ATTACHMENT 1

Technical Memorandum

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Subject: Florida Keys Site-Specific Capacity Study

Date: April 21, 2010

The purpose of this technical memorandum is to document the results of a site-specific traffic operations study undertaken to evaluate traffic conditions and roadway capacity on roadway segments in the upper Keys in Monroe County, Florida. The site-specific analyses were needed to assess traffic flow rates under a variety of conditions and to determine the appropriateness of the roadway capacity values used in the 2001 Florida Keys Hurricane Evacuation Study prepared by Miller Consulting, Inc. (aka the "Miller Study"), within the Key Largo area

This work was motivated by the need to provide more detailed analyses of traffic along several critical segments along the Keys evacuation route. It is felt that during a mass movement of traffic from the Keys these segments could largely control the overall capacity of the route. An area of specific emphasis were the locations where the mainline US-1 could be impeded by various traffic control and roadway geometric features as well as driver/vehicle characteristics that, individually or combined, could adversely impact the rate of outbound flow. The analyses presented here also represents an advance over the 2001 Miller Study because they rely on finer analyses which provide a higher level of computational fidelity over the original Miller Study that permits the operational impact of specific control and roadway features to be evaluated down to the level of individual vehicles.

Additionally, the Florida Department of Transportation – District Six and its consultants have taken advantage of new and evolving knowledge and techniques that have been developed over the 10-year period since the

original 2001 Florida Keys Hurricane Evacuation Study was carried out. This includes observational studies and simulation systems that have improved our understanding of traffic operations under mass evacuation demand conditions.

BACKGROUND

The Florida Keys evacuation route was divided into 31 roadway links (Link A1 through Link U) in the Miller Model. The 31 roadway links extend from Mile Marker 2.0 in Key West/Stock Island to the southern terminus of Florida's Turnpike in Florida City (a distance of approximately 125 miles). Each roadway link represents a different cross section on the highway network, such as:

- Two-lane undivided (2L) – one through lane in each direction
- Three lanes (3L) – one through lane in each direction with a center turn lane
- Four-lane undivided (4L) – two through lanes in each direction
- Four-lane with a divided median (4LD) – two through lanes in each direction with a raised or depressed median
- Five lanes (5L) – two through lanes in each direction with a center turn lane

The "Roadway Network" module of the Miller Model, including all 31 evacuating roadway links and their assumed hurricane evacuating hourly capacity, is contained in Attachment A of this report. These original estimates were based on a combination of prior observations, experience in working in the local area, and accepted professional standards and guidelines that are used to estimate roadway capacity under various sets of conditions.

Due to the unique nature[1] of the transportation network in the Florida Keys, and the life-threatening nature of hurricanes, the transportation engineering profession does not have a universally-accepted methodology to calculate capacity for Overseas Highway during hurricane evacuation conditions. For these reasons, the Miller Study

[1] One evacuation route with more than 100 miles in length, and roadway conditions that do not fit the typical urban or rural conditions defined in the 2000 Highway Capacity Manual.

assembled a team of traffic engineers/transportation professionals with extensive experience in roadway capacities, especially in the Florida Keys, for purposes of determining the appropriate capacity of the 31 roadway links located along US 1 within the Florida Keys and Florida City. The roadway capacity team included professionals from two engineering consulting firms, the Florida Department of Transportation (District Six and Central Office), the Department of Community Affairs, and the US Army Corps of Engineers.

The assumed capacity values that were agreed upon by the team of experts were consistent with nationally accepted professional standards and practices and have been shown to be consistent with numerous observations during emergency evacuations in several other locations (within and outside of Florida) as well as during other types of non-emergency major event scenarios. Despite all of this background evidence and the efforts of the local expert team assembled for the Miller Study, these capacity values have been frequently called into question since the release of the Miller report nearly a decade ago.

SITE SPECIFIC CAPACITY

In order to evaluate and re-confirm the roadway capacities used in the Miller Model, a site-specific capacity study was undertaken on Overseas Highway[2] within Key Largo. The study was based on a set of traffic observations made in January 2010. While ideally it would be desirable to record traffic volumes during a live evacuation, the infrequent nature of such events required a reasonably comparable volume scenario. These conditions were then used to code and calibrate a simulation model which could then be varied to reflect a wide-range of potential conditions.

The micro-simulation analysis of US 1 included the section between Mile Marker 99.0 and Mile Marker 107, including a short segment of County Road 905. The micro-simulation used CORSIM, a nationally-recognized tool in evaluating traffic conditions on roadway networks. CORSIM was developed in the early 1970's and became recognized as one of the most accurate traffic simulation tools in the 1980's with the introduction of the Personal Computers.

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[2] Within Key Largo, Overseas Highway is a four-lane divided facility with a posted speed limit of 45 miles per hour.

As a micro-scale simulation system, CORSIM permits the analysis of traffic conditions on a vehicle-by-vehicle basis. As such, it is influenced by location-specific traffic control and geometric design features such as intersections, turn lanes, and median cross-overs in addition to individual driver and vehicle characteristics that govern gap-acceptance and lane-changing behaviors. The Federal Highway Administration and the State of Florida have endorsed the use of CORSIM.

Another key aspect of a micro-level modeling approach is that the flow conditions on the road segments are not pre-determined by assumed or established capacity values. Rather, the process works in somewhat the opposite direction in which the flow conditions, including maximum flows, are a reflection of the specific driver, control, design, and traffic features that exist or are assumed to exist and coded in for each specific site. As such, the maximum observed flow rates (capacity) for a road section are the result of numerous detailed interactions of driver, control, design and traffic conditions. Further, these micro-level simulations do not fix a set of static conditions or assumptions in advance. Operational conditions can change from minute-to-minute and even second-to-second. It is through this type of dynamic modeling that analysts are able to observe and analyze the occurrences of flow break downs and recoveries that are commonly associated with rush hour conditions and, even more so, during an evacuation scenario. An added dimension of simulation is that input parameters (including inflow volumes) can be added and their effects studied.

To further enhance the validity of the analyses conducted in this effort and the results gained from them, a series of base-line simulation models were first developed based on and calibrated to a set of field observed traffic volumes recorded over a recent event weekend in the Keys.

The site-specific capacity study followed the five steps listed below:

1. Network Coding
2. Model Calibration
3. Development of Side Street Volumes
4. Results of Model Runs
5. Capacity Adjustments

Network Coding

As indicated previously, CORSIM was coded between Mile Marker 99 and Mile Marker 107, plus a short segment along County Road 905. Table 1 on the following page documents the node network coded into CORSIM.

TABLE 1 Node Coding in CORSIM Florida Keys Site-Specific Capacity Study		
Node Number	**Location**	**Comment**
106	MM 99.0	Southmost Point
1	Atlantic Boulevard	Signal (Loading Point)
2	Laguna Avenue	Loading Point
3	Ocean Drive	Loading Point
4	Sunset Boulevard	Loading Point
5	Lauderdale Drive	Loading Point
6	Kay Drive	Loading Point
7	Hibiscus Lane	Loading Point
8	Tarpon Basin Drive	Signal (Loading Point)
9	Samson Road	Loading Point
10	Michelle Drive	Loading Point
11	Mahogany Drive	Loading Point
12	Alhambra Drive	Loading Point
13	George Street	Loading Point
14	Cabrera Street	Loading Point
15	Snapper Avenue	Loading Point
16	Avenue B	Loading Point
17	Taylor Drive	Loading Point
18	Dolphin Road	Loading Point
19	N. Blackwater Lane	Loading Point
20	Linda Drive	Loading Point
21	Andros Road	Loading Point
22	Lake Surprise Avenue	Loading Point
23	18-Mile Stretch/County Road 905	Diverge Point
24	18-Mile Stretch/County Road 905	Emergency Signal
26	Mile Marker 107	Northmost Point along US 1
241	Northeast of US 1	Northmost Point along CSR

Source: CORSIM and Traf Tech Engineering, Inc.

As documented in the above table, 22 loading points were coded into the CORSIM model. A loading point[3] is an intersection where side-street traffic enters the evacuating traffic stream. In contrast, the Miller Model only had two loading points between Mile Marker 95 and Miler Marker 107 and therefore, the network coded into the CORSIM model for the site-

[3] The more loading points, the more realistic representation of local conditions.

specific capacity study incorporates a more realistic representation of local conditions within the Key Largo area.

All unsignalized side streets were coded into the CORSIM model as minor-street approach stop-control intersections to represent current field conditions. Four traffic signals are located within the study area. The four traffic signals are located:

1. at the intersection of Atlantic Boulevard/Ocean Bay Drive (fully operational signal) – south of Mile Marker 100

2. at the intersection of Tarpon Basin Drive/Tradewinds Shopping Center (fully operational signal) – north of Mile Marker 101

3. at the Key Largo School located just south of Mile Marker 105 near Bowen Drive (pedestrian signal)

4. at the intersection of Overseas Highway (US 1) and County Road 905 (emergency signal) – near Mile Marker 106

Of the four traffic signals located within the study area, only two were assumed to be fully operational during hurricane evacuation conditions. The pedestrian signal located near Mile Marker 105 was assumed to be in the "off" mode since schools close well in advance of an approaching storm. The emergency signal located near Mile Marker 106 was assumed to be in the "flashing" mode (free flowing along US 1) during hurricane evacuation conditions.

Concerned Monroe County residents and other non-traffic professionals have previously suggested that all Monroe County traffic signals should operate in the "flashing" mode. It is preferred that the traffic signals located at Atlantic Boulevard and at Tarpon Basin Drive should remain operational during hurricane evacuation conditions for the following reasons:

- Nearly 20 percent of the evacuating vehicles will enter Overseas Highway from Key Largo. As such, drivers from this area will need adequate gaps to permit safe merging into the outbound US-1 traffic stream

- The US 1 segment between Mile Markers 99.5 and 106.3 will carry the heaviest traffic volumes of the entire Florida Keys evacuation network

- By maintaining full operation of the traffic signals located near Mile Markers 100 and 101, gaps will be created along US 1 which will benefit all evacuating vehicles entering the main highway from the numerous side streets.

To minimize the effects of the traffic signals on the evacuating traffic flow along Overseas Highway, the two simulated traffic signals were timed so that most of the green time was allocated to US 1. That is, the assumed signal operating plan permits one vehicle turning left from US 1 and up to two vehicles entering Overseas Highway from the side street, per signal cycle. This is an assumption that significantly benefits the evacuating flow along the US 1.

Model Calibration

To assure that the simulation reflected actual traffic conditions during an evacuation event, it was first necessary to build and calibrate the model to a set of actual observed conditions. The calibrated CORSIM model could then be tested with any set of traffic volumes up to and even exceeding those assumed to occur under hurricane evacuation conditions and reflect the same operating conditions attained in the calibrated base model. The importance of developing a validated model calibrated to event-level traffic cannot be overstated. Validation and calibration form the cornerstone on which reliable traffic models are built. Calibration, in particular, establishes the basis on which the results of the model can be systematically and quantitatively adjusted to reflect a set of conditions actually observed in the field. It is only through this process that an analyst can state with reasonable confidence that any changes made to the model (in terms of driver, design, control, and/or traffic), would have a correspondingly similar effect in real life. Opportunities to calibrate evacuation simulation models are rare because mass evacuations are relatively infrequent and the acquisition of field traffic flow measurements under evacuation conditions is rarer still.

To perform the calibration process in this study, traffic volumes recorded during the Key West Food and Wine Festival (January 28 through January 31, 2010) at three continuous traffic count stations were used. The three traffic count stations included Station 164 near Mile Marker 106 in Key Largo, Station 165 near Mile Marker 25 in Big Pine Key, and Station 227 near Mile Marker 4 in Stock Island. The 24-hour traffic distribution during the 4-day period associated with the Key West Food and Wine Festival is graphically presented on Pages 9 and 10. The fact that these volumes were part of an event-based weekend, the level of traffic was assumed to

exceed routine daily levels. The recorded hourly volumes at each continuous traffic count station during the subject festival are contained in Attachment B.

In order to calibrate the CORSIM model in this study, a set of three hourly northbound volumes recorded at the count station located near Mile Marker 106 were entered into the model. The three hourly volumes included the highest exiting volume recorded at Mile Marker 106 which was approximately 1,332 vehicles per hour between 2:00 PM and 3:00 PM. Four different CORSIM Time Periods were coded. The first time period included very low traffic volumes in order to allow the simulation to reach equilibrium (a recommended practice when the simulation includes high traffic volumes). Time periods 2, 3, and 4 included as entry volumes the traffic volumes recorded between 1:00 PM and 2:00 PM, 2:00 PM and 3:00 PM, and from 3:00 PM to 4:00 PM. The results of the 3-hour simulation run are presented in Table 2 below.

