



Demographics: Illuminating the Path, or Just Another Three-Ring Circus?

BY ROBERT VON

In the beginning there was the Tax Reform Act of 1986. Back then you could literally drop affordable housing units out of the sky with the guarantee of hitting your target because the demand for affordable housing was so deep and wide. Fast forward 19 years and over 200,000 units later, and we are starting to see pockets of saturation in some markets. We need to move away from the carpet-bombing approach to a laser-guided missile approach. If we do, then the question becomes how are we going to guide the missiles? We are going to guide the missiles with data: Tenant characteristic data, occupancy rate data, and demographic data.



Why use demographics? Demographics are a key component of the market studies we perform for each affordable housing project funded through the Universal Application cycle. Demographics are a useful tool in defining the relationship between supply and demand.

The four most reliable and relevant demographic factors are defined below. These factors provide important information about the markets we are trying to serve. Some say this is too obscure or too difficult to understand. You judge for yourself.

1. Level of Effort (LOE) is supply divided by demand. If the supply of affordable housing within a defined geographic area is equal to 500 and the potential demand within that same defined geographic area equals 2,000, then the Level of Effort is $500/2,000$ or 25 percent. Level of Effort defines how much of the potential demand has already been satisfied.

2. Capture Rate (CR) is just the individual subject units divided by demand. If the subject contains 100 units and the potential demand is 2,000, then the Capture Rate is $100/2,000$ or 5 percent. Capture Rate helps to define the size of the subject relative to the size of the market.

3. Remaining Potential Demand (RPD) is equal to demand minus supply. If the potential demand is 2,000 and the supply is 500, then the RPD is 2,000 minus 500, or 1,500. RPD helps to define how deep the remaining market is.

4. Growth of Income-Qualified Renter Households (DIQRH). Potential demand currently is 2,000; however, five years from now the potential demand will grow to 2,500, indicating growth of 500, over the five-year period or an annual growth of potential demand of 100.

That's it. Those are the four factors that you need to know regarding demographics. These factors are highly correlated to project performance as measured by occupancy rate. The correlations are analyzed in depth in the Guarantee Fund Ring Study that I performed for the Florida Housing Finance Corporation one year ago. The entire study is available on the corporation's Web site (www.floridahousing.org/Home/Newsroom/Publications/guaranteefunddemographicringstudy.htm); a summary follows.

A word of caution: some choose to utilize data like a drunk uses a lamppost, for support instead of illumination. Prepare for bright light.

GUARANTEE FUND RING STUDY

The purpose of the study was to analyze demographic patterns within three, five and 10-mile rings surrounding each Guarantee Fund project. These multifamily projects are financed with Tax-Exempt Bonds and are credit enhanced by the Guarantee Fund. We analyzed data for 110 projects, 73 of which were operating at stabilized occupancy.

The only data set available to measure the performance of the Guarantee Fund projects is occupancy rate. The occupancy rates used in this study are based on a six-month average of the most recent data provided to the corporation. All of the demographic indicators have been tested against the occupancy rate data to determine which demographic indicators have the highest correlation to project performance.

Level of Effort and Capture Rate have negative correlation to occupancy, so the higher the Level of Effort and the higher the Capture Rate, the lower the likely stabilized occupancy rate. Conversely, Remaining Potential Demand and Growth have positive correlation to occupancy rate.

RESULTS

The chart illustrates the results of the Guarantee Fund Ring study. We grouped the 73 stabilized projects into 12 categories. First, each of the Large Counties (as defined by Section 420.5087(1), Florida Statutes, based on 2004 population statistics) has its own category. Next, all Medium County projects are grouped as one category, except Seminole County. Seminole County is one of the most saturated counties, so its demographic results are important to illustrate individually. The final categories include the well-occupied projects (96 percent or above), and poorly occupied projects (less than 92 percent), which are isolated in order to detect any differences in their performance as measured by demographic indicators defined in the study.

