YEAR 2035 LONG RANGE TRANSPORTATION PLAN FINAL TECHNICAL REPORT NO. 2: DATA COLLECTION, MAPPING AND DATA DEVELOPMENT

Prepared for:

METROPOLITAN TRANSPORTATION PLANNING ORGANIZATION FOR THE GAINESVILLE URBANIZED AREA

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DATA COLLECTION, MAPPING AND DATA DEVELOPMENT

INTRODUCTION

This Technical Report documents the entire data development process for the Gainesville Urbanized Area Year 2035 Long Range Transportation Plan (LRTP) Update. The data development process included development of maps, model networks and data files needed to validate and run the transportation model as well as development of existing and projected financial resources to fund needed transportation projects by the Year 2035. This report describes the entire map development effort, including the development of ZDATA and research of future financial resources. Financial resource projections were submitted as a separate technical memorandum for agency review, and are incorporated here as an appendix to this report, with revisions reflecting MTPO staff review. Key tasks for the data development process included data collection, mapping, data development, designation of screenlines, traffic count data, highway and transit networks, transit service data, data projections, and financial resources (tasks 2.1 through 2.9 in the project scope of services).

TASK 2.1 DATA COLLECTION

In Task 2.1, datasets were collected from the existing model, reviewed, and updated as necessary. These datasets, outlined in Tasks 2.1.1 through 2.1.5, included the following: screenlines and cutlines, traffic count data, highway network, transit network, and transit service data. For each dataset, this report describes the data content and date, data source, and modifications made to the data. All datasets will be updated as necessary during Task 3: Data Review and Verification and Task 4: Model Update and Validation.

TASK 2.1.1 SCREENLINES AND CUTLINES

Screenlines and cutlines from the previous Long Range Transportation Plan Update were evaluated for their applicability to the Year 2035 Update and determined to be sufficient for this project. Some screenlines may be added to address future development areas, such as along SW Archer Road. This will be evaluated during model validation as part of Task 4. A map of the screenlines is included as Figure 1. The screenlines shown in the map reflect major travel flows and patterns in the Gainesville Urbanized Area and the rest of Alachua County. In light of environmental constraints, limited transportation networks and growth management policy, it is unlikely that these traffic patterns will change substantially in the next several years or through the planning horizon to warrant substantial revisions in the screenlines.



Figure 1 - Screenlines





TASK 2.1.2 TRAFFIC COUNT DATA

Traffic count data and locations were made available for the 2007 Base Year by the MTPO, the Florida Department of Transportation, City of Gainesville, Alachua County and the University of Florida. Count data collected by several Developments of Regional Impact (DRIs) that were undergoing review during this period were obtained for use in model validation. Additional counts taken on the University of Florida campus as part of the Master Plan Update in 2009 were also obtained for use in the validation, as necessary. All data will be reviewed for use in the 2007 Base Year validation. Count data locations are adequate for model validation purposes, and have been converted into Annual Average Daily Traffic (AADT) using the 2007 peak season average weekday adjustment factor, where appropriate. Counts provided by the MTPO were already in AADT format. A map of traffic count station locations for use in model validation is included as Figure 2. The map identifies the links in the base year highway network where traffic count data exists.



Figure 2 - Traffic Count Station Locations

TASK 2.1.3 HIGHWAY NETWORK

A highway network for the 2007 Base Year has been developed based on the network used for the previous LRTP update. The 2007 Base Year Network incorporates changes since the last plan update, to reflect the current number of lanes and roadway functional classification. Maps of the highway network are included under Task 2.2.2 below. These updated networks (highway and transit) were provided to the modeling consultant for use in creating and validating the updated model in Cube Voyager. A full description of the model networks and updates will be provided in Technical Report 3 (Data Review and Verification) and Technical Report 4 (Model Update and Validation).

TASK 2.1.4 TRANSIT NETWORK

The transit network for the 2007 Base Year has been developed based on information provided by the Gainesville Regional Transit System (RTS). A map of the transit network is included under Task 2.2.3 below. As mentioned above, this network was provided to the modeling consultation for model update and validation.

TASKS 2.1.5 TRANSIT SERVICE DATA

Transit service data for Fiscal Year 2008 have been obtained from the RTS for Citywide and University of Florida (UF) campus routes. Table 1 below shows the ridership data by month for each route. In addition to route ridership data, information on service characteristics (fare, frequency, span of service, stop locations, etc.) has been obtained for fixed route transit service in the Gainesville urbanized area. RTS is currently conducting a Bus Rapid Transit Feasibility Study and System Master Plan for Gainesville and the urbanized areas of Alachua County. Once the study is complete, relevant data will be incorporated into the Year 2035 Update process. In the spring of 2009, RTS conducted an extensive systemwide on-board survey to capture passenger characteristics and origin-destination travel patterns. This database of information was obtained and will be incorporated into the walidation of the mode split model during Tasks 3 and 4.



