

**PAM/T 96-13
BoCC SPONSORED
EAR ADDENDUM AMENDMENT
TO THE**

LEE COUNTY COMPREHENSIVE PLAN

THE LEE PLAN

BoCC Adoption Document

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June 3, 1998

**LEE COUNTY
DIVISION OF PLANNING
STAFF REPORT FOR
COMPREHENSIVE PLAN AMENDMENT
PAM/T 96-13**

✓	This Document Contains the Following Reviews:
✓	Staff Review
✓	Local Planning Agency Review and Recommendation
✓	Board of County Commissioners Hearing for Transmittal
✓	Staff Response to the DCA Objections, Recommendations, and Comments (ORC) Report
✓	Board of County Commissioners Hearing for Adoption

ORIGINAL STAFF REPORT PREPARATION DATE: October 27, 1997

PART I - BACKGROUND AND STAFF RECOMMENDATION

A. SUMMARY OF APPLICATION

1. APPLICANT:

LEE COUNTY BOARD OF COUNTY COMMISSIONERS
REPRESENTED BY LEE COUNTY DIVISION OF PLANNING

2. REQUEST:

Amend the Future Land Use Map Series, Maps 16, the *Year 2010 Overlay Sub-districts*, and Map 17, the *Year 2010 Overlay Map*, and Future Land Use Element Policies: 1.1.1, 1.1.9, 1.3.5, 1.7.6, 2.1.3, and 2.2.2, converting the Lee Plan's planning horizon to the year 2020, deleting current overlay sub-districts, creating new community based planning districts, and allocating land uses through the Year 2020.

B. BACKGROUND INFORMATION

This amendment was initiated by the Board of County Commissioners on February 1, 1996. Staff brought this item forward to address concerns that if the existing 2010 Overlay, proposed for elimination through the Evaluation and Appraisal Report (EAR) process, were to remain in effect the allocations in the overlay would need to be revised. Staff's primary concern was that since its initial conception the 2010 baseline data had been found to be less than acceptable and a reevaluation was needed. Also, the Overlay had not been periodically updated as anticipated by Policy 1.7.6 and needed a reevaluation.

Final Order No. AC-96-11 was issued on July 25, 1996. The Final Order specified that the 1994 EAR based amendments, which proposed the deletion of the Year 2010 Overlay, were not

in compliance with Chapter 163, Part II, F.S., and Rule 9J-5, FAC. The Final Order required Lee County to rescind, and not make effective, all of the amendments which sought to delete the Year 2010 Overlay, to bring the remaining plan amendments as a whole into compliance. Therefore, the Year 2010 Overlay remains a regulatory requirement of the Lee Plan. This fact brings to the forefront the issue of the problems inherent in the overlay and the time horizon conflict between the 2010 Overlay and the 2020 based Lee Plan

C. STAFF RECOMMENDATION AND FINDINGS OF FACT SUMMARY

- 1. RECOMMENDATION:** Planning staff recommends that the Board of County Commissioners transmit this proposed amendment to the Future Land Use Element and the Future Land Use Map Series. Future Land Use Map 16 is to be replaced with the attached Map 16. Future Land Use Map 17 is deleted and held in reserve. A new table, Table 1(b) Acreage Allocation Table, will replace the function of Map 17. The text of the Future Land Use Element should be amended as follows:

POLICY 1.1.1: The Future Land Use Map contained in this element is hereby adopted as the pattern for future development and substantial redevelopment within the unincorporated portion of Lee County. Maps 16 and 17 Table 1(b) are an integral part of the Future Land Use Map series (see Policies 1.7.6 and 2.2.2). They depict the extent of development through the year ~~2010~~ 2020. No ~~final~~ development orders or extensions to ~~final~~ development orders will be issued or approved by Lee County which would allow the Planning Community's acreage totals for ~~any land use category on these maps residential, commercial or industrial uses established in Table 1(b)~~ to be exceeded (see Policy 1.7.6). The cities of Fort Myers, Cape Coral, and Sanibel are depicted on these maps only to indicate the approximate intensities of development permitted under the comprehensive plans of those cities. Residential densities are described in the following policies and summarized in Table 1. (Amended by Ordinance No. 94-29)

POLICY 1.1.9: The University Community land use category provides for Florida's 10th University and for associated support development. The location and timing of development within this area shall be coordinated with the development of the University and the provision of necessary infrastructure. All development within the University Community shall be designed to enhance and support the University. In addition to all other applicable regulations, development within the University Community shall be subject to cooperative master planning with, and approval by, the Board of Regents of the State University System.

Prior to development in the University Community land use category, there shall be established a Conceptual Master Plan which includes a generalized land use plan and a multi-objective water management plan. These plans shall be developed through a cooperative effort between the property owner, Lee County, and South Florida Water Management District.

Within the University Community are two distinct sub-categories: University Campus and the University Village. The University Window overlay, although not a true sub-category, is a distinct component of the total university environment. Together these functions provide the opportunity for a diversity of viable mixed use centers. Overall average density for the University Village shall not exceed 2.5 units per acre. Clustered densities within the area may reach fifteen units per acre to accommodate university housing. The overall average intensity of non-residential development within the University Village shall be limited to 10,000 square feet of building area per non-residential acre allowed pursuant to ~~the Year 2010 Overlay~~ Map 16 and Table 1(b). Specific policies related to the University Community are included within the Lee Plan under Goal 18. (Added by Ordinance No. 92-47) (Amended by Ordinance No. 94-30)

POLICY 1.3.5: The University Village Interchange land use category is designed to accommodate both interchange land uses and non-residential land uses related to the University. Development within this interchange area may or may not be related to, or justified by the land use needs of the University. Land uses allowed within this area include those allowed in the Industrial Commercial Interchange category and the associated support development allowed in the University Village. The overall average intensity of non-residential development shall be limited to 10,000 square feet of building area per non-residential acre allowed pursuant to ~~the Year 2010 Overlay~~ Map 16 and Table 1(b). See the definition of Associated Support Development in the Glossary. Cooperative master planning and approval by the Board of Regents shall be required prior to development within this land use category. Additionally, any development within this land use category which meets or exceeds the Development of Regional Impact thresholds, either alone or through aggregation, shall conform to the requirements of Chapter 380 F.S. (Added by Ordinance No. 92-47) (Amended by Ordinance No. 94-30)

POLICY 1.7.6: The Year 2010 Overlay Planning Communities Map and Acreage Allocation Table (see Maps 16 and 17 Table 1(b) and Policies 1.1.1 and 2.2.2) depicts the proposed distribution, extent, and location of generalized land uses for the year ~~2010~~ 2020. Acreage totals are provided for land in each subdistrict Planning Community in unincorporated Lee County. No final development orders or extensions to final development orders will be issued or approved by Lee County which would allow the acreage totals for any land use category residential, commercial or industrial uses ~~on these maps~~ contained in Table 1(b) to be exceeded. This policy shall be implemented as follows: (Amended by Ordinance No. 94-29)

1. For each ~~2010 Overlay subdistrict,~~ Planning Community the County shall maintain ~~or generate, as needed, records showing all final development orders, building permits and certificates of occupancy issued within the last twelve (12) months~~ a parcel based database of existing land use. ~~No later than September 30, 1994, the County shall have generated a baseline of existing developed acreage in each 2010 Overlay subdistrict.~~ The baseline database shall be periodically updated at least ~~once every twelve (12) months~~ twice every year, in September and March, for each ~~2010 Overlay~~

~~subdistrict Planning Community. The first comprehensive updating shall occur on or before September 30, 1995.~~

2. Project reviews for ~~final~~ development orders shall include a review of the ~~predicted amount of existing Overlay~~ capacity, in acres, that will be consumed by ~~buildout of~~ the development order ~~to be permitted at buildout~~. ~~Subsequent to the effective date of this provision, no final~~ No development order, or extension of a ~~final~~ development order, shall be issued or approved if the project acreage, when added to the acreage contained in the updated existing land use database, exceeds the limitation established by Table 1(b), Acreage Allocation Table is greater than the acreage remaining in the updated 2010 Overlay subdistrict (Maps 16 and 17 regardless of other project approvals in that ~~overlay subdistrict~~ Planning Community.

3. No later than the regularly-scheduled date for submission of the Lee Plan Evaluation and Appraisal Report, and every five years thereafter, the County shall conduct a comprehensive evaluation of the 2010 Overlay Planning Community Map and the Acreage Allocation Table system, including but not limited to, the appropriateness of land use distribution ~~in the Overlay~~, problems with administrative implementations, if any, and areas where the ~~overlay~~ Planning Community Map and the Acreage Allocation Table system might be improved.

POLICY 2.1.3: All land use categories and ~~Year 2010 Overlay districts~~ Planning Community Map areas permit the consideration of churches and schools (except in Wetlands and Airport Noise Zones), public uses and buildings, public utilities and resource recovery facilities, public recreational uses (including franchised quasi-commercial uses in conjunction with a public use), and sites for compatible public facilities when consistent with the goals, objectives, policies, and standards in this plan and applicable zoning and development regulations. (Amended by Ordinance No. 94-30)

POLICY 2.2.2: Map 1 of the Future Land Use Map series indicates the uses and density ranges that will ultimately be permitted on a given parcel. However, it is not a guarantee that such densities or uses are immediately appropriate, as the map provides for the county's growth over the coming 26 years. During the rezoning process the Board of County Commissioners will balance the overall standards and policies of this plan with three additional factors:

1. ~~Whether~~ Whether a given proposal would further burden already overwhelmed existing and committed public facilities such that the approval should be delayed until the facilities can be constructed; and
2. ~~Whether~~ Whether a given proposal is for land so far beyond existing development or adequate public facilities that approval should be delayed in an effort to encourage compact and efficient growth patterns; and

3. ~~Whether~~ a given proposal would result in unreasonable development expectations which may not be achievable because of acreage limitations ~~on the "Year 2010 Overlay"~~ contained in the Acreage Allocation Table (see Policy 1.7.6 and Maps 16 and ~~17~~ Table 1(b)).

In all cases where rezoning is approved, such approval does not constitute a determination that the minimum acceptable levels of service (see Policy 70.1.3) will be available concurrent with the impacts of the proposed development. Such a determination must be made prior to the issuance of additional development permits, based on conditions which exist at that time, as required by Lee County's concurrency management system. (Amended by Ordinance No. 94-30).

2. **BASIS AND RECOMMENDED FINDINGS OF FACT:** As stated in Part II Section B. Conclusions, of this report the following facts support this proposed amendment:

- The current Year 2010 Overlay system was not based on an accurate existing land use inventory;
- Projecting accurate long range future land use into small geographic is extremely difficult and does not constitute a good planning practice;
- The original boundaries for the Year 2010 Overlay sub-districts were erroneous, often crossing property or development lines;
- Elimination of the Year 2010 Overlay is not practical at this time;
- The planning horizon of the 2010 Overlay is not consistent with the horizon of other comprehensive planning efforts.
- Major modifications to the overlay should be considered for adoption;
- Larger, community based planning districts should be utilized and the proposed new Map 16 should replace the current map;
- The previous EAR population projections have been shown over time to be too high;
- The BEBR Mid-Range population projection for the year 2020 are the most appropriate projections and should be used for the county's planning efforts;
- Planning staff has created a reliable parcel based database of existing land use, suitable for tracking development patterns;
- Utilizing a 25% buffer above the expected incremental increase in population is an accepted planning practice;
- Planning staff has performed an in-depth evaluation of future land use needs and concludes that, for a planning horizon of 2020 the county should use the proposed Table 1(b) Acreage Allocation Table as a replacement for Map 17;
- The regulatory aspect which limits Residential, Commercial, and Industrial should be retained; and,
- The regulatory aspect which limits Parks and Public, Active and Passive Agriculture, Vacant, and Conservation acres should be eliminated.

PART II - STAFF ANALYSIS

A. STAFF DISCUSSION

Origin of the Year 2010 Overlay

The original 2010 Overlay was a result of the 1989 Settlement Agreement with the Department of Community Affairs (DCA). This agreement required the County to amend the Future Land Use Map Series by designating the proposed distribution, extend, and location of the generalized land uses required by Rule 9J-5.006(4)(a)1.-9 for the year 2010. This was accomplished by creating 115 sub-districts, generally nesting within the existing adopted Planning Districts, and allocating projected acreage totals, for each generalized land uses, needed to accommodate the projected 2010 population. Policies were added to the plan that provided that no development approvals would be issued in a sub-district that would cause the acreage total set for that land use category to be exceeded. The Overlay, in plain terms, was a device designed to reconcile the population accommodation capacity of the Future Land Use Map (estimated to be 70 years in 1989) with the 20-year time frame in the text of the element. It was also designed to provide more certainty as to the extent and location of future commercial and industrial development.

The Methodology Behind the Year 2010 Overlay

Residential acreage allocations were derived by projecting dwelling unit control totals for the year 2010 for each of the County's 15 planning districts. These units were then distributed into the sub-districts following an analysis of existing units, and buildout units for each sub-district. Units were changed to acres by applying a density factor based on land use category. Unfortunately, the base data for existing dwelling units was unreliable. The county did not have adequate data on any existing land use. This lack of an accurate inventory made it extremely difficult to project accurate needs and required acreage figures. In addition, there was no safety or flexibility factor included in the residential projections.

A Countywide commercial acreage figure was established by a consultant. Alternatively, socio-economic data from the metropolitan Planning organization was used equated to existing acreage resulting in an employee per acre figure. A straight line projection was made by Planning District. These figures were then disaggregated into the sub-districts.

Industrial allocations were based on the acreage figures for the Industrial Development, Industrial Interchange, Airport Commerce, and Industrial/ Commercial Interchange categories and the employment goal in Policy 7.1.3. All of these figures were reviewed in light of data generated in other studies and the inventory of existing uses in an effort to make the final figures consistent with reality.

