

**TRANSPORTATION ELEMENT
DATA AND ANALYSIS**

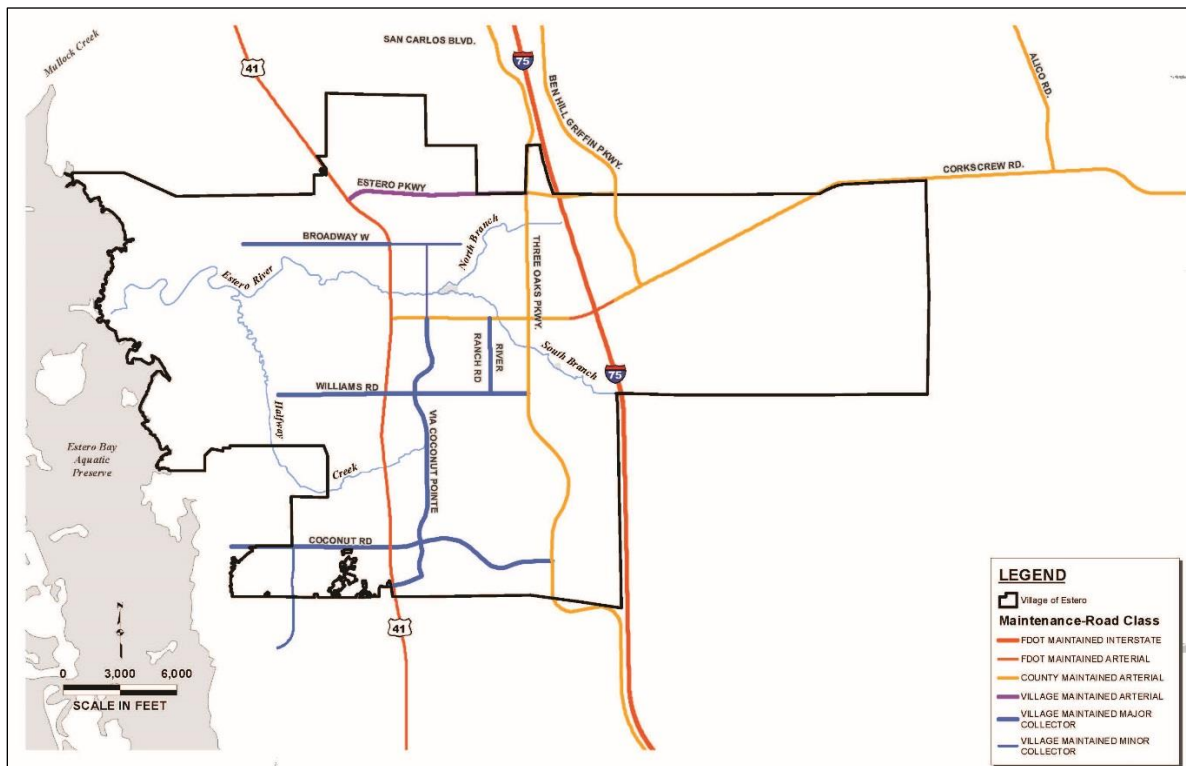
Transportation Element Data & Analysis

INTRODUCTION

Shortly after incorporation, the Village of Estero commissioned a transportation inventory and two traffic studies to identify transportation issues and needs. Much of the data in this report was derived from these reports: *Estero Infrastructure Inventory* dated February 2016, *Coconut Road Traffic Study* dated June 2016, and *The Village of Estero Area-Wide Traffic Study* dated August 2017.

EXISTING CONDITIONS

ROADWAYS



As depicted in the Roadway Classification Map above and incorporated in the Comprehensive Plan, the Village roadways are divided into 5 functional classifications:

- 1) Interstate
- 2) Arterial
- 3) Major Collector
- 4) Minor Collector
- 5) Local roads, public or privately maintained

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CONCURRENCY – LEVELS OF SERVICE

Lee County performs an annual Concurrency Report to document levels of service (LOS). The operational levels of service reported by Lee County in the 2015 Concurrency Report are shown on **Attachment 3: Roadway Level of Service Map**. Conditions of key corridors are summarized here:

- Corkscrew Road from Three Oaks Parkway to I-75 operated at LOS F, below the standard designated for arterials of LOS E.
- Estero Parkway from US 41 to Ben Hill Griffin Parkway operated at LOS E.
- Coconut Road from Spring Creek to US 41 operated at LOS E.
- The remaining public roadways in the Village operate at LOS C or better.

The majority of the Village's roadways are expected to continue to operate within level of service standard thresholds, with exception of Corkscrew Road from Three Oaks Parkway to I-75, Estero Parkway from US 41 to Ben Hill Griffin Parkway, and Coconut Road from Spring Creek to US 41. Studies and coordination to address necessary improvements along these corridors are underway.

