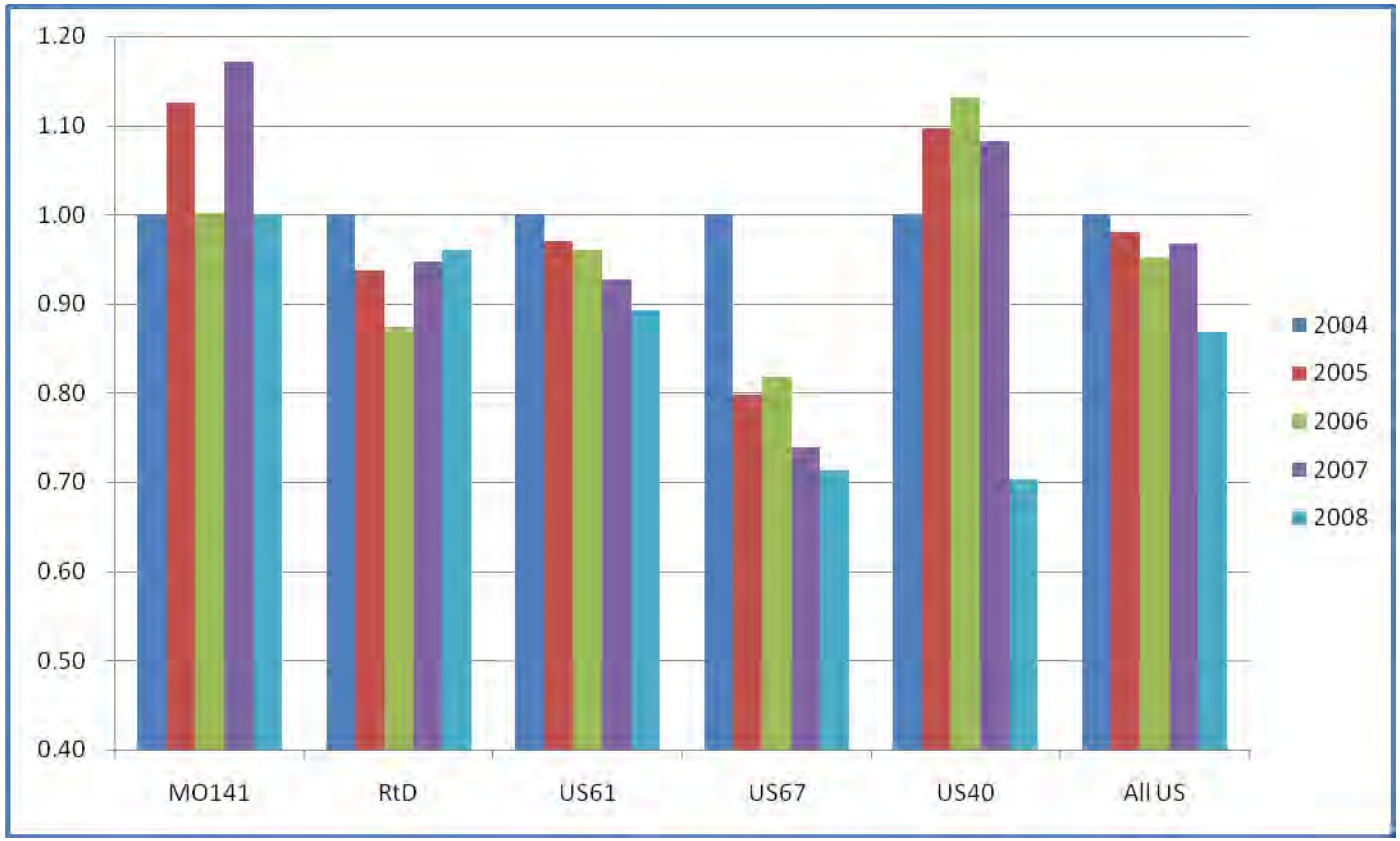


Figure S3: 5-year Crashes, US Routes and Expressways (2004 through 2008)

For more detailed evaluation, various types of figures are prepared and presented in Appendix based on the combination of influencing variables such as direction, crash severity, crash cause, and weather condition. As explained earlier, the research team has developed a computer programming tool that effectively and promptly extracts the crash data at any type of data query requests. The tool is also designed to summarize and report the resulting data in both graph and table formats. We expect the tool can help analysts to save time required for data manipulation and to evaluate results more efficiently.

In order to examine any changes in the crash severity before and after the closure, 30 graphs (= 3 groups of roadways x 2 directions x 5 severity types) are prepared and presented in Figures S16-S30 in the Appendix. After closely inspecting the graphs, the research team has created a summary table (as shown in Table S7) which explains the inspection results in a more systematic way. In the Table, values given in the 'increase' column denote the number of consecutive years during which the increase has been continued. The significance (in the last column in each item) was judged to be 'Yes' if a crash increase is continued for 3 or more years and it exceeds both the 4-year (i.e., 2004-2007) average and the 4-year highest number of crashes.

As seen in Table S7, most critical crash increases are observed in cases where the increasing trend started from 3 or more years ago. The number of crashes on I-70 East bound roadway, for example, has continuously increased for last 4 years (i.e., before the I-64 closure), and in 2008 it exceeded the 4-year highest value. (This observation can be crosschecked in Figures S16 in the Appendix.) Particularly, Property Damage Only (PDO) crashes have increased for 5 consecutive years on the same roadway. This observation suggests us to pay more attention to this route, but also implies that the crash increase after I-64 closure (i.e., in 2008) could be caused by the increasing trend that started from before the I-64 closure.

There are several cases showing 1-year increase where the crashes increase not continuously, but in year 2008 only. As seen in the table, almost all those cases do not exceed the 4-year highest crashes. These cases can be interpreted as either in the middle of increasing pattern or just one occasion where it will be reduced next year. Since those increases are not significantly large (because they are still within the 4-yr highest value range), it is hard to say those increases are due to the I-64closure. We might have better understating of those cases when more data points are available in one or two years.

Blank cells in the table indicate that compared to 2007, crashes are either reduced or remained at the same level in 2008. Based on the 'total' crashes in the table, only 5 routes show crash increases, and others experienced less or same level of crashes in 2008 compared to the previous year 2007.

Table S8 summarizes the crash data by three major causes that are observed from Figures S31-S36 in the Appendix. It is noteworthy that read-end crashes on MO-100 East bound increase for last 3-year in row exceeding the 4-year highest value. This observation suggests us further engineering investigation on this roadway. This investigation is beyond the high-level investigation as scoped for this study). Similar to the previous case, it is hard to conclude that I-64 closure caused the crash increase in year 2008 since this increasing trend started before the I-64 closure. Other 1-year increase cases are unlikely to be significant in that they are still less the 4-year maximum (in US61-S) or slightly higher than the 4-year maximum (in US340-W).

In order to investigate any monthly variation in the crash data, 12 graphs (=2 directions x 6 highways) prepared and presented in Figures S40-S45 in the Appendix. As summarized in Table S9, no noticeable changes in crash are found before and after I-64 closure. One thing noticeable is that for past 5 consecutive years, December crashes on I-270 Westbound have been continuously increased. This also suggests a further more detailed investigation of crashes along this roadway for the month of December.

It is said that year 2008 was one of the wettest years in St. Louis[1] history. Apparently, weather is an important factor that influences vehicle accidents. In order to analyze the weather effect on the crashes, crashed occurred only on rainy days are collected and analyzed. Figures S46-S40 in Appendix provides the results of the analysis, and findings are summarized in Table S10. As shown in the table, rainy crashes on 8 routes keep increasing for past three years. On I-70-E, particularly, about 200 accidents (out of total 1211 accidents) happened on rainy days in 2008, and the number exceeds the 4-year highest (see Figure S46). From this observation, it can be said that the rainy day crashes significantly contribute to the crash increase on I-70-E. This finding is confirmed by Figure S37 showing the increasing trend of the out-of-control crashes on the same highway for past three years.

Although solid statistical validation is needed, this quick inspection described above leads us to a tentative conclusion that there is no strong evidence proving that I-64 closure contributed to the crash increase on the highways that are potentially influenced by the closure.

[1] For more detail, see http://www.usatoday.com/weather/news/2009-01-01-missouri-precipitation_N.htm.

Table S7: Summary of Crashes by Severity Type (2004 - 2008)

	Route	Direction	Total				PDO				Minor				Disabling				Fatal			
			Increase	Exceeding 4-yr average?	Exceeding 4-yr high?	Significant? (Judgement)	Increase	Exceeding 4-yr average?	Exceeding 4-yr high?	Significant? (Judgement)	Increase	Exceeding 4-yr average?	Exceeding 4-yr high?	Significant? (Judgement)	Increase	Exceeding 4-yr average?	Exceeding 4-yr high?	Significant? (Judgement)	Increase	Exceeding 4-yr average?	Exceeding 4-yr high?	Significant? (Judgement)
Interstate Highway	I-44	E													1	Y	M	N				
		W	3	Y	N	M	3	Y	N	N	1	Y	N	N								
	I-270	E																				
		W									1	Y	N	N								
	I-70	E	1	Y	Y	M	5	Y	Y	Y	1	Y	N	N	4	Y	Y	Y	3	Y	Y	Y
		W													4	Y	Y	Y				
	I-170	E																	1	Y	M	N
		W									1	N	N	N								
	I-55	S																	1	Y	Y	M
		N																	1	N	N	N
MO Highway	MO366	E					1	N	N	N												
		W																				
	MO30	E													1	N	N	N				
		W																				
	MO100	E	3	Y	N	N	3	Y	Y	M	1	Y	N	N								
		W																				
	MO115	S	1	Y	N	N	1	N	N	N	1	Y	Y	N								
		N													1	Y	M	N				
	MO141	S																				
		N																				
	MO180	E																				
		W																				
	MO340	E					1	M	N	N					3	Y	Y	Y				
		W									3	Y	Y	N								
US Highway	RtD	E	3	Y	Y	M	3	Y	Y	M					1	Y	N	N	1	Y	Y	N
		W													1	N	N	N				
	US61	S																				
		N																				
	US67	S																				
		N									3	M	Y	N	1	Y	N	N				
	US40	E																				
		W																				

Y: Yes M:Maybe N: No

Table S8: Summary of Crashes by Major Three Causes (2004 - 2008)

	Route	Direction	Rea-End				Passing				Out-fo-Control			
			Increase	Exceeding 4-yr average?	Exceeding 4-yr high?	Significant? (Judgement)	Increase	Exceeding 4-yr average?	Exceeding 4-yr high?	Significant? (Judgement)	Increase	Exceeding 4-yr average?	Exceeding 4-yr high?	Significant? (Judgement)
Interstate Highway	I-44	E												
		W	3	Y	N	N					3	Y	N	N
	I-270	E												
		W									3	Y	N	N
	I-70	E									3	Y	Y	Y
		W									3	Y	Y	Y
	I-170	E												
		W												
	I-55	S	3	Y	Y	N					3	Y	Y	M
		N												
MO Highway	MO366	E												
		W												
	MO30	E									3	Y	N	M
		W												
	MO100	E	3	Y	Y	Y								
		W												
	MO115	S					1	M	N	N	1	Y	N	N
		N												
	MO141	S												
		N												
	MO180	E												
		W												
	MO340	E												
		W	1	Y	Y	N								
US Highway	RtD	E					1	Y	N	N				
		W									3	Y	N	M
	US61	S	1	Y	N	N	1	Y	N	N				
		N												
	US67	S									3	Y	Y	Y
		N												
	US40	E												
		W												

Y: Yes M:Maybe N: No

Table S9: Summary of Crashes by Month (2004 - 2008)

	Route	Direction	Jan				Feb				Mar				Apr				May				Jun				Jul				Aug				Sep				Oct				Nov				Dec			
			Increase	Exceeding 4-yr average?	Exceeding 4-yr high?	Significant? (Judgement)	Increase	Exceeding 4-yr average?	Exceeding 4-yr high?	Significant? (Judgement)	Increase	Exceeding 4-yr average?	Exceeding 4-yr high?	Significant? (Judgement)	Increase	Exceeding 4-yr average?	Exceeding 4-yr high?	Significant? (Judgement)	Increase	Exceeding 4-yr average?	Exceeding 4-yr high?	Significant? (Judgement)	Increase	Exceeding 4-yr average?	Exceeding 4-yr high?	Significant? (Judgement)	Increase	Exceeding 4-yr average?	Exceeding 4-yr high?	Significant? (Judgement)	Increase	Exceeding 4-yr average?	Exceeding 4-yr high?	Significant? (Judgement)	Increase	Exceeding 4-yr average?	Exceeding 4-yr high?	Significant? (Judgement)	Increase	Exceeding 4-yr average?	Exceeding 4-yr high?	Significant? (Judgement)	Increase	Exceeding 4-yr average?	Exceeding 4-yr high?	Significant? (Judgement)
Interstate Highway	I-44	E W																																														
	I-270	E W																																													3	Y	Y	Y
																																													5	Y	Y	Y
	I-70	E W																	4	Y	Y	Y																											
	I-170	E W																																															
	I-55	S N																																														
MO Highway	MO366	E W	HAVE NOT CHECKED																																													
	MO30	E W																																														
	MO100	E W																																														
	MO115	S N																																														
	MO141	S N																																														
	MO180	E W																																														
	MO340	E W																																														
US Highway	RtD	E W																																														
	US61	S N																																														
	US67	S N																																														
	US40	E W																																														

Y: Yes M:Maybe N: No

Table S10: Summary of Weather Type (2004 - 2008)

	Route	Direction	Rainy Day				Snow Day			
			Increase	Exceeding 4-yr average?	Exceeding 4-yr high?	Significant? (Judgement)	Increase	Exceeding 4-yr average?	Exceeding 4-yr high?	Significant? (Judgement)
Interstate Highway	I-44	E	3	Y	N	N	Haven't Checked			
		W								
	I-270	E								
		W	3	Y	N	N				
	I-70	E	3	Y	Y	Y				
		W	3	Y	N	N				
	I-170	E								
		W								
	I-55	S	3	Y	Y	Y				
		N								
MO Highway	MO366	E								
		W								
	MO30	E								
		W								
	MO100	E	3	Y	N	N				
		W								
	MO115	S								
		N								
	MO141	S								
		N								
	MO180	E	3	Y	N	N				
		W								
	MO340	E								
		W								
US Highway	RtD	E	3	Y	N	N				
		W								
	US61	S	1	Y	N	N				
		N								
	US67	S								
		N								
	US40	E								
		W								

Y: Yes M:Maybe N: No

3.2 Crash Rate Analysis

The crash rate represents the intensity of crashes relative to total vehicle miles traveled. For example, if roadway A shows a higher crash rate than roadway B, it indicates that roadway A is more vulnerable to crashes than roadway B in case the traffic volume and the roadway lengths of both roadways are same (i.e., under the same condition.) Unlike the crash rate that treats all severity types equally, the severity rate assigns higher weights to fatality and injury than property damage only crash. Due to the different weights, the severity rate provides more explanation of the characteristics of the crashes than the crash rate. For a given segment of a roadway, crash rate (CR) and severity rate (SR) are given by:

$$CR = \frac{100{,}000{,}000 \times Crash}{AADT \times Length \times Days} \quad (1)$$

$$SR = \frac{100{,}000{,}000 \times [10(FAT) + 4(INJ) + N]}{AADT \times Length \times Days} \quad (2)$$

Where, CRASH = Number of crashes for the section, Days = Number of days for the study, AADT = Annual Average Daily Traffic, Length = Length of Section, FAT = Number of fatal crashes, INJ = Number of injury crashes, N = Number of property damage only crashes.

Similarly, overall crash rate (OCR) and overall severity rate (OSR) for a given route are calculated by following equations:

$$OCR = \frac{100{,}000{,}000 \times Crash}{weighted\ AADT \times Length \times Days} \quad (3)$$

$$OSR = \frac{100{,}000{,}000 \times [10(FAT) + 4(INJ) + N]}{weighted\ AADT \times Length \times Days} \quad (4)$$

Where, Length = Length of the route,

$$weighted\ AADT = \frac{\sum_{all\ segments} AADT_i \times Length_i}{\sum_{all\ segments} Length_i}.$$

As explained, crash rate calculation requires not only the number of crashes but also traffic volumes (in vehicles per day), length of the roadway (in miles) and period being evaluated (in days). MoDOT provided the team with AADT information for the highways, and Table S11 summarizes the segment of highways AADT of which are used in this study.

Table S11: Highway Segments where AADT Data are acquired

		Starting Pt	Ending pt	miles
Interstate Highway	I-44	Antire Rd	Jefferson Ave	18.31
	I-270	I-55	US67	23.46
	I-70	LP 70	Walnut	21.18
	I-170	I-270	Galleria Pkwy	11.13
	I55	Il State Line	MERAMEC BOTTOM RD	17.00
MO Highway	MO366	I44	Grand-Nos	18.86
	MO30	JEFFERSON CO LINE	CITY LIMIT	15.70
	MO100	Baxster Rd	6th St	18.43
	MO115	I70	I70 E JCT	10.25
	MO180	ST CHARLES ROCK RD	KINGSHIGHWAY	13.92
	MO340	LADUE RD	PENNSYLVANIA	11.30
US highway and ExpressWay	MO141	MO340	I55	21.40
	RtD	IS 270	Skinker Parkway	15.23
	US40	MISSOURI RESEARCH PARK	STADIUM	12.57
	US67	MO 94	BAUMGARTNER RD	12.00
	US61	MISSOURI RESEARCH PARK	BAUMGARTNER RD	6.00

The team also developed an analytical tool that calculates the CR, SR, OCR and OSR in an automatic way. The tool is designed to be able to calculate CR and SR not only by original segments of a given roadway (defined by MoDOT) but also by any segment length (defined by users). Tables S18-S32 listed in Appendix present CR, SR, OCR and SCR calculated for the roadways investigated based on the 1-mile section length.

Annual Average Daily Traffic (AADT)

5-year AADT are summarized in Table S12, and Figures S4 and S5. Observations made from the table are as follow:

1) I-270 is the busiest route, but interestingly AADT in 2008 slightly dropped from the previous year;
2) Similar to I-270, traffics on all MO highways decreased in 2008 from the previous year,
3) Similar to MO highways, traffics on all US highways decreased in 2008 from the previous year,
4) Unlike the other routes, I-44 traffic has constantly increased for the past 5 year and the increase in year 2008 is quite significant, and
5) MO100E, MO141S, and MO180E showed exactly same AADTs in 2006 and 2007

Figures S4 and S5 provide graphical representations of the Table S12. For better picture of the historical trend in AADT, the 'relative' AADT values corresponding to Table S12 are also presented in Table S13 (also in Figures S6 and S7).

Note: To maintain consistency in this report, we are using AADT provided through MoDOT. We understand from work completed in the Mobility section of this report that traffic volumes increased on most of routes during 2008. This increase was associated with these routes being alternative routes during the I-64 closure. In a future report, we will show crash rates using both MoDOT's AADT and actual Interstate AADT collected from roadside detection devices.

Table S12: AADT (unit: vehicles/day)

		2004	2005	2006	2007	2008
Interstate Highway	I-44 E	49,973	50,325	53,637	53,610	55,011
	I-270 E	80,564	80,662	82,115	82,937	82,116
	I-64 E	63,787	63,742	66,777	66,632	65,759
	I-70 E	64,044	64,379	61,448	62,105	62,142
	I-170 E	51,202	51,261	51,061	51,572	51,252
	I-55 S	51,686	51,746	54,939	55,489	55,145
	I-44 W	53,581	53,726	52,332	52,890	54,667
	I-270 W	79,402	79,499	81,534	82,350	81,474
	I-64 W	67,448	67,256	65,627	64,463	62,273
	I-70 W	62,494	63,068	60,598	61,229	61,703
	I-170 W	51,753	51,812	52,758	53,286	52,956
	I-55 N	50,069	50,127	54,204	54,746	54,407
	I-44	103,554	104,050	105,969	106,500	109,679
	I-270	159,966	160,161	163,650	165,286	163,590
	I-64	131,235	130,998	132,404	131,095	128,032
	I-70	126,538	127,447	122,046	123,334	123,846
	I-170	102,955	103,073	103,820	104,858	104,208
	I-55	101,755	101,872	109,144	110,235	109,552
MO Highway	MO366	41,603	40,727	40,070	40,368	39,104
	MO30	39,837	39,207	39,599	39,358	38,129
	MO100	38,928	38,107	37,511	37,511	36,607
	MO115	27,594	27,737	23,173	22,942	22,388
	MO180	43,558	42,639	37,163	37,163	36,268
	MO340	50,179	48,258	39,492	39,498	39,782
US highway and Expressway	MO141	35,759	35,003	35,672	35,672	34,946
	RtD	51,585	50,912	50,639	50,432	49,302
	US40	106,765	106,550	105,118	104,120	102,156
	US67	34,834	34,096	30,392	30,392	29,391
	US61	43,273	42,427	46,873	43,455	42,463

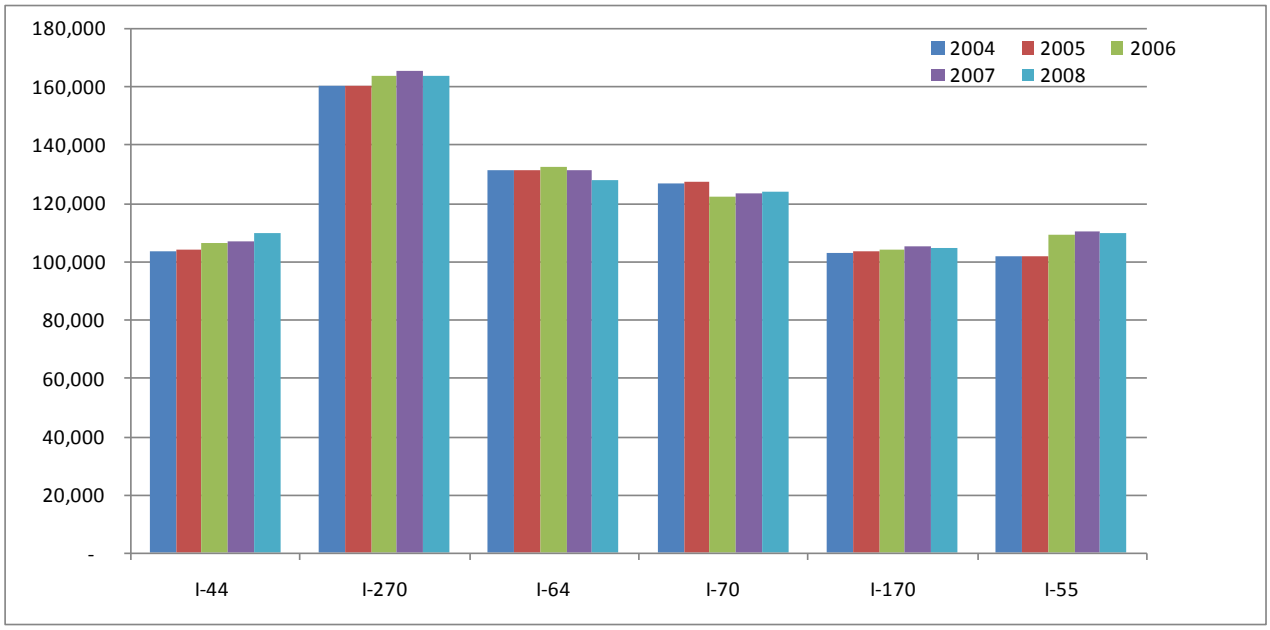


Figure S4: AADT, Interstate Highway (Both Directions, unit: vehicles/day)

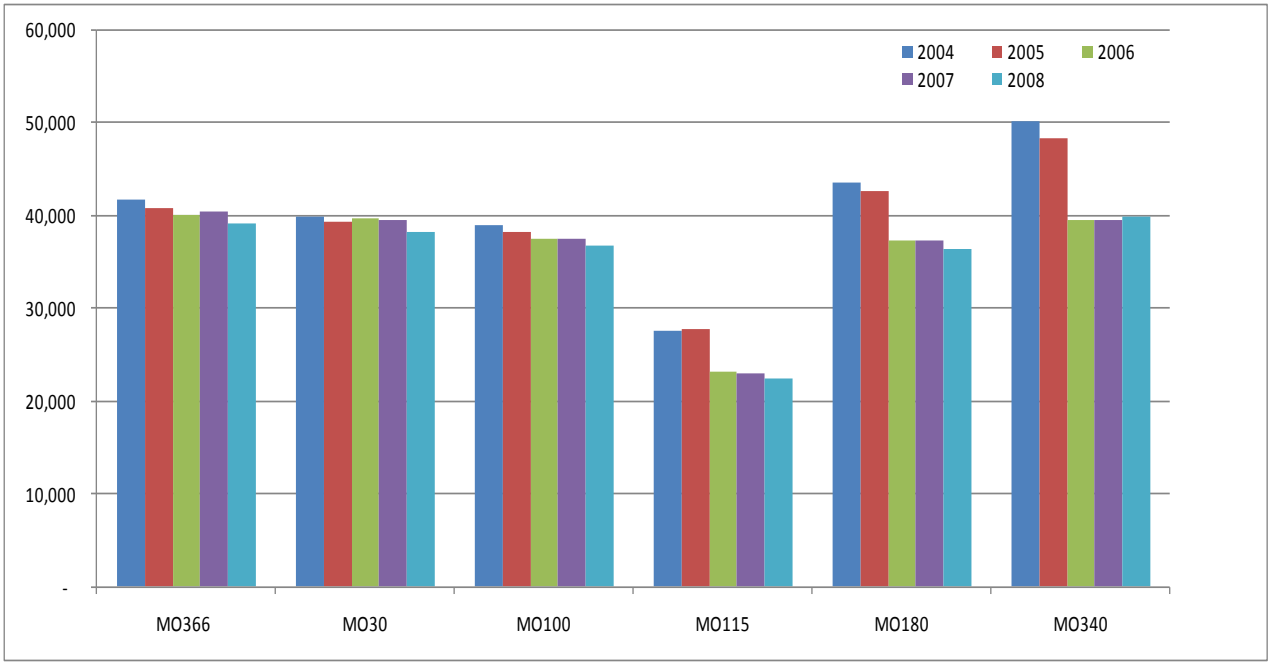


Figure S5: AADT, MO Highway (Both Directions, unit: vehicles/day)

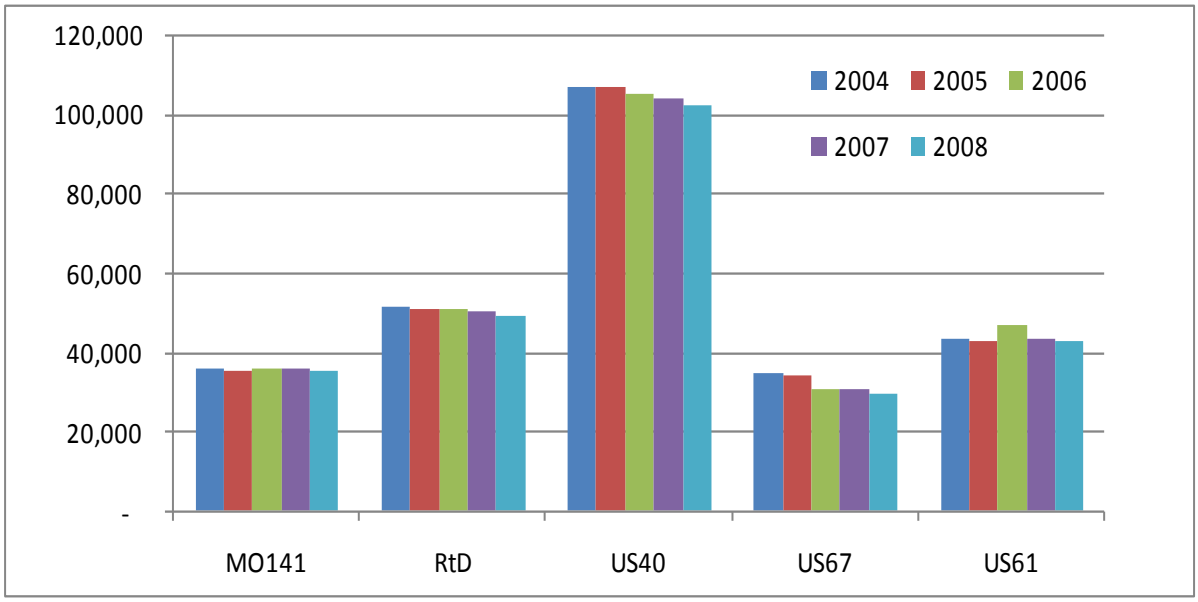


Figure S6: AADT, US Routes and Expressway (Both Directions, unit: vehicles/day)

Table S13: Relative AADT (unit: vehicles/day)

		2004	2005	2006	2007	2008
Interstate Highway	I-44 E	1.00	1.01	1.07	1.07	1.10
	I-270 E	1.00	1.00	1.02	1.03	1.02
	I-64 E	1.00	1.00	1.05	1.04	1.03
	I-70 E	1.00	1.01	0.96	0.97	0.97
	I-170 E	1.00	1.00	1.00	1.01	1.00
	I-55 S	1.00	1.00	1.06	1.07	1.07
	I-44 W	1.00	1.00	0.98	0.99	1.02
	I-270 W	1.00	1.00	1.03	1.04	1.03
	I-64 W	1.00	1.00	0.97	0.96	0.92
	I-70 W	1.00	1.01	0.97	0.98	0.99
	I-170 W	1.00	1.00	1.02	1.03	1.02
	I-55 N	1.00	1.00	1.08	1.09	1.09
	I-44	1.00	1.00	1.02	1.03	1.06
	I-270	1.00	1.00	1.02	1.03	1.02
	I-64	1.00	1.00	1.01	1.00	0.98
	I-70	1.00	1.01	0.96	0.97	0.98
	I-170	1.00	1.00	1.01	1.02	1.01
	I-55	1.00	1.00	1.07	1.08	1.08
MO Highway	MO366	1.00	0.98	0.96	0.97	0.94
	MO30	1.00	0.98	0.99	0.99	0.96
	MO100	1.00	0.98	0.96	0.96	0.94
	MO115	1.00	1.01	0.84	0.83	0.81
	MO180	1.00	0.98	0.85	0.85	0.83
	MO340	1.00	0.96	0.79	0.79	0.79
US highway and Expressway	MO141	1.00	0.98	1.00	1.00	0.98
	RtD	1.00	0.99	0.98	0.98	0.96
	US40	1.00	1.00	0.98	0.98	0.96
	US67	1.00	0.98	0.87	0.87	0.84
	US61	1.00	0.98	1.08	1.00	0.98

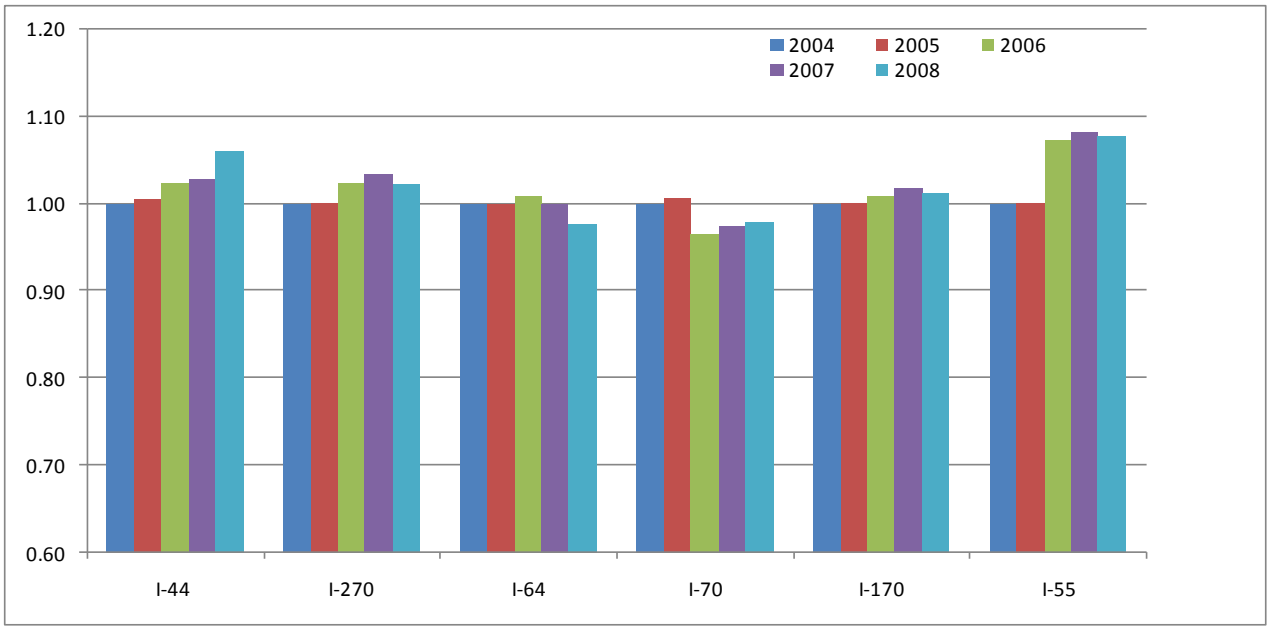


Figure S7: Relative AADT, Interstate Highway (Both Directions, unit: vehicles/day)