Problems with the Implementation of the Year 2010 Overlay

The Year 2010 Overlay has been exceptionally difficult to administer. Some of the initial problems experienced by the staff included the inadequacy of the original inventory, the lack of a reliable existing land use database, and difficulty in explaining the concept and regulatory nature of the overlay to the public. A major effort has been directed at resolving some of these problems. The establishment of a reliable database identifying the current baseline of uses was essential for the establishment and monitoring of a workable overlay. There are some issues with the existing overlay, however, that probably cannot be resolved in a principled and satisfactory manner. These include:

1. Sub-districts proved to be too small to allow needed flexibility. The average sub-district size is 4,000 acres (not including those totally located within one of the municipalities;
2. The sub-district boundaries, originally based on traffic analysis zones, are erroneous. Many existing and proposed developments (even parcels) cross sub-district lines;
3. The treatment of quasi-public uses, such as churches and schools;
4. The treatment of recreational facilities in residential developments;
5. The treatment of platted subdivisions with existing roads, but few houses;
6. The treatment of mineral extraction;
7. The treatment of DRIs with lengthy buildout periods;
8. The treatment of large lot developments and in general developments that are vastly different from the assumptions in the Lee Plan; and,
9. The apparent need to prohibit conservation, agricultural and recreational uses that exceed the acreage thresholds.

It was possible to devise rules to deal with all of these situations; these rules, however, are relatively arbitrary and provide the County with little valuable information for infrastructure planning purposes.

The commercial allocations have caused the most controversy, due to the speculative nature of the employee projections, the inaccurate data in the initial inventory, and the absence of alternatives to the crude straight-line averaging of the existing and buildout employees per acre ratios described in the previous section. Some of the allocations in the Overlay were inadequate to accommodate even the existing uses, and others have been exceeded as the result of a single zoning case or development order application. The County has responded to the capacity deficits by delaying the legal effectiveness of the overlay until the last point permitted by the 1989 settlement agreement. Procrastination, however, will not solve the problem; it may, in fact, make it worse by increasing the expectations of the affected property owners and financial institutions.

The sub-districts used for the allocations in the Year 2010 Overlay have proved to be very problematic. Of the 115 sub-districts, 10 contained no unincorporated lands and therefore have no land use allocations. Of the remaining 105 sub-districts, 22 exceeded their residential allocation with 77 exceeding at least one residential allocation in one of the Future Land Use Categories. Additionally, of the remaining 105 sub-districts, 40 exceeded their industrial allocation, 12 exceeded their commercial allocation, and 80 exceeded their Parks and Public allocation.

Proposed EAR Elimination of the Overlay

In response to the shortcomings in the Year 2010 Overlay, the County, as part of its Evaluation and Appraisal Report (EAR) amendments, proposed the elimination of the overlay. The DCA took strong

opposition to this proposal and found the amendment not in compliance. The finding of non-compliance also included several other objections to the proposed EAR amendments. By far the main point of contention was eliminating the overlay. Upon completion of the Administrative Hearing and issuance of the Recommended Final Order by the Hearing Judge, the County and DCA entered into negotiations to resolve the remaining issues. There were several meetings and some progress was made, but ultimately a mutually agreed upon settlement could not be reached. The case went before the Governor and his Cabinet and the Final Order specifically required the County to keep the overlay. Final Order No. AC-96-11 was issued on July 25, 1996. The Final Order specified that the 1994 EAR based amendments, which proposed the deletion of the Year 2010 Overlay, were not in compliance with Chapter 163, Part II, F.S., and Rule 9J-5, FAC. The Final Order required Lee County to rescind, and not make effective, all of the amendments which sought to delete the Year 2010 Overlay to bring the plan amendments as a whole into compliance. Therefore, the Year 2010 Overlay remains a regulatory requirement of the Lee Plan.

The Final Order did recognize that the Year 2010 Overlay was not the only mechanism to address the issues at hand. The order states this “determination does not mean that Lee County must retain the 2010 Overlay indefinitely, or that the 2010 Overlay is the only planning tool appropriate for Lee County. The 2010 Overlay can be deleted from the Lee Plan if alternative planning controls are established to compensate for the deletion of the overlay.” This is exactly what this proposed amendment is intended to do.

During the negotiations the County and DCA had several discussions on appropriate alternatives to the overlay. There were several themes the department felt were necessary components of an alternative. The department felt strongly that communities should be utilized as planning areas, a concept that planning staff agrees with. Regarding mixed-use categories, it was the department’s belief that percentage distribution between uses was the best way to regulate the mix. They did concur that the acreage limitations contained in the overlay were a way to satisfy this requirement. The department was also concerned with hurricane evacuation and the population at risk. As these negotiations continued the County and DCA found much common ground. Every attempt has been made in this proposed replacement to the Year 2010 Overlay to address all of the departments concerns.

Proposed Amendment to Replace the Year 2010 Overlay

The goal of this amendment is to configure a replacement for the Year 2010 Overlay that will address many of the identified shortfalls of the overlay yet keep the Lee Plan in compliance with the minimum criteria rule and Florida Statutes. Many of the issues that were discussed during the negotiations mentioned above are being incorporated. The new proposal has three basic tenets: to simplify the overlay by reducing the number of districts; to expand the planning horizon to the year 2020 to be consistent with the rest of the plan; and, to utilize the Bureau of Economic and Business Research (BEBR) Mid-Range 2020 population projections replacing the projections from the EAR.

Perhaps the biggest problem with the overlay is the large number of sub-districts. A large number of sub-districts translate into geographically small districts. Long range planning on small and numerous geographic areas is close to impossible. The Planning Communities Map proposed to replace Map 16 identifies 20 distinct areas within the County. The number and size of the districts was the subject of much debate. The number should be small enough to avoid the long range planning allocation problem yet large enough to assure some certainty in the location of the controlled uses. Planning staff brought

a preliminary map to the Local Planning Agency (LPA) in the spring. After discussion the number 20 was agreed upon. One LPA member suggested the phrase "20 for 2020" as a promotional tool. The proposed replacement for Map 16, is a reasonable consensus which should help resolve the Year 2010 Overlay problems and still serve to provide a level of certainty.

Map 17 of the original overlay was initially intended to provide a graphic representation of the development potential of each sub-district. The map, which is not a map at all, fell horribly short of this aspiration. While it was refined over time to better perform this task, it makes sense to call it what it is, a table with acreage limitations in it. Therefore, this amendment proposes to eliminate Map 17 and add a new table, Table 1(b) Acreage Allocation Table, to the Lee Plan.

B. METHODOLOGY

Population

The Division of Planning conducted a review of its adopted population projections from the Evaluation and Appraisal Report (EAR) against the annual population estimates from the Bureau of Economic and Business Research's (BEBR) for the years since the EAR projection was adopted. This review showed that the EAR population projections were exceeding the annual population estimates. The EAR projections were completed in 1993 and included population projections for every half decade. By 1995 these projections were exceeding the annual BEBR estimate by more than 10%. Planning Staffs review also showed that the EAR projections were between 25% and 35% higher than the BEBR projections by the year 2020.

The estimates done by staff in the spring of 1997, which included four more years of historical data, showed that Lee County's population growth projections were more closely following the BEBR "Mid-Range" population projections. The BEBR "Mid-Range" projections are also being used by other agencies and by other County divisions to develop long range plans. Most notable would be the MPO's intention to use these numbers for the update of the 2020 Transportation Plan. Therefore, the Division of Planning has based the re-evaluation of the Year 2020 Overlay on the BEBR Mid-Range population projections.

Residential Use

The BEBR population projection of 602,000 is being used as the countywide control total for residential use. The goal was to distribute this figure into the newly created Planning Communities in a rational and defensible manner. To assist planning staff in this effort a sophisticated spreadsheet was developed. Utilizing the existing land use database, dwelling unit counts for each Planning Community were determined and entered into the spreadsheet. Due to the very nature of the various communities, population characteristics will vary. Planning staff compiled certain demographic components for the individual Planning Communities and evaluated them for inclusion in the spreadsheet. These components were persons per household and occupancy rates. While staff recognized that differences in persons per households (PPH) exist between the 20 Planning Communities, a reliable trend could not be formulated for each of the communities. Limitations with census geography and changes in census methodology over time were hindrances in the effort to produce a reliable PPH estimate for each community. Therefore, staff felt it was appropriate to utilize the countywide PPH estimates from the Persons Per Household Study completed for the latest Lee Plan Evaluation and Appraisal Report. Staff was better able to collect occupancy rate information from the

census for each community. A greater level of confidence was obtained from utilizing the different occupancy rates for each community. Unlike the PPH estimates, which varied greatly between the various census data for some communities, the community occupancy rates were generally consistent and summed at or near the county average for each census. Therefore, staff felt comfortable in establishing a weighted average for occupancy rates for each community. As a reality check, the variables, by community, were applied to the 1996 units and that generated population was compared to the BEBR 1996 estimate. The figures were within a percentage of each other, validating the spreadsheet methodology.

The next task was to generate unit projections for each community for the year 2020. To start, the population projections for the City of Cape Coral, City of Fort Myers, and City of Sanibel were directly input from information provided to the Division of Planning from these municipalities. The Town of Fort Myers Beach has not completed its comprehensive plan and has no officially adopted population projection for the year 2020, therefore the Town of Fort Myers Beach's population projection was calculated in the same as the other Planning Communities. Lehigh Acres also had an agreed upon population figure, generated by the Commercial Land Use Study, and it was input into the accommodation model. The remaining unincorporated community population projections were evaluated using the approved Planned Development and subdivision information and the historical growth trends for the last six years for each community. Each community's dwelling units (DU) were trended out to the year 2020 with a built in cap based on the Future Land Use Map's potential additional units allowed on the existing undeveloped land and adopted Lee Plan Assumptions. These trends were also compared to the amount of available land in a community to assess whether or not the projections could be accommodated. In some areas it was discovered that projected trend would exceed the Lee Plan assumed number of units. There were also communities where the amount of approved residential development exceeded the assumed residential percentages from the Lee Plan. Likewise, there are instances where the amount of pre-approved (some existing some only planned) non-residential development in a community makes it impossible for the residential component to achieve the percentage assumed in the Lee Plan. After fully scrutinizing this data a number for new dwelling units, units to be built by the year 2020, was projected for each community. These unit numbers were entered into the spreadsheet where they were multiplied by the estimated community vacancy rate and the county PPH to determine the community's 2020 population.

The spreadsheet was designed to evaluate the increment of new dwelling units. The 1996 dwelling unit count from the existing land use database was considered the starting point. The difference in population from 1996 to 2020 was used as target for determining the need for new dwelling units. To allow for fluctuations in the market, and in keeping with good planning practice, an additional buffer of 25% was added to this figure. The proper way to allow for a flexibility factor was the subject of considerable debate during the administrative hearing. Utilizing 125% of the incremental growth was supported by recognized planning literature. The initial determination for needed new units expected by 2020 determined above were evaluated for each of the new Planning Community. Adjustments were made to assure that the population increment plus 25% was not exceeded.

The next step, and one that brings less certainty into the equation, is to determine acreage figures for these units. The finalized unit projections were then distributed into appropriate future land use categories. The projected units were then multiplied by the assumed unit per acre figure of the category. This was done to determine the appropriate residential acreage allocation. This DU per acre

figure was modified in some areas to adjust for the fact that this overlay is based on net acres while the Lee Plan assumptions are based on gross acres which is also how density is determined for consistency with the Lee Plan density. Also taken into consideration were developments, approved prior to the existence of the Lee Plan, where vacant land that is approved for densities higher than the allowable Lee Plan densities. Factors, such as one recently approved development that has taken advantage of the Planned Development District Option (PDDO), which allows up to 6 units per gross acre in a category that allows 1 unit per gross, acre were also considered. Normally this land use category would and assumes 0.8 units per gross acre. In this specific case, the approved units/net acres are 5.64. Likewise, some developments have been approved with densities (both gross and net) substantially less than the Lee Plan assumptions. Therefore the assumed density for each Future Land Use Map designation varies between Planning Communities

The corresponding acreage figures were only estimated for the unincorporated portions of the county. Therefore, the acreage allocation table for the Sanibel Community shows no acreage. There is, however, an input unit count for Sanibel that corresponds to the projected population, adjusted for PPH and occupancy rate. The Town of Fort Myers Beach is included on the allocation table for two reasons. The first was that the data was available and the second was there were no 2020 population projections for this area. The Planning Communities map for Fort Myers Beach includes no unincorporated lands.

Commercial

Future commercial needs for Lee County is not easy to pinpoint. Lee County's commercial component can not merely be based on the number of county residents. In addition, each community is not necessarily self-supporting in its commercial needs, therefore some areas may grow faster commercially than they do residentially and visa versa. Between 1980 and 1990 commercial square feet grew by 100% while the population grew by only 53% for the unincorporated area. Furthermore, from 1990 through the end of 1996, the unincorporated population has grown by 21% while commercial growth was 31%. Based on these trends, it is obvious that commercial growth in of Lee County is not totally tied or dependent on residential growth. Part of the growth not related to the residential aspect can be explained by the fact that Lee County is a resort area that caters to tourists and winter visitors.

In 1986 Lee County commissioned Thomas Roberts, of Thomas Roberts and Associates, to perform a commercial needs study. The final document was entitled "Commercial Land Use Needs in Lee County." This study identified an estimate of 11,483 commercially developed acres by the year 2010. In accordance with the study's methodology, this figure should then be multiplied by a safety factor of 10% (to allow for inaccuracies in projecting the need) to produce 12,631 acres. The study then utilizes a flexibility factor of 15% (to allow for competition and choice, land held back for speculation, etc.) to produce a grand total of 14,526 acres. The original study was based on a BEBR Mid-Range 2010 population of 499,500.

In 1989 the Board of County Commissioners revised its population projection and adopted the BEBR High-Range number of 640,500. At that time Mr. Roberts was asked to adjust the commercial needs figure. In a December 10, 1989 memorandum he proposed the following methodology to amend the previous projection. The pre-factored area of 11,483 acres should be multiplied by $640,500/499,500$, or 1.282, producing a new pre-factored area of 14,721 acres. He goes on to modify this figure with a safety factor and a flexibility factor. He does, however recommend that because the higher population

projection is being utilized, the safety factor should be reduced to 5%. Doing the math produces a figure of 18,622 acres, which he recommends the County use.

Utilizing a like methodology, planning staff recalculated the future commercial needs. The proposed population for this amendment is the BEBR Mid-Range number for 2020 of 602,000. Adjusting the original 11,483 acres by the ratio 602,000/499,500, or 1.205, produces a new pre-factored figure of 13,837 acres. Utilizing a safety factor of 10%, justified by the mid-range number, and a flexibility factor of 15% the countywide commercial need calculates to 17,504 acres. Further adjustments to either remove the incorporated areas or indicate allocations for them still need to be performed.