ROADWAY MAINTENANCE RESPONSIBILITIES

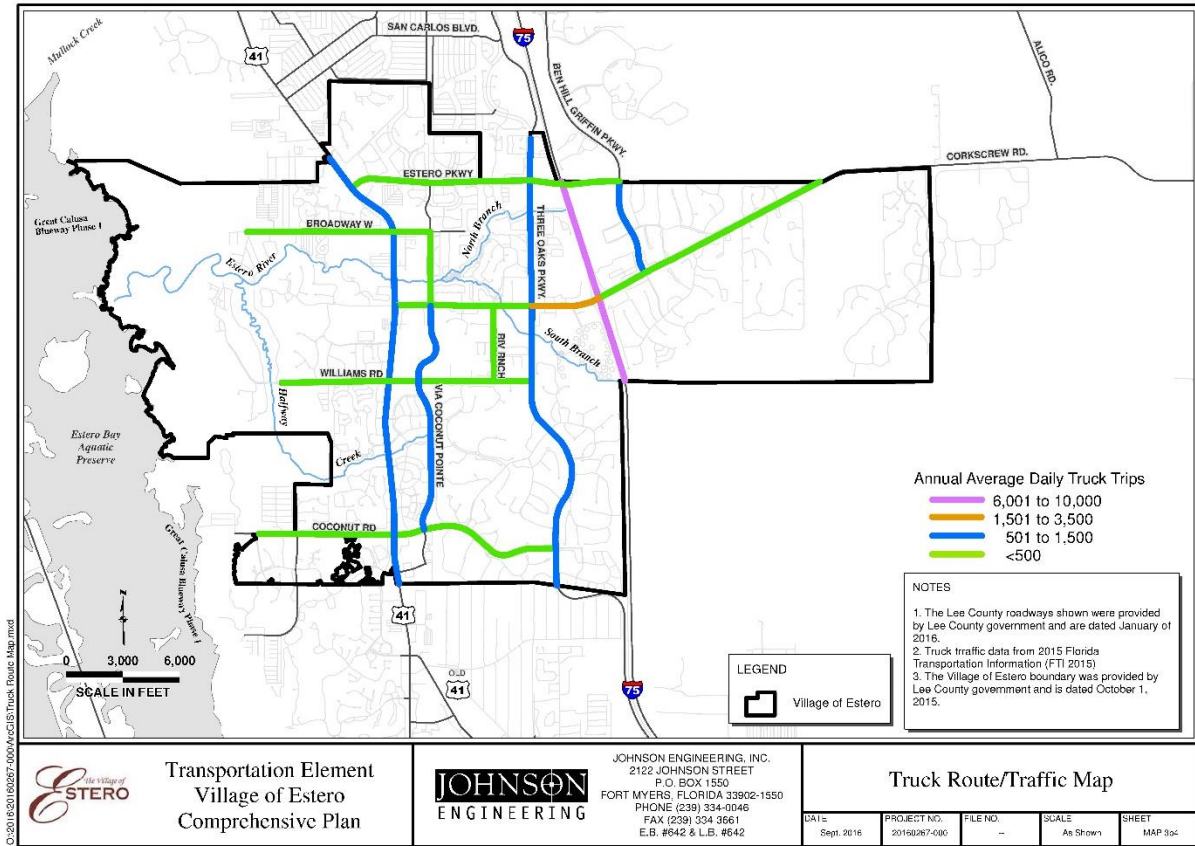
The Village has a significant number of gated communities. Roadways within these communities are typically privately maintained. Other than I-75, US 41 and Three Oaks Parkway, which are maintained by Lee County, all remaining public roads not located in gated communities will be maintained by the Village. An interlocal maintenance agreement between the Village and the County outlines responsibility for maintenance of all the public roadways, except for I-75 and US 41 which are maintained by the Florida Department of Transportation (FDOT). For a full list of roadways according to responsible entity, see **Attachment 4: Roadway Maintenance List**.

- Given that major roadways in the Village are state and county roadways, the Village will adopt minimum level of service standards consistent with state and county standards, while establishing that the Village will maintain local roads in good order and repair.
- The Transportation Element identifies that studies and coordination to address necessary improvements in critical segments shall assist in evaluating, prioritizing roadway segments, intersections, and safety improvements for potential inclusion in the Capital Improvements Plan.

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TRUCK TRAFFIC

Figure 9: Truck Route/Traffic Map



According to FDOT’s 2015 Florida Transportation Information (FTI 2015), the annual average daily trip count (AADT) for truck traffic along Corkscrew Road’s failing segment from Three Oaks to I-75 ranges from 1,501 to 3,500 trucks per day, while the segment between I-75 and Ben Hill Griffin Pkwy ranges up to 500 trucks per day. The range of 501-1,500 trucks per day applies to US 41, Three Oaks Parkway, Ben Hill Griffin Parkway, and Via Coconut Point from Corkscrew Road to Coconut Road.

According to intersection crash data in 2009, there were 28 crashes at I-75 and Corkscrew Road, 21 – 25 crashes at US 41, 11 – 15 at Three Oaks, and 8 - 10 at Ben Hill Griffin Parkway.

- Given the diminished level of service, the high volume of truck traffic, and the number of crashes along Corkscrew Road, an objective and policies in the Transportation Element of the Comprehensive Plan seek improvement of safety and traffic flow along Corkscrew Road.

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AREA-WIDE TRAFFIC STUDY

The Village commissioned a comprehensive evaluation of conditions of Estero's roadway traffic conditions. The purpose and findings of *The Village of Estero Area-Wide Traffic Study* dated August 14, 2017 are summarized on the following pages.

- The findings of *The Village of Estero Area-Wide Traffic Study* dated August 14, 2017 help define needs and options for addressing the Village's future roadway network improvements. Policies in the Transportation Element of the Comprehensive Plan recognize this Study as guidance for evaluating, prioritizing roadway segments, intersections, and safety improvements for potential inclusion in the Capital Improvements Plan.

Village of Estero

Area-Wide TRAFFIC STUDY



EXECUTIVE SUMMARY

This Area-Wide Traffic Study includes an analysis of the existing and projected future roadway and intersection conditions. The results of the analysis are outlined in more detail in the report.


The roadway analysis indicates that Corkscrew Road from Three Oaks Parkway to Bella Terra Boulevard is anticipated to operate over capacity in future conditions during the p.m. peak-hour. Corkscrew Road from Ben Hill Griffin Parkway to Bella Terra Boulevard is currently a two-lane roadway and is anticipated to be over capacity within the ten-year horizon period (2027) analyzed. Based upon discussions with Lee County DOT, the roadway widening is not a scheduled improvement as it is not currently funded as part of the County's five-year capital improvement program. However, concurrently with this analysis, Lee County has contracted with AIM Engineering & Surveying, Inc., to conduct an environmental and traffic study along Corkscrew Road. The study is intended to determine improvements needed to address the increased density along Corkscrew Road, east of I-75, and to identify costs and recommended transportation proportionate fair-share within the Corkscrew Road study area. It is anticipated potential widening of Corkscrew Road and funding will be analyzed as part of the County's study.


The intersection analysis for this study indicates several intersections within The Village of Estero are currently operating with approaches at an unacceptable level of service during the a.m. peak-hour and/or p.m. peak-hour including the following:

- Corkscrew Road & Bella Terra Boulevard
- Corkscrew Road & Cypress Shadows Boulevard
- Corkscrew Road & Ben Hill Griffin Parkway
- Corkscrew Road & I-75 Northbound Ramps
- Corkscrew Road & I-75 Southbound Ramps

Village of Estero

Area-Wide TRAFFIC STUDY





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Village of Estero Area-Wide TRAFFIC STUDY



- Corkscrew Road & Three Oaks Parkway
- Corkscrew Road & US 41
- US 41 & Estero Parkway
- US 41 & Broadway
- US 41 & Pelican Sound Drive
- US 41 & Williams Road
- US 41 & Fountain Lakes Boulevard

Programmed improvements that are anticipated within the ten-year analysis period of this study, from the FDOT, Lee County DOT, Village of Estero, and various development were included in the analysis.

In addition to the existing intersection deficiencies, the future (2027) analysis indicates the following intersection is anticipated to operate unacceptably during the p.m. peak-hour period.

