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Phosphate miner's cabin, 1880
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The Florida Geographer is the official publication of the Florida Society of Geographers and is distributed free to members of the society. It is a statewide journal, with coverage of social and physical geographical topics. Most, but not all articles are related to the state, or at least Florida figures as an important component.

Manuscripts are solicited from all who feel they have research worthy of dissemination. For matters of style, see articles in the present issue. Authors should not be dissuaded from submitting articles for review because of format considerations.

Authors should submit the final copy of the paper on an IBM compatible diskette (3.5"") in high-density format, or a compact disk (CD). Word Perfect or Word files are preferred. If not, please save files in ASCII (DOS text file) format.

This issue of the journal was prepared using Pagemaker 6.5 for Windows. Graphics were prepared using either Corel Draw 7 or Freehand 8.0.

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This year’s Florida Geographer should be of equal interest to those who teach in middle and secondary school as well as, to those who have a general interest in the field. The article on textbook adoption in Florida originated as a master’s thesis. Unfortunately, its value has been somewhat diminished because geography is being dropped from the curriculum of school districts throughout Florida since it is not tested on the Florida Comprehensive Achievement Test. In the case of Leon County this meant that those who taught the subject simply were reassigned to teach another social science course. For most teachers it was not a hardship, since their education was in other fields. For geography and the Florida Geographic Alliance it was a setback. However, in the case of the Alliance, its efforts have been redirected to the dissemination of geographical themes among social science and environment teachers throughout the state.

Besides the article on textbook adoption, whose theme is probably applicable to the adoption of textbooks in other subjects, the two that examine urban issues should prove helpful to high school teachers who want to introduce the issue of the state’s rapid population growth to their students. The article identifying that part of the state where the population feels most “southern” and that which identifies the origin of those who bought land in the Everglades at the beginning of the century will attract those with a cultural and historical interest in the state. The editor compiled a list of books about Florida published between mid 2001 and mid 2002 that appear to be of geographical relevance. Apologies are offered in advance to those of you who believe some books were left off that should have been included.

For those among you who believe that the Florida Geographer might be becoming a vehicle for the editor’s research let me assure you that if I had a larger selection of submissions to choose from, you would not be exposed so frequently to my efforts. Unfortunately, despite constant appeals, few submissions arrive. For some departments of geography within the state, the absence is especially conspicuous.

Once again I would like to thank the Florida Geographic Alliance for its continuing financial and intellectual support, especially Laurie Molina. Acknowledgements are also due to Peter Krafft, Jim Anderson, and Betsy Purdum, whose technical efforts make the publication possible.
Does the South end in North Florida?

Raymond K. Oldakowski and Ary J. Lamme III

Previous research has examined the existence and extent of "The South" and "Dixie" in Florida and has produced differing results (Lamme and Oldakowski 1982; Garreau 1981; Bigelow 1980; Zelinsky 1980; Reed 1976). Some studies have shown these regions to include all of Florida, while others have found them to be limited to certain areas of the state.

Moreover, the techniques, methodologies, and terminologies have varied among these studies. Some have examined these vernacular areas as part of larger national or regional analyses (Garreau 1981; Bigelow 1980; Zelinsky 1980; Reed 1976). Another has focused on vernacular regions specifically in Florida (Lamme and Oldakowski 1982). Different research methods have been used including sample surveys, telephone directories, demographic and socioeconomic data, and in-depth interviews. This paper will examine the location and boundaries of "The South" and "Dixie" in Florida. It will utilize data collected from survey interviews conducted with 479 Floridians [1]. It will then compare those findings with results obtained by analyzing listings in Florida telephone directories.

Background

Perhaps the most comprehensive quantitative analysis of The South and Dixie was conducted by Reed (1976). A sociologist, Reed views Southerners as an ethnic group, and feels the geographic boundaries of the South would be that part of the country where the people think they are Southerners. Due to a lack of existing survey data at that time, he employs an alternative strategy to determine the spatial extent of The South and Dixie. That is the use of business listings in telephone directories from cities across the country. The more frequently the terms "Southern" or "Dixie" appear as a part of

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business listings (e.g., Dixie Plumbing, Southern Pest Control), the more likely an area is to be part of those regions.

Reed's findings suggest that North Florida, north of a line from Steinhatchee on the Gulf to Saint Augustine on the Atlantic is part of a core South region that includes the Carolinas, Georgia, Alabama, Mississippi, Louisiana, and Tennessee. The Tampa Bay and Miami-Fort Lauderdale areas also had a proportion of "Southern" business listings similar to those in North Florida and would be considered part of this core. The remainder of the peninsula falls into a secondary South region, similar to Eastern Texas, Kentucky or Central Virginia.

Reed's findings for Dixie show a smaller core area than that for The South. Again, there is a similar line that separates North Florida, which is part of this core, from the rest of the peninsula. Also again, there are pockets of Dixie found in the Tampa Bay, West Palm Beach, and Miami areas. The remainder of the peninsula falls into a secondary Dixie region, similar to northern (e.g., Kentucky and Virginia) and western (e.g., Texas and Arkansas) fringe areas of the region. Reed concludes that Dixie represents the region's historic culture, and has more to do with attitude than latitude.

In his study of North American vernacular regions, Zelinsky (1980) also uses business listings in telephone directories for his analysis. However, he combines the terms Southern, Southeastern, and Dixie to determine the boundaries of The South. His results demonstrate "that all of Florida, except for Saint Petersburg, belongs to The South, albeit rather less staunchly than the states to its north."

Bigelow (1980) uses demographic and socioeconomic data from secondary sources to determine the cores and boundaries of the cultural regions of the United States. By mapping variables such as religion and voting behavior, he proposes the existence of over two dozen subregions within the Northern, Southern, and Western realms of the United States. Florida is once again split in two. He classifies North Florida as part of the Gulf Coast, "a transition zone between the Deep South and an area of northern culture, Peninsular Florida."

Dixie is one of the Nine Nations of North America identified by Garreau (1981). He uses the term synonymously with The South. His study is based not so much on primary data, but on the impressions of journalists about the regions in which they work. He combined these perceptions along with his own travel experiences and
informal interviews with residents across the continent to identify and demarcate the nine regions.

Garreau classifies the majority of Florida as part of Dixie. His map of Dixie includes the Florida cities of Pensacola, Jacksonville, Tampa, and Saint Petersburg. However, Garreau provides little evidence as to why the majority of Florida is part of Dixie. Rather, most of his references to the state deal with a nation referred to as “The Islands.” This region includes the southern third of the peninsula, south of a line from Fort Myers on the Gulf to Jupiter Inlet on the Atlantic. In fact, Miami is considered to be the capital of The Islands region because of its economic importance to the Caribbean Region.

Another primarily qualitative analysis is provided by Ayers (1996). A historian, he acknowledges that distinctive attributes or attitudes may be useful to measure regional identity. However, he also argues that “history creates all sorts of latent meanings in a place, meanings that can quickly come to the surface as events change.” In a twenty-page essay detailing The South, he mentions Florida only once. The context, he is visiting a craft fair in North Carolina and is asked by one of the locals if he had ever seen so many Yankees in his life. His reply “sure enough . . . the cars parked all around the square were from Pennsylvania, Florida, or New York.”

Finally, in a prior study (Lamme and Oldakowski 1982) we surveyed Floridians attending the Florida Folklife Festival in White Springs, Florida. Respondents were asked if their part of Florida was part of The South, The Deep South, and several other national regions. Our findings revealed that most Floridians considered their home areas to be part of the South, and the spatial distribution of persons using this term encompassed all areas of the state. However, The Deep South was used primarily by residents from northern rural areas of the state.

Methods

Survey Population and Sample: The population for our survey was Florida residents aged 18 and older. A sample was selected using directory based random digit dialing (directory based RDD) and “last birthday” respondent selection. Directory based RDD involves the selection of telephone numbers from working telephone directories. These numbers were selected through random systematic sampling from Florida telephone directories. The last two digits of each telephone number selected are replaced with two random digits, thus allowing for unlisted numbers to be incorporated into the sample.
The sample was selected proportional to the population size of each metropolitan area or city (the most common geographic units for telephone directories) in Florida. Figure 1 illustrates the spatial distribution of survey respondents [2]. Some over-sampling was utilized for sparsely populated rural areas to obtain a reasonable number of respondents. For households with multiple eligible respondents (i.e., more than one Florida resident aged 18 and older), only one respondent was interviewed and the last birthday method of respondent selection was utilized. With this method, the eligible respondent who had most recently celebrated a birthday was chosen to be interviewed.

A total of 1,121 telephone numbers were selected for the sample.
Of these, 797 were determined to be working numbers with eligible respondents in the household. 479 completed interviews were obtained, resulting in a cooperation rate of 60%.

Table 1 illustrates the basic demographic and socioeconomic characteristics of the survey respondents. In most instances, they are quite similar to data for the state of Florida collected by the U.S. Census Bureau and the University of Florida Bureau of Economic and Business Research. Hence, the sample appears to be representative of the general adult resident population of Florida.

Survey Data Collection: The data were collected via telephone interviews during Fall and Winter 2000/2001. Nearly all interviews were conducted in English, although bilingual interviewers were used for calls to counties with significant Spanish speaking populations such as Miami-Dade and Broward. A small number of respondents (less than 10%) preferred that the interview be administered in Spanish. A team of eight interviewers was employed to complete the project. Each of the interviewers had previous experience in administering surveys for social science research. Calls were made on weekdays, evenings and weekends. A minimum of ten contact attempts were made for each sample unit.

The questionnaire was designed to obtain information regarding the respondent’s familiarity with and knowledge of vernacular regions in Florida. It also collected basic demographic and geographic information including the respondent’s residential history. Information regarding the respondent’s familiarity with vernacular regions was collected in both an unaided and aided fashion. Respondents were given examples of vernacular regions in other parts of the country, and then were asked if there were any nicknames used to describe the part of the United States/Florida that they lived in. These nicknames were recorded, and the respondents were then asked to provide their perceptions or the salient characteristics of the regions. Vernacular regions not initially mentioned by the respondent were then asked about in an aided fashion. For example, “Would you say that your part of United States/Florida is part of the South?”

Telephone Directory Business Listings: The frequency of business names beginning with the terms “Southern” and “Dixie” was determined by using a computerized telephone directory (InfoUSA 2002). Data were collected for all cities in Florida with populations larger than 1000. Listings that modified the use of the word Southern with a place such as South Broward Catering or South Florida Pool Sup-
### Table 1
**Demographic Characteristics of the Sample**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Percent of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age:</strong></td>
<td></td>
</tr>
<tr>
<td>18–34</td>
<td>23</td>
</tr>
<tr>
<td>35–64</td>
<td>49</td>
</tr>
<tr>
<td>65 &amp; Over</td>
<td>28</td>
</tr>
<tr>
<td><strong>Race:</strong></td>
<td></td>
</tr>
<tr>
<td>White (Non Hispanic)</td>
<td>70</td>
</tr>
<tr>
<td>Black</td>
<td>15</td>
</tr>
<tr>
<td>Hispanic (Any Race)</td>
<td>12</td>
</tr>
<tr>
<td>Asian</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
</tr>
<tr>
<td><strong>Education:</strong></td>
<td></td>
</tr>
<tr>
<td>Less than High School</td>
<td>11</td>
</tr>
<tr>
<td>High School Graduate</td>
<td>31</td>
</tr>
<tr>
<td>Some College</td>
<td>28</td>
</tr>
<tr>
<td>College Graduate</td>
<td>21</td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
</tr>
<tr>
<td><strong>Income:</strong></td>
<td></td>
</tr>
<tr>
<td>Less Than $10,000</td>
<td>9</td>
</tr>
<tr>
<td>Less Than $20,000</td>
<td>13</td>
</tr>
<tr>
<td>Less Than $40,000</td>
<td>33</td>
</tr>
<tr>
<td>Less Than $60,000</td>
<td>23</td>
</tr>
<tr>
<td>Less Than $80,000</td>
<td>12</td>
</tr>
<tr>
<td>Greater Than $80,000</td>
<td>10</td>
</tr>
<tr>
<td><strong>Gender:</strong></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>56</td>
</tr>
<tr>
<td>Male</td>
<td>44</td>
</tr>
</tbody>
</table>
ply were omitted. We also did not count residential listings (there are quite a few families in the state with the last name of Southern or Dixie).

Clearly, the absolute number of entries is not an appropriate measure of the “Southerness” of a city. Larger cities may have more listings solely because they have more businesses. Hence, we created a standardized measure for each city by dividing the number of Southern and Dixie listings by the total number of listings beginning with the letter “R” [3]. That letter was selected because no counties or major cities in Florida begin with the letter “R,” a circumstance that might have influenced the number of listings.

Results

Survey Interviews: As can be seen from the data in Table 2, a majority of Floridians consider their part of the state to be part of The South. Nearly 40% of the respondents mentioned The South when asked “What nicknames do you use, or have you heard used, to refer to your part of the United States/Florida?” An additional 46% of the respondents answered yes when asked, “Do you consider your part of the United States/Florida to be part of The South?”

The spatial distribution of these responses is remarkably universal across the state (Figure 2). Respondents in North, Central, and South Florida, as well as respondents in urban, suburban, and rural areas felt their part of the state was part of The South. Only one minor deviation was found. Compared to the state as a whole, residents of North Florida were slightly more likely to mention The South unaided. That would suggest that phrase “The South” is used as a regional nickname more frequently in North Florida than in other areas of the state.

Table 2 shows a much different story for Dixie. Less than 2% of the respondents mentioned Dixie when asked “What nicknames do you use, or have you heard used, to refer to your part of the United States/Florida?” An additional 30% of the respondents did answer yes when asked, “Do you consider your part of the United States/Florida to be part of the Dixie?” However, that still left over two-thirds of the respondents who answered no.

Dixie also does not appear to encompass the entire state as did The South (Figure 3). Most respondents who felt their part of Florida was part of Dixie could be found north of a line that runs parallel to, but somewhat north of Interstate Highway-4. Respondents south of that boundary who felt they were part of Dixie were scattered
Figure 2

Survey Respondents Citing South

Total Respondents
- 1-4
- 5-8
- 9-15
- 16-25
- 26-36

Respondents Citing South
- 1
- 2-3
- 4-6
- 7-11
- 12-25

Table 2
Survey Respondents Stating Their Part of Florida is Part of the South or Dixie

<table>
<thead>
<tr>
<th>Region</th>
<th>Unaided</th>
<th>Aided</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>The South</td>
<td>38%</td>
<td>46%</td>
<td>16%</td>
</tr>
<tr>
<td>Dixie</td>
<td>1%</td>
<td>30%</td>
<td>69%</td>
</tr>
</tbody>
</table>
throughout the remainder of the state and did not appear to demonstrate any clusters or pockets of Dixie. Residents of rural areas did seem to be more likely to consider their area to be part of Dixie than did urban residents. Although again, this was most common in North Florida. Furthermore, among the state’s large metropolitan areas, only residents of Jacksonville were more likely to consider themselves part of Dixie than not.

