

APPENDIX D
ADMINISTRATIVE PROCEDURES MANUAL

OSCEOLA COUNTY
MOBILITY FEE ADMINISTRATIVE PROCEDURES MANUAL

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Osceola County

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SECTION 1

Mobility Fee Administrative Procedures Manual Definitions

The following definitions of terms shall apply for the purposes of this Mobility Fee Administrative Manual. Additional. Additional definitions are contained in Section 17.36 General Definitions of Osceola County's Land Development Code (LDC).

"Active Adult" shall mean a residential community or subdivision for residents who are fifty-five (55) years of age or older. Unit: per Dwelling Unit

"Amusement Park" shall mean a park that contains rides, entertainment, refreshments, and picnic areas. Unit: per Acre

"Assisted Living/Care" shall mean a residential setting that provides either routine general protective oversight or assistance with activities necessary for independent living to mentally or physically limited persons. Unit: per Dwelling Unit

"Auto Parts Store" shall mean a sales facility specialize in the sale of automobile parts for maintenance and repair. Unit: per 1,000 Square Feet

"Bank/Savings with Drive-Thru" shall mean banks that provide banking facilities for motorists who conduct financial transactions from their vehicles, and may also serve patrons who walk into the building. The drive-thru lanes may or may not provide automatic teller machines (ATMs). Unit: per Drive-Thru Lanes

"Car Sales" shall mean retail establishments where new or pre-owned vehicles are sold. Unit: 1,000 Square Feet

"Car Wash" shall mean facilities that allow manual cleaning of vehicles by providing stalls to park and wash vehicles. Unit: per Stall

"Community Retail" shall mean an integrated group of commercial establishments that is planned and developed, and in many cases owned, and managed as a unit, and that it sells merchandise goods and products to customers. The total square footage of the entire establishment is $\geq 20,000$ square feet and $\leq 100,000$ square feet. Unit: per 1,000 Square Feet

"Convenience Market & Gas" shall mean facilities that sell gasoline, convenience foods, newspapers, magazines and often beer and wine. This land use includes convenience markets with gasoline pumps where the primary business is the selling of convenience items, not the fueling of motor vehicles. Unit: per Vehicle Fueling Positions

"Day Care Center" shall mean a facility where care for pre-school age children is provided, normally during the daytime hours. Day care facilities generally include classrooms, offices, eating areas and playgrounds. Unit: per 1,000 Square Feet

"Factory Outlet Center" shall mean a shopping center that primarily houses factory outlet stores, attracting customers from a wide geographic area, very often from a larger area than a regional shopping center. Unit: per 1,000 Square Feet

“Golf Course” shall mean an area design for the play of golf. In some cases it may include clubhouses, with a pro-shop, lounge and banquet facilities. Unit: per Hole

“Grocery Store” shall mean a large retail store that sells a complete assortment of food, food preparation and other household goods and that is usually operated on a self-service basis. Unit: per 1,000 Square Feet

“Health/Fitness/Athletic Club” shall mean facilities that primarily focus on individual fitness or training. Typically they provide exercise classes, weightlifting, fitness and gymnastics equipment. Unit: per 1,000 Square Feet

“Hospital” shall mean an institution where medical or surgical care and overnight accommodations are provided to non-ambulatory and ambulatory patients. Unit: per 1,000 Square Feet

“Hotel” shall mean places of lodging that provide sleeping accommodations and supporting facilities such as restaurants, cocktail lounges, meeting and banquet rooms or convention facilities, and limited recreational facilities (pool, fitness room). Unit: per Room

“Marina” shall mean facilities that provide docks and berths for boats and may include limited retail and restaurant space. Unit: per Berth

“Medical/Dental Office” shall mean a facility that provides diagnoses and outpatient care on a routine basis but is unable to provide prolonged in-house medical and surgical care. Unit: per 1,000 Square Feet

“Mini-Warehousing” shall mean buildings in which a number of storage units or vaults are rented for the storage of goods. They are typically referred to as “self-storage” facilities. Unit: per 1,000 Square Feet

“Mobile Home” shall mean a manufactured home that is sited and installed on permanent foundations. They are typically part of a community that includes facilities such as recreation rooms, swimming pools and laundry. Unit: per Dwelling Unit

“Movie Theater” shall mean a building with an area for audience seating, single or multiple screens and auditoriums, a lobby and refreshment stand. Unit: per Seat

“Multi-Family” shall mean two or more rental units that are located within the same building. Unit: per Dwelling Unit.

“Multipurpose Recreational Facility” shall mean a facility containing two or more of the following land uses combined at one site: miniature golf, batting cages, video arcade, bumper boats, go-carts, and golf driving ranges. Refreshment areas may also be provided. Unit: per Acre

“Neighborhood Retail” shall mean an integrated group of commercial establishments that is planned and developed, and in many cases owned, and managed as a unit, and that it sells merchandise goods and products to customers. The total square footage of the entire establishment is < 20,000 square feet. Unit: per 1,000 Square Feet

“Nursing Home” shall mean a facility whose primary function is to provide care for persons who are unable to care for themselves. Examples of such facilities include rest homes and chronic care and convalescent homes. Unit: per 1,000 Square Feet.