- Corkscrew Road & Bella Terra Boulevard
- Coconut Road & Three Oaks Parkway


The following potential improvements were recommended to correct existing and future deficiencies (when warranted), for study area intersections in order to improve operations:

- Create median storage for the northbound left-turn at the intersection of Corkscrew Road & Cypress Shadows Boulevard
- Extend the southbound left-turn lane at Corkscrew Road & Ben Hill Griffin Parkway and re-time the intersection
- Provide interim safety improvements at the intersection of Corkscrew Road & Corkscrew Woodlands Boulevard

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Area-Wide TRAFFIC STUDY




- Re-time intersection, extend the eastbound left-turn lane at Corkscrew Road & Three Oaks Parkway, and add an additional northbound right-turn lane (for dual northbound right-turn lanes), depending on available right-of way
- Re-time the intersection of US 41 & Corkscrew Road and add an additional westbound right-turn lane (for dual westbound right-turn lanes), depending on available right-of way
- Re-time the intersection of US 41 & Estero Parkway and explore the possibility of an additional westbound right-turn (for dual westbound right-turns)
- Add a right-turn lane at the intersection of US 41 & Williams Road and extend the eastbound left-turn lane (along with the closure of the driveway on the west leg of Williams Road)
- Signalize the intersection of US 41 & Fountain Lakes Boulevard (when warranted)
- Re-time the intersection of Three Oaks Parkway & Coconut Road including changing the signal cycle length

The safety analysis that was conducted as part of the area-wide traffic study indicated that the study intersection signals appear to be in good shape as far as backplates, borders, and signal heads. It is recommended to confirm with Lee County DOT that the signal clearance interval times (yellow and all-red times) are adequate. It is also recommended to consider pavement friction improvements if skid numbers or visual inspection show poor pavement at the intersections of Ben Hill Griffin Parkway & Estero Parkway and Three Oaks Parkway & Williams Road. It is also recommended to consider lighting improvements at the intersection of Ben Hill Griffin Parkway & Estero Parkway and Three Oaks Parkway & Estero Parkway.


Village of Estero

Area-Wide TRAFFIC STUDY



Kimley»Horn

Village of Estero Area-Wide
TRAFFIC STUDY




SUMMARY OF ROADWAY ANALYSIS

The roadway analysis indicates that Corkscrew Road from Three Oaks Parkway to Ben Hill Griffin Parkway is anticipated to operate over capacity in future conditions during the p.m. peak-hour. The segments of Corkscrew Road from Ben Hill Griffin Parkway to Bella Terra Boulevard and east of Bella Terra Boulevard to Alico Road (outside The Village of Estero limits) are currently two-lanes and are anticipated to be over capacity within the ten-year horizon period (2027) analyzed.

Based upon discussions with Lee County DOT, the roadway widening is not a scheduled improvement as it is not currently funded as part of the County's five-year capital improvement program. The Metropolitan Planning Organization (MPO) Long Range Transportation Plan includes the four-lane improvement to Corkscrew Road in the Cost Feasible Plan with a projected year of expenditure between 2021 and 2025 for Preliminary Engineering and Right-of-Way Acquisition and from 2026 to 2030 for construction.

Concurrently with this analysis, Lee County has contracted with AIM Engineering & Surveying, Inc., to conduct an environmental and traffic study along Corkscrew Road. The study is intended to determine improvements needed to address the increased density along Corkscrew Road, east of I-75, and to identify costs and recommended transportation proportionate fair-share within the Corkscrew Road study area. It is anticipated potential widening of Corkscrew Road and funding will be analyzed as part of the County's study.

Village of Estero Area-Wide
TRAFFIC STUDY

Kimley » Horn



SUMMARY OF SAFETY ANALYSIS

Along the Corkscrew Road corridor and other identified intersections, Kimley-Horn reviewed the most recent five (5) years of crash data from Signal Four Analytics, an online system developed by the GeoPlan Center at the University of Florida.

The corridor crash trends are generally indicative of typical arterial congestion. Rear-end and sideswipe crashes are common for signalized intersections, especially during the peak travel demand periods. The results of the analysis did not indicate any needed potential access management or signal phasing changes; as the only trends that were identified were minimal and occurred at signalized intersections with existing protected-only left-turn phasing (green arrow).

It is recommended to consider pavement friction improvements if skid numbers or visual inspection show poor pavement at the intersections of Ben Hill Griffin Parkway & Estero Parkway and Three Oaks Parkway & Williams Road. It is recommended to consider lighting improvements at the intersection of Ben Hill Griffin Parkway & Estero Parkway and Three Oaks Parkway & Estero Parkway.



SUMMARY OF INTERSECTION ANALYSIS

The intersection analysis for this study indicates that the following intersections within The Village of Estero are currently operating with approaches that have an unacceptable level of service during the a.m. peak-hour and/or p.m. peak-hour:

- Corkscrew Road & Bella Terra Boulevard
- Corkscrew Road & Cypress Shadows Boulevard
- Corkscrew Road & Ben Hill Griffin Parkway
- Corkscrew Road & I-75 Northbound Ramps
- Corkscrew Road & I-75 Southbound Ramps
- Corkscrew Road & Three Oaks Parkway
- Corkscrew Road & US 41
- US 41 & Estero Parkway
- US 41 & Broadway
- US 41 & Pelican Sound Drive
- US 41 & Williams Road
- US 41 & Fountain Lakes Boulevard
- Coconut Road & Three Oaks Parkway

In addition to the existing intersection deficiencies, the future (2027) analysis indicates the following intersection is anticipated to operate unacceptably during the peak-hour period.

- Corkscrew Road & Bella Terra Boulevard
- Coconut Road & Three Oaks Parkway

Transportation Element Data & Analysis

COCONUT ROAD TRAFFIC STUDY

Coconut Road is an important east west major collector roadway within the Village, and it is under the jurisdiction and maintenance responsibility of the Village. Traffic on this roadway has increased in recent years, and future development is anticipated to impact the capacity of this roadway.

The Coconut Road Traffic Study from Estero Bay to Three Oaks Parkway was commissioned by the Village and was completed in June 2016 by Trebilcock Consulting Solutions.

The Study:

- Examined existing and future conditions on the road.
- Collected traffic counts during the peak season 2016 to capture existing conditions.
- Added trips from future developments directly impacting Coconut Road in the City of Bonita Springs, unincorporated Lee County and the Village of Estero to the existing counted traffic.
- Analyzed the intersection of US 41 and Coconut Road, in terms of delay, based on vehicle turning movement counts as part of the traffic study.

