

City of DeLand

Transportation Model Validation



Prepared By:



Ghyabi
Lassiter &
Associates

Engineering & Planning

Telephone: (904) 672-8600 Fax: (904) 676-0063

555 West Granada Blvd., Suite C-12 • Ormond Beach, FL 32174

RECEIVED
MAR 22 1999

FILE: ~~COMMUN~~99-09 DEVELOPMENT

Volusia County MPO



1190 Pelican Bay Drive
Daytona Beach, FL 32119-1381

Phone: 904-322-5160
SunCom: 380-5160
Fax: 904-322-5164
Email: vcmpo@worldnet.att.net

Volusia County Council Member
Patricia Northey, Chair

Barbara M. Davis, AICP, Director

Daytona Beach

Daytona Beach Shores

DeBary

DeLand

Deltona

Edgewater

Holly Hill

Lake Helen

New Smyrna Beach

Oak Hill

Orange City

Ormond Beach

Pierson

Ponce Inlet

Port Orange

South Daytona

Volusia County

March 19, 1999

Mr. Keith Riger, P.E.
City Engineer
City of DeLand
P.O. Drawer 449
DeLand, FL 32721-0449

Dear Mr. Riger:

In August of 1998 the Volusia County Metropolitan Planning Organization (MPO), Volusia County, and the City of DeLand jointly funded the DeLand Area Model Validation project, which was completed in January of 1999. The DeLand Area Model Validation project's purpose was to develop a new 1997 transportation model validating existing travel patterns in the DeLand area.

The DeLand Area Model Validation project consisted of reviewing the MPO's 1997 socioeconomic data, delineating additional traffic analysis zones, model validation, forecasting future roadway volumes, and the preparation of an analysis of future level of service problems within the DeLand area. The goal of the study was to develop an updated and validated 1997 transportation model for the DeLand area to plan for, and accommodate, anticipated growth within the study area.

Since the completion of the DeLand Area Model Validation project, the Volusia County MPO began work to update the 2020 Long Range Transportation Plan (LRTP). The LRTP is essentially a countywide transportation model similar to the model developed specifically for DeLand. The LRTP model is used to estimate the need and demand for new and/or expanded roadways, which is used by the MPO Board, to develop policy for the planning and construction of new roads throughout the County.

Although the MPO Board did not take formal action regarding the results of the DeLand Area Model Validation project, all of the refined data used in the DeLand study are now being incorporated into the MPO's LRTP refinement process. Therefore, the new MPO LRTP model being developed should serve DeLand's needs for the future.

Mr. Keith Riger, P. E.
City Engineer
City of DeLand
March 19, 1999
Page Two

We appreciated all of the help and cooperation you provided as the lead reviewer for the DeLand Area Model Validation project. If you have any questions and/or comments regarding how the DeLand area data is being incorporated into the MPO's LRTP, please do not hesitate to call me at (904) 322-5160 extension 35.

Sincerely,

A handwritten signature in black ink, appearing to read "M. W. Neidhart", with a long, sweeping horizontal stroke extending to the right.

Michael W. Neidhart, AICP
Senior Transportation Planner

DeLand Sub-Area Model Validation

Executive Summary

Prepared For:

City of DeLand, Florida

In Cooperation with the Volusia County MPO and Volusia County

Prepared By:

Ghyabi Lassiter & Associates, Inc.

January, 1999

Introduction

This report summarizes the existing conditions of the City of DeLand sub-area validation of the Volusia County model. The Volusia County Metropolitan Planning Organization provided the VCUATS model (Volusia County Urban Area Transportation System) for 1990 and 2020.

The summary contains a brief description of the Volusia County MPO traffic model and the steps that were taken to validate the model to replicate 1997 conditions within the DeLand Study Area. The primary purpose of the summary is to provide a record of the procedures used in the DeLand sub-area validation. For a more detailed discussion of the validation process, refer to Technical Reports No. 1 and 2.

Model Methodology Agreement

A Technical Advisory Team (TAT) was formed to guide the sub-area validation process. Ghyabi Lassiter & Associates, Inc. conducted a scoping meeting early in the process and a project kick-off meeting with the TAT on October 1. There was consensus from the beginning that the Volusia County MPO 1990 Model would be used for the sub-area validation.

Study Area

The study area for the transportation analysis included the greater DeLand area from the St. Johns River on the west to I-4 on the east, including Prevatt Avenue in Lake Helen. The northern and southern study area boundaries were the intersections of SR15A/SR11 and SR472/US17/92 respectively. The DeLand Study Area remains a part of the overall Volusia County Transportation Model.

The Volusia County MPO transportation model was adjusted to meet the needs of the City of DeLand for the DeLand Sub-Area, as defined by the TAT. The DeLand sub-area model validation included the following calibration tasks.

Review Traffic Analysis Zone Structure

Review Socioeconomic Data

Network Development

Traffic Count Data

Traffic Analysis Zone (TAZ) structure

We reviewed and modified Traffic Analysis Zones within the study area, including the addition of 27 new zones. The addition of Wisconsin Avenue from SR 15A to Garfield Avenue and its extension to the east, from Hill Avenue to Blue Lake Avenue, resulted in splitting eight traffic analysis zones in the downtown area. Additional zones, in the Victoria Park DRI area south of Downtown DeLand, were also added. Table 1 presents the original and final TAZs.

Table 1: Traffic Analysis Zones

Original TAZ	New TAZ	Original TAZ	New TAZ	Original TAZ	New TAZ
546	546	564	564	562	562
	666		692		690
	648	563	563	561	561
560	560		691		669
560	668	559	559	604	604
	592		592		667
592	645	603	603	605	605
	646		641		643
	602	602	607	607	642
602	644	609	662	606	606
	660		609		661
	659	663	601	601	
	665	664		658	
588	588	587	587	526	657
	695		694		526
					598

Socio-Economic (SE) data

The Volusia County Metropolitan Planning Organization provided the base year 1997 socio-economic data. Ghyabi Lassiter & Associates, Inc. reviewed the data for those TAZs within the study area. Table 2 presents the total number of single- and multi-family dwelling units, the permanent population for each type of housing, and the number of hotel/motel rooms in the study area.

Table 2: Housing and Population Data

Single Family		Multi-family		Hotel/Motel
Units	Population	Units	Population	Rooms
15,022	36,262	6,760	13,670	490

Table 3 shows the original 1997 employment data file provided by the MPO. The TAT members reviewed this information and decided to pursue another source for employment data. The City of DeLand purchased employment data from Dun & Bradstreet. The data was geocoded to the TAZs, and then adjusted manually in several zones based on local knowledge of the area. The final ZDATA2 file includes a total of 20,298 employees' split between industrial, commercial, and service employment. Table 4 presents the number and relative percentage of employees by type.

Table 3: 1997 MPO Study Area Employment Data

Sector	Industrial		Commercial		Service		Total
	Size	Percent	Size	Percent	Size	Percent	
Volusia Co.	32,592	18.2	45,425	25.6	103,209	58.1	181,070
DeLand	4,407	12.7	5,419	15.7	24,767	71.6	34,593

Table 4: 1997 Dun & Bradstreet Study Area Employment Data

Sector	Industrial		Commercial		Service		Total
	Size	Percent	Size	Percent	Size	Percent	
Volusia Co.	32,736	19.7	44,711	26.9	89,445	53.4	166,895
DeLand	4,900	24.2	4,532	22.3	10,866	53.5	20,298

The MPO model includes a number of special generators located throughout the county. In the DeLand Sub-Area, the model includes person trips associated with the former Woodland Plaza and Kmart Shopping Centers on South Woodland Boulevard (TAZs 604 and 616). Both special generators were removed from this sub-area analysis. We added a new special generator to the model to represent the Walmart Shopping Center in north DeLand located at US 17/92 and CR 92. The new zone, 598, includes 22,000-person trips, representing the Walmart shopping center. The volume for the external zones 771, 772 and 773 were adjusted to reflect the 1997 counts.

Network Development

We updated the existing transportation model network to the base year by including all the roadway capacity improvements made between 1990 and 1997. The following adjustments were made to the 1990 network.

- ◆ Added CR 92 from US 17 to SR 15A
- ◆ Added Taylor Road from its eastern terminus to Martin Luther King Jr. Btwy.
- ◆ Added Martin Luther King Jr. Btwy. from its northern terminus to SR 472
- ◆ Added Prevatt Ave. from its northern limit to SR 44
- ◆ Added Amelia Ave. from Plymouth to US 92
- ◆ Added Euclid Ave. from its western terminus to Old New York Ave.
- ◆ Extended Blue Lake Ave. north to Minnesota Ave.
- ◆ Added Wisconsin Ave. from SR 15A to Garfield Avenue
- ◆ Extended Wisconsin Ave. east from Hill Avenue to Blue Lake Avenue
- ◆ Deleted Lake Gertie Rd.

Update Traffic Count Data

Using Microsoft Excel, we updated many of the count stations to reflect the 1997 traffic counts provided by Volusia County Traffic Engineering staff. In addition, the City of DeLand provided counts on segments of Rich Avenue. The traffic counts were adjusted from Average Annual Daily Traffic (AADT) to Peak Season Average Weekday Daily Traffic (PSWADT) by dividing by the Model Output Conversion Factor (MOCF) of 0.94 for Volusia County. The external-internal (ZDATA4) volumes at Station 771, 772 and 773 were also adjusted to the 1997 traffic counts.

Root Mean Square Error (RMSE)

The RMSE is a statistical measure of the transportation model accuracy. Table 5 presents the RMSE by lane volume group for Volusia County and for the study area before and after model validation. The RMSE in the validated model improved in all volume groups except for the 20,001 to 30,000 volume group. This was due to the low number of links with counts used in the statistical analysis. This link group includes only six (6) links with counts, and accounts for only 4 percent of the total links with volume counts. The results are within the desirable percentage established by the Florida Department of Transportation.

Table 5: RMSE Summary

Volume Group	%RMSE				Maximum Desirable % RMSE
	Original Network		Validated Network		
	DeLand	Countywide	DeLand	Countywide	
0-5,000	83.64	73.57	42.56	64.21	55
5,001-10,000	36.10	38.75	18.00	36.58	45
10,001-20,000	32.88	27.60	11.01	25.78	35
20,001-30,000	11.87	16.20	21.80	17.31	27
30,001-40,000	N/A	28.89	N/A	5.85	22
Overall	48.00	40.77	28.64	37.55	39

Conclusions

The model results indicate a good validation to base year conditions. Based on the analysis of the resulting validation runs the model can be considered validated. Consequently, the model is considered acceptable in estimating future travel demand on alternative highway networks.

The model was used to distribute and assign trips associated with a proposed Walmart and out-parcel on North Woodland Boulevard, north and east of the existing Walmart site; the proposed West Volusia Judicial Center at the corner of New York Avenue and Amelia Avenue; and the phased development of the Victoria Park Development of Regional Impact. The results of this analysis are included in Technical Report No. 2.

The validity of the DeLand model will be effected by changes made outside of the study area. The City of DeLand must remain an active participant on the Volusia County MPO Technical Coordinating Committee and in future model development.

DeLand Sub-Area Model Validation

Technical Report No. 1

Prepared For:

City of DeLand, Florida

In Cooperation with the Volusia County MPO and Volusia County

Prepared By:

Ghyabi Lassiter & Associates, Inc.

January, 1999

Table of Contents

INTRODUCTION	1
MODEL METHODOLOGY AGREEMENT.....	1
STUDY AREA	1
FLORIDA STANDARD MODEL.....	1
TRAFFIC ANALYSIS ZONE (TAZ) STRUCTURE	4
SOCIO-ECONOMIC (SE) DATA.....	6
NETWORK DEVELOPMENT	6
UPDATE TRAFFIC COUNT DATA.....	7
MODEL VALIDATION.....	7
VALIDATION ANALYSIS.....	7
TRIP GENERATION.....	7
TRIP DISTRIBUTION.....	8
MODE SPLIT.....	9
TRIP ASSIGNMENT.....	9
HEVAL ANALYSIS	10
CONCLUSIONS.....	13
Appendix	
◆ Appendix 1: DeLand S/E data	
◆ Appendix 2: Trip Generation Rates	
◆ Appendix 3: DeLand GEN.OUT	
◆ Appendix 4: Friction Factors	
◆ Appendix 5: K-Factors	
◆ Appendix 6: Speed/Capacity Table	
◆ Appendix 7: Volume/Counts Table	
◆ Appendix 8: HEVAL.OUT	

List of Tables

TABLE 1: TRAFFIC ANALYSIS ZONES	4
TABLE 2: HOUSING AND POPULATION DATA.....	6
TABLE 3: 1997 MPO STUDY AREA EMPLOYMENT DATA	6
TABLE 4: 1997 DUN & BRADSTREET STUDY AREA EMPLOYMENT DATA.....	6
TABLE 5: TRIP PRODUCTION PERCENTAGES	8
TABLE 6: AUTO OCCUPANCY FACTORS	9
TABLE 7: NEW FACILITIES SPEED ATTRIBUTES	9
TABLE 8: MODIFIED FACILITIES	10
TABLE 9: TRAFFIC ASSIGNMENT ACCURACY LEVELS.....	11
TABLE 10: SCREENLINES	12
TABLE 11: RMSE SUMMARY	13

List of Figures

FIGURE 1.....	3
FIGURE 2.....	5

Technical Report No. 1

Introduction

Technical Report No. 1 documents the existing conditions of the City of DeLand sub-area validation of the Volusia County model. The Volusia County Metropolitan Planning Organization provided the VCUATS model (Volusia County Urban Area Transportation System) for 1990 and 2020.

This report contains a description of the Volusia County MPO traffic model and the steps that were taken to validate the model to replicate 1997 conditions within the DeLand Study Area. The primary purpose of the report is to provide a record of the procedures used in the DeLand sub-area validation. This will allow an experienced transportation planner with a background in the application of computer-based models to duplicate the model and verify the results.

Model Methodology Agreement

A Technical Advisory Team (TAT) was formed to guide the sub-area validation process. Ghyabi Lassiter & Associates, Inc. conducted a scoping meeting early in the process and a project kick-off meeting with the TAT on October 1. There was consensus from the beginning that the Volusia County MPO 1990 Model would be used for the sub-area validation.

Study Area

The study area for this transportation analysis includes the greater DeLand area from the St. Johns River on the west to I-4 on the east, including Prevatt Avenue in Lake Helen. The northern and southern study area boundaries are the intersections of SR15A/SR11 and SR472/US17/92 respectively. The DeLand Study Area remains a part of the overall Volusia County Transportation Model. The results from the DeLand model will be effected by changes made outside of the study area.

Florida Standard Model

Twelve model sets make up Florida's standardized model. The models are illustrated in Figure 1:

- ◆ EXT – Builds external trips
- ◆ GEN – Productions and Attractions
- ◆ HNET – Builds the Highway Network
- ◆ HPATH – Builds the Highway Paths
- ◆ DISTRIB – Gravity Model Distribution
- ◆ TNET – Builds Transit Networks
- ◆ TPATH - Builds Transit Paths
- ◆ MODE – Trip table of vehicle occupancy
- ◆ TASSIGN – Assigns transit trips to the Transit Network

- ◆ HASSIGN – Assign vehicle trips to the Highway Network
- ◆ TEVAL – Evaluates the Transit Systems
- ◆ HEVAL – Evaluates the Highway Systems

[This space left intentionally blank]

FLORIDA STANDARD MODEL MACRO FLOW
NON-TRANSIT PROCESS

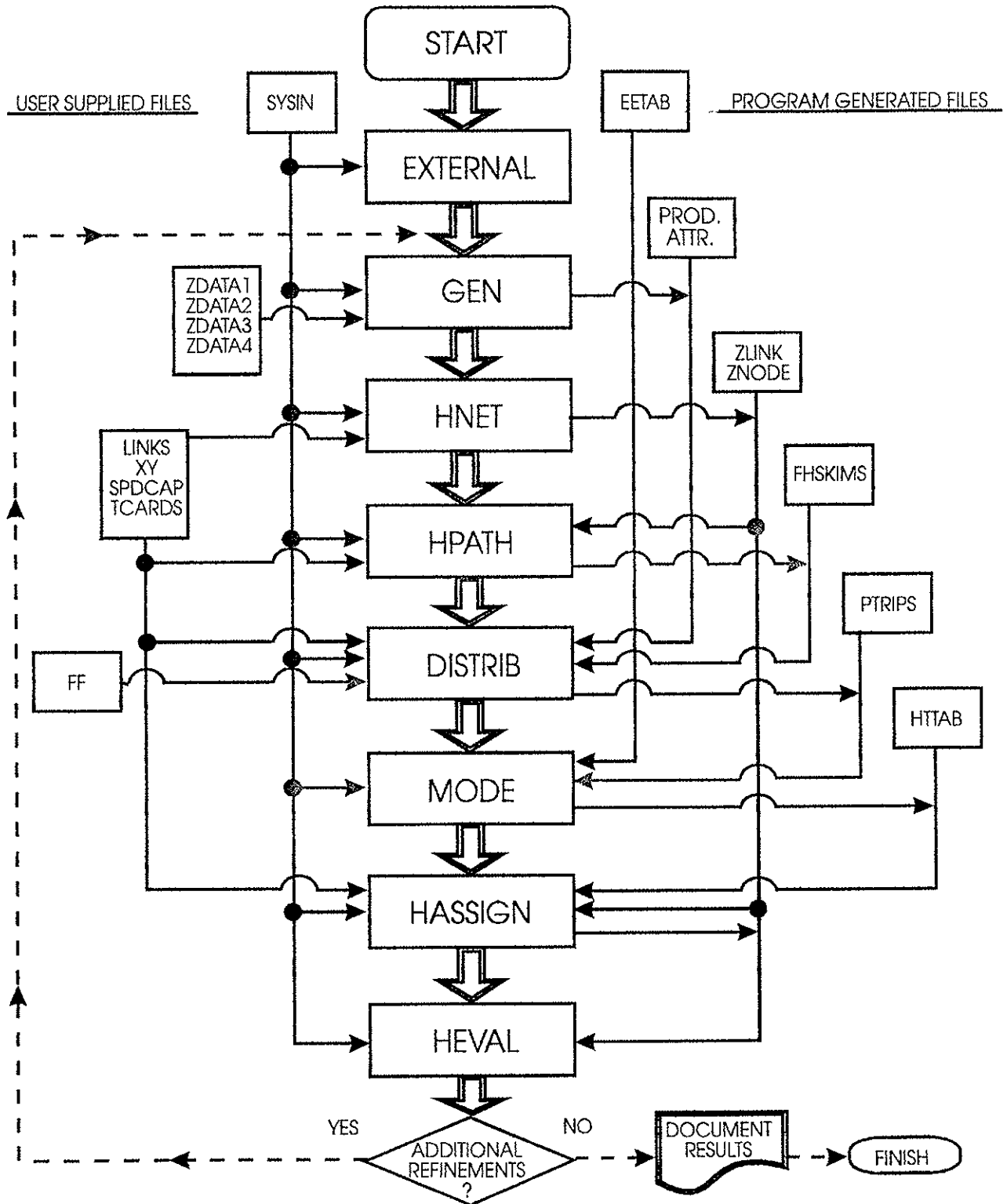


Figure 1

The validation for the DeLand sub-area did not include building or running a transit network. Therefore, TNET, TPATH, TASSIGN, and TEVAL were not used.

The Volusia County MPO transportation model was adjusted to meet the needs of the City of DeLand for the DeLand Sub-Area, as defined by the Technical Advisory Team. The DeLand sub-area model validation included the following calibration tasks.

Review Traffic Analysis Zone Structure

Review Socioeconomic Data

Network Development

Traffic Count Data

Traffic Analysis Zone (TAZ) structure

We reviewed and modified Traffic Analysis Zones within the study area, including the addition of 27 new zones. The addition of Wisconsin Avenue from SR 15A to Garfield Avenue and its extension to the east, from Hill Avenue to Blue Lake Avenue, resulted in splitting eight traffic analysis zones in the downtown area. Additional zones, in the Victoria Park DRI area south of Downtown DeLand, were also added. Table 1 presents the original and final TAZs. Figure 2 is a TAZ map of the study area.

Table 1: Traffic Analysis Zones

Original TAZ	New TAZ	Original TAZ	New TAZ	Original TAZ	New TAZ
546	546	564	564	562	562
	666		692		690
	648	563	563	561	561
560	691		669		
592	560	559	559	604	604
	668		667		640
602	592	603	603	605	605
	645		641		643
	646		607		642
	602	607	607	606	606
	644		662		606
588	660	609	609	601	601
	659		663		658
	665	664	657		
	588	587	587	526	526
	695		694		526
					598

Traffic Analysis Zones - DeLand Area

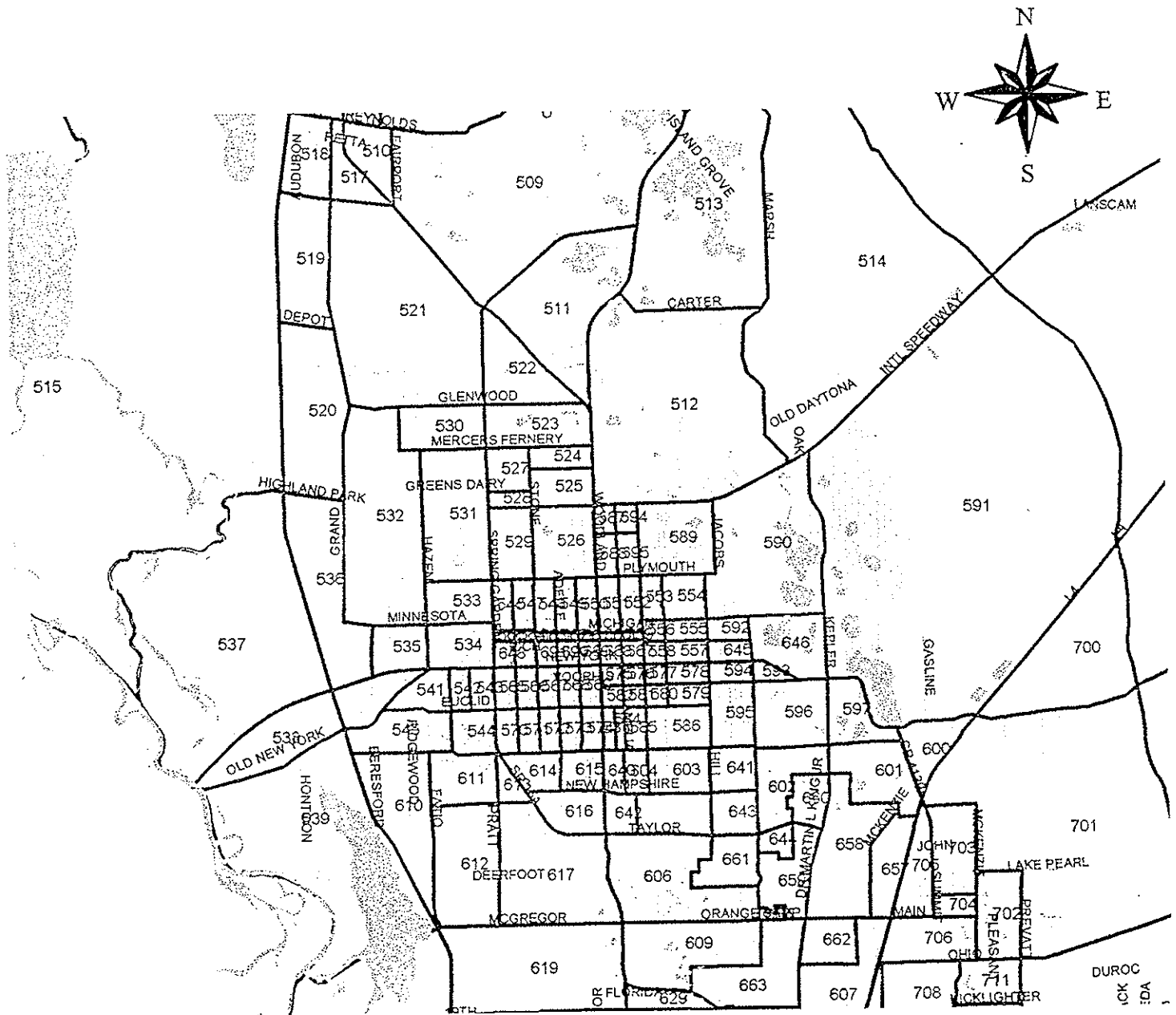


Figure 2

Socio-Economic (SE) data

The Volusia County Metropolitan Planning Organization provided the base year 1997 socio-economic data. Ghyabi Lassiter & Associates, Inc. reviewed the data for those TAZs within the study area. Table 2 presents the total number of single- and multi-family dwelling units, the permanent population for each type of housing, and the number of hotel/motel rooms in the study area.

Table 2: Housing and Population Data

Single Family		Multi-family		Hotel/Motel
Units	Population	Units	Population	Rooms
15,022	36,262	6,760	13,670	490

Table 3 shows the original 1997 employment data file provided by the MPO. The TAT members reviewed this information and decided to pursue another source for employment data. The City of DeLand purchased employment data from Dun & Bradstreet. The data was geocoded to the TAZs, and then adjusted manually in several zones based on local knowledge of the area. The final ZDATA2 file includes a total of 20,298 employees' split between industrial, commercial, and service employment. Table 4 presents the number and relative percentage of employees by type. Appendix 1 includes the DeLand sub-area socio-economic data.

Table 3: 1997 MPO Study Area Employment Data

Sector	Industrial		Commercial		Service		Total
	Size	Percent	Size	Percent	Size	Percent	
Volusia Co.	32,592	18.2	45,425	25.6	103,209	58.1	181,070
DeLand	4,407	12.7	5,419	15.7	24,767	71.6	34,593

Table 4: 1997 Dun & Bradstreet Study Area Employment Data

Sector	Industrial		Commercial		Service		Total
	Size	Percent	Size	Percent	Size	Percent	
Volusia Co.	32,736	19.7	44,711	26.9	89,445	53.4	166,895
DeLand	4,900	24.2	4,532	22.3	10,866	53.5	20,298

The MPO model includes a number of special generators located throughout the county. In the DeLand Sub-Area, the model includes person trips associated with the former Woodland Plaza and Kmart Shopping Centers on South Woodland Boulevard (TAZs 604 and 616). Both special generators were removed from this sub-area analysis. We added a new special generator to the model to represent the Walmart Shopping Center in north DeLand located at US 17/92 and CR 92. The new zone, 598, includes 22,000-person trips, representing the Walmart shopping center. The volume for the external zones 771, 772 and 773 were adjusted to reflect the 1997 counts.

Network Development

We updated the existing transportation model network to the base year by including all the roadway improvements made between 1990 and 1997. The following adjustments were made to the 1990 network.

- ◆ Added CR 92 from US 17 to SR 15A
- ◆ Added Taylor Road from eastern terminus to Martin Luther King Jr. Btwy.
- ◆ Added Martin Luther King Jr. Btwy. From north terminus to SR 472
- ◆ Added Prevatt Ave. from northern limit to SR 44
- ◆ Added Amelia Ave. from Plymouth to US 92
- ◆ Added Euclid Ave. from its western terminus to Old New York Ave.
- ◆ Extended Blue Lake Ave. north to Minnesota Ave.
- ◆ Added Wisconsin Ave. from SR 15A to Garfield Avenue
- ◆ Extended Wisconsin Ave. to the east from Hill Avenue to Blue Lake Avenue
- ◆ Deleted Lake Gertie Rd.

Update Traffic Count Data

Using Microsoft Excel, we updated many of the count stations to reflect the 1997 traffic counts provided by Volusia County Traffic Engineering staff. In addition, the City of DeLand provided counts on segments of Rich Avenue. The traffic counts were adjusted from Average Annual Daily Traffic (AADT) to Peak Season Average Weekday Daily Traffic (PSWADT) by dividing by the Model Output Conversion Factor (MOCF) of 0.94 for Volusia County. The external-internal (ZDATA4) volumes at Station 771, 772 and 773 were also adjusted to the 1997 traffic counts.

Model Validation

The sub-area validation was performed by adjusting network characteristics using the guidelines identified in "Calibration and Adjustment of System Planning Models, publication No. FHWA-ED-90-015, December 1990". Changes made to the network included evaluating internal-external volumes, adjusting centroid connectors, and raising or lowering the speed on individual links included in the Volusia County Model.

Validation Analysis

Trip Generation

The Florida Standard Urban Transportation Modeling Structure (FSUTMS) provides a standard trip generation model used throughout Florida. Trip generation is the process used to determine the number of person trips generated within a defined geographic area. Trip generation is directly related to the socio-economic data contained in the ZDATA1, ZDATA2 and ZDATA3 files. The output from trip generation includes trip productions and attractions by traffic zone and by trip purpose.

The standard trip generation model uses the cross-classification technique for calculating trip productions; it uses trip rate equations for calculating trip attractions. The trip generation model estimates the number of daily person trips produced in and attracted to each traffic analysis zone within the study area.

Special generators are land uses included within the study area that have unusual trip making features. Special generators are treated as additional trip purposes and added to the trip productions and attractions.

External vehicle trips are developed by applying growth factors to the external trip table. The external trip table includes two types of external trips; External to External (EE), and Internal to External (IE). The EE trips include both ends of the trip outside of the study area; the IE trips include those with one end of the trip inside and one end outside the study area.

The trip generation for the zones within the study area contained in the GEN.OUT file were checked for reasonableness and found adequate. Table 5 compares the percentages of each trip purpose against the area-wide model results.

Table 5: Trip Production Percentages

Area	HBW	HBSH	HBSR	HBO	NHB	TT
Volusia Co.	17%	14%	14%	20%	18%	7%
DeLand	20%	15%	15%	23%	18%	8%

HBW	Home Base Work	HBO	Home Base Other
HBSH	Home Base Shopping	NHB	Non-Home Base
HBSR	Home Base Social/Recreation	TT	Truck/Taxi

The trip generation rates used in the DeLand Study Area are included as Appendix 2. The 1997 DeLand Study Area Trip Generation statistics are shown in Table 6. The GEN.OUT data for the DeLand Area is attached in Appendix 3.

Trip Distribution

The gravity model calculates the person trip distribution and links each end of a trip. Trips are distributed throughout the study area based on the land use attractiveness and relative travel-time and distance. When the concentration of land use is intense, more trips will be distributed. As travel-time and distance increases, fewer trips will be distributed.

Trip length and friction factors from the Volusia County MPO Model were used in the trip distribution process. The friction factors are included as Appendix 4. The standard FSUTMS trip distribution model distributes trips for the following seven trip purposes.

- ◆ Home-based work
- ◆ Home-based shop
- ◆ Home-based social/recreational
- ◆ Home-based other
- ◆ Non Home-based
- ◆ Truck-Taxi
- ◆ Internal/External

The model productions and attractions for each trip purpose, the output of the Trip Generation Model, are one input to the DISTRIB model. Travel times, calculated in the HNET program, are the second input to the trip distribution process.

The Volusia County MPO model uses K-factors to prohibit over-assigning trips to the highway network. During the validation process we adjusted some of the K-factors and achieved more accurate model assignments in some areas. The use of K-factors is not a widely accepted practice and the scope for the DeLand Study Area states we are not to introduce K-factors to the model. For those two reasons, we chose not to make adjustments to the pre-existing K-factors. The K-factors used are included as Appendix 5.

Mode Split

Mode split is used to determine the number of auto person trips. A vehicle trip table is created to load to the highway network. The auto occupancy rates used in the model are shown in Table 6.

Table 6: Auto Occupancy Factors

Trip Purpose	Factor
Home Base Work	1.37
Home Base Shopping	1.92
Home Base Social/Recreation	1.92
Home Base Other	1.92
Non-Home Base	1.43

Transit does not play a significant role in the study area, therefore, transit was not considered when converting person trips to vehicle trips.

Trip Assignment

Trips produced through the modeling process are assigned to the highway network consistent with the trip distribution pattern. Trips are assigned to the network through a series of iterations until equilibrium is reached. Equilibrium occurs when no vehicle trip can be made by an alternate route without it affecting the travel time of all trips on the network. The equilibrium assignment simulates the congestion level on the roadway system.

Validation of the trip assignment (HASSIGN) includes checks on the relation of vehicle assignments to actual traffic counts. Several parameters within HASSIGN can be modified that result in changes to the highway assignment.

The first is the speed/capacity table. The scope for the DeLand Study Area states specifically that no changes were to be made to the existing speed/capacity relationships in the model. In order to avoid modifying the existing speed/capacity for the existing facilities, we added several new facility types during the validation model runs. This enabled the model to more closely replicate 1997 ground conditions without any modification to the preexisting speed capacity relationships. Table 7 presents the facility types added in the SPDCAP table. The complete SPDCAP table is included as Appendix 6.

Table 7: New Facilities Speed Attributes

Facility Type	Speed (mph)
31	42.0
32	28.0
33	35.0
34	48.0
41	30.0

Table 8 includes the sub-area roadways with modified facility types from those in the original model. The adjustment in facility types enabled a more accurate assignment of base year traffic.

Table 8: Modified Facilities

Road	From	To	Facility Type	
			Original	New
SR 44	Western Terminus	Summit Ave	30	31
Kepler Rd	Beresford Ave	US 92	30	31
Beresford Ave	Old New-York Ave	Blue Lake Ave	30/40	31
SR 15A	US 17-92	US 17	30	34
US 17-92	Beresford Ave	Lake Dr	20/30	31
Orange Camp Rd	US 17-92	Kepler Rd	30	31
Old New York Ave	SR 44	Hazen Rd	40	32
Garfield Ave	Plymouth Ave	US 92	40	32
Blue Lake Ave	Orange Camp Rd	Minnesota Ave	40	33
Villar Voorhis Ave	US 17-92	Blue Lake Ave	40	33
Minnesota Ave	Garfield Ave	Kepler Rd	40	33
Hill Ave	SR 44	Plymouth Ave	40	33
Plymouth Ave	US 17-92	Jacobs Rd	40	33
Amelia Ave	Villar Voorhis Ave	Plymouth Ave	40	33
CR 92	Spring Garden Ave	US 17-92	N/A	33
Hazen Rd	SR 44	Minnesota Ave	40	33
Jacobs Rd	Plymouth Ave	US 92	40	41

A second parameter that can be changed to achieve more accurate assignment includes turn penalties or prohibitors. The model file Tcards is used to penalize or prohibit certain movements. The only turn prohibitor used in the DeLand Study Area is at the intersection of Woodland Boulevard and New York Avenue.

HEVAL Analysis

The validation process was analyzed separately for the DeLand area by coding the study area in the geographic location field as "5". The sub-area model accuracy was checked using the thresholds shown in Table 9. The screenline volume to count ratio provides a check of the models trip information, including trip generation, distribution, and assignment. Screenline volume checks are useful in identifying errors in the traffic assignment, distribution, and trip generation models. Six screenlines were established for the DeLand Study Area.

Table 9: Traffic Assignment Accuracy Levels

Validation Check	Scale of Computation	Level of Accuracy
Assigned VMT/Count VMT	Area	± 5%
Assigned VHT/Count VHT	Area	± 5%
Volume/Count	Screenlines	± 10% (>50,000 VPD) ± 20% (<50,000 VPD)
Volume/Count	Cutlines	± 10% (>50,000 VPD) ± 20% (<50,000 VPD)
Assigned VMT/Count VMT	Facility Type, Area Type, No. of Lanes	± 15% (>100,000 VPD) ± 25% (<100,000 VPD)
Assigned VHT/Count VHT	Facility Type, Area Type, No. of Lanes	± 15% (>100,000 VPD) ± 25% (<100,000 VPD)
Percent Root Mean Square	Area	35%-50%
Percent Root Mean Square	Link Volume Group	25% (>50,000 VPD) 30% - 100% (<50,000 VPD)

The volume over count ratios for the Vehicle Miles Traveled (VMT) and Vehicle Hour Travel (VHT) are 1.03 and 1.01, respectively. These ratios are within the 5 percent acceptable threshold for a model validation. Table 10 presents the volume over count ratio for the six screenlines inside the study area. All screenlines are within the acceptable ratio. A table showing the volume over count ratio for all the links within the study area is included in the Appendix 7.

