#### Historical Analysis of Residential Sales in Tallahassee Pamela Hall, Ph.D. March 8, 2005

The following is a presentation of the sales history of homes, vacant lots and land for the City of Tallahassee. My aim is to provide data based information on housing in Tallahassee in order to aid the discussion of land planning policy. The analysis is based on the Property Appraiser's tax roll of 2002 and has been augmented by the Multiple Listing Sales (MLS) database provided by the Tallahassee Board of Realtors which is current through 2004. I take responsibility for all errors or omissions herein and welcome comment. I hope this report proves to be of use.

#### SUMMARY AND CONCLUSIONS

1. Within the city limits, the median price of houses sold in 2002 was \$130,000. In 2004 the median price was approximately \$153,000 (MLS database). The price of a new house in 2002 was \$151,000 which was 16% higher than the overall city median. Given the median price provided by the MLS in 2004, the median price of a new house in Tallahassee was in 2004 approximately \$178,000.

The price of a house in the northeast (NE) of the city in 2002 was just under \$155,000 which was 19% higher than the median for the entire city. In 2004, the MLS data provides a median price of houses sold in the northeast of \$193,000 . However, the MLS data base includes the entire County and this means the most expensive part of the County: the northeast outside the urban services area, is included in the MLS quadrant median. Therefore, the median price of a house in the northeast of the Tallahassee in 2004 is most likely between \$182,000 and \$193,000.

2. There is a huge difference in the price per acre of platted compared to unplatted land and therefore, it is uninformative to only refer to the price of "vacant" land. Whether it is platted or not must first be distinguished. The median price per acre of platted land in 2002 in Tallahassee was \$147,500. For unplatted land it was about \$65,000 (computed trend line, actual value was \$49,000). The price for the median sized lot of 0.24 acres was \$35,400, based on the price of vacant platted land per acre.

The price of platted land has risen faster than unplatted land, probably reflecting both an increase in cost of infrastructure construction and the increased value in selling platted land. The price of the median platted lot was 28% of the price of the median house in 2002 while the price of the unplatted acreage for the same lot size was 14%.

3. In 2002 there was nearly 14,000 acres of developable vacant land within the city of Tallahassee which under current development practices could provide over 32,000 residences. However, the current zoning allows for over 60,000. This indicates that zoning densities are not limiting the number of houses built but rather that development standards and creative land planning may be the main hindrance to increased density. Coincident with the adoption of the Comprehensive Plan residential density has increased inside the Urban Services Boundary (USA), but clearly more urban infill can be accomplished and at higher densities than current practices are

producing. But this needs to be done without turning Tallahassee into an "asphalt jungle" nor passing on the environmental consequences of greater storm water runoff and less green space to neighboring developments or the next generation of residents. I suggest that when more impervious is being created to accommodate higher density housing, a higher proportion of that impervious be actual rooftops instead of asphalt (roads or parking) and that the retained green space or landscaping be more integrated into the development to improve the aesthetics and environmental conditions of the development.

In the Northeast quadrant of Tallahassee there were 486 acres of unplatted developable land in parcels of 10 acres or more and 306 more acres in parcels of 5 < 10 acres. If built to maximum allowable densities these could provide 7,500 units, but current development practices would provide only 2,600. Substantial increases in net density needs to take place and this would greatly aid in the provision of inclusionary housing.

4. The inclusionary housing price threshold of \$160,000 is high relative to the median price of houses in Tallahassee of \$153,000 in 2004. In 2004 in the northeast, 27% of all houses, including new and existing, sold for \$160,000 or less (MLS data). This includes the particularly high priced houses in the unincorporated northeast area, therefore, there is substantial availability of houses, mostly existing, in the northeast area of the city, at or below the inclusionary housing price threshold. Placing an inclusionary housing price above the city median price may create some unexpected shifts in population. Also given realistic household budgets, the mortgage on a \$160,000 house would be a substantial burden on the median household income of about \$60,000 per year. I do recognize the standards for such considerations are produced by federal agencies, but I think a more realistic assessment of the financial status of household's should be considered given that many households have other debt (cars, credit cards, medical, etc. and savings commitments (retirement, education, etc.). I suggest the Commission consider lowering the inclusionary housing price to better reflect the market price as well as the price in the targeted census tracts of the northeast and the targeted households.

5. Providing inclusionary housing creates developments of mixed prices, lots sizes and house qualities. This is a common design of developments of many sizes in Tallahassee, so is not alien to our community. If a development of expensive houses of \$250,000, which is in the 75th percentile of all houses sold in the northeast in 2004 (MLS data) included 10% of the houses at \$120,000 to \$150,000, then, at a maximum, the sales revenue would be reduced by 5.6% to 4.4%, respectively.

However, this does not reflect the actual loss in profit in any, because the cost of building inclusionary houses will be less than their market counterparts due to smaller lots, lower quality building materials and fewer amenities, and some lower permitting costs, etc. Some of the costs would remain fixed regardless of the quality of the home such as infrastructure construction costs and the permitting associated with these. The buyers of the market placed houses also will not necessarily tolerate making up the entire difference in profit between a market and inclusionary prices house, which is different than the difference in sales revenue. But mixed price housing is often created in a development and the values that produce this could be used to create incentives

and provide subsidies to produce inclusionary priced houses.

6. The amount of vacant land of 5 to 10 acres is substantial in the northeast (and throughout the City) and given that the net density on such parcels is quite low under current development practices, I believe that a minimum development of 50 units should be lowered to include these many parcels and to encourage substantial improvement in net density of residential development in the northeast. Requiring minimum densities in all developments regardless of whether inclusionary priced houses are provided may create development designs that actually provide less expensive housing in order to have mixed pricing. There will have to be a fairly large number of small lot houses in order to meet a minimum density and still provide large lot houses with desirable higher profit margins for the developer.

Also, note that the total number of units in a development does not affect the percentage change in sales revenue, only the total amount sales. It is the required percentage of lower prices houses and the difference between the lower priced and market priced houses are the important factors that affect sales revenue totals. While providing 1 inclusionary prices home (a development of 10) may be very hard to achieve, a duplex could easily be "hidden" by creative design in an otherwise single family detached development.

7. In my opinion, the most important information that is lacking is a clear, objective analysis of the actual cost of providing homes at lower than market prices. The computation I present is crude compared to an actual accounting of the cost of infrastructure and dollars per square foot for construction though it is the outer limits of the "cost" associated with lower priced houses in an upscale market since it computes the decrease in sales revenue which a developer would prefer not to experience. But with a detailed analysis in hand of the actual costs of development to the developer and builder then the feasibility of providing inclusionary housing could be determined. I strongly suggest that the planning staff and development community work together to provide accurate information of this kind. From my point of view, I truly wonder why a 4% to 6% decrease in sales revenue cannot be compensated for by decrease cost in the amount of land, building costs of inclusionary houses, subsidies using our tax dollars for provision of utilities and a small increase in the market priced houses to their buyers and a decrease in the profit margins of the developer, builder and realtor.

8. To avoid confusion with other reported values for house prices, the difference between an "average" and a "median" value is described later in this document. For instance, The Tallahassee Democrat reported an average sale price of \$189,000 for all houses sold in 2004 . This is actually in the 67th percentile of all houses sold in 2004. This means that approximately two thirds of the houses sold in 2004 cost less than \$189,000. As stated above, the median price was \$153,000, half of all homes sold for this or less. The average price for a new house reported in the Democrat was \$244,000, which is the 80th percentile. However, the median price of a new house was approximately \$178,000, substantially less than the average. In the case of house prices, the median represents the "typical" or "average" price of a house because the actual arithmetic average is strongly influenced by the few sales of very highly priced houses. Incomes have the same sort of distribution as house prices and hence the median

income is used for computation of inclusionary house prices. Averages should not be used.