**Telephone Directory Business Listings:** Through the use of a computerized telephone directory, it was determined that in the State of Florida there were 1,680 business listings beginning with the word “Southern,” and 318 beginning with the word “Dixie” [4]. The num-
Table 3  
Business Listing Ratios

<table>
<thead>
<tr>
<th></th>
<th>Southern Ratio</th>
<th>Dixie Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum</td>
<td>.375</td>
<td>2.16</td>
</tr>
<tr>
<td>Minimum</td>
<td>.000</td>
<td>0.00</td>
</tr>
<tr>
<td>Highest Ratios</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trenton</td>
<td>.375</td>
<td>Cross City</td>
</tr>
<tr>
<td>Marianna</td>
<td>.166</td>
<td>Apalachicola</td>
</tr>
<tr>
<td>Cross City</td>
<td>.166</td>
<td>Madison</td>
</tr>
<tr>
<td>Large Cities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pensacola</td>
<td>.113</td>
<td>Lake Worth</td>
</tr>
<tr>
<td>Panama City</td>
<td>.098</td>
<td>Panama City</td>
</tr>
<tr>
<td>Tallahassee</td>
<td>.092</td>
<td>Lakeland</td>
</tr>
</tbody>
</table>

The number of entries for each city was standardized by the total number of business listings beginning with the letter “r” for that city. The resulting ratios for each term can be found in Table 3.

Ratios for Southern business listings ranged from .000 to .375. The highest ratios were found in the towns of Trenton, Marianna, and Cross City, all in North Florida. Among larger cities, the highest Southern ratios were found in Pensacola, Panama City, and Tallahassee, also all in North Florida. Ratios for Dixie listings ranged from .000 to 2.16. Cross City, which is located in Dixie County, had 13 businesses beginning with the word Dixie, and only 6 businesses beginning with the letter “r.” Large cities with the highest Dixie ratios included Lake Worth, Panama City, and Lakeland.

Figure 4 illustrates the distribution of Southern listings. The darker, larger dots indicate higher ratios. Clearly, the cities with higher ratios are found in North Florida. The majority of darker, larger dots can be found in the Panhandle, North Central and Northeast Florida. A boundary line could be drawn from northeast to southwest extending through Volusia, Seminole, northern Orange, and Northern Hillsborough counties. Again, this roughly parallels Interstate Highway-4. Although high ratios of Southern listings can be found in both rural and urban areas, all of Florida’s largest cities (i.e., Jacksonville, Orlando, Miami, and Tampa) had
ratios well below .010. Here, the telephone directory method may introduce a bias against larger cities. Their directories are more likely to contain regional listings for out of state businesses and listings of businesses found in surrounding areas. This would inflate the denominator for our calculations and result in a lower ratio.

Figure 5 illustrates the distribution of Dixie listings. Again, cities represented by the larger, darker dots have higher ratios. These cities are primarily found in North Florida’s Panhandle region. Places such as Cross City, Apalachicola, Madison, Marianna, and Chipley all fall in the two highest ratio categories. There are several cities outside of the Panhandle that also have high ratios, yet they are
somewhat misleading. Lake Worth in Palm Beach County, as well as Pompano Beach, Hollywood, and Hallandale in Broward County have high ratios and collectively account for over 30 Dixie business listings. However, nearly half of these businesses are located on Dixie Highway, a commercial thoroughfare that runs through the area [5].

Conclusions

Both the survey interviews and telephone directory business listings have provided useful information in our attempt to identify and delimit the culture regions of The South and Dixie in Florida.
Both methodologies indicate that the regions are not identical and the terms are not synonymous. The South appears to be the larger of the two. The survey interviews indicate that The South encompasses the entire state, whereas Dixie is confined to the Panhandle and northern third of the peninsula. The telephone directory business listings suggest that both regions cover smaller areas. Business listings for The South are most frequent in the Panhandle and northern third of the state, and business listings for Dixie are found primarily in the Panhandle.

Combined with the findings of previous research, our results suggest that Floridians from all parts of the state do consider themselves to be part of The South. However, the intensity of belonging or self-identification with the region may be highest in northern parts of the state. This would help to explain a higher ratio of business listings in those areas. Dixie appears to be restricted to the northern third of the state, and primarily the panhandle. There were over 1000 fewer Dixie business listings than Southern business listings. In addition, over two-thirds of survey respondents did not consider their part of Florida to be part of Dixie. It is hoped that future research will begin to determine if residents across the state have similar perceptions of The South and Dixie. Moreover, what characteristics determine if an area is included or excluded from these and other culture regions?

Endnotes

[1] The authors wish to thank the Florida Geographic Alliance and Jacksonville University for providing the funding to conduct the statewide telephone interviews.

[2] The authors wish to thank Jason Geiger for the production of all maps in this article.

[3] In his analysis of telephone directory listings of major metropolitan areas, Reed standardizes Dixie and Southern listings against listings beginning with the word “American.” We attempted this procedure, however many of the smaller cities in our sample had no American listings.

[4] The implication that Florida is less Southern than its neighbors appears to be true when assessed in terms of telephone directory
business listings. Alabama, with 10 million fewer residents than Florida, had approximately 1150 Southern listings and 285 Dixie listings. Georgia, with a population slightly larger than half of Florida, had approximately 1825 Southern listings and 330 Dixie listings.

[5] This may help to explain Reed's findings that suggested pockets of Dixie in the telephone directory business listings of West Palm Beach and Miami.

References


The Origin of Early Everglades Landowners

Christopher F. Meindl

Census takers in 1890 found less than 2,400 people on the Florida mainland south of Lake Okeechobee, and most of these were scattered in tiny hamlets along the coast (Figure 1; U.S. Department of the Interior 1895). Indeed, South Florida—dominated by the Everglades—remained a wetland wilderness until the Florida East Coast Railroad reached Miami in 1896. With the exception of a few hundred Seminole and Miccosukee Indians, very few people wandered into (let alone lived in) the Everglades. Florida Gubernatorial candidate Napoleon B. Broward developed Everglades drainage as an issue in 1904 in an attempt to put political distance between himself and other candidates. Broward won the election, but as Brooks (1988 p.42) suggests, “in allowing the land [Everglades] question to dominate his speaking, Broward was faced with all the rhetorical liabilities surrounding the issue.” Serving as his own publicist, engineer, and construction superintendent, Florida Governor Napoleon Broward launched Everglades reclamation in July 1906 (Knetsch 1991).

By late December 1908, just before the end of Broward’s term as governor, two dredges had managed to cut just six miles of canals each and drained little land. Making matters worse, the state did not have enough money to continue the reclamation effort. In a desperate attempt to generate the cash needed to continue digging canals, Governor Broward sold real estate developer Richard J. Bolles a half million acres of Everglades swamp land for $1 million. “This sale,” observes McCally (1999), “irrevocably committed the State of Florida to a specific drainage project even before the first engineering study regarding its feasibility appeared.” A handful of other real estate firms quickly followed suit, buying South Florida swamp land and accepting Broward’s pledge that the state would soon drain the Everglades (Randolph 1917). These corporations immediately produced reams of advertising material and they opened real estate offices both in and out of Florida in order to sell the cheaply acquired...

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wetlands for profit. The *Miami News*—Record (31 December 1908, p.2) noted that “for the past two years most strenuous endeavors have been made to dispose of the Everglade lands, and the result has been, so far as can be ascertained, that less than two hundred acres have been sold to actual settlers, while land corporations have secured control of about two million acres.”

By 1912, however, more than 14,000 lots had been sold in the Everglades (McCalley 1999). Who bought this property and more importantly, where did they come from? The purpose of this paper is to present evidence suggesting where these people came from. Most early Everglades land buyers were not from Florida or even from neighboring states in the South, and many purchased land before they had even seen it. Miami resident Margaret Topham wrote U.S. Department of Agriculture Secretary James Wilson on 13 November 1910 summarizing what she witnessed:
Can not this department take some measure to force the stop-
page of sales of so-called drained Everglades lands? Not a
day [goes by] but some poor, deluded victim arrives here in
Miami to find the acres which he has bought, and which have
been described to him as a very gold mine for productiveness,
sometimes as much as 8 feet under water, and with no present
prospect for that water disappearing. These land companies
are flooding the country, particularly the Middle West, with
the most fabulous misrepresentations. We who live here know how
absolutely cruel the sufferings of those misguided creatures. The
Everglades may be drained some day, but that day has not ar-
ried (as quoted in U.S. House of Representatives 1912, p.1263).

The failure of early 20th century attempts to drain the Everglades
generated a howl of protest among new landowners who had been
promised that the Glades would soon be turned into an agricultural
paradise. This led to a Congressional investigation in 1912 that
exposed questionable but not illegal activity in South Florida (U.S.
House of Representatives 1912).

Although South Florida has since become a haven for people
born in foreign countries and people from the northeast U.S. (Wins-
berg 1993), Margaret Topham believed that many early Glades
buyers came from the Midwest. Is this true? The New York Times
certainly thought so. In early 1912, the New York Times (28 Jan 1912
p.14) reported, “much of the region has been platted and sold to
prospective settlers, who number about 3,000 and hail largely from
the Middle West.” Even by 1912, there were far more than 3,000
Everglades landowners, but this newspaper’s impression that many
of them came from the Midwest is indeed accurate. Real estate com-
panies attempting to sell land in the Everglades made no attempt to
hide the identity of their purchasers. Some of the promotional liter-
ature contains testimonials of customers, or at the very least, a letter
of endorsement with the names of people who allegedly visited
the Glades and who agree with the rosy picture portrayed by the
real estate community. In at least three cases, the state of residence
of the endorser is listed next to their name. Using data from three
promotional brochures suggests that the overwhelming majority of
Everglades buyers claimed to be Midwesterners (133); a few hailed
from the Northeastern states (11); a few more from the West (10);
and just three lived in the South.
As the Congressional investigation of 1912 cast a pall over the Everglades reclamation project, the State of Florida invited several members of the press to take a tour of the region with then Governor Albert W. Gilchrist and other Florida officials. The tour was part of a celebration of the opening of the North New River Canal in April 1912. In conjunction with the Chambers Land Company, Chicago newspaperman William Larkin (1912) prepared a small booklet containing letters endorsing the Everglades from virtually all of those invited to participate on the journey across South Florida from Fort Myers up the Caloosahatchee River Canal to Lake Okeechobee, and down the recently completed North New River Canal to Fort Lauderdale. Only one media representative on this tour hailed from outside the Midwest and he was from Baltimore.

Perhaps the most insightful piece of evidence indicating the origin of many early 20th century Everglades land buyers is a manuscript prepared by early Everglades pioneer John Newhouse (no date). Entitled 1912 Land Buyer's Convention West Palm Beach, Florida, this essay is based on a booklet published by the Florida Everglades Land Company. Newhouse’s manuscript contains important geographic information; it lists the number of conventioneers from each state in the U.S. as well as those from foreign countries. Heiney (1978) and George (1989) discussed the details of a similar convention in 1911 at Ft. Lauderdale. Nearly 3,000 conventioneers assembled at the sleepy, South Florida village of just 150 people in March 1911. Like other land companies, the Florida Fruit Lands Company sold contracts to purchase at least ten and up to 640 acres of land in the Glades for the set price of $240. Buyers were attracted by the possibility of receiving one of the few 640-acre plots at the lottery in Ft. Lauderdale. Since the Everglades had not yet been surveyed, however, no one knew the exact location of individual purchases. This caused much dissatisfaction when it finally became known that many tracts were isolated and under water.

In any event, 4,805 Everglades buyers attended the 1912 West Palm Beach convention and Figure 2 demonstrates that there were more Midwesterners than people from any other region. Illinois, Kansas, Iowa, Missouri, and Minnesota accounted for over half the people present. One might have expected that Everglades buyers would hail from Florida and states closest to Florida. This did not happen. Of course, one might be able to explain the distribution of Everglades buyers in terms of the population of states; perhaps the Everglades attracted more buyers from states with more people.
To test this hypothesis, a location quotient (LQ) was determined for each state (using the data from Newhouse). According to Barber (1988), the location quotient is an index for comparing an area's share of a particular activity with the area's share of some basic phenomenon. In this case the "particular activity" is the share of the nation's purchasers of Everglades buyers from an individual state and the "basic phenomenon" is that state's share of the nation's total population in 1910 (the nearest decennial census). The location quotient expressed as an equation is found below:

\[
\text{Location Quotient} = \frac{\text{(Number of Glades Buyers from State X/Total Number of Glades Buyers)}}{\text{(Population of State X/Population of the United States)}}
\]

For example, South Dakota had 57 of the 4,805 Everglades purchasers at the West Palm Beach gathering (.011863 percent) and 583,888 of the nation's 92,228,891 people (.00632 percent). Dividing South Dakota's share of the nation's population into its share of the nation's Everglades buyers gives a location quotient of 1.87. This
means that South Dakota supplied almost twice as many Everglades buyers at the 1912 convention in West Palm Beach as one might expect based on the state’s population. Location quotients were calculated for all states and the District of Columbia, and have been displayed cartographically in Figure 2.

In spite of their relative proximity, almost all states east of the Mississippi River—even Florida’s immediate neighbors—contributed proportionally fewer Everglades buyers than expected based on their total populations. Indeed, none of the southeastern states (except Florida) has a location quotient of higher than 0.17. On the other hand, most Western and Midwestern states supplied more than their share of early 20th century Everglades buyers. Florida is the only Southern state to produce proportionally more Everglades buyers relative to its population, but this makes sense because the Glades are in Florida. Although Floridians who were born in the South (including Florida) may have contributed to the state’s relatively large number of Everglades purchasers (Florida LQ = 4.9), Figure 2 suggests that perhaps Floridians who previously migrated from more northern or Midwestern states were the “Floridians” buying land in the Glades.

Finally, Washington, D.C. led the nation with a location quotient of over 14—reflecting the work of Thomas Will and his friends (Meindl 2000 and Dove 1948). Will, former president of what later became Kansas State University, not only purchased land in the Everglades—he helped organize the Florida Everglades Homebuilders Association, a group of investors in Glades real estate. He engaged in much promotional activity in Washington from 1909 until he moved to South Florida in late 1914.

The question remains, why did so many Midwesterners buy land in the Everglades (or why were they targeted by advertisers)? Perhaps the more frontier-oriented residents of the West and Midwest viewed the Everglades as a “last frontier.” After all, Frederick Jackson Turner had recently declared an end to the frontier in the western United States (Turner 1894). Early Everglades pioneer R.H. Little (1938) is perhaps representative. Little recalled becoming interested in the Everglades as a result of reading several newspaper and magazine articles while living in Chicago. He and his wife were nearing retirement and they decided to buy land and move to the Everglades so they could enjoy an outdoor lifestyle throughout the year. The prospect of settling raw country such as the Everglades did not bother Little (1938 p.7) or his wife: “we had experienced pioneering conditions on the prairies of the Northwest, where her
parents and I had seen the wilderness develop into a prospering community, with modern conveniences, within a period of ten years." There were undoubtedly many more Westerners and Midwesterners who felt the same way.