Table 1 – RTS Fiscal Year 2008 Ridership by Route

		October	November	December	January	February	March	April	Mav	June	July	August	September	FY TOTAL
Route	City Routes	Passengers	Passengers	Passengers	Passengers	Passengers	Passengers	Passengers	Passengers	Passengers	Passengers	Passengers	Passengers	FY 2008Pass
1	Butler Plaza to Downtown via Archer Rd	47,675	38,931	29,128	40,399	38,770	34,138	36,659	33,582	33,796	38,153	41,424	51,934	464,5
2	Downtown to Robinson Heights via SE 15th St.	8,339	7,433	7,189	9,132	8,625	8,151	8,006	6,824	6,566	7,021	7,153	9,421	93,8
0	Oaks Mail to Downtown via University Ave.	47,958	41,059	30,224	41,627	41,213	36,633	41,779	28,355	27,855	30,548	32,876	50,493	450,
7	Downtown to Eachwood Meadows	8,083	7,009	8.553	10.548	9,840	10 701	0,000	0,040	7.846	3,125	8.057	0,009	100,
8	Pine Ridge to Shands via NW13th St.	33,898	26,893	17,711	29 302	29,398	24 867	27,390	22 422	21,635	24 270	23,934	38 625	320
9	Lexington Crossing to McCarty Hall	96,228	69,761	22,139	77,789	84,804	60,674	71,762	35,104	34,504	43,388	35,457	88,819	720
10	SFCC to Downtown via NW 16th Ave /University Ave.	9,456	7,285	4,982	5,985	6,021	5,377	5,613	5,111	4,890	5,485	5,754	9,735	75
11	Eastwood Meadows to Downtown via University Ave.	10,420	8,686	8,162	9,816	9,546	8,825	9,446	10,130	9,268	9,603	9,443	10,494	113
12	Campus Club to McCarty Hall	81,255	61,548	24,315	67,120	72,928	54,670	64,319	28,038	27,613	34,136	41,069	90,660	647
13	Job Services to Newell Dr./Museum Rd. via 13th St.	50,228	39,540	18,569	41,775	43,512	34,055	39,505	19,225	19,371	23,321	24,518	39,724	393
15	Downtown to NW 23rd St /NW 6th St.	24,833	22,046	21,036	22,228	22,510	21,343	23,209	24,178	22,852	23,288	20,609	24,007	272
16	Newell Dr /Museum Rd. to Sugar Hill via 16th Ave.	34,847	27,186	14,092	27,837	29,583	25,045	28,525	16,378	16,419	18,894	20,780	35,954	295
1/	Shands to Downtown(Began August 2007)	33,271	25,450	13,921	22,635	23,932	18,455	22,574	11,524	10,822	12,501	16,806	30,160	242
20	Caks Mail to McCarty Hall via 5vv 20th Ave.	100,418 61,976	26,026	35,438	81,748	85,178	04,052	78,000	46,500	40,417	61,U/8 2 000	50,205	115,975	849
24	Downtown to Job Come via SP 24 (Maldo Pd.)	10 0 10	0,020	7.519	40,080	9162	0 165	9,510	7 690	7 160	7 500	7.960	40,010	10/
29	Shands to Cobblestone (Began August 2007)	3 316	2 274	692	2,673	3,102	2 394	2,616		1,000	1,000	1,000	10/172	17
34	Lexington Crossing to the Hub	45 560	32,816	11 4 18	36.879	39,330	29,555	33,967	13 765	14 051	18 2 94	22.678	55.229	353
35	McCarty Hall to Homestead Apartments	76,741	57.513	20,170	59,388	63,149	46.026	54.052	21.001	20.506	23.872	28,453	72,638	543
36	McCarty Hall to SW 34th St /Archer Rd.	19,415	13,433	3,964	15,931	17,708	12,508	13,433	-			4,806	16,474	117
43	SFCC to Downtown via 43rd St.	16,345	12,073	6,850	13,724	14,154	11,522	13,241	10,534	10,556	11,549	12,004	20,428	152
75	Butler Plaza to Oaks Mall via 75th St.	17,272	16,181	16,720	18,934	19,637	18,892	19,196	20,055	19,746	20,613	19,926	21,551	228
300	Later Gator A (Downtown to Reitz Union)	5,815	4,441	2,057	4,602	5,199	3,266	5,415			3,764	4,257	6,517	45
301	Later Gator B (Lexington Cr. to Downtown)	2,956	2,891	1,148	2,021	2,669	1,460	2,732			3,050	2,627	4,568	26
302	Later Gator C (Oaks Mall to Downtown)	3,486	4,280	1,405	3,102	3,310	2,290	3,603			3,631	3,222	5,293	33
305	Later Gator F (Campus Club to Downtown)	1,479	1,547	687	1,064	1,561	984	1,538	0.000	0.074	1,264	1,262	2,433	13
0-408	Sunday Service Rodles(Demonstation Project)	3,282	3,387	4,055	3,/34	3,828	4,334	3,403	2,809	3,671	3,414	4,904	4,581	40
	City totals	855,033	666,946	351,707	711,761	744,033	590,750	674,950	384,638	377,838	451,070	478,604	884,357	7,171
oute	Campus Routes	Passengers	Passengers	Passengers	Passengers	Passengers	Passengers	Passengers	Passengers	Passengers	Passengers	Passengers	Passengers	FY 2008Pa
17	Park-N-Ride 2 (SW 34th St.)	26,413	18,019	5,019	16,337	17,602	12,039	13,909	329			5,785	21,972	137
118	Park-N-Ride 1 (Harn Museum)	94,568	66,289	17,622	70,324	80,379	58,152	67,816	924			14,480	65,431	535
119	Family Housing	8,916	6,578	2,326	7,494	8,485	6,125	7,783	3,319	3,361	7,667	4,709	9,520	76
120	West Circulator (Fraternity Row)	36,238	25,857	7,735	34,352	37,898	27,594	31,968	6,126	6,932	21,259	14,343	41,514	291
121	Commuter Lot	28,046	20,342	7,287	18,239	22,990	18,092	22,932	10,038	12,145	21,615	13,800	32,057	227
122	Lakecide	22,000	0,300	1,390	22 051	0,809	4,718	0,197	1,081	9.057	2,102	1,803	4,313	49
126	Lancoluc LIE EastAMest Circulator (Evening)	8 742	8 3 9 5	2,004	5 9/1	7 200	4 828	6 197	642	703	20,004	4 208	0 882	207
	East Circulator (Sprority Row)	31,858	21.613	6,276	25 665	28 559	20 178	23 401	4 539	4 561	6 961	10 257	32 531	216
127	Lake Mouburg	99	28	27	110	50	164	130	120	10	167	97		1
127 128	Lake waubuly		193,288	56,915	207,475	234,148	166,871	198,444	35,247	37,511	91,418	86,800	249,599	1,833
127 128	Campus totals	275,525	,											
127 128	Campus totals	275,525												

Fiscal Year 2007-08 RTS Ridership by Route The transit service data will also include the following datasets that will be developed during the Model Validation process (Task 4):

- AM Peak Screenline Ridership by route, mode and corridor;
- Midday (off-peak) Screenline Ridership by route, mode and corridor;
- Average Weekday Ridership by route, mode and corridor; and
- Average Weekday Transfer Data for AM Peak and Midday Ridership transferring between modes and between routes of the same mode.

TASK 2.2 MAPPING

TASK 2.2.1 TRAFFIC ANALYSIS ZONE MAP

Traffic Analysis Zones (TAZs) used for the previous Plan Update (2000) were evaluated for use in the Year 2035 Update. An additional 100 TAZs were added as well as other boundary adjustments to reflect changes in land development activity, better reflect driveway access to the highway network, and to account for possible future road connections contemplated in Alachua County's adopted Comprehensive Plan. TAZ boundaries were adjusted as follows:

- The 2000 zones of 131, 230 and 431 were combined into each neighboring 2007 TAZ, as a result of necessary zone boundary shifts. (Therefore, numbers of 131, 230 and 431 are not used in the 2007 model.)
- Year 2007 zones 444, 456 and 466 were newly used in the 2007 TAZ structure, but they were not used in 2000 TAZ structure. (As a note, numbers of 111, 119, 129, 145, 175, 457, 458 and 459 remained unused in 2007 model since they were not used in 2000 model.)
- External zones were renumbered to 600 624 in 2007 TAZ structure. The 2000 model used 500 524 for external stations.

Figure 3 shows both the 2000 and 2007 TAZ structures to highlight changes made.









TASK 2.2.2 HIGHWAY SYSTEM NETWORK MAP

The following figures show various characteristics of the highway network for the 2007 Base Year, including number of lanes (Figure 4), area type (Figure 5), and facility type (Figure 6). These maps have been distributed to agency staff for review and comment.

Figure 4 - Highway System Network: Number of Lanes



Figure 5 - Highway System Network: Area Type



Figure 6 - Highway System Network: Facility Type





TASK 2.2.3 TRANSIT SYSTEM NETWORK MAP

Figure 7 displays the 2007 transit routes provided by RTS for use in model validation and as a base of transit network alternatives to be developed and evaluated in the LRTP.







TASK 2.3 DATA DEVELOPMENT

The Data Development task focused on socioeconomic data for the model and use in preparing the Long Range Transportation Plan. These data were prepared by MTPO and University of Florida staff and are based on the latest available estimates and assumptions for population, land use, travel, employment, congestion, and economic activity. One future land use scenario which represents the most realistic forecast of where people will live and work in Alachua County in the Year 2035 based on City and County adopted Comprehensive Plans is being tested and evaluated for this Plan Update. All of the socioeconomic data for inclusion in the ZDATA files for the modeling portion of the Year 2035 Update are included in the MTPO's report *Year 2035 Livable Community Reinvestment Plan Socio-Economic Report: Base Year 2007 and Forecast Year 2035* (available for download at http://ncfrpc.org/mtpo/sedata.htm). The following section outlines the datasets provided and a status report on the development of any additional data.

TASK 2.3.1 ZDATA1: POPULATION AND HOUSEHOLD DATA

MTPO staff provided population and housing data for each TAZ. The data include the following:

- A. Base year (2007) population and housing data from the 2000 U.S. Census for each TAZ, including:
- Population and number of single-family and multi-family units;
- Auto availability;
- Percentage of vacant single-family and multi-family units; and
- Population and number of single-family and multi-family units occupied by non-permanent residents.
- B. Future year population forecasts from the University of Florida, Bureau of Economic and Business Research (BEBR), interpolated to estimate the Year 2035 study area population. MTPO staff reallocated the Year 2035 data to reflect TAZ adjustments described previously.
- C. Number of hotel/motel units from and associated occupancy rates.
- D. Vacancy rates for single-family and multi-family dwelling units (Year 2000 Census).

TASKS 2.3.2 ZDATA2: EMPLOYMENT AND SCHOOL ENROLLMENT DATA

MTPO staff provided base year (2007) employment data for each TAZ classified by type (service, commercial, industrial). The ZDATA2 dataset also includes the following:

- 1. Parking cost data for City and UF campus TAZs where short-term paid parking and long-term paid parking are available.
- 2. Base Year (2007) public school enrollment from Alachua County School Board and comparable data for private schools within the study area.
- 3. MTPO staff reallocated the 2035 data to reflect TAZ adjustments described previously.

