

**LAKE COUNTY
TRANSPORTATION IMPACT FEE UPDATE STUDY
FINAL REPORT**



July 26, 2007

Prepared for:

Lake County

315 West Main St.

Tavares, Florida 32778

Prepared by:

Tindale-Oliver & Associates, Inc.

1000 N. Ashley Dr., #100

Tampa, Florida, 33602

ph (813) 224-8862, fax (813) 226-2106

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July 26, 2007

Ms. Angi Thompson
Impact Fee Coordinator
Lake County
315 West Main St.
Tavares, FL 32778

RE: Lake County Transportation Impact Fee Update Study – Final Report

Dear Ms. Thompson:

Enclosed is the final Technical Report for the Lake County Impact Fee Update Study. We have updated the report based on the objective of using the most conservative cost figures in the impact fee equation. A modification has been made to the cost per lane mile for state roadway projects that adjusts the rural section design cost downward based on recent bid data. The resulting impact on the impact fee was quite insignificant (a reduction in the single family fee per dwelling unit from \$11,396 to \$11,352); however, to maintain the theme of being conservative, the adjustment has been incorporated into the impact fee schedule.

I apologize for any inconvenience this has created. If you should have any questions concerning the report, please do not hesitate to contact me or Nilgun Kamp.

Sincerely,

Tindale-Oliver & Associates, Inc.

A handwritten signature in blue ink that reads "Bob Wallace". The signature is fluid and cursive.

Bob Wallace, P.E., AICP
Vice-President

Enclosure

**LAKE COUNTY
TRANSPORTATION IMPACT FEE UPDATE STUDY**

Table of Contents

INTRODUCTION.....	1
DEMAND COMPONENT	2
Individual Land Use Trip Characteristics	3
COST COMPONENT	7
County Costs.....	7
State Costs.....	9
Summary of Costs (Blended Cost Analysis)	10
CREDIT COMPONENT.....	11
Gasoline Tax Credit	11
Facility Life.....	13
Interest Rate	13
Fuel Efficiency.....	13
Effective Days per Year.....	14
Capacity per Lane Mile.....	14
Interstate and Toll Facility Adjustment Factor	15
PROPOSED TRANSPORTATION IMPACT FEE SCHEDULE.....	16
TRANSPORTATION IMPACT FEE SCHEDULE COMPARISON.....	21
FUTURE DEMAND ANALYSIS & CAPITAL COST PROJECTIONS	21
REVENUE ESTIMATES.....	23
BENEFIT DISTRICTS	25
INDEXING	29
Methodology	29
Application.....	30

MAPS

Map 1 – Existing Impact Fee Benefit Districts

Map 2 – Proposed Impact Fee Benefit Districts

APPENDICES

Appendix A – Lake County Trip Characteristics Study Data

Appendix B – Florida Studies Trip Characteristics Database

Appendix C – Cost Component Calculation

Appendix D– Credit Component Calculation

Appendix E – Analysis of Travel Behavior of Low-Income Households

Appendix F – Proposed Lake County Transportation Impact Fee Schedule

LAKE COUNTY TRANSPORTATION IMPACT FEE UPDATE STUDY

Introduction

Lake County currently has implemented impact fees in five program areas. Of these, the transportation impact fee was last updated in 2001. To address the recent cost increases along with new infrastructure required due to continuing growth, Lake County retained Tindale-Oliver & Associates (TOA) to update the County's transportation impact fee program. The purpose of this study is to create a legally defensible and technically supportable transportation impact fee study.

Following the introduction, this report consists of the following sections:

- Demand Component
- Cost Component
- Credit Component
- Proposed Transportation Impact Fee Schedule
- Impact Fee Schedule Comparison
- Future Demand Analysis & Capital Cost Projections
- Revenue Estimates
- Benefit Districts
- Indexing

These sections are summarized in detail in the remainder of this report, resulting in the proposed updated transportation impact fee schedule.

This transportation impact fee study follows a standards-driven approach. Lake County is experiencing an influx of new development and future growth is expected to continue. In order to get people to and from work and other community services, significant additions to the existing roadway network will be necessary. To develop potential revenue sources to pay for the capacity that new growth will consume on the transportation network, a transportation impact fee program has been developed.

Included in this document is the necessary support material utilized in the calculation of the updated transportation impact fees. The general equation used to compute the impact fee for a given land use is:

$$\text{Demand} \times \text{Cost} - \text{Credit} = \text{Fee}$$

The demand for travel placed on the transportation system (daily trip generation rate times the trip length times the percent of new trips) is expressed in units of vehicle miles of travel for each land use contained in the impact fee schedule. It should be noted that trip generation is expressed in average daily rates since new development consumes trips on a daily basis. The cost of building new capacity is typically expressed in units of dollars per vehicle mile or lane mile of roadway capacity. The credit is an estimate of the non-impact fee revenues generated by a unit of each land use of new development that are allocated to roadway construction or transportation system capacity expansion. Thus, the impact fee is an "up front" payment for a portion of the cost of building a lane mile of capacity directly related to the amount of capacity consumed by each unit of land use contained in the impact fee schedule. It should be noted that the information used to develop the impact fee schedule was based upon the best most recent and localized data available.

Demand Component

There are 11 input variables used in the fee equation:

- Number of daily trips generated
- Length of those trips
- Proportion of travel that is new travel
- Cost per lane mile
- Equivalent gas tax credit (pennies)
- Facility life
- Interest rate
- Fuel efficiency
- Effective days per year
- Capacity per lane mile
- Interstate/toll facility adjustment factor

A review of these variables and corresponding recommendations are presented in the following sections.

Individual Land Use Trip Characteristics

The amount of road system consumed by a new land development is calculated using the following units of measure:

- number of daily trips generated;
- length of those trips; and
- proportion of travel that is new travel, rather than travel that is estimated to have already been on the road system.

As part of this update, the trip characteristic variables have been obtained primarily from two sources: previous similar studies conducted throughout Florida, including Lake County, and from the Institute of Transportation Engineers' (ITE) *Trip Generation* reference report (7th edition). However, it is important to note that this information also has been supplemented with additional trip characteristic studies that were conducted as part of this current update study. These studies include a survey and review of travel characteristics for the following land uses:

- single family residential;
- apartments; and
- church with daycare centers.

The analysis of trip characteristic data is based on the review of the lane miles of capacity consumed by specific types of land use. In order to better understand trip characteristics in Lake County, a total of 11 sites from the three identified land use categories were studied. This includes the review of five single-family residential sites, four multi-family/apartment sites, and two churches with daycare center sites. The details of these site surveys can be found in Appendix A. Two types of study data were collected at each study site: 1) trip generation data, and 2) origin destination surveys. The trip generation data were collected through the use of machine traffic counts during the weekdays for a period of 72 consecutive hours, or three days. Additionally, manual counts were collected periodically during the week to verify the accuracy of the machine traffic counts. Origin/destination survey data also was collected at each study site. For the residential study sites, the data were collected through road-side patron interviews. For non-residential study sites, the data were collected through on-site patron interviews. The interviews were generally conducted between the hours of 6:30 a.m. to 6:00 p.m., which allowed for data to be collected for both work and non-work type trips.

A statistical review of the reasonableness of the survey data was performed. This analysis is illustrated in Appendix A, Table A12. Finally, the results of the trip characteristic surveys are summarized through three tables (Appendix A, Tables A-13 through A-15). These tables provide information about the trip generation, percent new trips, and trip lengths for each of the three land uses previously referenced. Data resulting from the trip characteristic surveys are included in the subsequent subsections and are used in the development of the demand component of the transportation impact fee for the three land uses. One of the considerations in the collection of origin-destination survey data is to collect survey samples to develop a reasonable level of confidence that the collected data reflects local travel conditions in Lake County. From a statistical sampling perspective, the goal of these studies is to collect enough survey samples to be 85 percent confident that the average trip length from the survey data was within a plus or minus 15 percent level of accuracy for each study site, as outlined in the “Lake County Procedure LC-2, Traffic Studies and Independent Impact Fee Calculations for Development Activity.” This confidence level has been used in the collection of local trip characteristic data in a number of communities throughout Florida.

Appendix A, Table A-12 presents the review of the land use sample size for each of the sites surveyed at the three land uses. This table indicates the number of samples, coefficient of variation, and sample size requirement at both the 85 percent and 90 percent levels of confidence. Margins of error for each of these sample size requirements are provided at 10 and 15 percent. Review of the data presented in Table A-12 indicates that enough samples were obtained at all 11 of the study sites for the three land uses to obtain a confidence level at or above 85 percent confidence within a 15 percent margin of error. In fact, all sites surveyed actually met the sample size required for a 90 percent level of confidence with a 15 percent margin of error, with the exception of the Minneola First Baptist Learning Center site. This site had a small population size (there are only 40 students at the daycare site), which caused a high coefficient of variation. Since the total population of potential surveys was known, and the total number of surveys obtained represented 85 percent of the total population, the data from this site were determined to be reasonable (it also met the 85 percent +/- 15 percent confidence criteria). In addition, it was determined that the Minneola First Baptist Learning Center and the South Leesburg Church of God sites had a significant degree of variability in terms of vehicle miles of travel (118.5 and 44.9). Because of the significant variability in vehicles miles of travel, TOA decided not to add church with daycare as a new land use. It is recommended that the County study additional sites of this land use to develop a reasonable sample from which a decision could then be made regarding adding this land use to the impact fee schedule in the future.

In summary, the results of the local trip characteristic studies conducted in Lake County are provided reasonable data and the results met the statistical sampling requirements. Thus, the data collection will be used in the development of the demand component for the two of the three land uses for which data was collected in Lake County.

Table 1 provides a summary of the data collected for the three variables (trip generation rate, trip length, and percent new trips) and the resulting vehicle miles of travel (VMT) for each land use category that was studied.

Land use-based results that were incorporated into the Florida Trip Characteristics Studies are included in Appendix B. This database was used to document the trip length, percent new trips, and trip rate for the land uses contained in the impact fee schedule. Following the cost component calculations in Appendix C and the credit component calculations in Appendix D, an analysis of the trip characteristics of lower income households is presented in Appendix E. The trip characteristic variables used in the calculation of the impact fee for each land use included in the proposed fee schedule are presented in Appendix F.

The local trip characteristic data collected for the Lake County residential single family land use sites were compared to single family land use data contained in the Florida Studies Database. Based on this review, an adjustment factor of 1.33 (meaning that the trip lengths observed in Lake County were 33 percent longer than the average trip length observed in the residential single family land use for non-Lake County studies contained in the Florida Studies Database) was applied to most of the residential land uses. This adjustment factor represents a conservative estimate of the differences observed between the Florida Studies Database and studies conducted in Lake County.

In the previous technical report, “The Lake County Transportation Impact Fee Study” (May 2001), two non-residential land use types (shopping centers and fast-food restaurants) were studied. A comparison of the vehicle miles of travel (trip generation rate multiplied by trip length and percent new trips) observed at these sites with sites of similar size and demographic attributes show that shopping centers located in Lake County generate approximately 168 percent more VMT and, similarly, the fast-food restaurant sites generate 117 percent more VMT. In addition, the travel demand model based on the 2025 Cost Affordable Plan was analyzed to estimate the average trip length by trip type. The results confirmed that the adjustment factors being applied during this update are justified since, on average, trips in Lake County consume more vehicle miles of capacity than average for similar land uses in the Florida Studies Database.

**Table 1
Summary of Trip Characteristic Studies**

Development	Type	Gross Size ⁽¹⁾		Trip Generation Rate ⁽²⁾	Trip Length ⁽³⁾	Percent New Trips ⁽⁴⁾	VMT ⁽⁵⁾	Impact Fee VMT ⁽⁶⁾
Site 1	Residential	100	du	9.12	5.78	100%	52.71	26.36
Site 2	Residential	44	du	11.26	5.56	100%	62.61	31.30
Site 3	Residential	65	du	12.07	10.79	100%	130.24	65.12
Site 4	Residential	64	du	18.22	9.46	100%	172.36	86.18
Site 5	Residential	265	du	7.58	8.93	100%	67.69	33.84
Site 6	Residential	252	du	6.71	5.33	100%	35.76	17.88
Site 7	Residential	248	du	6.74	2.17	100%	14.63	7.31
Site 8	Residential	176	du	8.09	6.00	100%	48.54	24.27
Site 9	Residential	168	du	13.97	2.62	100%	36.60	18.30
Site 10	Non-Residential	11,728	1,000 sf	64.29	2.29	88%	129.56	64.78
Site 11	Non-Residential	11,020	1,000 sf	21.32	2.73	79%	45.98	22.99

(1) Source: Gross size data collected on site for single family land use, provided by management staff for the apartment land use and Lake County Property Appraiser for the church with daycare land use.

(2) Source: Appendix A, Table A-13

(3) Source: Appendix A, Table A-15

(4) Source: Appendix A, Table A-14

(5) VMT is calculated by multiplying the trip generation rate by the trip length and adjusting by the percent new trips.

(6) Impact fee VMT is found by dividing the VMT (Item 5) by 2.

Cost Component

The cost of providing transportation system capacity has increased in recent years. Certain phases of lane widening projects have seen significant cost increases recently. For example, construction costs have increased significantly in the past 6 to 24 months. Appreciation in land values has resulted in higher right-of-way (ROW) costs over the last several years. Information from Lake County and the Florida Department of Transportation (FDOT) regarding recent road construction costs was used to develop a unit cost for all phases involved in the addition of one lane mile of roadway capacity. The following subsections detail the analyses that were undertaken to review the different costs associated with the construction of county and state roads. Appendix C provides the data and other support information utilized in these analyses.

It should be noted that the current cost component development methodology utilized by TOA includes one additional cost that is added to the calculation of an updated cost per lane mile. This cost, carrying cost per lane mile, is intended to estimate the part of the cost for building a lane mile of roadway related to the fact that it takes six to eight years to construct the roadway. However, due to the significant increase in the per-lane-mile construction cost noted for Lake County and to remain consistent with the methodology used in the previous update, TOA has elected not to incorporate this cost into the impact fee calculation at this time. Incorporation of this cost element into the cost component would have increased the overall cost per lane mile by approximately 10 percent.

County Costs

This subsection examines the construction costs of transportation capacity improvements associated with county roads in Lake County. For this purpose, recent engineer cost estimates of future projects that are in the County's 2007-2011 Capital Improvement Program (CIP) and peer construction bids from Pasco and Collier counties were used to identify and provide supporting cost data for roadway improvements. The cost for each roadway capacity project was separated into four phases: design, ROW, construction, and construction engineering/inspection (CEI) costs.

Based on discussion with County staff, design costs were estimated at eight percent and CEI at four percent of construction costs. This percentage is based on recent construction project cost estimates and recently completed County projects. The ROW cost was developed based on a review of the Project Design & Environment (PD&E) Studies for

three major roadway corridors (CR 466, CR 466A, and CR 470, all from the Sumter County Line to US 27). It should be noted that ROW needs along these corridors are typical of ROW needs along other corridors contemplated to be built in Lake County in the CIP. Since the County intends to begin acquiring parcels along these corridors within the horizon of the FY 2007–FY 2011 CIP, the PD&E ROW estimates provide a conservative figure for land values. The weighted average ROW cost per lane mile is presented in Appendix C, Table C-3. The weighted average ROW cost per lane mile is approximately \$0.6 million for county roads.

The construction cost per lane mile was developed based on a review of recent engineer's estimates for sub-segments of the Hartle Road (CR 455 Extension) and CR 466A roadway improvement projects in Lake County, and recent bid tabulations from other counties in the state (i.e., Pasco and Collier). County staff confirmed that the projects used to develop the construction cost are typical of the type of roadway project that the County intends to construct in the future. It should be noted that unit prices and quantities included in the bid tabulations from recent bids in Lake County and other counties in the state were reviewed to determine the reasonableness of the Hartle Road and CR 466A engineer's estimates. These estimates were determined to be consistent with the unit prices being used for all components (i.e., roadway, signal, drainage, and lighting) in other counties in the state. The resulting construction cost per lane mile is approximately \$2.9 million. The two design estimate projects are being constructed as an urban cross-section and are consistent with FDOT and County design standards. County staff also indicated that it is anticipated that a majority of future county roadway projects will be built utilizing an urban cross-section design. Specifically, approximately 90 percent of county projects in the cost feasible 2025 LRTP will be built of urban design. The calculations used to develop the county construction cost are shown in Appendix C, Tables C-1 and C-2.

Based on an analysis of the project cost information for county roadway capacity-adding projects, the total cost per lane mile is estimated at approximately \$3.9 million. Table 2 presents the breakdown of the estimated average cost for each phase of a typical roadway capacity-expansion project in Lake County.

Table 2
Estimated Cost per Lane Mile
by County Project Phase

Cost Phase	Cost Per Lane Mile
Design ⁽¹⁾	\$232,882
Right-of-Way ⁽²⁾	\$599,185
Construction ⁽³⁾	\$2,911,021
CEI ⁽⁴⁾	\$116,441
Total Cost	\$3,859,529

(1-4) Source: Appendix C, Table C-12

State Costs

A similar review also was completed for state roadway projects in order to estimate the typical phase and total costs for capacity-adding projects. A total of 17 state projects were identified that were either completed, under construction, or the full project cost was programmed in the FY 2007-2011 Transportation Improvement Plan (TIP). The completed projects provided a basis with which to estimate construction costs for state projects in Lake County.

A review of recent bids and fully programmed project costs from the TIP were used to develop a blended cost for both urban and rural design state roadways in Lake County. This information was confirmed based on a review of recent bid data for state projects statewide. The detailed calculations used to develop the state construction cost by section design are presented in Appendix C, Tables C-7 through C-10. As shown in that table, the construction cost figures results in a conservative estimate for the state construction cost per lane mile for urban design arterial roadway of \$3.2 million. Information provided by FDOT District 5 staff concerning the construction cost estimate for SR 500/US 441 from Perkins Street to North of Griffin Road improvement in the FY 2007- FY 2011 TIP is approximately \$6.4 million per lane mile. Similarly, for the typical rural arterial roadway, the average construction cost is also estimated at \$2.9 million per lane mile. Rural section costs are approximately 90 percent of urban design costs based on recent statewide bid data and future cost estimates. It should be noted that the overall \$3.2 million state construction cost per lane mile is based on a blend of urban and rural section construction costs weighted by the lane mile distribution in the 2025 LRTP. This distribution is presented in

Appendix C, Table C-9, and shows that 13 percent of the future lane miles to be constructed will be of rural cross-section design, while 87 percent will be of urban cross-section design.

ROW cost data for the completed state projects are believed to be representative of typical state land acquisitions based on a review of the FY 2007-2011 TIP. The completed projects along SR 500/US 441, SR 19, SR 44, SR 25/US 27, and SR 50 had a weighted average ROW cost per lane mile of approximately \$1.5 million for the urban section roads and \$1.1 million for rural section roads. Given the fact that the projects evaluated include both completed and fully programmed roadway improvements, it is assumed that the recent increases in land values in Lake County are reflected in the ROW cost of future state projects.

Table 3 summarizes the estimated average cost per lane mile for state roads. As shown in the table, the average cost per lane mile for state roads is approximately \$5.3 million. This figure is consistent with other recent transportation impact fees studies conducted in the state such as Citrus, Pasco, and Collier Counties (with a range of \$4.7 million to \$5.8 million). As noted previously, state projects included in the analysis are presented in Appendix C, Tables C-5 and C-6.

Table 3
Estimated Cost per Lane Mile
by State Project Phase

Cost Phase	Cost Per Lane Mile
Design ⁽¹⁾	\$318,412
Right-of-Way ⁽²⁾	\$1,462,133
Construction ⁽³⁾	\$3,184,125
CEI ⁽⁴⁾	\$318,412
Total Cost	\$5,283,082

(1-4) Source: Appendix C, Table C-12

Summary of Costs (Blended Cost Analysis)

The weighted average cost per lane mile for the projects included in Tables 2 and 3 is calculated and presented in Table 4. The resulting weighted average cost of approximately \$4.1 million per lane mile will be utilized as the cost input in the

calculation of the impact fee schedule. This weighted average cost per lane mile includes county and state projects and is based on weighting the lane miles of roadway being constructed in the 2025 Long Range Transportation Plan (LRTP). As noted previously, the project information and methodology used in these calculations is included in Appendix C, Tables C-1 through C-12.

Table 4
Estimated Adjusted Cost per Lane Mile
County & State Roadway Capital Projects in Lake County

Cost Type	County Roads⁽¹⁾	State Roads⁽²⁾	County and State Roads⁽³⁾
Design	\$232,882	\$318,412	\$249,988
ROW	\$599,185	\$1,462,133	\$771,775
Construction	\$2,911,021	\$3,184,125	\$2,965,642
CEI	\$116,441	\$318,412	\$156,835
Total	\$3,859,529	\$5,283,082	\$4,144,240
Lane Mile Distribution ⁽⁴⁾	80%	20%	100%

(1) Source: Table 2

(2) Source: Table 3

(3) Source: Appendix C, Table C-12 for blend of county and state roads

(4) Lane mile distribution from Appendix C, Table C-11 multiplied by the design, construction, CEI, and ROW phase costs by jurisdiction to develop a weighted average cost per lane mile.

Credit Component

Gasoline Tax Credit

The present value of gasoline taxes generated by a new development over a 25-year period is credited against the cost of the system consumed by travel associated with new development. This is because travel from new development generates gasoline tax revenues, a portion of which is typically allocated to expansion of the transportation system.

Appendix D provides a detailed discussion of the County’s financing of transportation capital projects utilizing a combination of sales and gas tax revenues. Lake County currently uses the infrastructure sales surtax (enacted by referendum vote for the purpose of

construction, reconstruction, or improvement of public facilities pursuant to Chapter 212.055 Florida Statutes) to fund roadway capacity expansion projects. A review of the County roadway financing program shows that a combination of impact fees, sales tax revenues, and gas tax revenues are being used to fund capacity expansion projects. Historical and projected county expenditures for roadway expansion projects from 2001-2011 are presented in Appendix D, Tables D-5 through D-9. An equivalent county sales and gas tax credit was calculated at 1.9 pennies, representing the average annual funding that the County allocates to capacity expansion projects. This information is presented in Table 5.

In addition, state expenditures on county roads were reviewed and a credit for the capacity expansion portion attributable to state projects was provided. The equivalent number of pennies allocated to fund state projects was determined using information for a 15-year period of the FDOT Work Program (1997 through 2011). A list of capacity-adding roadway projects was developed including lane additions, new road construction, intersection improvements, traffic signal projects, and other capacity-addition projects. This review (which is summarized in Appendix D, Table D-4) indicates that FDOT spending generates an equivalent gas tax credit of 20.4 pennies of gas tax revenue annually. Table 5 provides a summary of the results of the gas and sales tax credit analysis. In addition, the table shows the equivalent pennies of gas tax credit that were used in the 2001 Study. The equivalent pennies of gas tax credit have increased by 3.2 pennies primarily due to an increase in state spending in the County.

Table 5
Gas and Sales Tax Equivalent Pennies

Credit	Equivalent Pennies (2007)	Equivalent Pennies (2001)
State Gas Tax Credit ⁽¹⁾	\$0.204	\$0.138
County Gas Tax Credit ⁽²⁾	\$0.004	\$0.053
County Sales Tax Credit ⁽³⁾	<u>\$0.015</u>	N/A
Total	\$0.223	\$0.191

(1) Source: Appendix D, Table D-4

(2), (3) Source: Appendix D, Table D-3

Facility Life

The facility life relates to the time period over which gasoline tax revenues might be bonded to pay for an improvement. The facility life used in the proposed fee is 25 years, which is typical of impact fees in many other communities.

Interest Rate

This is the discount rate at which gasoline tax revenues might be bonded. It is used to compute the present value of the gasoline taxes generated by new development. The discount rate of 4.5 percent is determined based on discussions with representatives from the County's Finance Department and reflects the rate at which the County is likely to borrow in the future.

Fuel Efficiency

The fuel efficiency (i.e., the average miles traveled per gallon of fuel consumed) of the fleet of motor vehicles was estimated using the quantity of gasoline consumed by travel associated with a particular land use.

Appendix D, Table D-13 documents the calculation for the new fuel efficiency value, based on the following equation, where "VMT" is vehicle miles of travel and "MPG" is fuel efficiency in terms of miles per gallon.

$$Fuel\ Efficiency = \sum VMT_{Roadway\ Type} \div \sum \left(\frac{VMT_{Vehicle\ Type}}{MPG_{Vehicle\ Type}} \right)_{Roadway\ Type}$$

The methodology utilizes non-interstate VMT and average fuel efficiency data for passenger vehicles (i.e., passenger cars and other 2-axle, 4-tire vehicles, such as vans, pickups, and SUVs) and large trucks (i.e., single-unit, 2-axle, 6-tire or more trucks and combination trucks) to calculate the total gallons of fuel utilized by each of these vehicle types. The VMT on the interstate system is excluded because there are no interstate facilities within Lake County.

The combined total VMT for the vehicle types is then divided by the combined total gallons of fuel consumed to calculate, in effect, a "weighted" fuel efficiency value that appropriately accounts for the existing fleet mix of traffic on non-interstate roadways.

The VMT and average fuel efficiency data were obtained from the most recent Federal Highway Administration's *Highway Statistics 2005*.¹ Based on the calculation completed in Appendix D, Table D-13, the fuel efficiency rate to be used in the updated impact fee equation is 17.70 miles per gallon.

Effective Days per Year

An effective 365 days per year of operation was assumed for all land uses in the proposed fee. While not all land uses operate 365 days per year (e.g., office buildings and seasonal land uses such as schools), the use of 365 days per year provides a "conservative" estimate of the amount of gas consumed annually, ensuring that gasoline taxes are adequately credited against the fee.

Capacity per Lane Mile

An additional component of the impact fee equation is the capacity added per lane mile of roadway constructed. A review of historical and planned county and state projects was conducted. The weighted average capacity per lane mile calculated based on these projects is 9,172 (refer to Appendix C, Table C-14 for a summary of the calculation) which are low compared to recent studies. As such, the average capacity per lane mile from three recently completed impact fee studies (Pasco, Collier, and Polk) was used. These peer counties had a mix of future projects (0 to 4 lanes, 2 to 4 lanes, 4 to 6 lanes) consistent with those in the Lake County TIP, CIP, and LRTP. As shown in Table 6, the average capacity per lane mile is 10,666.

¹ The data used in Table D-13 in Appendix D was compiled from Table VM-1 (Section V) of the document, *Highway Statistics 2005*, Office of Highway Policy Information, Federal Highway Administration, Washington, D.C (see Table D-14). The document can be accessed on-line at <http://www.fhwa.dot.gov/policy/ohim/hs05/re.htm>.

Table 6
Weighted Average Capacity per Lane Mile

Source	Capacity Added Per Lane Mile
Polk ⁽¹⁾	11,013
Collier ⁽²⁾	10,901
Citrus ⁽³⁾	10,084
Average Capacity Added	10,666

(1) Polk County Transportation Impact Fee Study, 2005

(2) Collier County Transportation Impact Fee Study, 2006

(3) Citrus County Impact Fee Study, 2006

Interstate and Toll Facility Adjustment Factor

This variable is used to recognize that Interstate highway improvements are funded by the State using earmarked State and Federal funds. Typically, impact fees are not used to pay for these improvements and the portion of travel occurring on the Interstate System is usually eliminated from the total travel for each use.

The Florida Turnpike, a toll facility, is identified as the only part of the State Intermodal System (SIS) that impacts Lake County. Therefore, the amount of vehicle miles of travel (VMT) applicable to this toll road facility has been calculated as a percentage of total VMT and this percentage was used to reduce the total VMT to adjust for the portion of the County's travel occurring on the Florida Turnpike. The discount serves as part of the demand component used in the fee calculation. Based on the data from the 2025 Central Florida Regional Planning Model, a toll facility adjustment factor of 1.69 percent is incorporated into the impact fee calculations. It should be noted that the calculation excludes external-to-external trips, which represent traffic that goes through Lake County, but does not necessarily stop in the county. This traffic is excluded from the calculations since it does not travel on the local road system for which impact fees are allocated. Table 7 shows the calculation of this figure. This factor is used to reduce vehicle miles of travel that the impact fee charges for each land use.

Table 7
Toll/Interstate Facility Adjustment Factor

Jurisdiction	VMT excluding EE Trips		
	2000	2007	2025
	CFRPM	Interpolated	CFRPM
Turnpike	71,640	90,713	139,759
Other Roads	3,794,818	5,266,584	9,051,124
Total	3,866,458	5,357,297	9,190,882
% Turnpike	1.85%	1.69%	1.52%

Source: 2025 Central Florida Regional Planning Model

Proposed Transportation Impact Fee Schedule

The impact fee calculations for each land use are included in Appendix F. This Appendix includes the major land use categories and the impact fees for the individual land uses contained in each of the major categories. In addition, based on discussion with County representatives, the land use schedule was updated to reflect current permit activity and development trends in Lake County.

For each land use, this Appendix illustrates the impact fee demand component variables (trip rate, trip length, and percent of new trips), the total impact fee cost, the annual gas tax credit and present value of the gas tax credit, the net impact fee, the current Lake County impact fee, and the percent difference between the potential impact fee and the current impact fee. It should be noted that the net impact fee illustrated in this Appendix represents the maximum impact fee per unit of land use that could be charged in Lake County.

There are a number of reasons why the impact fees presented in the 2007 Transportation Impact Fee Update Study (2007 Study) changed so dramatically from the fees calculated in the 2001 Transportation Impact Fee Update Study (2001 Study). Perhaps the most significant are the changes to the cost and credit components of the impact fee equation. For example, considering only the changes to the cost and credit components, the resulting percentage increase from the 2001 Study to the fees presented in the 2007 Study is approximately 420 percent.

However, the demand component (trip rate, trip length and percent new trips) was also updated in the 2007 Study. For land uses where the demand component showed an increase in the vehicle miles of travel per unit of land use (trip rate times the trip length times the percent new trips), the total percent increase between the fees calculated in the 2007 Study and the 2001 Study will be higher than 420 percent. Table V-8 provides documentation for all land uses that had increases greater than 420 percent. It should be noted that the 2007 Study contains some land uses that had a reduction in vehicle miles of travel from that calculated in 2001. These land uses will have a percent increase of less than 420 percent.

Finally, when reviewing the explanations for the changes in the demand component provided in Table 8, it is also important to note that the individual percent increases or decreases in demand component input variables (trip rate, trip length, and percent new trips) are used individually in the impact fee equation and cannot simply be added or subtracted to the 420 percent increase to the cost and credit component changes discussed above. The percent change column indicated in Table 8 represents the percent net increase between the fees calculated in the 2007 Study and the fees calculated in the 2001 Study.

Table 8
Percent Fee Changes for Selected Impact Fee Categories

ITE LUC	Land Use	Unit	% Change	Explanation
RESIDENTIAL:				
210	Single Family/Mobile Home	du	419%	TGR increased by 3% and TL decreased by 2% due to addition of local data.
RECREATION:				
492	Health Club/Dance Studio	1,000 sf	842%	TGR increased by 92% due to an ITE edition change from 6th to 7th edition.
INSTITUTIONS:				
520	Elementary School (Private)	student	516%	TGR increased by 26% due to an ITE edition change from 6th to 7th edition.
522	Middle School (Private)	student	448%	TGR increased by 12% due to an ITE edition change from 6th to 7th edition.
540	University/Junior College (7,500 or fewer students) (Private)	student	568%	Fee change due to the blending of University and Junior College land uses
730	Government Office Building - Municipal	1,000 sf	436%	NT increased by 3% due to the use of updated 2003 local studies.
733	Government Office Building - County	1,000 sf	498%	TGR increased by 12% due to an ITE edition change from 6th to 7th edition. NT increased by 4% due to the use of updated 2003 local studies.
N/A	Fire Station	1,000 sf	641%	NT increased by 9% due to the use of updated 2003 local studies.
OFFICE:				
715	Single Tenant Office Building	1,000 sf	566%	TL increased by 28% due to a 33% FL Studies adjustment factor for Lake County.
720	Medical Office/Clinic	1,000 sf	438%	TL increased by 2% due to a 33% FL Studies adjustment factor for Lake County. NT increased by 3% due to the use of
770	Business Park	1,000 sf	439%	TGR decreased by 2% and NT increased by 8% due to the use of updated FL Studies.
GENERAL COMMERCIAL:				
820	Retail 50,000 sf or less ⁽¹⁾	1,000 sf	577%	TGR decreased by 23% due to the use of the ITE 7th edition curve. TL increased by 11% due to the use of the the FL curve and a 33% adjustment factor for Lake County. NT increased by 2% due to the use of the FL Curve.
820	Retail 50,001-200,000 sf ⁽²⁾	1,000 sf	810%	TL increased by 25% due to the use of the the FL curve and a 33% adjustment factor for Lake County. NT decreased by 5% due to the use of the FL Curve.
820	Retail 200,001-400,000 sf ⁽²⁾	1,000 sf	691%	TGR increased by 11% due to the use of the ITE 7th edition curve. TL increased by 5% due to the use of the the FL curve and a 33% adjustment factor for Lake County. NT decreased by 8% due to the use of the FL Curve.
820	Retail greater than 400,000 sf ⁽²⁾	1,000 sf	585%	TGR increased by 12% due to the use of the ITE 7th edition curve. TL decreased by 8% due to the use of the the FL curve and a 33% adjustment factor for Lake County. NT decreased by 7% due to the use of the FL Curve.

Table 8 (continued)
Percent Fee Changes for Selected Impact Fee Categories

ITE LUC	Land Use	Unit	% Change	Explanation
RETAIL / SERVICES:				
812	Building Materials and Lumber	1,000 sf	635%	TGR increased by 48% due to an ITE edition change from 6th to 7th edition.
813	Free-Standing Discount Superstore (greater than 120,000 sf)	1,000 sf	442%	TGR increased by 6% and NT increased by 26% due to the use of updated FL Studies Database. TL increased by 153% due to a 33% FL Studies adjustment factor for Lake County.
912	Bank/Savings Drive-in	1,000 sf	435%	TGR increased by 21% due to the use of updated FL Studies Database. NT decreased by 16% due to use of updated FL Studies Database.
934	Fast Food Rest w/ Drive-Thru	1,000 sf	728%	TGR increased by 5% due to the use of updated FL Studies Database. TL increased by 41% due to a 33% FL Studies
944	Gas/Service Station	fuel pos	607%	TL increased by 24% due to a 33% FL Studies adjustment factor for Lake County.
947	Self-Service Car Wash	service bay	450%	NT increased by 7% due to use of updated FL Studies Database.
INDUSTRY:				
170	Utilities Building	1,000 sf	730%	TGR increased by 47% due to ITE edition change from 6th to 7th edition.

Note: TGR = Trip Generation Rate
 TL = Trip Length
 NT = Percent New Trips

For clarification purposes, it may be useful to walk through the calculation of an impact fee for one of the land use categories. In the following example, the net impact fee is calculated for the Single-Family Detached Residential land use category (ITE LUC 210), using information from the proposed impact fee schedule included in Appendix F, Table F-1. For each land use category, the following equations are utilized to calculate the net impact fee:

Net Impact Fee = Total Impact Cost – Gas Tax Credit

Where:

Total Impact Cost = $((\text{Trip Rate} \times \text{Recommended Trip Length} \times \% \text{ New Trips}) / 2) \times (1 - \text{Toll Facility Adj. Factor}) \times (\text{Cost per Lane Mile} / \text{Avg. Capacity Added per Lane Mile})$

Gas Tax Credit = Present Value (Annual Gas Tax), given 5% interest rate & 25-year facility life

Annual Gas Tax = $((\text{Trip Rate} \times \text{Assessable Trip Length} \times \% \text{ New Trips}) / 2) \times \text{Effective Days per Year} \times \text{\$/Gallon to Capital} / \text{Fuel Efficiency}$

Each of the inputs have been discussed previously in this document; however, for purposes of this example, brief definitions for each are provided below, along with the actual inputs for the Single-Family Detached Residential land use category.

- *Trip Rate* = the average daily trip generation rate, in vehicle-trips/day (8.73)
- *Recommended Trip Length* = the actual average trip length for the category, in vehicle-miles (8.40)
- *Assessable Trip Length* = the recommended trip length plus an adjustment factor of half a mile is added to the trip length to account for the fact that gas taxes are collected for travel on all roads including local roads (8.40 + 0.50 = 8.90)
- *% New Trips* = adjustment factor to account for trips that are already on the roadway (100%)
- The total daily miles of travel generated by a particular category (i.e., rate*length*% new trips) is divided by two to prevent the double-counting of travel generated among land use codes since every trip has an origin and a destination.
- *Interstate/Toll Facility Adjustment Factor* = adjustment factor to account for the travel demand occurring on interstate highways and/or toll facilities (1.69%)
- *Cost per Lane Mile* = unit cost to construct one lane mile of roadway, in \$/lane-mile (\$4,144,240)
- *Average Capacity Added per Lane Mile* = represents the average daily traffic on one travel lane at capacity for one lane mile of roadway, in vehicles/lane-mile/day (10,666)
- *Present Value* = calculation of the present value of a uniform series of cash flows, gas tax payments in this case, given an interest rate, “i,” and a number of periods, “n;” for 4.5% interest and a 25-year facility life, the uniform series present worth factor is 14.8282
- *Effective Days per Year* = 365 days
- *\\$/Gallon to Capital* = the amount of gas tax revenue per gallon of fuel that is used for capital improvements, in \$/gallon (\$0.223)
- *Fuel Efficiency* = average fuel efficiency of vehicles, in vehicle-miles/gallon (17.70)

Using these inputs, a net impact fee can be calculated for the Single-Family Residential land use category as follows.

Total Impact Cost = $((8.73 * 8.40 * 1.0) / 2) * (1 - 0.0169) * (\$4,144,240 / 10,666) = \$14,006$

Annual Gas Tax = $((8.73 * 8.90 * 1.0) / 2) * 365 * \$0.223 / 17.70 = \$179$

Gas Tax Credit = $\$179 * 14.8282 = \$2,654$

Net Impact Fee = $\$14,006 - \$2,654 = \$11,352$

Impact Fee Schedule Comparison

As part of the work effort in developing the Lake County transportation impact fee program, a comparison of transportation impact fee schedules of surrounding jurisdictions was completed. Table 9 presents the comparison of transportation impact fees in the surrounding jurisdictions.

Future Demand Analysis & Capital Cost Projections

Future demand projections and capital cost projections were conducted using the 2025 Cost Affordable Plan projects. The costs developed in this impact fee study for county and state roads of both urban and rural section design were used to update the total project costs in the 2025 Cost Affordable Plan. These costs are based on reviewing completed projects and future cost estimates accounting for the recent increase in construction costs in the last 6 to 18 months. The cost for financing the 2025 Cost Affordable Plan was estimated at approximately \$660.9 million. These costs were published in late 2005 in the 2025 Lake County LRTP but were based on the 2004 FDOT Transportation Costs publication. Using the current costs developed in the impact fee study (presented in Appendix C, Table C-12), the updated cost for these projects is projected to be \$1.6 billion (presented in Appendix C, Table C-12). Thus, using the updated impact fee cost component results in a projected 2025 LRTP cost that is approximately 145 percent higher than that published in the 2025 LRTP report. For the purpose of estimating future capital costs, the projects included in the 2025 Cost Affordable Plan were used. The finding of the Cost Affordable Plan needs to be reevaluated and projects prioritized based on these updated cost projections.

**Table 9
Transportation Impact Fee Schedule Comparison ⁽¹⁾**

Land Use	Unit	County Studies										
		Lake (Proposed)	Lake	Pasco (Proposed) ⁽²⁾	Citrus ⁽³⁾	Manatee ⁽⁴⁾	Marion ⁽⁵⁾	Orange	Polk ⁽⁶⁾	St. Lucie ⁽⁷⁾	Sumter ⁽⁸⁾	Volusia ⁽⁹⁾
Date of Last Update		2007	2001	2006	2006	2003	2006	2004	2005	1984	2004	2003
Residential:												
Single Family Detached (2,000 sq ft)	du	\$11,352	\$2,189	\$8,801	\$4,853	\$3,986	\$5,462	\$3,500	\$6,048	\$2,186	\$2,582	\$2,044
Non-residential:												
General Light Industrial	1,000 sf	\$11,093	\$2,157	\$5,469	\$2,909	\$1,568	\$3,294	\$3,130	\$1,409	\$490	\$1,690	\$1,220
Office (50,000 sf)	1,000 sf	\$15,370	\$2,883	\$12,556	\$6,322	\$3,507	\$8,883	\$6,396	\$9,768	\$1,337	\$2,670	\$2,310
High Turnover Restaurant	1,000 sf	\$58,284	\$11,422	\$50,899	\$23,992	\$9,052	\$27,807	\$16,820	\$40,242	\$2,839	\$19,550	\$10,590
Retail (100,000 sf)	1,000 sf	\$19,815	\$2,177	\$10,895	\$5,847	\$7,275	\$7,055	\$12,916	\$8,278	\$2,689	\$7,650	\$3,080
Bank w/Drive-In	1,000 sf	\$65,357	\$12,207	\$52,966	\$26,800	\$9,052	\$31,371	\$23,848	\$51,800	\$2,893	\$35,250	\$10,960

(1) Source: Appendix F, Table F-1 for Lake proposed and fee schedules for Lake (existing) and all other jurisdictions

(2) Fee for Pasco County is the current proposed fees lowest option.

(3) Fee for Citrus County was adopted at 50 percent based on 2006 Citrus County Impact Fee Update Study.

(4) For Manatee County, the single family (3 bedrooms) fee was used, and commercial retail (25,000 SF or less) was used for high turnover restaurant and bank w/drive-in land use comparisons.

(5) For Marion County, the restaurant fee was used for the high turnover restaurant fee comparison.

(6) For Polk County, the manufacturing/industrial land use was used for general industrial fee comparison.

(7) St. Lucie County has 4 districts with different rates. For comparison purposes, rates for Mainland are used. In addition, the general office fee land use is used for the office (50,000 sf) fee comparison as well as the retail category of under 100,000 sf for the high turnover restaurant and bank w/drive-in fee comparisons.

(8) Sumter County has 3 districts with different rates. For comparison purposes, rates for District 1 are used. In addition, the general office land use is used for the office (50,000 sf) fee comparison and the shopping center fee land use is used for the retail (100,000 sf) fee comparison.

(9) Volusia County is currently in the process of updating their transportation impact fee.

Revenues Estimates

Revenue estimates are based on a review of building permit activity and future population growth estimates. The impact fee schedule by land use presented in Appendix F, Table F-1 provided the basis for this analysis. Table 10 presents the projected residential units per year through 2025. The following assumptions were made for projecting the transportation impact fee revenues.

- Based on the trends in other jurisdictions, impact fee revenues from residential land uses represent 80 percent of total collections and non-residential land uses represent 20 percent.
- Residential building permits are estimated to be generated by single family units (60 percent), active adult single family (17 percent), multi-family (19 percent), mobile home parks (4 percent).
- The natural rate of growth of building permits is estimated to remain constant through 2025 based on a review of historical residential building permit activity. The average annual number of building permits between 2002 and 2006 was 5,491. Based on projected population, approximately 4,121 new homes will be constructed annually as the county approaches its build out population in 2025.
- To be conservative the projection of revenues will be based on an average of 4,121 new homes per year between now and 2025.
- Given the recent changes in building permit activity, the distribution of single family homes was reduced from 70 percent to 60 percent and multi-family units were increased from 9 to 19 percent. This provides a more conservative revenue estimate to account for this trend.

The weighted average population projections in Table 10 are calculated based on the following:

- Permanent population figures for 2007 are based on historical population projections from the Census 2000 and the Bureau of Economic and Business Research (BEBR), Florida Statistical Abstract and inflated based on future population projections to 2010 provided by the Lake County Comprehensive Planning Division. Population estimates for 2015, 2020, and 2025 also provided by the Lake County Comprehensive Planning Division.