Moreover, Midwestern farmers had recently experienced success in converting that region's wetlands into productive farmland, so perhaps many people from the Midwest assumed that the same could be done in the Everglades (Prince 1997). Of course, such an undertaking represented a substantial investment, but the necessary capital remained in short supply throughout most of the post-Civil War South. In addition, it may be that Midwesterners were targeted as potential landowners in the Glades because they were far removed from the reality of South Florida's Great American Wetland, and that Southerners—even if they would have had the capital—simply knew better than to attempt farming on wetlands that were not yet drained. Along these lines, the Miami Metropolis (1 March 1912, p.2) reprinted a generally favorable editorial regarding Florida that originally appeared in the Cincinnati Enquirer. Yet near the end of this piece, even this commentator expressed concern over the Glades: "Florida has so much good, rich land that requires no draining . . . that the State and its people have undoubtedly suffered great injury through attempts to unload upon unwary customers land that is in no condition to produce at this time."

In the end, it was probably a combination of variables that led to the unusual interest among Midwesterners in the Everglades. The real estate community recognized these variables and then generated a marketing and advertising blitz that rivaled modern efforts on Madison Avenue. When investors in Everglades land could not earn a return on their investment, many either sold out or simply quit making payments on their mortgages. At the beginning of the 20th Century, few people owned land in the Everglades; and so it is today, with a large percentage of Everglades property owned either by the State or Federal government, or by a small handful of corporate farmers.

References


Newhouse, John. (*no date*) "1912 Land Buyer's Convention West Palm Beach, Florida." Unpublished manuscript available at the P.K. Yonge Library of Florida History at the University of Florida, Gainesville, FL.


'Three real estate companies put together advertising brochures that are available at the P.K. Yonge Library of Florida History at the University of Florida, Gainesville, FL; 1. The Palm Beach Farms Company (untitled); 2. The Florida Everglades Land Company (Little Journeys to the Everglades); 3. The Everglades Land Sales Company (Where Nature Smiles). Although no publication date is listed, brochures from all three companies appear to have been produced in 1910 or 1911.
High School Geography Textbook Adoption: A Leon County, Florida Case Study

Ilhan Kaya, Jonathan Leib, Janet Kodras

Despite the advent of computers and resource-based learning, textbooks continue to be the primary educational resource in school classrooms today (Tulley 1985, Allen 2001). However, geographers have paid scant attention to the procedures that are used to select textbooks for geography education (Bednarz 1997, Graves 1997). Bednarz (1997, 65) is correct when she states “the process by which texts are developed and purchased by school districts and, in some cases, an entire state, is [a] fascinating aspect of textbook research in this country.” Although there have been studies of social science textbook adoption procedures (e.g., Allen 2001, Apple 1995, Altbach 1991, Bushweller 1995, Pearce 1996), there is a lack of studies of geography textbook adoption practices.

We begin to rectify this oversight by exploring the policies and processes that shape high school geography textbook adoption decisions at the state, district, and school levels in Leon County, Florida. By interviewing high school geography teachers and district and state textbook adoption specialists, our study brings together various perspectives from different levels of decision making in the textbook adoption system. The results of our study show that blockages exist in the flow of information between teachers and decision-making authorities at the school, district, and state levels. Teachers are not always knowledgeable about adoption procedures, and textbook adoption decision makers are not always aware of what teachers, as actual textbook users, think about the adoption system.

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STATEWIDE VERSUS LOCAL TEXTBOOK ADOPTION PROCEDURES

One of the many educational responsibilities of state and local governments is to design and implement textbook adoption policies and procedures (Tulley 1985). Two different textbook adoption processes occur in the United States: statewide adoption and local district adoption (Currey 1988, 25). In statewide textbook adoption systems, state boards or departments of education or other specifically designed state committees pick the textbooks for every classroom in the state (Allen 2001), while in local adoption systems, local school districts are in control of the selection process.

Statewide adoption advocates (e.g., Currey, 1988; Clary and Smith 1986, Pearce 1996) argue that such a centralized system reduces textbook costs through large volume purchases, makes possible a statewide curriculum, and results in the selection of higher quality textbooks because experts choose them. Currey (1988) claims that in states where academic freedom and tenure standards for secondary schools are not secure, state adoption may be a hidden blessing. On the other hand, those favoring local-level adoption (e.g., NYSL 1988, Bowler 1978, Pearce 1996, Beyer and Apple 1998, Allen 2001) suggest that expenditures for textbooks have never been considered excessive. They claim that textbook uniformity does not necessarily ensure that all students receive the same instruction. Moreover, they assert it has not been proven that state-level adoption provides higher quality textbooks than does local-level adoption (Tulley 1985). Local adoption advocates argue that state adoption fails to address the diverse needs of students within each state and restricts freedom of choice. In terms of the map of textbook adoption systems (Figure 1), generally speaking, southern states use centralized state-level adoption, while most northern states have an open system where local districts adopt textbooks with little or no state intervention (Fiore and Cook 1994, Allen 2001).

At the same time, the choice of statewide versus local adoption procedures is circumscribed by what textbook publishers produce. While the United States does not have official federal government sponsorship of specific curriculum content, the structure of a de facto national curriculum is produced by the marketplace and by states with the largest school age populations, such as Texas, California, and Florida which, as of 1998, account for about 30 percent of the U.S. textbook market (Allen 2001). Rosmiller (1992) suggests that publishers provide a curriculum that suits the needs of these big
market states and distribute similar textbooks throughout the country, thereby effectively limiting textbook adoption choices.

In this study, we examine the statewide adoption process in Florida relative to local adoption practices in that state’s Leon County. Florida provides a worthy study area for textbook adoption because it is a fast growing state with a rapidly increasing school age population, and is the fourth most populous state in the country. As suggested earlier, textbook adoption decisions made in Florida help shape the textbook market for the rest of the country (Apple 1995, Pearce 1996, Allen 2001). Leon County provides a good case study of Florida’s statewide adoption process because as home to the state capital, Tallahassee, we believe that Leon County school administrators and teachers should have a better relationship with the state authorities in terms of communicating ideas about textbook selection.

We used different data collection techniques and analyses to achieve our research objectives. First, we examined state of Florida
and Leon County documents on textbook adoption processes and procedures (such as recommended textbook evaluation criteria and checklists, products to assign and train textbook adoption committees, and guidelines for teachers when examining a textbook) to help define key variables before starting our interviews. Second, we interviewed geography teachers in Leon County high schools, Leon County’s social studies textbook adoption specialist, and the statewide textbook adoption specialist to explore and compare what individuals at different levels of the decision-making process think about the statewide textbook adoption system of Florida. These interviews were conducted in Spring 1998, just as state and local school officials were adopting new geography textbooks. Thus the interviews were conducted at a time when, in our view, the interviewees would be most aware of the textbook adoption process.

ADOPTING HIGH SCHOOL GEOGRAPHY TEXTBOOKS IN LEON COUNTY, FLORIDA

A Brief Description of Florida and Leon County Textbook Adoption Procedures

State Level

For more than forty years, Florida has used a statewide textbook adoption system to identify textbooks for use in its public schools. Florida has an extensive statewide adoption process involving publishers submitting instructional materials to state and district instructional materials committees for review prior to recommendation for approval by the Commissioner of Education.

The textbook process begins with the Florida Commissioner of Education appointing a state textbook adoption committee for each subject area. The appointees are selected from nominations from district superintendents and professional and educational associations (Florida Department of Education [FDE] 1997). Each committee is made up of nine people: four teachers actively engaged in teaching in public schools, two supervisors of teachers, two lay persons not professionally connected with education, and one school board member. After committee members receive training on the adoption process, the Department of Education mails a notice to all publishers to submit bids. The committee receives the materials to review, followed by oral presentations made by the publishers. All district schools are invited to participate in the pre-adoption evalua-
tion of materials, with district evaluations compiled into a report to be submitted to the appropriate state committee. The state committee then makes textbook recommendations to the Commissioner of Education, who makes the final decision as to which of the recommended materials are adopted. The Commissioner usually places four texts on the statewide adoption list.

District Level

Once the state approves its list of recommended materials, it is then the individual district's responsibility to choose their own textbooks according to their own procedures and criteria. Being adopted by the state, however, does not ensure that these materials will be selected and purchased by the districts or schools. In addition to selecting textbooks from the state-adopted list, local districts can choose textbooks that are not on the state's list. Local districts do have a monetary incentive to choose textbooks from the state's list, though, as they only receive full state funding for textbook purchases if they choose one of the state-approved books (districts may use up to 50% of their state categorical funds to purchase materials not on the state list).

The state requires districts to evaluate the materials before they adopt them. The district superintendent assigns members to the district textbook adoption committee, consisting of one principal or assistant principal from elementary, middle, and high schools; one representative from the District Advisory Council; and other members the superintendent deems appropriate. The committee is expected to reflect the broad racial, ethnic, socioeconomic, and cultural diversity of the district. The committee oversees, monitors, and evaluates selection procedures at all levels, determines textbook adoption priorities, and distributes the materials. The district committee also makes recommendations to the state textbook adoption committee for materials to be considered for adoption. The state Department of Education aids in the training of district evaluation committees.

In addition, the district textbook adoption committee appoints members to subject-area specific committees. The district subject area committees are responsible for studying, evaluating, and recommending core textbooks in their subjects. These committees serve under the main district textbook adoption committee. These subject-area committees are made up of subject-area teachers (60%), school or district administrators (20%), and laypersons (20%).
They select textbooks from the state’s list for the district. Leon County categorizes instructional materials into three groups: core textbooks, supplementary materials, and media center materials (Leon County Schools 1998). The County conducts the evaluation, implementation, and selection of textbooks on three levels: districtwide activities focusing on core textbooks, schoolwide activities focusing on supplementary materials, and individual teachers selecting other support materials.

Leon County established a selection criterion for textbook adoption based on the district’s missions and goals, its curriculum (including the state standards), curriculum frameworks, district scope and sequences, and course outlines. The literary quality, readability level, appropriateness of content, availability of supplementary materials, and durability of materials are all factors considered. The district is also strongly concerned with the way the materials handle sensitive topics such as religion, philosophy, ideology, sexuality, and profanity.

High School Geography Textbook Adoption from the Perspective of Teachers and State and District Adoption Specialists

Interviews were conducted at three different levels with high school geography teachers in Leon County, with the Leon County School District social studies textbook specialist, and with the state of Florida social studies textbook specialist. We interviewed those involved in the process at multiple levels of textbook adoption decision making in order to understand their different perspectives of the effectiveness of Florida’s adoption process.

Interviews with geography teachers

This part of the study investigated geography teachers’ opinions and feelings about the textbook adoption process. As of Spring 1998, when this part of the study was conducted, ten high school teachers taught geography in Leon County’s four public high schools. Of the ten, eight agreed to be interviewed for this study. Of these eight, two also served on the district social studies textbook adoption committee. Most of the teachers interviewed do not exclusively teach geography, but teach other subjects (primarily history) as well. We should note that it was our belief that the teachers would be more knowledgeable about textbook adoption in Spring 1998, as at that time new geography textbooks were being adopted.
in Leon County.

Each interview lasted approximately 35-45 minutes. Teachers were asked 27 questions: most questions were open-ended, though some were designed to elicit "yes/no" responses. Questions dealt with a range of issues concerning textbook usage: such as whether the teacher used a textbook, the role of the textbook in their classrooms, their opinion of textbook quality, the suitability of the textbook they used, and their knowledge of and role in the textbook adoption process.

For the purposes of this study, we are most interested in the teachers' responses to questions concerning textbook adoptions. During the interviews, subjects were asked their opinions and feelings about textbook adoption procedures, how they were informed about the process, how knowledgeable they were about the process, their relationship with the textbook adoption committees, and whether or not they were happy with the current system. Under these broad topics, more detailed questions were addressed. Table 1 provides the list of questions that were asked concerning the textbook adoption process.

The first three questions in Table 1 address the issue of to what extent high school geography teachers in Leon County are involved in the textbook adoption process. Two of the eight teachers interviewed serve on the district social science subject area committee. Of the remaining six, five are not involved in the textbook adoption process at all (Question 1: "How are you involved in the textbook adoption process at the school, district and state levels?""). They may know that there is an adoption committee, and they may talk briefly about textbook adoption, but they play no role in the process. As Teacher 8 noted, "I am not involved in the textbook adoption process, but we talk about them a little bit." Teacher 6 indicated greater involvement with the process, stating that her/his department head (who is a member of the committee) keeps them informed of the process, allows teachers at their school to look through the textbooks on the state list, and provide feedback to the department head. This respondent (Teacher 5) felt that her/his department head tried to achieve consensus among her/his teachers about which of the state-listed textbooks they preferred. While Teacher 5 felt that s/he had some involvement in the process, given that there are ten high school geography teachers in the county system, at least half (five) felt they were not involved in the adoption process. This was even the case for one of the teachers who reported being not much involved currently even though, in response to
**Table 1**

**INTERVIEW QUESTIONS ASKED OF GEOGRAPHY TEACHERS CONCERNING THE TEXTBOOK ADOPTION PROCESS**

**Questions pertaining to the level of teacher involvement in the textbook adoption process**

1) How are you involved in the textbook adoption process at the school, district and state levels?

2) What kind of relationship do you have with the textbook adoption committee?

3) How are you informed by textbook adoption decision makers about the adoption process, what needs to be adopted, and what is being adopted?

**Questions pertaining to the degree to which teachers think they should be involved in the textbook adoption process**

4) Do you believe that teachers are sufficiently involved in the adoption process?

5) Who should have the most to say in the textbook selection process?

6) Do you believe that teachers should have complete freedom to choose their own textbooks?

**Overall assessment of the current system**

7) After all these different levels of decisions such as state, district, and school, do you think students get the textbooks they should?

*After the first two interviews were conducted, the following question was added for the remaining interviews:*

8) Are you happy with the current textbook adoption system?

* A copy of the full questionnaire can be obtained from the lead author.

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**Question 2 (What kind of relationship do you have with the textbook adoption committee?), s/he reported having once served on the district adoption committee.**

Similarly, in response to Question 3 (How are you informed by textbook adoption decision makers about the adoption process, what needs to be adopted, and what is being adopted?), four of the six respondents who were not on the textbook adoption com-
mittee argued that they were not well informed by textbook adoption decision makers about the adoption process, what types of books and supplementary materials needed to be selected, and what books were being chosen. As Teacher 7 stated, "I'm not very involved. I just knew who was going to choose the textbooks." The two remaining teachers were informed of the process through their department head.

The responses to the first three questions demonstrate that at least half the geography teachers in Leon County public high schools do not feel that they have a say in or much knowledge of the textbook adoption process. For whatever reason, it appears the only way to significantly influence the adoption process is to be a current member of the adoption committee.