Staff realizes that, historically, the City of Fort Myers has provided more than its proportionate share of commercial development. However, the city is approaching buildout and is currently making an effort to stabilize its residential neighborhoods. The unincorporated county will be required to absorb a greater share of new commercial development. This trend is currently being demonstrated by the fact that in this decade no new "Big Box" retailers have located in the City of Fort Myers. Only one large shopping center has been constructed in Fort Myers in the last decade.

Likewise, the City of Cape Coral has somewhat limited opportunities for commercial development. The vast majority of the land in Cape Coral is platted into single family lots. Opposition to introducing new commercial uses within residential areas has surfaced in the past. According the city planners only ### acres of land are programmed for commercial development. Staff allocates 7216 acres of commercial to the municipalities leaving 10,288 acres for distribution to the unincorporated Planning Communities.

In addition to the Robert's projection, commercial projections were compiled based on projected total unit counts per community, in order to make allowances for seasonal residents, and the historical trends of commercial square feet per unit and floor area ratio. The county control total for commercial is in square feet and is based on historical trends of commercial growth. The projected commercial square feet needed by the year 2020 are projected to be 46,117,550. This is approximately 9,000,000 square feet less than that which would be projected using individual community historical community trends. The lower of these projections was chosen based on a higher correlation for the historical trends and the fact that the community based projections does not consider the fact that some of these areas are near buildout already. For example, as the coastal communities reach buildout, the growth in the tourist commercial demand will also begin to level out. The county wide control total is next applied to the communities to allocate the commercial uses throughout the County. This allows the results to be compared to the total available/undeveloped acreage remaining in each community.

This countywide acreage need was then disaggregated across the county into the unincorporated Planning Communities. This was accomplished by allocating commercial acreage based on the existing development, approved developments, and areas designated for commercial development. The amount of vacant commercial zoning was also taken into account in the disaggregation.

Industrial Use

Future Industrial needs for Lee County were originally studied and projected in a study completed in August 1983 by Thomas H Roberts. This study has been revised and modified over time and was most recently revised during the litigation process of the EAR. However, this study and its revisions focused

on how much land Lee County needed to designate on the Future Land Use Map as industrial. These studies were concerned with providing enough land for future industrial development and its ancillary uses. The Lee Plan allows for limited commercial development in industrially designated lands to support the surrounding industrial uses. This means the some uses that are envisioned to occur within these industrial areas will not be inventoried as industrial uses. For example, a small deli who's customer base is from a surrounding industrial park will be inventoried as a commercial use even though it may be located within an area designated as Industrial on the Future Land Use Map. Therefore, it is important to further refine the accepted industrial study from the existing Lee Plan Support Documentation to ascertain how much land will need to be allocated for industrial uses for the Year 2020. Staff has concluded that the appropriate unit of measure for the industrial component of the 2020 allocations is acres. Much of Lee County's industrial uses occur out of doors such as concrete batch plants, lumber yards, and distribution centers. The location of industrial uses, while not limited to areas designated as Industrial Development, Industrial Interchange, Industrial Commercial Interchange, and Airport Commerce, are primarily located in these areas. Staff has made the following effort to determine the appropriate allocation of industrial uses for the year 2020.

To accomplish this task, the original Thomas Roberts study was modified to focus on how much land will be utilized by industrial uses by the year 2020. The data in the study was also updated to include the latest National Planning Association data which has been consistently used in the industrial needs study, and is recognized as one source of best available data. The primary change in the methodology was the elimination of the number of acres needed to support the ancillary uses associated with industrial developments. Theses uses will be inventoried under in the database under their appropriate use category whether it is a commercial, public, or conservation use. Furthermore some uses have always be assumed to have locations which may be out of industrial land use categories. For example, only 50% of warehouse uses were assumed to be located in industrial land use categories in the original Roberts study and its subsequent revisions. However, in reality, approximately 75% of these types of uses are inventoried as industrial in the Lee County Land Use Inventory. There are ancillary commercial uses associated with this type of use that have and will be inventoried as commercial uses. The breakdown of percentages for the inventory's purposes are shown in table Year 2020 Industrial Allocation Needs along with its estimated 2020 employment figure. These employment figures were then utilized in the same manner as the previous industrial studies to estimate the need for industrial lands. First the assumption is 7 employees per acre to determine the minimum acreage need. A market safety factor was then applied to this acreage figure and subsequently a flexibility factor is applied to this figure. Since the allocations are for the unincorporated county the amount of industrial lands in the cities were removed from this figure. Mirroring the discussion in the discussion under Commercial Uses, areas for true industrial development are not abundant in the county's municipalities. Clearly, the "industry" in the county's coastal communities, Sanibel and Fort Myers Beach, is tourism. The desire of Lee Plan Policy 7.1.4 is to afford an opportunity to expand the County's economic base beyond tourism. As with commercial development, the City of Cape Coral has limited opportunities for industrial uses equal to its expected population base. Taking all this into consideration, this final unincorporated industrial need for Lee County is calculated to be 6,799 acres.

This countywide acreage need was then disaggregated across the county into the unincorporated Planning Communities. This was accomplished by allocating industrial acreage based on the existing development, approved developments, and areas designated for industrial development. The amount of vacant industrial zoning was also taken into account in the disaggregation.

Parks and Public

The countywide allocations in the original Year 2010 Overlay were exceeded in only two areas Parks and Public, and Active AG. The under allocation in the Parks and Public category can be attributed to a difference between the allocation and inventorying methods. The Parks and Public allocation was based on how much land was designated Public Facilities in each Sub-district. The first problem with this technique is that only parcels 20 acres or more in size were mapped. Furthermore, not all publicly owned lands were included in this designation. Properties designated as Public Facilities were generally schools, parks, hospitals, and utility plants. Lands owned by the state and other agencies for conservation purposes were not consistently mapped as Public Facilities. The main discrepancy is with no publicly owned lands which are inventoried in the Park and Public category but are not owned by a public agency. These uses include, but are not limited to, golf courses developed within a residential community, other residential amenities, government buildings, clubs, open space within private developments, and churches.

Staff can see no useful purpose in regulating an upper limit in the Parks and Public land use. The acreage figure contained in the Acreage Allocation Table for this use should not be regulatory. To do so would be counter productive. Staff admits there is merit in tracking this acreage figure and intends to update this use in the database.

Active and Passive Agriculture

The Active Agriculture component of the land use inventory also exceeds its allocation. In reality this should be expected. Although the current Year 2010 Overlay is not written this way, it is expected that, in an urbanizing county such as Lee County, over time agricultural uses will be displaced with other non-agricultural uses. However, it cannot be assumed that there will only be a reduction in the amount of agricultural acreage in all areas of the county. While agricultural uses are displaced in some areas of the county they are expanding in other areas of the county primarily in the areas designated as Rural and Density Reduction/Groundwater Resource. Therefore, the acreage projections should be used as 2020 targets and not as a regulatory number that cannot be exceeded or fallen below. This also applies to Passive Agricultural uses. Currently, Lee County exceeds its projected combined 2010 agricultural acreage allocation by approximately 3,050 acres. Clearly in a county that is urbanizing as Lee County is requiring the retention of passive agriculture use in lands designate within the urban boundary is counter productive. Staff, again, sees the merit of maintaining the database inventory of these uses, but believes the regulatory requirement not to let the 2020 component of this use be exceeded in the present is unwise.

Vacant Land

Similar to the agricultural uses, the amount of vacant land should also be expected to reduce over time. Lands classified as a vacant use are only those with no structures and no other use. For example, a vacant commercial building will still be classified as a commercial use and a parcel used as open space with no building will be classified as Public Open Space. Therefore, unlike, agricultural uses, vacant lands will not decline in one area and increase in other areas, with the exception of some demolitions of condemned/damaged buildings and also the occasional agricultural use which is abandoned and reverts back to vacant. For these reasons, the vacant acreage allocation, if used as a regulatory number, should be viewed as a number that cannot be fallen below during the life of the overlay.

Conservation Land

The Conservation Allocation is also one that is impractical to regulate. The current allocations in the Year 2010 Overlay are based on the amount of land designated on the 1989 Lee Plan Future Land Use Map as RPA (resource protection areas) and TZ (transition zones). Since these areas were digitized off of 1987 quad sheet maps which were at a 1" to 2000' scale their accuracy, while good for the illustrative purposes they were intended for, are not precise enough for a regulatory acreage figure. Furthermore, since the original mapping of these areas, the definition of what lands qualify as wetland has also changed. Staff has reviewed possible methods to improve the original mapping of wetlands. In a pilot project staff used the jurisdictional boundaries at Florida Gulf Coast University and compared them to several wetland and soils maps. No single mapped system showed superior results in identifying the ground truthed wetlands. Staff concluded that the current mapping system was the best available.

Recent revisions to the Lee Plan have moved the county from a regulatory roll in wetlands to one more of enforcement. If the county does not regulate this use, the acreage allocations can not be regulatory. Staff, again, sees the merit of maintaining the database inventory of these uses, but believes the regulatory requirement not to let the 2020 component of this use be exceeded in the present is unwise.

B. CONCLUSIONS

In accordance with Policy 1.7.6.3 planning staff has conducted this comprehensive evaluation of the Year 2010 Overlay system. Upon completion of this analysis planning staff concludes the following:

- The current Year 2010 Overlay system was not based on an accurate existing land use inventory;
- Projecting accurate long range future land use into small geographic is extremely difficult and does not constitute a good planning practice;
- The original boundaries for the Year 2010 Overlay sub-districts were erroneous, often crossing property or development lines;
- Elimination of the Year 2010 Overlay is not practical at this time;
- The planning horizon of the 2010 Overlay is not consistent with the horizon of other comprehensive planning efforts.
- Major modifications to the overlay should be considered for adoption;
- Larger, community based planning districts should be utilized and the proposed new Map 16 should replace the current map;
- The previous EAR population projections have been shown over time to be too high;
- The BEBR Mid-Range population projection for the year 2020 are the most appropriate projections and should be used for the county's planning efforts;
- Planning staff has created a reliable parcel based database of existing land use, suitable for tracking development patterns;
- Utilizing a 25% buffer above the expected incremental increase in population is an accepted planning practice;
- Planning staff has performed an in-depth evaluation of future land use needs and concludes that, for a planning horizon of 2020 the county should use the proposed Table 1(b) Acreage Allocation Table as a replacement for Map 17;
- The regulatory aspect which limits Residential, Commercial, and Industrial should be retained; and,

- The regulatory aspect which limits Parks and Public, Active and Passive Agriculture, Vacant, and Conservation acres should be eliminated.

C. STAFF RECOMMENDATION

Planning staff recommends that the Board of County Commissioners transmit this proposed amendment to the Future Land Use Element and the Future Land Use Map Series. Future Land Use Map 16 is to be replaced with the attached Map 16. Future Land Use Map 17 is deleted and held in reserve. A new table, Table 1(b) Acreage Allocation Table, will replace the function of Map 17. The text of the Future Land Use Element should be amended as indicated in Part I, Section C. of this report.

PART III - LOCAL PLANNING AGENCY REVIEW AND RECOMMENDATION

PUBLIC HEARING DATE. October 27, 1997

A. LOCAL PLANNING AGENCY REVIEW

The LPA formally heard this proposed amendment at their October 27, 1997 Public Hearing. Prior to the date, the LPA and planning staff had discussions at all of the previous amendment hearings regarding this proposal. Conceptual approval of the proposed Map 16 was indicated fairly early on in this process. Other areas of discussion were commercial acreage allocation and population projections.

LPA members had several questions regarding the methodology for determining need and allocation. Staff knew that the process that was utilized could not be easily translated to a written document and was prepared to answer the questions. Planning staff did answer all of the questions concerning the methodology to the LPA's satisfaction. Staff also informed the LPA that they were planning on dealing directly with DCA staff to walk them through this somewhat complicated process. The LPA identified three areas where they had concerns regarding the final allocations. Ultimately, there was only one recommendation for increasing or decreasing allocations. Staff did offer to take a closer look at these areas between the transmittal and adoption hearings. The LPA also expressed interest in including a footnote on Table 1(b) indicating the uses that are being regulated and those that are not.

Also discussed was the lack of residential allocation in the wetland category. No solution to this issue was proposed. Staff was concerned that such an allocation would encourage new development in the wetland areas. Under Chapter 13 of the Lee Plan, legally existing lots in the wetland areas do have the advantage of the single family residential provision.

Two members of the public addressed the LPA on this issue. The first suggested some additional language for Policy 1.7.6 to clarify the intent to adjust the allocations if necessary as part of the EAR review. The LPA concurred with this, as did staff. This person also suggested that the staff report include a discussion, similar to the one in the commercial use section, that highlights the limitations of the municipalities to accommodate industrial development. The LPA and staff agreed. The third request was to include the sections 1, 2, and 3 of Township 48 South, Range 26, East in the Bonita Springs Planning Community. The LPA made a motion to this effect. The second speaker urged the LPA to adopt the amendment and complimented staff's efforts on this amendment.

The LPA offered two motions concerning this amendment. The first, as mentioned above, was to include the specified sections in the Bonita Springs Planning Community, and to also move the rural residential allocation, which applied directly to these three sections, on Table 1(b) Acreage Allocation Table.

B. LOCAL PLANNING AGENCY RECOMMENDATION AND FINDINGS OF FACT SUMMARY

- 1. RECOMMENDATION:** Motion #1 The LPA recommended that the BoCC includes sections 1, 2, and 3 of Township 48 South, Range 26, East in the Bonita Springs

Planning Community and to also move the rural residential allocation, which applied directly to these three sections, on Table 1(b) Acreage Allocation Table.

Motion #2 The LPA recommended the BoCC transmit this amendment as recommended by staff and amended by the above motion.

- 1. BASIS AND RECOMMENDED FINDINGS OF FACT:** Motion #1 This area is more closely associated with the Bonita Springs Planning Community.

Motion #2 As contained in the staff analysis.