GUARANTEE FUND RING STUDY FINAL RESULTS

Category	# of Stab. Projects	Capture Rate		LOE	Avg. # Of Units	Avg. Occ. Rate	Annual Growth IQRH			Level of Effort			Remaining Potential Demand				
		3 mile	10 mile				3 mile	5 mile	10 mile	3 mile	5 mile	10 mile	3 mile	5 mile	10 mile		
Miami-Dade Averages	11	5.2%	22.1%	265	98.4%	114	300	988	46.6%	34.2%	22.1%	2,720	9,390	39,618			
Occ.>95.9% Averages	24	6.3%	24.7%	240	98.2%	78	210	653	44.8%	33.3%	24.7%	2,107	6,975	25,818			
Broward Averages	9	3.9%	22.2%	199	95.2%	79	218	626	28.6%	25.0%	22.2%	3,652	10,254	30,891			
Hillsborough Averages	3	16.1%	48.0%	311	93.0%	61	161	413	84.9%	59.7%	48.0%	294	1,926	6,758			
Pinellas Averages	1	10.6%	22.2%	232	92.7%	39	89	301	22.9%	10.1%	22.2%	1,688	4,493	11,622			
Stabilized Project Averages	73	9.6%	34.1%	262	92.6%	70	175	500	57.5%	42.7%	34.1%	1,154	4,142	14,467			
Medium County Averages	26	25.6%	45.5%	277	91.3%	27	66	165	90.6%	61.9%	45.5%	102	982	3,568			
Orange Averages	11	8.5%	54.2%	284	91.1%	126	279	822	84.7%	61.0%	54.2%	513	3,411	12,298			
Palm Beach Averages	6	7.0%	46.6%	202	89.6%	93	238	525	42.7%	40.7%	46.6%	1,666	4,691	9,246			
Duval Averages	5	13.0%	40.6%	299	89.5%	60	158	448	50.4%	45.5%	40.6%	1,143	3,306	11,603			
Occ.< 92.0% Averages	30	12.8%	50.0%	283	86.4%	73	166	461	78.1%	58.0%	50.0%	482	2,313	7,963			
Seminole Averages	5	34.7%	72.6%	318	83.3%	31	78	239	163.3%	122.6%	72.6%	(580)	(527)	2,209			
Correlation		-68.9%	-85.2%		-45.9%	100.0%			41.3%	51.6%	60.0%	-67.9%	-71.9%	-85.2%	74.0%	79.7%	81.0%

Categories are sorted by Occupancy Rate
 IQRH = Income-Qualified Renter Households
 Capture Rate = # of Subject Property Units Only/IQRH
 LOE = Level of Effort = Supply of Affordable Units/IQRH
 Remaining Potential Demand = IQRH - Supply of Affordable Units

The Miami-Dade projects had the highest average occupancy rate resulting in the second lowest three-mile Capture Rate, lowest 10-mile LOE and highest 10-mile Remaining Potential Demand. By contrast, Seminole County, which had the lowest average occupancy rate, had the highest average three-mile Capture Rate, highest 10-mile LOE and lowest 10-mile Remaining Potential Demand. In addition, Miami-Dade had the highest 10-mile annual growth in Income-Qualified Renter Households compared to Seminole County, which had the second lowest 10-mile annual growth in Income-Qualified Renter Households.

In addition, the well-occupied projects had Levels of Effort and Capture Rates half that of the poorly occupied projects. Also look at the level of annual growth of Income-Qualified Renter Households (IQRH) within the 10-mile ring relative to the average size of the project. Only in Medium County do we see project size being larger than the amount of annual growth. Clearly the average project size within Medium Counties is too large.

The average occupancies in each of the 12 categories range significantly, from a high of 98.4 percent in Miami-Dade County to a low of 83.3 percent in Seminole County. Seventy-three of the 110 Guarantee Fund projects are operating at a stabilized occupancy rate. Seventeen of the top 20 highest occupied projects are located in either Miami-Dade or Broward Counties, illustrating the strength

of the south Florida market. By contrast, 11 of the 20 lowest occupied projects are located within Orange, Seminole, or Lake Counties, illustrating the softness of the central Florida market. (These markets have recovered significantly since the completion of the study).

