THE IMPACT OF REAL ESTATE ON THE FLORIDA ECONOMY

--UPDATE FOR 2003--(Using Roll Year 2002 Property Appraiser Data)

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Summary of Economic Impacts Using 2002 Data

Ad Valorem Taxes:

In excess of \$13.6 billion annually in property taxes goes to school districts, county government, and municipalities.

Real Estate Activity (Construction and Transactions):

The economic impact from construction and real estate transactions is approximately of \$77.9 billion annually.

Real estate provides more than 1.3 million jobs with annual earnings of nearly \$24.7 billion.

Real Estate Investment Income:

An investment return to property owners of approximately \$117.7 billion annually.

Total Estimated Impact on Florida Economy:

In excess of \$ 233.9 billion annually

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The purpose of this research is to update the previous economic impact analysis report (*Shimberg Center for Affordable Housing Technical Note Series: Technical Note 02-02*) based on 2001 data to an analysis based on 2002 data. These reports characterize the importance of real estate, broadly defined, to the economy in the state of Florida. Equity in real estate dominates the wealth of the typical Florida homeowner, and the value of the Florida housing stock represents a sizable proportion of total wealth in the state. At year-end 2002, the state of Florida had over 8.6 million property parcels assessed at \$1.1 trillion. Of these, approximately 3.8 million parcels represented single-family houses assessed at nearly \$520 billion.

An indirect impact of the real estate is the tax revenue generated. The \$1.1 trillion assessed value has a taxable value of slightly more than \$794 billion, which generates more than \$13.6 billion in ad valorem tax revenues annually. These proceeds fund county government, school districts, special (water, sewer, etc.) districts, and municipal ventures.¹ However, the primary focus of this report is on the direct impact of real estate activity, which fundamentally consists of construction and real estate related transactions. Total construction output in 2002 was \$33.5 billion. This new construction translated into an increase of \$29.1 billion in assessed value

There were 653 thousand real estate transactions in 2001 totaling nearly \$98.4 billion in total sales, a turnover rate of approximately 7.5%. The remainder of this report documents the impact of real estate in several dimensions including investment.

¹ Nationally, property taxes provide over two-thirds of the average locality's revenues. See the National Realty Committee, "America's Real Estate: A National Policy Agenda," January 1995.

Section 1: The value of Real Estate and Ad Valorem Taxes

This analysis includes real property only, i.e., personal property as part of the tax base is disregarded. Additional information is gathered from the *2002 Florida Property Valuations and Tax Data* publication. Table 1 shows the total number of real estate parcels, total assessed (just) value, and total taxable value by general land use category for the entire state. The 15 general land use categories are vacant residential, single family detached housing, mobile homes, condominiums, multi-family housing (nine-orless and ten-or-more units), miscellaneous residential (cooperatives and retirement homes), vacant commercial, vacant industrial, improved industrial, agricultural, institutional, government, and miscellaneous.

	2002 Total Number of Parcels	2002 Just Value of Real Property	2003 Taxable Value of Real Property
Vacant Residential	1,745,761	\$32,279,697,447	
Single Family Residential	3,890,731	519,608,099,222	372,677,097,290
Mobile Homes	411,412	16,316,085,237	9,460,756,375
Condominium	1,308,641	151,760,046,293	125,501,328,608
Multi Family<10	156,105	19,221,756,550	16,870,511,552
Multi Family> or = 10	14,003	33,108,332,177	32,450,887,144
Misc. Residential	68,109	5,526,204,158	4,442,455,462
Vacant Commercial	80,839	10,100,150,223	9,875,240,175
Improved Commercial	183,571	131,810,953,259	129,265,778,370
Vacant Industrial	19,012	2,762,076,033	2,669,924,714
Improved Industrial	53,404	31,432,755,469	31,000,057,949
Agriculture	227,068	41,638,073,187	10,399,416,659
Institutional	51,907	26,413,974,954	6,471,931,961
Government	193,353	76,777,373,359	817,283,085
Misc.	283,334	14,599,593,380	10,593,129,566
Total Real Property	8,687,250	\$1,113,355,170,948	\$794,186,790,748

Table 1: Real Property in Florida for 2002

With an average millage rate of 17.12, the \$794 billion in taxable value generates approximately \$13.6 billion in tax revenues. On average (for the state), school districts

receive the greatest proportion (42.3% or \$5.75 billion), followed by county government (35.2% or \$4.8 billion), and municipalities (12.2% or \$1.66 billion).