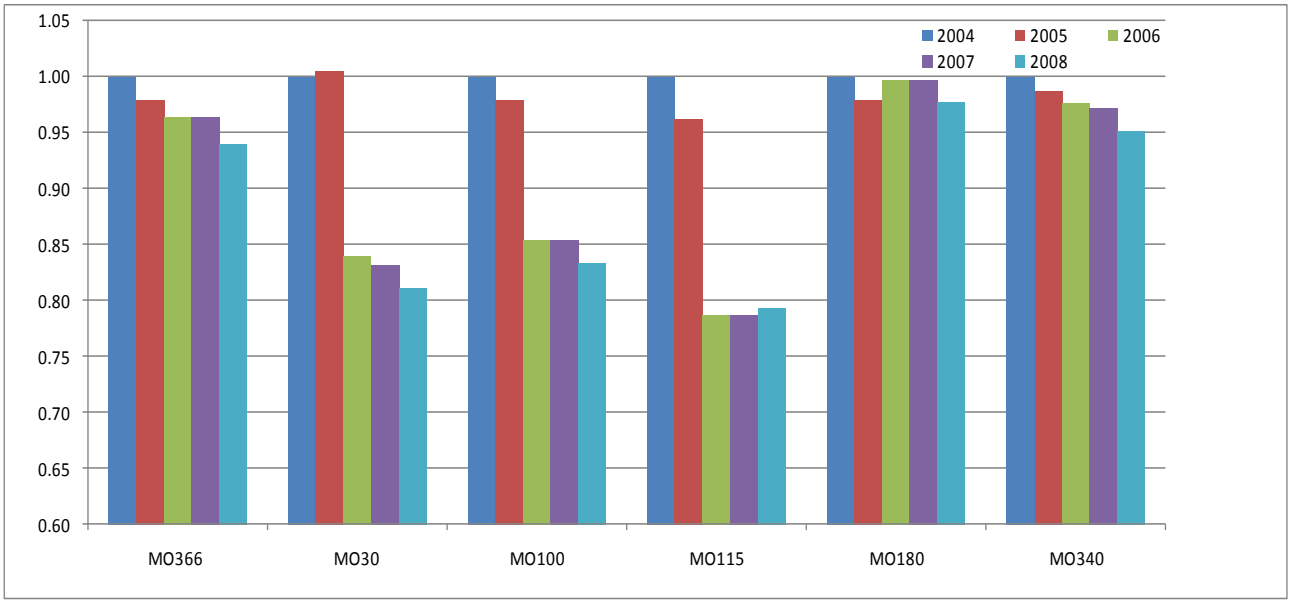


Figure S8: Relative AADT, MO Highway (Both Directions, unit: vehicles/day)

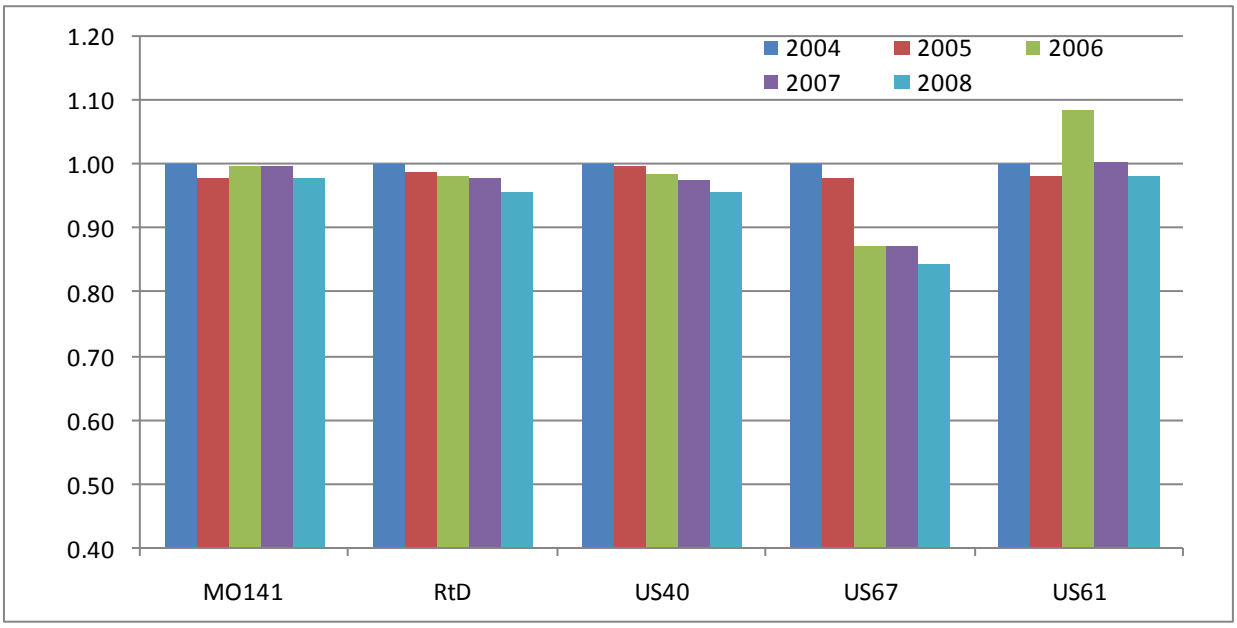


Figure S9: Relative AADT, US Highway and Expressway (Both Directions, unit: vehicles/day)

5-year crash rates (2004-2008)

Crash rates over the past 5 years (2004-2008) are presented in Table S14 (also in Figures S10, S11 and S12), and the corresponding 'relative' crash rates are provided in Table S15 (also in Figures S13, S14 and S15)[2].

Table S14 clearly shows that crashes on local routes are significantly higher than those on interstate highways. This is an obvious result because drivers on local routes are exposed to much more conflicts caused by frequent access roads and traffic control devices such as traffic signals, stop signs, etc. than those on the interstate highway. MO highways show unbalanced crash rates by direction. Particularly, the Route 115 corridor appears to be more vulnerable to crashes than other routes. It is also shown that compared to Year 2007, crash rates on most routes either decrease or remain same except I-70 E and I-55 S in 2008.

Another fact to be noted is that the crash rates on I-70 and MO100 keep increasing for past 3-5 years and they exceeded the 4-year (2004-2007) highest value. Again, this observation urges us to conduct further investigation on how and why these increases happen, but one reason for the increase on I-70 E was partially explained in the previous section (i.e., rainy day crashes.) It is also observed that the increasing trend of the two interstate highways started before the I-64 closure (i.e., before 2008). So, it is hard to decide whether the crash rate increases are caused by the I-64 closure or by other factors. The crash rate for MO115 also increases in 2008, but considering the up-and-down patterns shown in the past 4 years, it is also hard to determine whether it is due to local effect or due to the I-64 closure.

It should be also remarked that although the total crashes on I-44 increased in 2008 compared to 2007 (See Table S5), the crash rate on the highway slightly drops in 2008 (See Figure S8). From the traffic safety viewpoint, this indicates that the safety on I-44 was improved in year 2008 compared to the year 2007, which is a contradicting conclusion that could be reached at if only the number of crashes is used.

Table S15 (along with Figures S13 and S14 and S15) illustrates 5-year 'relative' crash rates for routes investigated. (In the graph, year 2004 is the base year.) Although, trends observed in this table (and Figures) are very parallel to those in 5-year crash rates in Table S14 (and Figures S8 and S9), it is more clear to see the growth rate by percentage. Compared to year 2004, for example, crashes on I-70 increases by more than 20% whereas crashes on other interstate highways slightly decrease (in I-44, I-270, I-55) or considerably decrease (in I-170).

[2] It should be noted that due to the different logging systems used in AADT and crash data records, the crash and injury rate analyses in this study is for one-way. (For more details, see section 2-2)

It is generally observed that in most of the routes, the crash rates decreases in 2008 compared to 2007 except several routes (such as I-44, I-70, MO-366, MO-100, MO-115, Route-D) showing slightly increased crash rates. Nonetheless, those increased crash rates (except I-70) are still below either the 4-year (2004-2007) average crash rate or the 4-year highest rate. It is noteworthy the crash rate in I-70 has been continuously increased since year 2004. Apparently, this increasing trend in I-70 started even before the I-64 closure. One more to be noted is that among all these routes, the south direction of US 61 highway shows unreasonably high crash rates ranged from 1500 to 1700. After closely examining the raw crash data, the team found out that highly concentrated crashes are recorded in a segment of the highway (around the continuous log of 170).

From this observation, we can tentatively conclude that no observational evidence is found to prove the fact that I-64 closure influences increases in crashes in the highways around the closure. (We use 'tentatively' in the statement since the statistical analysis should be applied to confirm the statement. The analysis will be carried out when more data points are available.)

Table S14: Overview of All Crash Rate (2004 through 2008)

		2004	2005	2006	2007	2008
Interstate Highway	I-44 E	163	170	154	164	160
	I-270 E	184	181	196	192	181
	I-64 E	233	237	205	172	129
	I-70 E	204	220	237	234	252
	I-170 E	292	250	253	241	240
	I-55 S	164	157	141	139	162
	I-44 W	161	145	145	147	154
	I-270 W	123	140	133	132	130
	I-64 W	220	216	209	165	108
	I-70 W	188	190	192	203	200
	I-170 W	143	148	178	171	146
	I-55 N	142	145	146	139	131
	I-44	162	157	150	156	157
	I-270	154	161	165	162	155
	I-64	226	226	207	169	119
	I-70	196	205	215	218	226
	I-170	217	199	215	206	193
	I-55	153	151	143	139	147
MO Highway	MO366	392	396	406	321	335
	MO30	568	579	465	466	427
	MO100	553	521	498	530	572
	MO115	645	611	647	633	673
	MO180	461	441	444	424	425
	MO340	516	471	465	462	433
US highway and Expressway	MO141	350	404	353	412	359
	RtD	407	388	364	396	409
	US40	100	110	120	116	77
	US67	346	290	325	294	268
	US61	900	894	800	833	818

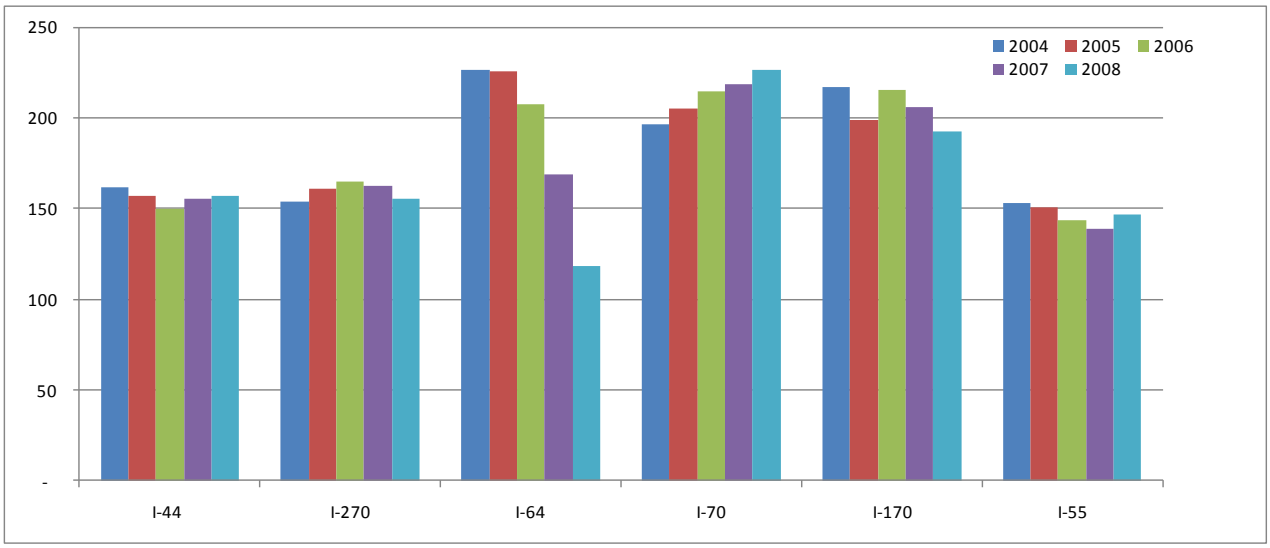


Figure S10: All Crash Rate, Interstate Highway (Both Directions, 2004 through 2008)

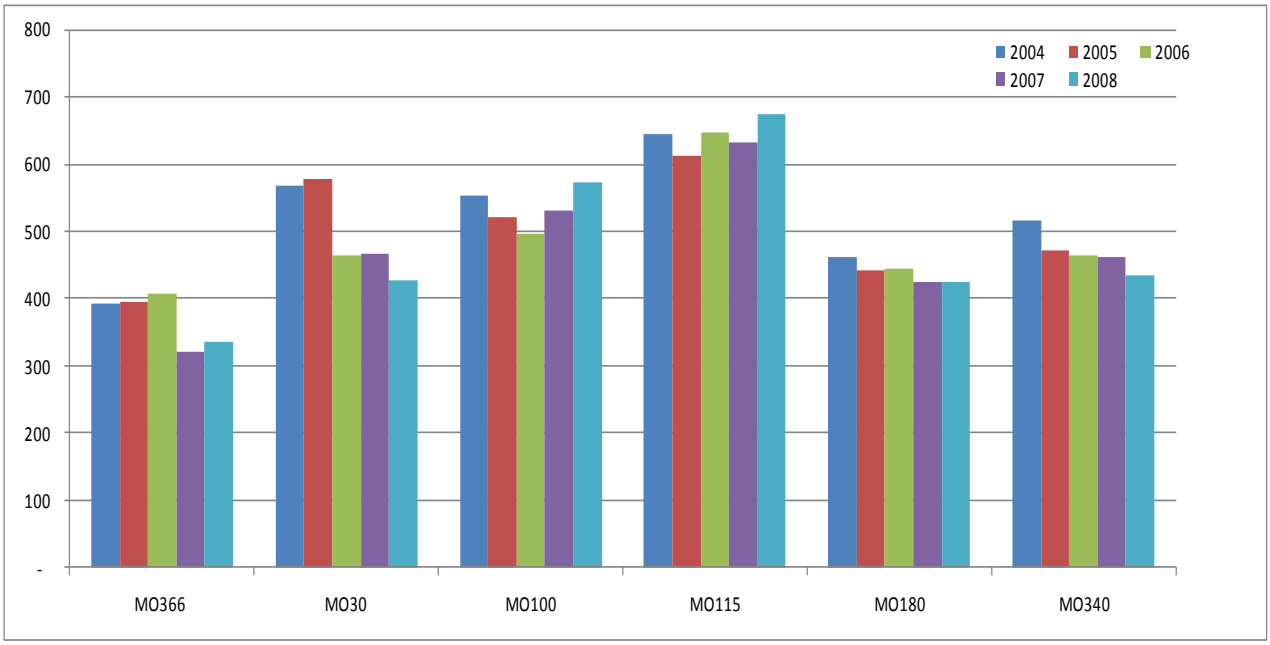


Figure S11: All Crash Rate, MO Highway (Both Directions, 2004 through 2008)

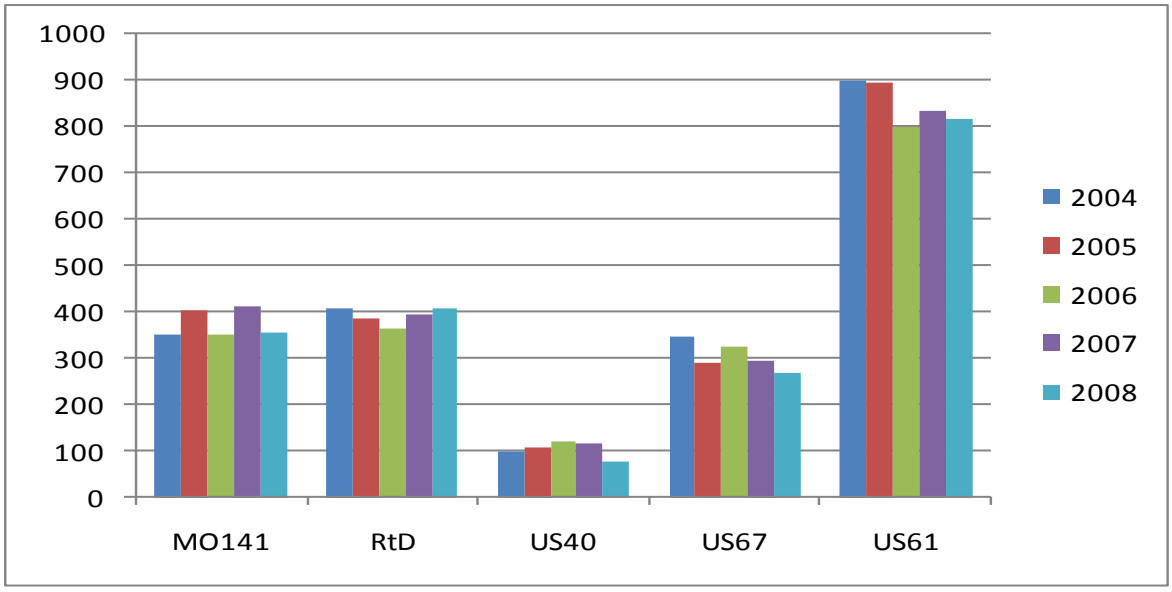


Figure S12: All Crash Rate, US Highway and Expressway (Both Directions, 2004 through 2008)

Table S15: 5-year Relative All Crash Rate (Base year: 2004)

		2004	2005	2006	2007	2008
Interstate Highway	I-44 E	1.00	1.04	0.94	1.01	0.98
	I-270 E	1.00	0.98	1.07	1.04	0.98
	I-64 E	1.00	1.02	0.88	0.74	0.55
	I-70 E	1.00	1.08	1.16	1.15	1.24
	I-170 E	1.00	0.86	0.87	0.83	0.82
	I-55 S	1.00	0.96	0.86	0.85	0.99
	I-44 W	1.00	0.90	0.90	0.92	0.96
	I-270 W	1.00	1.14	1.08	1.07	1.06
	I-64 W	1.00	0.98	0.95	0.75	0.49
	I-70 W	1.00	1.01	1.02	1.08	1.07
	I-170 W	1.00	1.03	1.25	1.20	1.02
	I-55 N	1.00	1.02	1.02	0.98	0.92
	I-44	1.00	0.97	0.92	0.96	0.97
	I-270	1.00	1.05	1.07	1.06	1.01
	I-64	1.00	1.00	0.92	0.75	0.52
	I-70	1.00	1.05	1.09	1.11	1.15
	I-170	1.00	0.92	0.99	0.95	0.89
	I-55	1.00	0.98	0.93	0.91	0.96
MO Highway	MO366	1.00	1.01	1.04	0.82	0.85
	MO30	1.00	1.02	0.82	0.82	0.75
	MO100	1.00	0.94	0.90	0.96	1.03
	MO115	1.00	0.95	1.00	0.98	1.04
	MO180	1.00	0.96	0.96	0.92	0.92
	MO340	1.00	0.91	0.90	0.89	0.84
US highway and Expressway	MO141	1.00	1.15	1.01	1.18	1.02
	RtD	1.00	0.95	0.89	0.97	1.00
	US40	1.00	1.10	1.20	1.16	0.77
	US67	1.00	0.84	0.94	0.85	0.77
	US61	1.00	0.99	0.89	0.93	0.91

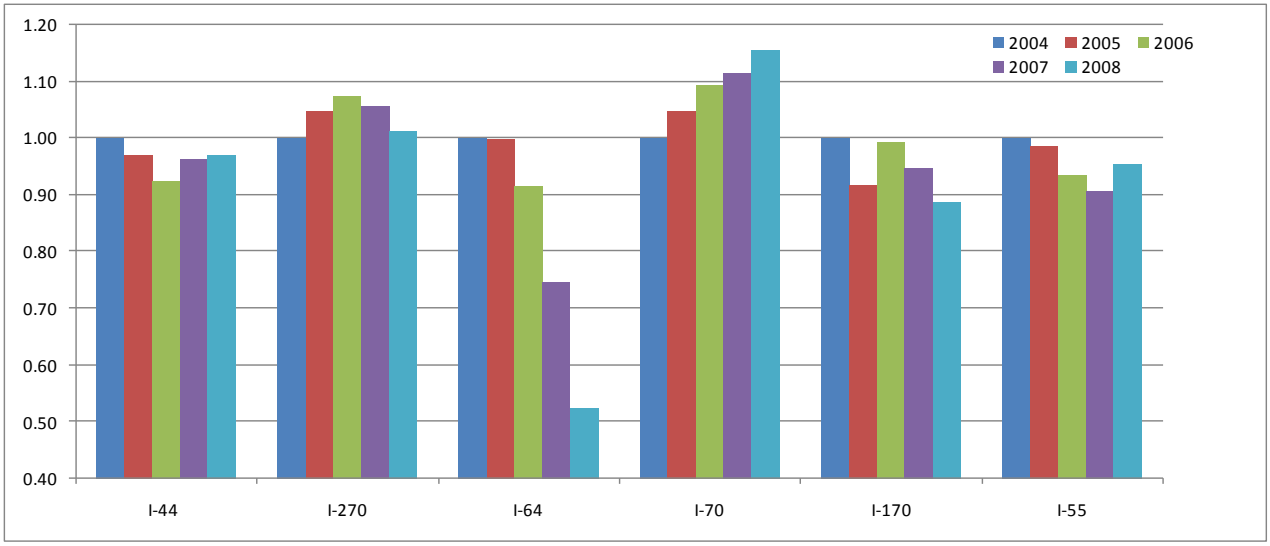


Figure S13: Relative All Crash Rate, Interstate Highway (Both Directions, Base year: 2004)

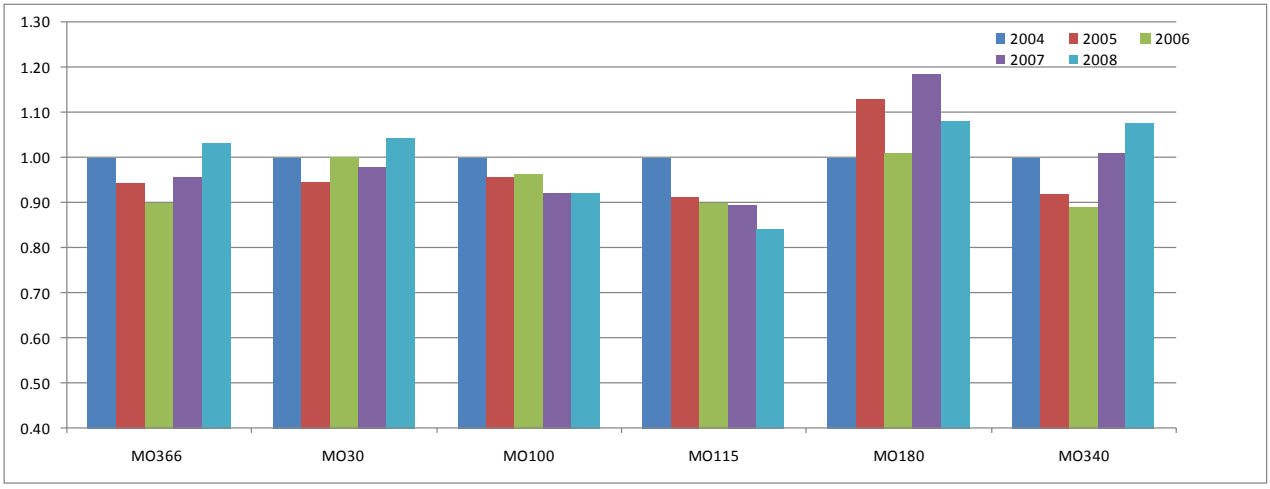


Figure S14: Relative All Crash Rate, MO Highway (Both Directions, Base year: 2004)

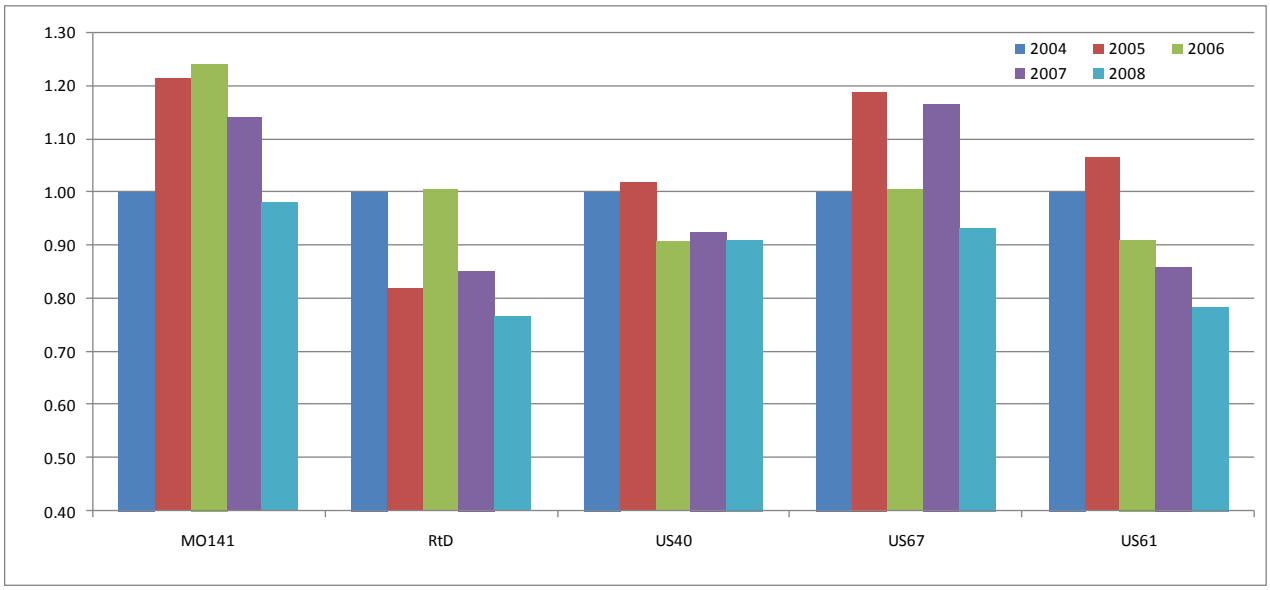
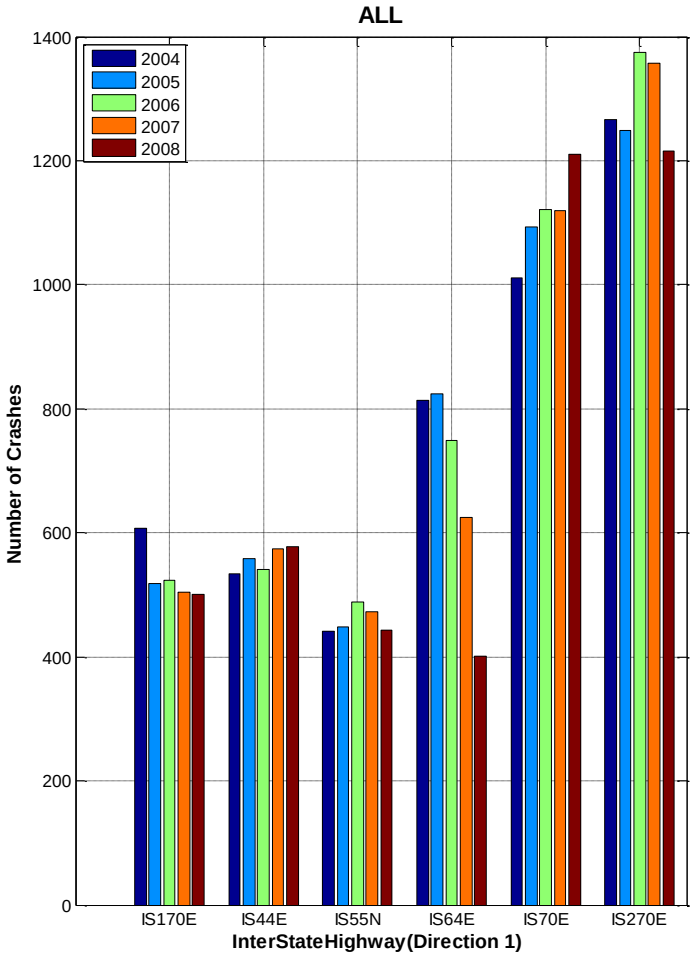


Figure S15: Relative All Crash Rate, US Highway and Expressway (Both Directions, Base year: 2004)

Appendix 1: Crashes (2004-2008)


ALL
2004
2005
2006
2007
2008
1400
1200
1000
800
600
400
200
0
Number of Crashes
IS170E
IS44E
IS55N
IS64E
IS70E
IS270E
InterStateHighway(Direction 1)

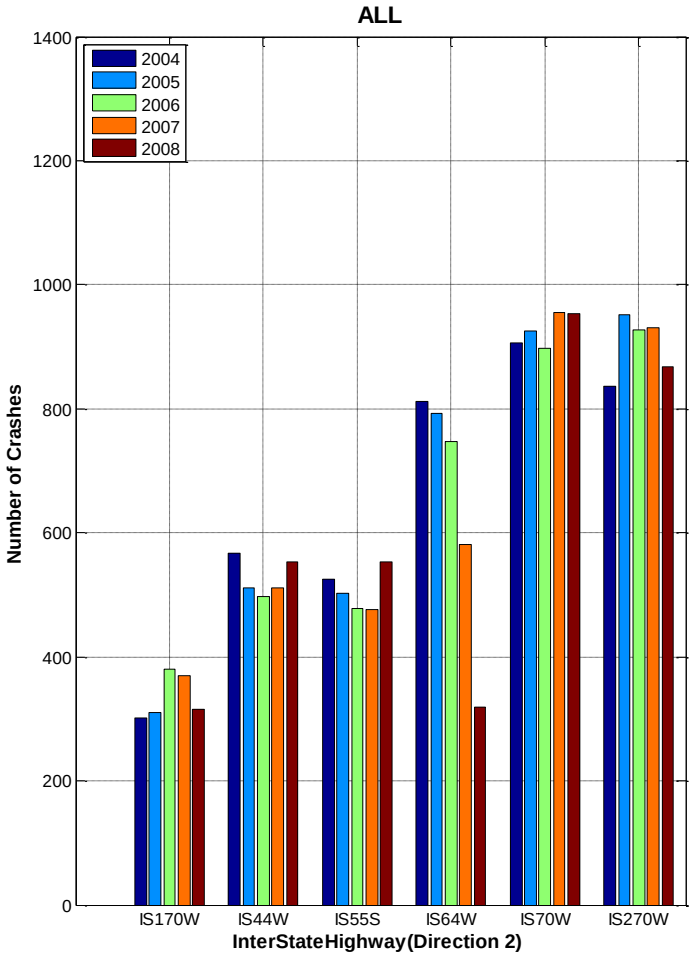
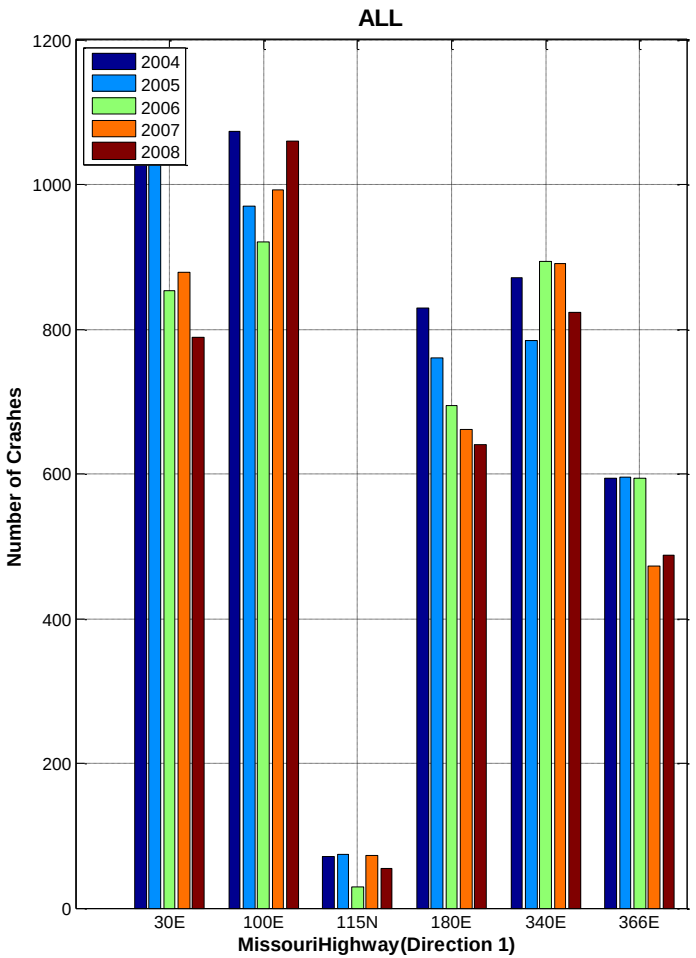

ALL
2004
2005
2006
2007
2008
1400
1200
1000
800
600
400
200
0
Number of Crashes
IS170W
IS44W
IS55S
IS64W
IS70W
IS270W
InterStateHighway(Direction 2)

Figure S16 : All Crashes on Interstate Highway (Both directions, 2004-2008)