**Table 10
Residential Units per Year (2007-2025)**

Year	Weighted Population	Item
2007	295,201	
2025	472,471	
Population Growth (2007-2025) ⁽¹⁾		177,270
Residents Per Dwelling Unit ⁽²⁾		2.39
New Homes (2007-2025) ⁽³⁾		74,172
New Homes per Year ⁽⁴⁾		4,121

(1) Source: US Census and the Bureau of Economic and Business Research

(2) Source: 2000 Census, Tables H-30 and H-33.
Population adjusted for seasonal residents by increasing the population by the ratio of seasonal to permanent residents (6.4%)

(3) Population growth (Item 1) divided by residents per dwelling unit (Item 2)

(4) New homes (2007-2025) (Item 3) divided by 18 years

As shown in Table 11, the transportation impact fee program will generate a total of approximately \$799.4 million, generating an average of approximately \$44.4 million annually through 2025. These estimates are based on using the population growth approach.

Table 11
Projected Transportation Impact Fee Revenues
(2007-2025)

Land Use	Distribution ⁽¹⁾	Permits ⁽²⁾	Impact Fee ⁽³⁾	Total Revenues ⁽⁴⁾
Single Family	60%	44,503	\$11,352	\$505,198,056
Active Adult Single Family	17%	12,609	\$4,057	\$51,154,713
Multi-Family	19%	14,093	\$5,208	\$73,396,344
Mobile Home Park	4%	2,967	\$3,287	\$9,752,529
Total Residential Revenues	100%	74,172	N/A	\$639,501,642
Non-Residential Impact Fee Revenues⁽⁵⁾				\$159,875,411
Total Residential and Non-residential Impact Fee Revenues⁽⁶⁾				\$799,377,053

(1) Source: Based on permit activity in Lake County from 2002-2006 and adjusted to reflect recent changes in the building permit activity.

(2) Source: Table 10 for total permits. Permits distributed for residential uses by estimated percentages in (Item 1)

(3) Source: Appendix F, Table F-1

(4) Number of permits (Item 2) multiplied by impact fee (Item 3)

(5) Non-residential revenues are estimated to be 20 percent of total collections

(6) Sum of total residential impact fees and total non-residential impact fee revenues (Item 5)

Based on this analysis shown in the tables above, Lake County is projected to generate an average of \$44.4 annually in transportation impact fee revenue between 2007 and 2025, and a total of \$0.8 billion during this 18-year time period. This projection is in 2007 dollars and does not take into account the indexing of the impact fees.

It should be noted that, for impact fee purposes, revenue projections serve only as an overall guideline in planning future infrastructure needs. In their simplest form, impact fees charge each unit of new growth for the net cost (total cost less credits) of infrastructure needed to serve that unit of growth. If the growth rates remain high, the County will have more impact fee revenues to fund growth related projects sooner rather than later. If the growth rate slows, less revenue will be generated, and the timing and need for future infrastructure improvements will be later rather than sooner.

Benefit Districts

Transportation impact fees tend to require the establishment of several benefit districts instead of being implemented countywide to establish benefit. In the past, communities had several benefit districts. More recently, this trend has been changing toward establishing fewer transportation impact fee districts to achieve a greater efficiency of

coordinating regional transportation projects, while still meeting the dual rational nexus test of proof of benefit and need for the feepayer.

The existing transportation impact fee benefit districts in Lake County were reviewed to determine if the number or geographic boundaries of the districts should be changed. Currently, Lake County has six benefit districts as illustrated in Map 1. These districts have remained unchanged since the establishment of the Lake County Transportation Impact Fee Program in 1985. Based on the analysis described in this section, it is recommended that the six current benefit districts be consolidated into the three districts as illustrated in Map 2. This recommendation is based on a review of current development patterns and other considerations for changing impact fee boundaries discussed below.

There are two primary reasons to consider changing or reducing the number of impact fee districts: First, since the establishment of the original benefit districts, the corporate limits for some of the cities have changed due to annexations. Annexations have caused some of these cities to be split between multiple benefit districts. As urban areas have expanded, current district boundaries have become less relevant to needed transportation improvements. Combining the districts where corporate limits of local governments are not split increases the efficiency of coordinating regional transportation projects and the funding of needed projects. Second, consistent with the recent trend throughout Florida, larger impact fee districts generally result in greater revenue collections per year per district, which results in a greater ability to construct needed improvements sooner due to the availability of funds.

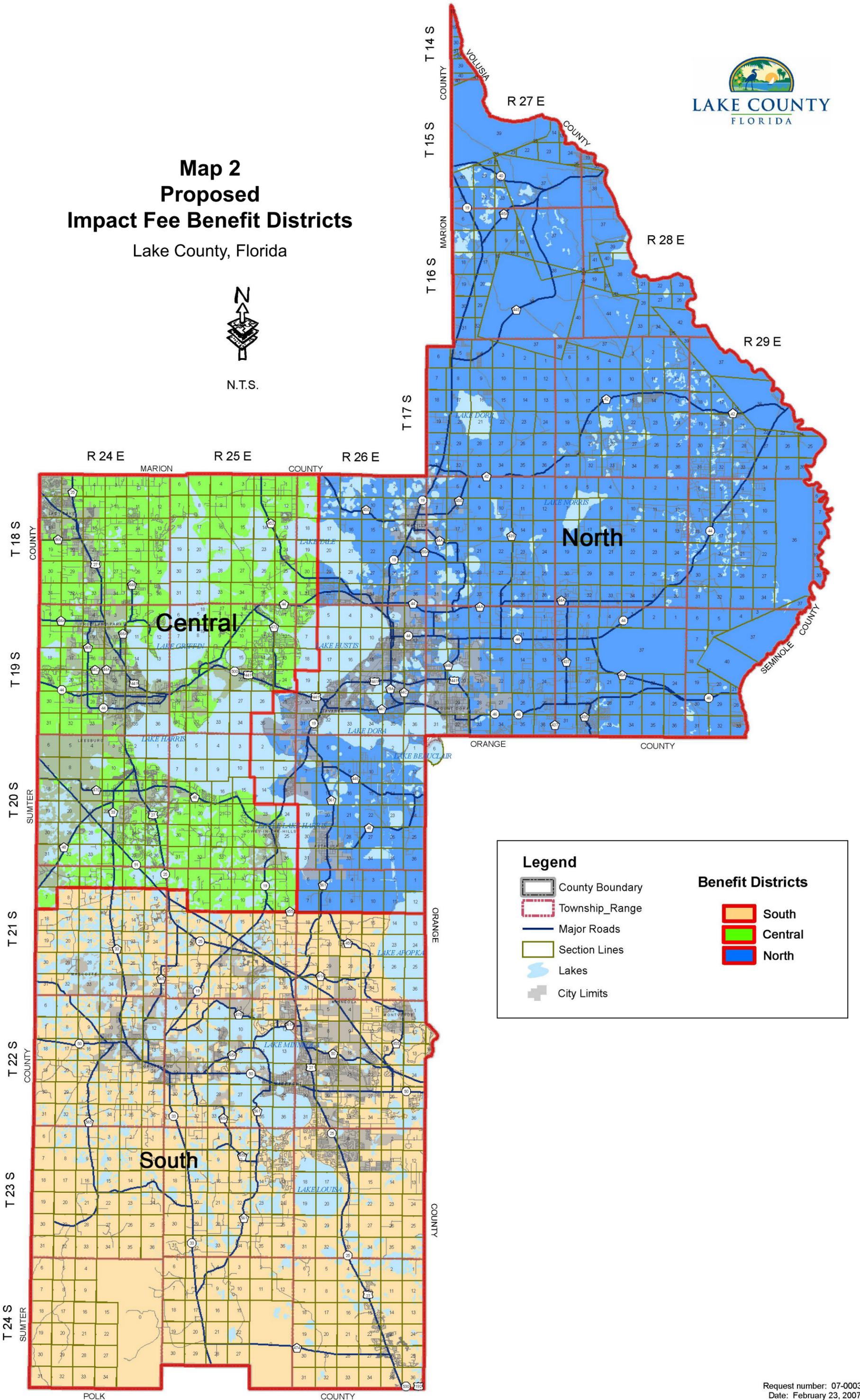
Another recommendation is that the ordinance be revised to allow impact fee revenues collected in one benefit district to be spent in an adjacent benefit district as long as both Districts benefit from the improvement. This would be allowed by an analysis that demonstrates that expenditure of funds for a road in an adjacent district provides benefit to the donating district. Several counties in Florida (i.e., Collier, Highlands etc.) include such language in their impact fee ordinance. The County Engineer would provide documentation that the donating district would receive benefit from the construction of the road project in an adjacent impact fee benefit district. As discussed previously, the impact fee is calculated as a consumption-based fee that charges new development for capacity on both state and county roads. This affords the County the flexibility to address concurrency needs by expending impact fee revenues on all roads.

Map 2 Proposed Impact Fee Benefit Districts

Lake County, Florida



N.T.S.



Legend		Benefit Districts	
	County Boundary		South
	Township_Range		Central
	Major Roads		North
	Section Lines		
	Lakes		
	City Limits		

Indexing

In many cases, impact fees are reviewed periodically (every three to five years, etc.) as opposed to on an annual basis. If no adjustment to the impact fee schedule is made during this period, a situation can be created where major adjustments to the impact fee schedule likely become necessary due to the time between the adjustments. The need for significant adjustments also creates major concerns in the development community. To address this issue, the proposed fees Appendix F, Table F-1 could be indexed annually for construction and land cost increases, as appropriate. The method for developing an index is discussed below.

Methodology

Land Cost

As shown in Table 12, between 2002 and 2006, just property values for increased by an annual average of 25.0 percent countywide.

Table 12
Lake County Property Value Increase

Year	Countywide Just Property Value	Percent Change - Countywide
2002	\$3,834,149,280	N/A
2003	\$4,311,844,568	12.5%
2004	\$4,861,490,285	12.7%
2005	\$6,675,507,088	37.3%
2006	\$9,178,738,092	37.5%
Average		25.0%

Source: Lake County Property Appraiser

Design and Construction Cost

The Florida Department of Transportation (FDOT) provides historical inflation rates for transportation project costs, which are presented in Table 13. These inflation rates are used for the design and construction components of the transportation impact fee indexing. Similar to building construction cost, roadway construction costs have increased rapidly over the past several years. Similar to the building cost index, to

capture the recent increases, the roadway design and construction cost index is based on the last three years. As shown in the table, over the next four years, the average annual index is 5.2 percent.

**Table 13
Design and Construction Cost Inflation Index**

Fiscal Year	Inflation Rate
2007	N/A
2008	7.0%
2009	4.5%
2010	4.0%
Annual Average	5.2%

Source: FDOT Office of Policy Planning, March 2005

Application

Table 14 presents the indexing application for the transportation impact fee.

**Table 14
Transportation Indexing Application**

Phase	Cost per Lane Mile⁽¹⁾	Percent of Total Cost⁽²⁾	Annual Increase⁽³⁾	Index⁽⁴⁾
Design	\$249,988	6.0%	5.2%	0.3%
ROW	\$771,775	18.6%	25.0%	4.7%
Construction	\$2,965,642	71.6%	5.2%	3.7%
CEI	<u>\$156,835</u>	3.8%	5.2%	0.2%
Total Cost	\$4,144,240			
Total Applicable Index⁽⁵⁾				8.9%

(1) Source: Table 4

(2) Design, ROW, and Construction cost divided by total cost.

Design as a Percent of Total Cost: $\$249,988 / \$4,144,240 = 6.0\%$

ROW as a Percent of Total Cost: $\$771,775 / \$4,144,240 = 18.6\%$

Construction as a Percent of Total Cost: $\$2,965,642 / \$4,144,240 = 71.6\%$

CEI as a Percent of Total Cost: $\$156,835 / \$4,144,240 = 3.8\%$

(3) Source: Tables VII-1, VII-2

(4) Percent of total cost (Item 2) for each cost component multiplied by annual increase of each phase cost (Item 3).

Design Index: $6.0\% \times 5.2\% = 0.3\%$

ROW Index: $18.6\% \times 25.0\% = 4.7\%$

Construction Index: $71.6\% \times 5.2\% = 3.7\%$

CEI Index: $3.8\% \times 5.2\% = 0.2\%$

(5) Sum of index components for Design, ROW, and Construction.

Total Applicable Index: $0.3\% + 4.7\% + 3.7\% + 0.2\% = 8.9\%$

Indexed Impact Fee Schedule

With this index, net impact fee for the single family 1,500 – 2,499 s.f. detached land use would increase to \$12,362 ($\$11,352 \times 1.089$) at the end of first year after adoption and implementation of the updated fee schedule. This index would change all fees within the fee schedule accordingly.

APPENDIX A
Lake County Trip Characteristics Study Data

Table A-1
Trip Length and Percent New Trips Statistical Analysis
Single Family Land Use – Site 1

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	1-1	41.8	41.8	NO		NO	
P	1-2	1.6	1.6	OK	1.6	OK	1.6
P	1-3	1.6	1.6	OK	1.6	OK	1.6
P	1-4	4.7	4.7	OK	4.7	OK	4.7
P	1-6	2.6	2.6	OK	2.6	OK	2.6
P	1-7	8.8	8.8	OK	8.8	OK	8.8
P	1-8	8.8	8.8	OK	8.8	OK	8.8
P	1-9	10	10	OK	10	OK	10
P	1-10	2.2	2.2	OK	2.2	OK	2.2
P	1-11	2.2	2.2	OK	2.2	OK	2.2
P	1-12	15.1	15.1	OK	15.1	OK	15.1
P	1-13	21.3	21.3	OK	21.3	OK	21.3
P	1-14	20.6	20.6	OK	20.6	OK	20.6
P	1-15	15.1	15.1	OK	15.1	OK	15.1
P	1-16	7.9	7.9	OK	7.9	OK	7.9
P	1-17	11.9	11.9	OK	11.9	OK	11.9
P	1-18	22.4	22.4	OK	22.4	OK	22.4
P	1-19	4.3	4.3	OK	4.3	OK	4.3
P	1-22	3.5	3.5	OK	3.5	OK	3.5
P	1-23	7.9	7.9	OK	7.9	OK	7.9
P	1-25	2.4	2.4	OK	2.4	OK	2.4
P	1-26	18.6	18.6	OK	18.6	OK	18.6
P	1-27	4.5	4.5	OK	4.5	OK	4.5
P	1-28	4.2	4.2	OK	4.2	OK	4.2
P	1-29	3.5	3.5	OK	3.5	OK	3.5
P	1-31	5	5	OK	5	OK	5
P	1-32	10.4	10.4	OK	10.4	OK	10.4
P	1-34	16	16	OK	16	OK	16
P	1-35	1.1	1.1	OK	1.1	OK	1.1
P	1-36	3.5	3.5	OK	3.5	OK	3.5
P	1-38	1.4	1.4	OK	1.4	OK	1.4
P	1-39	1.1	1.1	OK	1.1	OK	1.1
P	1-40	1.6	1.6	OK	1.6	OK	1.6
P	1-41	15	15	OK	15	OK	15
P	1-42	2.4	2.4	OK	2.4	OK	2.4
P	1-43	3.5	3.5	OK	3.5	OK	3.5
P	1-44	3.9	3.9	OK	3.9	OK	3.9
P	1-45	1.4	1.4	OK	1.4	OK	1.4
P	1-47	7.4	7.4	OK	7.4	OK	7.4
P	1-48	4.8	4.8	OK	4.8	OK	4.8
P	1-50	1.4	1.4	OK	1.4	OK	1.4
P	1-51	4	4	OK	4	OK	4
P	1-52	4	4	OK	4	OK	4
P	1-54	3.5	3.5	OK	3.5	OK	3.5
P	1-55	10.9	10.9	OK	10.9	OK	10.9
P	1-56	3.5	3.5	OK	3.5	OK	3.5
P	1-57	0.9	0.9	OK	0.9	OK	0.9
P	1-58	0.9	0.9	OK	0.9	OK	0.9
P	1-59	5.1	5.1	OK	5.1	OK	5.1
P	1-60	17.2	17.2	OK	17.2	OK	17.2
P	1-61	3.5	3.5	OK	3.5	OK	3.5
P	1-62	3.5	3.5	OK	3.5	OK	3.5
P	1-63	0.9	0.9	OK	0.9	OK	0.9
P	1-64	1.1	1.1	OK	1.1	OK	1.1
P	1-65	3.5	3.5	OK	3.5	OK	3.5

Table A-1 (continued)
Trip Length and Percent New Trips Statistical Analysis
Single Family Land Use – Site 1

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	1-66	20.9	20.9	OK	20.9	OK	20.9
P	1-67	4.5	4.5	OK	4.5	OK	4.5
P	1-68	3.5	3.5	OK	3.5	OK	3.5
P	1-69	0.9	0.9	OK	0.9	OK	0.9
P	1-70	31.6	31.6	NO		NO	
P	1-71	3.5	3.5	OK	3.5	OK	3.5
P	1-72	19.8	19.8	OK	19.8	OK	19.8
P	1-73	5.5	5.5	OK	5.5	OK	5.5
P	1-74	5.3	5.3	OK	5.3	OK	5.3
P	1-75	7	7	OK	7	OK	7
P	1-76	2.6	2.6	OK	2.6	OK	2.6
P	1-77	3.5	3.5	OK	3.5	OK	3.5
P	1-78	7	7	OK	7	OK	7
P	1-80	4.9	4.9	OK	4.9	OK	4.9
P	1-81	2.2	2.2	OK	2.2	OK	2.2
P	1-82	1.4	1.4	OK	1.4	OK	1.4
P	1-83	1.1	1.1	OK	1.1	OK	1.1
P	1-84	4.5	4.5	OK	4.5	OK	4.5
P	1-85	4	4	OK	4	OK	4
P	1-86	3.5	3.5	OK	3.5	OK	3.5
P	1-87	3.5	3.5	OK	3.5	OK	3.5
P	1-88	4.5	4.5	OK	4.5	OK	4.5
P	1-89	4	4	OK	4	OK	4
P	1-90	1.6	1.6	OK	1.6	OK	1.6
P	1-91	3.5	3.5	OK	3.5	OK	3.5
P	1-92	1.1	1.1	OK	1.1	OK	1.1
P	1-93	1.1	1.1	OK	1.1	OK	1.1
P	1-94	3.5	3.5	OK	3.5	OK	3.5
P	1-95	1.6	1.6	OK	1.6	OK	1.6
P	1-96	6.2	6.2	OK	6.2	OK	6.2
P	1-97	3.5	3.5	OK	3.5	OK	3.5
P	1-98	3.5	3.5	OK	3.5	OK	3.5
P	1-99	1.1	1.1	OK	1.1	OK	1.1
P	1-100	16	16	OK	16	OK	16
P	1-101	1.1	1.1	OK	1.1	OK	1.1
P	1-102	3.5	3.5	OK	3.5	OK	3.5
P	1-103	1.1	1.1	OK	1.1	OK	1.1
P	1-104	9	9	OK	9	OK	9
P	1-105	1.1	1.1	OK	1.1	OK	1.1
P	1-106	1.1	1.1	OK	1.1	OK	1.1
P	1-107	1.1	1.1	OK	1.1	OK	1.1
P	1-108	0.4	0.4	OK	0.4	OK	0.4
P	1-109	3.5	3.5	OK	3.5	OK	3.5
P	1-110	3.5	3.5	OK	3.5	OK	3.5
P	1-111	15	15	OK	15	OK	15
P	1-112	3.5	3.5	OK	3.5	OK	3.5
P	1-113	15	15	OK	15	OK	15
P	1-114	3.5	3.5	OK	3.5	OK	3.5
P	1-115	4.7	4.7	OK	4.7	OK	4.7
P	1-116	1.1	1.1	OK	1.1	OK	1.1

Table A-1 (continued)
Trip Length and Percent New Trips Statistical Analysis
Single Family Land Use – Site 1

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	1-117	1.4	1.4	OK	1.4	OK	1.4
P	1-118	3.5	3.5	OK	3.5	OK	3.5
P	1-119	0.1	0.1	OK	0.1	OK	0.1
P	1-121	3.5	3.5	OK	3.5	OK	3.5
P	1-122	4	4	OK	4	OK	4
P	1-123	4.7	4.7	OK	4.7	OK	4.7
P	1-124	5	5	OK	5	OK	5
P	1-125	3.5	3.5	OK	3.5	OK	3.5
P	1-126	3.5	3.5	OK	3.5	OK	3.5
P	1-127	3.5	3.5	OK	3.5	OK	3.5
P	1-128	5.1	5.1	OK	5.1	OK	5.1
P	1-129	8.4	8.4	OK	8.4	OK	8.4
P	1-130	1.3	1.3	OK	1.3	OK	1.3
P	1-131	17.2	17.2	OK	17.2	OK	17.2
P	1-132	2.2	2.2	OK	2.2	OK	2.2
P	1-133	2.1	2.1	OK	2.1	OK	2.1
P	1-134	2.1	2.1	OK	2.1	OK	2.1
P	1-135	2.1	2.1	OK	2.1	OK	2.1
P	1-136	7	7	OK	7	OK	7
P	1-137	1.1	1.1	OK	1.1	OK	1.1
P	1-138	1.6	1.6	OK	1.6	OK	1.6
P	1-139	1.6	1.6	OK	1.6	OK	1.6
P	1-140	15.9	15.9	OK	15.9	OK	15.9
P	1-141	10.3	10.3	OK	10.3	OK	10.3
P	1-142	10.6	10.6	OK	10.6	OK	10.6
P	1-143	10.6	10.6	OK	10.6	OK	10.6
P	1-145	4.1	4.1	OK	4.1	OK	4.1
P	1-146	3.5	3.5	OK	3.5	OK	3.5
P	1-147	13.5	13.5	OK	13.5	OK	13.5
P	1-148	3.5	3.5	OK	3.5	OK	3.5
P	1-149	10.6	10.6	OK	10.6	OK	10.6
P	1-150	3.5	3.5	OK	3.5	OK	3.5
P	1-151	7.7	7.7	OK	7.7	OK	7.7
P	1-152	11.3	11.3	OK	11.3	OK	11.3
P	1-153	0.6	0.6	OK	0.6	OK	0.6
P	1-154	2.1	2.1	OK	2.1	OK	2.1
P	1-155	15	15	OK	15	OK	15
P	1-156	4.7	4.7	OK	4.7	OK	4.7
P	1-157	3.5	3.5	OK	3.5	OK	3.5
P	1-158	2.4	2.4	OK	2.4	OK	2.4
P	1-159	3.5	3.5	OK	3.5	OK	3.5
P	1-160	9	9	OK	9	OK	9
P	1-161	30.1	30.1	NO		NO	
P	1-162	25.7	25.7	OK	25.7	OK	25.7
P	1-164	10.7	10.7	OK	10.7	OK	10.7
P	1-165	9.7	9.7	OK	9.7	OK	9.7
P	1-166	3.5	3.5	OK	3.5	OK	3.5
P	1-168	7.7	7.7	OK	7.7	OK	7.7
P	1-169	1.1	1.1	OK	1.1	OK	1.1
P	1-171	21.1	21.1	OK	21.1	OK	21.1
P	1-172	0.1	0.1	OK	0.1	OK	0.1
P	1-173	2.1	2.1	OK	2.1	OK	2.1
P	1-174	1.1	1.1	OK	1.1	OK	1.1

Table A-1 (continued)
Trip Length and Percent New Trips Statistical Analysis
Single Family Land Use – Site 1

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	1-175	4.6	4.6	OK	4.6	OK	4.6
P	1-176	15.1	15.1	OK	15.1	OK	15.1
P	1-177	4.7	4.7	OK	4.7	OK	4.7
P	1-178	26.9	26.9	NO		NO	
P	1-179	8.2	8.2	OK	8.2	OK	8.2
P	1-181	6.7	6.7	OK	6.7	OK	6.7
P	1-182	3.5	3.5	OK	3.5	OK	3.5
P	1-183	3.5	3.5	OK	3.5	OK	3.5
P	1-184	5.8	5.8	OK	5.8	OK	5.8
P	1-187	2.2	2.2	OK	2.2	OK	2.2
P	1-188	5.6	5.6	OK	5.6	OK	5.6
P	1-189	6.3	6.3	OK	6.3	OK	6.3
P	1-190	5.6	5.6	OK	5.6	OK	5.6
P	1-192	15.4	15.4	OK	15.4	OK	15.4
P	1-193	5	5	OK	5	OK	5
P	1-195	3.5	3.5	OK	3.5	OK	3.5
P	1-196	2.2	2.2	OK	2.2	OK	2.2
P	1-198	4.3	4.3	OK	4.3	OK	4.3
P	1-199	15	15	OK	15	OK	15
P	1-200	5.1	5.1	OK	5.1	OK	5.1
P	1-201	9	9	OK	9	OK	9
P	1-202	3.5	3.5	OK	3.5	OK	3.5
P	1-203	3.5	3.5	OK	3.5	OK	3.5
P	1-205	2.1	2.1	OK	2.1	OK	2.1
P	1-206	16	16	OK	16	OK	16
P	1-207	3.5	3.5	OK	3.5	OK	3.5
P	1-208	3.5	3.5	OK	3.5	OK	3.5
P	1-209	5.1	5.1	OK	5.1	OK	5.1
P	1-210	1.2	1.2	OK	1.2	OK	1.2
P	1-211	7	7	OK	7	OK	7
P	1-212	4.3	4.3	OK	4.3	OK	4.3
P	1-213	10.5	10.5	OK	10.5	OK	10.5
P	1-214	1.2	1.2	OK	1.2	OK	1.2
P	1-215	4.7	4.7	OK	4.7	OK	4.7
P	1-216	4.6	4.6	OK	4.6	OK	4.6
P	1-217	5.5	5.5	OK	5.5	OK	5.5

Trip Length Summary:

Combined Inbound/Outbound Data Limit Check			
Trip Length		Assessable Trip Length	
Average	6.33	Average	5.78
Standard Deviation	6.48	Standard Deviation	5.22
Average + 3σ	25.76	Average + 3σ	21.45
Average - 3σ	0.00	Average - 3σ	0.00
Coefficient of Variation	1.023	Coefficient of Variation	0.905
Number of Trip Ends	388	Assessable Trip Ends	380

Trip Type Summary:

Trip Type	Count
Primary Trips	194
Diverted Trips	0
Secondary Trips	0
Captured Trips	0
Total Surveys	194
% Captured Trips:	0%
% New Trips:	100%

Table A-2
Trip Length and Percent New Trips Statistical Analysis
Single Family Land Use – Site 2

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	3-1	0.8	0.8	OK	0.8	OK	0.8
P	3-2	0.8	0.8	OK	0.8	OK	0.8
P	3-3	8.0	8.0	OK	8	OK	8
P	3-4	25.4	25.4	OK	25.4	OK	25.4
P	3-5	2.2	2.2	OK	2.2	OK	2.2
P	3-6	0.8	0.8	OK	0.8	OK	0.8
P	3-7	0.8	0.8	OK	0.8	OK	0.8
P	3-8	0.8	0.8	OK	0.8	OK	0.8
P	3-9	0.8	0.8	OK	0.8	OK	0.8
P	3-10	0.7	0.7	OK	0.7	OK	0.7
P	3-11	0.8	0.8	OK	0.8	OK	0.8
P	3-12	8.4	8.4	OK	8.4	OK	8.4
P	3-13	0.8	0.8	OK	0.8	OK	0.8
P	3-14	3.1	3.1	OK	3.1	OK	3.1
P	3-15	5.0	5.0	OK	5	OK	5
P	3-16	0.8	0.8	OK	0.8	OK	0.8
P	3-17	4.2	4.2	OK	4.2	OK	4.2
P	3-18	5.4	5.4	OK	5.4	OK	5.4
P	3-19	2.4	2.4	OK	2.4	OK	2.4
P	3-20	0.8	0.8	OK	0.8	OK	0.8
P	3-21	3.1	3.1	OK	3.1	OK	3.1
P	3-22	12.5	12.5	OK	12.5	OK	12.5
P	3-23	6.2	6.2	OK	6.2	OK	6.2
P	3-24	3.8	3.8	OK	3.8	OK	3.8
P	3-25	20.7	20.7	OK	20.7	OK	20.7
P	3-26	3.4	3.4	OK	3.4	OK	3.4
P	3-27	51.9	51.9	NO		NO	
P	3-28	14.1	14.1	OK	14.1	OK	14.1
P	3-29	3.9	3.9	OK	3.9	OK	3.9
P	3-30	1.1	1.1	OK	1.1	OK	1.1
P	3-31	4.1	4.1	OK	4.1	OK	4.1
P	3-32	3.4	3.4	OK	3.4	OK	3.4
P	3-33	0.6	0.6	OK	0.6	OK	0.6
P	3-34	3.0	3.0	OK	3	OK	3
P	3-35	3.4	3.4	OK	3.4	OK	3.4
P	3-36	4.8	4.8	OK	4.8	OK	4.8
P	3-37	4.2	4.2	OK	4.2	OK	4.2
P	3-38	4.5	4.5	OK	4.5	OK	4.5
P	3-39	5.4	5.4	OK	5.4	OK	5.4
P	3-40	2.4	2.4	OK	2.4	OK	2.4
P	3-41	20.7	20.7	OK	20.7	OK	20.7
P	3-42	21.1	21.1	OK	21.1	OK	21.1
P	3-43	2.2	2.2	OK	2.2	OK	2.2
P	3-44	5.7	5.7	OK	5.7	OK	5.7
P	3-45	3.4	3.4	OK	3.4	OK	3.4
P	3-46	21.0	21.0	OK	21	OK	21
P	3-47	17.0	17.0	OK	17	OK	17
P	3-48	16.5	16.5	OK	16.5	OK	16.5
P	3-49	6.2	6.2	OK	6.2	OK	6.2
P	3-53	8.8	8.8	OK	8.8	OK	8.8
P	3-54	0.1	0.1	OK	0.1	OK	0.1
P	3-58	1.1	1.1	OK	1.1	OK	1.1
P	3-59	3.4	3.4	OK	3.4	OK	3.4
P	3-61	12.5	12.5	OK	12.5	OK	12.5
P	3-62	2.4	2.4	OK	2.4	OK	2.4
P	3-63	5.4	5.4	OK	5.4	OK	5.4
P	3-65	12.5	12.5	OK	12.5	OK	12.5
P	3-66	17.3	17.3	OK	17.3	OK	17.3
P	3-67	2.2	2.2	OK	2.2	OK	2.2
P	3-68	7.2	7.2	OK	7.2	OK	7.2
P	3-69	3.4	3.4	OK	3.4	OK	3.4
P	3-70	5.9	5.9	OK	5.9	OK	5.9
P	3-72	3.0	3.0	OK	3	OK	3
P	3-74	5.5	5.5	OK	5.5	OK	5.5
P	3-75	2.2	2.2	OK	2.2	OK	2.2
P	3-77	4.8	4.8	OK	4.8	OK	4.8
P	3-79	5.8	5.8	OK	5.8	OK	5.8
P	3-80	33.0	33.0	NO		NO	

Table A-2 (continued)
Trip Length and Percent New Trips Statistical Analysis
Single Family Land Use – Site 2

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	3-82	3.1	3.1	OK	3.1	OK	3.1
P	3-83	17.3	17.3	OK	17.3	OK	17.3
P	3-84	4.8	4.8	OK	4.8	OK	4.8
P	3-85	2.2	2.2	OK	2.2	OK	2.2
P	3-86	17.3	17.3	OK	17.3	OK	17.3
P	3-88	1.1	1.1	OK	1.1	OK	1.1
P	3-89	2.2	2.2	OK	2.2	OK	2.2
P	3-90	1.1	1.1	OK	1.1	OK	1.1
P	3-91	3.2	3.2	OK	3.2	OK	3.2
P	3-92	1.3	1.3	OK	1.3	OK	1.3
P	3-93	3.4	3.4	OK	3.4	OK	3.4
P	3-94	0.4	0.4	OK	0.4	OK	0.4
P	3-95	21.2	21.2	OK	21.2	OK	21.2
P	3-96	28.2	28.2	OK	28.2	OK	28.2
P	3-97	20.7	20.7	OK	20.7	OK	20.7
P	3-98	3.4	3.4	OK	3.4	OK	3.4
P	3-99	1.3	1.3	OK	1.3	OK	1.3
P	3-100	9.8	9.8	OK	9.8	OK	9.8
P	3-101	3.1	3.1	OK	3.1	OK	3.1
P	3-102	3.7	3.7	OK	3.7	OK	3.7
P	3-103	3.4	3.4	OK	3.4	OK	3.4
P	3-104	3.4	3.4	OK	3.4	OK	3.4
P	3-105	2.6	2.6	OK	2.6	OK	2.6
P	3-106	7.0	7.0	OK	7	OK	7
P	3-107	1.1	1.1	OK	1.1	OK	1.1
P	3-108	3.7	3.7	OK	3.7	OK	3.7
P	3-109	4.6	4.6	OK	4.6	OK	4.6
P	3-111	3.4	3.4	OK	3.4	OK	3.4
P	3-112	2.4	2.4	OK	2.4	OK	2.4
P	3-113	2.8	2.8	OK	2.8	OK	2.8
P	3-114	2.2	2.2	OK	2.2	OK	2.2
P	3-116	2.2	2.2	OK	2.2	OK	2.2
P	3-117	45.5	45.5	NO		NO	
P	3-118	1.1	1.1	OK	1.1	OK	1.1
P	3-119	2.2	2.2	OK	2.2	OK	2.2
P	3-120	6.4	6.4	OK	6.4	OK	6.4
P	3-121	8.0	8.0	OK	8	OK	8
P	3-122	5.6	5.6	OK	5.6	OK	5.6
P	3-123	4.9	4.9	OK	4.9	OK	4.9
P	3-125	3.9	3.9	OK	3.9	OK	3.9
P	3-126	17.2	17.2	OK	17.2	OK	17.2
P	3-127	8.0	8.0	OK	8	OK	8
P	3-128	1.1	1.1	OK	1.1	OK	1.1
P	3-129	2.2	2.2	OK	2.2	OK	2.2
P	3-130	3.4	3.4	OK	3.4	OK	3.4
P	3-131	1.9	1.9	OK	1.9	OK	1.9
P	3-132	1.1	1.1	OK	1.1	OK	1.1
P	3-133	3.2	3.2	OK	3.2	OK	3.2
P	3-134	3.5	3.5	OK	3.5	OK	3.5
P	3-135	2.2	2.2	OK	2.2	OK	2.2
P	3-136	2.2	2.2	OK	2.2	OK	2.2
P	3-137	2.2	2.2	OK	2.2	OK	2.2
P	3-138	2.2	2.2	OK	2.2	OK	2.2
P	3-139	1.9	1.9	OK	1.9	OK	1.9
P	3-140	3.9	3.9	OK	3.9	OK	3.9
P	3-141	2.2	2.2	OK	2.2	OK	2.2
P	3-142	5.4	5.4	OK	5.4	OK	5.4

Trip Length Summary:

Combined Inbound/Outbound Data Limit Check			
Trip Length		Assessable Trip Length	
Average	6.47	Average	5.56
Standard Deviation	8.36	Standard Deviation	5.96
Average + 3σ	31.55	Average + 3σ	23.43
Average - 3σ	0.00	Average - 3σ	0.00
Coefficient of Variation	1.293	Coefficient of Variation	1.072
Number of Trip Length Samples	250	Number of Assessable Trip Length Samples	244

Trip Type Summary:

Trip Type	Count
Primary Trips	125
Diverted Trips	0
Secondary Trips	0
Captured Trips	0
Total Surveys	125
% Captured Trips:	0%
% New Trips:	100%

Table A-3
Trip Length and Percent New Trips Statistical Analysis
Single Family Land Use – Site 3

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	4-3	43.4	43.4	NO		NO	
P	4-5	0.8	0.8	OK	0.8	OK	0.8
P	4-6	10	10	OK	10	OK	10
P	4-8	7.9	7.9	OK	7.9	OK	7.9
P	4-9	0.8	0.8	OK	0.8	OK	0.8
P	4-10	0.8	0.8	OK	0.8	OK	0.8
P	4-11	46.3	46.3	NO		NO	
P	4-12	4.3	4.3	OK	4.3	OK	4.3
P	4-13	8.2	8.2	OK	8.2	OK	8.2
P	4-14	14	14	OK	14	OK	14
P	4-15	0.8	0.8	OK	0.8	OK	0.8
P	4-16	14.6	14.6	OK	14.6	OK	14.6
P	4-17	4.2	4.2	OK	4.2	OK	4.2
P	4-18	8.8	8.8	OK	8.8	OK	8.8
P	4-19	4.2	4.2	OK	4.2	OK	4.2
P	4-20	7.9	7.9	OK	7.9	OK	7.9
P	4-21	9.9	9.9	OK	9.9	OK	9.9
P	4-23	21.6	21.6	OK	21.6	OK	21.6
P	4-25	1	1	OK	1	OK	1
P	4-26	24	24	OK	24	OK	24
P	4-29	13.7	13.7	OK	13.7	OK	13.7
P	4-30	29.8	29.8	OK	29.8	OK	29.8
P	4-33	1	1	OK	1	OK	1
P	4-34	18.1	18.1	OK	18.1	OK	18.1
P	4-36	35.6	35.6	OK	35.6	OK	35.6
P	4-37	1	1	OK	1	OK	1
P	4-40	1	1	OK	1	OK	1
P	4-42	1	1	OK	1	OK	1
P	4-43	1	1	OK	1	OK	1
P	4-45	9	9	OK	9	OK	9
P	4-46	1	1	OK	1	OK	1
P	4-48	1	1	OK	1	OK	1
P	4-49	7	7	OK	7	OK	7
P	4-50	7	7	OK	7	OK	7
P	4-51	1	1	OK	1	OK	1
P	4-52	16.5	16.5	OK	16.5	OK	16.5
P	4-53	1	1	OK	1	OK	1
P	4-54	8.5	8.5	OK	8.5	OK	8.5
P	4-57	34.2	34.2	OK	34.2	OK	34.2
P	4-60	21.7	21.7	OK	21.7	OK	21.7
P	4-61	24	24	OK	24	OK	24
P	4-62	26.4	26.4	OK	26.4	OK	26.4
P	4-63	14.8	14.8	OK	14.8	OK	14.8
P	4-65	22.1	22.1	OK	22.1	OK	22.1
P	4-67	29.8	29.8	OK	29.8	OK	29.8
P	4-68	16.4	16.4	OK	16.4	OK	16.4
P	4-69	13.7	13.7	OK	13.7	OK	13.7
P	4-71	10.2	10.2	OK	10.2	OK	10.2
P	4-72	7.9	7.9	OK	7.9	OK	7.9
P	4-73	40.9	40.9	NO		NO	
P	4-74	13.7	13.7	OK	13.7	OK	13.7
P	4-75	18.9	18.9	OK	18.9	OK	18.9
P	4-76	7.9	7.9	OK	7.9	OK	7.9
P	4-77	10	10	OK	10	OK	10
P	4-78	7.9	7.9	OK	7.9	OK	7.9
P	4-79	22	22	OK	22	OK	22
P	4-80	12.8	12.8	OK	12.8	OK	12.8
P	4-81	38.8	38.8	OK	38.8	OK	38.8
P	4-82	10.3	10.3	OK	10.3	OK	10.3
P	4-85	14	14	OK	14	OK	14

Table A-3 (continued)
Trip Length and Percent New Trips Statistical Analysis
Single Family Land Use – Site 3

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	4-86	9.8	9.8	OK	9.8	OK	9.8
P	4-87	13.7	13.7	OK	13.7	OK	13.7
P	4-88	3.8	3.8	OK	3.8	OK	3.8
P	4-89	7.9	7.9	OK	7.9	OK	7.9
P	4-90	4.2	4.2	OK	4.2	OK	4.2
P	4-91	27.6	27.6	OK	27.6	OK	27.6
P	4-92	10	10	OK	10	OK	10
P	4-94	30.6	30.6	OK	30.6	OK	30.6
P	4-95	4.1	4.1	OK	4.1	OK	4.1
P	4-97	16.6	16.6	OK	16.6	OK	16.6
P	4-98	11.1	11.1	OK	11.1	OK	11.1
P	4-99	7.9	7.9	OK	7.9	OK	7.9
P	4-100	7	7	OK	7	OK	7
P	4-103	10.2	10.2	OK	10.2	OK	10.2
P	4-105	8.5	8.5	OK	8.5	OK	8.5
P	4-106	13.3	13.3	OK	13.3	OK	13.3
P	4-107	1	1	OK	1	OK	1
P	4-108	10.3	10.3	OK	10.3	OK	10.3
P	4-109	1	1	OK	1	OK	1
P	4-110	14.5	14.5	OK	14.5	OK	14.5
P	4-111	7.9	7.9	OK	7.9	OK	7.9
P	4-112	1	1	OK	1	OK	1
P	4-113	7	7	OK	7	OK	7
P	4-114	7	7	OK	7	OK	7
P	4-115	1.5	1.5	OK	1.5	OK	1.5
P	4-116	9.8	9.8	OK	9.8	OK	9.8
P	4-117	24.3	24.3	OK	24.3	OK	24.3
P	4-118	10.3	10.3	OK	10.3	OK	10.3
P	4-119	0.8	0.8	OK	0.8	OK	0.8
P	4-120	4.2	4.2	OK	4.2	OK	4.2
P	4-121	7.9	7.9	OK	7.9	OK	7.9
P	4-122	1	1	OK	1	OK	1
P	4-124	11.1	11.1	OK	11.1	OK	11.1
P	4-125	16.8	16.8	OK	16.8	OK	16.8
P	4-126	10.8	10.8	OK	10.8	OK	10.8
P	4-128	14	14	OK	14	OK	14
P	4-129	1	1	OK	1	OK	1
P	4-130	4.2	4.2	OK	4.2	OK	4.2
P	4-131	8.5	8.5	OK	8.5	OK	8.5
P	4-132	26.1	26.1	OK	26.1	OK	26.1
P	4-133	0.8	8	OK	0.8	OK	8
P	4-134	13.5	13.5	OK	13.5	OK	13.5
P	4-136	16.4	16.4	OK	16.4	OK	16.4
P	4-138	7	7	OK	7	OK	7
P	4-140	40.7	40.7	NO		NO	
P	4-142	26.9	26.9	OK	26.9	OK	26.9
P	4-143	1	1	OK	1	OK	1
P	4-144	14.5	14.5	OK	14.5	OK	14.5
P	4-145	10.7	10.7	OK	10.7	OK	10.7
P	4-146	8.5	8.5	OK	8.5	OK	8.5
P	4-147	8.5	8.5	OK	8.5	OK	8.5
P	4-148	7.9	7.9	OK	7.9	OK	7.9
P	4-149	8.5	8.5	OK	8.5	OK	8.5
P	4-150	27.3	27.3	OK	27.3	OK	27.3
P	4-151	14.8	14.8	OK	14.8	OK	14.8
P	4-153	15	15	OK	15	OK	15
P	4-155	7.9	7.9	OK	7.9	OK	7.9
P	4-156	11.9	11.9	OK	11.9	OK	11.9
P	4-158	9.8	9.8	OK	9.8	OK	9.8
P	4-161	8.8	8.8	OK	8.8	OK	8.8
P	4-162	0.4	0.4	OK	0.4	OK	0.4
P	4-163	9.8	9.8	OK	9.8	OK	9.8
P	4-165	7.9	7.9	OK	7.9	OK	7.9

Table A-3 (continued)
Trip Length and Percent New Trips Statistical Analysis
Single Family Land Use – Site 3

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	4-167	13	13	OK	13	OK	13
P	4-168	0.4	0.4	OK	0.4	OK	0.4
P	4-169	9	9	OK	9	OK	9
P	4-170	4.3	4.3	OK	4.3	OK	4.3
P	4-171	20	20	OK	20	OK	20
P	4-174	16.5	16.5	OK	16.5	OK	16.5
P	4-175	10	10	OK	10	OK	10
P	4-176	11	11	OK	11	OK	11
P	4-179	28	28	OK	28	OK	28
P	4-180	12.8	12.8	OK	12.8	OK	12.8
P	4-183	9	9	OK	9	OK	9
P	4-185	18	18	OK	18	OK	18
P	4-186	8.8	8.8	OK	8.8	OK	8.8
P	4-187	1	1	OK	1	OK	1
P	4-188	1	1	OK	1	OK	1
P	4-189	8.5	8.5	OK	8.5	OK	8.5
P	4-190	1	1	OK	1	OK	1
P	4-191	13.9	13.9	OK	13.9	OK	13.9
P	4-192	12.6	12.6	OK	12.6	OK	12.6
P	4-193	9.2	9.2	OK	9.2	OK	9.2
P	4-204	13.7	13.7	OK	13.7	OK	13.7
P	4-205	11	11	OK	11	OK	11
P	4-206	4.9	4.9	OK	4.9	OK	4.9
P	4-208	10	10	OK	10	OK	10
P	4-209	1	1	OK	1	OK	1

