

# VOLUSIA COUNTY COUNCIL IMPACT FEE DISCUSSION

JUNE 5, 2018

# CRITICAL POINTS

May 1, 2018, the County Council directed staff to bring forward a discussion on the county thoroughfare road impact fee.

- How do we pay for thoroughfare road maintenance, expansion or construction of new roads?
- What are the legal and operational requirements for the use of thoroughfare road impact fees?
- How do we calculate impact fees for thoroughfare roads?
- How do we update those impact fees?

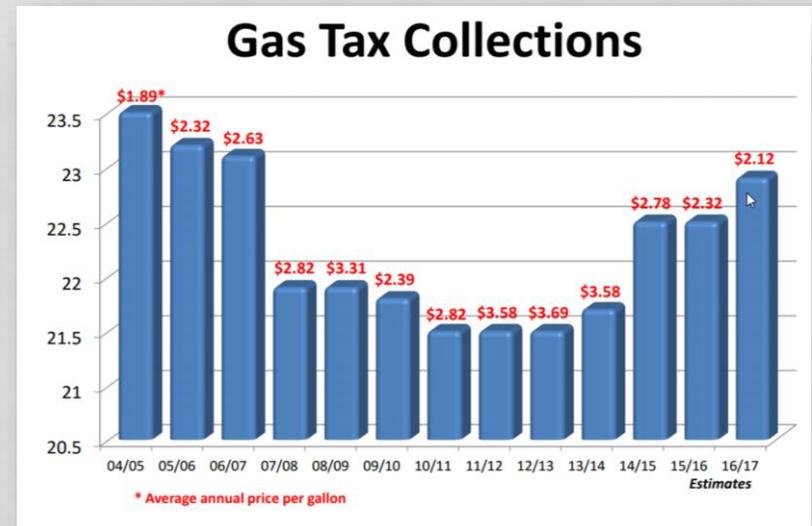
# BACKGROUND

- Volusia County uses **local option fuel tax and thoroughfare road impact fees** for the majority of road projects.
- Road projects include maintenance, expansion of existing facilities and construction of new roads.



# BACKGROUND - FUEL TAX

- Local option fuel tax can be used for maintenance, operation, and expansion.
- The amount and allocation of fuel tax revenue is established by the federal and state laws.



### Gas taxes funding roads

LEVEL	TAX	AMOUNT
<b>Federal</b> (Not Indexed)	Fuel Excise Tax	Gasoline - 18.4¢/gal Gasohol - 18.4¢/gal Diesel - 24.4¢/gal
<b>State (Distributed to FDOT)</b> <u>(Indexed)</u>	Fuel Sales Tax	All Fuels - 13.3¢/gal
<u>(Indexed)</u>	SCETS Tax	Gas/Gasohol - 6.1¢ to 7.4¢/gal Diesel - 7.4¢/gal
<b>State (Distributed to Local Gov'ts)</b> (Not Indexed)	Constitutional Fuel Tax	All Fuels - 2¢/gal
(Not Indexed)	County Fuel Tax	All Fuels - 1¢/gal
(Not Indexed)	Municipal Fuel Tax	All Fuels - 1¢/gal
<b>Local</b> (Not Indexed)	Ninth-Cent Fuel Tax	Gas/Gasohol - 0 to 1¢/gal Diesel - 1¢/gal
(Not Indexed)	Local Option Fuel Tax	Gas/Gasohol - 0 to 11¢/gal Diesel - 6¢/gal