“Office” shall mean a building that houses multiple tenants. It is a location where affairs of businesses, commercial or industrial organizations, or professional persons or firms are conducted. Units: per 1,000 Square Feet

“Pharmacy with Drive-Thru” shall mean a retail facility that primarily sell prescription and non-prescription drugs. These facilities may also sell cosmetics, toiletries, medications, stationary personal care products. Limited food products and general merchandise. Unit: per 1,000 Square Feet

“Place of Assembly” shall mean a building in which worship services are held. Unit: per 1,000 Square Feet

“Quick Lube Vehicle Service” shall mean a business where the primary activity is to perform oil change services for vehicles. Other ancillary services provided may include preventive maintenance, such as fluid and filter changes. Unit: per Bay

“Racquet/Tennis Court” shall mean privately owned facilities that primarily cater to racquet sports (tennis, racquetball, or squash – indoor or outdoor). This land use may also provide other ancillary facilities, such as swimming pools, whirlpools, saunas, weight rooms, and exercise classes. Refreshment areas may also be provided. Unit: per Court

“Recreational Community Center” shall mean stand-alone public facility similar to and including YMCAs. These facilities often include classes and clubs for adults and children, day care, meeting rooms, swimming pools and whirlpools, saunas, tennis, racquetball, handball, basketball and/or volleyball courts, outdoor athletic fields/courts, exercise classes, weightlifting and gymnastics equipment, locker rooms, and a restaurant or snack bar. Unit: per 1,000 Square Feet

“Regional Retail” shall mean an integrated group of commercial establishments that is planned and developed, and in many cases owned, and managed as a unit, and that it sells merchandise goods and products to customers. The total square footage of the entire establishment is > 100,000 square feet. Units: per 1,000 Square Feet

“Resort Hotel with Conference Center” shall mean a hotel that in addition to sleeping accommodations, restaurants, cocktail lounges, retail shops and guest service, it also provides a wide variety of recreational facilities/programs (golf courses, beach access, or other amenities). In addition, resort hotels are normally located in suburban or outlying locations on larger sites than conventional hotels, catering to the tourist and vacation industry. Unit: per Room

“Restaurant with Drive-Thru” shall mean restaurant that include a drive-thru window. This type of restaurant is characterized by a large drive-thru clientele, long hours of service (some a reopen for breakfast), all are open for lunch and dinner, some are open late at night or 24 hours per day) and high turnover rate for eat-in customers. Unit: per 1,000 Square Feet

“Rural Single Family” shall mean detached home on an individual lot located outside of the County’s Urban Growth Boundary. Unit: per Dwelling Unit

“Single Family” shall mean detached home on an individual lot located within the County’s Urban Growth Boundary. Unit: per Dwelling Unit

“Tire & Auto Repair” shall mean a business where the primary activity is the sales and marketing of tires for automotive vehicles and /or the repair of these vehicles. Services offered by these stores usually include tire installation and repair, as well as other automotive maintenance or repair services and customer assistance. Unit: per 1,000 Square Feet

“Townhome/Urban Flat/Condo” shall mean a single family ownership unit that has at least one other owned unit within the same building structure. Unit: per Dwelling Unit

“Variety/Dollar Store” shall mean a retail store that sells broad range of inexpensive items often at a single price. These stores are typically referred to as “dollar stores.” Items sold at these stores typically include kitchen supplies, cleaning products, home office supplies, food products, household goods, decorations and toys. Unit: per 1,000 Square Feet

“Warehouse/Manufacturing/Industrial”:

Warehouse shall mean a facility that is used for the storage of materials, goods and merchandise prior to the distribution to retail outlets, distribution centers or other warehouses.

Manufacturing shall mean a facility where the primary activity is the conversion of raw materials or parts into finished products.

Industrial shall mean a facility that has an emphasis on activities other than manufacturing and typically have minimal office space. Typical activities include printing, material testing and assembly of data processing equipment.

Unit: per 1,000 Square Feet

SECTION 2

Mobility Fee Independent Study Guidelines

2.1 Introduction

This Administrative Procedures Manual defines the methodology for conducting an Independent Mobility Fee Study (IMFS) in Osceola County. According to Section 17-44 (b) of Article II Impact Fees, Chapter 17, Planning and Development, Part II, Osceola County, Florida, Code of Ordinances:

“Any applicant (1) who believes that the trip generation rate, percentage of new trips, percentage of internal capture, or percentage of transit reduction used to calculate the mobility fee for the applicant’s development is incorrect, or (2) who has a unique or restrictive land use that can be verified through the county’s building permit or tenant occupancy permit process and believes that this results in a different value than that used to calculate the mobility fee for the applicant’s development, or (3) whose land use is not listed in the mobility fee schedule, or believes the use is incorrectly assigned in the mobility fee schedule, shall have the option to provide an independent mobility fee study prepared in accordance with the administrative procedures manual.”

This section contains the methodology, guidelines, and procedures that shall be followed in the preparation and submission of an IMFS.

2.1.1 IMFS Review Fee

The County will charge a fee to cover the cost to review the IMFS. The IMFS Review Fee schedule is included in Appendix A of this Manual. This fee will be paid incrementally and as needed as the IMFS advances through the review process.

2.1.2 IMFS Review Schedule

The IMFS Review Schedule and appeals process can be observed in Appendix B of this Manual.

2.2 Methodology Statement

Prior to conducting an IMFS, a written methodology statement shall be prepared by the applicant and submitted for review and approval by the County Manager. The objective of this Methodology Statement is to agree to the assumptions and procedures to be followed during the preparation of the study. Elements that need to be addressed in this methodology are described in the next paragraphs. The methodology statement shall remain valid for a period of one (1) year after the approval date.