While the first three questions examine to what extent teachers are involved in the textbook adoption process, the next three questions of the survey deal with the issue of to what extent teachers believe they should be involved in the textbook adoption process. In response to Question 4 (Do you believe that teachers are sufficiently involved in the adoption process?), four of the eight teachers felt that teachers were not sufficiently involved in the textbook adoption process (three felt they were, while one was not sure). In terms of teachers' opinions of who should have the most say in textbook adoption, not surprisingly, five of the eight suggested that teachers should have the greatest say (Question 5: Who should have the most to say in the textbook selection process?), two argued that the district committee should decide, while one recommended that the teachers and the committee should make the decision together. However, when asked whether teachers should have complete freedom to choose their own textbooks (Question 6: Do you believe that teachers should have complete freedom to choose their own textbooks?), the eight teachers gave a range of responses. Three teachers stated unequivocally that they should have complete freedom, while two respondents (including one member of the committee) answered that teachers should not be given complete freedom to make the textbook adoption decision. The other three, however, felt that while teachers should be given more freedom than they currently have to choose textbooks, there should be some constraint on that choice. For example, Teacher 4 noted that while teachers should be given freedom, they should not be given "complete freedom." S/he felt that teachers needed assistance in choosing textbooks, and that the district committee could provide that assistance. Similarly, Teacher 2 noted that there needed to be guidelines to
provide a framework to assist teachers. At the same time, Teacher 5, while noting that it "would be nice" if teachers could have the freedom to choose their own textbooks, indicated concerns that such freedom would also subject teachers to liability issues. Having the state and district committees making the adoption decision removes liability concerns (especially for texts containing controversial issues) from the teachers themselves.

The final two questions address whether teachers were happy with the current adoption system and whether it succeeds in its ultimate goal, providing teachers and students with the quality textbooks they want. On the question of whether the system provided students with the correct texts (Question 7: After all these different levels of decisions such as state, district, and school, do you think students get the textbooks they should?), the eight teachers were split: four agreed, four disagreed. However, the teachers' responses indicate that the level of teacher involvement in the adoption process influenced their answers. The four teachers who believe the system works feel that they are involved in the process: two currently serve on the district committee, one previously served, and the other (Teacher 5), while having never served on the committee, felt that her/his department head kept teachers involved in the process. The four teachers who were most dissatisfied with the decision-making process were the ones who reported having no input.

Our final question asked, in general, if the teachers were satisfied with the current adoption system (Question 8: Are you happy with the current textbook adoption system?). Five of the six teachers to whom we asked this question answered that they were not happy with the system. Their suggestions for improving the system ranged from wanting more freedom of choice to choose their own textbook (Teacher 2 said that s/he wanted "to have an opportunity to choose my own textbook from the state list. But I think the district committee limits our freedom of choice. The system should be more flexible"), to insisting that all teachers should be involved in the process. Teachers suggested that they wanted the state and district committee to pay more attention to their views on textbook adoption. The general sense of the "no" respondents was that the current system did not encourage their participation in the process, and they would like to see the system changed to facilitate their participation. Teacher 8 summed up her/his feelings noting that while she was not content with the current system, "I really don't deserve the judgment because I don't know much about it. I feel that I could have been more involved. I believe that we could do a better job."
Interviews with the district and state adoption specialists

After interviewing high school geography teachers, we interviewed both the district and state social studies textbook adoption specialists to determine whether the district and the state specialists were aware of how teachers felt about Florida’s textbook adoption system. Each interview took more than one hour. Questions were also asked about laws and regulations governing the system; textbook adoption committees and the way committee members were selected; the relationship between the state, the district, and individual schools regarding the textbook adoption system; their relationships with publishers; and the suitability of adopted textbooks and the adoption system. One of our goals was to investigate how the district and state researches the needs, feelings and expectations of their teachers.

During the interviews with the state and district adoption specialists, we discovered that, at both levels, these textbook-decision makers were not very aware of what teachers and students thought about textbook quality and the adoption process. One reason why the state textbook adoption specialist was not aware of what teachers (or students) thought about textbook quality is that studies are not conducted at the state level to gauge teachers’ (or students’) opinions, either before or after books are adopted. As the state social studies textbook adoption specialist told us, “we don’t do anything like a pilot study or questionnaire. We adopt textbooks according to our standards. We don’t really search anything from teachers. We only get our information through teachers who are on the committees.” The state specialist informed us that s/he had no idea whether teachers are happy with the quality of textbooks chosen for the state list. While input is received from teachers on the committee, the state social science textbook adoption specialist informed us that only two members of the statewide adoption committee are high school teachers.

The state specialist did tell us that if teachers do not like the textbooks adopted, they can select their own textbook. Having said this, however, the state specialist did not think that it was a good idea to allow districts complete freedom of choice in selecting textbooks, let alone allowing teachers complete freedom of choice. S/he noted that “there must be some guidelines or frameworks” for choosing textbooks, and the statewide adoption process “serves the purpose.” In terms of input from the district adoption commit-
tees, the state specialist noted that they “are represented directly in the state committee.” However, the state specialist noted that they receive little input from the local districts in the statewide selection process. As s/he put it, “they have the right to recommend something. But we do not have to adopt what they ask us to.” At the same time, however, the state specialist noted that given the different levels of decision-making (state, district, school), teachers and students do not get the textbooks they should. As s/he told us, “Where is the student? Where is the teacher? I think they get lost in the process.”

The Leon County social studies textbook specialist, not surprisingly, seemed more informed about local conditions and teacher desires. However, having said this, the district specialist has not formally surveyed teacher opinions about the textbook selection process either. The specialist assigns the members of the adoption committee. S/he told us that s/he assigns only teachers to the committee (unlike at the state level), and that most members are department heads and “good geography teachers.” While formal surveys are not conducted among the teachers concerning the books being considered, the district specialist believes that communication about the process is good, noting “we get inputs from teachers. There is a consistent flow of reaction and suggestion.” S/he further stated that while teachers and students generally have limited access to textbook selection, “we try to have teachers and schools participate in the process.” The district specialist told us that, overall, s/he believes that most teachers are happy with the current system.

The district specialist also believed that teachers are happy with the adoption system as it relates to the issue of freedom to select textbooks. The district specialist favors the current system, arguing that rather than seeing the current system as the state limiting local choice over textbooks, the state’s screening of textbooks makes the district’s job easier by winnowing the number of textbooks under consideration. S/he was satisfied with its limiting of choice, and believed that teachers were happy with this system as well. The analysis of documents and interviews with state and district officials showed that individual schools or teachers can select any textbook from the state’s list, even if it is not on the district’s list, yet many teachers are unaware of this freedom of choice. As a common tradition, schools in individual districts tend to agree on one primary and one secondary textbook from the state’s selected list to achieve uniformity among the district’s schools.

Both the state and district specialist pointed to other benefits of
the state playing an active role in choosing textbooks for schools across Florida. By using a statewide adoption system, the state can move towards a statewide uniformity of curriculum. Given the trend towards state education standards (as demonstrated in Florida through its Sunshine State standards) and statewide standardized testing, state authorities believe that statewide adoption ensures that textbooks include appropriate content for mastery of state standards. The district social studies textbook adoption specialist was also very grateful that they reached a districtwide agreement on social studies textbooks because,

The adoption of the same texts across our district will certainly assist students as they may transfer to other Leon County schools and in the opportunities for inservice, pre- and post-assessment, and development of learning activities relevant and usable by all our secondary social studies teachers.

At the same time, however, while statewide adoption is claimed to be a vehicle to achieve uniformity of curriculum, some educators believe that uniformity of curriculum is unsound, because it reduces the ability to meet diverse needs of students whose cultural and ethnic background may differ (NYSB 1988, Beyer and Apple 1998). The state textbook specialist rejected this claim and argued that local districts and teachers are allowed to adopt supplementary materials to fill in that gap. S/he also asserted that the state offers multiple lists of textbooks that make it possible to respond to diversity as each textbook they select meets the needs of different groups. As the district specialist told us, adopting two different textbooks helps to address issues of diversity.

Statewide adoption is seen as a vehicle to stabilize the cost of textbooks for more effective instruction. If students move from one district to another or from one school to another, they will have fewer interruptions in their education and will be using the same textbooks they used elsewhere. This can be considered an advantage if large numbers of students are moving. The district social studies textbook adoption specialist and the state textbook adoption specialist mentioned this advantage, however, they were not aware of how many students were moving from district to district or school to school each year.

The state and district authorities argue that statewide adoption saves time and work because it is conducted at the state level rather than multiple times at the district level in Florida’s 67 counties.
Districts do not have to examine a large number of textbooks. The state narrows choices for individual districts, allowing them time to conduct in-depth evaluations of textbooks. Indeed, the time and cost issue was noted by the district specialist in responding to our question about why there were not subject specific adoption committees, such as one for geography, but rather that an all-encompassing social studies committee was appointed instead. Time and work for districts may be saved through statewide adoption, but their freedom of choice is restricted. Districts have a limited number of textbooks to choose from. For example, Leon County picked its two high school geography textbooks from the four adopted at the state level. On the other hand, the state might receive bids from all major textbook publishers for evaluation and adoption. Such a system involves a trade off: the more work and time the districts save, the more restricted their choices become.

Statewide adoption is also considered useful for protecting small local districts from the marketing practices of publishers. The state textbook specialist stated that, "if we do not apply statewide adoption, publishers will not go to small districts with limited numbers of students to give presentations or introduce their textbooks because they do not think there is much money to go for in those districts." The state ensures that every district will get the same attention. This practice provides equal opportunities to every district to adopt better textbooks.

Finally, statewide adoption is assumed to ensure quality control of textbooks used in public schools by selecting books of the highest quality because the evaluations are conducted by professionals in the field. Local school districts may not have people who are capable of conducting satisfactory textbook evaluations for every subject. Statewide adoption involves a large number of individuals with greater abilities, and state-level textbook adoption committees and authorities are better able to detect qualitative differences among textbooks in a given subject area. Nevertheless, it is important to note here that this claim implies that local districts or individual teachers are not capable of identifying quality textbooks. When we asked the district social studies textbook adoption specialist to comment on this, s/he said that this was not completely true because in her/his opinion, the district had very experienced teachers who could do a great job evaluating and comparing textbook quality.
DISCUSSION

Our interviews with Leon County's high school geography teachers and the Leon County and state social studies textbook adoption specialists indicate that lines of communication are not completely open between teachers and those who select textbooks in Florida's statewide textbook adoption process. This became apparent during interviews with both teachers and textbook adoption decision-makers. Neither state nor district textbook specialists have an entirely clear idea about teachers' opinions and needs concerning the textbook adoption system nor are teachers totally aware of what is expected of them. There needs to be a better flow of information between the ultimate decision makers and the ultimate textbook users. State and district authorities do not really know if teachers are happy with the quality of the textbooks they receive through this system.

Another important observation during our interviews was that the majority of geography teachers interviewed have little knowledge about the textbook adoption system or about their rights in the adoption process. They knew very little about the procedures used by textbook adoption decision-makers at both state and local levels. As of May 1998, a number of Leon County's high school geography teachers had not yet seen any of the adopted textbooks even though 1998 was a social studies textbook adoption year, and geography textbooks had just been adopted by the Leon County district social studies committee. Some teachers did not know much about how they could participate in the textbook selection process, such as reviewing and suggesting textbooks to state and district committees, even if they wanted to participate.

Our study shows that among high school geography teachers interviewed in Leon County the ones who were the most informed about textbook selection were the ones who were on the district textbook adoption committee or who had served previously on the committee. This indicates teachers' awareness of the adoption system and process is directly linked to their active participation. Moreover, their satisfaction with the system also depends on their participation. The more teachers are involved in the process the more satisfied with it they are. This suggests that encouraging greater teacher involvement in the textbook selection process will increase teacher satisfaction with the textbooks ultimately chosen.

A majority of the teachers interviewed wanted to have more free-
dom in selecting their textbooks. Whether this should be complete or partial freedom is a question of debate. Our interviews showed that while some teachers do not desire to have complete freedom over textbook selection, the majority want more freedom of choice than they have now, and they want a system that encourages more participation in the textbook selection process. Overall, the teachers believe that rules and regulations governing textbook adoptions should promote more participation from individual teachers, since they actually use the textbooks and must deal with any problems that arise from them.

CONCLUSIONS

Our case study of high school geography textbook adoption in Leon County, Florida has demonstrated variable degrees of communication between teachers and those who select textbooks. Given that textbooks still play an important role in geography education, we argue that these findings, that teachers feel they lack power and influence in adopting the textbooks that they use in their classrooms, are important. We agree with Bednarz (1997, 65) that “the process by which texts are developed and purchased by school districts and, in some cases, an entire state, is [a] fascinating aspect of textbook research in this country.” Little research has been done on the geography textbook adoption process. We hope that her call and our study help to spur on additional research in this understudied, but vitally important, area of geography education.

NOTES

1 The interviews in this study were conducted by the lead author as part of his Master’s of Science thesis research.

2 A fifth public high school opened in Leon County the year after we conducted the teacher interviews.

3 In order to protect the teachers’ identities, we have assigned numbers randomly to the eight teachers interviewed. Their responses are reported by number only.

4 This question was added to the survey after the first two teachers were interviewed. Of the two who were not asked this question, one served on the district textbook adoption committee at the time.
REFERENCES


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Urban Sprawl in Florida between 1990 and 2000: An Interpretation Directed toward Teachers

Morton D. Winsberg

Note: This article was written primarily for Florida’s teachers. It includes a general discussion of urban sprawl, information about urban sprawl within the state as a whole, and for all of its twenty metropolitan statistical areas (MSAs). It concludes with citations of units that have already been written to teach the concept of urban sprawl. The author makes no pretense that the information in this article is complete. However, the data provided by the tables, the maps of population change in the state’s MSAs, as well as information within the article, should furnish the basis for the development of the theme within the context the teacher chooses. To make the unit complete the teacher and students are expected to provide the details for their community. To make them accessible to all who read this article, citations are all from the Internet. Consult the Florida Geographic Alliance web page (http://fga.freac.fsu.edu) for additional information about urban sprawl in Florida.

Urban sprawl, here defined as the spread of households from established urban areas nearby onto land of much lower population density per square mile, has contributed to many of the nation’s most serious social and environmental problems. An Internet search reveals approximately 126,000 sites in which the term was mentioned, most in a negative way. Despite the frequent and emotional expressions of hostility toward urban sprawl, throughout the nation the process has continued at a high intensity for the last half century, and shows few signs of abating in the near future. The focus here is on urban sprawl in Florida where urban population growth has been enormous, particularly during the last fifty years. The study is directed toward all with concern about the issue, but is most especially written with high school teachers in mind.

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Urban sprawl has become a global phenomenon brought about by advances in private transportation, most particularly the automobile. Until the twentieth century most nations, even the United States, had more rural than urban residents. The low efficiency of public transportation confined the urban population to densely populated areas near where they worked. Cities were compact, with economic activities highly concentrated in their centers. Public transportation, first powered by animals, later by steam, electric, and internal combustion engines increased mobility within cities and permitted urban expansion. Suburbs began to appear at the beginning of the twentieth century. However, it was the rapid growth in private automobile transportation that opened up the periphery of cities to urban expansion, first in the United States and now in many other nations. By the 1950s there were 32 registered vehicles (commercial and private) for every 100 people living in the United States (35 in Florida). By 2000 that figure had risen to 80 in the United States and 76 in Florida (www.fedstats.gov).