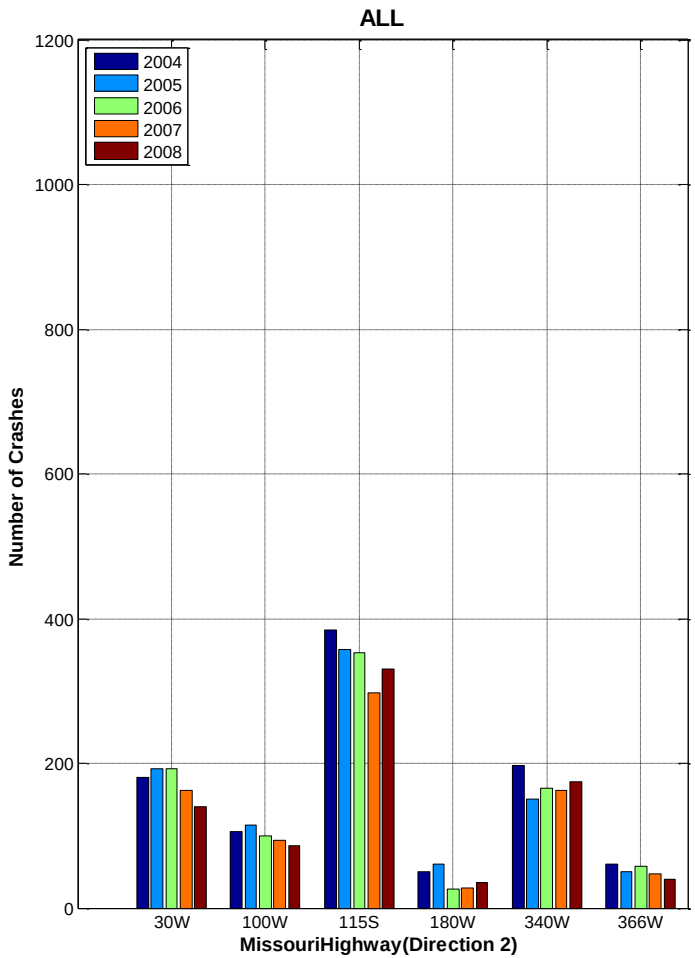


Figure S17: All Crashes on MO Highway (Both directions, 2004-2008)

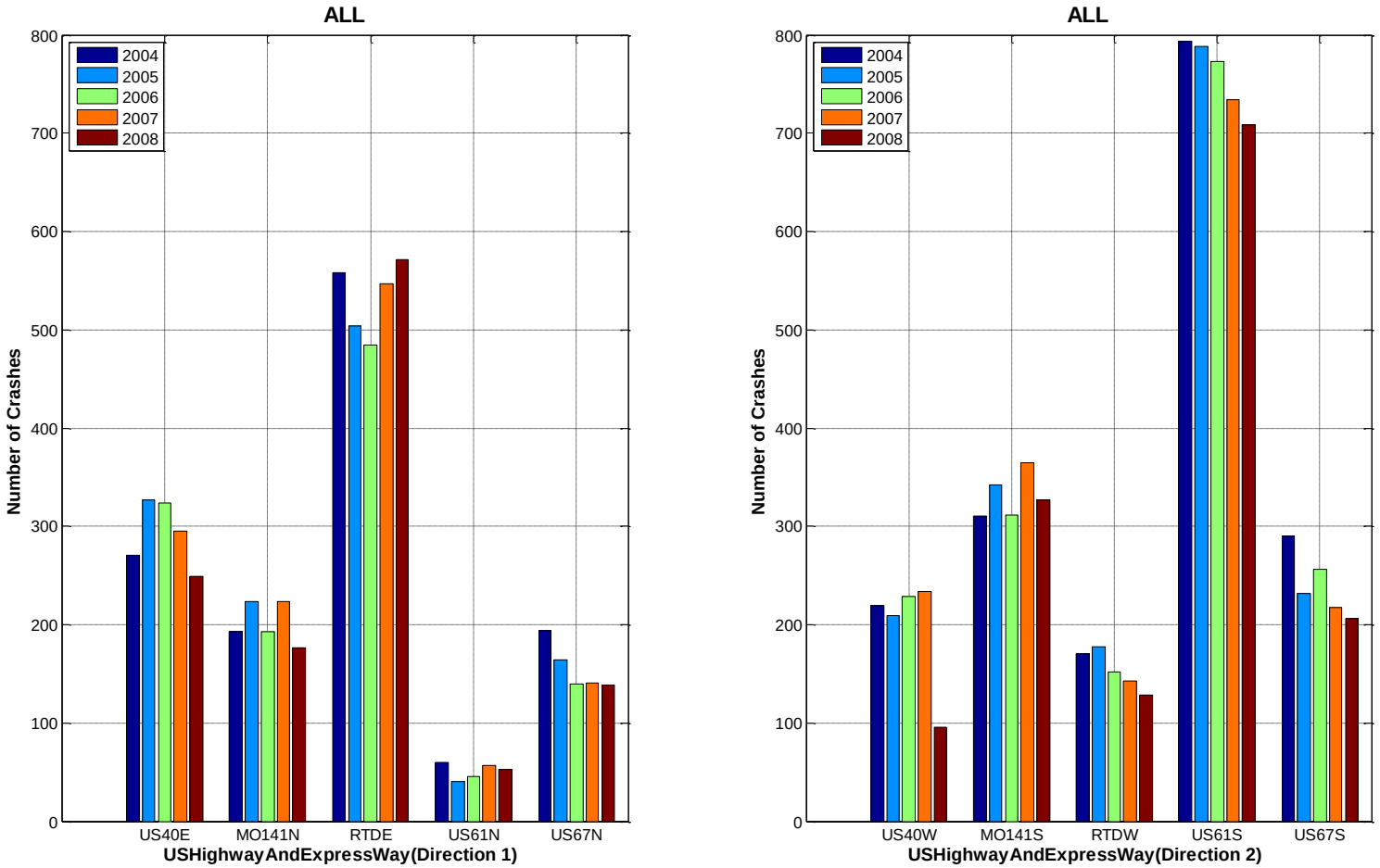


Figure S18: All Crashes on US Highway and Expressway (Both directions, 2004-2008)

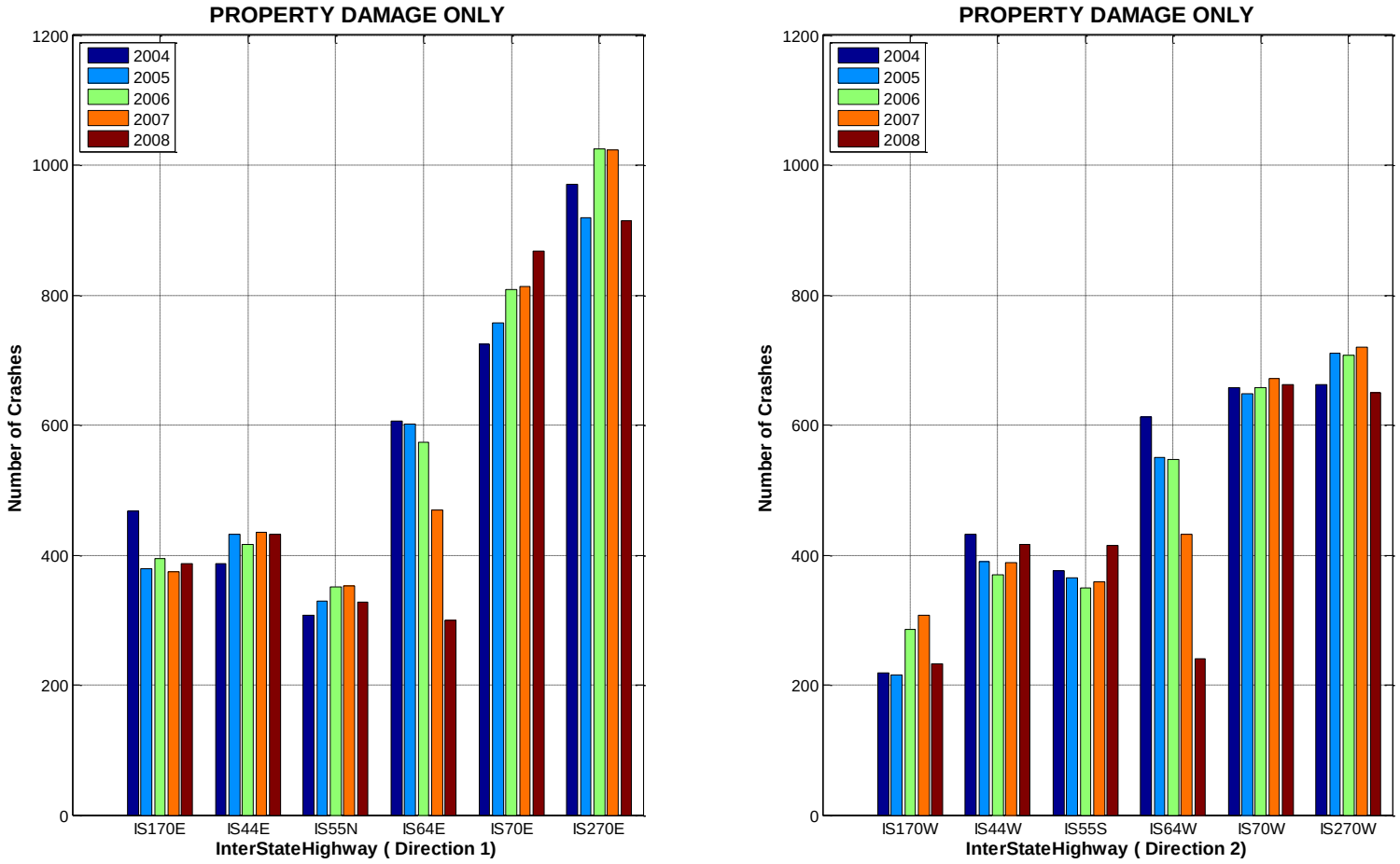


Figure S19: Property Damage in Interstate Highway (Both directions, 2004-2008)

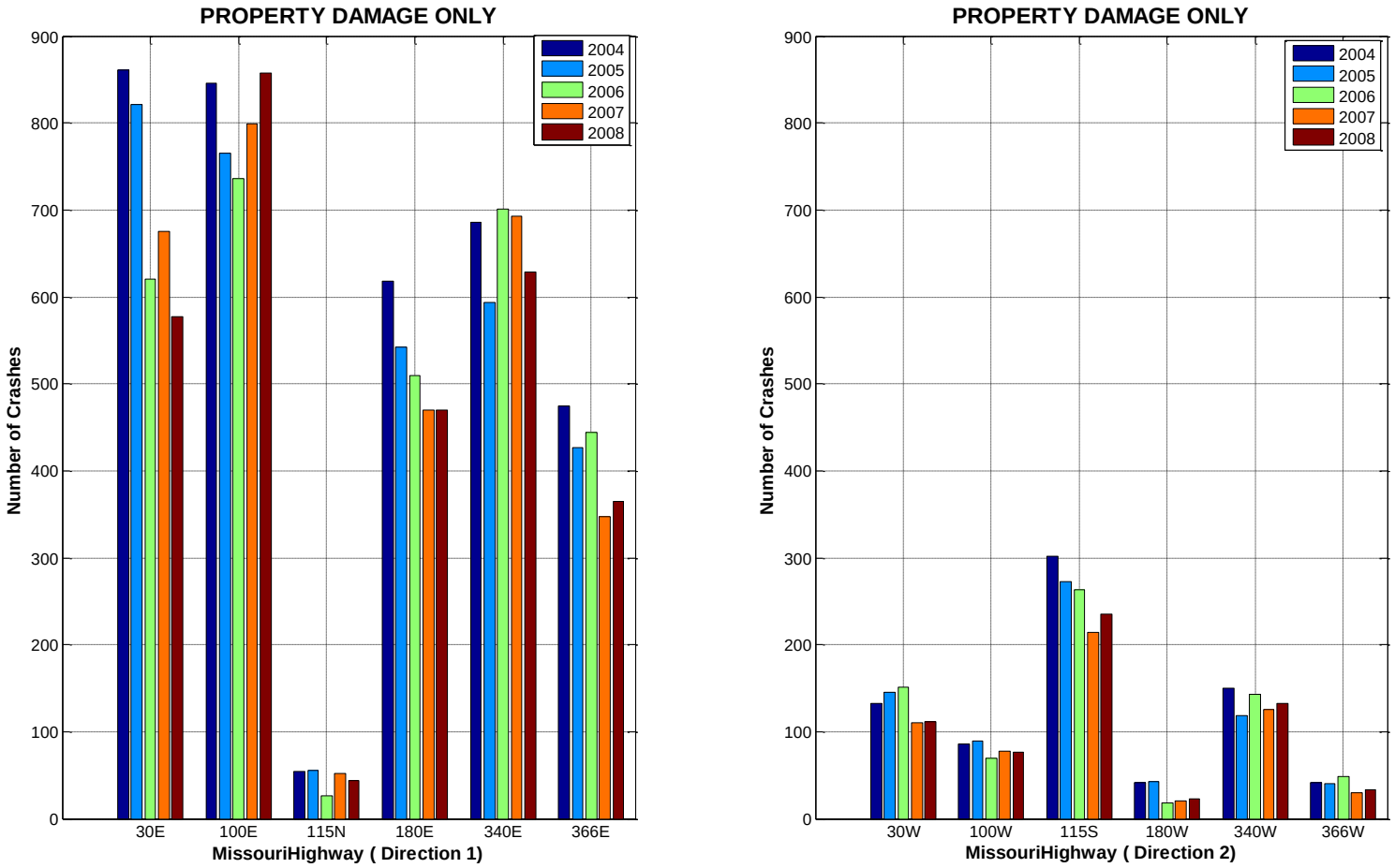


Figure S20: Property Damage in Missouri Highway (Both directions, 2004-2008)

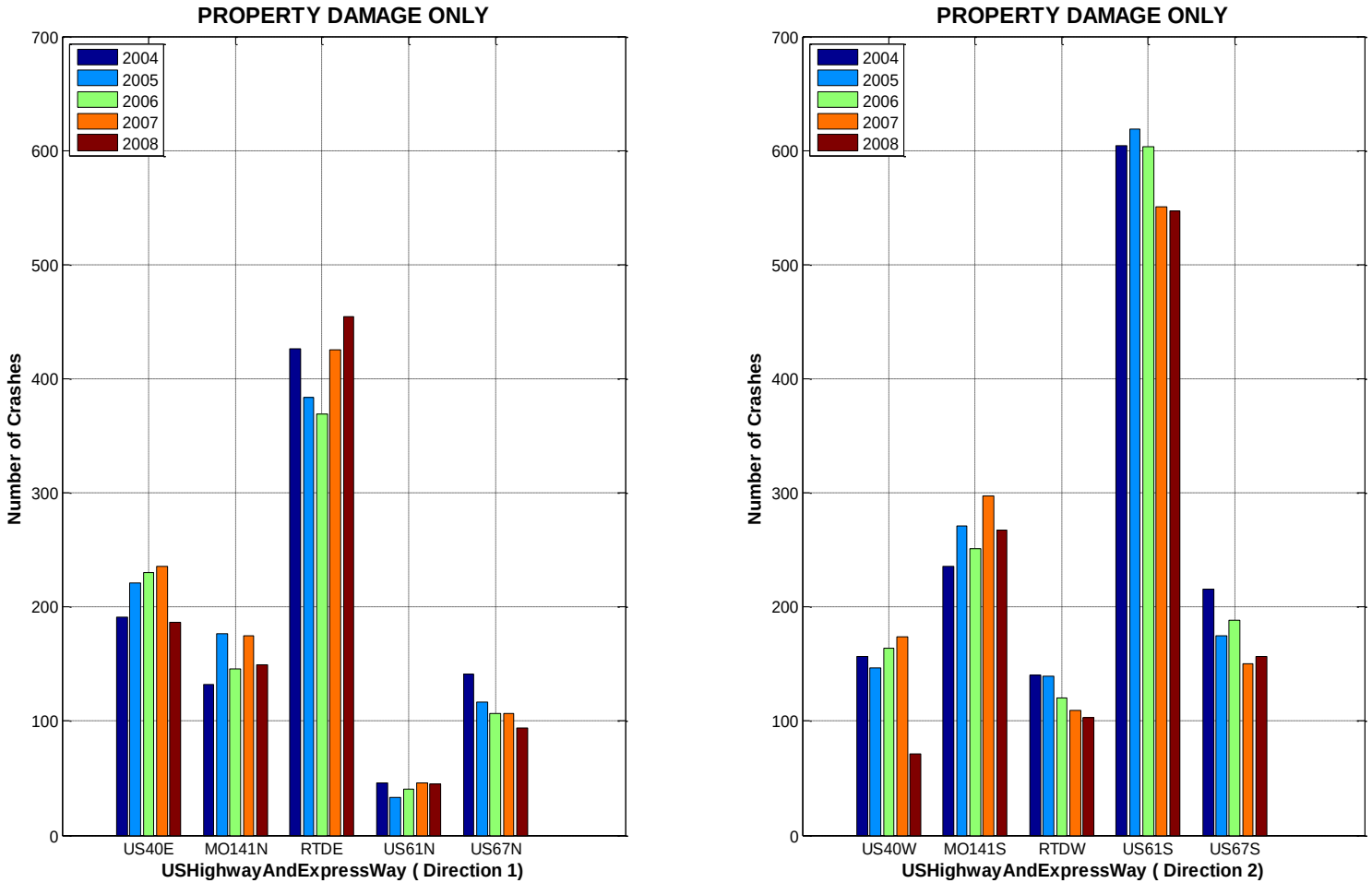


Figure S21: Property Damage in US Highway and Expressway (Both directions, 2004-2008)

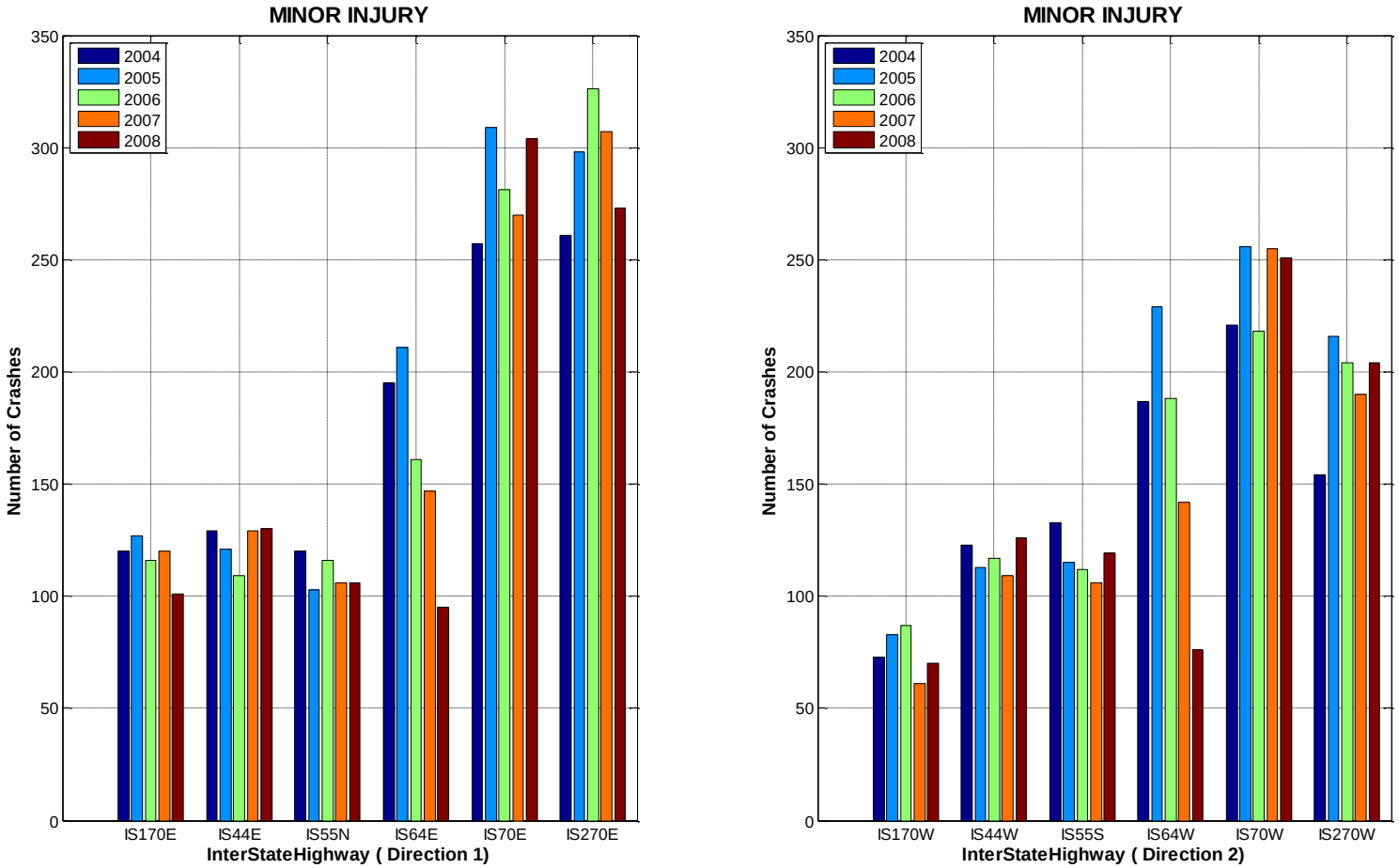


Figure S22: Minor Injury in Interstate Highway (Both directions, 2004-2008)

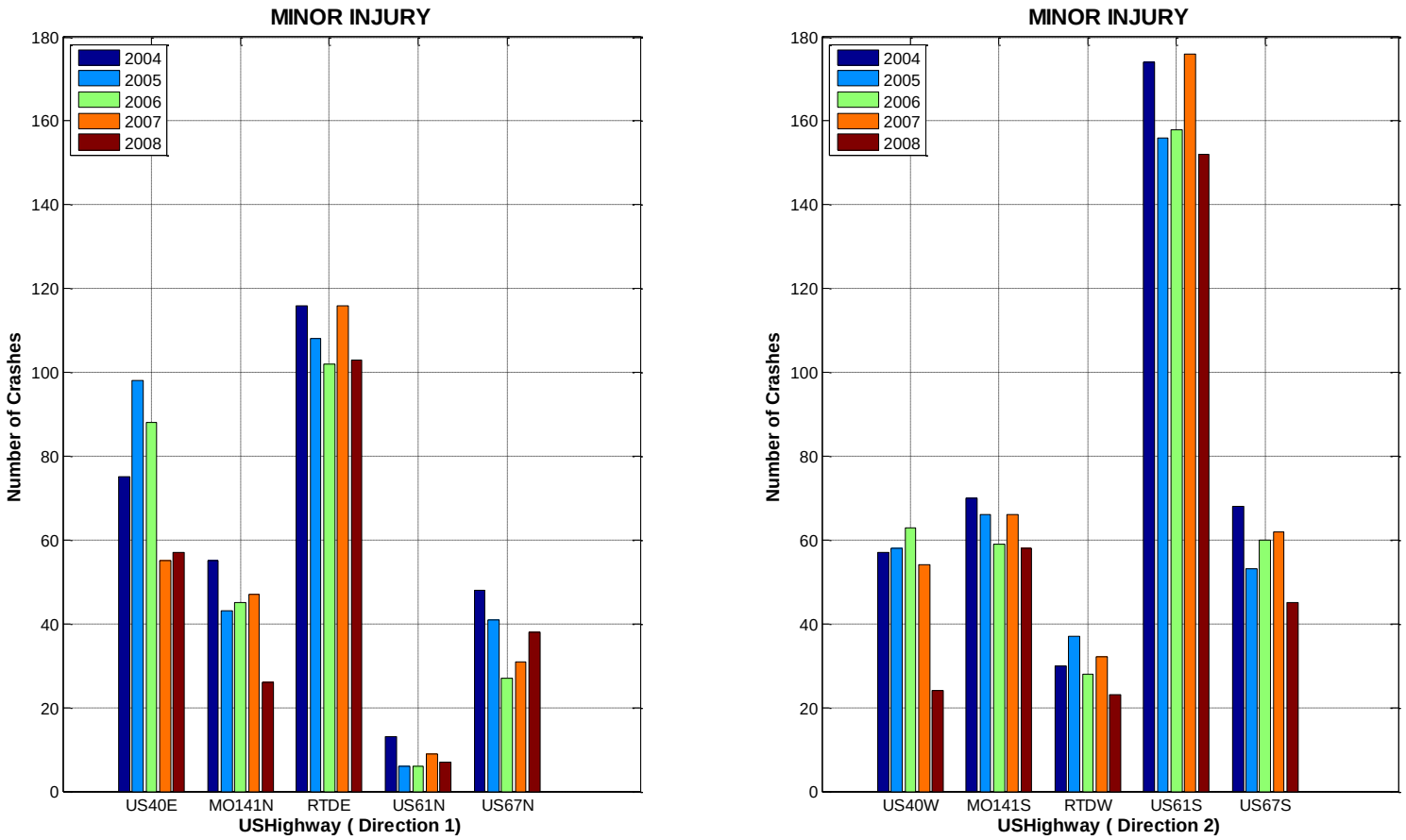


Figure S23: Minor Injury in US Highway and Expressway (Both directions, 2004-2008)

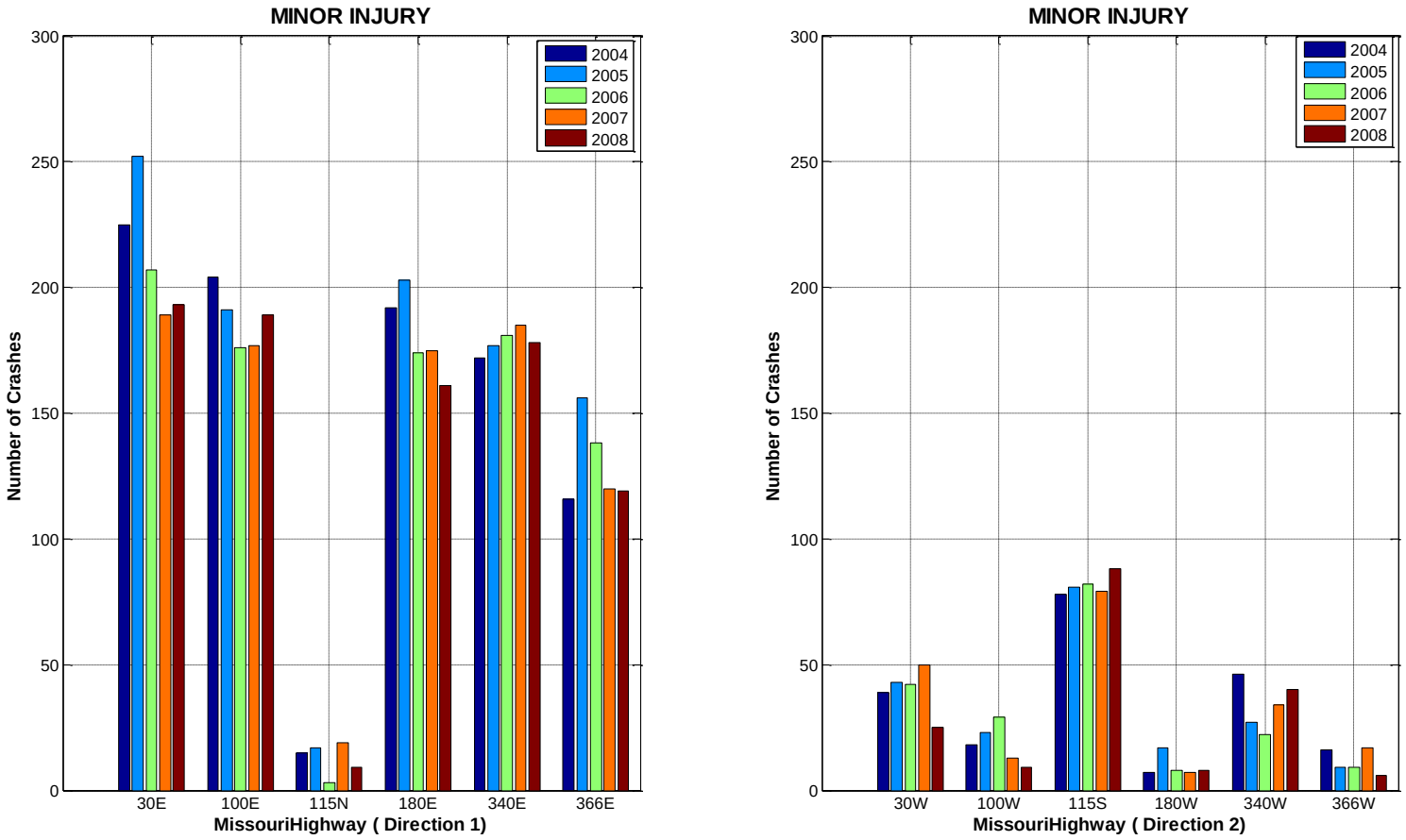


Figure S24: Minor Injury in Missouri Highway (Both directions, 2004-2008)

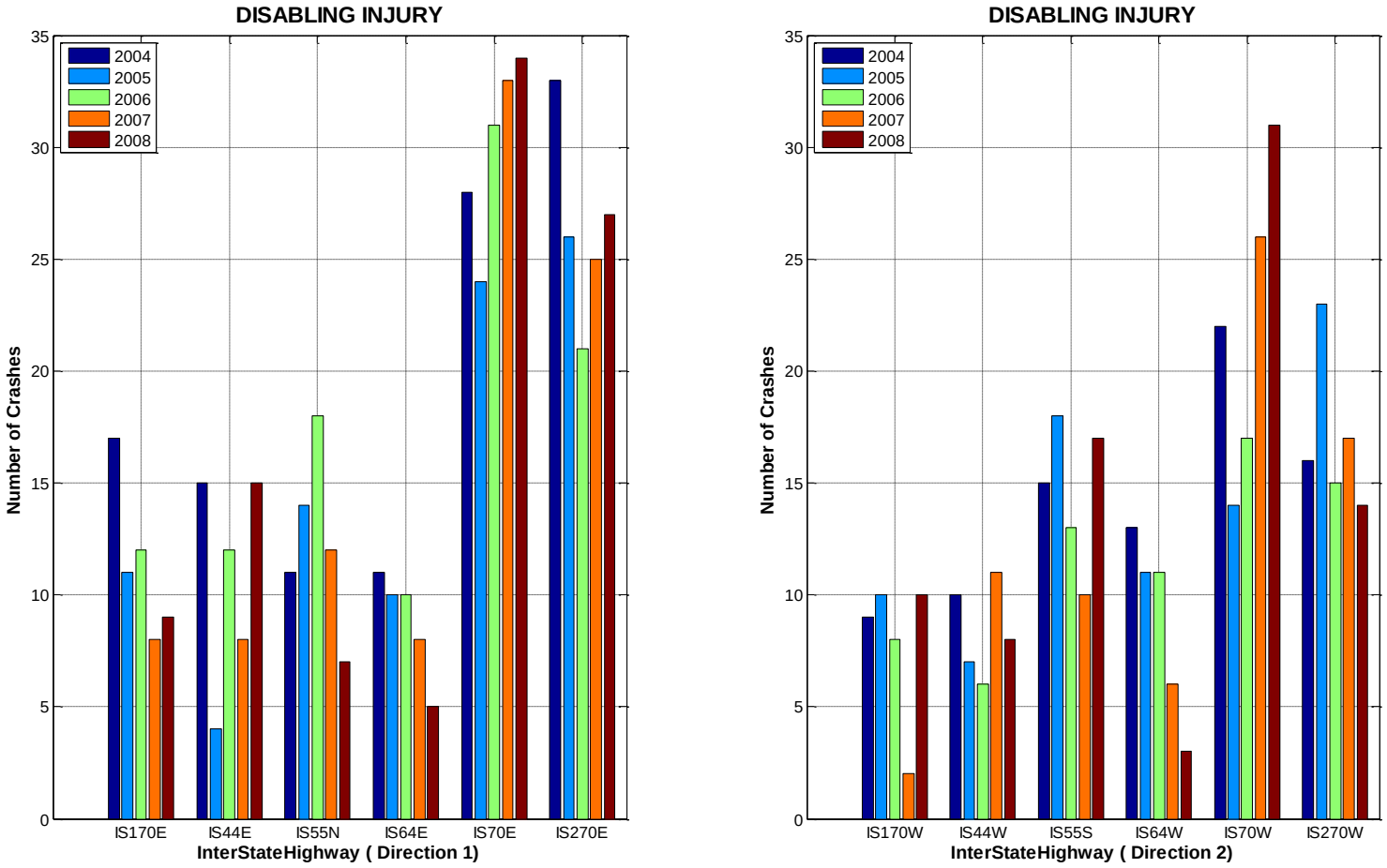


Figure S25: Disabling Injury in Interstate Highway (Both directions, 2004-2008)