Trip Length Summary:

Combined Inbound/Outbound Data Limit Check			
Trip Length		Assessable Trip Length	
Average	11.66	Average	10.79
Standard Deviation	9.68	Standard Deviation	8.26
Average + 3σ	40.69	Average + 3σ	35.58
Average - 3σ	0.00	Average - 3σ	0.00
Coefficient of Variation	0.830	Coefficient of Variation	0.766
Number of Trip Ends	296	Number of Assessable Trip Ends	288

Trip Type Summary:

Trip Type	Count
Primary Trips	148
Diverted Trips	0
Secondary Trips	0
Captured Trips	0
Total Surveys	148
% Captured Trips:	0%
% New Trips:	100%

**Table A-4
Trip Length and Percent New Trips Statistical Analysis
Single Family Land Use – Site 4**

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	6-1	16.4	16.4	OK	16.4	OK	16.4
P	6-2	5.9	5.9	OK	5.9	OK	5.9
P	6-3	11.4	11.4	OK	11.4	OK	11.4
P	6-4	3.0	3.0	OK	3	OK	3
P	6-5	1.2	1.2	OK	1.2	OK	1.2
P	6-6	8.5	8.5	OK	8.5	OK	8.5
P	6-7	45.1	45.1	OK	45.1	OK	45.1
P	6-8	10.2	10.2	OK	10.2	OK	10.2
P	6-9	0.9	0.9	OK	0.9	OK	0.9
P	6-10	5.9	5.9	OK	5.9	OK	5.9
P	6-11	7.8	7.8	OK	7.8	OK	7.8
P	6-12	1.5	1.5	OK	1.5	OK	1.5
P	6-13	3.2	3.2	OK	3.2	OK	3.2
P	6-14	16.1	16.1	OK	16.1	OK	16.1
P	6-15	16.1	16.1	OK	16.1	OK	16.1
P	6-16	5.2	5.2	OK	5.2	OK	5.2
P	6-17	42.2	42.2	OK	42.2	OK	42.2
P	6-19	2.0	2.0	OK	2	OK	2
P	6-20	29.6	29.6	OK	29.6	OK	29.6
P	6-21	49.0	49.0	OK	49	OK	49
P	6-22	26.7	26.7	OK	26.7	OK	26.7
P	6-23	3.5	3.5	OK	3.5	OK	3.5
P	6-24	25.4	25.4	OK	25.4	OK	25.4
P	6-25	1.8	1.8	OK	1.8	OK	1.8
P	6-26	16.1	16.1	OK	16.1	OK	16.1
P	6-27	16.1	16.1	OK	16.1	OK	16.1
P	6-28	40.0	40.0	OK	40	OK	40
P	6-31	16.1	16.1	OK	16.1	OK	16.1
P	6-33	16.1	16.1	OK	16.1	OK	16.1
P	6-34	16.1	16.1	OK	16.1	OK	16.1
P	6-35	1.1	1.1	OK	1.1	OK	1.1
P	6-36	4.1	4.1	OK	4.1	OK	4.1
P	6-38	13.0	13.0	OK	13	OK	13
P	6-39	16.1	16.1	OK	16.1	OK	16.1
P	6-40	2.2	2.2	OK	2.2	OK	2.2
P	6-42	5.9	5.9	OK	5.9	OK	5.9
P	6-43	10.7	10.7	OK	10.7	OK	10.7
P	6-44	2.5	2.5	OK	2.5	OK	2.5
P	6-45	14.8	14.8	OK	14.8	OK	14.8
P	6-47	4.7	4.7	OK	4.7	OK	4.7
P	6-48	50.0	50.0	OK	50	OK	50
P	6-49	1.2	1.2	OK	1.2	OK	1.2
P	6-51	3.2	3.2	OK	3.2	OK	3.2
P	6-52	1.1	1.1	OK	1.1	OK	1.1
P	6-54	4.4	4.4	OK	4.4	OK	4.4
P	6-55	1.2	1.2	OK	1.2	OK	1.2
P	6-56	4.8	4.8	OK	4.8	OK	4.8
P	6-57	4.2	4.2	OK	4.2	OK	4.2
P	6-58	14.6	14.6	OK	14.6	OK	14.6
P	6-59	46.5	46.5	OK	46.5	OK	46.5
P	6-60	31.9	31.9	OK	31.9	OK	31.9
P	6-61	2.5	2.5	OK	2.5	OK	2.5
P	6-63	31.6	31.6	OK	31.6	OK	31.6
P	6-64	1.2	1.2	OK	1.2	OK	1.2
P	6-65	2.0	2.0	OK	2	OK	2
P	6-66	4.8	4.8	OK	4.8	OK	4.8
P	6-67	3.7	3.7	OK	3.7	OK	3.7
P	6-68	4.8	4.8	OK	4.8	OK	4.8
P	6-69	16.1	16.1	OK	16.1	OK	16.1
P	6-70	16.1	16.1	OK	16.1	OK	16.1

Table A-4 (continued)
Trip Length and Percent New Trips Statistical Analysis
Single Family Land Use – Site 4

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	6-71	26.7	26.7	OK	26.7	OK	26.7
P	6-72	1.5	1.5	OK	1.5	OK	1.5
P	6-73	1.2	1.2	OK	1.2	OK	1.2
P	6-76	3.7	3.7	OK	3.7	OK	3.7
P	6-77	5.9	5.9	OK	5.9	OK	5.9
P	6-79	1.2	1.2	OK	1.2	OK	1.2
P	6-81	2.8	2.8	OK	2.8	OK	2.8
P	6-82	9.4	9.4	OK	9.4	OK	9.4
P	6-84	46.9	46.9	OK	46.9	OK	46.9
P	6-85	1.1	1.1	OK	1.1	OK	1.1
P	6-86	5.8	5.8	OK	5.8	OK	5.8
P	6-87	4.4	4.4	OK	4.4	OK	4.4
P	6-88	1.5	1.5	OK	1.5	OK	1.5
P	6-89	1.3	1.3	OK	1.3	OK	1.3
P	6-91	9.4	9.4	OK	9.4	OK	9.4
P	6-92	2.0	2.0	OK	2	OK	2
P	6-93	1.5	1.5	OK	1.5	OK	1.5
P	6-96	5.9	5.9	OK	5.9	OK	5.9
P	6-97	49.5	49.5	OK	49.5	OK	49.5
P	6-100	1.3	1.3	OK	1.3	OK	1.3
P	6-101	4.2	4.2	OK	4.2	OK	4.2
P	6-103	1.1	1.1	OK	1.1	OK	1.1
P	6-104	1.8	1.8	OK	1.8	OK	1.8
P	6-105	23.4	23.4	OK	23.4	OK	23.4
P	6-110	3.9	3.9	OK	3.9	OK	3.9
P	6-111	3.0	3.0	OK	3	OK	3
P	6-112	1.5	1.5	OK	1.5	OK	1.5
P	6-118	13.0	13.0	OK	13	OK	13
P	6-119	4.9	4.9	OK	4.9	OK	4.9
P	6-123	9.5	9.5	OK	9.5	OK	9.5
P	6-124	31.1	31.1	OK	31.1	OK	31.1
P	6-126	45.7	45.7	OK	45.7	OK	45.7
P	6-127	24.8	24.8	OK	24.8	OK	24.8
P	6-129	3.0	3.0	OK	3	OK	3
P	6-131	4.9	4.9	OK	4.9	OK	4.9
P	6-132	1.3	1.3	OK	1.3	OK	1.3
P	6-133	16.9	16.9	OK	16.9	OK	16.9
P	6-134	28.6	28.6	OK	28.6	OK	28.6
P	6-135	1.7	1.7	OK	1.7	OK	1.7
P	6-136	5.5	5.5	OK	5.5	OK	5.5
P	6-137	33.4	33.4	OK	33.4	OK	33.4
P	6-138	4.6	4.6	OK	4.6	OK	4.6
P	6-141	3.0	3.0	OK	3	OK	3
P	6-142	2.0	2.0	OK	2	OK	2
P	6-143	33.4	33.4	OK	33.4	OK	33.4
P	6-144	4.8	4.8	OK	4.8	OK	4.8
P	6-145	5.2	5.2	OK	5.2	OK	5.2
P	6-147	7.8	7.8	OK	7.8	OK	7.8
P	6-148	28.5	28.5	OK	28.5	OK	28.5
P	6-150	3.7	3.7	OK	3.7	OK	3.7
P	6-151	3.0	3.0	OK	3	OK	3
P	6-152	49.9	49.9	OK	49.9	OK	49.9
P	6-154	2.0	2.0	OK	2	OK	2
P	6-155	1.5	1.5	OK	1.5	OK	1.5
P	6-156	8.3	8.3	OK	8.3	OK	8.3
P	6-158	2.0	2.0	OK	2	OK	2
P	6-160	5.8	5.8	OK	5.8	OK	5.8
P	6-161	1.3	1.3	OK	1.3	OK	1.3
P	6-162	13.0	13.0	OK	13	OK	13
P	6-163	34.8	34.8	OK	34.8	OK	34.8
P	6-164	2.6	2.6	OK	2.6	OK	2.6
P	6-165	8.8	8.8	OK	8.8	OK	8.8
P	6-166	1.1	1.1	OK	1.1	OK	1.1

Table A-4 (continued)
Trip Length and Percent New Trips Statistical Analysis
Single Family Land Use – Site 4

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	6-167	1.2	1.2	OK	1.2	OK	1.2
P	6-169	6.8	6.8	OK	6.8	OK	6.8
P	6-170	1.3	1.3	OK	1.3	OK	1.3
P	6-172	1.1	1.1	OK	1.1	OK	1.1
P	6-173	46.3	46.3	OK	46.3	OK	46.3
P	6-174	7.4	7.4	OK	7.4	OK	7.4
P	6-175	1.2	1.2	OK	1.2	OK	1.2
P	6-178	1.2	1.2	OK	1.2	OK	1.2
P	6-179	3.4	3.4	OK	3.4	OK	3.4
P	6-180	5.1	5.1	OK	5.1	OK	5.1
P	6-181	1.2	1.2	OK	1.2	OK	1.2
P	6-182	1.2	1.2	OK	1.2	OK	1.2
P	6-183	5.8	5.8	OK	5.8	OK	5.8
P	6-186	32.8	32.8	OK	32.8	OK	32.8
P	6-188	35.9	35.9	OK	35.9	OK	35.9
P	6-189	3.2	3.2	OK	3.2	OK	3.2
P	6-190	13.0	13.0	OK	13	OK	13
P	6-191	52.5	52.5	NO		NO	
P	6-192	9.5	9.5	OK	9.5	OK	9.5
P	6-193	4.2	4.2	OK	4.2	OK	4.2
P	6-194	24.6	24.6	OK	24.6	OK	24.6
P	6-195	6.2	6.2	OK	6.2	OK	6.2
P	6-196	9.5	9.5	OK	9.5	OK	9.5
P	6-197	4.8	4.8	OK	4.8	OK	4.8
P	6-198	1.2	1.2	OK	1.2	OK	1.2
P	6-199	7.1	7.1	OK	7.1	OK	7.1
P	6-200	8.7	8.7	OK	8.7	OK	8.7
P	6-203	4.2	4.2	OK	4.2	OK	4.2
P	6-204	1.2	1.2	OK	1.2	OK	1.2
P	6-206	9.5	9.5	OK	9.5	OK	9.5
P	6-207	5.9	5.9	OK	5.9	OK	5.9
P	6-208	4.1	4.1	OK	4.1	OK	4.1
P	6-209	10.8	10.8	OK	10.8	OK	10.8
P	6-210	2.0	2.0	OK	2	OK	2
P	6-211	41.1	41.1	OK	41.1	OK	41.1
P	6-214	4.4	4.4	OK	4.4	OK	4.4
P	6-216	7.8	7.8	OK	7.8	OK	7.8
P	6-217	3.0	3.0	OK	3	OK	3
P	6-218	1.2	1.2	OK	1.2	OK	1.2
P	6-220	4.2	4.2	OK	4.2	OK	4.2
P	6-222	3.8	3.8	OK	3.8	OK	3.8
P	6-223	4.4	4.4	OK	4.4	OK	4.4
P	6-224	4.4	4.4	OK	4.4	OK	4.4
P	6-226	18.8	18.8	OK	18.8	OK	18.8
P	6-228	32.3	32.3	OK	32.3	OK	32.3
P	6-229	5.8	5.8	OK	5.8	OK	5.8
P	6-230	1.8	1.8	OK	1.8	OK	1.8
P	6-231	5.8	5.8	OK	5.8	OK	5.8
P	6-235	1.5	1.5	OK	1.5	OK	1.5
P	6-236	16.1	16.1	OK	16.1	OK	16.1
P	6-237	5.8	5.8	OK	5.8	OK	5.8
P	6-238	9.5	9.5	OK	9.5	OK	9.5
P	6-239	13.1	13.1	OK	13.1	OK	13.1
P	6-242	3.4	3.4	OK	3.4	OK	3.4
P	6-246	3.3	3.3	OK	3.3	OK	3.3
P	6-247	1.1	1.1	OK	1.1	OK	1.1
P	6-248	2.1	2.1	OK	2.1	OK	2.1
P	6-251	34.8	34.8	OK	34.8	OK	34.8
P	6-252	11.0	11.0	OK	11	OK	11
P	6-253	5.2	5.2	OK	5.2	OK	5.2
P	6-254	20.2	20.2	OK	20.2	OK	20.2
P	6-255	13.6	13.6	OK	13.6	OK	13.6

Table A-4 (continued)
Trip Length and Percent New Trips Statistical Analysis
Single Family Land Use – Site 4

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	6-256	9.8	9.8	OK	9.8	OK	9.8
P	6-258	75.1	75.1	NO		NO	
P	6-259	3.2	3.2	OK	3.2	OK	3.2
P	6-260	16.1	16.1	OK	16.1	OK	16.1
P	6-261	13.1	13.1	OK	13.1	OK	13.1
P	6-262	11.1	11.1	OK	11.1	OK	11.1
P	6-263	1.2	1.2	OK	1.2	OK	1.2
P	6-264	4.4	4.4	OK	4.4	OK	4.4
P	6-265	1.2	1.2	OK	1.2	OK	1.2
P	6-266	3.0	3.0	OK	3	OK	3
P	6-267	4.4	4.4	OK	4.4	OK	4.4
P	6-268	1.2	1.2	OK	1.2	OK	1.2
P	6-269	1.2	1.2	OK	1.2	OK	1.2
P	6-270	4.4	4.4	OK	4.4	OK	4.4
P	6-272	3.2	3.2	OK	3.2	OK	3.2
P	6-273	1.9	1.9	OK	1.9	OK	1.9
P	6-274	11.1	11.1	OK	11.1	OK	11.1
P	6-275	1.2	1.2	OK	1.2	OK	1.2
P	6-276	14.0	14.0	OK	14	OK	14
P	6-277	6.1	6.1	OK	6.1	OK	6.1
P	6-278	2.6	2.6	OK	2.6	OK	2.6
P	6-279	1.2	1.2	OK	1.2	OK	1.2
P	6-280	3.9	3.9	OK	3.9	OK	3.9
P	6-281	5.8	5.8	OK	5.8	OK	5.8
P	6-282	3.2	3.2	OK	3.2	OK	3.2
P	6-284	1.4	1.4	OK	1.4	OK	1.4
P	6-286	1.3	1.3	OK	1.3	OK	1.3
P	6-287	1.4	1.4	OK	1.4	OK	1.4
P	6-288	1.9	1.9	OK	1.9	OK	1.9
P	6-289	1.5	1.5	OK	1.5	OK	1.5
P	6-291	16.1	16.1	OK	16.1	OK	16.1
P	6-293	3.0	3.0	OK	3	OK	3
P	6-294	1.5	1.5	OK	1.5	OK	1.5
P	6-295	10.4	10.4	OK	10.4	OK	10.4
P	6-296	9.7	9.7	OK	9.7	OK	9.7
P	6-297	5.4	5.4	OK	5.4	OK	5.4
P	6-298	1.9	1.9	OK	1.9	OK	1.9
P	6-300	4.9	4.9	OK	4.9	OK	4.9
P	6-301	4.9	4.9	OK	4.9	OK	4.9
P	6-302	38.6	38.6	OK	38.6	OK	38.6
P	6-303	16.1	16.1	OK	16.1	OK	16.1
P	6-304	16.1	16.1	OK	16.1	OK	16.1
P	6-305	16.1	16.1	OK	16.1	OK	16.1
P	6-306	16.1	16.1	OK	16.1	OK	16.1
P	6-307	1.0	1.0	OK	1	OK	1
P	6-308	16.1	16.1	OK	16.1	OK	16.1
P	6-311	1.2	1.2	OK	1.2	OK	1.2
P	6-312	8.2	8.2	OK	8.2	OK	8.2
P	6-313	3.1	3.1	OK	3.1	OK	3.1
P	6-314	43.1	43.1	OK	43.1	OK	43.1
P	6-315	1.7	1.7	OK	1.7	OK	1.7
P	6-316	51.8	51.8	NO		NO	
P	6-320	33.3	33.3	OK	33.3	OK	33.3
P	6-321	1.9	1.9	OK	1.9	OK	1.9
P	6-323	1.5	1.5	OK	1.5	OK	1.5
P	6-324	13.6	13.6	OK	13.6	OK	13.6
P	6-326	3.0	3.0	OK	3	OK	3
P	6-327	1.0	1.0	OK	1	OK	1
P	6-328	1.9	1.9	OK	1.9	OK	1.9
P	6-330	8.0	8.0	OK	8	OK	8

Table A-4 (continued)
Trip Length and Percent New Trips Statistical Analysis
Single Family Land Use – Site 4

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	6-331	1.5	1.5	OK	1.5	OK	1.5
P	6-332	5.2	5.2	OK	5.2	OK	5.2
P	6-333	1.1	1.1	OK	1.1	OK	1.1
P	6-334	6.5	6.5	OK	6.5	OK	6.5
P	6-335	13.5	13.5	OK	13.5	OK	13.5
P	6-336	2.8	2.8	OK	2.8	OK	2.8
P	6-337	2.0	2.0	OK	2	OK	2
P	6-338	2.9	2.9	OK	2.9	OK	2.9
P	6-340	19.8	19.8	OK	19.8	OK	19.8
P	6-341	4.2	4.2	OK	4.2	OK	4.2
P	6-342	7.3	7.3	OK	7.3	OK	7.3
P	6-343	2.2	2.2	OK	2.2	OK	2.2
P	6-344	11.1	11.1	OK	11.1	OK	11.1
P	6-345	1.9	1.9	OK	1.9	OK	1.9
P	6-347	4.4	4.4	OK	4.4	OK	4.4
P	6-349	8.9	8.9	OK	8.9	OK	8.9
P	6-350	7.7	7.7	OK	7.7	OK	7.7
P	6-352	8.9	8.9	OK	8.9	OK	8.9
P	6-353	8.9	8.9	OK	8.9	OK	8.9
P	6-354	4.5	4.5	OK	4.5	OK	4.5
P	6-355	8.8	8.8	OK	8.8	OK	8.8
P	6-356	4.7	4.7	OK	4.7	OK	4.7
P	6-357	4.2	4.2	OK	4.2	OK	4.2
P	6-358	8.6	8.6	OK	8.6	OK	8.6
P	6-359	16.1	16.1	OK	16.1	OK	16.1
P	6-360	7.8	7.8	OK	7.8	OK	7.8
P	6-361	16.1	16.1	OK	16.1	OK	16.1
P	6-362	8.8	8.8	OK	8.8	OK	8.8
P	6-363	16.1	16.1	OK	16.1	OK	16.1
P	6-364	16.1	16.1	OK	16.1	OK	16.1
P	6-365	16.1	16.1	OK	16.1	OK	16.1
P	6-366	16.1	16.1	OK	16.1	OK	16.1
P	6-367	8.2	8.2	OK	8.2	OK	8.2
P	6-368	4.6	4.6	OK	4.6	OK	4.6
P	6-370	3.2	3.2	OK	3.2	OK	3.2
P	6-371	7.1	7.1	OK	7.1	OK	7.1
P	6-372	1.9	1.9	OK	1.9	OK	1.9
P	6-375	1.2	1.2	OK	1.2	OK	1.2
P	6-373	3.8	3.8	OK	3.8	OK	3.8
P	6-377	11.3	11.3	OK	11.3	OK	11.3
P	6-378	11.3	11.3	OK	11.3	OK	11.3
P	6-379	1.2	1.2	OK	1.2	OK	1.2
P	6-380	18.8	18.8	OK	18.8	OK	18.8
P	6-382	3.7	3.7	OK	3.7	OK	3.7
P	6-383	2.9	2.9	OK	2.9	OK	2.9
P	6-384	3.5	3.5	OK	3.5	OK	3.5
P	6-385	2.2	2.2	OK	2.2	OK	2.2
P	6-387	4.4	4.4	OK	4.4	OK	4.4
P	6-388	3.3	3.3	OK	3.3	OK	3.3
P	6-389	3.0	3.0	OK	3	OK	3
P	6-390	3.7	3.7	OK	3.7	OK	3.7
P	6-392	14.9	14.9	OK	14.9	OK	14.9
P	6-393	16.1	16.1	OK	16.1	OK	16.1
P	6-394	4.7	4.7	OK	4.7	OK	4.7
P	6-395	10.8	10.8	OK	10.8	OK	10.8
P	6-396	14.4	14.4	OK	14.4	OK	14.4
P	6-397	4.8	4.8	OK	4.8	OK	4.8
P	6-399			OK	0	OK	0
P	6-398	4.2	4.2	OK	4.2	OK	4.2
P	6-400	14.4	14.4	OK	14.4	OK	14.4

Table A-4 (continued)
Trip Length and Percent New Trips Statistical Analysis
Single Family Land Use – Site 4

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	6-402	2.4	2.4	OK	2.4	OK	2.4
P	6-403	4.5	4.5	OK	4.5	OK	4.5
P	6-404	6.5	6.5	OK	6.5	OK	6.5
P	6-405	42.0	42.0	OK	42	OK	42
P	6-408	16.1	16.1	OK	16.1	OK	16.1
P	6-411	16.1	16.1	OK	16.1	OK	16.1
P	6-412	16.1	16.1	OK	16.1	OK	16.1
P	6-414	4.4	4.4	OK	4.4	OK	4.4
P	6-415	16.1	16.1	OK	16.1	OK	16.1
P	6-416	1.9	1.9	OK	1.9	OK	1.9
P	6-417	10.9	10.9	OK	10.9	OK	10.9
P	6-420	16.1	16.1	OK	16.1	OK	16.1
P	6-421	16.1	16.1	OK	16.1	OK	16.1
P	6-422	1.9	1.9	OK	1.9	OK	1.9
P	6-423	1.2	1.2	OK	1.2	OK	1.2
P	6-425	8.9	8.9	OK	8.9	OK	8.9
P	6-426	27.8	27.8	OK	27.8	OK	27.8
P	6-427	1.2	1.2	OK	1.2	OK	1.2
P	6-428	1.9	1.9	OK	1.9	OK	1.9
P	6-429	11.1	11.1	OK	11.1	OK	11.1
P	6-430	4.1	4.1	OK	4.1	OK	4.1
P	6-431	75.1	75.1	NO		NO	
P	6-432	80.5	80.5	NO		NO	
P	6-433	66.7	66.7	NO		NO	
P	6-434	1.9	1.9	OK	1.9	OK	1.9
P	6-435	3.0	3.0	OK	3	OK	3
P	6-437	7.4	7.4	OK	7.4	OK	7.4
P	6-438	5.8	5.8	OK	5.8	OK	5.8
P	6-440	1.9	1.9	OK	1.9	OK	1.9
P	6-441	8.3	8.3	OK	8.3	OK	8.3
P	6-442	5.1	5.1	OK	5.1	OK	5.1
P	6-443	4.1	4.1	OK	4.1	OK	4.1
P	6-444	11.1	11.1	OK	11.1	OK	11.1
P	6-446	3.8	3.8	OK	3.8	OK	3.8
P	6-448	7.5	7.5	OK	7.5	OK	7.5
P	6-449	2.8	2.8	OK	2.8	OK	2.8
P	6-450	4.2	4.2	OK	4.2	OK	4.2
P	6-451	16.1	16.1	OK	16.1	OK	16.1
P	6-452	1.5	1.5	OK	1.5	OK	1.5
P	6-453	1.0	1.0	OK	1	OK	1
P	6-454	9.0	9.0	OK	9	OK	9
P	6-455	5.8	5.8	OK	5.8	OK	5.8
P	6-457	30.0	30.0	OK	30	OK	30
P	6-458	2.7	2.7	OK	2.7	OK	2.7
P	6-461	10.3	10.3	OK	10.3	OK	10.3
P	6-462	3.0	3.0	OK	3	OK	3
P	6-463	2.8	2.8	OK	2.8	OK	2.8
P	6-464	51.4	51.4	NO		NO	

Trip Length Summary:

Combined Inbound/Outbound Data Limit Check			
Trip Length		Assessable Trip Length	
Average	10.59	Average	9.46
Standard Deviation	13.26	Standard Deviation	10.76
Average + 3σ	50.37	Average + 3σ	41.75
Average - 3σ	0.00	Average - 3σ	0.00
Coefficient of Variation	1.252	Coefficient of Variation	1.137
Number of Trip Ends	704	Number of Assessable Trip Ends	692

Trip Type Summary:

Trip Type	Count
Primary Trips	353
Diverted Trips	0
Secondary Trips	0
Captured Trips	0
Total Surveys	353
% Captured Trips:	0%
% New Trips:	100%

**Table A-5
Trip Length and Percent New Trips Statistical Analysis
Single Family Land Use – Site 5**

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	11-1	21.4	21.4	OK	21.4	OK	21.4
P	11-4	29	29	OK	29	OK	29
P	11-5	12.9	12.9	OK	12.9	OK	12.9
P	11-9	1.2	1.2	OK	1.2	OK	1.2
P	11-10	1.2	1.2	OK	1.2	OK	1.2
P	11-11	7.5	7.5	OK	7.5	OK	7.5
P	11-12	6.8	6.8	OK	6.8	OK	6.8
P	11-15	6.8	6.8	OK	6.8	OK	6.8
P	11-18	1.3	1.3	OK	1.3	OK	1.3
P	11-19	0.5	0.5	OK	0.5	OK	0.5
P	11-21	7.5	7.5	OK	7.5	OK	7.5
P	11-23	9.6	9.6	OK	9.6	OK	9.6
P	11-24	33.2	33.2	OK	33.2	OK	33.2
P	11-25	3.1	3.1	OK	3.1	OK	3.1
P	11-26	1.2	1.2	OK	1.2	OK	1.2
P	11-29	5.9	5.9	OK	5.9	OK	5.9
P	11-30	5.2	5.2	OK	5.2	OK	5.2
P	11-32	1.8	1.8	OK	1.8	OK	1.8
P	11-34	5.2	5.2	OK	5.2	OK	5.2
P	11-35	6.8	6.8	OK	6.8	OK	6.8
P	11-36	3.1	3.1	OK	3.1	OK	3.1
P	11-38	6.8	6.8	OK	6.8	OK	6.8
P	11-39	7.8	7.8	OK	7.8	OK	7.8
P	11-40	15	15	OK	15	OK	15
P	11-41	26.9	26.9	OK	26.9	OK	26.9
P	11-42	7.3	7.3	OK	7.3	OK	7.3
P	11-43	3.1	3.1	OK	3.1	OK	3.1
P	11-44	6.1	6.1	OK	6.1	OK	6.1
P	11-45	11	11	OK	11	OK	11
P	11-46	13.7	13.7	OK	13.7	OK	13.7
P	11-48	10	10	OK	10	OK	10
P	11-49	2.8	2.8	OK	2.8	OK	2.8
P	11-50	5.9	5.9	OK	5.9	OK	5.9
P	11-52	3	3	OK	3	OK	3
P	11-53	2.9	2.9	OK	2.9	OK	2.9
P	11-54	17.3	17.3	OK	17.3	OK	17.3
P	11-58	6.8	6.8	OK	6.8	OK	6.8
P	11-59	20.9	20.9	OK	20.9	OK	20.9
P	11-60	34.4	34.4	OK	34.4	OK	34.4
P	11-61	17	17	OK	17	OK	17
P	11-63	9.5	9.5	OK	9.5	OK	9.5
P	11-64	14	14	OK	14	OK	14
P	11-66	22.7	22.7	OK	22.7	OK	22.7
P	11-68	5.8	5.8	OK	5.8	OK	5.8
P	11-69	0.4	0.4	OK	0.4	OK	0.4
P	11-71	26.6	26.6	OK	26.6	OK	26.6
P	11-72	19.7	19.7	OK	19.7	OK	19.7
P	11-74	4.7	4.7	OK	4.7	OK	4.7
P	11-75	28.2	28.2	OK	28.2	OK	28.2
P	11-78	9.8	9.8	OK	9.8	OK	9.8
P	11-79	5.2	5.2	OK	5.2	OK	5.2
P	11-80	3	3	OK	3	OK	3
P	11-81	1.3	1.3	OK	1.3	OK	1.3
P	11-82	1.3	1.3	OK	1.3	OK	1.3
P	11-83	4.4	4.4	OK	4.4	OK	4.4
P	11-85	4.8	4.8	OK	4.8	OK	4.8

Table A-5 (continued)
Trip Length and Percent New Trips Statistical Analysis
Single Family Land Use – Site 5

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	11-88	1.3	1.3	OK	1.3	OK	1.3
P	11-90	6.4	6.4	OK	6.4	OK	6.4
P	11-91	4.8	4.8	OK	4.8	OK	4.8
P	11-95	4.7	4.7	OK	4.7	OK	4.7
P	11-96	1.3	1.3	OK	1.3	OK	1.3
P	11-98	3	3	OK	3	OK	3
P	11-101	1.3	1.3	OK	1.3	OK	1.3
P	11-102	14.1	14.1	OK	14.1	OK	14.1
P	11-103	1.1	1.1	OK	1.1	OK	1.1
P	11-104	24	24	OK	24	OK	24
P	11-106	1.3	1.3	OK	1.3	OK	1.3
P	11-108	1.3	1.3	OK	1.3	OK	1.3
P	11-109	1.9	1.9	OK	1.9	OK	1.9
P	11-110	5.9	5.9	OK	5.9	OK	5.9
P	11-112	1.1	1.1	OK	1.1	OK	1.1
P	11-113	1.3	1.3	OK	1.3	OK	1.3
P	11-114	4.7	4.7	OK	4.7	OK	4.7
P	11-115	23.4	23.4	OK	23.4	OK	23.4
P	11-116	1.1	1.1	OK	1.1	OK	1.1
P	11-119	4.8	4.8	OK	4.8	OK	4.8
P	11-120	3	3	OK	3	OK	3
P	11-121	1.3	1.3	OK	1.3	OK	1.3
P	11-123	10.1	10.1	OK	10.1	OK	10.1
P	11-124	14.7	14.7	OK	14.7	OK	14.7
P	11-125	19.1	19.1	OK	19.1	OK	19.1
P	11-127	19.1	19.1	OK	19.1	OK	19.1
P	11-128	14.7	14.7	OK	14.7	OK	14.7
P	11-129	14.7	14.7	OK	14.7	OK	14.7
P	11-130	6.4	6.4	OK	6.4	OK	6.4
P	11-132	18.7	18.7	OK	18.7	OK	18.7
P	11-133	1.1	1.1	OK	1.1	OK	1.1
P	11-134	2.9	2.9	OK	2.9	OK	2.9
P	11-135	1.1	1.1	OK	1.1	OK	1.1
P	11-136	4.8	4.8	OK	4.8	OK	4.8
P	11-138	11.5	11.5	OK	11.5	OK	11.5
P	11-139	10.7	10.7	OK	10.7	OK	10.7
P	11-140	10.1	10.1	OK	10.1	OK	10.1
P	11-141	1.1	1.1	OK	1.1	OK	1.1
P	11-142	5.6	5.6	OK	5.6	OK	5.6
P	11-143	4.8	4.8	OK	4.8	OK	4.8
P	11-144	10	10	OK	10	OK	10
P	11-145	0.6	0.6	OK	0.6	OK	0.6
P	11-146	7.3	7.3	OK	7.3	OK	7.3
P	11-148	3	3	OK	3	OK	3
P	11-149	2.9	2.9	OK	2.9	OK	2.9
P	11-150	16.5	16.5	OK	16.5	OK	16.5
P	11-152	18.3	18.3	OK	18.3	OK	18.3
P	11-153	9.5	9.5	OK	9.5	OK	9.5
P	11-154	28.4	28.4	OK	28.4	OK	28.4
P	11-155	10.7	10.7	OK	10.7	OK	10.7
P	11-156	3.7	3.7	OK	3.7	OK	3.7
P	11-157	5	5	OK	5	OK	5
P	11-158	1.3	1.3	OK	1.3	OK	1.3
P	11-159	1.3	1.3	OK	1.3	OK	1.3
P	11-160	2.6	2.6	OK	2.6	OK	2.6
P	11-163	0.4	0.4	OK	0.4	OK	0.4
P	11-164	29.2	29.2	OK	29.2	OK	29.2
P	11-165	27.8	27.8	OK	27.8	OK	27.8

Table A-5 (continued)
Trip Length and Percent New Trips Statistical Analysis
Single Family Land Use – Site 5

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	11-168	2.8	2.8	OK	2.8	OK	2.8
P	11-169	1.3	1.3	OK	1.3	OK	1.3
P	11-170	1.3	1.3	OK	1.3	OK	1.3
P	11-173	3	3	OK	3	OK	3
P	11-174	5.8	5.8	OK	5.8	OK	5.8
P	11-175	4.5	4.5	OK	4.5	OK	4.5
P	11-176	1.3	1.3	OK	1.3	OK	1.3
P	11-177	1.6	1.6	OK	1.6	OK	1.6
P	11-178	19.7	19.7	OK	19.7	OK	19.7
P	11-179	0.4	0.4	OK	0.4	OK	0.4
P	11-180	24.3	24.3	OK	24.3	OK	24.3
P	11-181	1.3	1.3	OK	1.3	OK	1.3
P	11-183	18.3	18.3	OK	18.3	OK	18.3
P	11-184	4.8	4.8	OK	4.8	OK	4.8
P	11-186	7	7	OK	7	OK	7
P	11-189	5.1	5.1	OK	5.1	OK	5.1
P	11-190	0.4	0.4	OK	0.4	OK	0.4
P	11-191	1.1	1.1	OK	1.1	OK	1.1
P	11-192	23.9	23.9	OK	23.9	OK	23.9
P	11-193	3.7	3.7	OK	3.7	OK	3.7
P	11-197	17.3	17.3	OK	17.3	OK	17.3
P	11-202	0.7	0.7	OK	0.7	OK	0.7
P	11-203	6.4	6.4	OK	6.4	OK	6.4
P	11-204	21.8	21.8	OK	21.8	OK	21.8
P	11-205	4.7	4.7	OK	4.7	OK	4.7
P	11-206	0.7	0.7	OK	0.7	OK	0.7
P	11-207	0.4	0.4	OK	0.4	OK	0.4
P	11-209	18.3	18.3	OK	18.3	OK	18.3
P	11-210	34.1	34.1	OK	34.1	OK	34.1
P	11-211	0.7	0.7	OK	0.7	OK	0.7
P	11-212	1.3	1.3	OK	1.3	OK	1.3
P	11-213	18.3	18.3	OK	18.3	OK	18.3
P	11-214	1.3	1.3	OK	1.3	OK	1.3
P	11-215	18.3	18.3	OK	18.3	OK	18.3
P	11-216	0.4	0.4	OK	0.4	OK	0.4
P	11-217	0.4	0.4	OK	0.4	OK	0.4
P	11-218	0.4	0.4	OK	0.4	OK	0.4
P	11-219	0.4	0.4	OK	0.4	OK	0.4
P	11-220	0.4	0.4	OK	0.4	OK	0.4
P	11-221	0.4	0.4	OK	0.4	OK	0.4
P	11-222	0.4	0.4	OK	0.4	OK	0.4
P	11-224	26.6	26.6	OK	26.6	OK	26.6
P	11-225	23.4	23.4	OK	23.4	OK	23.4
P	11-227	22.6	22.6	OK	22.6	OK	22.6
P	11-234	29.1	29.1	OK	29.1	OK	29.1
P	11-235	23.2	23.2	OK	23.2	OK	23.2
P	11-237	1.3	1.3	OK	1.3	OK	1.3
P	11-239	20.3	20.3	OK	20.3	OK	20.3
P	11-240	3.7	3.7	OK	3.7	OK	3.7
P	11-241	3.7	3.7	OK	3.7	OK	3.7
P	11-243	21.8	21.8	OK	21.8	OK	21.8
P	11-244	17.5	17.5	OK	17.5	OK	17.5
P	11-247	5	5	OK	5	OK	5
P	11-249	12.9	12.9	OK	12.9	OK	12.9
P	11-250	4.1	4.1	OK	4.1	OK	4.1

Table A-5 (continued)
Trip Length and Percent New Trips Statistical Analysis
Single Family Land Use – Site 5

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	11-251	2.9	2.9	OK	2.9	OK	2.9
P	11-253	1.1	1.1	OK	1.1	OK	1.1
P	11-254	22	22	OK	22	OK	22
P	11-255	3	3	OK	3	OK	3
P	11-256	49.6	49.6	OK	49.6	OK	49.6
P	11-257	18.7	18.7	OK	18.7	OK	18.7
P	11-259	15.1	15.1	OK	15.1	OK	15.1
P	11-260	33.2	33.2	OK	33.2	OK	33.2
P	11-261	9.5	9.5	OK	9.5	OK	9.5
P	11-263	26.3	26.3	OK	26.3	OK	26.3
P	11-264	20.8	20.8	OK	20.8	OK	20.8
P	11-265	41.3	41.3	OK	41.3	OK	41.3
P	11-266	5.1	5.1	OK	5.1	OK	5.1
P	11-267	7.9	7.9	OK	7.9	OK	7.9
P	11-268	2.9	2.9	OK	2.9	OK	2.9
P	11-269	1.1	1.1	OK	1.1	OK	1.1
P	11-270	28.8	28.8	OK	28.8	OK	28.8
P	11-272	0.4	0.4	OK	0.4	OK	0.4
P	11-273	2.9	2.9	OK	2.9	OK	2.9
P	11-274	45	45	OK	45	OK	45
P	11-275	0.4	0.4	OK	0.4	OK	0.4
P	11-276	4.9	4.9	OK	4.9	OK	4.9
P	11-277	0.4	0.4	OK	0.4	OK	0.4
P	11-278	5.9	5.9	OK	5.9	OK	5.9
P	11-279	22	22	OK	22	OK	22
P	11-280	18.3	18.3	OK	18.3	OK	18.3
P	11-281	5.1	5.1	OK	5.1	OK	5.1
P	11-282	7.7	7.7	OK	7.7	OK	7.7
P	11-283	2.9	2.9	OK	2.9	OK	2.9
P	11-285	3.7	3.7	OK	3.7	OK	3.7
P	11-286	0.4	0.4	OK	0.4	OK	0.4
P	11-288	1.3	1.3	OK	1.3	OK	1.3
P	11-289	18.3	18.3	OK	18.3	OK	18.3
P	11-290	0.4	0.4	OK	0.4	OK	0.4
P	11-292	0.4	0.4	OK	0.4	OK	0.4
P	11-293	7.9	7.9	OK	7.9	OK	7.9
P	11-294	9.5	9.5	OK	9.5	OK	9.5
P	11-295	5.6	5.6	OK	5.6	OK	5.6
P	11-296	0.4	0.4	OK	0.4	OK	0.4
P	11-297	0.4	0.4	OK	0.4	OK	0.4
P	11-298	1	1	OK	1	OK	1
P	11-299	0.4	0.4	OK	0.4	OK	0.4
P	11-301	18.3	18.3	OK	18.3	OK	18.3
P	11-302	0.4	0.4	OK	0.4	OK	0.4
P	11-303	2.9	2.9	OK	2.9	OK	2.9
P	11-305	4.8	4.8	OK	4.8	OK	4.8
P	11-306	9.5	9.5	OK	9.5	OK	9.5
P	11-307	1.3	1.3	OK	1.3	OK	1.3
P	11-308	22.7	22.7	OK	22.7	OK	22.7
P	11-311	1.3	1.3	OK	1.3	OK	1.3
P	11-312	5.4	5.4	OK	5.4	OK	5.4
P	11-313	21.4	21.4	OK	21.4	OK	21.4
P	11-314	8.3	8.3	OK	8.3	OK	8.3
P	11-315	1.1	1.1	OK	1.1	OK	1.1
P	11-316	1.5	1.5	OK	1.5	OK	1.5
P	11-317	1.4	1.4	OK	1.4	OK	1.4
P	11-318	6.4	6.4	OK	6.4	OK	6.4
P	11-319	1.2	1.2	OK	1.2	OK	1.2
P	11-320	1.4	1.4	OK	1.4	OK	1.4

Table A-5 (continued)
Trip Length and Percent New Trips Statistical Analysis
Single Family Land Use – Site 5

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	11-321	3.2	3.2	OK	3.2	OK	3.2
P	11-322	1.4	1.4	OK	1.4	OK	1.4
P	11-323	3	3	OK	3	OK	3
P	11-326	0.5	0.5	OK	0.5	OK	0.5
P	11-327	34.6	34.6	OK	34.6	OK	34.6
P	11-328	17.8	17.8	OK	17.8	OK	17.8
P	11-329	0.5	0.5	OK	0.5	OK	0.5
P	11-330	17.7	17.7	OK	17.7	OK	17.7
P	11-332	5	5	OK	5	OK	5
P	11-333	0.5	0.5	OK	0.5	OK	0.5
P	11-336	6.8	6.8	OK	6.8	OK	6.8
P	11-338	33	33	OK	33	OK	33
P	11-340	3	3	OK	3	OK	3
P	11-341	13.8	13.8	OK	13.8	OK	13.8
P	11-342	17.8	17.8	OK	17.8	OK	17.8
P	11-343	9.7	9.7	OK	9.7	OK	9.7
P	11-344	4.3	4.3	OK	4.3	OK	4.3
P	11-345	5.9	5.9	OK	5.9	OK	5.9
P	11-346	12.2	12.2	OK	12.2	OK	12.2
P	11-347	26	26	OK	26	OK	26
P	11-350	34.9	34.9	OK	34.9	OK	34.9
P	11-351	4.3	4.3	OK	4.3	OK	4.3
P	11-353	1.1	1.1	OK	1.1	OK	1.1
P	11-354	17.8	17.8	OK	17.8	OK	17.8
P	11-356	1.1	1.1	OK	1.1	OK	1.1
P	11-357	5.4	5.4	OK	5.4	OK	5.4
P	11-358	5	5	OK	5	OK	5
P	11-359	1.1	1.1	OK	1.1	OK	1.1
P	11-360	9.5	9.5	OK	9.5	OK	9.5
P	11-362	6.2	6.2	OK	6.2	OK	6.2
P	11-363	24	24	OK	24	OK	24
P	11-364	1.5	1.5	OK	1.5	OK	1.5
P	11-365	4.8	4.8	OK	4.8	OK	4.8
P	11-366	3.7	3.7	OK	3.7	OK	3.7
P	11-368	4.4	4.4	OK	4.4	OK	4.4
P	11-369	23.3	23.3	OK	23.3	OK	23.3
P	11-370	8.6	8.6	OK	8.6	OK	8.6
P	11-371	9.5	9.5	OK	9.5	OK	9.5
P	11-375	19.1	19.1	OK	19.1	OK	19.1
P	11-376	3.7	3.7	OK	3.7	OK	3.7
P	11-377	4.3	4.3	OK	4.3	OK	4.3
P	11-378	1.1	1.1	OK	1.1	OK	1.1
P	11-379	3	3	OK	3	OK	3
P	11-380	9.5	9.5	OK	9.5	OK	9.5
P	11-381	4.9	4.9	OK	4.9	OK	4.9
P	11-382	17.8	17.8	OK	17.8	OK	17.8
P	11-383	4.9	4.9	OK	4.9	OK	4.9
P	11-384	17.8	17.8	OK	17.8	OK	17.8
P	11-385	24	24	OK	24	OK	24
P	11-386	0.6	0.6	OK	0.6	OK	0.6
P	11-387	9.5	9.5	OK	9.5	OK	9.5
P	11-388	1.3	1.3	OK	1.3	OK	1.3
P	11-389	17.4	17.4	OK	17.4	OK	17.4
P	11-390	17.4	17.4	OK	17.4	OK	17.4
P	11-391	2.9	2.9	OK	2.9	OK	2.9
P	11-394	2.9	2.9	OK	2.9	OK	2.9
P	11-395	17.8	17.8	OK	17.8	OK	17.8
P	11-397	1.1	1.1	OK	1.1	OK	1.1
P	11-398	1.5	1.5	OK	1.5	OK	1.5
P	11-399	14.8	14.8	OK	14.8	OK	14.8
P	11-400	5.9	5.9	OK	5.9	OK	5.9