As the disposable income of households increased in the United States, paralleled by an increase in automobile ownership, movement from the nation’s central cities to their suburbs grew dramatically. Most people, when given the choice, prefer to live in neighborhoods that are less densely populated than those common in the center of the city. Furthermore, Americans have a special attachment to the single unit detached house, which became their overwhelming residence of choice in the suburbs. The huge Interstate Highway Program begun in the 1950s, along with the limited access highway construction programs undertaken by states and cities, contributed to the migration to the suburbs since it improved automobile access between them and their central cities, and between other suburbs. This first led to a migration from the central city to the suburbs, but now movement between suburbs has become even more important.

The move to the suburbs was expensive. As the more affluent left the central cities, they left behind most of the poor, whose share within the central city population increased. This led to the central cities having lower tax bases and a consequent decline in the resources needed to fund public services, including police and schools. The deterioration of the social environment (evidenced by high crime rates and poor schools) of the central cities drove others who could afford it from them into the surrounding suburbs. Today there are many large metropolitan areas throughout the nation that have a larger population in their suburbs than their central cities. The collapse of population in the interior of some central cities,
particularly in their Black ghettos, has been so great that population densities within parts of them are now frequently lower than in the suburbs.

For many who have made the move from the central cities to the suburbs the relocation has not been an unqualified success. For one thing, to make the move usually required assuming a heavy debt for housing. Since most of the employed found themselves farther from work than when they lived in the central city, as well as from goods and services, naturally the cost of transportation, overwhelmingly the private automobile, also rose. Today in most two-parent suburban households both adults must work to meet the cost of the house mortgage and transportation. When their children reach the age when they are permitted to drive and want to own an automobile, it is often necessary for the teenager to obtain a part-time job at the least to contribute to the cost of operation. A frequent complaint of suburban residents is that their family life has deteriorated. So many family members are either working, or indulging in the freedom that their automobiles permit, that time spent with the family has diminished.

Two web sites provide excellent characteristics of urban sprawl. (www.plannersweb.com/sprawl/define and www.vtsprawl.org/sprawldef). These characteristics are summarized below, slightly modified in places to reflect conditions in Florida.

Sprawl is typically characterized by: (1) Rapid outward extension of housing and inefficient land consumption; (2) Low-density residential and commercial settlement; (3) Fragmented development with wide gaps between development and a scattered settlement appearance; (4) Dominance of private automobiles; (5) Fragmentation of powers over land use among many small localities; (6) Little to no centralized planning or control of land use; (7) Great disparities of average household income between localities; (8) Large “big box” retail establishments and shopping malls, surrounded by acres of parking or strip commercial development along major thoroughfares; (9) Scarcity of public spaces and community centers.

Sprawl is distinct from older compact urban centers that are characterized by: (1) Higher density than surrounding areas (2) Mixed land use; (3) More pedestrian oriented than suburbs; (4) Served by a larger number of public facilities, services and public spaces; (5) Diversity in type and scale of housing, business and industry (6) A greater number of unique historical and cultural elements.
Among the causes of sprawl are: (1) Public’s willingness to investment in roads, public buildings, water, sewer and other infrastructure in peripheral areas and a relative lack of enthusiasm to do so in existing centers; (3) Land regulations that promote suburban style development; (4) Other public policies, including tax policies and utility rate policies; (5) Low cost fuel which encourages commuting; (5) Lower land prices in peripheral areas; (6) Higher costs of development associated with existing centers (7) Consumer desire for rural lifestyle with large homes and large yards, safe environment and less traffic congestion; (8) Preference of business and industry for easy highway access and plenty of free parking; (9) Demands of commercial tenants for particular locations and designs for buildings and sites; (10) Telecommunication advances making it unnecessary for some business to be close to each other; (11) Commercial lending practices that favor suburban development.

Among the effects of sprawl are: Increased public costs: (1) Unnecessary public costs for redundant infrastructure outside existing centers; (2) Excessive public costs for roads and utility line extensions and service delivery to dispersed development; (3) Unutilized and underutilized infrastructure in older centers; (4) Reduced opportunity for public transportation services. Loss of sense of place and community decline: (1) Fragmented and dispersed communities and a decline in social interaction; (2) Isolation of some populations, such as poor and elderly, in central cities; (3) Decline in vitality and economic and fiscal viability of existing urban and village centers. Decline in environmental quality and natural resource production: (1) Fragmented open space that reduces wildlife habitat; (2) Loss of productive farmland and forest; (3) Increase in auto dependency and increased fuel consumption; (4) Decline in water quality from increased urban runoff, shoreline development and loss of wetlands. Decline in economic opportunity: (1) Premature disinvestments in existing buildings, facilities and services in central cities; (2) Relocation of jobs to peripheral areas at some distance from population centers; (3) Increased commuting times and costs; (4) Decline in number of jobs in some sectors, such as retail; (5) Isolation of employees from activity centers, homes, day care and schools; (6) Inability to capitalize on unique cultural, historic and public space resources (such as waterways) in urban and village centers.
Urban Sprawl in Florida

In 1950 Florida had approximately 2.8 million inhabitants and there was little evidence of urban sprawl. The counties that today compose the state's 20 metropolitan statistical areas (MSAs) held 86 percent of the population, and the central cities within them contained 48 percent of their total population. The situation was about to change, since between 1950 and 1970 Florida's population increased by slightly more than four million, or about 200,000 per year. In the thirty years between 1970 and 2000 growth was even more rapid, 9.2 million, or an average of 306,000 each year. In most years at least 80 percent of that increase was from in-migration, largely from other states, but following the 1959 Cuban revolution, increasingly from abroad, mainly Latin America. In 2000 the state's MSAs held 93 percent of Florida's population. However, the share living in their central cities had fallen to 26 percent. The decline would have been even greater but for the fact that a number of central cities annexed land between 1950 and 2000. Jacksonville is the most notable example, its boundary having been enlarged to include the entire county.

The combined populations of Broward County's central cities (Fort Lauderdale and Hollywood) held 60 percent of its MSA population in 1950, but only 22 percent in 2000. For Orlando the drop was from 34 percent to 11 percent; Miami-Hialeah 54 percent to 26 percent; West Palm Beach-Boca Raton 48 percent to 26 percent; and Tampa-St Petersburgh-Clearwater 54 percent to 28 percent. Many smaller MSAs experienced equally large declines in the share of their populations living in the older central cities. Notable exceptions to this trend are the MSAs of Tallahassee and Gainesville, where the central cities remain very important. The presence within them of large universities, and the concentration of students on and around their campuses account for much of the continued importance of their central cities.

Migrants, who are responsible for the majority of the state's population growth since 1950, have largely chosen to settle in South or Central Florida. North Florida began to lose population share even before the 20th century, and continues to do so today. Most settlement has been along the state's coasts, particularly along the Atlantic Ocean. However, those on the peninsula's Gulf Coast also have become a popular destination, and there are indications that those along the Panhandle will become far more successful in attracting
migrants than at present. As a result of jobs created by tourist developments such as Disney World, but also because retirees are finding them more economical to live in, and less congested, Florida's interior MSAs between Tampa-St. Petersburg and Daytona Beach have been growing rapidly. The state's distribution of population in 2000 (Figure 1) differs little from that of 1950 except for the fact that in 1950 cities and towns were usually separated from each other by either agricultural land or land of even less intense economic use.

What has taken place over the past 50 years is a closing of the empty space between the central cities as they filled up with people. Some central cities did annex land and grew in population by expansion. However, most growth was in villages and towns nearby.

Figure 1

Florida Population
2000 Census
or new towns created from rural land. Towns like Boynton Beach and Delray Beach in Palm Beach County, mere villages in 1950, today have more than 50,000 inhabitants each. It is now possible to travel along the state’s Atlantic Coast from Miami to Daytona Beach and be almost continually within an urban area. The same can be said from Saint Petersburg north to Crystal River and it is almost true from Tampa-St. Petersburg to Naples. A long urban ribbon is also emerging that soon will connect Tampa-St. Petersburg with Orlando, and in the not so distant future to Daytona Beach. In the more distant future we may expect another urban ribbon to run along the northern Gulf Coast from Pensacola to Panama City. It is along these urban corridors where the largest share of the state’s urban sprawl has occurred.

This raises the question of just how should one interpret urban sprawl. Does it lead to a permanent condition or is it an ongoing process that evolves into true urbanization? In Florida it appears more of a process. Given the state’s huge in-migration, what might have been identified as urban sprawl at the beginning of a decade could easily have become a part of a metropolitan statistical area’s central city by its end. Certainly most of the land in Florida that in the 1950s and 1960s would then have been classified as “urban sprawl,” has become that part of the MSA that to many is considered the old part of town. Florida is going through an urbanization process that earlier went on between Boston and Washington, and between Chicago and Milwaukee, and is taking place today between Los Angeles and San Diego, and in other parts of the nation. However in Florida, because of its rapid population growth, the process is faster than in most of the rest of the nation.

Most national environmentalist groups, as well as organizations such as the National Geographic Society (http://magma.nationalgeographic.com/ngm/data/2001/07/01/html/fl20020701.3.html) have long recognized urban sprawl as a process. Their concern is that federal, state, and local government should implement more rigid controls over the process. Although organizations differ over the degree and type of controls they believe government should enact, there is a consensus developing around the term “Smart Growth.” The state government of Florida, through its Department of Community Affairs, to achieve “smart growth,” in the 1980s required that all counties submit for its approval a “comprehensive plan” for future population growth. Many environmental, neighborhood, and other citizen advocacy groups have
complained that these comprehensive plans have not been consistently followed, and are too easily amended to serve the interests of commercial, industrial, and real estate interests.

The Sierra Club’s 1998 annual report (www.sierraclub.org/sprawl/report98/cities) identified what the organization believed were the most “sprawl-threatened cities” (by which they meant Metropolitan Statistical Areas) in the nation. In its judgment, within the category of one million or more population, Fort Lauderdale was ninth, Tampa fourteenth, and Miami eighteenth (Atlanta was first). In the category of 500,000 to one million West Palm Beach was fourth, and in the category 200,000 to 500,000, Pensacola was third and Daytona Beach fourth. If the Sierra Club had chosen to rank cities under 200,000, it is likely that Ft. Walton Beach, Ocala, Punta Gorda, and Panama City would appear. These rankings given by the Sierra Club may be disputed, but most who are familiar with the state’s metropolitan statistical areas (MSAs) would acknowledge that the spread of urban land use is not tightly regulated, and has generated many environmental and social problems.

How does urban sprawl display itself on the visible landscape? Perhaps most obvious to the casual observer would be the homogeneity of the residential landscapes. Many of the homes within the so-called urban sprawl have been constructed by developers, who prefer to develop large tracts of land. There are economies of scale that can be gained by building many houses following standardized housing plans and making inexpensive modifications to individualize the appearance of each house. Furthermore, the per mile cost of roads, drainage, and utilities is more economical when installed over a large area compared to one that is small. Developers also have found that it is easier to sell homes in a subdivision where homes are somewhat uniform in price, appealing to either the rich, the middle income, or the poor, but not to all three.

To the perceptive observer there also would be an absence of people on suburban streets, especially during a weekday. Then the parents probably are at work and the children in school. Even on weekends one seldom would see pedestrians, since most people would be in their house, in their backyard, or in their automobiles running errands. Perhaps in recognition of their low utility to suburbanites, many suburbs lack sidewalks to facilitate walking. Since much of the outer periphery of central cities has been developed on large tracts of land, these subdivisions often are widely spaced from each other. Each often is separated from others by empty or lightly
populated land, often held idle by land speculators waiting for the value to increase, when it will be sold to another developer.

The commercial landscape in suburbia is totally oriented toward the motorist. Large “regional” malls with acres of parking provide the prospective customer a mix of multi-department stores and those with more specialized merchandise, as well as restaurants and other services, including movie theaters. Smaller malls generally are “anchored” by a large discount store or a supermarket, and have a variety of smaller commercial establishments, including retail stores, as well as restaurants, video stores, and other services. They also provide ample parking.

The commercial landscape within what is here designated the area of urban sprawl is at least as dynamic as the residential landscape. However, the purchasers of new homes usually sell their old homes before they move. Most could not have purchased the new one if they were unable to sell the old one. New commercial construction often leads to older commercial buildings remaining empty for long periods of time. A common sight in suburbia is a strip mall where the anchor store, be it a supermarket or a discount store, has closed and the owner of the mall has not been able to find a tenant to replace it. Usually many of the smaller stores in the mall, following the closing of the anchor store lose potential customers, and they are forced to close. It is not uncommon to see whole malls, some quite large, totally, or almost totally empty. One should think for a moment of what has happened to business in a mall when its Wal-Mart or Target, or a similar type store, is closed and replaced by a superstore that has been built nearby at a newer mall, or on a large tract of land where it stands alone. There are many examples of this throughout Florida, and elsewhere in the nation.

This is not a new phenomenon, since the downtown business districts of central cities experienced the same problems several decades ago. One by one the large downtown department stores closed, followed by smaller ones, and soon all that was left of commercial life in the central business district of many cities was a handful of stores and restaurants to serve office workers. Since after the office workers went home there were so few customers, many restaurants ceased serving dinner. If the reader lives in one of Florida’s MSAs, reflect on the land use in your MSA’s central business district. Today the competition between retailers and service providers mainly takes place on the periphery of large cities, a competition where there often are as many losers as winners.

The stress put on the environment by low density housing is
not limited to the local area, it creates problems for the surrounding region as well. The Florida Everglades and adjacent wetlands, one of the nation’s most unique environmental habitats, located in the interior of the southern one-third of the Florida Peninsula, separates two of the state’s most densely populated areas, the Gold Coast and the Sun Coast. As people flow into these coastal cities the pressure of population mounts on the already occupied land. Basically these cities have two ways to absorb the new migrants. They can pack the new arrivals into the existing urban area by building apartments or row houses that can accommodate people more densely, or the urban area can be expanded into rural area to permit the more desirable detached housing. On the Gold Coast both strategies are being practiced, but more than any of the other MSAs in Florida the three along this coast have emphasized apartments. The most recent data available, that from the 1990 census, indicate that in all three slightly less than 40 percent of the housing units were detached. At the other extreme, the percentage of the housing stock classified as detached homes in the MSAs of Daytona Beach, Ocala, and Fort Walton Beach is approximately 55 percent. Within the Pensacola MSA it reaches 66 percent, and in Punta Gorda it is 71 percent.