Table 10: Screenlines

Screenline	Location	Across	PSWADT		Volume/ Count Ratio	Within Limits
			Model Volume	1997 Counts		
10	North of Plymouth Ave	Grand Ave	2,383	3,042	0.78	Yes
		Hazen Rd	384	632	0.61	
		Stone St	6,551	5,334	1.23	
		SR 17-92	27,191	24,468	1.11	
		Amelia Ave	9,220	9394	0.98	
		Garfield Ave	731	1,858	0.39	
		Jacobs Rd	3,180	2,408	1.32	
		Kepler Rd	13,487	14,214	0.99	
		Total	63,128	61,350	1.03	
11	South of Plymouth Ave	Grand Ave	499	1,786	0.28	Yes
		Stone St	1,295	1,442	0.90	
		SR 17-92	17,858	18,086	0.99	
		Amelia Ave	7,516	13,644	0.55	
		Garfield Ave	1,440	1,626	0.89	
		Hill Ave	4,731	5,360	0.88	
		Kepler Ave	14,470	13,422	1.00	
				Total	46,808	
12	West of SR 15A	Glennwood Rd	4,209	4,106	1.03	Yes
		Mercers Fernery Rd	1,181	1,164	1.01	
		Plymouth Ave	2,890	4,008	0.72	
		New York Ave	11,375	12,660	0.90	
		Beresford Ave	6,221	5,852	1.06	
		Mc Gregor Rd	5,021	2,720	1.85	
				Total	30,898	
13	West of Hill Ave	Orange Camp Rd	6,932	8,884	0.78	Yes
		Taylor Rd	4,161	5,222	0.80	
		Beresford Ave	3,173	4,076	0.78	
		Villar Voorhis Ave	2,146	3,390	0.63	
		New York Ave (SR 44)	11,237	12,872	0.87	
		Minnesota Ave	1,522	2,708	0.56	
		Plymouth Ave	3,180	2,330	1.36	
				Total	32,351	
14	North of New York Ave	Grand Ave	939	2,248	0.32	Yes
		Hazen Rd	1,471	1,492	1.14	
		SR 15A	21,340	25,532	0.84	
		SR 17-92	19,848	17,660	1.13	
				Total	43,598	
15	North of Orange Ave	Fatio Rd	109	336	0.32	Yes
		Spring Garden Ave	4,912	2,208	2.22	
		SR 17-92	38,576	44,680	0.86	
		Blue Lake Ave	3,502	2,768	1.27	
		Kepler Rd	12,391	9,612	1.29	
				Total	59,490	

Table 11 summarizes the percent root mean square (RMSE) for Volusia County by volume group. Additionally, the table includes a comparison of the RMSE for the validated model and the original network. The RMSE in the validated model has improved in all volume groups except for the 20,001 to 30,000 volume group. This is due to the low number of links with counts used in the statistical analysis. This link group includes only six (6) links with counts, and accounts for only 4 percent of the total links with volume counts. The results are below the maximum desirable percentage established by the Florida Department of Transportation. Appendix 8 presents the results from the HEVAL.OUT file.

Table 11: RMSE Summary

Volume Group	%RMSE				Maximum Desirable % RMSE
	Original Network		Validated Network		
	DeLand	Countywide	DeLand	Countywide	
0-5,000	83.64	73.57	42.56	64.21	55
5,001-10,000	36.10	38.75	18.00	36.58	45
10,001-20,000	32.88	27.60	11.01	25.78	35
20,001-30,000	11.87	16.20	21.80	17.31	27
30,001-40,000	N/A	28.89	N/A	5.85	22
Overall	48.00	40.77	28.64	37.55	39

Conclusions

Review of the model results indicates a good validation to base year conditions. Based on the analysis of the resulting validation runs the model is valid. Consequently, the model can be used to estimate future travel demand on alternative highway networks.

APPENDIX

APPENDIX 1
1997 DeLand S/E data

Year 1997 Deland Area
S/E Data

TAZ	Single Family		Multi-family		Employment			Total
	Units	Population	Units	Population	Industrial	Commercial	Service	
509	168	266	509	828	4	14	18	36
511	415	1000	582	1223	31	209	105	345
512	180	349	422	669	1547	250	376	2173
513	129	265	6	0	3	3	2	8
514	455	1222	49	143	4	3	1	8
515	26	77	0	0	2	0	6	8
516	116	296	6	18	0	0	11	11
519	97	229	0	0	2	0	10	12
520	85	317	30	0	36	3	2	41
521	573	1749	20	63	18	18	286	322
522	284	683	248	539	42	45	40	127
523	103	223	7	0	128	1	8	137
524	61	112	0	0	0	1	4	5
525	192	436	0	0	2	226	62	290
526	11	26	0	0	3	174	124	301
527	61	215	0	0	4	0	4	8
528	28	133	0	0	4	0	0	4
529	9	70	11	111	0	10	260	270
530	114	223	0	0	3	2	15	20
531	249	642	0	0	30	63	63	156
532	207	641	4	13	36	44	63	143
533	14	18	95	183	7	65	158	230
534	96	216	19	46	13	56	24	93
535	41	130	0	0	28	23	28	79
536	0	0	0	0	0	18	0	18
537	88	203	11	25	110	52	31	193
538	25	74	13	0	13	4	314	331
539	469	935	218	340	0	3	0	3
541	146	513	0	0	0	3	9	12
542	133	411	10	31	4	1	0	5
543	163	304	48	89	19	66	64	149
544	173	403	12	29	9	35	37	81
545	134	336	0	0	1	7	1	9
546	117	215	155	271	10	2	7	19
547	154	374	16	43	9	1	96	106
548	190	449	33	83	43	2	28	73
549	116	237	51	75	0	19	7	26
550	181	301	215	344	2	52	163	217
551	28	299	61	851	0	69	1022	1091
552	103	199	19	15	7	0	4	11
553	112	231	21	48	0	0	26	26
554	203	472	0	0	6	1	287	294
555	127	215	183	274	0	0	4	4
556	89	212	9	24	0	0	2	2
557	91	299	41	127	35	55	86	176
558	92	169	115	202	2	6	167	175
559	43	55	128	171	5	194	95	294

Year 1997 Deland Area
S/E Data

TAZ	Single Family		Multi-family		Employment			Total
	Units	Population	Units	Population	Industrial	Commercial	Service	
560	3	7	10	14	2	9	8	19
561	35	80	68	148	1	4	106	111
562	38	77	4	6	1	0	472	473
563	57	138	32	49	17	0	7	24
564	35	59	22	33	0	3	15	18
565	108	232	33	74	0	3	9	12
566	55	88	4	6	7	0	3	10
568	160	229	89	121	6	22	48	76
569	79	144	150	217	61	68	210	339
570	165	385	0	0	0	6	4	10
571	157	437	7	24	0	0	12	12
572	116	294	29	66	0	1	7	8
573	208	436	0	0	0	0	71	71
574	185	411	68	177	365	123	195	683
575	26	31	30	36	1	111	32	144
576	7	11	149	122	10	37	625	672
577	49	90	23	24	0	1	103	104
578	135	300	73	173	0	19	18	37
579	46	126	6	0	0	0	75	75
580	49	97	0	0	0	0	180	180
581	0	0	261	1017	2	4	236	242
582	48	90	29	52	63	4	250	317
583	13	62	7	34	23	3	756	782
584	0	0	0	0	0	0	0	0
585	113	251	6	13	0	3	6	9
586	12	30	21	52	30	1	37	68
587	142	309	19	48	2	55	9	66
588	205	500	135	242	0	130	31	161
589	441	990	111	235	1015	0	15	1030
590	202	446	0	0	4	10	33	47
591	937	2396	5	14	193	26	28	247
592	44	100	28	50	3	1	6	10
593	37	81	10	24	0	0	4	4
594	90	194	16	28	2	4	5	11
595	273	745	48	76	15	3	103	121
596	40	96	108	249	0	0	13	13
601	16	31	0	0	0	0	1	1
602	41	85	4	9	0	1	3	4
603	31	46	150	200	165	8	25	198
604	17	25	106	145	2	60	168	230
605	85	162	134	242	0	0	0	0
606	700	1713	0	0	428	138	32	598
607	26	93	0	0	0	114	38	152
608	0	0	5	29	23	21	2	46
609	30	100	38	137	10	248	45	303
610	66	199	13	42	4	42	17	63
611	214	607	0	0	6	7	123	136

Year 1997 Deland Area
S/E Data

TAZ	Single Family		Multi-family		Employment			Total
	Units	Population	Units	Population	Industrial	Commercial	Service	
612	134	367	4	12	10	0	24	34
613	40	148	0	0	3	0	3	6
614	259	817	6	22	3	3	73	82
615	205	389	222	352	3	68	28	99
616	133	313	163	396	14	134	177	325
617	238	617	134	301	8	499	85	592
618	0	0	0	0	0	0	0	0
619	129	367	46	142	17	164	8	189
632	265	597	9	20	1	0	0	1
640	17	25	106	145	11	40	19	70
641	15	23	74	100	0	0	0	0
642	42	81	68	120	31	234	262	527
643	42	81	68	120	0	0	0	0
644	41	84	3	8	0	0	0	0
645	44	100	28	50	0	0	132	132
646	92	202	57	101	25	25	125	175
648	27	44	1	2	0	9	25	34
657	0	0	0	0	0	0	0	0
658	0	0	0	0	0	0	0	0
659	0	0	0	0	0	0	0	0
660	0	0	0	0	0	0	0	0
661	0	0	0	0	0	0	0	0
662	0	0	0	0	0	0	0	0
663	0	0	0	0	0	0	0	0
664	0	0	0	0	2	1	0	3
665	0	0	0	0	0	0	0	0
666	27	44	1	2	1	3	0	4
667	0	0	0	0	0	0	30	30
668	0	0	0	0	0	63	143	206
669	0	0	0	0	29	154	961	1144
690	38	78	3	5	4	0	117	121
691	58	138	32	49	1	0	80	81
692	36	59	23	34	0	0	90	90
694	0	0	0	0	7	2	4	13
695	0	0	0	0	8	0	6	14
701	94	201	238	431	0	9	27	36
702	65	114	8	17	7	14	51	72
703	185	434	5	12	0	0	3	3
704	116	278	14	40	1	3	11	15
705	195	502	0	0	7	7	53	67
706	134	338	21	57	24	9	16	49
707	19	56	0	0	0	0	1	1
708	105	298	8	26	0	1	6	7
Total	15022	36262	6760	13670	4900	4532	10866	20301

2010

TAZ	Single Family		Multi-family		Hotel/Motel		Employment				School Enrolment
	Units	Pop	Units	Pop	Units	Pop	Industrial	Commercial	Service	Total	
509	299	477	519	842	0	0	4	14	18	36	0
511	617	1494	582	1221	0	0	31	316	162	509	0
512	187	363	435	688	0	0	2103	308	471	2882	0
513	133	267	6	0	0	0	3	3	2	8	0
514	550	1485	52	143	0	0	4	4	1	10	0
515	48	138	0	0	0	0	2	0	6	8	0
516	116	297	6	17	8	7	0	0	11	11	0
519	97	224	0	0	0	0	1	0	10	11	0
520	86	312	30	0	0	0	36	3	2	41	0
521	646	1921	20	60	22	19	18	25	405	447	0
522	345	833	248	538	0	0	42	45	40	127	0
523	117	254	14	0	0	0	128	1	8	137	0
524	91	161	0	0	0	0	0	1	4	5	0
525	243	554	0	0	0	0	2	226	62	290	0
526	27	64	0	0	30	27	3	74	124	201	0
527	72	246	0	0	0	0	4	0	10	14	0
528	46	135	0	0	0	0	4	0	0	4	0
529	16	162	23	99	0	0	0	33	916	949	0
530	136	268	0	0	0	0	3	6	48	58	0
531	474	1231	0	0	0	0	30	200	196	426	0
532	238	716	4	12	0	0	36	44	63	143	0
533	20	26	98	189	0	0	7	90	220	317	0
534	148	334	19	43	0	0	21	196	88	304	0
535	69	221	0	0	0	0	28	23	28	79	0
536	0	0	0	0	0	0	0	18	0	18	0
537	116	260	11	24	0	0	110	52	31	193	0
538	58	165	13	0	0	0	17	4	314	335	0
539	502	1006	218	340	47	42	0	3	0	3	0
541	180	614	0	0	0	0	0	3	9	12	0
542	144	435	10	29	0	0	4	1	0	5	0
543	173	323	48	89	0	0	19	113	114	246	0
544	190	444	12	28	0	0	9	35	37	81	0
545	190	480	0	0	0	0	1	7	1	9	0
546	134	247	165	289	0	0	10	3	10	22	0
547	166	406	16	41	0	0	14	1	131	146	0
548	222	527	33	79	0	0	43	2	28	73	0
549	116	238	51	75	0	0	0	19	7	26	0
550	201	336	215	344	60	53	2	52	163	217	0
551	28	190	95	617	0	0	0	69	1022	1091	3310
552	127	238	19	15	0	0	7	0	4	11	0
553	144	298	21	45	0	0	0	0	26	26	0
554	225	526	0	0	0	0	6	1	287	294	3050
555	138	234	186	278	0	0	0	0	4	4	0
556	89	213	9	23	0	0	0	0	2	2	140
557	104	342	46	141	0	0	35	55	86	176	0
558	92	170	135	237	0	0	2	6	167	175	0
559	43	55	131	174	0	0	5	194	95	294	0
560	3	7	10	14	0	0	2	11	10	22	0
561	38	87	68	148	2	2	1	4	106	111	0
562	45	92	4	6	0	0	1	0	783	784	0
563	64	157	32	49	0	0	17	0	8	25	0
564	35	58	22	33	0	0	0	9	47	56	0
565	117	252	33	70	0	0	0	6	18	23	0
566	64	100	4	6	0	0	7	0	7	14	0
568	160	230	116	158	112	99	6	34	73	113	40
569	79	144	150	217	0	0	61	88	278	427	0
570	171	400	0	0	0	0	0	10	7	17	0
571	157	439	38	116	0	0	0	0	12	12	0
572	116	295	72	163	0	0	0	1	7	8	0

TAZ	Single Family		Multi-family		Hotel/Motel		Employment				School Enrolment
	Units	Pop	Units	Pop	Units	Pop	Industrial	Commercial	Service	Total	
573	208	438	0	0	0	0	0	0	71	71	562
574	185	413	92	222	0	0	365	136	216	717	0
575	26	31	30	36	0	0	1	126	37	164	0
576	7	11	149	122	0	0	10	37	625	672	0
577	49	90	45	47	0	0	0	4	490	494	0
578	135	301	104	245	0	0	0	38	38	76	0
579	60	161	26	0	0	0	0	0	75	75	0
580	49	95	0	0	0	0	0	0	180	180	0
581	0	0	261	1015	0	0	2	5	287	294	0
582	48	90	29	52	0	0	63	4	250	317	0
583	17	78	7	32	0	0	23	3	1100	1126	0
584	0	0	0	0	0	0	0	0	0	0	0
585	124	269	16	33	0	0	0	3	6	9	0
586	112	266	43	96	0	0	30	1	37	68	0
587	142	310	80	181	177	157	2	64	11	77	0
588	205	502	232	416	0	0	0	130	31	161	1150
589	472	1065	159	336	0	0	1348	0	15	1363	0
590	528	1173	0	0	0	0	8	10	33	51	0
591	1313	3375	5	13	0	0	196	39	43	279	0
592	65	143	30	53	0	0	3	1	6	10	0
593	37	81	10	23	0	0	0	0	4	4	0
594	90	195	47	81	0	0	2	6	7	15	0
595	299	821	79	124	0	0	15	3	103	121	0
596	70	165	122	281	0	0	0	0	13	13	0
598	0	0	0	0	0	0	0	100	20	120	0
601	27	53	0	0	0	0	0	0	131	131	0
602	102	214	4	9	0	0	0	1	3	4	0
603	60	89	175	233	0	0	165	8	25	198	0
604	18	25	119	163	0	0	2	93	270	366	0
605	213	407	220	396	0	0	0	0	0	0	0
606	836	2056	0	0	32	28	428	198	47	673	0
607	63	216	0	0	0	0	0	114	38	152	0
608	0	0	43	100	0	0	23	21	4	48	0
609	139	443	327	1043	0	0	54	427	81	562	0
610	86	261	13	40	0	0	4	42	17	63	0
611	275	784	0	0	0	0	6	7	123	136	951
612	141	387	9	25	0	0	10	0	24	34	0
613	40	144	0	0	0	0	3	0	3	6	0
614	275	873	22	71	0	0	3	4	110	117	600
615	205	390	222	352	0	0	3	68	28	99	0
616	134	317	199	484	0	0	14	137	181	332	0
617	247	626	193	433	0	0	8	1005	180	1193	0
618	0	0	0	0	0	0	0	0	0	0	0
619	137	390	66	188	0	0	17	225	11	253	0
632	526	1192	75	148	0	0	1	0	0	1	0
640	17	25	106	145	0	0	11	40	19	70	0
641	15	23	74	100	0	0	0	0	0	0	0
642	42	81	68	120	0	0	31	234	262	527	1963
643	42	81	68	120	0	0	0	0	0	0	0
644	41	84	3	8	0	0	0	0	0	0	0
645	44	100	28	50	0	0	0	0	132	132	1266
646	92	202	57	101	0	0	25	25	125	175	0
648	27	44	1	2	0	0	0	9	25	34	0
657	0	0	0	0	105	105	0	0	466	466	0
658	420	1054	98	210	0	0	0	0	0	0	0
659	668	1677	0	0	0	0	0	0	0	0	0
660	0	0	0	0	0	0	0	0	0	0	0
661	650	1632	0	0	0	0	0	0	0	0	0
662	289	725	372	796	0	0	0	73	0	73	0

TAZ	Single Family		Multi-family		Hotel/Motel		Employment				School Enrolment	
	Units	Pop	Units	Pop	Units	Pop	Industrial	Commercial	Service	Total		
663	800	2008	0	0	0	0	0	0	0	0	0	0
664	0	0	0	0	0	0	2	1	0	3	0	0
665	0	0	0	0	0	0	0	0	0	0	0	0
666	27	44	1	2	0	0	1	3	0	4	0	0
690	38	78	3	5	0	0	4	0	117	121	0	0
691	58	138	32	49	0	0	1	0	80	81	0	0
692	36	59	23	34	0	0	0	0	90	90	0	0
694	0	0	0	0	0	0	7	2	4	13	0	0
695	0	0	0	0	0	0	8	0	6	14	0	0
696	34	80	68	148	0	0	29	154	695	878	0	0
697	3	6	9	13	0	0	0	63	143	206	0	0
698	42	55	128	171	0	0	0	0	30	30	0	0
701	103	221	238	430	0	0	0	9	29	38	0	0
702	65	114	8	16	0	0	7	14	51	72	400	0
703	185	424	5	12	0	0	0	0	3	3	0	0
704	116	279	14	38	0	0	1	3	11	15	0	0
705	195	504	0	0	0	0	7	7	53	67	0	0
706	134	339	21	54	0	0	24	9	16	49	0	0
707	71	200	0	0	0	0	0	0	5	5	0	0
708	105	299	12	37	0	0	0	1	6	7	0	0
Total	21373	51710	8729	17451	595	539	5857	6119	14129	26104	13432	0

APPENDIX 2
Trip Generation Rates

				HBW										
				AUTOS/DU			AUTOS/DU							
				0	1	2+	0	1	2+	0	1	2+		
PERS/	1	.52	.65	1.37	PERS/	1	.20	.59	1.56	PERS/	1	.33	.33	.33
DU	2	1.04	1.43	2.60	DU	2	.45	.85	2.02	DU	2	.26	.26	.26
	3	1.49	1.95	3.19		3	.72	1.17	2.41		3	.20	.20	.20
	4	1.82	2.28	3.38		4	1.04	1.30	2.67		4	.13	.13	.13
	5	2.02	2.47	3.45		5	1.30	1.43	2.80		5	.13	.13	.13

SF

MF

H/M

				HBSH										
				AUTOS/DU			AUTOS/DU							
				0	1	2+	0	1	2+	0	1	2+		
PERS/	1	.39	1.04	1.17	PERS/	1	.39	.65	.85	PERS/	1	.39	.39	.39
DU	2	.45	1.37	1.63	DU	2	.45	1.63	1.82	DU	2	1.69	1.69	1.69
	3	.52	1.56	1.89		3	.52	1.95	2.15		3	2.60	2.60	2.60
	4	.59	1.69	2.08		4	.59	2.15	2.41		4	3.25	3.25	3.25
	5	.59	1.69	2.21		5	.59	2.21	2.54		5	3.77	3.77	3.77

SF

MF

H/M

				HBSR										
				AUTOS/DU			AUTOS/DU							
				0	1	2+	0	1	2+	0	1	2+		
PERS/	1	.26	.85	1.11	PERS/	1	.39	.85	.98	PERS/	1	.78	.78	.78
DU	2	.33	1.11	1.37	DU	2	.45	1.37	1.56	DU	2	2.15	2.15	2.15
	3	.39	1.43	1.69		3	.52	1.89	2.15		3	3.51	3.51	3.51
	4	.52	1.76	2.15		4	.59	2.47	2.86		4	5.07	5.07	5.07
	5	.59	2.21	2.73		5	.72	3.45	3.97		5	7.67	7.67	7.67

SF

MF

H/M

				HBO										
				AUTOS/DU			AUTOS/DU							
				0	1	2+	0	1	2+	0	1	2+		
PERS/	1	.26	.78	.91	PERS/	1	.33	1.04	1.23	PERS/	1	.65	.65	.65
DU	2	.39	1.43	1.56	DU	2	.59	1.56	1.95	DU	2	1.56	1.56	1.56
	3	.72	2.41	2.86		3	.91	2.08	2.99		3	2.73	2.73	2.73
	4	1.30	3.58	4.62		4	1.43	2.73	4.42		4	4.29	4.29	4.29
	5	2.08	5.14	6.96		5	2.21	3.90	6.05		5	5.72	5.72	5.72

SF

MF

H/M

DEFAULT ATTRACTION RATES

	IND EMP	COM EMP	SRV EMP	TOT EMP	TOT DUS	SCH ENR
B WORK	.00	.00	.00	1.80	.00	.00
H-B SHOP	.00	6.10	.00	.00	.00	.00
H-B S/R	.00	1.50	1.50	.00	.50	.00
H-B MISC	.00	1.30	1.30	.00	.20	1.30
NON H-B	.00	2.90	1.40	.00	.30	.00
TRK/TAXI	.00	.00	.00	.45	.30	.00

APPENDIX 3
DeLand GEN.OUT

ZONE	WK-P	SHP-P	SR-P	MIS-P	NHB-P	TT-P	IE-P	TOT-P	WK-A	SHP-A	SR-A	MIS-A	NHB-A	TT-A	IE-A	TOT-A
509	783	792	769	962	269	219	0	3794	67	61	316	206	269	269	116	1304
511	1572	1438	1446	2005	1052	454	0	7967	646	905	792	708	1052	1052	481	5636
512	720	698	677	870	1432	1158	0	5555	4070	1082	1013	1088	1432	1432	985	11102
513	251	188	168	224	52	44	0	927	15	13	61	39	52	52	23	255
514	1133	794	795	1384	161	155	0	4422	15	13	211	123	161	161	69	753
515	74	47	46	84	16	11	0	278	15	0	18	15	16	16	7	87
516	249	179	181	313	52	42	0	1016	21	0	63	45	52	52	22	255
519	174	134	121	180	43	35	0	687	22	0	52	38	43	43	19	217
520	248	160	168	347	46	53	0	1022	77	13	53	34	46	46	28	297
521	1453	1000	996	1771	631	323	0	6174	603	78	614	598	631	631	281	3436
522	1046	833	831	1200	346	217	0	4473	238	195	321	253	346	346	162	1861
523	192	140	132	209	47	95	0	815	257	4	56	39	47	47	48	498
524	99	83	73	91	27	21	0	394	9	4	31	22	27	27	12	132
525	381	266	250	397	800	188	0	2282	543	978	431	481	800	800	370	4403
526	28	33	42	46	682	139	0	970	564	753	370	454	682	682	315	3820
527	184	116	119	237	24	22	0	702	15	0	30	20	24	24	11	124
528	44	30	39	90	8	10	0	221	7	0	11	7	8	8	4	45
529	45	38	55	94	399	128	0	759	506	43	339	413	399	399	178	2277
530	223	160	144	190	61	43	0	821	37	9	67	52	61	61	27	314
531	584	367	353	600	346	145	0	2395	292	273	256	249	346	346	162	1924
532	569	364	360	649	279	128	0	2349	268	190	217	211	279	279	133	1577
533	137	147	145	178	442	136	0	1185	431	281	318	363	442	442	202	2479
534	187	157	149	224	231	76	0	1024	174	242	145	148	231	231	108	1279
535	96	63	66	136	118	48	0	527	148	100	79	87	118	118	60	710
536	0	0	0	0	52	8	0	60	34	78	22	27	52	52	24	289
537	239	160	151	217	224	117	0	1108	362	225	142	149	224	224	126	1452
538	56	41	40	72	463	160	0	832	620	17	405	490	463	463	209	2667
539	1091	903	873	1180	215	207	0	4469	6	13	284	165	215	215	90	988
541	397	263	271	535	65	49	0	1580	22	13	74	52	65	65	28	319
542	339	242	241	422	46	45	0	1335	9	4	60	35	46	46	20	220
543	312	257	234	308	344	130	0	1585	279	286	245	246	344	344	160	1904

ZONE	WK-P	SHP-P	SR-P	MIS-P	NHB-P	TT-P	IE-P	TOT-P	WK-A	SHP-A	SR-A	MIS-A	NHB-A	TT-A	IE-A	TOT-A
544	334	271	254	396	209	92	0	1556	152	151	164	152	209	209	96	1133
545	324	212	205	346	62	44	0	1193	17	30	65	43	62	62	27	306
546	369	354	337	423	97	90	0	1670	36	9	122	77	97	97	43	481
547	330	243	236	383	188	99	0	1479	199	4	188	186	188	188	84	1037
548	388	299	284	436	112	100	0	1619	137	9	128	97	112	112	57	652
549	262	195	183	265	115	62	0	1082	49	82	100	78	115	115	51	590
550	450	403	398	462	498	216	0	2427	406	225	425	418	498	498	222	2692
551	127	134	194	290	1658	518	0	2921	2044	299	1373	10443	1658	1658	1468	18943
552	199	153	136	182	42	42	0	754	21	0	55	34	42	42	19	213
553	199	169	156	224	76	52	0	876	49	0	86	70	76	76	33	390
554	423	297	279	443	466	193	0	2101	551	4	436	3805	466	466	482	6210
555	277	285	269	329	99	95	0	1354	7	0	131	78	99	99	41	455
556	184	133	127	195	32	30	0	701	4	0	42	179	32	32	26	315
557	269	217	236	404	320	119	0	1565	330	238	227	244	320	320	152	1831
558	276	258	244	311	313	141	0	1543	328	26	296	310	313	313	139	1725
559	122	130	128	146	747	184	0	1457	551	840	424	477	747	747	345	4131
560	9	10	10	13	41	12	0	95	36	39	26	29	41	41	19	231
561	143	135	138	188	191	81	0	876	208	17	177	191	191	191	85	1060
562	59	46	42	62	673	225	0	1107	886	0	595	724	673	673	299	3850
563	141	111	108	162	37	38	0	597	45	0	45	31	37	37	19	214
564	69	69	63	79	47	25	0	352	34	13	45	41	47	47	21	248
565	254	206	195	269	64	48	0	1036	22	13	72	51	64	64	27	313
566	69	65	55	62	22	22	0	295	19	0	28	18	22	22	11	120
568	214	267	279	304	206	109	0	1379	142	95	187	208	206	206	96	1140
569	186	205	194	241	560	221	0	1607	635	294	434	474	560	560	265	3222
570	367	243	229	363	73	54	0	1329	19	26	80	54	73	73	31	356
571	305	195	195	364	66	55	0	1180	22	0	82	56	66	66	28	320
572	266	169	168	301	56	47	0	1007	15	4	69	46	56	56	24	270
573	374	274	249	367	162	94	0	1520	133	0	172	768	162	162	121	1518
574	363	271	257	408	706	383	0	2388	1279	532	493	540	706	706	399	4655
575	46	34	31	42	384	82	0	619	270	480	198	230	384	384	178	2124

ZONE	WK-P	SHP-P	SR-P	MIS-P	NHB-P	TT-P	IE-P	TOT-P	WK-A	SHP-A	SR-A	MIS-A	NHB-A	TT-A	IE-A	TOT-A
576	71	83	83	99	1029	349	0	1714	1259	160	875	1039	1029	1029	461	5852
577	70	64	63	97	169	68	0	531	195	4	157	174	169	169	75	943
578	322	270	265	387	143	79	0	1466	69	82	130	104	143	143	63	734
579	79	42	38	68	121	49	0	397	140	0	113	126	121	121	53	674
580	58	47	40	56	267	96	0	564	337	0	240	284	267	267	118	1513
581	344	406	523	696	420	187	0	2576	453	17	401	424	420	420	186	2321
582	83	74	69	98	385	166	0	875	594	17	343	402	385	385	184	2310
583	40	37	48	84	1073	358	0	1640	1465	13	938	1154	1073	1073	482	6198
584	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
585	197	157	142	208	53	40	0	797	17	13	60	41	53	53	23	260
586	55	53	54	75	65	41	0	343	127	4	60	65	65	65	35	421
587	319	326	367	446	220	78	0	1756	124	238	144	134	220	220	101	1181
588	540	435	424	617	522	174	0	2712	302	563	336	1575	522	522	342	4162
589	1022	788	752	1136	187	629	0	4514	1929	0	244	151	187	187	299	2997
590	442	297	280	444	136	82	0	1681	88	43	135	112	136	136	60	710
591	2145	1457	1402	2368	397	394	0	8163	463	113	451	301	397	397	213	2335
592	121	97	92	129	33	26	0	498	19	4	38	27	33	33	15	169
593	89	69	66	102	20	16	0	362	7	0	24	17	20	20	8	96
594	181	143	136	207	50	37	0	754	21	17	54	38	50	50	22	252
595	657	459	458	798	249	151	0	2772	227	13	261	235	249	249	112	1346
596	247	239	246	331	63	50	0	1176	24	0	76	54	63	63	27	307
601	30	20	19	30	6	5	0	110	2	0	8	5	6	6	3	30
602	88	60	58	96	21	15	0	338	7	4	23	17	21	21	9	102
603	152	179	177	211	113	143	0	975	371	35	114	92	113	113	85	923
604	117	131	131	156	446	140	0	1121	431	260	329	374	446	446	202	2488
605	270	249	249	362	66	66	0	1262	0	0	89	51	66	66	27	299
606	1594	1119	1063	1663	655	479	0	6573	1120	597	494	420	655	655	388	4329
607	74	48	49	97	392	76	0	736	285	493	197	236	392	392	182	2177
608	14	13	19	30	65	22	0	163	86	91	30	36	65	65	35	408
609	154	131	147	226	803	157	0	1618	568	1073	387	459	803	803	375	4468
610	197	136	142	255	169	52	0	951	118	182	105	108	169	169	78	929

ZONE	WK-P	SHP-P	SR-P	MIS-P	NHB-P	TT-P	IE-P	TOT-P	WK-A	SHP-A	SR-A	MIS-A	NHB-A	TT-A	IE-A	TOT-A
611	490	329	324	586	257	125	0	2111	255	30	247	1282	257	257	200	2528
612	311	210	208	373	75	57	0	1234	64	0	86	68	75	75	34	402
613	111	73	77	159	16	15	0	451	11	0	20	14	16	16	8	85
614	560	371	390	800	190	116	0	2427	154	13	201	831	190	190	138	1717
615	433	402	386	522	365	173	0	2281	185	294	292	245	365	365	164	1910
616	388	315	317	495	725	235	0	2475	609	580	502	540	725	725	332	4013
617	755	577	566	836	1678	378	0	4790	1109	2160	867	971	1678	1678	778	9241
618	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
619	401	301	309	507	539	138	0	2195	354	710	282	301	539	539	253	2978
632	573	414	382	554	82	83	0	2088	2	0	112	64	82	82	35	377
640	117	131	131	156	180	68	0	783	131	173	122	118	180	180	84	988
641	75	88	87	104	27	27	0	408	0	0	36	21	27	27	11	122
642	136	125	125	182	1078	270	0	1916	987	1013	652	2914	1078	1078	678	8400
643	136	125	125	182	33	33	0	634	0	0	45	26	33	33	14	151
644	86	59	58	96	13	13	0	325	0	0	18	10	13	13	6	60
645	121	97	92	129	206	81	0	726	247	0	191	1596	206	206	206	2652
646	250	200	191	267	292	123	0	1323	328	108	245	262	292	292	136	1663
648	38	33	29	36	70	24	0	230	64	39	53	58	70	70	31	385
657	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
658	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
659	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
660	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
661	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
662	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
663	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
664	0	0	0	0	3	1	0	4	6	4	1	2	3	3	2	21
665	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
666	38	33	29	36	17	10	0	163	7	13	15	11	17	17	8	88
667	0	0	0	0	42	14	0	56	56	0	37	45	42	42	19	241
668	0	0	0	0	383	93	0	476	386	273	252	312	383	383	175	2164
669	0	0	0	0	1792	515	0	2307	2143	667	1366	1688	1792	1792	814	10262

ZONE	WK-P	SHP-P	SR-P	MIS-P	NHB-P	TT-P	IE-P	TOT-P	WK-A	SHP-A	SR-A	MIS-A	NHB-A	TT-A	IE-A	TOT-A
690	59	46	42	62	176	67	0	452	227	0	160	187	176	176	79	1005
691	143	112	109	164	139	63	0	730	152	0	135	142	139	139	61	768
692	72	71	65	82	144	58	0	492	169	0	134	150	144	144	63	804
694	0	0	0	0	11	6	0	17	24	9	7	9	11	11	7	78
695	0	0	0	0	8	6	0	14	26	0	7	9	8	8	5	63
701	427	430	428	551	164	116	0	2116	67	39	180	132	164	164	71	817
702	98	77	70	104	134	54	0	537	135	61	109	551	134	134	98	1222
703	395	284	261	382	61	58	0	1441	6	0	81	49	61	61	26	284
704	237	179	175	287	63	46	0	987	28	13	70	51	63	63	27	315
705	422	271	265	483	153	89	0	1683	125	30	153	136	153	153	69	819
706	285	217	211	341	95	69	0	1218	92	39	94	74	95	95	47	536
707	33	28	27	49	7	6	0	150	2	0	9	6	7	7	3	34
708	254	162	165	307	45	37	0	970	13	4	55	37	45	45	19	218
Total	37520	29535	29060	44079	34896	15671	0	190761	38030	19611	27753	48176	34896	34896	18352	221714
	20%	15%	15%	23%	18%	8%										