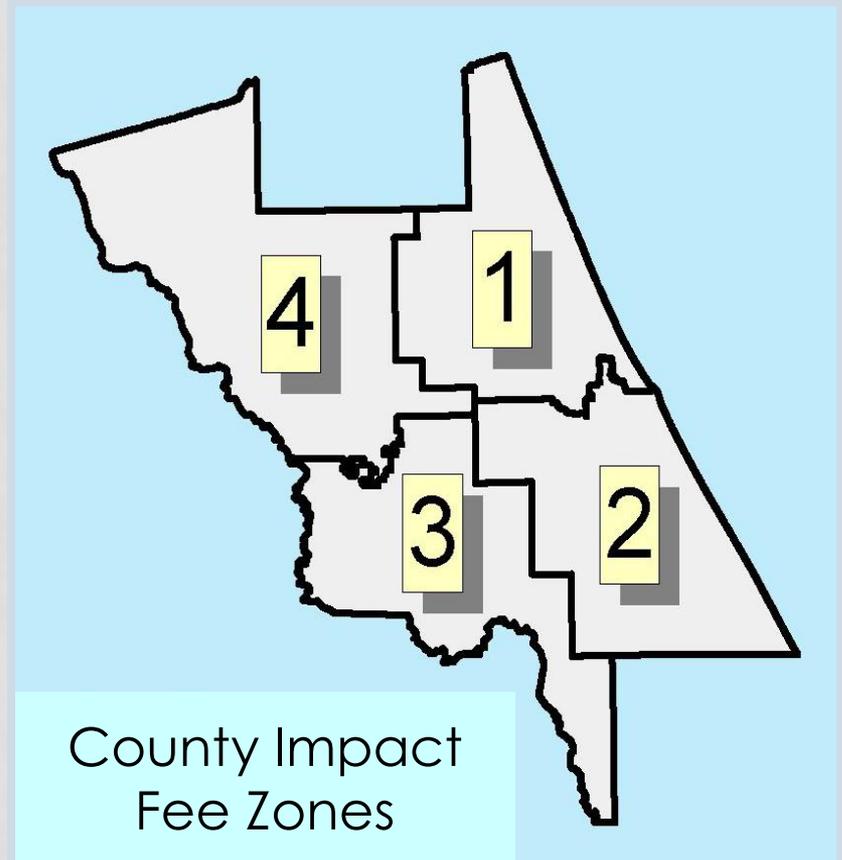
Only the State Fuel Sales Tax and SCETS Tax are indexed for inflation.

**County 2017 Legislative Issue**

Support indexing of all gas taxes distributed to local governments

# BACKGROUND – ROAD IMPACT FEES

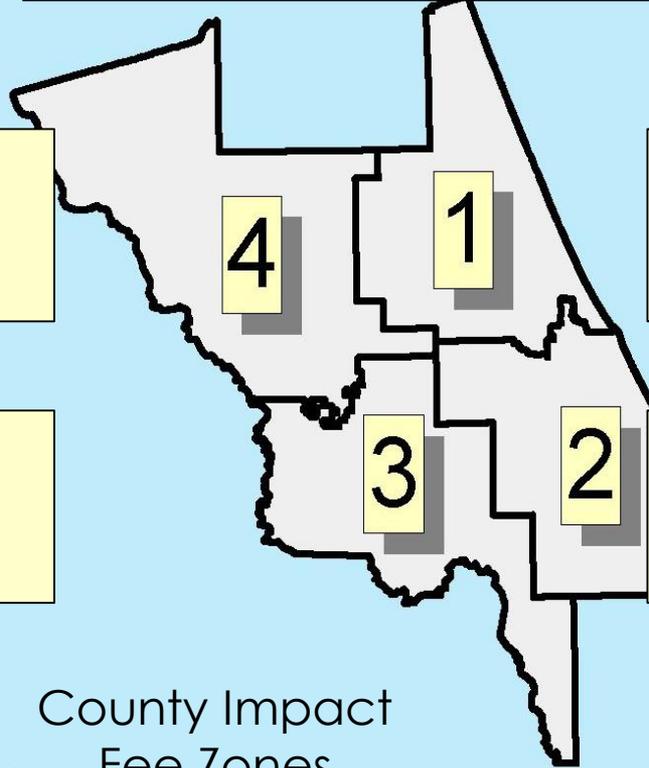
- There are four thoroughfare road impact fee zones.
- Road impact fees are used for expansion of existing roads and the study, design, land acquisition, and construction of new roads.
- There are restrictions that limit the use of road impact fees within the zones.



# HISTORY OF COLLECTIONS & CREDIT USED

(FY 2012/13 - FY 2016/17)

County Total	
Collected	= \$14,734,912
Credit Used	= \$ 8,180,068



Zone 4	
Collected	= \$3,775,293
Credits Used	= \$ 171,801

Zone 1	
Collected	= \$ 5,408,778
Credits Used	= \$ 5,362,778

Zone 3	
Collected	= \$3,436,586
Credits Used	= \$ 327,557

Zone 2	
Collected	= \$2,114,255
Credits Used	= \$2,317,933

County Impact  
Fee Zones

# HISTORY OF EXPENDITURES

(FY 2004/05 - FY 2016/17)