Through a more intensive use of existing housing units, the construction of subdivisions where homes are more densely spaced, and only to a small degree through the expansion of detached single family housing into lightly populated areas, the urban density of two of the large Gold Coast MSAs (Miami-Dade and Fort Lauderdale) increased between 1990 and 2000 (Table 1). The third, West Palm Beach, only decreased one percent. Even though urban expansion along the Gold Coast has been relatively small compared to those in other parts of Florida, between Miami and West Palm Beach expansion westward has encroached upon wetlands that have had to be drained, with its accompanying natural habitat disruption. The quantity and quality of the area’s water supply has also been affected.

On the Sun Coast the growing demand for housing has largely been met by developers subdividing rural areas into detached homes. Thousands of acres between Naples and Fort Myers were drained in the 1960s and 1970s by developers who subdivided the land into small lots and built roads in the hopes of attracting buyers. Although many lots were sold, most to absentee buyers, relatively few homes were built upon them. Nonetheless today, these empty subdivisions remain, and are eerie to visit, with their dense network of streets, but just a sprinkling of homes. The state has been
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* Less than .01 percent
buying some of these properties, and is beginning to restore them to their natural state. There are many highly successful housing developments along the Sun Coast, some large, many more small. An important exception to these vacant subdivisions is Cape Coral. Population growth and development at Cape Coral has been phenomenal and by 2000 it had reached a population of nearly 100,000. Port Charlotte and Spring Hill are other examples, and held approximately 50,000, and 40,000 respectively in 2000. (For a complete discussion of one of these developments see the article on Cape Coral which follows this article).

Although most conspicuous in the southern part of the Florida Peninsula, there are numerous examples of large housing developments farther north within the state. The Disney Corporation has created a planned community named Celebration on the pine flatwoods and swamps in Osceola County, on land that for over a century was cattle country. It is entertaining the construction of more communities nearby. Farther to the north, in Duval and St. Johns counties, the Winn-Dixie Corporation is developing Nocatee, a community on 15,000 acres (www.nocatee.com). It will take about 25 years to complete, and when finished will have a population of between 30,000 and 38,000 residents. In the Panhandle the St. Joe Company owns approximately 800,000 acres of land, the majority in tree farms. It presently is engaged in developing at least seven communities, most along the coast between Destin and Port St. Joe (www.arvida.com). These are only some of the important examples of Florida real estate development, just part of a huge process that has been going on for decades that has significantly reduced the state’s land in agriculture, forest, swamp, and grassland. One of the state’s most productive winter vegetable growing areas, the Pompano Beach Ridge in Broward and Palm Beach counties, has been engulfed by subdivisions, and today its area is only a fraction of what it was 40 years ago.

Florida’s urban sprawl contributes directly to the reduction of resource reserves elsewhere in the world. Single unit housing uses far more building materials to construct than multiple family housing, and the roads and other utilities needed to serve these widely spaced homes also take vast quantities of material, most coming from outside the state. To cool and heat these homes, which in Florida usually is done with electricity, requires energy, normally petroleum, natural gas, and coal, obtained from all over the world. Finally, there is the demand for gasoline for the many private automobiles that are required by the residents of lightly populated urban areas.
Measuring Urban Sprawl in Florida's MSAs

For the benefit of those who know at least one Florida metropolitan statistical area well, especially teachers who might want to address the issue of sprawl in their class, by using tables and maps the change in sprawl between 1990 and 2000 is here examined. This is accomplished through use of census tract data. Tracts are census units that are relatively permanent statistical divisions of a county. They usually have between 3,000 and 8,000 inhabitants, the average Florida tract having about 6,000. As the population within an existing tract increases, it may reach a point where in the next census it is subdivided. In Florida hundreds have been added each census since the first tracts were defined in 1940. Only since 1990 have tracts covered the entire state. The data used here were obtained from the Florida Senate Committee on Reapportionment (www.leg.state.fl.us/senatereapportionment), which with its counterpart in the Legislature, drew the new boundaries for the state's congressional and legislative districts. The fact that there were more tracts in the 2000 census than in that of 1990 would have presented a problem in the examination of population change during the ten-year period. However, for comparability, the redistricting committees converted all 2000 tracts so that those that had been subdivided during the decade were the same shape as they were in 1990. Although arbitrary, it was decided that the urban area of the state would include all tracts with a density of 250 people or more per square mile in 1990. The change in density, population, and area of all the state's tracts during the decade was then calculated.

Between 1990 and 2000 the state's urban area increased by almost 2000 square miles, roughly the area of Palm Beach County or that of Dade, which lead to a three percent decrease in the state's rural area (Table 1). Despite an urban population growth of 25 percent, or slightly over 3 million, during the decade, the total urban density of population remained essentially stable, approximately 1400 people per square mile. The tracts that have experienced the greatest growth in population during the decade had population densities of between 500 and 2000 people per square mile by the end of the decade, or 41 percent of the population growth. This would indicate that urban sprawl is mainly driven by immigration and not the desire of Floridians to live less densely.

A tract's population density is often closely related to poverty, the higher the density the higher the percentage of its population living in poverty. This is reflected in differences in the share of
specific groups living in high-density tracts. In 2000 the share of non-Hispanic whites, Hispanics and Blacks who in 2000 were living in Florida tracts with densities of 5000 or more, which for the state is a high density, was calculated. Only 18 percent of the state's non-Hispanic whites lived in these tracts, while the share was 50 percent for Hispanics and 35 percent for Blacks.

Floridians in large numbers, especially non-Hispanic whites, continue to spread out into low population density tracts at a rapid pace. Between 1990 and 2000 only eight percent of the population increase was in tracts that in 1990 had densities of 4000 or more (Table 2). Twenty eight percent of the growth was in tracts with densities between 250 and 999 inhabitants per square mile, and a staggering 39 percent was in what in this study has been designated rural tracts (below 250 per square mile). As will be shown, there is great variation between MSAs in this movement to rural Florida, but it has been large, and suggests that Floridians are truly sprawling over the landscape. In fact between 1990 and 2000 the area in

### Table 2
Percentage Distribution of Change in Population in Tracts of Various Densities Per Square Mile Between 1990 and 2000

<table>
<thead>
<tr>
<th>Metropolitan Statistical Area (MSA)</th>
<th>Total Change</th>
<th>%-4000+</th>
<th>1000-3999</th>
<th>250-999</th>
<th>0-249</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daytona Beach</td>
<td>93762</td>
<td>-0.1%</td>
<td>15.6</td>
<td>35.5</td>
<td>50.7</td>
<td>100.00</td>
</tr>
<tr>
<td>Fort Lauderdale</td>
<td>367590</td>
<td>20.5%</td>
<td>32.2</td>
<td>20.1</td>
<td>27.2</td>
<td>100.00</td>
</tr>
<tr>
<td>Fort Myers</td>
<td>105675</td>
<td>0.7%</td>
<td>24.6</td>
<td>19.3</td>
<td>55.4</td>
<td>100.00</td>
</tr>
<tr>
<td>Fort Pierce</td>
<td>62355</td>
<td>-0.4%</td>
<td>20.2</td>
<td>48.0</td>
<td>36.5</td>
<td>100.00</td>
</tr>
<tr>
<td>Fort Walton Beach</td>
<td>26722</td>
<td>-0.7%</td>
<td>31.4</td>
<td>24.1</td>
<td>42.8</td>
<td>100.00</td>
</tr>
<tr>
<td>Gainesville</td>
<td>36359</td>
<td>0.1%</td>
<td>31.4</td>
<td>24.1</td>
<td>42.8</td>
<td>100.00</td>
</tr>
<tr>
<td>Jacksonville</td>
<td>183784</td>
<td>-0.1%</td>
<td>33.6</td>
<td>24.1</td>
<td>42.8</td>
<td>100.00</td>
</tr>
<tr>
<td>Lakeland</td>
<td>76542</td>
<td>-0.2%</td>
<td>33.6</td>
<td>24.1</td>
<td>42.8</td>
<td>100.00</td>
</tr>
<tr>
<td>Melbourne</td>
<td>77252</td>
<td>-0.9%</td>
<td>33.6</td>
<td>24.1</td>
<td>42.8</td>
<td>100.00</td>
</tr>
<tr>
<td>Miami</td>
<td>311188</td>
<td>39.5%</td>
<td>29.0</td>
<td>14.8</td>
<td>16.7</td>
<td>100.00</td>
</tr>
<tr>
<td>Naples</td>
<td>92273</td>
<td>0.2%</td>
<td>13.3</td>
<td>29.3</td>
<td>55.4</td>
<td>100.00</td>
</tr>
<tr>
<td>Ocala</td>
<td>64083</td>
<td>0.0%</td>
<td>-0.3</td>
<td>14.5</td>
<td>85.8</td>
<td>100.00</td>
</tr>
<tr>
<td>Orlando</td>
<td>419709</td>
<td>0.9%</td>
<td>36.5</td>
<td>26.9</td>
<td>35.5</td>
<td>100.00</td>
</tr>
<tr>
<td>Panama City</td>
<td>21223</td>
<td>0.0%</td>
<td>-0.1%</td>
<td>24.6</td>
<td>76.9</td>
<td>100.00</td>
</tr>
<tr>
<td>Pensacola</td>
<td>67747</td>
<td>0.9%</td>
<td>0.2%</td>
<td>31.2</td>
<td>66.7</td>
<td>100.00</td>
</tr>
<tr>
<td>Punta Gorda</td>
<td>30652</td>
<td>0.0%</td>
<td>10.4</td>
<td>52.3</td>
<td>37.3</td>
<td>100.00</td>
</tr>
<tr>
<td>Sarasota</td>
<td>100476</td>
<td>0.1%</td>
<td>22.9</td>
<td>39.3</td>
<td>36.2</td>
<td>100.00</td>
</tr>
<tr>
<td>Tallahassee</td>
<td>50943</td>
<td>0.6%</td>
<td>22.7</td>
<td>18.4</td>
<td>52.7</td>
<td>100.00</td>
</tr>
<tr>
<td>Tampa-St. Pete</td>
<td>329038</td>
<td>0.4%</td>
<td>32.1</td>
<td>36.1</td>
<td>25.3</td>
<td>100.00</td>
</tr>
<tr>
<td>W. Palm Beach</td>
<td>267696</td>
<td>0.7%</td>
<td>42.0</td>
<td>27.9</td>
<td>23.5</td>
<td>100.00</td>
</tr>
<tr>
<td>Rest of Florida</td>
<td>238468</td>
<td>0.0%</td>
<td>0.1%</td>
<td>98.0</td>
<td>2.0</td>
<td>100.00</td>
</tr>
<tr>
<td>Florida</td>
<td>3044452</td>
<td>0.7%</td>
<td>25.0</td>
<td>27.7</td>
<td>39.1</td>
<td>100.00</td>
</tr>
</tbody>
</table>

19900 tracts adjusted to equal those of 1990
tracts of between 0 and 49 per square mile, essentially land that was uninhabited in 1990, declined by 4034 square miles, while the area in tracts between 50 and 249 per square mile rose by 2808 square miles. That vast empty area of Florida that is sparsely populated (Figure 1) decreased significantly during the decade, primarily from expansion landward from the peninsular Gulf and Atlantic Coasts, and south from the urban corridor between St. Petersburg and Orlando.

The population increase between 1990 and 2000 for each of the state’s MSAs was calculated (Table 1) and represented cartographically (Figures 2A-S). Both the data and its cartographic representation clearly show that some metropolitan areas within the state are beginning to run out of land for urban expansion, and increasingly

**Figure 2A**
Figure 2C

Fort Lauderdale-Hollywood MSA

1 dot indicates 250 inhabitants
increase between 1990 and 2000

1 cross indicates 250 inhabitants
decrease between 1990 and 2000

Gray tracts had less than 250 per square mile in 1990
Points are randomly distributed throughout tract

Figure 2C

Fort Myers-Cape Coral MSA

1 dot indicates 250 inhabitants
increase between 1990 and 2000

1 cross indicates 250 inhabitants
decrease between 1990 and 2000

Gray tracts had less than 250 per square mile
Points are randomly distributed throughout tract
Figure 2D

Fort Pierce-Port St. Lucie MSA

1 cross indicates 250 inhabitants decreased between 1990 and 2000

1 dot indicates 250 inhabitants decreased between 1990 and 2000

Points are randomly distributed throughout tract

Grey tracts had less than 250 per square mile in 1990
Figure 2E

Fort Walton Beach MSA

1 dot indicates 250
inhabitant increase
between 1950 and 2000

1 cross indicates 250
inhabitant decrease
between 1950 and 2000

Points are randomly distributed
throughout tract

Gray tracts had less than 250
per square mile in 1950
Figure 2H

Lakeland-Winter Haven MSA

1 dot indicates 250 inhabitants increased between 1990 and 2000.
1 cross indicates 250 inhabitants decreased between 1990 and 2000.
Gray shades had less than 250 per square mile in 1990.
Points are randomly distributed throughout tract.
Figure 2I

Melbourne-Titusville-Palm Bay MSA

1 dot indicates 250
inhabitant increase
between 1990 and 2000

1 cross indicates 250
inhabitant decrease
between 1990 and 2000

Gray tracts had less than 250
per square mile in 1990

Points are randomly distributed
throughout tract
Figure 2L

Orlando MSA

1 dot indicates 250 inpatient increase between 1990 and 2000

1 cross indicates 250 inpatient decrease between 1990 and 2000

Points are randomly distributed throughout tract

Gray tracts had less than 250 per square mile in 1990
Panama City MSA

1 dot indicates 250
inhabitant increase
between 1990 and 2000

1 cross indicates 250
inhabitant decrease
between 1990 and 2000

Points are randomly distributed throughout tract.
Gray tracts had less than 250 per square mile in 1990.
Figure 2N

Pensacola MSA

1 dot indicates 250 inhabitants increase between 1990 and 2000

1 cross indicates 250 inhabitants decrease between 1990 and 2000

Points are randomly distributed throughout tract

Grey tracts had less than 250 per square mile in 1990
Figure 20

Punta Gorda MSA

1 dot indicates 250
inhabitant increase
between 1990 and 2000

1 cross indicates 250
inhabitant decrease
between 1990 and 2000

Points are randomly distributed throughout tract
Gray tracts had less than 250 per square mile in 1990
Figure 2P

Sarasota-Bradenton MSA

1 dot indicates 250
inhabitant increase
between 1990 and 2000

1 cross indicates 250
inhabitant decrease
between 1990 and 2000

Points are randomly distributed throughout map.

Gray tracts had less than 250 per square mile in 1990.
Figure 2Q

Tallahassee MSA

1 dot indicates 250
inhabitant decrease
between 1990 and 2000

1 cross indicates 250
inhabitant decrease
between 1980 and 2000

Points are randomly distributed throughout tract
Grey tracts had less than 250 per square mile in 1990
Tampa-St. Petersburg-Clearwater MSA

1 dot indicates 250
inhabitant increase
between 1980 and 2000

1 cross indicates 250
inhabitant decrease
between 1990 and 2000

Points are randomly distributed throughout tracts.