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#### 1. Definitions and scope of analysis

The Property Appraiser's data base of 2002 (tax roll) contains records of all sales including houses, lots and land, new construction and resales. Though a few years out of data, given its completeness, it provides a good picture of the recent history of sales. Therefore, this analysis is based on the tax roll of parcels, vacant and improved, that were sold between 1972 and 2002, inclusive, using a qualified warranty deed and with a use classification of single family, condominium, townhouse or agricultural exemption. All selected sales are of parcels have a current form of zoning that allows residential development. This includes both mixed use zoning and that restricted to residential development only. Current zoning was not necessarily the zoning at the time of sale.

Parcels that are NOT selected include those that are currently developed as nonresidential, multifamily dwelling units, parcels with mobile homes or mobile home parks and parcels for which there is insufficient information to determine their current zoning, use or condition. While the history of sale prices for multifamily dwellings and mobile homes is of interest, these are not included in this analysis.

The tax roll contains data from the last two sales of a parcel. Sales were classified as house or land sales depending upon the condition of the parcel at the time of sale. Sales of improved parcels were further classified as being a resale of an existing house or a sale of a new house. These values were determined using a number of variables available in the tax roll and seeking a consistent interpretation of their values.

Some parcels are sold as a multi-lot sale and the sale price recorded is the price of the entire sale, not the price of each parcel. These "multi-sale" parcels were inspected and the value of individual parcels in the sale was computed based on the acreage and presence of a house on the parcel using consistent measures and ratios of house and land prices for each individual multisale.

Further details of how computations and assignments of variables are available on request. At all times, the most conservative form of estimation was used.

The Board of Realtors maintain the Multiple Listing Service (MLS) database which contains many, but not all records of house sales and only about half (by their own reckoning) of the lot and land sales. The MLS data also includes the unincorporated area and does not contain information to allow separate estimates of City and Unincorporated area sale prices. This is a substantial bias specifically in reference to the northeastern portion of the County as the tax roll clearly demonstrates that there have been substantially higher sale prices for houses outside the city in this quadrant. However, the sales for 2003 and 2004 are important recent history and so the MLS data set is used judiciously to illustrate recent sales prices. Explicit reference to it is provided, otherwise all values are derived from the 2002 tax roll.

#### 2. How to quantify "typical" price: average vs median

The median sales price is used throughout instead of the average price because it is the appropriate descriptor of the midpoint or "typical" sale price. To illustrate this point, the distribution of the sales of 4809 homes in 2004 using the MLS data base is shown in **Figure 1: Distribution of Sales Prices of Homes: Leon County 2004.** The average sale price in this year was given in the Tallahassee Democrat as \$189,000 but this is clearly not the "middle" of the distribution. Nearly 67% of the sales were actually for houses that cost less than \$189,000. The median which is the value at which 50% of the sales were higher and 50% were lower is the true midpoint of the distribution. The median was \$153,000. The reason the average is higher than the median is because of a few very high sales prices. In fact, 10% of the sales were over \$500,000 with a maximum price was \$2,625,000. A few very large sale prices distort the average so that the midpoint is not the average. The median is always, by definition, the midpoint of the distribution. Therefore, the median is the appropriate measure when the "typical" house price is discussed.

In **Fig. 1**, the left hand scale is for the bars which are the number of sales in each price category (categories are in values of \$10,000), with the final category containing all sales greater than \$500,000. The right hand scale is for the line which is the cumulative percentage of sales and rises from 0 to 100%. The lines from the cumulative curve to the right axis indicate where the median and the average value fall in the distribution.

The median was used throughout this analysis and was calculated for a variety of categories: all sales, new construction, resale of existing homes, and sales in the real estate "quadrants". The price of vacant land was computed on a per acre basis and then the median of the per acre price is reported. The sales price of vacant platted lots and unplatted vacant land was also computed. The price of a lot someone would buy when ready to build a house (a builder or the home buyer) was computed as the median price per acre of platted vacant land times the median lot size of existing houses. For instance, the median lot size in 2002 was 0.24 acres and the median price per acre of platted vacant land sold that year was \$147,450. Therefore, the median lot price was \$35,388. This analysis of "raw" vacant land versus "development ready" provides a qualified assessment of the price of land at different stages in the development process.

#### **Other definitions used:**

The median sales price in each year was also show as adjusted by the consumer price index (CPI) which was taken from the FHA web pages.

Except where specifically noted, all values are for sales within the city limits of Tallahassee as defined in 2004. The multiple sales listing (MLS) does not differentiate the city limits so any computation from it necessarily refers to the entire County. The MLS data is provided from 1997 to 2004, inclusive. The tax roll differentiates between city and County as well as real estate quadrant, but census tracts are not provided.

The MLS data base does not contain all sales of houses, has a very poor representation of lots and land sales, and does not distinguish between the unincorporated area and

the city limits. It is important to note the direction of its bias. Relative to the tax roll, the MLS data base tends to provide lower values the overall County median house price, but higher values for new construction. For quadrants, the MLS is very similar to the tax roll for the northeast, northwest and southwest but appears to miss most of the sales in the southeast due to Southwood or at least does not pick them up until a later date, probably as resales.

Values are reported starting with the 2002 tax roll, then for 2004, the MLS data base is used where it appears to be quite unbiased and where bias is evident, 2002 tax roll values are extrapolated. Land and lot sales are exclusively from the tax roll because of the paucity of sales recorded for such in the MLS data base.

#### 3. The "cost" of inclusionary housing: how much might sales revenue be reduced?

If a house is sold for less than the set market price of a house in a given subdivision, then the sales revenue received by the developer of the subdivision is reduced. This may or may not reflect an actual difference in profit between a subdivision with only market priced houses and one with inclusionary priced houses. The difference in profitability would include the difference in cost of the two types of subdivisions to the developer. Inclusionary priced houses would most likely be smaller in size, have fewer amenities, cheaper materials and be on a smaller lot and probably also the least desirable location with the subdivision. This would ameliorate the potential loss of profit. But other costs of development would be same whether inclusionary priced houses were built or not. Recouping the decrease in sales revenue due to inclusionary priced houses, containing the costs of the inclusionary houses, taking advantage of subsidies from the government such as free utility hookups for the inclusionary houses, etc.

I have provided an "outer limit" to the possible reduction in sales revenue with inclusionary housing in a new subdivision. The scenario I have chose to illustrate is how much the sale price of the market priced houses in the development would be increased if the price differential of the inclusionary houses was completely passed onto the buyers of the market priced houses. This is just one possibility. The point here is to evaluate the impact of providing inclusionary housing on total sales revenue so that we have a handle on just how much difference inclusionary housing makes for development.

The result of this scenario is in **Figure 2: Potential increase in market priced homes when providing inclusionary housing.** The formula used very simple assumptions and does not take into account that the inclusionary houses may actually cost less to build, they may be placed on much smaller lots, the cost of providing infrastructure, the ease of sale of a development with "inclusionary" houses in it, etc. It simply provides a maximum possible drop in sales revenue for any given development that has inclusionary housing compared to one that did not. The plotted curve is the formula:

Pm'/Pm = (1 - alpha\*Pa/Pm) / (1 - alpha)

where: Pm = market price per DU alpha = % of DU that are inclusionary (I have graphed 10%) Pa = inclusionary price, (1 have graphed 2 values: \$120K and \$150K) Pm = market sales price for DU is all units were market priced Pm' = adjusted market sales price for DU to accommodate inclusionary houses and still result in the same total dollars from sales

Note that the "cost" is not affected by the size of the development, but only by the percentage of inclusionary houses built and the differential between the planned market price and the inclusionary house price.

