

ROAD IMPACT FEE UPDATE

LEE COUNTY, FLORIDA



prepared by

duncan associates

In association with

CRSPE, Inc.

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INTRODUCTION

The purpose of this study is to update Lee County's road impact fees. The road impact fees were originally adopted in 1985. The fee schedules were updated in 1989, 1990 and again in 2000. The current road impact fee schedule is based on a previous study by Duncan Associates.¹

Impact fees are most appropriate for communities experiencing rapid growth. During the last decade, the County's population grew by approximately 32 percent, significantly higher than the 24 percent growth experienced by the state as a whole. The population of the unincorporated area in 2000 was 17 percent higher than it was in 1990, even after subtracting the population of Fort Myers Beach and Bonita Springs, both of which incorporated during the last decade.

Table 1
LEE COUNTY POPULATION GROWTH, 1990-2000

Jurisdiction	Population		% of 2000	
	1990	2000	Population	Growth
Bonita Springs (1)	n/a	32,914	7.5%	n/a
Cape Coral	74,991	102,206	23.2%	36.3%
Fort Myers	45,206	48,046	10.9%	6.3%
Fort Myers Beach (2)	n/a	6,539	1.5%	n/a
Sanibel	5,468	6,042	1.4%	10.5%
Unincorporated	209,448	245,141	55.6%	17.0%
Total County	335,113	440,888	100.0%	31.6%

Notes: (1) Incorporated on January 1, 2000; (2) Incorporated on January 1, 1996
Source: 1990 and 2000 U.S. Census.

The County's road impact fee program applies more or less throughout the County, except within the City of Cape Coral. Cape Coral has adopted a completely independent road impact fee system. All other municipalities currently participate in the County road impact fee system to some extent.

There are currently eight road impact fee benefit districts in the unincorporated area of the County in which fees are collected. As the permitting authority by interlocal agreement, the County also collects road impact fees for the Town of Fort Myers Beach and the City of Bonita Springs. Both of these municipalities have modeled their road impact fee ordinances on the County's road impact fee ordinance, including the fee schedule, and have entered into agreements allowing the County to collect the impact fees as part of the permitting process. The County remits collected impact fee funds to the two municipalities on a quarterly basis.

In contrast, the City of Sanibel and the City of Fort Myers have not adopted their own road impact fee ordinances, but instead have entered into interlocal agreements with the County to collect and administer the County's road impact fees within their respective jurisdictions. These two municipalities retain the impact fees they collect and spend them within their corporate limits.

¹ Duncan Associates and Chris R. Swenson, P.E., *Road Impact Fee Update for Lee County, Florida*, April 2000.

Over the last two years, the County's total road impact fee revenue for the unincorporated area, including both actual fees collected and credits for developer contributions, totaled about \$30 million, as summarized in Table 2. The municipalities of Fort Myers, Fort Myers Beach and Bonita Springs essentially apply the County's road impact fee schedule within their jurisdictions, and they collected an additional \$11 million over the last two years (Sanibel's impact fee collections are minimal and are not shown).

Most of the County's road impact fee revenue is collected in two benefit districts: District 3 and District 4, which are located east and south of Fort Myers, respectively. The cities of Fort Myers and Bonita Springs also collect a significant amount of revenue.

Table 2
ROAD IMPACT FEE REVENUE, FY 2000/01 AND FY 2001/02

Benefit District	Fees	Credits	Total
1) Fort Myers Area, Unincorporated	\$442,057	\$283,955	\$726,012
2) Lee County, North	\$1,125,204	\$279,864	\$1,405,068
3) Lee County, East	\$9,910,255	\$1,379,658	\$11,289,913
4) Lee County, South	\$9,911,959	\$4,579,430	\$14,491,389
5) Lee County, West	\$824,475	\$4,872	\$829,347
6) Captiva	\$122,612	\$0	\$122,612
7) Boca Grande	\$49,020	\$0	\$49,020
8) Bonita Springs Area, Unincorporated	\$897,685	\$0	\$897,685
Subtotal, Lee County Revenue	\$23,283,267	\$6,527,779	\$29,811,046
City of Fort Myers	\$1,810,690	\$2,051,132	\$3,861,822
Town of Fort Myers Beach	\$335,816	\$0	\$335,816
City of Bonita Springs	\$6,971,566	\$229,949	\$7,201,515
Subtotal, Participating Municipalities	\$9,118,072	\$2,281,081	\$11,399,153
Total Road Impact Fee Revenue	\$32,401,339	\$8,808,860	\$41,210,199

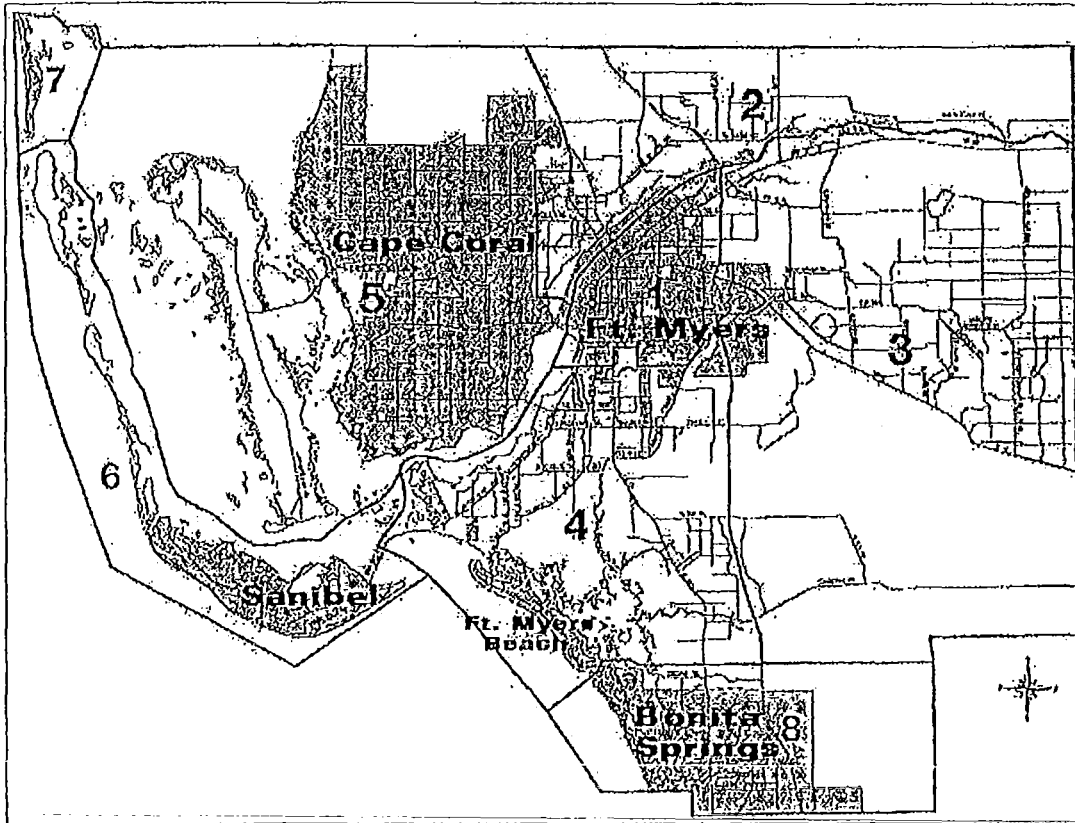
Source: Lee County Impact Administrator, January 22, 2003 facsimile and City of Fort Myers, December 4, 2002 memorandum; "fees" represent fees actually paid; "credits" represent developer credits used to offset the impact fees that otherwise would have been charged.

BENEFIT DISTRICTS

In an impact fee system, it is important to clearly define the geographic areas within which impact fees will be collected and within which the fees collected will be spent. There are really two types of geographic areas that serve different functions in an impact fee system: assessment districts and benefit districts. Assessment districts, which may also be called service areas, define the area within which a set of common capital facilities provides service, and for which a fee schedule based on average costs within that district is calculated. Benefit districts, on the other hand, represent an area within which the fees collected must be spent. They ensure that improvements funded with impact fees are constructed within reasonable proximity of the fee-paying developments as a means of helping to ensure that fee-paying developments benefit from the improvements.

Currently, the County is divided into eight benefit districts for the road impact fees. The current benefit districts are shown in Figure 1. These districts have not been revised since they were originally established in 1985.

Figure 1
CURRENT BENEFIT DISTRICTS



Due to several changes since the benefit districts were established, the County might want to consider reducing the number of districts and reconfiguring them somewhat. While changing the district boundaries would create some administrative work, it should not be overly burdensome. Basically, the County would need to spend funds already collected according to the existing district boundaries, but any new fee collections would be earmarked into the new districts.

One alternative would be to expand the boundaries of District 1. This district was originally intended to encompass the City of Fort Myers, but since it also includes some unincorporated area, it also functions as a Lee County benefit district. Now that the City has annexed beyond District 1 into the two adjacent districts (3 and 4), it does not make much sense either for the City or the County. District 1 could be replaced by a new Central district bounded by Daniels Parkway/SR 82 on the south and the Caloosahatchee River on the north. The enlarged Central benefit district would include all of Fort Myers' corporate area as well as the unincorporated area to the east.

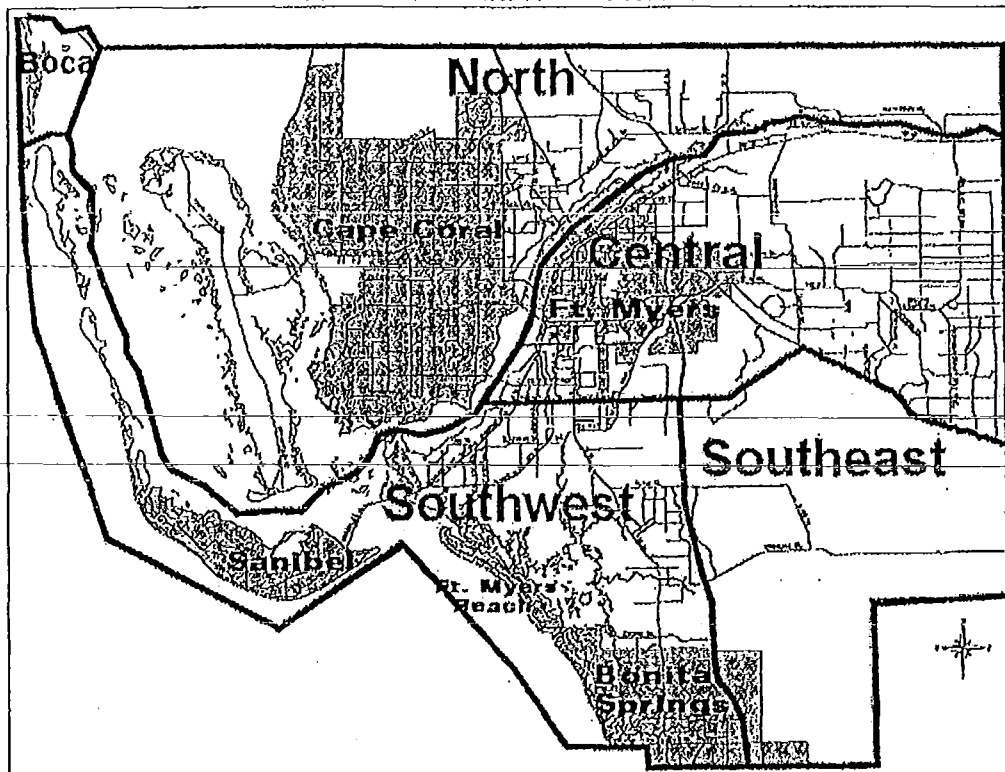
Another change that has taken place since the benefit districts were originally established is the incorporation of Bonita Springs, comprising most of District 8. The remaining incorporated area of District 8 could reasonably be merged into Districts 3 and 4 by extending I-75, which is a significant barrier to east/west movement in the rural parts of the county. To the part of District 3 remaining from the expansion of the Central district could be added the portion of District 8 (Bonita Springs area) east of I-75 to create a new Southeast benefit district.

To the part of District 4 remaining from the expansion of the Central district could be added the portion of District 8 (Bonita Springs area) west of I-75. In addition, it could also be combined with District 6 (Sanibel/Captiva area), a combination that makes sense because the Sanibel Causeway and Summerlin Road form the main corridor through the two districts.

Districts 2 and 5 could reasonably be combined into a new North benefit district. This consolidated district would encompass all the unincorporated area north of the Caloosahatchee River. Since the river is a major barrier to the movement of motor vehicles, it is a logical benefit district boundary.

Finally, there have been no changes that would warrant changes to the boundaries of District 7, which could be renamed the Boca Grande benefit district. In sum, it is recommended that the current eight benefits be reconfigured and reduced to five. The proposed benefit district boundaries are illustrated in Figure 2.

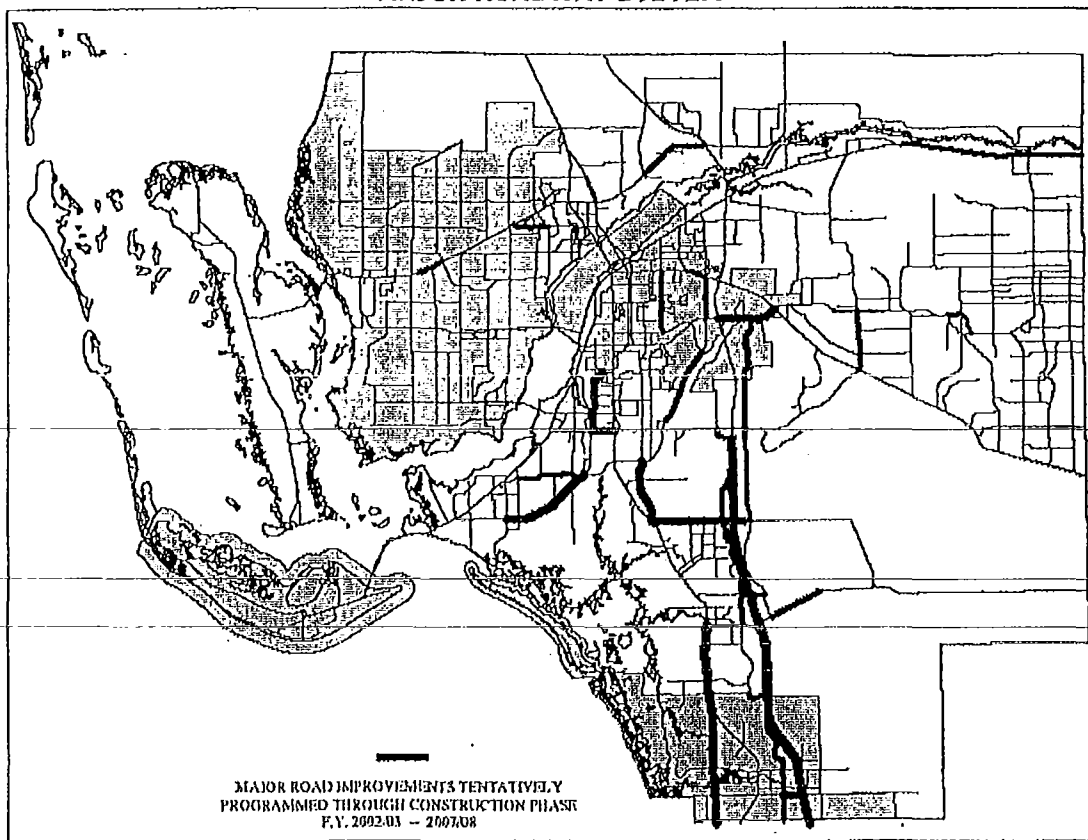
Figure 2
PROPOSED BENEFIT DISTRICTS



MAJOR ROADWAY SYSTEM

A road impact fee program should include a clear definition of the major roadway system that is to be funded with the impact fees. The County's road impact fee ordinance defines the major roadway system implicitly in its definition of "approved roads" for which credit against the road impact fees is authorized. Approved roads consist of all arterials, collectors, freeways and expressways, as well as designated access roads. Approved roads are divided into three classes, which determine the extent to which developers who improve them are eligible for credit. Class 1 roads are those included for improvement in the County five-year Capital Improvements Program (CIP), Class 2 roads are those scheduled for improvement within the next ten years, and Class 3 roads are those shown on the functional classification map, but which are not programmed for improvement within the next ten years. The division of the major roadway system into classes is intended to prevent premature development in areas not a priority for major road improvements from essentially monopolizing the expenditure of impact fee funds through the credit mechanism. The County's major roadway system is illustrated in Figure 3, which also indicates the location of major planned road improvements.