Gray tracts had less than 250 per square mile in 1990.
they have had to resort to intensifying residential land use within the existing urban area. The most notable example is Miami, where the urban land area only expanded by 46.52 square miles during the decade, or nine percent. During the same period its population density per square mile, already the highest in the state in 1990, increased by six percent. Fort Lauderdale finds itself in the same situation as Miami. Its urban population, whose urban density is second in Florida only to that of Miami, grew in population by 30 percent during the decade, while its urban density increased during the same period by 12 percent. Urban expansion of both counties is now being hemmed in on their western side by land owned by the state and federal government and the ocean on its eastward side. West Palm Beach, the most northern of the three MSAs that form the Gold Coast, is currently growing the most rapidly (35 percent
during the decade). It however, continues to have ample land for development, especially since developers broke the covenant that prevented the subdivision for housing of a large agricultural reserve west of Delray Beach. West Palm Beach’s urban area gain was 36 percent, but urban density only fell slightly (one percent).

Outside of the MSAs within the Gold Coast, that of Orlando is the only one in the state that has had a significantly larger than average rate of population growth during the decade while experiencing an increase in its population density. Most MSAs with rates of population growth markedly lower than the state average, have become more compact. This is especially true of Jacksonville, where the urban density increased ten percent. The two MSAs whose urban areas have experienced the most rapid population growth rate (Naples and Ocala) were the ones that experienced the largest rate of urban area growth. Ocala led the state in the decline in its urban density, from 801 per square mile in 1990 to 519 in 2000. That MSA in both 1990 and 2000 had the least densely populated urban area of any MSA in the state. By 2000 virtually the entire western portion of the MSA, by most definitions, would be considered urban sprawl.

During the decade of the 1990s, in half of Florida’s MSAs, those tracts that were rural at the beginning of the decade had sustained the greatest population growth by 2000 (Table 2). This was most true of Ocala, Panama City and Pensacola. It was least true in the MSAs of Miami, West Palm Beach and Tampa-St. Petersburg-Clearwater. In fact, because of the immigration to Miami of so many from Latin America during the decade, that metropolitan area’s tracts with a density of 4000 persons or more sustained the largest growth. Most immigrants who arrived came with little money, and sought shelter within the most densely populated tracts within the city, often in the small homes of relatives or friends who came earlier. Elsewhere, since during the 1990s so many American blacks abandoned the old central city ghettos, there was either a decline in the population of densely populated tracts, as in Daytona Beach, Lakeland, Fort Walton Beach, Jacksonville, Fort Pierce-St. Lucie, and Melbourne-Titusville-Palm Bay, or the growth was modest. This is well illustrated by the accompanying maps (Figures 2A-S).

It is understandable why developers would seek rural land to build on, since, as stated earlier, a large area of land can be more economically developed than building homes on small lots scattered throughout the city. However, it is less logical why during the 1990s developers so frequently chose to develop land in tracts with the lowest population density (Table 3). Most of these tracts were
far from the densely populated areas within the MSA. This was particularly true of Fort Pierce-St. Lucie, and Melbourne-Titusville-Palm Bay. For the teachers who are within or near an MSA where developers have shown such a great interest in developing its least densely populated tracts, this would be an excellent question for class investigation.

Another appropriate question to raise in a high school social studies class, and of course at the college level as well, is what causes urban sprawl within Florida. To many the explanation is that people within the inner city, once they could afford it moved to the suburbs to live in a less densely populated neighborhood, often exchanging an apartment for a detached home. However, that does little to explain the growth of urban sprawl within Florida. Within Florida most of the people among the millions who have arrived over the past 40 years, or have moved within Florida, are simply exchanging one detached house for another. This was well documented in the work of Kolankiewicz and Beck using urbanized area census data between 1970 and 1990 (www.sprawlcity.org/studyFL).
They concluded that there has been very little change in the per capita residential land use in Florida over time, a conclusion supported by tract data used in this study. This would suggest that if Floridians really wanted to stop the deterioration of the state’s natural environment, and improve the urban environment, they should support legislation that would slow population growth or at least not encourage immigration.

Conclusion

Hopefully, finishing this article the reader should be convinced that urban sprawl in Florida is an important issue. Resolution of the problem, however, will not be accomplished by one piece of legislation. The state’s comprehensive plan, mandated by the state’s legislature approximately two decades ago, was supposed to resolve the problem. Instead, most counties, under pressure from residential and commercial developers, have frequently altered the plan, often to the detriment of the county’s quality of life. It is also inconceivable that the state’s legislature will adopt legislation to discourage in-migration to the state.

The only really successful way of combating urban sprawl is, if you are disposed to do so, to engage in battles over local land use issues that you perceive will lower the quality of life within your community. For those who wish to contest these issues several web sites have been cited that provide information on how to campaign for your point of view. These web pages lead to numerous others that also provide good advice. For teachers who want to introduce the issue to students there are two excellent detailed teaching units produced by the University of North Carolina-Wilmington to accompany their video documentary Paving the American Dream: Southern Cities, Shores & Sprawl. One is for middle school students, the other is for those in high school (www.uncwil.edu/smartgrowth/how-to.html). Good luck.
Coping With Problems Created by Rapid Growth and Development at Cape Coral, Florida

Hubert B. Stroud

Introduction

Although the land sales industry did not begin to take its present form until the 1950s, subdividing land is not new to the American experience. Land fever began to afflict the American people shortly after the federal government was established. In fact, speculative land schemes, the subdivision of real estate for profit and premature subdivision of land, are age-old practices (Cornick, 1938). The success of the speculative land sales industry has fluctuated drastically, in many cases in direct response to the state of the economy. As a result, the land sales industry has experienced several “boom” and “bust” cycles. One particularly active period for land subdivision and lot sales activity occurred during the decades of 1950s and 1960s, especially in Florida and the desert Southwest (Stroud, 1995).

Lot sales subdivisions, sometimes referred to as pre-platted communities, vary tremendously in their successfulness in becoming real cities or towns with a viable population. While many lots and, in some cases, entire subdivisions remain largely vacant, some have experienced tremendous population growth. Cape Coral, Florida, serves as a good example of a large speculative land sales venture that has grown to become one of South Florida’s largest communities. As is depicted in Table 1, population totals at Cape Coral have expanded rapidly from only 10,193 in 1970 to over 102,000 in 2000. This large platted lands subdivision sprawls across over 60,000 acres that was subdivided into 270,000 small lots, most of which measure 40’ by 125’ (approximately 5,000 square feet). The lots, marketed worldwide, were sold as single family residential but, since they were so small, two lots were required to create a “building site” or a parcel large enough for a dwelling unit. Consequently, most customers were sold at least two lots as part of the original developer’s sales gimmick to sell more parcels of land (Stroud and Spikowski,

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Table I
Social and Economic Data of Cape Coral, Florida

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>% White</th>
<th>% 65+</th>
<th>Median Family Income as percent of Florida's</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>10,193</td>
<td>99</td>
<td>24</td>
<td>+2</td>
</tr>
<tr>
<td>1980</td>
<td>32,103</td>
<td>99</td>
<td>25</td>
<td>Same</td>
</tr>
<tr>
<td>1990</td>
<td>74,991</td>
<td>97</td>
<td>22</td>
<td>+5</td>
</tr>
<tr>
<td>2000</td>
<td>102,286</td>
<td>95</td>
<td>20</td>
<td>+1</td>
</tr>
</tbody>
</table>

1999).

Initial plans for what became Cape Coral began in the fall of 1957 when Leonard and Jack Rosen and several other men met on property the two brothers had recently purchased along the Gulf Coast in Lee County, Florida (Dodrill, 1993). The land is situated on a large peninsula along the western banks of the Caloosahatchee River across from Fort Myers (Figure 1). Since Cape Coral was created, initially at least, as a lot sales subdivision, it has more than its share of problems and issues to resolve, many of which are not found in most Florida communities. This research examines possible solutions to some of the more significant problems facing this vast community that extends across 114 square miles. Many of these problems were created because of the emphasis that was placed on generating a profit from rapidly subdividing and selling "homesites" to distant buyers.

Problems Associated with PrePlatted Communities

A long list of problems exist at Cape Coral and include environmental degradation, a large inventory of vacant yet vested lots, too many lots zoned single family residential, faulty layout and design, strip commercial development, inadequate delivery of basic services, inadequate provision of commercial and industrial land, inadequate access to the waterfront, limited open space, absentee ownership, limited job opportunities, and traffic congestion along major thoroughfares.

Many significant environmental problems were created by the unsound land development practices used by the original developer. One of the most significant was the excavation of more than 400 miles of canals that were needed to create "dry" land. Fill from the
canals was used to create higher elevations for roads and homesites. The digging of the canals disturbed the soil and natural vegetation and destroyed a shallow freshwater aquifer. Other environmental problems are created by eroding soil, urban runoff, and sewage from septic tanks. Since the developer was trying to sell as many lots as quickly as possible, phasing was not used and roads and canals were superimposed over the entire subdivision. These and other problems indicate a need to address many pressing environ-
mental issues associated with such a massive land development project (Dodrill, 2001 and Stroud, 1995).

Fortunately, environmental protection is no longer ignored and has become a high priority for the city. The Department of Community Development, Division of Planning and Zoning, for example, is actively involved in several important environmental issues. These include protection of burrowing owl habitat and eagles’ nests, canal maintenance and weed control, water resource protection and conservation, protection of historic and prehistoric resources, protection of estuarine ecosystems, and other measures (Ryffel, 2001 and 2002).

Another very significant problem at Cape Coral is associated with vested rights. This vast subdivision has more than 135,000 platted, zoned, and sold building sites (a building site at Cape Coral usually requires two lots). These building sites were sold to lot owners whose place of primary residence was in widely scattered locations across the United States and abroad. The vast majority of these lot owners believe that they have the right to build a single family home on their property whenever they wish. If the city prohibits owners from building on their lots, it is likely to be considered a “taking” of the property. The city would then become liable to compensate the owner for the taking.

Coupled with the problems associated with vested rights is the issue of regulating growth. Limiting growth at Cape Coral is extremely difficult since the land is already subdivided and sold. While growth management is extremely difficult, it can be controlled to a certain extent by offering incentives and disincentives that encourage growth in a pattern consistent with sound planning principals and the city’s ability to provide needed public facilities and improvements. Despite these efforts, there is no real way to predict when the property owner in Virginia will decide to build his retirement home, or when the owner in Pennsylvania will decide to sell the property to someone else who will build on it. It is all but impossible to predict which lots will develop at any point in time a major stumbling block to providing planned and managed growth (Sosnoski, 2002).

The current zoning creates another problem since each building site carries with it a zoning classification. Most of Cape Coral’s lots are zoned single-family residential, but there is a significant amount of multi-family and commercial zoning. The general zoning pattern is a carryover from the original subdivision, with strip commercial and multi-family zones concentrated along the four-lane, divided parkways. This exacerbates traffic problems along many of the
parkways. The existing street and canal pattern, with very few east-west routes south of Pine Island Road, creates strong development pressure on north-south thoroughfares such as Del Prado Boulevard. This allows development patterns that promote strip commercial uses, strip duplex or multi-family uses, with corresponding increases in traffic congestion and demand for services (Comprehensive Plan, 1997).

The original layout of streets and canals has created a particularly significant problem associated with neighborhood "islands" and numerous dead-end-streets. The latest count totals more than 1,060 streets with names. Approximately 817 are numbered (SW 17th Ave, for example) and 247 are unnamed. Some streets have names that are very similar like Coral Ave. and Coral Drive and some streets like SE 10th Place have been divided into many parts or segments by canals. In fact, most streets dead-end at canals, and then continue on the other side of the canal. The city was connected with a system of four-lane, divided parkways that cross the canals via bridges. Because of the direction pattern of the canals and the cost of building bridges over these waterways, the original developer provided only three east-west corridors south of Pine Island Road.

Since the original developers placed few controls on development along the major corridors, they have experienced extensive strip commercial development and are experiencing the worst traffic congestion. Previous zoning patterns allowed strip style commercial development as well as residential development along the parkways, without limiting access or considering the potential traffic flow impact.

Providing adequate infrastructure is a mammoth problem at Cape Coral. The original developers platted a community with enough lots to accommodate a population of more than 400,000 people, but they failed to provide the infrastructure, except for streets and drainage canals, to support a large city (Mazurkiewicz, 1998). Unfortunately, a significant portion of the roads (streets) are poorly maintained, particularly in more remote reserve areas. The overwhelming majority of the city’s landmass is not served by water and sewer lines or storm sewers. Home owners who build in unserved areas must drill private wells and install septic tanks. Since Cape Coral is platted, the city cannot control which lots develop and when. This creates a significant problem associated with scattered development and increases the demand for infrastructure in areas where the provision of such infrastructure is not cost effective or economically feasible. This is such an important issue because
private wells and septic tanks are unacceptable as the community reaches higher densities. A significant strategy for the city is to "manage" unlimited development until appropriate infrastructural needs have been met (Comprehensive Plan, 1997). Management options are, however, extremely limited. One of the few means of directing growth is through the provision of services. Currently, services such as water and sewer are available for only approximately one-third of the lots. As might be expected, areas with or that have been designated to receive services in the near future have experienced the most growth. Additionally, the city has an ordinance that requires the removal, at the lot owners expense, of septic tanks in areas where services have been extended. Even though this "deterrent” has not eliminated the problem of scattered development, city officials hope that it will serve as a more effective deterrent in the future.

The original developers set aside less than 1 percent of the total land area for open space and parks and failed to provide adequate land for commercial or industrial development or adequate space for community facilities needed to serve an expanding population. Consequently, competition is keen for the few remaining large parcels of land. There is a significant public need for large tracts to provide for community facilities such as city parks and a significant demand from private developers because of the potential for large scale commercial or industrial development within a city that is experiencing phenomenal growth.

Even though the city of Cape Coral has many miles of waterfront, only a small amount is available and accessible to the public. Only the Yacht Club, Horton Park, and Jaycee Park provide scenic vistas of the Caloosahatchee River. Cape Coral has not used its waterfront as a market place or gathering place as has been done in many well-known cities including Chicago, Baltimore, Miami, and Sarasota. It is hard to believe but Cape Coral’s downtown is virtually landlocked, without direct river frontage; a problem that is currently being addressed by the Community Redevelopment Agency (CRA) for downtown Cape Coral (Hunt, 2001). Open space in inland locations is limited as well. Even though Cape Coral has extensive areas that are yet to be developed and are currently vacant, they are owned by either individuals or by the State of Florida as preservation lands. Open space needs include recreational use, stormwater retention, natural groundwater recharge, preservation of native flora and fauna, schools, parks, tennis courts, senior citizen centers, swimming pools, and other recreation-
al facilities, government centers, water and sewer plants, and police
and fire stations. Land was also not provided for a general aviation
airport, a community college, medical facilities, or a civic center.