C. VOTE: Motion # 1

BARBARA BARNES-BUCHANAN	ABSTAINED
RICHARD DURLING	ABSENT
MITCH HUTCHCRAFT	AYE
RONALD INGE	AYE
BILL SPIKOWSKI	AYE
GREG STUART	AYE
MATT UHLE	ABSTAINED

Motion #2

BARBARA BARNES-BUCHANAN	AYE
RICHARD DURLING	ABSENT
MITCH HUTCHCRAFT	AYE
RONALD INGE	AYE
BILL SPIKOWSKI	AYE
GREG STUART	AYE
MATT UHLE	AYE

**PART IV - BOARD OF COUNTY COMMISSIONERS
HEARING FOR TRANSMITTAL OF PROPOSED AMENDMENT**

DATE OF TRANSMITTAL HEARING: November 5, 1997

- A. BOARD REVIEW:** Two issues were brought up during board review and were discussed by the public and the Board. First, the three sections of land designated "Rural" in the southeast portion of Lee County were discussed. A member of the public brought up this issue, a local land use attorney, and was agreed upon by the board. The board agreed that the entire strip of land south of Bonita Beach Road should be in the Bonita Community. They also concurred that the Rural allocation that was included in the LPA staff report for the Southeast Lee County Community should be added to the proposed Rural allocation in the Bonita Community.

The second issue addressed was the allocations in the San Carlos/Estero Community. The concern brought forward by a member of the public, also a land use attorney, was that the allocations do not accommodate all the development approved in the Corkscrew Road CRSA. The board agreed with the concern and instructed staff to review the San Carlos/Estero Community allocations prior to the adoption hearing.

B. BOARD ACTION AND FINDINGS OF FACT SUMMARY:

- 1. BOARD ACTION:** The Board voted to transmit this amendment with revisions to the Bonita Springs and Southeast Lee County Planning Communities.
- 2. BASIS AND RECOMMENDED FINDINGS OF FACT:** The Board accepted the findings of fact as advanced by staff and the LPA with the direction to staff to "re-look" at the San Carlos/Estero Community

C. VOTE:

JOHN ALBION	<u>AYE</u>
ANDREW COY	<u>AYE</u>
RAY JUDAH	<u>AYE</u>
JOHN MANNING	<u>AYE</u>
DOUG ST. CERNY	<u>AYE</u>

**PART V – DEPARTMENT OF COMMUNITY AFFAIRS
OBJECTIONS, RECOMMENDATIONS, AND COMMENTS (ORC) REPORT**

DATE OF ORC REPORT: February 5, 1998

A. DCA OBJECTIONS, RECOMMENDATIONS AND COMMENTS

2. Amendment PAM/T: 96-13: (Replacement of 2010 Overlay with 2020 Overlay): This is a proposal to amend the FLUM series, Map 16, the Year 2010 Overlay Sub-districts and Map 17, the Year 2010 Overlay Map and FLUE policies, and converting the Lee Plan's 2010 planning horizon to 2020.

Objections:

The Department does not object to the general concepts being proposed as part of the 2020 Overlay. However, specific details need further justification and/or refinement.

- la. According to the information provided, as a basis for projecting land use allocations needed in each planning district trends were extrapolated for 2020 based on the 2020 projected population of 602,000, with a 25 percent increment allowed for unexpected need. However, the proposed 2020 Overlay concept is not supported by adequate data and analysis because the methodology does not clearly state how the actual land use needs for each planning community were determined. In the absence of this information the relevance of the projected land use needs, and the professional acceptability of the method used to derive the actual land use needs of each planning community, cannot be assessed.
- b. The methodology used to project the land use allocations does not demonstrate how vested developments, including developments of regional impact, were taken into account. For example, Lehigh Acres is currently identified as a vested community and there is no indication as to how this was considered in allocating residential and nonresidential land use needs for the Lehigh Acres planning community. Rule 9J-5.005(2)(a), (b), & (c), and Rule 9J-5.006(2)(c), (3)(c)1., (5), & (5)(g)1., F.A.C. mm

Recommendation: Include an analysis showing how the projected land use need for each planning community was derived for each land use type. The analysis should clearly state the assumptions and mathematical derivation that was used to produce the anticipated land use needs shown in Table I (b), for all land use types. Please, provide a narrative description, and step by

step summary of the method and all assumptions used, and justify the professional acceptability of the method.

Also include an analysis showing how vested developments, including DRIs, were taken into account in determining the land use allocations for each planning community including Lehigh Acres.

2. The boundaries of the planning communities are not supported by adequate data and analysis demonstrating and justifying how they were determined. For instance, the eastern boundary of Planning 10 cuts through the low density area east of the airport and there is no justification for this the boundary. Also, the southern end of Planning Community 3 curves eastwards to embrace Sections 1, 2, 3, 4, 5, and 6., and there is no information provided to demonstrate why this boundary includes these properties. Furthermore, the boundaries do not show a clear separation between urban and rural land uses. Rule 9J-5.005(2)(a), (b), & (c), and 9J-5.006(2)(c), (3)(b)8, (3)(c)1., (5), & (5)(g)9., F.A.C.

Recommendation: Include an analysis showing how the boundaries of the planning communities were derived. The boundaries shall be based on adequate data and analysis; and the method used to delineate them has to be based on rational and justifiable assumptions that are professionally acceptable. Planning community boundaries should ensure a clear separation between urban and rural areas.

B. STAFF RECOMMENDATION

Adopt the amendment essentially as transmitted, with the technical and minor amendments contained in the revised Table 1(b) Acreage Allocation Table and the revised Planning Communities Map.

C. STAFF RESPONSE

Objections 1a and b. Objections 1a and b both relate to the allocation methodology and will be addressed in the same discussion as they are interrelated. The following steps were followed to create the Year 2020 Allocation Tables. Many of these steps were undertaken simultaneously, so their completion order did not necessarily follow the numerical order. For example, the 2020 countywide population projection was independent of the creation of the community boundaries; however, both were needed to complete the allocation of units by community for the year 2020.

1. Population projections.

The Division of Planning conducted a review of its adopted population projections from the Evaluation and Appraisal Report (EAR) against the annual population estimates from the Bureau of Economic and Business Research's (BEBR) for the years since the EAR projection was adopted. This review showed that the EAR population projections were exceeding the annual population estimates. The EAR projections were completed in 1993 and included population projections for every half decade. By 1995 these projections were exceeding the annual BEBR estimate by more than 10%. Planning Staffs review also showed that the EAR projections were between 25% and 35% higher than the BEBR projections by the year 2020.

The estimates done by staff in the spring of 1997, which included four more years of historical data, showed that Lee County's population growth projections were more closely following the BEBR "Mid-Range" population projections. The BEBR "Mid-Range" projections are also being used by other agencies and by other County divisions to develop long range plans. Most notable would be the MPO's intention to use these numbers for the update of the 2020 Transportation Plan. Therefore, the Division of Planning has based the re-evaluation of the Year 2020 Overlay on the BEBR Mid-Range population projections.

2. The creation of the Year 2020 community boundaries is described in detail in the response to objection 2.

3. Evaluation of census data.

Once the 20 planning community boundaries had been established, the 1980 and 1990 census data for population and housing units (occupied and vacant) was broken out for each community.

Population. These estimates were determined from the 1980 and 1990 censuses by summing the population figures of each tract or block within the community. (Work Book - ACRES BY FLUMC2.XLS; Sheet - Communities; Columns - D and E) When community lines split census geography, the population estimate for the community used the methodology described below for unit counts. Occupied unit estimates were multiplied by the person per unit estimate for the corresponding year and this population estimate was added to the sum of the tract/block populations wholly contained within the community.

Unit Counts. It was not feasible, in all cases, to create the community boundary lines along existing census geography, although this was done whenever justifiable. Several census units had to be manually broken down using 1980 and 1990 aerials. Rooftop counts were completed to determine how many units from the split census geography (tracts or blocks) were located in each community (Work Book - ACRES BY FLUMC2.XLS; Sheet - Communities; Columns -H and I).

Occupancy Rates. Reviewing the countywide occupancy rates for Lee County revealed that for both censuses the county had a 73% occupancy rate. This rate was not consistent through the county, with some of the Planning Communities much higher and others lower. Staff utilized the following methodology to determine the occupancy rate for each community. An occupancy rate was derived from the occupancy rates of the census tracts within each community. (Work Book - ACRES BY FLUMC2.XLS; Sheet - Communities; Columns - AE and AF) In areas where census geography was split the occupancy rate of the tract was assigned to each community. For example, if a community contained 80% of a tracts total 1000 units (800 units) and the remaining 20% (200 units) were in a separate tract, and the tract had a total of 750 occupied units, the two community would have been assumed to have had 600 and 150 occupied units respectively from this track. The estimate of occupied units were then divided by the community's total number of units to determine a Planning Community's occupancy rate.

This procedure was completed for both 1980 and 1990 census information. With only two historical data points, however, no reliable trend could be projected. Planning Staff concluded that the most appropriate method for projecting the occupancy rates was to somehow average the 1980 and 1990 rates for each community (Work Book - ACRES BY FLUMC2.XLS; Sheet - Communities; Column - AD). Staff realized that a new large development that was primarily seasonal in a community that had a small unit count in 1980 could skew these results, it was decided that the best method was to perform a weighted average for the occupancy rate. The total number of occupied units from each time period were added together and then divided by the sum of the total units for the two years. Applying this averaged occupancy rate to the 1980 and 1990 census countywide information yielded an estimated occupied unit count that was off by only 861 and 21 units respectively. This error factor is acceptable, especially with the 1990 data, the most recent, correlating so well.

Persons Per Unit (PPU). A similar analysis off this census data yielded no correlation for the Planning Communities between the two censuses. The overall trend of the county is for the persons per unit figure to be declining

over time. The statistical analysis performed on the PPU showed some community's PPU increasing dramatically over time, while the same models showed others dropping below 1 person per unit, it was decided that the best available data for this information was the county estimates adopted in the Evaluation and Appraisal Report (EAR). The EAR projected PPU's for the decennial years of 2000, 2010, and 2020 (Work Book - ACRES BY FLUMC2.XLS; Sheet - Communities; Cells - Y26, Z26, AA26, AB26, and AC26). The PPU for years not projected in the EAR were derived by projecting a straight line between the preceding and following PPU projections.

4. Estimating the 1996 units and population.

Dwelling Units. The dwelling unit count for 1996 was generated from the planning division's existing land use inventory (Work Book - ACRES BY FLUMC2.XLS; Sheet - Communities; Column - L). This inventory contains land use information, including the number of dwelling units, for every parcel in the unincorporated portions of Lee County. The first step in accomplishing this task was to update the inventory to include the newly created community information. Then the information could be disseminated by planning community. The division's database contains the year built for residential properties. This information is reliable for structures built since the creation of the inventory (fall 1994). The report generated from the database included total units for January 1, 1994, 1995, and 1996 (Work Book - ACRES BY FLUMC2.XLS; Sheet - Communities; Columns - J, K, and L). A straight-line forecast using the 5 known data points (1980, 1990, 1994, 1995, and 1996) was used to project a preliminary dwelling unit count for the years 2000, 2010, and 2020. It was understood that this was just a "first look" as many other variables need to be considered (see the discussion in 4. below).

Population. The 1996 population estimates were derived by multiplying the community's 1996 unit count by the community's occupancy rate and by the estimated 1996 PPU of 2.29. (Work Book - ACRES BY FLUMC2.XLS; Sheet - Communities; Column L * Z26).

5. Estimate the units for the years 2000, 2010, and 2020 for each community.

No two Planning Communities are alike, therefore no one method of projecting their future development will provide adequate results. Planning Staff took an objective and subjective look at each of the communities to determine these estimates. The straight-line dwelling unit estimates were used as a guide in the allocation process.

A straight-line forecast of units from the years 1980, 1990, 1994, 1995, and 1996 was performed to generate these estimates utilizing the forecasting tool included in Microsoft Excel (Work Book - ACRES BY FLUMC2.XLS; Sheet - Communities; Columns - M, N, and O). Other forecasting methods were also utilized. These include logarithmic model, inverse curve model, quadratic model, compound model, power model, s-curve model, growth model, exponential model, logistic model and cubic model.

A correlation test was run on the data for all 20 communities using a statistical software package called SPSS for Windows. The results of this test on the straight-line model were significant for most of the communities (see Appendix 1). This correlation test evaluates the fit of the projection curve to the input data. The coefficient of determination, or, measures the strength of the linear relationship. The closer to 1 R^2 is, the stronger the relationship.

The communities of Boca Grande, Captiva, Buckingham, Gateway, Fort Myers Shores, and Southeast Lee County do not return high correlation scores in this test. These low correlation results can be explained.

The historical data for Boca Grande does not fit any of the projection models well. The R^2 for all the models fall between 0.707 and 0.711 with the straight-line model being 0.709. The final projection used for Boca Grande was actually based on the Boca Grande Study of 1989 which projects a higher unit count for 2020 (nearly build out) than any of the models. The historical data was drastically effected by the development of Boca Bay, which contains significant development not reflected in the 1990 census.

The unit estimate situation for the Captiva Community is identical to the Boca Grande situation. Captiva is estimated to have only 2 vacant acres of land by the year 2020, approaching build out. The R^2 for all the models fall between 0.748 and 0.762 with the straight-line model being 0.757.

Buckingham is also similar statistically to Captiva and Boca Grande. The R^2 for all the models fall between 0.829 and 0.851 with the straight-line model being 0.830. Buckingham, however, is not expected to reach build out by 2020.

The Gateway/Airport area is the one community that does not correlate well with the linear model and does have a better fitting curve. The growth, exponential, and compound curves all fit the data from the Gateway/Airport area better than a simple linear model. However, these models still do not

have a high R2 (correlation). With the exception the Gateway DRI development, this community does not allow substantial amounts of residential. Therefore, staff utilized the approved Gateway DRI figures to estimate growth in this community. The residential allocation allows for the build out of the DRI and for minimal additional development in the Rural, DRGR, and Industrial Development areas. Of these three areas, only the Rural lands are expected to have future residential development of any consequence.

The communities of Fort Myers Shores and Southeast Lee County have suspect 1990 census information. Both of the communities have 1990 housing unit counts which appear to be in error. When the 1990 census information is dropped from the estimating equation, the linear model has a high correlation (good fit) with the data. Since these forecasts were only used for as a guide, this was the tactic used to deal with these two communities.

6. Determine the developed and undeveloped land by future land use map category and break down the developed land by existing use.