Figure 3
MAJOR ROADWAY SYSTEM



An inventory of the existing major roadway system was prepared as part of this update and is presented in Table 20 of the Appendix. The major purpose of the inventory is to determine the total amount of travel on the major roadway system, expressed in vehicle-miles of travel (VMT). This figure is used to calibrate national travel demand factors to local conditions. A summary of the major roadway system is presented in Table 3 below.

Table 3
EXISTING TRAVEL ON MAJOR ROADWAY SYSTEM

	Miles	Daily VMT
I-75	34.1	2,218,144
State Arterials	128.4	3,496,491
County Arterials*	258.3	4,089,198
County Collectors*	73.4	352,887
City of Fort Myers	19.2	292,388
City of Cape Coral	104.0	869,097
City of Sanibel	20.6	140,808
Total	638.0	11,459,013

* Includes some roads belonging to Fort Myers Beach and Bonita Springs
Source: Table 20 of the Appendix; daily VMT is annual average daily trips (AADT)
adjusted to represent peak season volumes.

SERVICE UNIT

A service unit creates the link between supply (roadway capacity) and demand (traffic generated by new development). An appropriate service unit basis for road impact fees is vehicle-miles of travel (VMT). Vehicle-miles is a combination of the number of vehicles traveling during a given time period and the distance (in miles) that these vehicles travel.

The two time periods most often used in traffic analysis are the 24-hour day (average daily trips or ADT) and the single hour of the day with the highest traffic volume (peak hour trips or PHT). Lee County's current road impact fee system is based on ADT. The regional transportation model is also based on ADT. However, the County's comprehensive plan sets forth desired level of service standards that are based on PHT.

The County's peak hour traffic characteristics reflect the area's retirement and tourist orientation and are significantly different from national averages. For example, approximately eight percent of average daily traffic on the County's major roadways occurs during the afternoon peak hour, compared to a national average of about ten percent. Peak hour trip generation rates based on national data may not be representative of all land uses in Lee County. On the other hand, studies in Lee County have shown that national average daily trip generation rates are more representative of Lee County. For this reason, we recommend continuing to base the County's road impact fees on average daily trip generation. Consequently, average daily VMT will be used as the service unit for the road impact fee update.

METHODOLOGY

As with the previous update, the proposed road impact fee methodology is based on a "demand-driven" model, which basically charges a new development the cost of replacing the capacity that it consumes on the major roadway system. That is, for every vehicle-mile of travel (VMT) generated by the development, the road impact fee charges the net cost to construct an additional vehicle-mile of capacity (VMC).

Since travel is never evenly distributed throughout a roadway system, actual roadway systems require more than one unit of capacity for every unit of demand in order for the system to function at an acceptable level of service. Suppose for example, that the County completes a major arterial widening project. The completed arterial is likely to have a significant amount of excess capacity for some period of time. If the entire system has just enough capacity to accommodate all of the vehicle-miles of travel, then the excess capacity on this segment must be balanced by another segment being over-capacity. Clearly, roadway systems in the real world need more total aggregate capacity than the total aggregate demand, because the traffic does not always precisely match the available capacity. Consequently, the standard demand-driven model generally underestimates the full cost of accommodating new development at the existing level of service. Nevertheless, it is a conservative, legally-defensible approach that has been upheld by the Florida courts, and this update recommends that the basic formula be retained.

In most rapidly growing communities, some roadways will be experiencing an unacceptable level of congestion at any given point in time. One of the principles of impact fees is that new development should not be charged for a higher level of service than is provided to existing development. In the context of road impact fees, this has sometimes been interpreted to mean that impact fees should not be spent on roadways that are already over-capacity. Actually, it is not necessary to address existing deficiencies in a demand-driven system, which, unlike an improvements-driven system, is not really designed to recover the full costs to maintain the desired LOS on all roadway segments. Instead, it is only designed to maintain a minimum one-to-one overall ratio between system demand and system capacity. Virtually all major roadway systems have more capacity (VMC) than demand (VMT) on a system-wide basis. Consequently, under a demand-driven system, the level of service standard is really a systemwide VMC/VMT ratio of one. Since the County's major roadway system currently operates at better than this LOS, there are no existing deficiencies on a system-wide basis.

The recommended impact fee formula is presented in Figure 3.

**Figure 3
ROAD IMPACT FORMULA**

IMPACT FEE	=	VTM x NET COST/VTM
<u>Where:</u>		
VTM	=	ADT x % NEW x LENGTH x ADJUST ÷ 2
ADT	=	Trip ends during average weekday
% NEW	=	Percent of trips that are primary trips, as opposed to passby or diverted-link trips
LENGTH	=	Average length of a trip on the major roadway system
ADJUST	=	Adjustment factor to calibrate national travel demand factors to local conditions
÷ 2	=	Avoids double-counting trips for origin and destination
NET COST/VTM	=	COST/VTM - CREDIT/VTM
COST/VTM	=	COST/LANE-MILE ÷ AVG LANE CAPACITY
COST/LANE-MILE	=	Average cost to add a new lane to the major roadway system
AVG LANE CAPACITY	=	Average daily capacity of a lane at desired LOS
CREDIT/VTM	=	\$/GAL ÷ MPG x 365 x NPV
\$/GAL	=	Capacity-expanding funding for roads per gallon of gasoline consumed
MPG	=	Miles per gallon, average for U.S. motor vehicle fleet
365	=	Days per year (used to convert daily VTM to annual VTM)
NPV	=	Net present value factor (i.e., 12.79 for 20 years at 4.7% discount)

ROADWAY CAPACITY

Nationally-accepted transportation level of service (LOS) categories have been developed by the transportation engineering profession. Six categories, ranging from LOS A to LOS F, generally describe driving conditions in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. LOS A represents free flow, while LOS F represents the breakdown of traffic flow, characterized by stop-and-go conditions.

In contrast to LOS, service volume capacity is a quantitative measure, expressed in terms of the rate of flow (vehicles passing a point during a period of time). Service volume capacity represents the maximum rate of flow that can be accommodated by a particular type of roadway while still maintaining a specified LOS. The service volume capacity at LOS E represents that maximum volume that can be accommodated before the flow breaks down into stop-and-go conditions that characterize LOS F, and thus represents the ultimate capacity of the roadway.

The analysis of the capacity of Lee County's major roadway system has been based on the generalized planning capacity estimates promulgated by the Florida Department of Transportation (FDOT), as modified by Lee County based on local data. These capacity estimates are based on Highway Capacity Manual procedures and take into consideration roadway cross-sections, left turn bays at intersections, posted speed limits, the spacing of signalized intersections and the characteristics of the area (i.e., rural, rural developed, transitioning to urban and urbanized).

The generalized capacity estimates developed for planning purposes by Lee County are hourly capacities, rather than average daily capacities. These capacities are essentially the same for LOS D and LOS E, since the capacities of the intersections have already been reached by the time the segment volumes reach LOS D. The hourly capacity numbers also contain a directional split (D) factor. The D factor used in the generalized Lee County calculations is 0.58 (which represents a typical peak hour directional split of 58% in the dominant direction and 42% in the opposite direction).

Average daily capacities are calculated by applying a specific peak hour factor to the peak hour capacity. To convert from peak hour to daily capacity, the hourly capacity is divided by the percentage of daily travel occurring in the peak hour. In the case where AM and PM peaks differ, the higher peak is used.

For area-wide planning numbers, such as are used in impact fees, a generalized peak factor, usually borrowed from another community, is often used. However, the *Lee County Traffic Count Report* contains the peaking characteristics for multiple permanent count stations in the County. This allows application of appropriate peaking characteristics to each project used in the cost calculations, and also defends against any charges that Lee County's peaking characteristics are unique due to the retiree population. Where the capacity improvement is planned on an existing transportation facility, the count station assigned to the facility in the *Lee County Traffic Count Report* was used. For new facilities, the count station judged to be the most likely to reflect traffic peaking characteristics on the new facility was used.

The average capacity per new lane-mile is determined based on the same set of improvements used to determine the average cost per lane-mile. In the 2000 update, all of the road improvements used to determine the average cost and capacity per new lane-mile were drawn from the Lee County Capital Improvements Program.

It would be reasonable, however, to base the fees on the cost to add capacity to the major roadway system in Lee County, regardless of whether the capacity is added to County or State roads. The County is increasingly participating in the cost of State road improvements in Lee County. The travel demand used to calculate the fees in this update include travel on State roads as well as County roads. Finally, motor fuel tax credits are provided for the portion of gasoline taxes that are used to fund State road improvements.

For these reasons, it is reasonable to include the cost of State road improvements in determining the average cost to add capacity to the major roadway system. Including State road improvement costs will bring the impact fees closer to the true cost of accommodating the impacts of growth on the major roadway system in Lee County. However, because including State road costs has a significant effect on the fee, two alternative fees will be calculated, one based on County planned road improvements only, and the other based on both County and State planned road improvements. While the higher fees based on the inclusion of state roads are the maximum fees that can be supported by this update, the County Commissioners may choose to impose the lower fees based on only County road costs, or to use this lower fee schedule in a gradual phase-in of the maximum fees.

The average cost to add capacity to the major roadway system is determined by examining County roadway improvements listed in Lee County's *FY 2002/20002-2006/2007 Capital Improvements Program* and State roadway improvements listed in the Florida Department of Transportation's *District One Adopted Work Program, FY 2003/2004-2007/08*. In all, capacity-expanding projects adding approximately

1,715,051 vehicle-miles of capacity (VMC) to the major roadway system are under construction or in the planning process in Lee County (see Table 4).

Table 4
CAPACITY ADDED BY PLANNED IMPROVEMENT PROJECTS

		New	Lane	Pk Hr Capacity		New	Pk Hr	New	New	New
Roadway	Segment	Miles	Lanes	Miles	Before	After	Factor	Daily Capacity	Daily VMC	
Colonial Blvd	I-75 to SR 82	2.50	2	5.00	3,490	5,240	1,750	0.08	21,875	54,688
Cypress Lake	Summerlin to US 41	0.90	2	1.80	3,490	5,240	1,750	0.08	21,875	19,688
Gladlolus Dr	Winkler to Bass Rd	0.80	4	3.20	1,660	5,240	3,580	0.07	51,143	40,914
Gladlolus Dr	Bass Rd to Pine Rldge	1.50	2	3.00	1,660	3,490	1,830	0.07	26,143	39,215
Bass Rd	Healthpark to Gladlolus	0.80	2	1.60	1,660	3,490	1,830	0.07	26,143	20,914
Gunnery Rd	SR 82 to Lee	2.20	2	4.40	1,660	3,490	1,830	0.09	20,333	44,733
Imperial St	BB Rd to E Terry	1.00	2	2.00	1,660	3,490	1,830	0.08	22,875	22,875
Koreshan Ext.	Three Oaks to Ben Hill	0.70	4	2.80	0	3,490	3,490	0.08	43,625	30,537
Ortlz Ave	SR 884 to SR 82	1.70	2	3.40	1,660	3,490	1,830	0.09	20,333	34,566
Palmetto Conn.	Idlewld to SR 884	1.00	2	2.00	0	1,660	1,660	0.07	23,714	23,714
Six Mi Cypress Pk	Daniels to Winkler Ext	2.30	2	4.60	1,660	3,490	1,830	0.09	20,333	46,766
Summerlin Rd	Boy Scout to University	2.40	2	4.80	3,490	5,240	1,750	0.08	21,875	52,500
Summerlin Rd	San Carlos to Gladlolus	4.26	2	8.52	3,490	5,240	1,750	0.07	25,000	106,500
Winkler Rd	Summerlin to Gladlolus	0.40	2	0.80	1,660	3,490	1,830	0.07	26,143	10,457
Gladlolus	Winkler to Summerlin	0.44	2	0.88	1,660	3,490	1,830	0.07	26,143	11,503
Three Oaks Ext.	N of Allico to Daniels	3.51	4	14.04	0	3,490	3,490	0.09	38,778	136,111
Three Oaks Ext.	E Terry to Brooks	4.15	4	16.60	0	3,490	3,490	0.08	43,625	181,044
Three Oaks	Corkscrew to Allico	4.60	2	9.20	1,660	3,490	1,830	0.08	22,875	105,225
Treeline Ext.	Daniels to Termination	1.50	2	3.00	1,660	3,490	1,830	0.07	26,143	39,215
Treeline Ext.	Termination to Colonial	2.90	4	11.60	0	3,490	3,490	0.07	49,857	144,585
Subtotal, County Road Projects		39.56		103.24						1,165,750
SR 739	US 41 to Allico	0.24	4	0.96	0	3,490	3,490	0.08	43,625	10,470
SR 739	Allico to Six Mile	3.25	6	19.50	0	5,240	5,240	0.08	65,500	212,875
SR 739	Six Mile to Daniels	1.26	4	5.03	1,660	5,240	3,580	0.08	44,750	56,251
SR 739	Daniels to Winkler	4.05	2	8.11	3,490	5,240	1,750	0.08	21,875	88,659
SR 78	Slaters to I75	2.25	2	4.49	1,660	3,490	1,830	0.08	22,875	51,377
SR 78	Chiquita to Santa Barb	1.87	2	3.74	1,660	3,490	1,830	0.08	22,875	42,731
US 41	Collier Co to BB Rd	1.31	2	2.62	3,490	5,240	1,750	0.07	25,000	32,775
US 41	Corkscrew to San Car	2.48	2	4.95	3,490	5,240	1,750	0.08	21,875	54,163
Total		56.26		152.64						1,715,051

Source: Projects from Lee County, FY 02/03-06/07 Capital Improvements Program and Florida Department of Transportation, District One Draft Tentative Work Program, FY 2003/2004-2007/08, October 21, 2002; Lee County Metropolitan Planning Organization, 2020 Transportation Plan, adopted December 8, 2000, amended January 17, 2003; peak hour capacities are LOS D/E from Lee County Generalized Two-Way Peak Hour Service Volumes, July 2000; new daily capacity is new peak hour capacity divided by peak hour factor; new daily VMC is new daily capacity times segment miles.

