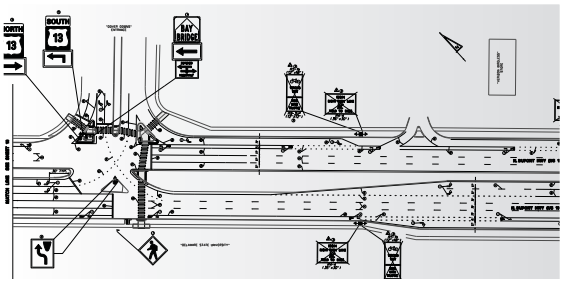
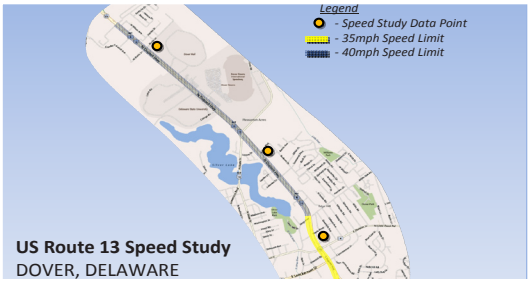
U.S. Route 13
Before / After Speed Study

Dover, Delaware







PREPARED FOR:

DelDOT

PREPARED BY:

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TRANSPORTATION ENGINEERS AND PLANNERS

July 31, 2013

ORA Job No. 2011_056

OBJECTIVE

This report was prepared in conjunction with a planned Delaware Department of Transportation (DelDOT) Pavement and Rehabilitation Project (DelDOT Contract No. T201106202) along a 4.44 mile section of DuPont Highway (US Route 13) in Dover, Delaware. The project's limits were from the St. Jones River to the south and Kentwood Drive to the north. The "before" conditions along this section of US Route 13 typically included 12' (or wider) travel lanes with no outside shoulders or bike lanes. The proposed "after" conditions generally included the reduction of all travel lane widths to 11 feet to accommodate one 4 foot wide bike lane each on northbound and southbound US Route 13. The purpose of this report is to analyze the before and after travel speeds along the corridor to determine what impact, if any, the narrower travel lanes have on vehicular speeds along the corridor. The post speed limits along the corridor remain the same for the before and after conditions and range from 35 mph to 40 mph.

METHODOLOGY

In order to collect the data required for the study, Orth-Rodgers & Associates (ORA) coordinated with DelDOT's TMC staff as they monitored traffic conditions along the corridor before, during and after the roadway construction. To obtain a complete sampling of travel speeds, four data collection stations were identified along the corridor. Figure 1 illustrates the project study area and the four data collection sites.

Prior to the start of construction DelDOT deployed a portable Wavetronix speed trailer at each station. The equipment was set up to count total vehicles and average speeds by direction on a 24/7 basis. The four data collection sites were at the following locations from north to south:

Site 1 – US Route 13 south of Rustic Lane,
Site 2 – US Route 13 and Jefferic Boulevard,
Site 3 – US Route 13 and Maple Parkway, and
Site 4 – US Route 13 and E. Water Street.

The data collection equipment was installed in July 2011 and remained in place and operational until February 2013. The "before" data used in this analysis was collected between Tuesday, July 19, 2011 and Thursday, August 11, 2011. The period between September 2011 and October 2012 had varying levels of roadway construction activity. Therefore no data during this period was use in the analysis. Additionally, the traffic data from November 2012 to December 2012 was purposely not used for the "after" analysis. This was to allow for post construction traffic patterns to return to normal conditions and to avoid any seasonal impact associated with holiday shopping and travel patterns. The "after" data used in this analysis was collected between Tuesday, January 13, 2012 and Thursday, January 31, 2013.

To ensure the validity of all before/after comparisons. A historic review of weather conditions was conducted for the before and after data collection periods. Any days with extended periods of rain or significant storms were eliminated from the analysis. Additionally, only data from typical weekdays (Tuesday, Wednesday, and Thursday) were used in the study. After compiling all the available data ORA identified a total of 12 typical weekdays that were suitable for use in the analysis (6 "before" days and 6 "after" days). For each day selected the total traffic volume and average vehicle speeds were quantified. The analysis periods that were reviewed included the following time periods:

1. Daily results (midnight to midnight),
2. AM Commuter Peak Period (6 to 9 AM),
3. PM Commuter Peak Period (3 to 6 PM), and
4. Off-peak overnight Period (1 to 4 AM).

Study Area / Site Location Map

US Route 13 Speed Study

DOVER, DELAWARE



In addition to analyzing speed and volume , crash data within the study area was also reviewed for periods before, during and after the US Route 13 pavement and rehabilitation project. Specifically, reportable crashes occurring between January 1st and May 15th for the following years were reviewed:

1. 2010 and 2011 (Pre-Construction Conditions)
2. 2012 (During Construction)
3. 2013 (Post-Construction Conditions)

RESULTS

Speed Summary

The overall results of the analysis show that travel speed generally increased for the "after" condition. Specifically the combined northbound and southbound daily totals for all four analysis sites showed an average "before" speed of 42.9 mph, while the average "after" speed was 44.7 mph. This equates to a 4.2% increase in the overall travel speed. The results for each individual data collection site and for each time period are listed below. It should be noted that the summary results consistently show that average travel speeds have increased along the corridor between 1.2% and 6.5%.

Site 1 Rustic Lane – The average daily travel speeds increased by 6.5% (43.2 mph to 46 mph)
Site 2 Jefferic Blvd - The average daily travel speeds increased by 6.5% (42.47 mph to 45.2mph)
Site 3 Maple Parkway - The average daily travel speeds increased by 2.8% (40.12 mph to 41.26 mph)
Site 4 E. Water St. - The average daily travel speeds increased by 1.2% (45.79 mph to 46.32mph)

Northbound (all sites) The average daily travel speeds increased by 4.2% (42.41 mph to 44.2 mph)
Southbound (all sites) The average daily travel speeds increased by 4.2% (43.37 mph to 45.19 mph)

AM Peak (6 to 9 AM) - The average daily travel speeds increased by 2.2% (45 mph to 46 mph)
PM Peak (3 to 6 PM) - The average daily travel speeds increased by 2.8% (41 mph to 42.2 mph)
Off-peak period (1 to 4 AM) - The average daily travel speeds increased by 4.8% (43.86 mph to 45.95 mph)

Crash Data Summary

Crash data from the years 2010, 2011, 2012 and 2013 were reviewed along the corridor. This period includes pre-construction conditions (2010, 2011), during construction (2012) and post construction conditions (2013). The crash data, as supplied by DelDOT, includes the period from January 1st to May 15th for each analysis year. The data shows that the average number of reported crashes during the pre-construction period was 77 (90 in 2010 and 64 in 2011. During the construction period (2012) the total number of crashes increased to 94, however, the 2013 after construction data again shows a total of 77 crashes. Albeit preliminary at this time, these initial results do not indicate any change in the total number of crashed when comparing the pre and post construction crash data.

The data did indicate an increase in "side swipe same direction" crashes in the year 2013, which is perhaps related to the reduced lane widths along the corridor. Specifically the data shows three

sideswipe crashes in the period before construction (2011) and seven crashes during that same period after construction (2013) was completed. A more detailed review of these seven crashes did not reveal any prominent crash clusters or defined patterns, as each of these post construction crashes occurred at dispersed locations along the corridor. Although the current data does not indicate any significant changes to the overall crash rates along the corridor, it is recommended that DelDOT continue to monitor the occurrence of side swipe crashes. The crash summary tables are included at the end of the report.