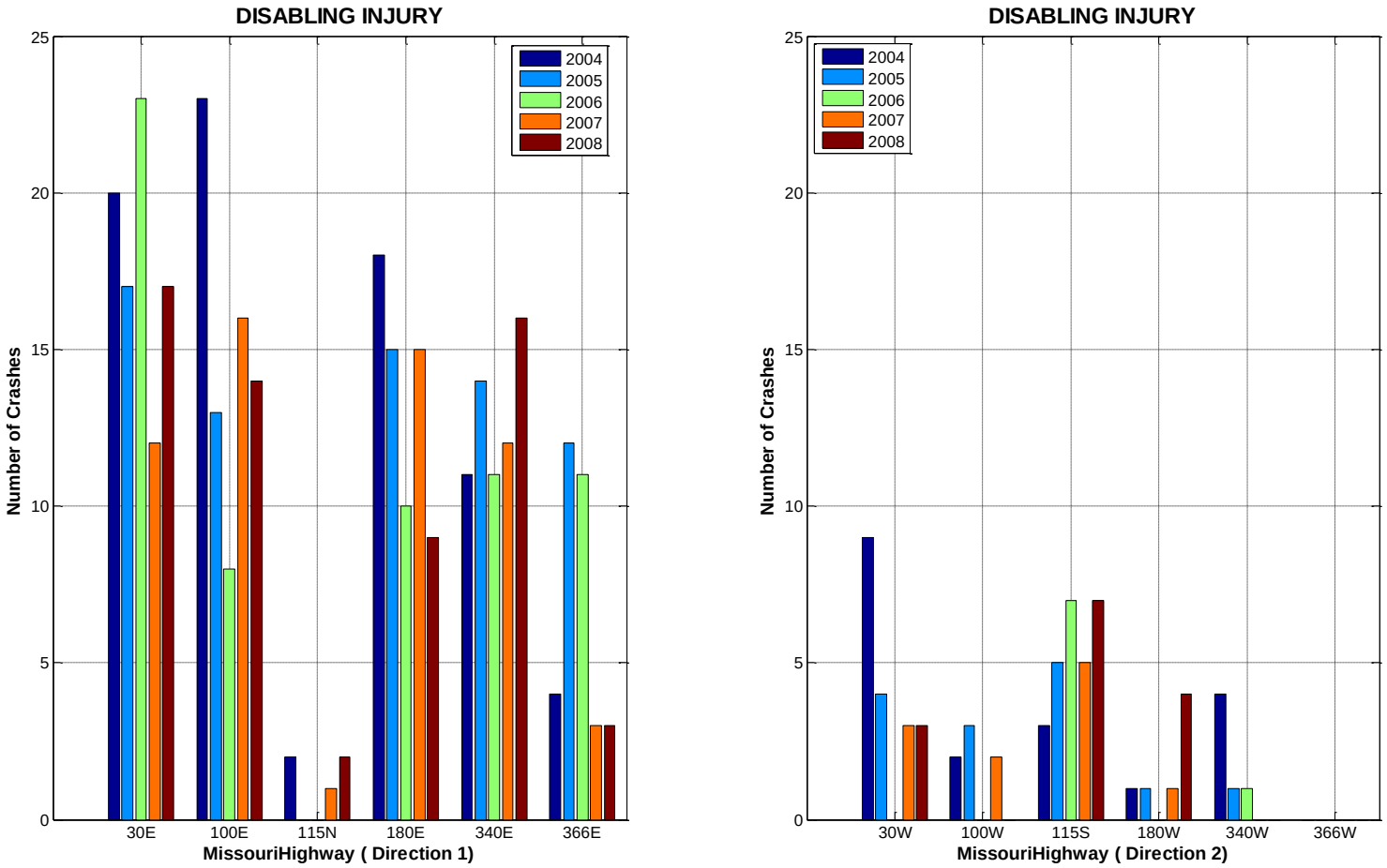


Figure S26: Disabling Injury in Missouri Highway (Both directions, 2004-2008)

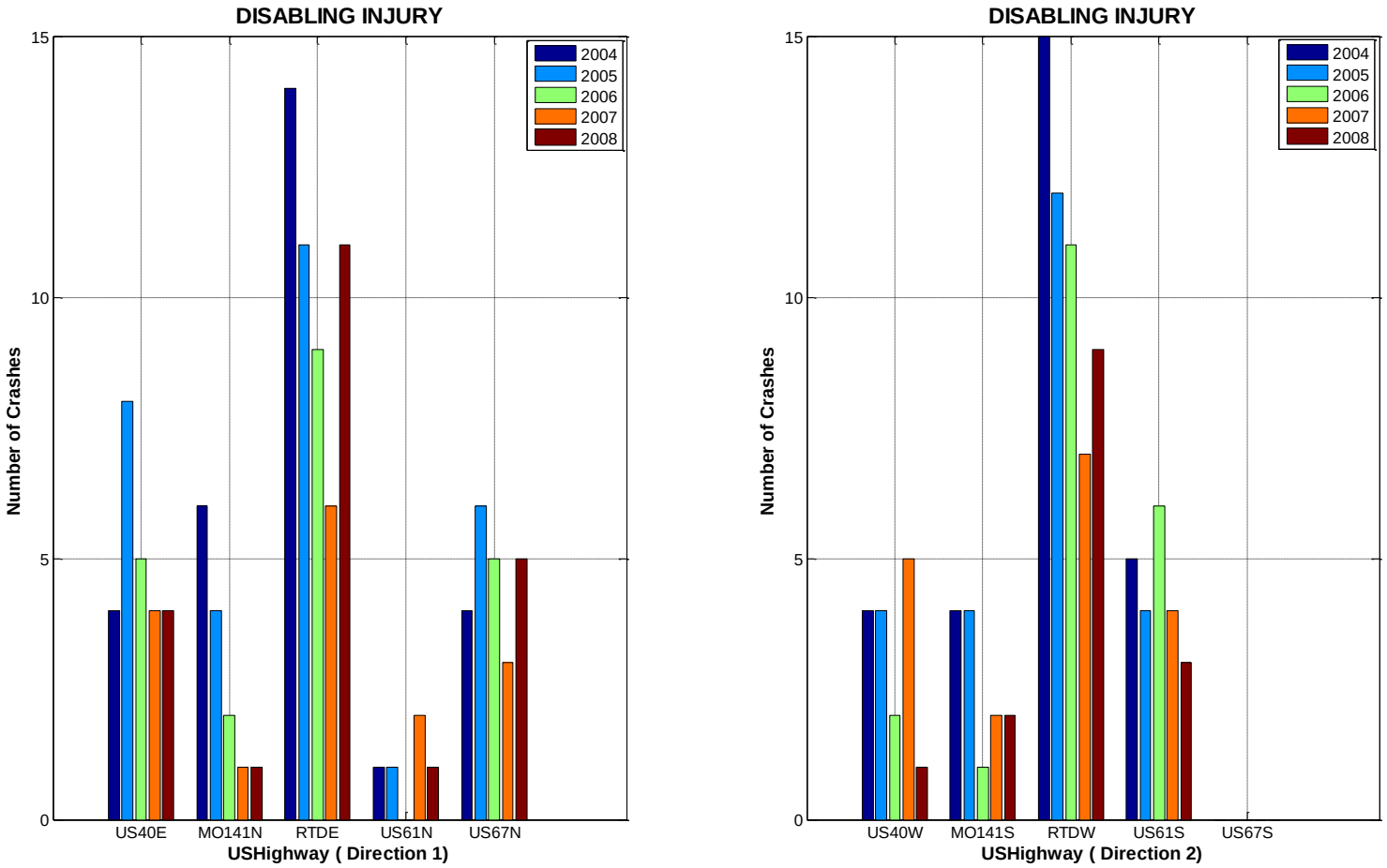


Figure S27: Disabling Injury in US Highway and Expressway (Both directions, 2004-2008)

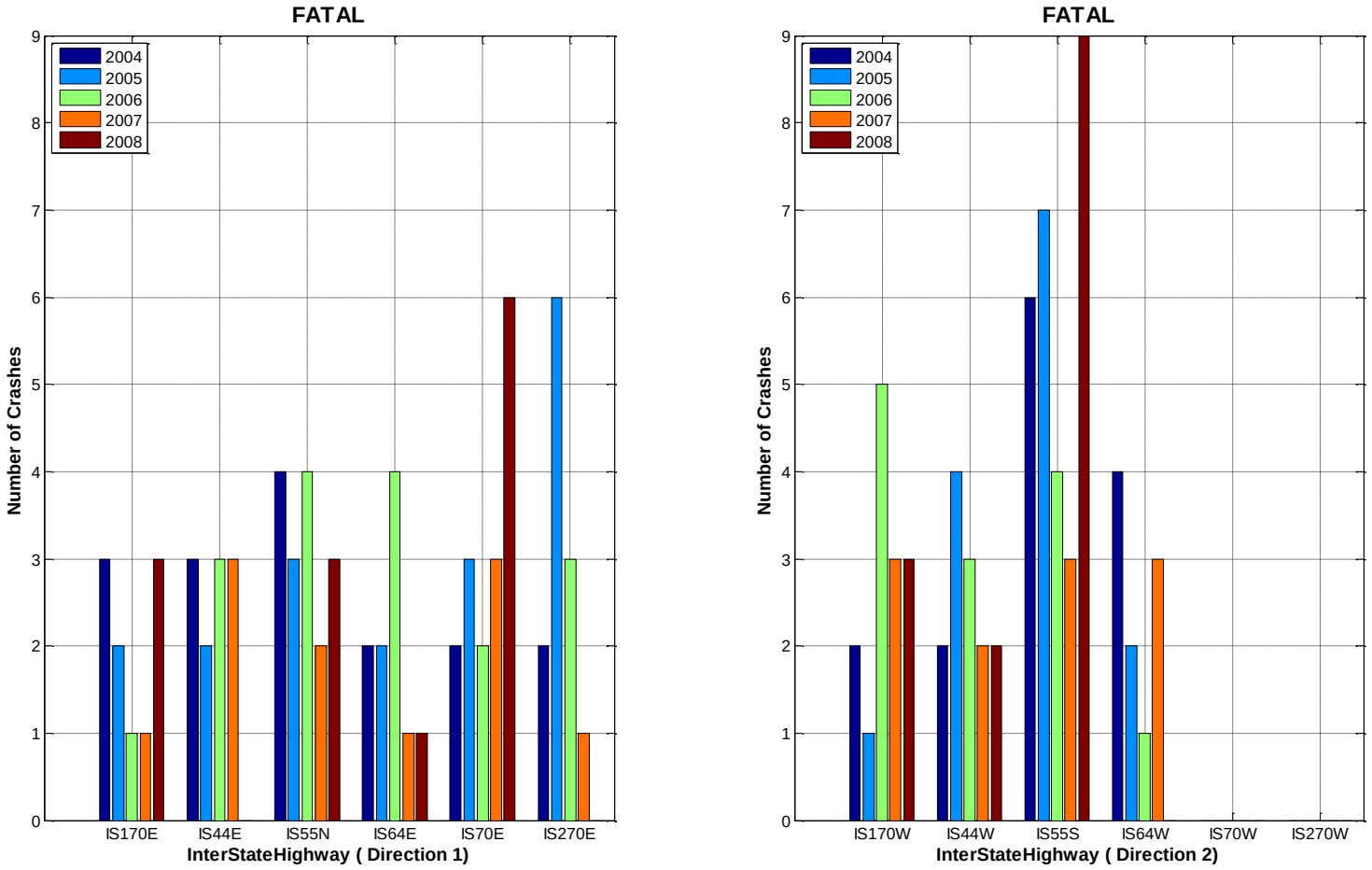


Figure S28: Fatality in Interstate Highway (Both directions, 2004-2008)

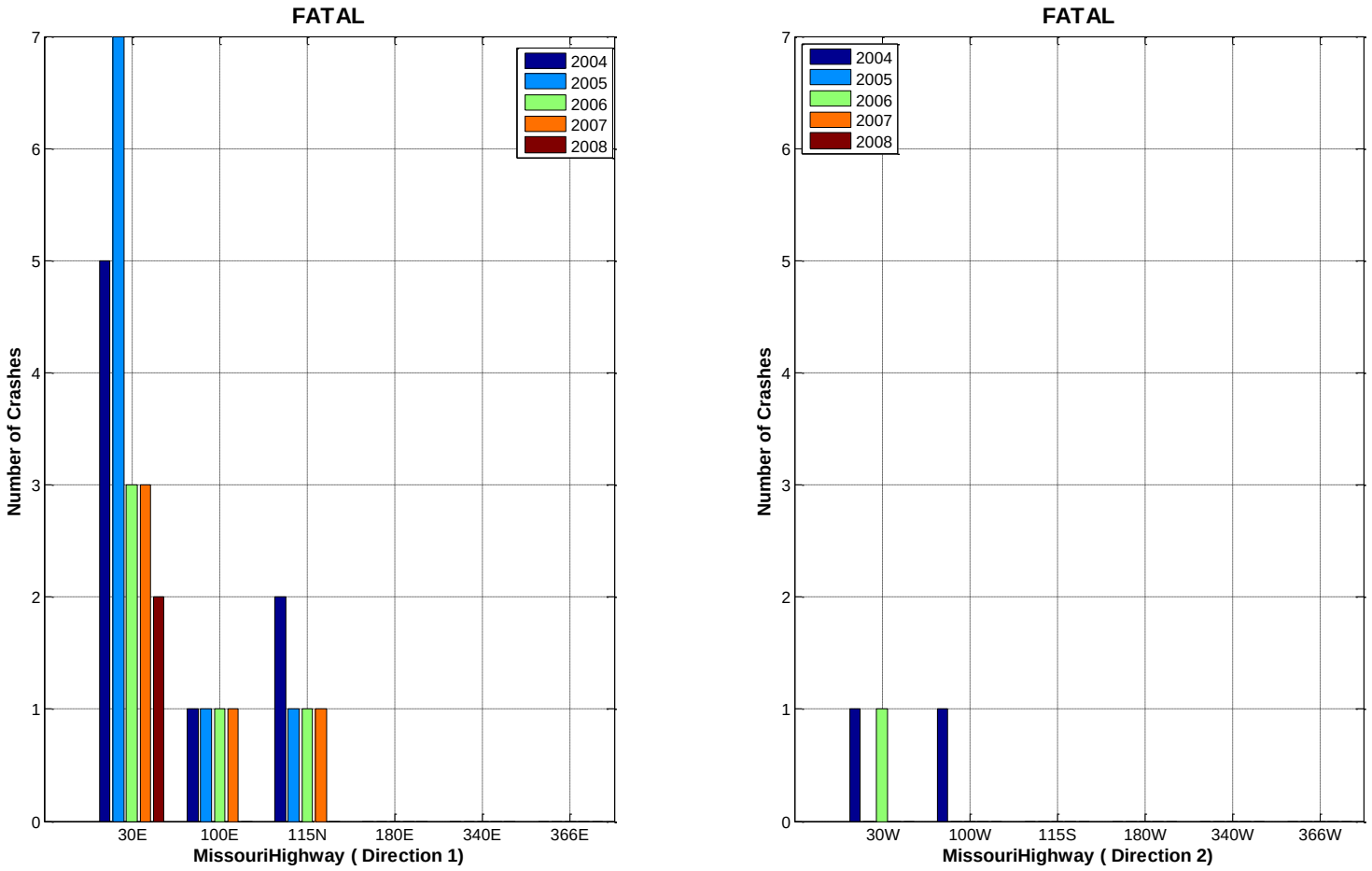


Figure S29: Fatality in Missouri Highway (Both directions, 2004-2008)

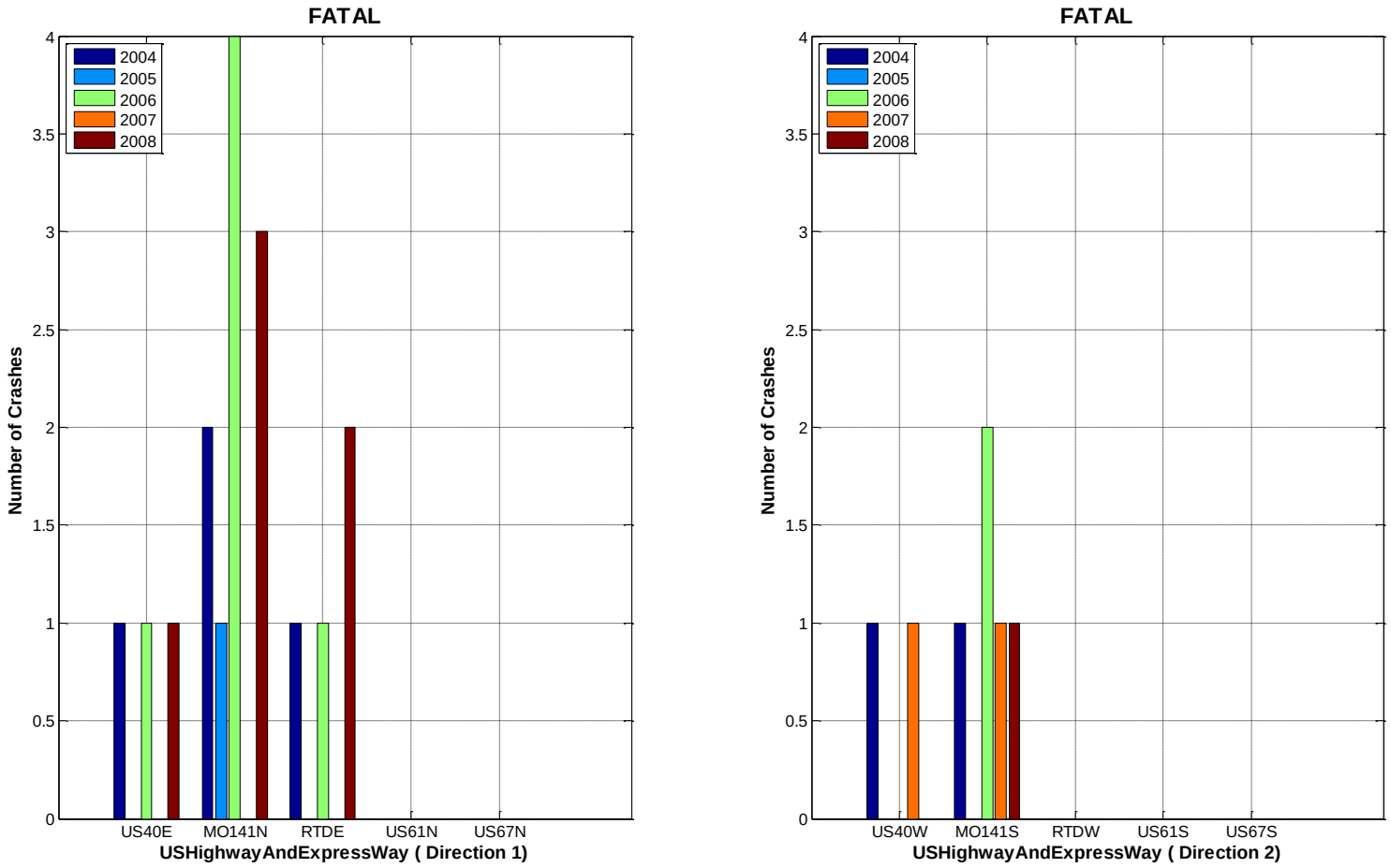


Figure S30: Fatality in US Highway and Expressway (Both directions, 2004-2008)

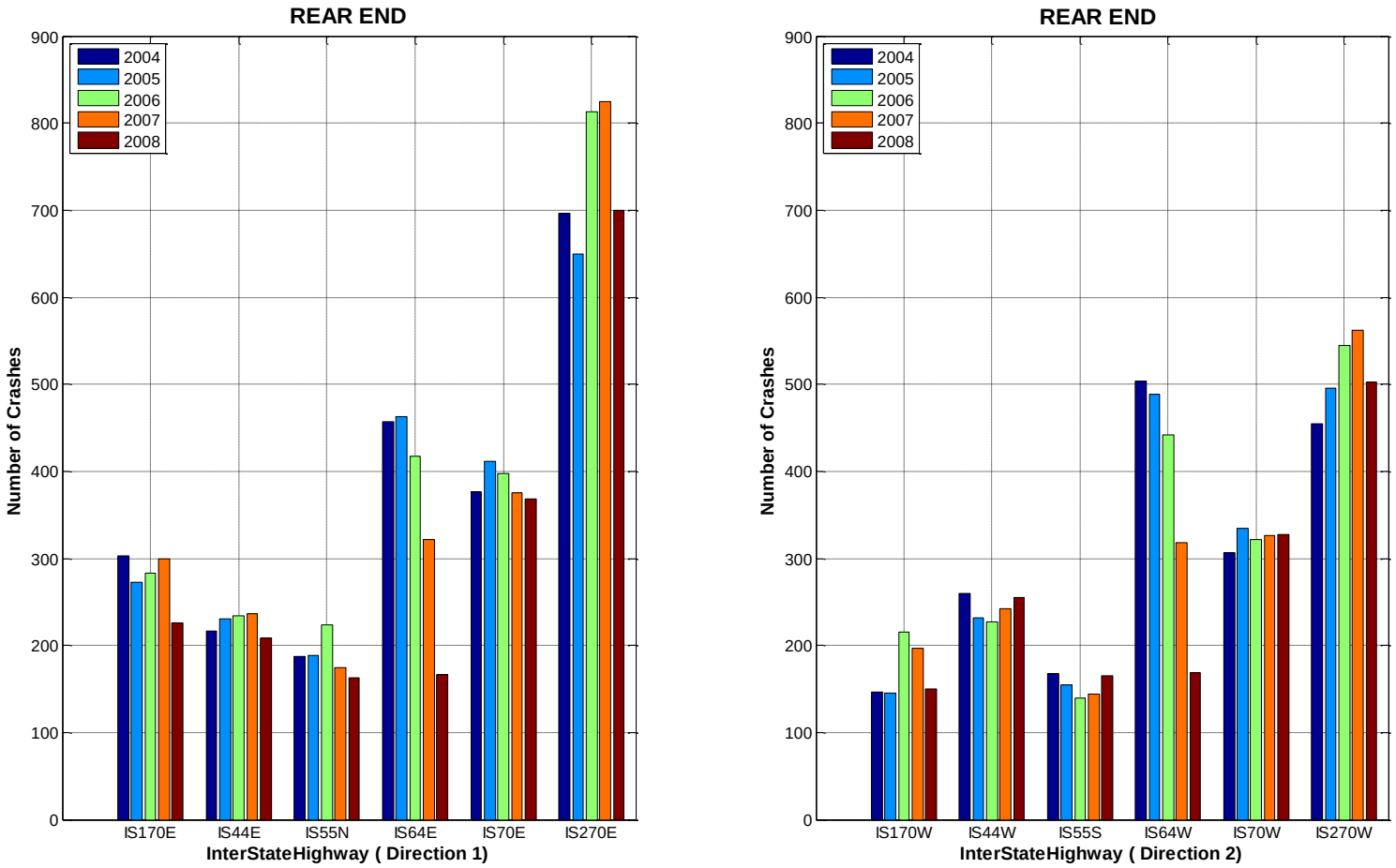


Figure S31: REAR-END in Inter-State Highway (Both directions, 2004-2008)

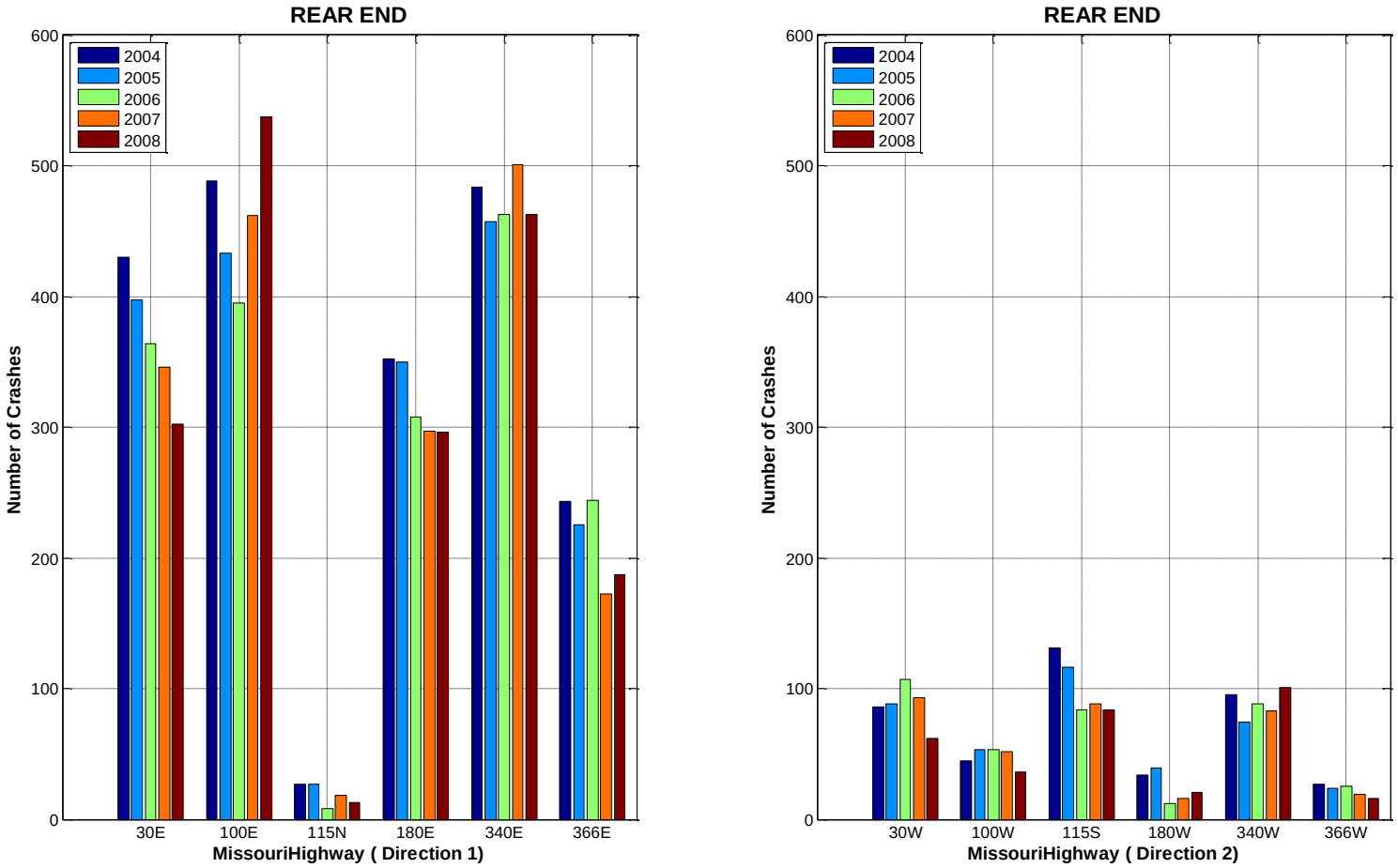


Figure S32: REAR-END in MO Highway (Both directions, 2004-2008)

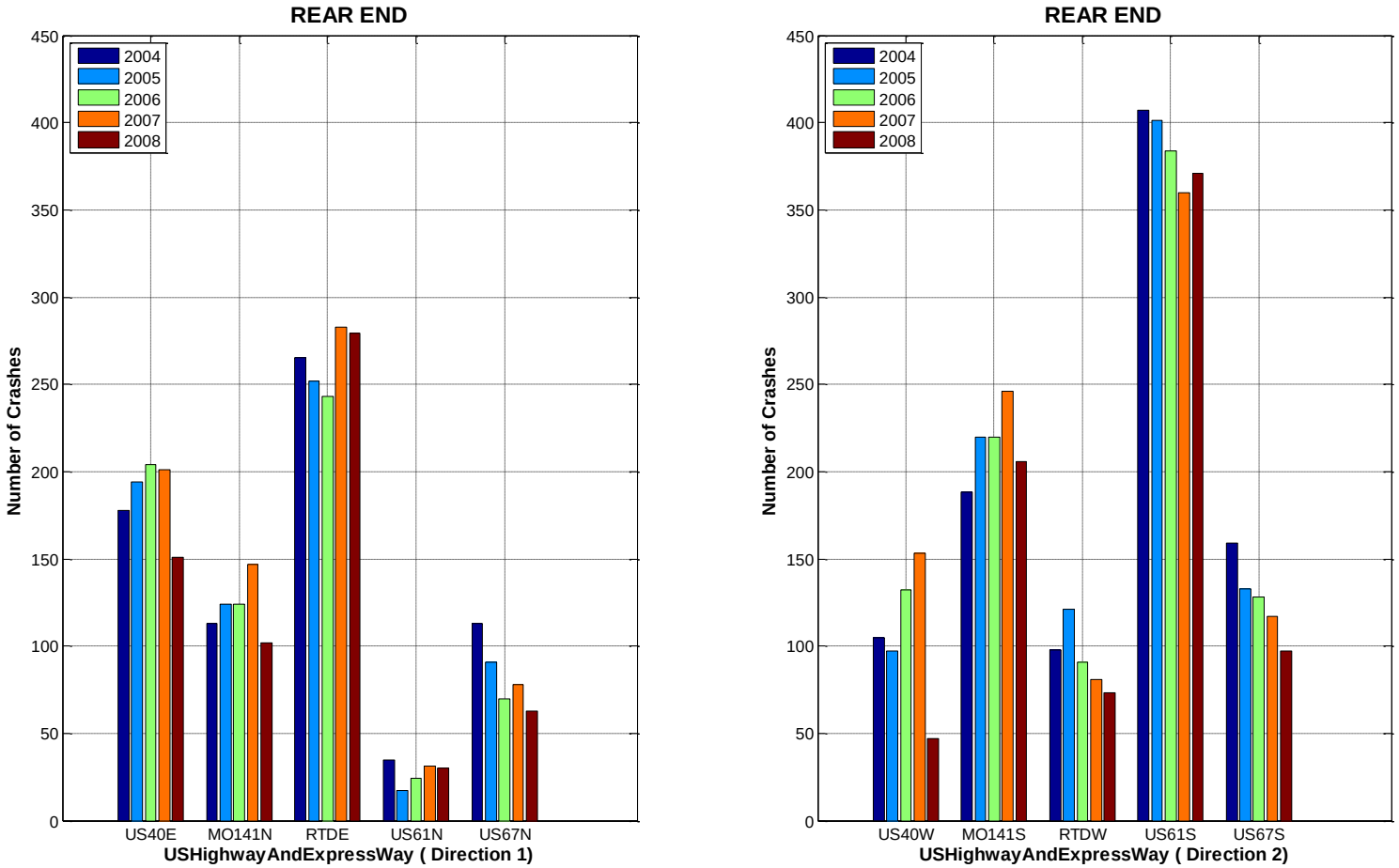


Figure S33: REAR-END in US Highway (Both directions, 2004-2008)

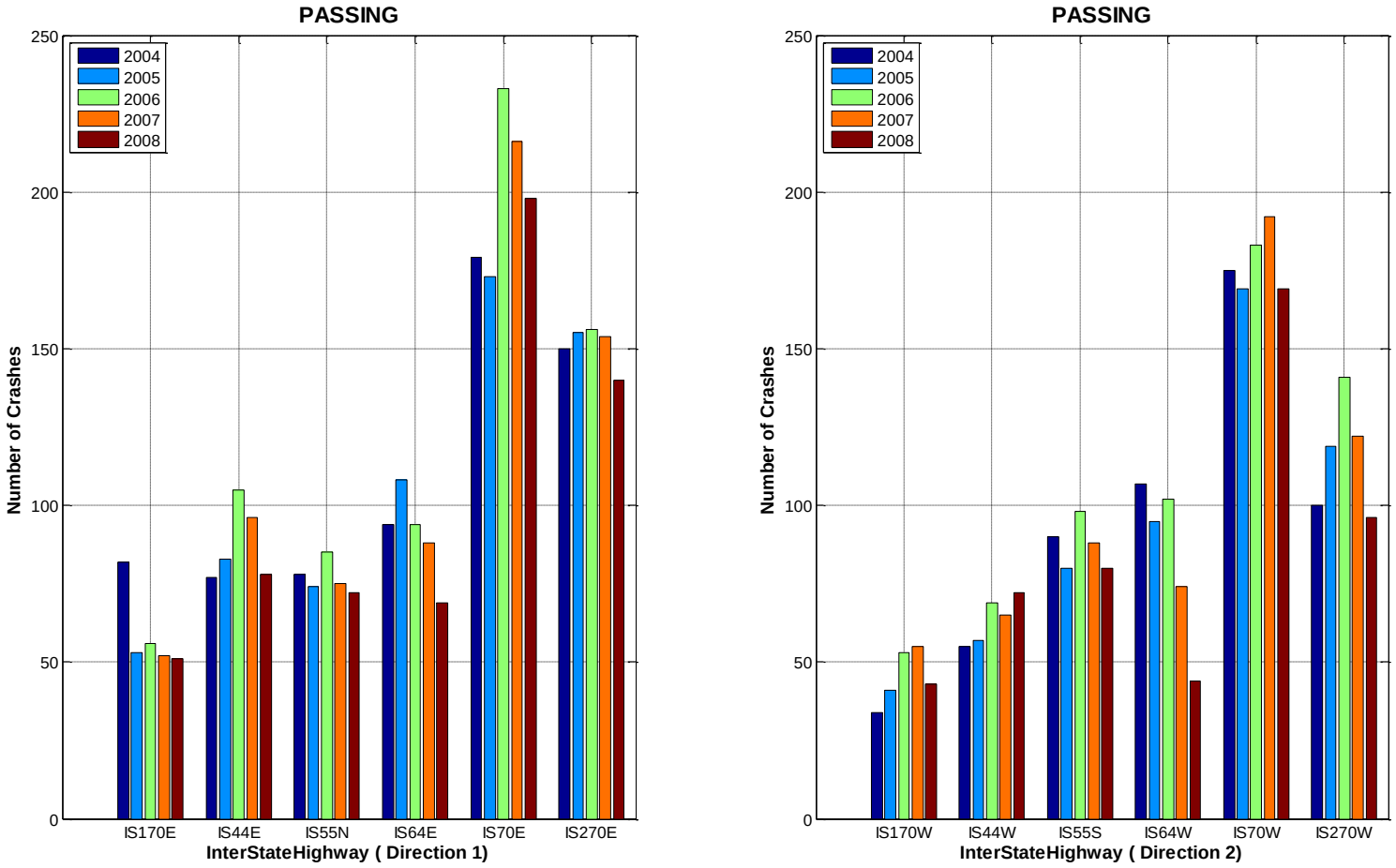


Figure S34: PASSING in Inter-State Highway (Both directions, 2004-2008)

