# Exhibit A-2: Future Land Use Element Supplemental Data and Analysis for the 2013-2023 Planning Period

#### **Planning Period**

This supplemental Data and Analysis Report for the Future Land Use Element provides the justification and documentation for the 10-year planning period for the City of Gainesville. That planning period is 2013-2023.

#### **Land Use Plan Analysis and Requirements**

As set forth by Section 163.3177(6)(a)2, Florida Statutes, the future land use plan must be based on surveys, studies, and data regarding the area, as applicable, including:

- a. The amount of land required to accommodate anticipated growth.
- b. The projected permanent and seasonal population of the area.
- c. The character of undeveloped land.
- d. The availability of water supplies, public facilities, and services.
- e. The need for redevelopment, including the renewal of blighted areas and the elimination of nonconforming uses which are inconsistent with the character of the community.
- f. The compatibility of uses on lands adjacent to or closely proximate to military installations.
- g. The compatibility of uses on lands adjacent to an airport as defined in s. 330.35 and consistent with s. 333.02.
- h. The discouragement of urban sprawl.
- i. The need for job creation, capital investment, and economic development that will strengthen and diversify the community's economy.
- j. The need to modify land uses and development patterns within antiquated subdivisions.

This document is intended to supplement the City of Gainesville's existing Future Land Use Element Data and Analysis report (dated February 6, 2001) by addressing these 10 factors as required by Florida Statutes.

#### • The amount of land required to accommodate anticipated growth

Table 1 contains acreage totals for each land use category established in the Future Land Use Element.

**Table 1: Future Land Use Categories Total Acreage** 

Land Use Category	Description	Total Acres	% of Total
SF	Single Family Residential, 1-8 units/acre	9,375.62	26.0%
RL	Residential Low density, up to 12 units/acre	2,018.05	5.6%
RM	Multiple Family Medium density, 8-30 units/acre	2,013.43	5.6%
RH	Multiple Family High density, 8-100 units/acre	203.31	0.6%
MUR	Mixed-Use Residential, up to 75 units/acre	35.93	0.1%
MUL	Mixed-Use Low Intensity, 8-30 units/acre	596.35	1.7%
MUM	Mixed-Use Medium Intensity, 12-30 units/acre	498.72	1.4%
MUH	Mixed-Use High Intensity, up to 150 units/acre	240.27	0.7%
UMU-1	Urban Mixed-Use 1, 8-75 units/acre and up to 25 additional units/acre with a special use permit	23.66	0.1%
UMU-2	Urban Mixed-Use 2, 10 to 100 units/acre and up to 25 additional units/acre with a special use permit	566.64	1.6%
0	Office	665.94	1.8%
С	Commercial	842.93	2.3%
BI	Business Industrial	232.78	0.6%
IND	Industrial	2,739.22	7.6%
Е	Education	2,319.68	6.4%
REC	Recreation	617.43	1.7%
CON	Conservation	3,766.62	10.4%
AGR	Agriculture	930.12	2.6%
PF	Public Facilities and Operations	4,744.88	13.2%
PUD	Planned Use District	1,285.06	3.6%
AC/C1	Alachua County Conservation	1.71	0.0%
AC/R-AG	Alachua County Rural Agriculture	1,932.06	5.4%
AC/LOW	Alachua County Low Density Residential (1-4 units/acre)	2.03	0.0%
AC/MED	Alachua County Medium Density Residential (greater than 4 to less than or equal to 8 units/acre)	132.04	0.4%
AC/MED-HI	Alachua County Medium Density Residential (greater than 8 to less than or equal to 14 units/acre)	12.15	0.1%
AC/IND*	Alachua County Heavy Industrial	64.71	0.2%
AC/IND-L*	Alachua County Light Industrial	218.47	0.6%
Total:		36,079.81	100.0%

\* Pending Future Land Use Map amendment to City of Gainesville Business Industrial future land use (Transmittal Hearing 11-15-2012

The City of Gainesville will more than adequately meet its residential needs associated with projected population growth through the 2013-2023 planning period by using a combination of existing vacant built housing units, high-density redevelopment (10 to 100 units/acre and up to 25 additional units/acre with a special use permit) near the University of Florida campus, and several large planned developments in northwest, northeast, and southwest Gainesville.

As noted in the Housing Element Supplemental Data and Analysis Report, the 2010 Census estimated that the number of vacant housing units was 6,547 (an 11.4% vacancy rate). Absorption of some of the vacant units provides a supply of housing units for projected housing needs. Utilizing a 6% vacancy rate as a reasonable percentage to provide for market variety and competitive pricing, the 11.4% vacancy rate represents about a 5.4% surplus (almost 2 times the amount of vacant housing units needed for market considerations) of housing units (3,092) that are available to meet future housing unit demand.

Most of these new housing needs will be provided by existing approved developments (subdivisions and multi-family complexes) that have yet to be built or built out. Significant redevelopment that has increased density in areas close to the University of Florida is providing housing units in that area. In addition, housing units in the unincorporated urban area, plus approved developments by Alachua County, can assist in providing the needed housing units.

Table 2 illustrates the projected number of new housing units that must be provided in the city to meet the housing needs of the future population for the planning period (2013-2023). The methodology associated with these projections is found in the Housing Element Supplemental Data and Analysis Report.

**Table 2: Projected Housing Unit Needs** 

Year	Projected Population in Housing Units	Number of Households	Net Increase in Households	Number of New Housing Units Needed
2012	111,545	50,934	0	0
2013	118,514	54,116	3,182	90
2014	119,327	54,487	371	393
2015	120,651	55,092	604	640
2016	121,744	55,591	499	529
2017	123,094	56,207	616	653
2018	124,210	56,717	509	540
2019	125,587	57,346	629	667
2020	126,725	57,865	519	551
2021	128,130	58,507	642	680
2022	129,290	59,036	530	561
2023	130,723	59,691	655	694
Total				5,998

During the period 2013-2023, a total of 5,998 new housing units will be needed (this includes maintaining the 6% vacancy rate). This is an average of 599 new units per year.

The projected need for non-residential development (commercial, industrial, and office) will be met through approximately 2,050,000 square feet of planned non-residential development located within the Plum Creek, Hatchet Creek, and Butler Plaza developments. Non-residential development near downtown and the University will be facilitated through continued redevelopment within the University Heights and Urban Village areas at increased densities and intensities.

#### • Projected Permanent and Seasonal Population

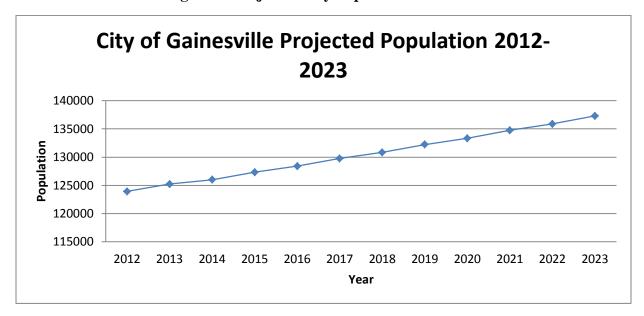
The year 2012 population figure is the most recent estimate available from the Bureau of Economic and Business Research for City of Gainesville. The 2012 base year was used to make the future projections.

**Table 3: Projected City Population: 2013 – 2023** 

Year	City Population
2012	123,903
2013	125,206
2014	125,992
2015	127,317

2016	128,398
2017	129,747
2018	130,848
2019	132,224
2020	133,345
2021	134,747
2022	135,889
2023	137,317

Figure 1: Projected City Population: 2013-2023



#### **Projection Methodology**

The methodology used to project population is a slowly declining share of overall Alachua County population. This is appropriate because the last twenty years of growth in Gainesville have been due primarily to annexations of populated areas. As the time period from large population annexations increases, the decline in the percentage or share of overall population starts to increase.

The City's population projections rely on data from the April 2012 Bureau of Economic and Business Research (BEBR) projections for Alachua County for future years. The medium projections were used because they are considered the most reliable forecasts. The following projections were calculated:

Table 4: Projected Alachua County Population (2012 data)

Year	2012	2015	2020	2025	2030	2035
Population	246,770	255,500	268,300	280,600	292,500	303,900

Source: BEBR, April 2012 (Office of Economic and Demographic Research)

Based on the BEBR projections for Alachua County for 2012 and 2020, the City used the following steps to produce the population projections.

- 1. A linear interpolation of the Alachua County data between 2012 and 2020 was developed using a constant annual growth rate of approximately 1.051%.
- 2. The ratio or share of estimated 2012 City population to 2012 overall County population was calculated at 50.21%.
- 3. The 50.21% share was held constant for 2013 and then was reduced slightly over the period to result in a slowly declining percentage of the overall County population. This is illustrated below:

**Percentage of County Population** Year 50.21% 2012 2013 50.21% 2014 50.00% 2015 50.00% 49.90% 2016 2017 49.90% 2018 49.80% 2019 49.80% 2020 49.70% 2021 49.70% 49.60% 2022 2023 49.60%

**Table 5: City Share of County Population** 

#### **Assumptions**

The following assumptions were used in finalizing the projections:

- 1. Population increases associated with annexations are not included in these projections because the City cannot predict how much population will be annexed or whether specific annexation attempts will be successful. These projections assume city limits remain constant over the ten-year planning period.
- 2. No efforts will be undertaken to reduce existing residential densities as shown on the Future Land Use Map.
- 3. The local, state and national economies will experience slow to moderate recovery during the planning period.
- 4. The University of Florida will maintain its current undergraduate enrollment policies of modest enrollment growth, especially in the early projection years through 2015.

5. The City's growth will see a slightly declining share of the total population growth of Alachua County due to reduced redevelopment possibilities within city limits and housing competition with Alachua County and the other municipalities such as the City of Alachua and the City of Newberry.

# • The Character of Undeveloped Land

Table 6 contains vacant acreage totals for each land use category established in the Future Land Use Element.

**Table 6: Future Land Use Categories Vacant Acreage** 

Land Use Category	Description	Total Developable Vacant Acres	% of Total Developable Vacant Acres
SF	Single Family Residential, 1-8 units/acre	2,357.14	23.0%
RL	Residential Low density, up to 12 units/acre	700.68	6.8%
RM	Multiple Family Medium density, 8-30 units/acre	312.06	3.0%
RH	Multiple Family High density, 8-100 units/acre	22.88	0.2%
MUR	Mixed-Use Residential, up to 75 units/acre	2.51	0.0%
MUL	Mixed-Use Low Intensity, 8-30 units/acre	108.28	1.1%
MUM	Mixed-Use Medium Intensity, 12-30 units/acre	45.41	0.4%
MUH	Mixed-Use High Intensity, up to 150 units/acre	8.17	0.1%
UMU-1	Urban Mixed-Use 1, 8-75 units/acre and up to 25 additional units/acre with a special use permit	1.16	0.0%
UMU-2	Urban Mixed-Use 2, 10 to 100 units/acre and up to 25 additional units/acre with a special use permit	65.86	0.6%
0	Office	63.99	0.6%
С	Commercial	169.62	1.7%
BI	Business Industrial	57.84	0.6%
IND	Industrial	1,208.29	11.8%
Е	Education	145.42	1.4%
AGR	Agriculture	930.12	9.1%
CON	Conservation	0	0%

PF	Public Facilities and Operations	752.73	7.3%
PUD	Planned Use District	817.20	8.0%
AC/C1	Alachua County Conservation	1.71	0.0%
AC/R-AG	Alachua County Rural Agriculture	1,942.06	18.9%
AC/LOW	Alachua County Low Density Residential (1-4 units/acre)	108.80	1.1%
AC/MED	Alachua County Medium Density Residential (greater than 4 to less than or equal to 8 units/acre)	132.40	1.3%
AC/MED-HI	Alachua County Medium-High Density Residential (greater than 8 to less than or equal to 14 units/acre)	12.15	0.1%
AC/IND*	Alachua County Heavy Industrial	77.39	0.8%
AC/IND-L*	Alachua County Light Industrial	218.47	2.1%
Total:		10,262.34	100.0%

<sup>\*</sup> Pending Future Land Use Map amendment to City of Gainesville Business Industrial future land use (Transmittal Hearing 11-15-2012

As of November 15, 2012, the City of Gainesville contained 36,079.81 acres of land with an existing or pending future land use category designation (Table 1). An analysis of the 36,079.81 total acres revealed that 10,262.34 acres (28%) are vacant according to the Alachua County Property Appraiser's database.

As seen in Tables 1 and 6, the largest concentration of total and vacant acreage within the City of Gainesville is designated with the Single Family Residential future land use category. Table 6 indicates that the total and vacant acreage within the Single Family Residential land use category has been reduced over the past decade as the City continues to support mixed-use and transit supportive development. Additionally, several new land use categories including the Urban Mixed-Use 1 and Urban Mixed-Use 2 land use categories were recently adopted and are intended to support a dense urban environment proximate to the University of Florida campus with a mix of retail, office, residential, and research uses. The Business Industrial land use was also adopted recently and is intended to attract appropriate office, commercial, and industrial uses to the Gainesville Regional Airport.

Other future land use categories with significant vacant acreage include the Industrial (11.8%) and the Alachua County Rural Agriculture (18.9%) land use categories. The vacant industrial land is largely concentrated north of 39<sup>th</sup> Avenue and East of US 441. The vacant Alachua County Rural Agriculture designated acreage is part of the Deerhaven Annexation Area. This and other major vacant land areas are discussed below.

The largest concentrations of developable, vacant land within City limits are shown in Table 7 below.

**Table 7: Major Vacant Land Areas** 

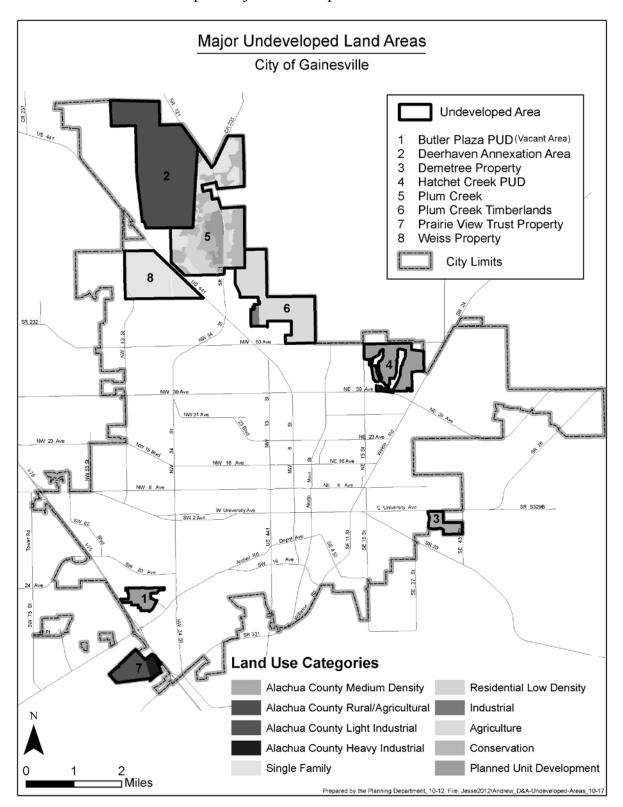
Project/Property	<b>Existing Land Use Category</b>	<b>Total Vacant Acres</b>
Deerhaven Annexation Area	Alachua County: Rural	1,945
	Agriculture	
Butler Plaza PUD (Vacant	Planned Use District	159
area)		
Hatchet Creek PUD	Planned Use District	498
Plum Creek	Planned Use District,	1,777
	Residential Low-Density,	
	Single-Family, Conservation	
Plum Creek Timberlands	Agriculture	920
Prairie View Trust Property	Alachua County Heavy	285
	Industrial & Alachua County	
	Light Industrial	
Weiss Property	Single Family	706
Demetree Property	Alachua County: Residential	132
	Medium Density	
Total		6,422

These properties are depicted in Map 1 on the following page. It is important to note that the total vacant acres shown in the table above are not representative of the actual developable area of these listed properties. Where present, environmental features such as regulated surface waters, wetlands, floodplains, flood channel, and/or natural and archeological resources will limit the developable area of these properties. Additionally, portions of all of the properties, with the exception of Butler Plaza PUD (Vacant area), are designated Strategic Ecosystem and are subject to additional regulations which may further reduce the developable vacant acreage listed in Table 7. The full extent of the reduction of developable areas for these properties will be determined at the site planning stage through a required environmental study and consultation with the City's Environmental Coordinator.