To calculate the average daily capacity per new lane-mile, the total new daily VMC for all listed capacity-expanding projects is divided by the total number of new lane-miles that will be constructed as a result of the capacity-expanding improvements. As shown in Table 5, the average daily capacity per new lane-mile, for both LOS D and LOS E, will be about 11,236 vehicles per day for this representative set of planned road improvements. If only County road improvements are considered, the capacity added per lane-mile is slightly higher.

**Table 5
AVERAGE DAILY CAPACITY PER NEW LANE**

	County Road Projects	County & State Road Projects
New Daily Vehicle-miles of Capacity (VMC)	1,165,750	1,715,051
New Lane-miles	103.24	152.64
Average Capacity per New Lane-mile	11,292	11,236

Source: New daily VMC and new lane-miles from Table 4.

COST PER SERVICE UNIT

One of the key inputs into the road impact fee formula is the cost per lane-mile to construct new roadway capacity. While the most obvious component of roadway construction is the physical roadway itself, other elements are involved, all of which add to the cost to the project. Included in the consideration of new roadway costs for Lee County are professional services (such as planning, and design), actual construction costs, right-of-way (land) costs, and other costs, which, in Lee County, primarily consist of costs for environmental mitigation, but may also include elements such as utility relocation.

The average cost per new lane-mile is determined using the same set of improvements used to determine the average capacity per new lane-mile. In a demand-driven impact fee system, roadway construction costs are entered into the formula as an average cost for providing new roadway capacity. Using this method, assuming there are no dramatic changes to the type of construction contemplated in the County, it is not necessary to revisit impact fees each time that the capital improvement program changes. Updates at reasonable periodic intervals are sufficient to analyze potential changes to average costs.

In the 2000 update, all of the road improvements used to determine the average cost per lane-mile were drawn from the Lee County Capital Improvements Program. In this update, 39 of the total project costs are for State road projects. For the reasons enumerated in the previous section, it is reasonable to include the cost of State road improvements in determining the average cost to add capacity to the major roadway system. There is also precedent for doing so. While many Florida road impact fee ordinances allow fee revenues to be spent on State road projects, several other counties have adopted a fee based on a study that explicitly includes the costs of State road projects. Lake County's road impact fees are based on State road projects,² although they were discounted by 36 percent so that they were approximately what they would have been had they been based exclusively on County road projects.

² From Tindale-Oliver and Associates, *Lake County Transportation Impact Fee Study*, December 2001, p. 9-5: "The average cost of building roads in Lake County should be used in the impact fee equation regardless of whether the road being built is state or county. The cost to build a lane mile of road in Lake County is based on historical data that includes both state and county roads. The fee can be reduced by an across the board discount of a specified percentage via a policy decision by the Board of County Commissioners (BCC). However, using a construction cost that only includes County road costs ignores the fact that approximately 64 percent of the future vehicle miles of travel occurring in Lake County are projected to occur on the state highway system.... Including state costs in the impact fee cost component gives the County greater flexibility in the expenditure of impact fee funds and places the County in a stronger position to continue the practice of spending impact fees on state road projects. If only County costs were included in the impact fee cost component, the County could be challenged if it wanted to spend impact fees on state road projects. As growth continues to occur, improvements to state roads will become more critical. A number of counties use impact fee funds on state projects to accelerate and leverage state projects that benefit their county."

Another county to explicitly include State road costs is Sumter County, which included the portion of the cost of State road improvements not covered by State funding. In addition, a number of jurisdictions have implicitly included State road costs by basing the fees on Florida Department of Transportation generalized per mile cost estimates, including Palm Beach County, St. Lucie County, Miami-Dade County, Broward County and the City of Orlando. However, because including State road costs has a significant effect on the fee, two alternative fees will be calculated, one based on County road costs only, and the other based on both County and State road costs.

The capacity-expanding improvement projects identified in the County's CIP and FDOT's Lee County work program for the next five years are summarized in Table 6. These projects will add approximately 153 new lane-miles, with the costs for these projects totaling \$305.5 million.

Table 6
PLANNED IMPROVEMENT PROJECT COSTS

Roadway	Segment	Miles	Lanes			Lane-miles	Cost
			Ex.	Fut.	New		
Colonial Blvd	I-75 to SR 82	2.50	4	6	2	5.00	\$5,306,000
Cypress Lake	Summerlin to US 41	0.90	4	6	2	1.80	\$3,310,000
Gladiolus Dr	Winkler to Bass	0.80	2	6	4	3.20	
Gladiolus Dr	Bass to Pine Ridge	1.50	2	4	2	3.00	\$12,482,000
Bass Rd	Healthpark to Gladiolus	0.80	2	4	2	1.60	
Gunnery Rd	SR 82 to Lee	2.20	2	4	2	4.40	\$9,371,000
Imperial St	Bonita Bch Rd to E Terry	1.00	2	4	2	2.00	\$11,977,000
Koreshan Ext.	Three Oaks to Ben Hill	0.70	0	4	4	2.80	\$18,740,000
Ortiz Ave	SR 884 to SR 82	1.70	2	4	2	3.40	\$6,248,000
Palmetto Conn.	Idlewild to SR 884	1.00	0	2	2	2.00	\$3,915,000
Six Mi Cypress Pk	Daniels to Winkler Ext	2.30	2	4	2	4.60	\$5,014,000
Summerlin Rd	Boy Scout to University	2.40	4	6	2	4.80	\$18,784,000
Summerlin Rd	San Carlos to Gladiolus	4.26	4	6	2	8.52	
Winkler Rd	Summerlin to Gladiolus	0.40	2	4	2	0.80	\$17,315,000
Gladiolus	Winkler to Summerlin	0.44	4	6	2	0.88	
Three Oaks Ext.	N of Allico to Daniels	3.51	0	4	4	14.04	\$15,654,000
Three Oaks Ext.	E Terry to Brooks	4.15	0	4	4	16.60	\$33,181,069
Three Oaks	Corkscrew to Allico	4.60	2	4	2	9.20	\$12,378,000
Treeline Ext.	Daniels to Termination	1.50	2	4	2	3.00	
Treeline Ext.	Termination to Colonial	2.90	0	4	4	11.60	\$13,062,000
Subtotal, County Road Projects		39.56				103.24	\$186,737,069
SR 739	US 41 to Allico	0.24	0	4	4	0.96	
SR 739	Allico to Six Mile Cypress Pkwy	3.25	0	6	6	19.50	\$41,885,000
SR 739	Six Mile Cypress Pkwy to Daniels	1.26	2	6	4	5.03	\$8,754,000
SR 739	Daniels to Winkler	4.05	4	6	2	8.11	\$24,783,000
SR 78	E of Slater to I-75	2.25	2	4	2	4.49	\$12,299,158
SR 78	Chiquita to Santa Barbara	1.87	2	4	2	3.74	\$7,291,475
US 41	Coller Co to Bonita Beach Rd	1.31	4	6	2	2.62	\$7,413,221
US 41	Corkscrew to San Carlos	2.48	4	6	2	4.95	\$16,296,000
Total		56.26				152.64	\$305,458,923

Source: Lee County, FY 2002/03-2006/07 Capital Improvements Program; Florida Department of Transportation, District One Five Year Adopted Work Program, FY July 1, 2002 Through June 30, 2007; District One Draft Tentative Work Program, FY 2003/2004-2007/08, October 21, 2002; Lee County Metropolitan Planning Organization, 2020 Transportation Plan, adopted December 8, 2000, amended January 17, 2003.

The average cost per unit of capacity added by the planned improvements can be determined by first dividing the total cost by the total added capacity, resulting in an average cost for a new lane-mile. This ranges from \$1.8 million to \$2.0 million per lane-mile for County and combined County/State road improvements, respectively. The cost per VMT is then calculated by dividing the average cost of a new lane-mile by the average daily capacity added per lane. As shown in Table 7, the average cost per service unit ranges from \$160 per VMT for County road improvements to \$178 per VMT for County and State improvements.

Table 7
ROAD COST PER SERVICE UNIT

	County Projects	County/State Projects
Planned Improvement Project Costs	\$186,737,069	\$305,458,923
New Lane-Miles	103.24	152.636
Average Cost per New Lane-Mile	\$1,808,767	\$2,001,225
Average Capacity per New Lane-Mile	11,292	11,236
Average Cost per Vehicle-Mile of Travel (VMT)	\$160	\$178

Source: Planned Improvement project costs and new lane-miles from Table 6; average capacity per new lane-mile from Table 5.

REVENUE CREDITS

In the calculation of the impact of new development on infrastructure costs, credit should be given for revenues that will be generated by new development and used to pay for capacity-related capital improvements. In Lee County, capacity-expanding road improvements are funded almost exclusively with road impact fees and Federal, State and local gasoline and motor fuel taxes. There is some outstanding County debt for past road improvements, but these bonds are being retired with the County's gas tax receipts.

In the calculation of this road impact fee, credit must be given for that portion of Federal, State and local fuel taxes that are being used to fund capacity-expanding capital improvements on the major roadway system in Lee County.

The amount of Federal and State motor fuel tax revenue that is applied toward funding capacity-expanding capital improvements is determined based on construction and right-of-way projects in the first year of each of the last five Florida Department of Transportation Five-Year Work Programs for Lee County, as shown in Table 8 below.

Table 8
FEDERAL/STATE FUEL TAX CAPACITY FUNDING, FY 99/00 - FY 03/04

Facility	Improvement	FY 99/00	FY 00/01	FY 01/02	FY 02/03	FY 03/04
I-75 @ Allico Rd	Interchange Imp	\$345,000			\$14,564,000	\$218,000
I-75 @ Daniels Parkway	Interchange Imp				\$2,500,000	
I-75 @ Bonita Beach Rd	Interchange Imp	\$89,000				
I-75, Bonita Beach-Corkscrew	Add Lanes				\$3,200,000	
I-75 @ Corkscrew	Interchange Imp				\$2,500,000	
I-75, Corkscrew-Daniels Parkway	Add Lanes				\$3,100,000	
I-75 @ Colonial, Northbound Ramp	Interchange Imp				\$1,080,312	
I-75 @ Colonial, Southbound Ramp	Interchange Imp				\$1,382,997	
SR 739, Winkler-Hanson	New Road Ext.			\$4,421,000		
SR 739, US 41-Six Mile Cypress	New Road Ext.			\$14,367,000	\$310,000	\$38,187,000
SR 739, Winkler Ave-SR 82	Add Lanes					
SR 739, Hanson-SR 82	Add Lanes				\$2,321,500	\$53,000
SR 739, Fowler-SR 82	Add Lanes			\$5,059,000		
SR 78 @ Burnt Store	Traffic Signals	\$25,000				
SR 78, E of Chiquita-W of S Barb	Add Lanes	\$1,300,000	\$989,000	\$5,365,000		\$495,000
SR 78, Hart Rd-Slater Rd	Add Lanes					
SR 78, Slater-I-75	Add Lanes	\$750,000	\$1,245,000	\$7,932,000	\$1,331,158	\$10,520,000
SR 78 @ Hancock Bridge Pkwy	Traffic Signals			\$150,000		
SR 80 @ I-75	Interchange Imp	\$52,000				
SR 80, E of Hickey Cr-Iverson	Add Lanes	\$1,162,000	\$25,000	\$1,100,000		
SR 80, Iverson-Hendry Co	Add Lanes	\$641,000		\$1,200,000		
SR 82, Sunshine-Green Meadow	Add Turn Lanes				\$304,646	
SR 82, Evans-Michigan Link	Add Lanes	\$2,660,000				
SR 82, Michigan-Ortiz Ave	Add Lanes	\$706,000		\$5,130,000		
SR 867, San Carlos-Southdale	Add Lanes	\$1,773,000				
SR 884 @ Ortiz Ave	Add Turn Lanes					\$10,000
US 41 Bus @ Littleton Rd	Add Turn Lanes	\$136,000				
US 41 Bus, Marianna-Littleton	Add Lanes			\$6,250,000	\$924,000	
US 41, Collier Co-Bonita Beach	Add Lanes			\$1,000,000	\$7,163,221	\$250,000
US 41, Bonita Beach-Old US 41	Add Lanes				\$16,805,180	
US 41, Old US 41-Corkscrew	Add Lanes				\$125,000	
US 41 @ Winkler Ave	Intersection Imp			\$160,000		
US 41, N of Is Park-S of Daniels	Add Lanes	\$613,000				
US 41, S of Allico-N of Is Park	Add Lanes	\$374,000				
US 41, San Carlos-Allico Rd	Widen 2-4 Lanes	\$7,096,000				
US 41, Victoria-N of 1st St	Interchange Imp	\$373,000				
Pine Ridge @ SR 865	Add Turn Lanes					\$10,000
Palmetto Ave, Colonial- SR 82	New Road Ext.				\$5,000,000	
Veterans Mem, Pine-Midpoint	New Road Ext.				\$640,000	\$1,140,000
Total Capacity Funding		\$18,095,000	\$2,259,000	\$52,134,000	\$63,252,014	\$50,883,000

Source: Capacity-expanding Improvement funding from first years of Florida Department of Transportation, District One Adopted Work Programs, FY 1996/1997 - 2003/2004.

Total motor fuel tax revenues collected in Lee County for each year are estimated based on the gallons of motor fuels sold in Lee County and the Federal/State tax rate per gallon in effect at the time. On average over the five-year period, it is estimated that 35 percent of Federal and State motor fuel taxes collected in Lee County have been spent on capacity-expanding improvements to the major roadway system in the county, as shown in Table 9.

Table 9
PERCENT OF FEDERAL/STATE FUEL TAX FUNDING TO CAPACITY

Fiscal Year	Gallons Sold in Lee County	Fed./State Tax/gallon	Fed./State Taxes Paid	FDOT Capacity Funding	Percent Capacity
FY 1999-2000	251,345,016	\$0.365	\$91,740,931	\$18,095,000	20%
FY 2000-2001	258,930,423	\$0.368	\$95,286,396	\$2,259,000	2%
FY 2001-2002	271,876,944	\$0.373	\$101,410,100	\$52,134,000	51%
FY 2002-2003	285,470,791	\$0.378	\$107,907,959	\$63,252,014	59%
FY 2003-2004	299,744,331	\$0.381	\$114,202,590	\$50,883,000	45%
Five-Year Average					35%

Source: Total gallons of fuel sold in Lee County (includes gasoline and diesel) for FY 1996/97 through FY 2001/02 from the Florida Department of Revenue; estimated gallons for FY 2002/03 and 2003/04 based on annual increase of 5%; federal/state motor fuel tax per gallon from the Florida Legislative Committee on Intergovernmental Relations; FDOT capacity-expanding improvement funding from Table 8.

Based on that historical percentage and the current tax structure, it can be reasonably anticipated that approximately 13.3 cents of the 38.1 cents per gallon of Federal and State fuel taxes will be available in the future for capacity-expanding capital improvements (see Table 10 below).

As summarized in Table 10 below, local motor fuel taxes amount to 16 cents per gallon. The amount of local motor fuel tax that is applied towards capacity-expanding capital improvements is determined by looking at financial reports prepared by the State of Florida and Lee County.