This is how the formula works:

Suppose a development of 50 homes is proposed. The developer wishes to sell these houses for an average price of \$250,000. This would result in a total sales of \$12,500,000. If that development provided 10% of the homes (5) at the inclusionary rate of \$120,000, then \$80,000 x 5 = \$650,000 of the total sales would not be realized (5.2%). The price of the market priced homes in the development could be increased to offset this loss of potential sales in its entirety. This would add \$650,000 / 45 = \$14,444 to each market priced home which is an increase in sale price of 5.8%.

Plugging these values into the formula above:

Pm'/Pm = (1 - .1 \* 120,000 / 250,000) / (1 - .1)Pm'/Pm = 1.0578

If Pm = \$250,000, then Pm' = 1.0578 \* \$250,000 = \$264,444. Therefore, the adjusted market price (Pm') is 5.8% higher than the planned market price (Pm').

The formula maximum is 11% (in this case Pa>>Pm so that Pa/Pm=0). So if the planned market price were \$1,000,000 homes, they would have to be increased by 9.8% to include 10% of the homes at \$120,000. This is, obviously, an unlikely scenario for a development to take and the current inclusionary housing ordinance provides alternatives to mixing such widely different houses in the same subdivision.

**Figure 2** graphs the percent increase in price for the market priced homes depending upon the planned market price for two levels of prices for inclusionary houses: \$120,000 (higher curve) and \$150,000 (lower curve).

1. Each curve starts at 0 when the planned market price is the same as the inclusionary price.

2. As expected as the difference between the inclusionary price and the planned market price increase, the percent increase in the market price increases.

The median priced house sold in Tallahassee in 2004 was approximately \$150,000. For a

development with market priced houses at this value and with 10% of the houses priced at \$120,000, the adjusted price for the market houses would be about 2.2% higher or \$153,000.

A house costing \$250,000 was in the 73rd percentile of houses sold in 2004 in the northeast of Leon County (median was \$193,000). This means that 73% of all sales were lower than and only 27% were higher. Therefore as shown above, if the market houses were planned to be \$250,000, and 10% of the houses were prices at \$150,000, the increase in the market priced homes would be 5.8% for an adjusted price of \$264,5000, to retain the equivalent sales revenue.

Note that the number of houses in the subdivision is irrelevant. The percentage decrease in sales revenue and increase in market priced houses is only a function of the difference between the prices of the two houses and the proportion of inclusionary houses that are provided.

# 4. What does a house cost in Tallahassee now and how much has this changed over time ?

The sale price of houses and vacant land from 1972 to 2002 from the tax roll with the addition of sale prices for houses in the realtors MLS from 1995 to 2004 (black line) are shown in **Figure 3: House and Lot Sales in the City of Tallahassee.** The CPI adjusted price is also shown as dashed lines. The lot price is computed as the median lot size in acres times the median price per acre of platted vacant land in that year. This is a measure of the price of the "typical" lot sold to a house buyer or builder.

In 2002 the median house price in Tallahassee was approximately \$130,000 (**Table 1A**). In constant 2003 dollars house prices have oscillated between \$100,000 and \$120,000 for the last 30 years. The true cost of a house has been rising and since 2000 has increased substantially more than inflation. According to the MLS records, the median price of houses sold throughout Leon County in 2002 was \$125,000 and in 2004 was \$153,000 (**Table 1G**). The similarity in prices between the two data sets for 2002 suggests that the median price of a house in Tallahassee in 2004 was about \$153,000 also.

There has been a very sharp increase in the price of houses in the last two years as shown by the MLS values. This appears to be the addition of resales from Southwood. Many of the initial Southwood sales were not recorded in the MLS database which may account for the lower MLS median house prices in 2001 and 2002 compared to the tax rolls which contain these initial sales.

The price of a platted vacant lot has been about \$20,000 (in constant dollars) and has also risen steadily but with relatively little change in constant dollars between 1975 and 1999. Since then, there has been a more rapid increase in the price of the median platted lot. In 2002 the median price of the median size platted lot in Tallahassee was \$35,400. The size of the median lot has slowly drifted down from 0.33 in 1972 to 0.24 acres by 2002.

#### 5. The premium paid for new construction.

The sale price of new vs existing houses at the time of sale from 1972 to 2002 is provided in **Figure 4 Sales of Existing and New Houses in Tallahassee**. A new house is defined as a house constructed the same year as the sale date and as determined by other information provided by the tax roll.

The median price for a new house in 2002 in Tallahassee was \$151,000. This represents a premium of 16% over the price of the median house (24% over the median price of a resale). The sale price of newly constructed houses has been consistently higher than for the resale of existing houses, though the premium for new construction has varied quite a bit (difference between the "New House" line and "Existing House" line in **Fig. 4**). The greater variation in the prices of new houses is due to small sample size and a coincidence of unusually high or low sale prices for a limited number of houses in a given year.

The median price of all houses sold in 2004 throughout Leon County as reported by the MLS in 2004 was \$153,000 (**Table 1G**). Assuming that the premium of a new house has remained the same in the last two years, the price of a new house in 2004 in Tallahassee was about \$177,000.

The price for a new house reported in the Tallahassee Democrat of \$244,000 was an average value and is greatly inflated relative to the "typical" new house cost. A house selling for \$244,000 is in the 71st percentile, meaning 71% of the houses sold for less.

#### 6. The value and cost of platting for the developer and the home buyer.

I provide a method of separating the cost of unplatted land from a platted lot. Unplatted land is "raw" land designated in the tax roll as "acreage". It is a parcel on which it is likely that here has been no infrastructure built (no roads, storm water, electricity or water utilities, etc.) or at least very little infrastructure has been added. Platted land is located within a subdivision (recorded or unrecorded) with a designated name. The price of platted land should include the costs of permitted for subdivision and platting, providing infrastructure such as roads, storm water facilities, sewer and water, and the lot is ready for a house. Vacant unplatted land tends to be larger in size than platted land and includes a substantial number of parcels (242) greater than 20 acres that were still vacant in 2002 and usually under some form of agricultural exemption.

The price per acre of vacant platted and unplatted land and the price of a median size house lot based on the price of vacant platted land are shown in **Figure 5: Price of Platted Lots and Unplatted Land in Tallahassee** and with further details in **Tables 1 C and E**.

The price of unplatted land was so variable from year to year that an exponential trend line was fit to provide a description of the general pattern. This line has no statistical significance. It is only provided to provide ease of interpretation.

The price per acre of platted land has always been higher than unplatted land. Starting

around 1996, the difference began to increase substantially. By 2002 in Tallahassee, the median sales price of platted land was \$147,500 per acre, over twice as much as the median value of approximately \$65,000 per acre for unplatted land (exponential trend line, actual value for 2002 was \$49,000 per acre). While the price of unplatted land has also increased since 1996, albeit with a lot of variation, it has risen much more slowly than platted land prices. Platting clearly adds a great deal of value to the land.

The median home lot size has decreased slowly in Tallahassee, from about 0.35 in the 70's to 0.24 in 2002 (**Table 1F**). The price of this median lot based on vacant platted land price per acre was \$35,400 in 2002 (compared to about \$7,000 in the 70's (**Table 1D**). However, though the price of a median lot has increased, the decrease in lot size has meant a less rapid rise in the price of a house plot than in the price per acre of platted land.

