

Lake County, Florida

Transportation Impact Fee

Analysis: South Benefit District



Prepared by

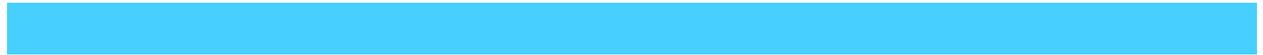
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In association with

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The consultant team of Duncan Associates and Littlejohn Engineering Associates was retained by Lake County to provide engineering and planning analysis to determine the extent to which development in the County's South transportation impact benefit district would benefit from improvements proposed to be partially funded by higher transportation impact fees assessed in that district. Our team is uniquely qualified for this assignment. Duncan Associates prepared the January 2013 update of the County's transportation impact fee, and Littlejohn Engineering Associates is currently working on the South Lake Sector Plan and has extensive experience with the Lake-Sumter MPO's regional travel demand model.

Background

The County's transportation impact fees were most recently updated based on a study prepared in January 2013. The fees were based on a county-wide analysis, but fees collected in the three benefit districts – South, Central and North – are earmarked and spent in the district in which they were collected. The fees are currently being assessed at about 13% of the maximum amounts calculated in the January 2013 *Transportation Impact Fee Update Study*.

The County is interested in assessing a higher percentage of the maximum fee in the current South benefit district. This area has the greatest growth potential and the most pressing need for additional major road infrastructure of any other area of the county. The Mineola CRA around a proposed new Florida Turnpike interchange and the South Lake Sector Planning Area are both located in this area.

The County could, of course, simply charge a higher percentage of the full net cost calculated in the January update uniformly in all three benefit districts. However, the County prefers to keep the transportation fees in the other two benefit districts at the current 13% rate.

In order to charge higher transportation impact fee in only one of the three districts, the County should be able to demonstrate that development in the South benefit district will receive significantly more benefit from the improvements that their higher impact fees will help fund than development in the other two benefit districts. The key issue to be addressed in assessing higher fees in one area of the county is to demonstrate that the benefit district or service area in which such higher fees are charged reflects a reasonable relationship between fees paid and benefit received. With the current approach of uniform county-wide fee calculation and assessment of the fees at the same percentage in all benefit districts, as well as reasonably similarly-sized benefit districts, there is little need for such justification.

Approach

The vast majority of road impact fee benefit districts or service areas in existence around the country are based on the simple, intuitive approach of dividing the jurisdiction into areas of reasonably

similar size. As noted above, this approach should be adequate to support the delineation of benefit districts in the context of transportation impact fee systems, similar to the County’s current approach, where fees are calculated and assessed uniformly across the county. In such a context, the fees are based on a system-wide, county-wide analysis and the benefit districts represent an additional attempt to ensure a need/benefit nexus. However, in the context of assessing fees at a higher rate in one benefit district than in the others, some additional analysis may be warranted.

The consultant team proposes to employ a series of select-link analyses using the adopted Central Florida Regional Planning Model (CFRPM) to determine whether a majority of the trips that will utilize major roadway improvements planned for this area have an origin or destination in the proposed benefit district. If this threshold can be shown to be met, it will provide a solid basis for assessing new development in the South benefit district higher transportation impact fees than in the other two benefit districts. It would provide strong support for the concept that the new development in the district is the primary beneficiary of the improvements to be funded by the higher fees. Providing this analysis is the purpose of this project.