The Plum Creek property also contains approximately 700 acres of land that has been designated with the Conservation land use which reduces the developable acreage to 1,077 from the total vacant acres shown in Table 7. It should also be noted that the large tract of agricultural land labeled Plum Creek Timberlands (920 acres) is in active silviculture. This land could eventually be converted to developable acreage with a land use amendment. However, it is not currently anticipated that this will occur during the 2013-2023 planning period.

The Deerhaven Annexation Area was annexed into the City of Gainesville on February 12, 2007 and has not received a City of Gainesville future land use designation. The Demetree Property was annexed into the City of Gainesville on January 19, 2012 and also has not received a City land use designation. Both properties contain significant environmental resources which have delayed land use actions until appropriate land use designations can be determined.

Map 1: Major Undeveloped Land Areas



#### • Availability of Water Supplies, Public Facilities, and Services

On September 6, 2012, the City Commission adopted the 5-Year Schedule of Capital Improvements for FYs 2011/2012 - 2015/2016. As demonstrated in that document, the City has no current Level of Service (LOS) deficiencies that are not either being addressed with current projects underway or projects that are fully funded with schedules for completion during the next five years.

Projected deficiencies in potable water, wastewater, recreation, stormwater management, and public schools facilities are included as programmed capital projects to maintain existing adopted LOS. The Transportation Mobility and transit projects shown in the 5-Year Schedule are not related to correcting roadway level of service problems because the entire city limits currently falls within a Transportation Concurrency Exception Area (TCEA). As part of the Evaluation and Appraisal update of the City's Comprehensive Plan, the City will rescind transportation concurrency. As a result, it will no longer be included in the concurrency management system. A new Transportation Mobility Program is proposed in the Transportation Mobility Element that will assist the City in providing for adequate transportation facilities.

The Future Land Use and Capital Improvements Elements stipulate that prior to the approval of an application for a development order or permit, a concurrency analysis is required, and no final development order is issued unless existing facilities and services have capacity in accordance with the current adopted Level of Service (LOS) standards, or unless the final development order is conditioned upon the provision of such facilities and services being available at the time the impact of the development will occur.

#### • Need for Redevelopment

Within the City of Gainesville there are four community redevelopment areas: Eastside, Fifth Avenue/Pleasant Street, Downtown and College Park/University Heights. Redevelopment within these areas is supported by the Comprehensive Plan through a combination of strategies. These strategies include, increasing residential densities near downtown and the University of Florida, encouraging mixed use development, promoting transportation choice, establishing urban design standards, and providing incentives through the use of off-site stormwater facilities.

• Compatibility of Uses on Lands Adjacent to or Closely Proximate to Military Installations

Currently, there are no military installations located within the City of Gainesville city limits.

• Compatibility of Uses on Lands Adjacent to an Airport as Defined in S. 330.35 and Consistent with S. 333.02

The City of Gainesville has adopted airport hazard zoning regulations in the Land Development Code (Appendix F). These regulations control development standards for land uses and building/structure height standards located within the Airport Zones of Influence and other zones prescribed in the Federal Aviation Regulations and consistent with Section 330.02, Florida

Statutes. Updates to the airport zoning regulations concerning the use of land within the Airport Noise Zone and a new Airport Noise Zone Map were adopted in December, 2009.

#### • Discouragement of Urban Sprawl

The City is amending Future Land Use Element Policy 4.1.3 to include the consideration of an urban sprawl analysis, as defined in Chapter 163.3164 Florida Statutes and consistent with the requirements of Chapter 163.3177(6)(a)9 Florida Statutes, as a factor in reviewing proposed changes to the Future Land Use Map. In addition, Objective 1.5 of the Future Land Use Element and the related policies establishes the entire area within current city limits as an urban service area. As previously stated, the City of Gainesville continues to pursue strategies to increase the potential for redevelopment within the urban core and the Urban Village through a combination of transit and pedestrian improvements, design standards, increased densities and intensities, and redevelopment incentive programs.

#### • Need for Job Creation, Capital Investment, and Economic Development

The City has sought to promote the development of an Innovation Economy which is defined as those technology firms and/or entities that bring a new process or technique to the production process and that are often, but not exclusively, related in some manner to University driven research, and are generally represented by sectors such as Agritechnology, Aviation and Aerospace, Information Technology, Life Sciences and Medical Technology. To this end, the City of Gainesville has incorporated policy recommendations into the current Future Land Use Element identified in the City's Strategic/Action Plan for Economic Development regarding economic development initiatives within the Gainesville Innovation Zone.

#### • Need to Modify Land Uses and Development Patterns within Antiquated Subdivisions

The City of Gainesville has established a procedure for abandonment of antiquated platted subdivisions within the Land Development Code. In an effort to encourage redevelopment of underutilized parcels, the City has also increased residential densities within designated redevelopment areas and recently annexed suburban areas to encourage lot assembly and redevelopment. As previously referenced, the City has established several redevelopment incentive programs in certain areas to further encourage modification and/or redevelopment of antiquated subdivisions.

#### Exhibit D-1: Transportation Mobility Element Supplemental Data and Analysis Report

This report supplements the existing Transportation Mobility Element Data and Analysis report (dated February 6, 2001). The primary changes since the previous report include the following:

- 1. Updates to the existing level of service for roadways based on the latest data available.
- 2. Updates to projected levels of roadway congestion based on the Year 2035 Long Range Transportation Plan (LRTP) for the Gainesville Urbanized Area.
- 3. A decision by the City of Gainesville to rescind Transportation Concurrency as part of the Evaluation and Appraisal update to the City's Comprehensive Plan.
- 4. Updates that recognize that the City's former Transportation Concurrency Exception Area (TCEA) has been eliminated by the Evaluation and Appraisal update and replaced by a new Transportation Mobility Program.

## **Transportation Element Analysis and Requirements**

As set forth by Section 163, Florida Statutes, the Transportation Element shall reflect the data, analysis, and associated principles and strategies relating to:

- a. The existing transportation system levels of service and system needs and the availability of transportation facilities and services.
- b. The growth trends and travel patterns and interactions between land use and transportation.
- c. Existing and projected intermodal deficiencies and needs.
- d. The projected transportation system levels of service and system needs based upon the future land use map and the projected integrated transportation system.
- e. How the local government will correct existing facility deficiencies, meet the identified needs of the projected transportation system, and advance the purpose of this paragraph and the other elements of the comprehensive plan.

These 5 requirements are discussed below.

• The existing transportation system levels of service and system needs and the availability of transportation facilities and services.

Table 1 contains the existing Level of Service (LOS) and Annual Average Daily Trips (AADT) for road segments located within the City of Gainesville city limits based on the latest available data from the North Central Florida Regional Planning Council (dated 2012).

**Table 1: Existing LOS by Road Segments Located within the City of Gainesville** 

Roadway	County/City/State Responsibility	From South or West Termini	To North or West Termini	AADT	Existing Level of Service
NW 55 Street	City of Gainesville	SR 26 / Newberry	NW 23 Avenue	9,346	С
1444 33 Street	City of damesvine	Road	WW 25 Avenue	3,340	C
North 8 Avenue	City of Gainesville	SR 26 / Newberry Road	West 22 Street	15,177	В
North 8 Avenue	City of Gainesville	NW 22 Street	NW 6 Street	14,465	D
SW 62 Boulevard	City of Gainesville	SR 26 / Newberry Road	SW 20 Avenue	20,408	В
NW 31 Avenue / Glen Springs Road	City of Gainesville	SR 121 / West 34 Street	NW 16 Terrace	6,706	В
NW 23 Boulevard	City of Gainesville	NW 16 Terrace	US 441/West 13 Street	10,316	С
NW 22 Street	City of Gainesville	SR 26 / University Avenue	NW 16 Avenue	6,849	В
North 8 Avenue	City of Gainesville	North Main Street	SR 24 / Waldo Road	9,802	D
South 2 Avenue	City of Gainesville	US 441 / West 13 Street	SE 7 Street	5,717	D
West 6 Street	City of Gainesville	SW 4 Avenue	NW 8 Avenue	7,711	D
SW 23 Terrace	City of Gainesville	SR 331 / Williston Road	SR 24 / Archer Road	8,431	В
West 6 Street	City of Gainesville	SW 16 Avenue	SW 4 Avenue	7,812	С
NE 9 Street	City of Gainesville	SE 2 Avenue	NE 31 Avenue	4,457	С
NW 38 Street	City of Gainesville	NW 8 Avenue	NW 16 Avenue	1,848	С
NW 24 Boulevard	City of Gainesville	SR 222 / NW 39 Avenue	NW 53 Avenue	3,101	В
NE 15 Street	City of Gainesville	SR 26/East University Avenue	NE 8 Avenue	4,967	С
NE 15 Street	City of Gainesville	NE 16 Avenue	SR 222 / NE 39 Avenue	4,902	В
NE 25 Street	City of Gainesville	SR 26 / East University Avenue	NE 8 Avenue	4,900	С
SE 4 Street	City of Gainesville	SR 331 / Williston Road	Depot Avenue	3,518	С
SE 4 Street - SE 22 Avenue	City of Gainesville	SR 331 / Williston Road	SE 15 Street	4,693	В
North 8 Avenue	City of Gainesville	SR 24 / Waldo Road	NE 25 Street	5,786	В
South 4 Avenue	City of Gainesville	US 441 / SW 13 Street	SE 15 Street	4,014	С

Roadway	County/City/State Responsibility	From South or West Termini	To North or West Termini	AADT	Existing Level of Service
SW 9 Road-Depot Avenue-SE 7 Avenue	City of Gainesville	US 441 / SW 13 Street	SE 15 Street	4,018	С
South 2 Avenue	City of Gainesville	SE 7 Street	SR 331 / Williston Road	2,574	С
NE 31 Avenue	City of Gainesville	North Main Street	SR 24 / Waldo Road	2,129	С
NW 17 Street	City of Gainesville	SR 26 / West University Avenue	NW 8 Avenue	2,672	С
West 12 Street	City of Gainesville	SW 4 Avenue	North 8 Avenue	3,690	D
West 10 Street	City of Gainesville	SW 4 Avenue	NW 8 Avenue	2,803	С
SW 16 Street	City of Gainesville	SW 16 Avenue	SR 24 / Archer Road	4,444	С
NW 5 Avenue	City of Gainesville	NW 22 Street	US 441 / NW 13 Street	1,877	С
West 3 Street	City of Gainesville	SW 4 Avenue	NW 8 Avenue	490	С
West 2 Street	City of Gainesville	SW 4 Avenue	NW 8 Avenue	676	С
Gale Lemerand Drive	City of Gainesville	SR 24 / Archer Road	Museum Road	10,676	С
Radio Road-Museum Road	City of Gainesville	SR 121/South 34 Street	US 441 / South 13 Street	9,570	С
East 1 Street	City of Gainesville	SE 2 Place	NE 8 Avenue	3,120	С
East 3 Street	City of Gainesville	SE Depot Avenue	NE 2 Avenue	4,213	D
Hull Road-Mowry Road	City of Gainesville	SW 34 Street	Center Drive	8,793	E
Gale Lemerand Drive	City of Gainesville	Museum Road	SR 26 / West University Avenue	12,368	F
North Main Street	City of Gainesville	SR 222/NW 39 Avenue	NW 53 Avenue	4,962	В
NW 53 Avenue	Alachua County	NW 52 Terrace	US 441 / West 13 Street	12,037	С
NW 43 Street	Alachua County	SR 26 / Newberry Road	NW 53 Avenue	27,131	D
NW 43 Street	Alachua County	NW 53 Avenue	US 441	10,802	С
NW 23 Avenue	Alachua County	NW 55 Street	NW 43 Street	20,821	С
NW 16 Avenue	Alachua County	NW 43 Street	US 441 / West 13 Street	20,451	В
North 16 Avenue	Alachua County	US 441 / West 13 Street	SR 24 / Waldo Road	12,127	D
SW 75 Street / Tower Road	Alachua County	SR 25 / Archer Road	SW 8 Avenue	14,055	С

Roadway	County/City/State Responsibility	From South or West Termini	To North or West Termini	AADT	Existing Level of Service
SW 20 Avenue	Alachua County	SW 75 Street / Tower Road	SW 62 Boulevard	14,856	D
SW 20 Avenue	Alachua County	SW 62 Boulevard	SR 121 / West 34 Street	21,524	F
North Main Street	Alachua County	NW 8 Avenue	North 23 Avenue	13,646	С
North Main Street	Alachua County	NW 23 Avenue	SR 222 / North 39 Avenue	15,265	В
South Main Street	Alachua County	Williston Road	University Avenue	12,200	С
NW 51 Street	Alachua County	NW 23 Avenue	SR 222 / NW 39 Avenue	8,896	С
Kincaid Loop	Alachua County	SR 20 / Hawthorne Road	SR 20 / Hawthorne Road	3,926	В
SW 40 Boulevard / SW 42 / 43 Street	Alachua County	SR 24 / Archer Road	SW 20 Avenue	11,451	D
North 53 Avenue	Alachua County	US 441 / West 13 Street	SR 24 / Waldo Road	12,558	С
Rocky Point Road	Alachua County	SR 331 / Williston Road	US 441 / SW 13 Street	3,220	В
SE 43 Street	Alachua County	SR 20 / Hawthorne Road	SR 26 / East University Avenue	3,285	В
US 441 / West 13 Street	State	SR 331 / Williston Road	SR 24 / Archer Road	17,300	В
US 441 / West 13 Street	State	SR 24 / Archer Road	SR 26 / University Avenue	35,000	F
US 441 / West 13 Street	State	SR 26 / University Avenue	NW 29 Road	29,500	F
US 441 / West 13 Street	State	NW 29 Road	NW 23 Street	23,750	В
SR 20 / NW 6 Street	State	NW 8 Avenue	SR 222 / North 39 Avenue	14,400	С
SR 20 / NW 6 Street	State	SR 222 / North 39 Avenue	US 441 / West 13 Street	8,700	В
SR 20 / Hawthorne Road	State	SR 24 / Waldo Road	SE 43 Street	14,900	С
SR 24 / Archer Road	State	SW 75 Street / Tower Road	Interstate -75	27,000	В
SR 24 / Archer Road	State	Interstate -75	SR 121 / SW 34 Street	46,673	D
SR 24 / Archer Road	State	SR 226 / SW 16 Avenue	US 441 / West 13 Street	31,000	D