TASK 2.3.3 ZDATA3: SPECIAL GENERATORS

The goal for this model validation effort is to minimize the use of special generators. The special generators used for the previous Year 2025 Plan Update (2000 Base Year) are listed below. At the current time, only Santa Fe College and the Gainesville Regional Airport are included as special generators for the Year 2035 Update. Certain regional parks may be added as necessary once the corridor validation checks are complete. The new model will replicate traffic patterns without use of many special generators, and if the model validation process indicates that more are needed, they will be added.

Table 2 - 2000 Special Generators

Various Group Housing Quarters (8) Various Housing Complexes (3) UF Parking Garages (6) UF Dorms (6) Santa Fe College Oaks Mall Butler Plaza Various Retail Centers (3) Thornbrook

TASK 2.3.4 ZDATA4 AND EETRIPS DATA

ZDATA4 and EETRIPS Data developed for the previous update are being reviewed and updated and will be reported under Tasks 3.1 and 4.1. They have been reviewed and updated to reflect FDOT's Interstate Master Plan Study for the I-75 corridor. These data will be adjusted as necessary during the model validation process to ensure accurate reflection of external trips (outside the county).

TASK 2.4 DESIGNATION OF SCREENLINES

As discussed under Task 2.1.1 above, screenlines and cutlines from the previous Long Range Transportation Plan Update were evaluated for their applicability to the Year 2035 Update and determined to be sufficient for this project. Some adjustment may be made for the SW Archer Road corridor to reflect changing travel patterns in that area, depending on validation steps.

TASK 2.5 TRAFFIC COUNT DATA

As discussed under Task 2.1.2 above, traffic count data and locations were made available by the MTPO to reflect counts taken by various agencies. These data are being reviewed for adequacy, and the counts have been adjusted to average weekday peak season counts, where necessary. Most of the data obtained were already in AADT format. Seasonal adjustment factors for local roads are being reviewed and will be used where appropriate.

TASK 2.6 HIGHWAY AND TRANSIT NETWORKS

TASK 2.6.1 HIGHWAY NETWORK

As discussed under Tasks 2.1.3 and 2.2.2 above, the highway network was developed for the 2007 Base Year.

TASK 2.6.2 TRANSIT NETWORK

As discussed under Tasks 2.1.4 and 2.2.3 above, the transit network was developed for the 2007 Base Year.

TASK 2.7 TRANSIT SERVICE DATA

As discussed under Task 2.1.5 above, the transit service data for Fiscal Year 2008 have been obtained from the Regional Transit System (RTS) for City and University of Florida (UF) campus



routes. The additional required datasets will be developed during the model validation process (Task 4).

TASK 2.8 DATA PROJECTIONS

MTPO staff has provided the socioeconomic data files (ZDATA1 and ZDATA2) for the Year 2035. ZDATA4 and EETRIPS data developed for the previous update are being reviewed and updated and will be reported under Tasks 3 and 4. Refer to the separate MTPO report documenting the development of Year 2035 population and employment projections. The Needs and Cost Feasible Plans will be based on the forecasts, as adjusted to reflect TAZ splits.

TASK 2.9 FINANCIAL RESOURCES

A draft Revenue Forecasts/Projections Analysis has been developed for the Year 2035 Update. The document has been prepared as a stand-alone document and is attached as Appendix A.

LAND USE AND TRANSPORTATION ACCESSIBILITY ANALYSIS

In addition to these required activities outlined in the scope of services, a significant amount of effort in this task entailed data development necessary to perform a land use and transportation accessibility analysis to support the peak oil/climate change factors associated with a preferred Needs Plan for the Year 2035. The first step involved breaking down the entire county into quarter mile grids and reallocating the socioeconomic data to this smaller geography. This was necessary to better understand and evaluate proximity of development to various transportation network characteristics. Data developed included detailed street network layer (Alachua County road centerline file), RTS network and detailed route information, bicycle and pedestrian facilities from City and County sources, MTPO socioeconomic data, existing land use information from the Alachua County Property Appraiser, and future land use from County and City sources. Using this smaller unit of analysis and more detailed network data, it sets the framework to properly assess the relationship of land use and transportation with the following variables:

- Network / intersection density (which is an indicator of safety and mode share in the research literature)
- Proximity to various modes (service and facilities)
- Walkable destinations (civic, institutional, retail, services)
- Land use density and diversity (mix)



These measures have been aggregated to identify a cumulative measure of land use/transportation accessibility for both existing and future year (2035) conditions, and will be instrumental in the development and evaluation of alternative networks and peak oil/climate change factors. This will be further documented in the Needs Plan task.

CONCLUSION

This report documents the data development activities undertaken to prepare for the validation of the 2007 Base Year Gainesville Urbanized Area Transportation Study Model and the development of the Year 2035 Long Range Transportation Plan. The data developed as part of this task will be used in the iterative model validation process in subsequent steps, and some information documented here is subject to change based on agency review and efforts to optimize model performance. These final adjustments will be sufficiently documented in the Model Validation Technical Report and in subsequent tasks associated with the LRTP Update.



APPENDIX A FINANCIAL RESOURCES

YEAR 2035 LONG RANGE TRANSPORTATION PLAN REVENUE FORECASTS/PROJECTIONS

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EXECUTIVE SUMMARY

The purpose of this analysis is to document the financial resources and revenues available for consideration in developing the Cost Feasible element of the Gainesville Metropolitan Transportation Planning Organization's (MTPO's) 2035 Long Range Transportation Plan (LRTP). This memo identifies both committed and potential transportation revenues at the federal, state, and local level, including funding sources dedicated to maintenance and operations activities. To meet federal requirements of the Safe Efficient Accountable Transportation Equity Act –Legacy for Users (SAFETEA-LU), all revenues are expressed in year of expenditure (YOE) dollars to reflect the rate of inflation. The use of YOE dollars may present an appearance of a greater availability of funds, but this is not necessarily the case.

The 2035 LRTP's 22-year total for state and federal revenue sources is \$139.6 million for highways and some transit projects (Flex, Highway, Enhancements), in inflation-adjusted revenues, plus an additional \$74.7 million for only transit, for a total of \$214.3 million, as shown below in Table 1a. These sources are those that have historically been considered by the MTPO during preparation of the LRTP.

(in millions, TOE)										
Capacity Programs	FY 2014- 2015 Subtotal	FY 2016- 2020 Subtotal	FY 2021- 2025 Subtotal	FY 2026- 2030 Subtotal	FY 2031- 2035 Subtotal	22 Year Total				
Flex – Highway or Transit	2.3	7.1	8.1	8.8	9.8	36.1				
Highway	6.0	18.5	20.8	22.4	24.3	92.0				
Enhancement	0.9	2.5	2.6	2.7	2.7	11.5				
Transit	5.6	14.5	16.4	18.3	19.9	74.7				
Total	14.8	42.7	47.9	52.2	56.7	214.3				

Table 1a: State and Federal Program Revenues (in millions, YOE)

Source: Florida Department of Transportation (FDOT), 2009.

Additional state and local revenues available to the MTPO were also identified, in order to better meet the SAFETEA-LU mandate regarding the identification of revenues to support operations and maintenance. For example, fuel tax revenues are historically used for these purposes. Projections for fuel tax receipts in the analyses do not account for conditions associated with "Peak Oil" or other per capita motor fuel consumption reductions, such as large-scale transitions to other modes of transportation. The analyses presented at this time assume per capita consumption will remain at today's level through 2035, and should be considered a Trend scenario for financial resources. Additional analyses will be performed to illustrate different fuel consumption and fuel availability scenarios.

Regarding potential future revenue sources, the analysis includes the implementation of the Charter County Transportation System surtax, maximizing the allowable discretionary local sales surtax, and the implementation of mobility fees, the latter of which are currently under evaluation by Alachua County. Other options, such as public-private partnerships and New Starts/Small Starts transit dollars will be considered as the analysis proceeds.