The State imposes a 2-cent per gallon excise tax on motor fuels that is distributed to local governments. The original intent of the Constitutional Fuel Tax (also known as the 5th/6th Cent Fuel Tax) was to provide the necessary revenue to cover debt service managed by the Florida Board of Administration, with the remaining balance distributed to local governments. Approximately 20 percent of the Constitutional Fuel Tax revenue for Lee County is retained by the State to cover debt service for the for the 1973 Road/Bridge Bond Issue (Mantanzas Pass and Hurricane Bay Bridges). The remaining 80 percent is being remitted to the County, which has been spending it on the operation and maintenance of the existing major roadway system.³

The County Fuel Tax, also known as the 7th Cent Fuel Tax, is distributed to counties via the same distribution formula used for the Constitutional Fuel Tax, and the proceeds are used by Lee County solely for the operation and maintenance of the existing major roadway system.

³ In FY02/03, the State will receive an estimated \$4,992,359 in Constitutional Tax revenue, of which \$3,981,000 will be distributed to Lee County (from the Florida Legislative Committee on Intergovernmental Relations, 2002 *Local Government Financial Information Handbook*, "Constitutional Fuel Tax, Summary of Distributions by County, State Fiscal Year 2002/03," and the *Lee County Revenue Manual*, FY 2000/01).

The Municipal Fuel Tax, also known as the 8th Cent Fuel Tax, is joined with non-transportation revenues and distributed to the cities from the Revenue Sharing Trust Fund for Municipalities. This money is not earmarked for transportation purposes.

Local governments in Florida are authorized to levy up to 12 cents of local option fuel taxes in the form of three separate levies. All 12 cents of local option fuel taxes are authorized for Lee County. The County uses a portion of the local fuel tax to retire debt service on the 1993 and 1997 Series Gas Tax Bonds, with the remaining portion distributed among the county and municipal governments according to interlocal agreement or statutory formula.

The Six Cent Tax is a tax of six cents per gallon of motor and diesel fuel sold within the County. The entire six cents is pledged to retire the 1993 and 1997 Series Gas Tax Bonds. However, only two cents, or one-third, is actually used for debt service, with the excess going to the Transportation Capital Improvement Fund and informally earmarked for road resurfacing and rehabilitation.

The Five Cent Tax is a tax of five cents per gallon of motor and diesel fuel sold within the County. All of the five-cent local option gas tax revenues are used for capacity-expanding improvements. Approximately one-half is dedicated to debt service for East/West Corridor improvements associated with the Midpoint Memorial Bridge, while the other half is used for other capacity-expanding projects.

The 9th Cent Tax is a tax of one cent per gallon of motor and diesel fuel sold in the County. The County is not required to share the proceeds of the 9th Cent Tax with the municipalities, and the funds are only to be used for transportation purposes. Approximately 55 percent of the 9th Cent Tax revenues are used to retire debt service on the 1993 Series Gas Tax Bonds, with the balance used for the operation and maintenance of the existing major roadway system.⁴

The motor fuel tax credits per gallon are summarized in Table 9. For every gallon of gasoline sold in Lee County, motorists currently pay approximately 54 cents per gallon in motor fuel taxes. Of this, approximately 21 cents per gallon can be expected to be available for capacity-expanding improvements to the major roadway system in Lee County based on past experience, or about 39 percent of motor fuel taxes paid.

⁴ In 2001, Lee County received \$2,531,000 in 9th Cent Tax, of which \$1,147,635 was used to retire the debt service on the 1993 Series Gas Tax Bonds, with the balance used for the operation and maintenance of roadway system (from the *Lee County Revenue Manual, FY 2000/01* and the *Lee County Debt Manual, FY 2001*).

Table 10
MOTOR FUEL TAX CREDIT PER GALLON

Type of Motor Fuel Tax	Tax Rate/ Gallon	% to Capacity	Capacity \$/Gal.
Federal Motor Tax	\$0.184		
State Motor Tax	\$0.141		
State Comprehensive Enhanced Transportation (SCEETS) Tax	\$0.056		
Subtotal, Federal/State Motor Fuel Tax per Gallon	\$0.381	35%	\$0.133
5 th and 6 th Cent Tax (Constitutional Fuel Tax)	\$0.020	20%	\$0.004
7 th Cent Tax (County Fuel Tax)	\$0.010	0%	\$0.000
8 th Cent Tax (Municipal Fuel Tax)	\$0.010	0%	\$0.000
Six Cent Local Option Tax	\$0.060	33%	\$0.020
Five Cent Local Option Tax	\$0.050	100%	\$0.050
9 th Cent Tax	\$0.010	55%	\$0.006
Subtotal, Local Motor Fuel Tax per Gallon	\$0.160	50%	\$0.080
Total Motor Fuel Tax per Gallon	\$0.541	39%	\$0.213

Source: Federal, State and SCEETS tax rates per gallon as of January 1, 2003 from the Florida Department of Revenue; local fuel tax rates per gallon from Lee County Revenue Manual, FY 2000/01; percent federal/state capacity funding per gallon from Table 9; percent of Constitutional Fuel Tax for capacity derived from the Florida Legislative Committee on Intergovernmental Relations, 2002 Local Government Financial Information Handbook, "Constitutional Fuel Tax, Summary of Distributions by County, State Fiscal Year 2002/03" (<http://fcn.state.fl.us/lcfr/estimates/cofuel3.pdf>) and the Lee County Revenue Manual, FY 2000/2001; percentages for local motor fuel taxes derived from the Lee County Revenue Manual, FY 2000/2001 and the Lee County 2002 Debt Manual (<http://www.lee-county.com/online/documents.htm>).

Over the approximately 20-year useful life of road improvements, new development could be expected to generate approximately \$59 in capacity-expanding road funding for every daily vehicle-mile of travel, as shown in Table 11. This is the amount of credit that should be applied against the cost of accommodating the transportation demands of new development.

Table 11
FUEL TAX CREDIT PER SERVICE UNIT

Total Federal, State and Local Motor Fuel Tax Capacity-Expanding Improvement Funding per Gallon	\$0.213
Average Miles per Gallon	16.9
Capacity-Expanding Improvement Funding per Daily Vehicle-Mile	\$0.0126
Days per Year	365
Annual Capacity-Expanding Improvement Funding per Daily Vehicle-Mile	\$4.60
Net Present Value Factor (4.7% discount rate over 20 years)	12.79
Motor Fuel Tax Credit per Daily Vehicle-Mile of Travel (VMT)	\$59

Source: Motor fuel tax finding per gallon from Table 9; average miles per gallon is average for all motor vehicles for 1998 from US Census Bureau, Statistical Abstract of the United States, 2000, Tables 1049 and 1050; net present value based on 4.8% discount rate, which is the average interest rate on 20-year AAA municipal bonds cited on bloomberg.com, bondsonline.com and fmsbonds on April 14, 2003.

TRAVEL DEMAND

The travel demand generated by specific land use types is a product of three factors: 1) trip generation; 2) percent new trips; and 3) trip length.

TRIP GENERATION

Trip generation rates are based on information published in the most recent edition of the Institute of Transportation Engineers' (ITE) Trip Generation manual. Trip generation rates represent trip ends, or driveway crossings at the site of a land use. Thus, a single one-way trip from home to work counts as one trip end for the residence and one trip end for the work place, for a total of two trip ends. To avoid over-counting, all trip rates have been divided by two. This places the burden of travel equally between the origin and destination of the trip and eliminates double-charging for any particular trip. There have been a couple of local studies that have found trip rates for some uses that were significantly different from national average trip rates. Unfortunately, these studies had limited sample sizes and were conducted over ten years ago. Consequently, in most cases this study relies on more current national trip generation data.

NEW TRIP FACTOR

Trip rates also need to be adjusted by a "new trip factor" to exclude pass-by and diverted-link trips. This adjustment is intended to reduce the possibility of over-counting by only including primary trips generated by the development. Pass-by trips are those trips that are already on a particular route for a different purpose and simply stop at a particular development on that route. For example, a stop at a convenience store on the way home from the office is a pass-by trip for the convenience store. A pass-by trip does not create an additional burden on the street system and therefore should not be counted in the assessment of impact fees. A diverted-link trip is similar to a pass-by trip, but a diversion is made from the regular route to make an interim stop. The reduction for pass-by and diverted-link trips was drawn from ITE and other published information.

AVERAGE TRIP LENGTH

In the context of a road impact fee based on a demand-driven methodology, we are interested in determining the average length of a trip on the major roadway system within Lee County. In the previous road impact fee update, the consultant used national trip rate data and calibrated a local average trip length of 5.52 miles for Lee County. For this update, an analysis was conducted of origin-destination survey data collected at several major intersections in Lee County.⁵ The analysis found average trip lengths that were comparable to national average trip lengths. Based on this finding, the consultant and Lee County transportation staff decided that it would be better to use national data for both trip generation rates and average trip lengths, and to calibrate total VMT to local conditions using a new adjustment factor.

Table 12 below, shows national average trip lengths by trip purpose. The U.S. Department of Transportation's 2001 *National Household Travel Survey* identifies average trips lengths for specific trip purposes, including home-to-work trips, doctor/dentist, school/church, shopping, and other personal trips. In addition, an average residential trip length was calculated using a weighting of 40 percent work trips and 60 percent average trips, based on the assumption that a typical home would have two workers generating four trip ends of the approximately ten trip ends generated by a single-family unit during a week day.

⁵ CRSPE, Inc., *Lee County Trip Length Study*, January 2003

Table 12
AVERAGE TRIP LENGTH BY TRIP PURPOSE

Trip Purpose	Length (miles)
To or from work	12.19
Residential	10.77
Doctor/Dentist	9.89
Average	9.82
School/Church	7.50
Family/Personal	7.43
Shopping	6.61

Source: US. Department of Transportation, *National Household Travel Survey*, 2001; residential trip length is weighted 40% local work trip length and 60% average trip length.

LOCAL ADJUSTMENT FACTOR

The first step in developing the adjustment factor for local travel demand is to estimate the total daily vehicle-miles of travel (VMT) that would be expected on Lee County's major roadway system based on national travel demand characteristics. Existing land use data were compiled using information from the Lee County Property Appraiser for all jurisdictions in the County. Existing land uses are multiplied by average daily trip generation rates, percent of primary trips and average trip lengths and summed to estimate total county-wide VMT. As shown in Table 13, existing county-wide land uses, using national trip generation and trip length data, would be expected to generate approximately 17.3 million VMT every day.

Table 13
COUNTY-WIDE VEHICLE-MILES OF TRAVEL

Land Use Type	ITE Code	Unit	Existing Units	Trip Rate	Primary Trips	Daily Trips	Length (miles)	Daily VMT
Single-Family Detached	210	Dwelling	140,896	4.79	100%	674,892	10.77	7,268,585
Multi-Family	220	Dwelling	89,929	3.32	100%	298,564	10.77	3,215,537
Mobile Home/RV Park	240	Pad	26,782	2.40	100%	64,277	10.77	692,261
Hotel/Motel	310/320	Rooms	9,463	4.51	80%	34,143	10.77	367,715
Shop Center/Gen. Retail	820	1000 sq ft	31,649	21.46	62%	421,096	6.61	2,783,446
Bank	911	1000 sq ft	1,057	78.24	27%	22,329	6.61	147,594
Convenience Store w/Gas	851	1000 sq ft	939	369.00	16%	55,439	3.31	183,502
Movie Theater	443	1000 sq ft	1,535	39.03	50%	29,956	6.61	198,006
Restaurant, Sit-Down	831	1000 sq ft	2,189	44.98	38%	37,415	6.61	247,315
Restaurant, Fast Food	834	1000 sq ft	368	248.06	27%	24,647	3.31	81,582
Office, General	710	1000 sq ft	15,718	5.51	75%	64,955	9.82	637,855
Office, Medical	720	1000 sq ft	2,570	18.07	75%	34,830	9.89	344,468
Hospital	610	1000 sq ft	2,142	8.39	75%	13,479	9.89	133,303
Nursing Home	620	1000 sq ft	3,138	2.35	75%	5,531	9.89	54,699
Church	560	1000 sq ft	3,154	4.56	75%	10,787	7.50	80,900
Day Care Center	565	1000 sq ft	515	39.63	24%	4,898	7.50	36,737
Elementary/Sec. School	520/522/530	1000 sq ft	10,380	6.21	24%	15,470	7.50	116,028
Industrial Park	130	1000 sq ft	3,493	3.48	95%	11,548	10.77	124,370
Warehouse	150	1000 sq ft	20,276	2.48	95%	47,770	10.77	514,486
Mini-Warehouse	151	1000 sq ft	3,633	1.25	95%	4,314	10.77	46,464
Total						1,876,339		17,274,853

Source: Existing units from the Lee County Property Appraiser, August 2002; trip rates, primary trips and trip lengths from Table 16; daily trips is product of trip rate and primary trips; daily VMT is product of daily trips and trip length.

The next step in developing the local travel demand adjustment factor is to determine actual county-wide VMT on Lee County's major roadway system. As noted earlier, an inventory of the existing major roadway system was prepared as part of this update (see Table 20 of the Appendix). Roadway segment lengths, recent travel volumes and peak season factors are used to determine actual daily VMT.

The majority of the average daily traffic volumes for 2001 were obtained from Lee County's Department of Transportation and FDOT. The County monitors average daily traffic for all arterials maintained by the State or County. The 2001 traffic counts were supplied by the County to the consultant in digital format. These counts were supplemented by counts maintained by the City of Cape Coral. Lack of traffic counts for certain roadways in the City of Fort Myers required use of estimated volumes based on the judgment of the consultant, but these roadways make up a very small percentage of the total traffic in the County. Preliminary 2002 count data was compared with 2001 counts for selected intersections, and from this data it was determined that 2002 counts are on average 4.25 percent higher. This factor was used to adjust all counts to 2002 levels.

Counts provided by all agencies were average annual counts. However, there is a significant seasonal variation in traffic in Lee County, and it was necessary to convert average annual counts to peak season counts. As with capacity, conversion of the counts was based on the permanent count station assigned to a particular link. In the few cases where a count station has not been assigned, the count station judged to be the most likely to reflect traffic peaking characteristics on the new facility was used. As part of the reporting generated by the permanent count stations, variations in monthly traffic are calculated. These variations are reported as a percentage of traffic during a particular month as compared to average annual traffic. In Lee County, traffic is heaviest during February and March. For purposes of converting traffic to peak season, traffic characteristics for March were used. In the instances where March data was unavailable, data for February was used.

Once traffic counts were converted to peak season, conversion to total county-wide VMT was straightforward. Counts for each segment were multiplied by the centerline length of the segment to calculate VMT for the link. VMT for individual links were totaled to arrive at an actual county-wide VMT. The detailed count data, peaking factor and VMT for each roadway segment are presented in Table 20 of the Appendix.

Before the projected VMT could be compared to actual VMT, the actual VMT must be reduced by the amount of travel associated with "through trips" that do not have an origin or destination in the County. Data interpolated from the 1990 and 2020 regional travel demand models indicate that "external-to-external" trips are equivalent to 1.2 percent of trips generated within Lee County. However, since the area covered by the model extends beyond Lee County into adjoining counties, the model may be under-estimating the percent of through trips. To compensate for this, the percentage of through trips will be assumed to be twice as much as predicted by the model, or 2.4 percent. Applying this percentage to the number of trips estimated to be generated within Lee County by existing land use yields an estimate of through trips. Since the majority of through trips are likely to occur on I-75, multiplying through trips by the length of I-75 through the county provides a reasonable estimate of VMT associated with through traffic. Subtracting through trip VMT from total VMT results in the VMT associated with trips generated within the county. As shown in Table 14, locally-generated trips account for about 9.9 million VMT on the major roadway system every day.