The tables included at the end of this report summarize the results of the analysis. Tables 1 through 4 show the before results for each of the data collection sites, Tables 5 through 8 show the after results, Table 9 shows the before/after comparison of traffic volume during each study period and Table 10 includes the overall results for travel speeds along the entire corridor as listed below. Tables 11 and 12 include a summary of crash data along the corridor.

Table 1 – Site 1, Route 13 at Rustic Lane Before Conditions

Table 2 - Site 2, Route 13 at Jefferic Blvd Before Conditions

Table 3– Site 3, Route 13 at Maple Pkwy Before Conditions

Table 4 - Site 4, Route 13 at Water St. Before Conditions

Table 5 – Site 1, Route 13 at Rustic Lane After Conditions

Table 6 - Site 2, Route 13 at Jefferic Blvd After Conditions

Table 7– Site 3, Route 13 at Maple Pkwy After Conditions

Table 8 - Site 4, Route 13 at Water St. After Conditions

Table 9 – Corridor Summary –Volume Data

Table 10 - Corridor Summary – Speed Data

Table 11 – Crash Data Summary

Table 12 – Sideswipe Crash Data Summary

CONCLUSION

Based on these results it appears that reducing the travel lane width from 12’ to 11’ did not result in a lowering of the average travel speeds along the corridor. On the contrary, travel speeds increased along the corridor. A complete review of the data shows that Sites 1 and 2 which are located in the 40 mph speed limit zone had a larger increase in average travel speed than Sites 3 and 4, which are in a 35 mph zone. Specifically, the overall daily increase in the 40 mph zone was 6.5%, while the increase in the 35 mph zone was 1.9%. The combined bidirectional average increase for the entire corridor was 4.2%.

While it appears evident from the recorded data that the reduction in lane width along this segment of the US13 corridor did not result in lower travel speeds, it would be erroneous to attribute the increased travel speeds solely to reduced lane width. Several other factors that need to be considered when comparing the before/after results are discussed next.

Seasonal Traffic Variation: The "before" traffic analysis was collected in July and August, while the "after" data was collected in January. Typically the data showed higher daily traffic volumes during the summer months. It would therefore be reasonable to assume that the levels of congestion under the "before" conditions would be greater, which may have contributed to generally lower travel speeds, however, the data also shows that during the AM peak period, traffic volume was highest during the "after" period. In spite of the higher AM peak volume in the "after" period, the data still shows an increase in AM period travel speeds. Based on these results it can be determined that volume alone is not the only contributing factor. Travel speeds generally increased throughout the corridor even thought the traffic volumes varied between the before and after conditions.

Pavement Conditions: It should also be noted that the purpose of the pavement & rehabilitation project was to restore this section of roadway and improve driving surface conditions. It is plausible to assume that the improved pavement conditions could also serve as a contributing factor to the increased travel speeds.

Signing and Striping: As with the improved pavement conditions, it is also likely that the human factors associated with improved delineation of the roadway may also serve as a contributing factor to the corridor's increased travel speeds.

In summary, the before/after speed and volume data collected along the corridor shows that the reduction in travel lane widths along this segment of the US Route 13corridor did not result in lower travel speeds. The overall data shows that after the pavement and rehabilitation work travel speeds along the segment studied have increased by an average of 4.2%.

Site 1 - Route 13 at Rustic Ln
Before Conditions
Volume and Speed Results

Table 1

ADT Volume				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	21092	20748	41840
Wednesday	7/20/2011	21990	21880	43870
Thursday	7/21/2011	22271	22403	44674
3 Day Average (July)		**21784**	**21677**	**43461**
Tuesday	8/9/2011	21223	20885	42108
Wednesday	8/10/2011	21620	21368	42988
Thursday	8/11/2011	21920	21661	43581
3 Day Average (Aug)		**21588**	**21305**	**42892**
6 Day Average		**21686**	**21491**	**43177**

Daily Speed Data				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	39.50	46.77	43.13
Wednesday	7/20/2011	40.71	47.37	44.04
Thursday	7/21/2011	40.16	47.22	43.69
3 Day Average (July)		**40.12**	**47.12**	**43.62**
Tuesday	8/9/2011	38.80	46.54	42.67
Wednesday	8/10/2011	38.75	46.92	42.83
Thursday	8/11/2011	38.26	47.03	42.65
3 Day Average (Aug)		**38.60**	**46.83**	**42.72**
6 Day Average		**39.36**	**46.98**	**43.17**

AM Peak Volume				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	2005	3242	5247
Wednesday	7/20/2011	2126	3224	5350
Thursday	7/21/2011	2062	3241	5303
3 Day Average (July)		**2064**	**3236**	**5300**
Tuesday	8/9/2011	2089	3255	5344
Wednesday	8/10/2011	1913	2923	4836
Thursday	8/11/2011	1924	2897	4821
3 Day Average (Aug)		**1975**	**3025**	**5000**
6 Day Average		**2020**	**3130**	**5150**

AM Peak Speed Data				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	42.06	50.00	46.03
Wednesday	7/20/2011	43.25	50.19	46.72
Thursday	7/21/2011	42.25	50.47	46.36
3 Day Average (July)		**42.52**	**50.22**	**46.37**
Tuesday	8/9/2011	42.11	49.75	45.93
Wednesday	8/10/2011	42.44	50.41	46.43
Thursday	8/11/2011	41.85	50.76	46.31
3 Day Average (Aug)		**42.14**	**50.31**	**46.22**
6 Day Average		**42.33**	**50.27**	**46.30**

PM Peak Volume				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	5380	4443	9823
Wednesday	7/20/2011	5348	4629	9977
Thursday	7/21/2011	5147	4621	9768
3 Day Average (July)		**5292**	**4564**	**9856**
Tuesday	8/9/2011	4945	4388	9333
Wednesday	8/10/2011	4911	4450	9361
Thursday	8/11/2011	5105	4421	9526
3 Day Average (Aug)		**4987**	**4420**	**9407**
6 Day Average		**5139**	**4492**	**9631**

PM Peak Speed Data				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	32.17	45.17	38.67
Wednesday	7/20/2011	33.56	45.92	39.74
Thursday	7/21/2011	33.36	45.67	39.51
3 Day Average (July)		**33.03**	**45.58**	**39.31**
Tuesday	8/9/2011	32.15	45.56	38.85
Wednesday	8/10/2011	32.56	45.74	39.15
Thursday	8/11/2011	32.50	45.06	38.78
3 Day Average (Aug)		**32.40**	**45.45**	**38.93**
6 Day Average		**32.71**	**45.52**	**39.12**

Off-Peak Period Volume				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	277	246	523
Wednesday	7/20/2011	307	291	598
Thursday	7/21/2011	369	315	684
3 Day Average (July)		**318**	**284**	**602**
Tuesday	8/9/2011	325	270	595
Wednesday	8/10/2011	330	274	604
Thursday	8/11/2011	407	319	726
3 Day Average (Aug)		**354**	**288**	**642**
6 Day Average		**336**	**286**	**622**

Off-Peak Period Speed Data				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	43.82	46.97	45.40
Wednesday	7/20/2011	46.17	48.64	47.40
Thursday	7/21/2011	43.61	47.36	45.49
3 Day Average (July)		**44.53**	**47.66**	**46.10**
Tuesday	8/9/2011	43.21	47.33	45.27
Wednesday	8/10/2011	43.22	47.78	45.50
Thursday	8/11/2011	41.44	47.31	44.38
3 Day Average (Aug)		**42.63**	**47.47**	**45.05**
6 Day Average		**43.58**	**47.56**	**45.57**

