Impact Fee Reductions and Development Activity: A Quantitative Analysis of Florida Counties¹

With the collapse of the housing bubble starting in 2006, many communities in formerly high-growth areas found their economies, which were heavily dependent on housing construction, begin to slow and even contract. These same high-growth communities had been using development impact fees as a way to raise funds for growth-related infrastructure needs, particularly for roads but also for other facilities such as parks, schools and fire stations. Impact fee revenues began to shrink, and the development industry began to call for impact fee reductions or suspensions as a way to rekindle development and stimulate the local economy. Many jurisdictions have heeded these calls. Now that we have had several years of experience with such efforts, it should be possible to measure their affects.

This paper focuses on the experience of Florida counties from 2007 to the present. Florida provides an appropriate setting for this analysis, given the widespread use of impact fees and the severity of the housing downturn in the state. A focus on counties is appropriate because of the relative dominance of counties in the provision of non-utility infrastructure, including roads and schools.² There are 64 Florida counties, and about 40 of them have used impact fees.

The Public Debate

Prior to the housing downturn, impact fee opponents in Florida generally used a twopronged attack: residential fees were resisted on the grounds that they would drive up home prices and hurt housing affordability, while fees on nonresidential developments were resisted on the grounds that they would make the jurisdiction less competitive for economic development projects. Rarely was it claimed that high residential fees would deter homebuilders, who presumably would be able to pass through these costs to buyers. Since the housing downturn, however, the nature of the discourse has changed. Now, reducing or suspending fees for residential development is sometimes promoted as a way to spur residential construction, which in turn will create jobs and revitalize local economies.

Even proponents of impact fee reductions or suspensions sometimes admit the effort may be little more than window dressing. For example, a member of Sarasota County's impact fee advisory committee was quoted in 2008 as saying of a proposed impact fee suspension: "Even if it is just a gesture, I think it's extremely important to encourage the community, because I don't think we've seen the bottom of the well yet."³ Others contend that while there is no assurance that lowering fees will stimulate growth, "If

¹ Draft of analysis by Clancy Mullen, Executive Vice President of Duncan Associates, Austin, Texas and Dr. James C. Nicholas, Professor Emeritus of the University of Florida, presented at the annual conference of the Growth and Infrastructure Consortium, Tampa, Florida, November 4, 2010.

² While Florida school boards have independent taxing authority, their boundaries are coterminous with counties and they rely on counties to enact and collect school impact fees on their behalf.

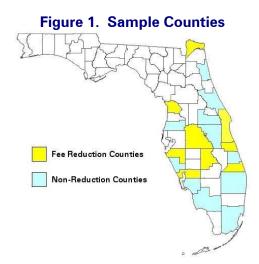
³ Sarasota Herald-Tribune, "Sarasota Looks at Impact Fees," November 15, 2008

don't try it, we won't know."⁴ Even in the face of continuing declines in permits after a year of reduced fees, the chair of the Indian River County Commission argued that there is no way to tell how much further building would have dropped off under the full amount of the fees.⁵

Are impact fee reductions simply a way for local officials to signal to developers and builders that they "feel their pain," or do they actually stimulate construction that would not have happened in the absence of such action? While a full exploration of this question for both residential and nonresidential construction would be desirable, analyzing the effect of fee reductions on nonresidential development poses some significant difficulties.⁶ In this paper, we confine the analysis to residential development.

Research Design

The method employed was to define a period of time during which a number of counties reduced their impact fees significantly, and compare the number of single-family permits issued the year before and the year after for a set of counties that include some that reduced their fees and others that did not. The first fee reductions occurred in January 2008. In order to define a large enough sample, while still allowing a year of subsequent building permit history, the fee reduction period was defined as the 19-month period of January 2008 to July 2009. The year before was 2007, and the year after the 12-month period of August 2009 to July 2010.