Roadway	County/City/State Responsibility	From South or West Termini	To North or West Termini	AADT	Existing Level of Service
SR 24 / Waldo Road	State	SR 26 / University Avenue	SR 222 / East 39 Avenue	24,434	В
SR 26 / Newberry Road	State	NW 122 Street	Interstate-75 [east ramp]	40,000	F
SR 26 / Newberry Road	State	Interstate -75 [east ramp]	NW 8 Avenue	51,000	F
SR 26 / Newberry Road	State	NW 8 Avenue	SR 121 / West 34 Street	31,750	D
SR 26 / University Avenue	State	SR 121 / West 34 Street	Gale Lemerand Drive	22,250	D
SR 26 / University Avenue	State	Gale Lemerand Drive	US 441 / West 13 Street	28,000	D
SR 26 / University Avenue	State	US 441 / West 13 Street	SR 24 / Waldo Road	20,500	D
SR 26 / University Avenue	State	SR 20 / Hawthorne Road	CR 329B / Lakeshore Drive	9,700	В
SR 26A / SW 2 Avenue	State	SR 26 / Newberry Road	SR 121 / West 34 Street	14,700	E
SR 26A / SW 2 Avenue	State	SR 121 / SW 34 Street	SR 26 / University Avenue	12,600	D
SR 121 / West 34 Street	State	SR 331 / Williston Road	SR 24 / Archer Road	25,380	С
SR 121 / West 34 Street	State	SR 24 / Archer Road	SR 26 / University Avenue	38,250	D
SR 121 / West 34 Street	State	SR 26 / University Avenue	NW 16 Avenue	20,450	F
SR 121 / West 34 Street	State	NW 16 Avenue	SR 222 / West 39 Avenue	14,750	С
SR 121 / West 34 Street	State	SR 222 / NW 39 Avenue	NW 53 Avenue	15,600	С
SR 222 / North 39 Avenue	State	US 441 / NW 13 Street	SR 24 / Waldo Road	17,400	В
SR 222 / North 39 Avenue	State	SR 24 / Waldo Road	End of 4-lane section	13,500	В
SR 222 / North 39 Avenue	State	End of 4-lane section	GMA	9,850	С
SR 226 / South 16 Avenue	State	SR 24 / Archer Road	US 441 / West 13 Street	18,518	С
SR 226 / South 16 Avenue	State	US 441 / West 13 Street	SR 329 / Main Street	16,900	С

Roadway	County/City/State Responsibility	From South or West Termini	To North or West Termini	AADT	Existing Level of Service
SR 226 / South 16 Avenue	State	SR 329 / Main Street	SR 331 / Williston Road	8,400	В
SR 120A / North 23 Avenue	State	US 441 / West 13 Street	SR 24 / Waldo Road	12,900	С
SR 329 / Main Street	State	University Avenue	North 8 Avenue	13,900	D
SR 331 / SR 121	State	Interstate -75 (south)	US 441 / SW 13 Street	23,500	В
SR 331 / Williston Road	State	US 441 / SW 13 Street	SR 26 / University Avenue	20,200	В
SR 20 /NW 8 Avenue	State	NW 6 Street	North Main Street	16,400	С
Interstate -75	State	SR 331 / SR 121	SR 24 / Archer Road	62,000	В
Interstate -75	State	SR 24 / Archer Road	SR 26 / Newberry Road	69,000	С
Interstate -75	State	SR 26 / Newberry Road	SR 222 / NW 39 Avenue	66,500	С
US 441	State	NW 23 Street	GMA	18,200	В
SR 222 / North 39 Avenue	State	NW 51 Street	US 441 / NW 13 Street	26,500	В
SR 121 / West 34 Street	State	NW 53 Avenue	US 441 / West 13 Street	9,100	В
SR 24 / Archer Road	State	SR 121 / SW 34 Street	SR 226 / SW 16 Avenue	51,000	E
SR 222 / North 39 Avenue	State	NW 83 Street	NW 51 Street	28,000	В
SR 24 / Waldo Road	State	SR 222 / East 39 Avenue	CR 255A / NE 77 Avenue	17,000	В
SR 121 / West 34 Street	State	US 441 / West 13 Street	NW 77 Avenue	9,922	С

Currently, the entire city limits falls within a Transportation Concurrency Exception Area (TCEA). As part of the Evaluation and Appraisal update of the City's Comprehensive Plan, the City will rescind transportation concurrency. As a result, transportation concurrency will no longer be included in the concurrency management system. A new Transportation Mobility Program (TMP) is proposed in the Transportation Mobility Element that will assist the City in providing funding for adequate transportation facilities.

# • The growth trends and travel patterns and interactions between land use and transportation.

As stated in the Future Land Use Element Supplemental Data and Analysis report, the City of Gainesville will continue to receive a slowly declining share of the total Alachua County

population. The report also includes an analysis of existing vacant land by future land use category and a detailed discussion of major vacant land areas and their future development potential.

Gainesville is expected to continue to serve as the economic, educational, and cultural hub of an 11-county region, with the University of Florida, Shands Hospital, the Veterans Administration Hospital, Innovation Square, the Gainesville Regional Airport, the federal courthouse other important downtown destinations among the employment centers that attract workers and visitors from across the state and the largely rural and suburban surrounding counties. In addition, commercial centers like the Oaks Mall and Butler Plaza located near Interstate 75 interchanges attract people from many of the North Central Florida counties surrounding Gainesville. The presence of the University, in particular, continues to fuel growth in Alachua County through its research and educational activities. The City will address transportation mobility through the continued development of a robust multi-modal transportation network which includes transit, bicycle, pedestrian, and road facilities. The proposed Transportation Mobility Program represents a critical component of this effort as the mechanism to fund mobility projects which enhance the existing transportation system. The TMP is intended to strengthen the connection between the future land use plan and transportation mobility and access.

#### • Existing and projected intermodal deficiencies and needs.

The Year 2035 Long Range Transportation Plan (LRTP) for the Gainesville Urbanized Area includes a list of roadways with a projected volume to capacity ratio (v/c) greater than 1.05 in the year 2035. These roadways were considered to be "congested." Much of the congestion was projected in the area west of downtown and the University of Florida along the major corridors leading to UF and downtown, such as US 441/W. 13th Street, Newberry Road, SW 20th Avenue, Archer Road, NW 34th Street, and I-75. The congested roadway segments (with v/c ratio greater than 1.05) located within the City of Gainesville city limits are listed in Table 2 below.

Table 2: Projected Year 2035 Congested Road Segments within the City of Gainesville

Roadway	County/City/State	From South or West Termini	To North or West Termini
Interstate -75	State	SR 24 / Archer Road	SR 26 / Newberry Road
SW 20 Avenue	Alachua County	SW 75 Street / Tower Road	SW 62 Boulevard
SW 20 Avenue	Alachua County	SW 62 Boulevard	SR 121 / West 34 Street
SW 62 Boulevard	City of Gainesville	SR 26 / Newberry Road	SW 20 Avenue
SR 24 / Archer Road	State	SW 75 Street / Tower Road	Interstate -75
SR 24 / Archer Road	State	Interstate -75	SR 121 / SW 34 Street
SR 24 / Archer Road	State	SR 226 / SW 16 Avenue	US 441 / West 13 Street

Roadway	County/City/State	From South or West Termini	To North or West Termini
US 441 / West 13 Street	State	SR 24 / Archer Road	SR 26 / University Avenue
US 441 / West 13 Street	State	SR 26 / University Avenue	NW 29 Road
US 441 / West 13 Street	State	NW 29 Road	NW 23 Street
US 441	State	NW 23 Street	GMA
SR 121 / West 34 Street	State	US 441 / West 13 Street	NW 77 Avenue
SR 329 / Main Street	State	University Avenue	North 8 Avenue
NW 43 Street	Alachua County	SR 26 / Newberry Road	NW 53 Avenue
NW 43 Street	Alachua County	NW 53 Avenue	US 441
SR 121 / West 34 Street	State	SR 331 / Williston Road	SR 24 / Archer Road
SR 121 / West 34 Street	State	SR 24 / Archer Road	SR 26 / University Avenue
SR 121 / West 34 Street	State	SR 26 / University Avenue	NW 16 Avenue
SR 121 / West 34 Street	State	NW 16 Avenue	SR 222 / West 39 Avenue
SR 121 / West 34 Street	State	SR 222 / NW 39 Avenue	NW 53 Avenue
SR 26A / SW 2 Avenue	State	SR 26 / Newberry Road	SR 121 / West 34 Street
SR 26A / SW 2 Avenue	State	SR 121 / SW 34 Street	SR 26 / University Avenue
SR 26 / Newberry Road	State	Interstate -75 [east ramp]	NW 8 Avenue
SR 222 / North 39 Avenue	State	NW 51 Street	US 441 / NW 13 Street
NW 53 Avenue	Alachua County	NW 52 Terrace	US 441 / West 13 Street

The LRTP identified the roadways listed in Table 2 as "constrained." A constrained roadway was defined as a roadway that cannot be widened due to adopted policies, community impacts, and/or major cost. Due to these constraints, the projected Level of Service on these roadways is expected to reflect their congested status. The specific factors were listed as:

- The existing geography or development patterns caused the project to be too difficult or expensive;
- Current state or local policies prohibited widening of the roadway; and
- Widening the roadway would have a major impact on either a designated historic district or environmentally sensitive lands.

Based on this analysis, a Constrained Needs Plan was developed that included roadway widening projects, where feasible, based on the criteria identified above. The Constrained Needs Plan also identified corridors/facilities where operational strategies and transit service, including Bus Rapid Transit, would help to alleviate a portion of the projected congestion or provide a viable travel option.

• The projected transportation system levels of service and system needs based upon the future land use map and the projected integrated transportation system.

Programmed transportation system enhancement projects are listed in the FDOT Work Program, the MTPO's Transportation Improvement Program, the City of Gainesville and Alachua County current budgets/Capital Improvements Programs which also include other sources of programmed construction funding, such as developer commitments. Additionally, the MTPO LRTP Year 2035 Cost Feasible identified a list of prioritized transit, bicycle, pedestrian, and roadway projects needed to meet projected growth within the Gainesville Metropolitan Area through the planning horizon (available on the North Central Florida Regional Planning Council website).

• How the local government will correct existing facility deficiencies, meet the identified needs of the projected transportation system, and advance the purpose of this paragraph and the other elements of the comprehensive plan.

In the past, the City addressed transportation mobility through the development and application of the Transportation Concurrency Exception Area (TCEA). In response to changes in State law implemented by HB 7207, the City of Gainesville is proposing to rescind transportation concurrency and amend the Transportation Mobility Element to reflect this action. The new proposed Transportation Mobility Program will largely be based on the principles established in the Concurrency Management Element (being deleted) and old TCEA that tied land use development and transportation planning together to support and provide funding for a multimodal transportation system. The new Transportation Mobility Program will provide a mechanism for the City to regulate design criteria and leverage resources towards multimodal projects designed to meet the City's projected transportation needs.

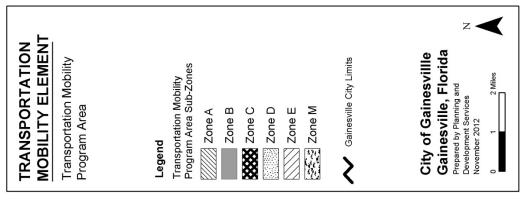
The City has a long history of utilizing alternatives to transportation concurrency as a method of dealing with traffic congestion and level of service issues. The City first adopted a TCEA in 1999 with two zones that covered approximately 80% of the area within city limits. Due to annexations, the TCEA was expanded to an additional zone in 2005. In 2009, in response to 2009 Senate Bill 360, the entire city limits area was designated a TCEA because the City met the definition of a "dense urban land area."

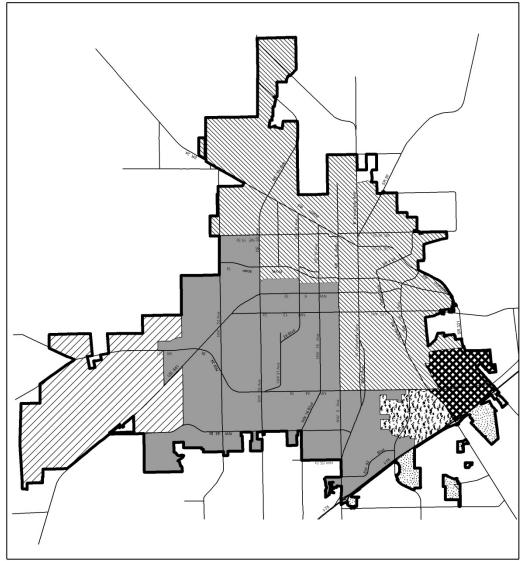
#### Transportation Mobility Program and Transportation Mobility Program Areas

The updated Transportation Mobility Element includes a new goal (Goal 10) and associated policies that introduces the City's proposed new Transportation Mobility Program (TMP). The Transportation Mobility Program will apply citywide to all properties that have a City-adopted land use category.

The new TMP utilizes most of the principles and techniques of the City's old TCEA. Based on a development's trip generation, certain criteria must be provided by the development to assist the City with meeting its transportation mobility goals. In addition, there are certain development design requirements that must be met. The geographic boundaries of the new Transportation Mobility Program Area (TMPA) and Subzones match those in the previously adopted TCEA.

Figure 1: Map of the Transportation Mobility Program Area and Subzones





The rationale for rescinding transportation concurrency and utilizing the new TMPA as an alternative corresponds with original justifications for the City to have a TCEA. These include:

1. Roadway widening as a solution to traffic congestion is not feasible or desirable in most areas of the City. The great majority of the congested roadways within city limits are in built-up areas where right-of way acquisition would be prohibitively expensive or detrimental to a development pattern that is supportive of pedestrian/bicycle/transit activity. Specific examples include Archer Road in the area east of I-75 (already at 6 lanes with existing commercial buildings along both sides of the road); SW 13<sup>th</sup> Street from University Avenue to Archer Road (abuts the University of Florida where there is significant pedestrian/bicycle traffic that would be disadvantaged by adding lanes to the road). Wide roads are not conducive to pedestrian or bicycle safety and comfort and lead to higher speeds. Further, there is mounting evidence that roadway widenings to gain motorized vehicle capacity are actually counterproductive. A November 12, 1998 press release about the Texas Transportation Institute's annual report on metropolitan congestion in major urban areas revealed the following.