The proportion of a house price that the vacant platted lot price represents has increased over time from an average of 20% in the 80's, 22% in the 90's and 28% from 2000 to 2002. The price of unplatted land in proportion to house price has averaged 11% in the 80's, 13% in the 90's and 14% from 2000 to 2002. While the initial price of unplatted land has increased, there has been a greater increase in the price of land when platted and sold as a house lot. The difference has widened substantially since the mid 90's. This suggests that the costs and benefits associated with platting; building roads and supplying utilities is a substantial part of the increase in the price of house lot.

#### 7. Location, location, location: house sales by quadrant

The median price of houses (new and existing combined) in Tallahassee divided into the four real estate quadrants is presented in **Figure 6: House Sales by Quadrant in Tallahassee**. This designation of quadrants do not completely correspond to census tracts, but there is a great deal of overlap.

In 2002 the median house price in the northeast (NE) was \$154,900, substantially higher than elsewhere (**Table 1G**). The premium on house sales in the NE was 19% above the city median. Median price in the Southeast (SE) was lower at \$128,000 but has been rapidly increasing due to the development of Southwood. The median house price in Southwood in 2002 was \$187,000 and only \$107,500 in the rest of the SE. The other two regions have lower median prices, but their prices have also increased greatly in the last few years.

The MLS data base provides overlap with the tax roll from 1997 to 2002 and extend the measures of median prices to 2004, but this is for the entire County. In 2004 the median house price in the NE including the unincorporated area was \$193,000 (**Table 1G**). The MLS data base tends to provide higher medians than the tax roll for the northeast and includes a the very highly priced NE outside the urban services boundary area which has experiences huge price increases in the last few years. The median price estimated from the tax rolls would be 19% over the overall median house price or \$182,000.

In 2001 the sales of houses and vacant lots started to begin in earnest in Southwood as

recorded in the tax roll and later picked up by the MLS data base. It appears that the prices of houses and especially vacant land in the SE outside of Southwood have also begun to increase.

Year	Southwood	Southeast without Southwood	% increase
2000		\$84,900	
2001	\$193,500	\$98,000	15%
2002	\$186,900	\$107,500	10%

#### 8. Prices in the Northeastern quadrant of Tallahassee

The northeast is the target of the proposed inclusionary housing ordinance. To summarize previously presented information, the median price of a house in the northeast of Tallahassee in 2002 was \$154,900. This represents a premium of 19% over the median price of a house throughout Tallahassee. Given the MLS 2004 median house price of \$153,000 for all of Leon County, the median house price in the NE of Tallahassee in 2004 was probably closer to \$182,000 than the MLS value of \$193,000. Recall that the MLS data includes the most expensive area of the County: the northeast area outside the urban service boundary (**Table 3E**). The median price of houses in the northeast area within the city is not this expensive.

The premium for a new house over an existing in 2002 was insubstantial for the northeast (**Table 2B**). There was a premium of 16% for new houses throughout Tallahassee but apparently in the northeast it is the location that strongly affects house price, not age of the house.

The price of land is a significant portion of the price of house. A graph of the prices of vacant land, platted and unplatted and of the median house lot are shown in **Fig. 7**: **Vacant land prices in Northeast Tallahassee**. The price per acre of platted land in the northeast has risen rapidly in recent years and the price of unplatted land has been highly variable. The median price per acre of unplatted vacant land was \$51,000 in 2002, but much higher at \$85,000 in 2000. The trend line value is about \$90,000 for 2002. However, it is still evident that the price of a platted land is increasing more rapidly than the price of an unplatted land suggesting that the price of unplatted land is not the controlling factor in the price of platted land.

The price of the median size house lot in northeast Tallahassee has also risen substantially in the last few years and was \$38,000 in 2002. But just as in other locations in Tallahassee, the price of a house lot has not increased as rapidly as the price of vacant platted land because the size of house lots has been decreasing.

#### 9. Comparison of City and County House and Lot Sales

City and the Unincorporated area house sale prices have been very similar but with the Unincorporated area having a higher median price since 1995 (**Figure 8: Comparison of City and Unincorporated Areas**). Sale prices for lots have also kept pace with each other except that the reverse has occurred from houses, the price of lots within the City

has been higher and appear to be increasing at a higher rate than in the unincorporated area. Therefore, the differential between the cost of a lot and a house has decreased in the City but increased in the Unincorporated area, indicating that land price is a smaller proportion of the cost of a house in the Unincorporated area than in the City and that bigger houses are more often built in the Unincorporated area than in the City.

# 10. Comment on Availability of Vacant Land and population changes in the Tallahassee MSA.

An full analysis of vacancy and potential build out for residential development is available at the following www link:

www.curg.org/news/LeonResVacancy2003.pdf.

Here I present a brief summary of this analysis as it pertains to the city of Tallahassee and further analysis that pertains to the inclusionary housing ordinance. It should be noted that this analysis does not make sound estimates of the possible production of multifamily housing and so these figures are most likely underestimates where multifamily residences could be constructed.

The density of residential development has increased substantially coincidentally with the adoption of the Comprehensive Plan and its urban services boundary and zoning standards. Residential development outside of the USA has not shown any change in density since the adoption of the Comprehensive Plan. This evidence of urban infill and limitation of urban sprawl are two of the major intents of the Plan.

For any given parcel, the density achieved relative to the maximum allowed varies quite a bit, however, on average, current regulatory and development practices on result in only about one half of their potential density. This suggests that in general, zoning density allowances are not the limiting factor for residential unit production and that development standards may be of greater limitation. More flexible standards in lot size, set backs, road building, etc. that do not simply pass on the environmental consequences of enhancing density to the general public or future generations and more creative, better development design should be considered to continue the observed trend of urban infill and to enhance it.

Increasing density will increase impervious area. I believe it is important to consider that as density increases, a higher proportion of the impervious area should be put under roof tops and less in roads, parking area and other asphalt covered facilities. As density increases even more care needs to be taken in the design of natural area set asides, landscaping and storm water management facilities to prevent the development of "asphalt jungles" and large public cost of external impacts.

Vacant Land in the City:

As of 2002, there were nearly 14,000 acres of developable (not environmentally constrained) vacant land that is currently zoned for residential development including

mixed use and residential only (**Table 2A**). Under current zoning a maximum of 60,000 dwelling units could be built. If the vacant parcels or lots were developed using current practices and regulations, approximately 32,500 residential units would be built. These figures include the some large developments in various stages of planning or stagnation: Bull Run, Southwood, Welaunee, Fallschase and the English Properties. Together these could create nearly one half the the potential build out (16,178 units). The current zoning on the English Properties (CPA) has not been in use long enough for an estimate of build out under "current development practices".

Leaving aside these developments of special interest, the remaining vacant land was 4,500 acres in 2002 with a potential build out of 16,000 units under current development practices (**Table 2B**). About one third of this is already platted and much of it may have already been built on and sold by now. It is unlikely that it would further subdivide to any extent. However, vacant lots in older subdivisions do subdivide as land becomes very valuable, further enhancing infill but unlikely to be able to add much to the inclusionary housing market because the lots are in established subdivisions.

The remaining vacant acreage is unplatted: 3,332 developable acres, nearly 12,000 units under current development practices but currently zoned for over 36,000 units (**Table 2B**). Some of these parcels may have been subdivided and developed since 2002, but it is unlikely that the majority are no longer vacant. These parcels were grouped according to their size (developable acreage) so that the feasibility of 50 unit or more developments could be assessed which is the minimum number for the inclusionary housing requirement (**Table 2C**). Parcels that are less than 5 acres are unlikely, without the allowance of multifamily residences, be able to accommodate 50 units or more.