The starting point was to identify Florida counties that charged impact fees in 2007. Using the 2007 National Impact Fee Survey, 42 Florida counties were identified as charging impact fees.⁷ The 2009 National Impact Fee Survey was used, along with an updated survey of Florida counties, to identify counties that had reduced their impact fees significantly between January 2008 and July 2009. Nine fee-reduction counties were included in the analysis: Brevard, Charlotte, Citrus, Highlands, Indian River, Manatee, Martin, Nassau and Polk. Eleven "non-reduction" counties were identified that charged impact fees of at least \$4,000 per single-family unit in 2007 and did not reduce them during the period: Collier, Lee, Orange, Osceola, Palm Beach, Pasco, St. Lucie, St. Johns, Sarasota and Volusia. Characteristics of the 20 counties utilized in the analysis are summarized in the following table. A number of counties had to be excluded for a variety of reasons (the excluded counties, their characteristics and reasons for exclusion are provided in Table 2 at the end of the paper).

⁴ Mike Secor, President, Highlands County Builders Association, CentralFloridaPolitics.com, posted on June 17, 2009 by Heath.Whiteaker

⁵ TCpalm.com, March 16, 2010

⁶ There is no "standard" unit of nonresidential development comparable to the single-family house for residential, fees vary significantly for various types of nonresidential development, and building permit data is much more difficult to acquire.

⁷ Wakulla County was identified as charging impact fees, but was not included in the 2007 survey.

Table 1. Summary of Sample Counties											
	2008	2000-08	Pop.	Single-Family Fees		Fee	Single-Fam Permits		%		
County	Populatior	Change	Growth	Before	After	Change	Before	After	Change		
Fee Reduction	Counties										
Brevard	556,213	79,983	17%	\$9,187	\$4,834	-\$4,353	2,039	1,129	-45%		
Charlotte	165,781	24,154	17%	\$8,380	\$4,002	-\$4,378	932	271	-71%		
Citrus	142,043	23,958	20%	\$9,314	\$6,920	-\$2,394	933	154	-83%		
Highlands	100,207	12,841	15%	\$5,218	\$0	-\$5,218	918	68	-93%		
Indian River	141,667	28,720	25%	\$9,877	\$8,185	-\$1,692	1,130	269	-76%		
Manatee	317,699	53,697	20%	\$15,529	\$5,499	-\$10,030	1,086	1,181	9%		
Martin	143,868	17,137	14%	\$11,511	\$9,839	-\$1,672	318	143	-55%		
Nassau	71,915	14,252	25%	\$6,211	\$3,726	-\$2,485	626	288	-54%		
Polk	585,733	101,809	21%	\$13,415	\$9,765	-\$3,650	3,854	1,199	-69%		
Average	247,236	39,617	19%	\$9,849	\$5,863	-\$3,986	1,315	522	-60%		
Non-Reduction	Counties										
Collier	332,854	81,477	32%	\$24,428	\$28,416	\$3,988	1,069	760	-29%		
Lee	623,725	182,837	41%	\$15,503	\$15,310	-\$193	4,356	1,118	-74%		
Miami-Dade	2,477,289	223,510	10%	\$6,157	\$7,999	\$1,842	3,246	913	-72%		
Orange	1,114,979	218,635	24%	\$12,217	\$18,067	\$5,850	4,053	2,199	-46%		
Osceola	273,709	101,216	59%	\$17,941	\$18,173	\$232	2,389	784	-67%		
Palm Beach	1,294,654	163,463	14%	\$11,367	\$11,367	\$0	2,101	1,279	-39%		
Pasco	438,668	93,900	27%	\$11,686	\$16,828	\$5,142	2,052	1,006	-51%		
Sarasota	276,585	83,890	44%	\$12,203	\$12,203	\$0	1,129	535	-53%		
St. Johns	393,608	67,647	21%	\$9,605	\$10,122	\$517	2,139	1,225	-43%		
St. Lucie	426,413	61,214	17%	\$8,729	\$9,602	\$873	1,690	269	-84%		
Volusia	510,750	67,407	15%	\$9,108	\$9,108	\$0	1,520	654	-57%		
Average	742,112	122,291	20%	\$12,631	\$14,290	\$1,659	2,340	977	-56%		
-											
All County Avg.	519,418	85,087	20%	\$11,379	\$10,498	-\$881	1,879	772	-58%		