2.2.1 Methodology Meeting

Prior to the preparation of submittal of the proposed Methodology, the applicant shall attend a mandatory methodology meeting with the County Manager. During this meeting, the general procedures to be followed, the proposed comparable sites to be studied, and the trip characteristics variables to be studied should be discussed. The Fee Schedule is included In Appendix A.

2.2.2 General Description

A general description of the proposed development, including but not limited to the following shall be provided: location, development program, site plan, and operating characteristics. In addition, the methodology shall clearly explain why the applicant considers that the preparation of an IMFS is pertinent for this specific development. This shall include a detailed explanation of the unique characteristics of the site and why it differs from the land uses and corresponding trip characteristics included in the County's Mobility Fee Schedule.

The IMFS shall include the study and identification of all of the following variables:

- Trip Generation Rate/Percentage of Internal Capture
- Percentage of New Trips

It should be noted that all of these three trip characteristics shall be studied and documented in the analysis, the applicant is not allowed to select and study just a subset of them.

In addition to these three trip characteristics, the Osceola County Mobility Fee also includes a reduction for transit use (i.e. Transit Reduction). The study of this variable as part of an IMFS is optional; however, it needs to be specified by the applicant as part of the methodology. In addition, the trip generation and mode split computation methodology will need to be clearly defined, discussed, and agreed upon during the methodology phase. Information regarding the fee associated with the inclusion of this trip characteristics variable as part of the IMFS is included in Appendix A.

For land uses that experience a high seasonality (e.g. amusement parks, resorts, timeshares, etc.) the site characteristics shall be collected during the peak season of the sites to be studied. Time of the year and dates of the data collection shall be discussed and agreed to during the Methodology phase.

It should be noted that, in the event that a new land use category is proposed, final decision about its approval shall be made upon completion of the IMFS based on the study results.

2.2.3 Comparable Sites

As part of the methodology, the comparable sites to be studied (a minimum of three) should be identified. A detailed and clear explanation of why these sites have similar characteristics to the proposed site shall be included. The site description shall include the following information:

- Location (including map)
- Land Use Description
- Size (units as applicable)
- General operation characteristics (hours of operations, special considerations, etc.)

In addition, the methodology will clearly identify data collection techniques and procedures to be used during the study, including:

- Trip generation technology
- Origin/destination interview forms

The County or its designee will review the proposed sites and determine if they are acceptable for use.

In the event that the trip characteristic variables to be identify as part of the IMFS will be used to determine the Mobility Fee for a land use within a mixed-use district, the following site characteristics (sites to be surveyed vs. proposed site) shall be discussed and agreed to during the methodology:

- Mix of land uses: the mix of land uses at the sites to be surveyed need to be similar to the ones that will be present at the proposed site (retail, office, single family residential, multi-family residential, etc.).
- Land use quantities: the quantities of each land use needs to be similar so the internal capture percentage is applicable to the proposed site.
- Type of mixed use: vertical vs. horizontal mixed use may result in significantly different internal capture percentages
- Location of the different land uses within the development: the proximity among land uses directly impacts the internal capture of the site.
- Availability of public transportation and other alternative modes: this will ensure that the modal split is representative not only for external trips but also for trips within the proposed development.
- Reliance on framework streets for internal circulation: even if there are trips within the development (internal capture), they may still rely on framework streets to accomplish the trips.

The above site characteristics have the potential of greatly impacting the results of the study and its applicability to the proposed site; therefore, their discussion and agreement at the methodology phase will result in significant time savings and potential review rounds during the IMFS stage.

2.2.4 Methodology Submittal

The applicant shall submit two (2) copies of the proposed study methodology along with a digital copy to the County Manager for review. A certification page shall be provided in the methodology that includes a statement that the professional responsible for the preparation is either a Professional Engineer (P.E.) or a Certified Planner (AICP). The corresponding professional registration number and seal shall also be provided (as applicable).

2.3 Preparation of an Independent Mobility Fee Study

An IMFS shall not be prepared without obtaining final methodology approval letter from the County Manager.

As noted above, the IMFS shall include the study and identification of the following variables:

- Trip Generation Rate/Percentage of Internal Capture
- Percentage of New Trips
- Transit Reduction (if applicable)

In order to collect these trip characteristic variables, interviews will need to be conducted at the three study sites by the applicant. The total number of valid interviews that the trip characteristic variables were derived from shall be documented in the IMFS report.

A certification page shall be provided in the IMFS that includes a statement that the professional responsible for the preparation is either a Professional Engineer (P.E.) or a Certified Planner (AICP). The corresponding professional registration number and seal shall also be provided (as applicable).

2.3.1 Trip Generation Rate/Percentage of Internal Capture

The trip generation rate (vehicle trips) is generally collected by using automated equipment (e.g. machine counts, video, etc.) and then adjusting/calibrating these counts based on field observations. The counter locations and data collection approach shall be discussed and agreed to as part of the methodology statement.

Traffic counts shall be collected for a minimum of three (3) consecutive days (Tuesday, Wednesday, and Thursday). These days should be representative of the normal operation of the site. These counts shall be collected during the same period as the Percentage of New Trips variable.