In addition to the federal and state transit funding sources identified by FDOT, the Gainesville Regional Transit System (RTS) 2009 Transit Development Plan (TDP) identified potential revenue sources for both operating and capital expenditures from local sources, as well as federal and state sources. These local

sources include a developer's agreement with the University of Florida, fare box collections, and employee pass programs.

Transit revenue projections from local sources, and those sources not captured by FDOT revenue projections, used in this analysis are based on the *RTS Transit Development Plan* (2009). The analysis specifically excludes those sources identified as being unfunded, and those identified as originating from federal and state sources, including New Starts and FDOT grants, so as to not overstate potential future revenues.

Potential new local revenue sources were also analyzed, but are not included in the above total. The financial forecasts included within the analysis contain several general assumptions.

• The rate of inflation is assumed to be an average of three percent annually.

Some financial experts feel inflation will rise sharply in the short term, and fall back over time, but the three percent figure is intended to represent an average across the long-term horizon and is consistent with FDOT methodology.

• The rate of increase for funding sources will be tied to population growth.

The population projections are generally estimated by BEBR, and are adjusted slightly to fit the LRTP 2035 socioeconomic data projections used in the transportation model.

• Revenue collections estimated for the current fiscal year provide the basis for future projections.

Although these figures have trended downward over the past couple years, this preliminary analysis projects that all revenues will remain flat (status quo) and only increase at the rate of population growth and according to inflation. Current contributions toward transportation modifications are down statewide due to economic conditions.

Table 1b on the following page presents a summary of the revenue projections for each of the evaluated revenue sources, which include state and federal programs, local transit revenues identified in the RTS *Transit Development Plan* (2009), state and federal-based gas tax revenues, Local Option Fuel Tax revenues, and local impact fees. The sum of each of these sources indicates a potential revenue total just over \$1.11 billion for FY 2014-FY 2035, in YOE dollars.



(<u> </u>		8/			
	FY 2014-	FY 2016-	FY 2021-	FY 2026-	FY 2031-	22 Voor
Revenue Sources	2015	2020	2025	2030	2035	ZZ Tear
	Subtotal	Subtotal	Subtotal	Subtotal	Subtotal	Total
State and Federal Revenues						
Flex - Highway or Transit	2.3	7.1	8.1	8.8	9.8	36.1
Highway	6	18.5	20.8	22.4	24.3	92
Enhancement	0.9	2.5	2.6	2.7	2.7	11.4
Transit	5.6	14.5	16.4	18.3	19.9	74.7
Total State and Federal Programs	14.8	42.7	47.9	52.2	56.7	214.3
Constitutional Fuel Tax Revenues (2 cent)	4.2	10.8	11.3	11.8	12.0	50.2
County Fuel Tax Revenues (1 cent)	1.8	4.8	5.0	5.2	5.3	22.1
Municipal Fuel Tax, from Revenue Sharing (1 cent)	2.6	6.6	7.0	7.3	7.4	30.8
State-Distributed Fuel Tax Revenues	8.6	22.2	23.3	24.3	24.7	103.2
TOTAL STATE / FEDERAL REVENUES FROM WITHIN URBANIZED AREA	23.4	64.9	71.2	76.5	81.4	317.5
Existing Local Revenue Sources						
Ninth Cent Fuel Tax	1.9	4.9	5.2	5.4	5.5	22.9
Local Option 6-Cent Fuel Tax - Unincorporated portion of Urbanized Area	4.5	11.7	12.3	12.8	13.0	54.3
Local Option 5-Cent Fuel Tax- Unincorporated portion of Urbanized Area	3.3	8.6	9.0	9.4	9.5	40.0
Gas Tax Revenue Bond Payment Contributions, Series 2006*	(1.6)	(4.1)	(0.8)	0.0	0.0	0.0
Gas Tax Revenue Bond Payments, Series 2008~	(2.1)	(5.1)	(2.0)	0.0	0.0	0.0
Unincorp. Alachua County portion of Local Option Fuel Tax in Urbanized Area	4.2	11.2	18.5	22.2	22.5	78.5
Local Option 6-Cent Fuel Tax - City of Gainesville portion	5.6	14.5	15.3	15.9	16.2	67.6
Local Option 5-Cent Fuel Tax - City of Gainesville portion	4.1	10.7	11.2	11.7	11.9	49.7
City of Gainesville portion of Local Option Fuel Tax in Urbanized Area	9.7	25.2	26.5	27.7	28.1	117.3
Total Local Option Fuel Tax Revenues within Urbanized Area	15.8	41.3	50.1	55.2	56.1	218.6
Alachua County Urbanized Area Impact Fees	1.5	4.3	5.3	6.4	7.5	25.0
City, County, and Other Local Capital and Operational Transit Revenues	35.1	98.4	114.5	138.5	163.1	549.6
TOTAL EXISTING LOCAL REVENUE SOURCES FROM WITHIN URBANIZED AREA	52.5	144.1	169.9	200.0	226.7	793.2
GRAND TOTAL REVENUE SOURCES WITHIN MTPO URBANIZED AREA	75.9	209.0	241.1	276.6	308.1	1,110.6
Potential New Local Revenue Sources						
County-wide Sales Tax = 0.5% for Infrastructure	27.6	79.4	96.5	116.6	137.4	457.5
County-wide Sales Tax = 1% for Infrastructure	55.2	158.8	192.9	233.3	274.8	915.0
Charter County Transportation System Surtax (Up to 1%)	54.5	156.7	190.4	230.2	271.1	902.8
Funds Available for District 2 Projects						
District 2 TRIP Funds	30.4	67.1	64.9	64.9	64.9	292.3
Funds Available for New Transit Starts						
Statewide New Starts Funds	150.0	291.7	270.9	270.9	270.9	1.254.3

Table 1b – Projected Revenues through 2035 (in millions, YOE; Totals may vary due to rounding)

REVENUE FORECAST/PROJECTION METHODOLOGIES

Change in Dollar Value and Representation

In order to comply with SAFETEA-LU requirements, and increase the potential for more accurate dollar value forecasts, each LRTP must now calculate its revenues and expenditures in year of expenditure (YOE) values. Each year, an inflation factor is applied to potential revenues. The practice figures in the likely spending power of a particular amount of money for a given year, or over a period of time. The result is a presentation of values that appear much larger relative to past LRTP revenue projections and totals.

Note the available revenues for total state and federal programs for 2035 and 2025 in Table 2 below. The 2035 LRTP's 22-year total for state and federal revenue sources is \$139.6 million for highways and some transit projects (Flex, Highway, Enhancements), in inflation-adjusted revenues, plus an additional \$74.7 million for transit. When that total of \$214.3 million is adjusted down into 2005 dollar values, it becomes equal to \$159.5 million, or \$7.2 million annually. This provides a basis for comparison with the total 2025 LRTP projection of \$74.5 million (highway and transit), or \$5.0 million annually from those state and federal sources. By directly comparing these average annual total revenues between the two LRTPs, which take into account both inflation and the number of years in their respective projection horizons, the difference in state and federal revenues is found to be \$2.2 million annually. This comparison is presented in Table 2.

Capacity Programs	2035 (YOE) 22 Year Total	2035 (2005 \$s) 22 Year Total	2025 (2005 \$s) 15 Year Total
Flex – Highway or Transit	36.1	26.9	N/A
Highway 1	92.0	68.5	38.5
Enhancement	11.5	8.5	5.6
Sub-Total	139.6	103.8	44.1
Transit	74.7	55.6	30.4
TOTAL CAPACITY PROGRAMS	214.3	159.5	74.5
Average Annual Total Revenue	9.7	7.2	5.0

Table 2: Comparison of Revenue Totals, 2035 vs. 2025

1: Other Arterial Construction/ROW in 2025 LRTP

Note: SIS Highways/FIHS Construction/ROW not funded in either 2025 or 2035 LRTP

Although the comparison shows a substantial increase in available revenue from total state and federal programs between the 2025 LRTP and the 2035 LRTP, the use of YOE dollars, and a different number of years in the time horizon lends the appearance of even larger available revenue streams for the 2035 update.