"The analysis by the Surface Transportation Policy Project compared metropolitan areas that have added extensive new road capacity with those that have not, and found no significant difference in the rise in traffic congestion...." The urban areas that added more new lanes spent roughly \$22 billion more on construction, but their drivers are still paying high costs due to congestion delays....The STTP report says the problem may be partially explained by the phenomenon of "induced traffic." Several recent studies have documented that new roads actually encourage more driving and more automobile trips. A University of California study...found that every 1% increase in lane miles generate a 0.9% increase in traffic within five years, negating the congestion-easing effect of new roads."

The Victoria Transport Policy Institute produced a March 12, 1999 report called "Generated Traffic--Implications for Transport Planning." The report mirrors the conclusions of the Texas Transportation Institute. The following comment is instructive.

"Roadway improvements that reduce traffic congestion tend to increase total vehicle travel, due to latent demand. This is called "generated" or "induced" traffic. Generated traffic consists of trips that are shifted in time, route and mode, and new or longer vehicle trips. Recent research indicates that typical roadway improvements can generate significant amounts of traffic."

"Under some circumstances, increasing roadway capacity can increase total congestion delay by concentrating traffic on a few links in the network and by reducing alternative travel options, such as public transit service." (from Richard Arnott and Kenneth Small, "The Economics of Traffic Congestion," Sept./Oct. 1994).

- 2. The strict adherence to transportation concurrency hampers infill and redevelopment efforts. Since the City's 1991 Comprehensive Plan, redevelopment and infill have been major goals. Based on the data in the Future Land Use Data and Analysis Report, the City is approximately 72% developed. The 28% of vacant, developable land may overstate the actual amount available for development because not all environmental constraints have been accounted for in the data. In particular, redevelopment of sites is more difficult than using vacant land. Transportation concurrency creates problems when desirable redevelopment intensifies the trip generation from a particular site. This is contrary to the City's goals of redeveloping the community in a better land use pattern that can support multi-modal transportation. In essence, inability to redevelop at higher densities and intensities renders the City incapable of supporting higher transit/pedestrian/bicycle use.
- 3. The strict adherence to transportation concurrency would promote urban sprawl. Because of the limited options that transportation concurrency and proportionate share allow for resolving level of service transportation problems, the City would be in the position of denying development orders. This would result in development being promoted outside of city limits and in more distant areas of unincorporated Alachua County where there are no roadway level of service problems.
- 4. The City's goals of enhanced multi-modal transportation are inconsistent with transportation concurrency and its focus on roadways. The 1991, 2000, and most recent updates to City of Gainesville Comprehensive Plan included many goals, objectives, and policies reflecting the City's interest in promoting multi-modal transportation as a vision for the future to create an improved development pattern.

The map on page 10 illustrates the boundaries of the TMPA Zones (Zones A, B, C, D, E, and M). Separate guidelines and policies for development are set for the various subzones (see associated goals, objectives and policies under Goal 10 in the Transportation Mobility Element). Zone A encompasses the eastern portion of the city and the area surrounding the University of Florida. Eastern Gainesville has lagged behind western Gainesville in development and redevelopment. It is anticipated that the policies for Zone A may help to incentivize development potential of this area since most of the modifications related to transportation mobility will not be required to be funded by the developer. The portion of Zone A proximate to the University of Florida campus is well served by transit.

Zone A of the proposed TMPA contains all of the existing and proposed Community Redevelopment Areas and includes downtown Gainesville. Zone A also largely contains the University of Florida Campus Master Plan Area. All of the City's Enterprise Zone areas are included within the TMPA and fall within either Zones A or B.

The TMPA provides a number of strategies to address transportation needs within the City. An important component is the reduction in the number of Zone A criteria that must be met from the criteria required in the other TMPA Zones.

The requirements in Zone A are designed to incentivize development and redevelopment. Redistribution of development to eastern Gainesville is one means of resolving transportation

congestion. Currently, there is excess capacity available in this area. Also, new residential development and/or more dense residential development in this zone could ease traffic congestion by placing the population closer to major employers such as the University of Florida, Shands Hospital, the City and County, Gainesville Regional Utilities, and the Veteran's Administration Hospital. In addition, student housing near the campus and on major transit routes in Zone A can also relieve problems.

The University of Florida students pay, as part of their activity fees, for a bus pass card. Transit is an critical strategy for relieving congestion and providing an alternative to single-occupant vehicle travel. Currently, all City buses are equipped with bicycle carriers to facilitate multi-modal transportation choice.

Within the other TMPA Zones, developers will be required to meet certain development criteria (see Transportation Mobility Element Policies 10.1.6, 10.1.7, 10.1.9, 10.1.11, 10.1.13) based on the trip generation characteristics of the project. These criteria are also an important strategy for resolving traffic problems. The criteria are established with specific projects that are suited to the respective zones.

Objective 10.5 and its associated policies recognize the important role of streetscaping and landscaping in reducing perceived roadway congestion and increasing pedestrian/transit user comfort. In the article "Will the Traffic Work?" by Walter Kulash, Joe Anglin and David Marks, the authors state:

"A small body of existing research suggests that the "other" street characteristics (i.e., other than capacity/speed and safety) may weigh heavily in the individual motorist's interpretation of traffic service. Driver/passenger surveys show that automobile occupants under-estimate their travel time and distance when driving through an appealing environment, and that, conversely, they overstate their time and distance when driving through a hostile environment. The extent of under- or over-reporting can overshadow large differences in the capacity/speed and safety performance of a given street."

Another strategy for addressing transportation needs is the adoption of policies supporting multi-modal transportation choice. Objective 10.2 (and associated policies) contains language encouraging greater street connectivity and the adoption of a map showing Existing Transit Hubs and Transit-Supportive Areas.

Urban design issues are also important in relation to transportation needs. Objective 10.3 and associated policies set a requirement for the City to adopt design standards for development/redevelopment within the proposed TMPA. The City uses its already adopted Central Corridors Overlay District in the Land Development Code for this purpose.

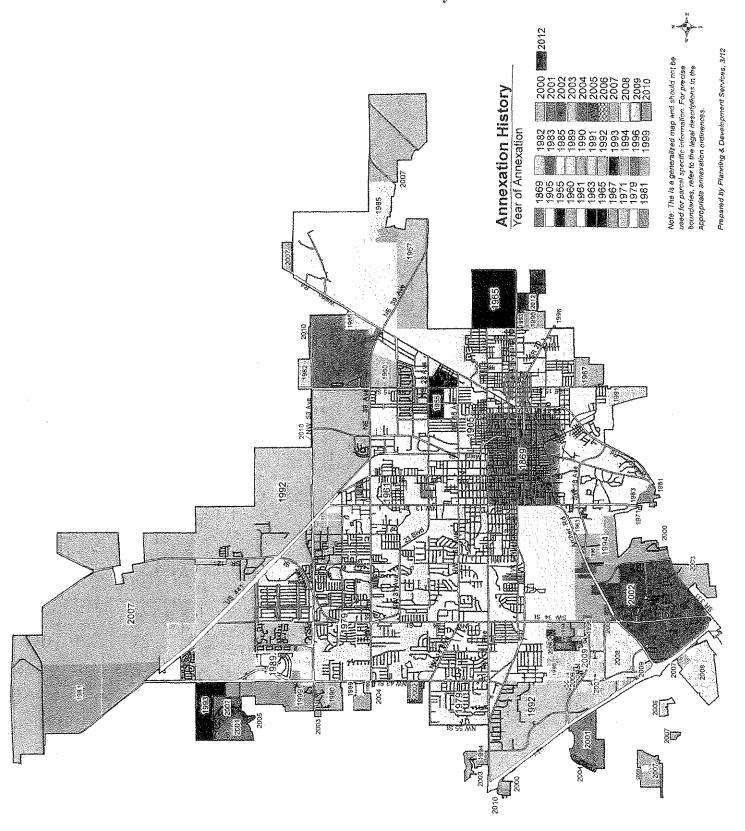
## Appendix B - Data and Analysis Addendum to the Housing Element

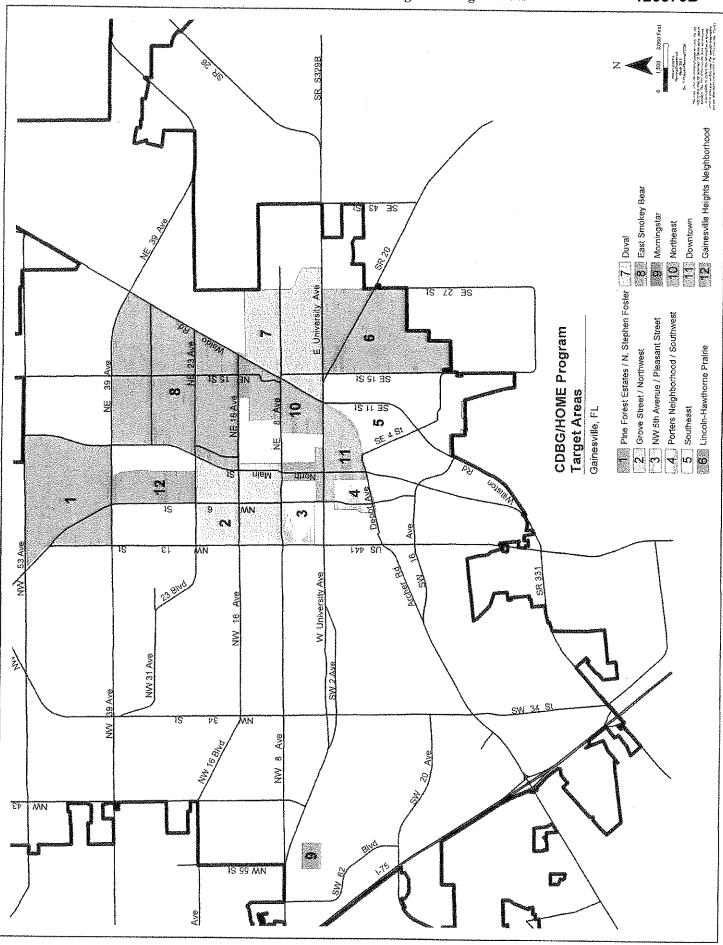
Housing, in addition to food and clothing, represents one of the three basic needs required for human survival. Housing does more than just shelter us from the elements; it provides us with a place of comfort and promotes our sense of well-being. Unfortunately, many City residents are unable to obtain safe and adequate housing due to high housing costs, low incomes and special needs. In fact, housing cost usually represents the largest single expense for most households. Others must live in such substandard housing conditions that their shelter is considered uninhabitable by today's housing standards. For these reasons and others, the City of Gainesville must determine what kind of housing exists, who lives here, and whose housing needs are not being met. The City must not only consider the needs of its existing population but its future population as well. The City must ensure that residential land will be available to accommodate these new households and that existing households will be adequately housed.

The City of Gainesville's Housing Element will analyze these issues and recommend programs and strategies to address them. The purpose of this Housing Element is to identify existing and future housing needs of the City and provide solutions through the goals, objectives and policies. The update of the Housing Element is needed for compliance with statutory changes enacted in 2011 by Chapter Law 2011-139, and address issues raised during the old Evaluation and Appraisal Report (EAR) process.

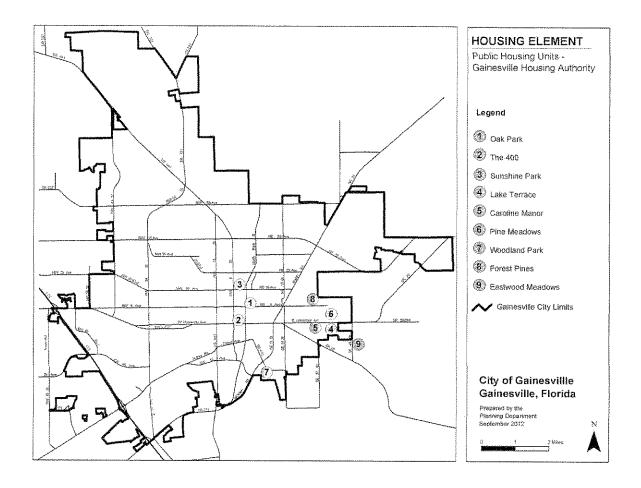
One key issue affecting the data and the eventual analysis of this data is the University of Florida (UF). This Element does not include the housing units on the UF campus. The University of Florida Campus Master Plan includes documentation about on-campus housing.

These housing units were omitted in order to give an accurate account of the housing units, which are under the jurisdiction of the City of Gainesville. The University and the State of Florida are responsible for planning all aspects of the provision of on-campus housing. In all instances, the elimination of these housing units from the data is noted in the corresponding data tables. The affordable housing needs assessment that was prepared by the Shimberg Center for Affordable Housing at UF subtracts institutional populations from total population estimates before the Affordable Housing Needs Assessment (AHNA) projections of permanent population are made. The projections of institutional populations are made separately and these populations are added back to the permanent population projections to produce a final population total. Because a certain portion of the institutional population is considered a household-forming population, the off-campus portion of the UF headcount is added back to the permanent population (by age) and the total is used to project households.

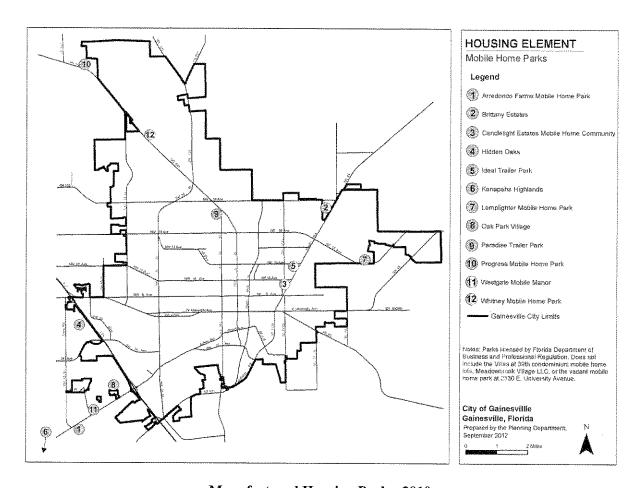




MAP 3: Public Housing Units Gainesville Housing Authority



Map 4: Mobile Home Parks



	Manufactured Housing Parks, 2010	
Property Name	Street Address	Lots
<ol> <li>Arredondo Farms</li> </ol>	7117 SW Archer Road	441
2. Brittany Estates	5010 NE Waldo Road	185
3. Candlelight Estates	1600 NE 13 <sup>th</sup> Avenue	80
4. Hidden Oaks	100 Castle Drive	461
5. Ideal Trailer Park	2200 NE Waldo Road	38
6. Kanapaha Highlands	SW 107 <sup>th</sup> St. & SW 84 <sup>th</sup> Avenue	79
7. Lamplighter	5200 NE 39 <sup>th</sup> Avenue	273
8. Oak Park Village	4000 SW 47 <sup>th</sup> Street	347
9. Paradise Trailer Park	4546 NW 13 <sup>th</sup> Street	10
10. Progress Mobile Home Park	6101 NW 120 <sup>th</sup> Lane	62
11. Westgate Mobile Manor	5816 SW Archer Road, Suite 1	157
12. Whitney Mobile Home Park	8401 NW 13 <sup>th</sup> Street	206

**Notes:** Includes only those parks licensed by the Florida Department of Business and Professional Regulation.

Source: Florida Department of Business and Professional Regulation.