**ALL IMPACT FEE EXPENDITURES \$23,850,206**

## Zone 4

- DeLand  
Orange Camp Rd- MLK, Jr to US 17/92  
I-4 Frontage Rd- SR 472 to Orange Camp  
Kepler Rd- SR 44 to US 92
- **TOTAL EXPENDITURES: \$345,501**

County Impact  
Fee Zones

4

1

3

2

## Zone 1

- Ormond Beach  
Tymber Creek Rd & Airport Rd intersection  
Airport Rd & Sunshine Blvd intersection
- Daytona Beach  
Williamson Blvd- US 92 to LPGA  
LPGA Blvd- Jimmy Ann to SR5A/Nova  
Clyde Morris Blvd- LPGA to Falls Way
- Port Orange  
Williamson Blvd- Spruce Creek to Taylor  
Taylor Rd- Dunlawton to Spruce Creek  
Madeline Ave Extension- Sauls to US 1
- **TOTAL EXPENDITURES: \$14,984,564**

## Zone 3

- Deltona  
Howland Blvd- Elkcam to Newmark  
Howland Blvd- Deltona High School to Providence  
Saxon Blvd- Normandy to Tivoli
- Orange City  
Hamilton Ave Extension- Saxon to French  
Rhode Island Extension- US 17/92 to University High School
- DeBary/Deltona  
DeBary Avenue Bypass- Deltona Blvd to Providence  
Saxon Blvd Extension- US 17/92 to Proposed SunRail Station
- **TOTAL EXPENDITURES: \$7,138,259**

## Zone 2

- Edgewater/New Smyrna Beach  
Old Mission Rd- Park Ave to Josephine  
Tenth St- Tatum to Myrtle  
Pioneer Trail & Turnbull Bay Rd intersection
- **TOTAL EXPENDITURES: \$1,381,882**

# WHAT ARE THE ISSUES?

- Is growth paying its fair share for thoroughfare road improvements?
- What is the legal framework for implementing impact fees?
- What are the technical factors required to determine a defensible and implementable impact fee?

# LEGAL FRAMEWORK

## 163.31801 - Florida Impact Fee Act

- Requires that the calculation of the impact fee be based on the **most recent** and **localized data**.
- If a local governmental entity imposes an impact fee to address its infrastructure needs, the entity shall account for the revenues and expenditures of such impact fee in a separate accounting fund.
- Limits administrative charges for the collection of impact fees to actual costs.
- **Requires** that **notice be provided no less than 90 days before the effective date** of an ordinance or resolution imposing a new or increased impact fee. A county or municipality is not required to wait 90 days to decrease, suspend, or eliminate an impact fee.
- In **any action challenging an impact fee**, the **government has the burden of proving by a preponderance of the evidence** that the imposition or amount of the fee meets the requirements of state legal precedent or this section. The court may not use a deferential standard.

# LEGAL FRAMEWORK

*Hollywood, Inc. v. Broward County*, 431 So.2d 606 (Fla. 4th DCA), review denied, 440 So.2d 352 (Fla.1983).

[T]he local government **must demonstrate** a reasonable connection, or **rational nexus, between the need for additional capital facilities and the growth in population** generated by the subdivision. In addition, the government **must show** a reasonable connection, or **rational nexus, between the expenditures of the funds collected and the benefits accruing** to the subdivision. In order to satisfy this latter requirement, the ordinance must specifically earmark the funds collected for use in acquiring capital facilities to benefit the new residents.

*Contractors & Builders Association v. City of Dunedin*, 329 So.2d 314 (Fla.1976).

Raising expansion capital by setting [impact fees], which **do not exceed a pro rata share of reasonably anticipated costs of expansion**, is permissible where expansion is reasonably required, if use of the money collected is limited to meeting the costs of expansion. The cost of new facilities should be borne by new users to the extent new use requires new facilities, but only to that extent. When new facilities must be built in any event, **looking only to new users for necessary capital gives old users a windfall at the expense of new users.**

# DUAL RATIONAL NEXUS

- **Need** – new development creates need and the fee is proportional to the capacity consumed by the new development

**AND**

- **Benefit** – new development subject to the fee will benefit from the expenditure of the impact fee



# WHAT HAS TO BE STUDIED?

Generally:

Impact Fee = [(Demand x Unit Cost) – Other Tax Credit]