Study Findings:

- Coconut Road currently operates at a satisfactory Level of Service (called LOS C)
- The segment of Coconut Road West of US 41 is projected to be operating at a failing Level of Service (F) in the future as developments are completed in approximately 5 years.
- Lee County does not currently have plans to improve the capacity of Coconut Road based on their financially feasible road plan.
- The intersection of US 41 and Coconut Road is currently operating at a satisfactory Level of Service, although the eastbound and westbound approaches experience significant delay.
- The intersection is projected to fail in less than 5 years.

Recommendations:

- Intersection of US41 and Coconut Road: Extend turn lanes, signal retiming
- Coconut Road: Widen road to 4 lanes or install roundabouts

Coconut Road West of US-41:

	LOS	VOLUME (CAPACITY = 860 vph)
2015 Lee County Concurrency Report	C	366 vph
2016 Village of Estero Counts	C	522 vph
2021 Village of Estero Projection*	F	1,196 vph
2026 Village of Estero Projection**	F	1,343 vph

LOS = Level of Service, where A thru E are satisfactory, and F is failing.

Transportation Element Data & Analysis

Roadway Link Capacity recommendations:

- A. Four-lane (costly, ROW issues); or
- B. Two-lane enhancement [Intersection improvements; i.e. Roundabouts and/or signal optimization]

Note: On Coconut Road east of US 41, there are no existing or projected LOS issues.

Coconut Road and US-41 Intersection:

2016 Conditions:	Eastbound and westbound PM approach delay LOS=F Overall LOS = D.
2021 Conditions*:	Eastbound, westbound and overall approach delay LOS=F Overall LOS = D, with improvements.
2026 Conditions**:	Eastbound, westbound and overall approach delay LOS=F Overall LOS = E, with improvements.

Intersection Capacity Recommendations:

- A. Signal retiming
- B. On Coconut Road:
 - Extend eastbound right-turn lane; and
 - Extend westbound dual left-turn lanes
- C. On US-41:
 - Extend southbound right-turn lane; and
 - Provide northbound dual left-turn lanes

*2021 Conditions include the traffic from all developments west of US-41 which have zoning approvals. Specific year of occurrence may vary depending on when units are constructed.

**2026 Conditions include the traffic from all developments west of US-41 which have potential for permitting including those not yet rezoned (i.e. Weeks, Raptor Bay, Diocese of Venice). Specific year of occurrence may vary depending on when units are constructed. Overall Recommendation: Work with City of Bonita Springs and Lee County to identify future improvement needs and funding sources (include in financially feasible plan).

- The findings of *The Coconut Road Traffic Study from Estero Bay to Three Oaks Parkway* dated June 2016 help define needs and options for addressing the Village's future roadway network improvements. This Study helps guide policies in the Transportation Element of the Comprehensive Plan aimed at evaluating, prioritizing roadway segments, intersections, and safety improvements for potential inclusion in the Capital Improvements Plan.

SUSTAINABILITY

TRIP REDUCTION/CONVERSION DUE TO EMERGING TECHNOLOGIES

As the opportunities for automobile trip reduction increase due to emerging technologies, and communities move toward use of automated (or driverless) vehicles, significant implications are expected in mobility of individuals as well as goods and services. Automated vehicle fleets may accommodate efficient commuter ridesharing and decrease the need to increase roadway capacity on facilities that currently fail only during peak hour but functions well off peak.

Pilot projects are already underway for automated vehicles and semi-automated vehicles by Google, Tesla, and other entities on land and air with potential for converting trips to multi-purpose/shared trips. Additional lanes on I-75 may function as a toll expressway facility and set the stage for managed lanes exclusively for automated or semi-automated cars and trucks with congestion pricing to promote off peak use.

ALTERNATIVE FUEL VEHICLE TRANSPORTATION IMPLICATIONS

Alternative fuel vehicles, such as electric or compressed natural gas, have a significant impact on gas sales tax necessary for roadway improvements. The reduction in this revenue can lead the local governments to either institute a roadway utility tax in the future, or alternatively, do more with the existing pavement resources to achieve an efficient and more compact community to maximize mobility.

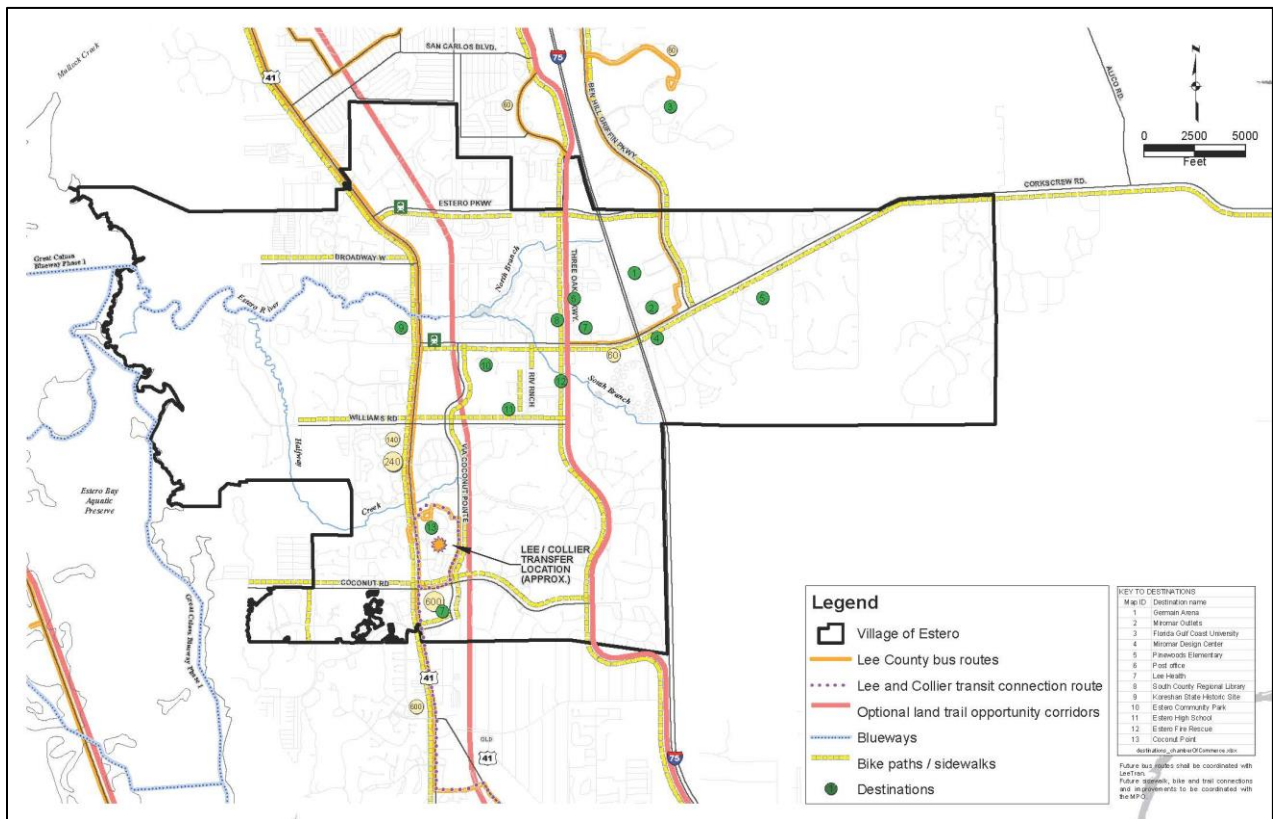
- The Transportation Element of the Comprehensive Plan contains policies to support new and emerging innovations such as alternative fueled vehicles, driverless and autonomous vehicles.