LEVEL OF EFFORT

The correlation is evident from a comparison of the 10-mile LOE for projects with occupancy rates below 92 percent (50.0 percent), which is about twice as high as projects with occupancy rates of 95.9 percent or above (24.7 percent). The correlation is also supported by the significant difference in average LOE between Miami-Dade County with an average stabilized occupancy of 98.4 percent and an LOE of 22.1 percent, compared to Seminole County at 83.3 percent average occupancy and an LOE of 72.6 percent.

CAPTURE RATE

This demographic indicator helps to measure if the subject properties are appropriately sized relative to the size of their markets. The higher the Capture Rate the greater the probability that the project is too large for the market, which may result in longer absorption periods and lower stabilized occupancy rates.

The Capture Rates range from a low of 3.9 percent in Broward County to a high of 34.7 percent in Seminole County; occupancies for these categories are 95.2 percent and 83.3 percent, respectively.

There are 26 stabilized projects located within the Medium Counties category, which has a relatively low average occupancy of 91.3 percent. Thirteen of the projects in this category have three-mile Capture Rates over 25 percent. Only one of the properties in this category has a three-mile Capture Rate below 10 percent: River Trace in Manatee County has the lowest Capture Rate at 8.8 percent, which suggests that it is “capturing” a proportionate share of the market. Occupancy figures bear this out, as the property is 95.1 percent occupied. It is clear from this data that the typical project size in Medium Counties is too large for the size of their markets.

REMAINING POTENTIAL DEMAND

The size of the RPD is a key indicator of a project’s chance of success. The larger the RPD, the more likely a project will be able to capture enough tenants to maintain a high level of stabilized occupancy. A low RPD can result from either a sparsely populated market or from a large existing supply of affordable housing. Either would result in a lower probability of achieving a high stabilized occupancy rate.

In the most obvious example, the category of projects with high occupancy rates (95.9 percent and above) has a much higher level of RPD compared to the category of poorly occupied projects (less than 92 percent). The strongest market (Miami-Dade County) has the highest RPD of 39,618 in the 10-mile ring, while the weakest market (Seminole County) actually has a negative RPD within the three- and five-mile rings. The Medium Counties have very low RPD within the 10-mile ring and a corresponding low average occupancy of 91.3 percent, as do Hillsborough and Orange Counties (with 93.0 percent and 91.1 percent occupancies).

The RPD demographic indicator category illustrates the significant differences even between the Large Counties, with Miami-Dade and Broward having much larger remaining pools of potential tenants compared to the other Large Counties. In fact, Miami-Dade and Broward combined have over 36 percent more RPD than the other five Large Counties combined.

“RANKING THE COUNTIES WILL INSURE THAT THE FUNDED PROJECTS WILL GO WHERE THEY ARE NEEDED MOST....I BELIEVE THE DEVELOPERS SHOULD HAVE TO PROVE THERE IS A MARKET FOR THEIR PRODUCT THROUGH UPFRONT DUE DILIGENCE....”

DIQRH

The higher the DIQRH relative to the project size, the less the project has to rely on cannibalizing tenants from existing projects. If the DIQRH is less than the project size, then the project must rely on tenants moving from existing projects, which would lower the overall occupancy rate of the entire market and lower the expected stabilized occupancy rate of the project.

Of the Large Counties, projects within Miami-Dade County had the highest average DIQRH (988), followed by Orange County (822). Of the Large Counties, Pinellas had the least

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Demographics: An Update from Florida Housing Finance Corporation Staff

By Rachael Fink

Building on the work done by Robert Von in the Guarantee Fund Ring Study, Florida Housing Finance Corporation is currently running an expanded test to determine whether any of the indicators might be used to assist us in making funding awards for rental developments through our annual Universal Cycle. For our test, we have increased the number of indicators and the number of Florida Housing financed developments to determine if the correlations presented in the Guarantee Fund Ring Study hold true for a larger, more diverse group of developments. We have collected occupancy rates for January through June of 2004 for 575 developments and are running correlation and regression calculations with seven different demographic indicators to determine which indicators have the closest correlation to occupancy. In addition to the four indicators highlighted by Robert, we are testing the number of income qualified renter households, which is a measure of demand for housing; median income as reported by the U.S. Census; and the number of renter

households with incomes between \$45,000 and \$70,000. We are running the calculations for each of the indicators in three, five and 10-mile rings around each of the 575 developments.