This step required a report from the existing use inventory. This report calculates the acreage of uses by community. Within each community, the acreage totals are broken down by future land use map categories. For parcels containing more than one future land use map category, a manual check of the property was required. These figures were input into the Excel Work Book - ACRES BY FLUMC2.XLS as follows: for each individual Planning Community Sheet¹ Columns - B (number of parcels; C (Sum of acres D+F+H+I+J+K+L+M); D (Commercial Acres); E (Commercial Building Square Feet) referencing the data in Sheet "com by pc and year" Columns C-BK, by year, totaled in column BQ row titled Running SF); F (Industrial Acres); G (Industrial Building Square Feet); H (Public Acres); I (Active Agricultural Acres); J (Passive Agricultural Acres); K (Conservation Acres - Wetlands); L (Vacant Acres); M (Total Residential Acres); and, N (Total Residential Units). The building square feet for commercial and industrial uses were not recorded by future land use category for this study. As stated, this information was reported by year built and community. The total for each community was reported in the total row cell E19, commercial, and G19, industrial.

7. Determine the total acres of each future land use category within each community.

While the acreage of future land use by parcel was achieved by the previous step, it does not include acreage of roads and other rights-of-way not

identified with a county STRAP number. Also, the division's inventory does not include parcels within the municipalities. Although the overlay has no regulatory authority over the cities, it is important for this information to be included in the evaluation of future needs. Tracking of future land use map category acres is accomplished with the use of a separate Excel worksheet named "*Lee Plan and EAR FLUM acres.xls*". Currently this worksheet includes tables showing acreage by community at the time of the EAR, the EAR changes, and the acreage changes resulting from amendments made to the Lee Plan since the EAR. Rather than retrofitting the existing EAR data by breaking it out by community, a new run was made of the land use map against the community map in the Property Appraiser's GIS system. (Sheet - planuse, Columns B-X) This allowed planning staff to have the most current data. Also, the data most closely resembling the acreage source for the existing use inventory which is the same GIS system. This was completed before the first post EAR map amendment, a small scale amendment, was reflected on the Future Land Use Map. Therefore, the worksheet was then altered to include a list of map amendments occurring within the communities since the initial acreage query. To date only a few small scale amendments have been approved and added to this list. It is staff's intention to maintain this spreadsheet to track acreage changes in the Future Land Use Map by community.

8. Estimate the potential remaining residential.

Two approaches were taken to determine the maximum residential acreage remaining to be developed within each community. This estimate was also used as a guide for the 2020 residential allocations.

Estimate based on Lee Plan assumptions (modified). In the past, the residential acreage estimates and population accommodation were based on the following assumptions. (ACRES BY FLUMC2.XLS; Sheet - Assumptions; Column - F (Descriptions), G (Units Per Acre), and I (Historical Percent Residential))

Description	Units Per Acre	% Residential
Airport	0	0
Airport Commerce	0	0
Central Urban	5.75	0.8
Density Reduction/ Groundwater Resource	0.1	0.1
General Commercial Interchange	0	0
General Interchange	0	0
Industrial Commercial Interchange	0	0
Industrial	0	0
Industrial Interchange	0	0

Intensive Development	7.5	0.5
New Community	4.6	0.768
No Designation	0	0
Outer Island	0.3	0.3
Open Lands	0.2	0.3
Outlying Suburban	2.5	0.89
Public Facilities	0	0
Rural	0.8	0.45
Rural Community Preserve	0.8	0.45
Wetlands	0	0
Suburban	3.5	0.89
Urban Community	3.5	0.84
University Community	2.6	1
University Village Interchange	0	0

Historically the “percent residential assumption” was applied to the total acreage figure for the corresponding future land use category and at times was broken out by planning districts or sub-districts. This acreage figure was used to determine how many residential units could be expected and ultimately the population accommodation for each future land use category and if applicable, within each district/sub-district. The aggregation of these districts/sub-districts was the population accommodation of the Lee Plan Future Land Use Map.

This process neglected to consider a few points. First, based on a study of a number of existing and approved developments, on average, 23% of raw land is used by rights-of-way. Therefore only 77% of a category is available for any type of non-ROW development. (ACRES BY FLUMC2.XLS; Sheet - Assumptions; Column - L) However, in most of the urban categories allowing residential uses, the assumed residential component was 80% or higher. Therefore, utilizing the old methodology, the population accommodation could exceed the potential.

Second, the previous method for determining the amount of residential land did not take into consideration how much development was existing and what uses had been developed. In some areas, the amount of commercial, industrial, and public uses exceeded the assumed non-residential acreage.

For this analysis, both of these factors were considered. Even with these corrections, this methodology still remains inaccurate, yet useful as one tool in solving for estimated development. First, the assumption for percent of land used for residential use was modified to deduct the land anticipated as future rights-of-way. The original percent residential assumption was multiplied by the average percent of land remaining for development after

ROW has been deducted. (ACRES BY FLUMC2.XLS; Sheet - Assumptions; Columns - $L * I = H$ - Revised Percent Residential)

This new percent residential was then linked to the individual community sheets (column R). This percentage was multiplied with the total future land use acreage within the community (column C) and the amount of existing residential acreage was subtracted to calculate one estimate of acreage left for new residential uses $R * C - M = T$. In some instances this was a negative number because the existing residential uses exceeded the assumption based on the Lee Plan (i.e. there was no residential use assumed for General Interchange, yet there are some existing houses in the General Interchange areas). This information was used later in the process when the allocations were formulated. Primarily, this figure was used as a reality allocation cap for future development. However, there is the possibility that the final allocation may exceed this number.

Also, when reviewing approved developments, what has already been approved for residential uses but not yet developed may be greater than what is assumed using this equation. Depending on how close to build out these developments are expected to reach by 2020, the allocation for the future land use category within the subject community may exceed these generally assumed residential acreage.

Estimate based on undeveloped land. The second method for determining the maximum amount of additional acreage available for future residential development is based on the amount of land remaining vacant or used for agricultural purposes (ACRES BY FLUMC2.XLS; Sheet - individual community; Columns - $I + J + L = S$) Historically, much of Lee County's agricultural property has been converted to other uses; therefore, the existing agricultural lands are included in the amount of land available for future development. This review of the existing conditions is also used to set constraints on the amount of lands allocated for additional development. This figure is also important for the allocations of non-residential uses. This acreage figure is broken down by future uses and added to the amount of existing acreage to determine the allocation for each use. For residential allocations this figure was also compared with the assumption above.

9. Review of previously approved projects.

To further refine the allocations to rely more on real world data and less on mathematical models, staff also reviewed the existing approvals within each area. This entailed inventorying all the approved planned development zoning

cases (including all Development of Regional Impacts, DRIs) and existing subdivision plats such as San Carlos Park. For this step, the subject projects were reviewed to determine the total approvals by use including acreage and units for residential and square feet for industrial. Two new tables were created in the Existing Use database to store this information. First a table with the development names and information such as zoning type, development id and community id. The second table contains specific approvals for each development. The community id links the approval information to the community table and the development id allows parcel information in the existing use inventory to be summarized by development. Utilizing the existing land use database allowed staff to determine how much of the approved development is remaining to be built. This information was entered into the spreadsheet and was utilized to show how much allocation above the existing inventory of each use would be required to accommodate the development that has already been approved (ACRES BY FLUMC2.XLS; Sheet - individual communityⁱ; Columns - W through AH). Since only the residential, commercial, and industrial allocations are proposed to be regulatory, only these approvals are tracked in the spreadsheet. Also, since commercial and industrial uses were not being allocated by future land use map category (flumc), these uses were not broken out by flumc. The spreadsheet also differentiates between those developments that are vested from the overlay allocations and those that will be required to adhere to these thresholds. Due to time constraints this breakdown has not been finalized.

Vested developments, such as Lehigh Acres or DRI's approved prior to the adoption of the Year 2010 Overlay, were evaluated as part of the allocation process. DRI's were reviewed and the amount of these developments both built and yet to be built was recorded. Residential and commercial land use needs for Lehigh Acres were done in accordance with the projections for population and commercial need generated by the "Lehigh Acres Commercial Land Use Study." As can be seen in Table 1(b), the permanent population for Lehigh Acres in the year 2020 is 91,734. This figure comes within one person of the projection from the study, contained on page 4-5. Projected populations for the other vested developments were obtained from their approvals. As with Lehigh Acres, buildout of these vested developments was not necessarily assumed during this planning horizon. The allocation process was one of balance and judgment, taking careful consideration of approved development yet holding total population to within 25% of the increment of new population. It should be noted that the fact that vested development could exceed the Year 2020 Allocation Table allotment is no different than the situation under the current Year 2010 Overlay. Vested development is just that, vested, and the original overlay and the current proposal cannot, legally, prevent them from developing. Utilizing the current methodology, these approvals were clearly identified and given proper consideration. Staff made

every attempt to allocate sufficient acres for these developments, however, as clearly shown by Lehigh Acres, full allocation cannot always be assigned.

10. Determine the projected development for 2020 exceeding the amount of existing and approved (not built) development. This is where the preceding steps were used to determine the final increase in residential development.

Number of additional acres. First, the number of additional acres is calculated. The equation for this step is 1) the lesser of following: "Potential Residential Acres" - column S - and "Residential Acres Remaining" - column T - minus 2) the total of the approved residential - columns W+AC - minus 3) the existing residential acreage - column M equals additional acres - column AI. In some communities, the number of units approved and existing exceeds the number estimated as needed by the year 2020. In those cases, professional judgement was used to determine if the 2020 estimate was too low or if the build out time frame for some of the approvals was beyond the year 2020. In instances where it was presumed that the build out of the approved development was beyond the year 2020 a negative acreage figure was entered into the additional development column. This approach was also used when projections needed to be altered to balance the affect of communities growing faster than the straight-line forecast was projecting. Since the combined straight line estimates for each community resulted in a unit estimate consistent with the BEBR 2020 mid range population estimate being used for this plan, if one allocation exceeded the straight line forecast, another needs to be adjusted down to balance that projection. This equation was completed for each of the future land use categories within a community.

Number of additional units. Once the number of acres is calculated, the assumption of units per acre is used to determine how many units this acreage will accommodate. Once again, the new methodology varies from the old adopted Lee Plan Methodology. In the adopted Lee Plan back up documentation, there is a countywide unit per acre assumption for each future land use designation. This was done because it was known that all developments were not designed/approved at the maximum allowable number of units per acre within the future land use category. For example, Lehigh Acres and San Carlos Park both contain a large number of approximately quarter acre residential lots (4 units per acre) however, these lots have future land use designations which allow up to 6 and 10 units per acre. Furthermore, the new methodology is based on net residential acres and the old assumptions were based on gross residential acres. The switch in methodologies is based on the proscribed method of inventorying the land from the Sheridan vs. Lee County Final Order. The existing land use inventory, which is used as the basis for this 2020 land use allocation plan, is

based on net acres. To estimate a new unit per acre (UPA) assumption, the UPA's of existing developments within each community for each future land use category was calculated. This allowed differences between communities to be acknowledged. For example, the lands designated as Urban Community in the Alva Community (1.67 upa) are not developing at as high a density as those in the Bonita Springs Community (4.67 upa).

These new UPA's are for net residential acres. The Lee Plan allowable density regulations are calculated on gross residential acres which may include golf course, open space, ROW, etc. Therefore, in some instances, the net UPA may exceed the allowable gross UPA. The equation for the number of units in addition to what are existing and/or approved is: $ACRES\ BY\ FLUMC2.XLS; Sheet - individual\ community^i; Column - AI$ (the number of additional residential acres) * the greater of columns P or Q (residential dwelling units per acre)=AJ. In sum communities some of the existing UPA assumptions were higher than the UPA's of existing developments. Since staff has seen a slight increase in the requested UPA's in recent years, it was decided that in instances where the current Lee Plan assumption was greater than the existing developments cumulative UPA the Lee Plan assumption was used for this analysis.

11. Residential allocations for acreage and units.

The final step in preparing the 2020 residential allocation for each community was simply to sum the existing, approved not built and additional development estimates. The equation for residential acres is $ACRES\ BY\ FLUMC2.XLS; Sheet - individual\ community^i; Columns - M+W+AC+AI= AT$. The equation for residential units is $ACRES\ BY\ FLUMC2.XLS; Sheet - individual\ community^i; Columns - N+X+AD+AJ=AU$.

12. The final community permanent population estimate.

The final unit count for each future land use category within each community was then multiplied with the community's occupancy rate and then the county wide PPU assumption to determine the permanent population of the area ($ACRES\ BY\ FLUMC2.XLS; Sheet - 2020\ Summary; Column\ F * Sheet - Communities; Column\ AD * Cell\ AC26 = Sheet - 2020\ Summary; Column\ I$). These population estimates by future land use category were summed to generate the communities 2020 population estimate. For the reader's ease, this estimate is also shown on the 2020 Summary sheet in column N in the row entitled Permanent. The community's occupancy rates and person per unit assumptions are also shown on the 2020 Summary Sheet.

13. Seasonal population estimated.

A county wide assumption has been made that 5% of all units are not occupied at any time during a year. This accounts for units for sale or rent, left vacant by the owner, and those which are considered not occupiable. The number of units between the 95% and the estimated occupancy rate for each community was then multiplied with the estimated seasonal persons per unit (PPU) estimate of 2. (ACRES BY FLUMC2.XLS; Sheet - 2020 Summary; Column F * Sheet - Communities; Cell AD24 - Column AD * Cell AD26 = Sheet - 2020 Summary; Column N in the row titled Seasonal)

14. Running total of population.

The Allocations sheet contains a population 2020 population figure for each community in row BX with a total county allocated population figure in cell BX24. This number is compared to the BEBR 2020 estimate of 602,000 and the estimated 1996 population. This information is stored on the Communities Sheet in cells AC27, BEBR 2020 estimate, and L26, the 1996 Lee County estimate. The two 2020 population figures were compared to determine how many people above the BEBR estimate the 2020 allocations were accommodating. Lee County set a target of 25% to allow an adequate buffer for market fluctuations and errors in estimates. Unlike past efforts, the 25% target is based on the increment of population growth, that is the difference between the current population and the BEBR 2020 estimate, between 1996 and 2020. The equation for this percentage is “allocated 2020 population-1996 estimate/BEBR 2020 estimate-1996 estimate” $\{((\text{Sheet - Allocations, Cell - BX24}) - (\text{Sheet - Communities, Cell - L26})) / (\text{Sheet - Communities, Cells - AC27-L26}) = \text{Sheet - Communities, Cell - AE24}\}$. A link to this cell was included on all of the individual community sheets (cell BB23) so changes to the unit counts could be monitored for their effects on the overall population goal.