Methodology

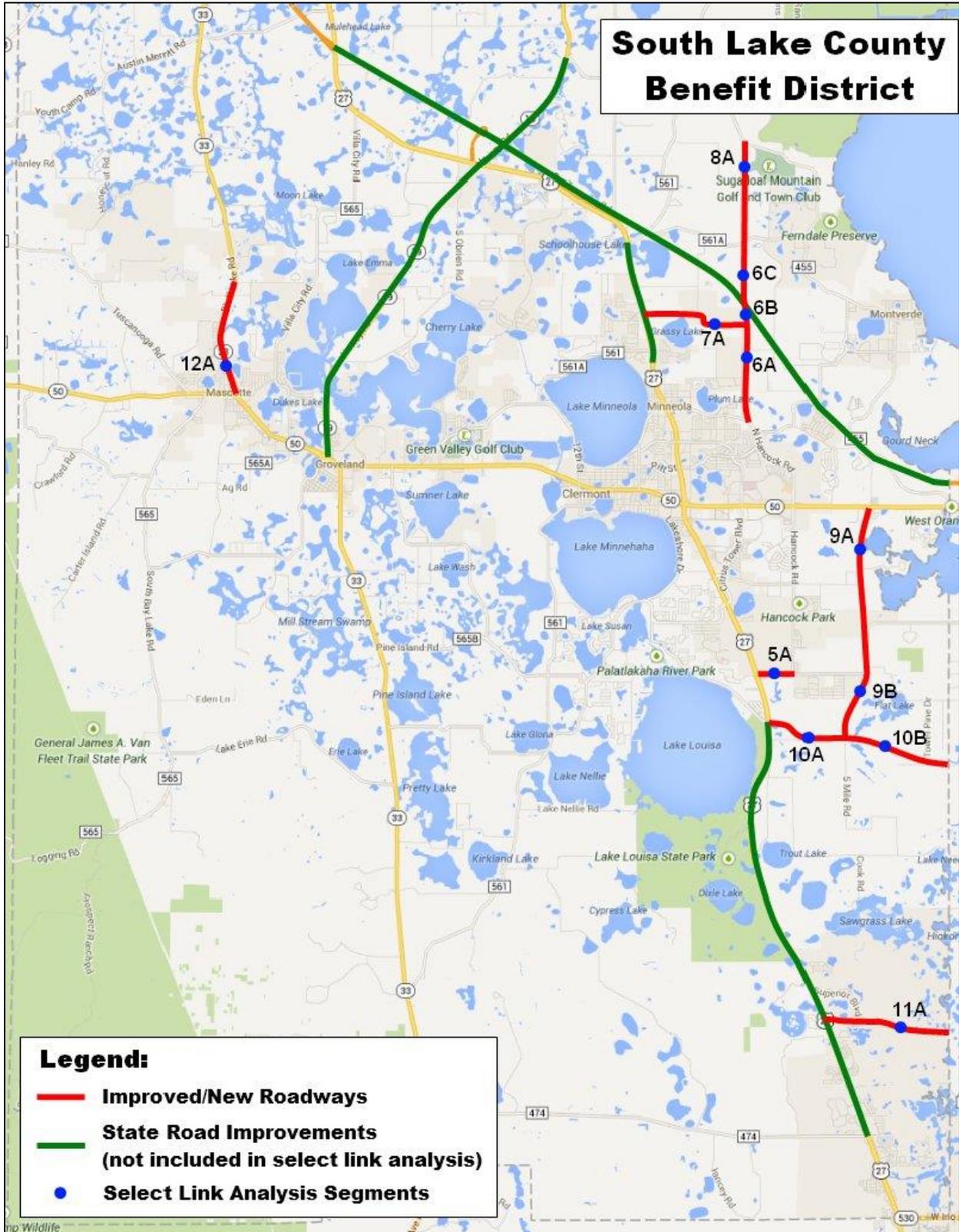
The Lake-Sumter MPO’s 2035 Needs Network was used to identify planned road improvements for the South benefit district. About half of the planned improvements are to State facilities, including US 27, Florida’s Turnpike (SR 91) and SR 19. Select-link analysis was not performed for these facilities, since they are unlikely to be funded with Lake County transportation impact fees. However, they were included in the 2035 Needs Network that was used for the model runs.

For each of the remaining road improvements likely to be funded, at least partially, with transportation impact fees (Hartwood Marsh Road, North Hancock Road extension, Citrus Grove Road, CR 561A extension, Sawgrass Bay Boulevard extension, the proposed Lake-Orange Parkway and CR 33), one or more representative segments were chosen for the select-link analysis. The planned improvements are summarized in Table 1. The location of these improvements and the select-link locations are illustrated in Figure 1.

Table 1. Planned Improvements

Select-Link ID	Roadway	Segment	Improvement
5A	Hartwood Marsh Road	US 27 - Hancock Road	2 to 4 lane widening
6A	N. Hancock Road Extn	CR 50 - Grassy Lake Road	2 to 4 lane widening
6B	N. Hancock Road Extn	Grassy Lake Road - Florida's Turnpike	2 to 4 lane widening
6C	N. Hancock Road Extn	Florida's Turnpike - CR 561A	New 4 lane road
7A	Citrus Grove Road	US 27 - N. Hancock Road Extn	2 to 4 lane widening
8A	CR 561A Extension	CR 561A - CR561	New 4 lane road
9A	Hartle Road	SR 50 - Hartwood Marsh Road	New 4 lane road
9B	Hartle Road	Hartwood Marsh Road - Lake-Orange Parkway	New 4 lane road
10A	Lake-Orange Parkway	US 27 - Hartle Road	New 4 lane road
10B	Lake-Orange Parkway	Hartle Road - Orange County Line	New 4 lane road
11A	Sawgrass Bay Blvd Extn	US 27 - Orange County Line	New 4 lane road
12A	CR 33	SR 50 - Simon Brown Road	2 to 4 lane widening