Table 14
MAJOR ROADWAY SYSTEM TRAVEL DEMAND

Total Daily Trips Generated by Land Uses in Lee County	1,876,339
Percent Through Trips	2.40%
Daily Through Trips	45,032
Average Length of Through Trips (miles)	34.1
Daily Through Trip VMT	1,535,591
Total Daily VMT on Major Roadway System	11,459,013
Locally-Generated Daily VMT	9,923,422

Source: Total daily trips generated within Lee County from Table 13; percent trips through Lee County with no origin or destination in county estimated from regional travel demand model; average length of through trips based on length of I-75 through county; total daily VMT from Table 3.

Comparing the results of the last two tables, it can be seen that projected VMT using existing land use data and national travel demand characteristics significantly over-estimates VMT actually observed on the major roadway system. Consequently, it is necessary to develop an adjustment factor to account for this variation. The local travel demand adjustment factor is the ratio of actual to projected VMT on the major roadway system. As shown in Table 15, the average daily demand for each land use should be multiplied by a local adjustment factor of 0.57.

Table 15
LOCAL ADJUSTMENT FACTOR

Actual Daily Vehicle-miles of Travel (VMT)	9,923,422
Projected Daily Vehicle-miles of Travel (VMT)	17,274,853
Local Adjustment Factor	0.57

Source: Actual daily VMT from Table 3; projected daily VMT Table 13.

The result of combining trip generation rates, primary trip factors, average trip lengths and a local adjustment factor is a travel demand schedule that establishes the VMT during the average weekday generated by various land use types per unit of development for Lee County. The recommended travel demand schedule is presented in Table 16.

Table 16
TRAVEL DEMAND SCHEDULE

Land Use Type	ITE Code	Unit	1-Way Trips	Primary Trips	Length (miles)	Adjustment Factor	Daily VMT
Single-Family Detached	210	Dwelling	4.79	100%	10.77	0.57	29.41
Multi-Family	220	Dwelling	3.32	100%	10.77	0.57	20.38
Mobile Home/RV Park	240	Pad	2.40	100%	10.77	0.57	14.73
Elderly/Disabled Housing	250	Dwelling	1.64	100%	10.77	0.57	10.07
Adult Cong. Living Facility (ACLF)	252	Dwelling	1.08	100%	10.77	0.57	6.63
Hotel/Motel	310/320	Room	4.51	80%	10.77	0.57	22.15
RETAIL/COMMERCIAL							
Shopping Center/General Retail	820	1000 sq. ft.	21.46	62%	6.61	0.57	50.13
Bank	911	1000 sq. ft.	78.24	27%	6.61	0.57	79.59
Car Wash, Self Service	847	Stall	10.05	44%	6.61	0.57	16.66
Convenience Store w/Gas Sales	851	1000 sq. ft.	369.00	16%	3.31	0.57	111.39
Golf Course (open to public)	430	Acre	2.52	80%	7.43	0.57	8.54
Movie Theater	443	1000 sq. ft.	39.03	50%	6.61	0.57	73.53
Restaurant, Sit-Down	831	1000 sq. ft.	44.98	38%	6.61	0.57	64.40
Restaurant, Fast Food	834	1000 sq. ft.	248.06	27%	3.31	0.57	126.36
OFFICE/INSTITUTIONAL							
Office, General	710	1000 sq. ft.	5.51	75%	9.82	0.57	23.13
Office, Medical	720	1000 sq. ft.	18.07	75%	9.89	0.57	76.40
Hospital	610	1000 sq. ft.	8.39	75%	9.89	0.57	35.47
Nursing Home	620	1000 sq. ft.	2.35	75%	9.89	0.57	9.94
Church	560	1000 sq. ft.	4.56	75%	7.50	0.57	14.62
Day Care Center	565	1000 sq. ft.	39.63	24%	7.50	0.57	40.66
Elementary/Sec. School (private)	520/522/530	1000 sq. ft.	6.21	24%	7.50	0.57	6.37
INDUSTRIAL							
Industrial Park	130	1000 sq. ft.	3.48	95%	10.77	0.57	20.30
Warehouse	150	1000 sq. ft.	2.48	95%	10.77	0.57	14.46
Mini-Warehouse	151	1000 sq. ft.	1.25	95%	7.43	0.57	5.03

Source: "1-Way Trips" = 1/2 of average daily trips (ADT) during weekday from Institute of Transportation Engineers (ITE), *Trip Generation*, 6th ed., 1997; elderly/disabled housing trip rate derived from the ratio of ADT and peak hour trips (PHT) rates for ITE Code 260 (recreational homes); nursing home trip rate derived from the ratio of ADT and PHT rates per bed; car wash, self service, ADT and primary trip percentage from Metro Transportation Group, Inc., *Independent Fee Calculation Study for Self-Serve Car Wash Facilities - Hancock Bridge Parkway Location*, October 24, 2000; primary trip percentages for shopping center (additional 10% deducted for diverted-link trips), bank, convenience store w/gas sales, and restaurant (sit-down and fast food) from ITE, *Trip Generation Handbook*, October 1998; percentage for day care center from paper by Hitchens, 1990 *ITE Compendium*; percentage for elementary/secondary school assumed same as for day care; remaining percentages derived from Table 13; average trip lengths from Table 12; retail average trip length reduced by 50% for convenience stores and fast food restaurants; local adjustment factor from Table 15.

POTENTIAL FEE SCHEDULES

Using the impact fee formula and the inputs calculated in this report, the maximum potential road impact fees per unit of development for various land uses are shown in Table 17, based on County road improvements, and in Table 18, based on both County and State road improvements.

Impact fees could be adopted at less than 100 percent of the level shown in the net cost schedule, provided that the reduction is applied uniformly across all land use categories in order to retain the proportionality of the fees. The impact fee ordinance contains a provision allowing the option of independent fee determination studies for those applicants who can demonstrate that their development will have less impact on the need for road facilities than indicated by the fee schedule.

Table 17
POTENTIAL IMPACT FEE SCHEDULE (COUNTY PROJECTS)

Land Use Type	Unit	Daily VMT	Cost/VMT	Cost/Unit	Credit/VMT	Credit/Unit	Net Cost/Unit
Single-Family Detached	Dwelling	29.41	\$160	\$4,706	\$59	\$1,735	\$2,971
Multi-Family	Dwelling	20.38	\$160	\$3,261	\$59	\$1,202	\$2,059
Mobile Home/RV Park	Pad	14.73	\$160	\$2,357	\$59	\$869	\$1,488
Elderly/Disabled Housing	Dwelling	10.07	\$160	\$1,611	\$59	\$594	\$1,017
Adult Cong. Living Facility (ACLF)	Dwelling	6.63	\$160	\$1,061	\$59	\$391	\$670
Hotel/Motel	Room	22.15	\$160	\$3,544	\$59	\$1,307	\$2,237
RETAIL/COMMERCIAL							
Shopping Center/General Retail	1000 sq. ft.	50.13	\$160	\$8,021	\$59	\$2,958	\$5,063
Bank	1000 sq. ft.	79.59	\$160	\$12,734	\$59	\$4,696	\$8,038
Car Wash, Self Service	Stall	16.66	\$160	\$2,666	\$59	\$983	\$1,683
Convenience Store w/Gas Sales	1000 sq. ft.	111.39	\$160	\$17,822	\$59	\$6,572	\$11,250
Golf Course (open to public)	Acre	8.54	\$160	\$1,366	\$59	\$504	\$862
Movie Theater	1000 sq. ft.	73.53	\$160	\$11,765	\$59	\$4,338	\$7,427
Restaurant, Sit-Down	1000 sq. ft.	64.40	\$160	\$10,304	\$59	\$3,800	\$6,504
Restaurant, Fast Food	1000 sq. ft.	126.36	\$160	\$20,218	\$59	\$7,455	\$12,763
OFFICE/INSTITUTIONAL							
Office, General	1000 sq. ft.	23.13	\$160	\$3,701	\$59	\$1,365	\$2,336
Office, Medical	1000 sq. ft.	76.40	\$160	\$12,224	\$59	\$4,508	\$7,716
Hospital	1000 sq. ft.	35.47	\$160	\$5,675	\$59	\$2,093	\$3,582
Nursing Home	1000 sq. ft.	9.94	\$160	\$1,590	\$59	\$586	\$1,004
Church	1000 sq. ft.	14.62	\$160	\$2,339	\$59	\$863	\$1,476
Day Care Center	1000 sq. ft.	40.66	\$160	\$6,506	\$59	\$2,399	\$4,107
Elementary/Sec. School (private)	1000 sq. ft.	6.37	\$160	\$1,019	\$59	\$376	\$643
INDUSTRIAL							
Industrial Park	1000 sq. ft.	20.30	\$160	\$3,248	\$59	\$1,198	\$2,050
Warehouse	1000 sq. ft.	14.46	\$160	\$2,314	\$59	\$853	\$1,461
Mini-Warehouse	1000 sq. ft.	5.03	\$160	\$805	\$59	\$297	\$508

Source: Daily VMT per unit from Table 16; cost per VMT from Table 7; credit per VMT from Table 11.

**Table 18
POTENTIAL IMPACT FEE SCHEDULE (ALL PROJECTS)**

Land Use Type	Unit	Daily VMT	Cost/VMT	Cost/Unit	Credit/VMT	Credit/Unit	Net Cost/Unit
Single-Family Detached	Dwelling	29.41	\$178	\$5,235	\$59	\$1,735	\$3,500
Multi-Family	Dwelling	20.38	\$178	\$3,628	\$59	\$1,202	\$2,426
Mobile Home/RV Park	Pad	14.73	\$178	\$2,622	\$59	\$869	\$1,753
Elderly/Disabled Housing	Dwelling	10.07	\$178	\$1,792	\$59	\$594	\$1,198
Adult Cong. Living Facility (ACLF)	Dwelling	6.63	\$178	\$1,180	\$59	\$391	\$789
Hotel/Motel	Room	22.15	\$178	\$3,943	\$59	\$1,307	\$2,636
RETAIL/COMMERCIAL							
Shopping Center/General Retail	1000 sq. ft.	50.13	\$178	\$8,923	\$59	\$2,958	\$5,965
Bank	1000 sq. ft.	79.59	\$178	\$14,167	\$59	\$4,696	\$9,471
Car Wash, Self Service	Stall	16.66	\$178	\$2,965	\$59	\$983	\$1,982
Convenience Store w/Gas Sales	1000 sq. ft.	111.39	\$178	\$19,827	\$59	\$6,572	\$13,255
Golf Course (open to public)	Acre	8.54	\$178	\$1,520	\$59	\$504	\$1,016
Movie Theater	1000 sq. ft.	73.53	\$178	\$13,088	\$59	\$4,338	\$8,750
Restaurant, Sit-Down	1000 sq. ft.	64.40	\$178	\$11,463	\$59	\$3,800	\$7,663
Restaurant, Fast Food	1000 sq. ft.	126.36	\$178	\$22,492	\$59	\$7,455	\$15,037
OFFICE/INSTITUTIONAL							
Office, General	1000 sq. ft.	23.13	\$178	\$4,117	\$59	\$1,365	\$2,752
Office, Medical	1000 sq. ft.	76.40	\$178	\$13,599	\$59	\$4,508	\$9,091
Hospital	1000 sq. ft.	35.47	\$178	\$6,314	\$59	\$2,093	\$4,221
Nursing Home	1000 sq. ft.	9.94	\$178	\$1,769	\$59	\$586	\$1,183
Church	1000 sq. ft.	14.62	\$178	\$2,602	\$59	\$863	\$1,739
Day Care Center	1000 sq. ft.	40.66	\$178	\$7,237	\$59	\$2,399	\$4,838
Elementary/Sec. School (private)	1000 sq. ft.	6.37	\$178	\$1,134	\$59	\$376	\$758
INDUSTRIAL							
Industrial Park	1000 sq. ft.	20.30	\$178	\$3,613	\$59	\$1,198	\$2,415
Warehouse	1000 sq. ft.	14.46	\$178	\$2,574	\$59	\$853	\$1,721
Mini-Warehouse	1000 sq. ft.	5.03	\$178	\$895	\$59	\$297	\$598

Source: Daily VMT per unit from Table 16; cost per VMT from Table 7; credit per VMT from Table 11.

COMPARATIVE FEES

The two alternative sets of maximum fees calculated in this report are compared with the current fees in Table 19. If the fees are based solely on the average cost of adding capacity with County road improvement projects, the updated maximum fees will be, on average, by about 22 percent higher than existing fees. Alternatively, if the fees are based on the average cost of County and FDOT road improvement projects, the updated maximum fees will be 44 percent higher, on average, than existing fees.

For administrative simplicity, the variable fees by size categories for a shopping center and general office building have been consolidated. For comparison purposes, the proposed shopping center fee is compared with the fee currently assessed on a shopping center that is between 100,000-249,999 square

feet and the proposed general office fee is compared with the fee currently assessed on general office building that is over 100,000 square feet.

The revised fees for a self-service car wash are considerably lower than the fee that is currently being assessed. In October of 2000, an independent impact fee study was conducted for self-serve car wash facilities in Lee County, and the results showed that national average daily trip generation rates per car wash bay were in general unrepresentative of Lee County. The results of the study were incorporated into this update.

**Table 19
COMPARATIVE ROAD FEES**

Land Use Type	Unit	Current Fee	Potential Fees		Percent Change	
			County	Co./State	County	Co./State
Single-Family Detached	Dwelling	\$2,436	\$2,971	\$3,500	22%	44%
Multi-Family	Dwelling	\$1,687	\$2,059	\$2,426	22%	44%
Mobile Home/RV Park	Pad	\$1,221	\$1,488	\$1,753	22%	44%
Elderly/Disabled Housing	Dwelling	n/a	\$1,017	\$1,198	n/a	n/a
Adult Cong. Living Facility (ACLF)	Dwelling	\$550	\$670	\$789	22%	43%
Hotel/Motel	Room	\$1,834	\$2,237	\$2,636	22%	44%
RETAIL/COMMERCIAL						
Shopping Center	1000 sq. ft.	\$3,869	\$5,063	\$5,965	31%	54%
Bank	1000 sq. ft.	\$6,063	\$8,038	\$9,471	33%	56%
Car Wash, Self Service	Stall	\$7,749	\$1,683	\$1,982	-78%	-74%
Convenience Store w/Gas Sales	1000 sq. ft.	\$8,715	\$11,250	\$13,255	29%	52%
Golf Course (open to public)	Acre	\$711	\$862	\$1,016	21%	43%
Movie Theater	1000 sq. ft.	\$5,600	\$7,427	\$8,750	33%	56%
Restaurant, Sit-Down	1000 sq. ft.	\$4,905	\$6,504	\$7,663	33%	56%
Restaurant, Fast Food	1000 sq. ft.	\$9,886	\$12,763	\$15,037	29%	52%
OFFICE/INSTITUTIONAL						
Office, General	1000 sq. ft.	\$1,918	\$2,336	\$2,752	22%	43%
Office, Medical	1000 sq. ft.	\$6,334	\$7,716	\$9,091	22%	44%
Hospital	1000 sq. ft.	\$2,941	\$3,582	\$4,221	22%	44%
Nursing Home	1000 sq. ft.	\$824	\$1,004	\$1,183	22%	44%
Church	1000 sq. ft.	\$1,402	\$1,476	\$1,739	5%	24%
Day Care Center	1000 sq. ft.	\$3,900	\$4,107	\$4,838	5%	24%
Elementary/Sec. School (private)	1000 sq. ft.	\$611	\$643	\$758	5%	24%
INDUSTRIAL						
Industrial Park	1000 sq. ft.	\$1,681	\$2,050	\$2,415	22%	44%
Warehouse	1000 sq. ft.	\$1,198	\$1,461	\$1,721	22%	44%
Mini-Warehouse	1000 sq. ft.	\$419	\$508	\$598	21%	43%

Source: Current fees from Lee County Land Development Code Sec. 2-266; potential fees from Table 17.