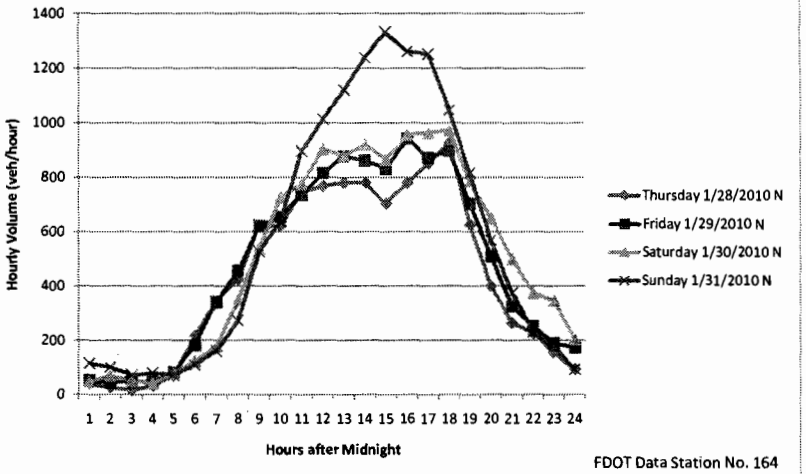
TABLE 2
CORSIM Calibration Run
Florida Keys Site-Specific Capacity Study

Time Period	Recorded Traffic Count	CORSIM Volume	Difference	
			Volume	% Change
One	to allow network to reach equilibrium			
Two	1,258 vph	1,178 vph	-80	-6.4%
Three	1,332 vph	1,226 vph	-106	-8.0%
Four	1,261 vph	1,233 vph	-28	-2.2%

SOURCE: CORSIM and Florida Department of Transportation

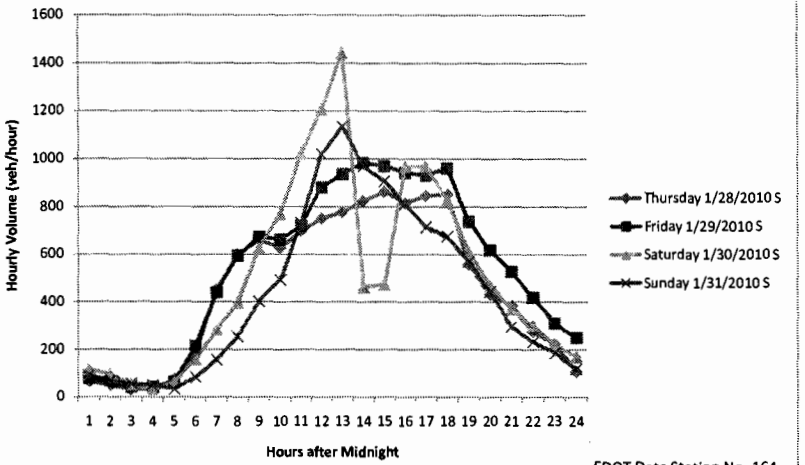
As indicated in Table 2, the CORSIM simulations produced traffic volumes that had less than 10% difference from the actual recorded traffic counts. Typically, simulation results that are within the range 5% to 10% of actual conditions are considered to be an acceptable representation of field conditions. Since Time Period 4 produced the most comparable results between the actual recorded traffic volumes and the traffic produced by CORSIM, the results obtained from Time Period 4 were used for purposes of this study.

Graph 1a: MM 106 - Key Largo (2 NB Lanes)
Northbound Hourly Traffic Volume



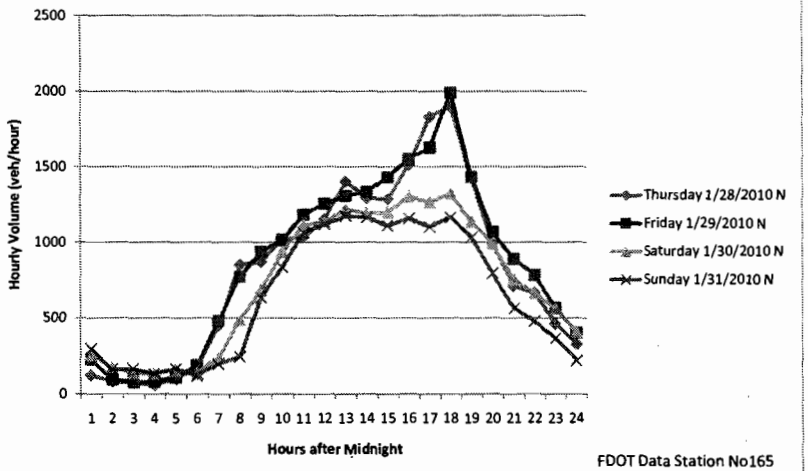
FDOT Data Station No. 164

Graph 1b: MM 106 - Key Largo (2NB Lanes)
Southbound Hourly Traffic Volume



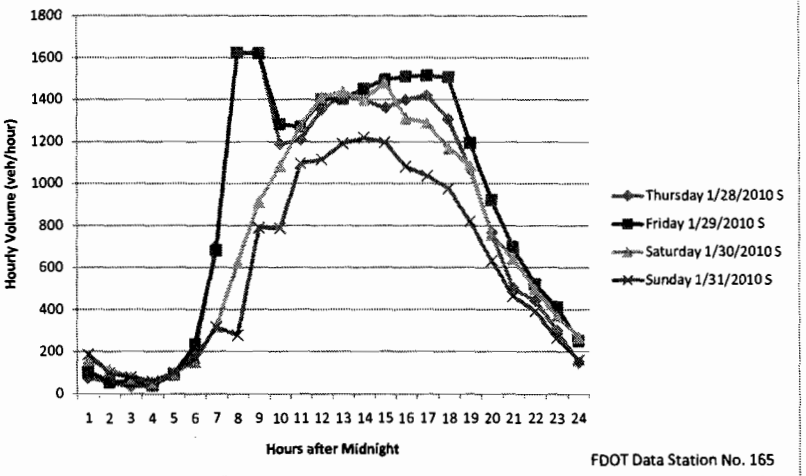
FDOT Data Station No. 164

Graph 2a: Stock Island (2 NB Lanes)
Northbound Hourly Traffic Volume



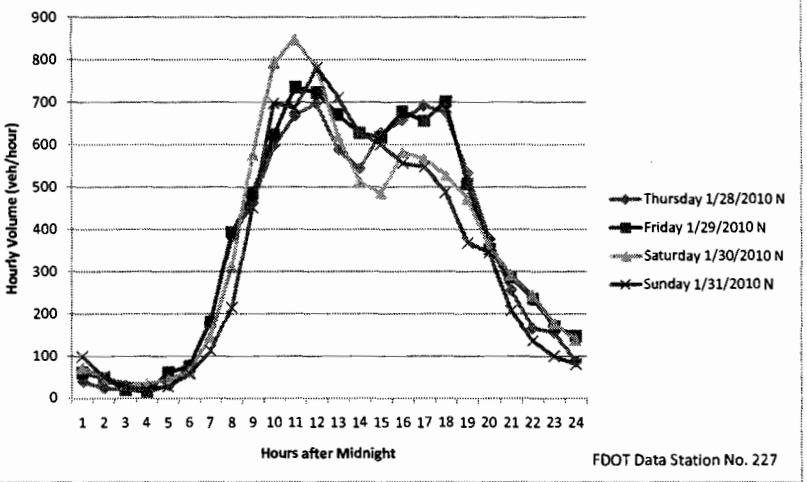
FDOT Data Station No165

Graph 2b: Stock Island (2NB Lanes)
Southbound Hourly Traffic Volume



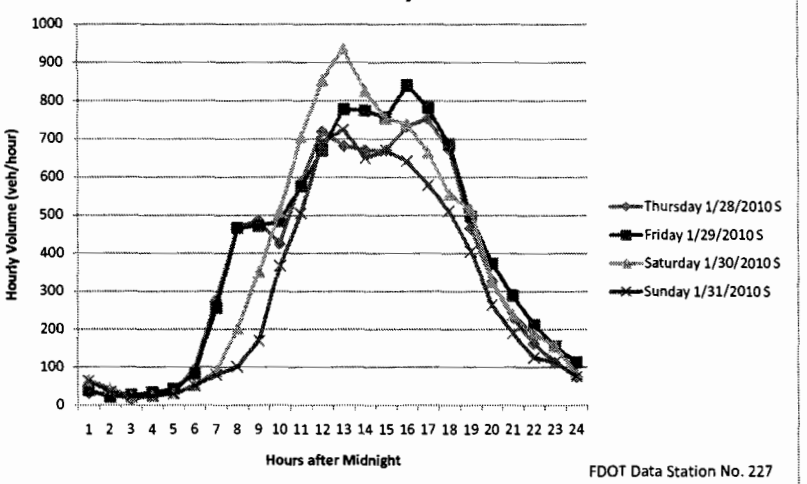
FDOT Data Station No. 165

Graph 3a: Big Pine Key (1 NB Lane)
Northbound Hourly Traffic Volume



FDOT Data Station No. 227

Graph 3b: Big Pine Key (1 NB Lane)
Southbound Hourly Traffic Volume



FDOT Data Station No. 227

Once the model run was completed, the animated simulations were compared with video recordings obtained during the same day and hour of the traffic volumes used for the calibration period. This process was undertaken to qualitatively assess the reasonableness of the traffic flow throughout the study area and to validate the accuracy of the CORSIM model. Based on a visual inspection of the output produced by the model, the traffic flow generated by CORSIM were reasonably consistent with the traffic conditions observed in the field.

Additionally, since CORSIM is a stochastic model that randomly assigns vehicles to the roadway network prior to the beginning of the simulation time period, CORSIM should be run multiple times using different initial network loadings and the model output should be averaged to eliminate the potential for obtaining skewed (biased) results. However, due to the linear nature of the study area, different seed numbers yielded almost identical results and therefore, multiple runs using different random seed numbers were not considered necessary for purposes of this traffic study. Table 3 documents the results obtained from using three different random seed number for the simulation period.

As shown in Table 3, the simulated roadway network does not warrant multiple runs using the CORSIM model.

TABLE 3
Multiple CORSIM Runs
Florida Keys Site-Specific Capacity Study

Random Seed Number	Total Number of Processed Vehicles		
	Time Period 2	Time Period 3	Time Period 4
7581	1,178 vph	1,226 vph	1,233 vph
1359	1,178 vph	1,225 vph	1,234 vph
9823	1,177 vph	1,225 vph	1,230 vph

SOURCE: CORSIM

The three CORSIM runs conducted for calibration purposes are contained in Attachment C.

Development of Side Street Volumes

Based on the Miller Study, approximately 8,096 evacuating vehicles will enter Overseas Highway between Mile Marker 95 and 113. In reviewing Monroe County's Planning Analysis Area/Enumeration Districts, the population located between Mile Marker 99 and Mile Marker 107 is approximately 65.4% of the population located between Mile Markers 95

and 113. Therefore, the number of evacuating vehicles estimated to enter US 1 between Mile Markers 99 and 107 is approximately 5,295 vehicles (65.4% of 8,096).

The 5,295 evacuating vehicles were distributed within the 22 loading nodes as follows:

- 30% will enter via nodes 1 through 5
- 20% will enter via nodes 6 through 12
- 20% will enter via nodes 13 through 16
- 15% will enter via nodes 17 through 19
- 15% will enter via nodes 20 through 22

The percentages documented above were based on the population density located within each sub-area. Moreover, once the total number of evacuating vehicles was determined for each simulated side street, (each hour with approximately 13.5% of the total evacuating traffic). As indicated previously, the CORSIM model was developed to simulate three 60-minute periods (Time Periods 2, 3, and 4).

Results of Model Runs

Once the side street volumes were developed for the 22 side streets, Overseas Highway near Mile Marker 99 (south terminus of study area) was loaded with 3,000 vehicles per hour (1,500 vehicles per hour per lane) in the northbound direction. If CORSIM processed all 3,000 vehicles, then the 3,000-vehicle loading was increased. However, all model runs processed less than 3,000 vehicles per hour at Mile Marker 100 and therefore, the 3,000-vehicle loading was considered appropriate for purposes of this study.

Two scenarios were tested. The first scenario assumed no incidents on the highway. The second scenario included an incident (crash, disabled vehicle, etc.) near Mile Marker 102.5. The incident scenario was simulated by entering a one-hour speed reduction to replicated potential disruptions to traffic flow caused by a minor crash, disabled vehicle, etc. The results of the two simulation scenarios are presented in Table 4.

TABLE 4 CORSIM Results Florida Keys Site-Specific Capacity Study		
	Maximum Hourly Volume (2 Lanes)	
Mile Marker	No Incident	With Incident
100	2,767 vph	2,334 vph
102	2,797 vph	2,188 vph
104	2,902 vph	2,267 vph
106	3,003 vph	2,368 vph
Average	**2,867 vph**	**2,289 vph**

SOURCE: CORSIM

As documented in Table 4, with an inflow of 1,500 vphpl the Overseas Highway was shown to process up to 1,435 vehicles per hour per lane, assuming no incidents, daylight conditions, and good weather (ideal conditions). A minor incident resulting in operating speeds of 10 miles per hour reduced the capacity to approximately 1,145 vehicles per hour per lane.

The results of the two CORSIM scenarios are contained in Attachment D.

Capacity Adjustments

The resulting maximum flow obtained from the CORSIM simulation runs were for daylight and good weather conditions (ideal scenario). According to the 2000 Highway Capacity Manual, adverse weather or night conditions can reduce the capacity of a roadway by approximately 15%. Moreover, adverse weather conditions occurring at night can reduce the capacity of a roadway by as much as 47%, according to the 2000 Highway Capacity Manual. Table 5 summarizes all potential capacity values anticipated during a mandatory hurricane evacuation condition of the Florida Keys.

TABLE 5 Potential Hourly Capacity per Lane Florida Keys Site-Specific Capacity Study					
No Incident			With Incident		
Dry and Daylight	Rain or Night	Rain and Night	Dry and Daylight	Rain or Night	Rain and Night
1,435 vph	1,220 vph	760 vph	1,145 vph	975 vph	610 vph

SOURCE: CORSIM and 2000 Highway Capacity Manual

SUMMARY

In summary, many factors can affect the capacity of Overseas Highway during a mandatory hurricane evacuation order for the Florida Keys. Since a significant portion of the evacuation will likely occur during night conditions, and inclement weather could also occur during the evacuation period, the capacity of US 1 within Key Largo can vary between 760 and 1,435 vehicles per hour per lane.