Transportation Element Data & Analysis

MULTI-MODAL TRANSPORTATION

The Village commissioned the *Estero Infrastructure Inventory* dated February 2016 and inventoried alternative transportation facilities. Based on the inventory and public involvement conducted during the comprehensive planning process, the Village places priority on expanding options for blueways, bikeways, and pedestrian paths and exploring an approach to transportation and mobility which promotes public transit and bicycle pedestrian activities in the Village to reduce the automobile traffic volumes and the subsequent need for roadway widening and extension.

Figure 10: Alternative Transportation Inventory



The map above depicts LeeTran bus routes, the CSX rail corridor, trail opportunities, bicycle/pedestrian facilities, blueways for recreation purposes as well as potential intermodal connections, and destinations most likely to attract trips whether for recreation, shopping, work, or entertainment. This map is incorporated in the Comprehensive Plan to identify and address multimodal transportation facilities.

Estero’s main arterial routes are generally served with bike paths/sidewalks and public transit. As the community matures, there are finer grain network connections, regional trails, and linkages needed to improve the quality of life with nonvehicular options linking employment, school, shopping, and recreational destinations. Given that the Village is in the early stages of its existence, the deficiencies and needs will be determined through a more robust planning effort to be performed in coordination with the

Transportation Element Data & Analysis

MPO. The Village will cooperate with the MPO's upcoming Bicycle and Pedestrian Master Plan for Estero, which will assist in refining the community's bicycle and pedestrian issues, needs and priorities.

The above data and public input indicates the Village should place priority on identifying and planning for opportunities to promote alternative transportation approaches in conjunction with land use patterns and planning of recreation facilities conducive to use of walking, bicycling and transit facilities.

- The Transportation Element of the Comprehensive Plan contains goals, objectives and policies to support complete streets; roadway beautification; multi-modal interconnections; blueway, bikeway and pedestrian path maintenance and enhancement.
- Coordination with the MPO on developing the Estero Bicycle and Pedestrian Master Plan is identified in the Transportation Element as a policy directive of the Village.

**HOUSING ELEMENT
DATA AND ANALYSIS**

Housing Element Data & Analysis

INTRODUCTION

The goals, objectives and policies of the comprehensive plan were formulated with principles, guidelines, standards and strategies that provide for:

- A. The provision of housing for all current and anticipated future residents of the jurisdiction.
- B. The elimination of substandard dwelling conditions.
- C. The structural and aesthetic improvement of existing housing.
- D. The provision of adequate sites for future housing, including affordable workforce housing as defined in Florida Statute 380.0651(3)(h), housing for low-income, very low-income, and moderate-income families, mobile homes, and group home facilities and foster care facilities, with supporting infrastructure and public facilities.
- E. Provision for relocation housing and identification of historically significant and other housing for purposes of conservation, rehabilitation, or replacement.
- F. The formulation of housing implementation programs.
- G. The creation or preservation of affordable housing to minimize the need for additional local services and avoid the concentration of affordable housing units only in specific areas of the jurisdiction.

The following data and analysis reflects the housing needs of the Village, and the number and distribution of units based on type, tenure, age, rent, value, monthly cost of the owner-occupied units, and rent or cost to income ratios. Also included are estimates of the number of units that are substandard.

EXECUTIVE SUMMARY

The majority of the tables provided herein are derived from estimates provided by the US Census Bureau's 2015 American Community Survey (ACS), which provides a variety of data on population characteristics, economics, and housing affordability. The Village of Estero also had a more recent population and housing study conducted by Metro Forecasting Models, LLC. (MFM). MFM studied each of the Village traffic analysis zones individually, in order to precisely analyze the current number of housing units and the potential for growth. Using their estimated and forecasted housing data, MFM provided both the permanent and peak seasonal current and forecasted population for the Village of Estero.

Housing Element Data & Analysis

Estero, as a newly formed municipality, currently has a population of approximately 30,800 with an estimated 24,257 housing units as of 2016. The median age in Estero is 62, which is considerably higher than the Lee County (47) and State of Florida (41) median age. The median household income is also considerably higher than the state and county at nearly \$68,000 per year.

The housing stock is relatively new with over 86% of the dwelling units built since 1990, and almost no instances of substandard housing units. None of the dwelling units lack complete plumbing facilities and only 0.1% of the dwelling units lack complete kitchen facilities.

The study conducted by MFM indicates that single family housing units (single-family detached units and mobile homes) comprise 59% of the total housing stock, making it the predominant dwelling unit type. The ACS estimates that percentage to be 55%, which is an acceptable difference considering the ACS is only an estimate.

The ACS estimates show that the Village has a significantly smaller proportion of single family detached housing units (44%) than Lee County (53%) or the State of Florida (54%); and that the Village exceeds the County and State proportions of townhomes, mobile homes, and multifamily units in structures containing between 3 and 19 units; providing for a diverse Village housing stock. The MFM study shows an additional 1,562 multifamily units are forecasted to be built by 2025.

Approximately 3,847, a third, of the owner-occupied housing units are valued at less than \$200,000; and approximately 1,278 units, or nearly two thirds of the total rental housing stock, are renting for \$1,499 or less. Overall, the data and analysis in this report indicates that there are sufficient affordable housing options in the Village of Estero. With the available land for development diminishing in the Village, it is important that the Future Land Use Element, Future Land Use Map, and Housing Element of the Comprehensive Plan provide for mixed-use areas, whereby the private sector will have the ability to provide high quality, yet moderately affordable housing in locations that allow convenient access to goods and services.

- The Future Land Use Element and Housing Element include policies and land use categories that provide for a variety of housing types in the Village to accommodate current and future populations.