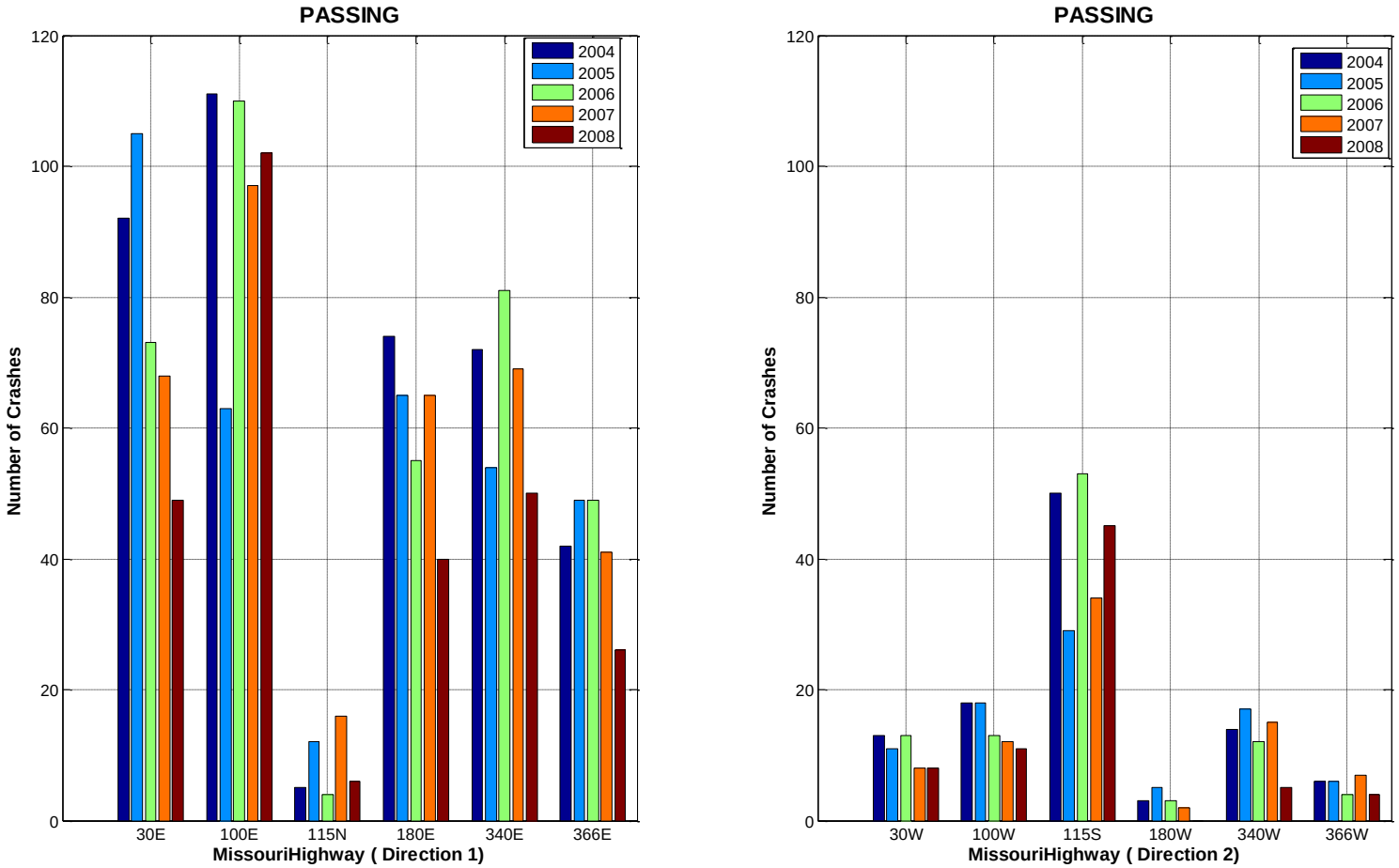


Figure S35: PASSING in Missouri Highway (Both directions, 2004-2008)

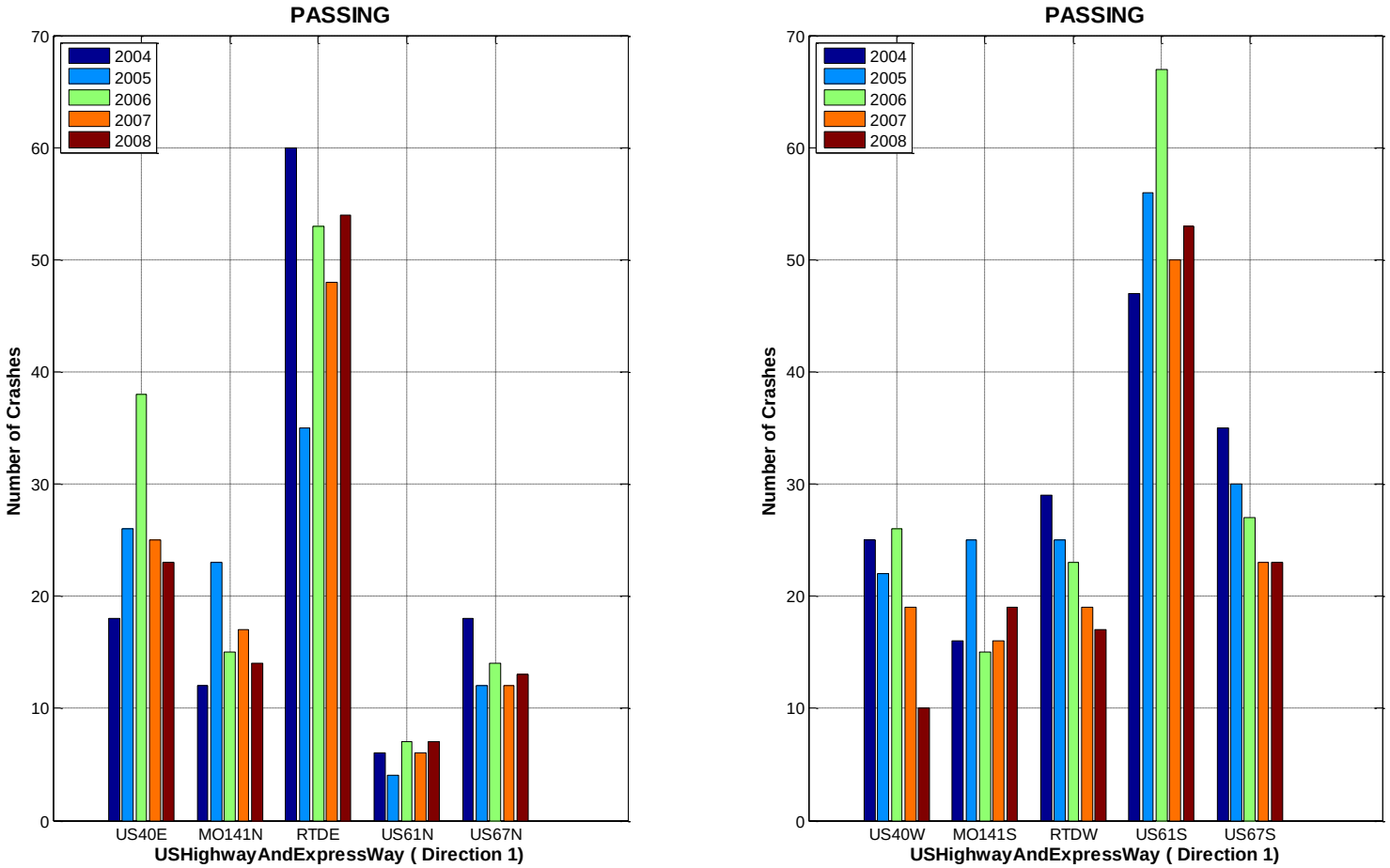


Figure S36: PASSING in US Highway (Both directions, 2004-2008)

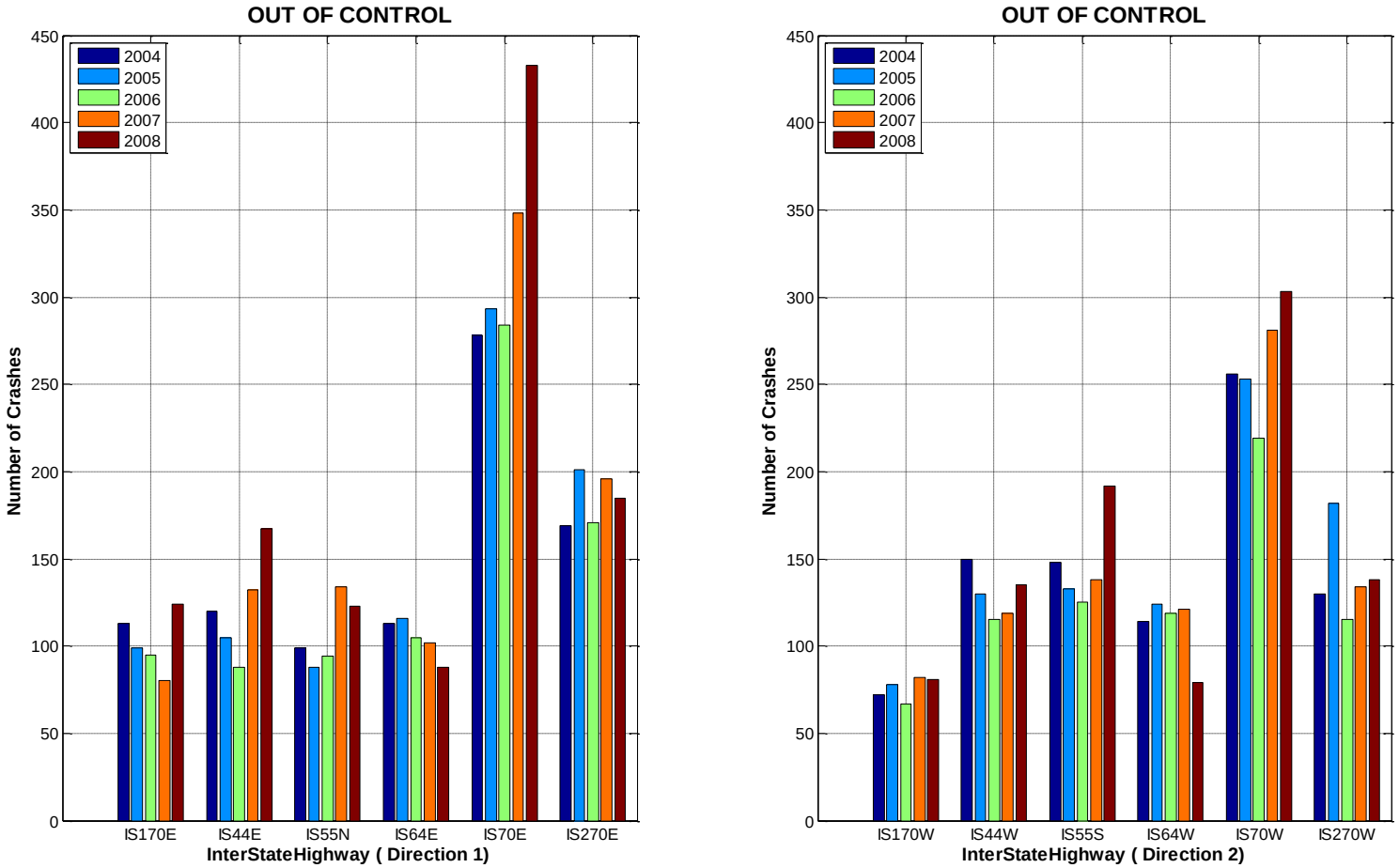


Figure S37: Out of Control in Interstate Highway (Both directions, 2004-2008)

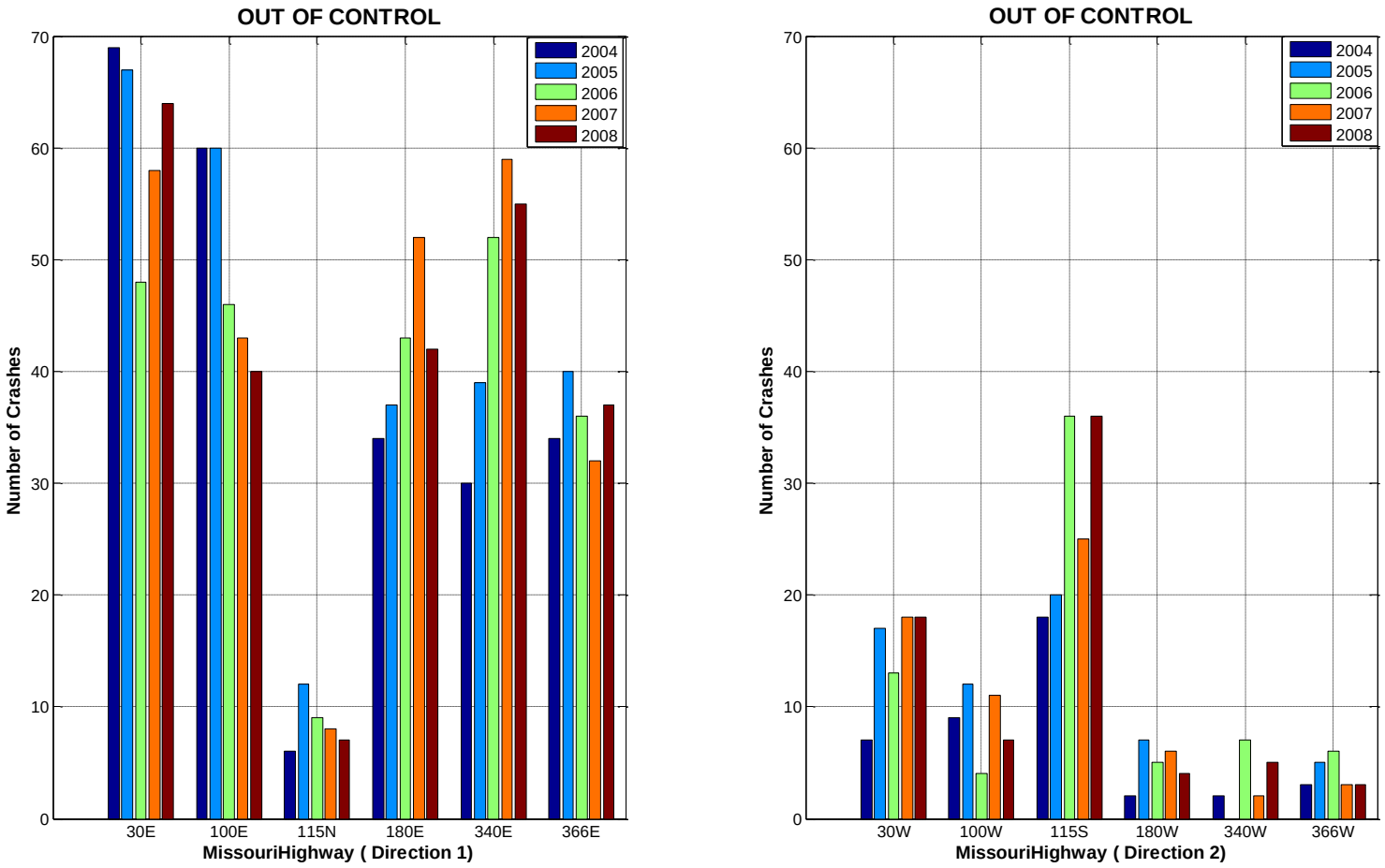


Figure S38: Out of Control in Missouri Highway (Both directions, 2004-2008)

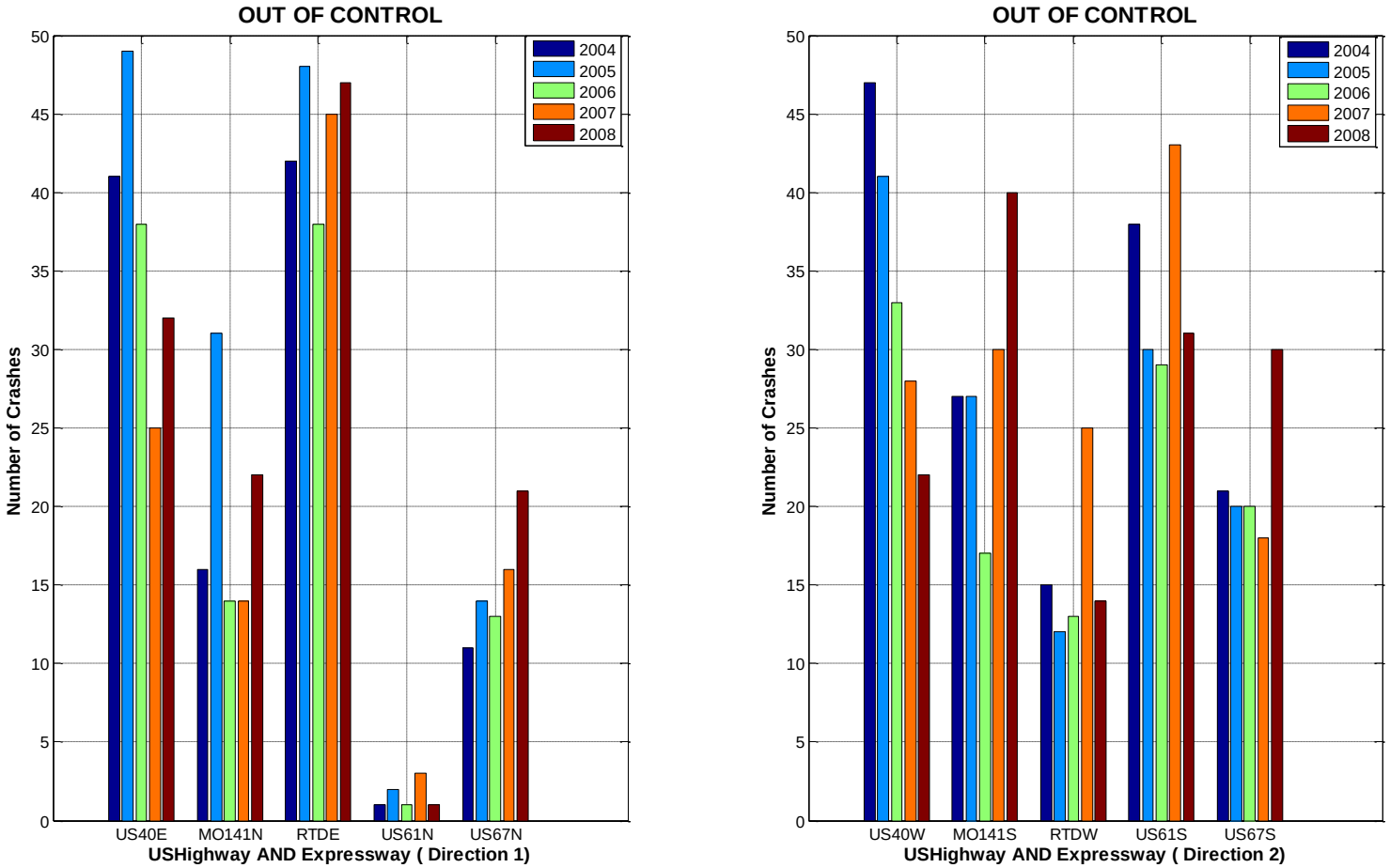


Figure S39: Out of Control in US Highway (Both directions, 2004-2008)

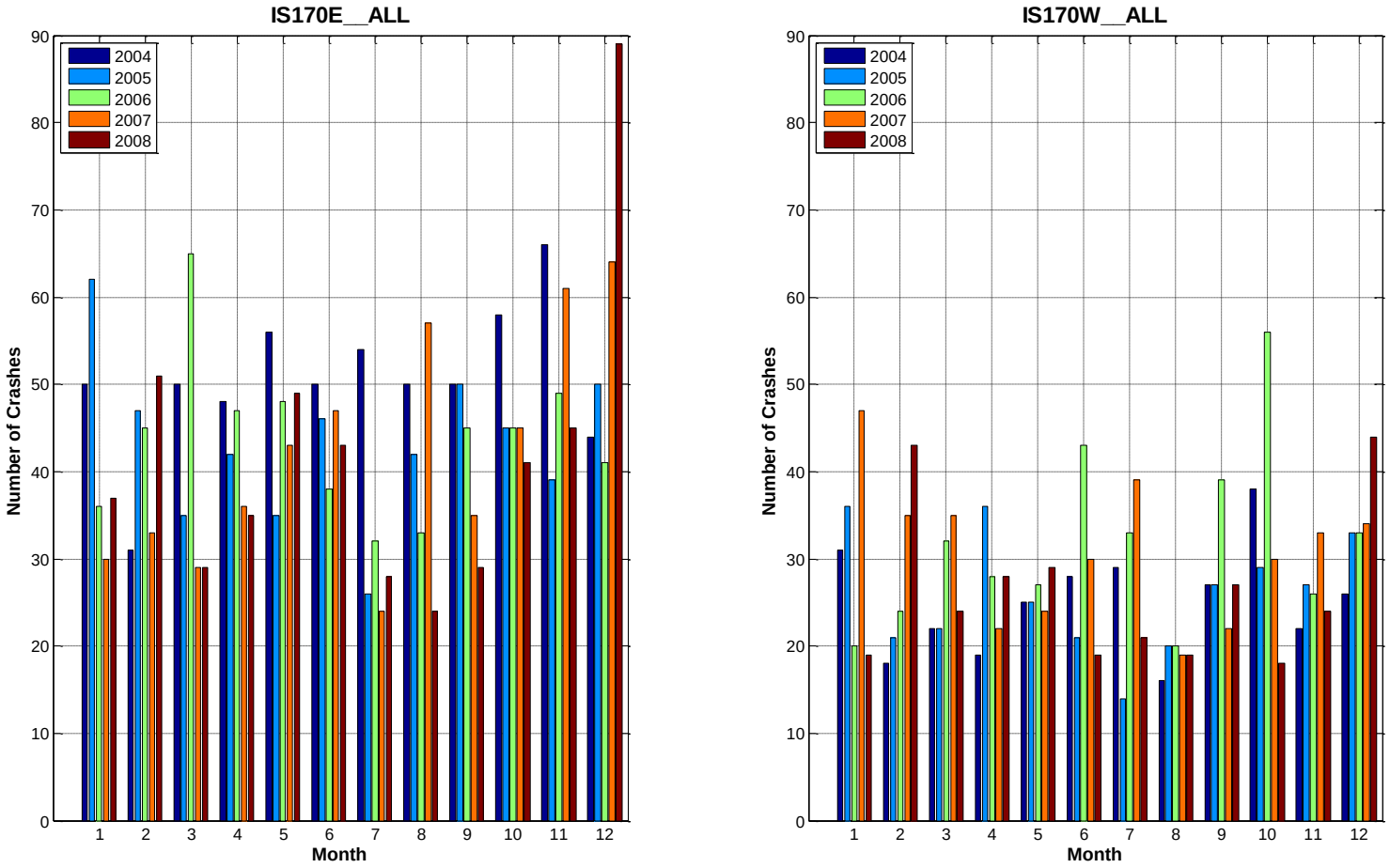


Figure S40: Crashes by Month on IS170 (Both directions, 2004-2008)

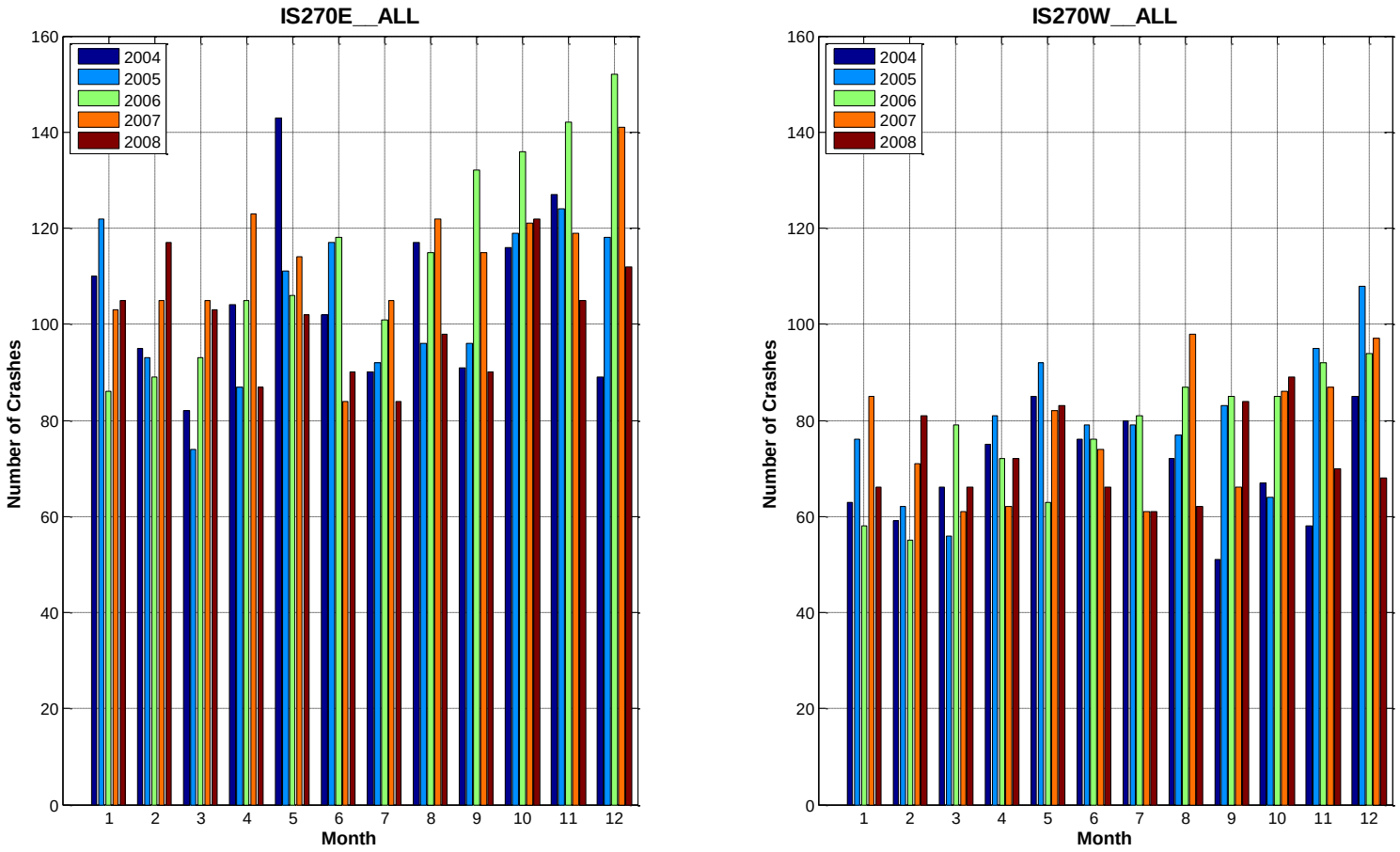


Figure S41: Crashes by Month on I-270 (Both directions, 2004-2008)

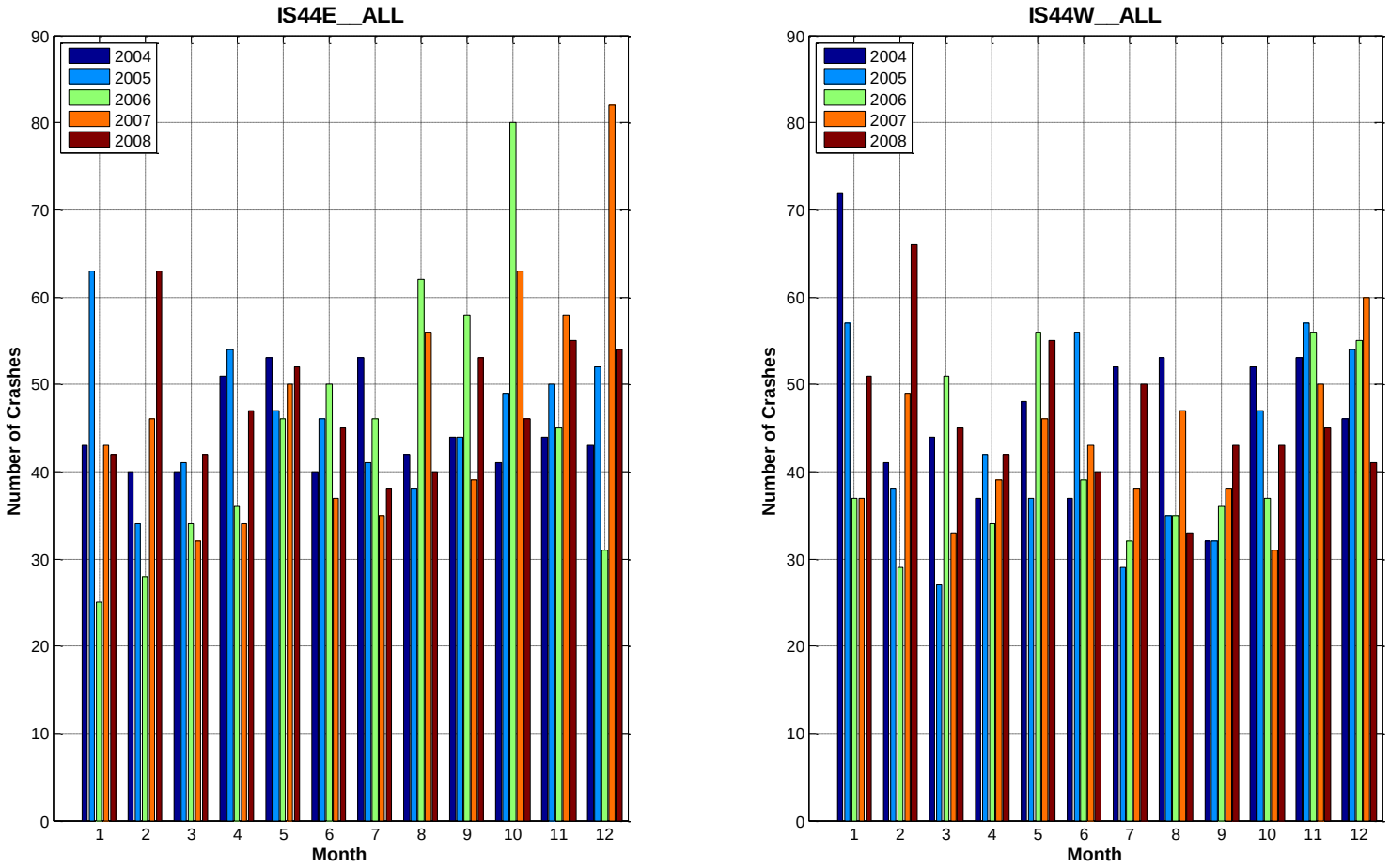


Figure S42: Crashes by Month on I-44 (Both directions, 2004-2008)