Net impact fee = Total Impact Cost - Gas Tax Credit

- Total Impact Cost = ((Trip Generation Rate x Trip Length x % New Trips/2) x (1- Interstate/Toll Facility Adj. Factor) x (1- City Collector Adj. Factor) x (Cost per Lane Mile/Avg. Capacity Added per Lane Mile))
- Gas Tax Credit = Present Value (Annual Gas Tax given current interest rate and 25-year facility life)
  - Annual Gas Tax = ((Trip Rate x Trip Length x % New Trips/2) x (Effective Days per Year) x (\$/Gallon to Capital/Fuel Efficiency))

# WHAT HAS TO BE STUDIED?

## BREAKING DOWN THE FORMULA

$$\text{Road Impact Fee} = ((1/2) \times (\text{TGR}) \times (\% \text{NT}) \times (\text{DF}) \times (\text{ATL}) \times (\text{CC/LM}) / \text{LM Capacity}) - \text{Credits}$$

- Trip Generation Rate (TGR): The average daily trip generation rate, in vehicle-trips/day.
- Percent New Trips (%NT): Adjustment factor for trips that are already on the roadway.
- Average Trip Length (ATL): The total daily miles travel associated with a particular land use. This reflect an adjustment to account for local roads and is divided in half to avoid double counting since every land use has an origin and a destination.
- Distribution Factor (DF): Adjustment factor to account for the travel on city, county, state and federal roadways. There is an adjustment to exclude travel occurring on roads that are not eligible to funded with the county's thoroughfare impact fee (interstates/toll facilities, local roads, and city collectors).
- Construction Cost per Lane Mile (CC/LM): The cost of constructing one mile of a thoroughfare road divided by the average capacity added per lane mile, which is the increase in average daily traffic on one lane-mile of roadway.
- Lane Mile Capacity (LM Capacity): the weighted capacity of one mile of lane.

# WHAT HAS TO BE STUDIED?

## TRIP GENERATION RATE

*Road Impact Fee = ((1/2) x **TGR** x (%NT) x (DF) x (ATL) x (CC/LM)/LM Capacity) – Credits*

**TGR** means the “trip generation rate.”

- Institute of Traffic Engineers Trip Generation Manual lists 177 land uses.
- Volusia County uses 44 land uses.
- Rate is based on average number of vehicle trips generated by land use.
- National, state, and local land use data is used to establish TGR.
- Example: a single-family home generates 9.57 vehicle trips on a daily basis; a 80,000 sq. ft. supermarket will generate 8,921 trips on a daily basis.

# WHAT HAS TO BE STUDIED?

## TRIP GENERATION RATE

Use the **TGR** for a single-family home to determine the trips generated by a 100-lot subdivision.  $100 \text{ dwelling units} * 9.57 \text{ trips/unit} = 957 \text{ daily trips on the road network.}$

Use the **TGR** for a hotel to determine the trips generated by a 98-room hotel project.  $98 \text{ rooms} * 8.23 \text{ trips/room} = 807 \text{ daily trips on the road network.}$

Uses	Units	Percent New Trips	Trip Generation Rate	Average Trip Length	Impact Fee with 3% Administrative Fee as of May 1, 2004*	Impact Fee with 3% Administrative Fee as of February 1, 2005*	Impact Fee with 3% Administrative Fee as of February 1, 2006*	Impact Fee with 3% Administrative Fee as of February 1, 2007*
<i>Residential</i>								
Single-family	DU	100.0%	9.57	6.12	\$1,801.55	\$1,919.66	\$2,043.67	\$2,173.88
Apartment	DU	100.0%	6.63	6.12	1,248.10	1,329.92	1,415.83	1,506.04
Residential condominium/townhouse	DU	100.0%	5.86	5.10	914.97	975.23	1,038.51	1,104.96
Mobile home within a park	DU	100.0%	4.81	4.30	629.88	671.58	715.38	761.36
<i>Nonresidential</i>						1,118.29	1,190.49	1,266.31
Hotel	Rooms	66.3%	8.23	6.25	1,049.52	602.13	641.40	682.63
Motel	Rooms	76.6%	5.63	4.30	564.74	192.04	204.83	218.26
Nursing home	Beds	89.0%	2.61	2.60	179.86	1,919.66	2,043.67	2,173.88

# WHAT HAS TO BE STUDIED?

## NEW TRIPS

*Road Impact Fee = ((1/2) x (TGR) x (%NT) x (DF) x (ATL) x (CC/LM)/LM Capacity) – Credits*

%NT means the percent of new trips associated with the land use.

