## MOBILITY

## Comprehensive Plan Amendment (CPA 01-09)

Alachua County's Plan to Effectively Link Land Use & Transportation

Strategic Intermodal System (SIS) Mitigation Plan

Alachua County Growth Management Department

January 26<sup>th</sup>, 2010

## SIS Mitigation Plan - CPA 01-09

Alachua County is proposing a Mobility Plan to effectively link land use and transportation within the Urban Cluster of Alachua County. The Mobility Plan proposes to reduce vehicle miles of travel and per capita green house gas emissions through provision of mobility within compact, mixed-use, interconnected developments that promote walking and bicycling, allowing for the internal capture of vehicular trips and the provision of densities and intensities needed to support transit. To address current statutory transportation concurrency requirements, the Mobility Plan will be designed be consistent with the Alternative Concurrency Approaches and Multi-Modal Transportation Districts in Florida Statute 163.3180. Depending on the final outcome of SB 360 and Alachua County's decision regarding pursuit of a TCEA, the SIS Mitigation Plan may be modified. Levels of Service Standards are proposed to be established for pedestrians, bicyclists, transit, and motor vehicles. The Mobility Plan proposes a twenty (20) year Capital Improvements Plan that transitions from funding capital infrastructure for a multi-modal transportation network to funding transit service along dedicated transit corridors.

There are several SIS facilities within Alachua County, with Newberry Road (SR 26) being the most significantly impacted by the Mobility Plan. The following are SIS facilities that could be impacted by the Mobility Plan:

- (1) Newberry Road (SR 26) from I-75 to Gilchrist County Line
- (2) I-75 from Marion County Line to Columbia County Line
- (3) Williston Road (SR 331) from I-75 to US 441
- (4) Hawthorne Road (SR 20) from Waldo Road (SR 24) to Putnam County Line
- (5) NW 39<sup>th</sup> Avenue (SR 222) from I-75 to NW 43<sup>rd</sup> Emerging SIS

**Newberry Road (SR 26)** from I-75 to CR 241 (NW 143<sup>rd</sup>) is the most significantly impacted roadway by the Mobility Plan proposal. Currently this roadway operates at an acceptable LOS. With the addition of reserved trips over the next 10 years, portions of this roadway are projected to be over capacity by 2018. With the current slowdown in residential development, some of the reserved trips may be removed pushing the time frame to 2020 or later. Newberry Road transitions from a posted speed of 50 mph to 30 mph near I-75. The County proposes to construct and upgrade SW 8<sup>th</sup> Avenue from I-75 to CR 241 (NW 143<sup>rd</sup>) to provide a parallel roadway to Newberry Road. The roadway is one (1) mile south of Newberry Road and serves the same

travel demand as Newberry Road. The posted speed limit for SW 8<sup>th</sup> Avenue will be 50 mph and reduced to 40 mph near I-75. The existing portions of SW 8<sup>th</sup> Avenue carry between 2,000 to 4,000 AADT. The projected capacity is 16,400 AADT. The roadway will be two (2) twelve foot lanes with bike lanes and a multi-use path. Intersection treatments along the roadway will include round-a-bouts and signalized intersections. SW 143<sup>rd</sup>, SW 136<sup>th</sup>, SW 122<sup>nd</sup>, SW 91<sup>st</sup>, SW 75<sup>th</sup> (Tower Road) and SW 20<sup>th</sup> are the major cross-roads. The parallel roadway will provide a significant amount of parallel capacity to accommodate existing reserved trips and future development. Upon Newberry Road (SR 26) from Interstate 75 to CR 241 (NW 143<sup>rd</sup>) reaching its maximum service volume, the County will fully fund and begin construction within three (3) years of SW 8<sup>th</sup> Avenue along parallel portions of Newberry Road that are over capacity. SW 8<sup>th</sup> Avenue per the Capital Improvements Element is projected to be under construction or completed by 2015.