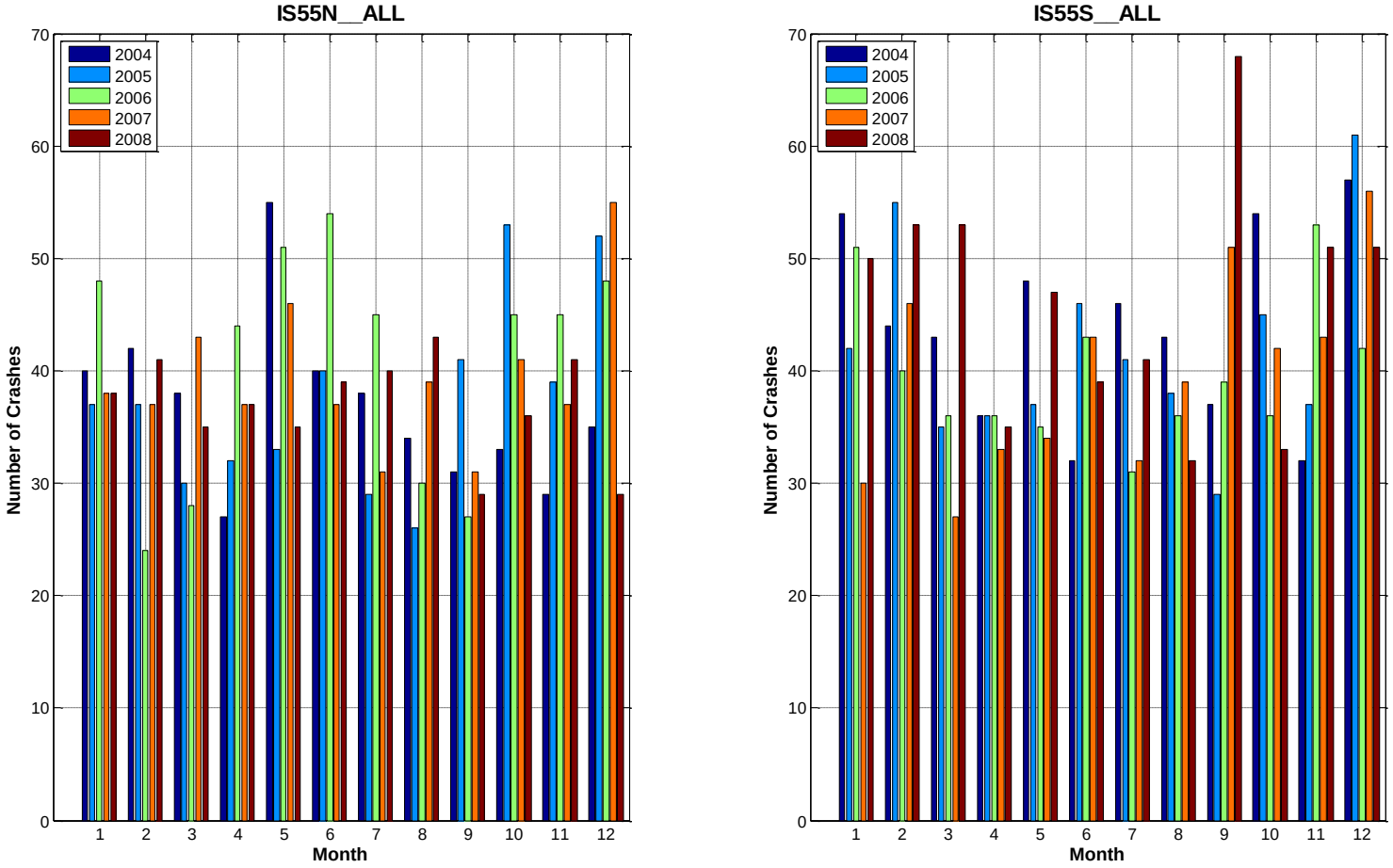


Figure S43: Crashes by Month on I-55 (Both directions, 2004-2008)

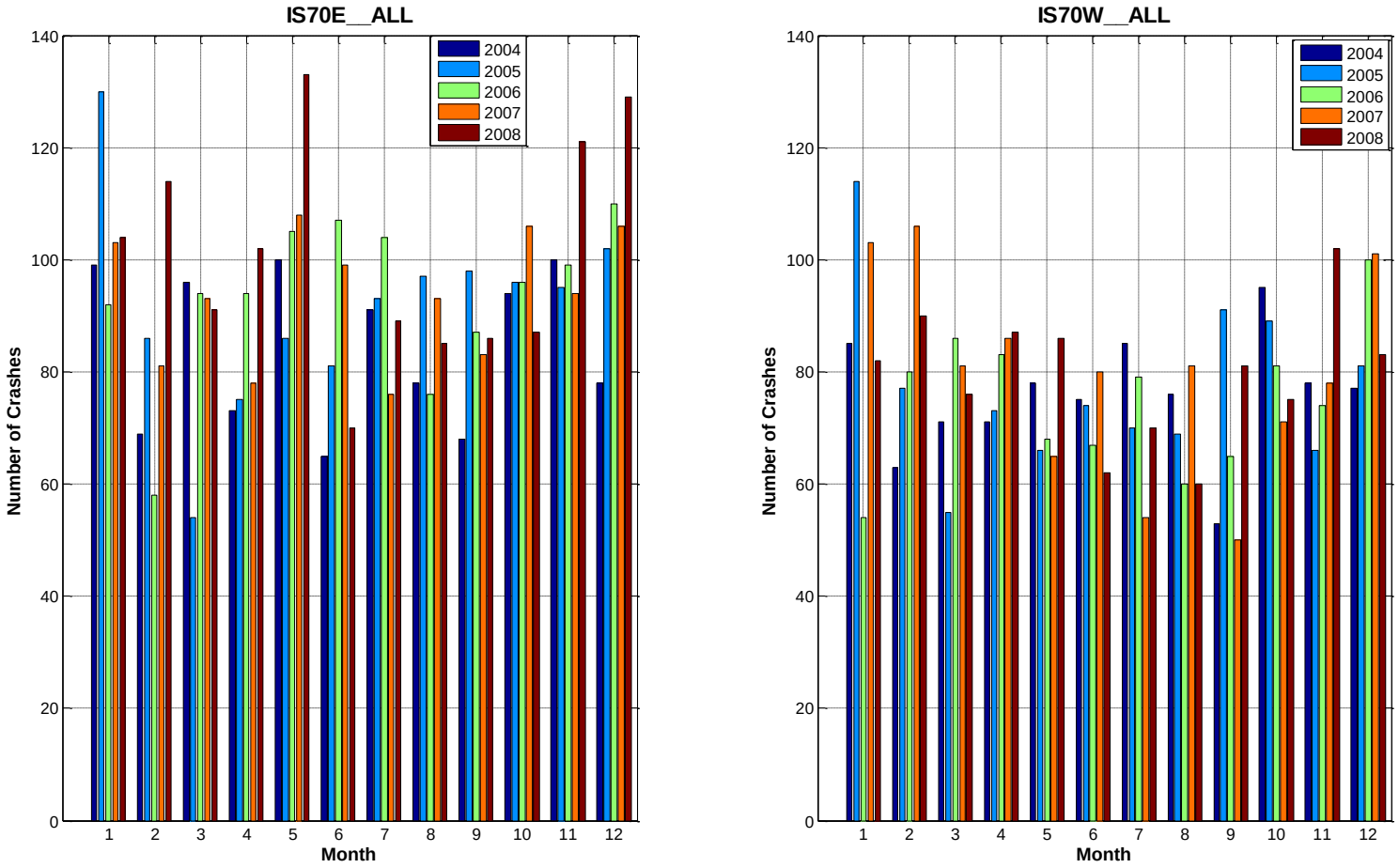


Figure S44: Crashes by Month on I-70 (Both directions, 2004-2008)

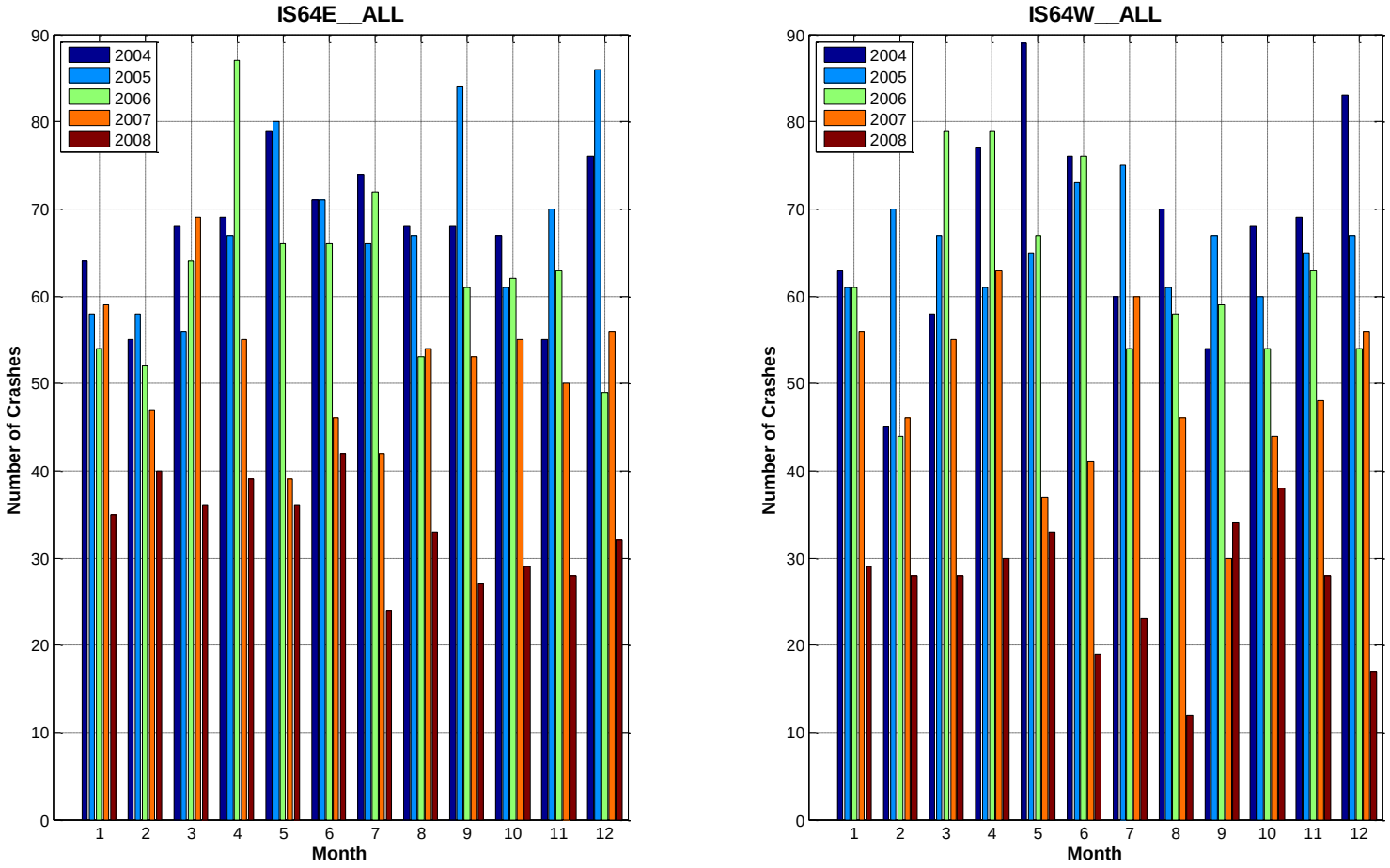


Figure S45: Crashes by Month on I-64 (Both directions, 2004-2008)

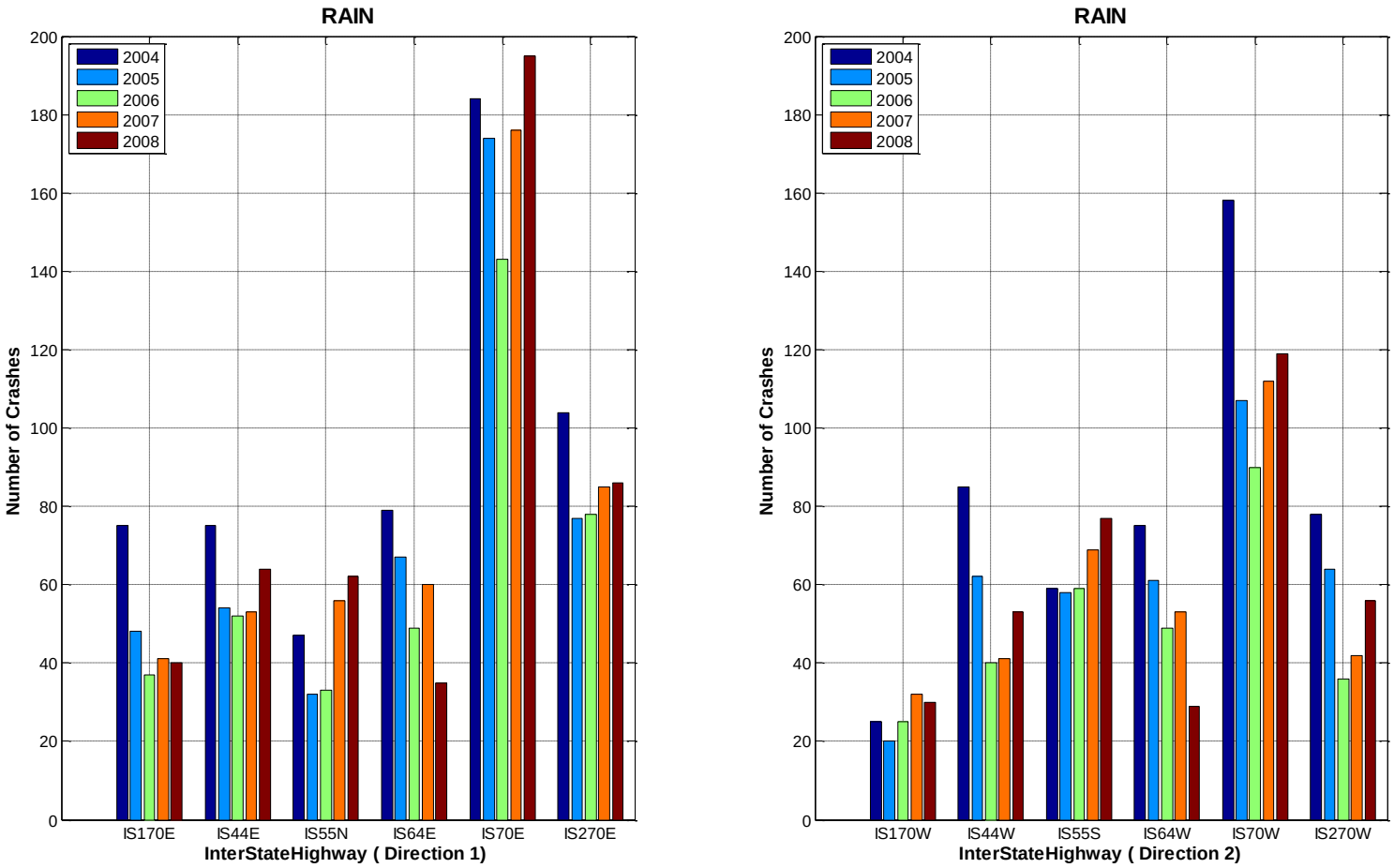


Figure S46: Crashes on Inter-State Highways on Rainy days (Both directions, 2004-2008)

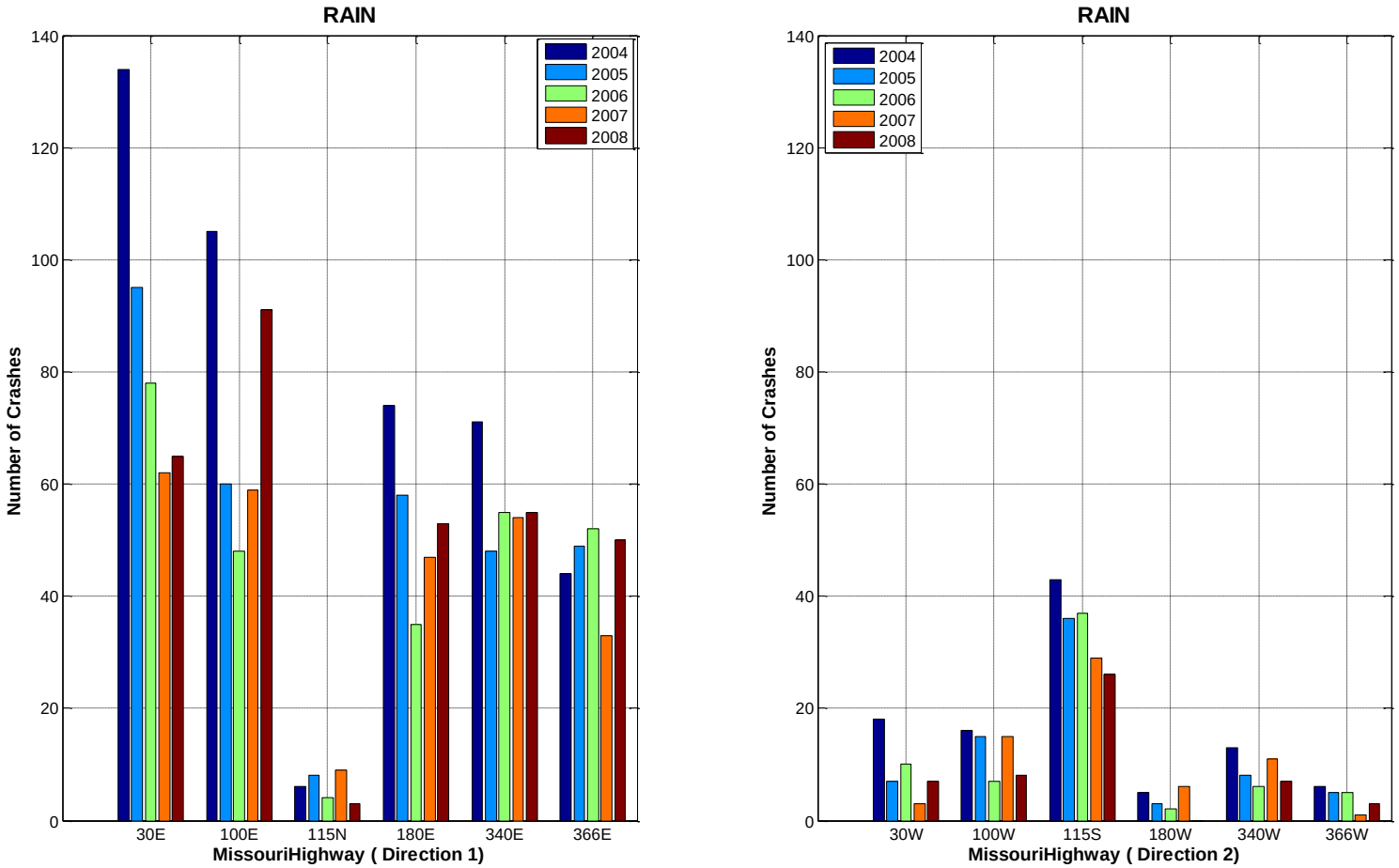


Figure S47: Crashes on Missouri Highways on Rainy days (Both directions, 2004-2008)

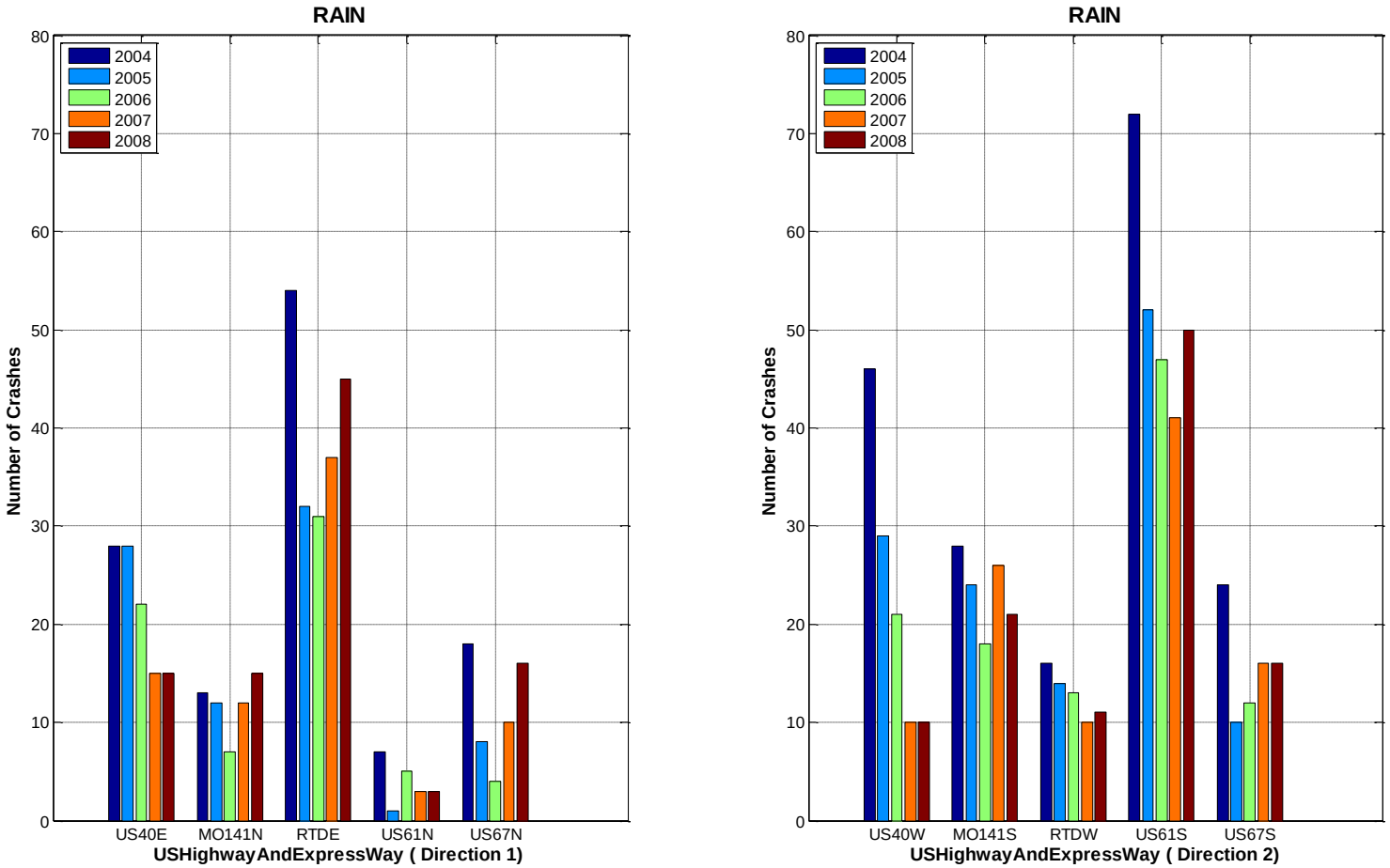


Figure S48: Crashes on US Highway and Expressways on Rainy days (Both directions, 2004-2008)

Appendix 2: Crash Rates (2004-2005)

Table S16: Crash and Severity Rates (I-270 East, 2004)

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2004 segment Name	Direction	Cont. Log (start)	Cont. Log (end)	Length (mi)	AADT	Crashes	Fatality	Injury	Property	Crash Rate	Severity Rate
IS 55<->MO 21	E	0.545	1	0.455	74800	41	0	5	36	3.3	4.51
IS 55<->MO 21	E	1	2	1	74800	21	0	3	18	0.77	1.1
IS 55<->MO 21<->MO 30	E	2	3	1	71920	81	0	21	60	3.09	5.49
MO 21<->MO 30<->IS 44	E	3	4	1	71921	91	0	19	72	3.47	5.64
MO 30<->IS 44	E	4	5	1	77195	44	0	9	35	1.56	2.52
MO 30<->IS 44	E	5	6	1	77195	43	0	7	36	1.53	2.27
MO 30<->IS 44<->BIG BEND BLVD	E	6	7	1	73932	106	0	24	82	3.93	6.6
IS 44<->BIG BEND BLVD<->DOUGHERTY FERRY RD	E	7	8	1	77074	48	0	14	34	1.71	3.2
BIG BEND BLVD<->DOUGHERTY FERRY RD<->MO 100	E	8	9	1	81985	42	0	5	37	1.4	1.9
DOUGHERTY FERRY RD<->MO 100	E	9	10	1	78231	15	0	4	11	0.53	0.95
DOUGHERTY FERRY RD<->MO 100<->IS 64	E	10	11	1	82313	85	0	22	63	2.83	5.03
MO 100<->IS 64	E	11	12	1	83747	16	0	6	10	0.52	1.11
MO 100<->IS 64<->RT AB	E	12	13	1	85119	44	0	16	28	1.42	2.96
IS 64<->RT AB<->MO 340	E	13	14	1	89214	48	0	16	32	1.47	2.95
RT AB<->MO 340<->MO 364-RT D	E	14	15	1	93994	86	0	13	73	2.51	3.64
MO 340<->MO 364-RT D	E	15	16	1	94098	46	0	13	33	1.34	2.47
MO 340<->MO 364-RT D<->DORSETT RD	E	16	17	1	93984	122	0	32	90	3.56	6.35
MO 364-RT D<->DORSETT RD<->IS 70	E	17	18	1	93515	83	0	18	65	2.43	4.01
DORSETT RD<->IS 70	E	18	19	1	93753	39	2	7	30	1.14	2.28
DORSETT RD<->IS 70	E	19	20	1	93753	54	0	14	40	1.58	2.81
DORSETT RD<->IS 70<->MO 180	E	20	21	1	82081	42	0	6	36	1.4	2
IS 70<->MO 180<->MO 370	E	21	22	1	58103	47	0	11	36	2.22	3.77
MO 180<->MO 370	E	22	23	1	56638	21	0	9	12	1.02	2.32
MO 180<->MO 370<->MCDONALD BLVD<->US 67	E	23	24	1	71023	1	0	0	1	0.04	0.04
MCDONALD BLVD<->US 67	E	24	25	1	63419	0	0	0	0	0	0
MCDONALD BLVD<->US 67<->IS 170	E	25	26	1	62566	0	0	0	0	0	0
US 67<->IS 170<->GRAHAM RD<->RT N	E	26	27	1	60976	0	0	0	0	0	0
GRAHAM RD<->RT N<->WASHINGTON-ELIZABETH AVE	E	27	28	1	62620	0	0	0	0	0	0
RT N<->WASHINGTON-ELIZABETH AVE<->WEST FLORISSANT AVE	E	28	29	1	61546	0	0	0	0	0	0
WASHINGTON-ELIZABETH AVE<->WEST FLORISSANT AVE<->RT AC	E	29	30	1	60985	0	0	0	0	0	0
WEST FLORISSANT AVE<->RT AC<->OLD HALLS FERRY RD<->MO 367	E	30	31	1	51285	0	0	0	0	0	0
OLD HALLS FERRY RD<->MO 367	E	31	32	1	53388	0	0	0	0	0	0
OLD HALLS FERRY RD<->MO 367<->BELLEFONTAINE RD	E	32	33	1	47377	0	0	0	0	0	0
MO 367<->BELLEFONTAINE RD<->LILAC AVE	E	33	34	1	35522	0	0	0	0	0	0
BELLEFONTAINE RD<->LILAC AVE<->LILAC AVE	E	34	35	1	29838	0	0	0	0	0	0
LILAC AVE<->LILAC AVE<->RT H-RIVERVIEW AVE<->	E	35	35.749	0.749	27311	0	0	0	0	0	0
Overall					80563.71776	1266	2	294	970	1.84	3.14

Table S17: Crash and Severity Rates (I-270 East, 2005)

2005 segment Name	Direction	Cont. Log (start)	Cont. Log (end)	Length (mi)	AADT	Crashes	Fatality	Injury	Property	Crash Rate	Severity Rate
IS 55<->MO 21	E	0.545	1	0.455	74875	38	1	3	34	3.06	4.52
IS 55<->MO 21	E	1	2	1	74875	18	1	8	9	0.66	1.87
IS 55<->MO 21<->MO 30	E	2	3	1	72016	80	0	12	68	3.05	4.43
MO 21<->MO 30<->IS 44	E	3	4	1	72019	111	1	25	85	4.23	7.44
MO 30<->IS 44	E	4	5	1	77272	64	0	18	46	2.28	4.2
MO 30<->IS 44	E	5	6	1	77272	39	1	12	26	1.39	2.99
MO 30<->IS 44<->BIG BEND BLVD	E	6	7	1	74032	118	0	25	93	4.38	7.16
IS 44<->BIG BEND BLVD<->DOUGHERTY FERRY RD	E	7	8	1	77170	45	0	15	30	1.6	3.2
BIG BEND BLVD<->DOUGHERTY FERRY RD<->MO 100	E	8	9	1	82067	67	0	20	47	2.24	4.25
DOUGHERTY FERRY RD<->MO 100	E	9	10	1	78309	14	0	4	10	0.49	0.91
DOUGHERTY FERRY RD<->MO 100<->IS 64	E	10	11	1	82420	65	0	17	48	2.17	3.87
MO 100<->IS 64	E	11	12	1	83864	25	0	9	16	0.82	1.7
MO 100<->IS 64<->RT AB	E	12	13	1	85238	57	0	15	42	1.84	3.29
IS 64<->RT AB<->MO 340	E	13	14	1	89334	49	0	12	37	1.51	2.61
RT AB<->MO 340<->MO 364-RT D	E	14	15	1	94088	40	0	8	32	1.17	1.87
MO 340<->MO 364-RT D	E	15	16	1	94230	55	0	12	43	1.6	2.65
MO 340<->MO 364-RT D<->DORSETT RD	E	16	17	1	94109	94	1	18	75	2.74	4.58
MO 364-RT D<->DORSETT RD<->IS 70	E	17	18	1	93610	56	0	16	40	1.64	3.05
DORSETT RD<->IS 70	E	18	19	1	93884	53	1	20	32	1.55	3.57
DORSETT RD<->IS 70	E	19	20	1	93884	51	0	14	37	1.49	2.72
DORSETT RD<->IS 70<->MO 180	E	20	21	1	82175	52	0	22	30	1.74	3.94
IS 70<->MO 180<->MO 370	E	21	22	1	58182	38	0	10	28	1.79	3.21
MO 180<->MO 370	E	22	23	1	56717	18	0	9	9	0.87	2.18
MO 180<->MO 370<->MCDONALD BLVD<->US 67	E	23	24	1	71097	2	0	0	2	0.08	0.08
MCDONALD BLVD<->US 67	E	24	25	1	63482	0	0	0	0	0	0
MCDONALD BLVD<->US 67<->IS 170	E	25	26	1	62640	0	0	0	0	0	0
US 67<->IS 170<->GRAHAM RD<->RT N	E	26	27	1	61048	0	0	0	0	0	0
GRAHAM RD<->RT N<->WASHINGTON-ELIZABETH AVE	E	27	28	1	62704	0	0	0	0	0	0
RT N<->WASHINGTON-ELIZABETH AVE<->WEST FLORISSANT AVE	E	28	29	1	61607	0	0	0	0	0	0
WASHINGTON-ELIZABETH AVE<->WEST FLORISSANT AVE<->RT AC	E	29	30	1	61046	0	0	0	0	0	0
WEST FLORISSANT AVE<->RT AC<->OLD HALLS FERRY RD<->MO 367	E	30	31	1	51339	0	0	0	0	0	0
OLD HALLS FERRY RD<->MO 367	E	31	32	1	53463	0	0	0	0	0	0
OLD HALLS FERRY RD<->MO 367<->BELLEFONTAINE RD	E	32	33	1	47896	0	0	0	0	0	0
MO 367<->BELLEFONTAINE RD<->LILAC AVE	E	33	34	1	35948	0	0	0	0	0	0
BELLEFONTAINE RD<->LILAC AVE<->LILAC AVE	E	34	35	1	30183	0	0	0	0	0	0
LILAC AVE<->LILAC AVE<->RT H-RIVERVIEW AVE<->	E	35	35.749	0.749	27636	0	0	0	0	0	0
Overall					80662.20955	1249	6	324	919	1.81	3.3

Table S18: Crash and Severity Rates (I-270 East, 2006)