Population Projections

The basis for all revenue assumptions in this analysis are the population projections for the Gainesville urbanized area. Using BEBR projections from the *Alachua County Evaluation and Appraisal Report* (EAR) draft from August 2009, the County population projections through 2035, in five-year intervals, were obtained. The LRTP model only provides the population of the base year and for the final year of the time horizon. In order to link the two projections, the last five years of the time horizon use a different rate of growth, so

the end-year projections become consistent. The disparity in the two projections was not spread over a larger time frame, because the last years of a time horizon are the ones most subject to uncertainty. A full description of the population projection methodology can be found in Appendix A.

State/Federal Revenue Sources

There are several sources of revenue for use by local governments on transportation strategies that originate at the state level. Funds identified by FDOT are generally pass-through revenues allocated from the federal government. These are identified below as "capacity programs," and are intended for specific uses. The other source of state-determined revenue comes from three types of fuel taxes. Each of these revenue sources, and their sub-sets, is described in further detail below. Table 3 identifies the funding types that are available from the state and federal government.

		6 71
Funding Type	Source	Uses
SIS	State/Federal	SIS facilities (corridors, connectors and hubs)
Flex – Highway or Transit; Highway (Other Arterials) ¹	State/Federal	Non-SIS/FIHS state highway system roadways, or eligible transit projects
Transit State/Federa		Technical , operating or capital assistance for transit, paratransit, or rideshare
Enhancement	Federal	Non-capacity improvements
TRIP	State/Local (match)	Regionally significant facilities

Table 3: State and Federal Sources and Uses for FDOT-Identified Funding Types

¹ Gainesville MTPO has "Other Arterials" separated into two sub-sets.

The Gainesville MTPO receives its share of the above revenues based on a series of formulas tied to population and gas-tax receipts. Table 4 below provides revenue projections of state and federal sources available to the MTPO as provided in the 2035 Revenue Forecast Handbook (May 2008, 2010 update) prepared by the Florida Department of Transportation. The Flex – Highway or Transit, and Highway categories are subsets of what has formerly been called Other Arterials. These revenues can be applied to non-FIHS/SIS State Highway System roadways for capacity and non-capacity programs, or to eligible transit projects for the Flex category. Transit revenues may be used for technical and operating/capital assistance for transit, paratransit, and rideshare programs. The Enhancement funds in the table are used for locally defined projects providing enhancements, typically for bicycle and pedestrian projects.

Table 4: State and Federal Program Revenues (in millions, YOE)

Capacity Programs	FY 2014- 2015 Subtotal	FY 2016- 2020 Subtotal	FY 2021- 2025 Subtotal	FY 2026- 2030 Subtotal	FY 2031- 2035 Subtotal	22 Year Total					
Flex – Highway or Transit 1	2.3	7.1	8.1	8.8	9.8	36.1					
Highway 1	6.0	18.5	20.8	22.4	24.3	92.0					
Enhancement	0.9	2.5	2.6	2.7	2.7	11.5					
Subtotal Roadway Programs	9.2	28.2	31.5	33.9	36.8	139.6					
Transit	5.6	14.5	16.4	18.3	19.9	74.7					
Total Capacity Programs	14.8	42.7	47.9	52.2	56.7	214.3					

Source: FDOT, 2010

¹Other Arterial Construction/ROW in 2025 LRTP

Note: SIS Highways not funded in 2035 LRTP

The state continues to place an emphasis on allocating revenues to the Strategic Intermodal System (SIS) facilities. SIS facilities in Alachua County that are eligible for SIS funding include:



- Interstate-75 (SR 93)
- Newberry Road (SR 26) West of I-75
- Williston Road (SR 331) From W. University Avenue to I-75
- Hawthorne Road (SR 20) East of Waldo Road (SR 24)
- NW 39th Avenue (SR222) I-75 to Airport Entrance
- NE 23rd Avenue (SR 120) From SR 24 to SR 120 to Greyhound Terminal Entrance
- US 301/SR 200 Countywide

In addition to the SIS facilities listed above, the Gainesville Regional Airport and the Gainesville Greyhound Intercity Bus Terminal are identified as Emerging SIS Hubs. This designation implies an increase in regional and statewide importance of these transportation hubs in the future.

There are two other pools of revenue the State of Florida may allocate to projects located within the MTPO. In addition to funds specifically dedicated to the Gainesville MTPO, the state also allocates funds from the Transportation Regional Incentive Program (TRIP) and New Starts/Small starts for transit. *TRIP* funds apply to modifications on facilities designated as regionally significant, and funds are allocated within each FDOT District based on regional project prioritization processes. The MTPO has entered into a TRIP agreement with Marion County, and is eligible for funding of regionally significant projects, should funding be available. The state also receives federal funding for new transit programs. These *New Starts/Small Starts* are available to transit agencies statewide, and are described further in the "Transit Revenues" section below. Table 5 outlines the available state and federal sources and the potential uses of the funds. The *TRIP* funds and *New Starts/Small Starts* are not included in the totals in Table 4 above, due to their discretionary nature.

Revenue Sources	FY 2014- 2015 Subtotal	FY 2016- 2020 Subtotal	FY 2021- 2025 Subtotal	FY 2026- 2030 Subtotal	FY 2031- 2035 Subtotal	22 Year Total			
Funds Available for District 2 Projects									
District 2 TRIP Funds	30.4	67.1	64.9	64.9	64.9	292.3			
Funds Available for New Transit Starts									
Statewide New Starts Funds	150.0	291.7	270.9	270.9	270.9	1,254.3			

Table 5: Discretionary State/Federal Revenue Sources (in millions, YOE)

State Fuel Taxes

There are three types of fuel taxes collected at the state level that are allocated to local governments. These taxes are not part of the local option taxes, and are collected for every gallon of fuel sold in the state. For each gallon of motor fuel sold, the Constitutional Fuel Tax yields two cents per gallon, and the County Fuel Tax yields one cent per gallon. The Municipal Fuel Tax is a one-cent per gallon tax, and each municipality may dedicate a percentage of their Municipal Revenue Sharing Program funds for certain types of transportation projects. Alachua County's estimated revenues from this source were collected from the *Local Government Financial Information Handbook* for each of the years from 2004-2009 (FY05-FY10). Generally, per capita values have decreased over the five-year period and are assumed for these analyses to

remain fixed at today's (FY10) value. The section below describes the methodology and assumptions used to project the revenues for each of these state-mandated gas taxes, and Table 6 displays the projected revenues from these sources.

Constitutional Fuel Tax

This revenue source is based on a 2-cent per gallon tax on fuel sales, and may be used for the acquisition, construction, and maintenance of roads. Each county is eligible for revenues, based on the county's fuel receipts, the county's population, the county's land area, and a distribution factor. The annual estimates for 2004-2009 revenues were used to calculate a per capita revenue value, and the per capita value of the last year of the series became the base year for the projections. To determine the value of the revenues collected within the MTPO's geographic bounds, the per capita value of the County's revenues was applied to the population of the urbanized area. This population-based area revenue was then projected to the end-year (2035) using population growth as the upward trend.

County Fuel Tax

The County Fuel Tax was calculated using the same methodology as the Constitutional Fuel Tax. The County Fuel Tax may be used for the acquisition of rights-of-way; the construction, reconstruction, operation, maintenance, and repair of transportation facilities, roads, bridges, bicycle paths, and pedestrian pathways; or to reduce bond indebtedness incurred for transportation purposes. The legislative intent for this tax is to reduce the burden of county ad valorem taxes.

Municipal Fuel Tax

This tax is a one-cent per gallon tax on motor fuel sold within the state's municipalities, and is collected within the Municipal Revenue Sharing Program trust fund. Each municipality's share of funds is calculated based on an adjusted municipal population, municipal sales tax collections, and a municipality's relative ability to raise revenue. Only the City of Gainesville's revenue from this source is included in the analysis.