For the entire city, there are 1,740 developable acres in individual parcels of 10 acres or more and could provide under current practices 7,000 units at a gross density of 4 units per acre (**Table 2C**). There are one third as many between 5 and 10 acres (656) that could provide an additional 2,600 units (also at 4 units per acre). These development density is well below the maximum allowed again pointing out that zoning density is not limiting development but development standards and design capacity may be.

In the Northeast, there are 486 developable acres in individual parcels of 10 acres or more, but under current practices would develop at less than 4 units per acre to about 1,800 units. The parcels between 5 and 10 acres could provide a substantial addition to this with 306 developable acres, but an even lower expected density under current practices producing only 830 units. These densities of development are particularly low in relationship to the maximum allowed. There is substantial room for increases in density in the northeast.

Note that the number of potential units compared to maximum allowed units is quite small, often one quarter or one third of the maximum allowed. Yet Bull Run, Southwood and Welaunee all plan to build more units than their underlying zoning in 2002 allowed due to the use of regulatory mechanisms for large planned developments. This suggests that the smaller developments are at quite a disadvantage in terms of attaining high densities. This could be due to a lack of planning or facilitation of planning, but there is clearly a need to make these smaller developments use land much more efficiently in terms of the number of residences constructed. I believe it is these

small developments that really provide for urban infill and create the character of the city. These developments need to be done with at least as much care and attention as the larger ones that probably have much greater planning resources at their command.

#### **11. Population Trends**

In recent years, the number of individuals moving into Leon County has been much higher than in the immediate past (**Table 3**). It is hard to know if this is an indication of substantial change or just an unusual few years. What is clear is that the surrounding counties have substantially smaller population sizes, ranging from 5 to 20% of Leon. The growth rate in these counties is high, but again the actual number of new residents is small, again from 5 to 20% of the net increase that occurred in Leon. The number of people who are choosing to live outside of Leon, but use its economic resources as their source of income is hard to evaluate, but clearly not everyone moving into the surrounding counties fits that description. If even half of the new residents in the surrounding counties are "house-price refugees" from Leon, then they compromise about 10% of the total increase of the population of Leon and its three surrounding counties. Clearly there is a need for regional planning, but the current population figures do not suggest that most of the house buyers are searching outside of Leon for homes. In fact, the increase in density inside the urban services boundary of Leon County in the last 15 years suggests that there have been a substantial increase in the numbers of people who are seeking and finding homes inside the city or its immediate environs.

#### 12. Description of Tables

The median sale prices of houses in 2002 as computed from the tax rolls and in 2004 as computed from the MLS data are provided for a number of categories in three tables. In **Table 1**, median prices of houses, vacant land and house lots are given Leon County, Tallahassee and in some cases the Unincorporated area (Unincorp) is provided separately. The MLS data is provided for house prices only because it contains too few of the land and lot sales.

In **Table 2**, the vacant and developable land in the City is provided, subsetting into quadrants and parcel size for investigation the availability of land that could be a part of the inclusionary housing ordinance.

**Table 3** provides population estimates for the Leon MSA. These sources for this information are: Year 2000 is from the U.S. Census Bureau; Years 2001-2004 and Years 2005 and 2010 are from University of Florida, Bureau of Economic and Business Research, population estimates and population projections, respectively.

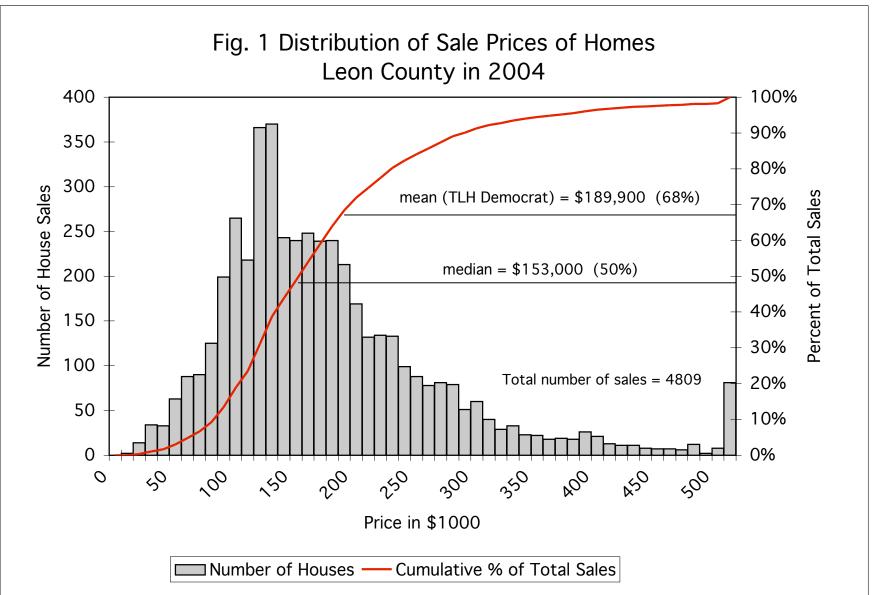
More detailed information on sales is provided in **Tables 4, 5 and 6**. This includes separate tabulation for inside and outside the urban services boundary (USA). Nearly all city parcels are inside the USA while a significant portion of the unincorporated area is also. Nearly all of the sales of vacant land inside the city are of platted lots while in the unincorporated areas a substantial portion of sales are of unplatted, acreage tracts.

A "premium" was computed for various houses or land conditions. The premium price of a new house (**Table 4A**) was computed as the percent increase of the price of a new house compared to all houses, new and existing combined. For Tallahassee in 2002 it was 16%. The premium for platted land (**Table 4B**) was computed as the ratio of platted land per acre to unplatted land per acre, the increased factor in the value of platted land compared to unplatted land. For Tallahassee in 2002 this was a factor of 3.0.

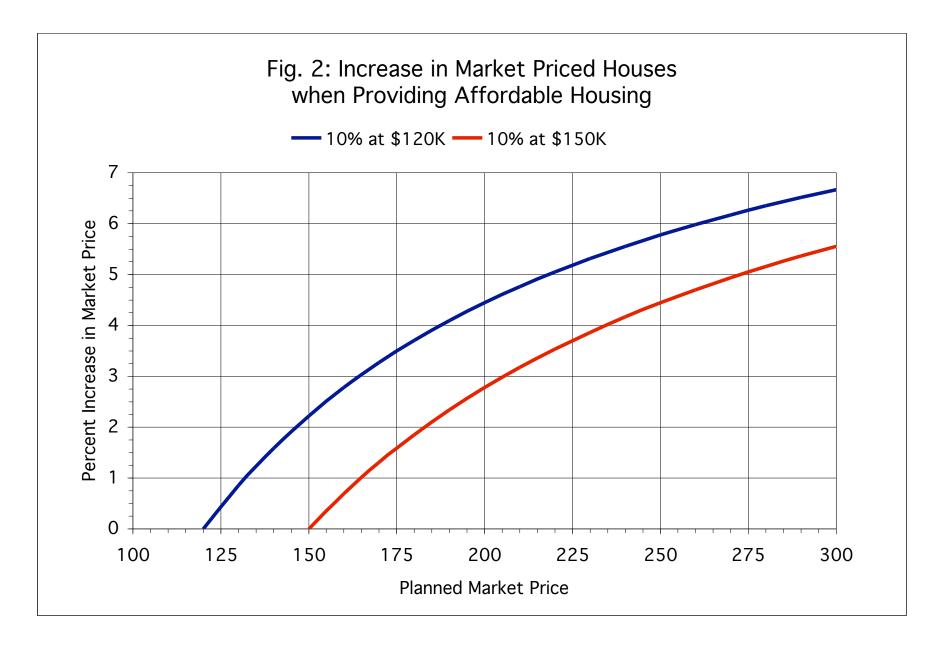
**Table 4C** gives the price of the median lot for all vacant land, platted land and unplatted land. Most land sales in Tallahassee are of platted land. **Table 4D** given the price per acre for vacant land, platted and unplatted combined for quadrants and jurisdictions. Again the price of vacant land in Tallahassee is dominated by the price of platted land.