Table 1: Housing Units by Type

Housing Units by Type (All units), Detail, 2006-2010 American Community Survey		
Share		
Type	Estimate	
Single Family (1 attached/detached)	42.8%	
Multi-family (2 or more)	55.0%	
Mobile Home	2.2%	
Other		
Total	100.0%	

**Notes:** The American Community Survey (ACS) is based on an annual sample of US households and therefore is subject to error. This application uses 5-year average data (2006-2010) to increase sample size and reduce error. The margin of error provided is based on a 90% confidence level; that is, there is a 90% probability that the actual value falls within the range provided by subtracting and then adding the margin of error to the estimate. See <u>American Community Survey: Multiyear Accuracy of the Data "-</u>" indicates that a value is not statistically significant (margin of error is greater than estimate). "No statistically significant values found" indicates that few or no valid results are available in the selected geographic area.

Source: U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Summary File

The city's housing stock includes a mix of both single family detached units and multi-family units. Table 1 indicates that in the 2006-2010 time period, of the city's housing stock 42.8% are single-family units while 55% are multiple-family and 2.2% are mobile homes. This represents a significant shift in the composition of the housing stock in the last two decades. In 1995, approximately 56.8% of the city's housing stock was single-family units, 39.4% were multiple-family units and 3.8% were mobile homes. The increase in the percentage of multiple-family units is due primarily to the annexation of largely multiple-family residential areas. In 2002, the City annexed an urbanized area in the southwest, roughly bounded by Interstate 75 on the west, SW Archer Road to the north, SW Williston Road to the south and SW 23<sup>rd</sup> Terrace to the east. The majority of residential development in this area is multiple-family. The annexation of the Urban Village area (roughly located east of Interstate 75, west of SW 34<sup>th</sup> Street, north of SW 24<sup>th</sup> Avenue and south of SW 16<sup>th</sup> Avenue) in 2009 also brought into the city an area that is largely multiple-family.

Table 2 shows that the growth in multiple-family developments far exceeded single-family development. Table 3 indicates that there are more renter-occupied than owner-occupied units in the city.

Table 2: Growth in Housing Units by Type

Growth in Housing Units by Type (All units), Detail				
	Units in the Structure	Units in the Structure	Percentage Change	
Type	2000 Estimate	2006-2010 Estimate	2000- 2006/2010	
1, detached	20,360	21,852	6.8%	
1,attached	1,722	2,026	15.0%	
2	1,980	2,127	6.9%	
3 or 4	2,779	5,633	50.7%	
5 to 9	3,871	7,768	50.2%	
10 to 19	3,288	8,299	60.4%	
20 or more	4,885	6,877	29.0%	
Mobile Home or Trailer	1,207	1,228	1.7%	
Other	19	_	_	
Total	40,111	55,810	28.1%	

**Notes:** The American Community Survey (ACS) is based on an annual sample of US households and therefore is subject to error. This application uses 5-year average data (2006-2010) to increase sample size and reduce error. The margin of error provided is based on a 90% confidence level; that is, there is a 90% probability that the actual value falls within the range provided by subtracting and then adding the margin of error to the estimate. See <u>American Community Survey: Multiyear Accuracy of the Data "-" indicates that a value is not statistically significant (margin of error is greater than estimate). "No statistically significant values found" indicates that few or no valid results are available in the selected geographic area.</u>

Source: U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Summary File

**Table 3: Housing Units by Tenure** 

Households by Tenure, 2009				
Owner	Renter	Total		
25,200	26,655	51,855		
Source: Florida Hou	sing Data Clearinghouse, Shimb	erg Center for Housing Studies, 2012.		
		Household Projection Methodology User		
Guide.				

Table 4: Households by Tenure - Projections

Year	Tenure	Household Count
2000	Owner	17,813
2000	Renter	19,548
2009	Owner	25,200
2009	Renter	26,655
2010	Owner	25,492
2010	Renter	26,530
2015	Owner	28,318
2015	Renter	28,101
2020	Owner	31,891
2020	Renter	29,993
2025	Owner	35,514
2025	Renter	31,877
2030	Owner	39,014
2030	Renter	33,886
Source: Florid	a Housing Data Clearingh	ouse, Shimberg Center for

Notes: Housing Needs Assessment – Population and Household

Projection Methodology User Guide.

Table 5: Housing Units by Year Built

		Year Stru	cture Buil	t, 2006-201	10		
1939 and earlier	1940s	1950s	1960s	1970s	1980s	1990s	2000 or After
1520	1,718	5,241	7,608	13,099	11,238	8,218	7,168

**Source:** U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Summary File, from Florida Housing Data Clearinghouse, Shimberg Center for Housing Studies, 2012.

Table 6: Monthly Gross Rent of Renter-Occupied Units

Percentage 1.47% 1.31%
1.31%
1.31%
7.15%
29.63%
27.28%
22.24%
7.91%
3.01%
100.00%
_

**Notes:** The American Community Survey (ACS) is based on an annual sample of US households and therefore is subject to error. This application uses 5-year average data (2006-2010) to increase sample size and reduce error. The margin of error provided is based on a 90% confidence level; that is, there is a 90% probability that the actual value falls within the range provided by subtracting and then adding the margin of error to the estimate. See <u>American Community Survey: Multiyear Accuracy of the Data</u>

Source: U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Summary File

According to the U.S. Census, the median monthly gross rent (rent plus separate utilities) for renter-occupied housing units in Gainesville was \$824 in the 2006-2010 time period. Of the 29,398 rental units 9.93% had monthly rents below \$500, 56.91% (16,731 units) paid between \$500 and \$1,000 and 30.15% (8,862 units) had monthly rents above \$1,000.

Table 7: Value of Owner-Occupied Housing Units

Value Of Owner-Occupied Housing Units, Summary, 2006-2010 American Community Survey				
Value	Estimate	Percentage		
Less than \$50,000	1,016	5.2%		
\$50,000-\$99,999	2,319	12.0%		
\$100,000-\$149,999	4,283	22.1%		
\$150,000-\$199,999	4,813	24.8%		
\$200,000-\$299,999	4,475	23.1%		
\$300,000-\$499,999	2,138	11.0%		
\$500,000-\$999,999	353	1.8%		
Greater than \$1,000,000	-	The state of the s		
Total	19,402	100.0%		

**Notes:** The American Community Survey (ACS) is based on an annual sample of US households and therefore is subject to error. This application uses 5-year average data (2006-2010) to increase sample size and reduce error. The margin of error provided is based on a 90% confidence level; that is, there is a 90% probability that the actual value falls within the range provided by subtracting and then adding the margin of error to the estimate. See <u>American Community Survey: Multiyear Accuracy of the Data</u> "-" indicates that a value is not statistically significant (margin of error is greater than estimate). "No statistically significant values found" indicates that few or no valid results are available in the selected geographic area.

Source: U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Summary File

According to the Florida Department of Revenue, Sales Data Files, the average sales price for a single-family home was \$151,334 in 2011. The median sales price in 2011 was \$140,000 compared to the statewide median sales price of \$150,000.

Table 8: Owner Costs, Owners with a Mortgage

Owner Costs, Owners with a Mortgage		
Value	Estimate	
< than \$200		
\$200-\$299	42	
\$300-\$399	50	
\$400-\$499	85	
\$500-\$599	456	
\$600-\$699	552	
\$700-\$799	754	
\$800-\$899	979	
\$900-\$999	909	
\$1,000-\$1,249	2,201	
\$1,250-\$1,499	2,150	
\$1,500-\$1,999	2,467	
\$2,000-\$2,499	1,210	
\$2,500-\$2,999	326	
>\$3,000	12,585	
Total	19,402	

**Notes:** The American Community Survey (ACS) is based on an annual sample of US households and therefore is subject to error. This application uses 5-year average data (2006-2010) to increase sample size and reduce error. The margin of error provided is based on a 90% confidence level; that is, there is a 90% probability that the actual value falls within the range provided by subtracting and then adding the margin of error to the estimate. See <u>American Community Survey: Multivear Accuracy of the Data</u> "-" indicates that a value is not statistically significant (margin of error is greater than estimate). "No statistically significant values found" indicates that few or no valid results are available in the selected geographic area.

**Source**: U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Summary File

Table 9: Owner Costs, Owners without a Mortgage

Owner Costs, Owner	rs without a Mortgage
Value	Estimate
< than \$100	119
\$100-\$149	132
\$150-\$199	275
\$200-\$249	621
\$250-\$299	575
\$300-\$349	758
\$350-\$399	822
\$400-\$499	1,106
\$500-\$599	782
\$600-\$699	715
>\$700	912
Total	6,817

**Notes:** The American Community Survey (ACS) is based on an annual sample of US households and therefore is subject to error. This application uses 5-year average data (2006-2010) to increase sample size and reduce error. The margin of error provided is based on a 90% confidence level; that is, there is a 90% probability that the actual value falls within the range provided by subtracting and then adding the margin of error to the estimate. See <u>American Community Survey: Multiyear Accuracy of the Data</u> "-" indicates that a value is not statistically significant (margin of error is greater than estimate). "No statistically significant values found" indicates that few or no valid results are available in the selected geographic area.

**Source**: U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Summary File

Tables 10 and 11 show the current and projected amount of income that owner and renter households pay for rent or mortgage costs. Household income is measured as a percentage of the median income for the county or area, and then adjusted for family size. The HUD-estimated median income for a family of four in Gainesville in 2012 is \$55,600.

Table 10: Owner Cost to Income Ratio

O	Owner Housing Cost Burden: Projections					
Year	Amount of Income Paid for Housing	Household Count				
2010	30.01-50%	3,204				
2010	50+%	2,076				
2010	<=30%	20,212				
2015	30.01-50%	3,527				
2015	50+%	2,301				
2015	<=30%	22,490				
2020	30.01-50%	3,930				
2020	50+%	2,584				
2020	<=30%	25,377				
2025	30.01-50%	4,336				
2025	50+%	2,872				
2025	<=30%	28,306				
2030	30.01-50%	4,732				
2030	50+%	3,156				
2030	<=30%	31,126				

**Notes:** <u>Housing Needs Assessment – Population and Household</u> Projection Methodology User Guide.

**Source:** Estimates and projections by Shimberg Center for Housing Studies, based on 2000 U.S. Census data and population projections by the Bureau of Economic and Business Research, University of Florida.

**Table 11: Renter Cost to Income Ratio** 

	Renter Housing Cost Burden: P			
Year	Amount of Income Paid for Housing	Household Count		
2010	30.01-50%	5,018		
2010	50+%	8,485		
2010	<=30%	13,027		
2015	30.01-50%	5,329		
2015	50+%	8,947		
2015	<=30%	13,825		
2020	30.01-50%	5,703		
2020	50+%	9,497		
2020	<=30%	14,793		
2025	30.01-50%	6,078		
2025	50+%	10,049		
2025	<=30%	15,750		
2030	30.01-50%	6,478		
2030	50+%	10,656		
2030	<=30%	16,752		

**Notes:** Housing Needs Assessment – Population and Household Projection Methodology User Guide.

**Source:** Estimates and projections by Shimberg Center for Housing Studies, based on 2000 U.S. Census data and population projections by the Bureau of Economic and Business Research, University of Florida.

Table 12: Housing Condition Characteristics (Occupied Units), 2006-2010

Housing Condition Characteristics (Occupied Units), 2006-2010 American Community Survey				
***************************************	Survey			
	Estimate	Share of Occupied Units (%)		
Persons Per Room				
- 1.01 or More Persons Per Room	731	1.5		
House Heating Fuel				
- No Fuel Used	158	0.3		
Kitchen Facilities				
- Lacking Complete Facilities	456	0.9		
Plumbing Facilities				
- Lacking Complete Facilities	255	0.5		

**Notes:** Housing units are considered to be substandard if they are overcrowded, do not have heat, or lack complete kitchens or plumbing. American Community Survey is based on a sample of households and therefore involves a margin of error. To find the margin of error for this and other ACS-based tables, see the General Unit Characteristics tool. A "-" indicates that a value in the ACS is not statistically significant from zero.

Source: U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Summary File

Table 13: Households by Household Size - Projections

All Households Size 2000 2009 2010 2015 2020 2025 2030							
2000	2009	2010	2015	2020	2025	2030	
25,001	34,663	34,756	37,668	41,281	44,923	48,577	
10,154	14,111	14,167	15,369	16,868	18,378	19,885	
2,207	3,083	3,098	3,380	3,731	4,087	4,438	
37,362	51,857	52,021	56,417	61,880	67,388	72,900	
	25,001 10,154 2,207	2000         2009           25,001         34,663           10,154         14,111           2,207         3,083	2000         2009         2010           25,001         34,663         34,756           10,154         14,111         14,167           2,207         3,083         3,098	2000         2009         2010         2015           25,001         34,663         34,756         37,668           10,154         14,111         14,167         15,369           2,207         3,083         3,098         3,380	2000         2009         2010         2015         2020           25,001         34,663         34,756         37,668         41,281           10,154         14,111         14,167         15,369         16,868           2,207         3,083         3,098         3,380         3,731	2000         2009         2010         2015         2020         2025           25,001         34,663         34,756         37,668         41,281         44,923           10,154         14,111         14,167         15,369         16,868         18,378           2,207         3,083         3,098         3,380         3,731         4,087	

**Source:** Estimates and projections by Shimberg Center for Housing Studies, based on 2000 U.S. Census data and population projections by the Bureau of Economic and Business Research, University of Florida.

**Notes:** Housing Needs Assessment – Population and Household Projection Methodology User Guide.

Table 14: Households by Age of Householder - Projections

		Il Househo	ius			
2000	2009	2010	2015	2020	2025	2030
15,647	20,869	20,581	21,377	22,269	23,163	24,265
16,416	23,379	23,624	25,070	26,855	28,503	30,050
5,298	7,607	7,817	9,972	12,760	15,725	18,585
37,361	51,855	52,022	56,419	61,884	67,391	72,900
_	15,647 16,416 5,298	15,647 20,869 16,416 23,379 5,298 7,607	15,647 20,869 20,581 16,416 23,379 23,624 5,298 7,607 7,817	15,647     20,869     20,581     21,377       16,416     23,379     23,624     25,070       5,298     7,607     7,817     9,972	15,647     20,869     20,581     21,377     22,269       16,416     23,379     23,624     25,070     26,855       5,298     7,607     7,817     9,972     12,760	15,647     20,869     20,581     21,377     22,269     23,163       16,416     23,379     23,624     25,070     26,855     28,503       5,298     7,607     7,817     9,972     12,760     15,725

**Source:** Estimates and projections by Shimberg Center for Housing Studies, based on 2000 U.S. Census data and population projections by the Bureau of Economic and Business Research, University of Florida.