APPENDIX

**Table 20
EXISTING MAJOR ROADWAY INVENTORY**

Roadway	From	To	2002 AADT	Miles	Peak Season Factor	Peak Season VMT
I-75	Collier County Line	Bonita Beach Rd	69,848	1.0	1.12	78,230
I-75	Bonita Beach Rd	Corkscrew Rd	63,071	7.4	1.12	522,732
I-75	Corkscrew Rd	Allco Rd	65,156	4.3	1.12	313,791
I-75	Allco Rd	Daniels Pkwy	68,805	3.8	1.12	292,834
I-75	Daniels Pkwy	Colonial Blvd	62,550	4.5	1.12	315,252
I-75	Colonial Blvd	MLK	63,071	1.6	1.12	113,023
I-75	MLK	Luckett Rd	62,029	1.5	1.12	104,209
I-75	Luckett Rd	SR 80	60,465	1.9	1.12	128,670
I-75	SR 80	SR 78	49,519	2.4	1.12	133,107
I-75	SR 78	County Line33	881	5.7	1.12	216,296
Subtotal, Interstate				34.1		2,218,144
Bus 41 NB	SR 82 (MLK Jr)	SR 80 EB (2nd St)	15,638	0.4	1.12	7,006
Bus 41 NB	SR 80 EB (2nd St)	SR 80 WB (1st St)	10,946	0.2	1.12	1,839
Bus 41 NB	SR 80 WB (1st St)	N. End of Bridge	16,159	1.3	1.12	23,528
Bus 41 SB	N. End of Bridge	SR 80 WB (1st St)	16,159	1.2	1.12	21,718
Bus 41 SB	SR 80 WB (1st St)	SR 80 EB (2nd St)	16,159	0.2	1.12	2,715
Bus 41 SB	SR 80 EB (2nd St)	SR 82 (MLK Jr)	16,680	0.3	1.12	5,604
Bus 41	N. End of Bridge	Pondella Rd	32,318	0.5	1.12	18,098
Bus 41	Pondella Rd	SR 78	26,063	1.1	1.12	32,110
Bus 41	SR 78	Littleton	17,410	1.0	1.12	19,499
Bus 41	Littleton	Laurel Dr	8,861	0.5	1.12	4,962
Bus 41	Laurel Dr	US 41	8,861	1.1	1.12	10,917
Colonial Blvd	US 41	Fowler st	43,264	0.5	1.07	23,146
Colonial Blvd	Fowler St	Metro Pkwy	52,125	0.8	1.07	44,619
Colonial Blvd	Metro Pkwy	Winkler Ave	39,513	2.1	1.25	103,722
Colonial Blvd	Winkler Ave	Six Mile Pkwy	54,731	0.7	1.10	42,143
Colonial Blvd	Six Mile Pkwy	I-75	48,476	0.5	1.10	26,662
McGregor Blvd	Gladious Dr	Griffin Blvd	25,802	1.0	1.17	30,188
McGregor Blvd	Griffin Blvd	A & W Bulb Rd	25,802	1.0	1.17	30,188
McGregor Blvd	A & W Bulb Rd	Cypress Lake Dr	34,924	0.7	1.17	28,603
McGregor Blvd	Cypress Lake Dr	College Pkwy	32,318	0.8	1.11	28,698
McGregor Blvd	College Pkwy	Winkler Rd	17,931	1.4	1.11	27,865
McGregor Blvd	Winkler Rd	Brentwood	23,978	0.8	1.10	21,101
McGregor Blvd	Brentwood	Colonial Blvd	22,310	0.8	1.10	19,633
Metro Pkwy	Six Mile Pkwy	Daniels Pkwy	10,634	1.3	1.11	15,345
Metro Pkwy	Daniels Pkwy	Crystal Dr	25,541	1.3	1.11	36,856
Metro Pkwy	Crystal Dr	Danley Dr	31,275	1.1	1.11	38,187
Metro Pkwy	Danley Dr	Colonial Blvd	37,530	1.2	1.11	49,990
Metro Pkwy	Colonial Blvd	Winkler Ave	21,371	0.5	1.11	11,861
Metro Pkwy	Winkler Ave	Warehouse Rd	22,414	0.5	1.11	12,440
Metro Pkwy	Warehouse Rd	Hanson st	18,661	0.8	1.11	16,571
MLK (SR 82)	Cranford Ave	Ford St	13,761	0.6	1.10	9,082

Roadway	From	To	2002 AADT	Miles	Peak Season Factor	Peak Season VMT
MLK (SR 82)	Ford St	Highland Ave	30,754	0.4	1.10	13,532
MLK (SR 82)	Highland Ave	Michigan Link	27,105	1.1	1.10	32,797
MLK (SR 82)	Michigan Link	Ortiz Ave	21,893	0.8	1.10	19,266
MLK (SR 82)	Ortiz Ave	I-75	19,286	0.6	1.10	12,729
MLK (SR 82)	I-75	Buckingham Rd	15,638	1.5	1.10	25,803
MLK (SR 82)	Buckingham Rd	Colonial Blvd	12,406	1.0	1.10	13,647
MLK (SR 82)	Colonial Blvd	Gateway Blvd	10,217	0.8	1.08	8,827
MLK (SR 82)	Gateway Blvd	Gunnery Rd10,	217	3.5	1.08	38,620
MLK (SR 82)	Gunnery Rd	Alabama Rd	10,946	3.5	1.08	41,376
MLK (SR 82)	Alabama Rd	Bell Blvd	6,151	4.2	1.08	27,901
MLK (SR 82)	Bell Blvd	County Line	7,089	2.7	1.08	20,672
San Carlos Blvd	Estero Blvd	Main St	25,541	0.6	1.08	16,551
San Carlos Blvd	Main St	Summerlin Rd	25,541	2.5	1.16	74,069
San Carlos Blvd	Summerlin Rd	Kelly Rd	16,472	1.1	1.17	21,199
San Carlos Blvd	Kelly Rd	McGregor Blvd	16,472	0.6	1.17	11,563
Six Mile Pkwy	US 41	Metro Pkwy	33,360	1.2	1.25	50,040
SR 31	SR 80	SR 78	8,132	1.4	1.09	12,409
SR 31	SR 78	N. River Rd	7,402	1.3	1.13	10,874
SR 31	N. River Rd	County Line	3,998	2.0	1.13	9,035
SR 78	Burnt Store Rd	Chiquita Blvd	16,055	2.0	1.24	39,816
SR 78	Chiquita Blvd	Santa Barbara Blvd	20,850	2.3	1.24	59,464
SR 78	Santa Barbara Blvd	Del Prado Blvd	24,499	2.3	1.24	69,871
SR 78	Del Prado Blvd	Barrett Rd	20,746	2.1	1.10	47,923
SR 78	Barrett Rd	US 41	20,746	0.5	1.10	11,410
SR 78	US 41	Wal-Mart Entrance	23,978	0.4	1.06	10,167
SR 78	Wal-Mart Entrance	Pinney Rd	23,978	0.4	1.06	10,167
SR 78	Pinney Rd	Bus 41	27,626	0.4	1.06	11,713
SR 78	Bus 41	Hart Rd	33,360	1.1	1.13	41,466
SR 78	Hart Rd	Brewers Rd	27,626	0.4	1.13	12,487
SR 78	Brewers Rd	Slater Rd	27,626	0.8	1.13	24,974
SR 78	Slater Rd	I-75	20,954	2.9	1.13	68,666
SR 78	I-75	Nalle Rd	10,112	0.6	1.13	6,856
SR 78	Nalle Rd	SR 31	10,112	2.7	1.13	30,852
SR 80 EB	SR 82 (MLK Jr)	Bus 41 SB	10,217	1.1	1.09	12,250
SR 80 EB	Bus 41 SB	Seaboard St	15,638	0.5	1.09	8,523
SR 80 WB	Seaboard St	Bus 41 SB	17,723	1.0	1.09	19,318
SR 80 WB	Bus 41 SB	US 41 (Fountain Int)	6,881	0.5	1.09	3,750
SR 80	Seaboard St	Prospect Ave	31,275	2.0	1.09	68,180
SR 80	Prospect Ave	Ortiz Ave	30,233	1.3	1.09	42,840
SR 80	Ortiz Ave	I-75	28,669	1.2	1.09	37,499
SR 80	I-75	SR 31	28,148	2.7	1.09	82,840
SR 80	SR 31	Buckingham Rd	27,105	2.5	1.09	73,861
SR 80	Buckingham Rd	Hickey Creek Rd	15,742	2.5	1.09	42,897
SR 80	Hickey Creek Rd	Mitchell Ave	13,240	0.9	1.09	12,988
SR 80	Mitchell Ave	Joel Blvd	13,240	4.0	1.09	57,726
SR 80	Joel Blvd	County Line10,	946	2.2	1.09	26,249
US 41	Collier County Line	Bonita Beach Rd	33,881	1.0	1.13	38,286
US 41	Bonita Beach Rd	Terry st	47,434	1.1	1.13	58,960
US 41	Terry St	Old 41	37,009	2.3	1.20	102,145

Roadway	From	To	2002 AADT	Miles	Peak Season Factor	Peak Season VMT
US 41	Old 41	Corkscrew Rd	43,264	3.5	1.20	181,709
US 41	Corkscrew Rd	Broadway	33,360	0.7	1.20	28,022
US 41	Broadway	Sanibel Blvd	40,136	1.9	1.20	91,510
US 41	Sanibel Blvd	Allco Rd	40,658	2.2	1.20	107,337
US 41	Allco Rd	Island Park Rd	56,295	1.0	1.20	67,554
US 41	Island Park Rd	Jamaica Bay W.	53,689	1.6	1.20	103,083
US 41	Jamaica Bay W.	Six Mile Pkwy	66,720	0.5	1.20	40,032
US 41	Six Mile Pkwy	Andrea Ln	40,658	0.5	1.07	21,752
US 41	Andrea Ln	Daniels Pkwy	40,658	0.8	1.07	34,803
US 41	Daniels Pkwy	College Pkwy	54,731	0.7	1.07	40,994
US 41	College Pkwy	South Rd	59,944	1.4	1.07	89,796
US 41	South Rd	Boy Scout Rd	56,295	0.4	1.07	24,094
US 41	Boy Scout Rd	North Airport Rd	42,743	0.8	1.07	36,588
US 41	North Airport Rd	Colonial Blvd	50,040	0.2	1.07	10,709
US 41	Fountain Interchange	N. Key Dr	47,642	0.9	1.10	47,166
US 41	N. Key Dr	Hancock B. Pkwy	47,434	0.7	1.10	36,524
US 41	Hancock B. Pkwy	Pondella Rd	29,190	0.3	1.10	9,633
US 41	Pondella Rd	SR 78	26,584	1.3	1.10	38,015
US 41	SR 78	Littleton Rd	25,020	1.0	1.10	27,522
US 41	Littleton Rd	Bus 41	17,618	1.2	1.10	23,256
US 41	Bus 41	Del Prado Blvd	19,078	0.8	1.10	16,789
US 41	Del Prado Blvd	Charlotte Co. Line	15,950	3.4	1.10	59,653
Subtotal, State Arterials				128.4		3,496,491
Alabama Rd	SR 82	Milwaukee Blvd	3,336	1.9	1.08	6,845
Alabama Rd	Milwaukee Blvd	Homestead Rd	5,838	1.7	1.05	10,421
Alexander Bell	SR 82	Milwaukee Blvd	1,147	2.3	1.08	2,849
Alexander Bell	Milwaukee Blvd	Leeland Heights	3,336	3.4	1.05	11,910
Allco Rd	US 41	Lee Rd	18,557	2.1	1.09	42,477
Allco Rd	Lee Rd	Three Oaks Pkwy	16,680	0.8	1.09	14,545
Allco Rd	Three Oaks Pkwy	I-75	17,931	0.5	1.09	9,772
Ben Hill Griffin Pkwy	Corkscrew Rd	FGCU Entrance	4,691	2.2	1.09	11,249
Ben Hill Griffin Pkwy	FGCU Entrance	Allco Rd	5,525	2.2	1.09	13,249
Bonita Beach Rd	Hickory Blvd	Vanderbilt Dr	12,510	1.5	1.38	25,896
Bonita Beach Rd	Vanderbilt Dr	US 41	27,522	0.7	1.38	26,586
Bonita Beach Rd	US 41	Hacienda Village	24,707	0.7	1.38	23,867
Bonita Beach Rd	Hacienda Village	Old 41	24,707	1.0	1.38	34,096
Bonita Beach Rd	Old 41	Imperial St	25,124	1.1	1.22	33,716
Bonita Beach Rd	Imperial St	I-75	27,939	0.7	1.22	23,860
Bonita Beach Rd	I-75	Bonita Grand Dr	10,321	0.7	1.22	8,814
Boyscout Rd	Summerlin Rd	Clayton Ct	24,186	0.4	1.11	10,739
Boyscout Rd	Clayton Ct	US 41	24,186	0.3	1.11	8,054
Buckingham Rd	SR 82	Orange River Blvd	2,919	7.8	1.08	24,590
Buckingham Rd	Orange River Blvd	SR 80	6,464	2.6	1.08	18,151
Burnt Store Rd	SR 78	Diplomat Pkwy	4,483	2.8	1.22	15,314
Burnt Store Rd	Diplomat Pkwy	County Line	3,545	6.3	1.22	27,247
Cape Coral Bridge	Del Prado Blvd	W. End of Bridge	41,387	0.4	1.10	18,210
Cape Coral Bridge	W. End of Bridge	McGregor Blvd	41,387	1.3	1.10	59,183
College Pkwy	McGregor Blvd	Winkler Rd	32,422	0.8	1.11	28,791

