

THE URBAN DEVELOPMENT  
OF SPANISH COLONIAL PENSACOLA, 1781-1821

A Dissertation  
Submitted to the Graduate Faculty of the  
Louisiana State University and  
Agricultural and Mechanical College  
in partial fulfillment of the  
requirements for the degree of  
Doctor of Philosophy

In

The Department of Geography and Anthropology

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May 2007

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## ACKNOWLEDGEMENTS

Many people have helped me complete this research and deserve special acknowledgement. I realize that I have omitted mentioning several people who deserve acknowledgement. Know that this is not for lack of appreciation.

I was blessed to have access to the knowledge of many scholarly experts while at LSU Geography and Anthropology, but my committee deserves special recognition for their scholarly insight and continual moral support. Andrew Curtis provided GIS and statistics expertise, and persistently kept me on course. Kent Mathewson afforded his unparalleled understanding of the history of geography at LSU and beyond. Michael Leitner supplied valuable insight into the various intricacies of spatial analysis and computer cartography. Paul Farnsworth challenged me to consider theoretical approaches and methods of researching historical documents. I am also indebted to Paul Hoffman whose knowledge of colonial America, and of those who study its history, continually proved invaluable.

Geographer Carville Earle deserves special mention for challenging me in his own blunt and direct way to focus my research interests into something worthwhile. Dr. Earle demanded much of me but, I soon discovered, not nearly as much as he demanded of himself. During the initial weeks in his introductory graduate seminar, Dr. Earle quite emphatically asked me why he should “spend his precious time” with someone who had not defined his research goals. In retrospect, I now know that his choice of words had other meanings beyond motivating a new, impressionable graduate student. But at the time I realized that this particular path required me to obtain skills that I did not yet possess, skills that Dr. Earle had in abundance. Although I have no way of proving it now, I believe he

agreed to co-chair my committee because he realized that I was determined to learn as much from him as I could about historical geography and geographical history, and because he recognized that I simply was not going to quit. I am very proud that Dr. Earle decided to spare a few moments of his precious time to help me “find a star” on which to hang my research.

While at Louisiana State University, the Department of Geography and Anthropology provided me with an assistantship that allowed me to complete the necessary course load and much of my dissertation research. The department also granted me support through the West Fund that permitted me to travel to Pensacola and find pertinent historical documents. Dana Sanders, the department’s graduate secretary, was my rock of faith through this entire ordeal.

Much of my time in Baton Rouge I was distracted by other, more pressing issues, but the love and support of friends and family brought me through these difficult times and allowed me to recover and continue my academic endeavors. My mother and Joe stayed with me during the most difficult times, and phone conversations with Lou kept me sane. My many friends visited and called, lifting my spirits and giving me hope. These include: Andrew, Jackie, Bill, Kent, Craig, Nina, Dana, Mike, Melissa, Celeste, Fenn, Lee, Annette, Dennis, Flynn, Dan, Cindy, Sang, Satomi, Kermit, Charlotte, Mary, Michelle, Lisa, Norman, Wade, Buford, Joe, and Dina. I also thank my friends in the medical profession, including: Richard, Jed, Stephen, Tim, Yvonne, Debbie, Cathy, Christie, and Jeffrey. I also thank Gwen Fairchild of the LSU foundation for her friendship and assistance in establishing a fund for geography graduate students who, because of illness, are forced to temporarily discontinue their studies.

Friends and colleagues in Pensacola helped me acquire historical documents related to the town's colonial development. Sandra Johnson and other friends at the Pensacola Historical Society assisted in finding and duplicating important land records and other documents. Archivists Dean DeBolt and Katrina King at the University of West Florida's Pace Library directed me to pertinent maps, plans, and land records. Also at the UWF, historian John Clune, and archaeologists Judy Bense, Elizabeth Benchley, and John Phillips, provided me with a wealth of information pertaining to Pensacola's development. UWF Archaeology Institute graphics wizard and GIS expert Lee McKenzie assisted in the production of figures and tables.

I cannot thank enough the friendship given to me by my partners in crime, Josh Kent and Jim Mitchell. These two GIS specialists provided technical expertise that allowed me to expand my research methods into more intellectually stimulating areas. I doubt that I will ever forget our experiences after the storm.

During much of my tenure as a graduate student at LSU, I worked at the Louisiana Department of Transportation and Development. My friends and coworkers at DOTD gave me continual support, particularly Darryl, Dora, Michael, Stanley, David F., Susan, Brian, Wanda, Connie, John, Jacqui, Neal, CJ, David R., George, and Jim.

I could not have accomplished this endeavor without my family who supported me in my decision to go beyond my rural heritage and pursue a life in academia. My mother, sister, and brother have always recognized the fact that my path would lead me away from rural north Florida, and have encouraged me to follow my dreams.

Friends tell me that I get what I need when I need it, and I have no reason to doubt them. Shortly after "the storm," Margaret came back into my life. Despite her own

challenges, Margaret continually supported me as I worked. She challenged me to push myself, and patiently worked along with me by reading and editing multiple drafts. Her continual encouragement and love has sustained me.