Table 1. Summary of Sample Counties

Notes: Some "after" fees changed in 2010 as follows and are not reflected here: Citrus suspended road fees 5/26/2010 (\$1,577 reduction); Martin suspension of all fees except roads and schools ended 10/1/2010 (\$4,749 increase); Collier reduced road and park fees in 10/2010 (\$3,671 reduction); St. Lucie increased some fees on 10/1/2020 (\$1,662 increase) *Source:* Population from University of Florida, Bureau of Economic and Business Research, *Florida Population Studies*, Vol. 42, Bulletin 154, June 2009; single-family fees "before" from Duncan Associates, *2007 National Impact Fee Survey*, August 2007;

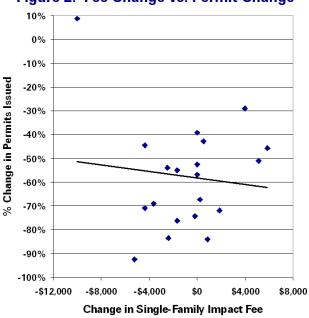
single-family fees "after" from Duncan Associates survey, October 2010; single-family building permits issued from U.S. Census, http://www.census.gov/const/www/permitsindex.html ("before" is 2007 calendar year, "after" is August 2009 through July 2010).

All of the sample counties experienced significant population growth between 2000 and 2008. The fee-reduction counties tend to be considerably smaller than the non-reduction counties (average population of 247,236 versus 742,112). All of the counties had relatively high impact fees in 2007, averaging almost \$10,000 per single-family unit in the fee-reduction counties, and over \$12,000 in the non-reduction counties, with none of the counties charging less than \$6,000 per house. The fee-reduction counties reduced their single-family fees by an average of almost \$4,000 from 2007-2010, while the non-reduction counties on average increased their fees by about \$1,600. Consistent with the state-wide trend, annual single-family permit issuance declined from 2007 to the 12-month August 2009-July 2010 period in all counties but Manatee, with the average decline among fee reduction counties slightly higher than among the non-reduction counties (60% versus 56%).

The average percentage change in permit issuance between fee reduction and nonreduction counties does not suggest a strong correlation between fee reductions and an increase (or a lower decline) in building permit issuance. However, the averages conceal large variations between counties. To take into account those variations, it is necessary to employ linear regression analysis. Regression analysis plots a line that most closely fits the data, and produces statistics that indicate the percent of variation explained (r-square), and the level of confidence that the relationship is not a random one (f-statistic).

Regression Analysis Results

If fee reductions do stimulate increased development (or at least slow declines in permit issuance), one would expect to see negative correlation between a fee increases and changes in building permit issuance. In other words, an increase in impact fees should be associated with a greater percentage decline in permit issuance, while a reduction in impact fees should be associated with an increase (or a lower decline) in the rate of permit issuance. To test this hypothesis, a linear regression analysis was performed, with the independent variable equal to the absolute change in the amount of impact fees and the dependent variable equal to the percent change in building permit issuance. The results indicate that there is no significant relationship between the

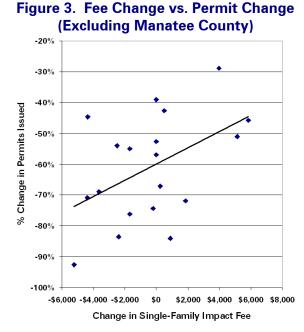




two variables. While the coefficient has the predicted sign (negative, indicating an inverse relationship), it is very small (a 1,000 decrease in impact fees is associated with 0.7% more building permits), explains only 1% of the variation, and has a 64% chance of being a random relationship.⁸ Plotting the data, as shown in Figure 2, reveals the extent to which Manatee County is an outlier.