These flow rates are consistent with evacuation traffic flow rates observed in several other evacuations, including those associated with Hurricanes Floyd[4] in Florida and South Carolina and Hurricane Katrina[5] in Louisiana. It is also worth noting that these one-hour maximum flow rates are under what could be considered "near-ideal" conditions. In reality, "maximum flow rates" cannot often be sustained for more than an hour because of inevitable disruptions to the smooth flow of traffic. Under capacity-level demand conditions, even slight disruptions in the traffic stream can result in the formation and propagation of traffic shockwave that move both quickly and widely throughout a traffic network.

Moreover, due to the lack of multiple evacuation routes in Monroe County, a minor incident at any location will negatively affect all upstream roadway links within the County. The micro-simulation runs indicate that an incident that reduces travel speeds to 10 miles per hour will reduce the capacity of US 1 to as low as 610 vehicles per hour per lane during night and rain conditions. This reduction is extremely important to take into consideration in a critical life-safety assessment of traffic such as this.

Based on the above, the 900 vehicles per hour per lane capacity assigned to US 1 within Key Largo, as documented in the Miller Study, is considered appropriate given the life-threatening nature of hurricanes. Hence, it is concluded that the capacities used in the Miller Study within the Key Largo area are appropriate for hurricane evacuation purposes.

[4] Federal emergency Management Agency (FEMA), "Reverse Lane Standards and ITS Strategies Southeast United States Hurricane Study – Technical Memorandum 3", Final Report, prepared by Post, Buckley, Schuh & Jernigan, Inc. Tallahassee, Florida 2000.
[5] Wolshon B. and B. McArdle, "Temporospatial Analysis of Hurricane Katrina Regional Evacuation Traffic Patterns," ASCE *Journal of Infrastructure Systems – Special Infrastructure Planning, Design, and Management for Big Events Issues*, March 2009, Vol 15, No. 1, pp.12-20.

Attachment A

Miller Model
Roadway Link Capacities

Monroe County, Florida
Roadway Network

Link Name	Area	Milemarkers		Location/Description	Year 2,000 Configuration	Evacuation Outbound Lanes	Pavement Width (FT)	Outbound Flow Rate/ Lane	Total Flow Rate
		From	To						
A1	Lower Keys	2.0	4.0	Key West to Stock Island	4L	2		900	1,800
A2	Lower Keys	4.0	9.0	Stock Island to Big Coppitt Key	4LD	2	44'-53'	900	1,800
B	Lower Keys	9.0	17.0	Big Coppitt Key to Sugarloaf Key	2L	1	34'	1,350	1,350
C	Lower Keys	17.0	22.0	Sugarloaf Key to Cudjoe Key	2L	1	34'	1,350	1,350
D1	Lower Keys	22.0	24.0	Cudjoe Key to Summerland Key Cove Airport	2L	1	44'	1,350	1,350
D2	Lower Keys	24.0	25.0	Summerland Key Cove Airport to Summerland Key	3L	1	44'	1,350	1,350
D3	Lower Keys	25.0	30.0	Summerland Key to Big Pine Key	2L	1	33'-44'	1,350	1,350
E	Lower Keys	30.0	34.0	Big Pine Key to West Summerland Keys	2L	2	33'	1,050	2,100
F1	Lower Keys	34.0	35.2	West Summerland Keys to Spanish Harbor Keys	2L	1	25'	1,350	1,350
F2	Lower Keys	35.2	36.5	Spanish Harbor Keys to Bahia Honda Bridge	4LD	2	width unknown	1,350	2,700
F3	Lower Keys	36.5	37.5	Bahia Honda Bridge to Bahia Honda Key	2L	1	33'	1,350	1,350
G	Middle Keys	37.5	47.0	Bahia Honda Key to Hog Key	2L	1	25'	1,500	1,500
H1	Middle Keys	47.0	48.0	Hog Key to Boot Key	2L	2	25'	1,350	2,700
H2	Middle Keys	48.0	50.2	Boot Key to Marathon	4L	2	25'-49'	900	1,800
I1	Middle Keys	50.2	50.8	Marathon to Marathon Shores	5L	2	64'	900	1,800
I2	Middle Keys	50.8	54.0	Marathon Shores to Key Colonial Beach	4LD	2	58'-64'	900	1,800
J1	Middle Keys	54.0	54.5	Key Colonial Beach to Deer Key	4LD	2	58'	900	1,800
J2	Middle Keys	54.5	58.0	Deer Key to Grassy Key	2L	2	32'-58'	1,350	2,700
K	Upper Keys	58.0	74.0	Grassy Key to Matecumbe Harbor	2L	2	32'	1,350	2,700
L	Upper Keys	74.0	80.0	Matecumbe Harbor to Teatable Key	2L	2	48'	1,350	2,700
M1	Upper Keys	80.0	83.5	Teatable Key to Islamorada	3L	2	48'	1,350	2,700
M2	Upper Keys	83.5	85.6	Islamorada to Windley Key	2L	2	48'	1,350	2,700
N	Upper Keys	85.6	90.0	Windley Key to Plantation Key	2L	2	33'-48'	1,350	2,700
O	Upper Keys	90.0	100.0	Tavernier Key to Newport Key	4LD	3	44'-56'	900	2,700
P	Upper Keys	100.0	105.0	Newport Key to Sexton Cove	4LD	3	44'-52'	900	2,700
Q	Upper Keys	105.0	106.3	Sexton Cove to Rattlesnake Key	4LD	3	44'-52'	900	2,700
R1	Upper Keys	106.3	126.5	Rattlesnake Key to Card Sound Rd	2L/4L	2	24'-25'	1,500	3,000
R2	South Dade	126.5	HEFT	Card Sound Rd to HEFT	4LD	3	-	900	2,700
S	Upper Keys	106.3	Int CR 905 / CR 905 A	Lake Surprise to Crocodile Lake	2L	1	32'	1,350	1,350
T	Upper Keys	Ocean Reef	Int CR 905 / CR 905 A	Tanglefish Key to Crocodile Lake	2L	1	60'	1,350	1,350
U	Upper Keys	Int CR 905 / CR 905 A	US 1	Crocodile Lake to South Miami-Dade	2L	1	24'-25'	1,350	1,350

LEGEND:

2L = Two-lane facility
2L/4L = Two lanes with short four-lane sections for passing purposes
3L = Three-lane facility (center lane is a two-way left-turn lane)
4L = Four-lane undivided facility
4LD = Four-lane divided facility
5L = Five-lane facility (center lane is a two-way left-turn lane)

Source: 2001 Florida Keys Hurricane Evacuation Study

Attachment B

4-Day Machine Traffic Counts
(Source: FDOT – January 2010)

TABLE B-1
Continuous Traffic Counts (January 28 to January 31, 2010)
Monroe County, Florida

	Clock time ending at:			1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 AM	
SITE		**DATE**	**DIR**	**HR01**	**HR02**	**HR03**	**HR04**	**HR05**	**HR06**	**HR07**	**HR08**	**HR09**	**HR10**	**HR11**	**HR12**	**HR13**	**HR14**	**HR15**	**HR16**	**HR17**	**HR18**	**HR19**	**HR20**	**HR21**	**HR22**	**HR23**	**HR24**	**TOTAL**
0164	Thursday	1/28/2010	N	40	25	16	31	70	216	345	424	625	620	746	768	781	780	704	779	851	926	626	400	263	226	155	92	10509
0164	Friday	1/29/2010	N	53	44	50	45	82	181	341	457	622	654	736	816	877	862	831	942	872	897	704	509	325	252	189	173	11514
0164	Saturday	1/30/2010	N	48	69	50	40	80	122	178	347	541	726	776	903	879	921	865	958	964	973	785	650	499	373	347	202	12296
0164	Sunday	1/31/2010	N	115	100	72	78	72	109	161	273	528	638	898	1013	1122	1238	1332	1261	1252	1047	816	567	375	231	177	91	13566
0164	Thursday	1/28/2010	S	65	49	32	32	74	187	451	600	660	627	696	751	776	825	863	815	845	853	558	432	385	274	223	109	11182
0164	Friday	1/29/2010	S	79	66	42	42	64	215	440	594	672	663	720	881	937	985	970	943	931	963	738	618	527	420	309	251	13070
0164	Saturday	1/30/2010	S	116	94	53	33	61	158	283	396	626	769	1022	1208	1444	464	473	968	969	827	608	470	371	301	220	170	12104
0164	Sunday	1/31/2010	S	91	68	55	48	34	83	156	255	403	492	732	1019	1135	969	907	811	713	675	570	443	295	232	185	120	10491
0165	Thursday	1/28/2010	N	121	82	71	59	96	175	450	849	873	1015	1037	1154	1405	1291	1285	1513	1831	1896	1423	990	711	663	462	325	19777
0165	Friday	1/29/2010	N	226	94	77	80	109	188	482	772	939	1016	1183	1255	1306	1335	1430	1550	1627	1988	1432	1068	890	781	567	401	20796
0165	Saturday	1/30/2010	N	254	175	136	133	155	134	238	487	683	935	1114	1136	1218	1192	1197	1301	1264	1321	1135	988	753	663	562	411	17585
0165	Sunday	1/31/2010	N	295	160	163	130	163	121	198	244	637	836	1064	1119	1172	1165	1109	1157	1101	1165	1035	794	563	476	367	219	15453
0165	Thursday	1/28/2010	S	75	54	34	37	98	195	703	1621	1624	1189	1207	1353	1419	1399	1360	1400	1421	1309	1065	766	503	442	301	149	19724
0165	Friday	1/29/2010	S	104	56	59	40	91	235	681	1627	1621	1283	1271	1402	1405	1452	1496	1512	1515	1509	1195	922	698	522	413	252	21361
0165	Saturday	1/30/2010	S	160	114	76	55	99	152	321	622	913	1085	1277	1412	1437	1400	1483	1311	1291	1168	1086	758	642	498	370	269	17999
0165	Sunday	1/31/2010	S	186	99	80	60	99	168	316	279	790	788	1094	1115	1191	1218	1196	1081	1036	978	818	632	464	393	264	161	14506
0227	Thursday	1/28/2010	N	39	24	20	16	30	77	186	382	464	598	669	698	588	543	627	658	692	675	534	377	256	167	156	87	8563
0227	Friday	1/29/2010	N	61	48	20	16	61	76	181	393	484	624	735	723	671	627	618	678	656	701	508	354	286	236	171	148	9076
0227	Saturday	1/30/2010	N	72	49	35	34	44	63	146	312	577	793	847	782	619	512	485	583	566	528	473	358	293	244	178	139	8732
0227	Sunday	1/31/2010	N	99	51	27	22	28	58	112	216	451	698	686	781	711	627	600	556	548	488	369	345	208	137	99	81	7998
0227	Thursday	1/28/2010	S	31	29	15	26	34	96	276	468	486	425	588	721	682	671	670	733	753	672	466	325	229	163	113	75	8747
0227	Friday	1/29/2010	S	39	21	27	33	43	82	257	467	472	484	576	671	778	775	757	841	783	687	498	373	289	212	156	113	9434
0227	Saturday	1/30/2010	S	65	43	22	24	30	52	89	202	351	508	706	854	937	826	753	740	665	555	516	325	238	188	157	82	8928
0227	Sunday	1/31/2010	S	63	35	24	24	30	51	79	102	170	366	505	692	725	650	670	642	580	511	405	263	189	125	113	77	7091

Source: Florida Department of Transportation

Counter 0164 at MM 106 in Key Largo
Counter 0165 in Stock Island
Counter 0227 in Big Pine Key