Table A-5 (continued)
Trip Length and Percent New Trips Statistical Analysis
Single Family Land Use – Site 5

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	11-401	4.3	4.3	OK	4.3	OK	4.3
P	11-404	22.6	22.6	OK	22.6	OK	22.6
P	11-405	4.7	4.7	OK	4.7	OK	4.7
P	11-406	6.2	6.2	OK	6.2	OK	6.2
P	11-407	4.9	4.9	OK	4.9	OK	4.9
P	11-408	6.4	6.4	OK	6.4	OK	6.4
P	11-409	24.8	24.8	OK	24.8	OK	24.8
P	11-410	9.5	9.5	OK	9.5	OK	9.5
P	11-411	4.4	4.4	OK	4.4	OK	4.4
P	11-412	3.9	3.9	OK	3.9	OK	3.9
P	11-413	4	4	OK	4	OK	4
P	11-414	1.1	1.1	OK	1.1	OK	1.1
P	11-415	4.4	4.4	OK	4.4	OK	4.4
P	11-416	4	4	OK	4	OK	4
P	11-417	9.3	9.3	OK	9.3	OK	9.3
P	11-418	12	12	OK	12	OK	12
P	11-419	4.9	4.9	OK	4.9	OK	4.9
P	11-420	9.1	9.1	OK	9.1	OK	9.1
P	11-423	32.5	32.5	OK	32.5	OK	32.5
P	11-424	29.1	29.1	OK	29.1	OK	29.1
P	11-425	9.5	9.5	OK	9.5	OK	9.5
P	11-426	4.4	4.4	OK	4.4	OK	4.4
P	11-427	30.1	30.1	OK	30.1	OK	30.1
P	11-428	2.8	2.8	OK	2.8	OK	2.8
P	11-429	1.1	1.1	OK	1.1	OK	1.1
P	11-431	6.5	6.5	OK	6.5	OK	6.5
P	11-432	6.2	6.2	OK	6.2	OK	6.2
P	11-433	1.7	1.7	OK	1.7	OK	1.7
P	11-434	4.4	4.4	OK	4.4	OK	4.4
P	11-435	0.4	0.4	OK	0.4	OK	0.4
P	11-436	20.8	20.8	OK	20.8	OK	20.8
P	11-437	2.6	2.6	OK	2.6	OK	2.6
P	11-438	9.5	9.5	OK	9.5	OK	9.5
P	11-439	9.5	9.5	OK	9.5	OK	9.5
P	11-440	14.1	14.1	OK	14.1	OK	14.1
P	11-442	1.3	1.3	OK	1.3	OK	1.3
P	11-443	0.4	0.4	OK	0.4	OK	0.4
P	11-444	1.1	1.1	OK	1.1	OK	1.1
P	11-445	1.1	1.1	OK	1.1	OK	1.1
P	11-446	3	3	OK	3	OK	3
P	11-447	1.1	1.1	OK	1.1	OK	1.1
P	11-448	17.8	17.8	OK	17.8	OK	17.8
P	11-449	4.9	4.9	OK	4.9	OK	4.9
P	11-450	14.1	14.1	OK	14.1	OK	14.1
P	11-551	19.5	19.5	OK	19.5	OK	19.5
P	11-452	0.4	0.4	OK	0.4	OK	0.4
P	11-453	4.9	4.9	OK	4.9	OK	4.9
P	11-454	4.8	4.8	OK	4.8	OK	4.8
P	11-455	2.8	2.8	OK	2.8	OK	2.8
P	11-456	0.4	0.4	OK	0.4	OK	0.4
P	11-457	1.1	1.1	OK	1.1	OK	1.1
P	11-458	9.3	9.3	OK	9.3	OK	9.3
P	11-459	4.9	4.9	OK	4.9	OK	4.9
P	11-460	4.7	4.7	OK	4.7	OK	4.7
P	11-461	28.8	28.8	OK	28.8	OK	28.8
P	11-462	4.7	4.7	OK	4.7	OK	4.7
P	11-463	3.7	3.7	OK	3.7	OK	3.7
P	11-464	29.9	29.9	OK	29.9	OK	29.9
P	11-465	5.3	5.3	OK	5.3	OK	5.3

Table A-5 (continued)
Trip Length and Percent New Trips Statistical Analysis
Single Family Land Use – Site 5

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	11-466	13.3	13.3	OK	13.3	OK	13.3
P	11-468	4	4	OK	4	OK	4
P	11-469	27.4	27.4	OK	27.4	OK	27.4
P	11-470	0.6	0.6	OK	0.6	OK	0.6
P	11-472	4.8	4.8	OK	4.8	OK	4.8
P	11-474	20.4	20.4	OK	20.4	OK	20.4
P	11-475	3	3	OK	3	OK	3
P	11-476	1.3	1.3	OK	1.3	OK	1.3
P	11-478	23.4	23.4	OK	23.4	OK	23.4
P	11-479	14.1	14.1	OK	14.1	OK	14.1
P	11-480	4.7	4.7	OK	4.7	OK	4.7
P	11-481	3	3	OK	3	OK	3
P	11-482	6.3	6.3	OK	6.3	OK	6.3
P	11-483	4.9	4.9	OK	4.9	OK	4.9
P	11-484	0.4	0.4	OK	0.4	OK	0.4
P	11-485	1.3	1.3	OK	1.3	OK	1.3
P	11-486	1.3	1.3	OK	1.3	OK	1.3
P	11-488	19.6	19.6	OK	19.6	OK	19.6
P	11-489	18	18	OK	18	OK	18
P	11-490	0.4	0.4	OK	0.4	OK	0.4
P	11-491	24	24	OK	24	OK	24
P	11-492	1.3	1.3	OK	1.3	OK	1.3
P	11-493	6.6	6.6	OK	6.6	OK	6.6
P	11-495	495	495	NO		NO	
P	11-496	4	4	OK	4	OK	4
P	11-498	2.4	2.4	OK	2.4	OK	2.4
P	11-499	1.1	1.1	OK	1.1	OK	1.1
P	11-500	1.1	1.1	OK	1.1	OK	1.1
P	11-502	24.7	24.7	OK	24.7	OK	24.7
P	11-503	5.7	5.7	OK	5.7	OK	5.7
P	11-504	0.6	0.6	OK	0.6	OK	0.6
P	11-506	14.3	14.3	OK	14.3	OK	14.3
P	11-508	1.1	1.1	OK	1.1	OK	1.1
P	11-509	17.3	17.3	OK	17.3	OK	17.3
P	11-510	1.1	1.1	OK	1.1	OK	1.1
P	11-511	4.1	4.1	OK	4.1	OK	4.1
P	11-512	0.4	0.4	OK	0.4	OK	0.4
P	11-513	3	3	OK	3	OK	3

Trip Length Summary:

Combined Inbound/Outbound Data Limit Check			
Trip Length		Assessable Trip Length	
Average	10.19	Average	8.93
Standard Deviation	26.43	Standard Deviation	9.35
Average + 3σ	89.48	Average + 3σ	36.99
Average - 3σ	0.00	Average - 3σ	0.00
Coefficient of Variation	2.593	Coefficient of Variation	1.047
Number of Trip Ends	772	Number of Assessable Trip Ends	770

Trip Type Summary:

Trip Type	Count
Primary Trips	386
Diverted Trips	0
Secondary Trips	0
Captured Trips	0
Total	386
% Captured Trips:	0%
% New Trips:	100%

**Table A-6
Trip Length and Percent New Trips Statistical Analysis
Apartment Land Use – Site 6**

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	2-1	10.1	10.1	OK	10.1	OK	10.1
P	2-2	11.3	11.3	OK	11.3	OK	11.3
P	2-3	0.3	0.3	OK	0.3	OK	0.3
P	2-4	0.3	0.3	OK	0.3	OK	0.3
P	2-5	2.7	2.5	OK	2.7	OK	2.5
P	2-6	1	0.6	OK	1	OK	0.6
P	2-7	1	0.6	OK	1	OK	0.6
P	2-10	11.3	11.3	OK	11.3	OK	11.3
P	2-11	1.5	1.5	OK	1.5	OK	1.5
P	2-13	1.4	1.4	OK	1.4	OK	1.4
P	2-14	1.2	1.2	OK	1.2	OK	1.2
P	2-15	1.2	1.2	OK	1.2	OK	1.2
P	2-17	4	4	OK	4	OK	4
P	2-18	1.5	1.5	OK	1.5	OK	1.5
P	2-19	1.4	1.4	OK	1.4	OK	1.4
P	2-20	1.2	1.2	OK	1.2	OK	1.2
P	2-21	4	4	OK	4	OK	4
P	2-23	5.3	5.3	OK	5.3	OK	5.3
P	2-24	5.3	5.3	OK	5.3	OK	5.3
P	2-25	1.5	1.5	OK	1.5	OK	1.5
P	2-26	1.2	1.2	OK	1.2	OK	1.2
P	2-27	11.9	11.9	OK	11.9	OK	11.9
P	2-28	1.2	1.2	OK	1.2	OK	1.2
P	2-30	4.4	4.4	OK	4.4	OK	4.4
P	2-31	1.1	1.1	OK	1.1	OK	1.1
P	2-32	1.1	1.1	OK	1.1	OK	1.1
P	2-34	21.3	21.3	OK	21.3	OK	21.3
P	2-35	2.6	2.6	OK	2.6	OK	2.6
P	2-36	1.1	1.1	OK	1.1	OK	1.1
P	2-37	7.5	7.5	OK	7.5	OK	7.5
P	2-38	3.5	3.5	OK	3.5	OK	3.5
P	2-40	1.5	1.5	OK	1.5	OK	1.5
P	2-42	0.6	0.6	OK	0.6	OK	0.6
P	2-44	0.6	0.6	OK	0.6	OK	0.6
P	2-46	2.1	2.1	OK	2.1	OK	2.1
P	2-47	1.1	1.1	OK	1.1	OK	1.1
P	2-48	4	4	OK	4	OK	4
P	2-51	3.3	3.3	OK	3.3	OK	3.3
P	2-54	1.1	1.1	OK	1.1	OK	1.1
P	2-55	4.4	4.4	OK	4.4	OK	4.4
P	2-56	1.1	1.1	OK	1.1	OK	1.1
P	2-57	4.4	4.4	OK	4.4	OK	4.4
P	2-58	34.8	34.8	NO		NO	
P	2-61	1.2	1.2	OK	1.2	OK	1.2
P	2-62	1.2	1.2	OK	1.2	OK	1.2
P	2-64	1.8	1.8	OK	1.8	OK	1.8
P	2-66	1.1	1.1	OK	1.1	OK	1.1
P	2-67	2	2	OK	2	OK	2
P	2-68	1.2	1.2	OK	1.2	OK	1.2
P	2-69	40.2	40.2	NO		NO	
P	2-70	1.1	1.1	OK	1.1	OK	1.1

Table A-6 (continued)
Trip Length and Percent New Trips Statistical Analysis
Apartment Land Use – Site 6

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	2-72	2.5	2.5	OK	2.5	OK	2.5
P	2-73	6	6	OK	6	OK	6
P	2-75	4	4	OK	4	OK	4
P	2-76	0.6	0.6	OK	0.6	OK	0.6
P	2-77	4	4	OK	4	OK	4
P	2-78	5.2	5.2	OK	5.2	OK	5.2
P	2-79	2.6	2.6	OK	2.6	OK	2.6
P	2-80	11.2	11.2	OK	11.2	OK	11.2
P	2-81	24.4	24.4	OK	24.4	OK	24.4
P	2-82	24.4	24.4	OK	24.4	OK	24.4
P	2-83	14.3	14.3	OK	14.3	OK	14.3
P	2-84	1.2	1.2	OK	1.2	OK	1.2
P	2-85	1.1	1.1	OK	1.1	OK	1.1
P	2-87	5.2	5.2	OK	5.2	OK	5.2
P	2-88	1.1	1.1	OK	1.1	OK	1.1
P	2-89	4.5	4.5	OK	4.5	OK	4.5
P	2-91	3.2	3.2	OK	3.2	OK	3.2
P	2-95	10.3	10.3	OK	10.3	OK	10.3
P	2-101	1.1	1.1	OK	1.1	OK	1.1
P	2-104	0.5	0.5	OK	0.5	OK	0.5
P	2-105	7.1	7.1	OK	7.1	OK	7.1
P	2-106	28.2	28.2	OK	28.2	OK	28.2
P	2-107	17	17	OK	17	OK	17
P	2-108	1.1	1.1	OK	1.1	OK	1.1
P	2-109	3.9	3.9	OK	3.9	OK	3.9
P	2-110	4.8	4.8	OK	4.8	OK	4.8
P	2-112	4.8	4.8	OK	4.8	OK	4.8
P	2-113	0.5	0.5	OK	0.5	OK	0.5
P	2-115	1.9	1.9	OK	1.9	OK	1.9
P	2-116	18.1	18.1	OK	18.1	OK	18.1
P	2-118	1.1	1.1	OK	1.1	OK	1.1
P	2-120	9.5	9.5	OK	9.5	OK	9.5
P	2-122	0.6	0.6	OK	0.6	OK	0.6
P	2-123	27.6	27.6	OK	27.6	OK	27.6
P	2-124	6.6	6.6	OK	6.6	OK	6.6
P	2-127	1.1	1.1	OK	1.1	OK	1.1
P	2-128	1.1	1.1	OK	1.1	OK	1.1
P	2-130	22	22	OK	22	OK	22
P	2-132	14.3	14.3	OK	14.3	OK	14.3
P	2-134	7.3	7.3	OK	7.3	OK	7.3
P	2-135	14.8	14.8	OK	14.8	OK	14.8
P	2-136	4.2	4.2	OK	4.2	OK	4.2
P	2-141	4.2	4.2	OK	4.2	OK	4.2
P	2-142	1.3	1.3	OK	1.3	OK	1.3
P	2-148	4.2	4.2	OK	4.2	OK	4.2
P	2-149	1.1	1.1	OK	1.1	OK	1.1
P	2-150	5.4	5.4	OK	5.4	OK	5.4
P	2-156	1.4	1.4	OK	1.4	OK	1.4
P	2-157	1.9	1.9	OK	1.9	OK	1.9
P	2-159	1.2	1.2	OK	1.2	OK	1.2

Table A-6 (continued)
Trip Length and Percent New Trips Statistical Analysis
Apartment Land Use – Site 6

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	2-163	11.2	11.2	OK	11.2	OK	11.2
P	2-164	7.9	7.9	OK	7.9	OK	7.9
P	2-167	23.1	23.1	OK	23.1	OK	23.1
P	2-168	2.5	2.5	OK	2.5	OK	2.5
P	2-169	1.2	1.2	OK	1.2	OK	1.2
P	2-170	1.1	1.1	OK	1.1	OK	1.1
P	2-176	0.3	0.3	OK	0.3	OK	0.3
P	2-177	1.3	1.3	OK	1.3	OK	1.3
P	2-179	10.6	10.6	OK	10.6	OK	10.6
P	2-180	35.5	35.5	NO		NO	
P	2-181	1.1	1.1	OK	1.1	OK	1.1
P	2-182	1.1	1.1	OK	1.1	OK	1.1
P	2-183	5.2	5.2	OK	5.2	OK	5.2
P	2-184	9.4	9.4	OK	9.4	OK	9.4
P	2-186	23.5	23.5	OK	23.5	OK	23.5
P	2-187	2.5	2.5	OK	2.5	OK	2.5
P	2-190	3.4	3.4	OK	3.4	OK	3.4
P	2-191	0.6	0.6	OK	0.6	OK	0.6
P	2-192	3.3	3.3	OK	3.3	OK	3.3
P	2-193	1.4	1.4	OK	1.4	OK	1.4
P	2-194	10.3	10.3	OK	10.3	OK	10.3
P	2-195	2.6	2.6	OK	2.6	OK	2.6
P	2-196	1.9	1.9	OK	1.9	OK	1.9
P	2-200	1.2	1.2	OK	1.2	OK	1.2
P	2-202	3.3	3.3	OK	3.3	OK	3.3
P	2-204	1.1	1.1	OK	1.1	OK	1.1
P	2-206	20.7	20.7	OK	20.7	OK	20.7
P	2-207	0.3	0.3	OK	0.3	OK	0.3
P	2-208	3.3	3.3	OK	3.3	OK	3.3
P	2-209	3.3	3.3	OK	3.3	OK	3.3
P	2-210	2.6	2.6	OK	2.6	OK	2.6
P	2-213	7.6	7.6	OK	7.6	OK	7.6
P	2-214	18.7	18.7	OK	18.7	OK	18.7
P	2-215	12.3	12.3	OK	12.3	OK	12.3
P	2-217	12.3	12.3	OK	12.3	OK	12.3
P	2-218	0.5	0.5	OK	0.5	OK	0.5
P	2-221	3.3	3.3	OK	3.3	OK	3.3

Trip Length Summary:

Combined Inbound/Outbound Data Limit Check			
Trip Length		Assessable Trip Length	
Average	6.01	Average	5.33
Standard Deviation	7.86	Standard Deviation	6.43
Average + 3σ	29.58	Average + 3σ	24.61
Average – 3σ	0.00	Average – 3σ	0.00
Coefficient of Variation	1.306	Coefficient of Variation	1.206
Number of Trip Ends	276	Number of Assessable Trip Ends	270

Trip Type Summary:

Trip Type	Count
Primary Trips	138
Diverted Trips	0
Secondary Trips	0
Captured Trips	0
Total	138
% Captured Trips:	0%
% New Trips:	100%

Table A-7
Trip Length and Percent New Trips Statistical Analysis
Apartment Land Use – Site 7

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	5-2	0.6	0.6	OK	0.6	OK	0.6
P	5-3	0.9	0.9	OK	0.9	OK	0.9
P	5-4	1.8	1.8	OK	1.8	OK	1.8
P	5-5	1.8	1.8	OK	1.8	OK	1.8
P	5-6	0.6	0.6	OK	0.6	OK	0.6
P	5-7	0.6	0.6	OK	0.6	OK	0.6
P	5-5	1.1	1.1	OK	1.1	OK	1.1
P	5-10	7.2	7.2	OK	7.2	OK	7.2
P	5-11	3.1	3.1	OK	3.1	OK	3.1
P	5-13	0.7	0.7	OK	0.7	OK	0.7
P	5-14	0.3	0.3	OK	0.3	OK	0.3
P	5-18	5.9	5.9	OK	5.9	OK	5.9
P	5-20	0.2	0.2	OK	0.2	OK	0.2
P	5-21	0.6	0.6	OK	0.6	OK	0.6
P	5-22	0.6	0.6	OK	0.6	OK	0.6
P	5-23	0.6	0.6	OK	0.6	OK	0.6
P	5-25	0.6	0.6	OK	0.6	OK	0.6
P	5-26	0.2	0.2	OK	0.2	OK	0.2
P	5-33	0.6	0.6	OK	0.6	OK	0.6
P	5-35	14.5	14.5	OK	14.5	OK	14.5
P	5-37	0.1	0.1	OK	0.1	OK	0.1
P	5-39	13.4	13.4	OK	13.4	OK	13.4
P	5-40	0.1	0.1	OK	0.1	OK	0.1
P	5-41	0.2	0.2	OK	0.2	OK	0.2
P	5-43	0.2	0.2	OK	0.2	OK	0.2
P	5-44	3	3	OK	3	OK	3
P	5-45	0.5	0.5	OK	0.5	OK	0.5
P	5-46	2.9	2.9	OK	2.9	OK	2.9
P	5-47	4	4	OK	4	OK	4
P	5-53	6.3	6.3	OK	6.3	OK	6.3
P	5-54	2.6	2.6	OK	2.6	OK	2.6
P	5-55	3.4	3.4	OK	3.4	OK	3.4
P	5-57	0.3	0.3	OK	0.3	OK	0.3
P	5-58	3.5	3.5	OK	3.5	OK	3.5
P	5-59	13	13	OK	13	OK	13
P	5-60	0.3	0.3	OK	0.3	OK	0.3
P	5-62	6.5	6.5	OK	6.5	OK	6.5
P	5-63	0.5	0.5	OK	0.5	OK	0.5
P	5-65	35	35	NO		NO	
P	5-66	0.5	0.5	OK	0.5	OK	0.5
P	5-68	0.8	0.8	OK	0.8	OK	0.8
P	5-69	0.2	0.2	OK	0.2	OK	0.2
P	5-70	0.7	0.7	OK	0.7	OK	0.7
P	5-71	3.6	3.6	OK	3.6	OK	3.6
P	5-76	0.6	0.6	OK	0.6	OK	0.6
P	5-79	0.9	0.9	OK	0.9	OK	0.9
P	5-80	0.9	0.9	OK	0.9	OK	0.9
P	5-82	0.3	0.3	OK	0.3	OK	0.3
P	5-83	0.6	0.6	OK	0.6	OK	0.6
P	5-86	3.4	3.4	OK	3.4	OK	3.4
P	5-89	2.9	2.9	OK	2.9	OK	2.9
P	5-91	0.9	0.9	OK	0.9	OK	0.9
P	5-92	0.9	0.9	OK	0.9	OK	0.9
P	5-93	8.3	8.3	OK	8.3	OK	8.3
P	5-94	3.9	3.9	OK	3.9	OK	3.9
P	5-95	0.3	0.3	OK	0.3	OK	0.3
P	5-97	0.6	0.6	OK	0.6	OK	0.6
P	5-98	0.3	0.3	OK	0.3	OK	0.3
P	5-99	22.3	22.3	NO		NO	

Table A-7 (continued)
Trip Length and Percent New Trips Statistical Analysis
Apartment Land Use – Site 7

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	5-101	2.9	2.9	OK	2.9	OK	2.9
P	5-102	0.6	0.6	OK	0.6	OK	0.6
P	5-103	7.2	7.2	OK	7.2	OK	7.2
P	5-104	0.6	0.6	OK	0.6	OK	0.6
P	5-105	3.6	3.6	OK	3.6	OK	3.6
P	5-106	0.6	0.6	OK	0.6	OK	0.6
P	5-107	0.6	0.6	OK	0.6	OK	0.6
P	5-109	0.9	0.9	OK	0.9	OK	0.9
P	5-111	0.6	0.6	OK	0.6	OK	0.6
P	5-113	0.9	0.9	OK	0.9	OK	0.9
P	5-114	0.6	0.6	OK	0.6	OK	0.6
P	5-115	0.6	0.6	OK	0.6	OK	0.6
P	5-117	0.6	0.6	OK	0.6	OK	0.6
P	5-118	0.6	0.6	OK	0.6	OK	0.6
P	5-119	0.9	0.9	OK	0.9	OK	0.9
P	5-120	4.1	4.1	OK	4.1	OK	4.1
P	5-121	2	2	OK	2	OK	2
P	5-123	0.3	0.3	OK	0.3	OK	0.3
P	5-124	0.6	0.6	OK	0.6	OK	0.6
P	5-125	0.3	0.3	OK	0.3	OK	0.3
P	5-128	0.2	0.2	OK	0.2	OK	0.2
P	5-129	0.9	0.9	OK	0.9	OK	0.9
P	5-131	0.2	0.2	OK	0.2	OK	0.2
P	5-133	2.6	2.6	OK	2.6	OK	2.6
P	5-134	2	2	OK	2	OK	2
P	5-138	2	2	OK	2	OK	2
P	5-140	4.4	4.4	OK	4.4	OK	4.4
P	5-141	2	2	OK	2	OK	2
P	5-142	0.9	0.9	OK	0.9	OK	0.9
P	5-143	2	2	OK	2	OK	2
P	5-146	1.5	1.5	OK	1.5	OK	1.5
P	5-147	0.2	0.2	OK	0.2	OK	0.2
P	5-149	5.9	5.9	OK	5.9	OK	5.9
P	5-150	1.3	1.3	OK	1.3	OK	1.3
P	5-151	0.2	0.2	OK	0.2	OK	0.2
P	5-154	2	2	OK	2	OK	2
P	5-155	2.1	2.1	OK	2.1	OK	2.1
P	5-156	3.1	3.1	OK	3.1	OK	3.1
P	5-157	0.2	0.2	OK	0.2	OK	0.2
P	5-158	0.2	0.2	OK	0.2	OK	0.2
P	5-159	1	1	OK	1	OK	1
P	5-160	0.1	0.1	OK	0.1	OK	0.1
P	5-161	1.3	1.3	OK	1.3	OK	1.3
P	5-162	1.3	1.3	OK	1.3	OK	1.3
P	5-163	6.3	6.3	OK	6.3	OK	6.3
P	5-164	0.9	0.9	OK	0.9	OK	0.9
P	5-165	6.3	6.3	OK	6.3	OK	6.3
P	5-166	0.3	0.3	OK	0.3	OK	0.3
P	5-168	0.1	0.1	OK	0.1	OK	0.1
P	5-169	0.2	0.2	OK	0.2	OK	0.2
P	5-171	0.9	0.9	OK	0.9	OK	0.9
P	5-172	0.9	0.9	OK	0.9	OK	0.9
P	5-175	2.1	2.1	OK	2.1	OK	2.1
P	5-176	1.3	1.3	OK	1.3	OK	1.3
P	5-177	0.5	0.5	OK	0.5	OK	0.5
P	5-179	1.4	1.4	OK	1.4	OK	1.4
P	5-181	2	2	OK	2	OK	2
P	5-182	0.5	0.5	OK	0.5	OK	0.5
P	5-183	2.3	2.3	OK	2.3	OK	2.3
P	5-184	0.9	0.9	OK	0.9	OK	0.9
P	5-185	6.8	6.8	OK	6.8	OK	6.8

Table A-7 (continued)
Trip Length and Percent New Trips Statistical Analysis
Apartment Land Use – Site 7

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	5-186	3.2	3.2	OK	3.2	OK	3.2
P	5-187	6.3	6.3	OK	6.3	OK	6.3
P	5-188	0.2	0.2	OK	0.2	OK	0.2
P	5-189	24.2	24.2	NO		NO	
P	5-190	0.2	0.2	OK	0.2	OK	0.2
P	5-191	2.9	2.9	OK	2.9	OK	2.9
P	5-192	0.2	0.2	OK	0.2	OK	0.2
P	5-193	28.6	28.6	NO		NO	
P	5-194	0.6	0.6	OK	0.6	OK	0.6
P	5-195	4.2	4.2	OK	4.2	OK	4.2
P	5-196	0.9	0.9	OK	0.9	OK	0.9
P	5-197	2	2	OK	2	OK	2
P	5-198	0.9	0.9	OK	0.9	OK	0.9
P	5-200	0.6	0.6	OK	0.6	OK	0.6
P	5-201	0.5	0.5	OK	0.5	OK	0.5
P	5-202	0.9	0.9	OK	0.9	OK	0.9
P	5-204	2	2	OK	2	OK	2
P	5-205	0.2	0.2	OK	0.2	OK	0.2
P	5-206	0.9	0.9	OK	0.9	OK	0.9
P	5-207	0.2	0.2	OK	0.2	OK	0.2
P	5-208	3.4	3.4	OK	3.4	OK	3.4
P	5-209	0.6	0.6	OK	0.6	OK	0.6
P	5-210	1.9	1.9	OK	1.9	OK	1.9
P	5-211	2.2	2.2	OK	2.2	OK	2.2
P	5-212	0.2	0.2	OK	0.2	OK	0.2
P	5-213	4.3	4.3	OK	4.3	OK	4.3
P	5-214	4.2	4.2	OK	4.2	OK	4.2
P	5-217	0.2	0.2	OK	0.2	OK	0.2
P	5-218	4.2	4.2	OK	4.2	OK	4.2
P	5-219	0.6	0.6	OK	0.6	OK	0.6
P	5-220	4.4	4.4	OK	4.4	OK	4.4
P	5-222	3.5	3.5	OK	3.5	OK	3.5
P	5-223	0.6	0.6	OK	0.6	OK	0.6
P	5-224	0.6	0.6	OK	0.6	OK	0.6
P	5-226	7.6	7.6	OK	7.6	OK	7.6
P	5-227	0.9	0.9	OK	0.9	OK	0.9
P	5-229	0.2	0.2	OK	0.2	OK	0.2
P	5-235	4.3	4.3	OK	4.3	OK	4.3
P	5-236	2	2	OK	2	OK	2
P	5-238	1.5	1.5	OK	1.5	OK	1.5
P	5-239	6.3	6.3	OK	6.3	OK	6.3
P	5-241	0.9	0.9	OK	0.9	OK	0.9
P	5-242	0.1	0.1	OK	0.1	OK	0.1
P	5-243	0.1	0.1	OK	0.1	OK	0.1
P	5-246	1.5	1.5	OK	1.5	OK	1.5
P	5-248	0.9	0.9	OK	0.9	OK	0.9
P	5-249	0.5	0.5	OK	0.5	OK	0.5
P	5-250	0.2	0.2	OK	0.2	OK	0.2
P	5-251	0.5	0.5	OK	0.5	OK	0.5
P	5-252	5.3	5.3	OK	5.3	OK	5.3
P	5-253	4.4	4.4	OK	4.4	OK	4.4
P	5-254	0.8	0.8	OK	0.8	OK	0.8
P	5-255	0.9	0.9	OK	0.9	OK	0.9
P	5-256	0.9	0.9	OK	0.9	OK	0.9
P	5-257	3.5	3.5	OK	3.5	OK	3.5
P	5-258	1.2	1.2	OK	1.2	OK	1.2
P	5-259	7.5	7.5	OK	7.5	OK	7.5

Table A-7 (continued)
Trip Length and Percent New Trips Statistical Analysis
Apartment Land Use – Site 7

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	5-261	0.9	0.9	OK	0.9	OK	0.9
P	5-264	9.8	9.8	OK	9.8	OK	9.8
P	5-266	0.9	0.9	OK	0.9	OK	0.9
P	5-267	0.9	0.9	OK	0.9	OK	0.9
P	5-268	3.4	3.4	OK	3.4	OK	3.4
P	5-270	0.2	0.2	OK	0.2	OK	0.2
P	5-272	0.3	0.3	OK	0.3	OK	0.3
P	5-274	1.3	1.3	OK	1.3	OK	1.3
P	5-275	4.7	4.7	OK	4.7	OK	4.7
P	5-279	1	1	OK	1	OK	1
P	5-281	0.9	0.9	OK	0.9	OK	0.9
P	5-283	1.4	1.4	OK	1.4	OK	1.4
P	5-285	3.4	3.4	OK	3.4	OK	3.4
P	5-286	6.3	6.3	OK	6.3	OK	6.3
P	5-287	1.1	1.1	OK	1.1	OK	1.1
P	5-288	9.4	9.4	OK	9.4	OK	9.4
P	5-289	5.2	5.2	OK	5.2	OK	5.2
P	5-290	7.3	7.3	OK	7.3	OK	7.3
P	5-291	0.2	0.2	OK	0.2	OK	0.2
P	5-293	0.2	0.2	OK	0.2	OK	0.2
P	5-294	1	1	OK	1	OK	1
P	5-295	0.2	0.2	OK	0.2	OK	0.2
P	5-297	0.2	0.2	OK	0.2	OK	0.2
P	5-299	7.9	7.9	OK	7.9	OK	7.9
P	5-300	0.2	0.2	OK	0.2	OK	0.2
P	5-301	0.9	0.9	OK	0.9	OK	0.9
P	5-303	2	2	OK	2	OK	2
P	5-306	2.8	2.8	OK	2.8	OK	2.8
P	5-308	0.2	0.2	OK	0.2	OK	0.2
P	5-309	0.5	0.5	OK	0.5	OK	0.5
P	5-310	15	15	NO		NO	
P	5-311	0.9	0.9	OK	0.9	OK	0.9
P	5-131	0.2	0.2	OK	0.2	OK	0.2
P	5-314	0.2	0.2	OK	0.2	OK	0.2
P	5-316	7.1	7.1	OK	7.1	OK	7.1
P	5-317	6.2	6.2	OK	6.2	OK	6.2
P	5-320	1.9	1.9	OK	1.9	OK	1.9
P	5-321	2.5	2.5	OK	2.5	OK	2.5
P	5-322	1.9	1.9	OK	1.9	OK	1.9
P	5-323	0.9	0.9	OK	0.9	OK	0.9
P	5-324	0.9	0.9	OK	0.9	OK	0.9
P	5-325	0.9	0.9	OK	0.9	OK	0.9
P	5-326	0.9	0.9	OK	0.9	OK	0.9
P	5-327	1.4	1.4	OK	1.4	OK	1.4
P	5-328	5.9	5.9	OK	5.9	OK	5.9
P	5-329	2.6	2.6	OK	2.6	OK	2.6
P	5-330	1.9	1.9	OK	1.9	OK	1.9
P	5-331	4.7	4.7	OK	4.7	OK	4.7
P	5-334	0.9	0.9	OK	0.9	OK	0.9
P	5-335	2	2	OK	2	OK	2
P	5-336	12	12	OK	12	OK	12
P	5-341	0.9	0.9	OK	0.9	OK	0.9
P	5-342	1.1	1.1	OK	1.1	OK	1.1
P	5-344	0.9	0.9	OK	0.9	OK	0.9
P	5-346	3	3	OK	3	OK	3
P	5-347	0.7	0.7	OK	0.7	OK	0.7
P	5-349	0.6	0.6	OK	0.6	OK	0.6
P	5-351	0.9	0.9	OK	0.9	OK	0.9
P	5-353	0.5	0.5	OK	0.5	OK	0.5
P	5-355	0.6	0.6	OK	0.6	OK	0.6
P	5-356	14.5	14.5	OK	14.5	OK	14.5
P	5-357	3.6	3.6	OK	3.6	OK	3.6
P	5-359	0.9	0.9	OK	0.9	OK	0.9
P	5-360	0.9	0.9	OK	0.9	OK	0.9

Table A-7 (continued)
Trip Length and Percent New Trips Statistical Analysis
Apartment Land Use – Site 7

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	5-361	0.9	0.9	OK	0.9	OK	0.9
P	5-362	6.3	6.3	OK	6.3	OK	6.3
P	5-365	0.9	0.9	OK	0.9	OK	0.9
P	5-368	0.9	0.9	OK	0.9	OK	0.9
P	5-369	1.9	1.9	OK	1.9	OK	1.9
P	5-370	2.2	2.2	OK	2.2	OK	2.2
P	5-371	0.9	0.9	OK	0.9	OK	0.9
P	5-375	1.1	1.1	OK	1.1	OK	1.1
P	5-378	3.1	3.1	OK	3.1	OK	3.1
P	5-379	0.9	0.9	OK	0.9	OK	0.9
P	5-381	2.1	2.1	OK	2.1	OK	2.1
P	5-383	1.1	1.1	OK	1.1	OK	1.1
P	5-384	7.3	7.3	OK	7.3	OK	7.3
P	5-388	4.3	4.3	OK	4.3	OK	4.3
P	5-392	2.7	2.7	OK	2.7	OK	2.7
P	5-397	6.4	6.4	OK	6.4	OK	6.4
P	5-398	0.2	0.2	OK	0.2	OK	0.2
P	5-399	14.3	14.3	OK	14.3	OK	14.3
P	5-401	13.1	13.1	OK	13.1	OK	13.1
P	5-404	1.1	1.1	OK	1.1	OK	1.1
P	5-406	1.1	1.1	OK	1.1	OK	1.1
P	5-408	3.5	3.5	OK	3.5	OK	3.5
P	5-411	2.9	2.9	OK	2.9	OK	2.9
P	5-412	0.9	0.9	OK	0.9	OK	0.9
P	5-418	0.5	0.5	OK	0.5	OK	0.5
P	5-419	0.9	0.9	OK	0.9	OK	0.9
P	5-420	0.9	0.9	OK	0.9	OK	0.9
P	5-421	0.6	0.6	OK	0.6	OK	0.6
P	5-422	2	2	OK	2	OK	2
P	5-423	0.6	0.6	OK	0.6	OK	0.6
P	5-424	0.6	0.6	OK	0.6	OK	0.6
P	5-425	0.6	0.6	OK	0.6	OK	0.6
P	5-426	0.6	0.6	OK	0.6	OK	0.6
P	5-429	7.3	7.3	OK	7.3	OK	7.3
P	5-430	0.6	0.6	OK	0.6	OK	0.6
P	5-435	0.2	0.2	OK	0.2	OK	0.2
P	5-436	0.2	0.2	OK	0.2	OK	0.2
P	5-438	0.9	0.9	OK	0.9	OK	0.9
P	5-440	0.2	0.2	OK	0.2	OK	0.2
P	5-441	0.9	0.9	OK	0.9	OK	0.9
P	5-443	0.2	0.2	OK	0.2	OK	0.2
P	5-444	0.2	0.2	OK	0.2	OK	0.2
P	5-445	7.3	7.3	OK	7.3	OK	7.3
P	5-446	0.7	0.7	OK	0.7	OK	0.7
P	5-447	0.2	0.2	OK	0.2	OK	0.2
P	5-448	1.7	1.7	OK	1.7	OK	1.7
P	5-451	0.6	0.6	OK	0.6	OK	0.6
P	5-453	3.1	3.1	OK	3.1	OK	3.1
P	5-454	0.2	0.2	OK	0.2	OK	0.2
P	5-455	2.9	2.9	OK	2.9	OK	2.9
P	5-457	1.2	1.2	OK	1.2	OK	1.2
P	5-458	3.5	3.5	OK	3.5	OK	3.5
P	5-459	1.9	1.9	OK	1.9	OK	1.9
P	5-461	0.2	0.2	OK	0.2	OK	0.2
P	5-462	2.7	2.7	OK	2.7	OK	2.7
P	5-463	3.1	3.1	OK	3.1	OK	3.1
P	5-464	0.2	0.2	OK	0.2	OK	0.2
P	5-465	3.7	3.7	OK	3.7	OK	3.7
P	5-467	0.2	0.2	OK	0.2	OK	0.2
P	5-468	3.1	3.1	OK	3.1	OK	3.1
P	5-473	0.2	0.2	OK	0.2	OK	0.2
P	5-474	8.3	8.3	OK	8.3	OK	8.3
P	5-475	3.1	3.1	OK	3.1	OK	3.1
P	5-479	3.1	3.1	OK	3.1	OK	3.1
P	5-480	0.9	0.9	OK	0.9	OK	0.9

Trip Length Summary:

Combined Inbound/Outbound Data Limit Check			
Trip Length		Assessable Trip Length	
Average	2.55	Average	2.17
Standard Deviation	4.03	Standard Deviation	2.70
Average + 3σ	14.65	Average + 3σ	10.26
Average - 3σ	0.00	Average - 3σ	0.00
Coefficient of Variation	1.584	Coefficient of Variation	1.240
Number of Trip Ends	612	Number of Assessable Trip Ends	602

Trip Type Summary:

Trip Type	Count
Primary Trips	306
Diverted Trips	0
Secondary Trips	0
Captured Trips	0
Total	306
% Captured Trips:	0%
% New Trips:	100%

Table A-8
Trip Length and Percent New Trips Statistical Analysis
Apartment Land Use – Site 8

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	8-1	7.6	7.6	OK	7.6	OK	7.6
P	8-2	6.1	6.1	OK	6.1	OK	6.1
P	8-4	4.3	4.3	OK	4.3	OK	4.3
P	8-6	0.6	0.6	OK	0.6	OK	0.6
P	8-7	13.0	13.0	OK	13	OK	13
P	8-9	0.9	0.9	OK	0.9	OK	0.9
P	8-10	4.3	4.3	OK	4.3	OK	4.3
P	8-11	3.0	3.0	OK	3	OK	3
P	8-12	0.2	0.2	OK	0.2	OK	0.2
P	8-14	3.3	3.3	OK	3.3	OK	3.3
P	8-15	3.8	3.8	OK	3.8	OK	3.8
P	8-17	0.6	0.6	OK	0.6	OK	0.6
P	8-19	0.6	0.6	OK	0.6	OK	0.6
P	8-20	0.2	0.2	OK	0.2	OK	0.2
P	8-21	6.9	6.9	OK	6.9	OK	6.9
P	8-22	2.1	2.1	OK	2.1	OK	2.1
P	8-25	7.6	7.6	OK	7.6	OK	7.6
P	8-27	5.4	5.4	OK	5.4	OK	5.4
P	8-28	7.6	7.6	OK	7.6	OK	7.6
P	8-29	0.6	0.6	OK	0.6	OK	0.6
P	8-30	3.0	3.0	OK	3	OK	3
P	8-31	3.0	3.0	OK	3	OK	3
P	8-32	3.5	3.5	OK	3.5	OK	3.5
P	8-33	6.1	6.1	OK	6.1	OK	6.1
P	8-34	3.0	3.0	OK	3	OK	3
P	8-35	7.6	7.6	OK	7.6	OK	7.6
P	8-36	3.9	3.9	OK	3.9	OK	3.9
P	8-37	7.6	7.6	OK	7.6	OK	7.6
P	8-38	0.6	0.6	OK	0.6	OK	0.6
P	8-39	8.6	8.6	OK	8.6	OK	8.6
P	8-40	5.9	5.9	OK	5.9	OK	5.9
P	8-42	5.2	5.2	OK	5.2	OK	5.2
P	8-44	3.0	3.0	OK	3	OK	3
P	8-45	7.6	7.6	OK	7.6	OK	7.6
P	8-46	8.1	8.1	OK	8.1	OK	8.1
P	8-47	7.9	7.9	OK	7.9	OK	7.9
P	8-48	3.9	3.9	OK	3.9	OK	3.9
P	8-49	5.0	5.0	OK	5	OK	5
P	8-50	0.6	0.6	OK	0.6	OK	0.6
P	8-51	5.2	5.2	OK	5.2	OK	5.2
P	8-53	4.3	4.3	OK	4.3	OK	4.3
P	8-54	7.6	7.6	OK	7.6	OK	7.6
P	8-55	1.2	1.2	OK	1.2	OK	1.2
P	8-56	0.2	0.2	OK	0.2	OK	0.2
P	8-57	5.7	5.7	OK	5.7	OK	5.7
P	8-58	11.0	11.0	OK	11	OK	11
P	8-60	1.3	1.3	OK	1.3	OK	1.3
P	8-61	6.6	6.6	OK	6.6	OK	6.6
P	8-62	7.6	7.6	OK	7.6	OK	7.6
P	8-63	2.1	2.1	OK	2.1	OK	2.1
P	8-65	13.0	13.0	OK	13	OK	13
P	8-66	3.9	3.9	OK	3.9	OK	3.9
P	8-67	7.6	7.6	OK	7.6	OK	7.6
P	8-69	7.6	7.6	OK	7.6	OK	7.6

Table A-8 (continued)
Trip Length and Percent New Trips Statistical Analysis
Apartment Land Use – Site 8