Housing Element Data & Analysis

HOUSING DATA AND POPULATION PROJECTIONS

Figure 11: Housing and Population Estimates and Projections

	<u>2016</u> <u>2018</u>	<u>2020</u> <u>2023</u>	<u>2025</u> <u>2028</u>	2030	2035	2040	BUILD- OUT
Population							
Permanent	34,631 30,851	42,174 38,410	46,749 44,684	48,125	49,266	49,916	51,848
Peak Seasonal	51,738 46,094	63,009 57,385	69,843 66,758	71,899	73,603	74,575	77,253
Housing Units							
Total	25,308 24,257	27,257 26,358	28,293 27,856	28,585	28,834	28,981	29,411
Single-Family *	14,996 14,246	16,068 15,746	16,402 16,283	16,482	16,625	16,735	17,063
% of Total	58.7 59.3%	59.7 59.0%	58.5 58.0%	57.7%	57.7%	57.7%	58.0%
Multi-Family	10,312 10,011	11,189 10,612	11,891 11,573	12,103	12,209	12,246	12,348
% of Total	41.3 40.7%	40.3 41.0%	41.5 42.0%	42.3%	42.3%	42.3%	42.0%
Household Size							
Single-Family	2.25	2.35	2.35	2.361	2.368	2.374	
Multi-Family	1.85	1.953	2.117	2.208	2.226	2.233	
Housing Vacancy Rate **							
Single-Family	0.39	0.321	0.296	0.287	0.28	0.275	
Multi-Family	0.39	0.346	0.276	0.238	0.23	0.227	
* Includes mobile homes							
** The vacancy rate is based on the number of units vacant for sale or rent plus seasonally vacant units divided by the total housing inventory.							

Source: Summary Housing & Population Report, Village of Estero, 2016; Metro Forecasting Models, LLC.
[LaRue Planning, 2017](#)

In the population and housing study conducted by MFM, each of the Village traffic analysis zones was studied individually, in order to precisely analyze the current number of housing units and the potential for growth. The results indicate that a significant portion of the Estero housing stock is currently only used on a seasonal basis, but as time goes on, seasonal residents will become permanent and the proportion of the population that is seasonal will decrease. The study found that approximately 5,154 units can be added per existing development regulations before available developable land is consumed, and a majority of that build out will occur in the next 5 to 10 years (not including redevelopment). With the modest amount of vacant land, there are limited options available to the Village for continuation of the same low density housing patterns that have been characteristic of the Village for many years.

Housing Element Data & Analysis

Approximately half (49.5%) of Estero’s population are aged 62 years and older. This is a significantly older community compared to Lee County (30.0%) and the State of Florida (22.2%).

- The Housing Element of the Comprehensive Plan includes policies which focus on housing needs of the elderly, as a subset of special needs populations in the Village.

Figure 12: Estero Age Statistics

	Estero		Lee Co		Florida	
	Estimate	Percent	Estimate	Percent	Estimate	Percent
Total population	29,588		663,675		19,645,772	
Under 5 years	1,100	3.7%	32,816	4.9%	1,081,057	5.5%
5 to 9 years	900	3.0%	34,416	5.2%	1,110,752	5.7%
10 to 14 years	1,008	3.4%	36,730	5.5%	1,140,728	5.8%
15 to 19 years	947	3.2%	35,273	5.3%	1,187,205	6.0%
20 to 24 years	1,106	3.7%	35,061	5.3%	1,301,825	6.6%
25 to 34 years	2,286	7.7%	70,760	10.7%	2,468,945	12.6%
35 to 44 years	2,199	7.4%	71,678	10.8%	2,427,295	12.4%
45 to 54 years	2,472	8.4%	83,658	12.6%	2,747,409	14.0%
55 to 59 years	1,837	6.2%	44,686	6.7%	1,312,091	6.7%
60 to 64 years	3,295	11.1%	48,551	7.3%	1,217,474	6.2%
65 to 74 years	7,620	25.8%	96,210	14.5%	1,984,853	10.1%
75 to 84 years	3,894	13.2%	53,211	8.0%	1,167,015	5.9%
85 years and over	924	3.1%	20,625	3.1%	499,123	2.5%
Median age (years)	61.8		46.9		41.4	
18 years and over	25,975	87.8%	538,200	81.1%	15,604,649	79.4%
21 years and over	25,447	86.0%	517,414	78.0%	14,844,344	75.6%
62 years and over	14,654	49.5%	199,169	30.0%	4,368,830	22.2%
65 years and over	12,438	42.0%	170,046	25.6%	3,650,991	18.6%

Source: US Census Bureau 2015 American Community Survey

Over 84% of the Village housing stock is owner occupied, which is a higher percentage than Lee County (69%) and the State of Florida (65%).

Housing Element Data & Analysis

Figure 13: Housing Tenure

	Estero		Lee Co		Florida	
	Estimate	Percent	Estimate	Percent	Estimate	Percent
Occupied Housing Units	13,790	13,790	252,287	252,287	7,300,494	7,300,494
Owner-occupied	11,597	84.1%	174,162	69.0%	4,765,260	65.3%
Renter-occupied	2,193	15.9%	78,125	31.0%	2,535,234	34.7%

Source: US Census Bureau 2015 American Community Survey

Though the Village housing is predominantly single family detached homes, the proportion of single family detached homes in the Village is significantly less than the Lee County and State of Florida proportions. The Village exceeds the County and State proportions of townhomes, mobile homes, and multifamily units in structures containing between 3 and 19 units. This demonstration of housing variety is positive.

- The Future Land Use Element, Future Land Use Map, and Housing Element of the Comprehensive Plan provide policies and land use categories that provide for a variety of housing types in the Village.