Attachment C

CORSIM Runs for Model Calibration

CUMULATIVE NETSIM STATISTICS AT TIME 8:15: 0

ELAPSED TIME IS 1:15: 0 (4500 SECONDS), TIME PERIOD 2 ELAPSED TIME IS 3600 SECONDS

Calibration Seed 7581

LINK	VEHICLE MILES	VEHICLE TRIPS	VEHICLE MINUTES MOVE TIME	VEHICLE MINUTES DELAY TIME	VEHICLE MINUTES TOTAL TIME	RATIO MOVE/ TOTAL	MINUTES/MILE TOTAL TIME	MINUTES/MILE DELAY TIME	SECONDS / VEHICLE TOTAL TIME	SECONDS / VEHICLE DELAY TIME	SECONDS / VEHICLE CONTROL DELAY	SECONDS / VEHICLE QUEUE DELAY	SECONDS / VEHICLE STOP* TIME	AVERAGE VALUES - STOPS (%)	AVERAGE VALUES - VOL VPH	AVERAGE VALUES - SPEED MPH
(106, 1)	126.14	666	168.2	39.6	207.8	0.81	1.65	0.31	18.7	3.6	2.7	2.2	2.1	21	532	36.4
(1, 106)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(1, 2)	131.46	731	175.3	20.4	195.7	0.90	1.49	0.16	16.0	1.7	0.0	0.0	0.0	0	584	40.3
(2, 1)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(2, 3)	84.65	764	112.9	6.1	118.9	0.95	1.40	0.07	9.3	0.5	0.0	0.0	0.0	0	611	42.7
(3, 2)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(3, 4)	550.63	829	734.2	30.0	764.2	0.96	1.39	0.05	55.0	2.2	0.1	0.0	0.0	0	663	43.2
(4, 3)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(4, 5)	198.46	866	264.6	12.1	276.7	0.96	1.39	0.06	19.1	0.8	0.0	0.0	0.0	0	692	43.0
(5, 4)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(5, 6)	283.18	898	377.6	17.6	395.2	0.96	1.40	0.06	26.3	1.2	0.1	0.0	0.0	0	718	43.0
(6, 5)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(7, 6)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(6, 7)	111.88	923	149.2	8.1	157.2	0.95	1.41	0.07	10.2	0.5	0.0	0.0	0.0	0	738	42.7
(7, 8)	152.04	950	202.7	74.0	276.7	0.73	1.82	0.49	17.5	4.7	3.5	2.7	2.5	22	760	33.0
(8, 7)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(8, 9)	108.03	975	144.0	28.1	172.1	0.84	1.59	0.26	10.6	1.7	0.0	0.0	0.0	0	780	37.7
(9, 8)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(9, 10)	260.58	997	347.4	20.8	368.3	0.94	1.41	0.08	22.0	1.2	0.1	0.0	0.0	0	797	42.5
(10, 9)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(10, 11)	299.14	1019	398.9	23.3	422.2	0.94	1.41	0.08	24.8	1.4	0.1	0.0	0.0	0	815	42.5
(11, 10)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(11, 12)	362.13	1042	482.8	30.3	513.2	0.94	1.42	0.08	29.5	1.7	0.1	0.0	0.0	0	833	42.3
(12, 11)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(12, 13)	600.06	1074	800.1	45.2	845.2	0.95	1.41	0.08	46.9	2.5	0.1	0.0	0.0	0	859	42.6
(13, 12)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(13, 14)	101.78	1108	135.7	10.8	146.5	0.93	1.44	0.11	7.9	0.6	0.0	0.0	0.0	0	886	41.7
(14, 13)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(14, 15)	314.05	1176	418.7	28.6	447.4	0.94	1.42	0.09	22.8	1.5	0.0	0.0	0.0	0	940	42.1
(15, 14)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(15, 16)	788.01	1206	1050.7	68.2	1118.9	0.94	1.42	0.09	55.3	3.4	0.2	0.0	0.0	0	964	42.3
(16, 15)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(16, 17)	1011.85	1239	1349.1	103.3	1452.4	0.93	1.44	0.10	69.9	5.0	0.3	0.0	0.0	0	991	41.8
(17, 16)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(17, 18)	324.39	1283	432.5	36.2	468.7	0.92	1.44	0.11	21.9	1.7	0.0	0.0	0.0	0	1026	41.5
(18, 17)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(18, 19)	410.92	1327	547.9	43.8	591.7	0.93	1.44	0.11	26.7	2.0	0.1	0.0	0.0	0	1061	41.7
(19, 18)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(19, 20)	681.12	1352	908.2	76.5	984.7	0.92	1.45	0.11	43.3	3.4	0.2	0.0	0.0	0	1081	41.5
(20, 19)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(20, 21)	486.68	1389	648.9	60.7	709.6	0.91	1.46	0.12	30.6	2.6	0.1	0.0	0.0	0	1111	41.1
(21, 20)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(21, 22)	130.00	1430	173.3	22.8	196.1	0.88	1.51	0.17	8.2	1.0	0.1	0.0	0.0	0	1144	39.8
(22, 21)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(22, 23)	97.64	1473	130.2	58.5	188.7	0.69	1.93	0.60	7.7	2.4	1.0	0.4	0.3	2	1178	31.0

Attachment D

CORSIM Runs – Two Hurricane Evacuation Scenarios

ELAPSED TIME IS 3:15: 0 (11700 SECONDS), TIME PERIOD 4 ELAPSED TIME IS 3600 SECONDS

No Incident Scenario

LINK	VEHICLE MILES	VEHICLE TRIPS	VEHICLE MINUTES MOVE TIME	VEHICLE MINUTES DELAY TIME	VEHICLE MINUTES TOTAL TIME	RATIO MOVE/ TOTAL	MINUTES/MILE TOTAL TIME	MINUTES/MILE DELAY TIME	SECONDS / VEHICLE TOTAL TIME	SECONDS / VEHICLE DELAY TIME	SECONDS / VEHICLE CONTROL DELAY	SECONDS / VEHICLE QUEUE DELAY	SECONDS / VEHICLE STOP* TIME	AVERAGE VALUES STOPS (%)	AVERAGE VALUES VOL VPH	AVERAGE VALUES SPEED MPH
(106, 1)	1693.75	8943	2258.3	3438.8	5697.1	0.40	3.36	2.03	38.3	23.2	11.9	8.3	6.8	47	2751	17.8
(1, 106)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(1, 2)	1632.27	9073	2176.4	2124.9	4301.2	0.51	2.64	1.30	28.5	14.1	5.9	1.1	0.3	7	2791	22.8
(2, 1)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(2, 3)	1008.02	9098	1344.0	2061.1	3405.1	0.39	3.38	2.04	22.5	13.6	1.3	1.7	0.3	7	2799	17.8
(3, 2)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(3, 4)	5973.86	8994	7965.1	15301.1	23266.2	0.34	3.89	2.56	154.9	102.5	23.5	12.3	2.3	21	2767	15.4
(4, 3)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(4, 5)	2056.31	8973	2741.8	6686.3	9428.0	0.29	4.58	3.25	62.9	44.6	6.1	6.5	1.9	22	2760	13.1
(5, 4)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(5, 6)	2811.58	8916	3748.8	10132.5	13881.3	0.27	4.94	3.60	93.0	68.0	12.3	12.6	5.8	41	2743	12.2
(6, 5)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(7, 6)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(6, 7)	1080.73	8916	1441.0	4147.7	5588.7	0.26	5.17	3.84	37.6	27.9	6.7	7.0	4.5	42	2743	11.6
(7, 8)	1422.26	8887	1896.3	5844.3	7740.6	0.24	5.44	4.11	52.1	39.4	15.6	14.4	11.9	71	2734	11.0
(8, 7)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(8, 9)	990.51	8940	1320.7	523.0	1843.6	0.72	1.86	0.53	12.4	3.5	0.0	0.0	0.0	0	2750	32.2
(9, 8)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(9, 10)	2352.80	9002	3137.1	644.3	3781.4	0.83	1.61	0.27	25.2	4.3	0.3	0.0	0.0	0	2769	37.3
(10, 9)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(10, 11)	2652.91	9037	3537.2	813.1	4350.3	0.81	1.64	0.31	28.8	5.4	0.2	0.0	0.0	0	2780	36.6
(11, 10)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(11, 12)	3151.47	9068	4202.0	985.1	5187.0	0.81	1.65	0.31	34.3	6.5	0.2	0.0	0.0	0	2790	36.5
(12, 11)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(12, 13)	5093.22	9116	6791.0	1636.4	8427.3	0.81	1.65	0.32	55.4	10.8	0.6	0.0	0.0	0	2804	36.3
(13, 12)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(13, 14)	844.62	9195	1126.2	293.1	1419.2	0.79	1.68	0.35	9.3	1.9	0.0	0.0	0.0	0	2829	35.7
(14, 13)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(14, 15)	2500.61	9364	3334.2	816.1	4150.2	0.80	1.66	0.33	26.6	5.2	0.2	0.0	0.0	0	2881	36.2
(15, 14)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(15, 16)	6150.54	9413	8200.7	2076.7	10277.5	0.80	1.67	0.34	65.3	13.2	0.6	0.0	0.0	0	2896	35.9
(16, 15)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(16, 17)	7704.43	9434	10272.6	2607.0	12879.6	0.80	1.67	0.34	81.6	16.5	0.9	0.0	0.0	0	2902	35.9
(17, 16)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(17, 18)	2411.34	9537	3215.1	813.1	4028.2	0.80	1.67	0.34	25.3	5.1	0.2	0.0	0.0	0	2934	35.9
(18, 17)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(18, 19)	2982.02	9630	3976.0	1012.4	4988.4	0.80	1.67	0.34	31.0	6.3	0.2	0.0	0.0	0	2963	35.9
(19, 18)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(19, 20)	4892.28	9711	6523.0	1697.6	8220.6	0.79	1.68	0.35	50.7	10.5	0.6	0.0	0.0	0	2988	35.7
(20, 19)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(20, 21)	3435.81	9806	4581.1	2977.4	7558.5	0.61	2.20	0.87	46.2	18.2	7.8	0.3	0.2	2	3017	27.3
(21, 20)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(21, 22)	900.64	9907	1200.8	1958.6	3159.4	0.38	3.51	2.17	19.1	11.8	2.2	0.7	0.3	7	3048	17.1
(22, 21)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(22, 23)	660.76	9968	881.0	1812.1	2693.1	0.33	4.08	2.74	16.2	10.9	2.5	1.8	0.9	6	3067	14.7

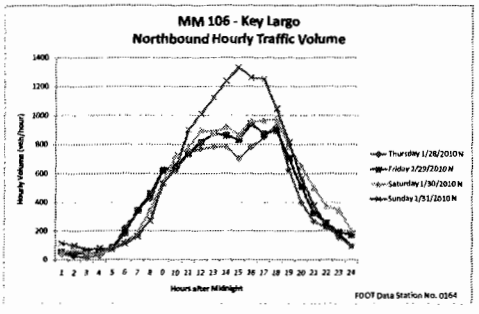
ELAPSED TIME IS 3:15: 0 (11700 SECONDS), TIME PERIOD 4 ELAPSED TIME IS 3600 SECONDS

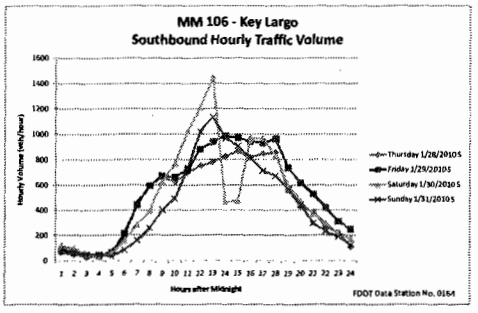
No Incident Scenario

LINK	VEHICLE MILES	VEHICLE TRIPS	VEHICLE MINUTES MOVE TIME	VEHICLE MINUTES DELAY TIME	VEHICLE MINUTES TOTAL TIME	RATIO MOVE/ TOTAL	MINUTES/MILE TOTAL TIME	MINUTES/MILE DELAY TIME	SECONDS / VEHICLE TOTAL TIME	SECONDS / VEHICLE DELAY TIME	SECONDS / VEHICLE CONTROL DELAY	SECONDS / VEHICLE QUEUE DELAY	SECONDS / VEHICLE STOP* TIME	AVERAGE VALUES STOPS (%)	AVERAGE VALUES VOL VPH	AVERAGE VALUES SPEED MPH
(106, 1)	1450.57	7659	1934.1	7877.0	9811.1	0.20	6.76	5.43	76.7	61.6	24.1	29.5	22.8	72	2356	8.9
(1, 106)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(1, 2)	1398.73	7775	1865.0	6788.6	8653.6	0.22	6.19	4.85	66.7	52.4	22.1	19.5	10.3	55	2392	9.7
(2, 1)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(2, 3)	860.22	7764	1147.0	4695.9	5842.9	0.20	6.79	5.46	45.1	36.2	8.8	14.3	6.6	52	2388	8.8
(3, 2)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(3, 4)	5039.32	7587	6719.1	30376.9	37096.0	0.18	7.36	6.03	290.4	238.1	60.4	97.6	38.7	71	2334	8.2
(4, 3)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(4, 5)	1726.77	7535	2302.4	11171.2	13473.5	0.17	7.80	6.47	106.8	88.6	21.2	35.0	16.6	70	2318	7.7
(5, 4)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(5, 6)	2354.02	7465	3138.7	15759.3	18898.0	0.17	8.03	6.69	150.9	125.9	33.5	51.8	29.1	79	2296	7.5
(6, 5)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(7, 6)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(6, 7)	904.36	7461	1205.8	6024.1	7230.0	0.17	7.99	6.66	57.9	48.3	17.9	20.7	15.3	80	2295	7.5
(7, 8)	1187.48	7420	1583.3	8009.5	9592.8	0.17	8.08	6.74	77.3	64.5	27.9	30.3	24.7	88	2283	7.4
(8, 7)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(8, 9)	825.54	7451	1100.7	4880.4	5981.1	0.18	7.25	5.91	48.1	39.2	15.7	13.3	6.6	66	2292	8.3
(9, 8)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(9, 10)	1925.20	7366	2566.9	14240.7	16807.7	0.15	8.73	7.40	136.1	115.3	25.1	44.0	17.7	84	2266	6.9
(10, 9)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(10, 11)	2131.54	7261	2842.1	16724.1	19566.2	0.15	9.18	7.85	160.6	137.3	26.8	53.7	17.3	84	2234	6.5
(11, 10)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(11, 12)	2497.41	7186	14651.5	6491.2	21142.6	0.69	8.47	2.60	175.2	53.8	2.4	18.3	0.5	4	2211	7.1
(12, 11)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(12, 13)	3929.42	7033	23052.6	8703.4	31756.0	0.73	8.08	2.21	267.4	73.3	3.6	14.8	0.1	0	2164	7.4
(13, 12)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(13, 14)	653.46	7114	871.3	486.8	1358.1	0.64	2.08	0.74	11.4	4.1	0.0	0.0	0.0	0	2188	28.9
(14, 13)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(14, 15)	1944.89	7283	2593.2	323.6	2916.8	0.89	1.50	0.17	24.0	2.7	0.3	0.0	0.0	0	2240	40.0
(15, 14)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(15, 16)	4791.45	7333	6388.6	1158.1	7546.7	0.85	1.58	0.24	61.6	9.5	0.9	0.0	0.0	0	2256	38.1
(16, 15)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(16, 17)	6018.83	7370	8025.1	1686.6	9711.8	0.83	1.61	0.28	78.8	13.7	1.0	0.0	0.0	0	2267	37.2
(17, 16)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(17, 18)	1887.96	7467	2517.3	559.0	3076.3	0.82	1.63	0.30	24.7	4.5	0.1	0.0	0.0	0	2297	36.8
(18, 17)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(18, 19)	2341.33	7561	3121.8	695.6	3817.3	0.82	1.63	0.30	30.2	5.5	0.2	0.0	0.0	0	2326	36.8
(19, 18)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(19, 20)	3849.95	7642	5133.3	1133.0	6266.2	0.82	1.63	0.29	49.1	8.9	0.4	0.0	0.0	0	2351	36.9
(20, 19)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(20, 21)	2715.09	7749	3620.1	848.1	4468.2	0.81	1.65	0.31	34.6	6.6	0.4	0.0	0.0	0	2384	36.5
(21, 20)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(21, 22)	713.55	7849	951.4	609.1	1560.5	0.61	2.19	0.85	11.9	4.7	1.3	0.2	0.1	2	2415	27.4
(22, 21)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(22, 23)	527.32	7955	703.1	1145.7	1848.8	0.38	3.51	2.17	13.9	8.6	2.8	1.7	0.9	6	2447	17.1