Site 2 - US Route 13 at Jefferic Blvd.
Before Conditions
Volume and Speed Results

Table 2

ADT Volume (Vehicles per Day)				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	23093	24297	47390
Wednesday	7/20/2011	24661	25706	50367
Thursday	7/21/2011	24543	25835	50378
3 Day Average (July)		**24099**	**25279**	**49378**
Tuesday	8/9/2011	23651	24801	48452
Wednesday	8/10/2011	23503	24095	47598
Thursday	8/11/2011	24367	25601	49968
3 Day Average (Aug)		**23840**	**24832**	**48673**
6 Day Average		**23970**	**25056**	**49026**

Daily Speed Data (MPH)				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	42.71	42.94	42.82
Wednesday	7/20/2011	43.69	43.30	43.49
Thursday	7/21/2011	43.49	42.89	43.19
3 Day Average (July)		**43.30**	**43.04**	**43.17**
Tuesday	8/9/2011	42.35	41.23	41.79
Wednesday	8/10/2011	42.04	40.03	41.03
Thursday	8/11/2011	42.57	42.41	42.49
3 Day Average (Aug)		**42.32**	**41.22**	**41.77**
6 Day Average		**42.81**	**42.13**	**42.47**

AM Peak Period Volume (6:00 to 9:00 AM)				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	2644	2849	5493
Wednesday	7/20/2011	2820	2922	5742
Thursday	7/21/2011	2675	2930	5605
3 Day Average (July)		**2713**	**2900**	**5613**
Tuesday	8/9/2011	2756	2841	5597
Wednesday	8/10/2011	2559	2555	5114
Thursday	8/11/2011	2689	2774	5463
3 Day Average (Aug)		**2668**	**2723**	**5391**
6 Day Average		**2691**	**2812**	**5502**

AM Peak Speed Data (MPH)				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	44.41	45.71	45.06
Wednesday	7/20/2011	45.50	46.19	45.85
Thursday	7/21/2011	46.06	46.36	46.21
3 Day Average (July)		**45.32**	**46.09**	**45.70**
Tuesday	8/9/2011	45.06	45.42	45.24
Wednesday	8/10/2011	44.71	45.15	44.93
Thursday	8/11/2011	45.11	45.94	45.53
3 Day Average (Aug)		**44.96**	**45.50**	**45.23**
6 Day Average		**45.14**	**45.79**	**45.47**

PM Peak Period Volume (3:00 to 6:00 PM)				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	5354	5557	10911
Wednesday	7/20/2011	5645	5889	11534
Thursday	7/21/2011	5351	5799	11150
3 Day Average (July)		**5450**	**5748**	**11198**
Tuesday	8/9/2011	4993	5436	10429
Wednesday	8/10/2011	4909	5144	10053
Thursday	8/11/2011	5411	5916	11327
3 Day Average (Aug)		**5104**	**5499**	**10603**
6 Day Average		**5277**	**5624**	**10901**

PM Peak Speed Data				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	40.81	41.94	41.38
Wednesday	7/20/2011	41.81	41.97	41.89
Thursday	7/21/2011	41.86	42.44	42.15
3 Day Average (July)		**41.49**	**42.12**	**41.81**
Tuesday	8/9/2011	40.18	42.47	41.32
Wednesday	8/10/2011	40.16	41.09	40.63
Thursday	8/11/2011	40.47	42.00	41.24
3 Day Average (Aug)		**40.27**	**41.85**	**41.06**
6 Day Average		**40.88**	**41.99**	**41.43**

Off-Peak Period Volume (1:00 to 4:00 AM)				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	312	393	705
Wednesday	7/20/2011	277	350	627
Thursday	7/21/2011	342	456	798
3 Day Average (July)		**310**	**400**	**710**
Tuesday	8/9/2011	399	417	816
Wednesday	8/10/2011	300	358	658
Thursday	8/11/2011	396	472	868
3 Day Average (Aug)		**365**	**416**	**781**
6 Day Average		**338**	**408**	**745**

Off-Peak Period Speed Data				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	43.40	42.00	42.70
Wednesday	7/20/2011	44.76	44.15	44.46
Thursday	7/21/2011	44.43	41.97	43.20
3 Day Average (July)		**44.20**	**42.71**	**43.45**
Tuesday	8/9/2011	44.00	40.39	42.19
Wednesday	8/10/2011	42.71	39.77	41.24
Thursday	8/11/2011	42.75	39.22	40.99
3 Day Average (Aug)		**43.15**	**39.80**	**41.47**
6 Day Average		**43.68**	**41.25**	**42.46**

Site 3 - US Route 13 at Maple Pkwy.
Before Conditions
Volume and Speed Results

Table 3

ADT Volume				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	22983	22688	45671
Wednesday	7/20/2011	23772	23422	47194
Thursday	7/21/2011	23219	23183	46402
3 Day Average (July)		**23325**	**23098**	**46422**
Tuesday	8/9/2011	21574	21426	43000
Wednesday	8/10/2011	22839	22838	45677
Thursday	8/11/2011	23358	23621	46979
3 Day Average (Aug)		**22590**	**22628**	**45219**
6 Day Average		**22958**	**22863**	**45821**

Daily Speed Data				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	40.96	38.90	39.93
Wednesday	7/20/2011	41.34	39.14	40.24
Thursday	7/21/2011	41.44	38.95	40.20
3 Day Average (July)		**41.25**	**39.00**	**40.12**
Tuesday	8/9/2011	41.36	39.03	40.19
Wednesday	8/10/2011	40.98	39.08	40.03
Thursday	8/11/2011	41.17	39.09	40.13
3 Day Average (Aug)		**41.17**	**39.07**	**40.12**
6 Day Average		**41.21**	**39.03**	**40.12**

AM Peak Volume				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	2711	2907	5618
Wednesday	7/20/2011	2811	2919	5730
Thursday	7/21/2011	2660	2856	5516
3 Day Average (July)		**2727**	**2894**	**5621**
Tuesday	8/9/2011	2176	2323	4499
Wednesday	8/10/2011	2353	2361	4714
Thursday	8/11/2011	2693	2751	5444
3 Day Average (Aug)		**2407**	**2478**	**4886**
6 Day Average		**2567**	**2686**	**5254**

AM Peak Speed Data				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	42.74	40.88	41.81
Wednesday	7/20/2011	42.56	40.75	41.65
Thursday	7/21/2011	42.69	40.94	41.82
3 Day Average (July)		**42.66**	**40.86**	**41.76**
Tuesday	8/9/2011	43.13	41.03	42.08
Wednesday	8/10/2011	42.84	41.41	42.13
Thursday	8/11/2011	42.36	41.22	41.79
3 Day Average (Aug)		**42.78**	**41.22**	**42.00**
6 Day Average		**42.72**	**41.04**	**41.88**

PM Peak Volume				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	5218	4967	10185
Wednesday	7/20/2011	5461	5268	10729
Thursday	7/21/2011	5158	5162	10320
3 Day Average (July)		**5279**	**5132**	**10411**
Tuesday	8/9/2011	5182	5172	10354
Wednesday	8/10/2011	4878	4973	9851
Thursday	8/11/2011	5201	5356	10557
3 Day Average (Aug)		**5087**	**5167**	**10254**
6 Day Average		**5183**	**5150**	**10333**