The trip generation data provided as part of the IMFS shall include:

- Date of the counts
- Counts provided in 15-minute increments
- Entering and exiting volumes
- Site Occupancy
- If video is used to collect the counts, provide videos (in digital format) as part of the IMFS submittal
- If automated machine counts are collected, provide traffic count processing software outputs as part of the IMFS submittal

In the event that traffic counts are collected using automated machines, due to their limited accuracy when collecting data at locations with relatively low operating speed and when vehicles cross the data collection device at an angle (typical operating conditions at driveways), manual verifications of these counts, and potential corresponding adjustments, shall be required.

These manual verifications will be performed as follows:

- Number of manual verifications: At least one per day of count
- Intervals: 15-minute increments
- Duration: a minimum of 30 minutes and no more than 2 hours. At locations with relatively low traffic volumes, manual verifications should last for as many 15-minute intervals as necessary to count a minimum of 100 vehicles (not to exceed 2 hours).
- Vehicle Classification: at a minimum, vehicles shall be classified as motorcycles, cars, and heavy vehicles.
- Manual counts and corresponding adjustments to machine counts shall be provided in the report for review.

The applicant shall ensure that the daily number of vehicles entering and exiting shall match (within 10 percent) unless the site presents special operating characteristics (e.g. high number of vehicles staying overnight or for extended periods of time). If this is the case, a clear explanation of the site operation shall be provided in the report.

In the event that cut-through traffic is present at the site, an explanation of how this condition was addressed during the data collection needs to be included in the report.

When identifying trip characteristic variables that will be applied to a mixed-use development, the 25 percent mixed-use reduction shall not be applied to the computation. This is because the observed trip rate will already include the mixed-use reduction in trip generation. Please refer to Section 4 of this Manual for a sample mobility fee computation. Hence the importance of selecting sites that accurately reflect the proposed site characteristics, this has already been discussed in the Methodology section of this Manual.

2.3.2 Percentage of New Trips

Percentage of New Trips information will be obtained by conducting an origin-destination interview. This interview shall obtain the following information:

- Date
- Location
- Interviewer's Name
- Time of each interview
- Origin of the interviewee's trip
- Destination of the interviewee's trip
- Trip purpose

Origin-destination information should be as accurate and detailed as possible. Ideally, the exact address needs to be collected; however, in circumstances where interviewee's do not provide address specific information, the specific name of the origin and destination (store name and general location, subdivision name, hotel name, etc.) and nearest intersection shall be collected. A sample interview form is provided in Appendix C.

According to ITE's Trip Generation Handbook, 9th Edition, pass-by trips are made as intermediate stops on the way from an origin to a primary trip destination without a route diversion. Therefore, these trips do not add traffic to the adjacent roadway system; however, they should not be confused with diverted trips. Diverted trips are trips that are attracted from the traffic volume on roadways within the vicinity of the generator but require a diversion from the roadway to another roadway to gain access to the site.

To identify if a trip is classified as pass-by or not and to compute the assessable trip length, acceptable procedures are described in "Measuring Travel Characteristics for Transportation Impact Fees", (W.E. Oliver, ITE Journal, April 1991). A copy of this article is included in Appendix D.

2.3.3 Transit Reduction

In the event that the applicant decides to include Transit Reduction as one of the variables to be analyzed, the following adjustments will need to be made to the data collection techniques:

The total trip generation (for all modes) will need to be collected. This will be accomplished by collecting person trip generation data and then applying the observed modal split (to be collected as part of the origin-destination interview).

When identifying the Transit Reduction, and during the origin-destination interviews, information regarding the mode of transportation will need to be collected in order to obtain the mode split (private vehicles vs. transit). In the event that the person indicates that the mode is public transportation, the interview will conclude. If the mode was private vehicle, the interview shall continue in order to obtain percent new trips information. In addition, the origin-destination interview will need to be collected at the site entrances instead of driveways to account for people instead of vehicles.

2.3.4 Number of Interviews to Collect

In order to determine a reasonable trip characteristics estimate for the studied site, the applicant will perform the origin-destination interviews as follows:

Interviews shall be performed for a minimum of eight (8) hours per site. These hours need to be consistent with the hours of operation of the site and, depending on the site, they should be collected during four (4) hours in the morning and four (4) hours in the afternoon. These hours should include the AM and PM peak periods.

The total number of valid interviews required should be a minimum of twenty-five percent (25%) of the trips to the site during the hours of the interview.

2.3.5 Independent Mobility Fee Study Report

The trip characteristic findings shall be compiled into an IMFS Report. The applicant shall submit two (2) copies of the IMFS Report along with a digital copy to the County representative for review.

The report shall include the Mobility Fee calculation for the proposed site per the procedures documented in the Osceola County Mobility Fee Technical Memorandum dated March 6, 2015.