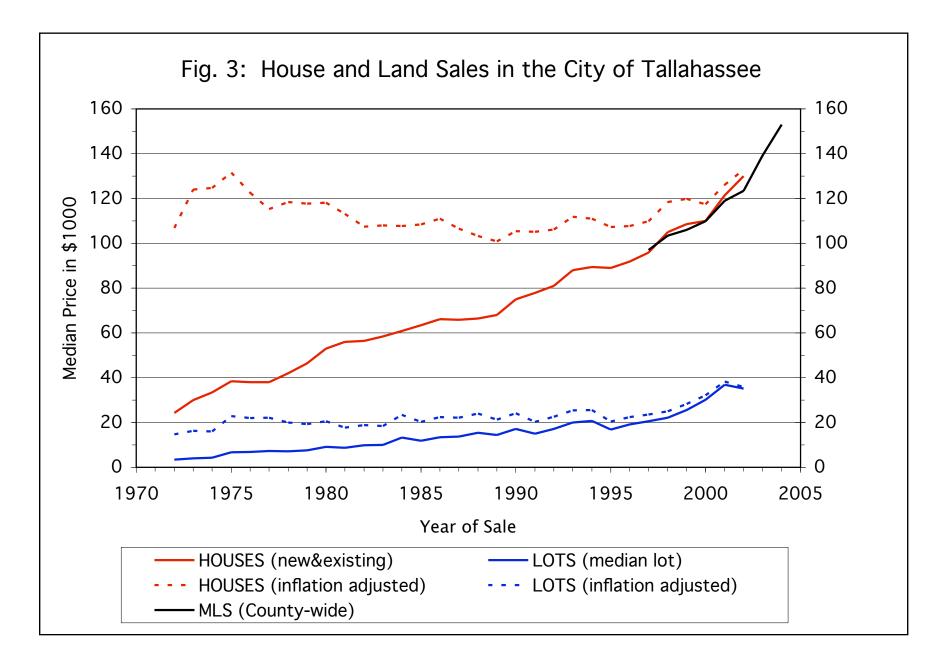
**Table 5** consists of prices for all houses and subsetted into new and existing houses for quadrants and jurisdictions. Figures for Tallahassee are in **Tab. 5B**. The premium for the quadrant is the percent increase (or decrease) in the quadrant median house (new and existing houses combined) price relative to the over all house price for the jurisdiction. The premium for new houses is also as a proportion of the median price for all houses. These premiums are not, necessarily, additive.

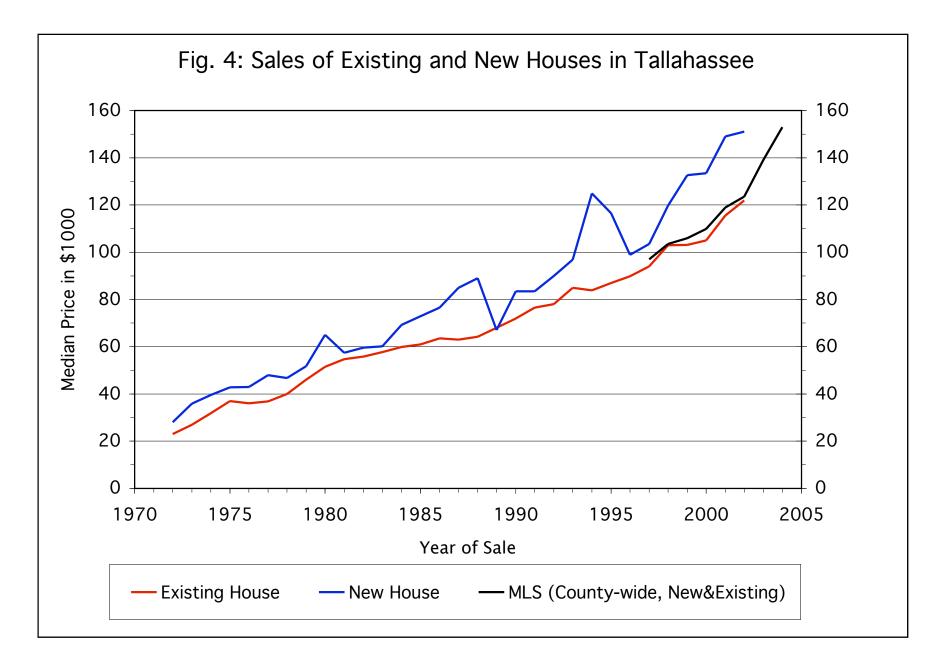
**Table 6** provides values for 2004 from the MLS database which does not distinguish between a sale in the city and the unincorporated area. No values for the sale of land or lots are provided because this database contains relatively few of the sales and the bias appears to be towards platted lots. However, the values for house sales are quite consistent with the tax roll data for the years of overlap (1997 - 2002). Premiums on new houses and for quadrants are computed relative to the overall County median.