APPENDIX 4
Friction Factors

1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1
3	3700	4240	2450	1882	7500	5800	13000
4	4200	2800	1900	1590	8000	6800	6900
5	2400	1900	1350	1300	4500	4200	4200
6	2000	1200	1050	1100	3400	3300	2850
7	1750	800	800	920	2500	2600	1975
8	1520	540	620	782	2000	2200	1425
9	1310	332	500	650	1600	1800	1050
10	1140	245	400	590	1250	1500	795
11	1000	190	320	500	1000	1220	620
12	850	140	260	430	820	1020	480
13	740	115	210	370	660	850	380
14	640	93	180	320	550	720	300
15	560	78	150	280	460	620	242
16	480	64	125	250	390	530	200
17	420	54	105	220	320	460	165
18	360	46	88	190	280	390	140
19	238	26	49	112	152	238	77
20	178	22	42	96	132	191	66
21	179	19	36	86	112	165	57
22	132	16	31	76	96	145	49
23	117	14	28	66	83	132	42
24	99	12	24	59	73	119	36
25	87	11	20	53	63	109	32
26	74	9	18	48	54	96	27
27	66	8	16	42	48	86	24
28	57	7	14	38	42	79	20
29	49	6	13	34	38	73	17
30	42	5	11	31	34	66	15
31	37	5	11	28	30	59	13
32	33	4	9	26	28	53	11
33	30	4	9	23	25	48	10
34	28	3	8	21	23	45	9
35	24	3	7	19	21	41	7
36	23	3	7	18	20	38	6
37	21	3	6	17	18	35	5
38	20	2	6	15	17	32	5
39	19	2	5	14	16	30	4
40	18	2	5	13	15	28	3
41	17	1	5	12	15	26	3
42	16	1	5	11	14	25	2
43	16	1	5	11	13	23	1
44	15	1	5	10	13	22	1
45	15	1	4	9	13	21	1
46	1	1	4	9	12	20	1
47	1	1	1	9	12	19	1
48	1	1	1	9	1	18	1
49	1	1	1	8	1	18	1
50	1	1	1	1	1	17	1
51	1	1	1	1	1	16	1
52	1	1	1	1	1	16	1
53	1	1	1	1	1	16	1
54	1	1	1	1	1	16	1
55	1	1	1	1	1	15	1
56	1	1	1	1	1	15	1
57	1	1	1	1	1	15	1
58	1	1	1	1	1	15	1
59	1	1	1	1	1	14	1
60	1	1	1	1	1	14	1

Appendix 5
K factor

- GK, 1, 001-432, 433-760, 0.118
- GK, 2, 001-432, 433-760, 0.118
- GK, 3, 001-432, 433-760, 0.118
- GK, 4, 001-432, 433-760, 0.118
- GK, 5, 001-432, 433-760, 0.118
- GK, 6, 001-432, 433-760, 0.118
- GK, 1, 433-760, 001-432, 0.118
- GK, 2, 433-760, 001-432, 0.118
- GK, 3, 433-760, 001-432, 0.118
- GK, 4, 433-760, 001-432, 0.118
- GK, 5, 433-760, 001-432, 0.118
- GK, 6, 433-760, 001-432, 0.118
- GK, 1, 501-699, 700-760, 0.015
- GK, 2, 501-699, 700-760, 0.015
- GK, 3, 501-699, 700-760, 0.015
- GK, 4, 501-699, 700-760, 0.015
- GK, 5, 501-699, 700-760, 0.015
- GK, 6, 501-699, 700-760, 0.015
- GK, 1, 700-760, 501-699, 0.015
- GK, 2, 700-760, 501-699, 0.015
- GK, 3, 700-760, 501-699, 0.015
- GK, 4, 700-760, 501-699, 0.015
- GK, 5, 700-760, 501-699, 0.015
- GK, 6, 700-760, 501-699, 0.015
- GK, 1, 1-261, 262-340, 0.220
- GK, 2, 1-261, 262-340, 0.220
- GK, 3, 1-261, 262-340, 0.220
- GK, 4, 1-261, 262-340, 0.220
- GK, 5, 1-261, 262-340, 0.220
- GK, 6, 1-261, 262-340, 0.220
- GK, 1, 262-340, 1-261, 0.220
- GK, 2, 262-340, 1-261, 0.220
- GK, 3, 262-340, 1-261, 0.220
- GK, 4, 262-340, 1-261, 0.220
- GK, 5, 262-340, 1-261, 0.220
- GK, 6, 262-340, 1-261, 0.220

APPENDIX 6
Speed/Capacity Table

ROADWAY EVALUATION -- YEAR/ALT (A97) -- REPORT: CONGESTED SPEEDS (MPH)

TOTAL LANES:	1	2	3	4	5	6
AREA TYPE: Central Business						
Totals	.00	.00	.00	.00	.00	.00
AREA TYPE: CBD Fringe						
Divided Arterial	.00	.00	.00	29.47	.00	.00
Undivid.Arterial	.00	21.58	.00	33.15	.00	.00
Undivid.Arterial	.00	32.00	.00	.00	.00	.00
Totals	.00	22.32	.00	32.54	.00	.00
AREA TYPE: Residential						
Divided Arterial	.00	.00	.00	29.75	.00	.00
Undivid.Arterial	.00	30.00	.00	.00	.00	.00
Undivid.Arterial	.00	39.72	.00	.00	.00	.00
Undivid.Arterial	.00	27.98	.00	.00	.00	.00
Undivid.Arterial	.00	34.55	.00	34.60	.00	.00
Collector Street	.00	29.96	.00	.00	.00	.00
Totals	.00	31.92	.00	31.72	.00	.00
AREA TYPE: Outlying Business						
Divided Arterial	.00	.00	.00	30.76	.00	.00
Undivid.Arterial	.00	40.74	.00	36.29	.00	.00
Undivid.Arterial	.00	35.03	.00	.00	.00	.00
Collector Street	.00	30.00	.00	.00	.00	.00
Totals	.00	34.29	.00	31.62	.00	.00
AREA TYPE: Rural Areas						
Freeway	.00	.00	.00	45.33	.00	.00
Divided Arterial	.00	.00	.00	43.08	.00	.00
Undivid.Arterial	.00	37.08	.00	.00	.00	.00
Undivid.Arterial	.00	37.87	.00	40.39	.00	.00
Undivid.Arterial	.00	27.96	.00	.00	.00	.00
Undivid.Arterial	.00	35.03	.00	.00	.00	.00
Collector Street	.00	34.93	.00	.00	.00	.00
Collector Street	.00	30.00	.00	.00	.00	.00
Totals	.00	35.45	.00	43.01	.00	.00
TOTAL AREA TYPES						
Freeway	.00	.00	.00	45.33	.00	.00
Divided Arterial	.00	.00	.00	36.86	.00	.00
Undivid.Arterial	.00	36.08	.00	.00	.00	.00
Undivid.Arterial	.00	36.50	.00	38.54	.00	.00
Undivid.Arterial	.00	27.97	.00	.00	.00	.00
Undivid.Arterial	.00	34.61	.00	34.60	.00	.00
Collector Street	.00	32.39	.00	.00	.00	.00
Collector Street	.00	30.00	.00	.00	.00	.00
Totals	.00	33.57	.00	38.89	.00	.00

ROADWAY EVALUATION -- YEAR/ALT (A97) -- REPORT: AVERAGE TOTAL VOLUMES ON ALL LI

TOTAL LANES:	1	2	3	4	5	6
AREA TYPE: Central Business						
Totals	.00	.00	.00	.00	.00	.00
AREA TYPE: CBD Fringe						
Divided Arterial	.00	.00	.00	31897.93	.00	.00
Undivid.Arterial	.00	18878.56	.00	27607.30	.00	.00
Undivid.Arterial	.00	9501.46	.00	.00	.00	.00
Totals	.00	17775.37	.00	28679.96	.00	.00
AREA TYPE: Residential						
Divided Arterial	.00	.00	.00	31311.67	.00	.00
Undivid.Arterial	.00	1890.22	.00	.00	.00	.00
Undivid.Arterial	.00	8887.90	.00	.00	.00	.00
Undivid.Arterial	.00	350.55	.00	.00	.00	.00
Undivid.Arterial	.00	4758.20	.00	13477.24	.00	.00
Collector Street	.00	1718.87	.00	.00	.00	.00
Totals	.00	3465.45	.00	19422.05	.00	.00
AREA TYPE: Outlying Business						
Divided Arterial	.00	.00	.00	29613.57	.00	.00
Undivid.Arterial	.00	8211.48	.00	24165.64	.00	.00
Undivid.Arterial	.00	1512.83	.00	.00	.00	.00
Collector Street	.00	566.93	.00	.00	.00	.00
Totals	.00	4672.97	.00	28160.79	.00	.00
AREA TYPE: Rural Areas						
Freeway	.00	.00	.00	59974.27	.00	.00
Divided Arterial	.00	.00	.00	18017.56	.00	.00
Undivid.Arterial	.00	5940.85	.00	.00	.00	.00
Undivid.Arterial	.00	9604.92	.00	16125.96	.00	.00
Undivid.Arterial	.00	2206.53	.00	.00	.00	.00
Undivid.Arterial	.00	4038.41	.00	.00	.00	.00
Collector Street	.00	1520.11	.00	.00	.00	.00
Collector Street	.00	3245.41	.00	.00	.00	.00
Totals	.00	4382.33	.00	21628.53	.00	.00
TOTAL AREA TYPES						
Freeway	.00	.00	.00	59974.27	.00	.00
Divided Arterial	.00	.00	.00	25322.98	.00	.00
Undivid.Arterial	.00	4963.12	.00	.00	.00	.00
Undivid.Arterial	.00	10429.72	.00	19153.36	.00	.00
Undivid.Arterial	.00	1587.87	.00	.00	.00	.00
Undivid.Arterial	.00	4662.84	.00	13477.24	.00	.00
Collector Street	.00	1649.23	.00	.00	.00	.00
Collector Street	.00	3245.41	.00	.00	.00	.00
Totals	.00	4295.31	.00	23800.66	.00	.00

ROADWAY EVALUATION -- YEAR/ALT (A97) -- REPORT: TOTAL SYSTEM MILES

TOTAL LANES:	1	2	3	4	5	6
Totals	.00	.00	.00	.00	.00	.00
AREA TYPE: Central Business						
Divided Arterial	.00	.00	.00	.14	.00	.00
Undivid.Arterial	.00	2.12	.00	.79	.00	.00
Undivid.Arterial	.00	.24	.00	.00	.00	.00
Totals	.00	2.36	.00	.93	.00	.00
AREA TYPE: CBD Fringe						
Divided Arterial	.00	.00	.00	.59	.00	.00
Undivid.Arterial	.00	1.48	.00	.00	.00	.00
Undivid.Arterial	.00	8.54	.00	.00	.00	.00
Undivid.Arterial	.00	.83	.00	.00	.00	.00
Undivid.Arterial	.00	10.29	.00	.47	.00	.00
Collector Street	.00	34.25	.00	.00	.00	.00
Totals	.00	55.39	.00	1.06	.00	.00
AREA TYPE: Residential						
Divided Arterial	.00	.00	.00	3.45	.00	.00
Undivid.Arterial	.00	1.28	.00	.75	.00	.00
Undivid.Arterial	.00	1.01	.00	.00	.00	.00
Collector Street	.00	1.57	.00	.00	.00	.00
Totals	.00	3.86	.00	4.20	.00	.00
AREA TYPE: Outlying Business						
Freeway	.00	.00	.00	4.68	.00	.00
Divided Arterial	.00	.00	.00	5.97	.00	.00
Undivid.Arterial	.00	11.13	.00	.00	.00	.00
Undivid.Arterial	.00	17.64	.00	3.81	.00	.00
Undivid.Arterial	.00	3.16	.00	.00	.00	.00
Undivid.Arterial	.00	2.16	.00	.00	.00	.00
Collector Street	.00	40.02	.00	.00	.00	.00
Collector Street	.00	.84	.00	.00	.00	.00
Totals	.00	74.95	.00	14.46	.00	.00
AREA TYPE: Rural Areas						
Freeway	.00	.00	.00	4.68	.00	.00
Divided Arterial	.00	.00	.00	10.15	.00	.00
Undivid.Arterial	.00	12.61	.00	.00	.00	.00
Undivid.Arterial	.00	29.58	.00	5.35	.00	.00
Undivid.Arterial	.00	3.99	.00	.00	.00	.00
Undivid.Arterial	.00	13.70	.00	.47	.00	.00
Collector Street	.00	75.84	.00	.00	.00	.00
Collector Street	.00	.84	.00	.00	.00	.00
Totals	.00	136.56	.00	20.65	.00	.00
TOTAL AREA TYPES						
Freeway	.00	.00	.00	4.68	.00	.00
Divided Arterial	.00	.00	.00	10.15	.00	.00
Undivid.Arterial	.00	12.61	.00	.00	.00	.00
Undivid.Arterial	.00	29.58	.00	5.35	.00	.00
Undivid.Arterial	.00	3.99	.00	.00	.00	.00
Undivid.Arterial	.00	13.70	.00	.47	.00	.00
Collector Street	.00	75.84	.00	.00	.00	.00
Collector Street	.00	.84	.00	.00	.00	.00
Totals	.00	136.56	.00	20.65	.00	.00

ROADWAY EVALUATION -- YEAR/ALT (A97) -- REPORT: RATIO OF VOLUME OVER COUNT VHT

TOTAL LANES:	1	2	3	4	5	6
AREA TYPE: Central Business						
Totals	.00	.00	.00	.00	.00	.00
AREA TYPE: CBD Fringe						
Undivid.Arterial	.00	1.02	.00	1.10	.00	.00
Undivid.Arterial	.00	1.04	.00	.00	.00	.00
Totals	.00	1.02	.00	1.10	.00	.00
AREA TYPE: Residential						
Divided Arterial	.00	.00	.00	1.01	.00	.00
Undivid.Arterial	.00	.72	.00	.00	.00	.00
Undivid.Arterial	.00	.88	.00	.00	.00	.00
Undivid.Arterial	.00	.20	.00	.00	.00	.00
Undivid.Arterial	.00	.77	.00	1.16	.00	.00
Collector Street	.00	.62	.00	.00	.00	.00
Totals	.00	.76	.00	1.02	.00	.00
AREA TYPE: Outlying Business						
Divided Arterial	.00	.00	.00	.88	.00	.00
Undivid.Arterial	.00	.87	.00	1.02	.00	.00
Undivid.Arterial	.00	1.06	.00	.00	.00	.00
Collector Street	.00	1.00	.00	.00	.00	.00
Totals	.00	.93	.00	.91	.00	.00
AREA TYPE: Rural Areas						
Freeway	.00	.00	.00	1.20	.00	.00
Divided Arterial	.00	.00	.00	.97	.00	.00
Undivid.Arterial	.00	1.12	.00	.00	.00	.00
Undivid.Arterial	.00	.89	.00	.87	.00	.00
Undivid.Arterial	.00	.51	.00	.00	.00	.00
Undivid.Arterial	.00	1.41	.00	.00	.00	.00
Collector Street	.00	1.06	.00	.00	.00	.00
Collector Street	.00	1.35	.00	.00	.00	.00
Totals	.00	.97	.00	1.13	.00	.00
TOTAL AREA TYPES						
Freeway	.00	.00	.00	1.20	.00	.00
Divided Arterial	.00	.00	.00	.94	.00	.00
Undivid.Arterial	.00	1.03	.00	.00	.00	.00
Undivid.Arterial	.00	.91	.00	.93	.00	.00
Undivid.Arterial	.00	.39	.00	.00	.00	.00
Undivid.Arterial	.00	.86	.00	1.16	.00	.00
Collector Street	.00	.87	.00	.00	.00	.00
Collector Street	.00	1.35	.00	.00	.00	.00
Totals	.00	.90	.00	1.09	.00	.00

APPENDIX 7
Volume/Count Table

1997 Volume over Counts Ratio

ROAD NAME	LIMITS	Comp Plan LOS	Year 1997					
			Number of Lanes	Capacity	Count	Model	Vol/Count	LOS
US 17	SR 15A/CR 15A to Glenwood Rd.	D	4	60,100	14,900	13,473	0.50	A
US 17	Glenwood Rd. to SR 11	D	4	60,100	21,500	21,739	1.01	A
US 17	SR 11 to US 92	D	4	60,100	23,000	23,522	1.02	B
US 17/92	US 92 to Plymouth Ave.	D	4	60,100	23,000	25,315	1.10	B
US 17/92	Plymouth Ave. to Wisconsin Ave.	E	2	17,000	17,000	16,393	0.96	F
US 17/92	Wisconsin Ave. to SR 44-New York Ave.	E	2	17,000	16,800	18,745	1.13	E
US 17/92	SR 44-New York Ave. to Euclid Ave.	E	2	17,000	17,500	18,846	1.08	F
US 17/92	Euclid Ave. to Beresford Ave.	E	2	17,000	19,000	19,200	1.01	F
US 17/92	Beresford Ave. to SR 15A-Taylor Rd.	D	4	35,700	29,000	29,277	1.01	C
SR 15A	US 17 to Mercers Glenwood Rd.	D	2	16,600	10,500	7,286	0.69	B
SR 15A	Glenwood Rd. to Plymouth Ave.	D	2	16,600	13,000	11,080	0.85	C
SR 15A	Plymouth Ave. to SR 44-New York Ave.	D	4	35,700	24,000	15,278	0.64	B
SR 15A	SR 44-New York Ave. to Beresford Ave.	D	4	35,700	19,500	13,578	0.70	B
SR 15A	Beresford Ave. to US 17/92	D	2	24,800	16,700	10,435	0.62	C
SR 44	Hazen Rd. to SR 15A-Spring Garden Ave.	C	2	17,700	11,900	10,192	0.86	B
SR 44	SR 15A-Spring Garden Ave. to High St.	E	2	17,000	12,600	9,307	0.74	C
SR 44	High St. to Orange Ave.	E	2	17,000	12,800	10,152	0.79	C
SR 44	Orange Ave. to Boston Ave.	E	2	17,000	10,900	10,624	0.97	B
SR 44	Boston Ave. to Hill Ave.	E	2	17,000	12,100	9,847	0.81	B
SR 44	Hill Ave. to Blue Lake Ave.	D	2	16,600	11,000	10,602	0.96	B
SR 44	Blue Lake Ave. to Kepler Rd.	D	2	16,600	12,000	11,652	0.97	B
SR 44	Kepler Rd. to I-4	D	2	16,600	11,500	12,729	1.11	B
I-4	SR 44 to US 92	C	4	48,800	43,700	43,557	1.00	C
SR 472	US 17/92 to CR 4101	C	4	47,800	15,300	12,303	0.80	A
SR 472	CR 4101 to I-4	C	4	47,800	19,400	15,995	0.82	B
US 92	US 17 to Kepler Rd.	C	4	47,800	21,500	21,986	1.02	B
Amelia Avenue	US 92 to Kentucky Ave.	E	2	15,500	7,728	7,872	1.02	C
Amelia Avenue	Kentucky Ave. to Plymouth Ave.	E	2	15,500	8,448	9,685	1.15	C
Amelia Avenue	Plymouth Ave. to Pennsylvania Ave.	E	2	15,500	10,819	9,153	0.85	C
Amelia Avenue	Pennsylvania Ave. to Minnesota Ave.	E	2	15,500	12,825	9,153	0.71	D
Amelia Avenue	Minnesota Ave. to Michigan Ave.	E	2	15,500	13,026	12,385	0.95	D
Amelia Avenue	Michigan Ave. to Ohio Ave.	E	2	15,500	11,228	13,958	1.24	D
Amelia Avenue	Church Ave. to SR 44	E	4	31,540	12,001	13,958	1.16	C
Amelia Avenue	SR 44 to Beresford Ave.	E	2	12,400	N/A	1,017	N/A	
Beresford Avenue	Beresford Rd. to Ridgewood Ave.	E	2	12,400	2,352	3,936	1.67	C
Beresford Avenue	Ridgewood Ave. to Woodward Ave.	E	2	12,400	3,300	4,264	1.29	C
Beresford Avenue	Woodward Ave. to Pearl St.	E	2	12,400	3,578	5,817	1.63	C
Beresford Avenue	Pearl St. to Spring Garden Ave.	E	2	12,400	5,500	6,384	1.16	C
Beresford Avenue	Spring Garden Ave. to SR 15A	E	2	12,400	5,711	4,445	0.78	C
Beresford Avenue	SR 15A to US 17-92	E	2	12,400	5,144	5,570	1.08	C
Beresford Avenue	US 17-92 to Alabama Ave.	E	2	16,275	10,776	12,369	1.15	C
Beresford Avenue	Alabama Ave. to Amelia Ave.	E	2	16,275	9,361	10,749	1.15	C
Beresford Avenue	Amelia Ave. to Boston Ave.	E	2	16,275	5,584	5,694	1.02	C
Beresford Avenue	Boston Ave. to Hill Ave.	E	2	12,400	3,831	2,942	0.77	C
Beresford Avenue	Hill Ave. to Blue Lake Ave.	E	2	12,400	N/A	2,195	N/A	
Beresford Avenue	Blue Lake Ave. to Kepler Rd.	E	0	12,400	N/A	N/A	N/A	
Beresford Avenue	Kepler Rd. to Summit Ave.	E	0	12,400	N/A	1,017	N/A	
Blue Lake Avenue Extension	Plymouth Ave. to University Ave.	E	0	15,500	N/A	N/A	N/A	
Blue Lake Avenue	Minnesota Ave. to SR 44	E	2	15,500	N/A	3,083	N/A	
Blue Lake Avenue	SR 44 to Voorhis Ave.	E	2	15,500	1,754	3,358	1.91	C
Blue Lake Avenue	Voorhis Ave. to Beresford Ave.	E	2	15,500	2,750	3,981	1.45	C
Blue Lake Avenue	Beresford Ave. to Rockingham Lane	E	2	15,500	3,277	4,048	1.24	C
Blue Lake Avenue	Rockingham Lane to Taylor Rd.	E	2	15,500	3,130	3,900	1.25	C
Blue Lake Avenue	Taylor Rd. to Jackson Ranch Rd.	E	2	15,500	2,757	3,767	1.37	C
Blue Lake Avenue	Jackson Ranch Rd. to Orange Camp Rd.	E	2	15,500	2,602	3,900	1.50	C
Blue Lake Avenue Extension	Orange Camp Rd. to SR 472	E	0	15,500	N/A	1,017	N/A	
CR 15A	US 17 to Airport Rd.	E	2	33,100	4,114	4,248	1.03	A
CR 15A	Airport Rd. to SR 11	E	2	33,100	1,997	584	0.29	A
CR 92 (Intr'l Spdwy Blvd.)	SR 15A to Midpoint	E	2	17,000	9,803	2,991	0.31	B
CR 92 (Intr'l Spdwy Blvd.)	Midpoint to Stone St.	E	2	17,000	9,803	5,233	0.53	B
CR 92 (Intr'l Spdwy Blvd.)	Stone St. to Bridge	E	2	17,000	13,561	3,533	0.26	C

1997 Volume over Counts Ratio

ROAD NAME	LIMITS	Comp Plan LOS	Year 1997					
			Number of Lanes	Capacity	Count	Model	Vol/Count	LOS
CR 92 (Intr'l Spdwy Blvd.)	Bridge to US 17/92	E	2	17,000	14,952	5,233	0.35	C
Garfield Avenue	US 92 to Kentucky Ave.	E	2	12,400	1,566	332	0.21	C
Garfield Avenue	Kentucky Ave. to Plymouth Ave.	E	2	12,400	1,747	330	0.19	C
Garfield Avenue	Plymouth Ave. to Minnesota Ave.	E	2	12,400	1,528	920	0.60	C
Garfield Avenue	Minnesota Ave. to SR 44	E	2	12,400	2,242	1,423	0.63	C
Grand Ave./CR 4053	Highland Park Rd. to Plymouth Ave.	E	2	11,280	2,859	2,272	0.79	C
Grand Ave./CR 4053	Plymouth Ave. to Minnesota Ave.	E	2	11,280	1,679	572	0.34	C
Grand Ave./CR 4053	Minnesota Ave. to SR 44	E	2	11,280	2,113	1,015	0.48	C
Grand Ave./CR 4053	SR 44 to Old New York Ave.	E	2	11,280	N/A	1,017	N/A	
Hazen Road	Mercers Fernery Rd. to Greens Dairy Rd.	E	2	11,280	378	572	1.51	C
Hazen Road	Greens Dairy Rd. to Plymouth Ave.	E	2	11,280	594	494	0.83	C
Hazen Road	Plymouth Ave. to Minnesota Ave.	E	2	11,280	1,355	1,415	1.04	C
Hazen Road	Minnesota Ave. to SR 44	E	2	11,280	1,402	1,593	1.14	C
Hill Avenue/Jacobs Road	US 92 to Plymouth Ave.	E	2	12,400	2,263	3,051	1.35	C
Hill Avenue	Plymouth Ave. to University Ave.	E	2	12,400	5,038	5,375	1.07	C
Hill Avenue	University Ave. to Minnesota Ave.	E	2	12,400	6,040	5,507	0.91	C
Hill Avenue	Minnesota Ave. to SR 44	E	2	12,400	3,881	3,947	1.02	C
Hill Avenue	SR 44 to Voorhis Ave.	E	2	12,400	2,623	1,268	0.48	C
Hill Avenue	Voorhis Ave. to Euclid Ave.	E	2	12,400	1,994	1,489	0.75	C
Hill Avenue	Euclid Ave. to Beresford Ave.	E	2	12,400	1,604	951	0.59	C
Hill Avenue	Beresford Ave. to Taylor Rd.	E	2	12,400	N/A	1,017	N/A	
McGregor Road	Westside Con/Fatio to Spring Garden Ave.	E	2	12,400	N/A	1,017	N/A	
McGregor Road	Spring Garden Ave. to Dale Circle	E	2	12,400	2,556	4,739	1.85	C
McGregor Road	Dale Circle to US17/92	E	2	12,400	7,032	6,241	0.89	C
Mercers Fernery Road	Glenwood Rd. to Hazen Rd.	E	2	11,280	271	795	2.93	C
Mercers Fernery Road	Hazen Rd. to SR 15A	E	2	11,280	1,095	1,197	1.09	C
Mercers Fernery Road	SR 15A to Stone St.	E	2	11,280	896	1,259	1.40	C
Mercers Fernery Road	Stone St. to US 17	E	2	11,280	1,115	603	0.54	C
Minnesota Avenue	Grand Ave. to Parkway St.	E	2	12,400	786	169	0.22	C
Minnesota Avenue	Parkway St. to SR 15A	E	2	12,400	2,005	437	0.22	C
Minnesota Avenue	SR 15A to Stone St.	E	2	12,400	2,267	1,883	0.83	C
Minnesota Avenue	Stone St. to US 17/92	E	2	12,400	1,779	3,764	2.12	C
Minnesota Avenue	Hill Ave. to Blue Lake Ave.	E	2	12,400	4,279	2,643	0.62	C
Minnesota Avenue	Blue Lake Ave. to Kepler Rd.	E	2	12,400	3,413	1,570	0.46	C
Old New York Avenue	SR 44 to Shell Rd.	E	2	11,280	N/A	1,017	N/A	
Old New York Avenue	Shell Rd. to Hontoon Rd.	E	2	11,280	1,159	2,295	1.98	C
Old New York Avenue	Hontoon Rd. to West Ave.	E	2	11,280	5,114	4,980	0.97	C
Old New York Avenue	West Ave. to Grand Ave.	E	2	11,280	3,916	1,625	0.42	C
Old New York Avenue	Grand Ave. to Beresford Rd.	E	2	11,280	3,405	1,570	0.46	C
Old New York Avenue	Beresford Rd. to Ridgewood Ave.	E	2	11,280	3,759	1,310	0.35	C
Old New York Avenue	Ridgewood Ave. to SR 44	E	2	11,280	3,759	1,908	0.51	C
Plymouth Avenue	Grand Ave. to Hazen Rd.	E	2	12,400	1,600	1,815	1.13	C
Plymouth Avenue	Hazen Rd. to SR 15A	E	2	12,400	3,767	2,736	0.73	C
Plymouth Avenue	SR 15A to Boundary Ave.	E	2	17,000	7,701	8,659	1.12	B
Plymouth Avenue	Boundary Ave. to Stone St.	E	2	17,000	8,600	8,967	1.04	B
Plymouth Avenue	Stone St. to Adelle Ave.	E	2	17,000	8,260	8,749	1.06	B
Plymouth Avenue	Adelle Ave. to Clara Ave.	E	2	17,000	9,467	8,839	0.93	B
Plymouth Avenue	Clara Ave. to Florida Ave.	E	2	17,000	11,100	9,555	0.86	B
Plymouth Avenue	Florida Ave/ to US 17/92	E	2	17,000	11,276	10,141	0.90	B
Plymouth Avenue	US 17/92 to Pine St.	E	2	17,000	8,636	9,810	1.14	B
Plymouth Avenue	Pine St. to Amelia Ave.	E	2	17,000	8,597	8,054	0.94	B
Plymouth Avenue	Amelia Ave. to Clark Ave.	E	2	17,000	6,069	4,496	0.74	B
Plymouth Avenue	Clark Ave. to Garfield Ave.	E	2	17,000	5,902	4,332	0.73	B
Plymouth Avenue	Garfield Ave. to Boston Ave.	E	2	17,000	5,149	3,932	0.76	B
Plymouth Avenue	Boston Ave. to Hill Ave.	E	2	17,000	3,554	3,113	0.88	B
Plymouth Avenue	Hill Ave. to Jacobs Rd.	E	2	17,000	2,191	3,051	1.39	B
Spring Garden Avenue	Beresford Rd. to North Ave.	E	2	12,400	2,128	4,802	2.26	C
Spring Garden Avenue	North Ave. to McGregor Rd.	E	2	12,400	2,076	4,635	2.23	C
Stone Street	Mercers Fernery Rd. to Greens Dairy Rd.	E	2	11,280	580	1,169	2.02	C
Stone Street	Greens Dairy Rd. to CR 92	E	2	11,280	984	2,578	2.62	C
Stone Street	CR 92 to Lake Gertie Rd.	E	2	11,280	3,645	3,270	0.90	C

1997 Volume over Counts Ratio

ROAD NAME	LIMITS	Comp Plan LOS	Year 1997					
			Number of Lanes	Capacity	Count	Model	Vol/Count	LOS
Stone Street	Lake Gertie Rd. to Plymouth Ave.	E	2	11,280	5,014	3,993	0.80	C
Summit Avenue/CR 4139	SR 44 to I-4 Overpass	E	2	11,280	4,859	3,052	0.63	C
Summit Avenue/CR 4139	I-4 Overpass to Main St.	E	2	11,280	4,077	2,768	0.68	C
Taylor Road (DL)	US 17/92 to Aquarius Ave.	E	2	12,400	4,909	2,649	0.54	C
Taylor Road (DL)	Aquarius Ave. to Stratford Dr.	E	2	12,400	4,471	1,291	0.29	C
Taylor Road (DL)	Stratford Dr. to Hill Ave.	E	2	12,400	3,114	431	0.14	C
Taylor Road (DL)	Hill Ave. to Blue Lake Ave.	E	2	12,400	3,114	431	0.14	C
Taylor Road (DL)	Blue Lake Ave. to Martin Luther King Bltwy.	E	2	12,400	2,685	38	0.01	C
Voorhis Avenue	US 17/92 to Hayden Ave.	E	2	12,400	4,800	1,216	0.25	C
Voorhis Avenue	Hayden Ave. to Amelia Ave.	E	2	12,400	5,376	1,336	0.25	C
Voorhis Avenue	Amelia Ave. to Boston Ave.	E	2	12,400	4,520	3,398	0.75	C
Voorhis Avenue	Boston Ave. to Hill Ave.	E	2	12,400	3,186	2,006	0.63	C
Voorhis Avenue	Hill Ave. to Wade Ave.	E	2	12,400	3,273	1,596	0.49	C
Voorhis Avenue	Wade Ave. to SR 44	E	2	12,400	3,690	3,112	0.84	C
West Avenue	Old New York Ave. to Beresford Ave.	E	2	12,400	N/A	1,017	N/A	
Westside Connector (new/Fatio)	SR 44 to Beresford Ave.	E	2	11,280	145	1,593	10.99	C
Westside Connector (Fatio Rd.)	Beresford Rd. to McGregor Rd.	E	2	11,280	315	103	0.33	C
W. Volusia Bltwy (Kepler Rd)	US 92 to Mimosa Lane	E	2	31,000	13,362	13,244	0.99	C
W. Volusia Bltwy (Kepler Rd)	Mimosa Lane to Minnesota Ave.	E	2	31,000	12,616	13,225	1.05	B
W. Volusia Bltwy (Kepler Rd)	Minnesota Ave. to Lake Charles Rd.	E	2	31,000	13,476	13,239	0.98	C
W. Volusia Bltwy (Kepler Rd)	Lake Charles Rd. to SR 44	E	2	31,000	12,992	13,239	1.02	B
W. Volusia Bltwy (Kepler Rd)	SR 44 to Midpoint	E	2	31,000	8,887	N/A	N/A	B
W. Volusia Bltwy (Kepler Rd)	N. of Beresford Rd.	E	2	31,000	8,754	N/A	N/A	B
W. Volusia Bltwy (Dr MLK Jr)	S. of Beresford Rd.	E	2	31,000	8,754	11,810	1.35	B
W. Volusia Bltwy (Dr MLK Jr)	N. of Taylor Rd.	E	2	31,000	8,754	11,774	1.35	B
W. Volusia Bltwy (Dr MLK Jr)	S. of Taylor Rd.	E	2	31,000	9,037	11,774	1.30	B
W. Volusia Bltwy (Dr MLK Jr)	Midpoint to Orange Camp Rd.	E	2	31,000	9,037	11,774	1.30	B

APPENDIX 8
HEVAL.OUT

FLORIDA D.O.T.
FSUTMS
VER 5.20

VCUATS

DELAND SUBAREA VALIDATION
HIGHWAY ASSIGNMENT

"HELABELS.SYN" CONTENTS:

LABEL FT 10	1	1	Freeway	Freeway
LABEL FT 20	2	2	Div Art	Divided Arterial
LABEL FT 30	3	3	Und Art	Undivid.Arterial
LABEL FT 31	4	4	Deland	Undivid.Arterial
LABEL FT 32	5	5	Deland	Undivid.Arterial
LABEL FT 33	6	6	Deland	Undivid.Arterial
LABEL FT 40	7	7	Collect	Collector Street
LABEL FT 41	8	8	Deland	Collector Street
LABEL FT 50	9	8	Local	Local Streets
LABEL FT 60	10	10	Oneway	Oneway Streets
LABEL FT 70	11	11	Other	Other
LABEL FT 80	12	12		
LABEL FT 90	9	9	Toll	Toll Facilities
LABEL AT 10	1	1	CBD	Central Business District
LABEL AT 20	2	2	Fringe	CBD Fringe
LABEL AT 30	3	3	Resid	Residential
LABEL AT 40	4	4	Out CBD	Outlying Business District
LABEL AT 50	5	5	Rural	Rural Areas

FLORIDA D.O.T.
FSUTMS
VER 5.20

VCUATS

DELAND SUBAREA VALIDATION
HIGHWAY ASSIGNMENT

FACILITY TYPES SELECTED:

10	20	30	31	32	33	40	41	50	60
70	80	90							

FACILITY TYPES SKIPPED:

1	2	3	4	5	6	7	8	9	11
12	13	14	15	16	17	18	19	21	22
23	24	25	26	27	28	29	34	35	36
37	38	39	42	43	44	45	46	47	48
49	51	52	53	54	55	56	57	58	59
61	62	63	64	65	66	67	68	69	71
72	73	74	75	76	77	78	79	81	82
83	84	85	86	87	88	89	91	92	93
94	95	96	97	98	99				

AREA TYPES SELECTED:

10	20	30	40	50
----	----	----	----	----

AREA TYPES SKIPPED:

1	2	3	4	5	6	7	8	9	11
12	13	14	15	16	17	18	19	21	22
23	24	25	26	27	28	29	31	32	33
34	35	36	37	38	39	41	42	43	44
45	46	47	48	49	51	52	53	54	55
56	57	58	59	60	61	62	63	64	65
66	67	68	69	70	71	72	73	74	75
76	77	78	79	80	81	82	83	84	85
86	87	88	89	90	91	92	93	94	95
96	97	98	99						

*** *** ***** *** *** ***** ***
*** *** ***** *** *** ***** ***
*** *** *** *** *** *** ***
***** *** *** *** *** ***** ***
***** *** *** *** *** ***** ***
*** *** *** *** *** *** ***
*** *** ***** *** *** *** *****
*** *** ***** ** *** *** *****

(CONTACT DATA MANAGER (BMMP) 904-488-4640 IF YOU HAVE QUESTIONS)

```

*****      *****      *****      *****      *****      *****      *****      *****      *****      * * *
* * *      * * *      * * *      * * *      * * *      * * *      * * *      * * *      * * *      * * *
* * *      * * *      * * *      * * *      * * *      * * *      * * *      * * *      * * *      * * *
* * *      * * *      * * *      * * *      * * *      * * *      * * *      * * *      * * *      * * *
* * *      * * *      * * *      * * *      * * *      * * *      * * *      * * *      * * *      * * *

```

HEVAL MODULE (D5520931.DRIVER.SETUP.FORT(HEVAL))

A GENERAL PURPOSE HIGHWAY EVALUATION PROGRAM DESIGNED TO PROVIDE THE TRANSPORTATION PLANNER WITH A TOOL TO EVALUATE A HIGHWAY ASSIGNMENT. THE PROGRAM OPERATES IN TWO MODES. ONE MODE ALLOWS THE USER TO PRINT A VARIETY OF REPORTS DESIGNED TO ASSIST IN THE TASK OF MODEL VALIDATION. THIS MODE IS REFERRED TO INTERNALLY AS VALIDATION AND IS SET BY THE USER WITH A STATEMENT - "VALIDATE=T" THE OTHER MODE IS AS AN ASSIGNMENT ANALYSIS TOOL. THIS MODE IS GENERALLY USED FOR ASSIGNMENTS TO FUTURE YEAR NETWORKS. THIS MODE IS SET BY THE USER WITH A STATEMENT "ANALYSIS=T".