PM Peak Speed Data				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	40.00	37.31	38.65
Wednesday	7/20/2011	40.78	37.53	39.15
Thursday	7/21/2011	41.22	37.81	39.51
3 Day Average (July)		**40.67**	**37.55**	**39.11**
Tuesday	8/9/2011	40.58	37.61	39.10
Wednesday	8/10/2011	40.18	37.47	38.82
Thursday	8/11/2011	40.53	36.75	38.64
3 Day Average (Aug)		**40.43**	**37.28**	**38.85**
6 Day Average		**40.55**	**37.41**	**38.98**

Off-Peak Period Volume				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	382	366	748
Wednesday	7/20/2011	316	326	642
Thursday	7/21/2011	340	418	758
3 Day Average (July)		**346**	**370**	**716**
Tuesday	8/9/2011	364	351	715
Wednesday	8/10/2011	313	361	674
Thursday	8/11/2011	370	371	741
3 Day Average (Aug)		**349**	**361**	**710**
6 Day Average		**348**	**366**	**713**

Off-Peak Period Speed Data				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	40.47	39.22	39.85
Wednesday	7/20/2011	40.81	40.28	40.54
Thursday	7/21/2011	40.39	38.56	39.47
3 Day Average (July)		**40.56**	**39.35**	**39.95**
Tuesday	8/9/2011	41.44	40.42	40.93
Wednesday	8/10/2011	40.44	40.42	40.43
Thursday	8/11/2011	41.08	39.92	40.50
3 Day Average (Aug)		**40.99**	**40.25**	**40.62**
6 Day Average		**40.77**	**39.80**	**40.29**

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Site 4 - US Route 13 at Water St.
Before Conditions
Volume and Speed Results

Table 4

ADT Volume				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	15007	15744	30751
Wednesday	7/20/2011	15789	16730	32519
Thursday	7/21/2011	15691	16749	32440
3 Day Average (July)		**15496**	**16408**	**31903**
Tuesday	8/9/2011	15003	15701	30704
Wednesday	8/10/2011	15093	15821	30914
Thursday	8/11/2011	15372	16170	31542
3 Day Average (Aug)		**15156**	**15897**	**31053**
6 Day Average		**15326**	**16153**	**31478**

Daily Speed Data				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	46.31	45.02	45.67
Wednesday	7/20/2011	45.77	45.53	45.65
Thursday	7/21/2011	46.76	45.40	46.08
3 Day Average (July)		**46.28**	**45.32**	**45.80**
Tuesday	8/9/2011	46.31	44.95	45.63
Wednesday	8/10/2011	46.08	45.36	45.72
Thursday	8/11/2011	46.27	45.69	45.98
3 Day Average (Aug)		**46.22**	**45.33**	**45.78**
6 Day Average		**46.25**	**45.33**	**45.79**

AM Peak Volume				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	2341	1833	4174
Wednesday	7/20/2011	2334	1876	4210
Thursday	7/21/2011	2248	1809	4057
3 Day Average (July)		**2308**	**1839**	**4147**
Tuesday	8/9/2011	2271	1737	4008
Wednesday	8/10/2011	2090	1650	3740
Thursday	8/11/2011	2226	1688	3914
3 Day Average (Aug)		**2196**	**1692**	**3887**
6 Day Average		**2252**	**1766**	**4017**

AM Peak Speed Data				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	47.03	45.50	46.26
Wednesday	7/20/2011	46.53	45.53	46.03
Thursday	7/21/2011	47.83	45.64	46.74
3 Day Average (July)		**47.13**	**45.56**	**46.34**
Tuesday	8/9/2011	47.39	45.22	46.31
Wednesday	8/10/2011	47.35	45.85	46.60
Thursday	8/11/2011	46.75	46.19	46.47
3 Day Average (Aug)		**47.16**	**45.76**	**46.46**
6 Day Average		**47.15**	**45.66**	**46.40**

PM Peak Volume				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	3144	3586	6730
Wednesday	7/20/2011	3330	3879	7209
Thursday	7/21/2011	3217	3852	7069
3 Day Average (July)		**3230**	**3772**	**7003**
Tuesday	8/9/2011	3088	3605	6693
Wednesday	8/10/2011	3245	3754	6999
Thursday	8/11/2011	3205	3902	7107
3 Day Average (Aug)		**3179**	**3754**	**6933**
6 Day Average		**3205**	**3763**	**6968**

PM Peak Speed Data				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	45.36	43.25	44.31
Wednesday	7/20/2011	44.22	43.75	43.99
Thursday	7/21/2011	46.28	44.08	45.18
3 Day Average (July)		**45.29**	**43.69**	**44.49**
Tuesday	8/9/2011	44.71	44.29	44.50
Wednesday	8/10/2011	44.86	44.08	44.47
Thursday	8/11/2011	45.22	44.64	44.93
3 Day Average (Aug)		**44.93**	**44.34**	**44.63**
6 Day Average		**45.11**	**44.02**	**44.56**

Off-Peak Period Volume				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	216	241	457
Wednesday	7/20/2011	206	253	459
Thursday	7/21/2011	210	274	484
3 Day Average (July)		**211**	**256**	**467**
Tuesday	8/9/2011	222	224	446
Wednesday	8/10/2011	188	257	445
Thursday	8/11/2011	204	240	444
3 Day Average (Aug)		**205**	**240**	**445**
6 Day Average		**208**	**248**	**456**

Off-Peak Period Speed Data				
Day	Date	NB	SB	Total
Tuesday	7/19/2011	47.56	46.64	47.10
Wednesday	7/20/2011	47.25	47.56	47.40
Thursday	7/21/2011	46.88	46.91	46.90
3 Day Average (July)		**47.23**	**47.04**	**47.13**
Tuesday	8/9/2011	46.78	46.69	46.74
Wednesday	8/10/2011	46.94	46.92	46.93
Thursday	8/11/2011	48.06	47.17	47.61
3 Day Average (Aug)		**47.26**	**46.93**	**47.09**
6 Day Average		**47.24**	**46.98**	**47.11**

Site 1 - Route 13 at Rustic Ln
After Conditions
Volume and Speed Results

Table 5

ADT Volume (Average Daily Vehicles)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	19782	19016	38798
Wednesday	1/9/2013	19672	18791	38463
Thursday	1/10/2013	19958	19290	39248
3 Day Average (week 1)		**19804**	**19032**	**38836**
Tuesday	1/29/2013	20309	19446	39755
Wednesday	1/30/2013	19805	19109	38914
Thursday	1/31/2013	20676	19931	40607
3 Day Average (week 2)		**20263**	**19495**	**39759**
6 Day Average		**20034**	**19264**	**39298**

Daily Speed Data (MPH)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	43.19	49.45	46.32
Wednesday	1/9/2013	43.06	49.47	46.27
Thursday	1/10/2013	43.05	49.69	46.37
3 Day Average (week 1)		**43.10**	**49.54**	**46.32**
Tuesday	1/29/2013	42.75	49.19	45.97
Wednesday	1/30/2013	42.68	48.40	45.54
Thursday	1/31/2013	41.90	48.88	45.39
3 Day Average (week 2)		**42.45**	**48.82**	**45.63**
6 Day Average		**42.77**	**49.18**	**45.98**