Figure 14: Housing Units by Type

	Estero		Lee Co		Florida	
	Estimate	Percent	Estimate	Percent	Estimate	Percent
Total housing units	23,282		374,333		9,094,999	
1-unit, detached	10,219	43.9%	199,628	53.3%	4,921,430	54.1%
1-unit, attached	3,991	17.1%	31,214	8.3%	566,490	6.2%
2 units	98	0.4%	9,885	2.6%	199,279	2.2%
3 or 4 units	1,477	6.3%	15,383	4.1%	354,985	3.9%
5 to 9 units	1,239	5.3%	18,123	4.8%	457,445	5.0%
10 to 19 units	1,725	7.4%	22,135	5.9%	540,669	5.9%
20 or more units	1,924	8.3%	38,186	10.2%	1,214,679	13.4%
Mobile home	2,578	11.1%	39,383	10.5%	828,485	9.1%
Boat, RV, Van, etc.	31	0.1%	396	0.1%	11,537	0.1%

Source: US Census Bureau 2015 American Community Survey

Housing Element Data & Analysis

Figure 15: Year Structure Built

	Estero		Lee Co		Florida	
	Estimate	Percent	Estimate	Percent	Estimate	Percent
Total housing units	23,282		374,333		9,094,999	
Built 2014 or later	52	0.2%	493	0.1%	11,438	0.1%
Built 2010 to 2013	505	2.2%	3,470	0.9%	117,898	1.3%
Built 2000 to 2009	14,454	62.1%	127,967	34.2%	1,868,511	20.5%
Built 1990 to 1999	5,022	21.6%	66,556	17.8%	1,572,724	17.3%
Built 1980 to 1989	1,797	7.7%	81,305	21.7%	1,923,496	21.1%
Built 1970 to 1979	839	3.6%	58,845	15.7%	1,658,289	18.2%
Built 1960 to 1969	406	1.7%	21,251	5.7%	870,929	9.6%
Built 1950 to 1959	168	0.7%	9,513	2.5%	670,395	7.4%
Built 1940 to 1949	18	0.1%	2,072	0.6%	200,217	2.2%
Built 1939 or earlier	21	0.1%	2,861	0.8%	201,102	2.2%

Source: US Census Bureau 2015 American Community Survey

Most of the Village of Estero housing stock is relatively new housing, as 83.7% of the entire stock was built between 1990 to 2009. Thus, the incidences of substandard conditions in Village housing stock is very low.

- The Housing Element of the Comprehensive Plan includes policies to ensure that the quality of housing remains high, and that implementation of a property maintenance code will be evaluated to maintain these conditions.

Figure 16: Substandard Housing Characteristics

	Estero		Lee Co		Florida	
	Estimate	Percent	Estimate	Percent	Estimate	Percent
Occupied housing units	13,790		252,287		7,300,494	
Lacking complete plumbing facilities	0	0.0%	804	0.3%	22,347	0.3%
Lacking complete kitchen facilities	9	0.1%	1,657	0.7%	51,067	0.7%
No telephone service available	348	2.5%	6,929	2.7%	229,462	3.1%

Source: US Census Bureau 2015 American Community Survey

Housing Element Data & Analysis

When considering housing costs and affordability for the Estero population, it should be noted that the typically used metric of reported household income is not as useful of an indicator for an older population as it is for younger, working populations in other areas of Lee County and the State of Florida. Despite the median age in Estero being 62 and presumably, a large segment of the Village population being retired, the Village median household income is still higher than Lee County and Florida. The average median household income for renter occupied households is approximately the same as the average median household income for all Lee County and Florida households. These figures demonstrate that the Village population has significantly higher buying and renting power than the average household in the County or State.

Figure 17: Median Household Income

	Estero	Lee Co	Florida
Occupied Housing Units	\$67,993	\$48,537	\$47,507
Owner-Occupied Housing Units	\$73,010	\$56,383	\$57,539
Renter-Occupied Housing Units	\$48,967	\$35,426	\$33,153

Source: US Census Bureau 2015 American Community Survey

However, there are several indicators that demonstrate affordability in the Estero housing stock. As defined by Florida Statute 380.0651(3)(h), affordable workforce housing means housing that is affordable to those earning less than 120% of the area median income. With an area median household income of \$67,993, affordable workforce housing for the Village of Estero is any housing that is affordable to an income of less than \$81,592.

For purposes of this analysis, we will also look at households in the very low income, low income, and moderate income ranges; and whether those households are housing cost burdened, or spending greater than 30% of their income on housing.

Very low income households are those households earning less than 50% of the area median income. For Estero, these are households earning less than \$33,997. To not be cost burdened, monthly housing costs cannot exceed \$850 per month for these households.

Low income households are those households earning less than 80% of the area median income. For Estero, these are households earning less than \$54,394. To not be cost burdened, monthly housing costs cannot exceed \$1,360 per month for these households

Moderate income households are those households earning less than 120% of the area median income. For Estero, these are households earning less than \$81,592. To not be cost burdened, monthly housing costs cannot exceed \$2,040 per month for these households.

Housing Element Data & Analysis

Figure 18: Occupied Units Gross Rent

	Estero		Lee Co		Florida	
	Estimate	Percent	Estimate	Percent	Estimate	Percent
Occupied units paying rent	2,009		74,446		2,412,595	
Less than \$500	25	1.2%	3,521	4.7%	160,904	6.7%
\$500 to \$999	454	22.6%	38,344	51.5%	1,040,672	43.1%
\$1,000 to \$1,499	799	39.8%	24,436	32.8%	830,030	34.4%
\$1,500 to \$1,999	475	23.6%	4,874	6.5%	258,328	10.7%
\$2,000 to \$2,499	183	9.1%	1,858	2.5%	74,455	3.1%
\$2,500 to \$2,999	73	3.6%	541	0.7%	24,283	1.0%
\$3,000 or more	0	0.0%	872	1.2%	23,923	1.0%
Median (dollars)	1,272		951		1,002	
No rent paid	184		3,679		122,639	

Source: US Census Bureau 2015 American Community Survey

According to the ACS estimate, there were approximately 25 units renting for \$500 or less, which are within the range of affordability for very low income households.

There were approximately 479 units, or 23.8% of the total rental housing stock, renting for \$999 or less, which are within the range of affordability for low income households.

There were approximately 1,278 units, or 63.6% of the total rental housing stock, renting for \$1,499 or less, which are within the range of affordability for moderate income households.

This demonstrates there is an adequate degree of affordability in the Estero rental housing stock.