**Notes:** Housing Needs Assessment – Population and Household Projection Methodology User Guide.

Table 15: Households by Household Income - Projections

		All Househ	olds			
2000	2009	2010	2015	2020	2025	2030
8,343	11,375	11,328	12,086	13,006	13,935	14,915
5,098	7,017	7,022	7,626	8,369	9,131	9,906
6,255	8,667	8,689	9,452	10,404	11,368	12,333
6,182	8,606	8,646	9,418	10,385	11,362	12,332
11,483	16,190	16,337	17,837	19,720	21,595	23,414
37,361	51,855	52,022	56,419	61,884	67,391	72,900
	8,343 5,098 6,255 6,182 11,483	2000         2009           8,343         11,375           5,098         7,017           6,255         8,667           6,182         8,606           11,483         16,190	2000         2009         2010           8,343         11,375         11,328           5,098         7,017         7,022           6,255         8,667         8,689           6,182         8,606         8,646           11,483         16,190         16,337	8,343     11,375     11,328     12,086       5,098     7,017     7,022     7,626       6,255     8,667     8,689     9,452       6,182     8,606     8,646     9,418       11,483     16,190     16,337     17,837	2000         2009         2010         2015         2020           8,343         11,375         11,328         12,086         13,006           5,098         7,017         7,022         7,626         8,369           6,255         8,667         8,689         9,452         10,404           6,182         8,606         8,646         9,418         10,385           11,483         16,190         16,337         17,837         19,720	2000         2009         2010         2015         2020         2025           8,343         11,375         11,328         12,086         13,006         13,935           5,098         7,017         7,022         7,626         8,369         9,131           6,255         8,667         8,689         9,452         10,404         11,368           6,182         8,606         8,646         9,418         10,385         11,362           11,483         16,190         16,337         17,837         19,720         21,595

**Source:** Estimates and projections by Shimberg Center for Housing Studies, based on 2000 U.S. Census data and population projections by the Bureau of Economic and Business Research, University of Florida.

**Notes:** <u>Housing Needs Assessment – Population and Household Projection Methodology User</u> Guide.

### **Existing Housing Unit Needs**

The City of Gainesville is meeting its existing housing needs with an adequate supply of built housing units that are occupied plus the available vacant, built units within city limits. The 2010 Census estimated that the number of vacant housing units was 6,547 (an 11.4% vacancy rate). In addition, housing units are available in the adjacent unincorporated Alachua County area with a 10.9% vacancy rate there. Absorption of some of the vacant units provides a supply of housing units for projected housing needs.

Comparing the most recent city vacancy rate data to previous years, the number of available vacant units has increased since 1980. In 1980, the vacancy rate was 5.1%; in 1990 it was 7.8%; and in 2000 it was 7.1%. The higher vacancy rate of 11.4% in 2010 partially reflects the national housing boom that occurred in the post-2000 time period.

Utilizing a 6% vacancy rate as a reasonable percentage to provide for market variety and competitive pricing, the 11.4% vacancy rate represents about a 5.4% surplus (almost 2 times the amount of vacant housing units needed for market considerations) of housing units (3,092) that are available to meet future housing unit demand.

#### **Projected Housing Unit Needs**

Table 16 illustrates the projected number of new housing units that must be provided in the city to meet the housing needs of the future population for the planning period (2013-2023). After reviewing the Shimberg Center projections, it was determined that those projections were too high and did not adequately reflect the recent slowing of growth in Gainesville.

The City produced an alternative methodology that relies on the population projections shown in the updated Future Land Use Element Data and Analysis Report. The population projections were adjusted using the following steps to produce the projected housing unit needs:

- 1. The population living in group quarters was removed from the projected population since those persons will not need standard housing units. For future years, the number of persons living in group quarters was held constant to the 2012 number. Those living in group quarters include the institutionalized population (inmates and nursing home patients) and the non-institutionalized population (dormitory residents; fraternity/sorority residents).
- 2. Using the total projected population, a conversion factor was used to translate population into households. Population was divided by the 2010 figure of 2.19 persons per household to produce the projected number of households. The estimate of 50,934 produced for 2012 using this methodology closely matches the 2010 Census housing unit count of 51,029 occupied units (within 95 units).
- 3. Based on the projected number of households during the planning period, the net, new number of housing units needed annually was calculated by subtracting the previous year households from the next year's households.
- 4. The net increase in households per year was then multiplied by 1.06 to sustain a constant 6% vacancy rate to support market choice and competition. However, for the year 2013 this multiplier was not used due to the excess vacant units available. For 2013, the number of new housing units needed is calculated by subtracting the excess vacant units (3,092) from the net increase in households (3,182), which results in a need for only 90 new housing units while still maintaining the 6% vacancy rate.

Table 16: Projected Housing Unit Needs

		Lause IV. IIVjeci	ou Housing C	ARRE I TOOLS
Year	Projected	Number of	Net	Number
	Population	Households	Increase in	of New
	in Housing		Households	Housing
	Units			Units
				Needed
2012	111,545	50,934	0	0
2013	118,514	54,116	3,182	90
2014	119,327	54,487	371	393
2015	120,651	55,092	604	640
2016	121,744	55,591	499	529
2017	123,094	56,207	616	653
2018	124,210	56,717	509	540
2019	125,587	57,346	629	667
2020	126,725	57,865	519	551
2021	128,130	58,507	642	680
2022	129,290	59,036	530	561
2023	130,723	59,691	655	694

During the period 2015-2020, a total of 3,029 new housing units will be needed (this includes maintaining the 6% vacancy rate). This is an average of 605 new units per year. Most of these new housing needs will be provided by existing approved developments (subdivisions and multifamily complexes) that have yet to be built or built out. Significant redevelopment that has increased density in areas close to the University of Florida is providing housing units in that area. In addition, housing units in the unincorporated urban area, plus approved developments by Alachua County, can assist in providing the needed housing units.

Table 17: Vacant, Developable Acreage by Residential Future Land Use Category

Future Land Use Category	Total Acres	Developable Vacant Acres	% Developable for Category
Single Family	9,376	2,357	25.1%
Residential (Low)	2,018	701	34.7%
Residential (Medium)	2,013	312	15.5%
Residential (High)	203	23	11.3%
Mixed Use Residential	36	3	8.3%
Total:	13,646	3,396	24.9%

Source: Planning Department, October 2012. Master Parcel System files.

Table 17 indicates the vacant and developable land acreages by Future Land Use category. Based solely on the residential land uses, there are 3,396 developable vacant acres available for residential construction. Table 16 indicates that for the time period 2015-2020, a total of 3,029

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housing units will need to be available to meet the needs of the projected population for the time period. Dividing the projected housing units with the available acreage, residential development could occur at 0.89 dwelling units per acre over the planning period to accommodate the projected number of households, with the existing amount of vacant, developable land. This is a much lower density than all the zones allow or that the city would desire for future development. The Single Family land use category allows up to 8 units per acre, while Residential Low allows up to 12 units per acre, Residential Medium allows 8-30 units per acre, Residential High allows 8-100 units per acre, and Mixed Use Residential allows up to 75 units per acre. There is currently adequate acreage within city limits to accommodate the projected housing need of the city. In addition, redevelopment at higher densities has occurred in portions of the city and is projected to continue over the planning period. Redevelopment is already meeting housing demand needs near the University of Florida campus. The developable vacant acres figure used here does not include acreage within the Mixed Use, Urban Mixed Use, or the Planned Use District land use categories that also allow for residential development. Finally, future annexations will likely include lands that will be designated for residential use, which will add acreage to meet the projected City of Gainesville housing demand.

## Appendix C - Addendum to Data and Analysis for the Conservation, Open Space & Groundwater Recharge Element

Exhibit C-1 Floridan aquifer

(Source: Planning & Development Services Department, May 2012)

The Floridan aquifer ground water system is the primary drinking water resource for the City and surrounding areas of Alachua County. To date, policies regarding identification and protection of "prime" ground water recharge areas have been based on regional analysis and mapping prepared by the St. Johns River Water Management District (SJRWMD) and the Suwannee River Water Management District (SRWMD), whose common boundary runs through the City area. A composite map entitled Floridan Aquifer Recharge is currently included in the Environmentally Significant Land & Resources Map Series of the Future Land Use Element. The area of the Floridan Aquifer Recharge map within the SJRWMD is based on quantified rates of recharge which are graphically depicted in five (5) rate categories, with the highest rate of recharge category labeled as "exceeding 12 inches per year." The area of the map within the SRWMD is based on two generalized categories, "Moderate to High Recharge Potential" and "Moderate Recharge Potential." Decisions regarding land use and development by the City have relied on this map as a technical reference in determining the location of areas of Floridan aquifer high recharge. In the absence of any other designation of "prime" ground water recharge criteria, the water management districts consider the categories "Exceeding 12 inches per year" and "Moderate to High Recharge Potential" to best represent areas of "Floridan aguifer high recharge." In recent years, the Florida Department of Environmental Protection, Florida Geological Survey (FGS) has conducted a comprehensive and detailed vulnerability analysis of the Floridan Aquifer System (FAS) in Alachua County using the methodologies developed for the statewide Florida Aquifer Vulnerability Assessment (FAVA). This analysis, the Alachua County Aquifer Vulnerability Analysis (ACAVA) is more refined than the statewide model due to the higher resolution of data involved. As opposed to the regionally described recharge concept used by the water management districts, the ACAVA incorporates local area vulnerability based on ground water quality information obtained from water well sampling, with emphasis on the watersheds of stream to sink basins through which surface waters are directly conveyed to the Floridan aquifer. Based on the ACAVA and the FAVA results, Alachua County has adopted a generalized map titled Alachua County Floridan Aquifer High Recharge Area, which provides a mapping of zones of relative vulnerability, ranging from High to Medium to Low Vulnerability, with an overlay zone of Stream-to-Sink Basins. It is extremely difficult to quantify recharge because of the heterogeneity and varying thickness of the sediments overlying the Floridan aguifer system and the stream-to-sink watersheds. In work conducted for the SRWMD by the USGS (JW Grubbs 1998 Recharge rates to the Upper Floridan Aquifer in the SRWMD, Florida WRI 97-4283), Grubbs used several techniques and came up with average annual recharge rates based on aquifer confinement, which assign numeric recharge values.

Staff recommends that the City replace the current reference map (Floridan Aquifer Recharge map) with the Alachua County Floridan Aquifer High Recharge Area map, rescaled to include only the central area of Alachua County, including the Urban Reserve Area. This change is recommended as the scale of focus is so different for the water management district purposes as opposed to local government purposes, and the local emphasis is so much more on vulnerability and contamination potential, rather than on ground water supply (which is the districts' focus),

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with knowledge that the technical basis and expertise behind this revised mapping is quite sufficient to give confidence in the result.

Exhibit C-2 Cabot Carbon/Koppers Superfund Site (Source: GRU, June 2012)

The Cabot Carbon/Koppers superfund site is located along NW 23rd Avenue west of Main Street in Gainesville. Although they are considered as one superfund site, the Cabot Carbon (Cabot) and Koppers properties are actually two separate properties. The Cabot Carbon site is located at the corner of Main Street and 23rd Avenue, and is currently occupied by a shopping plaza and various commercial businesses. The Cabot Carbon site had been used to produce charcoal, turpentine and other products from pine stumps until 1967. The Koppers site is located just west of the Cabot site and was operated as a wood treating facility from 1916 to 2010. Both sites have been contaminated due to historical operations, which included the use of unlined lagoons for storing waste products.

The City of Gainesville does not have responsibility for cleaning up the site, nor does the City have regulatory authority over the site cleanup. However, the City (including both general government and GRU) will continue to be active as an affected stakeholder and push for cleanup of the site and provide technical review and comments to U.S. Environmental Protection Agency (EPA). The City, along with Alachua County and the Alachua County Health Department have formed a "local Intergovernmental Team (LIT) to represent the interests of the community, highlight local environmental concerns and provide technical input to EPA. By working together, the LIT members are able to leverage one another's technical strengths and avoid duplication of efforts, thus representing community interests more effectively and efficiently than if they worked independently. Team members and their roles include:

City of Gainesville (General Government) - The City of Gainesville active as a stakeholder in providing input to EPA and FDEP to ensure that both on-site and off-site contamination are cleaned up properly, so that public health and the environment are protected, and so that the site can be redeveloped in a manner that is beneficial to the community. The City has regulatory authority for certain site development issues and permitting, which are not regulated by EPA. The City provides expert opinions related to surface soil and creek sediment issues (on and offsite) and on-site stormwater management issues. The City's efforts also include assembling outside experts to assist in interacting with EPA and FDEP.

Gainesville Regional Utilities (GRU) - GRU (owned by the City of Gainesville) is focused on protecting the community's water supply wellfield which is located approximately two miles from the site. GRU's efforts have included assembling a team of experts with specialized expertise in remediation of wood treating sites. GRU and its team provide technical input to EPA to ensure that appropriate actions are taken to characterize and remediate the site, and to ensure that the community's drinking water supply is protected.

Alachua County Environmental Protection Department (ACEPD) — ACEPD provides local environmental and technical expertise in review of clean-up plans and contamination investigation actions on the Cabot Carbon/Koppers site and on neighboring impacted properties. ACEPD's role includes providing input to EPA and FDEP concerning local environmental conditions and codes

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and conveying community concerns related to cleanup and monitoring actions at the site. ACEPD also provides communication to the public and local officials on technical activities at the Cabot Carbon/Koppers Superfund Site including a web-based electronic library of technical documents.

Exhibit C-3 Paynes Prairie Sheetflow Restoration Project (Source: GRU, June 2012)

Gainesville Regional Utilities (GRU) and the City of Gainesville Public Works Department (GPWD) are constructing the Paynes Prairie Sheetflow Restoration Project. The project provides a cost-effective, integrated approach to solve several environmental problems. It will improve water quality and meet regulatory requirements for both GRU and GPWD. The state of Florida and EPA have established a Total Maximum Daily Load (TMDL) for Alachua Sink, which receives flow from Sweetwater Branch and is located within Paynes Prairie Preserve State Park. This TMDL requires all sources of nitrogen to Alachua Sink to be reduced. The GRU Main Street Water Reclamation Facility and the GPWD stormwater system are required to reduce nitrogen loads to Alachua Sink to meet this TMDL. The project will meet these requirements. In addition, the project will restore 1,300 acres of natural wetlands within the state park, protect drinking water, and provide a public park with hiking trails, boardwalks and other facilities.

The City is implementing the project in partnership with the Florida Department of Environmental Protection (FDEP), St. Johns River Water Management District (SJRWMD), and the Florida Department of Transportation (FDOT). The focal point of the project is a 125-acre constructed enhancement wetland, which will reduce nutrient loads from wastewater treatment plant effluent, stormwater runoff, septic tank drainage, and other sources (See Figure 1). The project will also include improvements to GRU Main Street Water Reclamation Facility (MSWRF), construction of facilities to intercept trash and sediment from stormwater, removal of man-made drainage ditches, and construction of a distribution channel to restore the natural flow pattern onto Paynes Prairie. Construction of the project is expected to be completed by 2015.