AM Peak Volume (6-9 AM)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	1857	3095	4952
Wednesday	1/9/2013	1906	3109	5015
Thursday	1/10/2013	1936	3096	5032
3 Day Average (week 1)		**1900**	**3100**	**5000**
Tuesday	1/29/2013	1937	3229	5166
Wednesday	1/30/2013	2056	3200	5256
Thursday	1/31/2013	2069	3279	5348
3 Day Average (week 2)		**2021**	**3236**	**5257**
6 Day Average		**1960**	**3168**	**5128**

AM Peak Speed Data (MPH)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	45.07	51.56	48.31
Wednesday	1/9/2013	44.35	51.70	48.03
Thursday	1/10/2013	44.12	52.15	48.13
3 Day Average (week 1)		**44.52**	**51.80**	**48.16**
Tuesday	1/29/2013	43.59	50.88	47.24
Wednesday	1/30/2013	44.25	50.50	47.38
Thursday	1/31/2013	43.19	51.44	47.31
3 Day Average (week 2)		**43.68**	**50.94**	**47.31**
6 Day Average		**44.10**	**51.37**	**47.73**

PM Peak Volume (3-6 PM)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	5214	4179	9393
Wednesday	1/9/2013	5082	4094	9176
Thursday	1/10/2013	5101	4273	9374
3 Day Average (week 1)		**5132**	**4182**	**9314**
Tuesday	1/29/2013	5427	4286	9713
Wednesday	1/30/2013	5207	4320	9527
Thursday	1/31/2013	5276	4348	9624
3 Day Average (week 2)		**5303**	**4318**	**9621**
6 Day Average		**5218**	**4250**	**9468**

PM Peak Speed Data (MPH)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	36.66	47.87	42.26
Wednesday	1/9/2013	37.58	46.97	42.28
Thursday	1/10/2013	36.77	47.60	42.19
3 Day Average (week 1)		**37.00**	**47.48**	**42.24**
Tuesday	1/29/2013	36.86	47.22	42.04
Wednesday	1/30/2013	36.44	46.88	41.66
Thursday	1/31/2013	35.66	48.01	41.83
3 Day Average (week 2)		**36.32**	**47.37**	**41.84**
6 Day Average		**36.66**	**47.43**	**42.04**

Off-Peak Period Volume (1-4 AM)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	232	190	422
Wednesday	1/9/2013	276	238	514
Thursday	1/10/2013	242	242	484
3 Day Average (week 1)		**250**	**223**	**473**
Tuesday	1/29/2013	225	207	432
Wednesday	1/30/2013	235	204	439
Thursday	1/31/2013	233	255	488
3 Day Average (week 2)		**231**	**222**	**453**
6 Day Average		**241**	**223**	**463**

Off-Peak Period Speed Data (MPH)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	46.31	50.04	48.18
Wednesday	1/9/2013	46.44	50.18	48.31
Thursday	1/10/2013	47.86	51.22	49.54
3 Day Average (week 1)		**46.87**	**50.48**	**48.67**
Tuesday	1/29/2013	45.94	50.38	48.16
Wednesday	1/30/2013	46.14	48.99	47.56
Thursday	1/31/2013	45.16	46.40	45.78
3 Day Average (week 2)		**45.75**	**48.59**	**47.17**
6 Day Average		**46.31**	**49.53**	**47.92**

Site 2 - US Route 13 at Jefferic Blvd
After Conditions
Volume and Spped Results

Table 6

ADT Volume (Average Daily Vehicles)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	20914	22084	42998
Wednesday	1/9/2013	21261	22543	43804
Thursday	1/10/2013	20780	22333	43113
3 Day Average (week 1)		**20985**	**22320**	**43305**
Tuesday	1/29/2013	21560	22900	44460
Wednesday	1/30/2013	21292	22667	43959
Thursday	1/31/2013	22369	23733	46102
3 Day Average (week 2)		**21740**	**23100**	**44840**
6 Day Average		**21363**	**22710**	**44073**

Daily Speed Data (MPH)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	45.21	45.57	45.39
Wednesday	1/9/2013	45.06	45.56	45.31
Thursday	1/10/2013	45.10	45.84	45.47
3 Day Average (week 1)		**45.12**	**45.66**	**45.39**
Tuesday	1/29/2013	45.18	45.42	45.30
Wednesday	1/30/2013	45.10	45.48	45.29
Thursday	1/31/2013	44.32	45.08	44.70
3 Day Average (week 2)		**44.87**	**45.32**	**45.09**
6 Day Average		**44.99**	**45.49**	**45.24**

AM Peak Volume (6-9 AM)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	2466	2807	5273
Wednesday	1/9/2013	2539	2826	5365
Thursday	1/10/2013	2475	2858	5333
3 Day Average (week 1)		**2493**	**2830**	**5324**
Tuesday	1/29/2013	2633	2920	5553
Wednesday	1/30/2013	2731	2833	5564
Thursday	1/31/2013	2768	2991	5759
3 Day Average (week 2)		**2711**	**2915**	**5625**
6 Day Average		**2602**	**2873**	**5475**

AM Peak Speed Data (MPH)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	46.88	47.02	46.95
Wednesday	1/9/2013	46.87	47.40	47.13
Thursday	1/10/2013	46.61	47.59	47.10
3 Day Average (week 1)		**46.79**	**47.34**	**47.06**
Tuesday	1/29/2013	46.19	46.99	46.59
Wednesday	1/30/2013	45.59	46.94	46.26
Thursday	1/31/2013	45.25	47.18	46.21
3 Day Average (week 2)		**45.68**	**47.03**	**46.36**
6 Day Average		**46.23**	**47.19**	**46.71**

PM Peak Volume (3-6 PM)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	5146	5306	10452
Wednesday	1/9/2013	5064	5440	10504
Thursday	1/10/2013	4999	5309	10308
3 Day Average (week 1)		**5070**	**5352**	**10421**
Tuesday	1/29/2013	5196	5509	10705
Wednesday	1/30/2013	5193	5557	10750
Thursday	1/31/2013	5330	5653	10983
3 Day Average (week 2)		**5240**	**5573**	**10813**
6 Day Average		**5155**	**5462**	**10617**

PM Peak Speed Data (MPH)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	42.27	43.22	42.75
Wednesday	1/9/2013	41.41	43.16	42.28
Thursday	1/10/2013	41.88	43.52	42.70
3 Day Average (week 1)		**41.85**	**43.30**	**42.58**
Tuesday	1/29/2013	42.75	43.31	43.03
Wednesday	1/30/2013	41.76	43.37	42.56
Thursday	1/31/2013	40.43	43.35	41.89
3 Day Average (week 2)		**41.65**	**43.34**	**42.49**
6 Day Average		**41.75**	**43.32**	**42.53**

Off-Peak Volume (1-4 AM)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	223	279	502
Wednesday	1/9/2013	259	370	629
Thursday	1/10/2013	249	339	588
3 Day Average (week 1)		**244**	**329**	**573**
Tuesday	1/29/2013	219	262	481
Wednesday	1/30/2013	249	359	608
Thursday	1/31/2013	235	307	542
3 Day Average (week 2)		**234**	**309**	**544**
6 Day Average		**239**	**319**	**558**

Off-Peak Speed Data (MPH)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	46.49	46.47	46.48
Wednesday	1/9/2013	46.77	46.79	46.78
Thursday	1/10/2013	47.05	47.14	47.09
3 Day Average (week 1)		**46.77**	**46.80**	**46.78**
Tuesday	1/29/2013	46.64	46.69	46.67
Wednesday	1/30/2013	47.06	47.02	47.04
Thursday	1/31/2013	46.29	46.41	46.35
3 Day Average (week 2)		**46.66**	**46.71**	**46.69**
6 Day Average		**46.72**	**46.75**	**46.73**