INPUT DATA FOR THIS RUN:

USES HRLDXY FILE AS DATA SOURCE
 RATES=1979 UROAD AND CUTS RATES

OUTPUT DATA SETS FOR THIS RUN:

PRINTOUT ONLY

DATE AND TIME OF THIS RUN:

23NOV98 (DDMMYY) 17:00:06 (HH.MM.SS)

TYPE OF RUN:

VALIDATE

```

***      ****      ***** * * * * *      *****      *****      *** * *      *****
* * * * *      * * * * *      * * * * *      * * * * *      * * * * *      * * * * *      * * * * *      * * * * *
* * * * *      * * * * *      * * * * *      * * * * *      * * * * *      * * * * *      * * * * *      * * * * *
* * * * *      * * * * *      * * * * *      * * * * *      * * * * *      * * * * *      * * * * *      * * * * *
* * * * *      * * * * *      * * * * *      * * * * *      * * * * *      * * * * *      * * * * *      * * * * *

```

FACILITY AND AREA TYPES AS DEFINED IN THE HNET MODULE:

- FACILITY TYPE 1 - FREEWAYS
- FACILITY TYPE 2 - EXPRESSWAYS AND DIVIDED ARTERIALS
- FACILITY TYPE 3 - UNDIVIDED ARTERIALS
- FACILITY TYPE 4 - COLLECTORS
- FACILITY TYPE 5 - LOCALS (CENTROID CONNECTORS) - NOT INCLUDED
- FACILITY TYPE 6 - ONE WAYS
- FACILITY TYPE 8 - HOV LINKS
- FACILITY TYPE 9 - TOLL RAMPS

- AREA TYPE 1 - CBD
- AREA TYPE 2 - FRINGE
- AREA TYPE 3 - RESIDENTIAL
- AREA TYPE 4 - OBD
- AREA TYPE 5 - RURAL

LANE VALUES REPORTED ARE TRUE LANE VALUES.

FLORIDA D.O.T.
FSUTMS
VER 5.20

VCUATS
Deland Subarea Validation

DELAND SUBAREA VALIDATION

LINKS WITH NO ASSIGNED VOLUME

```
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+ 3528   3644 + 4134   4136 +
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
```

HIGHWAY EVALUATION -- YEAR/ALT (A97) -- REPORT: TOTAL NUMBER OF LINKS

TOTAL LANES:	1	2	3	4	5	6
AREA TYPE: Central Business						
Totals	0	0	0	0	0	0
AREA TYPE: CBD Fringe						
Divided Arterial	0	0	0	1	0	0
Undivid.Arterial	0	15	0	3	0	0
Undivid.Arterial	0	2	0	0	0	0
Totals	0	17	0	4	0	0
AREA TYPE: Residential						
Divided Arterial	0	0	0	2	0	0
Undivid.Arterial	0	7	0	0	0	0
Undivid.Arterial	0	52	0	0	0	0
Undivid.Arterial	0	4	0	0	0	0
Undivid.Arterial	0	50	0	4	0	0
Collector Street	0	185	0	0	0	0
Totals	0	298	0	6	0	0
AREA TYPE: Outlying Business						
Divided Arterial	0	0	0	11	0	0
Undivid.Arterial	0	5	0	4	0	0
Undivid.Arterial	0	3	0	0	0	0
Collector Street	0	2	0	0	0	0
Totals	0	10	0	15	0	0
AREA TYPE: Rural Areas						
Freeway	0	0	0	3	0	0
Divided Arterial	0	0	0	9	0	0
Undivid.Arterial	0	22	0	0	0	0
Undivid.Arterial	0	43	0	15	0	0
Undivid.Arterial	0	8	0	0	0	0
Undivid.Arterial	0	8	0	0	0	0
Collector Street	0	83	0	0	0	0
Collector Street	0	1	0	0	0	0
Totals	0	165	0	27	0	0
TOTAL AREA TYPES						
Freeway	0	0	0	3	0	0
Divided Arterial	0	0	0	23	0	0
Undivid.Arterial	0	29	0	0	0	0
Undivid.Arterial	0	115	0	22	0	0
Undivid.Arterial	0	12	0	0	0	0
Undivid.Arterial	0	63	0	4	0	0
Collector Street	0	270	0	0	0	0
Collector Street	0	1	0	0	0	0
Totals	0	490	0	52	0	0

FLORIDA D.O.T.
 FSUTMS
 VER 5.20

VCUATS
 Deland Subarea Validation

DELAND SUBAREA VALIDATION

HIGHWAY EVALUATION -- YEAR/ALT (A97) -- REPORT: LINK PERCENTAGES

TOTAL LANES:	1	2	3	4	5	6
				AREA TYPE: Central Business		
Totals	.00	.00	.00	.00	.00	.00
				AREA TYPE: CBD Fringe		
Divided Arterial	.00	.00	.00	.18	.00	.00
Undivid.Arterial	.00	2.77	.00	.55	.00	.00
Undivid.Arterial	.00	.37	.00	.00	.00	.00
Totals	.00	3.14	.00	.74	.00	.00
				AREA TYPE: Residential		
Divided Arterial	.00	.00	.00	.37	.00	.00
Undivid.Arterial	.00	1.29	.00	.00	.00	.00
Undivid.Arterial	.00	9.59	.00	.00	.00	.00
Undivid.Arterial	.00	.74	.00	.00	.00	.00
Undivid.Arterial	.00	9.23	.00	.74	.00	.00
Collector Street	.00	34.13	.00	.00	.00	.00
Totals	.00	54.98	.00	1.11	.00	.00
				AREA TYPE: Outlying Business		
Divided Arterial	.00	.00	.00	2.03	.00	.00
Undivid.Arterial	.00	.92	.00	.74	.00	.00
Undivid.Arterial	.00	.55	.00	.00	.00	.00
Collector Street	.00	.37	.00	.00	.00	.00
Totals	.00	1.85	.00	2.77	.00	.00
				AREA TYPE: Rural Areas		
Freeway	.00	.00	.00	.55	.00	.00
Divided Arterial	.00	.00	.00	1.66	.00	.00
Undivid.Arterial	.00	4.06	.00	.00	.00	.00
Undivid.Arterial	.00	7.93	.00	2.77	.00	.00
Undivid.Arterial	.00	1.48	.00	.00	.00	.00
Undivid.Arterial	.00	1.48	.00	.00	.00	.00
Collector Street	.00	15.31	.00	.00	.00	.00
Collector Street	.00	.18	.00	.00	.00	.00
Totals	.00	30.44	.00	4.98	.00	.00
				TOTAL AREA TYPES		
Freeway	.00	.00	.00	.55	.00	.00
Divided Arterial	.00	.00	.00	4.24	.00	.00
Undivid.Arterial	.00	5.35	.00	.00	.00	.00
Undivid.Arterial	.00	21.22	.00	4.06	.00	.00
Undivid.Arterial	.00	2.21	.00	.00	.00	.00
Undivid.Arterial	.00	11.62	.00	.74	.00	.00
Collector Street	.00	49.82	.00	.00	.00	.00
Collector Street	.00	.18	.00	.00	.00	.00
Totals	.00	90.41	.00	9.59	.00	.00

ROADWAY EVALUATION -- YEAR/ALT (A97) -- REPORT: PERCENTAGE OF LINKS WITH COUNTS

TOTAL LANES:	1	2	3	4	5	6
Totals	.00	.00	.00	.00	.00	.00
AREA TYPE: Central Business						
Undivided Arterial	.00	40.00	.00	33.33	.00	.00
Undivided Arterial	.00	100.00	.00	.00	.00	.00
Totals	.00	47.06	.00	25.00	.00	.00
AREA TYPE: CBD Fringe						
Divided Arterial	.00	.00	.00	50.00	.00	.00
Undivided Arterial	.00	71.43	.00	.00	.00	.00
Undivided Arterial	.00	30.77	.00	.00	.00	.00
Undivided Arterial	.00	50.00	.00	.00	.00	.00
Undivided Arterial	.00	50.00	.00	25.00	.00	.00
Collector Street	.00	11.08	.00	.00	.00	.00
Totals	.00	22.99	.00	33.33	.00	.00
AREA TYPE: Residential						
Divided Arterial	.00	.00	.00	27.27	.00	.00
Undivided Arterial	.00	60.00	.00	25.00	.00	.00
Undivided Arterial	.00	100.00	.00	.00	.00	.00
Collector Street	.00	100.00	.00	.00	.00	.00
Totals	.00	80.00	.00	26.67	.00	.00
AREA TYPE: Outlying Business						
Freeway	.00	.00	.00	66.67	.00	.00
Divided Arterial	.00	.00	.00	22.22	.00	.00
Undivided Arterial	.00	27.27	.00	.00	.00	.00
Undivided Arterial	.00	41.86	.00	33.33	.00	.00
Undivided Arterial	.00	12.50	.00	.00	.00	.00
Undivided Arterial	.00	62.50	.00	.00	.00	.00
Collector Street	.00	26.51	.00	.00	.00	.00
Collector Street	.00	100.00	.00	.00	.00	.00
Totals	.00	32.12	.00	33.33	.00	.00
AREA TYPE: Rural Areas						
TOTAL AREA TYPES						
Freeway	.00	.00	.00	66.67	.00	.00
Divided Arterial	.00	.00	.00	26.09	.00	.00
Undivided Arterial	.00	37.93	.00	.00	.00	.00
Undivided Arterial	.00	37.39	.00	31.82	.00	.00
Undivided Arterial	.00	25.00	.00	.00	.00	.00
Undivided Arterial	.00	55.56	.00	25.00	.00	.00
Collector Street	.00	16.48	.00	.00	.00	.00
Collector Street	.00	100.00	.00	.00	.00	.00
Totals	.00	28.06	.00	30.77	.00	.00

HIGHWAY EVALUATION -- YEAR/ALT (A97) -- REPORT: TOTAL LANE MILES

TOTAL LANES:	1	2	3	4	5	6
AREA TYPE: Central Business						
Totals	.00	.00	.00	.00	.00	.00
AREA TYPE: CBD Fringe						
Divided Arterial	.00	.00	.00	.56	.00	.00
Undivid.Arterial	.00	4.24	.00	3.16	.00	.00
Undivid.Arterial	.00	.48	.00	.00	.00	.00
Totals	.00	4.72	.00	3.72	.00	.00
AREA TYPE: Residential						
Divided Arterial	.00	.00	.00	2.36	.00	.00
Undivid.Arterial	.00	2.96	.00	.00	.00	.00
Undivid.Arterial	.00	17.08	.00	.00	.00	.00
Undivid.Arterial	.00	1.66	.00	.00	.00	.00
Undivid.Arterial	.00	20.58	.00	1.88	.00	.00
Collector Street	.00	68.50	.00	.00	.00	.00
Totals	.00	110.78	.00	4.24	.00	.00
AREA TYPE: Outlying Business						
Divided Arterial	.00	.00	.00	13.80	.00	.00
Undivid.Arterial	.00	2.56	.00	3.00	.00	.00
Undivid.Arterial	.00	2.02	.00	.00	.00	.00
Collector Street	.00	3.14	.00	.00	.00	.00
Totals	.00	7.72	.00	16.80	.00	.00
AREA TYPE: Rural Areas						
Freeway	.00	.00	.00	18.72	.00	.00
Divided Arterial	.00	.00	.00	23.88	.00	.00
Undivid.Arterial	.00	22.26	.00	.00	.00	.00
Undivid.Arterial	.00	35.28	.00	15.24	.00	.00
Undivid.Arterial	.00	6.32	.00	.00	.00	.00
Undivid.Arterial	.00	4.32	.00	.00	.00	.00
Collector Street	.00	80.04	.00	.00	.00	.00
Collector Street	.00	1.68	.00	.00	.00	.00
Totals	.00	149.90	.00	57.84	.00	.00
TOTAL AREA TYPES						
Freeway	.00	.00	.00	18.72	.00	.00
Divided Arterial	.00	.00	.00	40.60	.00	.00
Undivid.Arterial	.00	25.22	.00	.00	.00	.00
Undivid.Arterial	.00	59.16	.00	21.40	.00	.00
Undivid.Arterial	.00	7.98	.00	.00	.00	.00
Undivid.Arterial	.00	27.40	.00	1.88	.00	.00
Collector Street	.00	151.68	.00	.00	.00	.00
Collector Street	.00	1.68	.00	.00	.00	.00
Totals	.00	273.12	.00	82.60	.00	.00

HIGHWAY EVALUATION -- YEAR/ALT (A97) -- REPORT: TOTAL DIRECTIONAL SYSTEM MILES

TOTAL LANES:	1	2	3	4	5	6
Totals	.00	.00	.00	.00	.00	.00
AREA TYPE: Central Business						
Divided Arterial	.00	.00	.00	.28	.00	.00
Undivid.Arterial	.00	4.24	.00	1.58	.00	.00
Undivid.Arterial	.00	.48	.00	.00	.00	.00
Totals	.00	4.72	.00	1.86	.00	.00
AREA TYPE: CBD Fringe						
Divided Arterial	.00	.00	.00	1.18	.00	.00
Undivid.Arterial	.00	2.96	.00	.00	.00	.00
Undivid.Arterial	.00	17.08	.00	.00	.00	.00
Undivid.Arterial	.00	1.66	.00	.00	.00	.00
Undivid.Arterial	.00	20.58	.00	.94	.00	.00
Collector Street	.00	68.50	.00	.00	.00	.00
Totals	.00	110.78	.00	2.12	.00	.00
AREA TYPE: Residential						
Divided Arterial	.00	.00	.00	6.90	.00	.00
Undivid.Arterial	.00	2.56	.00	1.50	.00	.00
Undivid.Arterial	.00	2.02	.00	.00	.00	.00
Collector Street	.00	3.14	.00	.00	.00	.00
Totals	.00	7.72	.00	8.40	.00	.00
AREA TYPE: Outlying Business						
Freeway	.00	.00	.00	9.36	.00	.00
Divided Arterial	.00	.00	.00	11.94	.00	.00
Undivid.Arterial	.00	22.26	.00	.00	.00	.00
Undivid.Arterial	.00	35.28	.00	7.62	.00	.00
Undivid.Arterial	.00	6.32	.00	.00	.00	.00
Undivid.Arterial	.00	4.32	.00	.00	.00	.00
Collector Street	.00	80.04	.00	.00	.00	.00
Collector Street	.00	1.68	.00	.00	.00	.00
Totals	.00	149.90	.00	28.92	.00	.00
AREA TYPE: Rural Areas						
Freeway	.00	.00	.00	9.36	.00	.00
Divided Arterial	.00	.00	.00	20.30	.00	.00
Undivid.Arterial	.00	25.22	.00	.00	.00	.00
Undivid.Arterial	.00	59.16	.00	10.70	.00	.00
Undivid.Arterial	.00	7.98	.00	.00	.00	.00
Undivid.Arterial	.00	27.40	.00	.94	.00	.00
Collector Street	.00	151.68	.00	.00	.00	.00
Collector Street	.00	1.68	.00	.00	.00	.00
Totals	.00	273.12	.00	41.30	.00	.00
TOTAL AREA TYPES						
Freeway	.00	.00	.00	9.36	.00	.00
Divided Arterial	.00	.00	.00	20.30	.00	.00
Undivid.Arterial	.00	25.22	.00	.00	.00	.00
Undivid.Arterial	.00	59.16	.00	10.70	.00	.00
Undivid.Arterial	.00	7.98	.00	.00	.00	.00
Undivid.Arterial	.00	27.40	.00	.94	.00	.00
Collector Street	.00	151.68	.00	.00	.00	.00
Collector Street	.00	1.68	.00	.00	.00	.00
Totals	.00	273.12	.00	41.30	.00	.00

HIGHWAY EVALUATION -- YEAR/ALT (A97) -- REPORT: AVERAGE LINK LENGTH USING SYSTEM

TOTAL LANES:	1	2	3	4	5	6
				AREA TYPE: Central Business		
Totals	.00	.00	.00	.00	.00	.00
				AREA TYPE: CBD Fringe		
Divided Arterial	.00	.00	.00	.14	.00	.00
Undivid.Arterial	.00	.14	.00	.26	.00	.00
Undivid.Arterial	.00	.12	.00	.00	.00	.00
Totals	.00	.14	.00	.23	.00	.00
				AREA TYPE: Residential		
Divided Arterial	.00	.00	.00	.29	.00	.00
Undivid.Arterial	.00	.21	.00	.00	.00	.00
Undivid.Arterial	.00	.16	.00	.00	.00	.00
Undivid.Arterial	.00	.21	.00	.00	.00	.00
Undivid.Arterial	.00	.21	.00	.12	.00	.00
Collector Street	.00	.19	.00	.00	.00	.00
Totals	.00	.19	.00	.18	.00	.00
				AREA TYPE: Outlying Business		
Divided Arterial	.00	.00	.00	.31	.00	.00
Undivid.Arterial	.00	.26	.00	.19	.00	.00
Undivid.Arterial	.00	.34	.00	.00	.00	.00
Collector Street	.00	.78	.00	.00	.00	.00
Totals	.00	.39	.00	.28	.00	.00
				AREA TYPE: Rural Areas		
Freeway	.00	.00	.00	1.56	.00	.00
Divided Arterial	.00	.00	.00	.66	.00	.00
Undivid.Arterial	.00	.51	.00	.00	.00	.00
Undivid.Arterial	.00	.41	.00	.25	.00	.00
Undivid.Arterial	.00	.40	.00	.00	.00	.00
Undivid.Arterial	.00	.27	.00	.00	.00	.00
Collector Street	.00	.48	.00	.00	.00	.00
Collector Street	.00	.84	.00	.00	.00	.00
Totals	.00	.45	.00	.54	.00	.00
				TOTAL AREA TYPES		
Freeway	.00	.00	.00	1.56	.00	.00
Divided Arterial	.00	.00	.00	.44	.00	.00
Undivid.Arterial	.00	.43	.00	.00	.00	.00
Undivid.Arterial	.00	.26	.00	.24	.00	.00
Undivid.Arterial	.00	.33	.00	.00	.00	.00
Undivid.Arterial	.00	.22	.00	.12	.00	.00
Collector Street	.00	.28	.00	.00	.00	.00
Collector Street	.00	.84	.00	.00	.00	.00
Totals	.00	.28	.00	.40	.00	.00

FLORIDA D.O.T.
 FSUTMS
 VER 5.20

VCUATS
 Deland Subarea Validation

DELAND SUBAREA VALIDATION

HIGHWAY EVALUATION -- YEAR/ALT (A97) -- REPORT: TOTAL VMT USING VOLUMES ON LINK

TOTAL LANES:	1	2	3	4	5	6
				AREA TYPE: Central Business		
Totals	0	0	0	0	0	0
				AREA TYPE: CBD Fringe		
Undivid.Arterial	0	16219	0	7541	0	0
Undivid.Arterial	0	2280	0	0	0	0
Totals	0	18499	0	7541	0	0
				AREA TYPE: Residential		
Divided Arterial	0	0	0	11213	0	0
Undivid.Arterial	0	3490	0	0	0	0
Undivid.Arterial	0	23735	0	0	0	0
Undivid.Arterial	0	141	0	0	0	0
Undivid.Arterial	0	24047	0	1485	0	0
Collector Street	0	10094	0	0	0	0
Totals	0	61508	0	12698	0	0
				AREA TYPE: Outlying Business		
Divided Arterial	0	0	0	24559	0	0
Undivid.Arterial	0	4454	0	10760	0	0
Undivid.Arterial	0	1563	0	0	0	0
Collector Street	0	869	0	0	0	0
Totals	0	6886	0	35319	0	0
				AREA TYPE: Rural Areas		
Freeway	0	0	0	237517	0	0
Divided Arterial	0	0	0	27182	0	0
Undivid.Arterial	0	21458	0	0	0	0
Undivid.Arterial	0	72212	0	30824	0	0
Undivid.Arterial	0	568	0	0	0	0
Undivid.Arterial	0	5339	0	0	0	0
Collector Street	0	24962	0	0	0	0
Collector Street	0	2726	0	0	0	0
Totals	0	127266	0	295523	0	0
				TOTAL AREA TYPES		
Freeway	0	0	0	237517	0	0
Divided Arterial	0	0	0	62954	0	0
Undivid.Arterial	0	24949	0	0	0	0
Undivid.Arterial	0	116620	0	49125	0	0
Undivid.Arterial	0	709	0	0	0	0
Undivid.Arterial	0	33230	0	1485	0	0
Collector Street	0	35925	0	0	0	0
Collector Street	0	2726	0	0	0	0
Totals	0	214159	0	351080	0	0

HIGHWAY EVALUATION -- YEAR/ALT (A97) -- REPORT: TOTAL VMT USING COUNTS ON LINKS

TOTAL LANES:	1	2	3	4	5	6
				AREA TYPE: Central Business		
Totals	0	0	0	0	0	0
				AREA TYPE: CBD Fringe		
Undivd.Arterial	0	16137	0	6851	0	0
Undivd.Arterial	0	2200	0	0	0	0
Totals	0	18337	0	6851	0	0
				AREA TYPE: Residential		
Divided Arterial	0	0	0	11107	0	0
Undivd.Arterial	0	4841	0	0	0	0
Undivd.Arterial	0	27214	0	0	0	0
Undivd.Arterial	0	718	0	0	0	0
Undivd.Arterial	0	31457	0	1277	0	0
Collector Street	0	16326	0	0	0	0
Totals	0	80556	0	12384	0	0
				AREA TYPE: Outlying Business		
Divided Arterial	0	0	0	27819	0	0
Undivd.Arterial	0	5156	0	10521	0	0
Undivd.Arterial	0	1480	0	0	0	0
Collector Street	0	870	0	0	0	0
Totals	0	7506	0	38340	0	0
				AREA TYPE: Rural Areas		
Freeway	0	0	0	197722	0	0
Divided Arterial	0	0	0	28050	0	0
Undivd.Arterial	0	19274	0	0	0	0
Undivd.Arterial	0	82326	0	35680	0	0
Undivd.Arterial	0	1119	0	0	0	0
Undivd.Arterial	0	3791	0	0	0	0
Collector Street	0	23692	0	0	0	0
Collector Street	0	2023	0	0	0	0
Totals	0	132225	0	261452	0	0
				TOTAL AREA TYPES		
Freeway	0	0	0	197722	0	0
Divided Arterial	0	0	0	66976	0	0
Undivd.Arterial	0	24114	0	0	0	0
Undivd.Arterial	0	130833	0	53053	0	0
Undivd.Arterial	0	1838	0	0	0	0
Undivd.Arterial	0	38929	0	1277	0	0
Collector Street	0	40888	0	0	0	0
Collector Street	0	2023	0	0	0	0
Totals	0	238625	0	319027	0	0

FLORIDA D.O.T.
 FSUTMS
 VER 5.20

VCUATS
 Deland Subarea Validation

DELAND SUBAREA VALIDATION

HIGHWAY EVALUATION -- YEAR/ALT (A97) -- REPORT: RATIO OF VOLUME OVER COUNT VMT

TOTAL LANES:	1	2	3	4	5	6
AREA TYPE: Central Business						
Totals	.00	.00	.00	.00	.00	.00
AREA TYPE: CBD Fringe						
Undivd.Arterial	.00	1.01	.00	1.10	.00	.00
Undivd.Arterial	.00	1.04	.00	.00	.00	.00
Totals	.00	1.01	.00	1.10	.00	.00
AREA TYPE: Residential						
Divided Arterial	.00	.00	.00	1.01	.00	.00
Undivd.Arterial	.00	.72	.00	.00	.00	.00
Undivd.Arterial	.00	.87	.00	.00	.00	.00
Undivd.Arterial	.00	.20	.00	.00	.00	.00
Undivd.Arterial	.00	.76	.00	1.16	.00	.00
Collector Street	.00	.62	.00	.00	.00	.00
Totals	.00	.76	.00	1.03	.00	.00
AREA TYPE: Outlying Business						
Divided Arterial	.00	.00	.00	.88	.00	.00
Undivd.Arterial	.00	.86	.00	1.02	.00	.00
Undivd.Arterial	.00	1.06	.00	.00	.00	.00
Collector Street	.00	1.00	.00	.00	.00	.00
Totals	.00	.92	.00	.92	.00	.00
AREA TYPE: Rural Areas						
Freeway	.00	.00	.00	1.20	.00	.00
Divided Arterial	.00	.00	.00	.97	.00	.00
Undivd.Arterial	.00	1.11	.00	.00	.00	.00
Undivd.Arterial	.00	.88	.00	.86	.00	.00
Undivd.Arterial	.00	.51	.00	.00	.00	.00
Undivd.Arterial	.00	1.41	.00	.00	.00	.00
Collector Street	.00	1.05	.00	.00	.00	.00
Collector Street	.00	1.35	.00	.00	.00	.00
Totals	.00	.96	.00	1.13	.00	.00
TOTAL AREA TYPES						
Freeway	.00	.00	.00	1.20	.00	.00
Divided Arterial	.00	.00	.00	.94	.00	.00
Undivd.Arterial	.00	1.03	.00	.00	.00	.00
Undivd.Arterial	.00	.89	.00	.93	.00	.00
Undivd.Arterial	.00	.39	.00	.00	.00	.00
Undivd.Arterial	.00	.85	.00	1.16	.00	.00
Collector Street	.00	.88	.00	.00	.00	.00
Collector Street	.00	1.35	.00	.00	.00	.00
Totals	.00	.90	.00	1.10	.00	.00

1 HIGHWAY EVALUATION -- YEAR/ALT (A97) -- REPORT: TOTAL VHT USING VOLUMES ON LINK

TOTAL LANES:	1	2	3	4	5	6
AREA TYPE: Central Business						
Totals	0	0	0	0	0	0
AREA TYPE: CBD Fringe						
Undivd.Arterial	0	723	0	220	0	0
Undivd.Arterial	0	71	0	0	0	0
Totals	0	795	0	220	0	0
AREA TYPE: Residential						
Divided Arterial	0	0	0	379	0	0
Undivd.Arterial	0	116	0	0	0	0
Undivd.Arterial	0	606	0	0	0	0
Undivd.Arterial	0	5	0	0	0	0
Undivd.Arterial	0	718	0	42	0	0
Collector Street	0	336	0	0	0	0
Totals	0	1781	0	421	0	0
AREA TYPE: Outlying Business						
Divided Arterial	0	0	0	777	0	0
Undivd.Arterial	0	109	0	299	0	0
Undivd.Arterial	0	45	0	0	0	0
Collector Street	0	29	0	0	0	0
Totals	0	183	0	1076	0	0
AREA TYPE: Rural Areas						
Freeway	0	0	0	5272	0	0
Divided Arterial	0	0	0	632	0	0
Undivd.Arterial	0	588	0	0	0	0
Undivd.Arterial	0	1989	0	776	0	0
Undivd.Arterial	0	20	0	0	0	0
Undivd.Arterial	0	153	0	0	0	0
Collector Street	0	720	0	0	0	0
Collector Street	0	91	0	0	0	0
Totals	0	3561	0	6680	0	0
TOTAL AREA TYPES						
Freeway	0	0	0	5272	0	0
Divided Arterial	0	0	0	1788	0	0
Undivd.Arterial	0	704	0	0	0	0
Undivd.Arterial	0	3428	0	1295	0	0
Undivd.Arterial	0	25	0	0	0	0
Undivd.Arterial	0	986	0	42	0	0
Collector Street	0	1086	0	0	0	0
Collector Street	0	91	0	0	0	0
Totals	0	6320	0	8397	0	0

ROADWAY EVALUATION -- YEAR/ALT (A97) -- REPORT: TOTAL VHT USING COUNTS ON LINKS

TOTAL LANES:	1	2	3	4	5	6
AREA TYPE: Central Business						
Totals	0	0	0	0	0	0
AREA TYPE: CBD Fringe						
Undivd.Arterial	0	713	0	200	0	0
Undivd.Arterial	0	69	0	0	0	0
Totals	0	781	0	200	0	0
AREA TYPE: Residential						
Divided Arterial	0	0	0	375	0	0
Undivd.Arterial	0	161	0	0	0	0
Undivd.Arterial	0	692	0	0	0	0
Undivd.Arterial	0	26	0	0	0	0
Undivd.Arterial	0	932	0	36	0	0
Collector Street	0	544	0	0	0	0
Totals	0	2354	0	412	0	0
AREA TYPE: Outlying Business						
Divided Arterial	0	0	0	885	0	0
Undivd.Arterial	0	126	0	292	0	0
Undivd.Arterial	0	42	0	0	0	0
Collector Street	0	29	0	0	0	0
Totals	0	197	0	1177	0	0
AREA TYPE: Rural Areas						
Freeway	0	0	0	4381	0	0
Divided Arterial	0	0	0	649	0	0
Undivd.Arterial	0	523	0	0	0	0
Undivd.Arterial	0	2236	0	893	0	0
Undivd.Arterial	0	40	0	0	0	0
Undivd.Arterial	0	108	0	0	0	0
Collector Street	0	681	0	0	0	0
Collector Street	0	67	0	0	0	0
Totals	0	3656	0	5923	0	0
TOTAL AREA TYPES						
Freeway	0	0	0	4381	0	0
Divided Arterial	0	0	0	1909	0	0
Undivd.Arterial	0	684	0	0	0	0
Undivd.Arterial	0	3766	0	1385	0	0
Undivd.Arterial	0	66	0	0	0	0
Undivd.Arterial	0	1151	0	36	0	0
Collector Street	0	1254	0	0	0	0
Collector Street	0	67	0	0	0	0
Totals	0	6989	0	7711	0	0

ROADWAY EVALUATION -- YEAR/ALT (A97) -- REPORT: TOTAL VOLUME ON ALL LINKS WITH

TOTAL LANES:	1	2	3	4	5	6
AREA TYPE: Central Business						
Totals	0	0	0	0	0	0
AREA TYPE: CBD Fringe						
Undivid.Arterial	0	106083	0	26931	0	0
Undivid.Arterial	0	19003	0	0	0	0
Totals	0	125086	0	26931	0	0
AREA TYPE: Residential						
Divided Arterial	0	0	0	31146	0	0
Undivid.Arterial	0	10298	0	0	0	0
Undivid.Arterial	0	146975	0	0	0	0
Undivid.Arterial	0	704	0	0	0	0
Undivid.Arterial	0	133992	0	14849	0	0
Collector Street	0	38934	0	0	0	0
Totals	0	330903	0	45995	0	0
AREA TYPE: Outlying Business						
Divided Arterial	0	0	0	84844	0	0
Undivid.Arterial	0	21662	0	25023	0	0
Undivid.Arterial	0	4538	0	0	0	0
Collector Street	0	1134	0	0	0	0
Totals	0	27335	0	109867	0	0
AREA TYPE: Rural Areas						
Freeway	0	0	0	122778	0	0
Divided Arterial	0	0	0	32606	0	0
Undivid.Arterial	0	36348	0	0	0	0
Undivid.Arterial	0	165439	0	84455	0	0
Undivid.Arterial	0	2030	0	0	0	0
Undivid.Arterial	0	19613	0	0	0	0
Collector Street	0	50133	0	0	0	0
Collector Street	0	3245	0	0	0	0
Totals	0	276808	0	239839	0	0
TOTAL AREA TYPES						
Freeway	0	0	0	122778	0	0
Divided Arterial	0	0	0	148596	0	0
Undivid.Arterial	0	46646	0	0	0	0
Undivid.Arterial	0	440159	0	136409	0	0
Undivid.Arterial	0	2734	0	0	0	0
Undivid.Arterial	0	177146	0	14849	0	0
Collector Street	0	90201	0	0	0	0
Collector Street	0	3245	0	0	0	0
Totals	0	760131	0	422632	0	0

1. HIGHWAY EVALUATION -- YEAR/ALT (A97) -- REPORT: TOTAL COUNT VOLUME

TOTAL LANES:	1	2	3	4	5	6
				AREA TYPE: Central Business		
Totals	0	0	0	0	0	0
				AREA TYPE: CBD Fringe		
Undivd.Arterial	0	104658	0	24468	0	0
Undivd.Arterial	0	18334	0	0	0	0
Totals	0	122992	0	24468	0	0
				AREA TYPE: Residential		
Divided Arterial	0	0	0	30852	0	0
Undivd.Arterial	0	15216	0	0	0	0
Undivd.Arterial	0	158398	0	0	0	0
Undivd.Arterial	0	3524	0	0	0	0
Undivd.Arterial	0	168856	0	12768	0	0
Collector Street	0	57422	0	0	0	0
Totals	0	403416	0	43620	0	0
				AREA TYPE: Outlying Business		
Divided Arterial	0	0	0	90424	0	0
Undivd.Arterial	0	21348	0	24468	0	0
Undivd.Arterial	0	4376	0	0	0	0
Collector Street	0	1034	0	0	0	0
Totals	0	26758	0	114892	0	0
				AREA TYPE: Rural Areas		
Freeway	0	0	0	102980	0	0
Divided Arterial	0	0	0	34362	0	0
Undivd.Arterial	0	32270	0	0	0	0
Undivd.Arterial	0	183114	0	110532	0	0
Undivd.Arterial	0	3998	0	0	0	0
Undivd.Arterial	0	14120	0	0	0	0
Collector Street	0	46980	0	0	0	0
Collector Street	0	2408	0	0	0	0
Totals	0	282890	0	247874	0	0
				TOTAL AREA TYPES		
Freeway	0	0	0	102980	0	0
Divided Arterial	0	0	0	155638	0	0
Undivd.Arterial	0	47486	0	0	0	0
Undivd.Arterial	0	467518	0	159468	0	0
Undivd.Arterial	0	7522	0	0	0	0
Undivd.Arterial	0	205686	0	12768	0	0
Collector Street	0	105436	0	0	0	0
Collector Street	0	2408	0	0	0	0
Totals	0	836056	0	430854	0	0