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	8-72	4.3	4.3	OK	4.3	OK	4.3
P	8-73	0.2	0.2	OK	0.2	OK	0.2
P	8-74	0.2	0.2	OK	0.2	OK	0.2
P	8-75	3.9	3.9	OK	3.9	OK	3.9
P	8-78	5.2	5.2	OK	5.2	OK	5.2
P	8-79	7.4	7.4	OK	7.4	OK	7.4
P	8-80	4.3	4.3	OK	4.3	OK	4.3
P	8-81	7.6	7.6	OK	7.6	OK	7.6
P	8-82	6.8	6.8	OK	6.8	OK	6.8
P	8-84	12.0	12.0	OK	12	OK	12
P	8-85	1.9	1.9	OK	1.9	OK	1.9
P	8-86	3.0	3.0	OK	3	OK	3
P	8-87	6.8	6.8	OK	6.8	OK	6.8
P	8-88	5.2	5.2	OK	5.2	OK	5.2
P	8-89	0.2	0.2	OK	0.2	OK	0.2
P	8-91	4.3	4.3	OK	4.3	OK	4.3
P	8-93	9.5	9.5	OK	9.5	OK	9.5
P	8-94	0.1	0.1	OK	0.1	OK	0.1
P	8-95	0.6	0.6	OK	0.6	OK	0.6
P	8-96	7.0	7.0	OK	7	OK	7
P	8-97	23.8	23.8	OK	23.8	OK	23.8
P	8-98	3.6	3.6	OK	3.6	OK	3.6
P	8-101	2.9	2.9	OK	2.9	OK	2.9
P	8-103	5.5	5.5	OK	5.5	OK	5.5
P	8-104	3.6	3.6	OK	3.6	OK	3.6
P	8-105	5.9	5.9	OK	5.9	OK	5.9
P	8-106	4.1	4.1	OK	4.1	OK	4.1
P	8-107	2.4	2.4	OK	2.4	OK	2.4
P	8-108	0.6	0.6	OK	0.6	OK	0.6
P	8-109	6.4	6.4	OK	6.4	OK	6.4
P	8-111	2.9	2.9	OK	2.9	OK	2.9
P	8-112	6.5	6.5	OK	6.5	OK	6.5
P	8-114	3.4	3.4	OK	3.4	OK	3.4
P	8-115	6.9	6.9	OK	6.9	OK	6.9
P	8-119	3.0	3.0	OK	3	OK	3
P	8-121	3.8	3.8	OK	3.8	OK	3.8
P	8-122	5.1	5.1	OK	5.1	OK	5.1
P	8-123	0.6	0.6	OK	0.6	OK	0.6
P	8-126	3.5	3.5	OK	3.5	OK	3.5
P	8-128	3.9	3.9	OK	3.9	OK	3.9
P	8-130	23.2	23.2	OK	23.2	OK	23.2
P	8-132	4.7	4.7	OK	4.7	OK	4.7
P	8-133	3.2	3.2	OK	3.2	OK	3.2
P	8-134	4.3	4.3	OK	4.3	OK	4.3
P	8-135	0.7	0.7	OK	0.7	OK	0.7
P	8-136	5.1	5.1	OK	5.1	OK	5.1
P	8-137	12.0	12.0	OK	12	OK	12
P	8-138	7.6	7.6	OK	7.6	OK	7.6
P	8-139	7.5	7.5	OK	7.5	OK	7.5
P	8-141	9.8	9.8	OK	9.8	OK	9.8
P	8-142	7.6	7.6	OK	7.6	OK	7.6
P	8-144	4.3	4.3	OK	4.3	OK	4.3
P	8-145	2.2	2.2	OK	2.2	OK	2.2
P	8-146	0.6	0.6	OK	0.6	OK	0.6
P	8-148	4.3	4.3	OK	4.3	OK	4.3
P	8-149	5.2	5.2	OK	5.2	OK	5.2
P	8-150	3.0	3.0	OK	3	OK	3

Table A-8 (continued)
Trip Length and Percent New Trips Statistical Analysis
Apartment Land Use – Site 8

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	8-152	28.0	28.0	OK	28	OK	28
P	8-153	0.6	0.6	OK	0.6	OK	0.6
P	8-154	1.2	1.2	OK	1.2	OK	1.2
P	8-155	3.9	3.9	OK	3.9	OK	3.9
P	8-156	6.5	6.5	OK	6.5	OK	6.5
P	8-157	3.5	3.5	OK	3.5	OK	3.5
P	8-162	3.8	3.8	OK	3.8	OK	3.8
P	8-163	11.0	11.0	OK	11	OK	11
P	8-164	25.0	25.0	OK	25	OK	25
P	8-166	32.0	32.0	OK	32	OK	32
P	8-167	3.4	3.4	OK	3.4	OK	3.4
P	8-168	11.0	11.0	OK	11	OK	11
P	8-169	12.0	12.0	OK	12	OK	12
P	8-170	5.4	5.4	OK	5.4	OK	5.4
P	8-171	22.4	22.4	OK	22.4	OK	22.4
P	8-172	5.7	5.7	OK	5.7	OK	5.7
P	8-175	3.0	3.0	OK	3	OK	3
P	8-176	3.2	3.2	OK	3.2	OK	3.2
P	8-177	53.1	53.1	NO		NO	
P	8-179	11.0	11.0	OK	11	OK	11
P	8-181	26.0	26.0	OK	26	OK	26
P	8-183	12.6	12.6	OK	12.6	OK	12.6
P	8-184	3.2	3.2	OK	3.2	OK	3.2
P	8-185	1.3	1.3	OK	1.3	OK	1.3
P	8-186	3.8	3.8	OK	3.8	OK	3.8
P	8-187	8.1	8.1	OK	8.1	OK	8.1
P	8-188	3.6	3.6	OK	3.6	OK	3.6
P	8-191	3.0	3.0	OK	3	OK	3
P	8-193	4.1	4.1	OK	4.1	OK	4.1
P	8-194	7.3	7.3	OK	7.3	OK	7.3
P	8-195	7.3	7.3	OK	7.3	OK	7.3
P	8-197	7.5	7.5	OK	7.5	OK	7.5
P	8-198	26.0	26.0	OK	26	OK	26
P	8-200	5.4	5.4	OK	5.4	OK	5.4
P	8-201	7.8	7.8	OK	7.8	OK	7.8
P	8-203	4.1	4.1	OK	4.1	OK	4.1
P	8-206	2.9	2.9	OK	2.9	OK	2.9
P	8-209	7.5	7.5	OK	7.5	OK	7.5
P	8-214	13.1	13.1	OK	13.1	OK	13.1
P	8-217	7.8	7.8	OK	7.8	OK	7.8
P	8-218	19.9	19.9	OK	19.9	OK	19.9
P	8-219	6.1	6.1	OK	6.1	OK	6.1
P	8-220	7.7	7.7	OK	7.7	OK	7.7
P	8-224	3.3	3.3	OK	3.3	OK	3.3
P	8-228	6.4	6.4	OK	6.4	OK	6.4
P	8-231	18.9	18.9	OK	18.9	OK	18.9
P	8-232	2.9	2.9	OK	2.9	OK	2.9
P	8-233	0.2	0.2	OK	0.2	OK	0.2
P	8-236	2.9	2.9	OK	2.9	OK	2.9
P	8-239	5.9	5.9	OK	5.9	OK	5.9
P	8-241	41.8	41.8	NO		NO	
P	8-246	3.9	3.9	OK	3.9	OK	3.9
P	8-248	16.0	16.0	OK	16	OK	16
P	8-260	4.9	4.9	OK	4.9	OK	4.9
P	8-263	7.9	7.9	OK	7.9	OK	7.9
P	8-265	1.1	1.1	OK	1.1	OK	1.1
P	8-268	7.3	7.3	OK	7.3	OK	7.3
P	8-270	4.9	4.9	OK	4.9	OK	4.9

Table A-8 (continued)
Trip Length and Percent New Trips Statistical Analysis
Apartment Land Use – Site 8

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	8-271	0.2	0.2	OK	0.2	OK	0.2
P	8-276	0.2	0.2	OK	0.2	OK	0.2
P	8-277	6.2	6.2	OK	6.2	OK	6.2
P	8-279	7.7	7.7	OK	7.7	OK	7.7
P	8-282	0.2	0.2	OK	0.2	OK	0.2
P	8-283	4.9	4.9	OK	4.9	OK	4.9
P	8-285	4.9	4.9	OK	4.9	OK	4.9
P	8-287	85.0	85.0	NO		NO	
P	8-288	5.6	5.6	OK	5.6	OK	5.6
P	8-289	3.5	3.5	OK	3.5	OK	3.5
P	8-291	5.1	5.1	OK	5.1	OK	5.1
P	8-292	4.9	4.9	OK	4.9	OK	4.9
P	8-293	14.1	14.1	OK	14.1	OK	14.1
P	8-294	4.9	4.9	OK	4.9	OK	4.9
P	8-295	6.2	6.2	OK	6.2	OK	6.2
P	8-296	4.3	4.3	OK	4.3	OK	4.3
P	8-297	4.9	4.9	OK	4.9	OK	4.9
P	8-298	4.0	4.0	OK	4	OK	4
P	8-300	6.6	6.6	OK	6.6	OK	6.6
P	8-302	11.6	11.6	OK	11.6	OK	11.6
P	8-303	3.2	3.2	OK	3.2	OK	3.2
P	8-304	7.4	7.4	OK	7.4	OK	7.4
P	8-305	5.8	5.8	OK	5.8	OK	5.8
P	8-306	6.7	6.7	OK	6.7	OK	6.7
P	8-307	6.4	6.4	OK	6.4	OK	6.4
P	8-309	3.2	3.2	OK	3.2	OK	3.2
P	8-310	1.3	1.3	OK	1.3	OK	1.3
P	8-311	1.7	1.7	OK	1.7	OK	1.7
P	8-313	7.7	7.7	OK	7.7	OK	7.7
P	8-314	3.3	3.3	OK	3.3	OK	3.3
P	8-315	3.5	3.5	OK	3.5	OK	3.5
P	8-318	4.3	4.3	OK	4.3	OK	4.3
P	8-319	4.1	4.1	OK	4.1	OK	4.1
P	8-320	10.8	10.8	OK	10.8	OK	10.8
P	8-322	3.2	3.2	OK	3.2	OK	3.2
P	8-323	3.3	3.3	OK	3.3	OK	3.3
P	8-324	23.9	23.9	OK	23.9	OK	23.9
P	8-327	2.9	2.9	OK	2.9	OK	2.9
P	8-329	7.5	7.5	OK	7.5	OK	7.5
P	8-334	8.1	8.1	OK	8.1	OK	8.1
P	8-336	6.6	6.6	OK	6.6	OK	6.6
P	8-338	0.3	0.3	OK	0.3	OK	0.3
P	8-339	8.1	8.1	OK	8.1	OK	8.1
P	8-345	1.9	1.9	OK	1.9	OK	1.9
P	8-346	4.3	4.3	OK	4.3	OK	4.3
P	8-348	6.3	6.3	OK	6.3	OK	6.3

Trip Length Summary:

Combined Inbound/Outbound Data Limit Check			
Trip Length		Assessable Trip Length	
Average	6.76	Average	6.00
Standard Deviation	8.55	Standard Deviation	5.36
Average + 3σ	32.41	Average + 3σ	22.07
Average – 3σ	0.00	Average – 3σ	0.00
Coefficient of Variation	1.265	Coefficient of Variation	0.892
Number of Trip Ends	430	Number of Assessable Trip Ends	424

Trip Type Summary:

Trip Type	Count
Primary Trips	215
Diverted Trips	0
Secondary Trips	0
Captured Trips	0
Total	215
% Captured Trips:	0%
% New Trips:	100%

Table A-9
Trip Length and Percent New Trips Statistical Analysis
Apartment Land Use – Site 9

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	9-1	8.6	8.6	OK	8.6	OK	8.6
P	9-3	6.8	6.8	OK	6.8	OK	6.8
P	9-4	1.7	1.7	OK	1.7	OK	1.7
P	9-6	0.4	0.4	OK	0.4	OK	0.4
P	9-7	2.9	2.9	OK	2.9	OK	2.9
P	9-9	2.7	2.7	OK	2.7	OK	2.7
P	9-11	0.8	0.8	OK	0.8	OK	0.8
P	9-13	1.7	1.7	OK	1.7	OK	1.7
P	9-14	0.8	0.8	OK	0.8	OK	0.8
P	9-15	2.2	2.2	OK	2.2	OK	2.2
P	9-16	1.9	1.9	OK	1.9	OK	1.9
P	9-17	1.7	1.7	OK	1.7	OK	1.7
P	9-18	2.9	2.9	OK	2.9	OK	2.9
P	9-19	1.7	1.7	OK	1.7	OK	1.7
P	9-20	3.8	3.8	OK	3.8	OK	3.8
P	9-21	0.4	0.4	OK	0.4	OK	0.4
P	9-23	0.4	0.4	OK	0.4	OK	0.4
P	9-24	1.2	1.2	OK	1.2	OK	1.2
P	9-26	2.8	2.8	OK	2.8	OK	2.8
P	9-27	1.2	1.2	OK	1.2	OK	1.2
P	9-28	0.4	0.4	OK	0.4	OK	0.4
P	9-30	1.2	1.2	OK	1.2	OK	1.2
P	9-32	1.9	1.9	OK	1.9	OK	1.9
P	9-35	0.4	0.4	OK	0.4	OK	0.4
P	9-41	2.1	2.1	OK	2.1	OK	2.1
P	9-44	8.9	8.9	OK	8.9	OK	8.9
P	9-46	11.1	11.1	OK	11.1	OK	11.1
P	9-48	2.1	2.1	OK	2.1	OK	2.1
P	9-50	0.4	0.4	OK	0.4	OK	0.4
P	9-51	1.3	1.3	OK	1.3	OK	1.3
P	9-52	48.5	48.5	NO		NO	
P	9-54	1.9	1.9	OK	1.9	OK	1.9
P	9-58	0.8	0.8	OK	0.8	OK	0.8
P	9-59	1.7	1.7	OK	1.7	OK	1.7
P	9-64	1.1	1.1	OK	1.1	OK	1.1
P	9-69	1.9	1.9	OK	1.9	OK	1.9
P	9-72	0.4	0.4	OK	0.4	OK	0.4
P	9-73	1.7	1.7	OK	1.7	OK	1.7
P	9-74	1.9	1.9	OK	1.9	OK	1.9
P	9-75	1.9	1.9	OK	1.9	OK	1.9
P	9-76	1	1	OK	1	OK	1
P	9-78	1.9	1.9	OK	1.9	OK	1.9
P	9-79	13	13	OK	13	OK	13
P	9-80	1.7	1.7	OK	1.7	OK	1.7
P	9-81	2.7	2.7	OK	2.7	OK	2.7
P	9-82	0.4	0.4	OK	0.4	OK	0.4
P	9-83	2.1	2.1	OK	2.1	OK	2.1
P	9-84	3.9	3.9	OK	3.9	OK	3.9
P	9-85	1.7	1.7	OK	1.7	OK	1.7
P	9-87	1.9	1.9	OK	1.9	OK	1.9
P	9-88	2.5	2.5	OK	2.5	OK	2.5
P	9-89	2.1	2.1	OK	2.1	OK	2.1

Table A-9 (continued)
Trip Length and Percent New Trips Statistical Analysis
Apartment Land Use – Site 9

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	9-90	1.8	1.8	OK	1.8	OK	1.8
P	9-91	0.4	0.4	OK	0.4	OK	0.4
P	9-92	18.5	18.5	OK	18.5	OK	18.5
P	9-93	3.7	3.7	OK	3.7	OK	3.7
P	9-94	0.4	0.4	OK	0.4	OK	0.4
P	9-95	25.3	25.3	NO		NO	
P	9-96	0.4	0.4	OK	0.4	OK	0.4
P	9-97	1.9	1.9	OK	1.9	OK	1.9
P	9-98	1.7	1.7	OK	1.7	OK	1.7
P	9-100	42.5	42.5	NO		NO	
P	9-101	8.9	8.9	OK	8.9	OK	8.9
P	9-102	65.6	65.6	NO		NO	
P	9-103	0.4	0.4	OK	0.4	OK	0.4
P	9-104	1.3	1.3	OK	1.3	OK	1.3
P	9-105	1.9	1.9	OK	1.9	OK	1.9
P	9-106	2.7	2.7	OK	2.7	OK	2.7
P	9-109	1.8	1.8	OK	1.8	OK	1.8
P	9-110	2.6	2.6	OK	2.6	OK	2.6
P	9-111	0.4	0.4	OK	0.4	OK	0.4
P	9-112	2.3	2.3	OK	2.3	OK	2.3
P	9-114	1.9	1.9	OK	1.9	OK	1.9
P	9-116	0.4	0.4	OK	0.4	OK	0.4
P	9-118	1.9	1.9	OK	1.9	OK	1.9
P	9-122	0.4	0.4	OK	0.4	OK	0.4
P	9-123	0.4	0.4	OK	0.4	OK	0.4
P	9-124	2.1	2.1	OK	2.1	OK	2.1
P	9-125	2.9	2.9	OK	2.9	OK	2.9
P	9-126	1	1	OK	1	OK	1
P	9-129	0.4	0.4	OK	0.4	OK	0.4
P	9-130	1.3	1.3	OK	1.3	OK	1.3
P	9-131	3.6	3.6	OK	3.6	OK	3.6
P	9-132	1.9	1.9	OK	1.9	OK	1.9
P	9-133	1	1	OK	1	OK	1
P	9-134	25.3	25.3	NO		NO	
P	9-135	3.3	3.3	OK	3.3	OK	3.3
P	9-136	2.9	2.9	OK	2.9	OK	2.9
P	9-137	0.4	0.4	OK	0.4	OK	0.4
P	9-138	0.4	0.4	OK	0.4	OK	0.4
P	9-140	9	9	OK	9	OK	9
P	9-143	2.3	2.3	OK	2.3	OK	2.3
P	9-146	0.4	0.4	OK	0.4	OK	0.4
P	9-147	2.7	2.7	OK	2.7	OK	2.7
P	9-148	0.6	0.6	OK	0.6	OK	0.6
P	9-149	0.4	0.4	OK	0.4	OK	0.4
P	9-152	1.5	1.5	OK	1.5	OK	1.5
P	9-153	1.7	1.7	OK	1.7	OK	1.7
P	9-154	18.8	18.8	OK	18.8	OK	18.8
P	9-158	3.4	3.4	OK	3.4	OK	3.4
P	9-160	0.4	0.4	OK	0.4	OK	0.4
P	9-163	0.4	0.4	OK	0.4	OK	0.4
P	9-165	2.7	2.7	OK	2.7	OK	2.7
P	9-166	1.5	1.5	OK	1.5	OK	1.5
P	9-168	0.4	0.4	OK	0.4	OK	0.4
P	9-169	1	1	OK	1	OK	1
P	9-170	0.4	0.4	OK	0.4	OK	0.4

Table A-9 (continued)
Trip Length and Percent New Trips Statistical Analysis
Apartment Land Use – Site 9

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	9-171	3.1	3.1	OK	3.1	OK	3.1
P	9-172	2.5	2.5	OK	2.5	OK	2.5
P	9-174	0.4	0.4	OK	0.4	OK	0.4
P	9-177	0.9	0.9	OK	0.9	OK	0.9
P	9-178	1	1	OK	1	OK	1
P	9-179	2.7	2.7	OK	2.7	OK	2.7
P	9-181	3.9	3.9	OK	3.9	OK	3.9
P	9-182	0.4	0.4	OK	0.4	OK	0.4
P	9-183	2.2	2.2	OK	2.2	OK	2.2
P	9-184	8.6	8.6	OK	8.6	OK	8.6
P	9-186	3.9	3.9	OK	3.9	OK	3.9
P	9-187	14.9	14.9	OK	14.9	OK	14.9
P	9-188	4.5	4.5	OK	4.5	OK	4.5
P	9-189	1	1	OK	1	OK	1
P	9-190	3.7	3.7	OK	3.7	OK	3.7
P	9-193	1	1	OK	1	OK	1
P	9-197	3	3	OK	3	OK	3
P	9-198	1	1	OK	1	OK	1
P	9-199	2.3	2.3	OK	2.3	OK	2.3
P	9-200	2.4	2.4	OK	2.4	OK	2.4
P	9-201	1.7	1.7	OK	1.7	OK	1.7
P	9-202	3.3	3.3	OK	3.3	OK	3.3
P	9-204	1.7	1.7	OK	1.7	OK	1.7
P	9-205	5.9	5.9	OK	5.9	OK	5.9
P	9-207	8.6	8.6	OK	8.6	OK	8.6
P	9-209	2.7	2.7	OK	2.7	OK	2.7
P	9-210	1.9	1.9	OK	1.9	OK	1.9
P	9-211	2.5	2.5	OK	2.5	OK	2.5
P	9-212	0.4	0.4	OK	0.4	OK	0.4
P	9-214	1	1	OK	1	OK	1
P	9-215	4	4	OK	4	OK	4
P	9-216	1.9	1.9	OK	1.9	OK	1.9
P	9-218	0.4	0.4	OK	0.4	OK	0.4
P	9-219	3.1	3.1	OK	3.1	OK	3.1
P	9-220	12.5	12.5	OK	12.5	OK	12.5
P	9-221	2.5	2.5	OK	2.5	OK	2.5
P	9-222	1.9	1.9	OK	1.9	OK	1.9
P	9-223	1.9	1.9	OK	1.9	OK	1.9
P	9-225	5.9	5.9	OK	5.9	OK	5.9
P	9-226	0.4	0.4	OK	0.4	OK	0.4
P	9-228	1.5	1.5	OK	1.5	OK	1.5
P	9-230	4	4	OK	4	OK	4
P	9-233	8.6	8.6	OK	8.6	OK	8.6
P	9-234	2.8	2.8	OK	2.8	OK	2.8
P	9-235	0.8	0.8	OK	0.8	OK	0.8
P	9-237	3.7	3.7	OK	3.7	OK	3.7
P	9-238	0.4	0.4	OK	0.4	OK	0.4
P	9-239	2.1	2.1	OK	2.1	OK	2.1
P	9-240	2.1	2.1	OK	2.1	OK	2.1
P	9-242	0.4	0.4	OK	0.4	OK	0.4
P	9-244	1.3	1.3	OK	1.3	OK	1.3
P	9-246	1.6	1.6	OK	1.6	OK	1.6
P	9-247	1.4	1.4	OK	1.4	OK	1.4
P	9-248	2	2	OK	2	OK	2
P	9-250	2.5	2.5	OK	2.5	OK	2.5
P	9-251	2.8	2.8	OK	2.8	OK	2.8
P	9-253	2.7	2.7	OK	2.7	OK	2.7
P	9-256	1.6	1.6	OK	1.6	OK	1.6

Table A-9 (continued)
Trip Length and Percent New Trips Statistical Analysis
Apartment Land Use – Site 9

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	9-258	1	1	OK	1	OK	1
P	9-259	3.7	3.7	OK	3.7	OK	3.7
P	9-274	1.9	1.9	OK	1.9	OK	1.9
P	9-275	1.9	1.9	OK	1.9	OK	1.9
P	9-276	0.6	0.6	OK	0.6	OK	0.6
P	9-277	0.8	0.8	OK	0.8	OK	0.8
P	9-278	0.4	0.4	OK	0.4	OK	0.4
P	9-280	2.7	2.7	OK	2.7	OK	2.7
P	9-282	13	13	OK	13	OK	13
P	9-283	0.4	0.4	OK	0.4	OK	0.4
P	9-285	0.4	0.4	OK	0.4	OK	0.4
P	9-286	1.8	1.8	OK	1.8	OK	1.8
P	9-287	1.9	1.9	OK	1.9	OK	1.9
P	9-288	0.4	0.4	OK	0.4	OK	0.4
P	9-289	3.7	3.7	OK	3.7	OK	3.7
P	9-290	0.4	0.4	OK	0.4	OK	0.4
P	9-292	3.7	3.7	OK	3.7	OK	3.7
P	9-294	0.4	0.4	OK	0.4	OK	0.4
P	9-296	2.8	2.8	OK	2.8	OK	2.8
P	9-300	1.1	1.1	OK	1.1	OK	1.1
P	9-301	3.1	3.1	OK	3.1	OK	3.1
P	9-303	2	2	OK	2	OK	2
P	9-304	1.9	1.9	OK	1.9	OK	1.9
P	9-306	0.4	0.4	OK	0.4	OK	0.4
P	9-307	1	1	OK	1	OK	1
P	9-310	0.4	0.4	OK	0.4	OK	0.4
P	9-311	0.4	0.4	OK	0.4	OK	0.4
P	9-316	16.6	16.6	OK	16.6	OK	16.6
P	9-317	0.4	0.4	OK	0.4	OK	0.4
P	9-318	13	13	OK	13	OK	13
P	9-320	1.8	1.8	OK	1.8	OK	1.8
P	9-322	0.4	0.4	OK	0.4	OK	0.4
P	9-324	0.4	0.4	OK	0.4	OK	0.4
P	9-325	0.4	0.4	OK	0.4	OK	0.4
P	9-326	1.1	1.1	OK	1.1	OK	1.1
P	9-330	1.1	1.1	OK	1.1	OK	1.1
P	9-333	1.7	1.7	OK	1.7	OK	1.7
P	9-335	0	0	OK	0	OK	0
P	9-337	0.4	0.4	OK	0.4	OK	0.4
P	9-339	0.4	0.4	OK	0.4	OK	0.4
P	9-340	0.4	0.4	OK	0.4	OK	0.4
P	9-341	2.3	2.3	OK	2.3	OK	2.3
P	9-342	0.4	0.4	OK	0.4	OK	0.4
P	9-343	0.4	0.4	OK	0.4	OK	0.4
P	9-351	1.7	1.7	OK	1.7	OK	1.7
P	9-357	2.2	2.2	OK	2.2	OK	2.2
P	9-359	2.8	2.8	OK	2.8	OK	2.8
P	9-363	1.9	1.9	OK	1.9	OK	1.9
P	9-365	0.4	0.4	OK	0.4	OK	0.4
P	9-366	1.1	1.1	OK	1.1	OK	1.1
P	9-367	2.2	2.2	OK	2.2	OK	2.2
P	9-369	2.7	2.7	OK	2.7	OK	2.7
P	9-370	1.9	1.9	OK	1.9	OK	1.9
P	9-371	4.1	4.1	OK	4.1	OK	4.1
P	9-372	1.1	1.1	OK	1.1	OK	1.1
P	9-373	1.1	1.1	OK	1.1	OK	1.1
P	9-374	1.9	1.9	OK	1.9	OK	1.9

Table A-9 (continued)
Trip Length and Percent New Trips Statistical Analysis
Apartment Land Use – Site 9

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
P	9-377	3.3	3.3	OK	3.3	OK	3.3
P	9-378	0.9	0.9	OK	0.9	OK	0.9
P	9-379	2.7	2.7	OK	2.7	OK	2.7
P	9-380	1.7	1.7	OK	1.7	OK	1.7
P	9-381	3	3	OK	3	OK	3
P	9-382	1.9	1.9	OK	1.9	OK	1.9
P	9-383	1.4	1.4	OK	1.4	OK	1.4
P	9-386	1.9	1.9	OK	1.9	OK	1.9
P	9-388	8.9	8.9	OK	8.9	OK	8.9
P	9-390	2.3	2.3	OK	2.3	OK	2.3
P	9-391	0.9	0.9	OK	0.9	OK	0.9
P	9-393	1.1	1.1	OK	1.1	OK	1.1
P	9-394	8.9	8.9	OK	8.9	OK	8.9
P	9-396	27	27	NO		NO	
P	9-400	0.4	0.4	OK	0.4	OK	0.4
P	9-401	0.4	0.4	OK	0.4	OK	0.4
P	9-402	1.3	1.3	OK	1.3	OK	1.3
P	9-406	3.6	3.6	OK	3.6	OK	3.6
P	9-410	1.8	1.8	OK	1.8	OK	1.8
P	9-411	2	2	OK	2	OK	2
P	9-412	0.4	0.4	OK	0.4	OK	0.4
P	9-414	4.1	4.1	OK	4.1	OK	4.1
P	9-416	7.1	7.1	OK	7.1	OK	7.1
P	9-418	1.8	1.8	OK	1.8	OK	1.8
P	9-419	0.4	0.4	OK	0.4	OK	0.4
P	9-421	0.4	0.4	OK	0.4	OK	0.4
P	9-423	1.1	1.1	OK	1.1	OK	1.1
P	9-424	1.1	1.1	OK	1.1	OK	1.1
P	9-425	0.9	0.9	OK	0.9	OK	0.9
P	9-426	3.2	3.2	OK	3.2	OK	3.2
P	9-431	3.6	3.6	OK	3.6	OK	3.6
P	9-432	19	19	OK	19	OK	19
P	9-433	1.9	1.9	OK	1.9	OK	1.9
P	9-434	0.4	0.4	OK	0.4	OK	0.4
P	9-439	0.4	0.4	OK	0.4	OK	0.4
P	9-440	1	1	OK	1	OK	1
P	9-444	8.9	8.9	OK	8.9	OK	8.9
P	9-445	1.9	1.9	OK	1.9	OK	1.9
P	9-446	1.9	1.9	OK	1.9	OK	1.9
P	9-447	2.9	2.9	OK	2.9	OK	2.9
P	9-448	2	2	OK	2	OK	2
P	9-449	3.3	3.3	OK	3.3	OK	3.3
P	9-450	3.3	3.3	OK	3.3	OK	3.3
P	9-451	1.2	1.2	OK	1.2	OK	1.2
P	9-454	1.9	1.9	OK	1.9	OK	1.9
P	9-455	3.6	3.6	OK	3.6	OK	3.6
P	9-457	2.5	2.5	OK	2.5	OK	2.5
P	9-458	28.9	28.9	NO		NO	
P	9-459	13.5	13.5	OK	13.5	OK	13.5
P	9-460	13.5	13.5	OK	13.5	OK	13.5

Trip Length Summary:

Combined Inbound/Outbound Data Limit Check			
Trip Length		Assessable Trip Length	
Average	3.52	Average	2.62
Standard Deviation	6.79	Standard Deviation	3.24
Average + 3σ	23.90	Average + 3σ	12.34
Average – 3σ	0.00	Average – 3σ	0.00
Coefficient of Variation	1.932	Coefficient of Variation	1.238
Number of Trip Ends	544	Number of Assessable Trip Ends	530

Trip Type Summary:

Trip Type	Count
Primary Trips	272
Diverted Trips	0
Secondary Trips	0
Captured Trips	0
Total	272
% Captured Trips:	0%
% New Trips:	100%

**Table A-10
Trip Length and Percent New Trips Statistical Analysis
Church w/Daycare Land Use – Site 10**

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
D	7-2	0.85	0.85	OK	1.7	OK	1.7
D	7-8	0.15	0.15	OK	0.3	OK	0.3
S	7-9	1.6	3.2	OK	1.6	OK	3.2
S	7-10	5	2.7	OK	5	OK	2.7
D	7-12	1.65	1.65	OK	3.3	OK	3.3
P	7-13	2.6	2.6	OK	2.6	OK	2.6
S	7-16	3.3	2	OK	3.3	OK	2
D	7-18	1.65	1.65	OK	3.3	OK	3.3
D	7-19	0.15	0.15	OK	0.3	OK	0.3
S	7-22	0.8	1	OK	0.8	OK	1
D	7-25	1.45	1.45	OK	2.9	OK	2.9
S	7-30	0.8	0.8	OK	0.8	OK	0.8
D	7-33	0.5	0.5	OK	1	OK	1
S	7-37	3.8	1.3	OK	3.8	OK	1.3
P	7-38	2.7	2.6	OK	2.7	OK	2.6
S	7-39	8.5	6.2	OK	8.5	OK	6.2
D	7-40	0.65	0.65	OK	1.3	OK	1.3
P	7-41	5.1	5.1	OK	5.1	OK	5.1
P	Jul-43	42.2	42.2	NO		NO	
D	7-45	1.45	1.45	OK	2.9	OK	2.9
C	7-46	0	0	NO		NO	
S	7-48	2.1	3.3	OK	2.1	OK	3.3
P	7-52	1.4	1.3	OK	1.4	OK	1.3
D	7-53	0.55	0.55	OK	1.1	OK	1.1
D	7-54	0.75	0.75	OK	1.5	OK	1.5
P	7-55	1	1	OK	1	OK	1
C	7-56	0	0	NO		NO	
C	7-57	0	0	NO		NO	
D	7-59	0.65	0.65	OK	1.3	OK	1.3
C	7-60	0	0	NO		NO	
D	7-63	1.6	1.6	OK	3.2	OK	3.2
D	7-66	1.3	1.3	OK	2.6	OK	2.6
P	7-69	1	1	OK	1	OK	1
D	7-72	1.4	1.4	OK	2.8	OK	2.8

Trip Length Summary:

Combined Inbound/Outbound Data Limit Check			
Trip Length		Assessable Trip Length	
Average	2.76	Average	2.29
Standard Deviation	7.10	Standard Deviation	1.55
Average + 3σ	24.05	Average + 3σ	6.94
Average – 3σ	0.00	Average – 3σ	0.00
Coefficient of Variation	2.570	Coefficient of Variation	0.677
Number of Trip Ends	68	Number of Assessable Trip Ends	58

Trip Type Summary:

Trip Type	Count
Primary Trips	7
Diverted Trips	15
Secondary Trips	8
Captured Trips	4
Total	34
% Captured Trips:	12%
% New Trips:	88%

**Table A-11
Trip Length and Percent New Trips Statistical Analysis
Church w/Daycare Land Use – Site 11**

Trip Type (P,S,D,C)	Survey #	Inbound Trip Length	Outbound Trip Length	INBOUND LIMIT CHECK	Inbound Assessable Lengths	OUTBOUND LIMIT CHECK	Outbound Assessable Lengths
D	10-1	1.5	1.5	OK	3	OK	3
P	10-2	1.2	1.2	OK	1.2	OK	1.2
D	10-3	5.4	5.4	OK	10.8	OK	10.8
P	10-4	1.1	1.1	OK	1.1	OK	1.1
C	10-5	0	0	NO		NO	
C	10-6	0	0	NO		NO	
D	10-7	0.05	0.05	OK	0.1	OK	0.1
D	10-8	0.2	0.2	OK	0.4	OK	0.4
C	10-9	0	0	NO		NO	
S	10-10	2.4	2.4	OK	2.4	OK	2.4
P	10-11	10.4	10.4	OK	10.4	OK	10.4
S	10-12	26	20.3	NO		NO	
S	10-13	1	1.2	OK	1	OK	1.2
D	10-14	1.5	1.5	OK	3	OK	3
C	10-15	0	0	NO		NO	
D	10-16	1.2	1.2	OK	2.4	OK	2.4
D	10-17	0.2	0.2	OK	0.4	OK	0.4
C	10-18	0	0	NO		NO	
D	10-19	0.05	0.05	OK	0.1	OK	0.1
D	10-20	0.05	0.05	OK	0.1	OK	0.1
S	10-21	3.3	6	OK	3.3	OK	6
S	10-22	2.4	3	OK	2.4	OK	3
D	10-23	7.25	7.25	OK	14.5	OK	14.5
D	10-24	0.6	0.6	OK	1.2	OK	1.2
S	10-25	2.3	2.4	OK	2.3	OK	2.4
D	10-26	0.05	0.05	OK	0.1	OK	0.1
D	10-27	1.25	1.25	OK	2.5	OK	2.5
C	10-28	0	0	NO		NO	
D	10-29	0.15	0.15	OK	0.3	OK	0.3
P	10-30	0.3	0.3	OK	0.3	OK	0.3
C	10-31	0	0	NO		NO	
D	10-32	1	1	OK	2	OK	2
S	10-33	2.5	1.7	OK	2.5	OK	1.7
D	10-34	0.95	0.95	OK	1.9	OK	1.9

Trip Length Summary:

Combined Inbound/Outbound Data Limit Check			
Trip Length		Assessable Trip Length	
Average	2.14	Average	2.73
Standard Deviation	4.37	Standard Deviation	3.60
Average + 3σ	15.24	Average + 3σ	13.54
Average – 3σ	0.00	Average – 3σ	0.00
Coefficient of Variation	2.037	Coefficient of Variation	1.317
Number of Trip Ends	68	Number of Assessable Trip Ends	52

Trip Type Summary:

Trip Type	Count
Primary Trips	4
Diverted Trips	16
Secondary Trips	7
Captured Trips	7
Total	34
% Captured Trips:	21%
% New Trips:	79%

**Table A-12
Margin of Error Analysis - Sample Size Requirement**

Development	Land Use	Count of Assessable Inbound/Outbound Trip Ends	Coefficient of Variation	Sample Size Requirement at 90% Confidence		Sample Size Requirement at 85% Confidence	
				10% Margin of Error	15% Margin of Error	10% Margin of Error	15% Margin of Error
Site 1	Single Family	380	0.905	221	98	170	75
Site 6	Apartments	270	1.206	394	175	302	134
Site 2	Single Family	244	1.072	311	138	238	106
Site 3	Single Family	288	0.766	159	71	122	54
Site 7	Apartments	602	1.240	416	185	319	142
Site 4	Single Family	692	1.137	350	155	268	119
Site 10	Church w/ Daycare	58	0.677	124	55	95	42
Site 8	Apartments	424	0.892	215	96	165	73
Site 9	Apartments	530	1.238	415	184	318	141
Site 11	Church w/ Daycare	52	1.317	469	209	360	160
Site 5	Single Family	770	1.047	297	132	227	101

Notes:

1. Coefficient of Variation (C) is the standard deviation of the sample divided by the sample mean.
2. The Normal Distribution Z-value statistic at 90% and 85% confidence level is 1.645 and 1.440, respectively.
3. The sample size requirement is calculated by the formula $N = (C^2 \times Z^2) / E^2$, where C is the coefficient of variation, Z is the Z-value statistic and E is the margin of error. This formula is based on a methodology reported by Michael E. Smith in "Design of Small-Sample Home Interview Travel Surveys," Transportation Research Board 701, 1979.
4. For the trip length analysis, all sites meet or exceed 90% confidence at plus or minus 15%. The scope of services requires an 85% confidence at plus or minus 15%. The accuracy of the data collected exceeds the scope of services requirement.

**Table A-13
Trip Generation Rate Summary**

Development	Type	Gross Size ⁽¹⁾		Percent Occupied ⁽²⁾	Net Size		Gross Daily Trips	Daily Trip Rate	
Site 1	Residential	100	du	90%	90	du	821	9.12	trip ends per du
Site 2	Residential	44	du	95%	42	du	473	11.26	trip ends per du
Site 3	Residential	65	du	90%	59	du	712	12.07	trip ends per du
Site 4	Residential	64	du	80%	51	du	929	18.22	trip ends per du
Site 5	Residential	265	du	90%	239	du	1,811	7.58	trip ends per du
SINGLE FAMILY								8.73	trip ends per du
Site 6	Residential	252	du	99%	250	du	1,678	6.71	trip ends per du
Site 7	Residential	248	du	91%	226	du	1,524	6.74	trip ends per du
Site 8	Residential	176	du	96%	169	du	1,367	8.09	trip ends per du
Site 9	Residential	168	du	93%	157	du	2,194	13.97	trip ends per du
APARTMENTS								7.08	trip ends per du
Site 10	Non-Residential	11,728	1,000 sf				754	64.29	trip ends per 1,000 sf
Site 11	Non-Residential	11,020	1,000 sf				235	21.32	trip ends per 1,000 sf
CHURCH WITH DAYCARE								43.50	trip ends per 1,000 sf

(1) & (2) Source - Field visits for residential sub-division sites, managers for apartment sites, and Lake County Property Appraiser for church with daycare sites.