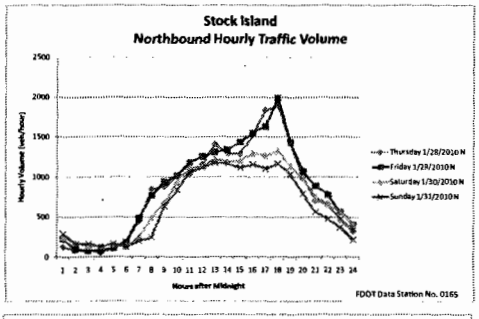
ATTACHMENT 2

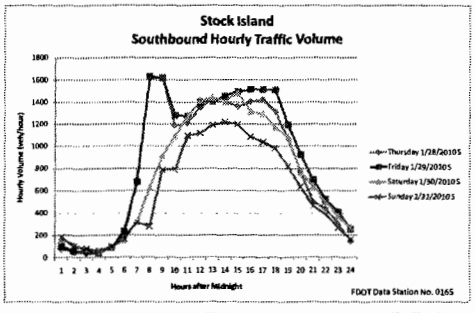
			Clock time ending at:		1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 AM		
CO	SITE		DATE	DIR	HR01	HR02	HR03	HR04	HR05	HR06	HR07	HR08	HR09	HR10	HR11	HR12	HR13	HR14	HR15	HR16	HR17	HR18	HR19	HR20	HR21	HR22	HR23	HR24	TOTAL	FLAG
90	0164	Thursday	1/28/2010	N	40	25	16	31	70	216	345	424	625	620	746	768	781	780	704	779	851	926	626	490	263	226	155	92	10509	N
90	0164	Friday	1/29/2010	N	53	44	50	45	82	181	341	457	622	654	736	816	877	862	831	942	872	897	704	509	375	252	189	173	11514	N
90	0164	Saturday	1/30/2010	N	48	69	50	40	80	122	178	347	541	726	776	907	879	921	865	936	964	873	785	650	499	373	347	202	12296	N
90	0164	Sunday	1/31/2010	N	115	100	72	78	72	109	161	273	528	638	898	1013	1122	1238	1332	1261	1252	1047	816	567	375	231	177	91	13566	A
90	0164	Thursday	1/28/2010	S	65	49	32	32	74	187	451	600	660	627	696	751	778	825	863	815	845	853	558	432	385	274	223	109	11182	N
90	0164	Friday	1/29/2010	S	79	66	42	42	64	215	440	594	672	683	720	881	937	985	970	943	931	963	738	618	527	420	309	251	13076	N
90	0164	Saturday	1/30/2010	S	116	94	53	33	61	158	283	386	626	769	1022	1206	1369	464	473	968	969	827	608	470	371	301	220	170	12106	A
90	0164	Sunday	1/31/2010	S	91	68	55	48	34	83	156	255	403	492	732	1019	1135	969	907	811	713	675	570	443	295	232	185	120	10491	N
90	0165	Thursday	1/28/2010	N	121	82	71	59	96	175	450	849	873	1015	1037	1154	1405	1291	1285	1513	1831	1896	1423	990	711	663	462	325	19777	N
90	0165	Friday	1/29/2010	N	226	94	77	80	109	188	482	772	939	1016	1183	1255	1306	1335	1430	1950	1627	1998	1432	1068	890	781	567	401	20785	N
90	0165	Saturday	1/30/2010	N	254	175	136	133	155	134	238	487	683	935	1114	1136	1218	1192	1197	1301	1284	1321	1135	988	753	663	562	411	17585	N
90	0165	Sunday	1/31/2010	N	295	160	163	130	163	121	198	244	527	826	1064	1119	1172	1165	1109	1157	1101	1165	1035	794	563	476	367	219	15453	N
90	0165	Thursday	1/28/2010	S	75	34	34	37	98	195	703	2621	2624	2189	1207	1353	1419	1399	1360	1400	1421	1309	1065	766	503	442	301	149	19724	N
90	0165	Friday	1/29/2010	S	104	56	59	40	91	235	681	1627	1621	1283	1271	1402	1405	1452	1496	1512	1515	1509	1195	922	658	522	413	252	21361	N
90	0165	Saturday	1/30/2010	S	160	114	76	55	99	152	321	622	913	1085	1277	1412	1437	1400	1483	1311	1291	1168	1086	758	642	498	370	269	17999	N
90	0165	Sunday	1/31/2010	S	186	99	80	60	99	168	316	279	790	788	1094	1115	1191	1218	1196	1081	1036	978	818	632	484	393	264	161	14506	N
90	0227	Thursday	1/28/2010	N	39	24	20	16	30	77	186	382	464	598	669	698	588	543	627	658	692	675	534	377	256	167	156	87	8563	N
90	0227	Friday	1/29/2010	N	61	48	20	16	61	76	181	393	484	624	735	723	671	627	618	678	656	701	508	354	286	236	171	148	8879	N
90	0227	Saturday	1/30/2010	N	72	49	35	34	44	63	146	312	577	708	847	762	619	512	485	583	566	528	473	338	293	244	178	139	8732	N
90	0227	Sunday	1/31/2010	N	99	51	27	22	28	58	112	216	451	698	686	781	711	627	600	556	548	488	369	345	208	137	99	81	7998	N
90	0227	Thursday	1/28/2010	S	31	29	15	26	34	96	276	468	486	425	598	723	682	673	670	733	753	672	466	325	229	163	113	75	8747	N
90	0227	Friday	1/29/2010	S	39	21	27	33	43	82	257	467	472	484	576	671	778	775	757	841	783	687	498	373	289	212	156	113	9194	N
90	0227	Saturday	1/30/2010	S	65	43	22	24	30	52	89	202	351	508	706	854	827	826	753	740	665	555	516	325	238	188	157	82	8928	N
90	0227	Sunday	1/31/2010	S	63	35	24	24	30	51	79	102	170	366	505	692	725	650	670	642	580	511	405	263	189	125	113	77	7091	N

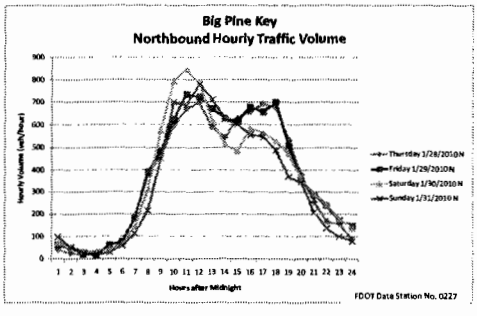


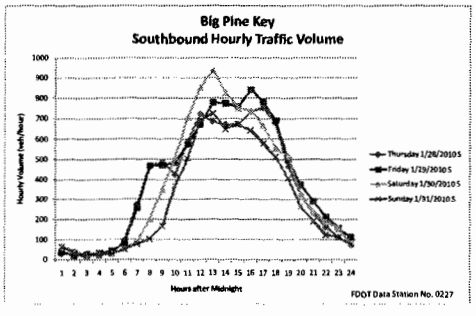


1) Counter 0165 in Stock Island
2) Counter 0227 in Big Pine Key
3) Counter 0164 at MM 106 in Key Largo
4) Counter 0430 Turnpike just north of Clmy









ATTACHMENT 3

TABLE 1
Roadway Configuration on US Highway 1 (Overseas Highhway)
and CR 905/Card Sound Road in the Florida Keys, Monroe County, Florida

Area	Milemarkers		Location/Description	Year 2010 (Includes Completed Roadway Improvements Projects)		Includes Roadway Improvements Projects Under Construction		Inlcudes Projects Funded in the 5-yr Work Program	
	From	To		Configuration	Functional Evacuation Lanes	Configuration	Functional Evacuation Lanes	Configuration	Functional Evacuation Lanes
Lower Keys	2.0	4.0	Key West to Stock Island	4L	2	4L	2	4L	2
Lower Keys	4.0	9.0	Stock Island to Big Coppitt Key	4LD	2	4LD	2	4LD	2
Lower Keys	9.0	17.0	Big Coppitt Key to Sugarloaf Key	2L	1	2L	1	2L	1
Lower Keys	17.0	22.0	Sugarloaf Key to Cudjoe Key	2L	1	2L	1	2L	1
Lower Keys	22.0	24.0	Cudjoe Key to Summerland Key Cove Airport	2L	1	2L	1	2L	1
Lower Keys	24.0	25.0	Summerland Key Cove Airport to Summerland Key	3L	1	3L	1	3L	1
Lower Keys	25.0	30.0	Summerland Key to Big Pine Key	2L	1	2L	1	2L	1
Lower Keys	30.0	34.0	Big Pine Key to West Summerland Keys	3L	2	3L	2	3L	2
Lower Keys	34.0	35.2	West Summerland Keys to Spanish Harbor Keys	2L	1	2L	1	2L	1
Lower Keys	35.2	36.5	Spanish Harbor Keys to Bahia Honda Bridge	4LD	2	4LD	2	4LD	2
Lower Keys	36.5	37.5	Bahia Honda Bridge to Bahia Honda Key	2L	1	2L	1	2L	1
Middle Keys	37.5	47.0	Bahia Honda Key to Hog Key	2L	1	2L	1	2L	1
Middle Keys	47.0	48.0	Hog Key to Boot Key	2L	1	2L	1	2L	2
Middle Keys	48.0	50.2	Boot Key to Marathon	4L	2	4L	2	4L	2
Middle Keys	50.2	50.8	Marathon to Marathon Shores	5L	2	5L	2	5L	2
Middle Keys	50.8	54.0	Marathon Shores to Key Colonial Beach	4LD	2	4LD	2	4LD	2
Middle Keys	54.0	54.5	Key Colonial Beach to Deer Key	4LD	2	4LD	2	4LD	2
Middle Keys	54.5	58.0	Deer Key to Grassy Key	2L	1	2L	1	2L	2
Upper Keys	58.0	74.0	Grassy Key to Matecumbe Harbor	2L	1	2L	1	2L	2
Upper Keys	74.0	80.0	Matecumbe Harbor to Teatable Key	2L	1	2L	1	2L	2
Upper Keys	80.0	83.5	Teatable Key to Islamorada	3L	1	3L	1	3L	2
Upper Keys	83.5	85.6	Islamorada to Windley Key	2L	1	2L	1	2L	2
Upper Keys	85.6	90.0	Windley Key to Plantation Key	2L	1	2L	1	2L	2
Upper Keys	90.0	100.0	Tavernier Key to Newport Key	4LD	2	4LD	2	4LD	3
Upper Keys	100.0	105.0	Newport Key to Sexton Cove	4LD	2	4LD	2	4LD	3
Upper Keys	105.0	106.3	Sexton Cove to Rattlesnake Key	4LD	2	4LD	2	4LD	3
Upper Keys	106.3	126.5	Rattlesnake Key to Card Sound Rd	2L/4L	1	2L/4L	2	2L/4L	2
South Dade	126.5	HEFT	Card Sound Rd to HEFT	5LD	3	5LD	3	5LD	3
Upper Keys	106.3	Int CR 905 / CR 905 A	Lake Surprise to Crocodile Lake	2L	1	2L	1	2L	1
Upper Keys	Ocean Reef	Int CR 905 / CR 905 A	Tanglefish Key to Crocodile Lake	2L	1	2L	1	2L	1
Upper Keys	Int CR 905 / CR 905 A	US 1	Crocodile Lake to South Miami-Dade	2L	1	2L	1	2L	1

LEGEND

2L Two-lane facility
2L/4L Two lanes with short four-lane sections for passing purposes
3L Three-lane facility (center lane is a two-way left-turn lane)
4L Four-lane undivided facility
4LD Four-lane divided facility
5L Five-lane facility (center lane is a two-way left-turn lane)
5LD Five-lane divided facility

NOTE: The "Potential Evacuation Lane" column includes existing and future 10-foot northbound shoulder improvements