⁸ The linear regression equation is y = -0.00000694 x - 0.582, the r-square is 0.0126, the f-statistic is 0.637 and the t-statistic for the x coefficient is -0.480

Running the regression analysis without Manatee County results in a weak but statistically significant relationship in the opposite direction. The equation explains 22% of the variation, and there is only a 4% chance of a random relationship. The equation indicates that a \$1,000 increase in impact fees is associated with 2.6% more building permits being issued.⁹ The researchers do not suggest that the results of this regression analysis indicate causality (i.e., impact increases in fees stimulate development), particularly since it was necessary to exclude the one county that reduced its fees the most and experienced an actual increase in building permits in order to achieve this result. Nevertheless, it clearly shows that the opposite relationship is not supported by these data.



Conclusion

This analysis has been unable to confirm any statistically significant relationship between impact fee reductions and higher rates of building permit issuance for single-family development. This finding will certainly not end the debate about the effects of impact fees on development activity, but hopefully it will inject some rationality into a discourse that up to now has been largely dominated by wishful thinking.

 $^{^{9}}$ The linear regression equation is y = 0.00000262 x- 0.600, the r-square is 0.2225, the f-statistic is 0.041 and the t-statistic for the x coefficient is -2.206

Growth Single-Family Fees											
0	2000 D	Growth			Netes						
County	2008 Pop.		2007	2010	Notes						
Counties that both adopted and suspended fees during the period											
Clay	185,168	31%	\$7,034	\$7,034	rd fee adopted 1/1/09, suspended 2 yrs eff. 1/1/2009						
Columbia	66,121	17%	\$0	\$0	fees adopted 2/2008; suspended 1/1/2009						
Counties that reduced fees during period, then increased them											
Wakulla	30,717	34%	?	?	1 yr suspension 9/2008, fees reinstated 3/17/2010						
Counties that reduced fees after the period											
Hernando	164,907	26%	\$9,238	\$4,862	rollback all fees to 2001 levels for 1 yr eff. 12/1/2009						
Lake	288,379	37%	\$10,026	\$10,127	rd fees suspended 1 yr eff 3/1/2010						
Marion	329,418	27%	\$5,714	\$4,254	road fees suspended for 1 yr eff. 1/1/2010						
Counties with relatively low fees in 2007											
Alachua	252,388	16%	\$2,508	\$5,776							
Broward	1,758,494	8%	\$2,718	\$5,731	road fee could not be determined						
Gilchrist	17,256	20%	\$3,500	\$3,500							
Hillsborough	1,200,541	20%	\$3,878	\$5,878							
Levy	40,817	18%	\$1,249	\$1,249							
Santa Rosa	181,180	47%	\$1,801	\$0	1 yr suspension eff. 2/19/2009, later extended thru end of 20						
Seminole	144,136	22%	\$2,635	\$6,251							
Sumter	93,034	74%	\$2,393	\$2,997							
Low-growth	counties										
DeSoto	34,487	7%	\$9,212	\$0	suspended all fees 1/1/2008						
Glades	11,323	7%	\$8,143	\$0	suspended all fees on 11/24/2008 until 12/1/2010						
Hardee	27,909	4%	\$2,628	\$2,628							
Monroe	76,081	-4%	\$1,534	\$1,534							
Pinellas	938,461	2%	\$2,066	\$2,066							
Putnam	74,989	6%	\$7,023	\$0	all fees suspended for 2 yrs eff. 3/1/2009						
Counties for which building permit data not available											
Flagler	95,512	92%	\$5,307	\$5,307							
Hendry	41,216	14%	\$7,591	\$0	all fees suspended c 9/2008, extended 2/24/09 until 1/1/2011						

Table 2. Impact Fee Counties Excluded from Analysis