1. HIGHWAY EVALUATION -- YEAR/ALT (A97) -- REPORT: RATIO OF VOLUME OVER COUNT VOLU

TOTAL LANES:	1	2	3	4	5	6
AREA TYPE: Central Business						
Totals	.00	.00	.00	.00	.00	.00
AREA TYPE: CBD Fringe						
Undivid.Arterial	.00	1.01	.00	1.10	.00	.00
Undivid.Arterial	.00	1.04	.00	.00	.00	.00
Totals	.00	1.02	.00	1.10	.00	.00
AREA TYPE: Residential						
Divided Arterial	.00	.00	.00	1.01	.00	.00
Undivid.Arterial	.00	.68	.00	.00	.00	.00
Undivid.Arterial	.00	.93	.00	.00	.00	.00
Undivid.Arterial	.00	.20	.00	.00	.00	.00
Undivid.Arterial	.00	.79	.00	1.16	.00	.00
Collector Street	.00	.68	.00	.00	.00	.00
Totals	.00	.82	.00	1.05	.00	.00
AREA TYPE: Outlying Business						
Divided Arterial	.00	.00	.00	.94	.00	.00
Undivid.Arterial	.00	1.01	.00	1.02	.00	.00
Undivid.Arterial	.00	1.04	.00	.00	.00	.00
Collector Street	.00	1.10	.00	.00	.00	.00
Totals	.00	1.02	.00	.96	.00	.00
AREA TYPE: Rural Areas						
Freeway	.00	.00	.00	1.19	.00	.00
Divided Arterial	.00	.00	.00	.95	.00	.00
Undivid.Arterial	.00	1.13	.00	.00	.00	.00
Undivid.Arterial	.00	.90	.00	.76	.00	.00
Undivid.Arterial	.00	.51	.00	.00	.00	.00
Undivid.Arterial	.00	1.39	.00	.00	.00	.00
Collector Street	.00	1.07	.00	.00	.00	.00
Collector Street	.00	1.35	.00	.00	.00	.00
Totals	.00	.98	.00	.97	.00	.00
TOTAL AREA TYPES						
Freeway	.00	.00	.00	1.19	.00	.00
Divided Arterial	.00	.00	.00	.95	.00	.00
Undivid.Arterial	.00	.98	.00	.00	.00	.00
Undivid.Arterial	.00	.94	.00	.86	.00	.00
Undivid.Arterial	.00	.36	.00	.00	.00	.00
Undivid.Arterial	.00	.86	.00	1.16	.00	.00
Collector Street	.00	.86	.00	.00	.00	.00
Collector Street	.00	1.35	.00	.00	.00	.00
Totals	.00	.91	.00	.98	.00	.00

SHWAY EVALUATION -- YEAR/ALT (A97) -- REPORT: TOTAL VOLUME ON ALL LINKS

TOTAL LANES:	1	2	3	4	5	6
AREA TYPE: Central Business						
Totals	0	0	0	0	0	0
AREA TYPE: CBD Fringe						
Divided Arterial	0	0	0	31898	0	0
Undivid.Arterial	0	283178	0	82822	0	0
Undivid.Arterial	0	19003	0	0	0	0
Totals	0	302181	0	114720	0	0
AREA TYPE: Residential						
Divided Arterial	0	0	0	62623	0	0
Undivid.Arterial	0	13232	0	0	0	0
Undivid.Arterial	0	462171	0	0	0	0
Undivid.Arterial	0	1402	0	0	0	0
Undivid.Arterial	0	237910	0	53909	0	0
Collector Street	0	317990	0	0	0	0
Totals	0	1032705	0	116532	0	0
AREA TYPE: Outlying Business						
Divided Arterial	0	0	0	325749	0	0
Undivid.Arterial	0	41057	0	96663	0	0
Undivid.Arterial	0	4538	0	0	0	0
Collector Street	0	1134	0	0	0	0
Totals	0	46730	0	422412	0	0
AREA TYPE: Rural Areas						
Freeway	0	0	0	179923	0	0
Divided Arterial	0	0	0	162158	0	0
Undivid.Arterial	0	130699	0	0	0	0
Undivid.Arterial	0	413012	0	241889	0	0
Undivid.Arterial	0	17652	0	0	0	0
Undivid.Arterial	0	32307	0	0	0	0
Collector Street	0	126169	0	0	0	0
Collector Street	0	3245	0	0	0	0
Totals	0	723084	0	583970	0	0
TOTAL AREA TYPES						
Freeway	0	0	0	179923	0	0
Divided Arterial	0	0	0	582429	0	0
Undivid.Arterial	0	143930	0	0	0	0
Undivid.Arterial	0	1199418	0	421374	0	0
Undivid.Arterial	0	19054	0	0	0	0
Undivid.Arterial	0	293759	0	53909	0	0
Collector Street	0	445293	0	0	0	0
Collector Street	0	3245	0	0	0	0
Totals	0	2104700	0	1237634	0	0

ROADWAY EVALUATION -- YEAR/ALT (A97) -- REPORT: VOLUME PERCENTAGES ON ALL LINKS

TOTAL LANES:	1	2	3	4	5	6
				AREA TYPE: Central Business		
Totals	.00	.00	.00	.00	.00	.00
				AREA TYPE: CBD Fringe		
Divided Arterial	.00	.00	.00	.95	.00	.00
Undivided Arterial	.00	8.47	.00	2.48	.00	.00
Undivided Arterial	.00	.57	.00	.00	.00	.00
Totals	.00	9.04	.00	3.43	.00	.00
				AREA TYPE: Residential		
Divided Arterial	.00	.00	.00	1.87	.00	.00
Undivided Arterial	.00	.40	.00	.00	.00	.00
Undivided Arterial	.00	13.83	.00	.00	.00	.00
Undivided Arterial	.00	.04	.00	.00	.00	.00
Undivided Arterial	.00	7.12	.00	1.61	.00	.00
Collector Street	.00	9.51	.00	.00	.00	.00
Totals	.00	30.90	.00	3.49	.00	.00
				AREA TYPE: Outlying Business		
Divided Arterial	.00	.00	.00	9.75	.00	.00
Undivided Arterial	.00	1.23	.00	2.89	.00	.00
Undivided Arterial	.00	.14	.00	.00	.00	.00
Collector Street	.00	.03	.00	.00	.00	.00
Totals	.00	1.40	.00	12.64	.00	.00
				AREA TYPE: Rural Areas		
Freeway	.00	.00	.00	5.38	.00	.00
Divided Arterial	.00	.00	.00	4.85	.00	.00
Undivided Arterial	.00	3.91	.00	.00	.00	.00
Undivided Arterial	.00	12.36	.00	7.24	.00	.00
Undivided Arterial	.00	.53	.00	.00	.00	.00
Undivided Arterial	.00	.97	.00	.00	.00	.00
Collector Street	.00	3.77	.00	.00	.00	.00
Collector Street	.00	.10	.00	.00	.00	.00
Totals	.00	21.63	.00	17.47	.00	.00
				TOTAL AREA TYPES		
Freeway	.00	.00	.00	5.38	.00	.00
Divided Arterial	.00	.00	.00	17.43	.00	.00
Undivided Arterial	.00	4.31	.00	.00	.00	.00
Undivided Arterial	.00	35.89	.00	12.61	.00	.00
Undivided Arterial	.00	.57	.00	.00	.00	.00
Undivided Arterial	.00	8.79	.00	1.61	.00	.00
Collector Street	.00	13.32	.00	.00	.00	.00
Collector Street	.00	.10	.00	.00	.00	.00
Totals	.00	62.97	.00	37.03	.00	.00

ROADWAY EVALUATION -- YEAR/ALT (A97) -- REPORT: TOTAL VMT FOR ALL LINKS USING V

TOTAL LANES:	1	2	3	4	5	6
AREA TYPE: Central Business						
Totals	0	0	0	0	0	0
AREA TYPE: CBD Fringe						
Divided Arterial	0	0	0	4466	0	0
Undivd.Arterial	0	39991	0	21880	0	0
Undivd.Arterial	0	2280	0	0	0	0
Totals	0	42271	0	26346	0	0
AREA TYPE: Residential						
Divided Arterial	0	0	0	18452	0	0
Undivd.Arterial	0	3842	0	0	0	0
Undivd.Arterial	0	71619	0	0	0	0
Undivd.Arterial	0	291	0	0	0	0
Undivd.Arterial	0	44137	0	6293	0	0
Collector Street	0	54771	0	0	0	0
Totals	0	174661	0	24745	0	0
AREA TYPE: Outlying Business						
Divided Arterial	0	0	0	110535	0	0
Undivd.Arterial	0	6976	0	18397	0	0
Undivd.Arterial	0	1563	0	0	0	0
Collector Street	0	869	0	0	0	0
Totals	0	9408	0	128932	0	0
AREA TYPE: Rural Areas						
Freeway	0	0	0	285518	0	0
Divided Arterial	0	0	0	103140	0	0
Undivd.Arterial	0	62801	0	0	0	0
Undivd.Arterial	0	168664	0	61568	0	0
Undivd.Arterial	0	6606	0	0	0	0
Undivd.Arterial	0	8780	0	0	0	0
Collector Street	0	54620	0	0	0	0
Collector Street	0	2726	0	0	0	0
Totals	0	304198	0	450226	0	0
TOTAL AREA TYPES						
Freeway	0	0	0	285518	0	0
Divided Arterial	0	0	0	236593	0	0
Undivd.Arterial	0	66644	0	0	0	0
Undivd.Arterial	0	287250	0	101845	0	0
Undivd.Arterial	0	6897	0	0	0	0
Undivd.Arterial	0	56760	0	6293	0	0
Collector Street	0	110260	0	0	0	0
Collector Street	0	2726	0	0	0	0
Totals	0	530538	0	630249	0	0

ROADWAY EVALUATION -- YEAR/ALT (A97) -- REPORT: TOTAL VHT FOR ALL LINKS USING V

TOTAL LANES:	1	2	3	4	5	6
Totals	0	0	0	0	0	0
AREA TYPE: Central Business						
Divided Arterial	0	0	0	152	0	0
Undivid.Arterial	0	1895	0	665	0	0
Undivid.Arterial	0	71	0	0	0	0
Totals	0	1967	0	817	0	0
AREA TYPE: CBD Fringe						
Divided Arterial	0	0	0	621	0	0
Undivid.Arterial	0	128	0	0	0	0
Undivid.Arterial	0	1830	0	0	0	0
Undivid.Arterial	0	10	0	0	0	0
Undivid.Arterial	0	1301	0	182	0	0
Collector Street	0	1839	0	0	0	0
Totals	0	5110	0	803	0	0
AREA TYPE: Residential						
Divided Arterial	0	0	0	3963	0	0
Undivid.Arterial	0	175	0	508	0	0
Undivid.Arterial	0	45	0	0	0	0
Collector Street	0	29	0	0	0	0
Totals	0	249	0	4471	0	0
AREA TYPE: Outlying Business						
Freeway	0	0	0	6311	0	0
Divided Arterial	0	0	0	2411	0	0
Undivid.Arterial	0	1828	0	0	0	0
Undivid.Arterial	0	4601	0	1540	0	0
Undivid.Arterial	0	236	0	0	0	0
Undivid.Arterial	0	251	0	0	0	0
Collector Street	0	1571	0	0	0	0
Collector Street	0	91	0	0	0	0
Totals	0	8577	0	10262	0	0
AREA TYPE: Rural Areas						
TOTAL AREA TYPES						
Freeway	0	0	0	6311	0	0
Divided Arterial	0	0	0	7146	0	0
Undivid.Arterial	0	1956	0	0	0	0
Undivid.Arterial	0	8501	0	2714	0	0
Undivid.Arterial	0	247	0	0	0	0
Undivid.Arterial	0	1668	0	182	0	0
Collector Street	0	3439	0	0	0	0
Collector Street	0	91	0	0	0	0
Totals	0	15901	0	16352	0	0

FLORIDA D.O.T.
 FSUTMS
 VER 5.20

VCUATS
 Deland Subarea Validation

DELAND SUBAREA VALIDATION

ROADWAY EVALUATION -- YEAR/ALT (A97) -- REPORT: ORIGINAL SPEEDS (MPH)

TOTAL LANES:	1	2	3	4	5	6
Totals	.00	.00	.00	.00	.00	.00
AREA TYPE: Central Business						
Divided Arterial	.00	.00	.00	35.00	.00	.00
Undivid.Arterial	.00	42.12	.00	41.95	.00	.00
Undivid.Arterial	.00	34.29	.00	.00	.00	.00
Totals	.00	41.16	.00	40.73	.00	.00
AREA TYPE: CBD Fringe						
Divided Arterial	.00	.00	.00	35.05	.00	.00
Undivid.Arterial	.00	30.00	.00	.00	.00	.00
Undivid.Arterial	.00	41.97	.00	.00	.00	.00
Undivid.Arterial	.00	27.98	.00	.00	.00	.00
Undivid.Arterial	.00	35.00	.00	34.81	.00	.00
Collector Street	.00	30.00	.00	.00	.00	.00
Totals	.00	32.24	.00	34.95	.00	.00
AREA TYPE: Residential						
Divided Arterial	.00	.00	.00	42.07	.00	.00
Undivid.Arterial	.00	41.74	.00	42.06	.00	.00
Undivid.Arterial	.00	35.03	.00	.00	.00	.00
Collector Street	.00	30.00	.00	.00	.00	.00
Totals	.00	34.52	.00	42.07	.00	.00
AREA TYPE: Outlying Business						
Freeway	.00	.00	.00	49.96	.00	.00
Divided Arterial	.00	.00	.00	45.00	.00	.00
Undivid.Arterial	.00	39.84	.00	.00	.00	.00
Undivid.Arterial	.00	41.98	.00	41.94	.00	.00
Undivid.Arterial	.00	27.96	.00	.00	.00	.00
Undivid.Arterial	.00	35.03	.00	.00	.00	.00
Collector Street	.00	34.98	.00	.00	.00	.00
Collector Street	.00	30.00	.00	.00	.00	.00
Totals	.00	36.63	.00	45.59	.00	.00
AREA TYPE: Rural Areas						
Freeway	.00	.00	.00	49.96	.00	.00
Divided Arterial	.00	.00	.00	43.10	.00	.00
Undivid.Arterial	.00	38.37	.00	.00	.00	.00
Undivid.Arterial	.00	41.98	.00	41.96	.00	.00
Undivid.Arterial	.00	27.97	.00	.00	.00	.00
Undivid.Arterial	.00	34.99	.00	34.81	.00	.00
Collector Street	.00	32.44	.00	.00	.00	.00
Collector Street	.00	30.00	.00	.00	.00	.00
Totals	.00	34.72	.00	43.92	.00	.00
TOTAL AREA TYPES						
Freeway	.00	.00	.00	49.96	.00	.00
Divided Arterial	.00	.00	.00	43.10	.00	.00
Undivid.Arterial	.00	38.37	.00	.00	.00	.00
Undivid.Arterial	.00	41.98	.00	41.96	.00	.00
Undivid.Arterial	.00	27.97	.00	.00	.00	.00
Undivid.Arterial	.00	34.99	.00	34.81	.00	.00
Collector Street	.00	32.44	.00	.00	.00	.00
Collector Street	.00	30.00	.00	.00	.00	.00
Totals	.00	34.72	.00	43.92	.00	.00

ROADWAY EVALUATION -- YEAR/ALT (A97) -- REPORT: PERCENT CHANGE IN SPEEDS

TOTAL LANES:	1	2	3	4	5	6
Totals	.00	.00	.00	.00	.00	.00
AREA TYPE: Central Business						
Divided Arterial	.00	.00	.00	-15.79	.00	.00
Undivid.Arterial	.00	-48.77	.00	-20.98	.00	.00
Undivid.Arterial	.00	-6.67	.00	.00	.00	.00
Totals	.00	-45.78	.00	-20.12	.00	.00
AREA TYPE: CBD Fringe						
Divided Arterial	.00	.00	.00	-15.13	.00	.00
Undivid.Arterial	.00	-5.35	.00	.00	.00	.00
Undivid.Arterial	.00	-1.29	.00	-.61	.00	.00
Collector Street	.00	-.15	.00	.00	.00	.00
Totals	.00	-.98	.00	-9.23	.00	.00
AREA TYPE: Residential						
Divided Arterial	.00	.00	.00	-26.89	.00	.00
Undivid.Arterial	.00	-2.39	.00	-13.71	.00	.00
Totals	.00	-.67	.00	-24.84	.00	.00
AREA TYPE: Outlying Business						
Freeway	.00	.00	.00	-9.28	.00	.00
Divided Arterial	.00	.00	.00	-4.27	.00	.00
Undivid.Arterial	.00	-6.94	.00	.00	.00	.00
Undivid.Arterial	.00	-9.79	.00	-3.71	.00	.00
Collector Street	.00	-.15	.00	.00	.00	.00
Totals	.00	-3.22	.00	-5.65	.00	.00
AREA TYPE: Rural Areas						
Freeway	.00	.00	.00	-9.28	.00	.00
Divided Arterial	.00	.00	.00	-14.47	.00	.00
Undivid.Arterial	.00	-5.96	.00	.00	.00	.00
Undivid.Arterial	.00	-13.05	.00	-8.16	.00	.00
Undivid.Arterial	.00	-1.09	.00	-.61	.00	.00
Collector Street	.00	-.15	.00	.00	.00	.00
Totals	.00	-3.30	.00	-11.46	.00	.00
TOTAL AREA TYPES						
Freeway	.00	.00	.00	-9.28	.00	.00
Divided Arterial	.00	.00	.00	-14.47	.00	.00
Undivid.Arterial	.00	-5.96	.00	.00	.00	.00
Undivid.Arterial	.00	-13.05	.00	-8.16	.00	.00
Undivid.Arterial	.00	-1.09	.00	-.61	.00	.00
Collector Street	.00	-.15	.00	.00	.00	.00
Totals	.00	-3.30	.00	-11.46	.00	.00

FLORIDA D.O.T.
 FSUTMS
 VER 5.20

VCUATS DELAND SUBAREA VALIDATION
 Deland Subarea Validation

HIGHWAY EVALUATION -- YEAR/ALT (A97) -- SCREENLINE SUMMARIES

SCREENLINE NUMBER	ANODE	BNODE	TOTAL VOLUME	TOTAL COUNT	VOLUME OVER COUNT RATIO	F T	A T
10	1459	3860	10303.	9394.	1.10	6	3
10	3580	4016	2418.	3042.	.79	7	5
10	3822	4008	4249.	5334.	.80	7	5
10	3856	4000	26931.	24468.	1.10	4	2
10	3878	3986	351.	1858.	.19	5	3
10	3900	3974	3245.	2408.	1.35	8	5
10	3960	3962	14088.	14214.	.99	4	5
10	4013	4014	526.	632.	.83	7	4
10	TOTALS		62111.	61350.	1.01		
11	1495	3896	5718.	5360.	1.07	6	3
11	1499	3876	979.	1626.	.60	7	3
11	1529	3852	17439.	18086.	.96	4	2
11	1531	3864	9736.	13644.	.71	6	3
11	1615	3584	1505.	1442.	1.04	6	4
11	3576	3580	608.	1786.	.34	7	5
11	3904	3956	14069.	13422.	1.05	4	5
11	TOTALS		50055.	55366.	.90		
12	3498	3500	5041.	2720.	1.85	3	5
12	3572	3588	10844.	12660.	.86	4	3
12	3606	3608	6790.	5852.	1.16	4	5
12	3818	4013	2911.	4008.	.73	4	4
12	4030	4038	3865.	4106.	.94	7	3
12	4032	4034	1273.	1164.	1.09	7	5
12	TOTALS		30724.	30510.	1.01		
13	1589	3510	4072.	5222.	.78	7	3
13	3494	3496	7009.	8884.	.79	4	3
13	3688	3690	3130.	4076.	.77	4	3
13	3698	3714	2133.	3390.	.63	6	3
13	3712	3722	10475.	12872.	.81	4	3
13	3890	3894	1622.	2708.	.60	6	3
13	3898	3900	3245.	2330.	1.39	6	5
13	TOTALS		31688.	39482.	.80		

HIGHWAY EVALUATION -- YEAR/ALT (A97) -- SCREENLINE SUMMARIES

SCREENLINE NUMBER	ANODE	BNODE	TOTAL VOLUME	TOTAL COUNT	VOLUME OVER COUNT RATIO	F T	A T
14	1351	3762	19941.	17660.	1.13	4	2
14	1557	3809	16298.	25532.	.64	4	5
14	3568	3574	1080.	2248.	.48	7	5
14	3572	3584	1695.	1492.	1.14	6	4
14	TOTALS		39015.	46932.	.83		
15	1451	1475	12525.	9612.	1.30	3	5
15	1467	1603	3956.	2768.	1.43	6	5
15	3500	3506	4931.	2208.	2.23	7	5
15	3502	3504	110.	336.	.33	7	5
15	3508	3514	38065.	44680.	.85	2	4
15	TOTALS		59587.	59604.	1.00		
99	1205	3546	10012.	10000.	1.00	4	5
99	1339	4098	620.	2124.	.29	3	5
99	1355	3760	14849.	12768.	1.16	6	3
99	1450	3512	4149.	2768.	1.50	6	5
99	1451	1617	3572.	8424.	.42	4	5
99	1463	3818	9212.	8192.	1.12	4	4
99	1467	3490	3956.	2768.	1.43	6	5
99	1478	3796	1082.	682.	1.59	7	3
99	1481	3782	1664.	1210.	1.38	7	3
99	1483	3780	1744.	4492.	.39	7	3
99	1485	3762	1624.	1938.	.84	7	3
99	1487	3730	1936.	902.	2.15	7	3
99	1491	3820	9539.	9148.	1.04	4	4
99	1499	3878	979.	1626.	.60	7	3
99	1501	3860	9736.	11510.	.85	6	3
99	1519	3990	23389.	22872.	1.02	2	4
99	1519	3992	23389.	22872.	1.02	2	4
99	1529	3854	17439.	18086.	.96	4	2
99	1531	3866	9736.	13644.	.71	6	3
99	1551	3760	13176.	13858.	.95	6	3
99	1551	3866	13145.	13858.	.95	6	3
99	1557	3808	16253.	25532.	.64	4	5
99	1563	3894	5858.	6426.	.91	6	3
99	1563	3896	5858.	6426.	.91	6	3
99	1569	3664	13158.	11464.	1.15	4	3
99	1569	3666	11490.	11464.	1.00	4	3
99	1571	3666	11434.	9958.	1.15	4	3
99	1571	3676	11434.	9958.	1.15	4	3
99	1577	3676	6057.	5940.	1.02	4	3
99	1577	3678	4626.	5940.	.78	4	3
99	1579	3690	1012.	1706.	.59	3	3
99	1579	3694	1012.	1706.	.59	3	3
99	1589	1593	2819.	5222.	.54	7	3

FLORIDA D.O.T.
 FSUTMS
 VER 5.20

VCUATS DELAND SUBAREA VALIDATION
 Deland Subarea Validation

ROADWAY EVALUATION -- YEAR/ALT (A97) -- SCREENLINE SUMMARIES

SCREENLINE NUMBER	ANODE	BNODE	TOTAL VOLUME	TOTAL COUNT	VOLUME OVER COUNT RATIO	F T	A T
99	1593	3514	3460.	5222.	.66	7	3
99	1595	3512	4306.	3486.	1.24	6	5
99	1609	3902	1670.	3630.	.46	6	3
99	1615	4013	1339.	1442.	.93	6	4
99	1617	3490	4549.	8424.	.54	4	5
99	1619	3992	5567.	10428.	.53	6	3
99	3430	3432	13089.	16276.	.80	2	5
99	3438	3488	65634.	51490.	1.27	1	5
99	3440	3442	5013.	2292.	2.19	7	5
99	3456	3458	5119.	2436.	2.10	7	5
99	3460	3462	1373.	4756.	.29	7	3
99	3480	3488	5340.	6892.	.77	3	3
99	3486	3487	2945.	4338.	.68	7	5
99	3488	3949	57145.	51490.	1.11	1	5
99	3490	3492	4349.	7410.	.59	4	5
99	3496	3498	6638.	7480.	.89	3	5
99	3506	3536	5108.	2264.	2.26	7	5
99	3514	3518	31146.	30852.	1.01	2	3
99	3516	3530	11101.	17766.	.62	4	5
99	3554	3568	10610.	10426.	1.02	4	5
99	3562	3604	4536.	3510.	1.29	4	5
99	3566	3572	2030.	3998.	.51	5	5
99	3580	4018	1930.	1702.	1.13	4	5
99	3604	3606	6188.	3806.	1.63	4	5
99	3610	3622	4728.	6076.	.78	4	3
99	3660	3664	20425.	20212.	1.01	4	2
99	3696	3698	1584.	2122.	.75	3	3
99	3698	3700	1350.	2790.	.48	3	3
99	3698	3918	1697.	3482.	.49	6	3
99	3702	3916	11280.	11700.	.96	4	3
99	3708	3894	4199.	4128.	1.02	6	3
99	3710	3726	1424.	1152.	1.24	7	3
99	3734	3736	1514.	2386.	.63	7	3
99	3748	3752	3615.	4808.	.75	6	3
99	3752	3770	1421.	5720.	.25	6	3
99	3766	3768	20050.	18618.	1.08	4	2
99	3766	3776	11302.	11596.	.97	4	3
99	3770	3772	1294.	5106.	.25	6	3
99	3792	3794	10800.	13618.	.79	4	3
99	3806	3808	14445.	20744.	.70	4	5
99	3808	3810	9901.	13404.	.74	4	3
99	3822	3838	9306.	8788.	1.06	4	3
99	3844	3856	10788.	11996.	.90	4	2
99	3856	3858	10435.	9188.	1.14	6	2
99	3858	3860	8568.	9146.	.94	6	2
99	3860	3862	4784.	6456.	.74	6	3
99	3862	3878	4608.	6278.	.73	6	3
99	3878	3880	4184.	5478.	.76	6	3
99	3892	3898	3312.	3780.	.88	6	3
99	3894	3902	2812.	4552.	.62	6	3

FLORIDA D.O.T.
 FSUTMS
 VER 5.20

VCUATS DELAND SUBAREA VALIDATION
 Deland Subarea Validation

HIGHWAY EVALUATION -- YEAR/ALT (A97) -- SCREENLINE SUMMARIES

SCREENLINE NUMBER	ANODE	BNODE	TOTAL VOLUME	TOTAL COUNT	VOLUME OVER COUNT RATIO	F T	A T
99	3904	3906	14084.	14336.	.98	4	5
99	3906	3908	14084.	13822.	1.02	4	5
99	3908	3910	12396.	12766.	.97	4	5
99	3914	3920	3572.	1866.	1.91	6	3
99	3922	3924	3312.	3926.	.84	7	3
99	3926	3928	4235.	2926.	1.45	6	3
99	3938	3940	3247.	5170.	.63	7	5
99	3942	3944	13542.	12234.	1.11	4	5
99	3968	3970	3654.	2540.	1.44	7	5
99	3978	3980	353.	1666.	.21	5	3
99	3992	4056	25023.	24468.	1.02	4	4
99	4014	4026	608.	402.	1.51	7	4
99	4016	4020	1277.	2944.	.43	7	5
99	4020	4022	1140.	2582.	.44	7	5
99	4020	4084	894.	4334.	.21	7	3
99	4022	4024	847.	288.	2.94	7	5
99	4034	4038	11786.	13830.	.85	4	5
99	4034	4042	1339.	954.	1.40	7	3
99	4038	4040	1214.	2094.	.58	7	3
99	4040	4060	1792.	2140.	.84	7	3
99	4044	4046	1244.	618.	2.01	7	5
99	4052	4054	641.	1186.	.54	7	3
99	4054	4058	23127.	22872.	1.01	4	5
99	4058	4076	7005.	5958.	1.18	3	5
99	4060	4078	14333.	15852.	.90	4	5
99	4062	4064	924.	2058.	.45	7	5
99	4066	4068	924.	1362.	.68	7	5
99	4080	4082	7751.	11170.	.69	4	5
99	4080	4092	19517.	18086.	1.08	2	5
99	4080	4094	4518.	4376.	1.03	3	5
99	4102	4104	729.	640.	1.14	7	5
99	4110	4112	2869.	658.	4.36	7	5
99	4116	4122	425.	672.	.63	7	5
99	TOTALS		909584.	973666.	.93		

```

****      *****      ***      *****      *****      *****      *****      *****      *****      *****
*          *          *   *          *          *          *          *          *          *
***      *          *****      *          *          ***      *          *          *          ***
  *      *          *   *          *          *          *          *          *          *          *
**      *          *   *          *          *****      *****      *          *****      *****      *****

```

TOTAL NUMBER OF LINKS	542	
TOTAL SYSTEM MILES	157.21	
TOTAL LANE MILES	355.72	
TOTAL DIRECTIONAL MILES	314.42	
TOTAL VMT USING VOLUMES	565239	(LINKS WITH COUNTS)
TOTAL VMT USING COUNTS	557652	(LINKS WITH COUNTS)
TOTAL VMT V/C	1.01	(LINKS WITH COUNTS)
TOTAL VHT USING VOLUMES	14718	(LINKS WITH COUNTS)
TOTAL VHT USING COUNTS	14700	(LINKS WITH COUNTS)
TOTAL VHT V/C	1.00	(LINKS WITH COUNTS)
TOTAL VOLUMES ALL LINKS	3342334	
AVERAGE TOTAL VOLUME	6166.67	
TOTAL VMT ALL LINKS	1160787	
TOTAL VHT ALL LINKS	32254	
TOTAL ORIGINAL SPEED (MPH)	35.70	
TOTAL CONGESTED SPEED (MPH)	34.18	

DeLand Sub-Area Model Validation

Technical Report No. 2

Prepared For:

City of DeLand, Florida

In Cooperation with the Volusia County MPO and Volusia County

Prepared By:

Ghyabi Lassiter & Associates, Inc

January, 1999

Table of Contents

INTRODUCTION	1
STUDY AREA.....	1
2003 E+C NETWORK DEVELOPMENT.....	1
SOCIO-ECONOMIC (SE) DATA.....	2
FUTURE YEAR LEVEL OF SERVICE ANALYSIS.....	3
CONCLUSION	5

List of Tables

TABLE 1: PLANNED IMPROVEMENTS.....	1
TABLE 2: STUDY AREA HOUSING AND POPULATION DATA	2
TABLE 3: STUDY AREA EMPLOYMENT DATA.....	2

List of Figures

FIGURE 1.....	4
---------------	---

Technical Report No. 2

Introduction

Technical Report No. 2 documents the future traffic conditions on the roadways within the DeLand Study Area. The level of service analysis of the future condition was based on the model assignment of the 2003, 2010, 2020 trip tables to the 2003 roadway network.

Study Area

The study area for the future condition remains the same as for the base year model validation. It includes the greater DeLand area from the St. Johns River on the west to I-4 on the east, including Prevatt Avenue in Lake Helen. The northern and southern study area boundaries are the intersections of SR15A/SR11 and SR472/US17/92 respectively. The DeLand Study Area remains a part of the overall Volusia County Transportation Model. The results from the DeLand model will be effected by changes made outside of the study area.

2003 E+C Network Development

The 2003 future year model network was updated to incorporate the changes made to the 1997 base year model and all planned improvements in the FDOT, Volusia County, and DeLand five year road programs through fiscal year 2002/2003. Table 1 presents the facilities added to the 1997 network.

Table 1: Planned Improvements

Roadway	Limits	Description
SR 15A	Plymouth Ave to Greens Dairy Rd	Widen to 4 lane
SR 44	Summit Ave to I-4	Widen to 4 lane
SR 44	Pioneer Trail to SR 415	Widen to 4 lane
I-4 Frontage Rd	SR 472 to Orange Camp Rd	New 2 lane
Veteran Memorial Parkway	Saxon Blvd to Graves Ave	New 2 lane
Beresford Ave	Blue Lake to Kepler	New 2 lane
Prevatt Ave	Kicklighter Rd to SR 44	New 2 lane
Blue Lake Ave Extension	Minnesota Ave to Plymouth Ave	New 2 lane
Fatio Rd	Beresford Ave to SR 44	New 2 lane
SR 427 (Howland Ext)	I-4 to Howland Blvd	New 2 lane

Socio-Economic (SE) data

Ghyabi Lassiter & Associates, Inc. compared the actual 1997 housing and population with the 2010 and 2020 S/E data projections. The 1997 population and housing data came from the Volusia County Property Appraiser's records. Our review indicated that some areas of Volusia County experienced growth between 1990 and 1997 that exceeded the projections made in 1990. We then applied the annual growth rate, assumed by the MPO in 1990, to the 1997 base year data. The City of DeLand purchased the 1997 employment data from Dun & Bradstreet. The 2003 data set includes the trip generation for a potential new Wal-Mart located north and east of the existing Wal-Mart site on North Woodland Boulevard. The special generator trips for the existing Wal-Mart were relocated from TAZ 598 to the planned location, added as new trips to TAZ 669. However, the employment data purchased from Dun & Bradstreet was not adjusted. This will account for some reasonable amount of redevelopment of the existing Wal-Mart site in the 2003 period. TAZ 669 is a new zone created within TAZ 512 for the proposed Berman Property with 20,945 person trips coded in ZDATA3. The vehicle trip projection from the proposed Wal-Mart and additional out-parcel is 13,910 daily trips. To track the new Justice Center trips a new TAZ (568) was created within zone 597 and 13,060 person trips were coded in the special generator file ZDATA3. In addition, the S/E data for the Victoria Park Development of Regional Impact, for each development phase as provided by the City of DeLand staff, were included to the 2003, 2010, and 2020 S/E data. Table 2 presents a summary of the ZDATA1 data (housing and population) in the study area for each of the future analysis years.

Table 2: Study Area Housing and Population Data

Year	Single Family		Multi-family		Hotel/Motel Rooms	School Enrollment
	Units	Population	Units	Population		
1997	15,022	36,262	6,760	13,670	490	
2003	18,302	44,294	7,621	15,363	490	12,386
2010	21,294	51,569	8,524	17,119	595	13,432
2020	24,692	59,765	9,554	18,277	760	16,330

Table 3 shows the projected employment data in the study area. The average annual growth between 1997 and 2020 is 2.39 percent.

Table 3: Study Area Employment Data

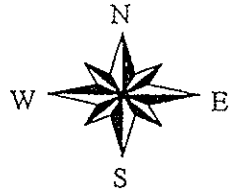
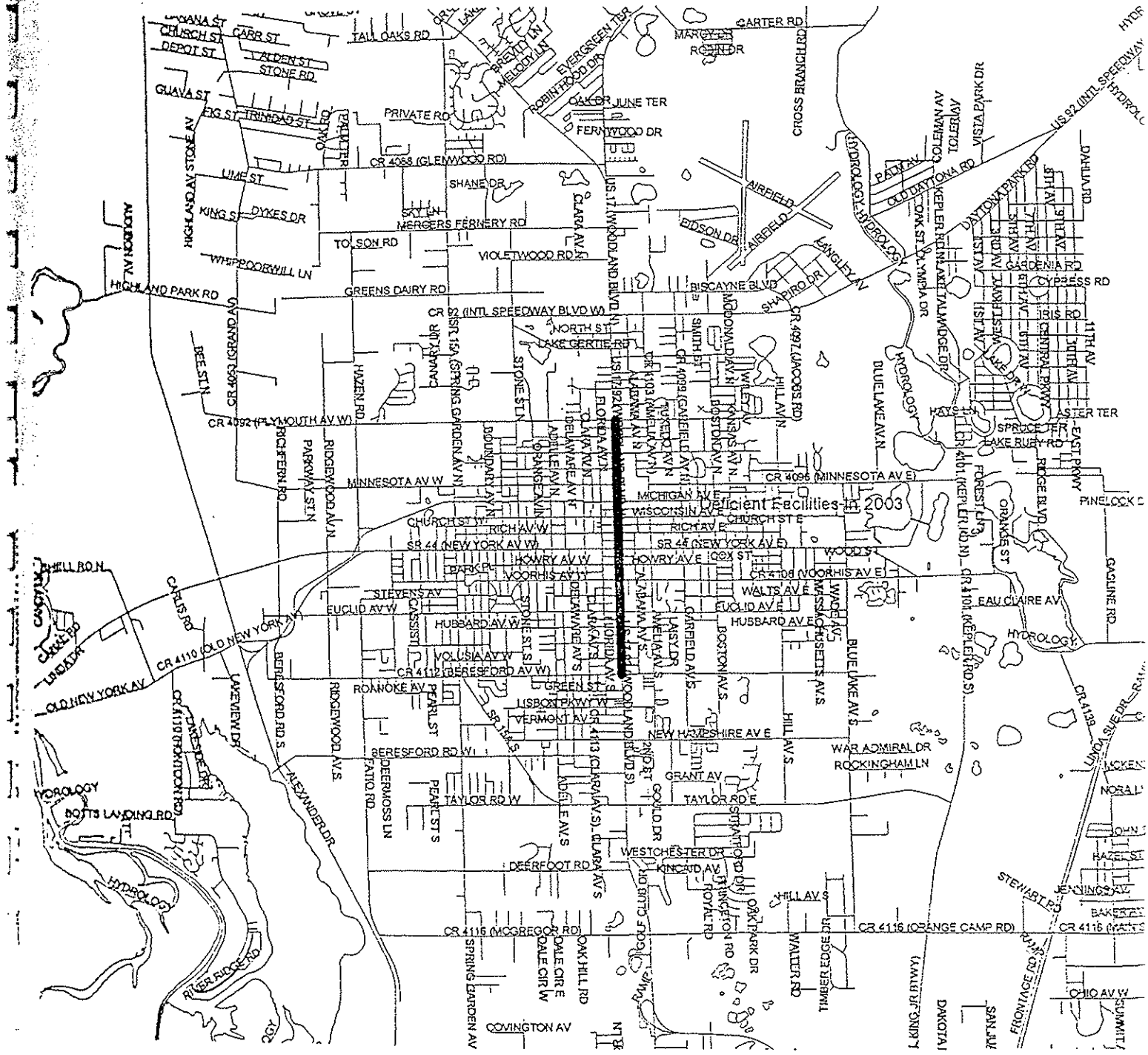
Year	Industrial		Commercial		Service		Total
	Size	Percent	Size	Percent	Size	Percent	
1997	4,900	24.2	4,532	22.3	10,866	53.5	20,298
2003	4,949	20.2	5,498	22.5	14,049	57.3	24,489
2010	5,857	22.1	6,119	23.1	14,530	55.8	26,505
2020	6,592	20.9	7,306	23.2	17,556	55.9	31,454

The volumes at the external zones 771, 772 and 773 were adjusted to reflect future traffic growth.