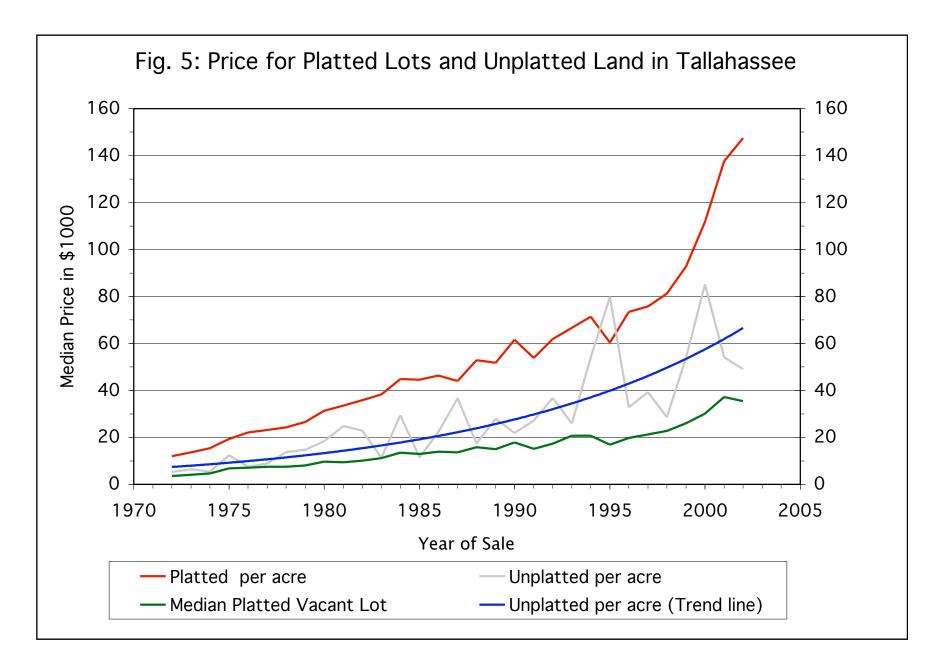


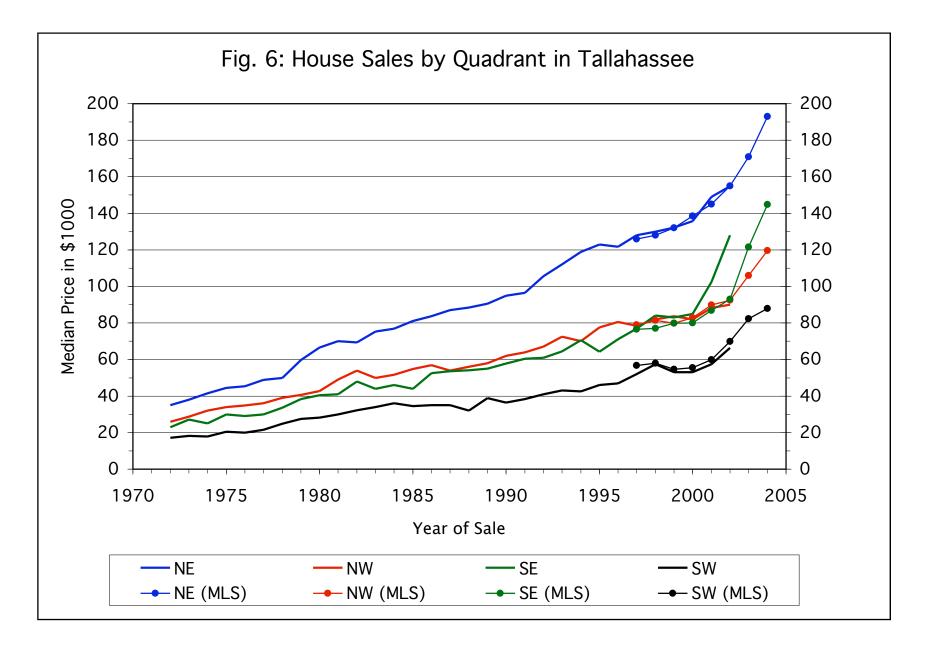
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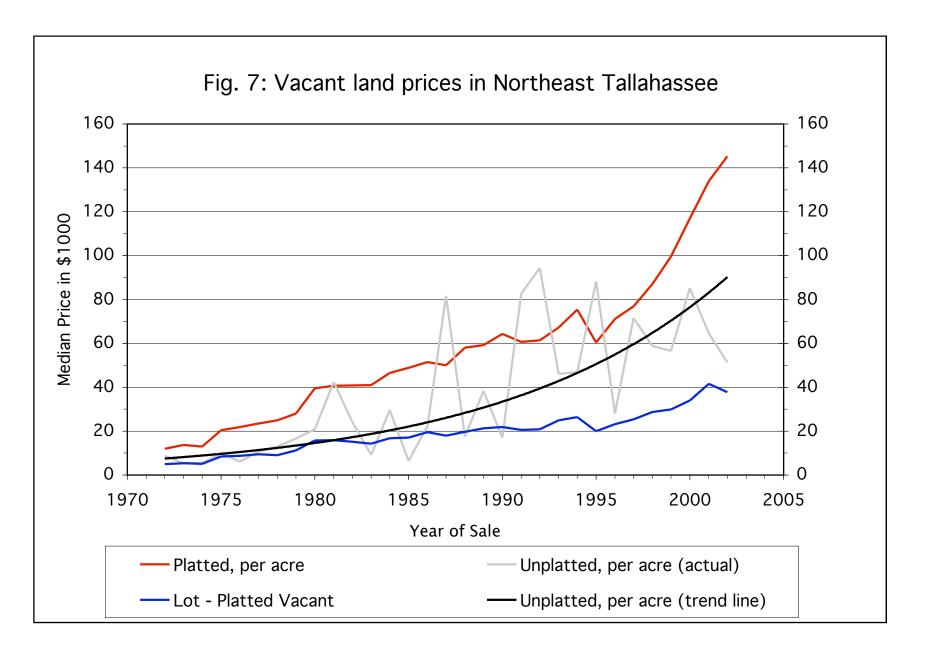


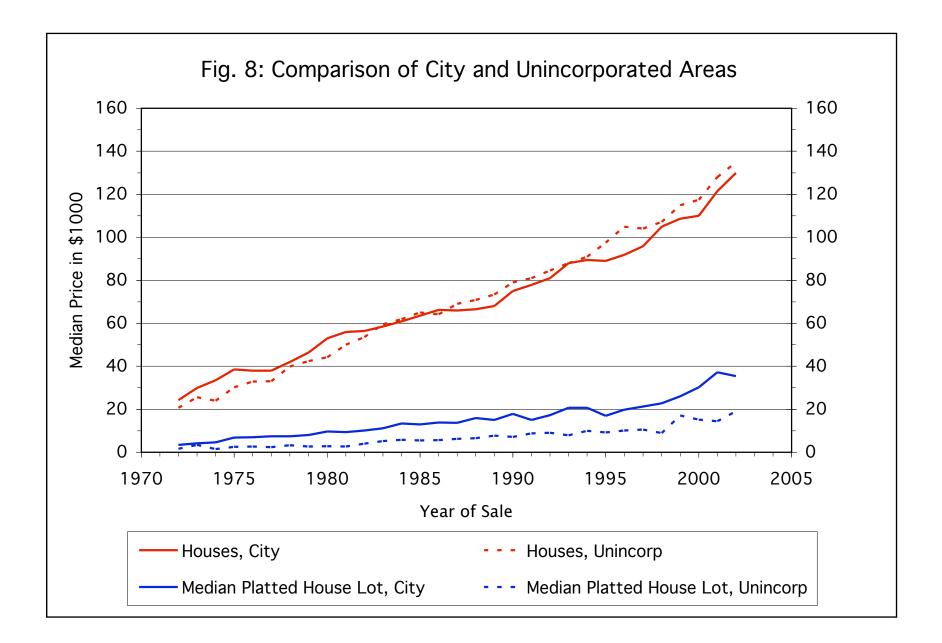












A. Median House Price (new and existing)						
year	Leon County	Tallahassee	MLS (County)			
2000	114,000	110,000	109,900			
2001	124,900	121,500	119,000			
2002	131,800	130,000	123,500			
2003			139,107			
2004	153,000	153,000	153,000			

C. Vacant Platted Land (per acre)					
year	Leon County	Tallahassee	Unincorp		
2000	46,444	111,800	35,322		
2001	59,933	137,647	35,211		
2002	91,883	147,450	45,231		

E. Vacant Unplatted Land (per acre)					
year	Leon County	Tallahassee	Unincorp		
2000	11,002	85,246	10,000		
2001	14,984	54,054	12,571		
2002	13,000	49,079	11,236		
2002 est.		65,000			

B. New House Price					
year	Leon County	Tallahassee ML	S (County)		
2000	133,050	133,500	151,900		
2001	145,000	149,000	143,000		
2002	153,000	151,050	156,695		
2003			169,900		
2004	177,610	177,774			

D. Median House Lot Price						
year	Leon County	Tallahassee	Unincorp			
2000	14,630	30,186	15,189			
2001	19,179	37,165	14,437			
2002	26,646	35,388	18,997			

F. Median House Lot Size (acres)					
year	Leon County	Tallahassee	Unincorp		
2000	0.32	0.27	0.43		
2001	0.32	0.27	0.41		
2002	0.29	0.24	0.42		