SECTION 3

Sample Mobility Fee Computation

This Section documents the calculation of an impact fee for one land use category. In this example, the Mobility Fee is calculated for the Multi-Family Residential land use that includes the Mixed-Use reduction.

$$\text{Mobility Fee per Land Use} = \text{Net Cost per Person Mile of Capacity} \times \text{Person Mile of Travel per Land Use}$$

Where:

$$\text{Net Cost per Person Mile of Capacity} = \text{Person Mile of Capacity Rate} - \text{Total Credit per Person Mile of Capacity}$$

$$\text{Person Mile of Travel per Land Use (Mixed-Use)} = (\text{Average Daily Traffic} \times (1 - \% \text{ Internal Capture}) \times \% \text{ New Trips} \times \text{Trip Length}) \times \text{Person Miles of Travel Factor} / 2$$

Each of these inputs is discussed in the Osceola County Mobility Fee Technical Memorandum; however, for the purposes of this example, a brief explanation is included below along with the sample inputs for Multi-Family Residential land use:

- Person Mile of Capacity Rate = the average cost of adding one person mile of capacity in Osceola County. (\$198.05. Source: Osceola County Mobility Fee Technical Memorandum – Table 9)
- Total Credit per Person Mile of Capacity = total credit related to Federal and State taxes, local option fuel taxes, Constitutional fuel tax, dedicated ad-valorem revenue, infrastructure sales tax revenue, debt service and the local government transportation surcharge funding for avenues, boulevards, and multimodal corridors. (\$52.18. Source: Osceola County Mobility Fee Technical Memorandum – Table 15)
- Average Daily Traffic = average number of trips generated by the proposed land use per day. (6.65. Source: Source: Osceola County Mobility Fee Technical Memorandum – Table 24)
- % Internal Capture = adjustment factor to account trips internal to the site in a mixed-use development. (25%. Source: Source: Osceola County Mobility Fee Technical Memorandum – Table 25)
- % New Trips = adjustment factor to account for trips that are already on the roadway. (100%. Source: Source: Osceola County Mobility Fee Technical Memorandum – Table 24)
- Trip Length = assessable average trip length adjusted to local conditions. This trip length already takes into consideration adjustments to account for travel on limited access facilities. (5.08. Source: Source: Osceola County Mobility Fee Technical Memorandum – Table 24)
- Person Miles Travel Factor = this factor is utilized to convert vehicle miles of travel to person miles of travel. (1.3 for the Central Florida area. Source: Osceola County Mobility Fee Technical Memorandum)

Mobility Fee

Using these inputs, the mobility fee can be calculated for a multi-family home that includes a mixed-use reduction:

$$\text{Net Cost per Person Mile of Capacity} = \$198.05 - \$52.18 = \$145.87$$

$$\text{Person Mile of Travel Multi Family Residential (Mixed-Use)} = (6.65 \times (1 - 0.25) \times 100\% \times 5.08) \times 1.3 / 2 = 16.47$$

$$\text{Mobility Fee Multi-Family Residential (Mixed Use)} = \$145.87 \times 16.47 = \$2,402$$

The above computation documents the Mobility Fee for multi-family residential land that includes the mixed-use reduction. In the section below, a sample computation of a potential mobility fee obtained through an IMFS is illustrated.

Independent Mobility Fee Study Mobility Fee Sample Computation

Through an IMFS the following trip characteristic variables were obtained for a Multi-Family Residential Land Use within a mixed-use development:

$$\text{Average Trip Generation Rate} = 4.5 \text{ trips/unit.}$$

It should be noted that the average trip generation rate obtained through the IMFS already takes into consideration internally captured trips since trips within the mixed use development that do not rely on framework streets will not be included in the average trip rate computation.

$$\% \text{ New Trips} = 100\%$$

In this case, since the study was performed for a residential land use, the % New Trips is 100%.

$$\text{Total Trip Length} = 6.1 \text{ miles}$$

This trip length includes travel on limited access facilities; therefore, the Limited Access Facility adjustment factor needs to be applied (0.6835. Source: Osceola County Mobility Fee Technical Memorandum – Table 20). In addition, this Trip Length also accounts for internally captured trips that rely partially on framework streets and; therefore, need to be taken into consideration.

Independent Mobility Fee Study Mobility Fee

$$\text{Person Mile of Travel Multi Family Residential (Mixed-Use)} = (4.5 \times 100\% \times 6.1 \times 0.6835) \times 1.3 / 2 = 12.20$$

$$\text{Mobility Fee Multi Family Residential (Mixed Use)} = \$145.87 \times 12.20 = \$1,779.61$$

SECTION 4

Sufficiency Determination

The County representative will review the IMFS for compliance with the approved methodology, technical accuracy, and overall study findings to determine whether the study is acceptable or corrections need to be made.

Appendix A
Review Fee Schedule

Appendix A – Review Fee Schedule

Methodology Meeting in Osceola County: \$500

Methodology Review: \$1,250 – If Transit Reduction is included: \$1,750

Initial review including review of proposed study sites, trip characteristic survey forms/questions, and proposed data collection methodology. This includes the review of the original submittal plus one (1) round of sufficiency review.

IMFS Review: \$4,500 – If Transit Reduction is included: \$6,000

This includes visits to the site being surveyed and review of the original submittal plus two (2) rounds of sufficiency review.

Attendance to meetings in Osceola County or Public Hearing: \$500

Appendix B
Review Schedule

Appendix B – Review Schedule

Notice of Intent to Provide IMFS: sixty (60) days following issuance of building permit or tenant occupancy permit

Initial Methodology Review: ten (10) days

Methodology Sufficiency Review: ten (10) days

Initial IMFS Review: thirty (30) days

IMFS Sufficiency Review: fifteen (15) days

If after the second sufficiency review the information submitted remains inadequate for the County representative, a recommendation for denial of approval based on insufficiency of supporting information will be developed and provided to the Applicant.