**Table A-14
Percent New Trips Summary ⁽¹⁾**

Land Use: Single Family Residential			
Development	% New Trips	# of Surveys	Weighted % New Trips
Site 1	100%	194	194
Site 2	100%	125	125
Site 3	100%	148	148
Site 4	100%	353	353
Site 5	100%	386	386
		1,206	1,206
	Weighted Average % New Trips:		100%

Land Use: Apartments			
	% New Trips	# of Surveys	Weighted % New Trips
Site 6	100%	138	138
Site 7	100%	306	306
Site 8	100%	215	215
Site 9	100%	272	272
		931	931
	Weighted Average % New Trips:		100%

Land Use: Church w/daycare			
	% New Trips	# of Surveys	Weighted % New Trips
Site 10	88%	34	30
Site 11	79%	34	27
		68	57
	Weighted Average % New Trips:		84%

(1) Source: Origin-Destination surveys conducted in December 2006

**Table A-15
Trip Length Summary ⁽¹⁾**

Land Use Type - Single Family Residential			
Development	Trip Length	# Trip Ends	Weighted Trip Lengths
Site 1	5.78	388	2,242.64
Site 2	5.56	244	1,356.64
Site 3	10.79	288	3,107.52
Site 4	9.46	692	6,546.32
Site 5	8.93	770	6,876.10

Land Use Type - Apartment			
	Trip Length	# Trip Ends	Weighted Trip Lengths
Site 6	5.33	270	1,439.10
Site 7	2.17	602	1,306.34
Site 8	6.00	424	2,544.00
Site 9	2.62	530	1,388.60

Land Use Type - Church with Daycare			
	Trip Length	# Trip Ends	Weighted Trip Lengths
Site 10	2.29	58	132.82
Site 11	2.73	52	141.96

(1) Source: Origin-Destination surveys conducted in December 2006

APPENDIX B
Florida Studies Trip Characteristics Database

Appendix B Florida Studies Trip Characteristics Database

Single-Family Detached Housing (ITE LUC 210)

General Development	Land use Code	Size units	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diversed Linked %	Pass-By %	ADT	VMT	Source	
Single Family	210	52.0	Lake Co, FL	Apr-02	212		10.00	7a-6p	7.60	N/A					76.00	Tindale-Oliver & Associates	
Single Family	210	49.0	Lake Co, FL	Apr-02	170		6.70	7a-6p	10.20	N/A					68.34	Tindale-Oliver & Associates	
Single Family	210	126.0	Lake Co, FL	Apr-02	217		8.50	7a-6p	8.30	N/A					70.55	Tindale-Oliver & Associates	
Single Family	210	90.0	Lake Co, FL	Dec-06	194		9.12		5.78						52.71	Tindale-Oliver & Associates	
Single Family	210	42.0	Lake Co, FL	Dec-06	122		11.26		5.56						62.61	Tindale-Oliver & Associates	
Single Family	210	59.0	Lake Co, FL	Dec-06	144		12.07		10.79						130.24	Tindale-Oliver & Associates	
Single Family	210	51.0	Lake Co, FL	Dec-06	346		18.22		9.46						172.36	Tindale-Oliver & Associates	
Single Family	210	239.0	Lake Co, FL	Dec-06	385		7.58		8.93						67.69	Tindale-Oliver & Associates	
Total Size		708.0															
								Average Trip Length: 8.33									
								Weighted Average Trip Length: 8.40									

Weighted Average Trip Generation Rate: 8.73
ITE Average Trip Generation Rate: 9.57

Apartment (ITE LUC 220)

General Development	Land use Code	Size units	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diversed Linked %	Pass-By %	ADT	VMT	Source	
Apartment	230	243.0	Sarasota Co, FL	Jun-93	4	36	5.84	-	11.5	-					67.16	Sarasota County	
Apartment	220	212.0	Sarasota Co, FL	Jun-93	4	42	5.78	-	5.20	-					30.06	Sarasota County	
Apartment	220	500.0	Marion Co, FL	Apr-02	170	170	5.46		5.94						32.43	Kimley-Horn & Associates	
Apartment	220	214.0	Marion Co, FL	Apr-02	175	175	6.84		4.61						31.53	Kimley-Horn & Associates	
Apartment	220	240.0	Marion Co, FL	Apr-02	174	174	6.96		3.43						23.87	Kimley-Horn & Associates	
Apartment	220	288.0	Marion Co, FL	Apr-02	175	175	5.66		5.55						31.41	Kimley-Horn & Associates	
Apartment	220	480.0	Marion Co, FL	Apr-02	175	175	5.73		6.88						39.42	Kimley-Horn & Associates	
Apartment	220	250.0	Lake Co, FL	Dec-06	135	135	6.71		5.33						35.76	Tindale-Oliver & Associates	
Apartment	220	157.0	Lake Co, FL	Dec-06	265	265	13.97		2.62						30.60	Tindale-Oliver & Associates	
Apartment	220	226.0	Lake Co, FL	Dec-06	301		6.74		2.17						11.63	Tindale-Oliver & Associates	
Apartment	220	169.0	Lake Co, FL	Dec-06	212		8.09		6.00						48.54	Tindale-Oliver & Associates	
Total Size		2341.0															
ITE		1696.0															
		4,037															
								Average Trip Length: 4.95									
								Weighted Average Trip Length: 5.35									

Weighted Average Trip Generation Rate: 6.02
ITE Average Trip Generation Rate: 6.72
Blend of ITE & FL Studies - Average Trip Generation Rate: 6.33

Mobile Home Park (ITE LUC 240)

General Development	Land use Code	Size units	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diversed Linked %	Pass-By %	ADT	VMT	Source	
Mobile Home Park	240	1892.0	Hernando Co., FL	May-96	3	425	4.13	9a-6p	4.13	N/A	N/A	N/A	N/A	5408	17.06	Tindale-Oliver & Associates	
Mobile Home Park	227.0	297.0	Marion Co, FL	Apr-02	173	-	2.76	24hr.	8.80	N/A					24.29	Kimley-Horn & Associates	
Mobile Home Park	227.0	297.0	Marion Co, FL	Apr-02	175	-	4.78	24hr.	4.78	N/A					22.75	Kimley-Horn & Associates	
Mobile Home Park	227.0	185.0	Marion Co, FL	Apr-02	147	-	3.51	24hr.	5.48	N/A					19.23	Kimley-Horn & Associates	
Mobile Home Park	240	82.0	Marion County, FL	Jul-91	3	58	10.80	24hr.	3.72	N/A	N/A	N/A	N/A	443	40.18	Tindale-Oliver & Associates	
Mobile Home Park	240	67.0	Marion County, FL	Jul-91	3	22	5.40	48hrs.	2.29	N/A					12.37	Tindale-Oliver & Associates	
Mobile Home Park	240	137.0	Marion County, FL	Jul-91	3	22	3.10	24hr.	4.88	N/A	N/A	N/A	N/A	965	15.13	Tindale-Oliver & Associates	
Mobile Home Park	235.0	996.0	Sarasota Co, FL	Jun-93	100	100	3.51	-	5.10	N/A					17.90	Sarasota County	
Mobile Home Park	235.0	996.0	Sarasota Co, FL	Jun-93	181	181	4.19	-	4.40	N/A					18.44	Sarasota County	
Total Size		4121.0															
ITE		6580.0															
Blended total		10701.0															
								Average Trip Length: 4.84									
								Weighted Average Trip Length: 4.60									

Weighted Average Trip Generation Rate: 4.17
ITE Average Trip Generation Rate: 4.99
Blend of ITE & FL Studies - Average Trip Generation Rate: 4.67

Active Adult Community (ITE LUC -)

General Development	Land use Code	Occupied dws	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diversed Linked %	Pass-By %	ADT	VMT	Source	
Residential Community	320	450	Leesburg	Oct-99	4	-	4.5	24hr	11.4	-	N/A	N/A	N/A	N/A	51.3	Tindale-Oliver & Associates	
Residential Community	320	540	Leesburg	Oct-99	4	-	3.8	24hr	8.3	-	N/A	N/A	N/A	N/A	31.2	Tindale-Oliver & Associates	
Residential Community	320	810	Clermont	Oct-99	4	-	3.5	24hr	3.5	-	N/A	N/A	N/A	N/A	12.0	Tindale-Oliver & Associates	
Total Size		1800.0															
								Average Trip Length: 7.7									
								Weighted Average Trip Length: 6.9									
								Weighted Percent New Trip Average: -									

Weighted Average Trip Generation Rate: 3.81
ITE Average Trip Generation Rate: -

Elderly Housing -Attached (ITE LUC 252)

General Development	Land use Code	Size (1000 Ft ² /units)	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diversed Linked %	Pass-By %	ADT	VMT	Source	
Retirement Community	253	208.0	Sun City Center, FL	Oct-91	4	726	2.46	24hr	3.28	-	N/A	N/A	N/A	137.13	8.07	Tindale-Oliver & Associates	
Total Size		208															
ITE		1,029															
Blended total		1,237															
								Average Trip Length: 3.28									
								Weighted Average Trip Length: 3.28									
								Percent New Trip Average: -									

Weighted Average Trip Generation Rate: 2.46
ITE Average Trip Generation Rate: 3.48
Blend of ITE & FL Studies - Average Trip Generation Rate: 3.31

Hotel (ITE LUC 310)

General Development	Land use Code	Size rooms	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diversed Linked %	Pass-By %	ADT	VMT	Source	
Hotel	310	174.0	Pinellas Co., FL	Aug-89	4	134	106	12.50	7-11a3-7p	6.30	79.0	N/A	N/A	N/A	62.21	Tindale-Oliver & Associates	
Hotel	310	114.0	Pinellas Co., FL	Oct-89	4	30	14	7.30	12-7-30p	6.20	47.0	N/A	N/A	N/A	21.27	Tindale-Oliver & Associates	
Total Size		288.0															
ITE		4760.0															
Blend		5048.0															
								Average Trip Length: 6.25									
								Weighted Average Trip Length: 6.26									
								Lake Adjusted Trip Length: 8.38									
								Weighted Percent New Trip Average: 66.0									

Weighted Average Trip Generation Rate: 10.44
ITE Average Trip Generation Rate: 8.17
Blend of ITE & FL Studies - Average Trip Generation Rate: 8.30

Motel (ITE LUC 320)

General Development	Land use Code	Size rooms	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diversed Linked %	Pass-By %	ADT	VMT	Source	
Motel	320	54.0	Pinellas Co., FL	Oct-89	4	32	22	12p-7p	3.80	69.0	N/A	N/A	N/A	N/A	-	Tindale-Oliver & Associates	
Motel	320	48.0	Pinellas Co., FL	Oct-89	4	46	24	10a-2:20p	2.80	65.0	N/A	N/A	N/A	N/A	-	Tindale-Oliver & Associates	
Motel	320	120.0	Pinellas Co., FL	Oct-89	4	26	22	2p-7p	5.20	84.6	N/A	N/A	N/A	N/A	-	Tindale-Oliver & Associates	
Total Size		222.0															
								Average Trip Length: 3.93									
								Weighted Average Trip Length: 4.34									
								Lake Adjusted Trip Length: 5.72									
								Weighted Percent New Trip Average: 77.0									

Weighted Average Trip Generation Rate: -
ITE Average Trip Generation Rate: 5.63

Movie Theater with Matinee (ITE LUC 444)

General Development	Land use Code	Size screens	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diversed Linked %	Pass-By %	ADT	VMT	Source	
Movie Theater	444	8.0	Pinellas Co., FL	Oct-89	4	151	116	113.10	2p-5p	2.70	77.0	N/A	N/A	N/A	235.13	Tindale-Oliver & Associates	
Movie Theater	444	12.0	Pinellas Co., FL	Sep-89	4	122	116	63.40	2p-5p	1.90	95.0	N/A	N/A	N/A	114.44	Tindale-Oliver & Associates	
Total Size		20.0															
ITE		10.0 assumed															
Blend		30.0															
								Average Trip Length: 2.30									
								Weighted Average Trip Length: 2.22									
								Lake Adjusted Trip Length: 3.43									
								Weighted Percent New Trip Average: 88.0									

Weighted Average Trip Generation Rate: 83.28
ITE Average Trip Generation Rate: 153.33
Blend of ITE & FL Studies - Average Trip Generation Rate: 106.63

Health Club (ITE LUC 492)

General Development	Land use Code	Size (1000 Ft ² /units)	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diverted Linked %	Pass-By %	ADT	VMT	Source
Health Spa	496	-	Tampa, FL	Mar-86	1	33	-	-	7.90	94.0	N/A	N/A	N/A	N/A	-	Kimley-Horn & Associates
Average Size:									Average Trip Length: 7.90							
ITE									Weighted Average Trip Length: 7.90							

Percent New Trip Average: 94.0
 Average Trip Generation Rate: -
 ITE Average Trip Generation Rate: 32.93

Day Care Center (ITE LUC 565)

General Development	Land use Code	Size (1000 Ft ² /units)	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diverted Linked %	Pass-By %	ADT	VMT	Source
Day Care Center	565	5.6	Pinellas Co.	Aug-89	94	66	67.00	7a-6p	1.90	70.0	N/A	N/A	N/A	89.11	-	Tindale-Oliver & Associates
Day Care Center	565	10.0	Pinellas Co.	Sep-89	179	134	67.00	7a-6p	2.10	75.0	N/A	N/A	N/A	105.53	-	Tindale-Oliver & Associates
Day Care Center	565	-	Tampa, FL	Mar-86	28	25	-	-	2.60	89.0	N/A	N/A	N/A	N/A	-	Kimley-Horn & Associates
Total Size		15.6							Average Trip Length: 2.20							
ITE		30.0							Weighted Average Trip Length: 2.05							

Weighted Percent New Trip Average: 73.0
 Weighted Average Trip Generation Rate: 66.99
 ITE Average Trip Generation Rate: 79.26
 Blend of ITE & FL Studies - Average Trip Generation Rate: 75.07

Nursing Home (ITE LUC 620)

General Development	Land use Code	Size beds	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diverted Linked %	Pass-By %	ADT	VMT	Source
Nursing Home	620	120.0	Lakeland, FL	Mar-90	4	74	2.86	11a-4p	2.59	89.0	N/A	N/A	N/A	6.59	-	Tindale-Oliver & Associates
Total Size		120							Average Trip Length: 2.59							
ITE		415							Weighted Average Trip Length: 2.59							
		535.0							Lake Adjusted Trip Length: 3.46							

Weighted Percent New Trip Average: 89.0
 Weighted Average Trip Generation Rate: 2.86
 ITE Average Trip Generation Rate: 2.37
 Blend of ITE & FL Studies - Average Trip Generation Rate: 2.48

General Office Building (ITE LUC 710)

General Development	Land use Code	Size (1000 Ft ² /units)	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diverted Linked %	Pass-By %	ADT	VMT	Source
General Office	710	98.0	Gwinnett Co., GA	12/13-18/92	5	-	4.30	-	5.40	-	N/A	N/A	N/A	1080	-	Street Smarts
General Office	710	180.0	Gwinnett Co., GA	12/13-18/92	5	-	3.60	-	5.90	-	N/A	N/A	N/A	1080	-	Street Smarts
General Office	710	262.8	St. Petersburg, FL	Sep-89	5	291	274	-	7a-5p	3.40	94.0	N/A	N/A	N/A	-	Tindale-Oliver & Associates
General Office	710	187.0	Pinellas Co.	Oct-89	5	431	388	18.49	7a-5p	6.30	90.0	N/A	N/A	N/A	104.84	Tindale-Oliver & Associates
General Office	710	14.3	Sarasota Co., FL	Jun-93	14	14	48.33	-	11.30	-	-	-	-	-	-	Sarasota County
Total Size		742.1							Average Trip Length: 6.46							
ITE									Weighted Average Trip Length: 5.15							
									Lake Adjusted Trip Length: 7.42							

Weighted Percent New Trip Average: 92.0
 Weighted Average Trip Generation Rate: N/A
 ITE Average Trip Generation Rate: 11.01

Single Tenant Office Building (ITE LUC 715)

General Development	Land use Code	Size (1000 Ft ² /units)	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diverted Linked %	Pass-By %	ADT	VMT	Source
Single Tenant Office	710	82.0	Sarasota Co., FL	Jun-93	142	142	17.59	-	6.60	-	-	-	-	116.09	-	Sarasota County
Single Tenant Office	710	84.0	Sarasota Co., FL	Jun-93	79	79	11.54	-	7.20	-	-	-	-	83.09	-	Sarasota County
Total Size		166.0							Average Trip Length: 6.90							
ITE									Weighted Average Trip Length: 6.90							
									Lake Adjusted Trip Length: 9.68							

Weighted Percent New Trip Average: -
 Weighted Average Trip Generation Rate: 14.53
 ITE Average Trip Generation Rate: 11.57

Medical-Dental Office Building (ITE LUC 720)

General Development	Land use Code	Size (1000 Ft ² /units)	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diverted Linked %	Pass-By %	ADT	VMT	Source
Medical Office	720	28.0	Hernando Co., FL	May-96	5	202	189	49.75	9a-6p	6.06	93.8	N/A	N/A	1393	282.64	Tindale-Oliver & Associates
Medical Office	720	58.4	Hernando Co., FL	May-96	5	390	349	28.52	9a-6p	6.47	89.5	N/A	N/A	1666	165.09	Tindale-Oliver & Associates
Medical Office	720	-	St. Petersburg, FL	Nov-89	5	34	30	57.20	9a-4p	1.20	88.0	N/A	N/A	N/A	-	Tindale-Oliver & Associates
Medical Office	720	14.6	Palm Harbor, FL	Oct-89	5	104	76	33.98	9a-5p	6.30	73.0	N/A	N/A	N/A	156.27	Tindale-Oliver & Associates
Medical Office	720	-	Tampa, FL	Mar-86	5	33	29	-	6.00	79.0	N/A	N/A	N/A	N/A	-	Kimley-Horn & Associates
Medical Office	720	30.4	Charlotte Co., FL	Oct-97	-	-	324	39.80	9a-5p	3.30	83.5	-	-	-	109.68	Tindale-Oliver & Associates
Medical Office	720	28.0	Charlotte Co., FL	Oct-97	-	-	186	31.00	9a-5p	3.60	81.6	-	-	-	91.04	Tindale-Oliver & Associates
Medical Office	720	11.0	Charlotte Co., FL	Oct-97	-	-	186	49.50	9a-5p	4.60	92.1	-	-	-	209.67	Tindale-Oliver & Associates
Medical Office	720	38.9	Citrus Co., FL	Oct-03	-	-	168	32.26	8-6p	6.80	97.1	-	-	-	213.03	Tindale-Oliver & Associates
Medical Office	720	10.0	Citrus Co., FL	Nov-03	-	-	340	40.56	8-6:30p	6.20	92.4	-	-	-	232.33	Tindale-Oliver & Associates
Medical Office	720	5.9	Citrus Co., FL	Dec-03	-	-	20	29.36	8-5p	6.25	95.2	-	-	-	146.78	Tindale-Oliver & Associates
Total Size		224.5							Average Trip Length: 5.07							
ITE		450.0							Weighted Average Trip Length: 5.55							
Blend		674.5							Lake Adjusted Trip Length: 7.82							

Weighted Percent New Trip Average: 89.0
 Weighted Average Trip Generation Rate: 35.59
 ITE Average Trip Generation Rate: 36.13
 Blend of ITE & FL Studies - Average Trip Generation Rate: 35.95

Business Park (ITE LUC 770)

General Development	General Development	Size (1000 Ft ² /units)	Location	Date	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diverted Linked %	Pass-By %	ADT	VMT	Source
Business Park	Flex-Space	211.1	Collier Co., FL	5/99		284	17.91	8a-6p	5.40		93.0			93	89.94	Tindale-Oliver & Associates	
Business Park	Flex-Space	66.0	Collier Co., FL	5/99		43	11.53	8a-6p	5.70		79.0			79	51.92	Tindale-Oliver & Associates	
Business Park	Flex-Space	14.1	Collier Co., FL	11/89		55	33.48	8a-6p	3.60		72.7			72.7	87.62	Tindale-Oliver & Associates	
Total Size		291.2							Average Trip Length: 4.90								
ITE		5565.0							Weighted Average Trip Length: 5.38								
		5856.2							Lake Adjusted Trip Length: 7.68								

Weighted Percent New Trip Average: 89.0
 Weighted Average Trip Generation Rate: 17.22
 ITE Average Trip Generation Rate: 12.76
 Blend of ITE & FL Studies - Average Trip Generation Rate: 12.98

Building Materials and Lumber Store (ITE LUC 812)

General Development	Land use Code	Size (1000 Ft ² /units)	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diverted Linked %	Pass-By %	ADT	VMT	Source
Plumbing	812	86.9	Tampa, FL	Jun-93	1	40	-	7a-4:30p	6.58	73.0	N/A	N/A	N/A	N/A	-	Tindale-Oliver & Associates
Plumbing	812	98.5	Tampa, FL	Jun-93	1	40	-	7a-4:30p	6.00	-	N/A	N/A	N/A	N/A	-	Tindale-Oliver & Associates
Plumbing	812	-	Tampa, FL	Jun-93	1	40	-	7a-4:30p	5.87	75.7	N/A	N/A	N/A	N/A	-	Tindale-Oliver & Associates
Total Size		185.4							Average Trip Length: 6.15							
ITE									Weighted Average Trip Length: 6.27							
									Lake Adjusted Trip Length: 8.88							

Weighted Percent New Trip Average: 74.4
 Weighted Average Trip Generation Rate: -
 ITE Average Trip Generation Rate: 45.16

Free-Standing Discount Superstore (ITE LUC 813)

General Development	Land use Code	Size (1000 Ft ² /units)	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diverted Linked %	Pass-By %	ADT	VMT	Source
Discount Superstore	814	203.6	Citrus Co., FL	Nov-03	1	236	55.01	8a-6p	5.91	81.8	N/A	N/A	N/A	N/A	298.55	Tindale-Oliver & Associates
Total Size		203.6							Average Trip Length: 5.91							
ITE		1600.0							Weighted Average Trip Length: 5.91							
		1803.6							Lake Adjusted Trip Length: 8.35							

Weighted Percent New Trip Average: 92.0
 Weighted Average Trip Generation Rate: 55.01
 ITE Average Trip Generation Rate: 49.21
 Blend of ITE & FL Studies - Average Trip Generation Rate: 49.86

New Car Sales (ITE LUC 841)

General Development	Land use Code	Size (1000 Ft ² /units)	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diversed Linked %	Pass-By %	ADT	VMT	Source
Car Dealership	841	43.0	St. Petersburg, FL	Oct-89	1	152	120	9am-5pm	4.70	79.0	N/A	N/A	N/A	N/A	-	Tindale-Oliver & Associates
Car Dealership	841	43.0	Clearwater, FL	Oct-89	1	136	106	9am-5pm	4.50	78.0	N/A	N/A	N/A	N/A	103.19	Tindale-Oliver & Associates
Total Size		86.0							Average Trip Length: 4.60							
ITE		43.0							Weighted Average Trip Length: 4.60							
Blend		417.0							Lake Adjusted Trip Length: 6.75							

Weighted Percent New Trip Average: 79.0
 Weighted Average Trip Generation Rate: 29.40
 ITE Average Trip Generation Rate: 33.34
 Blend of ITE & FL Studies - Average Trip Generation Rate: 32.93

NOTE: FOR PURPOSES OF BLEND THE SAME NUMBER OF UNITS FOR THE CAR DEALERSHIP WAS ASSUMED FOR BOTH SITES.

Supermarket (ITE LUC 850)

General Development	Land use Code	Size (1000 Ft ² /units)	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diversed Linked %	Pass-By %	ADT	VMT	Source
Supermarket	850	62.0	Palm Harbor, FL	Aug-89	1	62	62	9am-5pm	2.08	56.0	N/A	N/A	N/A	N/A	123.77	Tindale-Oliver & Associates
Total Size		62.0							Average Trip Length: 2.08							
ITE		156.0							Weighted Average Trip Length: 2.08							
Blend		218.0							Lake Adjusted Trip Length: 3.29							

Weighted Percent New Trip Average: 56.0
 Weighted Average Trip Generation Rate: 106.26
 ITE Average Trip Generation Rate: 102.24
 Blend of ITE & FL Studies - Average Trip Generation Rate: 103.38

Service Station w/Convenience Market (ITE LUC 853)

General Development	Land use Code	Size (1000 Ft ² /units)	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diversed Linked %	Pass-By %	ADT	VMT	Source
Service Station w/ Store	845	4.4	Marion County, FL	Jun-91	2	85	25	486.70	48hrs.	1.06	29.4	N/A	N/A	2129	151.68	Tindale-Oliver & Associates
Service Station w/ Store	845	1.1	Marion County, FL	Jun-91	2	77	20	54.80	24hr.	0.89	26.0	N/A	N/A	1144	128.07	Tindale-Oliver & Associates
Service Station w/ Store	845	2.1	Marion County, FL	Jun-91	2	66	24	997.60	24hr.	1.67	36.4	N/A	N/A	2095	606.42	Tindale-Oliver & Associates
Service Station w/ Store	845	-	Collier County, FL	Aug-91	2	96	38	-	-	1.19	39.6	N/A	N/A	N/A	-	Tindale-Oliver & Associates
Service Station w/ Store	845	-	Collier County, FL	Aug-91	2	78	16	-	-	1.06	20.5	N/A	N/A	N/A	-	Tindale-Oliver & Associates
Service Station w/ Store	845	3.3	Ellenton, FL	10/20-22/92	2	124	44	-	24hr.	0.96	35.3	N/A	N/A	1371	-	Tindale-Oliver & Associates
Service Station w/ Store	845	2.3	Tampa, FL	10/13-15/92	2	239	74	-	24hr.	1.06	31.1	N/A	N/A	1313	-	Tindale-Oliver & Associates
Service Station w/ Store	845	3.8	Tampa, FL	11/10-12/92	2	142	23	-	24hr.	3.13	16.4	N/A	N/A	2622	-	Tindale-Oliver & Associates
Service Station w/ Store	845	-	Tampa, FL	Mar-86	2	72	-	-	-	2.00	-	N/A	N/A	N/A	-	Kimley-Horn & Associates
Service Station w/ Store	-	2.5	Marion County, FL	Apr-02	2	23	-	610.46	24hr.	1.77	11.7	-	-	-	126.61	Kimley-Horn & Associates
Service Station w/ Store	-	2.5	Marion County, FL	Apr-02	2	87	-	719.79	24hr.	1.62	32.8	-	-	-	322.19	Kimley-Horn & Associates
Service Station w/ Store	845	3.0	Marion County, FL	Apr-02	2	59	-	606.02	24hr.	0.83	32.6	N/A	N/A	N/A	195.00	Kimley-Horn & Associates
Total Size		25.1	15.6						Average Trip Length: 1.44							
ITE		30.0	30.0						Weighted Average Trip Length: 1.51							
Blend		55.1	45.6						Lake Adjusted Trip Length: 2.59							

Weighted Percent New Trip Average: 28.0
 Weighted Average Trip Generation Rate: 639.68
 ITE Average Trip Generation Rate: 845.60
 Blend of ITE & FL Studies - Average Trip Generation Rate: 775.14

Pharmacy/Drugstore with Drive-Through Window (ITE LUC 881)

General Development	Land use Code	Size (1000 Ft ² /units)	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diversed Linked %	Pass-By %	ADT	VMT	Source
Drugstore	-	12.0	Pasco Co. FL	Apr-02	2	212	90	122.2	2.04	42.5	-	-	-	-	105.8	Tindale-Oliver & Associates
Drugstore	-	15.1	Pasco Co. FL	Apr-02	2	1192	54	98.0	2.13	28.1	-	-	-	-	58.7	Tindale-Oliver & Associates
Drugstore	-	11.1	Pasco Co. FL	Apr-02	2	138	38	89.0	2.05	27.5	-	-	-	-	50.2	Tindale-Oliver & Associates
Total Size		38.2							Average Trip Length: 2.07							
ITE		42.0							Weighted Average Trip Length: 2.08							
Blend		80.2							Lake Adjusted Trip Length: 3.29							

Weighted Percent New Trip Average: 33.0
 Average Trip Generation Rate: 103.03
 ITE Average Trip Generation Rate: 86.16
 Blend of ITE & FL Studies - Average Trip Generation Rate: 95.21

Furniture Store (ITE LUC 890)

General Development	Land use Code	Size (1000 Ft ² /units)	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diversed Linked %	Pass-By %	ADT	VMT	Source
Furniture Store	890	16.9	Tampa, FL	Jul-92	1	68	39	-	7.38	55.7	-	-	-	-	-	Tindale-Oliver & Associates
Furniture Store	890	15.0	Largo, FL	7/28-30/92	1	64	34	-	4.63	52.5	N/A	N/A	N/A	N/A	-	Tindale-Oliver & Associates
Total Size		31.9							Average Trip Length: 6.01							
ITE									Weighted Average Trip Length: 6.09							
Blend									Lake Adjusted Trip Length: 8.61							

Weighted Percent New Trip Average: 54.0
 Average Trip Generation Rate: -
 ITE Average Trip Generation Rate: 5.06

Drive-In Bank (ITE LUC 912)

General Development	Land use Code	Size (1000 Ft ² /units)	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diversed Linked %	Pass-By %	ADT	VMT	Source
Bank	912	5.4	Hernando Co., FL	May-96	2	164	41	364.72	9a-6p	2.77	24.7	N/A	N/A	1956	249.54	Tindale-Oliver & Associates
Bank	912	-	Tampa, FL	Mar-86	2	77	-	-	2.40	-	-	N/A	N/A	N/A	-	Kimley-Horn & Associates
Bank	912	-	Tampa, FL	Mar-86	2	211	-	-	-	54.0	-	-	-	-	-	Kimley-Horn & Associates
Bank	912	0.4	Clearwater, FL	Aug-88	2	113	52	-	9am-6pm	5.20	46.0	N/A	N/A	N/A	-	Tindale-Oliver & Associates
Bank	912	2.0	Largo, FL	Sep-89	2	129	94	192.50	-	1.60	73.0	-	-	-	224.84	Tindale-Oliver & Associates
Bank	912	4.5	Seminole, FL	10-89	-	-	-	201.78	-	-	-	-	-	-	-	Tindale-Oliver & Associates
Bank	912	2.3	Marion County, FL	Jun-91	2	69	29	680.00	24hr.	1.33	42.0	N/A	N/A	1549	379.85	Tindale-Oliver & Associates
Bank	912	2.5	Marion County, FL	Jul-91	2	57	26	386.00	48hrs.	2.70	45.6	N/A	N/A	324	475.24	Tindale-Oliver & Associates
Bank	912	-	Collier County, FL	Aug-91	2	162	96	-	24hr.	0.88	59.3	N/A	N/A	N/A	-	Tindale-Oliver & Associates
Bank	912	-	Collier County, FL	Aug-91	2	116	54	-	-	1.58	46.6	N/A	N/A	N/A	-	Tindale-Oliver & Associates
Bank	912	-	Collier County, FL	Aug-91	2	142	69	-	-	2.08	47.9	N/A	N/A	N/A	-	Tindale-Oliver & Associates
Bank	912	3.1	Marion County, FL	Jun-91	2	47	32	580.80	24hr.	1.75	68.1	N/A	N/A	1776.0	692.17	Tindale-Oliver & Associates
Bank	-	2.4	Marion County, FL	Apr-02	2	70	-	642.00	24hr.	3.55	54.6	-	-	-	1245.31	Kimley-Horn & Associates
Bank	-	2.7	Marion County, FL	May-02	2	50	-	246.66	24hr.	2.66	40.5	-	-	-	265.44	Kimley-Horn & Associates
Total Size		25.2							Average Trip Length: 2.38							
ITE		76.0							Weighted Average Trip Length: 3.09							
Blend		101.2							Lake Adjusted Trip Length: 3.83							

Weighted Percent New Trip Average: 46.0
 Average Trip Generation Rate: 393.10
 ITE Average Trip Generation Rate: 246.49
 Blend of ITE & FL Studies - Average Trip Generation Rate: 281.55

Quality Restaurant (ITE LUC 931)

General Development	Land use Code	Size (1000 Ft ² /units)	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diversed Linked %	Pass-By %	ADT	VMT	Source
Quality Restaurant	831	7.5	St. Petersburg, FL	Oct-89	1	177	154	-	11:30am-02:00	3.50	87.0	N/A	N/A	N/A	-	Tindale-Oliver & Associates
Quality Restaurant	831	8.0	Clearwater, FL	Oct-89	1	60	40	110.60	0-2:30/5-8:3	2.80	67.0	N/A	N/A	N/A	207.49	Tindale-Oliver & Associates
Quality Restaurant	831	-	Tampa, FL	Mar-86	1	76	62	-	-	2.10	82.0	N/A	N/A	N/A	-	Kimley-Horn & Associates
Total Size		15.5	8.0						Average Trip Length: 2.80							
ITE		135.0	135.0						Weighted Average Trip Length: 3.14							
Blend		150.5	143.0						Lake Adjusted Trip Length: 4.62							

Weighted Percent New Trip Average: 77.0
 Weighted Average Trip Generation Rate: 110.63
 ITE Average Trip Generation Rate: 89.95
 Blend of ITE & FL Studies - Average Trip Generation Rate: 91.10

High-Turnover Restaurant (ITE LUC 932)

General Development	Land use Code	Size (1000 Ft ² /units)	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diversed Linked %	Pass-By %	ADT	VMT	Source
Restaurant	832	5.0	St. Petersburg, FL	Oct-89	2	74	132.60	1130-7p	2.00	92.0	N/A	N/A	N/A	243.98	Tindale-Oliver & Associates	
Restaurant	832	5.2	Kenneth City, FL	Oct-89	2	236	176	4p-7:30p	2.30	75.0	N/A	N/A	N/A	220.59	Tindale-Oliver & Associates	
Restaurant	832	6.2	Hernando Co., FL	May-96	2	242	175	187.51	9a-6p	2.76	72.5	N/A	N/A	1162	375.00	Tindale-Oliver & Associates
Restaurant	832	8.2	Hernando Co., FL	May-96	2	154	93	102.71	9a-6p	4.15	60.2	N/A	N/A	839	256.43	Tindale-Oliver & Associates
Restaurant		5.3	Pasco Co. Fl	Apr-02		100	62	168.31	9a-6p	8.09	62.0				844.21	Tindale-Oliver & Associates
Restaurant		5.2	Pasco Co. Fl	Apr-02		114	88	82.47	9a-6p	3.72	77.2				236.81	Tindale-Oliver & Associates
Restaurant		5.8	Pasco Co. Fl	Apr-02		182	102	116.97	9a-6p	3.49	56.0				228.77	Tindale-Oliver & Associates
Total Size		35.6														
ITE		98.0														
Blend		133.6														
										Average Trip Length: 3.07						
										Weighted Average Trip Length: 3.17						
										Lake Adjusted Trip Length: 4.76						
										Weighted Percent New Trip Average: 71.0						
										Weighted Average Trip Generation Rate: 124.69						
										ITE Average Trip Generation Rate: 127.15						
										Blend of ITE & FL Studies - Average Trip Generation Rate: 125.50						

Fast Food Restaurant w/Drive Thru (ITE LUC 934)

General Development	Land use Code	Size (1000 Ft ² /units)	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diversed Linked %	Pass-By %	ADT	VMT	Source
Fast Food w/ Drive Thru	834	5.4	Hernando Co., FL	May-96	2	136	82	311.83	9a-6p	1.68	60.2	N/A	N/A	1692	315.27	Tindale-Oliver & Associates
Fast Food w/ Drive Thru	834	3.1	Hernando Co., FL	May-96	2	168	82	547.34	9a-6p	1.59	48.8	N/A	N/A	1711	425.04	Tindale-Oliver & Associates
Fast Food w/ Drive Thru	834	4.3	Pinellas Co., FL	Oct-89	2	456	260	660.40	1 day	2.30	57.0	N/A	44	N/A	865.78	Tindale-Oliver & Associates
Fast Food w/ Drive Thru	834	2.2	Pinellas Co., FL	Aug-89	2	81	48	502.80	11am-2pm	1.70	59.0	N/A	N/A	N/A	504.51	Tindale-Oliver & Associates
Fast Food w/ Drive Thru	834	-	Tarpon Springs, FL	Oct-89	2	233	114	-	7am-7pm	3.60	49.0	N/A	N/A	N/A	-	Tindale-Oliver & Associates
Fast Food w/ Drive Thru	834	4.0	Marion County, FL	Jun-91	2	75	46	625.00	48hrs.	1.54	61.3	N/A	N/A	2500	590.01	Tindale-Oliver & Associates
Fast Food w/ Drive Thru	834	1.6	Marion County, FL	Jun-91	2	60	32	962.50	48hrs.	0.91	53.3	N/A	N/A	1540	466.84	Tindale-Oliver & Associates
Fast Food w/ Drive Thru	834	-	Collier County, FL	Aug-91	2	66	44	-	-	1.91	66.7	N/A	N/A	N/A	-	Tindale-Oliver & Associates
Fast Food w/ Drive Thru	834	-	Collier County, FL	Aug-91	2	118	40	-	-	1.17	33.9	N/A	N/A	N/A	-	Tindale-Oliver & Associates
Fast Food w/ Drive Thru	834	-	Tampa, FL	Mar-86	2	61	-	-	-	2.70	-	N/A	N/A	N/A	-	Kimley-Horn & Associates
Fast Food w/ Drive Thru	834	-	Tampa, FL	Mar-86	2	306	-	-	-	-	65.0	-	-	-	-	Kimley-Horn & Associates
Fast Food w/ Drive Thru		2.2	Lake Co. FL	Apr-01		376	252	934.30		2.50	74.6				1742.47	Tindale-Oliver & Associates
Fast Food w/ Drive Thru		3.2	Lake Co. FL	Apr-01		171	182	654.90		4.10	47.8				1283.47	Tindale-Oliver & Associates
Fast Food w/ Drive Thru		3.8	Lake Co. FL	Apr-01		188	137	353.70		3.30	70.8				826.38	Tindale-Oliver & Associates
Fast Food w/ Drive Thru		3.0	Pasco Co. Fl	Apr-02		486	164	515.32	9a-6p	2.72	33.7				472.92	Tindale-Oliver & Associates
Fast Food w/ Drive Thru		4.4	Pasco Co. Fl	Apr-02		168	120	759.24	9a-6p	1.89	71.4				1024.99	Tindale-Oliver & Associates
Fast Food w/ Drive Thru		2.7	Pasco Co. Fl	Apr-02		100	46	283.12	9a-6p	5.10	46.0				664.20	Tindale-Oliver & Associates
Total Size		39.9														
ITE		63.0														
Blend		102.9														
										Average Trip Length: 2.42						
										Weighted Average Trip Length: 2.42						
										Lake Adjusted Trip Length: 3.69						
										Weighted Percent New Trip Average: 58.0						
										Weighted Average Trip Generation Rate: 564.46						
										ITE Average Trip Generation Rate: 496.12						
										Blend of ITE & FL Studies - Average Trip Generation Rate: 522.62						

Automobile Repair Shop (ITE LUC 942)

General Development	Land use Code	Size (1000 Ft ² /units)	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diversed Linked %	Pass-By %	ADT	VMT	Source
Auto Repair Shop	838	5.2	Lakeland, FL	Mar-90	1	24	14	-	9a-4p	1.36	59.0	N/A	N/A	N/A	-	Tindale-Oliver & Associates
Auto Repair Shop	838	-	Lakeland, FL	Mar-90	1	54	42	-	9a-4p	2.44	78.0	N/A	N/A	N/A	-	Tindale-Oliver & Associates
Auto Repair Shop	838	25.0	Orange Co. FL	Nov-92	1	41	39	-	2-6pm	4.60	-	-	-	-	-	LCE, Inc. *
Auto Repair Shop	838	2.3	Jacksonville, FL	2/3-4/90	1	124	94	-	9a-5p	3.07	76.0	-	-	-	-	Tindale-Oliver & Associates
Auto Repair Shop	838	2.3	Jacksonville, FL	2/3-4/90	1	110	74	-	9a-5p	2.96	67.0	-	-	-	-	Tindale-Oliver & Associates
Auto Repair Shop	838	2.4	Jacksonville, FL	2/3-4/90	1	132	87	-	9a-5p	2.32	66.0	-	-	-	-	Tindale-Oliver & Associates
Auto Repair Shop	838	5.5	Largo, FL	Sep-89	1	34	30	37.64	9a-5p	2.40	88.0	-	-	-	79.50	Tindale-Oliver & Associates
Total Size		42.6														
ITE		60.0														
Blend		65.5														
										Average Trip Length: 2.74						
										Weighted Average Trip Length: 3.62						
										Lake Adjusted Trip Length: 5.29						
										Weighted Percent New Trip Average: 72.2						
										Weighted Average Trip Generation Rate: 37.64						
										ITE Average Trip Generation Rate: 33.90						
										Blend of ITE & FL Studies - Average Trip Generation Rate: 34.12						

Service Station (ITE LUC 944)

General Development	Land use Code	Size (1000 Ft ² /units)	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diversed Linked %	Pass-By %	ADT	VMT	Source
Service Station	844	0.6	Largo	Nov-89	2	70	14	-	8am-5pm	1.90	23.0	N/A	N/A	N/A	-	Tindale-Oliver & Associates
Service Station	844	-	Collier County, FL	Aug-91	2	168	40	-	-	1.01	23.8	N/A	N/A	N/A	-	Tindale-Oliver & Associates
Total Size		0.6														
										Average Trip Length: 1.46						
										Weighted Average Trip Length: 1.90						
										Lake Adjusted Trip Length: 3.03						
										Weighted Percent New Trip Average: 23.0						
										Average Trip Generation Rate: -						
										ITE Average Trip Generation Rate: 168.56						

Car Wash (ITE LUC 947)

General Development	Land use Code	Size (1000 Ft ² /units)	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diversed Linked %	Pass-By %	ADT	VMT	Source
Car Wash	846	5.8	Largo, FL	Nov-89	2	111	84	-	8am-5pm	2.00	76.0	N/A	N/A	N/A	-	Tindale-Oliver & Associates
Car Wash	846	-	Clearwater, FL	Nov-89	2	177	108	-	10am-5pm	1.30	61.0	N/A	N/A	N/A	-	Tindale-Oliver & Associates
Total Size		5.8														
										Average Trip Length: 1.65						
										Weighted Average Trip Length: 2.00						
										Lake Adjusted Trip Length: 3.16						
										Weighted Percent New Trip Average: 76.0						
										Weighted Average Trip Generation Rate: -						
										ITE Average Trip Generation Rate: 108.0						

Gasoline/Fast Food/Convenience Store (ITE LUC -)

General Development	Land use Code	Size (1000 Ft ² /units)	Location	Date	Total No. Interviews	# Trip Length Interviews	Trip Gen. Rate	Time Period	Trip Length	Percent New Trips	Non-Pass-By %	Diversed Linked %	Pass-By %	ADT	VMT	Source
	846	-	Volusia Co., FL		2											
Mobil		3.0	Indian River Co., FL	Mar-98		107	84	563.10	8a-6p	2.00	39.3				442.60	Tindale-Oliver & Associates
Amoco		3.1	Indian River Co., FL	Mar-98		132	110	1388.00	8a-6p	1.80	41.7				1047.84	Tindale-Oliver & Associates
Mobil		2.5	Indian River Co., FL	Mar-98		132	52	748.30	8a-6p	3.70	19.7				545.44	Tindale-Oliver & Associates
Vineyards Mobil		2.4	Collier Co., FL	Nov-99			128	1399.58	8a-6p	4.10	13.3				763.19	Tindale-Oliver & Associates
Curt's Mobil		3.3	Collier Co., FL	Nov-99		2	144	862.56	8a-6p	2.20	39.6	N/A	N/A	N/A	751.46	Tindale-Oliver & Associates
Total Size		14.3														
										Average Trip Length: 2.70						
										Weighted Average Trip Length: 2.65						
										Lake Adjusted Trip Length: 3.96						
										Weighted Percent New Trip Average: 32.0						
										Weighted Average Trip Generation Rate: 984.59						
										ITE Average Trip Generation Rate: -						

APPENDIX C
Cost Component Calculations

Appendix C Cost Component Calculations

All information used to compute a typical cost per lane mile and a typical average daily capacity added per lane mile is presented in this Appendix. As noted, the primary source for the county project data are recent engineer estimates, FY 2007-2011 CIP projects and peer construction bids from Pasco and Collier Counties. In the case of the state projects data, the source is the FDOT reports for recently completed or fully programmed capacity expansion projects in Lake County.

As mentioned previously, the cost calculations are based on county and state projects in Lake County (presented in Tables C-1 through C-5). These projects were utilized in the calculation of the average cost per lane mile figure that is utilized in the update of the impact fee equation for Lake County.

ROW Cost

County

The ROW cost was developed based on a review of the Project Design & Environment (PD&E) Studies for three major roadway corridors (CR 466, CR 466A, and CR 470, all from the Sumter County Line to US 27). The ROW cost estimates in these studies were compared to recent land sales to see whether these estimates accounted for the increased land values. Since the County intends to begin acquiring parcels along these corridors within the horizon of the FY 2007 –FY 2011 CIP, the PD&E ROW estimates provide a conservative figure for land values. The weighted average ROW cost per lane mile is presented in Table C-3. The weighted average ROW cost per lane mile is approximately \$599,185 for county roads.

State

As mentioned in the report, ROW cost data for the completed state projects are believed to be representative of typical state land acquisitions. The completed projects along SR 500/US 441, SR 19, SR 44, SR 25/US 27, and SR 50 had a weighted average ROW cost per lane mile of approximately \$1.5 million for the urban section roads and \$1.1 million for rural section roads. Given the fact that the projects evaluated include both completed and fully-programmed roadway improvements, it is estimated that the recent increases in land values and recent land purchases associated with completed state projects in Lake County was accounted for. Table C-5 presents this calculation.

**Table C-1
Lake County Roadway Projects**

Description	From	To	Feature	Length (Miles)	Lanes Added	Total Lane Miles	Construction Cost	CST Cost per Lane Mile
CR 466A ⁽¹⁾	Sumter County Line	Rolling Acres Road	Add Lanes & Reconstruct - 2 to 4 Lanes	1.27	2	2.54	\$10,403,748	\$4,095,964
CR 455 Extension (Hartle Road) ⁽²⁾	Hartwood Marsh Road	SR 50	New Road Construction - 4 Lanes	0.28	4	1.12	\$3,465,000	\$3,093,750
Total						3.66	\$13,868,748	\$3,789,275

- (1) Road classified as a major arterial in a rural underdeveloped area as a 2U initially and then a 4D in a transitioning area. County used 95 percent of state capacities, Table 4-3, uninterrupted flow highway, LOS D as a 2U, and Table 4-2, uninterrupted flow highway, LOS D (Transitioning Area) as a 4D. Source: Lake County 2025 LRTP
- (2) Road classified as a major arterial in transitioning area. County used 95 percent of state capacities, Table 4-2, State Two-Way Arterial, Class II LOS D (Transitioning Area) as a 4D. Project design estimates from Kittleson and Associates provided in February 2007 using updated unit prices and standard quantities.

**Table C-2
County Construction Cost - Peer County Bids & Lake County Recent Cost Estimates**

County	Number of Bids/Estimates	Lane Miles	Construction Cost	Cost/Lane Mile
Lake ⁽¹⁾	2	3.66	\$13,868,748	\$3,789,275
Collier ⁽²⁾	2	20.16	\$54,732,435	\$2,714,903
Pasco ⁽³⁾	1	4.40	\$13,547,823	\$3,079,051
Total	5	28.22	\$82,149,006	\$2,911,021

- (1) Source: Table C-1, (a) and (b)
- (2) Based on three recently bid urban section projects in Collier County. These projects include Collier Boulevard (bid in January 2006) and Rattlesnake Hammock Road (bid in August 2005) being widened from 2 to 6 lanes.
- (3) Based on an urban section roadway bid received on CR 54 being widened from 2 to 4 lanes in October 2005.