- Based on origin, destination, and stops along the way.
- Example: a person traveling from home to work creates a new trip.
- Example: a person stops at a gas station on the way home, that is a pass-by trips.

# WHAT HAS TO BE STUDIED?

## NEW TRIPS

A single family generates all new trips, but a fast food restaurant has relatively low new trips since many people stop there on their way to another destination

Uses	Units	Percent New Trips	Trip Generation Rate	Average Trip Length	Impact Fee with 3% Administrative Fee as of May 1, 2004*	Impact Fee with 3% Administrative Fee as of February 1, 2005*	Impact Fee with 3% Administrative Fee as of February 1, 2006*	Impact Fee with 3% Administrative Fee as of February 1, 2007*
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Residential condominium/townhouse	DU	100.0%	5.86	5.10	914.97	975.23	1,038.51	1,104.96
High-turnover restaurant	sq. ft.	71.6%	130.34	3.00	8.81	9.38	9.97	10.59
Fast food restaurant	sq. ft.	59.5%	496.12	2.06	19.14	20.37	21.66	23.01
CBD sandwich shop	sq. ft.	100.0%	19.30	6.55	3.98	4.23	4.50	4.78
Quick lubrication	Bays	70.7%	42.54	3.38	3,200.41	3,405.40	3,620.64	3,846.65
Auto care	sq. ft.	72.2%	37.60	3.60	3.08	3.27	3.48	3.70
New and used car sales	sq. ft.	79.0%	37.50	4.70	4.38	4.66	4.96	5.27

# WHAT HAS TO BE STUDIED? DISTRIBUTION FACTOR

*Road Impact Fee = ((1/2) x (TGR) x (%NT) x **(DF)** x (ATL) x (CC/LM)/LM Capacity) – Credits*

**(DF)** means the “distribution factor.”

- Based on complex planning, logarithmic model that separates uses into trip producers (residential) and attractors (work, school, shopping, etc.).
- Identifies the percentage of thoroughfare roads that are traveled to get from origin to destination.
- Excludes pass through traffic on thoroughfare roads that do not originate or have destination in the county.
- Excludes vehicles that use the federal interstate system.

# WHAT HAS TO BE STUDIED? DISTRIBUTION FACTOR

The adopted impact fee model calculated the distribution factor of 70.3% of all trips generated by the various uses will use the county thoroughfare system.

TGR	=	Trip Generation Rate	=	Number of trips generated based upon land use and Trip Generation per Volusia County Roadway Impact Fee Update Technical Memorandum dated September 25, 2003.
%NT	=	Percent of New Trips	=	Percent of trips generated by the Land Development Activity considered to be new trips on the roadway.
DF	=	Distribution Factor	=	Percent of trips utilizing the county's thoroughfare system = 70.3%, (excluding vehicle miles of travel (VMT) on Interstates.)
ATL	=	Average Trip Length	=	Based upon the land use activity, (excluding local roads.)
CC/LM	=	Construction Cost per Lane Mile	=	1,678,362 Construction costs per lane-mile shall be computed using an average cost per lane-mile derived from the data provided in Volusia County Roadway Impact Fee Update Technical Memorandum dated September 25, 2003.
		Weighted Capacity of 1 Lane Mile	=	10,232 vehicles per day on the thoroughfare road system.

# WHAT HAS TO BE STUDIED? AVERAGE TRIP LENGTH

*Road Impact Fee = ((1/2) x (TGR) x (%NT) x (DF) x  
(ATL) x (CC/LM)/LM Capacity) – Credits*

(ATL) means “average trip length.”

- Reflects the findings from a statistical analysis of the different land uses.
- Based on state and local data. Has to be adjusted by the number of trips using interstate highways and local roads.
- Example: The distance traveled from a home to a convenience store is less than the distance traveled to a grocery store.

# WHAT HAS TO BE STUDIED? AVERAGE TRIP LENGTH

The currently adopted impact fee ordinance identifies trip lengths from the 2003 update.

DF	=	Distribution Factor	=	Percent of trips utilizing the county's thoroughfare system = 70.3%, (excluding vehicle miles of travel (VMT) on Interstates.)
ATL	=	Average Trip Length	=	Based upon the land use activity, (excluding local roads.)
CC/LM	=	Construction Cost per Lane Mile	=	1,678,362 Construction costs per lane-mile shall be computed using an average cost per lane-mile derived from the data provided in Volusia County Roadway Impact Fee Update Technical Memorandum dated September 25, 2003.