CUMULATIVE NETSIM STATISTICS AT TIME 9:15: 0

ELAPSED TIME IS 2:15: 0 (8100 SECONDS), TIME PERIOD 3 ELAPSED TIME IS 3600 SECONDS

Calibration Seed 7581

LINK	VEHICLE MILES	VEHICLE TRIPS	VEHICLE MINUTES MOVE TIME	VEHICLE MINUTES DELAY TIME	VEHICLE MINUTES TOTAL TIME	RATIO MOVE/ TOTAL	MINUTES/MILE TOTAL TIME	MINUTES/MILE DELAY TIME	SECONDS / VEHICLE TOTAL TIME	SECONDS / VEHICLE DELAY TIME	SECONDS / VEHICLE CONTROL DELAY	SECONDS / VEHICLE QUEUE DELAY	SECONDS / VEHICLE STOP* TIME	AVERAGE VALUES STOPS (%)	AVERAGE VALUES VOL VPH	AVERAGE VALUES SPEED MPH
(106, 1)	242.99	1283	324.0	77.2	401.2	0.81	1.65	0.32	18.7	3.6	2.9	2.3	2.2	20	570	36.3
(1, 106)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(1, 2)	252.31	1403	336.4	39.6	376.0	0.89	1.49	0.16	16.1	1.7	0.0	0.0	0.0	0	623	40.3
(2, 1)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(2, 3)	161.98	1462	216.0	11.7	227.6	0.95	1.41	0.07	9.3	0.5	0.0	0.0	0.0	0	649	42.7
(3, 2)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(3, 4)	1049.44	1580	1399.3	59.2	1458.5	0.96	1.39	0.06	55.2	2.2	0.2	0.0	0.0	0	702	43.2
(4, 3)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(4, 5)	375.60	1639	500.8	23.7	524.5	0.95	1.40	0.06	19.2	0.9	0.0	0.0	0.0	0	728	43.0
(5, 4)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(5, 6)	536.39	1701	715.2	34.5	749.7	0.95	1.40	0.06	26.4	1.2	0.1	0.0	0.0	0	756	42.9
(6, 5)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(7, 6)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(6, 7)	211.39	1744	281.9	16.1	298.0	0.95	1.41	0.08	10.2	0.6	0.0	0.0	0.0	0	775	42.6
(7, 8)	286.15	1788	381.5	144.8	526.3	0.72	1.84	0.51	17.6	4.9	3.7	2.8	2.6	22	794	32.6
(8, 7)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(8, 9)	202.64	1829	270.2	53.5	323.7	0.83	1.60	0.26	10.6	1.8	0.0	0.0	0.0	0	812	37.6
(9, 8)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(9, 10)	490.06	1875	653.4	42.6	696.0	0.94	1.42	0.09	22.2	1.4	0.1	0.0	0.0	0	833	42.2
(10, 9)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(10, 11)	562.46	1916	749.9	47.5	797.4	0.94	1.42	0.08	25.0	1.5	0.1	0.0	0.0	0	851	42.3
(11, 10)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(11, 12)	680.13	1957	906.8	61.2	968.0	0.94	1.42	0.09	29.7	1.9	0.1	0.0	0.0	0	869	42.2
(12, 11)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(12, 13)	1120.78	2006	1494.4	93.6	1587.9	0.94	1.42	0.08	47.3	2.8	0.1	0.0	0.0	0	891	42.3
(13, 12)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(13, 14)	190.14	2070	253.5	22.0	275.5	0.92	1.45	0.12	8.0	0.6	0.0	0.0	0.0	0	920	41.4
(14, 13)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(14, 15)	587.23	2199	783.0	58.5	841.5	0.93	1.43	0.10	22.9	1.6	0.1	0.0	0.0	0	977	41.9
(15, 14)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(15, 16)	1476.05	2259	1968.1	140.6	2108.6	0.93	1.43	0.10	55.9	3.7	0.2	0.0	0.0	0	1004	42.0
(16, 15)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(16, 17)	1893.85	2319	2525.1	203.6	2728.8	0.93	1.44	0.11	70.3	5.3	0.4	0.0	0.0	0	1030	41.6
(17, 16)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(17, 18)	605.81	2396	807.7	74.6	882.3	0.92	1.46	0.12	22.1	1.9	0.1	0.0	0.0	0	1064	41.2
(18, 17)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(18, 19)	766.10	2474	1021.5	93.1	1114.5	0.92	1.45	0.12	27.0	2.3	0.1	0.0	0.0	0	1099	41.2
(19, 18)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(19, 20)	1276.09	2533	1701.5	161.9	1863.4	0.91	1.46	0.13	43.9	3.8	0.2	0.0	0.0	0	1125	41.1
(20, 19)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(20, 21)	912.39	2604	1216.5	127.0	1343.6	0.91	1.47	0.14	30.9	2.9	0.1	0.0	0.0	0	1157	40.7
(21, 20)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(21, 22)	243.64	2680	324.8	50.0	374.8	0.87	1.54	0.21	8.4	1.1	0.1	0.0	0.0	0	1191	39.0
(22, 21)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(22, 23)	182.89	2759	243.9	140.7	384.5	0.63	2.10	0.77	8.4	3.1	1.3	0.6	0.4	2	1226	28.5

CUMULATIVE NETSIM STATISTICS AT TIME 10:15: 0

ELAPSED TIME IS 3:15: 0 (11700 SECONDS), TIME PERIOD 4 ELAPSED TIME IS 3600 SECONDS

Calibration Seed 7581

LINK	VEHICLE MILES	VEHICLE TRIPS	VEHICLE MINUTES MOVE TIME	VEHICLE MINUTES DELAY TIME	VEHICLE MINUTES TOTAL TIME	RATIO MOVE/ TOTAL	MINUTES/MILE TOTAL TIME	MINUTES/MILE DELAY TIME	SECONDS / VEHICLE TOTAL TIME	SECONDS / VEHICLE DELAY TIME	SECONDS / VEHICLE CONTROL DELAY	SECONDS / VEHICLE QUEUE DELAY	SECONDS / VEHICLE STOP* TIME	AVERAGE VALUES STOPS (%)	AVERAGE VALUES VOL VPH	AVERAGE VALUES SPEED MPH
(106, 1)	346.40	1829	461.9	109.6	571.5	0.81	1.65	0.32	18.7	3.6	2.8	2.2	2.1	20	562	36.4
(1, 106)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(1, 2)	360.21	2003	480.3	55.8	536.1	0.90	1.49	0.15	16.1	1.7	0.0	0.1	0.0	0	616	40.3
(2, 1)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(2, 3)	231.56	2090	308.8	16.5	325.2	0.95	1.40	0.07	9.3	0.5	0.0	0.0	0.0	0	643	42.7
(3, 2)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(3, 4)	1503.76	2264	2005.0	86.2	2091.2	0.96	1.39	0.06	55.3	2.3	0.2	0.0	0.0	0	696	43.1
(4, 3)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(4, 5)	539.00	2352	718.7	35.9	754.6	0.95	1.40	0.07	19.2	0.9	0.0	0.0	0.0	0	723	42.9
(5, 4)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(5, 6)	769.12	2439	1025.5	53.0	1078.5	0.95	1.40	0.07	26.5	1.3	0.1	0.0	0.0	0	750	42.8
(6, 5)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(7, 6)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(6, 7)	303.39	2503	404.5	24.6	429.2	0.94	1.41	0.08	10.3	0.6	0.0	0.0	0.0	0	770	42.4
(7, 8)	411.14	2569	548.2	211.7	759.9	0.72	1.85	0.51	17.7	4.9	3.7	2.8	2.6	22	790	32.5
(8, 7)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(8, 9)	291.50	2631	388.7	78.7	467.3	0.83	1.60	0.27	10.7	1.8	0.0	0.0	0.0	0	809	37.4
(9, 8)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(9, 10)	703.85	2693	938.5	64.3	1002.8	0.94	1.42	0.09	22.3	1.4	0.1	0.0	0.0	0	828	42.1
(10, 9)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(10, 11)	809.64	2758	1079.5	69.6	1149.2	0.94	1.42	0.09	25.0	1.5	0.1	0.0	0.0	0	848	42.3
(11, 10)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(11, 12)	980.75	2822	1307.7	89.1	1396.8	0.94	1.42	0.09	29.7	1.9	0.1	0.0	0.0	0	868	42.1
(12, 11)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(12, 13)	1611.33	2884	2148.4	136.2	2284.7	0.94	1.42	0.08	47.4	2.9	0.1	0.0	0.0	0	887	42.3
(13, 12)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(13, 14)	273.46	2977	364.6	32.4	397.0	0.92	1.45	0.12	8.0	0.7	0.0	0.0	0.0	0	916	41.3
(14, 13)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(14, 15)	844.66	3163	1126.2	86.2	1212.4	0.93	1.44	0.10	23.0	1.6	0.1	0.0	0.0	0	973	41.8
(15, 14)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(15, 16)	2124.89	3252	2833.2	207.5	3040.6	0.93	1.43	0.10	55.9	3.8	0.2	0.0	0.0	0	1000	41.9
(16, 15)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(16, 17)	2727.67	3340	3636.9	291.5	3928.4	0.93	1.44	0.11	70.4	5.2	0.4	0.0	0.0	0	1027	41.7
(17, 16)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(17, 18)	872.81	3452	1163.7	104.3	1268.1	0.92	1.45	0.12	22.0	1.8	0.1	0.0	0.0	0	1062	41.3
(18, 17)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(18, 19)	1104.86	3568	1473.2	130.2	1603.4	0.92	1.45	0.12	26.9	2.2	0.1	0.0	0.0	0	1097	41.3
(19, 18)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(19, 20)	1850.41	3673	2467.2	228.3	2695.5	0.92	1.46	0.12	43.9	3.7	0.2	0.0	0.0	0	1130	41.2
(20, 19)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(20, 21)	1325.13	3782	1766.8	175.9	1942.8	0.91	1.47	0.13	30.8	2.8	0.1	0.0	0.0	0	1163	40.9
(21, 20)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(21, 22)	354.00	3894	472.0	70.6	542.6	0.87	1.53	0.20	8.4	1.1	0.1	0.0	0.0	0	1198	39.1
(22, 21)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(22, 23)	265.81	4010	354.4	193.3	547.7	0.65	2.06	0.73	8.2	2.9	1.2	0.5	0.3	2	1233	29.1

CUMULATIVE NETSIM STATISTICS AT TIME 8:15: 0

ELAPSED TIME IS 1:15: 0 (4500 SECONDS), TIME PERIOD 2 ELAPSED TIME IS 3600 SECONDS

Calibration Seed 1359

LINK	VEHICLE MILES	TRIPS	VEHICLE MINUTES MOVE TIME	DELAY TIME	TOTAL TIME	RATIO MOVE/ TOTAL	MINUTES/MILE TOTAL TIME	DELAY TIME	SECONDS / VEHICLE TOTAL TIME	DELAY TIME	CONTROL DELAY	QUEUE DELAY	STOP* TIME	AVERAGE VALUES STOPS (%)	VOL VPH	SPEED MPH
(106, 1)	126.14	666	168.2	39.5	207.7	0.81	1.65	0.31	18.7	3.6	2.7	2.2	2.1	21	532	36.4
(1, 106)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(1, 2)	131.46	731	175.3	20.4	195.6	0.90	1.49	0.15	16.0	1.7	0.0	0.0	0.0	0	584	40.3
(2, 1)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(2, 3)	84.65	764	112.9	6.0	118.8	0.95	1.40	0.07	9.3	0.5	0.0	0.0	0.0	0	611	42.7
(3, 2)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(3, 4)	549.96	828	733.3	30.6	763.9	0.96	1.39	0.06	55.1	2.2	0.2	0.0	0.0	0	662	43.2
(4, 3)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(4, 5)	198.46	866	264.6	12.0	276.6	0.96	1.39	0.06	19.2	0.8	0.0	0.0	0.0	0	692	43.1
(5, 4)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(5, 6)	283.18	898	377.6	18.1	395.7	0.95	1.40	0.06	26.3	1.2	0.1	0.0	0.0	0	718	42.9
(6, 5)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(7, 6)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(6, 7)	111.88	923	149.2	7.9	157.1	0.95	1.40	0.07	10.2	0.5	0.0	0.0	0.0	0	738	42.7
(7, 8)	151.88	949	202.5	74.2	276.7	0.73	1.82	0.49	17.5	4.7	3.6	2.7	2.5	21	759	32.9
(8, 7)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(8, 9)	108.03	975	144.0	28.7	172.7	0.83	1.60	0.27	10.6	1.8	0.0	0.0	0.0	0	780	37.5
(9, 8)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(9, 10)	260.32	996	347.1	21.2	368.3	0.94	1.41	0.08	22.1	1.3	0.1	0.0	0.0	0	796	42.4
(10, 9)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(10, 11)	298.84	1018	398.5	23.4	421.8	0.94	1.41	0.08	24.8	1.4	0.0	0.0	0.0	0	814	42.5
(11, 10)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(11, 12)	362.48	1043	483.3	31.7	515.0	0.94	1.42	0.09	29.5	1.8	0.1	0.0	0.0	0	834	42.2
(12, 11)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(12, 13)	599.50	1073	799.3	48.9	848.2	0.94	1.41	0.08	47.1	2.7	0.1	0.0	0.0	0	858	42.4
(13, 12)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(13, 14)	101.78	1108	135.7	11.5	147.2	0.92	1.45	0.11	8.0	0.6	0.0	0.0	0.0	0	886	41.5
(14, 13)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(14, 15)	314.31	1177	419.1	29.3	448.4	0.93	1.43	0.09	22.8	1.5	0.0	0.0	0.0	0	941	42.1
(15, 14)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(15, 16)	785.40	1202	1047.2	71.1	1118.3	0.94	1.42	0.09	55.4	3.6	0.2	0.0	0.0	0	961	42.1
(16, 15)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(16, 17)	1010.22	1237	1347.0	109.6	1456.6	0.92	1.44	0.11	70.4	5.3	0.3	0.0	0.0	0	989	41.6
(17, 16)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(17, 18)	324.39	1283	432.5	36.2	468.8	0.92	1.44	0.11	21.9	1.7	0.1	0.0	0.0	0	1026	41.5
(18, 17)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(18, 19)	411.23	1328	548.3	45.7	594.0	0.92	1.44	0.11	26.8	2.1	0.1	0.0	0.0	0	1062	41.5
(19, 18)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(19, 20)	682.13	1354	909.5	81.9	991.4	0.92	1.45	0.12	43.5	3.6	0.2	0.0	0.0	0	1083	41.3
(20, 19)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(20, 21)	487.38	1391	649.8	63.1	713.0	0.91	1.46	0.13	30.7	2.7	0.1	0.0	0.0	0	1112	41.0
(21, 20)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(21, 22)	130.18	1432	173.6	22.4	196.0	0.89	1.51	0.17	8.2	0.9	0.0	0.0	0.0	0	1145	39.9
(22, 21)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(22, 23)	97.64	1473	130.2	61.3	191.5	0.68	1.96	0.63	7.8	2.5	1.2	0.5	0.3	2	1178	30.6