As with the Constitutional and County fuel taxes, the 2009 Local Government Financial Information Handbook provided estimates for the total annual revenue from the trust fund. The Municipal Fuel Tax's portion of this fund is based on an annual assumed percentage, which varies each year and represents the minimum value of funds available for transportation projects. Municipal Fuel Tax revenues may be used for the purchase of transportation facilities and road and street rights-of-way; construction, reconstruction, and maintenance of roads, streets, bicycle paths, and pedestrian pathways; adjustment of city-owned utilities as required by road and street construction; and construction, reconstruction, transportation-related public safety activities, maintenance, and operation of transportation facilities.

The analysis used the identified percentages to determine a per capita (based on city population) annual value of the revenues. The per capita value of the estimated FY2010 Municipal Fuel Tax's share of the Municipal Revenue Sharing Program trust fund was used as the base value from which the projections through 2035 were calculated, based on the City of Gainesville's population. The projections were based on the City's population growth.

Table 6: State Distributed Fuel Tax Revenues

Revenue Sources	FY 2014- 2015 Subtotal	FY 2016- 2020 Subtotal	FY 2021- 2025 Subtotal	FY 2026- 2030 Subtotal	FY 2031- 2035 Subtotal	22 Year Total
Constitutional Fuel Tax Revenues (2-cent)	4.2	10.8	11.3	11.8	12.0	50.2
County Fuel Tax Revenues (1-cent)	1.8	4.8	5.0	5.2	5.3	22.1
Municipal Fuel Tax, from Revenue Sharing (1-cent)	2.6	6.6	7.0	7.3	7.4	30.8
State-Distributed Fuel Tax Revenues	8.6	22.2	23.3	24.3	24.7	103.2

.11.

NOD

Projections for fuel tax receipts in the above analysis, do not account for conditions associated with "Peak Oil" or other per capita fuel consumption reductions, such as large-scale transitions to other modes of transportation. The analyses presented at this time assume motor fuel consumption will remain at today's level through 2035.

Existing Local Revenue Sources

The Florida Statutes provides the opportunity for local governments to impose taxes and fees in order to raise funds for specific public purposes. One of the means by which local governments are able to raise funds for transportation projects is through the implementation of local option fuel taxes. There are several optional fuel taxes that counties are permitted to levy per each gallon of fuel sold within their jurisdictional boundary. These taxes must be approved by the county governing body, or by voter approval in a countywide referendum. Alachua County currently uses the maximum rate of local optional fuel taxes available. Each of these is shown in Table 7 below.

Local Option Gas Taxes

All Florida counties have the option to raise additional revenues by augmenting the state's taxes on highway fuels, discussed above. Local governments are authorized to collect an additional 12 cents (ninth-cent fuel tax and maximum local option fuel taxes) per gallon, which may be spent on local or state transportation projects.

Six-cent and Five-cent Local Option Fuel Taxes

These are two separate local fuel taxing options that are collected and distributed in the same manner. The 6-cent Fuel Tax is levied at a rate of six cents for each gallon of fuel, both regular and diesel, sold within the County. The 5-cent Fuel Tax is not applied to diesel fuel, and was not instated in Alachua County until 2008. These two types of taxes may be used for general transportation expenditures, and the 5-cent tax may also be used for transportation expenditures needed to meet the requirements of the capital improvement element of an adopted local government comprehensive plan.

The collected tax revenues are distributed to each local government in a county using a set of established percentages. The percentages are based on county expenditures of transportation funds within each jurisdiction. Alachua County and the City of Gainesville receive the lion's share of the available revenues from these sources, 52.15 percent and 38.635 percent respectively, for a total of 90.785 percent for each

of the two types of fuel taxes. The percentages are determined one of two ways: a) established percentages are recalculated every 10 years, and depend on actual spending over the previous five years; or b) percentages are set through an interlocal agreement. In Alachua County, the percentages are determined through an interlocal agreement.

The projected revenues for each of these two fuel taxes used the same methodology. The *Local Government Financial Information Handbook* provided estimated revenues for both the City of Gainesville and for the unincorporated portion of Alachua County. Using existing population figures for these two jurisdictions, per capita values for the revenues collected within the urbanized area were calculated, and applied to the population projections for the City of Gainesville and for the unincorporated Alachua County portion of the urbanized area. The two geographies were kept separate in order to demonstrate the effect Alachua County's Transportation Bonds have on the availability of local option fuel taxes within that jurisdiction. Additional discussion of the bonds is provided below.

Ninth Cent Fuel Tax

This tax is collected on both regular and diesel fuel, and is used to fund transportation expenditures. Applied at a rate of one-cent per gallon, the County does not share the Ninth Cent Fuel Tax with the municipalities within its jurisdiction. The projection methodology, therefore, is more similar to that used for the Constitutional Fuel Tax than for the other local optional fuel taxes. The estimated tax receipts, applied on a per capita basis, from the *2009 Local Government Financial Information Handbook* was used as the base for the annual projections. The resultant per capita value was then applied to the population projections for the urbanized area, resulting in annual revenues for the urbanized area.

Gas Tax Revenue Bonds

Alachua County has issued two bond series to raise money for transportation projects. The 2006 series will mature in 2021, and the 2008 series will mature in 2022. Until these bonds mature, a portion of the County's collected local option fuel taxes will be used to pay the bondholders. The County's debt service is paid through receipts from the 5-cent, 6-cent, 7th-cent (state-funded County Fuel Tax), and Ninth Cent fuel taxes.

Alachua County's debt service for its transportation bonds does not use tax revenues from the City of Gainesville, or any other local government. In order to calculate the impact of the bonds on future gas tax revenues, the revenues were isolated according to the collecting jurisdiction within the urbanized area. The fuel taxes collected countywide (County Fuel Tax, Ninth Cent Fuel Tax) were distributed on a per capita basis, using the County's overall population. The fuel taxes collected within the urbanized area, distributed specifically to the City of Gainesville and unincorporated Alachua County, have been separated by local government (6-cent and 5-cent taxes) within the urbanized area.

Annual bond series payments for each bond are only available through FY 2014. The remaining bond indebtedness was calculated as a yearly average of the remaining principal and interest, and is ultimately subtracted from the County's local revenue sources in Table 7. The table presents the per capita debt service contributed by the residents of unincorporated Alachua County living within the urbanized area.

Impact Fees/Assessments

Impact fees are assessed on new development projects to provide funding for infrastructure needed to offset the impacts of new development. The Alachua County Transportation Impact Fee Amendment (Ordinance 07-23, adopted 10/30/2007), indicates that fees were to rise by 33 percent from 2008 to 2009, and 33 percent from 2009 to 2010. On January 1, 2010 and annually thereafter, the ordinance mandates the fees be adjusted to keep pace with inflation. The projections take the identified increases into account, and assume the fees will not otherwise be raised during the planning period. As with all other portions of this analysis, the inflation rate is assumed to be held at a constant three percent annual increase.

Within the Gainesville Urbanized Area, only Alachua County collects impact fees. The City of Gainesville does not collect impact fees, in order to encourage annexation into the municipal limits. To project future impact fee collections, and maintain a rational basis for the estimates, the current rate of collections for all transportation-related impact fees collected in the county was calculated on a per capita basis. This per capita calculation was then applied to the population projections for the urbanized area located ONLY within unincorporated Alachua County. As with the projections for the fuel taxes, the methodology assumes that population growth will drive (and be tied to) development and the collection of impact fees.

Although not reflected independently in Table 7 below, the University of Florida maintains a development agreement with the City and the County in which the University promises to pay its fair share to mitigate off campus transportation system congestion. The University has agreed to roadway modifications including intersection modifications, new road connections, acquisition of right-of-way and construction of new roadways, as well as their fair-share of funding for a county-wide traffic management system. These contributions are in addition to the agreed upon contributions for transit, and for bicycle and pedestrian modifications. The current agreement was signed in 2006, and continues through FY 2010. Updates to agreements such as this have regularly occurred since 1998, and are expected to continue in the future.