Section 2: Real Estate Activity

2.1 Construction

Building Permit activity is analyzed to derive the value of new construction for the state. Additions to the tax base and revenues generated are also determined. The sources of these data are the U.S. Census Bureau and *2002 Florida Property Valuations and Tax Data* publication. New construction in the state of Florida is valued at approximately \$33.5 billion dollars. The building permit 2002 total for the state for new residential construction is \$22.5 billion, implying \$11 billion is non-residential new construction. For new residential, 128,719 single-family units were constructed and 56,712 multi-family units were constructed. For the state, single-family represents about 69.4 percent of the total units built.

2.2 Transactions²

Next, real estate sales, mortgage and related activities are examined. The sources of these data are the *2002 Florida Property Valuations and Tax Data* publication. For the state of Florida in 2001, 653,355 real property parcel transactions took place with a total sales value of approximately \$98.4 billion. In addition to the sales price, these transactions generate fees, doc stamps, title transfers, and brokerage commissions, which are estimated as a percentage of total sales. Although the exact sales cost percentage is not known, the revenues generated assuming four, five, and six percent are as follows:

² Due to a misunderstanding between the author and the Florida Department of Revenue, the values reported in the 2002 Update were actually this year's values. Therefore, the number of transactions and the value of those transactions are identical in the two reports.

Sales Cost	Sales Revenue
4 percent:	\$3.9 billion
5 percent:	\$4.9 billion
6 percent:	\$5.9 billion

We conservatively estimate the demand for real estate transaction related services to be \$4.9 billion per year for real estate transactions.

Section 3: Economic Multipliers and Actual Employment & Earnings

The Regional Input-Output Modeling System (RIMS II), developed by the U.S. Department of Commerce Bureau of Economic Analysis (BEA) is used to analyze economic impacts. The RIMS II system allows economic impacts to be estimated for any region (e.g., Florida) and for any industry with a Standard Industry Classification (SIC) in the national input-output tables.

For each specific industry division, there is a set of three "total" multipliers: output, earnings, and employment. These multipliers are applied to the demand estimates (developed in Section 2) to produce estimates of the total impact (over all related industries within the state) of real estate on the state's economy. The total impact of employment and earnings refers to all direct and indirect jobs and the income they create. An example of direct employment is a real estate agent, while an example of an indirect employment is the advertising job at the local newspaper that is created by the listing of the properties for sale. We compare our multiplier-predicted employment and earnings to actual (direct) employment and earnings as a verification of the final demand estimates. The remainder of this section summarizes demand estimates for different industrial divisions, predicts the total multiplier effect for output, earnings and employment, and documents actual earnings/employment to compare with our predicted impacts of real estate activity.

3.1 Total Multipliers for Output

Output multipliers predict how much increased economic activity in other industries is caused by every additional dollar increase in one specified industry. The output multipliers allow us to estimate the amount of economic activity that is generated from an increase in the value of real estate activity. The effect on economic output is demonstrated in Table 3-1 below. For every one dollar that is spent on new construction, a total of \$2.12 of economic activity is generated. The \$2.12 is composed of \$1.00 of direct (on the job) materials and labor, plus an additional \$1.12 of increased output in other related industries. The multipliers are applied to our final estimates of annual demand (from Section 2): \$33.5 billion for new construction and \$4 billion for real estate transactions. Output multipliers predict a total impact of \$71 billion from new construction (of which \$41.4 billion comes from new residential construction) and \$6.9 billion from real estate transactions. This represents an annual (2002) total for the state of approximately \$77.9 billion.