CUMULATIVE NETSIM STATISTICS AT TIME 9:15: 0

ELAPSED TIME IS 2:15: 0 (8100 SECONDS), TIME PERIOD 3 ELAPSED TIME IS 3600 SECONDS

Calibration Seed 1359

LINK	VEHICLE MILES	VEHICLE TRIPS	VEHICLE MINUTES MOVE TIME	VEHICLE MINUTES DELAY TIME	VEHICLE MINUTES TOTAL TIME	RATIO MOVE/ TOTAL	MINUTES/MILE TOTAL TIME	MINUTES/MILE DELAY TIME	SECONDS / VEHICLE TOTAL TIME	SECONDS / VEHICLE DELAY TIME	SECONDS / VEHICLE CONTROL DELAY	SECONDS / VEHICLE QUEUE DELAY	SECONDS / VEHICLE STOP* TIME	AVERAGE VALUES STOPS (%)	AVERAGE VALUES VOL VPH	AVERAGE VALUES SPEED MPH
(106, 1)	242.99	1283	324.0	77.1	401.1	0.81	1.65	0.32	18.7	3.6	2.8	2.3	2.2	20	570	36.3
(1, 106)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(1, 2)	252.31	1403	336.4	39.7	376.1	0.89	1.49	0.16	16.1	1.7	0.0	0.0	0.0	0	623	40.3
(2, 1)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(2, 3)	161.98	1462	216.0	11.7	227.6	0.95	1.41	0.07	9.3	0.5	0.0	0.0	0.0	0	649	42.7
(3, 2)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(3, 4)	1049.44	1580	1399.3	60.8	1460.1	0.96	1.39	0.06	55.3	2.3	0.2	0.0	0.0	0	702	43.1
(4, 3)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(4, 5)	375.60	1639	500.8	24.0	524.8	0.95	1.40	0.06	19.2	0.9	0.0	0.0	0.0	0	728	42.9
(5, 4)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(5, 6)	536.39	1701	715.2	36.0	751.2	0.95	1.40	0.07	26.5	1.3	0.1	0.0	0.0	0	756	42.8
(6, 5)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(7, 6)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(6, 7)	211.39	1744	281.9	16.2	298.1	0.95	1.41	0.08	10.2	0.6	0.0	0.0	0.0	0	775	42.6
(7, 8)	285.67	1785	380.9	142.8	523.7	0.73	1.83	0.50	17.6	4.8	3.6	2.7	2.6	22	793	32.7
(8, 7)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(8, 9)	202.64	1829	270.2	54.0	324.2	0.83	1.60	0.27	10.6	1.8	0.0	0.0	0.0	0	812	37.5
(9, 8)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(9, 10)	490.06	1875	653.4	43.6	697.0	0.94	1.42	0.09	22.3	1.4	0.1	0.0	0.0	0	833	42.2
(10, 9)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(10, 11)	562.17	1915	749.6	48.9	798.4	0.94	1.42	0.09	25.0	1.5	0.1	0.0	0.0	0	851	42.2
(11, 10)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(11, 12)	679.78	1956	906.4	64.2	970.6	0.93	1.43	0.09	29.8	2.0	0.1	0.0	0.0	0	869	42.0
(12, 11)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(12, 13)	1120.78	2006	1494.4	99.1	1593.5	0.94	1.42	0.09	47.5	3.0	0.2	0.0	0.0	0	891	42.2
(13, 12)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(13, 14)	190.14	2070	253.5	22.4	275.9	0.92	1.45	0.12	8.0	0.6	0.0	0.0	0.0	0	920	41.4
(14, 13)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(14, 15)	587.23	2199	783.0	58.4	841.3	0.93	1.43	0.10	22.9	1.6	0.1	0.0	0.0	0	977	41.9
(15, 14)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(15, 16)	1475.40	2258	1967.2	142.8	2110.0	0.93	1.43	0.10	55.9	3.8	0.2	0.0	0.0	0	1003	42.0
(16, 15)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(16, 17)	1890.58	2315	2520.8	201.7	2722.5	0.93	1.44	0.11	70.3	5.2	0.3	0.0	0.0	0	1028	41.7
(17, 16)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(17, 18)	605.55	2395	807.4	70.1	877.5	0.92	1.45	0.12	22.0	1.8	0.1	0.0	0.0	0	1064	41.4
(18, 17)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(18, 19)	764.24	2468	1019.0	89.5	1108.5	0.92	1.45	0.12	26.9	2.2	0.1	0.0	0.0	0	1096	41.4
(19, 18)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(19, 20)	1276.60	2534	1702.1	156.4	1858.5	0.92	1.46	0.12	43.8	3.7	0.2	0.0	0.0	0	1126	41.2
(20, 19)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(20, 21)	912.04	2603	1216.0	119.9	1335.9	0.91	1.46	0.13	30.7	2.8	0.1	0.0	0.0	0	1156	41.0
(21, 20)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(21, 22)	243.64	2680	324.8	44.2	369.1	0.88	1.51	0.18	8.3	1.0	0.1	0.0	0.0	0	1191	39.6
(22, 21)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(22, 23)	182.76	2757	243.7	115.6	359.3	0.68	1.97	0.63	7.8	2.5	1.1	0.5	0.3	2	1225	30.5

CUMULATIVE NETSIM STATISTICS AT TIME 10:15: 0

ELAPSED TIME IS 3:15: 0 (11700 SECONDS), TIME PERIOD 4 ELAPSED TIME IS 3600 SECONDS

Calibration Seed 1359

LINK	VEHICLE MILES	VEHICLE TRIPS	VEHICLE MINUTES MOVE TIME	VEHICLE MINUTES DELAY TIME	VEHICLE MINUTES TOTAL TIME	RATIO MOVE/ TOTAL	MINUTES/MILE TOTAL TIME	MINUTES/MILE DELAY TIME	SECONDS / VEHICLE TOTAL TIME	SECONDS / VEHICLE DELAY TIME	SECONDS / VEHICLE CONTROL DELAY	SECONDS / VEHICLE QUEUE DELAY	SECONDS / VEHICLE STOP* TIME	AVERAGE VALUES STOPS (%)	AVERAGE VALUES VOL VPH	AVERAGE VALUES SPEED MPH
(106, 1)	346.40	1829	461.9	109.5	571.4	0.81	1.65	0.32	18.7	3.6	2.8	2.2	2.1	20	562	36.4
(1, 106)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(1, 2)	360.21	2003	480.3	55.9	536.2	0.90	1.49	0.16	16.1	1.7	0.0	0.0	0.0	0	616	40.3
(2, 1)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(2, 3)	231.56	2090	308.8	16.4	325.2	0.95	1.40	0.07	9.3	0.5	0.0	0.0	0.0	0	643	42.7
(3, 2)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(3, 4)	1503.76	2264	2005.0	87.6	2092.6	0.96	1.39	0.06	55.3	2.3	0.2	0.0	0.0	0	696	43.1
(4, 3)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(4, 5)	539.23	2353	719.0	36.2	755.2	0.95	1.40	0.07	19.2	0.9	0.0	0.0	0.0	0	724	42.8
(5, 4)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(5, 6)	769.12	2439	1025.5	54.3	1079.8	0.95	1.40	0.07	26.5	1.3	0.1	0.0	0.0	0	750	42.7
(6, 5)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(7, 6)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(6, 7)	303.39	2503	404.5	24.7	429.3	0.94	1.41	0.08	10.3	0.6	0.0	0.0	0.0	0	770	42.4
(7, 8)	410.98	2568	548.0	209.7	757.7	0.72	1.84	0.51	17.7	4.9	3.7	2.8	2.6	22	790	32.5
(8, 7)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(8, 9)	291.61	2632	388.8	79.7	468.5	0.83	1.61	0.27	10.7	1.8	0.0	0.0	0.0	0	809	37.3
(9, 8)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(9, 10)	703.59	2692	938.1	64.3	1002.5	0.94	1.42	0.09	22.3	1.4	0.1	0.0	0.0	0	828	42.1
(10, 9)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(10, 11)	809.35	2757	1079.1	70.7	1149.8	0.94	1.42	0.09	25.0	1.5	0.1	0.0	0.0	0	848	42.2
(11, 10)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(11, 12)	980.75	2822	1307.7	92.8	1400.5	0.93	1.43	0.09	29.7	2.0	0.1	0.0	0.0	0	868	42.0
(12, 11)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(12, 13)	1611.33	2884	2148.4	143.4	2291.9	0.94	1.42	0.09	47.5	3.0	0.1	0.0	0.0	0	887	42.2
(13, 12)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(13, 14)	273.46	2977	364.6	32.4	397.0	0.92	1.45	0.12	8.0	0.7	0.0	0.0	0.0	0	916	41.3
(14, 13)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(14, 15)	844.66	3163	1126.2	86.1	1212.3	0.93	1.44	0.10	23.0	1.6	0.1	0.0	0.0	0	973	41.8
(15, 14)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(15, 16)	2125.54	3253	2834.1	208.4	3042.4	0.93	1.43	0.10	56.0	3.8	0.2	0.0	0.0	0	1000	41.9
(16, 15)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(16, 17)	2723.58	3335	3631.4	292.5	3923.9	0.93	1.44	0.11	70.4	5.2	0.4	0.0	0.0	0	1026	41.6
(17, 16)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(17, 18)	872.81	3452	1163.7	98.4	1262.2	0.92	1.45	0.11	21.9	1.7	0.1	0.0	0.0	0	1062	41.5
(18, 17)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(18, 19)	1104.86	3568	1473.2	127.1	1600.3	0.92	1.45	0.12	26.9	2.1	0.1	0.0	0.0	0	1097	41.4
(19, 18)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(19, 20)	1850.92	3674	2467.9	223.9	2691.8	0.92	1.45	0.12	43.9	3.7	0.2	0.0	0.0	0	1130	41.3
(20, 19)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(20, 21)	1326.18	3785	1768.2	173.0	1941.3	0.91	1.46	0.13	30.8	2.7	0.1	0.0	0.0	0	1164	41.0
(21, 20)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(21, 22)	354.18	3896	472.2	66.2	538.4	0.88	1.52	0.19	8.3	1.0	0.1	0.0	0.0	0	1198	39.5
(22, 21)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(22, 23)	265.88	4011	354.5	170.6	525.1	0.68	1.97	0.64	7.9	2.6	1.1	0.5	0.3	2	1234	30.4