Figure 1. Location of Planned Improvements, South Benefit District



Using the CFRPM transportation model, the 2035 Needs Network and the 2035 demographic data set, the total 2035 daily traffic volumes were identified for each of the selected links. Next, the model was used to determine the number of daily trips on each of the selected links that was attributable to the South benefit district

Trips attributable to the benefit district are defined as any trip on the link that has at least one trip end in one of the Traffic Analysis Zones (TAZs) that make up the South benefit district. The following 90 TAZs fall within the South benefit district: 1625, 1626, 1633-1640, 1647-1653, 1660-1668, 1675-1728, 1729-1741, 1743 and 1744.

The identification of benefit district trips proceeded in two steps. The first step was to determine the number of 2035 trip ends from the benefit district TAZs that are associated with a trip on the selected link. The second step was to determine the number of those trip ends that are intra-zonal (both the origin and destination of the trip are located in a benefit district TAZ). Since intra-zonal trips have two trip ends in the benefit district, these trip ends need to be divided by two, in order to avoid double-counting trips. This was accomplished by dividing the number of intra-zonal trip ends associated with the selected link in half, then subtracting that from the total number of benefit district trip ends associated with the selected link. This analysis yields number of trips on the link that are attributable to the benefit district.

Results of Analysis

The results of the select-link analysis described above are summarized in Table 2. In addition to the percentages of South benefit district trips attributable to each of the selected links, the table calculates both a weighted average percentage (weighted by the sum of total trips for all of the selected links) and an unweighted average percentage.

Table 2. Share of Planned Improvements Attributable to District

Select-Link ID	Improved Road	Select-Link Segment	Total Trips	So. Benefit District	
				Trips	% of Trips
5A	Hartwood Marsh Road	US 27 - Hancock Road	30,022	20,109	67.0%
6A	N. Hancock Road Extn	CR 50 - Grassy Lake Road	69,089	46,269	67.0%
6B	N. Hancock Road Extn	Grassy Lake Road - Florida's Turnpike	70,031	45,158	64.5%
6C	N. Hancock Road Extn	Florida's Turnpike - CR 561A	39,019	36,486	93.5%
7A	Citrus Grove Road	US 27 - N. Hancock Road Extn	33,991	33,939	99.8%
8A	CR 561A Extension	CR 561A - CR561	13,547	11,337	83.7%
9A	Hartle Road	SR 50 - Hartwood Marsh Road	46,156	32,678	70.8%
9B	Hartle Road	Hartwood Marsh Rd - Lake-Orange Pkwy	52,453	20,539	39.2%
10A	Lake-Orange Parkway	US 27 - Hartle Road	49,953	28,184	56.4%
10B	Lake-Orange Parkway	Hartle Road - Orange County Line	62,412	24,509	39.3%
11A	Sawgrass Bay Blvd Extn	US 27 - Orange County Line	97,476	31,297	32.1%
12A	CR 33	SR 50 - Simon Brown Road	37,511	30,916	82.4%
Total and Weighted Average			601,660	361,421	60.1%
Unweighted Average					66.3%

Source: Select-link analysis provided by LittleJohn Engineering Associates, August 6, 2013; total trips are total 2035 trips on the link; South benefit district trips are those with an at least one trip end in the benefit district.

It must be noted that three of the 12 select-links show less than 50% of their trips being attributable to development in the service area. However, it should also be noted that these are the three

locations located closest to the Orange County line and on facilities that lead directly to the county line. These three links reflect spillover effects between Lake and Orange County – development in Orange County is generating traffic on Lake County roads, while development in Lake County is generating traffic on Orange County roads. This is a phenomenon routinely encountered near jurisdictional boundaries, and represents the effect of counter-balancing spillover effects. If neither jurisdiction charges for this “pass-through” traffic, development in both jurisdictions receives a windfall for being located near a jurisdictional boundary.

Rather than focusing on the percentages for individual selected links, due to the spillover effects described above, our recommendation is to use a systemic approach. It is our contention that the system-wide average percentages of 60.1% (weighted) and 66.3% (unweighted) attributable to the South benefit districts are the most appropriate measures of benefit. These data clearly show that, taken as a whole, the primary beneficiary of the improvements proposed to be funded at least partially with the higher transportation impact fees will be the new developments in the South benefit district that would be paying the higher fees.

In summary, this analysis provides a reasonable basis for assessing a higher transportation impact fee in the South benefit district. New developments in the South benefit district will be the primary beneficiaries of the improvements that will be funded with the higher impact fees those developments would be paying.