**Table C-3
Lake County TIF - ROW Corridor Analysis**

Corridor	From	To	Feature	PD & E Length (miles)	Lanes Added	Total Lane Miles Added	Total ROW Cost	ROW Cost/Lane Mile
CR 466	US 27	Sumter County Line	Add Lanes & Reconstruct - 2 to 4 Lanes	2.10	2	4.20	\$1,408,000	\$335,238
CR 470	US 27	Sumter County Line	Add Lanes & Reconstruct - 2 to 4 Lanes	5.30	2	10.60	\$2,490,000	\$234,906
CR 466A	US 27	Sumter County Line	Add Lanes & Reconstruct - 2 to 4 Lanes	3.03	2	6.06	\$8,601,000	\$1,419,307
All Corridors						N/A	\$12,499,000	\$599,185

Source: CR 466, CR 466A, and CR 470 PD& E Studies

**Table C-4
PD&E Acreage Needed**

Corridor	From	To	Feature	ROW Length (miles)	Acreage Needed			Total ROW Cost			ROW Cost/Acre
					Land	Ponds	Total	Land	Ponds	Total	
CR 466	US 27	Sumter County Line	Add Lanes & Reconstruct - 2 to 4 Lanes	1.91	5.66	N/A	5.66	\$814,000	\$594,000	\$1,408,000	\$248,763
CR 470	US 27	Sumter County Line	Add Lanes & Reconstruct - 2 to 4 Lanes	3.82	35.87	19.75	55.62	\$2,390,000	\$100,000	\$2,490,000	\$44,768
CR 466A	US 27	Sumter County Line	Add Lanes & Reconstruct - 2 to 4 Lanes	3.06	14.21	21.92	36.13	\$7,025,000	\$1,576,000	\$8,601,000	\$238,057

Source: CR 466, CR 466A, and CR 470 PD& E Studies

**Table C-5
Lake County State Roadway Projects – ROW Costs**

Financial Management Number	Description	From	To	Feature	Section Design	Length (Miles)	Lanes Added	Total Lane Miles	ROW Cost	ROW Cost per Lane Mile	ROW Outlier
2382901	SR 530/US 192	SR 25/US 27	Orange Co Line	Add Lanes and Reconstruct - 4 to 6 Lanes	Rural	1.0	2	2.00	\$1,000	\$0	n/a
2383141	SR 500/US 441	Lake Eustis Dr	CR 44 B	Add Lanes and Reconstruct - 4 to 6 Lanes	Urban	4.7	2	9.40	\$4,921,000	\$523,511	N
2383151	SR 500/US 441	Mills Street	W of College Road	Add Lanes and Reconstruct - 2 to 4 Lanes	Urban	4.3	2	8.60	\$9,830,000	\$1,143,023	N
2383201	SR 19	CR 561	SR 500/ US 441	Add Lanes and Reconstruct - 2 to 4 Lanes	Urban	1.9	2	3.80	\$2,667,000	\$701,842	N
2383401	SR 44	CR 468	Caballo Place	Add Lanes and Reconstruct - 2 to 4 Lanes	Urban	1.3	2	2.50	\$142,000	\$0	n/a
2383411	SR 44	Sumter Co Line	CR 468	Add Lanes and Reconstruct - 2 to 4 Lanes	Urban	2.2	2	4.40	\$656,000	\$149,091	N
2383581	SR 500/US 441	0.2Mi. W of Lakeshore Drive	Lake Eustis Drive	Add Lanes and Reconstruct - 4 to 6 Lanes	Urban	1.4	2	2.80	\$12,350,000	\$4,410,714	N
2384121	SR 500/US 441	0.2Mi. W College Rd	0.2Mi. W of Lakeshore Drive	Add Lanes and Reconstruct - 4 to 6 Lanes	Urban	4.0	2	8.00	\$46,000	\$5,750	Y
2384211	SR 25/US 27	Boggy Marsh Road	N. of SR 530 (Polk County Line)	Add Lanes and Reconstruct - 4 to 6 Lanes	Rural	3.5	2	7.00	\$7,357,991	\$1,051,142	N
2384241	SR 25/US 27	WB Ramp @ SR 50	CR 561-A	Add Lanes and Reconstruct - 4 to 6 Lanes	Urban	2.8	2	5.60	\$4,179,000	\$746,250	N
2383942	SR 500/US 441	Perkins Street	N of Griffin Road	Add Lanes and Reconstruct - 4 to 6 Lanes	Urban	0.8	2	1.60	\$20,940,000	\$13,087,500	Y
2383943	SR 500/US 441	Perkins Street	SR 44	Add Lanes and Reconstruct - 4 to 6 Lanes	Urban	1.9	2	3.80	\$19,069,000	\$5,018,158	N
2383954	SR 500/US 441	Martin Luther King	Lake Ella Road	Add Lanes and Reconstruct - 4 to 6 Lanes	Urban	3.2	2	6.40	\$14,976,000	\$2,340,000	N
2383955	SR 500/US 441	Lake Ella Road	Avenida Central	Add Lanes and Reconstruct - 4 to 6 Lanes	Urban	4.2	2	8.40	\$18,374,000	\$2,187,381	N
2384221	SR 25/US 27	Boggy Marsh Road	Lake Louisa Road	Add Lanes and Reconstruct - 4 to 6 Lanes	Rural	6.5	2	13.00	\$15,628,000	\$1,202,154	N
2384293	SR 50	W of Bloxham Blvd	W of Hancock Road	Add Lanes and Reconstruct - 4 to 6 Lanes	Urban	1.8	2	3.60	\$28,910,000	\$8,030,556	Y
2384294	SR 50	W of Hancock Road	Orange Co Line	Add Lanes and Reconstruct - 4 to 6 Lanes	Urban	3.7	2	7.40	\$4,416,000	\$596,757	N
	Total (Urban Design excluding outliers)							60.6	\$91,438,000	\$1,508,878	
	Total (Rural Design excluding outliers)							20.0	\$22,985,991	\$1,149,300	

Source: FDOT District 5 Gaming Reports

**Table C-6
Lake County State Roadway Projects – Construction Costs**

Financial Management Number	Description	From	To	Feature	Section Design	Length (Miles)	Lanes Added	Total Lane Miles	Construction Cost	CST Cost per Lane Mile	CST Outlier
2382901	SR 530/US 192	SR 25/US 27	Orange Co Line	Add Lanes and Reconstruct - 4 to 6 Lanes	Rural	1.0	2	2.00	\$1,681,000	\$840,500	Y
2383141	SR 500/US 441	Lake Eustis Dr	CR 44 B	Add Lanes and Reconstruct - 4 to 6 Lanes	Urban	4.7	2	9.40	\$37,141,000	\$3,951,170	N
2383151	SR 500/US 441	Mills Street	W of College Road	Add Lanes and Reconstruct - 2 to 4 Lanes	Urban	4.3	2	8.60	\$22,408,000	\$2,605,581	N
2383201	SR 19	CR 561	SR 500/ US 441	Add Lanes and Reconstruct - 2 to 4 Lanes	Urban	1.9	2	3.80	\$8,668,000	\$2,281,053	N
2383401	SR 44	CR 468	Caballo Place	Add Lanes and Reconstruct - 2 to 4 Lanes	Urban	1.3	2	2.50	\$440,000	\$176,000	Y
2383411	SR 44	Sumter Co Line	CR 468	Add Lanes and Reconstruct - 2 to 4 Lanes	Urban	2.2	2	4.40	\$6,868,000	\$1,560,909	N
2383581	SR 500/US 441	0.2Mi. W of Lakeshore Drive	Lake Eustis Drive	Add Lanes and Reconstruct - 4 to 6 Lanes	Urban	1.4	2	2.80	\$12,309,000	\$4,396,071	N
2384121	SR 500/US 441	0.2Mi. W College Rd	0.2Mi. W of Lakeshore Drive	Add Lanes and Reconstruct - 4 to 6 Lanes	Urban	4.0	2	8.00	\$26,866,000	\$3,358,250	N
2384211	SR 25/US 27	Boggy Marsh Road	N. of SR 530 (Polk County Line)	Add Lanes and Reconstruct - 4 to 6 Lanes	Rural	3.5	2	7.00	\$23,270,067	\$3,324,295	N
2384241	SR 25/US 27	WB Ramp @ SR 50	CR 561-A	Add Lanes and Reconstruct - 4 to 6 Lanes	Urban	2.8	2	5.60	\$27,951,000	\$4,991,250	Y
2383942	SR 500/US 441	Perkins Street	N of Griffin Road	Add Lanes and Reconstruct - 4 to 6 Lanes	Urban	0.8	2	1.60	\$10,286,000	\$6,428,750	N
2383943	SR 500/US 441	Perkins Street	SR 44	Add Lanes and Reconstruct - 4 to 6 Lanes	Urban	1.9	2	3.80	\$41,000	\$10,789	Y
2383954	SR 500/US 441	Martin Luther King	Lake Ella Road	Add Lanes and Reconstruct - 4 to 6 Lanes	Urban	3.2	2	6.40	\$441,000	\$68,906	Y
2383955	SR 500/US 441	Lake Ella Road	Avenida Central	Add Lanes and Reconstruct - 4 to 6 Lanes	Urban	4.2	2	8.40	\$19,000	\$2,262	Y
2384221	SR 25/US 27	Boggy Marsh Road	Lake Louisa Road	Add Lanes and Reconstruct - 4 to 6 Lanes	Rural	6.5	2	13.00	\$1,610,000	\$123,846	Y
2384293	SR 50	W of Bloxham Blvd	W of Hancock Road	Add Lanes and Reconstruct - 4 to 6 Lanes	Urban	1.8	2	3.60	\$0	\$0	n/a
2384294	SR 50	W of Hancock Road	Orange Co Line	Add Lanes and Reconstruct - 4 to 6 Lanes	Urban	3.7	2	7.40	\$40,358,000	\$5,453,784	Y
	Total (Urban Design excluding outliers)							38.6	\$124,546,000	\$3,226,580	

Source: FDOT District 5 Gaming Reports

Tables C-7 through C-11 present the design, ROW, construction, and CEI cost calculations for the county and state roads. An adjustment was made to account for the proportion of future roads that will be of urban design versus rural design. Again, based on a review of the 2025 Cost Affordable Plan projects and consultation with County staff, it is anticipated that 90 percent of the lane miles that the County will build in the future will consist of urban design cross-sections and 10 percent of the lane miles will be rural design. Also, based on the Cost Affordable Plan, it is estimated that 87 percent of the lane miles for state roads will be urban design-based and 13 percent will be rural design-based. The County has not recently bid any rural design section roads, as such the urban design construction and ROW costs were used as a proxy. It should be noted that design costs are assumed to be 8 percent of construction for county roads and 10 percent for state roads, based on discussions with the County Public Works Department and FDOT District 5 staff, respectively. This assumption reflects current design cost percentages on recently bid county and state projects.

**Table C-7
Design Cost Adjustment – State Roads**

Road Type	Lane Miles Added	Total Design Cost	Design Cost per Lane Mile⁽¹⁾	Design Weight⁽²⁾	Weighted Design Cost per Lane Mile⁽³⁾
Urban Design	N/A	N/A	\$322,658	87%	\$280,712
Rural Design	N/A	N/A	\$290,000	13%	\$37,700
Weighted Average Design Cost per Lane Mile					\$318,412

- (1) Design cost assumed to be 10 percent of construction costs based on recently bid and completed state roadway improvements in Lake County.
- (2) Design weight provides a distribution of future construction projects between urban and rural design. The design weight is based on the lane mile distribution of the 2025 Lake County LRTP projects by cross-section design.
- (3) Total design cost per lane mile (Item 1) multiplied by associated design weight (Item 2).

**Table C-8
ROW Cost Adjustment – State Roads**

Road Type	Lane Miles Added⁽¹⁾	Total ROW Cost⁽²⁾	ROW Cost per Lane Mile⁽³⁾	Design Weight⁽⁴⁾	Weighted ROW Cost per Lane Mile⁽⁵⁾
Urban Design	60.60	\$91,438,000	\$1,508,878	87%	\$1,312,724
Rural Design	20.00	\$22,985,991	\$1,149,300	13%	\$149,409
Weighted Average ROW Cost per Lane Mile					\$1,462,133

- (1) Table C-5 for urban and rural design projects, respectively.
- (2) Table C-5 for urban and rural design projects, respectively
- (3) Total ROW cost (Item 2) divided by lane miles added (Item 1).
- (4) Design weight provides a distribution of future construction projects between urban and rural design. The design weight is based on the lane mile distribution of the 2025 Lake County LRTP projects by cross-section design.
- (5) Total ROW cost per lane mile (Item 3) multiplied by associated design weight (Item 4).

**Table C-9
Construction Cost Adjustment – State Roads**

Road Type	Lane Miles Added⁽¹⁾	Total Construction Cost⁽²⁾	Construction Cost per Lane Mile⁽³⁾	Design Weight⁽⁴⁾	Weighted Construction Cost per Lane Mile⁽⁵⁾
Urban Design	38.60	\$124,546,000	\$3,226,580	87%	\$2,807,125
Rural Design	N/A	N/A	\$2,900,000	13%	\$377,000
Weighted Average Construction Cost per Lane Mile					\$3,184,125

- (1) Table C-6 for urban design projects.
- (2) Table C-6 for urban design projects.
- (3) Total Construction Cost (Item 2) divided by lane miles added (Item 1) for urban design and estimated at approximately 90 percent of the urban construction cost for rural design.
- (4) Design weight provides a distribution of future construction projects between urban and rural design. The design weight is based on the lane mile distribution of the 2025 Lake County LRTP projects by cross-section design.
- (5) Total construction cost per lane mile (Item 3) multiplied by associated design weight (Item 4).

**Table C-10
CEI Cost Adjustment – State Roads**

Road Type	Lane Miles Added	Total CEI Cost	CEI Cost per Lane Mile⁽¹⁾	Design Weight⁽²⁾	Weighted CEI Cost per Lane Mile⁽³⁾
Urban Design	N/A	N/A	\$322,658	87%	\$280,712
Rural Design	N/A	N/A	\$290,000	13%	\$37,700
Weighted Average CEI Cost per Lane Mile					\$318,412

- (1) CEI cost assumed to be 10 percent of construction costs based on FDOT Office of Inspector General Advisory Memorandum 240-5001 showing a performance measure.
- (2) Design weight provides a distribution of future construction projects between urban and rural design. The design weight is based on the lane mile distribution of the 2025 Lake County LRTP projects by cross-section design.
- (3) Total design cost per lane mile (Item 1) multiplied by associated design weight (Item 2).

**Table C-11
Lane Mile Distribution**

Jurisdiction	Lane Mile Distribution⁽¹⁾
County	80%
State	20%

Source: 2025 Lake CountyLRTP
distribution of lane miles
summed by jurisdiction

**Table C-12
Adjusted Total Cost per Lane Mile**

Cost Type	County Roads	State Roads	County and State Roads⁽⁵⁾
Design ⁽¹⁾	\$232,882	\$318,412	\$249,988
Right-of-Way ⁽²⁾	\$599,185	\$1,462,133	\$771,775
Construction ⁽³⁾	\$2,911,021	\$3,184,125	\$2,965,642
CEI ⁽⁴⁾	\$116,441	\$318,412	\$156,835
Total	\$3,859,529	\$5,283,082	\$4,144,240

- (1) Source: Table C-6 for State Roads and 8 percent of county construction costs for County roads.
- (2) Source: Table C-3 for County Roads, Table C-7 for State Roads
- (3) Source: Table C-2 for County Roads, Table C-8 for State Roads
- (4) Source: Table C-9 for State Roads and 4 percent of county construction costs for County roads.
- (5) Lane mile distribution from Table C-10, multiplied by the design, construction, CEI, and ROW by jurisdiction to develop a weighted average cost per lane mile.

Table C-13
2025 LRTP Future Capital Cost Projections
Based on 2004 Costs

2025 Jurisdiction and Segment Design Class	Lane Miles Added	Design Cost	ROW Cost	Construction Cost	Total Cost
County Rural	30.82	\$5,167,120	\$6,078,964	\$30,394,821	\$41,640,905
County Urban	291.92	\$42,008,519	\$51,528,321	\$231,540,397	\$325,077,237
State Rural	10.92	\$5,866,026	\$16,316,945	\$29,048,727	\$51,231,698
State Urban	71.67	\$41,705,622	\$40,626,222	\$160,633,069	\$242,964,913
Total	405.33	\$94,747,287	\$114,550,452	\$451,617,014	\$660,914,753

2025 LRTP Future Capital Cost Projections
Based on 2006 Costs

2025 Jurisdiction and Segment Design Class	Lane Miles Added	Design Cost	ROW Cost	Construction Cost	Total Cost
County Rural	30.82	\$7,177,423	\$18,466,882	\$89,717,667	\$115,361,972
County Urban	291.92	\$67,982,916	\$174,914,087	\$849,785,249	\$1,092,682,252
State Rural	10.92	\$3,166,800	\$12,550,356	\$31,668,000	\$47,385,156
State Urban	71.67	\$23,124,900	\$108,141,287	\$231,248,991	\$362,515,178
Total	405.33	\$101,452,039	\$314,072,612	\$1,202,419,907	\$1,617,944,558

Source: 2025 Lake-Sumter LRTP

Table C-14
Lake County Historical and Future Capacity Calculations

Source	Lane Miles Added ⁽¹⁾	LRTP Lane Miles Added Distribution ⁽²⁾	Vehicle Miles of Capacity Added ⁽³⁾	Average Capacity Added Per Lane Mile ⁽⁴⁾
County	62.6	80%	584,688	9,340
State	45.7	20%	388,499	8,501
Total	108.3	100%	973,187	
Weighted Average Capacity Added⁽⁵⁾				9,172

Source: Table C-15 for county roads and Table C-16 for state roads

(1) Source: Table C-11

(2) Source: Table C-15 for county roads and Table C-16 for state roads

(3) Item (3) divided by Item (1) for County and State Projects

(4) Item (4) for County and State Projects weighted by lane mile distributions in Item (2).

**Table C-15
Lake County Historical and Future County Roadway Projects**

Description	From	To	Feature	Length (Miles)	Lanes Added	Total Lane Miles	Initial Capacity	Final Capacity	Added Capacity	VMC Added
N. Hancock Rd. Phase I	Lake-Sumter Community College	Levitt/Park Square	New Road Construction - 4 Lanes	0.41	4	1.60	0	29,300	29,300	12,013
Hooks Street Phase I ⁽¹⁾	Citrus Tower Blvd.	South Hancock Road	New Road Construction - 4 Lanes	0.70	4	2.80	0	29,300	29,300	20,510
Huffstetler Drive Phase II ⁽²⁾	US 441	David Walker Drive	New Road Construction - 2 Lanes	1.12	2	2.20	0	13,600	13,600	15,232
Thomas Avenue Extension	CR 460	CR 25A	New Road Construction - 2 Lanes	0.45	2	0.90	0	18,200	18,200	8,190
N. Hancock Rd. Phase II	Levitt/Park Square	Old Highway 50	New Road Construction - 4 Lanes	4.22	4	16.90	0	29,300	29,300	123,646
Hooks Street Phase II	Citrus Tower Blvd.	East Ridge High School	New Road Construction - 4 Lanes	0.60	4	2.40	0	29,300	29,300	17,580
South Clermont Connector	Lakeshore Drive	Citrus Tower Blvd	New Road Construction - 4 Lanes	2.40	4	9.60	0	56,500	56,500	135,600
Capt. Haynes Road	Woodlea Rd.	Dead River Road	New Road Construction - 2 Lanes	0.77	2	1.50	0	14,600	14,600	11,242
CR 466A	Sumter County Line	Rolling Acres Road	Add Lanes & Reconstruct - 2 to 4 Lanes	1.24	2	2.50	13,110	53,675	40,565	50,301
CR 455 Extension (Hartle Road)	Hartwood Marsh Road	SR 50	New Road Construction - 4 Lanes	0.28	4	1.10	0	30,600	30,600	8,568
Hartwood Marsh Road	US 27/ Lake Louisa Road	Hancock Rd.	New Road Construction - 2 Lanes	0.71	2	1.40	0	13,600	13,600	9,656
Hartwood Marsh Road	US 27	Orange County Line	Add Lanes & Reconstruct - 2 to 4 Lanes	4.01	2	8.00	12,573	34,236	21,663	86,869
Hooks Street Extension	Hancock Road	Hartle Road	New Road Construction - 4 Lanes	1.37	4	5.50	0	29,300	29,300	40,141
Hooks Street Extension Phase III	3,300' West of Citrus Tower Boulevard	Citrus Tower Blvd	New Road Construction - 4 Lanes	0.63	4	2.50	0	29,300	29,300	18,459
Hooks Street Ext. Phase IV	US 27/ Lake Louisa Road	Hooks St. Ph. 3	New Road Construction - 4 Lanes	0.53	4	2.10	0	29,300	29,300	15,529
Steve's Road	US 27/ Lake Louisa Road	Citrus Tower Blvd (Phase II)	New Road Construction - 2 Lanes	0.82	2	1.60	0	13,600	13,600	11,152
Total						62.60				584,688

Source: Lake County Public Works Department and FY 2007-2011 CIP

**Table C-16
Lake County Historical and Future State Roadway Projects**

Description	From	To	Feature	Length	Lanes Added	Total Lane Miles	Initial Capacity	Final Capacity	Added Capacity	VMC Added
SR 530/US 192	SR 25/US 27	Orange Co Line	Add Lanes and Reconstruct - 4 to 6 Lanes	1.0	2	2.0	27,900	42,800	14,900	14,900
SR 500/US 441	Lake Eustis Dr	CR 44 B	Add Lanes and Reconstruct - 4 to 6 Lanes	4.7	2	9.4	35,700	53,500	17,800	83,660
SR 500/US 441	Mills Street	W of College Road	Add Lanes and Reconstruct - 2 to 4 Lanes	4.3	2	8.6	15,400	32,700	17,300	74,390
SR 19	CR 561	SR 500/ US 441	Add Lanes and Reconstruct - 2 to 4 Lanes	1.9	2	3.8	15,400	32,700	17,300	32,870
SR 44	CR 468	Caballo Place	Add Lanes and Reconstruct - 2 to 4 Lanes	1.3	2	2.5	15,400	32,700	17,300	21,642
SR 44	Sumter Co Line	CR 468	Add Lanes and Reconstruct - 2 to 4 Lanes	2.2	2	4.4	15,400	32,700	17,300	37,991
SR 500/US 441	0.2Mi. W of Lakeshore Drive	Lake Eustis Drive	Add Lanes and Reconstruct - 4 to 6 Lanes	1.4	2	2.8	35,700	53,500	17,800	24,920
SR 500/US 441	0.2Mi. W College Rd	0.2Mi. W of Lakeshore Drive	Add Lanes and Reconstruct - 4 to 6 Lanes	4.0	2	8.0	35,700	53,500	17,800	71,200
SR 25/US 27	Boggy Marsh Road	N. of SR 530 (Polk County Line)	Add Lanes and Reconstruct - 4 to 6 Lanes	3.5	2	7.1	28,600	42,800	14,200	50,268
SR 25/US 27	WB Ramp @ SR 50	CR 561-A	Add Lanes and Reconstruct - 4 to 6 Lanes	2.8	2	5.6	34,700	52,100	17,400	48,720
SR 500/US 441	Perkins Street	N of Griffin Road	Add Lanes and Reconstruct - 4 to 6 Lanes	0.8	2	1.6	32,700	49,200	16,500	13,200
SR 500/US 441	Perkins Street	SR 44	Add Lanes and Reconstruct - 4 to 6 Lanes	1.9	2	3.8	32,700	49,200	16,500	31,350
SR 500/US 441	Martin Luther King	Lake Ella Road	Add Lanes and Reconstruct - 4 to 6 Lanes	3.2	2	6.4	32,700	49,200	16,500	52,800
SR 500/US 441	Lake Ella Road	Avenida Central	Add Lanes and Reconstruct - 4 to 6 Lanes	4.2	2	8.4	32,700	49,200	16,500	69,300
SR 25/US 27	Boggy Marsh Road	Lake Louisa Road	Add Lanes and Reconstruct - 4 to 6 Lanes	6.5	2	13.0	28,600	42,800	14,200	92,300
SR 50	W of Bloxham Blvd	W of Hancock Road	Add Lanes and Reconstruct - 4 to 6 Lanes	1.8	2	3.6	35,700	53,500	17,800	32,040
SR 50	W of Hancock Road	Orange Co Line	Add Lanes and Reconstruct - 4 to 6 Lanes	3.7	2	7.4	35,700	53,500	17,800	65,860
Total (excluding designated outliers)						45.7				388,499

Source: FDOT Gaming Reports and FY 2007-2011 TIP

APPENDIX D
Credit Component Calculations

Appendix D Credit Component Calculations

The Value of a Penny in Lake County

Currently, in addition to the capital support that ultimately results from State Fuel Tax revenues, Lake County also receives financial benefit from several other funding sources. Of these, County fuel taxes are listed below, along with a few pertinent characteristics of each.

1. Constitutional Fuel Tax (2¢/gallon)

- Tax applies to every net gallon of motor and diesel fuel sold within a county. Collected in accordance with Article XII, Section 9 (c) of the Florida Constitution.
- The State allocated 80 percent of this tax to counties after first withholding amounts pledged for debt service on bonds issued pursuant to provisions of the State Constitution for road and bridge purposes.
- The 20 percent surplus can be used to support the road construction program within the county.

2. County Fuel Tax (1¢/gallon)

- Tax applies to every net gallon of motor and diesel fuel sold within a county.
- Primary purpose of these funds is to help reduce a county's reliance on ad valorem taxes.
- Proceeds are to be used for transportation-related expenses, including the reduction of bond indebtedness incurred for transportation purposes. Authorized uses include acquisition of rights-of-way; the construction, reconstruction, operation, maintenance and repair of transportation facilities, roads, bridges, bicycle paths, and pedestrian pathways; or the reduction of bond indebtedness incurred for transportation purposes.

3. 1st Local Option Tax (6¢/gallon)

- Tax applies to every net gallon of motor and diesel fuel sold within a county.
- Proceeds may be used to fund transportation expenditures.
- To accommodate statewide equalization, all six cents are automatically levied on diesel fuel in every county, regardless of whether a county is levying the tax on motor fuel at all or at the maximum rate.
- Proceeds are distributed to a county and its municipalities according to distribution factors determined at the local level by interlocal agreement.

Each year, the Florida Legislative Committee on Intergovernmental Relations (LCIR) produces a document, the *Local Government Financial Information Handbook*, which details the estimated local government revenues for the upcoming fiscal year. Included in this document are the estimated distributions of the various fuel tax revenues for each county in the state. The following two tables (Tables D-1 and D-2) utilize information from the LCIR for the preliminary 2006-07 fiscal year. In the tables, the fuel tax revenue data are utilized to calculate the value per penny (per gallon of fuel) that should be used to estimate the “equivalent pennies” of other revenue sources, and the number of pennies that should be applied to the credit variable in the impact fee calculation.

Tables D-1 and D-2 shows the distribution per penny for each of the fuel levies, then, a weighted average for the value of a penny of fuel tax was calculated. A weighting procedure was used to calculate the mean to account for the varying levies per gallon of fuel. The weighted average figure of approximately \$1.48 million presented in Table D-2 is used in the value per penny calculations.

Table D-1
Estimated Fuel Tax Distributions Allocated to Capital Program for Lake County, FY 2006-07

Tax	Amount of Levy per Gallon	Total Distribution	Distribution Per Penny
Constitutional Fuel Tax	\$0.02	\$3,308,886	\$1,654,443
County Fuel Tax	\$0.01	\$1,497,626	\$1,497,626
1st Local Option Tax (1-6 cents) - excl. municipalities' shares	\$0.06	\$5,170,891	\$861,815
2nd Local Option Tax (1-5 cents) - excl. municipalities' shares	\$0.05	\$0	\$0
Ninth-Cent Fuel Tax	\$0.01	\$1,492,519	\$1,492,519
Source: Florida Legislative Committee on Intergovernmental Relations, http://fcn.state.fl.us/lcir/estimates/logovest06.html		Weighted Average	\$1,146,992
		Average	\$1,376,601

Table D-2

Estimated Fuel Tax Distributions Allocated to Capital Program for Lake County & Municipalities, FY 2006-07

Tax	Amount of Levy per Gallon	Total Distribution	Distribution Per Penny
Constitutional Fuel Tax	\$0.02	\$3,308,886	\$1,654,443
County Fuel Tax	\$0.01	\$1,497,626	\$1,497,626
1st Local Option Tax (1-6 cents) - incl. municipalities' shares	\$0.06	\$8,469,928	\$1,411,655
2nd Local Option Tax (1-5 cents) - incl. municipalities' shares	\$0.05	\$0	\$0
Ninth-Cent Fuel Tax	\$0.01	\$1,492,519	\$1,492,519
Source: Florida Legislative Committee on Intergovernmental Relations, http://fcn.state.fl.us/lcir/estimates/logovest06.html		Weighted Average	\$1,476,896
		Average	\$1,514,061

Gas Tax Credit

County Portion

A review of the County's 2001 – 2011 roadway projects and its funding sources reveals that the capacity expansion projects in the CIP are built with impact fees and gas and sales taxes. As shown in Table D-3, the County will use all of its gas and sales tax revenues to fund capacity expansion projects. As such, credit is given for 0.40 pennies of gas tax revenues and 1.5 pennies of sales tax revenues allocated annually to the County. Table D-3 presents the total pennies of gas and sales tax revenues allocated to Lake County.

**Table D-3
County Equivalent Pennies**

Allocation	Cost of Projects	Number of Years	Revenue from 1 penny	Annual Revenue	Equivalent Pennies
County CIP- Gas Tax (2007-2011) ⁽¹⁾	\$2,833,000	5	\$1,476,896	\$566,600	\$0.004
County CIP- Gas Tax (2001-2006) ⁽²⁾	\$2,865,987	6	\$1,476,896	\$477,665	\$0.003
County CIP- Sales Tax (2003-2006) ⁽³⁾	\$10,675,598	4	\$1,476,896	\$2,668,900	\$0.018
County CIP- Sales Tax (2007-2011) ⁽⁴⁾	\$9,429,000	5	\$1,476,896	\$1,885,800	\$0.013
Total Gas Tax (2001-2010)	\$5,698,987	11	\$1,476,896	\$518,090	\$0.004
Total Sales Tax (2001-2010)	\$20,104,598	9	\$1,476,896	\$2,233,844	\$0.015

(1) Source: Table D-7, Total Cost of Expansion Projects

(2) Source: Sum of Table D-5, Item (a) and Table D-6, Item (a), Total Cost of Expansion Projects

(3) Source: Table D-8, Total Cost of Expansion Projects

(4) Source: Table D-9, Total Cost of Expansion Projects

State Portion

In the calculation of the equivalent pennies of gas tax from the State, the FDOT Work Program was reviewed for capacity expansion projects in Lake County for the 15-year period from 1997 to 2011. The five years of "future" roadway projects from the currently adopted 2007-2011 Work Program indicates a total state expenditure of over \$198.7 million for capacity-adding projects in the County. On an annual basis, this level of expenditure is equivalent to 26.9 pennies of gas tax revenue. Comparatively, the total cost of the capacity-adding projects for the five-year "historical" period from 2002 to 2006 equates to 26.9 pennies and that for the period from 1997 to 2001 equates to 7.5 pennies. The combined weighted average over the 15-year total of state expenditures in the County for capacity-adding roadway projects results in a total equivalency of 20.4 pennies. Table D-4 documents this calculation.

**Table D-4
Equivalent Penny Calculation for State Portion**

Allocation	Cost of Projects	Number of Years	Revenue from 1 penny	Annual Revenue	Equivalent Pennies
Future Work Program (2007-2011) ⁽¹⁾	\$198,652,000	5	\$1,476,896	\$39,730,400	\$0.269
Historical Work Program (2002-2006) ⁽²⁾	\$198,532,683	5	\$1,476,896	\$39,706,537	\$0.269
Historical Work Program (1997-2001) ⁽³⁾	<u>\$55,549,263</u>	<u>5</u>	\$1,476,896	\$11,109,853	<u>\$0.075</u>
Total	\$452,733,946	15	\$1,476,896	\$30,182,263	\$0.204

(1) Source: Table C-10, Total Cost of Expansion Projects

(2) Source: Table C-11, Total Cost of Expansion Projects

(3) Source: Table C-12, Total Cost of Expansion Projects

The specific State projects that were utilized in the equivalent penny calculations are summarized in Tables D-10 through D-12.

**Table D-5
Lake County FY 2001 - 2006 Gas Tax Expenditures - Expansion Projects**

Proj #	Description	On/From/To	FY 2000/2001	FY 2001/2002	FY 2002/2003	FY 2003/2004	FY 2004/2005	FY 2005/2006	Total
8-95	Widen & Resurface	CR 42	\$58,767	\$0	\$0	\$0	\$0	\$0	\$58,767
2001-01	Intersection Improvement	Lake Harris Shores Phase III & CR 439 & CR 561/CR 48	\$265,757	\$0	\$0	\$0	\$0	\$0	\$265,757
2001-11	Reconstruction of Roadway	CR 452 Lake Shore Drive	\$69,376	\$0	\$0	\$0	\$0	\$0	\$69,376
97030	Paving	Alco Road & Dexter Road	\$39,395	\$58,270	\$349	\$0	\$0	\$0	\$98,014
2001-10	Turn Lane	Lane Park Cutoff	\$0	\$33,540	\$0	\$0	\$0	\$0	\$33,540
2001-16	Road Widening	Whitney Road	\$0	\$44,200	\$0	\$0	\$0	\$0	\$44,200
2002-04	Road Widening	Sunset Drive	\$0	\$163,573	\$18,167	\$0	\$0	\$0	\$181,740
03028	Intersection Improvement	CR 44A & Estes Road	\$0	\$0	\$0	\$28,561	\$0	\$0	\$28,561
04013	Intersection Improvement	Johns Lake Road & Hancock Road	\$0	\$0	\$0	\$19,069	\$0	\$0	\$19,069
04024	Signal Addition	CR 561 & CR 48 Signal Design	\$0	\$0	\$0	\$14,300	\$0	\$0	\$14,300
04025	Intersection Improvement	CR 466 & Rolling Acres Road	\$0	\$0	\$0	\$6,885	\$0	\$0	\$6,885
04026	Intersection Improvement	CR 439 & CR 44A	\$0	\$0	\$0	\$22,377	\$0	\$0	\$22,377
04027/04028	Intersection Improvement	Dwight's Road & Lake Nellie Road	\$0	\$0	\$0	\$5,597	\$0	\$0	\$5,597
04029	Intersection Improvement	CR 439	\$0	\$0	\$0	\$31,142	\$0	\$0	\$31,142
04036	Signal Addition	CR 455 Signal Warrant Study	\$0	\$0	\$0	\$5,150	\$0	\$0	\$5,150
INT00009	Intersection Improvement	Grand Highway & Citrus Boulevard	\$0	\$0	\$0	\$282	\$0	\$0	\$282
2004-13	Intersection Improvement	Hooks Street and Citrus Tower Boulevard	\$0	\$0	\$0	\$3,596	\$0	\$0	\$3,596
Total			\$433,295	\$299,583	\$18,516	\$136,959	\$0	\$0	\$888,353

Source: Lake County Public Works Department

**Table D-6
Lake County FY 2001 - 2006 Gas Tax Expenditures - Expansion Projects (Staff Time)**

Item	FY 2000/2001	FY 2001/2002	FY 2002/2003	FY 2003/2004	FY 2004/2005	FY 2005/2006	Total
Gas Tax Expenditures⁽¹⁾							
Engineering	\$232,474	\$375,996	\$397,427	\$276,321	\$235,186	\$406,428	\$1,923,832
Construction Inspection	\$0	\$0	\$0	\$26,986	\$23,826	\$2,990	\$53,802
Total	\$232,474	\$375,996	\$397,427	\$303,307	\$259,012	\$409,418	\$1,977,634 (a)

Source: Lake County Public Works Department and Office of Management and Budget

**Table D-7
Lake County FY 2007 - 2011 Gas Tax Expenditures - Expansion Projects**

Item	FY 2006/2007	FY 2007/2008	FY 2008/2009	FY 2009/2010	FY 2010/2011	Total
Gas Tax Expenditures						
Road System Improvements	\$675,000	\$0	\$0	\$0	\$0	\$675,000
CR 42 from Marion County to Maggie Jones Road	\$0	\$1,190,000	\$0	\$0	\$0	\$1,190,000
CR 561 on Lake Minnehaha	\$385,000	\$0	\$0	\$0	\$0	\$385,000
Lakeshore Drive from CR 561 to Bridge # 11407	\$583,000	\$0	\$0	\$0	\$0	\$583,000
Total	\$1,643,000	\$1,190,000	\$0	\$0	\$0	\$2,833,000 (a)

Source: Lake County Public Works Department

**Table D-8
Lake County FY 2003 - 2006 Infrastructure Sales Tax Expenditures - Expansion Projects ⁽¹⁾**

Proj #	Description	On/From/To	FY 2002/2003	FY 2003/2004	FY 2004/2005	FY 2005/2006	Total
C2P98007	Paving	Cemetery Road from Twin Ponds Road to Saltsdale Road	\$0	\$0	\$0	\$1,423	\$1,423
C2P ⁽²⁾	Paving (Seven Road Segments)		\$0	\$0	\$0	\$168,741	\$168,741
W&R06015	Road Widening & Resurfacing	CR 448 from CR 561 to Apopka Beauclair Canal	\$0	\$0	\$0	\$710	\$710
INT04026	Signal Addition	CR 44A/CR 439	\$0	\$0	\$0	\$103,498	\$103,498
W&R03006	Paved Shoulders & Resurfacing	CR 452 (Lakeshore Drive) from Bay Road to Harbour Drive	\$211,454	\$0	\$1,067,098	\$423,867	\$1,702,419
REB98031	Realign/Re-build Curve	CR 455 east of intersection of CR 455 and CR 561	\$0	\$0	\$0	\$9,577	\$9,577
W&R04043	Intersection Improvements & Resurfacing	CR 48 from US 27 to SR 19	\$0	\$0	\$31,048	\$2,384,379	\$2,415,427
C2P04027	Paving	Dwights Road from Green Swamp Road to Lake Nellie Road	\$0	\$0	\$14,484	\$18,369	\$32,853
C2P98021	Paving	Keene Road (Phasae I & II) and County Line Road	\$0	\$0	\$232,924	\$671,465	\$904,389
W&R04015	Paved Shoulders & Resurfacing	CR 46A from SR 44 to SR 46	\$0	\$0	\$0	\$2,176,797	\$2,176,797
C2P04028	Paving	Lake Nellie Road from Dwights Road to Pavement	\$0	\$0	\$0	\$331	\$331
W&R01021	Road Widening & Resurfacing	CR 437 from Orange County Line to SR 46	\$0	\$0	\$664,866	\$0	\$664,866
C2P97036	Paving	Twin Ponds Road from CR 44A to Lake Burns Road	\$0	\$0	\$14,460	\$0	\$14,460
W&R01022	Road Widening & Intersection Improvements	Lakeshore Drive from CR 561 to Lake Susan Lodge	\$0	\$0	\$12,374	\$0	\$12,374
C2P97030	Paving	Alco & Dexter Road	\$768,552	\$86,058	\$0	\$0	\$854,610
RS-0408	Roads (CR 437 & CR 445A Bid Awards)		\$0	\$1,534,635	\$0	\$0	\$1,534,635
W&R98029	Road Widening & Intersection Improvements	Radio Road from Treadway School Road to Jackson Road	\$78,101	\$0	\$0	\$0	\$78,101
C2P98004	Paving	Orange Blossom Road	\$0	\$0	\$0	\$387	\$387
Total			\$1,058,107	\$1,620,693	\$2,037,254	\$5,959,544	\$10,675,598

(1) Source: Lake County Public Works Department

(2) Seven roads were bid at the same time for paving. The roads are Citrus Valley, Revels Road, Palm Avenue, Libby Road #3, Libby Road West, Libby Road Southwest, and O'Brien Road South.