Future Year Level of Service Analysis

All future year FSUTMS runs assigned trips to the 2003 E+C network. Select zone analyses were performed to report separately the impact of the Berman Property, the West Volusia Justice Center, and the Victoria Park DRI trips. The results of the analyses for 2003, 2010, and 2020 are presented in the Appendix. The level of service capacities are consistent with Volusia County adopted capacities as shown in the Volusia County traffic count spreadsheet. Segments of US 17/92, SR 15A, Beresford Avenue and Orange Camp Road show a volume over capacity ratio greater than 0.85 in 2003. Therefore, the FDOT Level of Service software ARTPLAN was used to evaluate the level of service. The ARTPLAN analysis shows link levels of service ranging from "B" to "F" on US 17/92. The overall level of service on US 17/92 is "C". The ARTPLAN analysis shows a level of service "A" and "B" on SR 15A. The overall link level of service on SR 15A is "A". The ARTPLAN analysis shows a level of service "B" and "C" on Beresford Avenue. The over-all level of service on Beresford Avenue is "C". The ARTPLAN analysis shows a level of service "B" and "C". The over-all level of service on Orange Camp Road is "C". Output from the ARTPLAN analysis is included in the Appendix. Figure 1 presents graphically the deficient links based on the generalized capacity table. The City of DeLand Comprehensive Plan identifies US 17/92 between Beresford Avenue and Plymouth Avenue as a constrained facility. As a constrained facility the city has adopted a maximum acceptable capacity of 22,028.

LOS Deficient Roadways in 2003



LOS Deficient Roads

Conclusion

There is excess capacity in the Study Area's Transportation System. This is due to the majority of roads having an adopted level of service "E" capacity. Based on current growth projections, the 2003 model analysis shows an improved condition on US17/92. The model results indicate significant benefit from the planned improvements to SR15A. Phase II of the study will focus on redevelopment of certain properties, some with vested rights, within the City of DeLand. The City of DeLand also should take a close look at their growth projections to determine whether the planned projects in the area will cause an increase in the annual rate of growth. While the model shows a much improved condition on US17/92, actual travel behavior should be monitored to determine the impact of the improvements to SR15A.

APPENDIX

TAZ	Single Family		Multi-family		Hotel/Motel		Employment				School	
	Units	Pop	Units	Pop	Units	Pop	Industrial	Commercial	Service	Total	Enrolment	
509	229	363	513	835	0	0		4	14	18	36	0
511	508	1228	582	1222	0	0		31	258	131	421	0
512	183	356	428	678	0	0	1804	277	420	2500	0	0
513	131	266	6	0	0	0	3	3	2	8	0	0
514	499	1343	50	143	0	0	4	4	1	9	0	0
515	36	105	0	0	0	0	2	0	6	8	0	0
516	116	296	6	18	8	7	0	0	11	11	0	0
519	97	227	0	0	0	0	2	0	10	12	0	0
520	85	315	30	0	0	0	36	3	2	41	0	0
521	606	1828	20	61	22	19	18	21	341	380	0	0
522	312	752	248	539	0	0	42	45	40	127	0	0
523	109	237	10	0	0	0	128	1	8	137	0	0
524	75	135	0	0	0	0	0	1	4	5	0	0
525	216	491	0	0	0	0	2	226	62	290	0	0
526	18	43	0	0	30	27	3	74	124	201	0	0
527	66	229	0	0	0	0	4	0	7	11	0	0
528	36	134	0	0	0	0	4	0	0	4	0	0
529	12	113	17	105	0	0	0	21	563	583	0	0
530	124	244	0	0	0	0	3	4	30	37	0	0
531	353	914	0	0	0	0	30	126	124	280	0	0
532	221	676	4	13	0	0	36	44	63	143	0	0
533	17	22	97	186	0	0	7	77	186	270	0	0
534	120	271	19	45	0	0	17	120	53	191	0	0
535	54	172	0	0	0	0	28	23	28	79	0	0
536	0	0	0	0	0	0	0	18	0	18	0	0
537	101	229	11	24	0	0	110	52	31	193	0	0
538	40	116	13	0	0	0	15	4	314	333	0	0
539	484	968	218	340	47	42	0	3	0	3	0	0
541	162	560	0	0	0	0	0	3	9	12	0	0
542	138	422	10	30	0	0	4	1	0	5	0	0
543	167	313	48	89	0	0	19	88	87	194	0	0
544	181	422	12	28	0	0	9	35	37	81	0	0
545	160	403	0	0	0	0	1	7	1	9	0	0
546	125	230	160	279	0	0	10	2	8	20	0	0
547	160	389	16	42	0	0	11	1	112	125	0	0
548	205	485	33	81	0	0	43	2	28	73	0	0
549	116	237	51	75	0	0	0	19	7	26	0	0
550	190	317	215	344	60	53	2	52	163	217	0	0
551	28	249	77	743	0	0	0	69	1022	1091	2810	0
552	114	217	19	15	0	0	7	0	4	11	0	0
553	127	262	21	47	0	0	0	0	26	26	0	0
554	213	497	0	0	0	0	6	1	287	294	2589	0
555	132	224	184	276	0	0	0	0	4	4	0	0
556	89	212	9	23	0	0	0	0	2	2	119	0
557	97	319	43	134	0	0	35	55	86	176	0	0
558	92	169	124	218	0	0	2	6	167	175	0	0
559	43	55	129	173	0	0	5	194	95	294	0	0
560	3	7	10	14	0	0	2	10	9	20	0	0
561	36	83	68	148	2	2	1	4	106	111	0	0
562	41	84	4	6	0	0	1	0	616	617	0	0
563	60	147	32	49	0	0	17	0	7	24	0	0
564	35	58	22	33	0	0	0	6	30	35	0	0
565	112	241	33	72	0	0	0	4	13	17	0	0
566	59	93	4	6	0	0	7	0	5	12	0	0

TAZ	Single Family		Multi-family		Hotel/Motel		Employment				School
	Units	Pop	Units	Pop	Units	Pop	Industrial	Commercial	Service	Total	Enrolment
568	160	229	102	138	112	99	6	28	60	93	34
569	79	144	150	217	0	0	61	77	241	380	0
570	168	392	0	0	0	0	0	8	5	13	0
571	157	438	21	67	0	0	0	0	12	12	0
572	116	295	49	111	0	0	0	1	7	8	0
573	208	437	0	0	0	0	0	0	71	71	477
574	185	412	79	198	0	0	365	129	205	699	0
575	26	31	30	36	0	0	1	118	34	153	0
576	7	11	149	122	0	0	10	37	625	672	0
577	49	90	33	35	0	0	0	3	282	284	0
578	135	300	87	206	0	0	0	28	27	55	0
579	53	142	15	0	0	0	0	0	75	75	0
580	49	96	0	0	0	0	0	0	180	180	0
581	0	0	261	1016	0	0	2	4	260	266	0
582	48	90	29	52	0	0	63	4	250	317	0
583	15	69	7	33	0	0	23	3	915	941	0
584	0	0	0	0	0	0	0	0	0	0	0
585	118	259	11	22	0	0	0	3	6	9	0
586	58	139	31	72	0	0	30	1	37	68	0
587	142	310	47	109	177	157	2	59	10	71	0
588	205	501	180	322	0	0	0	130	31	161	976
589	455	1025	133	281	0	0	1169	0	15	1184	0
590	352	781	0	0	0	0	6	10	33	49	0
591	1110	2848	5	14	0	0	194	32	35	262	0
592	54	120	29	51	0	0	3	1	6	10	0
593	37	81	10	23	0	0	0	0	4	4	0
594	90	194	30	53	0	0	2	5	6	13	0
595	285	780	62	98	0	0	15	3	103	121	0
596	54	128	114	264	0	0	0	0	13	13	0
598	0	0	0	0	0	0	0	100	20	120	0
601	21	41	0	0	0	0	0	0	61	61	0
602	69	145	4	9	0	0	0	1	3	4	0
603	44	66	162	215	0	0	165	8	25	198	0
604	17	25	112	153	0	0	2	75	215	293	0
605	144	275	174	313	0	0	0	0	0	0	0
606	763	1871	0	0	32	28	428	166	39	633	0
607	43	150	0	0	0	0	0	114	38	152	0
608	0	0	22	62	0	0	23	21	3	47	0
609	80	258	171	555	0	0	30	331	61	422	0
610	75	227	13	41	0	0	4	42	17	63	0
611	242	689	0	0	0	0	6	7	123	136	807
612	137	376	6	18	0	0	10	0	24	34	0
613	40	146	0	0	0	0	3	0	3	6	0
614	267	843	13	45	0	0	3	4	90	97	510
615	205	390	222	352	0	0	3	68	28	99	0
616	133	315	180	436	0	0	14	135	179	328	0
617	242	621	161	362	0	0	8	733	129	869	0
618	0	0	0	0	0	0	0	0	0	0	0
619	133	378	55	163	0	0	17	192	10	219	0
632	385	872	39	79	0	0	1	0	0	1	0
640	17	25	106	145	0	0	11	40	19	70	0
641	15	23	74	100	0	0	0	0	0	0	0
642	42	81	68	120	0	0	31	234	262	527	1666
643	42	81	68	120	0	0	0	0	0	0	0

2003 DeLand SE 11,324

6,742

18,066

TAZ	Single Family		Multi-family		Hotel/Motel		Employment				School Enrolment	
	Units	Pop	Units	Pop	Units	Pop	Industrial	Commercial	Service	Total		
644	41	84	3	8	0	0	0	0	0	0	0	0
645	44	100	28	50	0	0	0	0	0	132	132	1075
646	92	202	57	101	0	0	25	25	125	175	175	0
648	27	44	1	2	0	0	0	9	25	34	34	0
657	0	0	0	0	0	0	0	0	24	24	24	0
658	217	545	50	107	0	0	0	0	0	0	0	0
659	667	1674	0	0	0	0	0	0	0	0	0	0
660	0	0	0	0	0	0	0	0	0	0	0	0
661	0	0	0	0	0	0	0	0	0	0	0	0
662	170	427	214	458	0	0	0	55	0	55	55	0
663	636	1596	0	0	0	0	0	0	0	0	0	0
664	0	0	0	0	0	0	2	1	0	3	3	0
665	0	0	0	0	0	0	0	0	0	0	0	0
666	27	44	1	2	0	0	1	3	0	4	4	0
690	38	78	3	5	0	0	4	0	117	121	121	0
691	58	138	32	49	0	0	1	0	80	81	81	0
692	36	59	23	34	0	0	0	0	90	90	90	0
694	0	0	0	0	0	0	7	2	4	13	13	0
695	0	0	0	0	0	0	8	0	6	14	14	0
696	34	80	68	148	0	0	29	154	695	878	878	0
697	3	6	9	13	0	0	0	63	143	206	206	0
698	42	55	128	171	0	0	0	0	30	30	30	0
701	98	210	238	431	0	0	0	9	28	37	37	0
702	65	114	8	17	0	0	7	14	51	72	72	340
703	185	429	5	12	0	0	0	0	3	3	3	0
704	116	279	14	39	0	0	1	3	11	15	15	0
705	195	503	0	0	0	0	7	7	53	67	67	0
706	134	339	21	56	0	0	24	9	16	49	49	0
707	43	122	0	0	0	0	0	0	3	3	3	0
708	105	299	10	31	0	0	0	1	6	7	7	0
Total	18381	44435	7826	15695	490	434	5341	5286	12049	22676	22676	11402

TAZ	Single Family		Multi-family		Hotel/Motel		Employment				School Enrolment
	Units	Pop	Units	Pop	Units	Pop	Industrial	Commercial	Service	Total	
509	400	640	526	853	0	0	4	14	18	36	0
511	772	1875	582	1219	0	0	31	398	205	635	0
512	192	375	445	703	0	0	2531	352	545	3427	0
513	136	268	6	0	0	0	3	3	2	8	0
514	623	1686	54	142	0	0	4	5	2	11	0
515	65	185	0	0	0	0	2	0	6	8	0
516	116	298	6	16	8	7	0	0	11	11	0
519	97	221	0	0	0	0	1	0	10	11	0
520	86	308	30	0	0	0	36	3	2	41	0
521	701	2053	20	57	22	19	18	30	496	543	0
522	392	949	248	537	0	0	42	45	40	127	0
523	127	277	19	0	0	0	128	1	8	137	0
524	114	199	0	0	0	0	0	1	4	5	0
525	282	645	0	0	0	0	2	226	62	290	0
526	39	93	0	0	30	27	3	74	124	201	0
527	80	269	0	0	0	0	4	0	14	18	0
528	59	137	0	0	0	0	4	0	0	4	0
529	22	233	32	90	0	0	0	50	1420	1471	0
530	153	302	0	0	0	0	3	10	74	87	0
531	647	1684	0	0	0	0	30	305	298	633	0
532	261	774	4	11	0	0	36	44	63	143	0
533	25	32	101	194	0	0	7	110	267	384	0
534	187	425	19	41	0	0	27	303	137	467	0
535	91	290	0	0	0	0	28	23	28	79	0
536	0	0	0	0	0	0	0	18	0	18	0
537	138	304	11	23	0	0	110	52	31	193	0
538	83	236	13	0	0	0	21	4	314	339	0
539	527	1060	218	339	47	42	0	3	9	12	0
541	206	691	0	0	0	0	0	3	0	5	0
542	153	453	10	28	0	0	4	1	0	5	0
543	180	338	48	89	0	0	19	149	152	320	0
544	203	475	12	27	0	0	9	35	37	81	0
545	233	591	0	0	0	0	1	7	1	9	0
546	147	271	173	303	0	0	10	3	12	25	0
547	176	431	16	39	0	0	18	2	158	177	0
548	246	586	33	75	0	0	43	2	28	73	0
549	116	239	51	75	0	0	0	19	7	26	0
550	216	363	215	343	60	53	2	52	163	217	0
551	28	107	122	438	0	0	0	69	1022	1091	4024
552	145	269	19	15	0	0	7	0	4	11	0
553	168	350	21	43	0	0	0	0	26	26	0
554	243	568	0	0	0	0	6	1	287	294	3708
555	146	248	188	282	0	0	0	0	4	4	0
556	89	214	9	22	0	0	0	0	2	2	171
557	113	375	49	152	0	0	35	55	86	176	0
558	92	171	151	264	0	0	2	6	167	175	0
559	43	55	133	177	0	0	5	194	95	294	0
560	3	7	10	14	0	0	2	12	11	24	0
561	40	93	68	148	2	2	1	4	106	111	0
562	51	103	4	6	0	0	1	0	1023	1024	0
563	70	172	32	49	0	0	17	0	9	26	0
564	35	57	22	33	0	0	0	13	72	85	0
565	124	267	33	67	0	0	0	8	24	32	0
566	71	109	4	6	0	0	7	0	11	18	0
568	160	231	137	186	112	99	6	43	92	141	49
569	79	145	150	216	0	0	61	103	330	494	0
570	175	411	0	0	0	0	0	13	9	22	0
571	157	441	62	187	0	0	0	0	12	12	0
572	116	296	105	238	0	0	0	1	7	8	0
573	208	439	0	0	0	0	0	0	71	71	683

TAZ	Single Family		Multi-family		Hotel/Motel		Employment				School Enrolment
	Units	Pop	Units	Pop	Units	Pop	Industrial	Commercial	Service	Total	
574	185	414	110	257	0	0	365	146	233	744	0
575	26	31	30	36	0	0	1	138	41	180	0
576	7	10	149	122	0	0	10	37	625	672	0
577	49	91	61	65	0	0	0	7	787	795	0
578	135	302	127	300	0	0	0	52	53	106	0
579	72	188	41	0	0	0	0	0	75	75	0
580	49	94	0	0	0	0	0	0	180	180	0
581	0	0	261	1014	0	0	2	6	326	334	0
582	48	91	29	52	0	0	63	4	250	317	0
583	20	90	7	31	0	0	23	3	1365	1391	0
584	0	0	0	0	0	0	0	0	0	0	0
585	133	283	24	48	0	0	0	3	6	9	0
586	188	447	59	129	0	0	30	1	37	68	0
587	142	311	127	283	177	157	2	71	12	85	0
588	205	504	307	550	0	0	0	130	31	161	1398
589	496	1123	196	413	0	0	1605	0	15	1620	0
590	778	1732	0	0	0	0	10	10	33	53	0
591	1602	4128	5	12	0	0	198	49	55	303	0
592	81	176	31	55	0	0	3	1	6	10	0
593	37	82	10	22	0	0	0	0	4	4	0
594	90	196	70	122	0	0	2	7	9	18	0
595	320	879	102	161	0	0	15	3	103	121	0
596	93	217	133	306	0	0	0	0	13	13	0
598	0	0	0	0	0	0	0	100	20	120	0
601	36	70	0	0	0	0	0	0	230	230	0
602	150	314	4	8	0	0	0	1	3	4	0
603	82	121	195	259	0	0	165	8	25	198	0
604	18	25	130	177	0	0	2	119	349	470	0
605	311	596	286	515	0	0	0	0	0	0	0
606	941	2320	0	0	32	28	428	244	59	731	0
607	91	310	0	0	0	0	0	114	38	152	0
608	0	0	72	155	0	0	23	21	5	49	0
609	223	707	549	1740	0	0	88	565	108	761	0
610	102	308	13	38	0	0	4	42	17	63	0
611	322	921	0	0	0	0	6	7	123	136	1156
612	146	403	13	36	0	0	10	0	24	34	0
613	40	142	0	0	0	0	3	0	3	6	0
614	288	915	34	109	0	0	3	5	138	147	730
615	206	391	222	351	0	0	3	68	28	99	0
616	135	320	227	551	0	0	14	139	184	337	0
617	256	633	238	534	0	0	8	1394	253	1655	0
618	0	0	0	0	0	0	0	0	0	0	0
619	143	407	81	223	0	0	17	271	14	302	0
632	726	1650	126	246	0	0	1	0	0	1	0
640	17	25	106	145	0	0	11	40	19	70	0
641	15	23	74	100	0	0	0	0	0	0	0
642	42	81	68	120	0	0	31	234	262	527	2386
643	42	81	68	120	0	0	0	0	0	0	0
644	41	84	3	8	0	0	0	0	0	0	0
645	44	100	28	50	0	0	0	0	132	132	1540
646	92	202	57	101	0	0	25	25	125	175	0
648	27	44	1	2	0	0	0	9	25	34	0
657	0	0	0	0	270	270	0	0	0	0	0
658	534	1340	133	285	0	0	0	0	1151	1151	0
659	668	1677	0	0	0	0	0	0	0	0	0
660	334	838	0	0	0	0	0	0	0	0	0
661	668	1677	0	0	0	0	0	0	0	0	0
662	405	1017	372	0	0	0	0	96	0	96	0
663	967	2427	0	0	0	0	0	0	0	0	0
664	0	0	0	0	0	0	2	1	0	3	0

TAZ	Single Family		Multi-family		Hotel/Motel		Employment				School Enrolment	
	Units	Pop	Units	Pop	Units	Pop	Industrial	Commercial	Service	Total		
665	0	0	0	0	0	0	0	0	0	0	0	0
666	27	44	1	2	0	0	1	3	0	4	0	0
690	38	78	3	5	0	0	4	0	117	121	0	0
691	58	138	32	49	0	0	1	0	80	81	0	0
692	36	59	23	34	0	0	0	0	90	90	0	0
694	0	0	0	0	0	0	7	2	4	13	0	0
695	0	0	0	0	0	0	8	0	6	14	0	0
696	34	80	68	148	0	0	29	154	695	878	0	0
697	3	6	9	13	0	0	0	63	143	206	0	0
698	42	55	128	171	0	0	0	0	30	30	0	0
701	110	236	238	429	0	0	0	10	30	40	0	0
702	65	115	8	15	0	0	7	14	51	72	487	0
703	185	416	5	11	0	0	0	0	3	15	0	0
704	116	280	14	36	0	0	1	3	11	15	0	0
705	195	506	0	0	0	0	7	7	53	67	0	0
706	134	341	21	52	0	0	24	9	16	49	0	0
707	111	310	0	0	0	0	0	0	8	8	0	0
708	105	301	16	45	0	0	0	1	6	7	0	0
Total	24771	59906	9759	18609	760	704	6592	7306	17155	31053	16330	0

2003 Volumes

ROAD NAME	LIMITS	Number of Lanes	Comp Plan LOS	Capacity at Adopted LOS	1997 Model Volumes	Year 2003 Volumes				Total Volume/Capacity	LOS
						Total Trips	Berman Prop. Trips	Victoria DRI Trips	Justice Ctr		
US 17	SR 15A/CR 15A to Glenwood Rd.	4	D	60,100	13,981	16,207	1,036	70	292	0.27	A
US 17	Glenwood Rd. to SR 11	4	D	60,100	21,949	26,033	2,694	214	684	0.43	B
US 17	SR 11 to US 92	4	D	60,100	23,964	30,254	7,404	475	996	0.50	B
US 17/92	US 92 to Plymouth Ave.	4	D	60,100	25,560	24,033	4,558	461	1,303	0.40	B
US 17/92	Plymouth Ave. to Wisconsin Ave.	2	E	17,000*	16,786	16,251	2,486	413	1,657	0.96	D
US 17/92	Wisconsin Ave. to SR 44-New York Ave.	2	E	17,000*	18,657	18,330	2,026	588	2,442	1.08	F
US 17/92	SR 44-New York Ave. to Euclid Ave.	2	E	17,000*	19,131	18,783	1,518	204	1,606	1.10	F
US 17/92	Euclid Ave. to Beresford Ave.	2	E	17,000*	19,157	19,450	1,311	380	1,378	1.14	F
US 17/92	Beresford Ave. to SR 15A-Taylor Rd.	4	D	35,700	28,239	31,051	1,708	979	1,796	0.87	C
SR 15A	US 17 to Mercers Glenwood Rd.	2	D	16,600	8,333	9,120	0	129	100	0.55	B
SR 15A	Glenwood Rd. to Plymouth Ave.	2	D	16,600	12,860	14,412	0	246	292	0.87	C
SR 15A	Plymouth Ave. to SR 44-New York Ave.	4	D	35,700	20,059	21,252	910	571	8	0.60	B
SR 15A	SR 44-New York Ave. to Beresford Ave.	4	D	35,700	17,985	19,950	426	677	349	0.56	B
SR 15A	Beresford Ave. to US 17/92	2	D	24,800	13,268	15,673	64	847	48	0.63	C
SR 44	Hazen Rd. to SR 15A-Spring Garden Ave.	2	C	17,700	10,693	10,257	460	48	550	0.58	B
SR 44	SR 15A-Spring Garden Ave. to High St.	2	E	17,000	9,939	10,897	0	70	997	0.64	B
SR 44	High St. to Orange Ave.	2	E	17,000	10,771	11,882	38	87	1,072	0.70	B
SR 44	Orange Ave. to Boston Ave.	2	E	17,000	10,721	11,937	153	277	639	0.70	B
SR 44	Boston Ave. to Hill Ave.	2	E	17,000	10,563	10,879	330	1,016	778	0.64	B
SR 44	Hill Ave. to Blue Lake Ave.	2	D	16,600	11,286	11,422	708	1,252	596	0.69	B
SR 44	Blue Lake Ave. to Kepler Rd.	2	D	16,600	11,451	12,771	609	974	511	0.77	B
SR 44	Kepler Rd. to I-4	2	D	16,600	12,061	12,713	548	238	441	0.77	B
I-4	SR 44 to US 92	4	C	48,800	43,051	42,898	6	86	2	0.88	C
SR 472	US 17/92 to CR 4101	4	C	47,800	11,930	21,636	758	692	620	0.45	A
SR 472	CR 4101 to I-4	4	C	47,800	16,505	22,012	744	298	568	0.46	B
US 92	US 17 to Kepler Rd.	4	C	47,800	24,041	22,231	2,356	110	408	0.47	B
Amelia Avenue	US 92 to Kentucky Ave.	2	E	15,500	7,331	6,768	1,450	152	226	0.44	C
Amelia Avenue	Kentucky Ave. to Plymouth Ave.	2	E	15,500	8,666	8,185	1,400	218	276	0.53	C
Amelia Avenue	Plymouth Ave. to Pennsylvania Ave.	2	E	15,500	7,065	7,506	1,546	390	340	0.48	C
Amelia Avenue	Pennsylvania Ave. to Minnesota Ave.	2	E	15,500	7,065	7,506	1,546	390	340	0.48	C
Amelia Avenue	Minnesota Ave. to Michigan Ave.	2	E	15,500	10,170	10,855	1,474	736	426	0.70	C
Amelia Avenue	Michigan Ave. to Ohio Ave.	2	E	15,500	11,756	11,885	1,328	948	1,912	0.77	C
Amelia Avenue	Church Ave. to SR 44	4	E	31,540	11,756	11,885	1,328	948	1,912	0.38	C
Amelia Avenue	SR 44 to Beresford Ave.	2	E	15,500	415	1,078	12	10	252	0.07	C
Beresford Avenue	Beresford Rd. to Ridgewood Ave.	2	E	12,400	3,665	3,855	18	162	24	0.31	C
Beresford Avenue	Ridgewood Ave. to Woodward Ave.	2	E	12,400	3,956	4,395	18	198	24	0.35	C
Beresford Avenue	Woodward Ave. to Pearl St.	2	E	12,400	5,326	6,105	58	228	80	0.49	C
Beresford Avenue	Pearl St. to Spring Garden Ave.	2	E	12,400	5,848	6,692	58	260	80	0.54	C
Beresford Avenue	Spring Garden Ave. to SR 15A	2	E	12,400	4,581	5,765	0	320	0	0.46	C
Beresford Avenue	SR 15A to US 17-92	2	E	12,400	5,420	6,962	24	387	68	0.56	C
Beresford Avenue	US 17-92 to Alabama Ave.	2	E	16,275	10,519	16,127	623	1,012	640	0.99	E
Beresford Avenue	Alabama Ave. to Amelia Ave.	2	E	16,275	8,727	9,064	55	994	36	0.56	C
Beresford Avenue	Amelia Ave. to Boston Ave.	2	E	16,275	6,024	10,734	311	1,354	434	0.66	C
Beresford Avenue	Boston Ave. to Hill Ave.	2	E	12,400	2,983	8,916	244	1,628	374	0.72	C
Beresford Avenue	Hill Ave. to Blue Lake Ave.	2	E	12,400	2,160	8,678	244	1,677	378	0.70	C
Beresford Avenue	Blue Lake Ave. to Kepler Rd.	2	E	12,400	N/A	2,621	29	414	33	0.21	C
Beresford Avenue	Kepler Rd. to Summit Ave.	2	E	12,400	415	1,078	12	10	252	0.09	C
Blue Lake Avenue Extension	Plymouth Ave. to University Ave.	2	E	15,500	N/A	3,226	66	372	0	0.21	C
Blue Lake Avenue	Minnesota Ave. to SR 44	2	E	15,500	2,012	4,039	56	625	0	0.26	C
Blue Lake Avenue	SR 44 to Voorhis Ave.	2	E	15,500	2,673	3,895	124	1,284	64	0.25	C
Blue Lake Avenue	Voorhis Ave. to Beresford Ave.	2	E	15,500	3,600	5,833	82	1,908	87	0.38	C
Blue Lake Avenue	Beresford Ave. to Rockingham Lane	2	E	15,500	3,610	10,787	280	3,464	416	0.70	C
Blue Lake Avenue	Rockingham Lane to Taylor Rd.	2	E	15,500	3,454	10,683	270	3,490	404	0.69	C
Blue Lake Avenue	Taylor Rd. to Jackson Ranch Rd.	2	E	15,500	3,345	10,384	212	2,734	346	0.67	C
Blue Lake Avenue	Jackson Ranch Rd. to Orange Camp Rd.	2	E	15,500	3,454	10,683	270	3,490	404	0.69	C
Blue Lake Avenue Extension	Orange Camp Rd. to SR 472	2	E	15,500	415	1,078	12	10	252	0.07	C
CR 15A	US 17 to Airport Rd.	2	E	33,100	4,343	5,524	198	28	60	0.17	A
CR 15A	Airport Rd. to SR 11	2	E	33,100	531	748	0	0	0	0.02	A
CR 92 (Intn'l Spdwy Blvd.)	SR 15A to Midpoint	2	E	17,000	5,080	5,218	1,107	16	0	0.31	B
CR 92 (Intn'l Spdwy Blvd.)	Midpoint to Stone St.	2	E	17,000	9,328	2,747	106	14	21	0.16	B
CR 92 (Intn'l Spdwy Blvd.)	Stone St. to Bridge	2	E	17,000	6,417	2,457	56	2	3	0.14	B
CR 92 (Intn'l Spdwy Blvd.)	Bridge to US 17/92	2	E	17,000	9,328	2,747	106	14	21	0.16	B
Garfield Avenue	US 92 to Kentucky Ave.	2	E	12,400	680	508	0	0	0	0.04	C
Garfield Avenue	Kentucky Ave. to Plymouth Ave.	2	E	12,400	687	508	0	0	0	0.04	C
Garfield Avenue	Plymouth Ave. to Minnesota Ave.	2	E	12,400	1,354	1,104	118	0	0	0.09	C
Garfield Avenue	Minnesota Ave. to SR 44	2	E	12,400	1,715	1,575	22	66	30	0.13	C
Grand Ave./CR 4053	Highland Park Rd. to Plymouth Ave.	2	E	11,280	2,241	2,171	0	30	71	0.19	C
Grand Ave./CR 4053	Plymouth Ave. to Minnesota Ave.	2	E	11,280	469	435	0	0	0	0.04	C
Grand Ave./CR 4053	Minnesota Ave. to SR 44	2	E	11,280	883	893	0	16	12	0.08	C
Grand Ave./CR 4053	SR 44 to Old New York Ave.	2	E	11,280	415	1,078	12	10	252	0.10	C
Hazen Road	Mercers Fernery Rd. to Greens Dairy Rd.	2	E	11,280	495	548	90	0	0	0.05	C
Hazen Road	Greens Dairy Rd. to Plymouth Ave.	2	E	11,280	362	384	0	0	0	0.03	C
Hazen Road	Plymouth Ave. to Minnesota Ave.	2	E	11,280	1,217	1,426	166	0	0	0.13	C