Appendix C
Sample Interview Form

Osceola County
Independent Mobility Fee Study - Trip Characteristics
Residential Land Uses

Date: _____ Interviewer: _____
 Location: _____ Page #: _____

Interview # (a)	Time Enter interview starting time (b)	Inbound (I) or Outbound (O) trip? Circle "I" for inbound or "O" for outbound (c)	What is the name of the place/business that you are coming from/going to? Enter the name of the place/business (d)	Did you/are you planning to stop anywhere in between (current location and site mentioned in (d))? If "Yes" write the location name (e)	What is the address of nearest intersection of this location? If answered to previous question (e) was "NO" write address corresponding to (d) if answer was "YES", address corresponding to (d) (f)
1		I / O			
2		I / O			
3		I / O			
4		I / O			
5		I / O			
6		I / O			
7		I / O			
8		I / O			
9		I / O			
10		I / O			
11		I / O			
12		I / O			

Osceola County
Independent Mobility Fee Study - Trip Characteristics
Non-Residential Land Uses - Only Outbound Trips to be Interviewed

Date: _____
 Location: _____
 Interviewer: _____
 Page #: _____

Interview #	Time <i>Enter interview starting time</i>	What is the name of the place/business that you are coming from before coming here? <i>Enter the name of the place/business</i>	Did you stop anywhere in between (current location and site mentioned in (c))? <i>If "Yes" write the location name</i>	What is the address of nearest intersection of this location? <i>If answered to previous question (d) was "NO" write address corresponding to (c) if answer was "YES", address corresponding to (d)</i>	What is the name of the place/business that you are going to? <i>Enter the name of the place/business</i>	Are you planning to stop anywhere in between (current location and site mentioned in (f))? <i>If "Yes" write the location name</i>	Did you/are you planning to stop anywhere in between (current location and site mentioned in (d))? <i>If answered to previous question (g) was "NO" write address corresponding to (f) if answer was "YES", address corresponding to (g)</i>
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

Appendix D
***Measuring Travel
Characteristics for
Transportation Impact Fees***

Measuring Travel Characteristics for Transportation Impact Fees

BY WILLIAM E. OLIVER

Many government agencies in Florida have adopted transportation impact fees as a means of assessing the additional demands for road capacity imposed by new developments. The magnitude of these fees is related to the amount of new travel added to the road system as a result of the development. For example, a development that adds 10 vehicle-miles of new travel would be expected to pay more in impact fees than a development that adds only 5 vehicle-miles of new travel.

The general equation used to compute the transportation impact fee for a given land use is

$$\text{Demand} \times \text{Cost} - \text{Credits} = \text{Fees}$$

The travel demand placed on the transportation system is usually expressed in units of new lane-miles of roadway consumed or new vehicle-miles of travel generated. The cost is usually expressed in units of dollars per lane-mile of roadway or dollars per vehicle-mile of travel. The credits are based on an estimate of the revenues generated by the development that will be allocated to roadway construction or transportation system capacity expansion.

A primary consideration in establishing impact fee rates is that the fees be appropriate and equitable. This means that the fee for a given land use should not be higher than the cost to replace the road system capacity it consumes and that developments consuming similar amounts of the road system should

be charged similar fees. For these reasons, it is important to develop standardized and conservative procedures for measuring travel characteristics of land uses.

The amount of new travel is estimated by multiplying three variables: the trip-end generation, the assessable trip length, and the percentage of new trips added to the road system by the development. Although there are standard procedures¹ to estimate the trip-end generation for a site, no standard terminology or procedure has been established for measuring the assessable trip length or the percentage of new trips to a site. The purpose of this article is to suggest standard procedures for measuring these travel characteristics for use in the demand and credit components of an impact-fee equation. In addition, this article introduces important concepts regarding the definition of "captured" trips in an impact fee context, which differs from the definition typically encountered in a traffic-impact-analysis context, and considerations for allocating responsibility for diverted trips.

Assessable Trip Length

The trip length used to compute an impact fee (the assessable trip length) is the amount of new travel that a development adds to the arterial and collector road system, for which payment should be made. Typically, the portion of the trip on local streets is excluded from the as-

sessable trip length because governments in Florida usually do not build local streets using their transportation funds. This job is usually left to the developer of a subdivision. Thus, the procedures to measure assessable trip lengths should exclude travel on local streets. In addition, the portion of trips using the interstate or toll-road system is frequently excluded because local agencies typically do not use their impact-fee revenues to expand the interstate highway or toll-road systems. The proportion of interstate and toll-road travel is highly dependent on the proximity of a site to these facilities and the presence of such facilities in the community. Interstate and toll-road mileage is usually discounted from the assessable trip length by applying a community-wide estimated interstate and toll-road mileage-reduction factor prior to computing the fee.

Motorist interviews are conducted to collect data on trip length. An example of a typical interview form is shown in Figure 1. The purpose of the questions is to ascertain the type of trip, as well as the trip length. The form includes optional questions regarding length of stay and nature of the visit. For some land uses, these questions can be helpful in establishing normal and unusual site-visit patterns and in categorizing trips. From each interview, information relative to two trip-ends is obtained—the inbound trip-end and the outbound trip-end. Using the survey information, trips

had they traveled out of their way to stop at a survey site or, had they not stopped, would they have passed the survey site; their responses were compared with the reported locations of trip origin and next destination (considered to be more fac-

$$\frac{\sum (\text{lengths of primary and secondary trip-ends}) + 2 \sum (\text{diverted trip-ends})}{\text{number of primary, secondary, and diverted trip-ends surveyed}}$$

Equation 1. The assessable trip length for secondary trips.