15. Inventory of Existing Commercial.

The initial inventory of existing commercial uses by community was completed in step 6. The next step was to determine how much commercial was needed for the projected entire population of Lee County. This was accomplished by utilizing existing commercial land use information. In order to project the future needs of commercial by community, however, more information was needed.

A number of methods were used to project the needed population for Lee County and the individual communities. To do this commercial totals were

generated for previous years and input into the Workbook "ACRES BY FLUMC2.XLS". The sheet created for this information is called "com by pc and year". Initially eight rows of information were included in this sheet for each community. The row titles are Planning, Year Built, Parcels, Commercial, Building Area, Running Acres, FAR, and Running SF. The information in these rows are as follows: Planning Community Number; the year the information pertained to; the number of new commercial parcels that were built that year; the number of acres converted to commercial use that year; the amount of commercial building area that came online in that year; the total number of commercial acres existing in the community that year; the floor area ratio for that community that year (Floor Area/Land Area); and, the total commercial floor area in that community that year. This information is contained in columns B through BJ. Column BK is a summation column for this information.

16. Comparison of Commercial data with dwelling unit information.

Columns BL through BQ is a repeat of this information for the years that unit counts and population figures were available. These years are 1980, 1990, 1995 (Dec 31, 1994), 1996 (Dec 31, 1995), and 1997 (Dec 31, 1996). The information carried over in these columns included the total number of acres, the total commercial floor area, and the floor area ratio. In the row titled "Planning" a link to the communities sheet was created to show the number of units in each community. The row titled "Year Built" a calculation of the amount of commercial floor area per dwelling unit was calculated. This was simply [Floor area]/[Units]. The Building Area row was modified to be the percentage of the county's new commercial each year that occurred in each community

17. Commercial Projections for the years 2000, 2010, and 2020.

Column BV contains new titles for the years 2000, 2010, 2020 rows. These titles are: 1.Projected Units, 2.Square Feet Per Unit, 3.square feet by Unit, 4.Square feet by %, 5.% of SF, 6.Acres, 7.FAR, and 8.Square Feet. The information in these rows is described in the following steps.

1. The number of units estimates from the communities sheet for these respective years was linked to this sheet.
2. Using the forecast tool in Excel, the amount of commercial floor area per unit was projected for these 3 timeframes.

3. This projection was applied to the projected number of units to estimate the amount of commercial area needed in each community.
4. The next step involves the 5th row of each community section. Using the forecast tool in Excel, the percent of the county's total commercial floor area within each community is projected.
5. The estimated percentage from step 4 was applied only to the incremental commercial floor area change. This number was then added to the previous time interval's estimate of floor area. In some communities the estimated percentage of new commercial occurring in the community was a negative number. In those community, rather than decreasing the commercial floor area within the community, a factor of zero was applied for new commercial. The resulting 2020 estimate of commercial floor area was used as a guild for the amount of new commercial floor area with in a community. The end results through the allocation process is that each community was allocated some new commercial ranging from 3 acres and 15,000 square feet in Captiva to over 2,000 acres and 2 million square feet in the San Carlos/Estero community.
6. Using the forecast tool in Excel, the amount of commercial acreage is projected for these 3 timeframes for each community. This acreage estimate is applied to the estimated FAR described in step 2 to estimate the commercial floor area for each community
7. Using the forecast tool in Excel, the commercial floor area ratio is projected for these 3 timeframes for each community.
8. Using the forecast tool in Excel, the amount of commercial floor area is projected for these 3 timeframes for each community.

These forecasts were used as guides through the allocation process. The three commercial floor area estimates are averaged to use as the guiding estimate on the individual community sheets. This floor area estimate is also used to project the appropriate commercial acreage allocation for each community. This also is used as only a guide. The acreage needed for the allocation may also be effected by any existing approvals that have not been constructed. This information is not accounted for in these estimates and the FAR in these approvals may differ from the existing development information.

18. Additional Commercial Development.

As discussed in step 9, the amount of approved commercial was entered into the "ACRES BY FLUMC2.XLS workbook on the individual communityⁱ sheets. The next step was to determine how much commercial floor area is needed in addition to what is approved, or, in some communities, how much of the approved commercial exceeds the actual need of the community. While the equations described above are useful tools in estimated the need by community, they also do not consider factors such as available land and how much of the vacant land is suitable for commercial development. These factors required each community to be evaluated by staff. No equations could be applied to measure these conditions. Staff also feels it is important for a community to have some potential for new commercial within the next 22 years. It is important to offer some commercial development within each community to attempt to capture some trips especially for daily needs. With the estimates from the previous steps as a guide, the needed additional floor area was entered into cell AL19 on each of the community's worksheet. The initial equation used to give the guiding estimate is Sheet - com by pc and year; Cell BZ5 minus (Sheet - individual communityⁱ; Cell E19 +Z19+AF19) plus Professional Judgment.

19. Additional Commercial Acres.

The next step is to determine how much land is needed to accommodate the commercial building space estimated in each community. As described in previous steps, each community has a different FAR. In the urbanized areas, such as South Fort Myers, multi-story commercial buildings are not uncommon and therefore the FAR is higher than the rural areas where the single-story buildings are the norm. For this reason, the FAR listed in column BU in the 7th row of each community's section is divided into the estimate for additional commercial square feet to estimate the amount of land needed to support this commercial floor area.

20. Commercial Allocation.

This step is the same as for the residential allocations. The main difference is that this allocation is for the total need for the community while the residential is broken out by future land use category. The step here is to add the columns containing the existing, approved, and additional commercial figures. The equations for commercial are contained in the Excel Work Book - ACRES BY FLUMC2.XLS for each individual Planning Community Sheetⁱ. The Commercial Acres: $J19+AD19+X19+D19=AV19$ and Commercial Square Feet: $AK19+AE19+Y19+E19=AW19$.

21. Industrial employment estimates.

First the entire county need is estimated using the Methodology described in the Thomas H. Roberts Industrial Land Use Needs Study, 1983. This report has been updated with more recent 1994 NPA data. The 1994 NPA data's longest range projection was for the year 2015, and is therefore inconsistent with the 2020 time horizon of this plan. The 2015 information had to be projected out to the year 2020. This adjustment was also a necessary step because the NPA population estimates for Lee County are not the same as the BEBR mid-range. This estimate was done using simple ratios. The NPA 2015 employment estimate for each employment category was divided by the NPA population estimate for 2015. This employee per population ratio was then multiplied with the 2020 Lee County permanent population estimate for BEBR to generate an employee estimate for 2020.

The exception to the above methodology deals with the manufacturing sector. Currently, Lee County has 1.68% of its population employed in the manufacturing sector of its economy. This percentage is also the figure that the NPA data uses for projected estimates. The Lee Plan in Policy 7.1.4 sets a desired employment rate of 3% of the county's population in manufacturing. Therefore, the 3% figure is used in the 2020 estimate of employment to estimate manufacturing employment. The Roberts methodology further identified the percentage of employees in the various employment sectors that would be located in the industrial land use categories. To reflect this, the NPA data, as adjusted for the 3% desired manufacturing estimate, were multiplied by this "Roberts Percent of Employment in Industrial District" assumption. This returned an estimate of 35,966 employees anticipated to be employed in an industrial area in the Year 2020.

22. Industrial acreage estimates.

This employment estimate is then applied to Roberts' estimate of 7 employees per acre to generate the need for industrial land. Roberts then applies a safety factor of 30% to the estimated need (see page 65 of the Thomas H. Roberts Industrial Land Use Needs Study, 1983). Finally, Roberts' study applies a flexibility factor of 25% to the acreage need estimate. This produced an acreage amount of 8,349 for county wide industrial use.

23. Unincorporated industrial acres estimate.

Once the total industrial acreage need estimate was finalized, the number of acres needing to be allocated for the Year 2020 in the unincorporated area of Lee County is estimated. This was done by simply reducing the total

industrial acreage need by the amount of industrial acreage in the cities (developed and undeveloped). The final estimate for unincorporated Lee County is 6,799 acres.

24. Industrial allocation.

This countywide acreage need is then disaggregated across the county into the unincorporated Planning Communities. This was accomplished by allocating industrial acreage based on the existing development, approved developments, and areas designated for industrial development. A starting point for acreage allocation was calculated. This was done by using the following allocation equation: : ACRES BY FLUMC2.XLS; Sheet - individual communityⁱ; Column - C (the total acres in a given FLUMC) multiplied by the modified Roberts assumption of how much land would be devoted to industrial uses within each of the given FLUMC multiplied by 80% for future ROW needs less Column - F the amount of existing industrial development in the given FLUMC equal to AM19. The ROW assumption was reduced to 20%, leaving 80% for development due to the nature of industrial uses locating on larger lots. The percent of how much land would be devoted to industrial uses within each of the given FLUMCs is as follows, 90% in Industrial Development and Industrial Commercial Interchange, 50% in Industrial Commercial Interchange, and 12% in New Community. This figure was the base allocation for each community. Utilizing a report from the existing land use database, staff also reviewed all the vacant land with industrial zoning within each community. Using "professional judgement" this information was used to adjust the industrial allocations within each community. Careful attention was given to the unincorporated industrial acreage need to make sure the control total of 6,799 acres was not exceeded.

Staff Response to Objection 3, Year 2020 Community Overlay Community Boundary Description/Methodology

As part of the effort to improve the problematic Year 2010 Overlay and to create a more useful planning tool, the Year 2010 Overlay Sub-districts Map 16, is proposed to be replaced with the new Year 2020 Communities Map. This map, while still allowing the county to allocate the amount of land by use which is professionally accepted to accommodate Lee County's projected 2020 population, allows more flexibility to accommodate a fluctuating market for the next 22 years. These community boundaries allow the land use allocations to be more oriented towards the needs of Lee County's communities. These larger, community based allocation district boundaries help to remove the problems inherent in the smaller sub-districts caused by unforeseen condition changes.

Community Boundary Creation

The number of communities designated on the Community Map was based primarily on how areas identify themselves. In some instances these boundaries were modified due to political and regulatory issues. The result of the creation of these communities is the division of the county into 20 Planning Communities. These Planning Communities are proposed to replace both the 115 Year 2010 Overlay Subdistricts and the 15 Planning Districts. The actual boundary descriptions for these communities are included in appendix 2, "Physical Descriptions". These descriptions are not intended to be "legal descriptions" but do allow the reader the ability to determine the exact boundary of a community. When possible, these descriptions follow section lines, road centerlines, river channels, and platted development boundaries. In some instances these descriptions reference parcel lines. Therefore, it is important to realize that these are for parcels as they exist in April of 1998.

First, four communities were drawn to reflect the four incorporated cities. The two island municipalities were drawn to include only the land within their corporate boundaries.

Sanibel - This community includes all land incorporated in the City of Sanibel as of this date. Sanibel does have a strong retail base for tourist needs and the daily needs of the residents. However, for more major needs residents do utilize businesses outside of this community.

Fort Myers Beach - This community includes all land incorporated in the Town of Fort Myers Beach as of this date. The town of Fort Myers beach has a similar non-residential base as Sanibel. One significant difference is the existence of the boating and marina industry on the island.

The community boundaries for the cities of Cape Coral and Fort Myers, however, include enclaves likely to be annexed during the time frame of this overlay. This helps to minimize the issue of how to manage the allocations when property within a community is annexed thereby removing it from the county's land use jurisdiction. This issue was never fully resolved with the 2010 Overlay sub-districts where many of the districts surrounding the City of Fort Myers had property annexed into the city. In reality, while the amount of land regulated by the overlay within the sub-district declined, the actual allocations within the sub-district remained the same.

Cape Coral - The Cape Coral Community includes all the unincorporated enclaves with the exception of the few enclaves located on Pine Island Road West of Chiquita Boulevard. Some of these enclaves may never annex into the City of Cape Coral, such as the Matlacha Isles area. These areas have historically been included with the Pine Island Community, and will remain so. Other of these enclaves may annex into the city and it may be advantageous at that time to amend the Community Map and the corresponding allocation tables to reflect such annexations. The Fort Myers

Community includes much more unincorporated area. While commercial and industrial opportunities of all varieties exist in the City of Cape Coral, many of the residents still satisfy these needs outside of the city. Likewise, many residents of less intense areas of the county will utilize Cape Coral's commercial and industrial opportunities for their needs.

Fort Myers - The City of Fort Myers is annexing land in an aggressive manner, especially in the vicinity of Gateway. An urban reserve overlay for the City of Fort Myers is no longer in effect. This planning tool was deleted from the Lee Plan in the 1992/1993 amendment cycle. This was done due to cessation of the interlocal with the City of Fort Myers. The Fort Myers Community includes all land within the City of Fort Myers along with most areas included in the repealed Fort Myers Urban Reserve and the portions of Gateway which are in the process of annexing or expected to annex into the City of Fort Myers. The only areas not included in the Fort Myers Community which had been in the Fort Myers Urban Reserve is the Morse Shores/Tice area which is west of I-75 north of Tice Street. It is unlikely that these areas will annex into the city. The other area previously in the Fort Myers Urban Reserve which is not in the Fort Myers Community is the Twin Lakes RPD and neighboring properties in the northeast quadrant of the I-75/SR82 interchange. There are properties southeast of the City of Fort Myers that are included in the community due to existing interest in their annexation into the City of Fort Myers. While the emphasis of new commercial and industrial activity in Lee County has been moving south along US 41, The community of Fort Myers remains a commercial/industrial center for the rest of Lee County.

Once the community boundaries for the cities were drawn, the remaining portions of the county were studied to determine existing "communities". Planning Staff's first goal was to completely follow census geography in this task. It was quickly realized that tract lines did not necessarily follow community boundaries and that the community lines would need to deviate from census geography. The next geography, which was used to base the community boundary lines on, was Traffic Analysis Zones (TAZ's). However, as with census geography, these zones also did not always create a good community border. When these geographies were not available, Planning Staff relied on future land use designation lines, section/property lines, and natural features such as rivers and creeks. One of the problems with the original 2010 overlay sub-districts, which were based on TAZ's, was that many properties were split into multiple overlay sub-districts. This resulted in staff spending additional time determining which side of the sub-district line a property's use was actually occurring. With the exception of less than 10 parcels, the goal of not splitting parcels into multiple communities was achieved. Through this exercise, twenty distinct communities emerged.

The Second type of community reviewed and defined was the island based communities. Five island based communities were identified on the 2020 Planning

Community Overlay Map. Two of these are the incorporated islands described above. The other three are Boca Grande, Captiva, and Pine Island.