CUMULATIVE NETSIM STATISTICS AT TIME 8:15: 0

ELAPSED TIME IS 1:15: 0 (4500 SECONDS), TIME PERIOD 2 ELAPSED TIME IS 3600 SECONDS

Calibration Seed 9823

LINK	VEHICLE MILES	VEHICLE TRIPS	VEHICLE MINUTES MOVE TIME	VEHICLE MINUTES DELAY TIME	VEHICLE MINUTES TOTAL TIME	RATIO MOVE/ TOTAL	MINUTES/MILE TOTAL TIME	MINUTES/MILE DELAY TIME	SECONDS / VEHICLE TOTAL TIME	SECONDS / VEHICLE DELAY TIME	SECONDS / VEHICLE CONTROL DELAY	SECONDS / VEHICLE QUEUE DELAY	SECONDS / VEHICLE STOP* TIME	AVERAGE VALUES STOPS (%)	AVERAGE VALUES VOL VPH	AVERAGE VALUES SPEED MPH
(106, 1)	126.14	666	168.2	39.5	207.7	0.81	1.65	0.31	18.7	3.6	2.7	2.2	2.1	21	532	36.4
(1, 106)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(1, 2)	131.46	731	175.3	20.4	195.6	0.90	1.49	0.15	16.0	1.7	0.0	0.0	0.0	0	584	40.3
(2, 1)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(2, 3)	84.65	764	112.9	5.9	118.8	0.95	1.40	0.07	9.3	0.5	0.0	0.0	0.0	0	611	42.8
(3, 2)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(3, 4)	550.63	829	734.2	30.2	764.3	0.96	1.39	0.05	55.0	2.2	0.1	0.0	0.0	0	663	43.2
(4, 3)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(4, 5)	198.23	865	264.3	11.7	276.0	0.96	1.39	0.06	19.1	0.8	0.0	0.0	0.0	0	692	43.1
(5, 4)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(5, 6)	283.18	898	377.6	17.7	395.2	0.96	1.40	0.06	26.3	1.2	0.1	0.0	0.0	0	718	43.0
(6, 5)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(7, 6)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(6, 7)	111.88	923	149.2	7.8	157.0	0.95	1.40	0.07	10.2	0.5	0.0	0.0	0.0	0	738	42.8
(7, 8)	151.88	949	202.5	73.1	275.6	0.73	1.81	0.48	17.4	4.6	3.5	2.7	2.5	21	759	33.1
(8, 7)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(8, 9)	108.03	975	144.0	28.4	172.5	0.84	1.60	0.26	10.6	1.7	0.0	0.0	0.0	0	780	37.6
(9, 8)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(9, 10)	260.32	996	347.1	21.2	368.2	0.94	1.41	0.08	22.1	1.3	0.1	0.0	0.0	0	796	42.4
(10, 9)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(10, 11)	299.73	1021	399.6	23.7	423.4	0.94	1.41	0.08	24.8	1.4	0.1	0.0	0.0	0	816	42.5
(11, 10)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(11, 12)	362.13	1042	482.8	34.5	517.3	0.93	1.43	0.10	29.7	2.0	0.1	0.0	0.0	0	833	42.0
(12, 11)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(12, 13)	599.50	1073	799.3	52.2	851.5	0.94	1.42	0.09	47.3	2.9	0.1	0.0	0.0	0	858	42.2
(13, 12)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(13, 14)	101.78	1108	135.7	12.7	148.4	0.91	1.46	0.12	8.0	0.7	0.0	0.0	0.0	0	886	41.2
(14, 13)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(14, 15)	314.31	1177	419.1	34.0	453.1	0.92	1.44	0.11	23.0	1.7	0.0	0.0	0.0	0	941	41.6
(15, 14)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(15, 16)	786.05	1203	1048.1	81.7	1129.8	0.93	1.44	0.10	56.0	4.1	0.2	0.0	0.0	0	962	41.7
(16, 15)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(16, 17)	1011.85	1239	1349.1	113.3	1462.5	0.92	1.45	0.11	70.5	5.5	0.3	0.0	0.0	0	991	41.5
(17, 16)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(17, 18)	324.39	1283	432.5	38.4	470.9	0.92	1.45	0.12	22.0	1.8	0.0	0.0	0.0	0	1026	41.3
(18, 17)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(18, 19)	410.61	1326	547.5	50.2	597.6	0.92	1.46	0.12	27.0	2.3	0.1	0.0	0.0	0	1060	41.2
(19, 18)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(19, 20)	681.12	1352	908.2	84.5	992.7	0.91	1.46	0.12	43.7	3.7	0.2	0.0	0.0	0	1081	41.2
(20, 19)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(20, 21)	486.68	1389	648.9	63.8	712.7	0.91	1.46	0.13	30.7	2.8	0.1	0.0	0.0	0	1111	41.0
(21, 20)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(21, 22)	130.18	1432	173.6	24.1	197.6	0.88	1.52	0.18	8.3	1.0	0.1	0.0	0.0	0	1145	39.5
(22, 21)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(22, 23)	97.58	1472	130.1	65.9	196.0	0.66	2.01	0.68	8.0	2.7	1.2	0.6	0.4	2	1177	29.9

CUMULATIVE NETSIM STATISTICS AT TIME 9:15: 0

ELAPSED TIME IS 2:15: 0 (8100 SECONDS), TIME PERIOD 3 ELAPSED TIME IS 3600 SECONDS

Calibration Seed 9823

LINK	VEHICLE MILES	TRIPS	VEHICLE MINUTES MOVE TIME	VEHICLE MINUTES DELAY TIME	VEHICLE MINUTES TOTAL TIME	RATIO MOVE/ TOTAL	MINUTES/MILE TOTAL TIME	MINUTES/MILE DELAY TIME	SECONDS / VEHICLE TOTAL TIME	SECONDS / VEHICLE DELAY TIME	SECONDS / VEHICLE CONTROL DELAY	SECONDS / VEHICLE QUEUE DELAY	SECONDS / VEHICLE STOP* TIME	AVERAGE VALUES STOPS (%)	AVERAGE VALUES VOL VPH	AVERAGE VALUES SPEED MPH
(106, 1)	242.99	1283	324.0	77.1	401.1	0.81	1.65	0.32	18.7	3.6	2.9	2.3	2.2	20	570	36.3
(1, 106)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(1, 2)	252.31	1403	336.4	39.6	376.0	0.89	1.49	0.16	16.1	1.7	0.0	0.0	0.0	0	623	40.3
(2, 1)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(2, 3)	161.98	1462	216.0	11.5	227.4	0.95	1.40	0.07	9.3	0.5	0.0	0.0	0.0	0	649	42.7
(3, 2)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(3, 4)	1049.44	1580	1399.3	60.6	1459.8	0.96	1.39	0.06	55.3	2.3	0.2	0.0	0.0	0	702	43.1
(4, 3)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(4, 5)	375.38	1638	500.5	23.1	523.6	0.96	1.39	0.06	19.1	0.9	0.0	0.0	0.0	0	728	43.0
(5, 4)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(5, 6)	536.39	1701	715.2	35.1	750.3	0.95	1.40	0.07	26.4	1.2	0.1	0.0	0.0	0	756	42.9
(6, 5)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(7, 6)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(6, 7)	211.39	1744	281.9	16.0	297.9	0.95	1.41	0.08	10.2	0.6	0.0	0.0	0.0	0	775	42.6
(7, 8)	285.99	1787	381.3	139.1	520.5	0.73	1.82	0.49	17.5	4.7	3.5	2.6	2.5	21	794	33.0
(8, 7)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(8, 9)	202.53	1828	270.0	53.0	323.0	0.84	1.60	0.26	10.6	1.7	0.0	0.0	0.0	0	812	37.6
(9, 8)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(9, 10)	490.06	1875	653.4	42.7	696.1	0.94	1.42	0.09	22.3	1.4	0.1	0.0	0.0	0	833	42.2
(10, 9)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(10, 11)	563.05	1918	750.7	48.6	799.3	0.94	1.42	0.09	25.0	1.5	0.0	0.0	0.0	0	852	42.3
(11, 10)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(11, 12)	679.09	1954	905.5	66.5	972.0	0.93	1.43	0.10	29.8	2.1	0.1	0.0	0.0	0	868	41.9
(12, 11)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(12, 13)	1120.78	2006	1494.4	103.0	1597.4	0.94	1.43	0.09	47.7	3.1	0.2	0.0	0.0	0	891	42.1
(13, 12)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(13, 14)	190.14	2070	253.5	23.8	277.4	0.91	1.46	0.13	8.0	0.7	0.0	0.0	0.0	0	920	41.1
(14, 13)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(14, 15)	587.23	2199	783.0	63.4	846.3	0.93	1.44	0.11	23.1	1.7	0.1	0.0	0.0	0	977	41.6
(15, 14)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(15, 16)	1474.74	2257	1966.3	152.8	2119.1	0.93	1.44	0.10	56.2	4.1	0.2	0.0	0.0	0	1003	41.8
(16, 15)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(16, 17)	1893.85	2319	2525.1	213.6	2738.8	0.92	1.45	0.11	70.6	5.5	0.4	0.0	0.0	0	1030	41.5
(17, 16)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(17, 18)	606.06	2397	808.1	75.2	883.3	0.91	1.46	0.12	22.1	1.9	0.1	0.0	0.0	0	1065	41.2
(18, 17)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(18, 19)	765.17	2471	1020.2	98.0	1118.2	0.91	1.46	0.13	27.1	2.4	0.1	0.0	0.0	0	1098	41.1
(19, 18)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(19, 20)	1276.60	2534	1702.1	167.8	1869.9	0.91	1.46	0.13	44.0	3.9	0.2	0.0	0.0	0	1126	41.0
(20, 19)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(20, 21)	911.34	2601	1215.1	124.0	1339.1	0.91	1.47	0.14	30.8	2.9	0.1	0.0	0.0	0	1156	40.8
(21, 20)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(21, 22)	243.55	2679	324.7	48.0	372.7	0.87	1.53	0.20	8.3	1.1	0.1	0.0	0.0	0	1190	39.2
(22, 21)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(22, 23)	182.76	2757	243.7	130.6	374.3	0.65	2.05	0.71	8.1	2.8	1.3	0.6	0.4	2	1225	29.3

CUMULATIVE NETSIM STATISTICS AT TIME 10:15: 0

ELAPSED TIME IS 3:15: 0 (11700 SECONDS), TIME PERIOD 4 ELAPSED TIME IS 3600 SECONDS

Calibration Seed 9823

LINK	VEHICLE MILES	VEHICLE TRIPS	VEHICLE MINUTES MOVE TIME	VEHICLE MINUTES DELAY TIME	VEHICLE MINUTES TOTAL TIME	RATIO MOVE/ TOTAL	MINUTES/MILE TOTAL TIME	MINUTES/MILE DELAY TIME	SECONDS / VEHICLE TOTAL TIME	SECONDS / VEHICLE DELAY TIME	SECONDS / VEHICLE CONTROL DELAY	SECONDS / VEHICLE QUEUE DELAY	SECONDS / VEHICLE STOP* TIME	AVERAGE VALUES - STOPS (%)	AVERAGE VALUES - VOL VPH	AVERAGE VALUES - SPEED MPH
(106, 1)	346.40	1829	461.9	109.5	571.4	0.81	1.65	0.32	18.7	3.6	2.8	2.2	2.1	20	562	36.4
(1, 106)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(1, 2)	360.21	2003	480.3	55.8	536.0	0.90	1.49	0.15	16.0	1.7	0.0	0.0	0.0	0	616	40.3
(2, 1)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(2, 3)	231.56	2090	308.8	16.1	324.9	0.95	1.40	0.07	9.3	0.5	0.0	0.0	0.0	0	643	42.8
(3, 2)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(3, 4)	1503.76	2264	2005.0	87.5	2092.5	0.96	1.39	0.06	55.3	2.3	0.2	0.0	0.0	0	696	43.1
(4, 3)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(4, 5)	538.77	2351	718.4	35.1	753.5	0.95	1.40	0.07	19.2	0.9	0.0	0.0	0.0	0	723	42.9
(5, 4)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(5, 6)	769.12	2439	1025.5	53.9	1079.4	0.95	1.40	0.07	26.5	1.3	0.1	0.0	0.0	0	750	42.8
(6, 5)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(7, 6)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(6, 7)	303.39	2503	404.5	24.6	429.1	0.94	1.41	0.08	10.3	0.6	0.0	0.0	0.0	0	770	42.4
(7, 8)	410.98	2568	548.0	205.4	753.4	0.73	1.83	0.50	17.6	4.8	3.6	2.7	2.5	22	790	32.7
(8, 7)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(8, 9)	291.72	2633	389.0	77.9	466.9	0.83	1.60	0.27	10.6	1.8	0.0	0.0	0.0	0	810	37.5
(9, 8)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(9, 10)	703.59	2692	938.1	64.1	1002.2	0.94	1.42	0.09	22.3	1.4	0.1	0.0	0.0	0	828	42.1
(10, 9)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(10, 11)	810.23	2760	1080.3	71.8	1152.1	0.94	1.42	0.09	25.0	1.6	0.1	0.0	0.0	0	849	42.2
(11, 10)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(11, 12)	980.75	2822	1307.7	96.4	1404.0	0.93	1.43	0.10	29.8	2.0	0.1	0.0	0.0	0	868	41.9
(12, 11)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(12, 13)	1612.44	2886	2149.9	149.2	2299.1	0.94	1.43	0.09	47.7	3.1	0.2	0.0	0.0	0	888	42.1
(13, 12)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(13, 14)	273.36	2976	364.5	34.7	399.1	0.91	1.46	0.13	8.0	0.7	0.0	0.0	0.0	0	915	41.1
(14, 13)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(14, 15)	844.66	3163	1126.2	92.7	1218.9	0.92	1.44	0.11	23.1	1.8	0.1	0.0	0.0	0	973	41.6
(15, 14)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(15, 16)	2124.89	3252	2833.2	222.4	3055.6	0.93	1.44	0.10	56.2	4.1	0.2	0.0	0.0	0	1000	41.7
(16, 15)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(16, 17)	2725.22	3337	3633.6	307.2	3940.9	0.92	1.45	0.11	70.7	5.5	0.3	0.0	0.0	0	1026	41.5
(17, 16)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(17, 18)	872.81	3452	1163.7	105.4	1269.2	0.92	1.45	0.12	22.0	1.8	0.1	0.0	0.0	0	1062	41.3
(18, 17)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(18, 19)	1104.86	3568	1473.2	137.4	1610.5	0.91	1.46	0.12	27.1	2.3	0.1	0.0	0.0	0	1097	41.2
(19, 18)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(19, 20)	1840.84	3654	2454.5	230.6	2685.1	0.91	1.46	0.13	43.9	3.8	0.2	0.0	0.0	0	1124	41.1
(20, 19)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(20, 21)	1319.88	3767	1759.8	172.0	1931.8	0.91	1.46	0.13	30.8	2.7	0.1	0.0	0.0	0	1159	41.0
(21, 20)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(21, 22)	353.00	3883	470.7	69.4	540.1	0.87	1.53	0.20	8.3	1.1	0.1	0.0	0.0	0	1194	39.2
(22, 21)	0.00	0	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0	0	0.0
(22, 23)	265.02	3998	353.4	186.2	539.5	0.65	2.04	0.70	8.1	2.8	1.2	0.5	0.3	2	1230	29.5