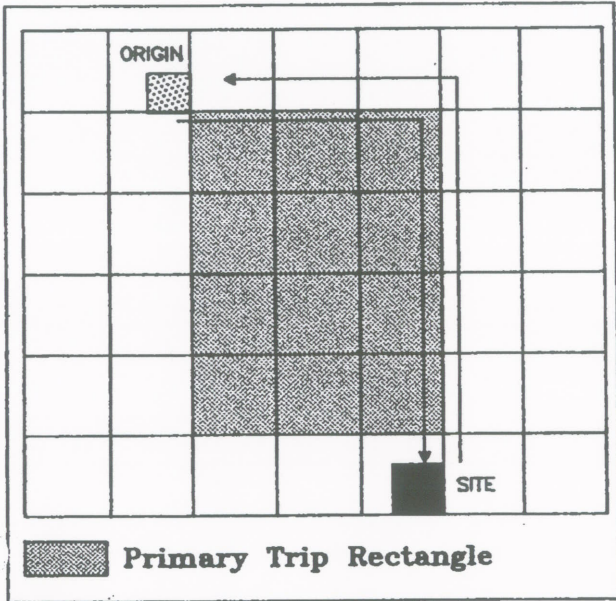


Figure 2. An example of how the length of a primary trip is measured.

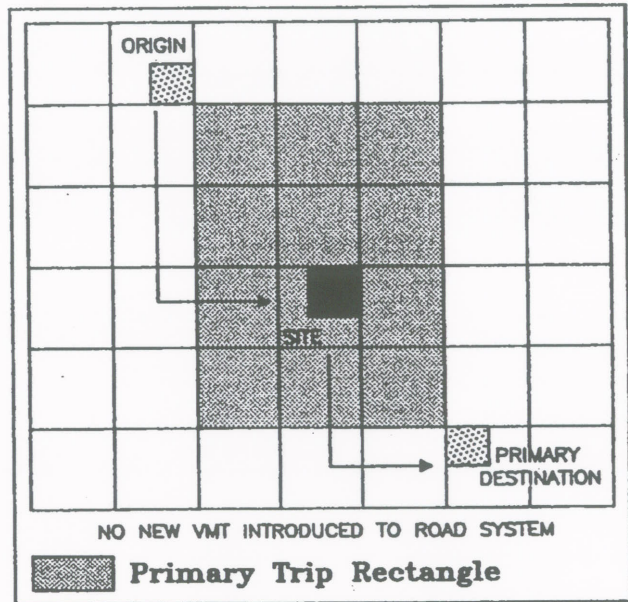


Figure 3. An example of how the length of a captured trip is measured.

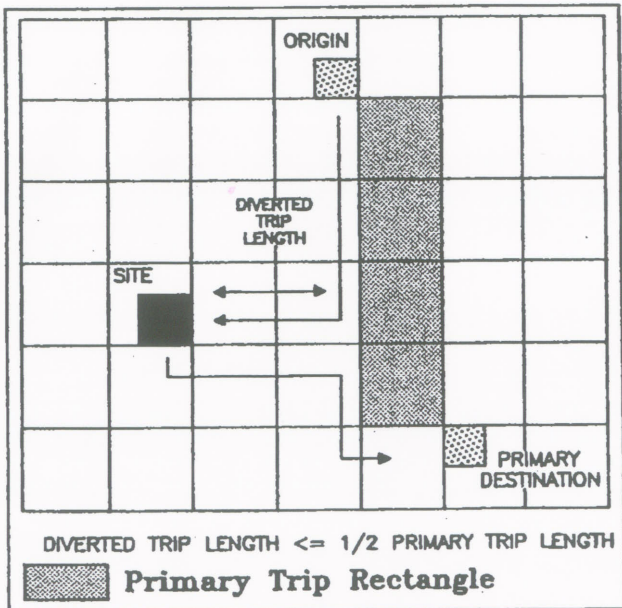


Figure 4. An example of how the length of a diverted trip is measured.

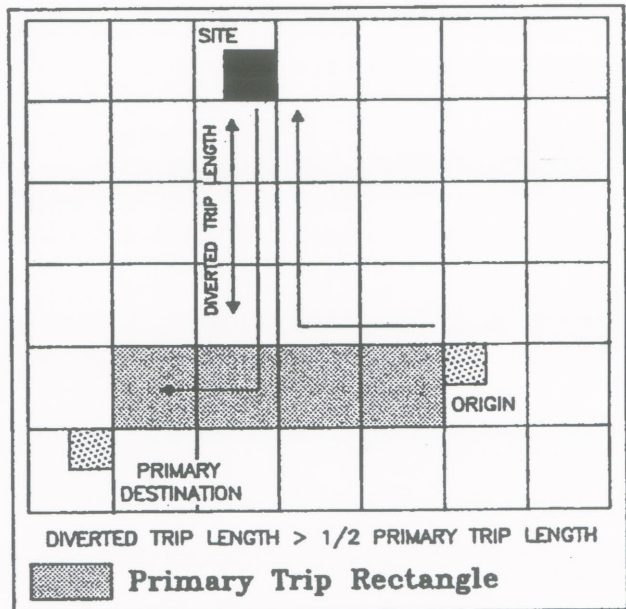


Figure 5. An example of how the length of a secondary trip is measured.

tual information). We found that the motorists' subjective judgments of distance traveled were frequently in great error. Furthermore, their unfamiliarity with the concepts of trip capture and trip diversion led to very inconsistent results. As a result, we developed the quantitative approach described in the preceding paragraphs.