Housing Element Data & Analysis

Figure 19: Monthly Owner Costs

	Estero		Lee Co		Florida	
	Estimate	Percent	Estimate	Percent	Estimate	Percent
Housing units with a mortgage	5,370		92,498		2,847,869	
Less than \$500	45	0.8%	2,038	2.2%	52,895	1.9%
\$500 to \$999	689	12.8%	22,479	24.3%	607,788	21.3%
\$1,000 to \$1,499	1,290	24.0%	29,416	31.8%	871,184	30.6%
\$1,500 to \$1,999	1,074	20.0%	17,354	18.8%	593,451	20.8%
\$2,000 to \$2,499	956	17.8%	10,228	11.1%	322,234	11.3%
\$2,500 to \$2,999	562	10.5%	4,433	4.8%	165,910	5.8%
\$3,000 or more	754	14.0%	6,550	7.1%	234,407	8.2%
Median (dollars)	1,826		1,365		1,435	
Housing units without a mortgage	6,227	6,227	81,664	81,664	1,917,391	1,917,391
Less than \$250	605	9.7%	11,495	14.1%	306,239	16.0%
\$250 to \$399	867	13.9%	16,320	20.0%	464,741	24.2%
\$400 to \$599	1,307	21.0%	21,673	26.5%	541,150	28.2%
\$600 to \$799	1,518	24.4%	14,855	18.2%	294,854	15.4%
\$800 to \$999	665	10.7%	7,485	9.2%	131,573	6.9%
\$1,000 or more	1,265	20.3%	9,836	12.0%	178,834	9.3%
Median (dollars)	636		520		463	

Source: US Census Bureau 2015 American Community Survey

For housing units with a mortgage, the Census Bureau calculates the sum of payment for mortgages, real estate taxes, various insurances, utilities, fuels, mobile home costs, and condominium fees. These costs represent total monthly owner costs.

At the time of the ACS, they estimated there were approximately 45 units with less than \$500 in total monthly owner costs, which are within the range of affordability for very low income households.

There were approximately 734 units, or 13.6% of the total units with mortgages, with less than \$999 in monthly costs, which are within the range of affordability for low income households.

There were approximately 3,098 units, or 57.7% of the total units with mortgages, with less than \$1,999 in monthly costs, which are within the range of affordability for moderate income households.

This demonstrates there is an adequate degree of affordability in the ownership housing stock of Estero.

Housing Element Data & Analysis

Figure 20: Gross Rent as a Percentage of Household Income

	Estero		Lee Co		Florida	
	Estimate	Percent	Estimate	Percent	Estimate	Percent
Occupied units paying rent	1,995		72,529		2,345,564	
Less than 15.0 percent	318	15.9%	6,516	9.0%	194,463	8.3%
15.0 to 19.9 percent	290	14.5%	8,951	12.3%	238,533	10.2%
20.0 to 24.9 percent	160	8.0%	9,424	13.0%	280,405	12.0%
25.0 to 29.9 percent	118	5.9%	8,790	12.1%	265,029	11.3%
30.0 to 34.9 percent	275	13.8%	6,740	9.3%	222,989	9.5%
35.0 percent or more	834	41.8%	32,108	44.3%	1,144,145	48.8%

Source: US Census Bureau 2015 American Community Survey

55.6% of the Village renting households spend more than 30% of their income on housing. This figure is in between the County (53.6%) and State (58.3%) proportions. However, with the median age of the Village more than 20 years older than the State median and 15 years older than the County median, it is safe to assume that the Village contains significantly more retired households, for which reported household income is not as useful of a determining factor of cost burden.

Housing Element Data & Analysis

Figure 21: Monthly Owner Costs as a Percentage of Household Income

	Estero		Lee Co		Florida	
	Estimate	Percent	Estimate	Percent	Estimate	Percent
Housing units with a mortgage	5,360		91,411		2,823,251	
Less than 20.0 percent	1,909	35.6%	31,493	34.5%	948,793	33.6%
20.0 to 24.9 percent	635	11.8%	12,561	13.7%	421,802	14.9%
25.0 to 29.9 percent	570	10.6%	10,620	11.6%	317,583	11.2%
30.0 to 34.9 percent	490	9.1%	8,082	8.8%	234,463	8.3%
35.0 percent or more	1,756	32.8%	28,655	31.3%	900,610	31.9%
Housing units without a mortgage	6,056		80,046		1,877,451	
Less than 10.0 percent	2,523	41.7%	30,158	37.7%	725,855	38.7%
10.0 to 14.9 percent	1,504	24.8%	15,746	19.7%	364,748	19.4%
15.0 to 19.9 percent	561	9.3%	10,211	12.8%	229,578	12.2%
20.0 to 24.9 percent	402	6.6%	5,920	7.4%	143,912	7.7%
25.0 to 29.9 percent	287	4.7%	4,112	5.1%	96,423	5.1%
30.0 to 34.9 percent	104	1.7%	2,977	3.7%	68,113	3.6%
35.0 percent or more	675	11.1%	10,922	13.6%	248,822	13.3%

Source: US Census Bureau 2015 American Community Survey

The issue of using reported household income to determine cost burden in a largely retired population is especially problematic when assessing monthly owner costs as a percentage of household income. Here the ACS estimates that 41.9% of total households with a mortgage in the Village are cost burdened, spending 30% or more of their household income on housing expenses. This is on par with Lee County (40.1%) and the State of Florida (40.2%). While it is difficult to obtain data to support this theory, it is a logical assumption that many households are paying these costs out of retirement plans or savings that do not show as reported household income.

Housing Element Data & Analysis

Figure 22: Value of Owner-Occupied Units

	Estero		Lee Co		Florida	
	Estimate	Percent	Estimate	Percent	Estimate	Percent
Owner-occupied units	11,597		174,162		4,765,260	
Less than \$50,000	665	5.7%	19,342	11.1%	489,047	10.3%
\$50,000 to \$99,999	779	6.7%	34,827	20.0%	913,583	19.2%
\$100,000 to \$149,999	931	8.0%	28,438	16.3%	812,370	17.0%
\$150,000 to \$199,999	1,472	12.7%	24,329	14.0%	757,562	15.9%
\$200,000 to \$299,999	2,980	25.7%	29,594	17.0%	850,415	17.8%
\$300,000 to \$499,999	2,751	23.7%	23,064	13.2%	602,686	12.6%
\$500,000 to \$999,999	1,562	13.5%	11,017	6.3%	251,134	5.3%
\$1,000,000 or more	457	3.9%	3,551	2.0%	88,463	1.9%
Median (dollars)	265,600		157,400		159,000	

Source: US Census Bureau 2015 American Community Survey

Of the owner occupied dwelling units in Estero, approximately 3,847 (33%) of them are valued at less than \$200,000, which is a price range that is affordable for the majority of households.

Overall, the above data and analysis indicates that there are sufficient affordable housing options in the Village of Estero, especially when the issue of reported monthly income amongst a largely retired population is considered. However, with the Village predicted to approach complete buildout within 5 years, it is important that the Future Land Use Element, Future Land Use Map, and Housing Element of the Village's Comprehensive Plan provide for mixed-use areas, whereby the private sector will have ability to provide high quality, yet moderately affordable housing.

- No deficiencies are identified in the variety, quality and affordability housing stock in Estero.
- The Future Land Use Element, Future Land Use Map, and Housing Element of the Comprehensive Plan provide policies and land use categories that provide for a variety of housing types in the Village to accommodate current and future populations.