Roadway	From	To	2002 AADT	Miles	Peak Season Factor	Peak Season VMT
College Pkwy	Winkler Rd	Whiskey Creek Dr	40,241	0.8	1.11	35,734
College Pkwy	Whiskey Creek Dr	Summerlin Rd	41,804	0.8	1.11	37,122
College Pkwy	Summerlin Rd	US 41	33,047	0.9	1.11	33,014
Colonial Blvd	McGregor Blvd	Summerlin Rd	50,978	0.4	1.07	21,819
Colonial Blvd	Summerlin Rd	US 41	50,561	0.7	1.07	37,870
Colonial Blvd	I-75	SR 82	22,622	2.4	1.10	59,722
Corkscrew Rd	US 41	Three Oaks Pkwy	17,618	1.3	1.20	27,484
Corkscrew Rd*	Three Oaks Pkwy	I-75	19,391	0.8	1.20	18,615
Corkscrew Rd	I-75	Ben Hill Griffin Pkwy	8,027	0.5	1.20	4,816
Corkscrew Rd	Ben Hill Griffin Pkwy	Wildcat Run Dr	2,502	1.7	1.20	5,104
Corkscrew Rd	Wildcat Run Dr	Allico Rd	2,502	2.6	1.20	7,806
Corkscrew Rd	Allico Rd	County Line	2,502	10.4	1.20	31,225
Cypress Lake Dr	McGregor Blvd	South Point Blvd	15,221	0.4	1.17	7,123
Cypress Lake Dr	South Point Blvd	Winkler Rd	19,286	0.6	1.17	13,539
Cypress Lake Dr	Winkler Rd	Summerlin Rd	26,584	0.7	1.17	21,772
Cypress Lake Dr	Summerlin Rd	US 41	34,820	0.9	1.17	36,665
Danels Pkwy	US 41	Big Pine Way	37,009	0.5	1.17	21,650
Danels Pkwy	Big Pine Way	Metro Pkwy	37,009	0.6	1.17	25,980
Danels Pkwy	Metro Pkwy	Six Mile Pkwy	37,009	0.8	1.25	37,009
Danels Pkwy	Six Mile Pkwy	Palamino Dr	47,434	2.2	1.25	130,444
Danels Pkwy	Palamino Dr	I-75	45,140	0.6	1.25	33,855
Danels Pkwy	I-75	Treeline Ave	36,696	0.5	1.26	23,118
Danels Pkwy	Treeline Ave	Chamberlin Pkwy	36,696	0.8	1.26	36,990
Danels Pkwy	Chamberlin Pkwy	Gateway Blvd	18,765	1.7	1.10	35,091
Danels Rd	West Link Dr	SR-82	18,000	3.2	1.10	63,360
Del Prado Blvd	Cape Coral Pkwy	SE 46th St	27,835	0.3	1.08	9,019
Del Prado Blvd	SE 46th St	Coronado Pkwy	28,982	0.6	1.08	18,780
Del Prado Blvd	Coronado Pkwy	Cornwallis Pkwy	42,013	1.3	1.08	58,986
Del Prado Blvd	Cornwallis Pkwy	Coral Point Dr	50,040	1.8	1.09	98,178
Del Prado Blvd	Coral Point Dr	Hancock B. Pkwy	34,924	2.0	1.09	76,134
Del Prado Blvd	Hancock B. Pkwy	NE 6th St	21,267	0.7	1.09	16,227
Del Prado Blvd	NE 6th St	SR 78	21,267	0.4	1.09	9,272
Estero Blvd	Hickory Blvd	Avenida Pescador	7,402	2.9	1.08	23,183
Estero Blvd	Avenida Pescador	Mid Island Dr	15,638	1.2	1.08	20,267
Estero Blvd	Mid Island Dr	San Carlos Blvd	18,510	1.8	1.08	35,983
Fowler St	US 41	N Airport Rd	20,433	1.0	1.10	22,476
Fowler St	N Airport Rd	Colonial Blvd	25,124	0.3	1.10	8,291
Fowler St	Colonial Blvd	Winkler Ave	20,850	0.5	1.10	11,468
Fowler St	Winkler Ave	Hanson St	26,897	1.3	1.10	36,463
Fowler St	Hanson St	SR 82	25,333	1.3	1.10	36,226
Gladlous Dr	McGregor Blvd	Pine Ridge Rd	10,321	0.5	1.15	5,935
Gladlous Dr	Pine Ridge Rd	Bass Rd	18,244	1.6	1.15	33,569
Gladlous Dr	Bass Rd	Winkler Rd	19,391	0.8	1.15	17,840
Gladlous Dr	Winkler Rd	Summerlin Rd	19,391	0.5	1.16	11,247
Gladlous Dr	Summerlin Rd	US 41	41,596	1.5	1.20	74,873
Gunnery Rd	SR 82	Lee Blvd	6,255	2.5	1.08	16,889
Gunnery Rd	Lee Blvd	Buckingham Rd	8,027	1.5	1.07	12,883
Hancock B Pkwy	Del Prado Blvd	NE 24th Ave	20,537	1.1	1.10	24,850
Hancock B Pkwy	NE 24th Ave	Orange Grove Blvd	24,186	0.5	1.10	13,302

Roadway	From	To	2002 AADT	Miles	Peak Season Factor	Peak Season VMT
Hancock B Pkwy	Orange Grove Blvd	Moody Rd	23,978	1.2	1.10	31,651
Hancock B Pkwy	Moody Rd	US 41	24,082	0.9	1.10	23,841
Hickory Blvd	Bonita Beach Rd	McLaughlin Blvd	12,510	1.1	1.08	14,862
Hickory Blvd	McLaughlin Blvd	Melody Lane	10,634	0.7	1.08	8,039
Hickory Blvd	Melody Lane	Estero Blvd	7,715	6.7	1.08	55,826
Homestead Rd	SR 82	Leeland Heights	6,464	5.6	1.05	38,008
Homestead Rd	Leeland Heights	Lee Blvd	22,935	1.1	1.05	26,490
Joel Blvd	Bell Blvd	Country Club(n)	13,031	0.9	1.08	12,666
Joel Blvd	Country Club(n)	18th St	5,317	3.9	1.08	22,395
Joel Blvd	18th St	SR 80	5,317	3.1	1.08	17,801
Koreshan Blvd	US 41	Three Oaks Pkwy	2,189	1.8	1.20	4,728
Lee Blvd	SR 82	Gunnery Rd22,	518	3.6	1.07	86,739
Lee Blvd	Gunnery Rd	Homestead Rd	24,707	3.9	1.07	103,102
Lee Blvd	Homestead Rd	Leeland Heights	9,591	1.6	1.07	16,420
Leeland Heights	Homestead Rd	Lee Blvd	14,387	0.4	1.07	6,158
Leeland Heights	Lee Blvd	Joel Blvd	14,387	1.6	1.07	24,631
Littleton Rd	Corbett Rd	US 41	6,255	1.5	1.06	9,945
Littleton Rd	US 41	Bus 41	5,734	0.7	1.12	4,495
Luckett Rd	Ortiz Ave	I-75	10,634	0.8	1.10	9,358
McGregor Blvd	Sanibel T Plaza	Harbor Dr	20,120	0.2	1.29	5,191
McGregor Blvd	Harbor Dr	Summerlin Rd	23,039	2.2	1.29	65,385
McGregor Blvd	Summerlin Rd	Kelly Rd	11,155	1.7	1.04	19,722
McGregor Blvd	Kelly Rd	Thornton Rd	17,097	0.3	1.04	5,334
McGregor Blvd	Thornton Rd	San Carlos Blvd	17,097	0.7	1.04	12,447
N River Rd	SR 31	Franklin Lock Rd	2,398	4.5	1.09	11,762
N River Rd	Franklin Lock Rd	Broadway Rd	1,355	5.7	1.09	8,419
N River Rd	Broadway Rd	County Line	1,981	3.6	1.09	7,773
Old 41	County Line	Bonita Beach Rd	10,634	1.2	1.05	13,399
Old 41	Bonita Beach Rd	Terry St	17,410	1.0	1.05	18,281
Old 41	Terry St	Rosemary Rd	17,618	0.3	1.05	5,550
Old 41	Rosemary Rd	US 41	12,614	2.7	1.05	35,761
Orange River Blvd	SR 80	Staley Rd	7,298	1.3	1.09	10,341
Orange River Blvd	Staley Rd	Buckingham Rd	4,587	3.0	1.09	14,999
Ortiz Ave	Colonial Blvd	SR 82	13,344	1.7	1.10	24,953
Ortiz Ave	SR 82	Ballard St	13,865	1.1	1.10	16,777
Ortiz Ave	Ballard St	Tice St	13,865	1.3	1.10	19,827
Ortiz Ave	Tice St	SR 80	9,174	0.3	1.10	3,027
Pine Island Rd	Stringfellow Rd	Burnt Store Rd	11,363	5.4	1.24	76,087
Pondella Rd	SR 78	Westwood Rd	10,425	0.9	1.06	9,945
Pondella Rd	Westwood Rd	Orange Grove Blvd	17,097	0.6	1.06	10,874
Pondella Rd	Orange Grove Blvd	US 41	17,097	1.6	1.06	28,997
Pondella Rd	US 41	Bus 41	17,410	0.6	1.06	11,073
Sanibel Causeway	Sanibel Shoreline	Toll Plaza	20,120	2.9	1.25	72,935
Six Mile Cypress	Metro Pkwy	Daniels Pkwy	20,537	1.8	1.25	46,208
Six Mile Cypress	Daniels Pkwy	Winkler Ext.	13,553	3.7	1.10	55,161
Six Mile Cypress	Winkler Ext.	Challenger Blvd	10,842	0.8	1.10	9,541
Six Mile Cypress	Challenger Blvd	Colonial Blvd	10,842	0.5	1.10	5,963
Six Mile Cypress	SR 78	Nalle Grade Rd	5,838	4.0	1.13	26,388
Slater Rd	1st Ave	Pine Island Rd	9,383	7.9	1.31	97,105

Roadway	From	To	2002 AADT	Miles	Peak Season Factor	Peak Season VMT
Stringfellow Rd	Pine Island Rd	Pineland Rd	8,132	3.3	1.31	35,155
Stringfellow Rd	Pineland Rd	Main St	3,545	3.7	1.31	17,183
Stringfellow Rd	McGregor Blvd	San Carlos Blvd	21,163	2.2	1.29	60,061
Summerlin Rd	San Carlos Blvd	Pine Ridge Rd	21,059	0.5	1.26	13,267
Summerlin Rd	Pine Ridge Rd	Bass Rd	32,318	1.7	1.26	69,225
Summerlin Rd	Bass Rd	Gladiolus Dr	35,862	1.8	1.26	81,335
Summerlin Rd	Gladiolus Dr	Cypress Lake Dr	21,997	1.8	1.26	49,889
Summerlin Rd	Cypress Lake Dr	College Pkwy	28,043	0.7	1.11	21,789
Summerlin Rd	College Pkwy	Boy Scout	31,953	1.9	1.11	67,389
Summerlin Rd	Boy Scout	Colonial Blvd	22,257	1.1	1.11	27,176
Summerlin Rd	SR 82	Lee Blvd	1,355	3.6	1.07	5,219
Sunshine Blvd	Lee Blvd	W 12th St	3,545	3.2	1.07	12,138
Sunshine Blvd	Corkscrew Rd	San Carlos Blvd	7,506	3.1	1.20	27,922
Three Oaks Pkwy	San Carlos Blvd	Alco Rd	5,942	1.7	1.09	11,011
Three Oaks Pkwy	County Line	Bonita Beach Rd	8,861	1.0	1.13	10,013
Vanderbilt Dr	Santa Barbara Blvd	Country Club Blvd	35,237	1.1	1.07	41,474
Veterans Mem. Pkwy	Country Club Blvd	Midpoint Bridge Toll	40,345	1.5	1.07	64,754
Veterans Mem. Pkwy	Midpoint Bridge Toll P	McGregor Blvd	39,302	2.9	1.07	121,954
Veterans Mem. Pkwy	US 41	Old 41	11,572	1.8	1.22	25,412
W Terry St	Summerlin Rd	Gladiolus Dr	3,545	0.5	1.26	2,233
Winkler Rd	Gladiolus Dr	Brandywine Cir	11,051	0.8	1.26	11,139
Winkler Rd	Brandywine Cir	Cypress Lake Dr	12,823	0.9	1.26	14,541
Winkler Rd	Cypress Lake Dr	College Pkwy	13,657	0.7	1.11	10,611
Winkler Rd	College Pkwy	Sunset Vista	7,089	0.5	1.11	3,934
Winkler Rd	Sunset Vista	McGregor Blvd	7,089	0.8	1.11	6,295
Subtotal, Lee County Arterials			258.3			4,089,198
Alco Rd	I-75	Ben Hill Griffin Pkwy	6,776	0.5	1.09	3,693
Alco Rd	Ben Hill Griffin Pkwy	Corkscrew Rd	1,043	7.2	1.09	8,185
A & W Bulb Rd	Gladiolus Dr	McGregor Blvd	3,440	1.3	1.17	5,232
Bass Rd	Summerlin Rd	Gladiolus Dr	5,942	1.3	1.26	9,733
Bonita Grand Rd	East Terry St	Bonita Beach Blvd	900	1.0	1.22	1,098
Brantley Rd	Summerlin Rd	US 41	4,274	0.7	1.11	3,321
Briardcliff Rd	US 41	Triple Crown Ct	4,796	2.9	1.09	15,160
Broadway Rd(alva)	SR 80	N. River Rd	4,691	0.5	1.08	2,533
Captiva Dr	Blind Pass	South Seas	6,568	3.3	1.25	27,093
Crystal Dr	US 41	Beacon Blvd	12,719	0.2	1.07	2,722
Crystal Dr	Beacon Blvd	Metro Pkwy	12,719	0.9	1.07	12,248
Davis Rd	McGregor Blvd	Iona Rd	2,294	1.0	1.29	2,959
Fiddlesticks Blvd	Guardhouse	Daniels Pkwy	6,255	1.6	1.25	12,510
Hart Rd	Sr 78	Tucker Lane	7,819	2.6	1.13	22,972
Iona Rd	Davis Rd	McGregor Blvd	6,464	2.6	1.11	18,655
Island Park Rd	Park Rd	US 41	8,444	1.6	1.07	14,456
Kelly Rd	McGregor Blvd	San Carlos Blvd	3,545	1.2	1.04	4,424
Kelly Rd	San Carlos Blvd	Pine Ridge Rd	2,189	1.2	1.04	2,732
Laurel Dr	Bus 41	Breeze Dr	6,881	1.9	1.12	14,643
Lee Rd	San Carlos Blvd	Alco Rd	7,506	1.5	1.09	12,272
Milwaukee Blvd	Homestead Rd	Columbus Blvd	209	3.6	1.05	790
Nalle Grade Rd	Slater Rd	Nalle Rd	1,251	3.0	1.13	4,241