To analyze the survey data, each survey form is reviewed, and the two trip-ends surveyed are identified as primary, captured, diverted, or secondary based on the locations of the origin of the inbound trip and the destination of the outbound trip. The length of each trip is logged onto a data summary form (illustrated in Figure 6). Each survey form provides information regarding two trip-ends. The lengths for each trip type are then added and combined in accordance with the equation provided earlier. Because impact fees allocate the assessment for a trip evenly to the origin-end development and the destination-end development, the demand equation usually includes a denominator of two. If not, then one-half the average trip length as calculated in Figure 6 should be used in the fee equation.

This procedure has a systematic flaw

that fails to account for 100 percent of the travel on the road network. In the captured trip example in Figure 3, if the survey and analysis procedures were applied at the "primary destination" location, the trips from the site to the primary destination and from the primary destination back to the origin would be identified as secondary trips, and one-half their lengths would be allocated to the primary destination. Since none of the captured-trip length is allocated to the site, the first half of the trip from the site to the primary destination is unassessed. Similar "gaps" in the allocation of travel can occur in the case of diverted trips as well. There is no easy way of accounting for all the travel through survey or analysis technique modifications.

The travel unaccounted for by the survey and analysis methods could be accounted for if all trips were treated as primary or secondary. However, not accounting for all of the travel is preferable to the alternative of not recognizing trip capture and diversion of the land uses that exhibit these characteristics. Furthermore, if the approach is consistently applied to all land uses, the land uses will be treated objectively and a lower trip length will be provided, thereby im-

proving the chances of successful defense of a fee if it is challenged as being excessive.

Travel demand characteristics are usually incorporated into an impact-fee rate computation at two points: the computation of the demand for facilities, and the estimation of credits for transportation revenues generated.

Demand Component

For the demand component of the impact fee equation, the following equation and values are typically used:

$$\text{Demand (lane-miles)} = ADT \times \%NT \times ATL \times IRF / (2 \times CAP)$$

Where

ADT = Number of daily trips generated by the development,

%NT = Percentage of new trips,

ATL = Assessable trip length,

IRF = Interstate and toll-road reduction factor, which must be locally determined, and

CAP = Capacity per lane of road, from the local impact fee.

The resulting quantity is the assessable lane-miles of roadway consumed. When multiplied by the cost per lane-mile, the cost to replace the capacity consumed by the land-development activity is estimated.

Credit Component

The credit component of the impact fee equation will vary from community to community. Typically, it recognizes the revenues that will be collected from the land-development activity and applied to roadway system expansion. Examples of such revenues may be *ad valorem* taxes, utility taxes, or any special or benefit assessments, such as a municipal services tax. The most common credit is the gasoline tax, to which the travel characteristic should be applied. The gasoline tax credit is computed as follows:

$$\text{Gas tax credit} = \{ [(\$ \text{ per gallon}) \times ADT \times TTL \times DPY] / (2 \times MPG) \} \times (P/A)^{.25}$$

Where

\$ per gallon = Amount of gasoline tax per gallon (federal, state, and local) that is

	Primary Trip Lengths	Secondary Trip Lengths	Diverted Trip Lengths	
	mi.	mi.	mi.	
	2.5	2.1	0.8	Information from one motorist interview.
	2.5	0.8	0.8	
	7.8	3.1		
	7.8	0.5		
	2.2			
	2.2			
Totals:	49.6 mi.	23.1 mi.	4.4 mi.	
Number of Observations:	12	10	6	
Average Assessable Trip Length =	[(49.6 + 23.1) + (2 × 4.4)] / (12 + 10 + 6)			
	= 2.9 mi.			

Figure 6. An example of assessable trip-length calculation.

applied to road-system expansion,

ADT = Number of daily trips generated by the developments,

TTL = Total trip length, including local street, interstate, and toll-road mileage,

DPY = Number of operating days per year,

MPG = Fuel efficiency of vehicle fleet accessing the site,

P/A = The factor representing the present worth of an annually recurring uniform amount,

i% = Compounded interest rate to be applied to the annual gasoline taxes collected, and

n = Number of years of gasoline taxes to be

credited, typically 25 to 50 years.

The rationale for including the local, interstate, and toll-road mileage in the credit component is that gasoline is consumed and gasoline taxes are generated for road construction regardless of the type of road.

Conclusion

A need exists to establish standard procedures so that assessable trip lengths are measured for use in transportation impact fees and so that these characteristics can be cataloged uniformly for various land uses. This article has provided a study methodology that is conservative and a solid, defensible base on which to determine a fee. The procedure is simple and lends itself easily to uniform application. Important considerations in identifying captured trips (or percentage of new trips) and the allocation of re-

sponsibility for diverted trips were introduced. Finally, the application of the assessable trip-length data has been discussed. These procedures have been applied to successful impact-fee studies in Florida.

Reference

1. Institute of Transportation Engineers. *Trip Generation*, 4th Edition. Washington, D.C.: ITE, 1987. ■



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