Revenue Sources	FY 2014- 2015 Subtotal	FY 2016- 2020 Subtotal	FY 2021- 2025 Subtotal	FY 2026- 2030 Subtotal	FY 2031- 2035 Subtotal	22 Year Total
Ninth Cent Fuel Tax	1.9	4.9	5.2	5.4	5.5	22.9
Local Option 6-Cent Fuel Tax - Unincorporated portion of Urbanized Area	4.5	11.7	12.3	12.8	13.0	54.3
Local Option 5-Cent Fuel Tax- Unincorporated portion of Urbanized Area	3.3	8.6	9.0	9.4	9.5	40.0
Gas Tax Revenue Bond Payment Contributions, Series 2006*	(1.6)	(4.1)	(0.8)	0.0	0.0	0.0
Gas Tax Revenue Bond Payments, Series 2008~	(2.1)	(5.1)	(2.0)	0.0	0.0	0.0
Unincorp. Alachua County portion of Local Option Fuel Tax in Urbanized Area	4.2	11.2	18.5	22.2	22.5	78.5
Local Option 6-Cent Fuel Tax - City of Gainesville portion	5.6	14.5	15.3	15.9	16.2	67.6
Local Option 5-Cent Fuel Tax - City of Gainesville portion	4.1	10.7	11.2	11.7	11.9	49.7
City of Gainesville portion of Local Option Fuel Tax in Urbanized Area	9.7	25.2	26.5	27.7	28.1	117.3
Total Local Option Fuel Tax Revenues within Urbanized Area	15.8	41.3	50.1	55.2	56.1	218.6
Alachua County Urbanized Area Impact Fees	1.5	4.3	5.3	6.4	7.5	25.0
TOTAL LOCAL OPTION FUEL TAX, IMPACT FEE REVENUES	17.3	45.7	55.4	61.6	63.6	243.6

Table 7: Existing Local Revenue Sources (in millions, YOF)

*Matures in 2021; Unincorporated Alachua County within Urbanized Area portion only

 ${\sim}\textit{Matures}$ in 2022; Unincorporated Alachua County within Urbanized Area portion only

The projected revenue totals in Table 7 above do not necessarily provide an accurate representation of available funding. As noted above in the discussion of bonds and debt service, according to staff at Alachua County, just over half (50.74 percent in 2009) of the annual collected local fuel taxes are allocated toward debt service of the transportation bonds, and the remaining revenues are dedicated to operations expenditures. This only leaves the County's portion of the Constitutional fuel tax, and the municipal fuel tax for use on new projects until the bonds are repaid. Additional bonds may be issued in the future, however.

Projections for fuel tax receipts in the above analysis also do not account for conditions associated with "Peak Oil" or other per capita fuel consumption reductions, such as large-scale transitions to other modes of transportation. The analyses presented at this time assume motor fuel consumption will remain at today's level through 2035. Additional analyses will be performed to illustrate different fuel consumption and fuel availability scenarios.

Transit Revenues

In addition to the projections of state and federal sources available to the MTPO, as provided in the 2035 *Revenue Forecast Handbook (May 2008)* prepared by the Florida Department of Transportation, the Gainesville Regional Transit System (RTS) *Transit Development Plan* (TDP) includes a 10-year projection of capital and operating revenues that lists all anticipated revenue sources. A City department, RTS provides transit service to the City and limited service to unincorporated portions of the urbanized area. RTS receives both operating and capital revenues from federal, state, and local sources. Operating revenues include agreements with the University of Florida, Santa Fe College, fare box collections, employee pass programs, and FDOT Block and Commuter Assistance Grants, along with transportation disadvantaged equipment and planning grants. Non-operating revenues include federal capital assistance and grant funds from the New Freedom and Job Access Reverse Commute programs.

One funding source for transit projects is the Federal Transit Administration's *Small Starts / New Starts* program. This program supports locally planned, implemented, and operated major transit capital investments, such as new, and extensions to, existing fixed guideway transit systems, including commuter rail, light rail, heavy rail, bus rapid transit, and streetcars. The state is allocated funds for these types of projects (Table 5), which are selected for funding based on a set of evaluation criteria and feasibility of the required committed local match. A project that receives *Small Starts / New Starts* funding is eligible for federal funding of up to 50 percent of project costs, with state funding providing up to an additional 25 percent. Small Starts funding is allocated to projects with a maximum cost of \$250 million, with no more than \$75 million in funding from FTA, and requires at least a 20 percent local match.

The list of operating and capital revenues contained within the TDP provides estimates through FY 2019, and includes unfunded programs and grants in the calculations. This analysis only included those sources identified as being "funded". RTS assumes a portion of the identified capital revenues will be provided through the New Starts program, and those revenue assumptions were not included in the analysis. All other federal and state revenue assumptions in the TDP, for both the capital and operating categories, were also not included in the analysis, in order to reduce the likelihood of double-counting potential federal and state revenues. Transit figures from the *2035 Revenue Forecast Handbook* were used instead. Additionally, the TDP estimates for FY 2010-FY 2019 assume a 2.5 percent rate of inflation, instead of three percent, and their assumptions for that time period are used in this analysis.

Projections to 2035 were estimated by dividing the TDP-estimated revenue (FY 2010-FY 2019) from local sources by the population of the urbanized area to obtain a per capita revenue value for those years. Based on the TDP's projections, the top revenue source is the University of Florida, followed by existing City and County operating funds, farebox revenues, and anticipated contributions from Santa Fe College.

From FY 2020 through FY 2035, the annual increase in revenue was tied to the increase in population and the three percent rate of inflation (starting in 2020). To project revenues for FY 2020-FY 2035, the five-year average for per capita revenues for FY 2015-FY 2019 was set as the base per capita value from which to calculate annual inflation-adjusted values. These were in turn applied to the population projections of the urbanized area to yield annual transit revenues. The individual local sources were projected as an aggregation for fiscal years 2020-2035, in order to reduce the possible cumulative effect of forecast overestimation. Table 8 below identifies the revenue projections for transit operations and capital revenues through 2035.

Revenue Sources	FY 2014- 2015 Subtotal	FY 2016- 2020 Subtotal	FY 2021- 2025 Subtotal	FY 2026- 2030 Subtotal	FY 2031- 2035 Subtotal	22 Year Total
Transit Revenues	35.1	98.4	114.5	138.5	163.1	549.6

Table 8: City, County, and Other Local Transit Revenue Projections (in millions, YOE)

Source: RTS TDP, 2009.

Revenue projections for the transit component of the LRTP were taken from FDOT projections, and supplemented by the RTS TDP (2009), and excluded sources identified as being unfunded, or those identified in the TDP as originating from federal or state sources. These exclusions reduced the potential for double-counting revenues, but coordination with RTS will be required to ensure transit's share of revenue potential is not overstated in the LRTP.

Potential New Local Revenue Sources

Given the above-stated volatility of gas prices and long term revenue tied to fuel consumption, initiatives are currently underway to re-evaluate fuel tax revenues, and consider alternatives to consumption-based taxes.

Mobility Fees

With the passage of Senate Bill 360 (2009-096, Laws of Florida), mobility fees may be another source of potential local revenue. These revenues are above and beyond credits granted for impact fees or proportionate fair share payments, and would likely be based on vehicle miles traveled (VMT) or some other measure with at least an indirect association to urban sprawl. Alachua County is currently engaged in the development of a theoretical, pilot mobility fee calculation methodology that would be imposed on new development within the County. Refinements to the pilot methodology are currently being considered, and implementation has not yet begun.

City of Gainesville Impact Fees

As noted above, the City of Gainesville does not currently collect impact fees on development located within the incorporated city limits, in order to encourage development in the City, instead of in unincorporated Alachua County. Should the City determine that the value of any potential impact or mobility fees is greater than encouraging development within the city limits, it could institute its own schedule of local fees to raise additional revenues.