2003 Volumes

ROAD NAME	LIMITS	Number of Lanes	Comp Plan LOS	Capacity at Adopted LOS	1997 Model Volumes	Year 2003 Volumes				Total Volume/Capacity	LOS
						Total Trips	Berman Prop. Trips	Victoria DRI Trips	Justice Ctr		
Hazen Road	Minnesota Ave. to SR 44	2	E	11,280	1,383	1,756	166	0	0	0.16	C
Hill Avenue/Jacobs Road	US 92 to Plymouth Ave.	2	E	12,400	2,988	3,779	120	308	0	0.30	C
Hill Avenue	Plymouth Ave. to University Ave.	2	E	12,400	4,447	4,642	548	162	0	0.37	C
Hill Avenue	University Ave. to Minnesota Ave.	2	E	12,400	4,586	4,642	548	162	0	0.37	C
Hill Avenue	Minnesota Ave. to SR 44	2	E	12,400	4,034	5,380	526	172	0	0.43	C
Hill Avenue	SR 44 to Voorhis Ave.	2	E	12,400	1,451	1,681	50	30	116	0.14	C
Hill Avenue	Voorhis Ave. to Euclid Ave.	2	E	12,400	1,639	1,242	68	0	80	0.10	C
Hill Avenue	Euclid Ave. to Beresford Ave.	2	E	12,400	1,047	597	2	50	4	0.05	C
Hill Avenue	Beresford Ave. to Taylor Rd.	2	E	12,400	415	1,078	12	10	252	0.09	C
McGregor Road	Westside Con./Fatio to Spring Garden Ave.	2	E	12,400	415	1,078	12	10	252	0.09	C
McGregor Road	Spring Garden Ave. to Dale Circle	2	E	12,400	4,720	2,640	60	50	14	0.21	C
McGregor Road	Dale Circle to US17/92	2	E	12,400	6,287	6,453	78	520	36	0.52	C
Mercers Fernery Road	Glenwood Rd. to Hazen Rd.	2	E	11,280	587	630	54	2	8	0.06	C
Mercers Fernery Road	Hazen Rd. to SR 15A	2	E	11,280	1,110	1,368	202	12	28	0.12	C
Mercers Fernery Road	SR 15A to Stone St.	2	E	11,280	1,762	1,382	258	0	0	0.12	C
Mercers Fernery Road	Stone St. to US 17	2	E	11,280	393	1,267	310	0	0	0.11	C
Minnesota Avenue	Grand Ave. to Parkway St.	2	E	12,400	206	184	14	0	4	0.01	C
Minnesota Avenue	Parkway St. to SR 15A	2	E	12,400	434	1,509	76	0	4	0.12	C
Minnesota Avenue	SR 15A to Stone St.	2	E	12,400	1,431	2,082	18	26	98	0.17	C
Minnesota Avenue	Stone St. to US 17/92	2	E	12,400	3,661	3,762	86	58	206	0.30	C
Minnesota Avenue	Hill Ave. to Blue Lake Ave.	2	E	12,400	1,632	1,351	32	178	34	0.11	C
Minnesota Avenue	Blue Lake Ave. to Kepler Rd.	2	E	12,400	1,582	1,434	42	74	34	0.12	C
Old New York Avenue	SR 44 to Shell Rd.	2	E	11,280	415	1,078	12	10	252	0.10	C
Old New York Avenue	Shell Rd. to Hontoon Rd.	2	E	11,280	2,044	2,006	0	108	0	0.18	C
Old New York Avenue	Hontoon Rd. to West Ave.	2	E	11,280	4,743	4,847	82	156	92	0.43	C
Old New York Avenue	West Ave. to Grand Ave.	2	E	11,280	1,702	1,653	82	0	92	0.15	C
Old New York Avenue	Grand Ave. to Beresford Rd.	2	E	11,280	1,644	1,604	82	0	92	0.14	C
Old New York Avenue	Beresford Rd. to Ridgewood Ave.	2	E	11,280	1,254	1,334	82	0	68	0.12	C
Old New York Avenue	Ridgewood Ave. to SR 44	2	E	11,280	1,882	1,321	82	0	68	0.12	C
Orange Camp Rd	17/92 to Blue lake Ave.	2	E	17,000	4,014	8,011	60	4,324	0	0.47	B
Orange Camp Rd	Blue Lake Ave. to Kepler Rd.	2	E	17,000	4,113	15,565	260	6,078	0	0.92	D
Orange Camp Rd	Kepler Rd to I-4	2	E	17,000	10,898	12,694	0	1,578	0	0.75	C
Orange Camp Rd	I-4 to Summit Ave.	2	E	17,000	5,058	7,188	0	320	0	0.42	C
Plymouth Avenue	Grand Ave. to Hazen Rd.	2	E	12,400	1,905	1,853	4	34	73	0.15	C
Plymouth Avenue	Hazen Rd. to SR 15A	2	E	12,400	2,718	2,593	184	34	73	0.21	C
Plymouth Avenue	SR 15A to Boundary Ave.	2	E	17,000	8,548	8,531	366	56	353	0.50	B
Plymouth Avenue	Boundary Ave. to Stone St.	2	E	17,000	8,863	8,761	439	56	353	0.52	B
Plymouth Avenue	Stone St. to Adelle Ave.	2	E	17,000	7,655	10,389	559	126	488	0.61	B
Plymouth Avenue	Adelle Ave. to Clara Ave.	2	E	17,000	7,700	10,454	587	126	488	0.61	B
Plymouth Avenue	Clara Ave. to Florida Ave.	2	E	17,000	8,117	10,170	693	126	327	0.60	B
Plymouth Avenue	Florida Ave. to US 17/92	2	E	17,000	8,805	10,584	825	126	327	0.62	B
Plymouth Avenue	US 17/92 to Pine St.	2	E	17,000	7,703	9,315	1,318	174	40	0.55	B
Plymouth Avenue	Pine St. to Amelia Ave.	2	E	17,000	5,955	7,551	1,224	174	40	0.44	B
Plymouth Avenue	Amelia Ave. to Clark Ave.	2	E	17,000	3,881	6,464	904	32	90	0.38	B
Plymouth Avenue	Clark Ave. to Garfield Ave.	2	E	17,000	3,722	6,324	866	32	90	0.37	B
Plymouth Avenue	Garfield Ave. to Boston Ave.	2	E	17,000	3,310	5,859	748	32	90	0.34	B
Plymouth Avenue	Boston Ave. to Hill Ave.	2	E	17,000	2,255	4,947	596	162	68	0.29	B
Plymouth Avenue	Hill Ave. to Jacobs Rd.	2	E	17,000	2,988	2,119	48	0	68	0.12	B
Spring Garden Avenue	Beresford Rd. to North Ave.	2	E	12,400	4,848	3,192	96	30	36	0.26	C
Spring Garden Avenue	North Ave. to McGregor Rd.	2	E	12,400	4,617	2,481	60	46	14	0.20	C
Stone Street	Mercers Fernery Rd. to Greens Dairy Rd.	2	E	11,280	1,518	1,167	0	0	2	0.10	C
Stone Street	Greens Dairy Rd. to CR 92	2	E	11,280	3,482	4,586	1,494	30	22	0.41	C
Stone Street	CR 92 to Lake Gertie Rd.	2	E	11,280	5,298	3,471	444	14	19	0.31	C
Stone Street	Lake Gertie Rd. to Plymouth Ave.	2	E	11,280	6,158	6,057	170	184	135	0.54	C
Summit Avenue/CR 4139	SR 44 to I-4 Overpass	2	E	11,280	2,750	4,999	102	256	114	0.44	C
Summit Avenue/CR 4139	I-4 Overpass to Main St.	2	E	11,280	2,424	4,184	64	270	80	0.37	C
Taylor Road (DL)	US 17/92 to Aquarius Ave.	2	E	12,400	2,508	4,330	62	1,478	126	0.35	C
Taylor Road (DL)	Aquarius Ave. to Stratford Dr.	2	E	12,400	3,911	1,165	0	10	2	0.09	C
Taylor Road (DL)	Stratford Dr. to Hill Ave.	2	E	12,400	426	3,249	38	2,224	40	0.26	C
Taylor Road (DL)	Hill Ave. to Blue Lake Ave.	2	E	12,400	426	3,249	38	2,224	40	0.26	C
Taylor Road (DL)	Blue Lake Ave. to Martin Luther King Bltwy.	2	E	12,400	32	5,346	96	5,687	98	0.43	C
Voorhis Avenue	US 17/92 to Hayden Ave.	2	E	12,400	1,371	2,096	51	0	25	0.17	C
Voorhis Avenue	Hayden Ave. to Amelia Ave.	2	E	12,400	1,417	2,426	59	17	34	0.20	C
Voorhis Avenue	Amelia Ave. to Boston Ave.	2	E	12,400	3,512	3,940	132	8	165	0.32	C
Voorhis Avenue	Boston Ave. to Hill Ave.	2	E	12,400	2,017	2,442	18	184	28	0.20	C
Voorhis Avenue	Hill Ave. to Wade Ave.	2	E	12,400	1,586	2,693	0	214	66	0.22	C
Voorhis Avenue	Wade Ave. to SR 44	2	E	12,400	2,691	3,327	42	268	40	0.27	C
West Avenue	Old New York Ave. to Beresford Ave.	2	E	12,400	415	1,078	12	10	252	0.09	C
Westside Connector (new/Fatio)	SR 44 to Beresford Ave.	2	E	11,280	1,383	1,756	166	0	0	0.16	C
Westside Connector (Fatio Rd.)	Beresford Rd. to McGregor Rd.	2	E	11,280	103	159	0	4	0	0.01	C
W. Volusia Bltwy (Kepler Rd)	US 92 to Mimosa Lane	2	E	31,000	12,678	11,884	0	120	0	0.38	B
W. Volusia Bltwy (Kepler Rd)	Mimosa Lane to Minnesota Ave.	2	E	31,000	12,661	11,870	0	120	0	0.38	B
W. Volusia Bltwy (Kepler Rd)	Minnesota Ave. to Lake Charles Rd.	2	E	31,000	12,684	11,964	0	149	0	0.39	B

2003 Volumes

ROAD NAME	LIMITS	Number of Lanes	Comp Plan LOS	Capacity at Adopted LOS	1997 Model Volumes	Year 2003 Volumes				Total Volume/ Capacity	LOS
						Total Trips	Berman Prop. Trips	Victoria DRI Trips	Justice Ctr		
W. Volusia Bltwy (Kepler Rd)	Lake Charles Rd. to SR 44	2	E	31,000	12,684	11,964	0	149	0	0.39	B
W. Volusia Bltwy (Kepler Rd)	SR 44 to Midpoint	2	E	31,000	11,902	14,338	78	1,231	90	0.46	C
W. Volusia Bltwy (Kepler Rd)	N. of Beresford Rd.	2	E	31,000	11,680	12,325	48	1,374	56	0.40	B
W. Volusia Bltwy (Dr MLK Jr)	S. of Beresford Rd.	2	E	31,000	11,680	12,325	48	1,374	56	0.40	B
W. Volusia Bltwy (Dr MLK Jr)	N. of Taylor Rd.	2	E	31,000	11,680	17,672	146	7,060	154	0.57	D
W. Volusia Bltwy (Dr MLK Jr)	S. of Taylor Rd.	2	E	31,000	11,648	14,820	38	4,026	48	0.48	C
W. Volusia Bltwy (Dr MLK Jr)	Midpoint to Orange Camp Rd.	2	E	31,000	11,648	14,820	38	4,026	48	0.48	C

* Constrained Facility Allowed Capacity 22,028 trips

2010 Volumes

ROAD NAME	LIMITS	Number of Lanes	Comp Plan LOS	Capacity at Adopted LOS	1997 Model Volumes	Year 2010 Volumes				Total Volume/Capacity	LOS
						Total Trips	Berman Prop. Trips	Victoria DRI Trips	Justice Ctr		
US 17	SR 15A/CR 15A to Glenwood Rd.	4	D	60,100	13,981	18,131	1,338	18	393	0.30	A
US 17	Glenwood Rd. to SR 11	4	D	60,100	21,949	26,392	3,202	131	788	0.44	B
US 17	SR 11 to US 92	4	D	60,100	23,964	31,879	9,496	619	1,124	0.53	B
US 17/92	US 92 to Plymouth Ave.	4	D	60,100	25,560	23,136	5,137	233	1,562	0.38	B
US 17/92	Plymouth Ave. to Wisconsin Ave.	2	E	17,000	16,786	13,251	3,374	200	1,932	0.78	C
US 17/92	Wisconsin Ave. to SR 44-New York Ave.	2	E	17,000	18,657	15,427	2,724	372	3,173	0.91	D
US 17/92	SR 44-New York Ave. to Euclid Ave.	2	E	17,000	19,131	16,040	2,412	128	2,522	0.94	D
US 17/92	Euclid Ave. to Beresford Ave.	2	E	17,000	19,157	16,579	2,154	314	2,272	0.98	D
US 17/92	Beresford Ave. to SR 15A-Taylor Rd.	4	D	35,700	28,239	32,730	2,518	790	2,619	0.92	D
SR 15A	US 17 to Mercers Glenwood Rd.	4	D	35,700	8,333	13,708	0	214	128	0.38	B
SR 15A	Glenwood Rd. to Plymouth Ave.	4	D	35,700	12,860	19,702	249	340	406	0.55	B
SR 15A	Plymouth Ave. to SR 44-New York Ave.	4	D	35,700	20,059	25,726	1,350	782	252	0.72	B
SR 15A	SR 44-New York Ave. to Beresford Ave.	4	D	35,700	17,985	22,740	570	933	611	0.64	B
SR 15A	Beresford Ave. to US 17/92	4	D	35,700	13,268	20,973	116	1,535	76	0.59	B
SR 44	Hazen Rd. to SR 15A-Spring Garden Ave.	2	C	17,700	10,693	13,700	748	64	973	0.77	B
SR 44	SR 15A-Spring Garden Ave. to High St.	2	E	17,000	9,939	11,988	0	66	1,409	0.71	B
SR 44	High St. to Orange Ave.	2	E	17,000	10,771	12,526	45	32	1,497	0.74	B
SR 44	Orange Ave. to Boston Ave.	2	E	17,000	10,721	11,965	128	405	422	0.70	B
SR 44	Boston Ave. to Hill Ave.	2	E	17,000	10,563	9,747	362	1,682	824	0.57	B
SR 44	Hill Ave. to Blue Lake Ave.	2	D	16,600	11,286	10,069	480	1,680	704	0.61	B
SR 44	Blue Lake Ave. to Kepler Rd.	2	D	16,600	11,451	13,278	535	924	439	0.80	B
SR 44	Kepler Rd. to I-4	2	D	16,600	12,061	13,127	449	242	339	0.79	B
I-4	SR 44 to US 92	4	C	48,800	43,051	49,226	8	194	6	1.01	D
SR 472	US 17/92 to CR 4101	4	C	47,800	11,930	20,784	1,165	506	923	0.43	A
SR 472	CR 4101 to I-4	4	C	47,800	16,505	18,553	1,002	153	700	0.39	A
US 92	US 17 to Kepler Rd.	4	C	47,800	24,041	26,812	3,751	509	586	0.56	B
Amelia Avenue	US 92 to Kentucky Ave.	2	E	15,500	7,331	6,988	2,081	195	370	0.45	C
Amelia Avenue	Kentucky Ave. to Plymouth Ave.	2	E	15,500	8,666	8,729	1,995	309	450	0.56	C
Amelia Avenue	Plymouth Ave. to Pennsylvania Ave.	2	E	15,500	7,065	7,947	1,786	274	498	0.51	C
Amelia Avenue	Pennsylvania Ave. to Minnesota Ave.	2	E	15,500	7,065	7,947	1,786	274	498	0.51	C
Amelia Avenue	Minnesota Ave. to Michigan Ave.	2	E	15,500	10,170	11,124	1,674	927	612	0.72	C
Amelia Avenue	Michigan Ave. to Ohio Ave.	2	E	15,500	11,756	13,044	1,536	1,412	2,258	0.84	C
Amelia Avenue	Church Ave. to SR 44	4	E	31,540	11,756	13,044	1,536	1,412	2,258	0.41	C
Amelia Avenue	SR 44 to Beresford Ave.	2	E	15,500	415	1,997	14	2	668	0.13	C
Beresford Avenue	Beresford Rd. to Ridgewood Ave.	2	E	12,400	3,665	6,406	30	204	32	0.52	C
Beresford Avenue	Ridgewood Ave. to Woodward Ave.	2	E	12,400	3,956	7,002	30	238	32	0.56	C
Beresford Avenue	Woodward Ave. to Pearl St.	2	E	12,400	5,326	8,750	94	258	110	0.71	C
Beresford Avenue	Pearl St. to Spring Garden Ave.	2	E	12,400	5,848	9,297	94	294	110	0.75	C
Beresford Avenue	Spring Garden Ave. to SR 15A	2	E	12,400	4,581	5,300	0	27	0	0.43	C
Beresford Avenue	SR 15A to US 17-92	2	E	12,400	5,420	6,572	60	71	84	0.53	C
Beresford Avenue	US 17-92 to Alabama Ave.	2	E	16,275	10,519	13,847	603	971	614	0.85	C
Beresford Avenue	Alabama Ave. to Amelia Ave.	2	E	16,275	8,727	9,486	378	1,181	331	0.58	C
Beresford Avenue	Amelia Ave. to Boston Ave.	2	E	16,275	6,024	11,306	302	1,390	415	0.69	C
Beresford Avenue	Boston Ave. to Hill Ave.	2	E	12,400	2,983	7,771	262	2,127	460	0.63	C
Beresford Avenue	Hill Ave. to Blue Lake Ave.	2	E	12,400	2,160	7,535	262	2,225	462	0.61	C
Beresford Avenue	Blue Lake Ave. to Kepler Rd.	2	E	12,400	N/A	2,156	5	428	5	0.17	C
Beresford Avenue	Kepler Rd. to Summit Ave.	2	E	12,400	415	1,997	14	2	668	0.16	C
Blue Lake Avenue Extension	Plymouth Ave. to University Ave.	2	E	15,500	N/A	5,592	426	892	82	0.36	C
Blue Lake Avenue	Minnesota Ave. to SR 44	2	E	15,500	2,012	7,049	390	1,502	0	0.45	C
Blue Lake Avenue	SR 44 to Voorhis Ave.	2	E	15,500	2,673	5,539	316	2,549	252	0.36	C
Blue Lake Avenue	Voorhis Ave. to Beresford Ave.	2	E	15,500	3,600	7,376	313	3,294	277	0.48	C
Blue Lake Avenue	Beresford Ave. to Rockingham Lane	2	E	15,500	3,610	10,814	544	5,502	702	0.70	C
Blue Lake Avenue	Rockingham Lane to Taylor Rd.	2	E	15,500	3,454	10,675	528	5,520	690	0.69	C
Blue Lake Avenue	Taylor Rd. to Jackson Ranch Rd.	2	E	15,500	3,345	11,373	412	5,176	560	0.73	C
Blue Lake Avenue	Jackson Ranch Rd. to Orange Camp Rd.	2	E	15,500	3,454	10,675	528	5,520	690	0.69	C
Blue Lake Avenue Extension	Orange Camp Rd. to SR 472	2	E	15,500	415	1,997	14	2	668	0.13	C
CR 15A	US 17 to Airport Rd.	2	E	33,100	4,343	7,443	278	59	152	0.22	A
CR 15A	Airport Rd. to SR 11	2	E	33,100	531	1,528	0	9	26	0.05	A
CR 92 (Intnl Spdwy Blvd.)	SR 15A to Midpoint	2	E	17,000	5,080	6,525	1,776	68	23	0.38	B
CR 92 (Intnl Spdwy Blvd.)	Midpoint to Stone St.	2	E	17,000	9,328	3,470	85	32	64	0.20	B
CR 92 (Intnl Spdwy Blvd.)	Stone St. to Bridge	2	E	17,000	6,417	3,359	32	6	44	0.20	B
CR 92 (Intnl Spdwy Blvd.)	Bridge to US 17/92	2	E	17,000	9,328	3,470	85	32	64	0.20	B
Garfield Avenue	US 92 to Kentucky Ave.	2	E	12,400	680	763	0	0	0	0.06	C
Garfield Avenue	Kentucky Ave. to Plymouth Ave.	2	E	12,400	687	804	0	7	0	0.06	C
Garfield Avenue	Plymouth Ave. to Minnesota Ave.	2	E	12,400	1,354	1,511	168	30	0	0.12	C
Garfield Avenue	Minnesota Ave. to SR 44	2	E	12,400	1,715	1,937	12	183	8	0.16	C
Grand Ave./CR 4053	Highland Park Rd. to Plymouth Ave.	2	E	11,280	2,241	2,273	0	38	78	0.20	C
Grand Ave./CR 4053	Plymouth Ave. to Minnesota Ave.	2	E	11,280	469	648	0	0	0	0.06	C
Grand Ave./CR 4053	Minnesota Ave. to SR 44	2	E	11,280	883	1,254	6	18	21	0.11	C
Grand Ave./CR 4053	SR 44 to Old New York Ave.	2	E	11,280	415	1,997	14	2	668	0.18	C
Hazen Road	Mercers Fernery Rd. to Greens Dairy Rd.	2	E	11,280	495	533	132	0	0	0.05	C
Hazen Road	Greens Dairy Rd. to Plymouth Ave.	2	E	11,280	362	431	0	0	0	0.04	C
Hazen Road	Plymouth Ave. to Minnesota Ave.	2	E	11,280	1,217	2,982	598	0	0	0.26	C
Hazen Road	Minnesota Ave. to SR 44	2	E	11,280	1,383	3,184	598	0	0	0.28	C
Hill Avenue/Jacobs Road	US 92 to Plymouth Ave.	2	E	12,400	2,988	6,045	554	812	20	0.49	C

2010 Volumes

ROAD NAME	LIMITS	Number of Lanes	Comp Plan LOS	Capacity at Adopted LOS	1997 Model Volumes	Year 2010 Volumes				Total Volume/Capacity	LOS
						Total Trips	Berman Prop. Trips	Victoria DRI Trips	Justice Cr.		
Hill Avenue	Plymouth Ave. to University Ave.	2	E	12,400	4,447	5,444	398	264	0	0.44	C
Hill Avenue	University Ave. to Minnesota Ave.	2	E	12,400	4,586	5,444	398	264	0	0.44	C
Hill Avenue	Minnesota Ave. to SR 44	2	E	12,400	4,034	5,587	400	184	0	0.45	C
Hill Avenue	SR 44 to Voorhis Ave.	2	E	12,400	1,451	2,931	160	325	160	0.24	C
Hill Avenue	Voorhis Ave. to Euclid Ave.	2	E	12,400	1,639	1,464	94	0	108	0.12	C
Hill Avenue	Euclid Ave. to Beresford Ave.	2	E	12,400	1,047	718	2	98	2	0.06	C
Hill Avenue	Beresford Ave. to Taylor Rd.	2	E	12,400	415	1,997	14	2	668	0.16	C
McGregor Road	Westside Con./Fatio to Spring Garden Ave.	2	E	12,400	415	1,997	14	2	668	0.16	C
McGregor Road	Spring Garden Ave. to Dale Circle	2	E	12,400	4,720	2,309	64	70	27	0.19	C
McGregor Road	Dale Circle to US1 7/92	2	E	12,400	6,287	6,247	50	728	31	0.50	C
Mercers Fernery Road	Glenwood Rd. to Hazen Rd.	2	E	11,280	587	755	74	6	24	0.07	C
Mercers Fernery Road	Hazen Rd. to SR 15A	2	E	11,280	1,110	1,611	278	16	44	0.14	C
Mercers Fernery Road	SR 15A to Stone St.	2	E	11,280	1,762	2,136	824	0	0	0.19	C
Mercers Fernery Road	Stone St. to US 17	2	E	11,280	393	1,721	900	0	0	0.15	C
Minnesota Avenue	Grand Ave. to Parkway St.	2	E	12,400	206	438	30	4	19	0.04	C
Minnesota Avenue	Parkway St. to SR 15A	2	E	12,400	434	970	56	4	19	0.08	C
Minnesota Avenue	SR 15A to Stone St.	2	E	12,400	1,431	3,572	17	12	166	0.29	C
Minnesota Avenue	Stone St. to US 17/92	2	E	12,400	3,661	5,359	229	84	290	0.43	C
Minnesota Avenue	Hill Ave. to Blue Lake Ave.	2	E	12,400	1,632	1,969	18	473	130	0.16	C
Minnesota Avenue	Blue Lake Ave. to Kepler Rd.	2	E	12,400	1,582	1,600	54	104	48	0.13	C
Old New York Avenue	SR 44 to Shell Rd.	2	E	11,280	415	1,997	14	2	668	0.18	C
Old New York Avenue	Shell Rd. to Hontoon Rd.	2	E	11,280	2,044	6,134	166	148	132	0.54	C
Old New York Avenue	Hontoon Rd. to West Ave.	2	E	11,280	4,743	9,022	280	194	256	0.80	C
Old New York Avenue	West Ave. to Grand Ave.	2	E	11,280	1,702	3,274	280	8	256	0.29	C
Old New York Avenue	Grand Ave. to Beresford Rd.	2	E	11,280	1,644	3,215	280	0	256	0.29	C
Old New York Avenue	Beresford Rd. to Ridgewood Ave.	2	E	11,280	1,254	2,144	280	0	90	0.19	C
Old New York Avenue	Ridgewood Ave. to SR 44	2	E	11,280	1,882	2,104	280	0	90	0.19	C
Orange Camp Rd	17/92 to Blue lake Ave.	2	E	17,000	4,014	8,825	56	5,320	86	0.52	B
Orange Camp Rd	Blue Lake Ave. to Kepler Rd.	2	E	17,000	4,113	13,069	328	7,051	454	0.77	C
Orange Camp Rd	Kepler Rd to I-4	2	E	17,000	10,898	11,875	0	906	0	0.70	C
Orange Camp Rd	I-4 to Summit Ave.	2	E	17,000	5,058	6,960	9	334	9	0.41	C
Plymouth Avenue	Grand Ave. to Hazen Rd.	2	E	12,400	1,905	1,812	6	48	80	0.15	C
Plymouth Avenue	Hazen Rd. to SR 15A	2	E	12,400	2,718	4,006	634	48	80	0.32	C
Plymouth Avenue	SR 15A to Boundary Ave.	2	E	17,000	8,548	11,097	355	78	314	0.65	B
Plymouth Avenue	Boundary Ave. to Stone St.	2	E	17,000	8,863	11,317	453	78	314	0.67	B
Plymouth Avenue	Stone St. to Adelle Ave.	2	E	17,000	7,655	11,685	616	46	384	0.69	B
Plymouth Avenue	Adelle Ave. to Clara Ave.	2	E	17,000	7,700	11,761	650	46	384	0.69	B
Plymouth Avenue	Clara Ave. to Florida Ave.	2	E	17,000	8,117	11,989	738	46	358	0.71	B
Plymouth Avenue	Florida Ave. to US 17/92	2	E	17,000	8,805	12,539	852	46	358	0.74	B
Plymouth Avenue	US 17/92 to Pine St.	2	E	17,000	7,703	10,473	912	78	34	0.62	B
Plymouth Avenue	Pine St. to Amelia Ave.	2	E	17,000	5,955	8,628	741	78	34	0.51	B
Plymouth Avenue	Amelia Ave. to Clark Ave.	2	E	17,000	3,881	7,202	880	114	60	0.42	B
Plymouth Avenue	Clark Ave. to Garfield Ave.	2	E	17,000	3,722	7,042	828	114	60	0.41	B
Plymouth Avenue	Garfield Ave. to Boston Ave.	2	E	17,000	3,310	6,485	660	90	60	0.38	B
Plymouth Avenue	Boston Ave. to Hill Ave.	2	E	17,000	2,255	6,040	462	264	60	0.36	B
Plymouth Avenue	Hill Ave. to Jacobs Rd.	2	E	17,000	2,988	2,521	64	0	60	0.15	B
Spring Garden Avenue	Beresford Rd. to North Ave.	2	E	12,400	4,848	2,528	88	46	59	0.19	C
Spring Garden Avenue	North Ave. to McGregor Rd.	2	E	12,400	4,617	2,128	64	58	27	0.17	C
Stone Street	Mercers Fernery Rd. to Greens Dairy Rd.	2	E	11,280	1,518	638	0	0	6	0.06	C
Stone Street	Greens Dairy Rd. to CR 92	2	E	11,280	3,482	5,302	2,208	76	53	0.47	C
Stone Street	CR 92 to Lake Gertie Rd.	2	E	11,280	5,298	2,443	454	8	32	0.22	C
Stone Street	Lake Gertie Rd. to Plymouth Ave.	2	E	11,280	6,158	3,900	308	144	98	0.35	C
Summit Avenue/CR 4139	SR 44 to I-4 Overpass	2	E	11,280	2,750	3,822	83	302	85	0.34	C
Summit Avenue/CR 4139	I-4 Overpass to Main St.	2	E	11,280	2,424	2,993	48	316	50	0.27	C
Taylor Road (DL)	US 17/92 to Aquarius Ave.	2	E	12,400	2,508	4,720	38	1,126	44	0.38	C
Taylor Road (DL)	Aquarius Ave. to Stratford Dr.	2	E	12,400	3,911	1,362	4	12	0	0.11	C
Taylor Road (DL)	Stratford Dr. to Hill Ave.	2	E	12,400	426	3,520	0	1,706	0	0.28	C
Taylor Road (DL)	Hill Ave. to Blue Lake Ave.	2	E	12,400	426	3,520	0	1,706	0	0.28	C
Taylor Road (DL)	Blue Lake Ave. to Martin Luther King Bltwy	2	E	12,400	32	2,936	116	3,123	130	0.24	C
Voorhis Avenue	US 17/92 to Hayden Ave.	2	E	12,400	1,371	1,707	40	0	42	0.14	C
Voorhis Avenue	Hayden Ave. to Amelia Ave.	2	E	12,400	1,417	1,744	28	29	39	0.14	C
Voorhis Avenue	Amelia Ave. to Boston Ave.	2	E	12,400	3,512	4,069	208	250	382	0.33	C
Voorhis Avenue	Boston Ave. to Hill Ave.	2	E	12,400	2,017	1,924	14	153	40	0.16	C
Voorhis Avenue	Hill Ave. to Wade Ave.	2	E	12,400	1,586	3,302	80	478	94	0.27	C
Voorhis Avenue	Wade Ave. to SR 44	2	E	12,400	2,691	4,013	75	159	61	0.32	C
West Avenue	Old New York Ave. to Beresford Ave.	2	E	12,400	415	1,997	14	2	668	0.16	C
Westside Connector (new/Fatio)	SR 44 to Beresford Ave.	2	E	11,280	1,383	3,184	598	0	0	0.28	C
Westside Connector (Fatio Rd.)	Beresford Rd. to McGregor Rd.	2	E	11,280	103	180	0	12	0	0.02	C
W. Volusia Bltwy (Kepler Rd)	US 92 to Mimoso Lane	2	E	31,000	12,678	11,639	0	134	0	0.38	B
W. Volusia Bltwy (Kepler Rd)	Mimoso Lane to Minnesota Ave.	2	E	31,000	12,661	11,618	0	134	0	0.37	B
W. Volusia Bltwy (Kepler Rd)	Minnesota Ave. to Lake Charles Rd.	2	E	31,000	12,684	11,798	0	154	0	0.38	B
W. Volusia Bltwy (Kepler Rd)	Lake Charles Rd. to SR 44	2	E	31,000	12,684	11,798	0	154	0	0.38	B
W. Volusia Bltwy (Kepler Rd)	SR 44 to Midpoint	2	E	31,000	11,902	13,659	71	1,138	85	0.44	C
W. Volusia Bltwy (Kepler Rd)	N. of Beresford Rd.	2	E	31,000	11,680	11,974	66	1,120	80	0.39	B
W. Volusia Bltwy (Dr MLK Jr)	S. of Beresford Rd.	2	E	31,000	11,680	11,974	66	1,120	80	0.39	B

2010 Volumes

ROAD NAME	LIMITS	Number of Lanes	Comp Plan LOS	Capacity at Adopted LOS	1997 Model Volumes	Year 2010 Volumes				Total Volume/ Capacity	LOS
						Total Trips	Berman Prop. Trips	Victoria DRI Trips	Justice Ctr		
W. Volusia Bldwy (Dr MLK Jr)	N. of Taylor Rd.	2	E	31,000	11,680	14,909	182	4,243	212	0.48	C
W. Volusia Bldwy (Dr MLK Jr)	S. of Taylor Rd.	2	E	31,000	11,648	13,994	64	3,269	80	0.45	C
W. Volusia Bldwy (Dr MLK Jr)	Midpoint to Orange Camp Rd.	2	E	31,000	11,648	13,994	64	3,269	80	0.45	C

2020 Volumes

ROAD NAME	LIMITS	Number of Lanes	Comp Plan LOS	Capacity at Adopted LOS	1997 Model Volumes	Year 2020 Volumes				Total Volume/Capacity	LOS
						Total Trips	Berman Prop. Trips	Victoria DRI Trips	Justice Ctr		
US 17	SR 15A/CR 15A to Glenwood Rd.	4	D	60,100	13,981	17,289	1,191	55	217	0.29	A
US 17	Glenwood Rd. to SR 11	4	D	60,100	21,949	26,915	3,209	265	670	0.45	B
US 17	SR 11 to US 92	4	D	60,100	23,964	31,381	8,653	774	925	0.52	B
US 17/92	US 92 to Plymouth Ave.	4	D	60,100	25,560	26,551	4,652	507	1,205	0.44	B
US 17/92	Plymouth Ave. to Wisconsin Ave.	2	E	17,000	16,786	13,738	2,459	364	1,502	0.81	C
US 17/92	Wisconsin Ave. to SR 44-New York Ave.	2	E	17,000	18,657	16,542	2,013	598	2,839	0.97	D
US 17/92	SR 44-New York Ave. to Euclid Ave.	2	E	17,000	19,131	15,471	1,477	152	1,602	0.91	D
US 17/92	Euclid Ave. to Beresford Ave.	2	E	17,000	19,157	16,395	1,275	356	1,370	0.96	D
US 17/92	Beresford Ave. to SR 15A-Taylor Rd.	4	D	35,700	28,239	32,618	1,738	300	2,322	0.91	D
SR 15A	US 17 to Mercers Glenwood Rd.	4	D	35,700	8,333	16,442	142	200	247	0.46	B
SR 15A	Glenwood Rd. to Plymouth Ave.	4	D	35,700	12,860	23,287	446	378	546	0.65	B
SR 15A	Plymouth Ave. to SR 44-New York Ave.	4	D	35,700	20,059	26,310	1,313	975	370	0.74	B
SR 15A	SR 44-New York Ave. to Beresford Ave.	4	D	35,700	17,985	26,378	965	1,061	657	0.74	B
SR 15A	Beresford Ave. to US 17/92	4	D	35,700	13,268	22,286	142	1,413	76	0.62	B
SR 44	Hazen Rd. to SR 15A-Spring Garden Ave.	2	C	17,700	10,693	11,219	318	86	929	0.63	B
SR 44	SR 15A-Spring Garden Ave. to High St.	2	E	17,000	9,939	13,128	0	187	1,286	0.77	B
SR 44	High St. to Orange Ave.	2	E	17,000	10,771	13,929	35	202	1,367	0.82	B
SR 44	Orange Ave. to Boston Ave.	2	E	17,000	10,721	13,970	149	698	941	0.82	B
SR 44	Boston Ave. to Hill Ave.	2	E	17,000	10,563	11,640	304	2,224	1,270	0.68	B
SR 44	Hill Ave. to Blue Lake Ave.	2	D	16,600	11,286	13,178	664	2,414	644	0.79	B
SR 44	Blue Lake Ave. to Kepler Rd.	2	D	16,600	11,451	19,933	796	2,054	718	1.20	B
SR 44	Kepler Rd. to I-4	2	D	16,600	12,061	19,096	690	944	547	1.15	B
I-4	SR 44 to US 92	4	C	48,800	43,051	51,435	10	208	8	1.05	D
SR 472	US 17/92 to CR 4101	4	C	47,800	11,930	29,118	1,109	979	877	0.61	A
SR 472	CR 4101 to I-4	4	C	47,800	16,505	27,730	857	476	619	0.58	A
US 92	US 17 to Kepler Rd.	4	C	47,800	24,041	24,907	4,139	534	398	0.52	B
Amelia Avenue	US 92 to Kentucky Ave.	2	E	15,500	7,331	8,763	1,991	259	384	0.57	C
Amelia Avenue	Kentucky Ave. to Plymouth Ave.	2	E	15,500	8,666	10,536	1,885	382	486	0.68	C
Amelia Avenue	Plymouth Ave. to Pennsylvania Ave.	2	E	15,500	7,065	8,728	1,605	354	650	0.56	C
Amelia Avenue	Pennsylvania Ave. to Minnesota Ave.	2	E	15,500	7,065	8,728	1,605	354	650	0.56	C
Amelia Avenue	Minnesota Ave. to Michigan Ave.	2	E	15,500	10,170	13,060	1,473	1,172	740	0.84	C
Amelia Avenue	Michigan Ave. to Ohio Ave.	2	E	15,500	11,756	16,132	1,306	1,740	3,372	1.04	C
Amelia Avenue	Church Ave. to SR 44	4	E	31,540	11,756	16,132	1,306	1,740	3,372	0.51	C
Amelia Avenue	SR 44 to Beresford Ave.	2	E	15,500	415	2,141	10	12	691	0.14	C
Beresford Avenue	Beresford Rd. to Ridgewood Ave.	2	E	12,400	3,665	7,501	12	312	33	0.60	C
Beresford Avenue	Ridgewood Ave. to Woodward Ave.	2	E	12,400	3,956	8,602	12	377	33	0.69	C
Beresford Avenue	Woodward Ave. to Pearl St.	2	E	12,400	5,326	10,516	76	427	111	0.85	C
Beresford Avenue	Pearl St. to Spring Garden Ave.	2	E	12,400	5,848	11,003	76	477	111	0.89	C
Beresford Avenue	Spring Garden Ave. to SR 15A	2	E	12,400	4,581	7,608	0	425	42	0.61	C
Beresford Avenue	SR 15A to US 17-92	2	E	12,400	5,420	8,874	20	508	124	0.72	C
Beresford Avenue	US 17-92 to Alabama Ave.	2	E	16,275	10,519	16,061	500	1,232	534	0.99	C
Beresford Avenue	Alabama Ave. to Amelia Ave.	2	E	16,275	8,727	11,211	87	1,775	56	0.69	C
Beresford Avenue	Amelia Ave. to Boston Ave.	2	E	16,275	6,024	12,482	268	1,988	340	0.77	C
Beresford Avenue	Boston Ave. to Hill Ave.	2	E	12,400	2,983	10,815	216	3,070	422	0.87	C
Beresford Avenue	Hill Ave. to Blue Lake Ave.	2	E	12,400	2,160	10,800	220	3,263	426	0.87	C
Beresford Avenue	Blue Lake Ave. to Kepler Rd.	2	E	12,400	N/A	6,666	103	2,167	188	0.54	C
Beresford Avenue	Kepler Rd. to Summit Ave.	2	E	12,400	415	2,141	10	12	691	0.17	C
Blue Lake Avenue Extension	Plymouth Ave. to University Ave.	2	E	15,500	N/A	6,953	712	987	72	0.45	C
Blue Lake Avenue	Minnesota Ave. to SR 44	2	E	15,500	2,012	10,305	694	1,113	96	0.66	C
Blue Lake Avenue	SR 44 to Voorhis Ave.	2	E	15,500	2,673	5,683	525	2,225	132	0.37	C
Blue Lake Avenue	Voorhis Ave. to Beresford Ave.	2	E	15,500	3,600	11,983	555	4,077	669	0.77	C
Blue Lake Avenue	Beresford Ave. to Rockingham Lane	2	E	15,500	3,610	14,707	635	5,868	870	0.95	C
Blue Lake Avenue	Rockingham Lane to Taylor Rd.	2	E	15,500	3,454	14,606	623	5,878	858	0.94	C
Blue Lake Avenue	Taylor Rd. to Jackson Ranch Rd.	2	E	15,500	3,345	15,601	580	6,828	816	1.01	C
Blue Lake Avenue	Jackson Ranch Rd. to Orange Camp Rd.	2	E	15,500	3,454	14,606	623	5,878	858	0.94	C
Blue Lake Avenue Extension	Orange Camp Rd. to SR 472	2	E	15,500	415	2,141	10	12	691	0.14	C
CR 15A	US 17 to Airport Rd.	2	E	33,100	4,343	8,789	284	72	138	0.27	A
CR 15A	Airport Rd. to SR 11	2	E	33,100	531	2,139	0	8	22	0.06	A
CR 92 (Intnl Spdwy Blvd.)	SR 15A to Midpoint	2	E	17,000	5,080	8,105	1,921	73	46	0.48	B
CR 92 (Intnl Spdwy Blvd.)	Midpoint to Stone St.	2	E	17,000	9,328	6,241	842	146	16	0.37	B
CR 92 (Intnl Spdwy Blvd.)	Stone St. to Bridge	2	E	17,000	6,417	6,069	798	102	0	0.36	B
CR 92 (Intnl Spdwy Blvd.)	Bridge to US 17/92	2	E	17,000	9,328	6,241	842	146	16	0.37	B
Garfield Avenue	US 92 to Kentucky Ave.	2	E	12,400	680	1,296	104	0	48	0.10	C
Garfield Avenue	Kentucky Ave. to Plymouth Ave.	2	E	12,400	687	1,473	104	22	48	0.12	C
Garfield Avenue	Plymouth Ave. to Minnesota Ave.	2	E	12,400	1,354	6,267	600	204	66	0.51	C
Garfield Avenue	Minnesota Ave. to SR 44	2	E	12,400	1,715	2,196	16	150	8	0.18	C
Grand Ave./CR 4053	Highland Park Rd. to Plymouth Ave.	2	E	11,280	2,241	3,102	0	61	102	0.28	C
Grand Ave./CR 4053	Plymouth Ave. to Minnesota Ave.	2	E	11,280	469	679	0	0	0	0.06	C
Grand Ave./CR 4053	Minnesota Ave. to SR 44	2	E	11,280	883	3,178	401	26	17	0.28	C
Grand Ave./CR 4053	SR 44 to Old New York Ave.	2	E	11,280	415	2,141	10	12	691	0.19	C
Hazen Road	Mercers Fernery Rd. to Greens Dairy Rd.	2	E	11,280	495	731	122	0	0	0.06	C
Hazen Road	Greens Dairy Rd. to Plymouth Ave.	2	E	11,280	362	655	0	0	0	0.06	C