As a large lot sales subdivision, Cape Coral has landowners from
all over the United States, Canada, and abroad. This fact complicates
problems associated with land assembly or other options that
could help alleviate problems associated with the current ownership
pattern. Communicating with such a scattering of owners is
extremely difficult and at times next to impossible. In some cases,
landowners can not be found or ownership has passed to heirs who
may or may not know that they own Cape Coral real estate. Another
problem is associated with the participation of land owners in the
decision making process. While efforts are currently being made to
provide residents the opportunity to voice their opinions on govern-
ment policies and actions, a large number of the city's property
owners do not live in the city, or even in the state and possibly not
even in the country. Until the city comes closer to having all its lots
built-on, decisions relative to land use and strategies for the devel-
opment of vacant land will likely receive more input from the own-
ers of developed land than from those who own the undeveloped
land. As a result, the city must ensure that its policies and strategies
protect the rights of the absentee land owners, as well as serve the
current permanent and seasonal residents (Ryffel, 2001).

Another rather unusual situation is the tremendous variation
in the price (value) of lots within Cape Coral. Lots located along
canals with access to the Gulf may exceed a value of $100,000 while
inland lots north of Pine Island Road may be valued at less than
$3,000 (Brookes, 2001). The high value of single-family residential
lots in some locations discourages multi-family and other uses.
Moreover, accelerating lot prices and rapid population growth make
it essential for the city to develop an effective land acquisition pro-
gram before land prices climb even higher (Comprehensive Plan,
1997).

Since the development was created as a retirement community,
the provision of employment opportunities was a low priority.
Consequently, jobs are extremely limited. While some employment
is available in Cape Coral largely from the construction sector, many
residents commute to Fort Myers and other parts of Lee County for
employment. A large number of commuters coupled with problems
associated with the internal layout of major thoroughfares make
long-range planning to meet transportation needs essential. Trans-
Portion routes need to be extended and interconnected to meet the needs of an ever increasing traffic volume (Collette, 2001).

Resolving Problems

A good indication of what the city of Cape Coral plans to do to improve land use planning is outlined in the Future Land Use Element of the Comprehensive Plan that was adopted in June, 1997 (Comprehensive Plan, 1997). Eleven specific objectives and numerous policy statements are included under Future Land Use Objectives and Policies. Some of the most important objectives include: enforcing and strengthening existing regulations and eliminating those that are superfluous or confusing; directing future private development into areas that currently have or are slated for the immediate provision of water and sewer services (Urban Services Infill and Transition Areas); extending infrastructure and community services to 100 percent of the anticipated functional population in these areas; discouraging premature “leap-frog” development within areas where there are no services other than roads and canals (Urban Services Reserve Area) by requiring individual builders and developers, not the city, to pay for the cost of extending infrastructure; pursuing the redevelopment and renewal of blighted areas in the downtown area consistent with the provisions of the Community Redevelopment Agency (CRA) plan; discouraging land uses which are incompatible or inconsistent with the Future Land Use Map; continuing to protect marine and estuarine communities; identifying all historic and prehistoric resources within the city’s jurisdiction; using land banking as a method to acquire an area for city use or for assemblage for private use; and using subdivision replatting and redesign in a process by which land is acquired, replatted, and resold (Comprehensive Plan, 1997).

An important policy under Objective 1 (Existing Regulations) is to require that any subdivision of land within the city be allowed (granted a permit) only within Developments of Regional Impact (DRIs) or in Planned Development Projects (PDPs). This will help control the growth of larger land development projects but does nothing to resolve the problems associated with the development of individual lots in remote areas (Comprehensive Plan, 1997). Another specific policy under Objective 1 is to regulate areas of seasonal and periodic flooding and provide drainage and stormwater management. Any development of 5 acres or more is required to submit a surface water management plan. The plan must meet
specific engineering design standards that are now in place. In addition, the city has constructed a spreader canal/waterway along its western boundary. Theoretically, storm water (excess water) will flow over the weirs and out as sheet flow to the west of Cape Coral property (Sosnowski, 2001).

Objective 1 will also be accomplished by issuing no development orders or construction permits which result in a reduction in the level of service for any affected public facilities below the level of service standard adopted in the Comprehensive Plan. This regulation is designed to help protect existing homeowners from problems associated with uncontrolled and rapid population growth. The city will conduct studies to ascertain the feasibility of implementing alternative mechanisms to aid and encourage the deplatting of platted lands, and to encourage the acquisition and assembly of land for public uses. Deplatting is encouraged by the Southwest Florida Regional Planning Council and has been suggested by Smart Growth initiatives and symposiums. Unfortunately, Cape Coral has not, at least to date, been successful in deplatting lots and there is no specific mechanism in place to encourage deplatting.

The city will maintain regulations that create a Transfer of Development Rights (TDR) mechanism that may be used to acquire lands for public use, and to create commercial and industrial tracts for private use. The property owners may transfer the right to develop their lots to a designated zone (receiving area) within the Urban Services Transition Zone. The sending area is a portion of the subdivision not slated for services or is an area where development would be disruptive to the environment. A receiving zone is selected because it has two distinctive features: (a) low density of existing development, and (b) a near-term expectation of full community services. This allows the city to encourage development in some locations and discourage it (albeit indirectly) by implementing the TDR sending and receiving zones. Unfortunately, Cape Coral has never had a TDR transfer. As is frequently the case, developers have no real incentive (or benefit) for using the TDR mechanism. As long as there is an adequate supply of “raw land” available and as long as developers can obtain desired density through rezoning, there is no market for TDRs (Sosnoski, 2001).

The city will adopt regulations and standards to encourage land assembly for private uses by providing density bonuses as an incentive for the recombination of platted lands. Land banking may be used as a method to acquire a specific area for city use or for assemblage for private use. In most cases, the city functions as the
entrepreneur although some non-profit organizations sometimes provide this service. Land banking can be funded in advance and it is less expensive than condemnation since it avoids the legal costs associated with eminent domain procedures. An important option may be to acquire land on the installment plan, allowing the city the leverage of obtaining a large number of parcels at a relatively low annual cost. Another option is that it provides the opportunity for the city to consolidate lands that may be sold at a profit for development as industrial or commercial properties. Or, the city may prefer to develop the consolidated parcels in partnership with a private developer. One of the most important advantages for a platted lands community is that land banking can reduce the city’s long-term obligation to provide water and sewer services to remote areas. The city may purchase platted lands, vacate the development rights, and convert the lands to open space. Although land assembly is encouraged, it is another potentially significant option that has not been used.

Land assembly is extremely difficulty because of the complex lot ownership pattern that was created within this massive platted lands community. Developers learn rather quickly how difficult it is to acquire and reassemble lots from absentee owners. Some owners, particularly those who live in other countries, are difficult to find and others may refuse to sell their property. In one particular case, 55 lots had to be acquired and reassembled to create a 12.6 acre parcel of land to be used for commercial purposes (Collette, 2002). The developer concluded that land assembly was a time consuming, frustrating process that he would not attempt in the future. Despite these and other difficulties, a land assembly program is essential if the city is going to meet its land needs in the future. This option is particularly important is view of the rapid rate of population growth that the city has experienced. It is quickly becoming more and more difficult for the city to find large, undeveloped sites in the proper location. Acquiring and assembling land now, or in advance of need, will reduce acquisition cost and enable the city to provide adequate public facilities on the most suitable sites as they are needed.

Another objective (Objective 2) for managing future growth is centered around directing future private development into the Urban Services Infill Area (where services are currently available) and the Urban Services Transition Area (the area into which services are currently being added). The city has no formal lot-swapping program and uses the availability of services as an incentive
to encourage building in the Infill and Transition areas. Another possibility or strategy for growth management is associated with tax delinquent lots. As property owners default on their taxes, there is an increasing number of tax delinquent lots available. The city should keep these and accumulate an inventory of lots that could be used as part of a land assembly or a lot-swap program. Some counties or municipalities sell tax delinquent lots each year as a source of revenue. Local governments often argue that they can not afford to hold these lots. On the contrary, municipalities should not pass up this opportunity to obtain an inventory of vacant lots (Comprehensive Plan, 1997 and Daltry, 2001).

Objectives 3 and 4 will direct private development that requires public water and wastewater into the Urban Services Infill Area and the Urban Services Transition Area. This will reduce problems associated with scattered development and the cost of extending services to remote locations. Exemptions from this policy will be made only in extraordinary cases where the nature or location of the project would make strict adherence unreasonable. Specific exceptions include developments of regional impact, utility plants, airports, public schools, technical schools, community colleges, parks and other government facilities. The commitment to provide infrastructure and community services is expressed in Objectives 2, 3, and 4 of the Future Land Use Element of the Comprehensive Plan (Comprehensive Plan, 1997).

It is also important that the city plans to discourage premature "leap-frog" development within the Urban Services Reserve Area (where no services other than roads and canals are available) (Objective 5). This will be accomplished in part by requiring builders and developers, not the city, to bear the costs of extending infrastructure. In addition, the city will amend the Future Land Use Map through the plan amendment process to annex Urban Services Reserve Area lands into the Urban Services Transition Area as a prerequisite to the extension of infrastructure and community services. The city will provide incentives to individual property owners, builders, and developers to assemble parcels of land for future private uses, and will encourage the use of zero lot line (ZLI) and cluster type development to improve lot layout, drainage, and stormwater retention. Moreover, development, except for single family uses within the Urban Services Reserve Area, shall be permitted only in Developments of Regional Impact (DRIs) or Planned Development Projects (PDPs) (Comprehensive Plan, 1997).

Another important objective (Objective 6) pertains to the rede-
velopment and renewal of blighted areas in the downtown area consistent with the provisions of the Community Redevelopment Agency (CRA) plan, and in residential areas as identified through the Code Enforcement Program. The city will investigate innovative free market opportunities to property owners in blighted areas to remodel, rebuild and replat their buildings and properties. A mixed-use development will be allowed in the CRA that will include commercial/professional uses as well as residential uses. The Community Redevelopment Area Master Plan has been approved and CRA officials are currently working on the implementation phase which includes writing the enforcement codes for the plan. The redevelopment plan includes the incorporation of waterfront property into the downtown area, more pedestrian friendly streets and opportunities for a variety of land uses all within a planned unit along and near Cape Coral Parkway (Hunt, 2001 and 2002). The city will discourage land uses that are incompatible or inconsistent with the Future Land Use Map (Objective 7). Expansions or replacements of land uses that are inconsistent with the Future Land Use Element will be prohibited. In fact, land development regulations will require the buffering of incompatible land uses (Comprehensive Plan, 1997).

The city is also committed to improving hurricane evacuation (Objective 8). Specifically, the city will coordinate coastal area population densities with the Southwest Florida Comprehensive Hurricane Evacuation Plan. The city will concentrate the development of infrastructure in the northeast portion of the community to take advantage of higher elevations and opportunities for rapid evacuation (Comprehensive Plan, 1997).

Objectives 9 and 10 coordinate planning efforts with the provisions of the Charlotte Harbor Management Plan and stress the need to continue to protect marine and estuarine communities. The city is committed to the protection of preservation lands and will regulate the use of land and water to protect the system of fresh and saltwater canals and the outlying waters of the Caloosahatchee River and Charlotte Harbor. This protection will be extended to include significant upland ecological communities. The city plans to own and maintain a minimum of 200 acres of upland for use as a major park emphasizing passive recreation and nature study (Comprehensive Plan, 1997).

The city will identify all historic and prehistoric resources within
the city's jurisdiction, and will adopt regulations to preserve and protect those resources for future enjoyment (Objective 11) (Comprehensive Plan, 1997).

Conclusion

After more than 40 years of existence, Cape Coral has grown to become one of the largest cities in South Florida. Rapid growth is not unusual for counties along Florida's southern Gulf coast. Charlotte, Lee, and Collier counties, for example, have all experienced tremendous increases in population in recent decades. Lee County, for example, has grown from a population of 105,216 in 1970 to more than 440,000 in 2000. Collier County has experienced similar dramatic increases in population. Its population total was only 38,040 in 1970 but now exceeds 251,000. Unfortunately, much of the growth has occurred in pre-platted subdivisions with inadequate infrastructure and a faulty layout and design.

Since most of the lots within these massive subdivisions were purchased by non-voting out-of-state owners for investment purposes, local officials have tended to assume that impact would be insignificant. While this is true for some pre-platted subdivision, many have grown substantially and now represent the largest and/or fastest growing communities in their region, despite an absence of services (Stroud and Spikowski, 1999).

Even though the original developers of Cape Coral were promoting the pre-platted subdivision as a "city in the making," no one expected such incredible growth. Not surprisingly, city officials are having an extremely difficult time providing services and managing patterns of growth on lots that were quickly platted and sold decades ago.

Since a major objective of the original developer was to sell lots as rapidly as possible, it is not surprising that layout and design does not meet current land use planning standards. Even though there are numerous technical options for dealing with platted lands, few have, for one reason or the other, been successfully implemented. Options include lot consolidation/lot merger, plat vacation, subdivision redesign, downzoning/transfer of development rights (TDRs), and public acquisition (through purchases and donations). Frequently, local officials fear the effect of these options on property rights or are concerned that implementation might hamper economic growth (Elliott, 1997; Stroud and Spikowski, 1999).

Currently, Cape Coral city officials are stressing the need for a
land assembly and subdivision redesign program. Even though replats are usually initiated by the owner of the land, local governments may have the power to initiate a replat on their own. Whether or not this power exists should be stated in state subdivision enabling acts and in local subdivision regulations. For a subdivision such as Cape Coral, where substantial development has already occurred, replatting is normally more appropriate than plat vacation. With the proper design, subdivision replats can help to improve quality, lower density, or remove lots from development (Elliott, 1997, pp. 19-20). A controversial part of land assembly/redesign is condemnation. This expensive and rather coercive method of acquiring land may be essential if land owners of vacant lots refuse to participate in any kind of land assembly, lot exchange, or transfer of developments rights process.

Reassembly could provide entire GAC units that could be converted into attractive neighborhoods with commercial land uses buffered from neighborhood parks, schools, and open space. Improving the lot layout could create a more efficient extension of water and sewer lines. This approach is one of the best if problems associated with the initial assembly of land could be worked out. Other benefits include improved residential neighborhoods with modern land use design and large parcels of land suitable for commercial and industrial uses. Unfortunately, such a redesign program is only in the initial stages and is far from being implemented. This leaves local officials limited options for resolving layout and design problems. Undoubtedly, the problems are not going to go away and will only become progressively worse as rapid population continues. Those trying to resolve problems associated with complex ownership patterns and faulty design must use piecemeal approaches to problems that deserves a major commitment of time and resources. Fortunately, city officials are working toward developing a long-range planning strategy that will, through time, help resolve some of these vexing platted land problems.

It is crucial that local officials identify or establish specific goals so that appropriate tools may be chosen. Goals may include improving the quality of the subdivision, reducing density, or removing lots. Regardless of the tool or mechanism used, local governments should review the history of the subdivision, ownership patterns and infrastructural investment patterns before implementing any remedial program. These steps are essential if legitimate
property rights are to be protected and if the tools implemented are to withstand challenges that may be based on such things as due process, vested rights and takings (Elliott, 1997, pp. 24-25).

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References


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