Roadway	From	To	2002 AADT	Miles	Peak Season Factor	Peak Season VMT
Nalle Rd	Sr 78	Nalle Grade Rd	2,815	2.7	1.13	8,589
N Airport Rd	US 41	Fowler st	900	0.5	1.07	482
Orange Grove Blvd	Club Entr.	4 Lane End	9,070	1.0	1.06	9,614
Orange Grove Blvd	4 Lane End	Hancock B. Pkwy	9,070	0.9	1.06	8,653
Orange Grove Blvd	Hancock B. Pkwy	Pondella Rd	9,800	1.0	1.06	10,388
Park Meadows Dr	Summerlin Rd	US 41	4,900	0.8	1.07	4,194
Pine Ridge Rd	San Carlos Blvd	Summerlin Rd	11,363	1.0	1.11	12,613
Pine Ridge Rd	Summerlin Rd	Gladiolus Dr	6,047	1.7	1.11	11,411
Pine Ridge Rd	Gladiolus Dr	McGregor Blvd	5,004	0.4	1.11	2,222
Plantation Rd	Daniels Pkwy	Idlewild st	6,464	2.5	1.25	20,200
Richmond Ave	Leeland Heights	E 9th st	1,043	2.1	1.05	2,300
Richmond Ave	E 9th St	E 12th st	1,043	0.8	1.05	876
Richmond Ave	E 12th St	Greenbriar Blvd	626	2.6	1.05	1,709
South Pointe Blvd	Cypress Lake Dr	College Pkwy	10,008	0.8	1.11	8,887
Staley Rd	Luckett Rd	Orange River Blvd	2,398	1.6	1.09	4,182
East Terry St	Bonita Grand Rd	Old US 41	900	2.5	1.22	2,745
East Terry St	Old US 41	Morton Ave	9,174	1.8	1.22	20,146
Tlce St	SS 80	Ortiz Ave	4,274	0.6	1.09	2,795
Tlce St	Ortiz Ave	Staley Rd	2,606	2.3	1.09	6,533
Whiskey Creek Dr	College Pkwy	Sautern Dr	6,776	0.9	1.11	6,769
Whiskey Creek Dr	Sautern Dr	McGregor Blvd	3,232	0.9	1.11	3,229
W. 12th St	Sunshine Blvd	Richmond Ave	1,043	2.4	1.07	2,678
Subtotal, Lee County Collectors				73.4		352,887
McGregor Blvd	Colonial	Hill	19,286	0.9	1.10	19,093
McGregor Blvd	Hill	1st	15,429	1.9	1.10	32,247
McGregor Blvd	1st	US 41	15,429	0.6	1.10	10,183
Palm Beach Blvd	Bus 41	Prospect	26,063	3.0	1.10	86,008
MLK Blvd (SR 82)	US 41	Cranford	10,634	0.9	1.10	10,528
Edison Ave	US 41	Highland	11,989	1.9	1.10	25,057
Hanson	US 41	Fowler	8,340	0.6	1.10	5,504
Hanson	Fowler	Evans	12,927	0.1	1.10	1,422
Hanson	Evans	Metro	12,927	0.5	1.10	7,110
Central	Winkler	Hanson	6,255	1.3	1.10	8,945
Central	Hanson	Edison	6,255	0.5	1.10	3,440
Broadway	Edison	MLK	3,753	0.5	1.10	2,064
Evans	Colonial	Winkler	7,506	0.5	1.10	4,128
Evans	Winkler	Hanson	9,070	1.3	1.10	12,970
Evans	Hanson	Edison	5,838	0.7	1.10	4,495
Winkler	US 41	Fowler	12,197	0.6	1.10	8,050
Winkler	Fowler	Evans	20,329	0.1	1.10	2,236
Winkler	Evans	Metro	20,329	0.5	1.10	11,181
Winkler	Metro	Challenger	15,533	1.3	1.10	22,212
Winkler	Challenger	Colonial	15,533	0.8	1.10	13,669
Winkler Ext	Colonial	Challenger	2,398	0.3	1.10	791
Winkler Ext	Challenger	Six Mile	2,398	0.4	1.10	1,055
Subtotal, Fort Myers Arterials and Collectors				19.2		292,388
Andalusa Blvd	SR 78	Tropicana	4,379	0.3	1.06	1,393

Roadway	From	To	2002 AADT	Miles	Peak Season Factor	Peak Season VMT
Andalusa Blvd	Tropicana	Diplomat	4,379	1.2	1.06	5,570
Andalusa Blvd	Diplomat	Kismet	900	0.9	1.22	988
Beach Pkwy	Chiquita	Surfside	3,753	1.9	1.07	7,630
Cape Coral Pkwy	Del Prado	Leonard	31,379	0.5	1.08	16,945
Cape Coral Pkwy	Coronado	Leonard	33,986	0.3	1.08	11,011
Cape Coral Pkwy	Palm Tree	Coronado	35,445	0.5	1.07	18,963
Cape Coral Pkwy	Santa Barbara	Palm Tree	40,032	0.5	1.07	21,417
Cape Coral Pkwy	Pelican	Santa Barbara	32,839	0.5	1.07	17,569
Cape Coral Pkwy	Skyline	Pelican	24,916	0.5	1.07	13,330
Cape Coral Pkwy	Chiquita	Skyline	18,348	1.0	1.07	19,632
Cape Coral Pkwy	SW 25th	Chiquita	8,236	1.1	1.07	9,694
Celtus Pkwy	Burnt Store	El Dorado	900	1.0	1.22	1,098
Chiquita Blvd	El Dorado	Cape Coral	6,359	1.0	1.07	6,804
Chiquita Blvd	Cape Coral	Beach	14,491	0.8	1.07	12,404
Chiquita Blvd	Beach	Savona	15,429	0.8	1.07	13,207
Chiquita Blvd	Savona	Gleason	17,931	0.6	1.07	11,512
Chiquita Blvd	Gleason	Miracle	16,055	1.0	1.06	17,018
Chiquita Blvd	Miracle	Trafalgar	12,510	1.0	1.06	13,261
Chiquita Blvd	Trafalgar	SR78	15,116	1.0	1.06	16,023
Chiquita Blvd	SR 78	Tropicana	5,421	1.9	1.06	10,918
Chiquita Blvd	Tropicana	Diplomat	900	1.1	1.22	1,208
Chiquita Blvd	Diplomat	Kismet	900	1.0	1.22	1,098
Chiquita Blvd	Kismet	Wilmington	900	0.4	1.22	439
Coronado Pkwy	El Dorado	Cape Coral	11,885	0.7	1.06	8,819
Coronado Pkwy	Cape Coral	SE 47th	11,676	0.1	1.08	1,261
Coronado Pkwy	SE 47th	Vincennes	10,842	0.7	1.08	8,197
Coronado Pkwy	Vincennes	Del Prado	13,865	0.6	1.08	8,985
Country Club	Palm Tree	SE 9th	8,027	1.0	1.08	8,669
Country Club	SE 9th	Wildwood	8,027	0.8	1.08	6,935
Country Club	Wildwood	Archer	12,406	1.1	1.08	14,738
Country Club	Archer	Veterans	18,244	0.3	1.06	5,802
Country Club	Veterans	Nicholas	20,329	1.7	1.06	36,633
Country Club	Nicholas	SE 10th	15,429	0.3	1.08	4,999
Country Club	SE 10th	Viscaya	16,055	0.3	1.08	5,202
Cultural Park	SR 78	Hancock	5,213	0.5	1.08	2,815
Cultural Park	Hancock	SE 5th	8,653	0.6	1.08	5,607
Cultural Park	SE 5th	Nicholas	5,734	0.9	1.08	5,573
Del Prado Blvd	SR 78	Diplomat	13,240	1.0	1.06	14,034
Del Prado Blvd	Diplomat	Kismet	9,800	1.0	1.06	10,388
Del Prado Extension	Kismet	US 41	8,757	3.5	1.06	32,488
Diplomat Pkwy	Burnt Store	El Dorado	900	1.0	1.22	1,098
Diplomat Pkwy	El Dorado	Chiquita	900	1.1	1.22	1,208
Diplomat Pkwy	Chiquita	Nelson	900	1.0	1.22	1,098
Diplomat Pkwy	Nelson	Del Prado	3,649	3.0	1.06	11,604
El Dorado Blvd	Celtus	Tropicana	900	1.7	1.22	1,867
El Dorado Blvd	Tropicana	Diplomat	900	0.8	1.22	878
El Dorado Blvd	Diplomat	Kismet	900	1.3	1.22	1,427
El Dorado Blvd	Kismet	Jacarando	900	1.1	1.22	1,208
El Dorado Pkwy	SW 28th	Chiquita	5,000	1.6	1.10	8,800

Roadway	From	To	2002 AADT	Miles	Peak Season Factor	Peak Season VMT
El Dorado Pkwy	Chiquita	Skyline	5,000	1.0	1.10	5,500
El Dorado Pkwy	Skyline	Pelican	5,000	0.5	1.10	2,750
El Dorado Pkwy	Bayside	Coronado	5,000	1.1	1.10	6,050
El Dorado Pkwy	Coronado	Del Prado	5,000	0.7	1.10	3,850
Gleason Pkwy	Pelican	Skyline	5,317	0.6	1.06	3,382
Gleason Pkwy	Santa Barbara	Pelican	7,923	0.5	1.06	4,199
Gleason Pkwy	Skyline	Chiquita	3,440	1.0	1.06	3,646
Hancock Bridge Pkwy	Del Prado	Cultural	11,780	1.1	1.08	13,995
Hancock Bridge Pkwy	Cultural	Santa Barbara	11,885	1.0	1.08	12,836
Kismet Pkwy	El Dorado	Chiquita	900	1.0	1.22	1,098
Kismet Pkwy	Chiquita	Nelson	900	1.0	1.22	1,098
Kismet Pkwy	Nelson	Juanita	900	1.0	1.22	1,098
Kismet Pkwy	Juanita	Andalusia	900	1.1	1.22	1,208
Kismet Pkwy	Andalusia	Del Prado	900	1.0	1.22	1,098
Kismet Pkwy	Del Prado	NE 24th	3,128	1.0	1.06	3,316
Miracle Pkwy	Surfside	Chiquita	3,962	1.0	1.06	4,200
Mohawk Pkwy	Pelican	Skyline	2,189	0.5	1.07	1,171
Mohawk Pkwy	Skyline	Chiquita	3,962	1.0	1.10	4,358
Nelson Rd	Embers	Tropicana	900	0.9	1.22	988
Nelson Rd	Tropicana	Diplomat	900	1.0	1.22	1,098
Nelson Rd	Diplomat	Kismet	900	1.0	1.22	1,098
Nelson Rd	Kismet	Wilmington	900	0.9	1.22	988
Nicholas Pkwy	Santa Barbara	SR 78	4,379	1.4	1.07	6,560
Nicholas Pkwy	Country Club	Santa Barbara	10,112	1.2	1.07	12,984
Palm Tree Blvd	Cape Coral	SE 47th	9,383	0.1	1.08	1,013
Palm Tree Blvd	Country Club	Wildwood	6,151	1.3	1.08	8,636
Palm Tree Blvd	SE 47th	Country Club	8,444	0.2	1.08	1,824
Pelican Blvd	Cape Coral	Mohawk	7,715	1.1	1.10	9,335
Pelican Blvd	Mohawk	Gleason	6,568	1.0	1.10	7,225
Pelican Blvd	Cape Coral	El Dorado	8,236	0.9	1.10	8,154
Rose Garden Rd	SW 58th	El Dorado	900	1.5	1.10	1,485
Santa Barbara Blvd	Cape Coral	Gleason	12,302	2.1	1.10	28,418
Santa Barbara Blvd	Gleason	Kamal	19,495	0.5	1.07	10,430
Santa Barbara Blvd	Kamal	Veterans	22,935	0.5	1.07	12,270
Santa Barbara Blvd	Veterans	SW 22 Ter	29,399	0.2	1.07	6,291
Santa Barbara Blvd	SW 22 Ter	Trafalgar	24,395	0.9	1.07	23,492
Santa Barbara Blvd	Trafalgar	Nicholas	23,978	0.7	1.07	17,960
Santa Barbara Blvd	Nicholas	Hancock	19,078	1.3	1.07	26,537
Santa Barbara Blvd	Hancock	SR78	10,529	0.1	1.07	1,127
Savona Pkwy	Aqualinda	Chiquita	2,919	0.7	1.10	2,248
SE 24 Ave	Viscaya	Hancock	7,089	1.1	1.10	8,578
SE 47 Ter	Del Prado	SE 17th	4,274	0.2	1.10	940
SE 47 Ter	Palm Tree	Coronado	12,197	0.7	1.10	9,392
SE 47 Ter	Coronado	Vincennes	11,468	0.2	1.10	2,523
SE 47 Ter	Vincennes	Del Prado	7,610	0.4	1.10	3,348
Skyline Blvd	Trafalgar	SR78	5,108	1.4	1.07	7,652
Skyline Blvd	Cape Coral	Mohawk	9,800	1.1	1.10	11,858
Skyline Blvd	El Dorado	Cape Coral	7,610	0.9	1.10	7,534
Skyline Blvd	Mohawk	Gleason	14,074	1.0	1.10	15,481

Roadway	From	To	2002 AADT	Miles	Peak Season Factor	Peak Season VMT
Skyline Blvd	Gleason	Miracle	11,051	1.0	1.07	11,825
Skyline Blvd	Miracle	Trafalgar	8,027	1.1	1.07	9,448
Trafalgar Pkwy	Santa Barbara	Skyline	8,132	1.1	1.07	9,571
Trafalgar Pkwy	Skyline	Chiquita	5,421	1.0	1.07	5,800
Trafalgar Pkwy	Chiquita	Surfside	2,919	1.0	1.07	3,123
Tropicana Pkwy	Burnt Store	El Dorado	900	1.0	1.22	1,098
Tropicana Pkwy	El Dorado	Chiquita	900	1.0	1.22	1,098
Tropicana Pkwy	Chiquita	Nelson	900	1.0	1.22	1,098
Tropicana Pkwy	Nelson	Juanita	900	1.0	1.22	1,098
Tropicana Pkwy	Juanita	Andalusia	900	1.1	1.22	1,208
Vincennes Blvd	Cape Coral	SE 47th	5,942	0.1	1.10	654
Vincennes Blvd	SE 47th	Coronado	3,545	0.5	1.10	1,950
Viscaya Pkwy	Del Prado	SE 24th	14,804	1.0	1.08	15,988
Viscaya Pkwy	SE 9th	Del Prado	17,618	0.6	1.08	11,416
Wildwood Pkwy	Palm Tree	Country Club	4,483	0.4	1.08	1,937
Subtotal, Cape Coral Arterials and Collectors				104.0		869,097
Casa Ybel Rd	W Gulf Dr	Middle Gulf Dr	2,500	0.6	1.25	1,875
Casa Ybel Rd	Middle Gulf Dr	Blrdsong Place	2,500	0.3	1.25	938
Casa Ybel Rd	Blrdsong Place	Perlwinkle Way	2,500	0.7	1.25	2,188
Gulf Dr	Rue Belle	Tarpon Bay Rd	2,500	5.3	1.25	16,563
Gulf Dr	Tarpon Bay Rd	Casa Ybel Rd	2,500	0.7	1.25	2,188
Gulf Dr	Casa Ybel Rd	Donax St	2,500	1.6	1.25	5,000
Perlwinkle Way	Tarpon Bay Rd	Casa Ybel Rd	9,600	1.4	1.25	16,800
Perlwinkle Way	Casa Ybel Rd	Donax St	9,600	0.7	1.25	8,400
Perlwinkle Way	Donax St	Causeway Blvd	9,600	0.7	1.25	8,400
Perlwinkle Way	Causeway Blvd	Ferry Landing Dr	9,600	1.3	1.25	15,600
Sanibel-Captiva Blvd	Captiva Bridge	Rue Belle	5,900	3.4	1.25	25,075
Sanibel-Captiva Blvd	Rue Belle	Tarpon Bay Rd	7,750	3.9	1.25	37,781
Subtotal, Sanibel				20.6		140,808
Total				638.0		11,459,013

Source: Lee County Department of Transportation, *Traffic County Report*, 2001, Florida Department of Transportation, *Florida Traffic Information*, 2001, and the City of Cape Coral's web site section titled *2001 Traffic Counts*; most AADTs based on 2001 traffic count data increased by 4.25% for 2002, AADTs of 900, 2,500 and 5,000 are estimates based on local knowledge and judgement from CRSPE, February 11, 2003 memorandum.