Upon Newberry Road reaching its maximum service volume, minus traffic from municipalities and counties to the north and west of the Newberry Road and CR 241 (NW 143<sup>rd</sup> Street) intersection, the operating at 110% of its capacity, the County will commence design and of a dedicated transit lane within the median of Newberry Road. Upon Newbery Road operating at 120% of its capacity, the County shall fully fund and commence construction within three (3) years of a dedicated transit lane within the median. The County or FDOT may enter into an interlocal agreement to construct the dedicated lanes upon Newberry Road reaching its maximum service volume, if the municipalities and counties to the north and west of the Newberry Road and CR 241 (NW 143<sup>rd</sup> Street) intersection fully fund the construction of the dedicated transit lane. Starting in 2015, express transit service shall be provided along Newberry Road from CR 241 (NW 143<sup>rd</sup>) to the University of Florida consistent with the headways adopted in the Comprehensive Plan Amendment Transit LOS Standards. The impacted segments for Newberry Road shall be consistent with those shown in the Capital Improvements Element. The required limits of the proposed improvement and this policy shall be revisited during updates to the Capital Improvements Element should portions of the area annex into a municipality.

From Interstate 75 to NW 109<sup>th</sup> terrace, the dedicated lanes will be provided within the existing median. From NW 109<sup>th</sup> to CR 241, the existing median, lane widths and bike lanes will need to be reconstructed and reconfigured to provide a single-track dedicated transit lane and a five (5) lane roadway section. This will result in the potential removal of the existing bike lanes to this portion of Newberry Road. The existing sidewalks along Newberry will be evaluated to determine if multi-use paths can be added on both sides of the roadway to accommodate bicycle and pedestrian. The addition of a dedicated transit lane and reconstruction of Newberry will result in a consistent roadway cross-section from I-75 to CR 241 (NW 143<sup>rd</sup>). Portions of the dedicated transit lanes would include dual tracks for transit vehicles to pass in areas where there are no turn lanes and the median width provides for the ability to provide dual track transit lanes. The design of the dedicated lanes will be done in coordination with RTS and FDOT.

**Interstate 75 (SR 93)** between Newberry Road (SR 26) and NW 39<sup>th</sup> Avenue (SR 222) is within the Urban Cluster of unincorporated Alachua County; from Williston Road (SR 121) to Newberry Road (SR 26) is within the City of Gainesville. Alachua County has approved minimal developments in the last 10 years south of Williston Road (SR 121) that would impact Interstate 75. The proposed Mobility Plan will not result in any additional impact to I-75 south of Williston Road (SR 121) as this portion of the County is outside the Urban Cluster Boundary. The portion of I-75 from NW 39<sup>th</sup> Ave (SR 222) to the US 441 interchange is significantly impacted by development within the City of Alachua and the City of High Springs. Very little development has occurred within unincorporated Alachua County that would impact this portion of I-75. North of the US 441 interchange has seen minimal development within the last 10 years. The proposed Mobility Plan will not result in any additional impact to I-75 north of NW 39<sup>th</sup> Avenue (SR 222) as this portion of the County is outside the Urban Cluster Boundary.

The primary travel demand within the Urban Cluster of Alachua County is east-west over Interstate 75. The interchanges along I-75 could be impacted due to increased traffic volumes on intersecting arterial roadways. To address the potential for congestion at the interchanges and to mitigate the impact of future development, two (2) new overpasses over I-75 are proposed, as well as the widening of two (2) additional overpasses. New overpasses are proposed between Archer Road (SR 24) and SW 20<sup>th</sup> Avenue and between NW 39<sup>th</sup> Avenue (SR 222) and NW 53<sup>rd</sup> (Millhopper Road). The SW 20<sup>th</sup> Avenue and NW 23<sup>rd</sup> Avenue overpass are proposed for widening. These projects would provide an additional 12 lanes of capacity over I-75 within the Urban Cluster over the next 20 years to mitigate development impact and reduce congestion at existing interchanges. In addition, dedicated transit lanes are proposed for the two (2) new overpasses. The two (2) widened overpasses will be evaluated for the provision of transit preemption features to facilitate transit mobility.