G. Median House Price (new and existing)						
	Leon County	Tallahassee	Tallahassee	MLS	MLS	
year	2002	2002	2004	2002	2004	
quadrant						
NE	157,450	154,900	182,305	154,995	192,950	
NW	98,500	90,000	105,923	92,500	119,700	
SE	110,000	128,000	150,646	93,000	144,900	
SW	71,000	66,300	78,030	69,900	88,000	

\* estimated values are in italics

\*\* blanks are unavailable data or no estimation made

## Table 2

# Vacant Land, Developable Acre and Potential Residential Build Out in 2002

A. Vacant Land by Quadrant and Individual Developments of Interest				
	N parcels	Develop Acres	Potential DU	Maximum DU
CITY total	5,384	13,985	32,460	60,037
Quad - subtotal	4,927	4,531	16,282	48,541
NE	2,173	1,927	5,105	14,801
NW	1,242	1,293	6,813	16,582
SE	414	340	1,797	7,536
SW	1,098	971	2,567	9,622
Ind. Dev subtotal	457	9,454	16,178	11,496
Bull Run	3	322	800	750
Southwood	438	3,356	4,770	2,797
Welaunee	12	5,087	10,320	7,123
English Properties	2	231	0	538
Falls Chase	2	457	288	288

B. Vacant Land by Quadrant and Platted/Unplatted Individual Developments of Interest are not included					
	N parcels	Develop Acres	Potential DU	Maximum DU	
Platted - subtotal	3,858	1,391	4,450	12,673	
NE	1,748	739	1,575	3,742	
NW	963	397	2,035	5,215	
SE	238	62	207	702	
SW	909	193	634	3,013	
Unplatted - subtotal	1,069	3,332	11,953	36,315	
NE	425	1,380	3,652	11,505	
NW	279	896	4,778	11,367	
SE	179	418	1,675	7,146	
SW	186	638	1,849	6,297	

Prepared by PHall

## Table 2

# Vacant Land, Developable Acre and Potential Residential Build Out in 2002

C. Unplatted parcels grouped by acreage, for entire City and for NE only				
	N parcels	Develop Acres	Potential DU	Maximum DU
Entire City				
<5 acres	889	744	2,192	9,929
5<10 acres	94	656	2,668	7,517
10 to maximum	86	1,740	6,973	18,422
NE Only				
<5 acres	354	396	839	3,376
5<10 acres	44	306	830	2,581
10 to maximum	27	486	1,861	5,101
D. Rest of County				
D. Rest of County	N parcels	Develop Acres	Potential DU	Maximum DU
UNINCORP-subtotal	10,998	153,200	44,587	104,597
Inside USA	4,452	11,050	18,268	65,798
Outside USA	6,546	142,150	26,319	38,799
COUNTY total	16,382	167,185	77,047	164,634

Year	Leon	Wakulla	Gadsden	Jefferson
2000	239,452	22,863	45,087	12,902
2001	244,208	23,807	45,284	13,043
2002	248,039	24,217	45,911	13,261
2003	255,500	24,938	46,491	13,552
2004	263,896	25,505	46,857	14,064
2005*	267,900	26,400	47,300	14,100
2010*	288,400	31,700	48,800	14,600
Increase	Leon	Wakulla	Gadsden	Jefferson
2000-2001	4,756	944	197	141
2001-2002	3,831	410	627	218
2002-2003	7,461	721	580	291
2003-2004	8,396	567	366	512
2004-2005	4,004	895	443	36
2005-2010*	4,100	1,060	300	100
* annualized				
MSA 2000 - 2005	5	Total		
2000		320,304		
2005		355,700		
Increase		35,396		

20%

# Table 3:Population Dynamics of Leon and surrounding<br/>Counties

percent outside of Leon

Table A House Price Premiur				
Location	All Houses	Existing	New Houses	New House
Leon	131,800	128,000	153,000	16%
Tallahassee	130,000	121,950	151,050	16%
Unincorporated	134,900	133,900	155,800	15%
Inside USA	130,000	127,000	150,000	15%
Outside USA	159,200	147,000	198,900	25%

Table B	Price per A	t Land	Premium for:	
Location	All Parcels	Platted	Unplatted	Platting
Leon	62,267	91,883	13,000	7.1
Tallahassee	146,146	147,450	49,079	3.0
Unincorporated	34,043	45,231	11,236	4.0
Inside USA	128,571	131,521	38,647	3.4
Outside USA	18,563	24,923	8,675	2.9

Table C	Price of I	Price of Median House Lot				
Location	All Parcels	Platted	Unplatted	Acres		
Leon	18,057	26,646	3,770	0.29		
Tallahassee	35,075	35,388	11,779	0.24		
Unincorporated	14,298	18,997	4,719	0.42		
Inside USA	34,714	35,511	10,435	0.27		
Outside USA	31,186	41,870	14,573	1.68		

Table D	Price per Acre for Vacant Land by Quadrant					
Location	NE	NW	SE	SW		
Leon	93,590	54,144	90,909	59,137		
Tallahassee	144,043	60,000	197,143	144,444		
Unincorporated	34,091	53,571	19,500	16,793		
Inside USA	129,643	60,938	190,893	108,182		
Outside USA	18,954	18,367	20,080	14,737		

Table A	All Houses	Existing	New Houses	Premimum	for:
Leon	131,800	128,000	153,000	Quadrant	New House
NE	157,450	155,100	160,550	19%	2%
NW	98,500	97,700	100,000	-25%	2%
SE	110,000	95,500	184,200	-17%	67%
SW	71,000	66,300	99,900	-46%	41%

Table 5: Prices for Houses and Land	y Quadrant in 2002	(tax roll data)
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Table B	All Houses	Existing	New Houses	Premimum	n for:
Tallahassee	130,000	121,950	151,050	Quadrant	New House
NE	154,900	153,750	155,350	19%	0.3%
NW	90,000	88,200	94,500	-31%	5%
SE	128,000	109,000	185,900	-2%	45%
SW	66,300	61,900	99,900	-49%	51%

Table C	All Houses	Existing	New Houses	Premimum	for:
Unincorporated	134,900	133,900	155,800	Quadrant	New House
NE	163,650	159,900	178,600	21%	9%
NW	112,250	115,000	105,000	-17%	-6%
SE	92,900	92,500	113,000	-31%	22%
SW	75,000	75,000	101,500	-44%	35%

Table D	All Houses	Existing	New Houses	Premimum	for:
Inside USA	130,000	127,000	150,000	Quadrant	New House
NE	155,000	152,500	158,500	19%	2%
NW	98,550	97,950	100,000	-24%	1%
SE	114,500	97,000	185,050	-12%	62%
SW	65,000	61,300	99,900	-50%	54%

Table E	All Houses	Existing	New Houses	Premimum	for:
Outside USA	159,200	147,000	198,900	Quadrant	New House
NE	190,000	186,750	203,000	19%	2%
NW	93,250	93,250	none built	-41%	
SE	88,000	87,000	only1 built	-45%	
SW	91,500	90,750	only1 built	-43%	

	Wide, 2002 - 2004			County-
				Premium on
A. All Houses	Leon	New	Existing	New Houses
Year				
2002	125,000	156,695	117,900	0.25
2003	141,000	169,900	132,500	0.20
2004	153,000	na	na	na
B. Quadrants	NE	NW	SE	SW
2002	155,000	93,500	93,800	73,250
2003	172,000	107,000	125,000	87,075
2004	192,950	119,700	144,900	88,000
Premium on Quad	drant			
2002	24%	-25%	-25%	-41%
2003	22%	-24%	-11%	-38%
2004	26%	-22%	-5%	-42%

#### Table 6: House Prices from MLS data: County-