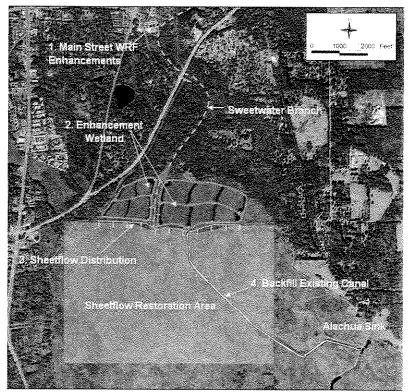
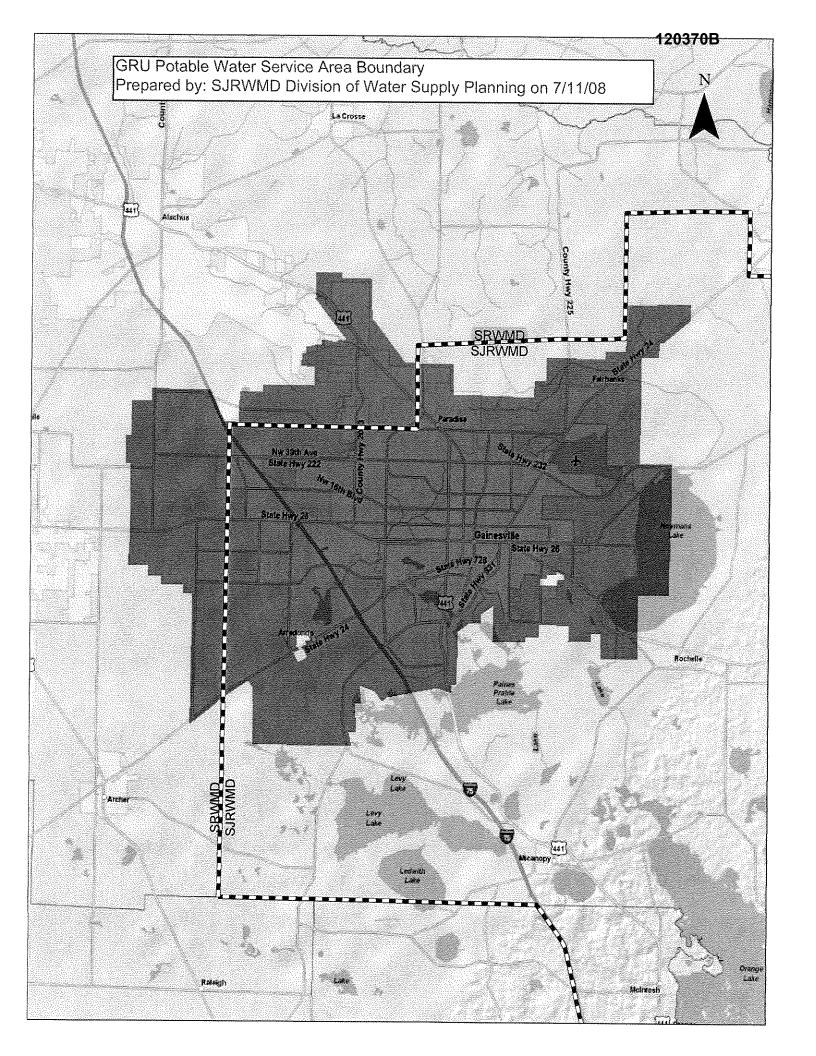


Figure 1. Paynes Prairie Sheetflow Restoration Project Conceptual Plan.

### Exhibit C-4 Potable Water Projected Needs and Sources (Sources: GRU June 2012; St. Johns River Water Management District, June 2012)

GRU provides centralized potable water service to approximately 63,000 residential customers and 6,000 commercial customers in the City and surrounding areas. The total population served is approximately 189,000 people. The City gets its potable water supply from the Floridan Aquifer. Water is withdrawn from the Floridan Aquifer at the Murphree Wellfield and is treated at the City's Murphree Water Treatment Plant before it is distributed to customers. Water withdrawal at the Murphree Wellfield is permitted through a consumptive use permit (CUP) through the St. Johns River Water Management District (SJRWMD).

The current CUP extends through 2014 and provides a maximum annual average withdrawal of 30 mgd. However, GRU will renew the permit prior to expiration. Based on the SJRWMD 2010 Water Supply Plan the projected demand for 2030 is 31.8 mgd. This projection is based on population projections and water use profiles. The City will continue to utilize groundwater from the Floridan Aquifer as its water supply. The City will continue to implement water conservation and water reuse measures to ensure adequate potable water supply to meet future demands.



GRU Population and Potable Water Demand Projections - Best Available Data

Note: GRU's service area encompasses all of the City of Gainesville and portions of unincorporated Alachua County

		e Permitting Proc VID on 8/13/09; ea		SJRWMD Water Supply Planning Process (WSA 2010) <sup>2</sup>			
Year	Population	Demand (mgd)	Allocation [supply] (mgd)	Population	Demand (mgd)		
2008	181,788	28.99					
2009	184,281	29.43	29.43				
2010	186,657	29.85	29.85	188,097	27.85		
2011	189,237	30.29	30.00	yayang syang dalah s			
2012	191,701	30.73	30.00	Vertile entitle			
2013	194,052	31.15	30.00				
2014	196,292	31.55	30.00				
2015	198,424	31.94		195,174	28.90		
2016	200,449	32.31					
2017	203,224	32.76					
2018	205,920	33.20					
2019	208,537	33.63	e al el el el				
2020	211,077	34.04		202,806	30.03		
2021	213,540	34.45					
2022	215,927	34.84					
2023	218,240	35.22					
2024	220,478	35.59	Tella Hallanda in				
2025	222,643	35.95		210,278	31.13		
2026	224,734	36.29					
2027	227,363	36.72					
2028	230,024	37.15					
2029							
2030				214,680	31.79		

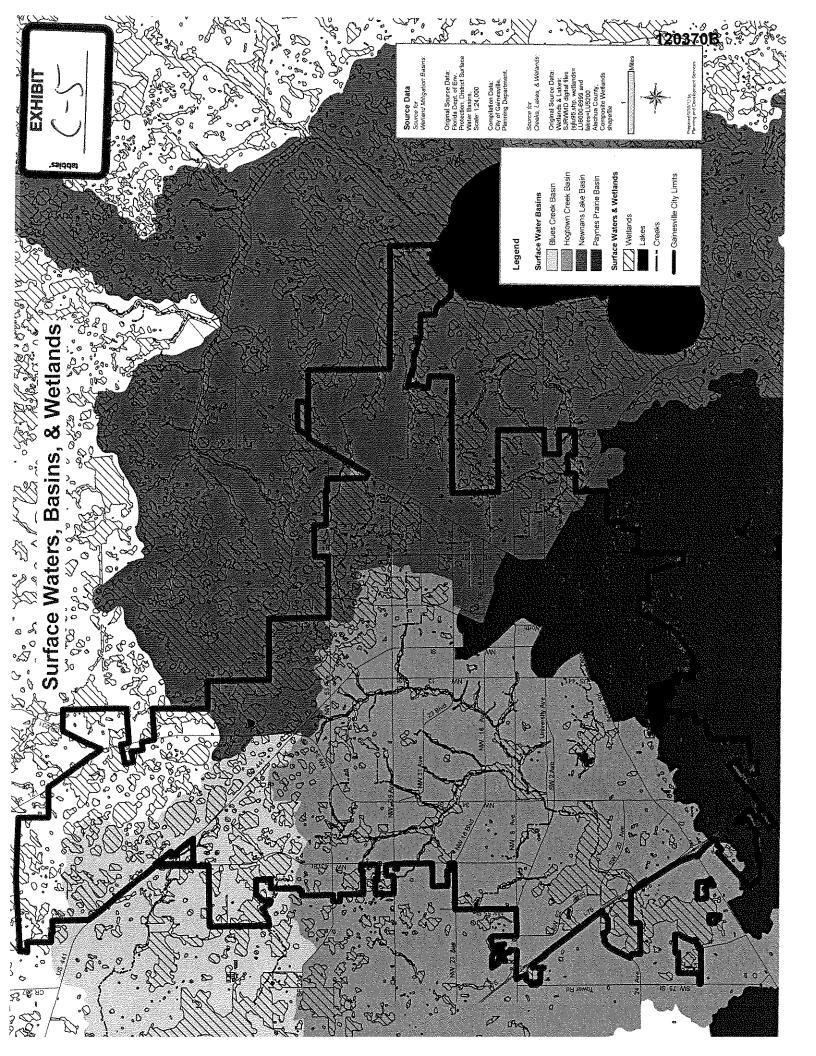
Note: Actual groundwater used by GRU in years 2009, 2010 and 2011 was less than the CUP groundwater allocations for those years (24.2 mgd, 22.6 mgd and 24.06 mgd, respectively).

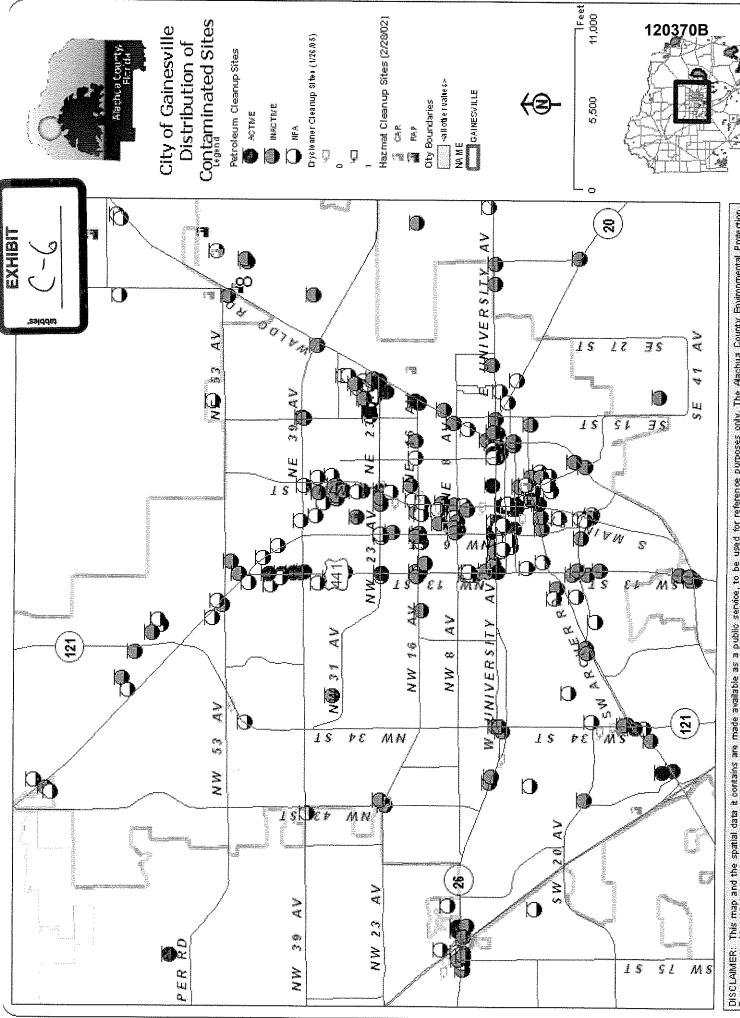
Note: SJRWMD will be completing a new water supply planning process (North Florida regional water supply planning process) in 2013-2014 that should result in updated population and demand projections for GRU as well as the identification of feasible alternative water supply options through 2035.

Note: GRU will file a CUP renewal application prior to the 8/11/14 expiration date. At that time, it is anticipated that GRU and SJRWMD will work together to identify adequate water supply for the GRU service area through a combination of groundwater, reclaimed water and water conservation.

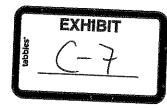
<sup>&</sup>lt;sup>1</sup> Population and demand projections provided by GRU to SJRWMD on 1/30/08 in response to RAI #2. Allocations are from the CUP issued by SJRWMD on 8/13/09.

<sup>&</sup>lt;sup>2</sup> Projections prepared by SJRWMD as part of the 2010 Water Supply Assessment. Population projections are based on 2009 medium BEBR.





DISCLAMER: This map and the spatial data it contains are made available as a public service, to be used for reference purposes only. The Alachua County Environmental Protection Department provides this information AS 18 without warranty of any kind, implied or expressed, regarding accuracy, completeness, or fitness of use. The quality of the data is dependent on the various sources from which each data layer is obtained.



	and the second s	Gainesville Contaminated Sites		
		A	7771.00	
, , , , , , , , , , , , , , , , , , , ,	Total # Sites	Active Cleanup Sites	Inactive Cleanup Sites	NFA
Dry Cleaners Sites	19	The second secon	19	
Hazmat Cleanup Sites	10	10	0	
Petroleum Cleanup Sites	270	75		122
Total	389	47	130	122
· · · · · · · · · · · · · · · · · · ·	An and a second of the second	1100		
<u>Map Legend Appreviations</u>				
Active = Petroleum Contaminated Site -Current Cleanup Activity Occurring	ated Site -Current	Cleanup Activity Occurring	AND THE PROPERTY OF THE PROPER	
Inactive =Petroleum Contamina	ated Site - No cur	Inactive =Petroleum Contaminated Site - No current cleanup action due to low priority	The state of the s	***************************************
NFA = Cleaned Up Petroleum Site	ite	Third and the state of the stat		
0 = Inactive Drycleaner Site - Potentially Contaminated Site, No Cleanup Activity	stentially Contami	nated Site, No Cleanup Activity		
1= Active Drycleaner Cleanup S	ite-Contaminate	1= Active Drycleaner Cleanup Site- Contaminated Site- Cleanup Activity Ongoing	The state of the s	
CAR= Contaminated Non-Petroleum	leum Site-Conta	Site- Contamination Assessment Phase	AND THE PROPERTY OF THE PROPER	111111111111111111111111111111111111111
RAP= Contaminated Non-Petroleum	leum Site- Reme	Site- Remedial Action Plan Phase	The state of the s	

Listed Species of Concern to City of Gainesville Parks, Recreation and Cultural Affairs Department 120370B