Industry	Demand Estimate	Multiplier	Output Impact
New Construction	\$33,500,000,000	2.1207	\$71,043,450,000
Real Estate	4,900,000,000	1.3990	6,855,100,000
		Total:	\$77,898,550,000

Table 3-1 State of Florida: Total Multipliers for Output

3.2 Total Multipliers for Earnings

Earnings multipliers for a given industry in a region show the earnings that a given industry pays, both directly and indirectly, to households employed in regional industries to deliver an additional dollar of output. For example, Table 3-2 below shows that the earnings multiplier for new construction is 0.7134. This means that \$0.71 will be paid in wages to people directly and indirectly involved in the creation of each additional dollar of output. A portion of the earnings would be considered direct if the earner was at the actual job site placing concrete. An indirect earner would be someone involved in mining the raw materials used to make the concrete that is be used on the job.

Earnings multipliers predict \$23.9 billion from new construction (of which \$16 billion comes from new residential construction) and \$790 million from real estate transactions. This represents an annual (2002) total for the state of approximately \$24.7 billion.

Industry	Demand Estimate	Multiplier	Earnings Impact
New Construction	\$33,500,000,000	0.7134	\$23,898,900,000
Real Estate	4,900,000,000	0.1612	789,880,000
		Total:	\$ 24,688,780,000

Table 3-2: State of Florida: Total Multipliers for Earnings

3.3 Total Multipliers for Employment

Employment multipliers work in much the same way as earnings multipliers, except that they predict the number of jobs that will be created and they are expressed in millions of dollars of output. The employment multipliers predict the actual number of direct and indirect jobs created. For example, as shown in Table 3-3 below, each \$1 million of new construction is estimated to create 37.6 jobs. Employment multipliers therefore predict 1.26 million jobs from new construction (new residential construction accounts for 846 thousand of these jobs) and 66 thousand jobs from real estate transactions. This represents an annual (2002) total for the state of over 1.3 million jobs.

able 3-3: State of Florida:	Total Multipliers for	Employment	
Industry	Demand Estimate	Multiplier*	Employment Impact
New Construction	\$33,500,000,000	37.6	1,259,600
Real Estate	4,900,000,000	13.5	66,150
* jobs per \$1,000,000		Total:	1,325,750

Section 4: Investment Returns from Real Estate

The multiplier estimates above do not include investment ("unearned") income from real estate. Because real estate is considered a factor of production that generates a return, such returns from real estate should also be regarded as an "impact" All real estate parcels provide either an explicit rent (if they are rented or leased), or an implicit rent to the owner who would otherwise have to pay rent in lieu of ownership.

Obviously, different parcels (with different land uses and different locations) will generate different returns. RealtyRates.com surveys the return expectations of a representative sample of large institutional investors each quarter. Published in their quarterly Market Survey, this survey provides insight into the required yields (capitalization rates) used by large investors when making acquisitions. The mean required yield for 2002 investments in all property types was 10.57 percent.

According to the Florida Department of Revenue, the total just value of all real estate is approximately \$1.1 trillion. Applying a 10.57 percent yield rate to the \$1.1 trillion of market value suggests that real estate owners in Florida earn approximately \$117.7 billion in investment income annually.

Section 5: Conclusion

Figures here have been updated to 2002, the most recent year for which data are available from all the sources employed here. The different impacts of real estate are taxes, activity, and investment.

Ad Valorem Taxes: In excess of **\$13.6 billion** annually goes to school districts (42.3%), county government (35.2%), and municipalities (12.2%).

<u>Real Estate Activity (Construction and Transactions)</u>: We estimate an economic impact from construction and real estate transactions to approximately **\$77.9 billion** annually. Furthermore, real estate provides more than **1.3 million jobs** with annual earnings of nearly **\$24.7 billion**.

Real Estate Investment Income: An investment return to property owners of approximately **\$117.7 billion** is generated annually. This does not include the employment and earnings that are generated from indirect real estate investments such as REITs.