Hawthorne Road (SR 20) is located in the East Gainesville area, which has experienced limited growth over the past 10 years. The MTPO, the City of Gainesville and Alachua County would like to see more growth directed towards East Gainesville. Hawthorne Road has been designed such that it could be widened to six (6) lanes, even though the City of Gainesville Comprehensive Plan and the proposed amendments to the Alachua County Comprehensive Plan will not allow for any new 6 lane roadways. The County does envision that dedicated transit lanes could be provided on either University Ave (SR 26) or Hawthorne Road (SR 20) within the existing right-of-way to address congestion, if it were to arise in the East Gainesville area. The Mobility Plan identifies the provision of express transit service from the Eastside Activity Center with Downtown and UF. Dedicated transit lanes could be provided by on University Ave (SR 26) by narrowing the roadway to two (2) vehicular lanes and two (2) dedicated transit lanes, or by removing the bike lane and on-street parking on Hawthorne Road (SR 20) to allow for dedicated transit lanes. The sidewalks along both sides of Hawthorne Road shall be widened to accommodate bicycle and pedestrian travel. Alachua County will work with FDOT and RTS to determine the most appropriate alternative for future dedicated transit lanes. There are no projected capacity issues within East Gainesville for the foreseeable future. If Hawthorne Road (SR 20) from SE 43<sup>rd</sup> to SE 27<sup>th</sup> were to reach its maximum service volume, the County would fully fund and begin construction within three (3) years of dedicated transit lanes on either Hawthorne Road (SR 20) or University Avenue (SR 26). The required limits of the proposed improvement and this policy shall be revisited during updates to the Capital Improvements Element should portions of the area annex into a municipality.

**Williston Road (SR 331)** from I-75 to US 441 is significantly within the City of Gainesville. Little development has happened with unincorporated Alachua County along this roadway due to

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the strict development standards in the Idylwild / Serenola area. The Idylwild / Serenola area has significant environmental sensitive areas, which limits development potential within this area. If Williston Road (SR 331) from Interstate 75 to US 441 reaches its maximum service volume, the County, in conjunction with the City of Gainesville, RTS and FDOT shall identify mitigation such as increased transit frequencies or intersection improvements. The Capital Improvements Element shall be updated accordingly. The required extent and limits of the corridor to be mitigated shall be revisited should portions of the area annex into a municipality

**NW 39<sup>th</sup> Avenue (SR 222)** has adequate capacity today and into the future. NW 39<sup>th</sup> Avenue is currently an Emerging SIS facility, thus its mitigation requirements differ somewhat from SIS facilities. The Mobility Plan recognizes that both Santa Fe DRI and Springhills DRI will have a significant impact to NW 39<sup>th</sup> Avenue. The County is taking the proactive approach to address the future impact from these projects as well as future expansion plans for Santa Fe College.

Approximately one (1) mile to the south, the Mobility Plan includes a proposal to four (4) lane NW 23<sup>rd</sup> Avenue from NW 98<sup>th</sup> to NW 55<sup>th</sup>. NW 23<sup>rd</sup> is already an underutilized four (4)-lane roadway from NW 55<sup>th</sup> to NW 43<sup>rd</sup>. NW 23<sup>rd</sup> Avenue serves a similar travel demand pattern as NW 39<sup>th</sup> Avenue. The Mobility Plan provides for both additional capacity on roadways parallel to NW 39<sup>th</sup> Avenue as well as provisions for rapid transit service on dedicated transit lanes that connect Springhills, Santa Fe, Santa Fe College and the University of Florida along with other regional destinations. The Mobility Plan includes a parallel four (4) lane roadway with dedicated transit lanes on the north side of NW 39<sup>th</sup> Avenue from west of I-75 to NW 83<sup>rd</sup>. This facility would largely serve traffic from the proposed DRI's and direct traffic away from NW 39<sup>th</sup> Avenue. In addition to parallel roadways, a system of dedicated transit lanes is also proposed along NW 83<sup>rd</sup> and Ft. Clark Blvd to connect to planned transit corridors within the City of Gainesville.