2020 Volumes

ROAD NAME	LIMITS	Number of Lanes	Comp Plan LOS	Capacity at Adopted LOS	1997 Model Volumes	Year 2020 Volumes				Total Volume/Capacity	LOS
						Total Trips	Berman Prop. Trips	Victoria DRI Trips	Justice Ctr		
Hazen Road	Plymouth Ave. to Minnesota Ave.	2	E	11,280	1,217	3,945	683	0	0	0.35	C
Hazen Road	Minnesota Ave. to SR 44	2	E	11,280	1,383	5,425	683	16	0	0.48	C
Hill Avenue/Jacobs Road	US 92 to Plymouth Ave.	2	E	12,400	2,988	7,454	878	934	14	0.60	C
Hill Avenue	Plymouth Ave. to University Ave.	2	E	12,400	4,447	6,229	340	405	12	0.50	C
Hill Avenue	University Ave. to Minnesota Ave.	2	E	12,400	4,586	6,229	340	405	12	0.50	C
Hill Avenue	Minnesota Ave. to SR 44	2	E	12,400	4,034	9,096	536	924	0	0.73	C
Hill Avenue	SR 44 to Voorhis Ave.	2	E	12,400	1,451	3,746	54	917	548	0.30	C
Hill Avenue	Voorhis Ave. to Euclid Ave.	2	E	12,400	1,639	1,793	90	86	104	0.14	C
Hill Avenue	Euclid Ave. to Beresford Ave.	2	E	12,400	1,047	1,199	4	193	2	0.10	C
Hill Avenue	Beresford Ave. to Taylor Rd.	2	E	12,400	415	2,141	10	12	691	0.17	C
McGregor Road	Westside Con./Fatio to Spring Garden Ave.	2	E	12,400	415	2,141	10	12	691	0.17	C
McGregor Road	Spring Garden Ave. to Dale Circle	2	E	12,400	4,720	5,687	477	175	14	0.46	C
McGregor Road	Dale Circle to US 17/92	2	E	12,400	6,287	11,032	455	872	42	0.89	C
Mercers Fernery Road	Glenwood Rd. to Hazen Rd.	2	E	11,280	587	714	66	2	6	0.06	C
Mercers Fernery Road	Hazen Rd. to SR 15A	2	E	11,280	1,110	1,543	264	28	30	0.14	C
Mercers Fernery Road	SR 15A to Stone St.	2	E	11,280	1,762	2,969	1,078	4	23	0.26	C
Mercers Fernery Road	Stone St. to US 17	2	E	11,280	393	2,633	1,166	0	0	0.23	C
Minnesota Avenue	Grand Ave. to Parkway St.	2	E	12,400	206	2,367	427	6	17	0.19	C
Minnesota Avenue	Parkway St. to SR 15A	2	E	12,400	434	2,112	72	2	25	0.17	C
Minnesota Avenue	SR 15A to Stone St.	2	E	12,400	1,431	4,373	14	60	406	0.35	C
Minnesota Avenue	Stone St. to US 17/92	2	E	12,400	3,661	5,394	121	132	334	0.43	C
Minnesota Avenue	Hill Ave. to Blue Lake Ave.	2	E	12,400	1,632	5,971	308	188	110	0.48	C
Minnesota Avenue	Blue Lake Ave. to Kepler Rd.	2	E	12,400	1,582	3,037	326	276	38	0.24	C
Old New York Avenue	SR 44 to Shell Rd.	2	E	11,280	415	2,141	10	12	691	0.19	C
Old New York Avenue	Shell Rd. to Hontoon Rd.	2	E	11,280	2,044	7,883	124	230	246	0.70	C
Old New York Avenue	Hontoon Rd. to West Ave.	2	E	11,280	4,743	10,830	232	302	360	0.96	C
Old New York Avenue	West Ave. to Grand Ave.	2	E	11,280	1,702	4,010	247	6	363	0.36	C
Old New York Avenue	Grand Ave. to Beresford Rd.	2	E	11,280	1,644	4,022	247	6	365	0.36	C
Old New York Avenue	Beresford Rd. to Ridgewood Ave.	2	E	11,280	1,254	2,405	247	4	89	0.21	C
Old New York Avenue	Ridgewood Ave. to SR 44	2	E	11,280	1,882	2,360	247	4	89	0.21	C
Orange Camp Rd	17/92 to Blue Lake Ave.	2	E	17,000	4,014	10,780	6	3,110	24	0.63	B
Orange Camp Rd	Blue Lake Ave. to Kepler Rd.	2	E	17,000	4,113	17,778	464	7,955	664	1.05	F
Orange Camp Rd	Kepler Rd to I-4	2	E	17,000	10,898	17,981	177	1,333	252	1.06	F
Orange Camp Rd	I-4 to Summit Ave.	2	E	17,000	5,058	11,898	175	1,689	0	0.70	B
Plymouth Avenue	Grand Ave. to Hazen Rd.	2	E	12,400	1,905	2,592	6	69	104	0.21	C
Plymouth Avenue	Hazen Rd. to SR 15A	2	E	12,400	2,718	6,800	1,116	55	96	0.55	C
Plymouth Avenue	SR 15A to Boundary Ave.	2	E	17,000	8,548	12,102	676	145	307	0.71	B
Plymouth Avenue	Boundary Ave. to Stone St.	2	E	17,000	8,863	12,309	753	145	307	0.72	B
Plymouth Avenue	Stone St. to Adelle Ave.	2	E	17,000	7,655	11,764	661	72	450	0.69	B
Plymouth Avenue	Adelle Ave. to Clara Ave.	2	E	17,000	7,700	11,793	679	72	450	0.69	B
Plymouth Avenue	Clara Ave. to Florida Ave.	2	E	17,000	8,117	12,349	1,001	68	393	0.73	B
Plymouth Avenue	Florida Ave/ to US 17/92	2	E	17,000	8,805	12,834	1,121	68	393	0.75	B
Plymouth Avenue	US 17/92 to Pine St.	2	E	17,000	7,703	13,761	1,118	211	170	0.81	B
Plymouth Avenue	Pine St. to Amelia Ave.	2	E	17,000	5,955	12,852	960	211	170	0.76	B
Plymouth Avenue	Amelia Ave. to Clark Ave.	2	E	17,000	3,881	11,586	1,174	239	68	0.68	B
Plymouth Avenue	Clark Ave. to Garfield Ave.	2	E	17,000	3,722	11,425	1,120	239	68	0.67	B
Plymouth Avenue	Garfield Ave. to Boston Ave.	2	E	17,000	3,310	6,890	624	56	86	0.41	B
Plymouth Avenue	Boston Ave. to Hill Ave.	2	E	17,000	2,255	6,719	424	294	90	0.40	B
Plymouth Avenue	Hill Ave. to Jacobs Rd.	2	E	17,000	2,988	3,557	82	111	102	0.21	B
Spring Garden Avenue	Beresford Rd. to North Ave.	2	E	12,400	4,848	5,548	497	151	44	0.45	C
Spring Garden Avenue	North Ave. to McGregor Rd.	2	E	12,400	4,617	5,414	477	166	14	0.44	C
Stone Street	Mercers Fernery Rd. to Greens Dairy Rd.	2	E	11,280	1,518	1,526	0	4	29	0.14	C
Stone Street	Greens Dairy Rd. to CR 92	2	E	11,280	3,482	7,304	3,519	148	121	0.65	C
Stone Street	CR 92 to Lake Gertie Rd.	2	E	11,280	5,298	4,336	896	15	168	0.38	C
Stone Street	Lake Gertie Rd. to Plymouth Ave.	2	E	11,280	6,158	6,692	690	245	256	0.59	C
Summit Avenue/CR 4139	SR 44 to I-4 Overpass	2	E	11,280	2,750	7,924	148	1,227	191	0.70	C
Summit Avenue/CR 4139	I-4 Overpass to Main St.	2	E	11,280	2,424	6,788	285	1,757	98	0.60	C
Taylor Road (DL)	US 17/92 to Aquarius Ave.	2	E	12,400	2,508	6,416	72	1,236	54	0.52	C
Taylor Road (DL)	Aquarius Ave. to Stratford Dr.	2	E	12,400	3,911	1,812	2	20	2	0.15	C
Taylor Road (DL)	Stratford Dr. to Hill Ave.	2	E	12,400	426	3,566	70	2,587	84	0.29	C
Taylor Road (DL)	Hill Ave. to Blue Lake Ave.	2	E	12,400	426	3,566	70	2,587	84	0.29	C
Taylor Road (DL)	Blue Lake Ave. to Martin Luther King Bltwy.	2	E	12,400	32	3,674	112	3,909	126	0.30	C
Voorhis Avenue	US 17/92 to Hayden Ave.	2	E	12,400	1,371	2,150	32	0	37	0.17	C
Voorhis Avenue	Hayden Ave. to Amelia Ave.	2	E	12,400	1,417	2,720	35	59	42	0.22	C
Voorhis Avenue	Amelia Ave. to Boston Ave.	2	E	12,400	3,512	6,463	318	533	633	0.52	C
Voorhis Avenue	Boston Ave. to Hill Ave.	2	E	12,400	2,017	5,026	123	614	284	0.41	C
Voorhis Avenue	Hill Ave. to Wade Ave.	2	E	12,400	1,586	6,861	89	1,446	726	0.55	C
Voorhis Avenue	Wade Ave. to SR 44	2	E	12,400	2,691	4,314	48	511	180	0.35	C
West Avenue	Old New York Ave. to Beresford Ave.	2	E	12,400	415	2,141	10	12	691	0.17	C
Westside Connector (new/Fatio)	SR 44 to Beresford Ave.	2	E	11,280	1,383	5,425	683	16	0	0.48	C
Westside Connector (Fatio Rd.)	Beresford Rd. to McGregor Rd.	2	E	11,280	103	273	0	8	0	0.02	C
W. Volusia Bltwy (Kepler Rd)	US 92 to Mimosa Lane	2	E	31,000	12,678	15,546	0	238	0	0.50	B

2020 Volumes

ROAD NAME	LIMITS	Number of Lanes	Comp Plan LOS	Capacity at Adopted LOS	1997 Model Volumes	Year 2020 Volumes				Total Volume/ Capacity	LOS
						Total Trips	Berman Prop. Trips	Victoria DRI Trips	Justice Ctr		
W. Volusia Bltwy (Kepler Rd)	Mimosa Lane to Minnesota Ave.	2	E	31,000	12,661	15,510	0	238	0	0.50	B
W. Volusia Bltwy (Kepler Rd)	Minnesota Ave. to Lake Charles Rd.	2	E	31,000	12,684	17,048	274	449	0	0.55	B
W. Volusia Bltwy (Kepler Rd)	Lake Charles Rd. to SR 44	2	E	31,000	12,684	17,048	274	449	0	0.55	B
W. Volusia Bltwy (Kepler Rd)	SR 44 to Midpoint	2	E	31,000	11,902	20,813	157	2,417	253	0.67	C
W. Volusia Bltwy (Kepler Rd)	N. of Beresford Rd.	2	E	31,000	11,680	16,730	132	2,855	164	0.54	B
W. Volusia Bltwy (Dr MLK Jr)	S. of Beresford Rd.	2	E	31,000	11,680	15,971	82	2,046	100	0.52	B
W. Volusia Bltwy (Dr MLK Jr)	N. of Taylor Rd.	2	E	31,000	11,680	18,906	194	5,170	226	0.61	C
W. Volusia Bltwy (Dr MLK Jr)	S. of Taylor Rd.	2	E	31,000	11,648	17,702	64	3,890	80	0.57	C
W. Volusia Bltwy (Dr MLK Jr)	Midpoint to Orange Camp Rd.	2	E	31,000	11,648	17,702	64	3,890	80	0.57	C

ART-PLAN 2.0

Arterial Level of Service Estimating Software
Based on Chapter 11 of the 1994 Highway Capacity Manual Update

Florida Department of Transportation

August 1995

DESCRIPTION

Road Name: **US 17/92**
From: **Plymouth Ave**
To: **Beresford Ave**
Peak Direction: **NB**
Off-peak Direction: **SB**
Study Time Period: **PM PEAK**
Analysis Date: **Dec. 28,1998**
User Notes:

TRAFFIC CHARACTERISTICS

AADT:
K FACTOR: **0.082**
D FACTOR: **0.550**
PHF: **0.925**
ADJ. SATURATION FLOW RATE: **1,900**
% TURNS FROM EXCLUSIVE LANES: **12**

ROADWAY CHARACTERISTICS

THRU-LANES PEAK DIRECTION: **1**
THRU LANES OFF-PEAK DIRECTION: **1**
URBAN, TRANSITIONING, OR
RURAL DEVELOPED (U/T/R): **U**
ARTERIAL CLASS: **2 (1, 2, or 3)**
FREE FLOW SPEED (mph): **35 (40,35,30,25)**
For Arterial Type and Class: Use Free flow speed of:
Rural **55, 50, 45, 40 or 35**
Transitioning, Class 1 **55, 50, 45, 40 or 35**
Urban, Class 1 **45, 40 or 35**
Urban or Transitioning, Class 2 **40, 35, 30 or 25**
Urban, Class 3 **35, 30 or 25**

SIGNALIZATION CHARACTERISTICS

ARRIVAL TYPE PEAK DIRECTION: **4**
ARRIVAL TYPE OFF-PEAK DIRECTION: **4**
TYPE SIGNAL SYSTEM: **A**
P=PRETIMED
S=SEMIACTUATED
A=ACTUATED
SYSTEM CYCLE LENGTH: **105**
WEIGHTED THRU MOVEMENT g/C: **0.62**

NB PEAK DIRECTION'S SPECIFIC INPUTS									
LINK	LINK	PEAK HOUR	% TURNS		CYCLE	EFFECTIVE	DISTANCE	LINK	ARRIVAL
	AADT (1 if unavail.) (0 if unused)		FROM	EXCLUS.	LANES	LENGTH	g/C		
LINK		VOLUME	LANES	LANES	SIGNALS 2-20	SIGNALS 2-20	(Enter in Miles or Feet)	(FT)	TYPE
1-2	14948	674	12	1	105	0.38	0.26	1,368	4
2-3	14948	674	12	1	105	0.69	0.25	1,294	4
3-4	14948	674	12	1	105	0.69	0.26	1,378	4
4-5	15630	705	12	1	105	0.69	0.12	644	4
5-6	15630	705	12	1	105	0.64	0.06	312	4
6-7	15630	705	12	1	105	0.69	0.06	338	4
7-8	16939	764	12	1	105	0.52	0.11	576	4
8-9	16939	764	12	1	105	0.55	0.10	544	4
9-10	18070	815	12	1	105	0.69	0.76	3,986	4
10-11	0	0							
11-12	0	0							
12-13	0	0							
13-14	0	0							
14-15	0	0							
15-16	0	0							
16-17	0	0							
17-18	0	0							
18-19	0	0							
19-20	0	0							

NB PEAK DIRECTION RESULTS								
LINK	NOTES	THROUGH		INTERSECTION		SPEED	ARTERIAL	
	or FROM/TO	MOVEMENT	v/c RATIO	STOPPED	APPROACH	(MPH)	LINK	
LINK		FLOW RATE		DELAY	LOS		LOS	
1-2		641	0.89	27.0	D	14.2	D	
2-3		641	0.49	5.1	B	24.3	B	
3-4		641	0.49	5.1	B	25.1	B	
4-5		671	0.51	5.3	B	18.3	C	
5-6		671	0.55	7.1	B	11.9	E	
6-7		671	0.51	5.3	B	14.3	D	
7-8		727	0.74	14.2	B	11.5	E	
8-9		727	0.70	12.2	B	12.1	E	
9-10		775	0.59	5.9	B	31.7	A	
10-11		0						
11-12		0						
12-13		0						
13-14		0						
14-15		0						
15-16		0						
16-17		0						
17-18		0						
18-19		0						
19-20		0						
NB	Arterial Speed =		20.5 mph					
	LOS =		C					

SB OFF-PEAK DIRECTION'S SPECIFIC INPUTS							
LINK	PEAK HOUR VOLUME	% TURNS		CYCLE LENGTH SIGNALS 19-1	EFFECTIVE g/C SIGNALS 19-1	LENGTH (FT)	ARRIVAL TYPE
		FROM EXCLUS. LANES	LANES				
20-19		0					
19-18		0					
18-17		0					
17-16		0					
16-15		0					
15-14		0					
14-13		0					
13-12		0					
12-11		0					
11-10		0					
10-9	667	12	1	105	0.55	3,986	4
9-8	625	12	1	105	0.52	544	4
8-7	625	12	1	105	0.69	576	4
7-6	577	12	1	105	0.64	338	4
6-5	577	12	1	105	0.69	312	4
5-4	577	12	1	105	0.69	644	4
4-3	552	10	1	105	0.69	1,378	4
3-2	552	12	1	105	0.38	1,294	4
2-1	552	12	1	105	0.69	1,368	4

SB OFF-PEAK DIRECTION RESULTS							
LINK	NOTES or FROM/TO	THROUGH MOVEMENT		STOPPED DELAY	INTERSECTION APPROACH LOS	SPEED (MPH)	ARTERIAL LINK LOS
		FLOW RATE	v/c RATIO				
20-19		0					
19-18		0					
18-17		0					
17-16		0					
16-15		0					
15-14		0					
14-13		0					
13-12		0					
12-11		0					
11-10		0					
10-9		634	0.61	10.9	B	29.5	B
9-8		595	0.60	11.9	B	12.2	E
8-7		595	0.45	4.9	A	17.9	D
7-6		549	0.45	6.3	B	13.2	E
6-5		549	0.42	4.7	A	14.5	D
5-4		549	0.42	4.7	A	18.9	C
4-3		537	0.41	4.6	A	25.5	B
3-2		525	0.73	20.0	C	15.9	D
2-1		525	0.40	4.6	A	25.5	B
SB	Arterial Speed =		21.6 mph				
	LOS =		C				

ART-PLAN 2.0

Arterial Level of Service Estimating Software
Based on Chapter 11 of the 1994 Highway Capacity Manual Update

Florida Department of Transportation

August 1995

DESCRIPTION

Road Name: **SR 15A**
From: **Plymouth Ave**
To: **Glewood Rd**
Peak Direction: **NB**
Off-peak Direction: **SB**
Study Time Period:
Analysis Date: **Jan 21, 1999**
User Notes:

TRAFFIC CHARACTERISTICS

AADT:
K FACTOR: **0.092**
D FACTOR: **0.550**
PHF: **0.925**
ADJ. SATURATION FLOW RATE: **1,900**
% TURNS FROM EXCLUSIVE LANES: **12**

ROADWAY CHARACTERISTICS

THRU-LANES PEAK DIRECTION: **1**
THRU LANES OFF-PEAK DIRECTION: **1**
URBAN, TRANSITIONING, OR
RURAL DEVELOPED (U/T/R): **T**
ARTERIAL CLASS: **2 (1, 2, or 3)**
FREE FLOW SPEED (mph): **35 (40,35,30,25)**
For Arterial Type and Class: Use Free flow speed of:
Rural **55, 50, 45, 40 or 35**
Transitioning, Class 1 **55, 50, 45, 40 or 35**
Urban, Class 1 **45, 40 or 35**
Urban or Transitioning, Class 2 **40, 35, 30 or 25**
Urban, Class 3 **35, 30 or 25**

SIGNALIZATION CHARACTERISTICS

ARRIVAL TYPE PEAK DIRECTION: **4**
ARRIVAL TYPE OFF-PEAK DIRECTION: **4**
TYPE SIGNAL SYSTEM: **A** **P=PRETIMED**
S=SEMIACTUATED
A=ACTUATED
SYSTEM CYCLE LENGTH: **120**
WEIGHTED THRU MOVEMENT g/C: **0.55**

NB PEAK DIRECTION'S SPECIFIC INPUTS									
LINK	LINK	PEAK HOUR	% TURNS		CYCLE	EFFECTIVE	DISTANCE	LINK	ARRIVAL
	AADT (1 if unavail.) (0 if unused)		FROM	EXCLUS.	LANES	LENGTH	g/C		
LINK		VOLUME	LANES	LANES	2-20	2-20	(Enter in Miles or Feet)	(FT)	TYPE
1-2	14861	752	12	2	120	0.55	0.83	4,382	4
2-3	14861	752	12	1	120	0.55	1.19	6,283	4
3-4	0	0	0				0.00		
4-5	0	0	0						
5-6	0	0	0						
6-7	0	0	0						
7-8	0	0	0						
8-9	0	0	0						
9-10	0	0	0						
10-11	0	0	0						
11-12	0	0	0						
12-13	0	0	0						
13-14	0	0	0						
14-15	0	0	0						
15-16	0	0	0						
16-17	0	0	0						
17-18	0	0	0						
18-19	0	0	0						
19-20	0	0	0						

NB PEAK DIRECTION RESULTS								
LINK	NOTES or FROM/TO	THROUGH			INTERSECTION		SPEED (MPH)	ARTERIAL LINK LOS
		MOVEMENT	FLOW RATE	v/c RATIO	STOPPED DELAY	APPROACH LOS		
1-2	Plymouth US 92		715	0.34	9.7	B	30.4	A
2-3	US 92 Glenwood		715	0.68	13.6	B	30.6	A
3-4			0					
4-5			0					
5-6			0					
6-7			0					
7-8			0					
8-9			0					
9-10			0					
10-11			0					
11-12			0					
12-13			0					
13-14			0					
14-15			0					
15-16			0					
16-17			0					
17-18			0					
18-19			0					
19-20			0					
NB		Arterial Speed =			30.5 mph			
		LOS =			A			

SB OFF-PEAK DIRECTION'S SPECIFIC INPUTS								
LINK	PEAK HOUR VOLUME	% TURNS		CYCLE LENGTH SIGNALS 19-1	EFFECTIVE g/C SIGNALS 19-1	LENGTH (FT)	ARRIVAL TYPE	
		FROM EXCLUS. LANES	LANES					
20-19		0						
19-18		0						
18-17		0						
17-16		0						
16-15		0						
15-14		0						
14-13		0						
13-12		0						
12-11		0						
11-10		0						
10-9		0						
9-8		0						
8-7		0						
7-6		0	12					
6-5		0	12					
5-4		0						
4-3		0	10					
3-2	615	12		1	120	0.55	6,283	4
2-1	615	12		2	120	0.51	4,382	4

SB OFF-PEAK DIRECTION RESULTS							
LINK	NOTES or FROM/TO	THROUGH MOVEMENT		STOPPED DELAY	INTERSECTION APPROACH LOS	SPEED (MPH)	ARTERIAL LINK LOS
		FLOW RATE	v/c RATIO				
20-19		0					
19-18		0					
18-17		0					
17-16		0					
16-15		0					
15-14		0					
14-13		0					
13-12		0					
12-11		0					
11-10		0					
10-9		0					
9-8		0					
8-7		0					
7-6		0					
6-5		0					
5-4		0					
4-3		0					
3-2		585	0.56	11.7	B	31.1	A
2-1		585	0.30	11.0	B	29.8	B
SB	Arterial Speed =		30.6 mph				
	LOS =		A				

ART-PLAN 2.0

Arterial Level of Service Estimating Software
Based on Chapter 11 of the 1994 Highway Capacity Manual Update

Florida Department of Transportation
August 1995

DESCRIPTION

Road Name: **Beresford Ave**
From: **US 17/92**
To: **Boston Ave**
Peak Direction: **EB**
Off-peak Direction: **WB**
Study Time Period:
Analysis Date: **Dec. 28, 1998**
User Notes:

TRAFFIC CHARACTERISTICS

AADT:
K FACTOR: **0.092**
D FACTOR: **0.550**
PHF: **0.925**
ADJ. SATURATION FLOW RATE: **1,900**
% TURNS FROM EXCLUSIVE LANES: **12**

ROADWAY CHARACTERISTICS

THRU-LANES PEAK DIRECTION: **1**
THRU LANES OFF-PEAK DIRECTION: **1**
URBAN, TRANSITIONING, OR
RURAL DEVELOPED (U/T/R): **T**
ARTERIAL CLASS: **2 (1, 2, or 3)**
FREE FLOW SPEED (mph): **35 (40,35,30,25)**
For Arterial Type and Class: Use Free flow speed of:
Rural **55, 50, 45, 40 or 35**
Transitioning, Class 1 **55, 50, 45, 40 or 35**
Urban, Class 1 **45, 40 or 35**
Urban or Transitioning, Class 2 **40, 35, 30 or 25**
Urban, Class 3 **35, 30 or 25**

SIGNALIZATION CHARACTERISTICS

ARRIVAL TYPE PEAK DIRECTION: **4**
ARRIVAL TYPE OFF-PEAK DIRECTION: **4**
TYPE SIGNAL SYSTEM: **A**
P=PRETIMED
S=SEMIACTUATED
A=ACTUATED
SYSTEM CYCLE LENGTH: **90**
WEIGHTED THRU MOVEMENT g/C: **0.49**

EB PEAK DIRECTION'S SPECIFIC INPUTS									
LINK	LINK	PEAK HOUR	% TURNS		CYCLE	EFFECTIVE	DISTANCE	LINK	ARRIVAL
	AADT		FROM	EXCLUS.	LENGTH	g/C	BETWEEN		
	(1 if unavail.)	VOLUME	LANES	LANES	SIGNALS	SIGNALS	(Enter in	(FT)	TYPE
	(0 if unused)				2-20	2-20	Miles or Feet)		
1-2	14408	729	0	1	90	0.47	0.24	1,278	4
2-3	10294	521	0	1	90	0.49	0.49	2,582	4
3-4	0	0	0						
4-5	0	0	0						
5-6	0	0	0						
6-7	0	0	0						
7-8	0	0	0						
8-9	0	0	0						
9-10	0	0	0						
10-11	0	0	0						
11-12	0	0	0						
12-13	0	0	0						
13-14	0	0	0						
14-15	0	0	0						
15-16	0	0	0						
16-17	0	0	0						
17-18	0	0	0						
18-19	0	0	0						
19-20	0	0	0						

EB PEAK DIRECTION RESULTS							
LINK	NOTES	THROUGH	INTERSECTION			ARTERIAL	
	or	MOVEMENT	STOPPED	APPROACH	SPEED	LINK	
	FROM/TO	FLOW RATE	DELAY	LOS	(MPH)	LOS	
			v/c RATIO				
1-2		788	0.88	19.7	C	15.8	D
2-3		563	0.60	11.4	B	26.8	B
3-4		0					
4-5		0					
5-6		0					
6-7		0					
7-8		0					
8-9		0					
9-10		0					
10-11		0					
11-12		0					
12-13		0					
13-14		0					
14-15		0					
15-16		0					
16-17		0					
17-18		0					
18-19		0					
19-20		0					
EB		Arterial Speed =	21.8 mph				
		LOS =	C				

WB OFF-PEAK DIRECTION'S SPECIFIC INPUTS							
LINK	PEAK HOUR VOLUME	% TURNS		CYCLE	EFFECTIVE	LENGTH (FT)	ARRIVAL TYPE
		FROM EXCLUS. LANES	LANES	LENGTH SIGNALS 19-1	g/C SIGNALS 19-1		
20-19		0					
19-18		0					
18-17		0					
17-16		0					
16-15		0					
15-14		0					
14-13		0					
13-12		0					
12-11		0					
11-10		0					
10-9		0					
9-8		0					
8-7		0					
7-6		0	12				
6-5		0	12				
5-4		0					
4-3		0	10				
3-2	426	12	1	90	0.47	2,582	4
2-1	596	12	1	90	0.51	1,278	4

WB OFF-PEAK DIRECTION RESULTS							
LINK	NOTES or FROM/TO	THROUGH		STOPPED DELAY	INTERSECTION APPROACH LOS	SPEED (MPH)	ARTERIAL LINK LOS
		MOVEMENT FLOW RATE	v/c RATIO				
20-19		0					
19-18		0					
18-17		0					
17-16		0					
16-15		0					
15-14		0					
14-13		0					
13-12		0					
12-11		0					
11-10		0					
10-9		0					
9-8		0					
8-7		0					
7-6		0					
6-5		0					
5-4		0					
4-3		0					
3-2		405	0.45	10.6	B	27.2	B
2-1		567	0.59	10.5	B	20.3	C
WB	Arterial Speed =		24.4 mph				
	LOS =		B				

ART-PLAN 2.0

Arterial Level of Service Estimating Software
Based on Chapter 11 of the 1994 Highway Capacity Manual Update

Florida Department of Transportation August 1995

DESCRIPTION

Road Name: **Orange Camp Rd**
From: **17/92**
To: **Kepler Rd**
Peak Direction: **NB**
Off-peak Direction: **SB**
Study Time Period:
Analysis Date: **Jan 28, 1999**
User Notes:

TRAFFIC CHARACTERISTICS

AADT:
K FACTOR: **0.092**
D FACTOR: **0.550**
PHF: **0.925**
ADJ. SATURATION FLOW RATE: **1,900**
% TURNS FROM EXCLUSIVE LANES: **0**

ROADWAY CHARACTERISTICS

THRU-LANES PEAK DIRECTION: **1**
THRU LANES OFF-PEAK DIRECTION: **1**
URBAN, TRANSITIONING, OR
RURAL DEVELOPED (U/T/R): **R**
ARTERIAL CLASS: **2** Class = 1
FREE FLOW SPEED (mph): **40** (40,35,30,25)
For Arterial Type and Class: **Use Free flow speed of:**
 Rural 55, 50, 45, 40 or 35
 Transitioning, Class 1 55, 50, 45, 40 or 35
 Urban, Class 1 45, 40 or 35
Urban or Transitioning, Class 2 40, 35, 30 or 25
 Urban, Class 3 35, 30 or 25

SIGNALIZATION CHARACTERISTICS

ARRIVAL TYPE PEAK DIRECTION: **4**
ARRIVAL TYPE OFF-PEAK DIRECTION: **4**
TYPE SIGNAL SYSTEM: **A** P=PRETIMED
 S=SEMIACTUATED
 A=ACTUATED
SYSTEM CYCLE LENGTH: **0**
WEIGHTED THRU MOVEMENT g/C: **0.55**

SB OFF-PEAK DIRECTION'S SPECIFIC INPUTS							
LINK	PEAK HOUR VOLUME	% TURNS		CYCLE	EFFECTIVE	LENGTH (FT)	ARRIVAL TYPE
		FROM EXCLUS. LANES	LANES	LENGTH SIGNALS 19-1	g/C SIGNALS 19-1		
20-19		0					
19-18		0					
18-17		0					
17-16		0					
16-15		0					
15-14		0					
14-13		0					
13-12		0					
12-11		0					
11-10		0					
10-9		0					
9-8		0					
8-7		0					
7-6		0					
6-5		0					
5-4		0					
4-3		0					
3-2	644	0	1	100	0.48	3,062	4
2-1	332	0	2	0	0.51	8,237	4

SB OFF-PEAK DIRECTION RESULTS							
LINK	NOTES or FROM/TO	THROUGH		STOPPED DELAY	INTERSECTION		ARTERIAL LINK LOS
		MOVEMENT FLOW RATE	v/c RATIO		APPROACH LOS	SPEED (MPH)	
20-19		0					
19-18		0					
18-17		0					
17-16		0					
16-15		0					
15-14		0					
14-13		0					
13-12		0					
12-11		0					
11-10		0					
10-9		0					
9-8		0					
8-7		0					
7-6		0					
6-5		0					
5-4		0					
4-3		0					
3-2		697	0.76	15.8	D	27.9	C
2-1		359	0.19	0.0	A	40.0	B
SB	Arterial Speed =		35.8 mph				
	LOS =		B				

NB PEAK DIRECTION'S SPECIFIC INPUTS									
LINK	LINK	PEAK HOUR	% TURNS		CYCLE	EFFECTIVE	DISTANCE	LINK	ARRIVAL
	AADT (1 if unavail.) (0 if unused)		FROM	EXCLUS.	LANES	LENGTH	g/C		
		VOLUME	LANES	LANES	2-20	2-20	(Enter in Miles or Feet)	(FT)	TYPE
1-2	8011	405	0	2	100	0.48	1.56	8,237	4
2-3	15565	788	0	1	60	0.50	0.58	3,062	4
3-4	0	0	0				0.00		
4-5	0	0	0						
5-6	0	0	0						
6-7	0	0	0						
7-8	0	0	0						
8-9	0	0	0						
9-10	0	0	0						
10-11	0	0	0						
11-12	0	0	0						
12-13	0	0	0						
13-14	0	0	0						
14-15	0	0	0						
15-16	0	0	0						
16-17	0	0	0						
17-18	0	0	0						
18-19	0	0	0						
19-20	0	0	0						

NB PEAK DIRECTION RESULTS								
LINK	NOTES		THROUGH	v/c RATIO	INTERSECTION		SPEED (MPH)	ARTERIAL
	or	FROM/TO	MOVEMENT		STOPPED	APPROACH		LINK
			FLOW RATE		DELAY	LOS		LOS
1-2	Plymouth	US 92	438	0.24	9.9	B	36.6	B
2-3	US 92	Glenwood	851	0.90	15.0	D	28.3	C
3-4			0					
4-5			0					
5-6			0					
6-7			0					
7-8			0					
8-9			0					
9-10			0					
10-11			0					
11-12			0					
12-13			0					
13-14			0					
14-15			0					
15-16			0					
16-17			0					
17-18			0					
18-19			0					
19-20			0					
NB			Arterial Speed =		34.0 mph			
			LOS =		C			