Boca Grande - This community includes the portions of Gasparilla Island within Lee County and the surrounding smaller islands. The smaller islands in this community have minimal if any development. The core of this community is the unincorporated town of Boca Grande. This community is unique in that it has no direct road access to the rest of Lee County. All access to Boca Grande is via Charlotte County or by boat.

Captiva - This community includes the major islands of Captiva Island, Upper Captiva Island, Cayo Casta Island, Usseppa Island, Buck Key, and Cabbage Key and the surrounding smaller islands. Although Captiva itself is a seasonal resort community, in comparison to the other islands in this community it is the center of activity. Due to the nature of this community, residents must satisfy their major commercial and industrial needs outside of this community.

Pine Island - This community includes the major islands of Pine Island, Little Pine Island, and Matlacha, the surrounding smaller islands, and the previously mentioned enclaves in the City of Cape Coral. This community has an overall identity of Pine Island; however, there are four sub community centers within the overall community. Pine Island itself has three communities, Bokeelia at the north tip, St James City at the southern tip of the island, and Pine Island Center at the intersection of the two main roads of this community, Pine Island Road and Stringfellow Boulevard. Pine Island Center would be considered the most major of these three communities. There are numerous other islands immediately surrounding Pine Island. Of these, Matlacha has somewhat of its own identity. This area, along with Matlacha Isles, has always been included in the area known as Greater Pine Island. While there are four small communities within the larger Pine Island community and this community does contain more commercial zoning than is needed to support its projected population, many of the residents do leave the islands to satisfy their commercial needs.

The remainder of the county was divided into thirteen non-island communities. However, these communities do include some islands such as San Carlos Island, Black Island, and Bonita Beach. This task did involve some professional judgement on the part of Planning Staff and the boundaries were modified during the public hearing process.

The following are general location/boundaries of the remaining areas and these area's current conditions including the existing and planned infrastructure. The widening of Interstate 75 is not specifically mentioned in these descriptions since it is a regional/state resource effecting all of the communities.

Alva - This Community is located in the northeast corner of the county and is focused on the rural community of Alva. The majority of this area is designated as

Rural, Open Lands, or Density Reduction/Groundwater Resource. The lands surrounding the Alva "Center", which lie north and south of the Caloosahatchee River at the intersections of the Broadway (the bridge at Alva) and SR 78 and SR 80, are designated as Urban Community as are the lands in the vicinity of the Hickey Creek Mitigation Park. The mitigation park lands are, however, slated to be placed in a more suitable Conservation Lands land use designation. There are some lands designated as Outlying Suburban within the Alva Planning Community, most of which are located south of Bayshore Road west of SR 31. This community roughly includes lands in Township 43 South/Range 27 East, lands north of the Caloosahatchee River in Township 43 South/Range 26 East, and, lands north of the Caloosahatchee River in Sections 1,2, 11-14, and 23-27 of Township 43 South/Range 26 East.

The lands west of SR 31 were included in this community to more closely reflect census tract lines. This area currently has a rural character similar to the rest of the Alva Planning Community; however, its location/accessibility to I-75 may render it more closely related to the North Fort Myers Community. If during the 2000 census, a tract split along SR 31 can be accomplished, it may be desirable to move these lands into the North Fort Myers Planning Community.

While the Alva community does offer some non-residential opportunities, most residents do find themselves shopping for these goods out side of this community in the more urbanized communities to the west and south.

This Community is served by three substantial transportation facilities, SR 80 (Palm Beach Boulevard) SR 78 (North River Road/Bayshore Road) and SR 31. Currently, all these roads are two lane facilities.

Properties in this area are typically served by well and septic systems and no major utility expansions are expected in the near future.

North Fort Myers - This Community is located north of the Caloosahatchee River between the Alva Planning Community and the City of Cape Coral. This community includes a wide mix of Future Land Use designations from Intensive Development to Density Reduction/Groundwater Resource. The one exception is the lack of the Industrial Development land use designation in this community. There are only 2 small areas in the North Fort Myers community with this designation. The existing core of this community is in the area of the two US 41 routes near the river. The old US 41 corridor is the current focal point of the North Fort Myers CRA and the new 41 Corridor is home to a number of new major commercial endeavors. These corridors are what give this community its commercial identity. They are surrounded by residential that have a country atmosphere. While US 41 Corridor contains businesses that have an inter-community draw, there are also commercial nodes that are more neighborhood oriented. These would include the commercial areas along Hancock Parkway (although the new Winn Dixie grocery store will draw

from areas outside the community), Bayshore Road, and Pondella Road. The North Fort Myers community contains major commercial concerns that attract consumers from outside of the community.

The North Fort Myers Community is serviced by a number of major roads/highways including US 41, Business 41, Interstate 75, and SR 78 (Pine Island/Bayshore Road). There are also road improvements in the community, which have been recently completed, are under construction, or are in the planning process. These include the widening of Business 41 north of Pine Island Road to the intersection of US 41. This corridor currently links North Fort Myers to Downtown Fort Myers and there are plans to continue this corridor south to reconnect with US 41 in the Alico Road area via Metro Parkway. This would create an alternate north/south route through Lee County. Pine Island Road (SR 78) has recently been widened into Cape Coral and the segment between old and new 41 is in the process to be widened to 4 lanes. Bayshore Road (SR 78) was widened to 4 lanes for a short distance from its intersection with Business 41 east, and the remaining segments to I-75 are planned to be widened in the future. Pondella Road was recently widened from US 41 to Orange Grove Blvd and plans exist to continue the widening and its extension to Del Prado Blvd in Cape Coral. Diplomat Parkway, an existing east/west road in Cape Coral, is under construction to through the Hancock Creed Industrial Park to US 41. There are also discussions underway to build a new road from the Del Prado Blvd Extension east to connect with Henderson Grade Road and build a new interchange on I-75.

Properties in this community are serviced by both water and sewer and well and septic systems. North Fort Myers Utilities continuously expands the area serviced within its franchise area to meet the needs of the area's growth.

Burnt Store - This Community is located in the northwest corner of the mainland of Lee County excluding any portions of the City of Cape Coral. The majority of the property in this community is Open Lands. The land west of Burnt Store Road is designated as Rural with the exception of 10 acres, which are designated as Outlying Suburban. This community is primarily a residential area with a high percentage of seasonal residents. There are some commercial and marine oriented amenities within the Burnt Store Marina Development which serve primarily residents of that development. Most of the community's commercial needs are served outside of the community in Cape Coral, North Fort Myers and Fort Myers, or in Charlotte County. The Burnt Store Development actually encompasses land in both Lee and Charlotte Counties.

The primary road corridor servicing the Burnt Store Community is Burnt Store Road. No major improvements to this facility are planned in the foreseeable future in the Burnt Store Community. The extension of Burnt Store Road within the Cape Coral Community is shown on the 2020 Financially Feasible Plan. This connection from the southern terminus of Burnt Store Road at SR 78 to the new Mid-Point

Memorial Bridge corridor will give residents in the Burnt Store Community better access to central Cape Coral and South Fort Myers.

The Burnt Store Marina development is serviced by water and sewer facilities. The area between Burnt Store Road and the North Fort Myers community relies on wells and septic systems.

Tice/Morse Shores/Fort Myers Shores - This Community is located south of the Caloosahatchee River, east of Hickey Creek, and north of the Orange River; and, along I-75 west of the Buckingham Rural Community Preserve, north of SR 82 and east of the City of Fort Myers. This area also has a mixture of future land use designations. The majority of the land is designated Suburban, Rural, or Urban Community; however, there are some lands designated Intensive Development, Central Urban, Public Facilities, Industrial Interchange Area, and General Interchange. This community contains commercial outlets which accommodate the needs of its residents as well as those from neighboring communities such as Alva and Buckingham. There are two major shopping areas in this community to satisfy resident's primary needs such as food and automotive needs. However, the residents of this community utilize commercial establishments in the more urbanized areas for other commercial needs.

The major roads servicing this Community are Interstate 75 and Palm Beach Blvd (SR 80). Palm Beach Blvd was recently widened to 6 lanes between Ortiz Blvd and SR 31 and 4 lane from Ortiz Blvd to the existing 4-lane segment in the City of Fort Myers. This Community also has 2 I-75 interchanges within its boundaries. The Interchange at Palm Beach Blvd is a major entryway into the county/City of Fort Myers for motorists from the north.

Utility services in this community are similar to those in the North Fort Myers community. This community is serviced by both water and sewer and well and septic systems. Lee County Utilities continuously expands the area serviced within its franchise area to meet the needs of the area's growth.

Buckingham - This Community is located between Lehigh Acres and the City of Fort Myers and Buckingham Road and the Orange River. It is considered the Buckingham Rural Community Preserve. The property in this community is predominantly designated Rural Community Preserve with some pockets of Public Facilities, Rural, and Outlying Suburban. There is an active push, by the residents, to maintain the rural nature of this area of the county. The residents have supported an amendment to the Lee Plan which limits the commercial activity within the community to a node focused around the intersections of Buckingham Road and Cemetery Road and Buckingham Road and Orange River Road. It is their preference that the majority of the communities commercial needs be met outside of their community.

The major roads serving this community are Buckingham Road, Gunnery Road, and Orange River Blvd. None of these are state or federal highways.

The primary source for potable and wastewater systems is well and septic systems; however, Lee County Utilities has extended a few sewer lines in the area. The Buckingham community residents have opposed any infrastructure improvements that would encourage urban development within their community. Goal 17 of the Lee Plan addresses these concerns. The following objectives are in the adopted Lee Plan:

OBJECTIVE 17.2: TRANSPORTATION. *To protect the rural character of the Buckingham area, all future rights-of-way in Buckingham shall be no greater than 100 feet (except for Buckingham Road and Luckett Road extensions). (Amended by Ordinance No. 94-30)*

OBJECTIVE 17.3: SEWER AND WATER. *In order to discourage unwanted urban development, central sewer and water lines shall not be extended into the Buckingham Rural Community Preserve, except in the areas identified by Maps 6 and 7 as Future Water and Sanitary Sewer Service Areas and to the site of the proposed resource recovery facility.*

Lehigh Acres - This Community is located between the southern line of Township 43 South and SR 82, and east of Buckingham Road/the Buckingham Rural Community Preserve to the eastern Lee County line. This community contains the Lehigh Acres development, which was platted starting in 1954. The plat contains primarily quarter and half acre lots on a grid street pattern. This community is designated as Urban Community and Central Urban with the exception of one small strip of Rural and a few properties with the Public Facilities designation.

The transportation network within this community has been very problematic and will continue to be challenging in the future. The community is serviced by Lee Blvd/Joel Blvd (CR 884), SR 82, and Gunnery Road. Gunnery Road is planned to be the connecting point for the extension of Daniels Road to SR 82, and Lee Blvd is currently being widened from its 2-lane state. Many roads within the Lehigh Community are also being improved to assist in the flow of traffic within the community. There is also a proposed amendment to the Lee Plan, the Lehigh Commercial Study, that will help address some of these same issues.

Central water and sewer service much of the highly developed area of the Lehigh Community and as areas of the community develop these services are extended into the area. However, many areas of the Lehigh Community are still utilizing wells and septic systems.

Gateway/Southwest Florida International Airport - This Community is located South of SR 82, generally east of I-75, and north of Alico Road. The community includes those portions of the Gateway development which have not been or not anticipated to be annexed into the City of Fort Myers. It also includes the Southwest International Airport and the properties it is expected the airport will use

for its expansion. In addition, the community contains the lands designated as Airport Commerce, and the only portion west of I-75 is the land designated as Industrial Development, which is also, one of the primary flight paths into the airport. In addition to these two land use designations, properties in this community are designated New Community (the Gateway development), Airport, Density Reduction/Groundwater Resource (primarily the anticipated airport expansion areas), Rural, and General Interchange.

Daniels Parkway, Interstate 75, Commerce Blvd, Alico Road, and SR 82 service this community. The road network in this community is planned to change dramatically over time. The first scheduled improvement is the extension of Daniels Parkway to SR 82 and its connection with Gunnery Road. This will create a direct link from Lehigh Acres through this community to the southern portions of Lee County. Currently this is achieved by utilizing Commerce Blvd through the Gateway development. SR 82 is also projected to be widened, as is Alico Road. There are also many new road facilities planned within this community. In conjunction with the expansion of the airport, Treeline Blvd is planned to be extended south from Daniels Parkway to Alico Road and connect with Ben Hill Griffin Parkway. This road facility will contain the main entrances to two of the county's premiere facilities, the Southwest International Airport, and Florida Gulf Coast University, the newest state university. The Lee County MPA 2020 Financially Feasible Plan also shows Treeline Blvd extending north to SR 82 creating a continuous road from Corkscrew Road to Colonial Blvd. Another facility appearing on the Lee County MPA 2020 Financially Feasible Plan for future evaluation is the South County East/West Expressway. Although no alignment has been determined, it is expected that if built this expressway would be located parallel to the existing Alico Road on the north side through the Industrial Development area of this community.

As stated above, and implied in the name of the community, this community is the home to an international airport. This facility is currently planned to be greatly expanded. The expansion plans call for adding a second parallel runway and a new terminal building. These improvements will more than double the existing capacity of the airport.

Central water and sewer service the majority of the developed land in this community and the expansion of these facilities is expected to continue with the development of the area.

Daniels Parkway - This Community is located between I-75 and the Six Mile Cypress Slough, south of the City of Fort Myers and north of the Alico Road industrial area. The community contains lands designated Rural, Outlying Suburban, and a small area of General Interchange. This community is considered one of the primary gateways to Lee County.

Daniels Parkway and Interstate 75 are the primary roads servicing this community. No major improvements are planned for these facilities in the near future. The one major road improvement project in this community included on the Financially Feasible Plan is the future connection of Fiddlesticks to Three Oaks Parkway.

Central water and sewer service the majority of the developed land in this community and the expansion of these facilities is expected to continue with the development of the area. There are areas in this community that are developed at very low density which are utilizing septic systems and some are also using private wells for potable water.

South Fort Myers - This Community is located in the center of Lee County. South of the City of Fort Myers, east of the Caloosahatchee River, west of the Six Mile Cypress Slough, and north of Gladiolus Drive. This community primarily has the higher intensity land use categories such as Intensive Development, Central Urban, Urban Community, Industrial Development, and Suburban.