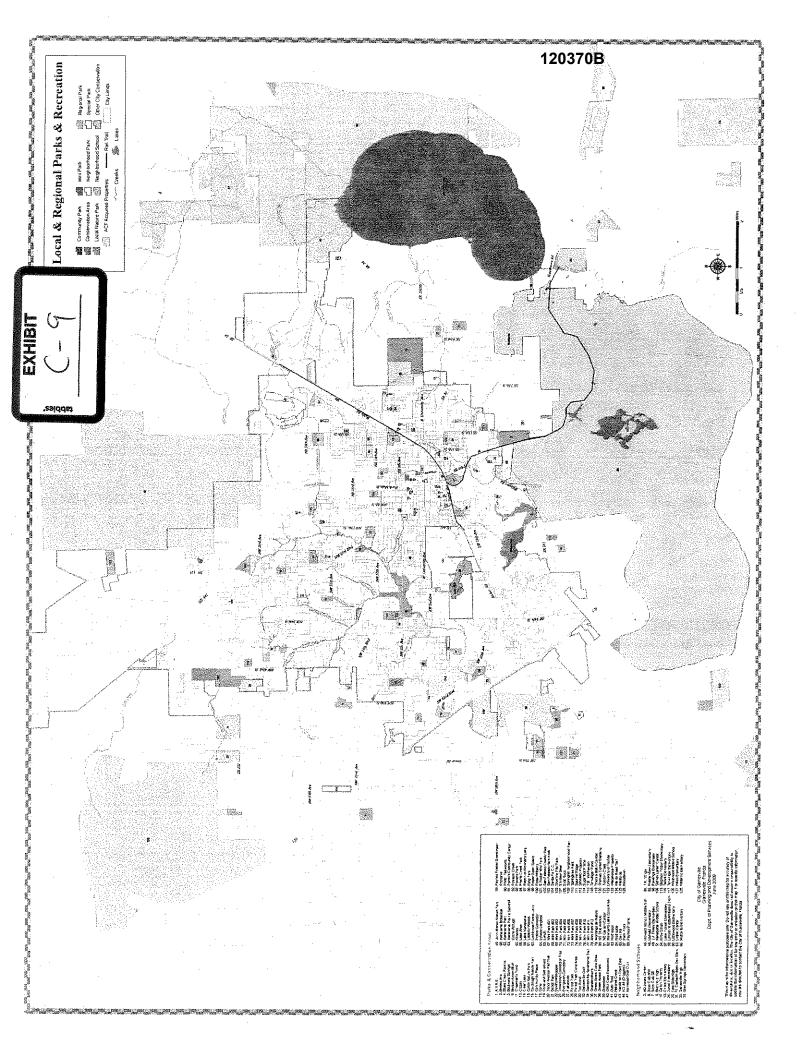
		12	2037	(i - jaminasikan kenanan manan maka-man	
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		EDERAL STATUS	Si	3	$\cup$
J.		ST/	STATUS		
		₩	ST,		
		#	STATE		
SCIENTIFIC NAME	COMMON NAME		TX.	FNAI STATUS*	
RARE PLANTS			0,		
Acacia angustissima var. hirta	Prairie Acacia		E		
Adiantum tenerum	Brittle Maidenhair		E	G5 S3	
Agrimonia incisa	Incised Groovebur		E	G3 S2	
Andropogon arctatus	Pinewoods Bluestem		T	G3 S3	
Arnoglossum diversifolium	Variable-leaved Indian Plantain		T	G2 S2	
Asplenium pumilum	Dwarf Spleenwort		TE	G5 S1	
Asplenium verecundum	Modest Spleenwort		ΤE	G1 S1	
Athyrium filix-femina	Southern Lady Fern		T		
Blechnum occidentale var. minor	Hammock fern		TE	G5 S1	
Brickellia cordifolia	Flyr's nemesis		E	G2G3 S2	
Callirhoe papaver	Poppy Mallow		T E	G5 S2	
Calopogon multiflorus	Manyflowered Grass-pink		E	G2G3 S2S3	
Calycanthus floridus	Carolina allspice		E	G5 S2	
Carex chapmanii	Chapman's sedge		<del>-</del>	G3 S3	
Centrosema arenicola	Pineland Butterfly Pea		È	G2Q S2	
Cheilanthes microphylla	Southern Lip Fern		E	G5 S3	
Cleistes bifaria	Small Spreading Pogonia		T	G4 S3	
Cleistes divaricata	Spreading Pogonia		-	G4 S1	
Coelorachis tuberculosa	Florida Jointtailgrass		+	G3 S3	
Ctenium floridanum	Florida Toothachegrass	мс	E	G2 S2	
Drosera intermedia	Spoonleaf Sundew		╁╤╁	G5 S3	
Epidendrum conopseum	Green-fly Orchid		CE		1
Forestiera godfreyi	Godfrey's Swamp Privet		E	G2 S2	
Habenaria nivea	Snowy Orchid		$\frac{1}{7}$	711 02	
Hexalectris spicata	Crested Coralroot		E		
Lilium catesbaei	Catesby's Lily		<del>-</del>	G5 S1	
Listera australis	Southern Twayblade Orchid		T		
Litsea aestivalis	Pondspice		Ė	G3 S2	
Lobelia cardinalis	Cardinalflower		f = f	3002	
Malaxis unifolia	Green Adder's-Mouth Orchid		E	G5 S3	
Matelea flavidula	Carolina milkvine	MC	TET	G2 S2	
Matelea floridana	Florida Spinypod		T	G2 S2	
Matelea gonocarpos	Anglepod		E	O2	
Matelea pubiflora	Sandhill Spinypod		E	G3? \$1	
Matelea spp	Milkvine species		T/E	00.01	
Najas filifolia	Slender Naiad		'' <u>-</u>	G1 S1	
Pecluma dispersa	Widespread Polypody		E	G5 S2	
Pinguicula caerulea	Blueflower Butterwort		T	30 02	
Pinguicula lutea	Yellow Butterwort		T		
Platanthera blepharigiottis	White-fringed Orchid		T		
Platanthera ciliaris	Yellow-fringed Orchid		Ť		
Platanthera cristata	Crested-fringed Orchid		+		
Platanthera flava	Southern Tubercled Orchid		<del>                                     </del>		
Pogonia ophioglossoides	Rose Pogonia		T		
Polygonum meisnerianum	Mexican Tearthumb		E	G5?T5? S1	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			<u> </u>	30,10, 31	

# Listed Species of Concern to City of Gainesville Parks, Recreation and Cultural Affairs Department 120370B

SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	FNAI STATUS*
Pycnanthemum floridanum	Florida Mountain-mint	<u> </u>	S	G3 S3
Pteroglossaspis ecristata	Giant Orchid	МС	T	G2 S2
Rhododendron austrinum	Florida Flame Azalea	IVIC	┢┋╢	G3 S3
Rhus michauxii	Michaux's Sumac	E	E	G1 G1
Sacoila lanceolata	Leafless Beaked Ladiestresses	<u> </u>	<u> </u>	G1
Salix floridana			<del></del>	G2 S2
Salvia urticifolia	Florida Willow		E	
	Nettle-leafed Sage		E	G5 S1
Sarracenia minor	Hooded Pitcherplant		T	- A
Schoenolirion croceum	Yellow Sunnybeli		E	G4 S2
Sideroxylon alachuense	Silver Buckthorn		E	G1 S1
Sideroxylon lycioides	Buckthorn Bully		E.	G5 S2
Spiranthes brevilabris	Texas ladiestresses		E	G1 S1
Spiranthes ovalis	October Ladiestresses		E	
Spiranthes tuberosa	Little Ladiestresses		Т	
Thelypteris reptans	Creeping Star-hair Fern		E	G5 S2
Tipularia discolor	Cranefly Orchid			
Triphora trianthophoros	Three-birds Orchid		T	
Verbesina heterophylla	Variable-leaved Crownbeard	MC		G2 S2
Zephyranthes atamasco	Atamasco Lily		Ţ	
Zephyranthes simpsonli	Simpon's Rain Lily		Т	G2G3 S2S3
Zephyranthes treatiae	Treat's Rain Lily		T	
Zephyranthes spp	Rain Lily species		Т	
RARE ANIMALS				
INVERTEBRATES				
Sphodros rufipes	Red-legged purseweb spider			G4S3
Autochton cellus	Golden-banded Skipper			G4S1
Cordulegaster sayi	Say's Spiketail			G2 S2
Nemopalpus nearcticus	Sugarfoot Moth Fly			G1G2 S1S2
AMPHIBIANS				
Ambystoma cingulatum	Flatwoods Salamander	Т	ssc	G2G3 S2S3
Ambystoma tigrinum	Eastern Tiger Salamander		, i	G5 S3
Amphiuma pholeter	One-toed Amphiuma			G3 S3
Desmognathus auriculatus	Southern Dusky Salamander			G5 S3
Hemidactylium scutatum	Four-toed Salamander			G5 S2
Notophthalmus perstriatus	Striped Newt			G2G3 S2S3
Rana capito	Gopher Frog		ssc	G3G4 S3
Rana virgatipes	Carpenter Frog			G5 S2
Stereochilus marginatus	Many-lined Salamander		<del>                                     </del>	G5 S1
REPTILES	The second secon			J-0 - 0 1
Alligator mississipiensis	American Alligator	T(s/a)	SSC	G5 S4
Clemmys guttata	Spotted Turtle	I(SIA)	330	G5 S3?
Crotalus adamanteus	Eastern Diamondback Rattlesnake		<del>  -</del>	G5 S3 ? G4 S3
Orotalus auamanteus				G4 S3
Crotalus horridus	Timbor Potticopoles			
Crotalus horridus Drymarchon corais couperi	Timber Rattlesnake Eastern Indigo Snake	T	T	G4T3 \$3

# Listed Species of Concern to City of Gainesville Parks, Recreation and Cultural Affairs Department 120370B

SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	STATE STATUS	FNAI STATUS*
Heterodon simus	Southern Hognose Snake			G2 S2
Pituophis melanoleucus mugitus	Florida Pine Snake		ssc	G4T3 S3
Lampropeltis getula	Common Kingsnake			G5 S2S3
Lampropeltis extenuata	Short-tailed Snake		Т	G3 S3
BIRDS				
Aimophila aestivalis	Bachman's Sparrow			G3 S3
Aramus guarauna	Limpkin		SSC	G5 S3
Falco sparverius paulus	Southeastern Kestrel		Т	G5T4 S3
Grus canadensis pratensis	Florida Sandhill Crane		T	G5T2T3 S2S3
Haliaeetus leucocephalus	Bald Eagle	Т	Т	G4 S3
Mycteria americana	Wood Stork	E	E	G4 S2
Picoides borealis	Red-cockaded Woodpecker	E	T	G3 S2
Picoides villosus	Hairy Woodpecker			<b>G</b> 5 <b>S</b> 3
Sitta carolinensis	White-breasted Nuthatch			G5 S2
Sitta pusilla	Brown-headed Nuthatch			NR
Speotyto cunicularia	Burrowing Owl		ssc	G4T3 S3
MAMMALS				
Lontra canadensis	River Otter			
Podomys floridanus	Florida Mouse	1	ssc	G3 S3
Sciurus niger shermani	Sherman's Fox Squirrel	<b> </b>	SSC	G5T3 S3
Ursus americanus floridanus	Florida Black Bear	<b>-</b>	T*	G5T2 S2
			╁	
Summary:		<del> </del>	1	
E = Endangered		<b>-</b>		
T = Threatened				
T* = Threatened in all Florida counties ex	Cent Columbia and Baker			
T/E = State threatened or endangered de			-	
T(s/a) = Threatened due to similarity of ap				
SSC = Species of Special Concern				
MC = Management Concern			-	
CE = Commercially Exploited				
FNAI Status Nomenclature (G-Global, S-S	State) soo endo usago an ENAL wobaito		-	· · · · · · · · · · · · · · · · · · ·
T IVAT Status IVOTTE HUALUTE (G-GIODAL, S-C	state) - see code usage on FivAl website			
Sources:				***
FNAI Oct 2002: FNAI tracking nomenclatu	ure (www.fnai.org).			
DOACS: Florida Protected Plant Species	List (www.doacs.state.fl.us/~pi/5b-40.htm).			
FWS: Federal Animal and Plant List (www	v.endangered.fws.gov).			
MC listing: Federal internal listing found a	t www.fnai.org. MC listing status has been veri	fied with I	FWC or	nly for species on
this list.		T		
FFWCC: Florida Fish and Wildlife Conser	vation Commission, Florida Protected Animal s	species li	stings	
(www.floridaconservation.org/pubs/endang		1	T	
		1		

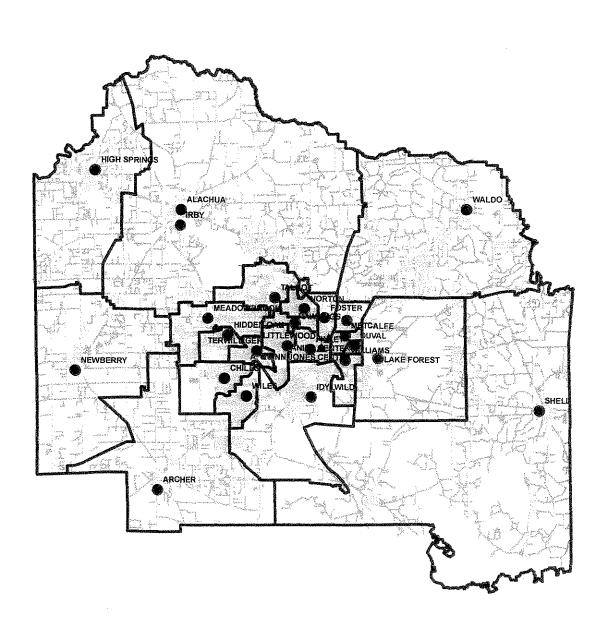


Appendix C – Updated Data & Analysis for Public Schools Facilities Element

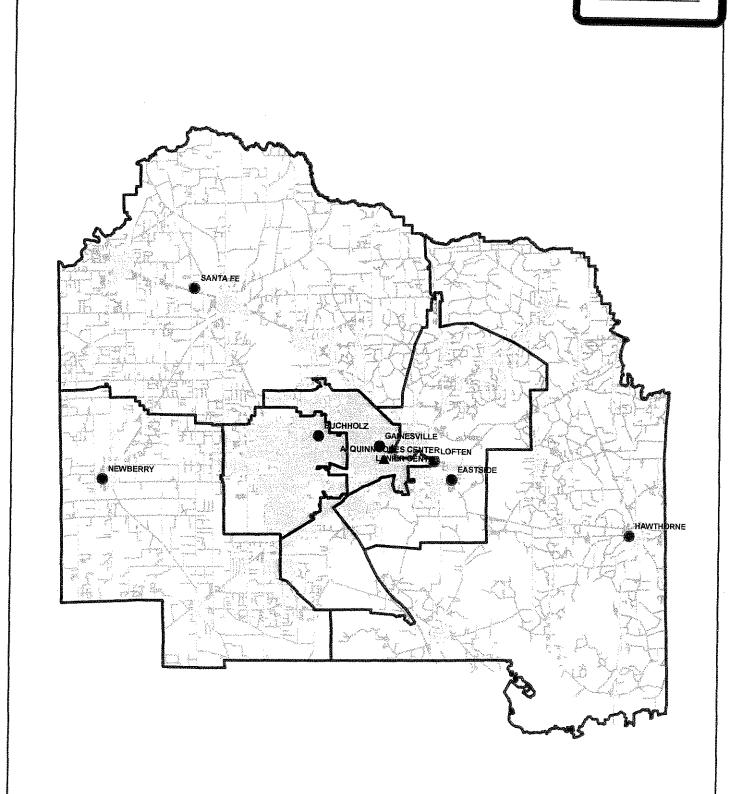
120370B

EXHIBIT

C-/



2012 ELEMENTARY SCHOOLS / ATTENDANCE ZONES



2012 HIGH SCHOOLS / ATTENDANCE ZONES