Site 3 - US Route 13 at Maple Pkwy. Table 7
After Conditions
Volume and Speed Results

ADT Volume (Vehicles per Day)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	20536	20288	40824
Wednesday	1/9/2013	20647	20506	41153
Thursday	1/10/2013	20460	20416	40876
3 Day Average (week 1)		**20548**	**20403**	**40951**
Tuesday	1/29/2013	20837	20667	41504
Wednesday	1/30/2013	20837	20675	41512
Thursday	1/31/2013	21613	21475	43088
3 Day Average (week 2)		**21096**	**20939**	**42035**
6 Day Average		**20822**	**20671**	**41493**

Daily Speed Data (MPH)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	42.22	40.56	41.39
Wednesday	1/9/2013	42.06	40.53	41.29
Thursday	1/10/2013	42.17	40.85	41.51
3 Day Average (week 1)		**42.15**	**40.65**	**41.40**
Tuesday	1/29/2013	42.05	40.33	41.19
Wednesday	1/30/2013	42.32	40.05	41.18
Thursday	1/31/2013	41.66	40.26	40.96
3 Day Average (week 2)		**42.01**	**40.21**	**41.11**
6 Day Average		**42.08**	**40.43**	**41.25**

AM Peak Volume (6-9 AM)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	2600	2761	5361
Wednesday	1/9/2013	2635	2733	5368
Thursday	1/10/2013	2615	2761	5376
3 Day Average (week 1)		**2617**	**2752**	**5368**
Tuesday	1/29/2013	2661	2805	5466
Wednesday	1/30/2013	2792	2714	5506
Thursday	1/31/2013	2851	2897	5748
3 Day Average (week 2)		**2768**	**2805**	**5573**
6 Day Average		**2692**	**2779**	**5471**

AM Peak Speed Data (MPH)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	43.87	42.16	43.01
Wednesday	1/9/2013	43.81	42.46	43.14
Thursday	1/10/2013	43.55	42.58	43.06
3 Day Average (week 1)		**43.74**	**42.40**	**43.07**
Tuesday	1/29/2013	42.98	41.81	42.40
Wednesday	1/30/2013	43.09	41.67	42.38
Thursday	1/31/2013	42.78	41.90	42.34
3 Day Average (week 2)		**42.95**	**41.79**	**42.37**
6 Day Average		**43.35**	**42.10**	**42.72**

PM Peak Volume (3-6 PM)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	5080	4791	9871
Wednesday	1/9/2013	4869	4873	9742
Thursday	1/10/2013	4924	4726	9650
3 Day Average (week 1)		**4958**	**4797**	**9754**
Tuesday	1/29/2013	5047	4821	9868
Wednesday	1/30/2013	5047	4896	9943
Thursday	1/31/2013	5171	4940	10111
3 Day Average (week 2)		**5088**	**4886**	**9974**
6 Day Average		**5023**	**4841**	**9864**

PM Peak Speed Data (MPH)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	41.03	38.58	39.81
Wednesday	1/9/2013	40.70	38.14	39.42
Thursday	1/10/2013	40.82	38.85	39.84
3 Day Average (week 1)		**40.85**	**38.52**	**39.69**
Tuesday	1/29/2013	41.09	38.68	39.88
Wednesday	1/30/2013	41.38	38.25	39.81
Thursday	1/31/2013	40.82	38.78	39.80
3 Day Average (week 2)		**41.10**	**38.57**	**39.83**
6 Day Average		**40.98**	**38.55**	**39.76**

Off-Peak Volume (1-4 AM)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	220	255	475
Wednesday	1/9/2013	281	331	612
Thursday	1/10/2013	256	284	540
3 Day Average (week 1)		**252**	**290**	**542**
Tuesday	1/29/2013	238	230	468
Wednesday	1/30/2013	266	303	569
Thursday	1/31/2013	243	264	507
3 Day Average (week 2)		**249**	**266**	**515**
6 Day Average		**251**	**278**	**529**

Off-Peak Speed Data (MPH)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	42.23	41.61	41.92
Wednesday	1/9/2013	42.12	42.04	42.08
Thursday	1/10/2013	43.44	42.18	42.81
3 Day Average (week 1)		**42.60**	**41.94**	**42.27**
Tuesday	1/29/2013	42.06	40.79	41.42
Wednesday	1/30/2013	42.43	41.11	41.77
Thursday	1/31/2013	41.58	39.68	40.63
3 Day Average (week 2)		**42.02**	**40.52**	**41.27**
6 Day Average		**42.31**	**41.23**	**41.77**

Site 4 - Route 13 at Water St.
After Conditions
Volume and Speed Results

Table 8

ADT Volume (Average Daily Vehicles)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	13670	14646	28316
Wednesday	1/9/2013	13992	14851	28843
Thursday	1/10/2013	na	na	na
3 Day Average (week 1)		**13831**	**14749**	**28580**
Tuesday	1/29/2013	14103	15112	29215
Wednesday	1/30/2013	14137	14796	28933
Thursday	1/31/2013	14641	15400	30041
3 Day Average (week 2)		**14294**	**15103**	**29396**
6 Day Average		**14109**	**14961**	**29070**

Daily Speed Data (MPH)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	47.24	46.13	46.69
Wednesday	1/9/2013	46.87	45.72	46.30
Thursday	1/10/2013	46.75	46.05	46.40
3 Day Average (week 1)		**46.96**	**45.97**	**46.46**
Tuesday	1/29/2013	46.91	45.91	46.41
Wednesday	1/30/2013	47.22	44.91	46.07
Thursday	1/31/2013	46.81	45.31	46.06
3 Day Average (week 2)		**46.98**	**45.38**	**46.18**
6 Day Average		**46.97**	**45.67**	**46.32**

AM Peak Volume (6-9 AM)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	2263	1884	4147
Wednesday	1/9/2013	2238	1843	4081
Thursday	1/10/2013	na	na	na
3 Day Average (week 1)		**2251**	**1864**	**4114**
Tuesday	1/29/2013	2312	1841	4153
Wednesday	1/30/2013	2350	1849	4199
Thursday	1/31/2013	2335	1940	4275
3 Day Average (week 2)		**2332**	**1877**	**4209**
6 Day Average		**2300**	**1871**	**4171**

AM Peak Speed Data (MPH)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	47.63	47.13	47.38
Wednesday	1/9/2013	47.71	46.82	47.26
Thursday	1/10/2013	na	na	na
3 Day Average (week 1)		**47.67**	**46.97**	**47.32**
Tuesday	1/29/2013	47.00	46.93	46.97
Wednesday	1/30/2013	46.49	46.08	46.28
Thursday	1/31/2013	46.71	46.18	46.44
3 Day Average (week 2)		**46.73**	**46.40**	**46.56**
6 Day Average		**47.11**	**46.63**	**46.87**

PM Peak Volume (3-6 PM)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	3094	3543	6637
Wednesday	1/9/2013	3142	3577	6719
Thursday	1/10/2013	na	na	na
3 Day Average (week 1)		**3118**	**3560**	**6678**
Tuesday	1/29/2013	3240	3685	6925
Wednesday	1/30/2013	3192	3562	6754
Thursday	1/31/2013	3326	3755	7081
3 Day Average (week 2)		**3253**	**3667**	**6920**
6 Day Average		**3199**	**3624**	**6823**