Along with this community's higher intensity future land use designations comes a large number of transportation corridors. The community is served by the following: US 41, Metro Parkway, Summerlin Road, McGregor Blvd, Six Mile Cypress Parkway/Gladiolus Drive, Cypress Lake Drive/Daniels Parkway, College Parkway, and Boy Scout Rd/Fowler St.

Central water and sewer service the majority of the developed land in this community and the expansion of these facilities is expected to continue as this community builds out.

Iona/McGregor - This Community is located primarily south of Gladiolus Drive west of Hendry Creek and contains all of the islands not included in the Town of Fort Myers Beach. The northern boundary is generally the channel in the Caloosahatchee River and the community includes islands approximately 2 miles west of the mainland. This community primarily has lands designated as Urban Community and Suburban, both having a standard density cap of 6 units per acre. There are some areas designated as Central Urban and others as Outlying Suburban. There is also an industrial area located along the west side of Pine Ridge road north and south of Summerlin Road.

The road network in this area includes the major road corridors of Summerlin Road, Gladiolus Drive, McGregor Blvd, and San Carlos Blvd. McGregor Blvd is currently programmed to be 4-laned from Cypress Lake Drive to Gladiolus Drive. This will complete the 4-laning of McGregor from College Parkway to the Sanibel Causeway. Improvements shown as financially feasible include the widening of Summerlin Road to 6-lanes, the completion of the 4-laning of Gladiolus Drive, and the widening of San Carlos Blvd from Summerlin Rd. to Gladiolus Drive.

San Carlos Park/Island Park/Estero - This Community is located in the southern portion of Lee County, east of Hendry Creek and, for the most part, south of Alico Road. It is north of the Estero River on the west side of US 41 then north of the new Brooks of Bonita development east of US41. The community does extend east of I-75 to include the approved developments along Corkscrew Road and all lands designated University Community. The majority of the land in this community is designated as Suburban and then Urban Community (both having a maximum standard density of 6 units per acre). There are some properties designated as Rural, Outlying Suburban, and Industrial Development, however, these lands make up a small portion of the Community.

As with the South Fort Myers Community, this community must also accommodate any traffic moving from the northern portions of the county to the southern portions and visa versa. Even north/south interstate traffic funnels through this community. To accomplish this movement in addition to the internal (origin and destination) trips there are two major north/south corridors: US 41 and Interstate 75. To aid the movement to and from these corridors, there are two major east/west routes in this community: Alico Road and Corkscrew Road. The location for the newly opened Florida Gulf Coast University will increase the number of trips beginning and ending in this community. Road improvements programmed to assist with this traffic are: the widening of Alico Road and Corkscrew Road to 4-lanes; the 4-lane extension of Ben Hill Griffin Blvd from the campus entrance to Corkscrew Road; and, the widening of US 41 to 6-lane from San Carlos Park north (these final two projects are currently underway). In addition, the Lee County MPO 2020 Financially Feasible Plan includes the widening of Three Oaks Parkway and its extension north to Daniels Pkwy and south to Old US 41 in Bonita. The widening of US 41 to 6-lane south, the widening and extension of Ben Hill Griffin Blvd to Treeline Blvd. and the extension of Koreshan Blvd. across I-75 (no interchange is planned) to Ben Hill Griffin Blvd are also planned. Another major north/south route which will be located in the northern extremity of this community is the metro parkway extension from its terminus at Six Mile Cypress Parkway to US 41 and Alico Road with an interchange planned for this intersection. Additionally, the potential south county east/west expressway which is shown for future evaluation on the MPO's 2020 plan may also be constructed.

Bonita - This Community is located in south Lee County and abuts the Collier County line. It is generally west of I-75 except south of Bonita Beach Road where it extends all the way to the east county line. These General Interchange, Outlying Suburban, and Rural lands east of I-75 are included because they do not fit within the Southeast Lee County community described below, which is almost entirely Density Reduction/Groundwater Resource. The Community contains all the islands south of the Town of Fort Myers Beach and includes those in the area of Mound Key. The northern boundary of this community is the San Carlos Park/Island Park/Estero Community, which are the Estero River, then the northern boundary of the Brooks of Bonita development. This community has a wide variety of Future

Land Use designations from Rural to Central Urban. It includes Industrial Development areas and a General Interchange area.

While this is one of the fastest growing communities in Lee County, Bonita Springs only contains three major transportation corridors: US 41, Interstate 75, and Bonita Beach Rd. Bonita Beach Road was recently 4-laned from Vanderbilt Beach Dr to Bonita Grande Dr and the portion from Vanderbilt Beach Dr to Hickory Blvd is currently programmed to be 4-laned. Bonita Beach Road is planned to be 6-laned on either side of its intersection with US 41 and between Imperial St and I-75. US 41 is also planned to be widened from 4-lanes to 6-lanes through the entire Bonita Springs Community. Another north/south road planned for the area is the extension of Three Oaks Parkway connecting it to Old US 41 north of the Bonita Springs Town Center. Extensions of Matheson Ave north to Strike Lane and Imperial Street south to Collier County ultimately connecting with Livingston Road in Collier County are also shown on the Recommended Network and Alignments from the Bonita Springs Traffic Circulation Study which was approved by the BoCC and amended the Lee County MPO 2020 Financially Feasible Plan. Passing through the community east of I-75 is the proposed road connecting CR951 in Collier County with Ben Hill Griffin Blvd in Lee County. The only new east/west road planned for the Bonita Springs Community is the extension of Coconut Rd through the Brooks of Bonita development east of I-75 connecting with the new north/south road planned for east of I-75.

Southeast Lee County - As the name implies, this Community is located in the southeast area of Lee County. South of SR 82, north of Bonita Beach Road, east of I-75 (excluding areas in the San Carlos Park/Island Park/Estero Corkscrew Road and Gateway/Southwest Florida International Airport Communities) and west of the county line. With the exception of the Public Facilities and the Wetlands, the entire community is designated as Density Reduction/Groundwater Resource on the Future Land Use Map.

This community contains the most remote areas of Lee County and does not contain an abundance of public infrastructure. SR 82 and Bonita Beach Rd are the northern and southern boundary of the community. Alico and Corkscrew Roads are the only major roads located in the community. Corkscrew Road does extend out of Lee County into northern Collier County. No improvements are planned for these roads in the Lee County MPO 2020 Financially Feasible Plan. An amendment was made based on recommendations from the Bonita Springs Traffic Circulation Study to extend Ben Hill Griffin Blvd south from Corkscrew Road intersecting with Bonita Beach Road and continuing on to connect with CR 951 in Collier County. In addition, an extension of Coconut Road through the Brooks of Bonita development to connect with this extension of Ben Hill Griffin Blvd has been recommended by this study.

Although the area does contain a water treatment plant, the only water lines are those running from the plant along Alico Road. No major sewage treatment facilities exist in the area. Some developments do have multiple user package plant facilities in the area. Septic systems and private wells serve the majority of the area. These conditions are not expected to change in the future.

Recommended Changes. In response to the recommendation from DCA, staff is recommending that the Density Reduction/Groundwater Resource lands originally located in the San Carlos Park/Island Park/Estero community be transferred into the Southeast Lee County community.

**PART VI - BOARD OF COUNTY COMMISSIONERS
HEARING FOR ADOPTION OF PROPOSED AMENDMENT**

DATE OF ADOPTION HEARING: June 3, 1998

- A. BOARD REVIEW:** The Planning Director discussed two issues not included in the distributed packets. A letter requesting an increase to the commercial acreage in the Burnt Store Community, to accommodate development expectations of the Burnt Store Marina development was distributed. Staff had an opportunity to review this request and concurred with it. Staff proposed to allocate the additional commercial acreage to the Burnt Store Community and reduce by 2 acres the commercial allocation in the San Carlos/Estero Community to compensate for this change. It was also discussed that the change was not a 1 acre for 1 acre change. The commercial acreage allocations are based on the county's need for commercial floor area. Each community's commercial floor area ratio (FAR) was included in the commercial acreage methodology. These FAR's are based on an analysis of the communities and are different between the various communities. The FAR for San Carlos/Estero Community is higher than that for the Burnt Store Community

The second issue discussed by staff was the need to include additional language in the Response to ORC to address vested development and Developments of Regional Impact (DRI's). This language was distributed to the commissioners prior to the hearing.

Public testimony was received regarding a misprint in the staff report stating that the majority of the land in the Burnt Store Community is Density Reduction/Groundwater Resource. In reality the majority of the land in this community is designated as Open Lands. Staff agreed to make the correction.

Public testimony was received regarding Table 1(b) the Year 2020 Allocations. The speaker was concerned with the inclusion of the available unit estimates in this table, specifically how they would apply to the Open Lands Category. Staff responded that, from the language in Policy 1.7.6, it is clear that the acreage allocations are the regulatory figures. A follow up question was exactly how the acreage figures are calculated. As stated in the methodology under steps 9 and 10, the acreage for residential use is a net acreage. The question was then raised about clustering of units and how that affects the acreage calculation. It was explained that only the areas that actually develop as residential would be counted. Preservation areas and other uses, such as golf courses would be placed into a conservation or recreation category.

Additional public testimony was received from a second speaker regarding three issues: the issue of clustering, when the allocation acreages area applied to development, and the amendability of the allocations. The speaker was satisfied with the previous discussion on clustering. The speaker was seeking clarification that the new allocations would be applied at the development order stage not the rezoning stage. The final concern was whether these allocations were amendable in the future as conditions change. Primarily, that an amendment could be initiated to remove allocations from areas not growing as expected and moved to a community growing faster than expected. The Planning Director addressed each issue. First, clustering was a viable option in all areas of the county, second, Policy 1.7.6 specifically states that "No final development orders ... will be issued", and finally that the

allocations will be reviewed by staff and that the applications to amend the allocations can be submitted through the plan amendment process.

The Board asked staff to include a discussion about this topic in the record. The following paragraphs address this issue.

The Lee Plan allows, and to some degree encourages, the clustering of units within a development. Clustered development can provide larger areas for more open space, indigenous vegetation and/or recreation uses. Clustering may also reduce the amount of infrastructure needed over non-clustered developments. The clustered form of development can also assist in reducing the amount of urban sprawl. By clustering development near collector or arterial roads, more removed areas of a property can be left in a more natural state.

The Lee Plan calculates allowable density based on gross residential area. Gross residential density (Density) is defined in the glossary of the Lee Plan. All proposed development must be consistent with this density. The methodology inventories only the land that is developed with residential use as residential land, equating to net density. In smaller condo and apartment developments the common areas, such as parking and the pool areas, will be included in the residential acreage. Therefore, the entire parcel would be included in the net density figure. However, in larger developments with golf courses and preserve areas, these portions of the development are inventoried to reflect the actual use. Golf course areas are inventoried as "public/non-county golf course," open space areas are designated as "public/open space." Most other uses within the development will be inventoried as "public/residential amenities." These anomalies are and will be acknowledged in the allocation reviews of each district/community. The "Existing Use Designations" contained in Attachment 22 reflect this fact. The historical dwelling unit per acre figures that are contained in column Q of the individual community sheets of the workbook ACRES BY FLUMC2.XLS show this fact. Some of these figures exceed the allowable unit per acre within a land use category even though there may be no developments within the area which are inconsistent with the Lee Plan density limitations.

For example:

The Gulf Harbor (formerly Rivers Edge) development has a density of 4.1 units per gross acre (UPGA). This density is under the maximum density of 6 UPGA allowed in the Suburban Category, however, when the open space and golf course acreage are removed from the equation the units per net acre (UPNA) is 8.27.

The Legends (Section 28 RPD) has an approved UPGA of 2.4, this is under the maximum allowable 3 UPGA in the Outlying Suburban category. However, the UPNA of this project is 9.6. This project, originally approved in 1995, was administratively amended to preserve an additional 31 acres of land. This increased the UPNA to the current 9.6 from 8.04.

In fact virtually all developments cluster to some extent and the allocation of residential acres takes this fact into account. The residential allocations included in Table 1(b) are net acre allocations for the year 2020. There are two future land use categories which could exploit this approach to inventorying clustered development. These are the Open Lands and Density Reduction/Groundwater Resource land use categories. In these areas little residential development is expected and relatively small amounts of acreage were allocated for residential use. In theory, a property owner could propose a development of

a large tract of land with all of the units clustered in a relatively small portion of the property. Such a scenario would still be restricted to the land use category's density limitations, but the clustered development could exceed what was envisioned for this area by the methodology. It should be noted that this practice could happen with the current Year 2010 Overlay just as easily. The ability to cluster units on a large tract exists with either system. While this approach is possible, it is not likely.

The ability to utilize this approach has been in place for over 8 years now and no one has used it. It should be noted that this development scenario could be looked at as a positive thing. While the number of units anticipated by the methodology in this area would be exceeded, the limited density of these categories would result in a unit increase that would not be significant on a county-wide basis. Also on a positive note, this development scenario would place large areas of land into conservation classifications. The land used for density purposes but not developed as part of the cluster would be held by the zoning approval as conservation or open space. This would preclude development of the majority of these sensitive lands. In any case, the next evaluation of the acreage allocations would take this development into account and reflect the changing community character.

B. BOARD ACTION AND FINDINGS OF FACT SUMMARY:

1. **BOARD ACTION:** The Board adopted this plan amendment with the revisions to Table 1(b) concerning the minor change to the commercial allocations in the Burnt Store and San Carlos/Estero Communities. The Board directed staff to include a discussion on the administrative policy regarding residential acreage and clustering in the support documentation.

2. **BASIS AND RECOMMENDED FINDINGS OF FACT:** The Board accepted the findings of fact as advanced by staff.

C. VOTE:

JOHN ALBION	AYE
ANDREW COY	AYE
RAY JUDAH	AYE
JOHN MANNING	ABSENT
DOUG ST. CERNY	AYE

¹ Individual Community refers to the 20 worksheets within the ACRES BY FLUMC2.XLS workbook that are for individual communities. These worksheet names are Alva, Boca Grande, Bonita Springs, Fort Myers Shores, Burnt Store, Cape Coral, Captiva, Fort Myers, Fort Myers Beach, Gateway Airport, Daniels Parkway, Iona McGregor, San Carlos Estero, Sanibel, South Fort Myers, Pine Island, Lehigh, Southeast County, North Fort Myers, and Buckingham.