2006 segment Name	Direction	Cont. Log (start)	Cont. Log (end)	Length (mi)	AADT	Crashes	Fatality	Injury	Property	Crash Rate	Severity Rate
IS 55<->MO 21	E	0.545	1	0.455	77612	42	1	7	34	3.27	5.6
IS 55<->MO 21	E	1	2	1	77612	16	0	1	15	0.57	0.67
IS 55<->MO 21<->MO 30	E	2	3	1	74649	77	0	20	57	2.83	5.04
MO 21<->MO 30<->IS 44	E	3	4	1	74652	110	0	28	82	4.05	7.14
MO 30<->IS 44	E	4	5	1	80097	40	0	11	29	1.37	2.5
MO 30<->IS 44	E	5	6	1	80097	39	0	7	32	1.34	2.06
MO 30<->IS 44<->BIG BEND BLVD	E	6	7	1	74393	108	0	26	82	3.99	6.87
IS 44<->BIG BEND BLVD<->DOUGHERTY FERRY RD	E	7	8	1	77170	53	0	11	42	1.89	3.06
BIG BEND BLVD<->DOUGHERTY FERRY RD<->MO 100	E	8	9	1	82067	54	0	13	41	1.81	3.11
DOUGHERTY FERRY RD<->MO 100	E	9	10	1	78309	12	1	2	9	0.42	0.95
DOUGHERTY FERRY RD<->MO 100<->IS 64	E	10	11	1	82420	74	0	24	50	2.47	4.87
MO 100<->IS 64	E	11	12	1	83864	37	0	14	23	1.21	2.59
MO 100<->IS 64<->RT AB	E	12	13	1	87827	75	0	20	55	2.35	4.22
IS 64<->RT AB<->MO 340	E	13	14	1	98106	61	0	14	47	1.71	2.88
RT AB<->MO 340<->MO 364-RT D	E	14	15	1	103263	71	0	11	60	1.89	2.77
MO 340<->MO 364-RT D	E	15	16	1	94385	61	0	18	43	1.78	3.35
MO 340<->MO 364-RT D<->DORSETT RD	E	16	17	1	91995	103	0	31	72	3.08	5.85
MO 364-RT D<->DORSETT RD<->IS 70	E	17	18	1	81820	62	0	18	44	2.08	3.89
DORSETT RD<->IS 70	E	18	19	1	82059	68	0	16	52	2.28	3.88
DORSETT RD<->IS 70	E	19	20	1	82059	67	0	17	50	2.24	3.95
DORSETT RD<->IS 70<->MO 180	E	20	21	1	87139	51	1	10	40	1.61	2.84
IS 70<->MO 180<->MO 370	E	21	22	1	67793	65	0	16	49	2.63	4.58
MO 180<->MO 370	E	22	23	1	66086	26	0	11	15	1.08	2.45
MO 180<->MO 370<->MCDONALD BLVD<->US 67	E	23	24	1	82842	3	0	1	2	0.1	0.2
MCDONALD BLVD<->US 67	E	24	25	1	73969	0	0	0	0	0	0
MCDONALD BLVD<->US 67<->IS 170	E	25	26	1	68073	0	0	0	0	0	0
US 67<->IS 170<->GRAHAM RD<->RT N	E	26	27	1	61048	0	0	0	0	0	0
GRAHAM RD<->RT N<->WASHINGTON-ELIZABETH AVE	E	27	28	1	62704	0	0	0	0	0	0
RT N<->WASHINGTON-ELIZABETH AVE<->WEST FLORISSANT AVE	E	28	29	1	61607	0	0	0	0	0	0
WASHINGTON-ELIZABETH AVE<->WEST FLORISSANT AVE<->RT AC	E	29	30	1	61046	0	0	0	0	0	0
WEST FLORISSANT AVE<->RT AC<->OLD HALLS FERRY RD<->MO 367	E	30	31	1	51339	0	0	0	0	0	0
OLD HALLS FERRY RD<->MO 367	E	31	32	1	53463	0	0	0	0	0	0
OLD HALLS FERRY RD<->MO 367<->BELLEFONTAINE RD	E	32	33	1	48146	0	0	0	0	0	0
MO 367<->BELLEFONTAINE RD<->LILAC AVE	E	33	34	1	36156	0	0	0	0	0	0
BELLEFONTAINE RD<->LILAC AVE<->LILAC AVE	E	34	35	1	30358	0	0	0	0	0	0
LILAC AVE<->LILAC AVE<->RT H-RIVERVIEW AVE<->	E	35	35.749	0.749	34934	0	0	0	0	0	0
Overall					82115.4321	1375	3	347	1025	1.96	3.48

Table S19: Crash and Severity Rates (I-270 East, 2007)

2007 segment Name	Direction	Cont. Log (start)	Cont. Log (end)	Length (mi)	AADT	Crashes	Fatality	Injury	Property	Crash Rate	Severity Rate
IS 55<->MO 21	E	0.545	1	0.455	78388	34	0	7	27	2.62	4.24
IS 55<->MO 21	E	1	2	1	78388	18	0	4	14	0.63	1.05
IS 55<->MO 21<->MO 30	E	2	3	1	75395	66	0	15	51	2.4	4.04
MO 21<->MO 30<->IS 44	E	3	4	1	75398	111	0	24	87	4.04	6.67
MO 30<->IS 44	E	4	5	1	80898	38	0	5	33	1.29	1.8
MO 30<->IS 44	E	5	6	1	80898	36	0	7	29	1.22	1.94
MO 30<->IS 44<->BIG BEND BLVD	E	6	7	1	75138	120	1	30	89	4.39	8.01
IS 44<->BIG BEND BLVD<->DOUGHERTY FERRY RD	E	7	8	1	77941	43	0	7	36	1.52	2.26
BIG BEND BLVD<->DOUGHERTY FERRY RD<->MO 100	E	8	9	1	82888	56	0	9	47	1.86	2.75
DOUGHERTY FERRY RD<->MO 100	E	9	10	1	79092	12	0	2	10	0.42	0.63
DOUGHERTY FERRY RD<->MO 100<->IS 64	E	10	11	1	83244	70	0	14	56	2.31	3.7
MO 100<->IS 64	E	11	12	1	84703	35	0	14	21	1.14	2.5
MO 100<->IS 64<->RT AB	E	12	13	1	88706	72	0	21	51	2.23	4.18
IS 64<->RT AB<->MO 340	E	13	14	1	99087	64	0	13	51	1.77	2.86
RT AB<->MO 340<->MO 364-RT D	E	14	15	1	104296	68	0	14	54	1.79	2.9
MO 340<->MO 364-RT D	E	15	16	1	95329	61	0	9	52	1.76	2.54
MO 340<->MO 364-RT D<->DORSETT RD	E	16	17	1	92915	135	0	39	96	3.99	7.45
MO 364-RT D<->DORSETT RD<->IS 70	E	17	18	1	82638	73	0	19	54	2.43	4.32
DORSETT RD<->IS 70	E	18	19	1	82880	52	0	17	35	1.72	3.41
DORSETT RD<->IS 70	E	19	20	1	82880	59	0	17	42	1.96	3.65
DORSETT RD<->IS 70<->MO 180	E	20	21	1	88011	50	0	17	33	1.56	3.15
IS 70<->MO 180<->MO 370	E	21	22	1	68471	57	0	16	41	2.29	4.21
MO 180<->MO 370	E	22	23	1	66747	22	0	9	13	0.91	2.02
MO 180<->MO 370<->MCDONALD BLVD<->US 67	E	23	24	1	83670	5	0	3	2	0.16	0.46
MCDONALD BLVD<->US 67	E	24	25	1	74709	0	0	0	0	0	0
MCDONALD BLVD<->US 67<->IS 170	E	25	26	1	68753	0	0	0	0	0	0
US 67<->IS 170<->GRAHAM RD<->RT N	E	26	27	1	61658	0	0	0	0	0	0
GRAHAM RD<->RT N<->WASHINGTON-ELIZABETH AVE	E	27	28	1	63331	0	0	0	0	0	0
RT N<->WASHINGTON-ELIZABETH AVE<->WEST FLORISSANT AVE	E	28	29	1	62223	0	0	0	0	0	0
WASHINGTON-ELIZABETH AVE<->WEST FLORISSANT AVE<->RT AC	E	29	30	1	61656	0	0	0	0	0	0
WEST FLORISSANT AVE<->RT AC<->OLD HALLS FERRY RD<->MO 367	E	30	31	1	51852	0	0	0	0	0	0
OLD HALLS FERRY RD<->MO 367	E	31	32	1	53998	0	0	0	0	0	0
OLD HALLS FERRY RD<->MO 367<->BELLEFONTAINE RD	E	32	33	1	47920	0	0	0	0	0	0
MO 367<->BELLEFONTAINE RD<->LILAC AVE	E	33	34	1	35929	0	0	0	0	0	0
BELLEFONTAINE RD<->LILAC AVE<->LILAC AVE	E	34	35	1	30167	0	0	0	0	0	0
LILAC AVE<->LILAC AVE<->RT H-RIVERVIEW AVE<->	E	35	35.749	0.749	34714	0	0	0	0	0	0
Overall					82936.66766	1357	1	332	1024	1.92	3.34

Table S20: Crash and Severity Rates (I-270 East, 2008)

2008 segment Name	Direction	Cont. Log (start)	Cont. Log (end)	Length (mi)	AADT	Crashes	Fatality	Injury	Property	Crash Rate	Severity Rate
IS 55<->MO 21	E	0.545	1	0.455	77902	40	0	5	35	3.09	4.25
IS 55<->MO 21	E	1	2	1	77902	11	0	3	8	0.39	0.7
IS 55<->MO 21<->MO 30	E	2	3	1	74927	85	0	18	67	3.11	5.08
MO 21<->MO 30<->IS 44	E	3	4	1	74931	78	0	9	69	2.85	3.84
MO 30<->IS 44	E	4	5	1	80396	33	0	8	25	1.12	1.94
MO 30<->IS 44	E	5	6	1	80396	26	0	8	18	0.89	1.7
MO 30<->IS 44<->BIG BEND BLVD	E	6	7	1	74671	102	0	32	70	3.74	7.26
IS 44<->BIG BEND BLVD<->DOUGHERTY FERRY RD	E	7	8	1	77458	35	0	5	30	1.24	1.77
BIG BEND BLVD<->DOUGHERTY FERRY RD<->MO 100	E	8	9	1	82374	44	0	8	36	1.46	2.26
DOUGHERTY FERRY RD<->MO 100	E	9	10	1	78602	10	0	3	7	0.35	0.66
DOUGHERTY FERRY RD<->MO 100<->IS 64	E	10	11	1	82728	85	0	21	64	2.81	4.9
MO 100<->IS 64	E	11	12	1	84178	38	0	11	27	1.24	2.31
MO 100<->IS 64<->RT AB	E	12	13	1	87379	143	0	38	105	4.48	8.06
IS 64<->RT AB<->MO 340	E	13	14	1	95841	57	0	13	44	1.63	2.74
RT AB<->MO 340<->MO 364-RT D	E	14	15	1	100897	68	0	12	56	1.85	2.82
MO 340<->MO 364-RT D	E	15	16	1	94738	32	0	4	28	0.93	1.27
MO 340<->MO 364-RT D<->DORSETT RD	E	16	17	1	92339	75	0	19	56	2.23	3.92
MO 364-RT D<->DORSETT RD<->IS 70	E	17	18	1	82126	69	0	14	55	2.3	3.7
DORSETT RD<->IS 70	E	18	19	1	82366	43	0	13	30	1.43	2.73
DORSETT RD<->IS 70	E	19	20	1	82366	32	0	9	23	1.06	1.96
DORSETT RD<->IS 70<->MO 180	E	20	21	1	87465	41	0	21	20	1.28	3.26
IS 70<->MO 180<->MO 370	E	21	22	1	68047	54	0	16	38	2.17	4.11
MO 180<->MO 370	E	22	23	1	66333	14	0	10	4	0.58	1.82
MO 180<->MO 370<->MCDONALD BLVD<->US 67	E	23	24	1	83151	0	0	0	0	0	0
MCDONALD BLVD<->US 67	E	24	25	1	74246	0	0	0	0	0	0
MCDONALD BLVD<->US 67<->IS 170	E	25	26	1	68327	0	0	0	0	0	0
US 67<->IS 170<->GRAHAM RD<->RT N	E	26	27	1	61276	0	0	0	0	0	0
GRAHAM RD<->RT N<->WASHINGTON-ELIZABETH AVE	E	27	28	1	62939	0	0	0	0	0	0
RT N<->WASHINGTON-ELIZABETH AVE<->WEST FLORISSANT AVE	E	28	29	1	61838	0	0	0	0	0	0
WASHINGTON-ELIZABETH AVE<->WEST FLORISSANT AVE<->RT AC	E	29	30	1	61274	0	0	0	0	0	0
WEST FLORISSANT AVE<->RT AC<->OLD HALLS FERRY RD<->MO 367	E	30	31	1	51530	0	0	0	0	0	0
OLD HALLS FERRY RD<->MO 367	E	31	32	1	53663	0	0	0	0	0	0
OLD HALLS FERRY RD<->MO 367<->BELLEFONTAINE RD	E	32	33	1	45788	0	0	0	0	0	0
MO 367<->BELLEFONTAINE RD<->LILAC AVE	E	33	34	1	34178	0	0	0	0	0	0
BELLEFONTAINE RD<->LILAC AVE<->LILAC AVE	E	34	35	1	28698	0	0	0	0	0	0
LILAC AVE<->LILAC AVE<->RT H-RIVERVIEW AVE<->	E	35	35.749	0.749	33023	0	0	0	0	0	0
Overall					82115.58272	1215	0	300	915	1.81	3.14

Table S21: Crash and Severity Rates (I-70 East, 2004)

2004 segment Name	Direction	Cont. Log (start)	Cont. Log (end)	Length (mi)	AADT	Crashes	Fatality	Injury	Property	Crash Rate	Severity Rate
LP 70<->EARTH CITY EXPY	E	230.123	231	0.877	82949	16	0	7	9	0.6	1.39
LP 70<->EARTH CITY EXPY<->IS 270	E	231	232	1	84280	52	0	11	41	1.69	2.76
EARTH CITY EXPY<->IS 270<->MO 180	E	232	233	1	76121	43	1	10	32	1.55	2.95
IS 270<->MO 180	E	233	234	1	55781	16	0	9	7	0.79	2.11
IS 270<->MO 180<->US 67	E	234	235	1	54330	43	0	8	35	2.17	3.38
MO 180<->US 67<->CYPRESS RD<->AIRFLIGHT DR	E	235	236	1	84691	60	0	16	44	1.94	3.49
CYPRESS RD<->AIRFLIGHT DR<->MO 115	E	236	237	1	95060	35	0	6	29	1.01	1.53
AIRFLIGHT DR<->MO 115<->IS 170	E	237	238	1	80552	40	0	11	29	1.36	2.48
MO 115<->IS 170<->NORTH HANLEY RD	E	238	239	1	77791	47	0	12	35	1.66	2.92
IS 170<->NORTH HANLEY RD<->RT N	E	239	240	1	63964	30	0	11	19	1.28	2.7
NORTH HANLEY RD<->RT N<->BERMUDA RD<->RT U	E	240	241	1	63452	24	0	4	20	1.04	1.55
BERMUDA RD<->RT U<->JENNINGS STATION RD	E	241	242	1	65606	101	0	26	75	4.22	7.48
RT U<->JENNINGS STATION RD<->JENNINGS STATION RD	E	242	243	1	63343	49	0	20	29	2.12	4.71
JENNINGS STATION RD<->JENNINGS STATION RD<->GOODFELLOW BLVD<->RIVERVIEW DR<->KINGSHIGHWAY BLV	E	243	244	1	61492	28	0	5	23	1.25	1.92
RIVERVIEW DR<->KINGSHIGHWAY BLVD<->SHREVE AVE	E	244	245	1	53403	44	0	15	29	2.26	4.57
KINGSHIGHWAY BLVD<->SHREVE AVE<->WEST FLORISSANT AVE<->BROADWAY	E	245	246	1	49881	44	0	13	31	2.42	4.56
WEST FLORISSANT AVE<->BROADWAY<->ADELAIDE AVE<->GRAND AVE	E	246	247	1	54330	72	1	28	43	3.63	8.32
ADELAIDE AVE<->GRAND AVE<->MO 115-SALISBURY ST	E	247	248	1	58358	47	0	12	35	2.21	3.9
GRAND AVE<->MO 115-SALISBURY ST<->10TH-11TH STS	E	248	249	1	46618	49	0	11	38	2.88	4.82
MO 115-SALISBURY ST<->10TH-11TH STS<->6TH-7TH STS<->MO 799	E	249	250	1	39924	40	0	14	26	2.74	5.63
6TH-7TH STS<->MO 799<->MEMORIAL-PINE<->MEMORIAL-WALNUT<->	E	250	251	1	41316	52	0	17	35	3.45	6.83
MEMORIAL-WALNUT<->	E	251	251.3	0.3	44066	79	0	19	60	16.37	28.19
Overall					64044	1011	2	285	724	2.04	3.81

Table S22: Crash and Severity Rates (I-70 East, 2005)

2005 segment Name	Direction	Cont. Log (start)	Cont. Log (end)	Length (mi)	AADT	Crashes	Fatality	Injury	Property	Crash Rate	Severity Rate
LP 70<->EARTH CITY EXPY	E	230.123	231	0.877	83032	11	0	6	5	0.41	1.09
LP 70<->EARTH CITY EXPY<->IS 270	E	231	232	1	82774	54	2	11	41	1.79	3.48
EARTH CITY EXPY<->IS 270<->MO 180	E	232	233	1	73909	53	0	14	39	1.97	3.53
IS 270<->MO 180	E	233	234	1	55859	26	0	13	13	1.28	3.2
IS 270<->MO 180<->US 67	E	234	235	1	54389	36	0	9	27	1.82	3.18
MO 180<->US 67<->CYPRESS RD<->AIRFLIGHT DR	E	235	236	1	84793	66	0	22	44	2.14	4.28
CYPRESS RD<->AIRFLIGHT DR<->MO 115	E	236	237	1	95155	42	0	15	27	1.21	2.51
AIRFLIGHT DR<->MO 115<->IS 170	E	237	238	1	80632	55	0	14	41	1.87	3.3
MO 115<->IS 170<->NORTH HANLEY RD	E	238	239	1	77874	58	0	11	47	2.05	3.21
IS 170<->NORTH HANLEY RD<->RT N	E	239	240	1	64050	25	0	6	19	1.07	1.84
NORTH HANLEY RD<->RT N<->BERMUDA RD<->RT U	E	240	241	1	65330	30	0	7	23	1.26	2.14
BERMUDA RD<->RT U<->JENNINGS STATION RD	E	241	242	1	68893	82	0	24	58	3.27	6.14
RT U<->JENNINGS STATION RD<->JENNINGS STATION RD	E	242	243	1	66533	34	0	8	26	1.4	2.39
JENNINGS STATION RD<->JENNINGS STATION RD<->GOODFELLOW BLVD<->RIVERVIEW DR<->KINGSHIGHWAY BLV	E	243	244	1	62914	42	0	24	18	1.83	4.98
RIVERVIEW DR<->KINGSHIGHWAY BLVD<->SHREVE AVE	E	244	245	1	53456	55	0	13	42	2.83	4.83
KINGSHIGHWAY BLVD<->SHREVE AVE<->WEST FLORISSANT AVE<->BROADWAY	E	245	246	1	49944	63	0	20	43	3.47	6.77
WEST FLORISSANT AVE<->BROADWAY<->ADELAIDE AVE<->GRAND AVE	E	246	247	1	54384	67	0	19	48	3.38	6.26
ADELAIDE AVE<->GRAND AVE<->MO 115-SALISBURY ST	E	247	248	1	58417	58	0	25	33	2.73	6.25
GRAND AVE<->MO 115-SALISBURY ST<->10TH-11TH STS	E	248	249	1	46665	59	1	14	44	3.47	6.48
MO 115-SALISBURY ST<->10TH-11TH STS<->6TH-7TH STS<->MO 799	E	249	250	1	39969	67	0	26	41	4.61	9.97
6TH-7TH STS<->MO 799<->MEMORIAL-PINE<->MEMORIAL-WALNUT<->	E	250	251	1	41360	44	0	15	29	2.92	5.91
MEMORIAL-WALNUT<->	E	251	251.3	0.3	44110	66	0	17	49	13.7	24.29
Overall					64379	1093	3	333	757	2.2	4.27

Table S23: Crash and Severity Rates (I-70 East, 2006)

2006 segment Name	Direction	Cont. Log (start)	Cont. Log (end)	Length (mi)	AADT	Crashes	Fatality	Injury	Property	Crash Rate	Severity Rate
LP 70<->EARTH CITY EXPY	E	230.123	231	0.877	83032	21	0	9	12	0.79	1.81
LP 70<->EARTH CITY EXPY<->IS 270	E	231	232	1	83359	60	0	8	52	1.98	2.77
EARTH CITY EXPY<->IS 270<->MO 180	E	232	233	1	76092	59	0	14	45	2.13	3.65
IS 270<->MO 180	E	233	234	1	60013	28	0	11	17	1.28	2.79
IS 270<->MO 180<->US 67	E	234	235	1	58434	39	0	12	27	1.83	3.53
MO 180<->US 67<->CYPRESS RD<->AIRFLIGHT DR	E	235	236	1	67382	58	0	14	44	2.36	4.08
CYPRESS RD<->AIRFLIGHT DR<->MO 115	E	236	237	1	73012	46	0	8	38	1.73	2.63
AIRFLIGHT DR<->MO 115<->IS 170	E	237	238	1	61869	60	0	22	38	2.66	5.59
MO 115<->IS 170<->NORTH HANLEY RD	E	238	239	1	63476	60	0	23	37	2.6	5.58
IS 170<->NORTH HANLEY RD<->RT N	E	239	240	1	67349	30	0	9	21	1.22	2.33
NORTH HANLEY RD<->RT N<->BERMUDA RD<->RT U	E	240	241	1	65741	30	0	7	23	1.25	2.13
BERMUDA RD<->RT U<->JENNINGS STATION RD	E	241	242	1	67207	67	0	9	58	2.74	3.84
RT U<->JENNINGS STATION RD<->JENNINGS STATION RD	E	242	243	1	64905	49	0	11	38	2.07	3.47
JENNINGS STATION RD<->JENNINGS STATION RD<->GOODFELLOW BLVD<->RIVERVIEW DR<->KINGSHIGHWAY BL\	E	243	244	1	62200	35	0	10	25	1.55	2.87
RIVERVIEW DR<->KINGSHIGHWAY BLVD<->SHREVE AVE	E	244	245	1	53456	36	0	9	27	1.85	3.24
KINGSHIGHWAY BLVD<->SHREVE AVE<->WEST FLORISSANT AVE<->BROADWAY	E	245	246	1	49944	63	0	17	46	3.47	6.27
WEST FLORISSANT AVE<->BROADWAY<->ADELAIDE AVE<->GRAND AVE	E	246	247	1	54384	46	0	9	37	2.32	3.69
ADELAIDE AVE<->GRAND AVE<->MO 115-SALISBURY ST	E	247	248	1	58417	53	0	19	34	2.49	5.17
GRAND AVE<->MO 115-SALISBURY ST<->10TH-11TH STS	E	248	249	1	46665	54	0	19	35	3.18	6.53
MO 115-SALISBURY ST<->10TH-11TH STS<->6TH-7TH STS<->MO 799	E	249	250	1	39969	59	1	20	38	4.06	8.8
6TH-7TH STS<->MO 799<->MEMORIAL-PINE<->MEMORIAL-WALNUT<->	E	250	251	1	41360	71	0	23	48	4.72	9.3
MEMORIAL-WALNUT<->	E	251	251.3	0.3	44110	98	1	29	68	20.35	40.28
Overall					61448	1122	2	312	808	2.37	4.38

Table S24: Crash and Severity Rates (I-70 East, 2007)

2007 segment Name	Direction	Cont. Log (start)	Cont. Log (end)	Length (mi)	AADT	Crashes	Fatality	Injury	Property	Crash Rate	Severity Rate
LP 70<->EARTH CITY EXPY	E	230.123	231	0.877	83862	7	0	3	4	0.26	0.6
LP 70<->EARTH CITY EXPY<->IS 270	E	231	232	1	83123	43	0	9	34	1.42	2.31
EARTH CITY EXPY<->IS 270<->MO 180	E	232	233	1	75309	63	0	16	47	2.3	4.05
IS 270<->MO 180	E	233	234	1	60613	21	0	4	17	0.95	1.5
IS 270<->MO 180<->US 67	E	234	235	1	59019	39	0	10	29	1.82	3.21
MO 180<->US 67<->CYPRESS RD<->AIRFLIGHT DR	E	235	236	1	68056	65	0	17	48	2.62	4.68
CYPRESS RD<->AIRFLIGHT DR<->MO 115	E	236	237	1	73742	42	0	11	31	1.56	2.79
AIRFLIGHT DR<->MO 115<->IS 170	E	237	238	1	62488	41	0	12	29	1.8	3.39
MO 115<->IS 170<->NORTH HANLEY RD	E	238	239	1	64111	68	0	18	50	2.91	5.23
IS 170<->NORTH HANLEY RD<->RT N	E	239	240	1	68022	35	0	5	30	1.41	2.02
NORTH HANLEY RD<->RT N<->BERMUDA RD<->RT U	E	240	241	1	67071	33	0	12	21	1.35	2.83
BERMUDA RD<->RT U<->JENNINGS STATION RD	E	241	242	1	69072	91	1	23	67	3.62	6.72
RT U<->JENNINGS STATION RD<->JENNINGS STATION RD	E	242	243	1	66706	49	0	13	36	2.02	3.62
JENNINGS STATION RD<->JENNINGS STATION RD<->GOODFELLOW BLVD<->RIVERVIEW DR<->KINGSHIGHWAY BL\	E	243	244	1	63327	26	0	7	19	1.13	2.04
RIVERVIEW DR<->KINGSHIGHWAY BLVD<->SHREVE AVE	E	244	245	1	53991	55	1	15	39	2.8	5.55
KINGSHIGHWAY BLVD<->SHREVE AVE<->WEST FLORISSANT AVE<->BROADWAY	E	245	246	1	50443	56	0	17	39	3.05	5.83
WEST FLORISSANT AVE<->BROADWAY<->ADELAIDE AVE<->GRAND AVE	E	246	247	1	54928	62	0	15	47	3.1	5.35
ADELAIDE AVE<->GRAND AVE<->MO 115-SALISBURY ST	E	247	248	1	59001	48	0	19	29	2.24	4.89
GRAND AVE<->MO 115-SALISBURY ST<->10TH-11TH STS	E	248	249	1	47132	51	1	12	38	2.97	5.6
MO 115-SALISBURY ST<->10TH-11TH STS<->6TH-7TH STS<->MO 799	E	249	250	1	40368	85	0	27	58	5.78	11.3
6TH-7TH STS<->MO 799<->MEMORIAL-PINE<->MEMORIAL-WALNUT<->	E	250	251	1	41773	68	0	18	50	4.47	8.02
MEMORIAL-WALNUT<->	E	251	251.3	0.3	44551	72	0	20	52	14.8	27.13
Overall					62105	1120	3	303	814	2.34	4.29

Table S25: Crash and Severity Rates (I-70 East, 2008)

2008 segment Name	Direction	Cont. Log (start)	Cont. Log (end)	Length (mi)	AADT	Crashes	Fatality	Injury	Property	Crash Rate	Severity Rate
LP 70<->EARTH CITY EXPY	E	230.123	231	0.877	83342	10	0	0	10	0.37	0.37
LP 70<->EARTH CITY EXPY<->IS 270	E	231	232	1	83840	60	1	12	47	1.96	3.43
EARTH CITY EXPY<->IS 270<->MO 180	E	232	233	1	76620	45	0	14	31	1.61	3.11
IS 270<->MO 180	E	233	234	1	60237	14	0	5	9	0.64	1.32
IS 270<->MO 180<->US 67	E	234	235	1	58653	57	0	18	39	2.66	5.18
MO 180<->US 67<->CYPRESS RD<->AIRFLIGHT DR	E	235	236	1	67634	75	0	28	47	3.04	6.44
CYPRESS RD<->AIRFLIGHT DR<->MO 115	E	236	237	1	73285	63	0	17	46	2.36	4.26
AIRFLIGHT DR<->MO 115<->IS 170	E	237	238	1	62101	48	0	16	32	2.12	4.24
MO 115<->IS 170<->NORTH HANLEY RD	E	238	239	1	63713	71	1	13	57	3.05	5.12
IS 170<->NORTH HANLEY RD<->RT N	E	239	240	1	67600	43	0	13	30	1.74	3.32
NORTH HANLEY RD<->RT N<->BERMUDA RD<->RT U	E	240	241	1	67787	39	0	12	27	1.58	3.03
BERMUDA RD<->RT U<->JENNINGS STATION RD	E	241	242	1	70648	102	0	32	70	3.96	7.68
RT U<->JENNINGS STATION RD<->JENNINGS STATION RD	E	242	243	1	68228	58	2	16	40	2.33	4.98
JENNINGS STATION RD<->JENNINGS STATION RD<->GOODFELLOW BLVD<->RIVERVIEW DR<->KINGSHIGHWAY BLV	E	243	244	1	63783	35	1	11	23	1.5	3.31
RIVERVIEW DR<->KINGSHIGHWAY BLVD<->SHREVE AVE	E	244	245	1	53656	57	0	12	45	2.91	4.75
KINGSHIGHWAY BLVD<->SHREVE AVE<->WEST FLORISSANT AVE<->BROADWAY	E	245	246	1	50130	58	0	16	42	3.17	5.79
WEST FLORISSANT AVE<->BROADWAY<->ADELAIDE AVE<->GRAND AVE	E	246	247	1	54588	74	0	16	58	3.71	6.12
ADELAIDE AVE<->GRAND AVE<->MO 115-SALISBURY ST	E	247	248	1	58635	47	0	8	39	2.2	3.32
GRAND AVE<->MO 115-SALISBURY ST<->10TH-11TH STS	E	248	249	1	46839	51	1	16	34	2.98	6.32
MO 115-SALISBURY ST<->10TH-11TH STS<->6TH-7TH STS<->MO 799	E	249	250	1	40118	78	0	26	52	5.33	10.65
6TH-7TH STS<->MO 799<->MEMORIAL-PINE<->MEMORIAL-WALNUT<->	E	250	251	1	41514	66	0	21	45	4.36	8.51
MEMORIAL-WALNUT<->	E	251	251.3	0.3	44275	60	0	16	44	12.38	22.28
Overall					62142	1211	6	338	867	2.52	4.74

Table S26: Crash and Severity Rates (Mo100 East, 2004)

2004	segment N	Direction	Cont. Log (s	Cont. Log (e	Length (mi	AADT	Crashes	Fatality	Injury	Property	Crash Rate	Severity	Ra
	RT OO<->M	U	88.811	89	0.189	8079	0	0	0	0	0	0	
	RT OO<->M	U	89	90	1	8079	0	0	0	0	0	0	
	RT OO<->M	U	90	91	1	8079	0	0	0	0	0	0	
	RT OO<->M	U	91	92	1	8929	0	0	0	0	0	0	
	MELROSE F	U	92	93	1	12034	0	0	0	0	0	0	
	BEGIN DIV	U	93	94	1	9230	0	0	0	0	0	0	
	RT T<->W l	E	94	95	1	8601	0	0	0	0	0	0	
	RT T<->W l	E	95	96	1	7110	0	0	0	0	0	0	
	MO 109<->	E	96	97	1	9412	0	0	0	0	0	0	
	MO 109<->	E	97	98	1	14255	0	0	0	0	0	0	
	WESTGLEN	E	98	99	1	30386	0	0	0	0	0	0	
	OLD STATE	U	99	100	1	47483	0	0	0	0	0	0	
	MO 340<->	U	100	101	1	47966	0	0	0	0	0	0	
	MO 340<->	U	101	102	1	47966	0	0	0	0	0	0	
	MO 340<->	U	102	103	1	50206	0	0	0	0	0	0	
	BAXTER RD	U	103	104	1	29527	79	0	18	61	733.02	1234.07	
	MO 141<->	E	104	105	1	21942	96	0	24	72	1198.68	2097.68	
	MO 141<->	E	105	106	1	29569	50	0	14	36	463.28	852.43	
	BEGIN DIV	E	106	107	1	20898	127	0	28	99	1664.97	2766.21	
	RT JJ<->GE	E	107	108	1	13670	57	0	12	45	1142.39	1863.9	
	RT JJ<->GE	E	108	109	1	20123	96	0	25	71	1307.03	2328.15	
	GEYER RD<	U	109	110	1	26811	94	0	20	74	960.55	1573.67	
	US 61-67<-	U	110	111	1	26698	103	0	13	90	1056.98	1457.19	
	US 61-67<-	U	111	112	1	23181	55	0	5	50	650.04	827.32	
	MCKNIGHT	U	112	113	1	19492	77	0	15	62	1082.28	1714.79	
	MCKNIGHT	U	113	114	1	18482	65	0	15	50	963.54	1630.61	
	BIG BEND -	U	114	115	1	12042	43	0	11	32	978.31	1729.11	
	ST LOUIS C	U	115	116	1	9533	27	0	7	20	775.96	1379.49	
	ST LOUIS C	U	116	117	1	9533	16	0	1	15	459.83	546.05	
	ST LOUIS C	U	117	118	1	9563	88	0	19	69	2521.13	4154.14	
	VANDEVEN	U	118	119	1	9585	0	0	0	0	0	0	
	VANDEVEN	U	119	120	1	9585	0	0	0	0	0	0	
	VANDEVEN	U	120	121	1	8464	0	0	0	0	0	0	
	CHOUTEAL	U	121	121.431	0.431	6642	0	0	0	0	0	0	
	Overall					19404	1073	0	227	846	1009.99	1651	

Table S27: Crash and Severity Rates (Mo100 East, 2005)