While Florida Housing hopes to use one or more of these indicators in the scoring process for the 2006 Universal Cycle, there are several concerns which must be addressed before a system can be put into place. First, market driven information like demographics may have to take second place to the pressing issue of land availability. In some areas of the state, development is happening at such a furious pace that land available for affordable housing is disappearing rapidly, and it may be necessary to fund a development in an area with a less than ideal demographic profile simply because there are few available locations remaining in a community that still needs affordable housing. Secondly, there is some evidence to suggest that developments in certain locations, such as waterfront or vacation destinations, perform very well, despite demographic evidence to the contrary.

Destination locations often have very little housing available for low wage earners and a household may be willing to relocate from considerable distance to be closer to jobs. An affordable development in a destination location may draw residents from many miles away, rendering inaccurate a demand number based on current demographics in a three, five or 10-mile ring around the development. Finally, a method for providing the development community with access to the data and methodology to be used in the scoring process must be established.

Florida Housing will be engaging the community in this discussion as part of the 2006 Universal Application development process. The ultimate goal is to develop a system that incorporates relevant demographic indicators into the scoring process to ensure that Florida Housing financed developments are well positioned to compete in the market place.

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projected annual growth at 301. The Medium County projects had an DIQRH of less than half the typical Large County; the average occupancy in this category is also relatively low at 91.3 percent. The DIQRH of markets for the well-occupied projects (>95.9 percent) was 42 percent higher than the projects that were poorly occupied (<92.0 percent).

Only two categories had a DIQRH within the 10-mile ring that was less than the average project size: Medium County and Seminole County. The DIQRH for the Medium County category was 165, compared to an average project size of 277. In Seminole County, the DIQRH was 239, compared to an average project size of 318. As a result, the Medium County projects have an average occupancy rate of 91.3 percent, while the Seminole County projects have an average occupancy rate of only 83.3 percent.

THE ROAD AHEAD

The question now becomes how do we apply this information to the process? A few years ago, the concept of proximity was added to the Universal Application. For the first time, the application recognized that all sites are not created equal and proximity to certain services was utilized to help rank the applications. We now have new tools to assist in this important task. The demographic factors, LOE, CR, RPD, and Growth, are knowable, objective, and relevant.

The demographic factors can be utilized in another important way: to rank the counties. The order in which projects are funded should not be left to chance. Ranking the counties will insure that the funded projects will go where they are needed most.

If you rank the counties and the applications utilizing the demographic factors illustrated in the Guarantee Fund study, the Corporation could eliminate the concept of "Location A," that essentially tells the development community where not to build, which in my opinion is a seriously flawed policy. I believe the developers should have to prove there is a market for their product through upfront due diligence, which would eliminate ill-conceived projects before they reach the underwriting process.

Now you know all that you need to know about demographics and can be your own Lord of the Rings!



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THE HOMELESS: AWAITING A HOME IN LIBERTY CENTER IV



Rev. Langford, Executive Director for Liberty Center for the Homeless, Inc., in front of Liberty Center IV.

Liberty Center IV was awarded Predevelopment funds, Housing Credits, and LSAIL program funds to substantially rehabilitate an old office building on the banks of the St. Johns River in Jacksonville for conversion to a 100-unit SRO facility to house homeless persons. On a cold day in January 2005, Wight Greger went to the site to take a few pictures to show how construction was progressing. While taking pictures from one vantage point near the overpass, Greger was approached by a homeless man who expressed an interest in the project. While the man did not wish to give his name or have his picture taken, he did state that he was anxiously awaiting the completion of the facility so that he could move in and had already spoken to Rev. Langford, Executive Director for Liberty Center for the Homeless, Inc., for assurance that space would be available for him.



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