PM Peak Speed Data (MPH)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	45.76	44.21	44.99
Wednesday	1/9/2013	44.90	43.00	43.95
Thursday	1/10/2013	45.13	43.88	44.50
3 Day Average (week 1)		**45.26**	**43.69**	**44.48**
Tuesday	1/29/2013	45.21	43.69	44.45
Wednesday	1/30/2013	46.04	42.04	44.04
Thursday	1/31/2013	45.50	43.63	44.56
3 Day Average (week 2)		**45.58**	**43.12**	**44.35**
6 Day Average		**45.42**	**43.41**	**44.42**

Off-Peak Volume (1-4 AM)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	140	165	305
Wednesday	1/9/2013	173	199	372
Thursday	1/10/2013	167	190	357
3 Day Average (week 1)		**160**	**185**	**345**
Tuesday	1/29/2013	137	158	295
Wednesday	1/30/2013	171	178	349
Thursday	1/31/2013	122	201	323
3 Day Average (week 2)		**143**	**179**	**322**
6 Day Average		**152**	**182**	**334**

Off-Peak Speed Data (MPH)				
Day	Date	NB	SB	Total
Tuesday	1/8/2013	48.46	47.11	47.78
Wednesday	1/9/2013	46.90	47.25	47.08
Thursday	1/10/2013	49.79	48.89	49.34
3 Day Average (week 1)		**48.38**	**47.75**	**48.07**
Tuesday	1/29/2013	47.21	46.89	47.05
Wednesday	1/30/2013	47.58	46.67	47.13
Thursday	1/31/2013	47.00	44.57	45.78
3 Day Average (week 2)		**47.26**	**46.04**	**46.65**
6 Day Average		**47.82**	**46.90**	**47.36**

US Route 13 Corridor Summary
Volume Data (Total Vehicles)

Table 9

			Before [1]				After [2]				% Change			
			AM	PM	Off-Peak	Daily	AM	PM	Off-Peak	Daily	AM	PM	Off-Peak	Daily
40 MPH	Site 1	NB	2020	5139	336	21686	1960	5218	241	20034	-3.0%	1.5%	-28.3%	-7.6%
		SB	3130	4492	286	21491	3168	4250	223	19264	1.2%	-5.4%	-22.0%	-10.4%
		Total	5150	9631	622	43177	5128	9468	464	39298	-0.4%	-1.7%	-25.4%	-9.0%
	Site 2	NB	2691	5277	338	23970	2602	5155	239	21363	-3.3%	-2.3%	-29.3%	-10.9%
		SB	2812	5624	408	25056	2873	5462	319	22710	2.2%	-2.9%	-21.8%	-9.4%
		Total	5503	10901	746	49026	5475	10617	558	44073	-0.5%	-2.6%	-25.2%	-10.1%
	Site 1 & 2 Total	NB	4711	10416	674	45656	4562	10373	480	41397	-3.2%	-0.4%	-28.8%	-9.3%
		SB	5942	10116	694	46547	6041	9712	542	41974	1.7%	-4.0%	-21.9%	-9.8%
		Total	10653	20532	1368	92203	10603	20085	1022	83371	-0.5%	-2.2%	-25.3%	-9.6%
35 MPH	Site 3	NB	2567	5183	348	22958	2692	5023	251	20822	4.9%	-3.1%	-27.9%	-9.3%
		SB	2686	5150	366	22863	2779	4841	278	20671	3.5%	-6.0%	-24.0%	-9.6%
		Total	5253	10333	714	45821	5471	9864	529	41493	4.2%	-4.5%	-25.9%	-9.4%
	Site 4	NB	2252	3205	208	15326	2300	3199	152	14109	2.1%	-0.2%	-26.9%	-7.9%
		SB	1766	3763	248	16153	1871	3624	182	14961	5.9%	-3.7%	-26.6%	-7.4%
		Total	4018	6968	456	31479	4171	6823	334	29070	3.8%	-2.1%	-26.8%	-7.7%
	Site 3 & 4 Total	NB	4819	8388	556	38284	4992	8222	403	34931	3.6%	-2.0%	-27.5%	-8.8%
		SB	4452	8913	614	39016	4650	8465	460	35632	4.4%	-5.0%	-25.1%	-8.7%
		Total	9271	17301	1170	77300	9642	16687	863	70563	4.0%	-3.5%	-26.2%	-8.7%
	Total	NB	9530	18804	1230	83940	9554	18595	883	76328	0.3%	-1.1%	-28.2%	-9.1%
		SB	10394	19029	1308	85563	10691	18177	1002	77606	2.9%	-4.5%	-23.4%	-9.3%
		Total	19924	37833	2538	169503	20245	36772	1885	153934	1.6%	-2.8%	-25.7%	-9.2%

[1] *Before data was collected during July & August, 2011*
[2] *After data was collected during January, 2013*

US Route 13 Corridor Summary
Speed Data (MPH)

Table 10

			Before [1]				After [2]				% Change			
			AM	PM	Off-Peak	Daily	AM	PM	Off-Peak	Daily	AM	PM	Off-Peak	Daily
40 MPH	Site 1	NB	42.33	32.71	43.58	39.36	44.1	36.66	46.31	42.77	4.2%	12.1%	6.3%	8.7%
		SB	50.27	45.52	47.56	46.98	51.37	47.43	49.53	49.18	2.2%	4.2%	4.1%	4.7%
		Total	46.30	39.12	45.57	43.17	47.74	42.05	47.92	45.98	3.1%	7.5%	5.2%	6.5%
	Site 2	NB	45.14	40.88	43.68	42.81	46.23	41.75	46.72	44.99	2.4%	2.1%	7.0%	5.1%
		SB	45.79	41.99	41.25	42.13	47.19	43.32	46.75	45.49	3.1%	3.2%	13.3%	8.0%
		Total	45.47	41.44	42.47	42.47	46.71	42.54	46.74	45.24	2.7%	2.7%	10.1%	6.5%
	Site 1 & 2 Total	NB	43.74	36.80	43.63	41.09	45.17	39.21	46.52	43.88	3.3%	6.5%	6.6%	6.8%
		SB	48.03	43.76	44.41	44.56	49.28	45.38	48.14	47.34	2.6%	3.7%	8.4%	6.2%
		Total	45.88	40.28	44.02	42.82	47.22	42.29	47.33	45.61	2.9%	5.0%	7.5%	6.5%
35 MPH	Site 3	NB	42.72	40.55	40.77	41.21	43.35	40.98	42.31	42.08	1.5%	1.1%	3.8%	2.1%
		SB	41.04	37.41	39.8	39.03	42.1	38.55	41.23	40.43	2.6%	3.0%	3.6%	3.6%
		Total	41.88	38.98	40.29	40.12	42.73	39.77	41.77	41.26	2.0%	2.0%	3.7%	2.8%
	Site 4	NB	47.15	45.11	47.24	46.25	47.11	45.42	47.82	46.97	-0.1%	0.7%	1.2%	1.6%
		SB	45.66	44.02	46.98	45.33	46.63	43.41	46.9	45.67	2.1%	-1.4%	-0.2%	0.8%
		Total	46.41	44.57	47.11	45.79	46.87	44.42	47.36	46.32	1.0%	-0.3%	0.5%	1.2%
	Site 3 & 4 Total	NB	44.94	42.83	44.01	43.73	45.23	43.20	45.07	44.53	0.7%	0.9%	2.4%	1.8%
		SB	43.35	40.72	43.39	42.18	44.37	40.98	44.07	43.05	2.3%	0.7%	1.6%	2.1%
		Total	44.14	41.77	43.70	42.96	44.80	42.09	44.57	43.79	1.5%	0.8%	2.0%	1.9%
	Total	NB	44.34	39.81	43.82	42.41	45.20	41.20	45.79	44.20	1.9%	3.5%	4.5%	4.2%
		SB	45.69	42.24	43.90	43.37	46.82	43.18	46.10	45.19	2.5%	2.2%	5.0%	4.2%
		Total	45.01	41.02	43.86	42.89	46.01	42.19	45.95	44.70	2.2%	2.8%	4.8%	4.2%