2005	segment N	Direction	Cont. Log (	Cont. Log (	Length (mi	AADT	Crashes	Fatality	Injury	Property	Crash Rate	Severity	Ra
	RT OO<->M	U	88.811	89	0.189	8055	0	0	0	0	0	0	
	RT OO<->M	U	89	90	1	8055	0	0	0	0	0	0	
	RT OO<->M	U	90	91	1	8055	0	0	0	0	0	0	
	RT OO<->M	U	91	92	1	8903	0	0	0	0	0	0	
	MELROSE F	U	92	93	1	12001	0	0	0	0	0	0	
	BEGIN DIV	U	93	94	1	9202	0	0	0	0	0	0	
	RT T<->W	E	94	95	1	8575	0	0	0	0	0	0	
	RT T<->W	E	95	96	1	6962	0	0	0	0	0	0	
	MO 109<->	E	96	97	1	9211	0	0	0	0	0	0	
	MO 109<->	E	97	98	1	13950	0	0	0	0	0	0	
	WESTGLEN	E	98	99	1	29745	0	0	0	0	0	0	
	OLD STATE	U	99	100	1	41207	0	0	0	0	0	0	
	MO 340<->	U	100	101	1	46958	0	0	0	0	0	0	
	MO 340<->	U	101	102	1	46958	0	0	0	0	0	0	
	MO 340<->	U	102	103	1	50599	0	0	0	0	0	0	
	BAXTER RD	U	103	104	1	28902	74	0	16	58	703.4	1159.66	
	MO 141<->	E	104	105	1	21481	99	0	17	82	1266.13	1918.38	
	MO 141<->	E	105	106	1	28943	35	1	9	25	332.22	673.93	
	BEGIN DIV	E	106	107	1	20456	102	0	20	82	1369.87	2175.67	
	RT JJ<->GE	E	107	108	1	13383	71	0	12	59	1457.48	2196.49	
	RT JJ<->GE	E	108	109	1	19701	89	0	28	61	1241.08	2412.44	
	GEYER RD<	U	109	110	1	26248	91	0	13	78	952.45	1360.65	
	US 61-67<-	U	110	111	1	26137	58	0	13	45	609.64	1019.56	
	US 61-67<-	U	111	112	1	22691	48	0	10	38	581.15	944.36	
	MCKNIGHT	U	112	113	1	19075	71	0	20	51	1022.57	1886.71	
	MCKNIGHT	U	113	114	1	18088	58	0	13	45	880.92	1473.26	
	BIG BEND -	U	114	115	1	11790	46	0	6	40	1071.87	1491.3	
	ST LOUIS C	U	115	116	1	9333	15	0	2	13	441.54	618.15	
	ST LOUIS C	U	116	117	1	9333	17	0	1	16	500.41	588.72	
	ST LOUIS C	U	117	118	1	9362	96	0	24	72	2817.09	4929.91	
	VANDEVEN	U	118	119	1	9384	0	0	0	0	0	0	
	VANDEVEN	U	119	120	1	9384	0	0	0	0	0	0	
	VANDEVEN	U	120	121	1	8286	0	0	0	0	0	0	
	CHOUTEAU	U	121	121.431	0.431	6502	0	0	0	0	0	0	
	Overall					18995	970	1	204	765	935.28	1534.06	

Table S28: Crash and Severity Rates (Mo100 East, 2006)

2006	segment N	Direction	Cont. Log (s	Cont. Log (e	Length (mi)	AADT	Crashes	Fatality	Injury	Property	Crash Rate	Severity	Ra
	RT OO<->M	U	88.811	89	0.189	9738	0	0	0	0	0	0	
	RT OO<->M	U	89	90	1	9738	0	0	0	0	0	0	
	RT OO<->M	U	90	91	1	9738	0	0	0	0	0	0	
	RT OO<->M	U	91	92	1	10051	0	0	0	0	0	0	
	MELROSE F	U	92	93	1	11192	0	0	0	0	0	0	
	BEGIN DIV	U	93	94	1	8657	0	0	0	0	0	0	
	RT T<->W l	E	94	95	1	8090	0	0	0	0	0	0	
	RT T<->W l	E	95	96	1	7467	0	0	0	0	0	0	
	MO 109<->	E	96	97	1	9901	0	0	0	0	0	0	
	MO 109<->	E	97	98	1	13952	0	0	0	0	0	0	
	WESTGLEN	E	98	99	1	29502	0	0	0	0	0	0	
	OLD STATE	U	99	100	1	38581	0	0	0	0	0	0	
	MO 340<->	U	100	101	1	38517	0	0	0	0	0	0	
	MO 340<->	U	101	102	1	38517	0	0	0	0	0	0	
	MO 340<->	U	102	103	1	41635	0	0	0	0	0	0	
	BAXTER RD	U	103	104	1	26764	83	0	16	67	851.97	1344.68	
	MO 141<->	E	104	105	1	20624	106	0	17	89	1411.99	2091.34	
	MO 141<->	E	105	106	1	26954	42	0	9	33	428.08	703.27	
	BEGIN DIV	E	106	107	1	19802	103	0	21	82	1428.98	2303.02	
	RT JJ<->GE	E	107	108	1	13156	51	0	5	46	1064.99	1378.22	
	RT JJ<->GE	E	108	109	1	20530	73	0	10	63	976.86	1378.31	
	GEYER RD<	U	109	110	1	26839	65	0	14	51	665.34	1095.26	
	US 61-67<-	U	110	111	1	26602	60	0	13	47	619.63	1022.4	
	US 61-67<-	U	111	112	1	23153	43	0	11	32	510.22	901.79	
	MCKNIGHT	U	112	113	1	19534	60	0	12	48	843.84	1350.14	
	MCKNIGHT	U	113	114	1	18528	73	0	14	59	1082.41	1705.17	
	BIG BEND -	U	114	115	1	12257	43	0	11	32	963.79	1703.44	
	ST LOUIS C	U	115	116	1	9896	27	0	10	17	749.55	1582.39	
	ST LOUIS C	U	116	117	1	9896	14	0	6	8	388.66	888.36	
	ST LOUIS C	U	117	118	1	9738	77	0	15	62	2172.3	3441.82	
	VANDEVEN	U	118	119	1	9619	0	0	0	0	0	0	
	VANDEVEN	U	119	120	1	9619	0	0	0	0	0	0	
	VANDEVEN	U	120	121	1	8497	0	0	0	0	0	0	
	CHOUTEAL	U	121	121.431	0.431	3398	0	0	0	0	0	0	
	Overall					18952	920	0	184	736	889.1	1422.56	

Table S29: Crash and Severity Rates (Mo100 East, 2007)

2007	segment N	Direction	Cont. Log (s	Cont. Log (r	Length (mi)	AADT	Crashes	Fatality	Injury	Property	Crash Rate	Severity	Ra
	RT OO<->M	U	88.811	89	0.189	9738	0	0	0	0	0	0	
	RT OO<->M	U	89	90	1	9738	0	0	0	0	0	0	
	RT OO<->M	U	90	91	1	9738	0	0	0	0	0	0	
	RT OO<->M	U	91	92	1	10051	0	0	0	0	0	0	
	MELROSE F	U	92	93	1	11192	0	0	0	0	0	0	
	BEGIN DIV	U	93	94	1	8657	0	0	0	0	0	0	
	RT T<->W L	E	94	95	1	8090	0	0	0	0	0	0	
	RT T<->W L	E	95	96	1	7467	0	0	0	0	0	0	
	MO 109<->	E	96	97	1	9901	0	0	0	0	0	0	
	MO 109<->	E	97	98	1	13952	0	0	0	0	0	0	
	WESTGLEN	E	98	99	1	29502	0	0	0	0	0	0	
	OLD STATE	U	99	100	1	38581	0	0	0	0	0	0	
	MO 340<->	U	100	101	1	38517	0	0	0	0	0	0	
	MO 340<->	U	101	102	1	38517	0	0	0	0	0	0	
	MO 340<->	U	102	103	1	41635	0	0	0	0	0	0	
	BAXTER RD	U	103	104	1	26764	100	0	26	74	1026.47	1827.12	
	MO 141<->	E	104	105	1	20624	118	0	8	110	1571.84	1891.53	
	MO 141<->	E	105	106	1	26954	43	0	11	32	438.27	774.62	
	BEGIN DIV	E	106	107	1	19802	123	0	26	97	1706.45	2788.6	
	RT JJ<->GE	E	107	108	1	13156	50	0	10	40	1044.11	1670.57	
	RT JJ<->GE	E	108	109	1	20530	80	0	17	63	1070.53	1753	
	GEYER RD<	U	109	110	1	26839	74	0	20	54	757.47	1371.63	
	US 61-67<-	U	110	111	1	26602	67	0	10	57	691.93	1001.74	
	US 61-67<-	U	111	112	1	23153	42	0	7	35	498.36	747.54	
	MCKNIGHT	U	112	113	1	19534	58	1	8	49	815.71	1279.82	
	MCKNIGHT	U	113	114	1	18528	76	0	17	59	1126.9	1883.1	
	BIG BEND -	U	114	115	1	12257	63	0	14	49	1412.07	2353.44	
	ST LOUIS C	U	115	116	1	9896	24	0	6	18	666.27	1165.97	
	ST LOUIS C	U	116	117	1	9896	7	0	0	7	194.33	194.33	
	ST LOUIS C	U	117	118	1	9738	68	0	13	55	1918.39	3018.65	
	VANDEVEN	U	118	119	1	9619	0	0	0	0	0	0	
	VANDEVEN	U	119	120	1	9619	0	0	0	0	0	0	
	VANDEVEN	U	120	121	1	8497	0	0	0	0	0	0	
	CHOUTEAU	U	121	121.431	0.431	3398	0	0	0	0	0	0	
	Overall					18952	993	1	193	799	959.65	1527.9	

Table S30: Crash and Severity Rates (Mo100 East, 2008)

2008	segment N	Direction	Cont. Log (s	Cont. Log (e	Length (mi)	AADT	Crashes	Fatality	Injury	Property	Crash Rate	Severity	Ra
	RT OO<->M	U	88.811	89	0.189	9446	0	0	0	0	0	0	
	RT OO<->M	U	89	90	1	9446	0	0	0	0	0	0	
	RT OO<->M	U	90	91	1	9446	0	0	0	0	0	0	
	RT OO<->M	U	91	92	1	9763	0	0	0	0	0	0	
	MELROSE F	U	92	93	1	10922	0	0	0	0	0	0	
	BEGIN DIV	U	93	94	1	8449	0	0	0	0	0	0	
	RT T<->W l	E	94	95	1	7895	0	0	0	0	0	0	
	RT T<->W l	E	95	96	1	7287	0	0	0	0	0	0	
	MO 109<->	E	96	97	1	9662	0	0	0	0	0	0	
	MO 109<->	E	97	98	1	13616	0	0	0	0	0	0	
	WESTGLEN	E	98	99	1	28791	0	0	0	0	0	0	
	OLD STATE	U	99	100	1	37652	0	0	0	0	0	0	
	MO 340<->	U	100	101	1	37589	0	0	0	0	0	0	
	MO 340<->	U	101	102	1	37589	0	0	0	0	0	0	
	MO 340<->	U	102	103	1	40632	0	0	0	0	0	0	
	BAXTER RD	U	103	104	1	26119	84	0	23	61	881.11	1604.88	
	MO 141<->	E	104	105	1	20127	108	0	20	88	1470.12	2286.85	
	MO 141<->	E	105	106	1	26305	37	0	6	31	385.36	572.84	
	BEGIN DIV	E	106	107	1	19325	140	0	26	114	1984.8	3090.61	
	RT JJ<->GE	E	107	108	1	12839	74	0	18	56	1579.09	2731.4	
	RT JJ<->GE	E	108	109	1	20036	125	0	28	97	1709.25	2857.87	
	GEYER RD<	U	109	110	1	26192	127	0	23	104	1328.44	2050.19	
	US 61-67<-	U	110	111	1	25960	66	0	8	58	696.54	949.83	
	US 61-67<-	U	111	112	1	22594	47	0	8	39	569.92	860.94	
	MCKNIGHT	U	112	113	1	19063	75	0	8	67	1077.9	1422.82	
	MCKNIGHT	U	113	114	1	18081	95	0	13	82	1439.49	2030.44	
	BIG BEND -	U	114	115	1	11962	29	0	8	21	664.2	1213.89	
	ST LOUIS C	U	115	116	1	9658	12	0	5	7	340.41	765.92	
	ST LOUIS C	U	116	117	1	9658	4	0	2	2	113.47	283.67	
	ST LOUIS C	U	117	118	1	9504	37	0	7	30	1066.6	1671.97	
	VANDEVEN	U	118	119	1	9387	0	0	0	0	0	0	
	VANDEVEN	U	119	120	1	9387	0	0	0	0	0	0	
	VANDEVEN	U	120	121	1	8292	0	0	0	0	0	0	
	CHOUTEAU	U	121	121.431	0.431	3317	0	0	0	0	0	0	
	Overall					18495	1060	0	203	857	1046.82	1648.24	

Economics Appendix – Taxable Sales by Major Industry and Region

Figure 1: Taxable Sales Growth Index for St. Louis City and St. Louis County

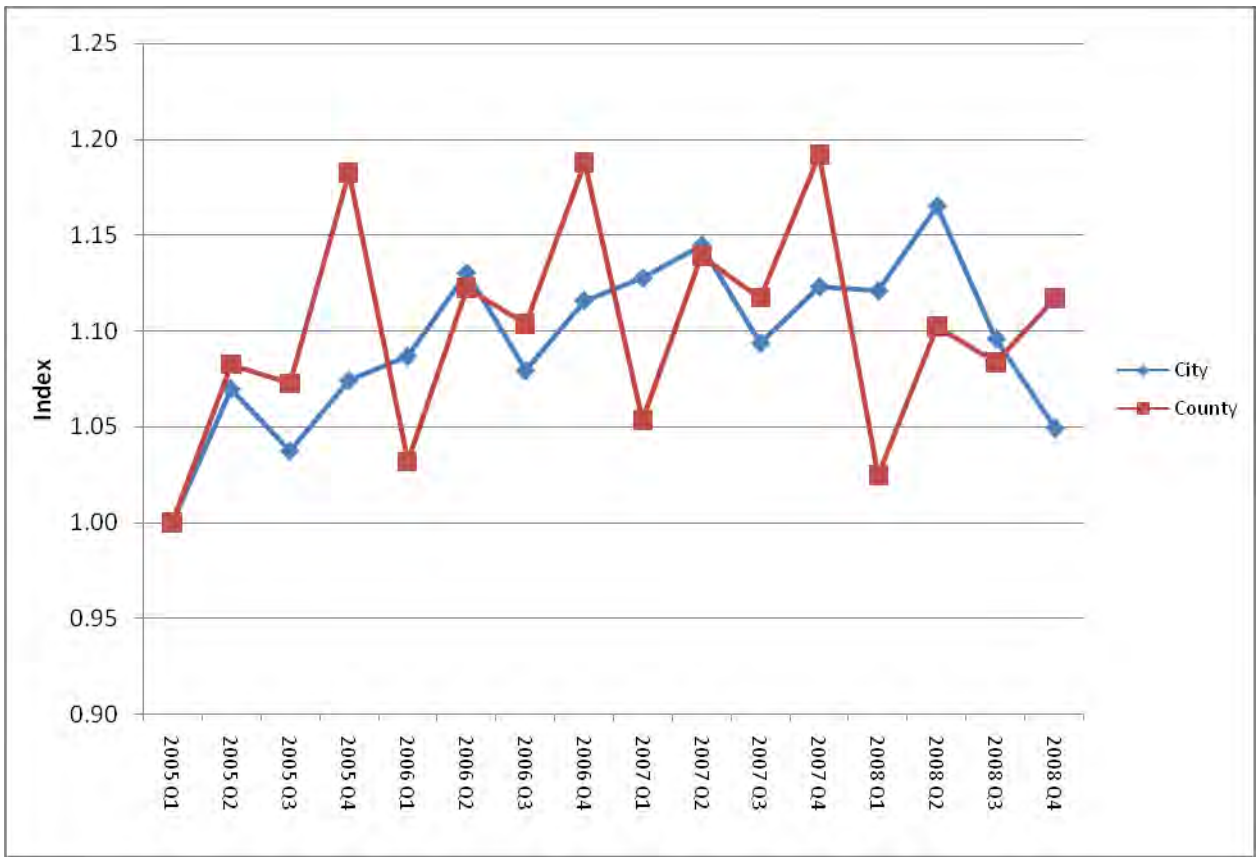

Figure 2: Taxable Sales Growth Index by Corridor Region

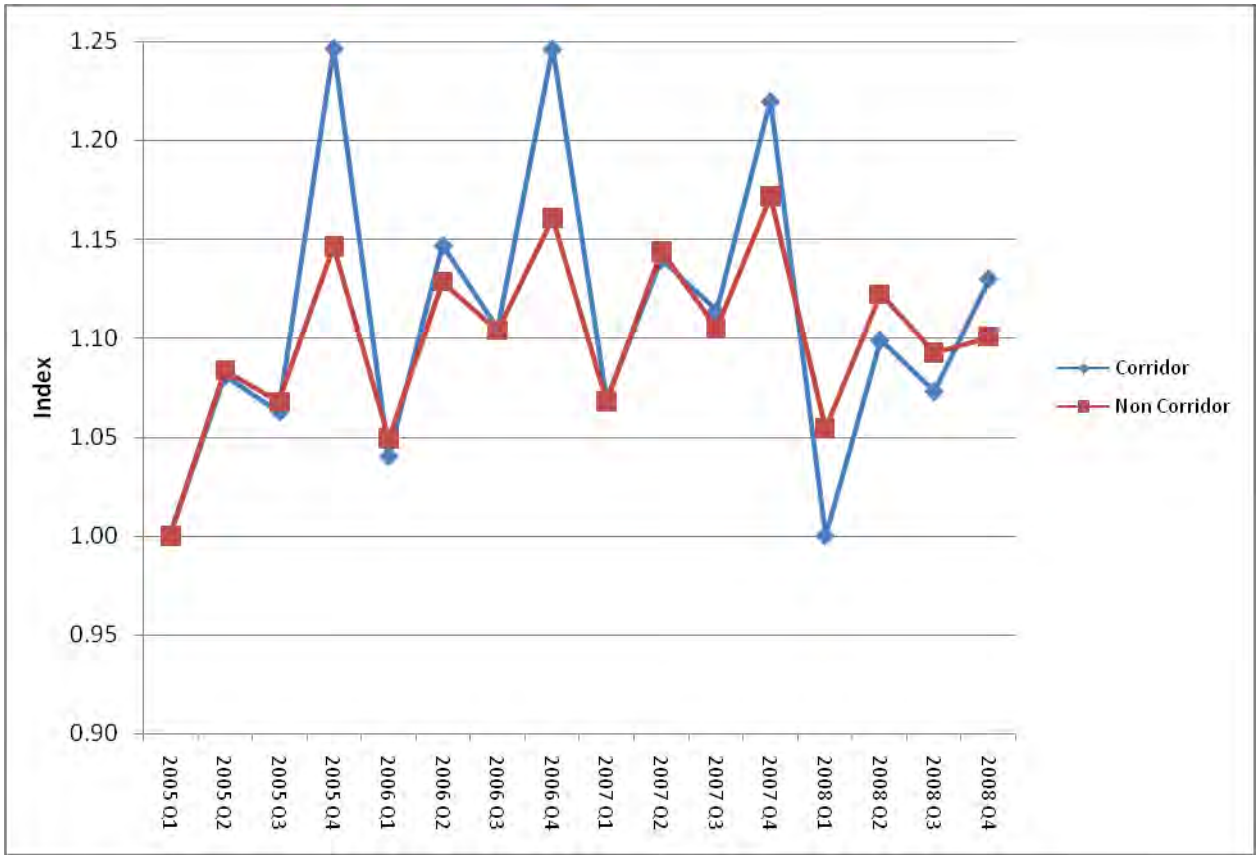

Figure 3: Taxable Sales Growth Index for City Retail

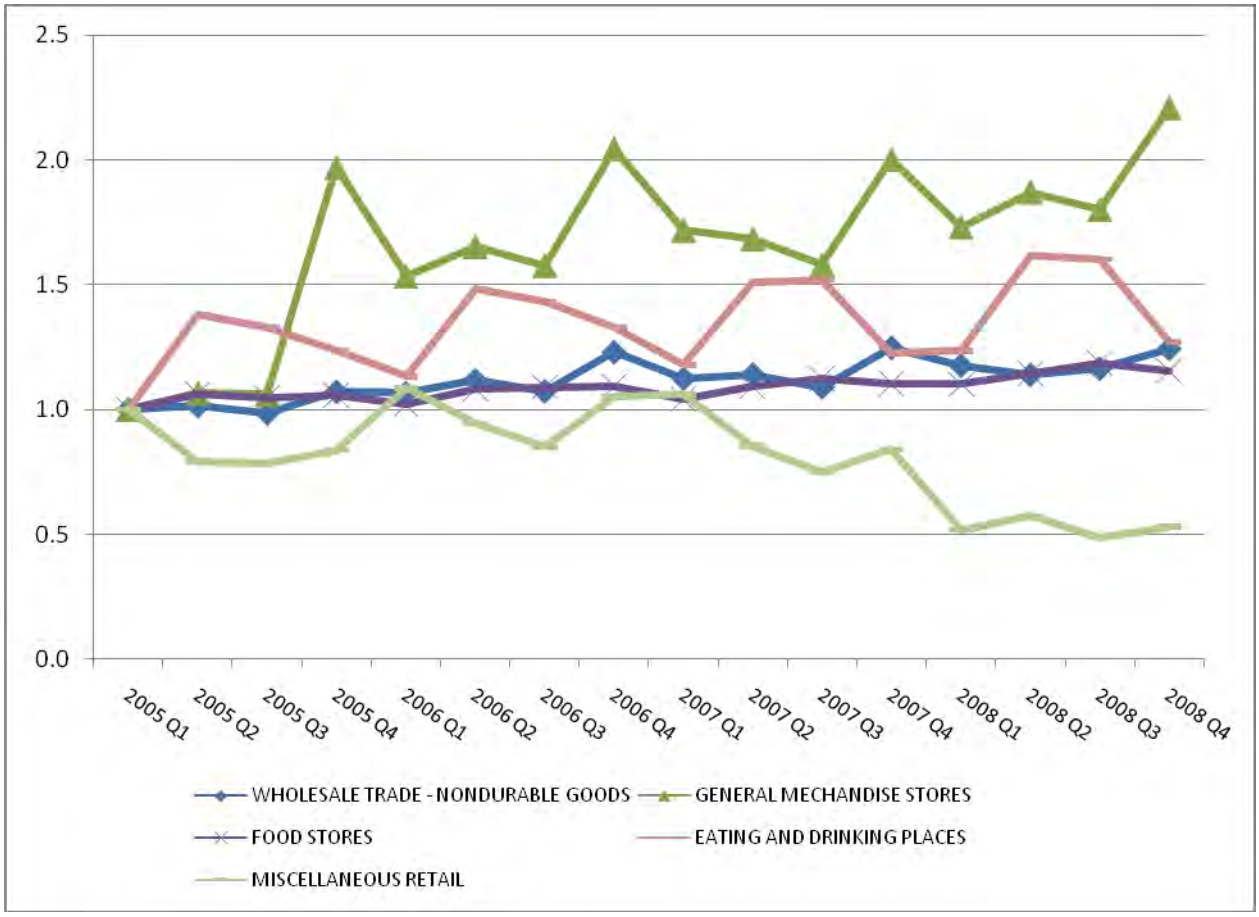

Figure 4: Taxable Sales Growth Index for City Services

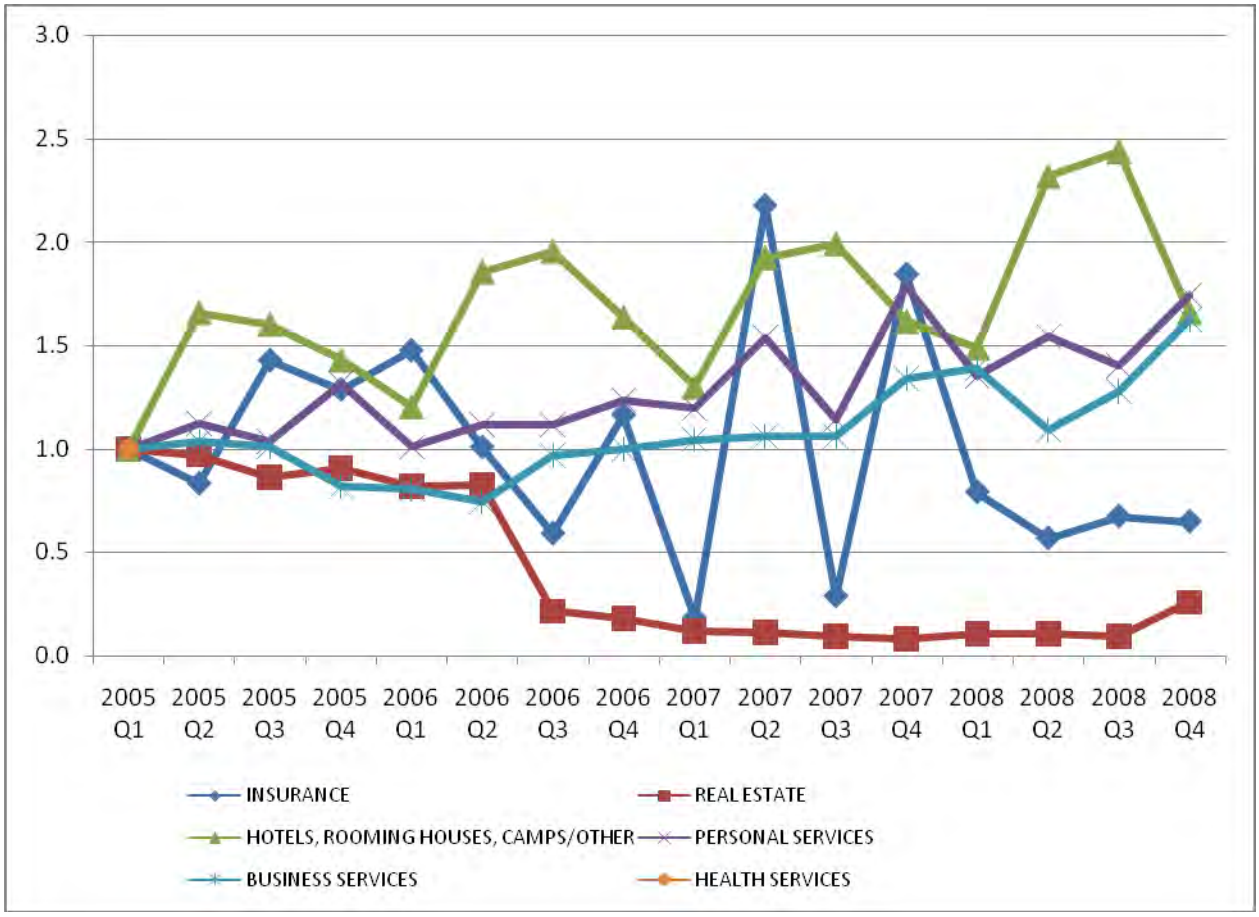

Figure 5: Taxable Sales Growth Index for County Construction

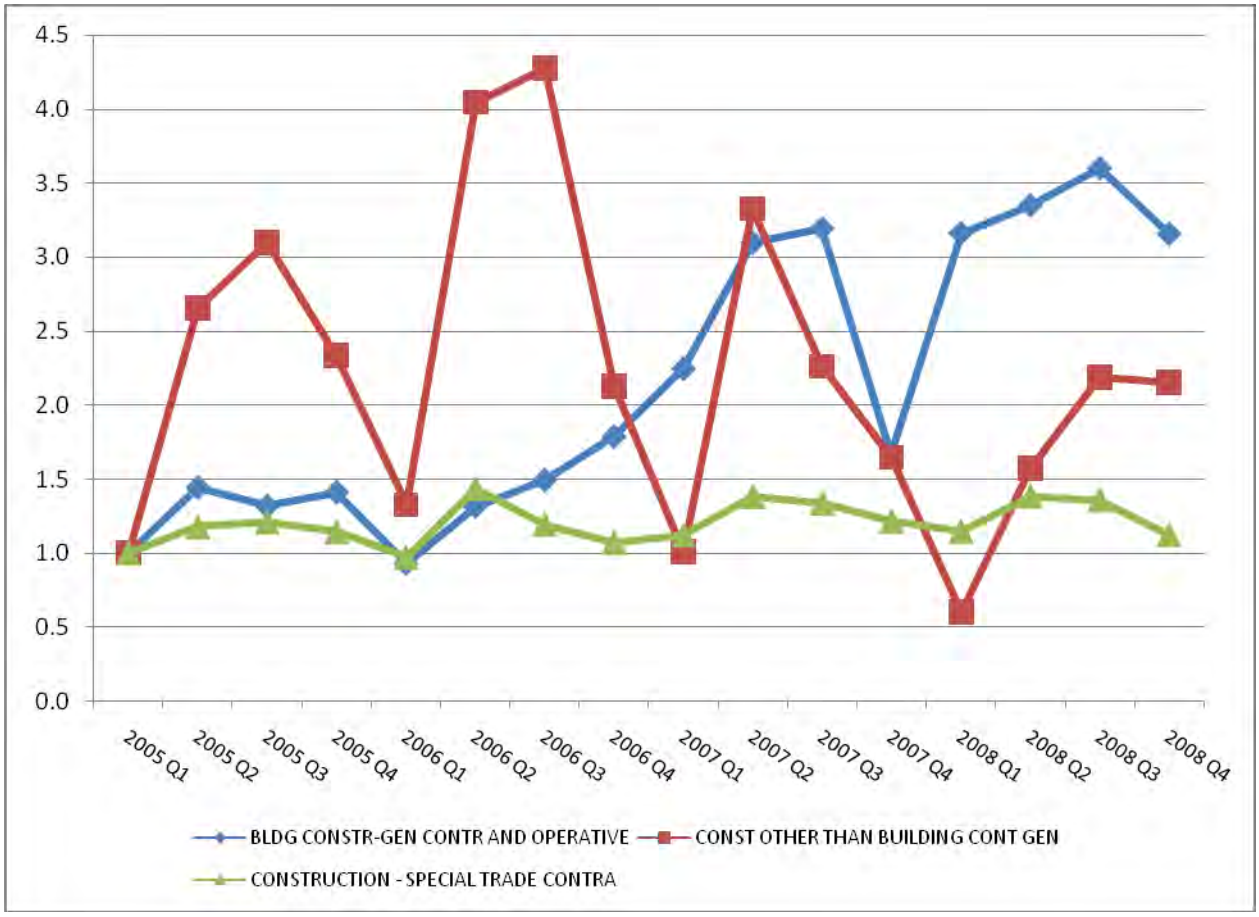

Figure 6: Taxable Sales Growth Index for County Retail

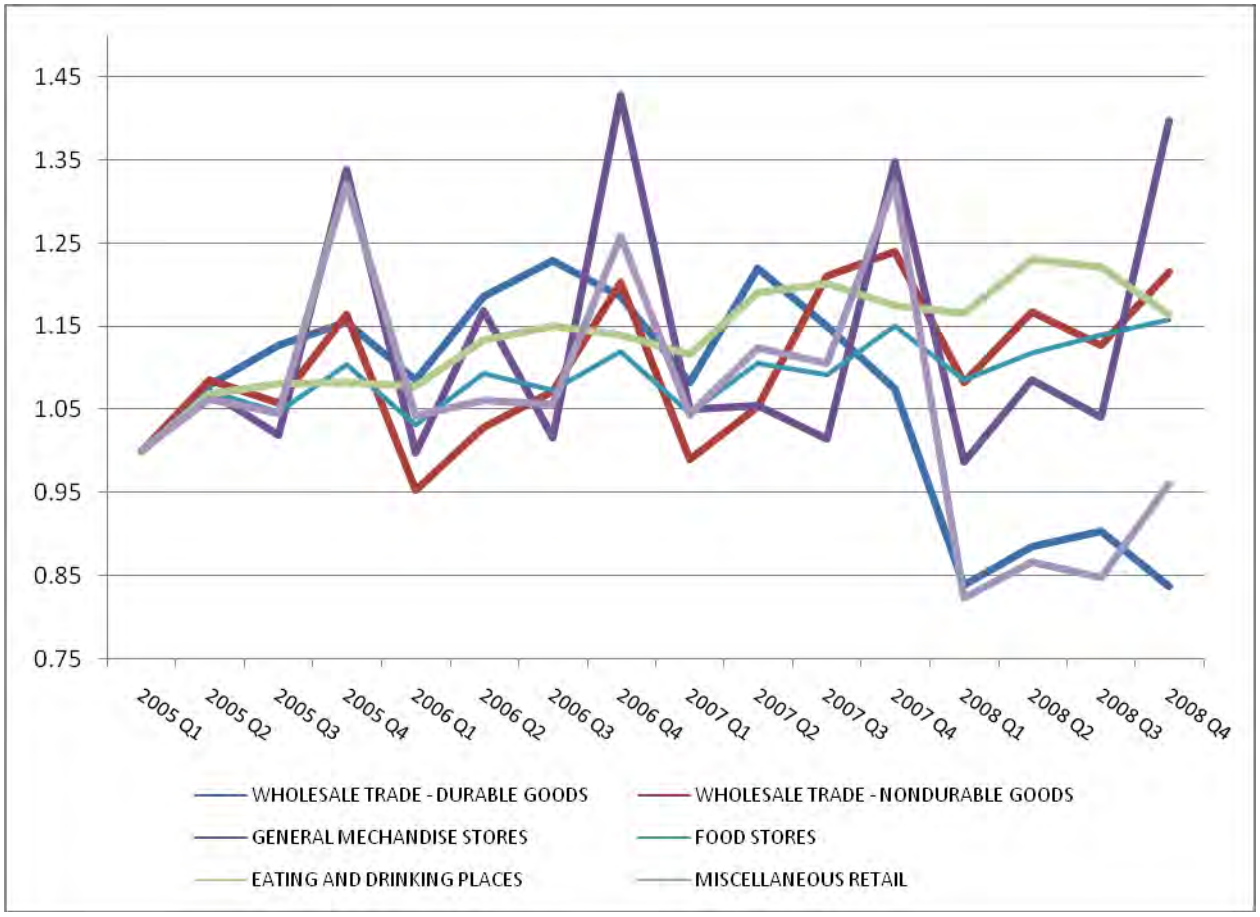

Figure 7: Taxable Sales Growth Index for County Services