County-wide Discretionary Sales Surtax

Alachua County currently imposes an additional 0.5 percent sales tax on goods and services, above the six percent standard sales tax, as a revenue stream for local government infrastructure. Fees collected may be used to finance, plan, and construct infrastructure, which includes transportation infrastructure (and now also land purchases for affordable housing). It may also be used to purchase land for public recreation, conservation, or protection of natural resources. The latter of these is the intended use for the existing 0.5



percent sales tax, which was approved by voter referendum in 2008, effective between January 1, 2009 and December 31, 2010.

The County is eligible for an additional 0.5 percent surtax until December 31, 2010, when the existing surtax expires, or a one percent total discretionary sales surtax as of January 1, 2011. In order to levy the additional surtax, an ordinance must be enacted by the County Commission and approved by voters in a countywide referendum. Projection estimates for this surtax, both at 0.5 percent and one percent, were calculated based on the *Local Government Financial Information Handbook*'s determination of potential utilization of a one-percent surtax. Like the methodology for the 6-cent and 5-cent local option fuel taxes, the collected tax receipts were distributed to each unit of local government in the County according to a predetermined formula. Those proportions yielded revenues for the City and the unincorporated County, which were then summed and applied to the population of the urbanized area. An inflation rate of three percent was applied to the annual totals. The 0.5 percent surtax was calculated by halving the results of the one-percent calculations.

Charter County Transportation System Surtax

The State of Florida authorizes Charter Counties to levy up to an additional one percent surtax specifically for transportation purposes. Only two counties currently employ this surtax, and then only at 0.5 percent each. The analysis for the Gainesville MTPO used the maximum available surtax (one percent). Unlike the discretionary sales surtax described above, this tax is independent of the cap on optional taxes, outlined in Section 212.055(1), F.S. The Charter County Transportation System surtax is subject to a charter amendment approved by a majority vote of the county's electorate. Generally, the tax receipts are used for the development, construction, operation, and maintenance of fixed guideway rapid transit systems, bus systems, and roads and bridges.

Calculations for revenue projections were based on the *Local Government Financial Information Handbook*'s determination of potential utilization of a one-percent surtax applied and collected countywide, with no distributive percentages to each unit of local government within the County. Therefore, per capita revenues were based on the population of the entire County, applied to the population projections for the urbanized area.

Revenue Sources	FY 2014- 2015 Subtotal	FY 2016- 2020 Subtotal	FY 2021- 2025 Subtotal	FY 2026- 2030 Subtotal	FY 2031- 2035 Subtotal	22 Year Total
County-wide Sales Tax = 0.5% for Infrastructure	27.6	79.4	96.5	116.6	137.4	457.5
County-wide Sales Tax = 1% for Infrastructure	55.2	158.8	192.9	233.3	274.8	915.0
Charter County Transportation System Surtax (Up to 1%)	54.5	156.7	190.4	230.2	271.1	902.8

Table 8: Potential New Local Revenue Sources(in millions, year of expenditure)

Other Local Sources

Another source of locally generated funds is municipal service taxing (or benefit) units (MSTU). These sources represent direct revenues to fund infrastructure for identified projects within a specified area, potentially covering both capital and operations/maintenance costs. No revenues from MSTUs are included in the projections provided in this analysis. MSTU revenues may be included at a later time as projects are identified as part of the Cost Feasible element of the LRTP.

Other local revenue sources available for transportation modifications or maintenance and operations activities include grants, proportionate fair share contributions, ad valorem or general revenues, and tax increment financing or other Community Redevelopment Area sources. The current climate of reduced local revenues makes forecasting the availability of these resources difficult; these resources are already being tapped to their maximums. As such, these sources are not included in the projections at this time.

SUMMARY

The above analysis documents the financial resources and revenues available for consideration in developing the Cost Feasible element of the MTPO's 2035 LRTP, and includes revenue projections for each identified source. Potential new local revenue sources were also analyzed, including the implementation of the Charter County Transportation System surtax, maximizing the allowable discretionary local sales surtax, and the implementation of mobility fees, the latter of which are currently under evaluation by Alachua County.

This preliminary analysis represents a continuation of the status quo for all revenue sources, and projects that all revenues will increase only according to the rate of population growth and according to inflation. These estimates assume that impact fees will continue to be collected, and at the same rate as during the past five years, and that fuel taxes will continue to provide a steady stream of revenues. Local gas tax and impact fee revenues are included in this analysis even though these revenues are dedicated for operations, maintenance, and management activities, because SAFTETEA-LU places a greater emphasis on demonstrating continuation of facilities and operations and maintenance. These components will be more prominent in this LRTP update than in the past.

One item to note is that the University of Florida may not provide future funding in the quantities it has in the past. The University receives its funding for local transportation projects from the Department of

Education as a pass-through, and this source may become limited over time. The University's contributions will continue to have positive impacts, but may not be able to continue off-setting the cost of needed roadway modifications. The developer's agreement between the City, the County, and the University does, however, include a requirement to "*at a minimum*" (italics in original) maintain the transit level of service within the urbanized area.

The total estimated revenue over the planning period is projected to be approximately \$1.11 billion. This figure is optimistic, based on the current economic conditions and a general and statewide decline in contributions toward transportation modifications. Additionally, projections used for fuel tax receipts in the analyses also do not account for conditions associated with "Peak Oil" or other per capita motor fuel consumption reductions, such as large-scale transitions to modes of transportation not powered by gasoline or other motor fuels, or VMT reductions based on land use development patterns. The analyses presented at this time assume per capita consumption will remain at today's level through 2035, and should be considered a Trend scenario for financial resources. Additional analyses will be performed to illustrate different revenue availability scenarios.



APPENDIX A

Population Projection Methodology

In order to determine annual population projections for Alachua County from the five-year intervals provided by BEBR, the rate of change for each five-year period was calculated and divided by five to yield an average annual rate of change for that five-year period. The annual rates of change were applied to the population of the first year in the five year series to yield interim population values. As noted above, the last five-year period (2030-2035) used a BEBR-projected 2030 value and a model-projected 2035 value. The model assumed a lower overall rate of growth for the entire 25 year time period, but this lower rate is only represented in the last five year period where the rate of growth is closer to one percent, rather than the approximately five to six percent the other five-year periods display.

Because the County is larger than the MTPO's boundary of the Gainesville Urbanized Area, a methodology for projecting the population of that smaller geography was established. Historic populations of the urbanized area available from FDOT, and BEBR figures for the City of Gainesville were used to establish trends from 2000-2008. This step was included in order to determine historic per capita "contributions" for each revenue source in the analysis. They also provided proportional trends that could be used as a basis for comparison to the proportions determined by the LRTP model outputs.

The socioeconomic data developed for the LRTP model provided the base year (2007) population and the end-year (2035) population projection for the urbanized area. The model also provided the end-year projection for the City of Gainesville, while BEBR provided the base year population for the City (2008). These population figures for the urbanized area and the City were compared to the County's population projections in order to determine the population proportions of both geographies to the County. Using a straight-line trend analysis, the slope of the line created by plotting the base and end years was applied to the County's annual population projections to yield annual proportions for the City and for the urbanized area. Over time the trend displays a negative slope, since the County assumes an increase in the population base outside of the urbanized area over time. This trend is displayed in Figure A below.



The differences between these two proportions were used to determine the population proportion of unincorporated Alachua County within the Gainesville urbanized area to the entire County. Each of the proportional trends was then applied to the annual Alachua County projections in order to determine annual population projections for:

- Gainesville Urbanized Area;
- City of Gainesville; and
- unincorporated Alachua County lands within the urbanized area.

These annual projections were the basis for all revenue source projections in the analysis. Table A below displays the projections for these areas, in five-year intervals.

Table A: Population Projections for Selected Geographies in Alachua County,
in Five-Year Intervals

Place	2010	2015	2020	2025	2030	2035
Gainesville Urbanized Area	189,715	198,713	208,873	218,574	227,533	227,777
City of Gainesville	125,935	132,018	138,886	145,461	151,555	151,852
Unincorporated Alachua County within Urbanized Area	63,780	66,695	69,988	73,113	75,978	75,926
Alachua County	256,100	270,200	286,100	301,600	316,300	319,016