**Table D-9
Lake County FY 2007 - 2011 Infrastructure Sales Tax Expenditures - Expansion Projects**

Proj #	Description	On/From/To	FY 2006/2007	FY 2007/2008	FY 2008/2009	FY 2009/2010	FY 2010/2011	Total
W&R04029	Road Widening & Resurfacing	CR 439 from SR 44 to CR 44A	\$0	\$250,000	\$0	\$0	\$0	\$250,000
W&R05002	Road Widening & Resurfacing	CR 445 from Deer Road East C-9080A to Bridge # 114087	\$0	\$50,000	\$0	\$2,280,000	\$0	\$2,330,000
W&R06015	Road Widening & Resurfacing	CR 448 from CR 561 to Apopka Beauclair Canal	\$0	\$0	\$1,561,000	\$1,041,000	\$0	\$2,602,000
C2P98007	Paving	Cemetery Road from Twin Ponds Road to Saltsdale Road	\$0	\$50,000	\$0	\$0	\$0	\$50,000
C2P04030	Paving	Citrus Valley Road from E. Dewey Robbins Road to Orange Blossom Road	\$0	\$0	\$0	\$0	\$259,000	\$259,000
C2P04027	Paving	Dwights Road from Green Swamp Road to Lake Nellie Road	\$0	\$779,000	\$0	\$0	\$0	\$779,000
C2P98021	Paving	Keene Road (Phasae I & II) and County Line Road	\$1,173,000	\$0	\$0	\$0	\$0	\$1,173,000
C2P04028	Paving	Lake Nellie Road from Dwights Road to Pavement	\$0	\$0	\$0	\$20,000	\$0	\$20,000
C2P06022	Paving	Libby Road No. 3 from South O'Brien Road to Wilson Lake Parkway	\$0	\$10,000	\$0	\$0	\$671,000	\$681,000
C2P06023	Paving	Libby Road Southwest from West Libby Road to Libby Road No. 3	\$0	\$10,000	\$0	\$0	\$270,000	\$280,000
C2P06024	Paving	Libby Road West from South O'Brien Road to Wilson Lake Parkway	\$0	\$10,000	\$0	\$0	\$695,000	\$705,000
C2P02017	Paving	O'Brien Road South C-2227 from end to SR 19	\$0	\$10,000	\$0	\$0	\$0	\$10,000
C2P97036	Paving	Twin Ponds Road from CR 44A to Lake Burns Road	\$0	\$100,000	\$0	\$0	\$0	\$100,000
N/A	Paving	Palm Avenue from N. Buckhill Road to E. Revels Road	\$0	\$0	\$0	\$0	\$190,000	\$190,000
	Total		\$1,173,000	\$1,269,000	\$1,561,000	\$3,341,000	\$2,085,000	\$9,429,000

Source: Lake County Public Works Department

**Table D-10
FDOT FY 2007 - 2011 Work Program – Lake County Expansion Projects**

Proj #	Description	On/From/To	FY 2006/2007	FY 2007/2008	FY 2008/2009	FY 2009/2010	FY 2010/2011	Total
2382751	PD&E/EMO Study	SR 46 from SR 500 (US 441) to Seminole Co Line	\$1,001,000	\$0	\$0	\$0	\$45,000,000	\$46,001,000
4168621	Add Lanes & Reconstruct	CR 466 from Sumter County Line to US 27/441	\$0	\$5,000,000	\$0	\$0	\$0	\$5,000,000
4156711	Add Lanes & Reconstruct	CR 466A from Sumter County Line to US 27/442	\$5,000	\$0	\$0	\$0	\$0	\$5,000
4196651	Add Lanes & Reconstruct	Hartwood Marsh Road from SR 500/US 27 to Orange County Line	\$3,000,000	\$0	\$0	\$0	\$0	\$3,000,000
2383942	Intersection (Major)	SR 500 from Perkins Street to N of Griffin Road	\$5,207,000	\$2,662,000	\$8,544,000	\$0	\$0	\$16,413,000
2384211	Add Lanes & Rehabilitate Pavement	US 27 from N. of SR 530 to N. of Boggy Marsh Road	\$1,476,000	\$900,000	\$0	\$0	\$0	\$2,376,000
2384221	Add Lanes & Rehabilitate Pavement	US 27 from Boggy Marsh Road to Lake Louisa Road	\$11,029,000	\$4,090,000	\$910,000	\$0	\$0	\$16,029,000
2384231	Add Lanes & Rehabilitate Pavement	US 27 from 1000' N Lake Louisa to WB Ramp on SR 50	\$11,790,000	\$5,381,000	\$860,000	\$0	\$0	\$18,031,000
2384241	Add Lanes & Rehabilitate Pavement	US 27 from WB Ramp on SR 50 to CR 561A	\$766,000	\$900,000	\$0	\$0	\$0	\$1,666,000
4098701	Add Lanes & Rehabilitate Pavement	SR 44 from SR 500/US 441 to SR 44/Orange Avenue	\$2,525,000	\$3,010,000	\$0	\$0	\$0	\$5,535,000
2384293	Add Lanes & Rehabilitate Pavement	SR 50 from W. of Bloxham Boulevard to W. of Hancock Road	\$2,419,000	\$2,399,000	\$5,122,000	\$6,966,000	\$0	\$16,906,000
2384294	Add Lanes & Rehabilitate Pavement	SR 50 from W. of Hancock Road to Orange County Line	\$3,277,000	\$34,722,000	\$0	\$1,350,000	\$0	\$39,349,000
2383141	Add Lanes & Rehabilitate Pavement	SR 500/US 441 from Lake Eustis Drive to CR 44B	\$1,500,000	\$0	\$0	\$0	\$0	\$1,500,000
2383151	Add Lanes & Rehabilitate Pavement	SR 500/US 441 from Mills Street to W. of College Road	\$625,000	\$0	\$0	\$0	\$0	\$625,000
2383943	Add Lanes & Rehabilitate Pavement	SR 500/US 441 from Perkins Street to SR 44	\$2,505,000	\$175,000	\$1,221,000	\$4,170,000	\$3,150,000	\$11,221,000
2383954	Add Lanes & Rehabilitate Pavement	SR 500/US 441 from Martin Luther King Boulevard to Lake Ella Road	\$3,007,000	\$3,303,000	\$1,418,000	\$0	\$0	\$7,728,000
2383955	Add Lanes & Rehabilitate Pavement	SR 500/US 441 from Lake Ella Road to Avenida Central	\$180,000	\$1,253,000	\$4,050,000	\$1,784,000	\$0	\$7,267,000
	Total		\$50,312,000	\$63,795,000	\$22,125,000	\$14,270,000	\$48,150,000	\$198,652,000

Source: FDOT District 5 Gaming Reports

**Table D-11
FDOT FY 2002 - 2006 Work Program- Lake County Expansion Projects**

Proj #	Description	On/From/To	FY 2001/2002	FY 2002/2003	FY 2003/2004	FY 2004/2005	FY 2005/2006	Total
404182-1	Add Turn Lane (s)	SR 19 Intersection with CR 450/Bulldog Drive	\$11,144	\$0	\$0	\$0	\$0	\$11,144
410372-1	Add Lanes & Reconstruct	CR 470 from SR 91 to SR 25/US 27	\$1,000,000	\$0	\$0	\$0	\$0	\$1,000,000
415000-1	Add Left Turn Lane (s)	SR 25 (US 27) from Corley Island Road Northward	\$0	\$0	\$0	\$0	\$267	\$267
238423-1	Add Lanes & Rehabilitate Pavement	SR 25 (US 27) from 1000'N Lake Louisa to N of Cluster Oak Drive	\$0	\$0	\$3,490,255	\$163,328	\$4,377,092	\$8,030,675
238421-1	Add Lanes & Rehabilitate Pavement	SR 25 (US 27) from N. of SR 530 to N. of Boggy Marsh Road	\$68,222	\$612,602	\$2,727,073	\$3,385,589	\$24,217,082	\$31,010,568
238424-1	Add Lanes & Reconstruct	SR 25 (US 27) from WB Ramp @ SR 50 to CR 561A	\$47,139	\$298,845	\$575,160	\$3,863,480	\$26,239,752	\$31,024,376
238422-1	Add Lanes & Reconstruct	SR 25 (US 27) from Boggy Marsh Road to Lake Louisa Road	\$692,898	\$52,101	\$3,859,834	\$78,302	\$195,537	\$4,878,672
238413-1	Add Right Turn Lane (s)	SR 25/500/US 441 @ Lake Ella Road in Lady Lake	\$128	\$0	\$0	\$0	\$0	\$128
406705-1	Add Turn Lane (s)	SR 44 at Britt Road and Thrill Hill Road	\$462,604	\$0	\$0	\$0	\$0	\$462,604
238429-4	Add Lanes & Reconstruct	SR 50 from W. of Hancock Road to Orange County Line	\$0	\$1,553,215	\$233,941	\$129,462	\$2,213,032	\$4,129,650
238341-1	Add Lanes & Reconstruct	SR 44 from Sumter County Line to CR 468	\$49,765	\$0	\$0	\$0	\$0	\$49,765
409049-1	Add Left Turn Lane (s)	SR 44 Intersection with CR 42	\$0	\$391,815	\$0	\$13,528	\$0	\$405,343
238429-3	Add Lanes & Reconstruct	SR 50 from W. of Bloxham Boulevard to W. of Hancock Road	\$0	\$0	\$0	\$2,362,134	\$141,311	\$2,503,445
238395-5	Add Lanes & Reconstruct	SR 500 (US 441) from Lake Ella Road to Avenida Central	\$0	\$0	\$0	\$8,581	\$3,277,451	\$3,286,032
238395-4	Add Lanes & Reconstruct	SR 500 (US 441) from Martin Luther King to Lake Ella Road	\$0	\$0	\$43,483	\$865,004	\$2,793,621	\$3,702,108
238394-2	Add Lanes & Reconstruct	SR 500 (US 441) from Perkins Street to N. of Griffin Road	\$0	\$1,041,904	\$29,330	\$15,727	\$4,648,791	\$5,735,752
238394-3	Add Lanes & Reconstruct	SR 500 (US 441) from Perkins Street to SR 44	\$0	\$0	\$0	\$0	\$258	\$258
413474-1	Intersection (Minor)	SR 500 (US 441) at Lincoln Avenue & Reiniger Flea Market	\$0	\$0	\$0	\$671,563	\$74,582	\$746,145
238358-1	Add Lanes & Reconstruct	SR 500 (US 441) from 0.2 miles W of Lake Shore to Lake Eustis Drive	\$2,073,749	\$556,733	\$247,846	\$0	\$0	\$2,878,328
238412-1	Add Lanes & Reconstruct	SR 500 (US 441) from 0.2 miles W of College Road to 0.2 miles W of Lake Shore	\$23,070,506	\$264,928	\$1,466,977	\$889,766	\$902,743	\$26,594,920
238394-1	Add Lanes & Reconstruct	SR 500 (US 441) from 1500' S of SR 44 to Picciola Road	\$10,497	\$9,523	\$263	\$0	\$0	\$20,283
238314-1	Add Lanes & Reconstruct	SR 500 (US 441) from Lake Eustis Drive to CR 44B	\$1,231,937	\$2,312,033	\$296,753	\$34,421,753	\$1,249,387	\$39,511,863
238315-1	Add Lanes & Reconstruct	SR 500 (US 441) from Mills Street to W of College Road	\$100,257	\$3,803,701	\$20,389,497	\$2,131,925	\$2,828,465	\$29,253,845
410982-1	New Road Construction	TOP- Lake County BOCC Construction Hook Street, Hancock Road & US 27	\$2,500,000	\$0	\$0	\$0	\$0	\$2,500,000
405170-1	Traffic Operations Improvement	City of Eustis Traffic Calming City-Wide	\$72,904	\$0	\$0	\$0	\$0	\$72,904
415473-1	Traffic Signal Addition	CR 466 Intersection at Rolling Acres Road	\$0	\$0	\$0	\$81,119	\$0	\$81,119
414974-1	Traffic Signal Addition	SR 25/500/US 441 from Citizens Boulevard to Eagles Nest Road	\$0	\$0	\$0	\$2,039	\$539,815	\$541,854
238401-1	PD & E/EMO Study	SR 25/US 27 from Polk County Line to New Turnpike Interchange	\$3,272	\$0	\$0	\$0	\$0	\$3,272
416218-1	Traffic Signal Addition	SR 46 from CR 437 South	\$0	\$0	\$0	\$0	\$37,607	\$37,607
416724-2	ROW Activities	SR 50 Lake County Advance ROW Acquisition	\$0	\$0	\$0	\$19,581	\$0	\$19,581
238395-1	PD & E/EMO Study	SR 500/US 441 from Picciola Road to Boone Court/Sumter County Line	\$24,425	\$15,750	\$0	\$0	\$0	\$40,175
Total			\$31,419,447	\$10,913,150	\$33,360,412	\$49,102,881	\$73,736,793	\$198,532,683

Source: FDOT District 5 Gaming Reports

**Table D-12
FDOT FY 1997 - 2001 Work Program- Lake County Expansion Projects**

Proj #	Description	On/From/To	FY 1996/1997	FY 1997/1998	FY 1998/1999	FY 1999/2000	FY 2000/2001	Total
404182-1	Add Turn Lane (s)	SR 19 Intersection with CR 450/Bulldog Drive	\$0	\$0	\$0	\$0	\$132,192	\$132,192
410372-1	Add Lanes & Reconstruct	CR 470 from SR 91 to SR 25/US 27	\$0	\$0	\$0	\$0	\$275,000	\$275,000
238320-1	Add Lanes & Reconstruct	SR 19 from CR 561 to SR 500/US 441	\$8,635,000	\$1,466,000	\$659,000	\$649,000	\$2,218	\$11,411,218
238421-1	Add Lanes & Rehabilitate Pavement	SR 25 (US 27) from N. of SR 530 to N. of Boggy Marsh Road	\$0	\$0	\$0	\$0	\$1,312,616	\$1,312,616
238424-1	Add Lanes & Reconstruct	SR 25 (US 27) from WB Ramp @ SR 50 to CR 561A	\$0	\$0	\$0	\$0	\$2,311,353	\$2,311,353
238413-1	Add Right Turn Lane (s)	SR 25/500/US 441 @ Lake Ella Road in Lady Lake	\$0	\$0	\$0	\$0	\$149,820	\$149,820
238341-1	Add Lanes & Reconstruct	SR 44 from Sumter County Line to CR 468	\$374,000	\$215,000	\$229,000	\$6,692,000	\$134,759	\$7,644,759
238358-1	Add Lanes & Reconstruct	SR 500 (US 441) from 0.2 miles W of Lake Shore to Lake Eustis Drive	\$273,000	\$51,000	\$975,000	\$3,214,000	\$17,989,000	\$22,502,000
238412-1	Add Lanes & Reconstruct	SR 500 (US 441) from 0.2 miles W of College Road to 0.2 miles W of Lake Shore	\$77,000	\$435,000	\$175,000	\$204,000	\$314,000	\$1,205,000
238394-1	Add Lanes & Reconstruct	SR 500 (US 441) from 1500' S of SR 44 to Picciola Road	\$19,000	\$44,000	\$12,000	\$15,000	\$40,750	\$130,750
238314-1	Add Lanes & Reconstruct	SR 500 (US 441) from Lake Eustis Drive to CR 44B	\$272,000	\$1,401,000	\$944,000	\$214,000	\$489,711	\$3,320,711
238315-1	Add Lanes & Reconstruct	SR 500 (US 441) from Mills Street to W of College Road	\$0	\$453,000	\$7,000	\$729,000	\$87,431	\$1,276,431
405170-1	Traffic Operations Improvement	City of Eustis Traffic Calming City-Wide	\$0	\$0	\$0	\$0	\$376,857	\$376,857
410900-1	ROW Acquisition	SR 44 Intersection with Lake Port Boulevard	\$0	\$0	\$0	\$0	\$5,300	\$5,300
238401-1	PD & E/EMO Study	SR 25/US 27 from Polk County Line to New Turnpike Interchange	\$0	\$0	\$0	\$0	\$36,231	\$36,231
238395-1	PD & E/EMO Study	SR 500/US 441 from Picciola Road to Boone Court/Sumter County Line	\$0	\$0	\$0	\$0	\$17,725	\$17,725
238290-1	Add Lanes & Reconstruct	SR 530/US 192 from SR 25/US 27 to Orange County Line	\$1,645,000	\$48,000	\$0	\$0	\$0	\$1,693,000
238340-1	Add Lanes & Reconstruct	SR 44 from CR 468 to Caballo Place	\$531,000	\$51,000	\$0	\$0	\$0	\$582,000
410374-1	Add Lanes & Reconstruct	SR 500/US 441 from SR 44 to Orange Avenue	\$0	\$0	\$0	\$0	\$500,000	\$500,000
N/A	Traffic Signal Additions & Turn Lanes		\$265,400	\$139,500	\$155,500	\$105,900	\$0	\$666,300
Total			\$12,091,400	\$4,303,500	\$3,156,500	\$11,822,900	\$24,174,963	\$55,549,263

Source: FDOT District 5 Gaming Reports

**Table D-13
Average Motor Vehicle Fuel Efficiency – Excluding Interstate Travel**

Travel			
Vehicle Miles of Travel (VMT) @			
	19.7	6.7	
Other Arterial Rural	356,437,241,650	40,123,037,750	396,560,279,400
Other Rural	348,080,891,010	28,852,429,199	376,933,320,209
Other Urban	1,414,612,160,557	62,088,922,445	1,476,701,083,001
Total	2,119,130,293,217	131,064,389,393	2,250,194,682,610
Fuel Consumed			
	Gallons @ 19.7 mpg	Gallons @ 6.7 mpg	
Other Arterial Rural	18,093,260,997	5,988,513,097	24,081,774,094
Other Rural	17,669,080,762	4,306,332,716	21,975,413,478
Other Urban	71,807,723,886	9,267,003,350	81,074,727,236
Total	107,570,065,645	19,561,849,163	127,131,914,808

Percent VMT	
@ 19.7 mpg	@ 6.7 mpg
90%	10%
92%	8%
96%	4%
94%	6%

Total Mileage and Fuel	
2,250,195	miles (millions)
127,132	gallons (millions)
17.70	mpg

Source: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics 2005*, Section V, Table VM-1 - Annual Vehicle Distance Traveled in Miles and Related Data - 2005 by Highway Category and Vehicle Type

Table D-14
Annual Vehicle Distance Traveled In Miles and Related Data- By Highway Category and Vehicle Type ⁽¹⁾

YEAR	ITEM	PASSENGER CARS	MOTOR-CYCLES	BUSES	OTHER 2-AXLE 4-TIRE VEHICLES 2/	SINGLE-UNIT 2-AXLE 6-TIRE OR MORE TRUCKS 3/	COMBINATION TRUCKS	SUBTOTALS		ALL MOTOR VEHICLES
								PASSENGER CARS AND OTHER 2-AXLE 4-TIRE VEHICLES	SINGLE-UNIT 2-AXLE 6-TIRE OR MORE AND COMBINATION TRUCKS	
2005	Motor-Vehicle Travel: (millions of vehicle-miles)									
2004	Interstate Rural	122,470	1,433	971	82,208	7,758	43,950	204,679	51,708	258,790
2005	Other Arterial Rural	129,415	1,354	999	83,181	7,713	43,583	212,596	51,296	266,245
2004	Other Rural	208,127	1,411	961	148,310	14,102	26,021	356,437	40,123	398,932
2005		217,495	1,435	992	148,802	14,276	26,414	366,297	40,690	409,413
2004		208,472	1,624	1,658	139,609	14,716	14,136	348,081	28,852	380,215
2004		217,599	1,593	1,700	142,532	15,028	14,316	360,131	29,344	392,768
2005	All Rural	539,070	4,467	3,589	370,127	36,577	84,107	909,197	120,683	1,037,937
2004		564,509	4,381	3,691	374,515	37,017	84,313	939,024	121,330	1,068,426
2005	Interstate Urban	259,602	2,296	964	166,144	10,492	29,572	425,746	40,063	469,070
2004	Other Urban	258,666	2,089	986	155,714	9,729	28,355	414,379	38,083	455,538
2005		891,293	4,006	2,093	523,319	32,105	29,984	1,414,612	62,089	1,482,800
2004		876,715	3,652	2,124	496,935	31,696	29,702	1,373,651	61,398	1,440,824
2005	All Urban	1,150,895	6,302	3,057	689,463	42,597	59,556	1,840,359	102,152	1,951,870
2004		1,135,381	5,741	3,110	652,649	41,424	58,056	1,788,030	99,481	1,896,362
2005	Total Rural and Urban	1,689,965	10,770	6,646	1,059,590	79,174	143,662	2,749,555	222,836	2,989,807
2004		1,699,890	10,122	6,801	1,027,164	78,441	142,370	2,727,054	220,811	2,964,788
2005	Number of motor vehicles registered 4/	136,568,083	6,227,146	807,053	95,336,839	6,395,240	2,086,759	231,904,922	8,481,999	247,421,120
2004		136,430,651	5,767,934	795,274	91,845,327	6,161,028	2,010,335	228,275,978	8,171,364	243,010,550
2005	Average miles traveled per vehicle	12,375	1,729	8,235	11,114	12,380	68,845	11,856	26,272	12,084
2004		12,460	1,755	8,552	11,184	12,732	70,819	11,946	27,023	12,200
2005	Person-miles of travel 5/ (millions)	2,670,145	13,677	140,910	1,836,988	79,174	143,662	4,507,133	222,836	4,884,557
2004		2,685,827	12,855	144,188	1,780,771	78,441	142,370	4,466,598	220,811	4,844,452
2005	Fuel consumed 6/ (thousand gallons)	73,870,371	215,393	1,329,254	65,419,170	9,042,283	24,410,512	139,289,541	33,452,796	174,286,984
2004		75,401,891	202,447	1,360,178	63,417,148	8,958,622	24,190,904	138,819,039	33,149,526	173,531,190
2005	Average fuel consumption per vehicle (gallons) 6/	541	35	1,647	686	1,414	11,698	601	3,944	704
2004		553	35	1,710	690	1,454	12,033	608	4,057	714
2005	Average miles traveled per gallon of fuel consumed 6/	22.9	50.0	5.0	16.2	8.8	5.9	19.7	6.7	17.2
2004		22.5	50.0	5.0	16.2	8.8	5.9	19.6	6.7	17.1

1/ The 50 states and the District of Columbia report travel by highway category, number of motor vehicles registered, and total fuel consumed. The travel and fuel data by vehicle type and stratification of trucks are estimated by the Federal Highway Administration (FHWA). Entries for 2004 may have been revised based on the availability of more current data. Estimation procedures include use of State-supplied data, the 2002 Census of Transportation Vehicle Inventory and Use Survey (VIUS), and other sources. Some States may still be using 1990 Census-based urbanized area boundaries which may in turn affect highway data by category.

2/ Other 2-Axle 4-Tire Vehicles which are not passenger cars. These include vans, pickup trucks, and sport/utility vehicles.

3/ Single-Unit 2-Axle 6-Tire or More Trucks on a single frame with at least two axles and six tires.

4/ Truck registration figures are from tables MV-1 and MV-9 with truck distribution estimated by the FHWA using the 2002 VIUS.

5/ Vehicle occupancy is estimated by the FHWA from the 2001 National Household Travel Survey (NHTS) with nominal values for heavy trucks.

6/ Total fuel consumption figures are from tables MF-21 and MF-27. Distribution by vehicle type is estimated by the FHWA based on miles per gallon for both diesel and gasoline powered vehicles using State-supplied data, the 2002 VIUS, and other sources with nominal values for motorcycles and buses (revised).

APPENDIX E

Analysis of Travel Behavior of Low-Income Households

Appendix E

Analysis of the Travel Behavior of Low-Income Households

Because of continued concern that the existing trip rate for the smallest Single Family (Detached) subcategory (i.e., Less than 1,500 s.f.) may not be representative of income-restricted households, an analysis was completed on the travel behavior of lower income households. This analysis utilized data from the 2001 National Household Travel Survey (NHTS) and the 2003 American Housing Survey (AHS) to examine the overall trip-making characteristics of low-income households in the United States.

Table E-1 presents the existing trip characteristics being utilized in the current adopted impact fee schedule for the Single Family (Detached) subcategory. The 2001 NHTS database was used to assess average annual household vehicle miles of travel (VMT) for various annual household income levels. In addition, the 2003 AHS database was used to compare median annual family/household incomes with housing unit size. It is important to recognize that the use of the income variable in each of these databases is completed simply to provide a convenient linking mechanism between household VMT from the NHTS and housing unit size from the AHS.

The results of the analyses of these two sources are included in Tables E-2 and E-4. First, the data shown in Table E-2 indicate that the median income in the U.S. for families/households living in housing units smaller than 1,500 square feet in size (\$33,178) is significantly lower than even the overall median income for the U.S. (\$46,849). Then, in Table E-4, annual average household VMT was calculated from the NHTS database for a number of different income levels and ranges related to the resulting AHS income data in Table E-2 and the Lake County SHIP definitions for low income (<\$45,900) and very low income (<\$28,700) households, as shown in Table E-3.

The results of these analyses indicate that the most logical income-restricted categories to utilize in conjunction with the smallest Single Family (Detached) housing unit size is the less-than-\$45,900 (i.e. median of \$22,950 category from Table E-4) the less-than-\$28,700 (i.e. median of \$14,350 category from Table E-4) segments. In order to calculate a corresponding trip rate for this new subcategory, however, it was necessary to rely on comparative ratios. First, it was determined that the average annual household VMT for the median income level of the less-than-\$45,900 (median of \$22,950 category from Table E-4) segment is 16,592 miles. This figure was then compared to the overall average annual VMT per household in the U.S., normalized to the median-of-\$55,638 (28,195 miles)

category to derive a ratio of 0.589. Next, this ratio was applied to the daily VMT for the average Single Family (Detached) housing unit size (i.e., 1,500 to 2,499 s.f.) to generate a daily VMT of 43.19 for the new subcategory, as shown in Table E-5. This daily VMT figure was then divided by the proposed assessable trip length of 8.4 miles to obtain a typical trip rate of 5.14 trips per day.¹

It should be noted that a second income-restricted subcategory was derived for the Single Family (Detached) residential land use category, as well: Less than 1,500 s.f. and Annual Household Income less than \$28,700 (using the normalized ratio to the mean for the median of \$14,350 income category from Table E-4). The travel rate calculations for this subcategory are the same as that described previously for the other new subcategory. The calculated daily trip rate for this subcategory is 3.53 trips.

Then, these two trip rates were placed in the impact fee schedule to generate a net impact fee value for the new “income-restricted” subcategories.

Table E-6 illustrates the impact that the incorporation of the low-income tiers for the Single Family (Detached) land use has on the County’s proposed impact fee schedule. As shown in the table, the net impact fee for a housing unit of less than 1,500 square feet and very low income is \$4,595. The net impact fee for a housing unit of less than 1,500 square feet and low income is \$6,689.

¹ Recommended trip length is assumed to be 8.40 miles based on the trip characteristics studies performed in Lake County.

Table E-1

Proposed Values Excluding Tiering	Recommended		Daily	Ratio
	Trip Rate	Trip Length	VMT	to Mean
Single Family (Detached)	8.73	8.40	73.33	1.00

Source: Proposed Lake Transportation Impact Fee Schedule.

Table E-2

2003 AHS Median Income Data by Housing Unit Size (US)	Annual Income
Less than 1,500 sf	\$33,178
1,500 to 2,499 sf	\$55,638
2,500 sf or more	\$76,157
Total	\$46,849

Source: American Housing Survey for the United States in 2003, U.S. Census Bureau, Table 2-18.

Table E-3

Lake County SHIP Definitions
Low income ---> Less than \$45,900
Very low income ---> Less than \$28,700

Source: Florida Housing Finance Corporation, 2006 Income Limits-SHIP (4 Person Household).
<http://www.floridahousing.org/Home/PropertyOwnersManagers/IncomeLimits.htm>
 for the Orlando MSA

Table E-4

2001 NHTS Travel Data by Annual HH Income (US)	Annual VMT/HH	Days	Daily VMT	Ratio to Mean	Normalized to 1.184
Median of \$14,350	11,379	365	31.18	0.478	0.404
Median of \$22,950	16,592	365	45.46	0.697	0.589
Median of \$33,178	20,179	365	55.28	0.847	0.715
Mean ---> Total	23,815	365	65.25	1.000	
Median of \$55,638	28,195	365	77.25	1.184	1.000
Median of \$76,157	31,210	365	85.51	1.311	1.107

Source: 2001 National Household Travel Survey Database, Federal Highway Administration.

Table E-5

Estimation of Trip Rate By Tier	Recommended		Daily	Ratio
	Trip Rate	Trip Length	VMT	to Mean
Single Family (Detached)				
Less than 1,500 sf and very low income	3.53	8.40	29.63	0.404
Less than 1,500 sf and low income	5.14	8.40	43.19	0.589
Mean ---> 1,500 to 2,499 sf	8.73	8.40	73.33	1.000

Table E-6

Impact of Tiering on Fee Schedule	Recommended		Daily	Net
	Trip Rate	Trip Length	VMT	Fee
Single Family (Detached)				
Less than 1,500 sf and very low income	3.53	8.40	29.63	\$4,595
Less than 1,500 sf and low income	5.14	8.40	43.19	\$6,689
Mean ---> 1,500 to 2,499 sf	8.73	8.40	73.33	\$11,352

APPENDIX F

Proposed Lake County Transportation Impact Fee Schedule

**Table F-1
Proposed Lake County Transportation Impact Fee Schedule**

Gasoline Tax:		Unit Construction Cost:	\$4,144,240		
\$\$ per gallon to capital:	\$0.223	County Sales Equiv:	\$0.015	Capacity per lane:	10,666
Facility life (years):	25	County Gas Equiv:	\$0.004	Fuel Efficiency:	17.70 mpg
Interest rate:	4.5%	State Gas Equiv:	\$0.204	Effective days per year:	365
				Toll Facility Adjustment Factor	1.69%

ITE LUC	Land Use	Unit	Recommended Trip Rate	Trip Rate Source	Recommended Trip Length	Assessable Trip Length	Trip Length Source	Recommended % New Trips	% New Trips Source	Total Impact Cost	Annual Gas Tax	Gas Tax Credit	Net Impact Fee	Current Fee	% Change
RESIDENTIAL:															
210	Single Family (Detached)														
	less than 1,500 s.f. and SHIP defined very low income	du	3.53	Local Studies (NPTS,AHS, Census)	8.40	8.90	Local Studies	100%	Local Studies	\$5,663	\$72	\$1,068	\$4,595	N/A	N/A
	less than 1,500 and SHIP defined low income	du	5.14	Local Studies (NPTS,AHS, Census)	8.40	8.90	Local Studies	100%	Local Studies	\$8,246	\$105	\$1,557	\$6,689	N/A	N/A
	Single Family/Mobile Home	du	8.73	Local Studies (NPTS,AHS, Census)	8.40	8.90	Local Studies	100%	Local Studies	\$14,006	\$179	\$2,654	\$11,352	\$2,189	419%
220	Apartments/Multi-Family	du	6.33	Blend of ITE 7th & FL Studies.	5.35	5.85	FL Studies	100%	Local Studies	\$6,468	\$85	\$1,260	\$5,208	\$1,408	270%
240	Mobile Home Park	du	4.67	Blend of ITE 7th & FL Studies.	4.60	5.10	FL Studies	100%	N/C - 2001 Study	\$4,103	\$55	\$816	\$3,287	\$859	283%
N/A	Active Adult Community	du	3.81	Blend of ITE 7th & FL Studies.	6.90	7.40	FL Studies	100%	FL Studies	\$5,021	\$65	\$964	\$4,057	\$1,153	252%
252	ALF	du	3.31	Blend of ITE 7th & FL Studies.	3.28	3.78	FL Studies	72%	FL Studies	\$1,493	\$21	\$311	\$1,182	\$309	283%
LODGING:															
310	Hotel	room	8.30	Blend of ITE 7th & FL Studies.	8.38	8.88	FL Studies (adjusted)	66%	FL Studies	\$8,806	\$112	\$1,661	\$7,145	\$1,446	394%
320	Motel	room	5.63	ITE 7th Edition	5.72	6.22	FL Studies (adjusted)	77%	FL Studies	\$4,717	\$62	\$919	\$3,798	\$774	391%
416	Campground/RV Park	site	3.70	ITE 7th Edition	6.12	6.62	2001 Study (Adjusted)	77%	N/C - 2001 Study	\$3,329	\$43	\$638	\$2,691	\$536	402%
RECREATION:															
412	General Recreation	acre	2.28	ITE 7th Edition	6.04	6.54	2001 Study (Adjusted)	90%	N/C - 2001 Study	\$2,366	\$31	\$460	\$1,906	\$388	391%
420	Marina	berth	2.96	ITE 7th Edition	7.58	8.08	2001 Study (Adjusted)	94%	N/C - 2001 Study	\$4,029	\$52	\$771	\$3,258	\$668	388%
430	Golf Course	hole	35.74	ITE 7th Edition	6.52	7.02	2001 Study (Adjusted)	90%	N/C - 2001 Study	\$40,036	\$519	\$7,696	\$32,340	\$6,594	390%
437	Bowling Alley	1,000 sf	33.33	ITE 7th Edition	6.52	7.02	2001 Study (Adjusted)	94%	N/C - 2001 Study	\$38,996	\$505	\$7,488	\$31,508	\$6,286	401%
435	Multi-Purpose Recreational Facility	acre	90.38	ITE 7th Edition	6.52	7.02	2001 Study (Adjusted)	90%	N/C - 2001 Study	\$101,245	\$1,312	\$19,455	\$81,790	N/A	N/A
491	Racquet/Tennis Club	1,000 sf	14.03	ITE 7th Edition	6.52	7.02	2001 Study (Adjusted)	94%	FL Studies	\$16,415	\$213	\$3,158	\$13,257	\$3,303	N/A
492	Health Club/Dance Studio	1,000 sf	32.93	ITE 7th Edition	6.52	7.02	2001 Study (Adjusted)	94%	Same as LUC 491	\$38,528	\$499	\$7,399	\$31,129	\$3,303	842%
495	Community Recreation Center	1,000 sf	22.88	ITE 7th Edition	6.04	6.54	2001 Study (Adjusted)	90%	N/C - 2001 Study	\$23,747	\$310	\$4,597	\$19,150	\$3,895	392%

Table F-1 (continued)
Proposed Lake County Transportation Impact Fee Schedule

ITE LUC	Land Use	Unit	Recommended Trip Rate	Trip Rate Source	Recommended Trip Length	Assessable Trip Length	Trip Length Source	Recommended % New Trips	% New Trips Source	Total Impact Cost	Annual Gas Tax	Gas Tax Credit	Net Impact Fee	Current Fee	% Change
INSTITUTIONS:															
520	Elementary School (Private)	student	1.29	ITE 7th Edition	6.98	7.48	2001 Study (Adjusted)	80%	N/C - 2001 Study	\$1,376	\$18	\$267	\$1,109	\$180	516%
522	Middle School (Private)	student	1.62	ITE 7th Edition	6.98	7.48	2001 Study (Adjusted)	90%	N/C - 2001 Study	\$1,945	\$25	\$371	\$1,574	\$287	448%
530	High School (Private)	student	1.71	ITE 7th Edition	6.98	7.48	2001 Study (Adjusted)	90%	N/C - 2001 Study	\$2,053	\$26	\$386	\$1,667	\$355	370%
540	University/Junior College (7,500 or fewer students) (Private)	student	2.00	ITE Regression Analysis	8.58	9.08	2001 Study (Adjusted)	90%	N/C - 2001 Study	\$2,949	\$38	\$563	\$2,386	\$357	568%
550	University/Junior College (more than 7,500 students) (Private)	student	1.50	ITE Regression Analysis	8.58	9.08	2001 Study (Adjusted)	90%	N/C - 2001 Study	\$2,212	\$28	\$415	\$1,797	\$552	226%
560	Church	1,000 sf	9.11	ITE 7th Edition	5.19	5.69	2001 Study (Adjusted)	90%	N/C - 2001 Study	\$8,122	\$107	\$1,587	\$6,535	\$1,322	394%
565	Day Care	1,000 sf	75.07	Blend of ITE 7th & FL Studies.	2.66	3.16	FL Studies (adjusted)	73%	FL Studies	\$27,917	\$399	\$5,916	\$22,001	\$4,507	388%
590	Library	1,000 sf	71.33	ITE 7th Edition	2.51	3.01	2001 Study (Adjusted)	82%	N/C - 2001 Study	\$28,084	\$405	\$6,005	\$22,079	\$4,265	418%
610	Hospital	1,000 sf	17.57	ITE 7th Edition	6.04	6.54	2001 Study (Adjusted)	77%	N/C - 2001 Study	\$15,602	\$203	\$3,010	\$12,592	\$2,444	415%
620	Nursing Home	bed	2.48	Blend of ITE 7th & FL Studies.	3.46	3.96	FL Studies (adjusted)	89%	FL Studies	\$1,458	\$20	\$297	\$1,161	\$242	380%
730	Government Office Building - Municipal	1,000 sf	19.92	2003 Local Lake County Studies	7.87	8.37	2003 Local Lake County Studies	95%	2003 Local Lake County Studies	\$28,445	\$364	\$5,397	\$23,048	\$4,304	436%
733	Government Office Building - County	1,000 sf	27.92	ITE 7th Edition	12.50	13.00	2003 Local Lake County Studies	96%	2003 Local Lake County Studies	\$63,989	\$801	\$11,877	\$52,112	\$8,711	498%
N/A	Fire Station	1,000 sf	9.62	2003 Local Lake County Studies	12.35	12.85	2003 Local Lake County Studies	100%	2003 Local Lake County Studies	\$22,691	\$284	\$4,211	\$18,480	\$2,494	641%
OFFICE:															
710	Office 50,000 sf or less ⁽¹⁾	1,000 sf	15.65	ITE 7th Equation	6.92	7.42	FL Studies (adjusted)	92%	FL Studies	\$19,018	\$246	\$3,648	\$15,370	\$2,833	443%
710	Office 50,001-100,000 sf ⁽²⁾	1,000 sf	14.25	ITE 7th Equation	6.92	7.42	FL Studies (adjusted)	92%	FL Studies	\$17,317	\$224	\$3,322	\$13,995	\$2,833	394%
710	Office 100,001-200,000 sf ⁽²⁾	1,000 sf	12.15	ITE 7th Equation	6.92	7.42	FL Studies (adjusted)	92%	FL Studies	\$14,765	\$191	\$2,832	\$11,933	\$2,110	466%
710	Office 200,001-400,000 sf ⁽²⁾	1,000 sf	10.36	ITE 7th Equation	6.92	7.42	FL Studies (adjusted)	92%	FL Studies	\$12,590	\$163	\$2,417	\$10,173	\$2,110	382%
710	Office greater than 400,000 sf ⁽²⁾	1,000 sf	8.83	ITE 7th Equation	6.92	7.42	FL Studies (adjusted)	92%	FL Studies	\$10,730	\$139	\$2,061	\$8,669	\$1,722	403%
715	Single Tenant Office Building	1,000 sf	11.57	ITE 7th Edition	9.18	9.68	FL Studies (adjusted)	92%	N/C - 2001 Study	\$18,657	\$237	\$3,514	\$15,143	\$2,275	566%
760	Research Center	1,000 sf	8.11	ITE 7th Edition	7.18	7.68	2001 Study (Adjusted)	82%	N/C - 2001 Study	\$9,122	\$117	\$1,735	\$7,387	\$1,508	390%
720	Medical Office/Clinic	1,000 sf	35.95	Blend of ITE 7th & FL Studies.	7.32	7.82	FL Studies (adjusted)	89%	FL Studies	\$44,650	\$574	\$8,511	\$36,139	\$6,717	438%
770	Business Park	1,000 sf	12.98	Blend of ITE 7th & FL Studies.	7.18	7.68	FL Studies (adjusted)	89%	FL Studies	\$15,810	\$204	\$3,025	\$12,785	\$2,373	439%

Table F-1 (continued)
Proposed Lake County Transportation Impact Fee Schedule

ITE LUC	Land Use	Unit	Recommended Trip Rate	Trip Rate Source	Recommended Trip Length	Assessable Trip Length	Trip Length Source	Recommended % New Trips	% New Trips Source	Total Impact Cost	Annual Gas Tax	Gas Tax Credit	Net Impact Fee	Current Fee	% Change
GENERAL COMMERCIAL:															
820	Retail 50,000 sf or less ⁽¹⁾	1,000 sf	86.56	ITE 7th equation	2.66	3.16	FL Curve (adjusted)	55%	FL Curve	\$24,186	\$346	\$5,131	\$19,055	\$2,816	577%
820	Retail 50,001-200,000 sf ⁽²⁾	1,000 sf	62.81	ITE 7th equation	3.35	3.85	FL Curve (adjusted)	62%	FL Curve	\$24,931	\$345	\$5,116	\$19,815	\$2,177	810%
820	Retail 200,001-400,000 sf ⁽²⁾	1,000 sf	46.23	ITE 7th equation	3.54	4.04	FL Curve (adjusted)	69%	FL Curve	\$21,555	\$296	\$4,389	\$17,166	\$2,171	691%
820	Retail greater than 400,000 sf ⁽²⁾	1,000 sf	36.27	ITE 7th equation	3.88	4.38	FL Curve (adjusted)	76%	FL Curve	\$20,448	\$278	\$4,122	\$16,326	\$2,385	585%
RETAIL / SERVICES:															
444	Movie Theaters	screen	106.63	Blend of ITE 7th & FL Studies.	2.93	3.43	FL Studies (adjusted)	88%	FL Studies	\$52,319	\$737	\$10,928	\$41,391	\$11,552	258%
812	Building Materials and Lumber	1,000 sf	45.16	ITE 7th Edition	8.38	8.88	FL Studies (adjusted)	74%	FL Studies	\$53,769	\$686	\$10,172	\$43,597	\$5,930	635%
813	Free-Standing Discount Superstore (greater than 120,000 sf)	1,000 sf	49.86	Blend of ITE 7th & FL Studies.	2.93	3.43	2001 Study (Adjusted)	73%	N/C - 2001 Study	\$20,340	\$287	\$4,256	\$16,084	\$2,969	442%
815	Free-Standing Discount Store (less than or equal to 120,000 sf)	1,000 sf	56.02	ITE 7th Edition	2.93	3.43	2001 Study (Adjusted)	73%	N/C - 2001 Study	\$22,853	\$322	\$4,775	\$18,078	\$3,580	405%
816	Hardware/Paint Store	1,000 sf	51.29	ITE 7th Edition	8.25	8.75	2001 Study (Adjusted)	74%	N/C - 2001 Study	\$59,775	\$763	\$11,314	\$48,461	\$9,939	388%
817	Retail (Stand-Alone) Nursery/Garden Center	acre	96.21	ITE 7th Edition	8.11	8.61	2001 Study (Adjusted)	74%	N/C - 2001 Study	\$110,318	\$1,410	\$20,908	\$89,410	N/A	N/A
841	New/Used Auto Sales	1,000 sf	32.93	Blend of ITE 7th & FL Studies.	6.25	6.75	FL Studies (adjusted)	79%	FL Studies	\$31,058	\$404	\$5,991	\$25,067	\$5,742	337%
850	Supermarket	1,000 sf	103.38	Blend of ITE 7th & FL Studies.	2.79	3.29	FL Studies (adjusted)	56%	FL Studies	\$30,882	\$438	\$6,495	\$24,387	\$4,952	392%
853	Convenience Store with Gas Pumps	1,000 sf	775.14	Blend of ITE 7th & FL Studies.	2.00	2.50	FL Studies (adjusted)	28%	FL Studies	\$82,697	\$1,245	\$18,461	\$64,236	\$14,834	333%
862	Home Improvement Superstore	1,000 sf	29.80	ITE 7th Edition	2.93	3.43	Same as LUC 813	92%	Same as LUC 813	\$15,321	\$216	\$3,203	\$12,118	\$4,034	200%
881	Pharmacy/Drug Store w/ Drive-Thru	1,000 sf	95.21	Blend of ITE 7th & FL Studies.	2.79	3.29	FL Studies (adjusted)	33%	FL Studies	\$16,760	\$238	\$3,529	\$13,231	\$3,915	238%
890	Furniture Store	1,000 sf	5.06	ITE 7th Edition	8.11	8.61	FL Studies (adjusted)	54%	FL Studies	\$4,234	\$54	\$801	\$3,433	\$704	388%
912	Bank/Savings Drive-in	1,000 sf	281.55	Blend of ITE 7th & FL Studies.	3.33	3.83	FL Studies (adjusted)	46%	FL Studies	\$82,246	\$1,139	\$16,889	\$65,357	\$12,207	435%
931	Quality Restaurant	1,000 sf	91.10	Blend of ITE 7th & FL Studies.	4.12	4.62	FL Studies (adjusted)	77%	FL Studies	\$55,022	\$743	\$11,017	\$44,005	\$8,731	404%
932	High-Turnover Restaurant	1,000 sf	126.50	Blend of ITE 7th & FL Studies.	4.26	4.76	FL Studies (adjusted)	71%	FL Studies	\$72,801	\$979	\$14,517	\$58,284	\$11,422	410%
934	Fast Food Rest w/ Drive-Thru	1,000 sf	522.62	Blend of ITE 7th & FL Studies.	3.19	3.69	FL Studies (adjusted)	58%	FL Studies	\$184,794	\$2,573	\$38,153	\$146,641	\$17,706	728%
936	Bar / Lounge / Drinking Place	1,000 sf	113.40	ITE 7th Edition	3.99	4.49	2001 Study (Adjusted)	72%	N/C - 2001 Study	\$62,220	\$843	\$12,500	\$49,720	\$11,422	335%
941	Quick Lube	service bay	40.00	ITE 7th Edition	4.39	4.89	2001 Study (Adjusted)	72%	N/C - 2001 Study	\$24,142	\$324	\$4,804	\$19,338	\$3,884	398%

**Table F-1 (continued)
Proposed Lake County Transportation Impact Fee Schedule**

ITE LUC	Land Use	Unit	Recommended Trip Rate	Trip Rate Source	Recommended Trip Length	Assessable Trip Length	Trip Length Source	Recommended % New Trips	% New Trips Source	Total Impact Cost	Annual Gas Tax	Gas Tax Credit	Net Impact Fee	Current Fee	% Change
RETAIL / SERVICES:															
942	Auto Repair or Body Shop	1,000 sf	34.12	Blend of ITE 7th & FL Studies.	4.79	5.29	FL Studies (adjusted)	72%	FL Studies	\$22,465	\$299	\$4,434	\$18,031	\$4,010	350%
944	Gas/Service Station	fuel pos	168.56	ITE 7th Edition	2.53	3.03	FL Studies (adjusted)	23%	FL Studies	\$18,711	\$270	\$4,004	\$14,707	\$2,080	607%
947	Self-Service Car Wash	service bay	108.00	ITE 7th Edition	2.66	3.16	FL Studies (adjusted)	76%	FL Studies	\$41,699	\$596	\$8,838	\$32,861	\$5,973	450%
N/A	Conv'ce/Gasoline/Fast Food Store	1,000 sf	984.59	FL Studies	3.46	3.96	FL Studies (adjusted)	32%	FL Studies	\$208,085	\$2,867	\$42,512	\$165,573	\$32,865	404%
N/A	Stand-Alone Meeting Facility w/Catering	1,000 sf	14.53	N/C - Same as 2001 Study	8.11	8.61	2001 Study (Adjusted)	90%	N/C - 2001 Study	\$20,263	\$259	\$3,841	\$16,422	\$3,368	388%
N/A	Veterinarian Clinic	1,000 sf	32.80	N/C - Same as 2001 Study	2.66	3.16	2001 Study (Adjusted)	70%	N/C - 2001 Study	\$11,664	\$167	\$2,476	\$9,188	\$1,788	414%
INDUSTRY:															
110	General Light Industrial	1,000 sf	6.97	ITE 7th Edition	11.14	11.64	N/C - 2001 Study	92%	N/C - 2001 Study	\$13,643	\$172	\$2,550	\$11,093	\$2,157	414%
120	General Heavy Industrial	1,000 sf	1.50	ITE 7th Edition	11.14	11.64	N/C - 2001 Study	92%	N/C - 2001 Study	\$2,936	\$37	\$549	\$2,387	\$464	414%
140	Manufacturing	1,000 sf	3.82	ITE 7th Edition	11.14	11.64	N/C - 2001 Study	92%	N/C - 2001 Study	\$7,477	\$94	\$1,394	\$6,083	\$1,182	415%
150	Warehouse	1,000 sf	4.96	ITE 7th Edition	11.14	11.64	N/C - 2001 Study	92%	N/C - 2001 Study	\$9,709	\$122	\$1,809	\$7,900	\$1,535	415%
151	Mini-Warehouse	1,000 sf	2.50	ITE 7th Edition	4.37	4.87	N/C - 2001 Study	92%	N/C - 2001 Study	\$1,920	\$26	\$386	\$1,534	\$290	429%
152	High Cube Warehouse	1,000 sf	1.20	ITE 7th Edition	15.90	16.40	N/C - 2001 Study	92%	N/C - 2001 Study	\$3,353	\$42	\$623	\$2,730	\$535	410%
170	Utilities Building	1,000 sf	8.00	ITE 7th Edition	11.14	11.64	N/C - 2001 Study	92%	N/C - 2001 Study	\$15,659	\$197	\$2,921	\$12,738	\$1,535	730%
N/A	Airport Hanger	1,000 sf	4.96	N/C - Same as 2001 Study	11.14	11.64	N/C - 2001 Study	92%	N/C - 2001 Study	\$9,709	\$122	\$1,809	\$7,900	\$1,684	369%

- (1) The trip generation rate recommended for the office and retail less than 50,000 sf categories used the end-point of 50,000
- (2) The trip generation rate recommended for all other office and retail tiered categories used the mid-point of each tier of the respective category
- (3) The trip length was determined using a relationship between the VMT for the retail 200,001 - 400,000 tier. This is due to the comparable size of home improvement stores to this size category.