Uses	Units	Percent New Trips	Trip Generation Rate	Average Trip Length	Impact Fee with 3% Administrative Fee as of May 1, 2004*	Impact Fee with 3% Administrative Fee as of February 1, 2005*	Impact Fee with 3% Administrative Fee as of February 1, 2006*	Impact Fee with 3% Administrative Fee as of February 1, 2007*
Supermarket	sq. ft.	62.0%	111.51	2.60	5.66	6.02	6.40	6.80
Convenience store	sq. ft.	41.0%	737.99	1.50	14.29	15.20	16.17	17.17
Convenience store w/gas pumps	sq. ft.	28.5%	845.60	1.60	12.14	12.92	13.73	14.59
Convenience store w/gas & fast food	sq. ft.	33.0%	918.00	2.40	22.89	24.36	25.90	27.51
Home improvement store	sq. ft.	50.0%	38.13	4.99	3.00	3.19	3.39	3.60

# WHAT HAS TO BE STUDIED? CONSTRUCTION COSTS PER LANE MILE

*Road Impact Fee = ((1/2) x (TGR) x (%NT) x (DF) x (ATL) x (CC/LM)/LM Capacity) – Credits*

**(CC/LM)** means the “construction cost per lane mile.”

- This is the cost of constructing one lane of road over a distance of one mile. The road specifications are based on county standards and the costs are based on recent road construction projects.
- A blended road cost can be used when there are insufficient county projects but there are equivalent FDOT projects.

# WHAT HAS TO BE STUDIED? CONSTRUCTION COSTS PER LANE MILE

The adopted impact fee ordinance uses a construction cost from the 2003 study of \$1,678,362 per lane-mile.

TGR	=	Trip Generation Rate	=	Number of trips generated based upon land use and Trip Generation per Volusia County Roadway Impact Fee Update Technical Memorandum dated September 25, 2003.
%NT	=	Percent of New Trips	=	Percent of trips generated by the Land Development Activity considered to be new trips on the roadway.
DF	=	Distribution Factor	=	Percent of trips utilizing the county's thoroughfare system = 70.3%, (excluding vehicle miles of travel (VMT) on Interstates.)
ATL	=	Average Trip Length	=	Based upon the land use activity, (excluding local roads.)
CC/LM	=	Construction Cost per Lane Mile	=	1,678,362 Construction costs per lane-mile shall be computed using an average cost per lane-mile derived from the data provided in Volusia County Roadway Impact Fee Update Technical Memorandum dated September 25, 2003.
		Weighted Capacity of 1 Lane Mile	=	10,232 vehicles per day on the thoroughfare road system.

# WHAT HAS TO BE STUDIED?

## WEIGHTED CAPACITY OF 1 LANE MILE

$$\text{Road Impact Fee} = ((1/2) \times (TGR) \times (\%NT) \times (DF) \times (ATL) \times (CC/LM)) / \underline{\text{LM Capacity}} - \text{Credits}$$

**(LM Capacity)** means “the weighted capacity of one mile of lane.”

- Specific amount of traffic that a typical county thoroughfare road can accommodate in a lane over a distance of one mile.
- Based on the adopted level of service and adjusted based on travel over federal, state, county and local roads.
- The result is the weighted number of vehicles based on traffic using the county thoroughfare road system.

# WHAT HAS TO BE STUDIED? WEIGHTED CAPACITY OF 1 LANE MILE

The adopted impact fee ordinance uses a weighted capacity of 10,232 vehicles per day on the thoroughfare road system.

CC/LM	=	Construction Cost per Lane Mile	=	1,678,362 Construction costs per lane-mile shall be computed using an average cost per lane-mile derived from the data provided in Volusia County Roadway Impact Fee Update Technical Memorandum dated September 25, 2003.
		Weighted Capacity of 1 Lane Mile	=	10,232 vehicles per day on the thoroughfare road system.

# WHAT HAS TO BE STUDIED? CREDITS COMPONENT

*Road Impact Fee = ((1/2) x (TGR) x (%NT) x (DF) x (ATL) x (CC/LM)/LM Capacity) – Credits*

**Credits** - Present value of the portion of non-impact fee revenues generated by new development over a 25 year period that are projected to be expended on capacity expansion projects is credited against the cost of the system consumed by travel associated with the new development.