[1] *Before data was collected during July & August, 2011*

[2] *After data was collected during January, 2013*

US13 from St. Jones River to Kentwood Drive Crash Details (January 1st, 2013 to May 15th, 2013)

Manner of Impact	# of Report-able	% Report-able	# Non-Report-able	% Non-Report-able	# of Personal Injury	% Personal Injury	# of Fatality	% Fatality	Total Number	Total Percent
Front to rear	26	34%	0	0%	23	30%	0	0%	49	64%
Front to front	0	0%	0	0%	1	1%	0	0%	1	1%
Angle	6	8%	0	0%	4	5%	0	0%	10	13%
Sideswipe same direction	4	5%	0	0%	3	4%	0	0%	7	9%
Sideswipe Oppo. direction	1	1%	0	0%	0	0%	0	0%	1	1%
Rear to Side	0	0%	0	0%	0	0%	0	0%	0	0%
Rear to rear	0	0%	0	0%	0	0%	0	0%	0	0%
Other	0	0%	0	0%	1	1%	0	0%	1	1%
Unknown	0	0%	0	0%	0	0%	0	0%	0	0%
Not Collision b/n two veh	6	8%	0	0%	2	3%	0	0%	8	10%
2013 Totals	43	56%	0	0%	34	44%	0	0%	77	100%

US13 from St. Jones River to Kentwood Drive Crash Details (January 1st, 2012 to May 15th, 2012)

Manner of Impact	# of Report-able	% Report-able	# Non-Report-able	% Non-Report-able	# of Personal Injury	% Personal Injury	# of Fatality	% Fatality	Total Number	Total Percent
Front to rear	47	50%	0	0%	21	22%	0	0%	68	72%
Front to front	0	0%	0	0%	0	0%	0	0%	0	0%
Angle	10	11%	0	0%	6	6%	0	0%	16	17%
Sideswipe same direction	3	3%	0	0%	2	2%	0	0%	5	5%
Sideswipe Opp. direction	1	1%	0	0%	0	0%	0	0%	1	1%
Rear to Side	0	0%	0	0%	0	0%	0	0%	0	0%
Rear to rear	0	0%	0	0%	1	1%	0	0%	1	1%
Other	0	0%	0	0%	0	0%	0	0%	0	0%
Unknown	2	2%	0	0%	0	0%	0	0%	2	2%
Not Collision b/n two veh	1	1%	0	0%	0	0%	0	0%	1	1%
2012 Totals	**64**	**68%**	**0**	**0%**	**30**	**32%**	**0**	**0%**	**94**	**100%**

US13 from St. Jones River to Kentwood Drive Crash Details (January 1st, 2011 to May 15th, 2011)

Manner of Impact	# of Report-able	% Report-able	# Non-Report-able	% Non-Report-able	# of Personal Injury	% Personal Injury	# of Fatality	% Fatality	Total Number	Total Percent
Front to rear	18	28%	0	0%	23	36%	0	0%	41	64%
Front to front	4	6%	0	0%	2	3%	0	0%	6	9%
Angle	6	9%	0	0%	2	3%	0	0%	8	13%
Sideswipe same direction	3	5%	0	0%	0	0%	0	0%	3	5%
Sideswipe Oppo. direction	0	0%	0	0%	0	0%	0	0%	0	0%
Rear to Side	0	0%	0	0%	0	0%	0	0%	0	0%
Rear to rear	1	2%	0	0%	0	0%	0	0%	1	2%
Other	1	2%	0	0%	2	3%	1	2%	4	6%
Unknown	1	2%	0	0%	0	0%	0	0%	1	2%
Not Collision b/n two veh	0	0%	0	0%	0	0%	0	0%	0	0%
2011 Totals	34	53%	0	0%	29	45%	1	2%	64	100%

US13 from St. Jones River to Kentwood Drive Crash Details (January 1st, 2010 to May 15th, 2010)

Manner of Impact	# of Report-able	% Report-able	# Non-Report-able	% Non-Report-able	# of Personal Injury	% Personal Injury	# of Fatality	% Fatality	Total Number	Total Percent
Front to rear	28	31%	0	0%	15	17%	0	0%	43	48%
Front to front	1	1%	0	0%	4	4%	0	0%	5	6%
Angle	11	12%	0	0%	10	11%	0	0%	21	23%
Sideswipe same direction	2	2%	0	0%	2	2%	0	0%	4	4%
Sideswipe Oppo. direction	0	0%	0	0%	0	0%	0	0%	0	0%
Rear to Side	1	1%	0	0%	0	0%	0	0%	1	1%
Rear to rear	2	2%	0	0%	2	2%	0	0%	4	4%
Other	3	3%	0	0%	6	7%	0	0%	9	10%
Unknown	3	3%	0	0%	0	0%	0	0%	3	3%
Not Collision b/n two veh	0	0%	0	0%	0	0%	0	0%	0	0%
2010 Totals	51	57%	0	0%	39	43%	0	0%	90	100%

US13 from St. Jones River to Kentwood Drive Crash Details (January 1st, 2013 to May 15th, 2013)

Sideswipe Details 2013

Same Direction Northbound:	
1	On south leg of intersection with Dover Downs Ent.
1	On south leg of intersection with River Road
Same Direction Southbound:	
1	Approximately 65 feet north of Intersection with North State Street
1	North of Intersection with Loockerman Street
1	Near the US13/US113 Split
1	Aproximately 460 feet south of Lepore Drive
Opposite Direction Northbound:	
1	Approximately 100 feet south of E. Loockerman St. One vehicle travelling in the wrong direction.
On Intersectiong Street or Adjacent property:	
1	On Southbound Bay Rd at intersection with Souith Little Creek Road.

Sideswipe Details 2012

Same Direction Northbound:	
1	Approximately 225 feet south of intersection with College Road
1	Approximately 210 feet north of intersection with Jefferic Blvd.
1	Approximately 170 feet south of intersection with E. Loockerman Street.
Same Direction Southbound:	
1	Approximately 30 feet south of Bay Road.
Opposite Direction Northbound:	
1	Within intersection with Court Street.
On Intersectiong Street or Adjacent property:	
1	On Maple Parkway at intersection with US13

Sideswipe Details 2011

Same Direction Northbound:	
1	North of intersection with Leipsic Road
1	Just north of intersection with White Oak Road.
Same Direction Southbound:	
1	Approximately 100 feet North of Greenhill Road.

Sideswipe Details 2010

Same Direction Northbound:	
1	Approximately 200 feet north of intersection with E. Loockerman St.
Same Direction Southbound:	
0	
On Intersectiong Street or Adjacent property:	
1	At 515 N. Dupont Hwy - Kmart Parking Lot
1	At 1001 N. Dupont Hwy - Acme Parking Lot
1	At DelState