# WHAT HAS TO BE STUDIED? CREDITS COMPONENT

*Road Impact Fee = ((1/2) x (TGR) x (%NT) x (DF) x (ATL) x (CC/LM)/LM Capacity) – Credits*

## Credits

Present worth variables:

- Facility Life – estimated at 25 years
- Effective days per year – 365 days provides conservative estimate
- Interest rate – the rate at which projects may be bonded
- Fuel Efficiency =  $\sum VMT_{Roadway Type} \div \sum \left( \frac{VMT_{Vehicle Type}}{MPG_{Vehicle Type}} \right)_{Roadway Type}$
- The combined total VMT for the vehicle types is divided by the combined total gallons of fuel consumed to calculate a “weighted” fuel efficiency value that reflects the existing fleet mix of traffic on non-interstate roadways.

# WHAT HAS TO BE STUDIED?

## CURRENT CREDIT CALCULATION

Gas Tax Credit = Present Value (Annual Gas Tax) given current interest rate and 25 year facility life.

Annual Gas Tax =  $((\text{Trip Rate} \times \text{Avg. Trip Length} \times \% \text{ New Trips})/2) \times ((\text{Effective Days per Year} \times \$/\text{Gallon to Capital})/\text{Fuel Efficiency})$

- Present Value = Calculation of the present value of a uniform series of cash flows, gas tax payment at the given interest rate for a set time period
- Effective days per year = 365 days
- \$/Gallon to Capital = The amount of gas tax revenue per gallon of fuel that is used for capital improvements
- Fuel Efficiency = Average fuel efficiency of vehicles

# EXAMPLES OF EXISTING FEES

Land Use	Size/No. DUs	Fee per unit	Fee paid
Apartments	286 du's	x 1,506.04/du	= \$430,727.44
Fast Food Restaurant	4,325 sq. ft.	\$23.01/sq. ft.	\$99,518.25
Medical Office	9,335 sq. ft.	\$5.56/sq. ft.	\$51,902.60
Warehouse-Distribution	524,993 sq. ft.	\$.68/sq. ft. to \$1.22/sq. ft.	\$558,779.80
Retail	8,762 sq. ft.	\$5.35/sq. ft.	\$47,876.70
Corp. HQ	37,812 sq. ft.	\$1.48/sq. ft.	\$55,961.76

# FINAL POINTS

- Impact fees are “a moment in time” fee.
- Once a home or commercial structure is constructed and occupied it is no longer “new” growth.
- The owners of the “new” home/business will pay taxes and fees that are collected from all residents/businesses in the county.

# FINAL POINTS

## The American Planning Association's Policy Guide on Impact Fees

- Impact fees.....can be an effective tool for ensuring adequate infrastructure to accommodate growth where and when it is anticipated.
- Impact fees should not be considered a panacea for the funding of general capital improvements, nor should they be used to "stop growth." They can do neither.

American Planning Association, Ratified by Board of Directors, April 1997, San Diego, California  
([www.planning.org/policy/guides/adopted/impactfees.htm](http://www.planning.org/policy/guides/adopted/impactfees.htm))

# DECISIONS ON IMPACT FEE UPDATES

Does the County Council want to update to the thoroughfare road impact fees?

- A. Take no action at this time and see if the ½ cent sales tax is approved by the voters.
- B. Proceed with an update to the impact fee factors used in the calculations.
- C. Prepare a scope and request for qualifications for a new impact fee study.

# DECISIONS ON IMPACT FEE UPDATES

- A. Take no action at this time. Update impact fees after the decision by the voters on the ½ cent sales tax.
- Allows for collection of the current fee.
  - Allows for a single update to the fees, rather than conducting two updates if the ½ cent sales tax is approved.

# DECISIONS ON IMPACT FEE UPDATES

- B. Proceed with an update to the impact fee factors used in the calculations.
- Use existing contract with Duncan & Associates.
  - Utilizes existing data collection and analysis.
  - Decide whether to establish a committee to review the updated impact fee and make recommendations.

# DECISIONS ON IMPACT FEE UPDATES

- C. Prepare a scope and request for qualifications for a new impact fee study.
  - Will take approximately 18 to 24 months to prepare scope, select consultant, and complete the analysis.
  - Decide whether to establish a committee to review and make recommendation on the scope of services, selection of consultant, and implementation of the of the updates.