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## ABSTRACT

Pensacola evolved through the second Spanish period (1781-1821) from a fledgling military outpost to an increasingly complex urban center. Local and regional demographic trends and environmental conditions prompted Pensacola to grow in a manner that differed from other Spanish colonial urban centers and created in Pensacola an unusual class structure and residential patterning. The primary goal of this dissertation is to show that Pensacola's residential and landowning patterns never experienced the degree of socioeconomic residential clustering noted in other Spanish colonial urban centers. Social residential clustering was unusual in Spanish Pensacola, and socioeconomic classes and land values varied from lot to lot. Middle-class whites made up the overwhelming majority of landowners and owned property in every section of town, while elites and lower-class families bought less land in Pensacola and lived interspersed throughout the residential section.

The second goal of this dissertation is to illuminate three phases of urban development from a small colonial military town and scant landowning class congregated near the central fort before the Louisiana Purchase in 1803, to a more traditional Spanish administrative regional center with increased population after the Purchase, to a town threatened by American influence and speculation after 1816. The third goal of this dissertation reveals the town's socioeconomic class structure, a necessary step that provides context regarding Pensacola's residents. Unlike other Spanish colonial urban centers, administrators and retired military officers dominated Pensacola's small elite class. The middle class was approximately three times as populous as the elite class, and included a variety of *Peninsulars* and Creole professionals, high-status artisans, and landowners.

Most residents were among the lower class, and consisted of Creoles, mulattos, and Blacks whose labors catered to the local military and administrative needs.

# CHAPTER 1.

## INTRODUCTION

The second Spanish period in West Florida history (1781 to 1821) was a period of rapid and dramatic change.<sup>1</sup> Spanish control of the region that had lasted for nearly three hundred years was in decline, and the Spanish colonial administration could not effectively protect against invasion or immigration. Global and local political unrest resulted in frequent border disputes and boundary changes. To complicate matters, the frontier that once extended for miles in all directions from Pensacola, the colony's capital, rapidly succumbed to the wave of Anglo settlers moving south and west from the United States. Although the Spanish colonial government in Pensacola went to great lengths to preserve their political control of the area, it was widely accepted that their struggles were pointless in light of the popular belief that the United States would soon incorporate West Florida into its holdings. As one of the most important Spanish colonial towns, Pensacola felt the brunt of many of these problems. Throughout the period, the local Spanish administration was at odds to maintain order in Pensacola and ensure stability in the region. Efforts promoting land tenure to legal citizens met with some success, but the region's inhospitable political and environmental climate effectively drove most prospective merchants and settlers out of the region.

Despite these obstacles, Pensacola evolved through the period from a fledgling military outpost in 1781 to an increasingly complex urban center by 1821. In 1781, the

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<sup>1</sup> For the purposes of this research, I use 1781 as the beginning year because Spanish forces effectively defeated the local British military and occupied the town until its official transfer in 1783. Spanish colonial land records extend to 1781 and reflect private property transfer between outgoing British citizens and incoming Spanish citizens.

town had existed in its present location for just over twenty years, and employed an orderly grid town plan implemented by the previous British administration. Subsequent Spanish development adhered to the British plan with only minor revisions to the residential section. The combination of an orderly town grid and the abundance of available real estate facilitated the town's growth through the remainder of the period.

Local and regional demographic trends and environmental conditions, however, prompted Pensacola to grow in a manner that differed from other Spanish colonial urban centers and created in Pensacola an unusual class structure and residential patterning. This dissertation draws from information gleaned from colonial records and addresses three goals related to Pensacola's urban morphogenesis through the second Spanish period. The first goal pertains to the town's patterns of residence and landownership, while the second and third goals relate to Pensacola's socioeconomic classes.

The primary goal of this dissertation is to show that Pensacola's residential and landowning patterns never experienced the degree of socioeconomic residential clustering noted in other Spanish colonial urban centers. In this respect, Pensacola differed from larger Spanish urban centers where elites lived near city centers and lesser classes resided in zones away from the centers. Social residential clustering was unusual in Spanish Pensacola, and socioeconomic classes and land values varied from lot to lot. Middle-class whites made up the overwhelming majority of landowners and owned property in every section of town, while elites and lower-class families bought less land in Pensacola and lived interspersed throughout the residential section. Only one socioeconomic neighborhood began forming during the second Spanish period. This began after 1804 comprised of low class Blacks and mulattos, many of whom were single



mothers who worked as laundresses or seamstresses. Land speculators started buying land throughout the residential section toward the end of the period and further fragmented the limited social grouping and neighborhood formation.

Pensacola's residential section evolved through intermittent periods of growth and stagnation, but generally occurred in three phases, each with very different patterns of urban growth. The second goal of this dissertation is to illuminate these three patterns, and to show the effects of various local and regional conditions on each phase. The first phase involved the town's small population and scant landowning class before the Louisiana Purchase in 1803. The town's relatively small population congregated near the gates of the central fort and along the major paths into the fort. The second phase occurred as a result of the dramatic population increases after the Louisiana Purchase and lasted to about 1815. An increased residency resulted in unprecedented demands for land, and new inhabitants quickly bought most of the remaining house lots in town. The third phase occurred after 1816 when increased American interest in the Floridas prompted out-migration of many of the town's population and also land speculation throughout the residential section.

Discussions of residential development rely on information pertaining to socioeconomic classes of Pensacola's residents necessitate the inclusion of the third goal which reveals the town's class structure. Pensacola's social stratification differed from other Spanish urban centers primarily because of the lack of merchant elites which congregated in or near many of the more prosperous urban centers in the Spanish American realm and capitalized on native subordinate populations and the exploitation of local resource. Similarly, merchant elites in other Spanish towns flourished from

economic and administrative ties with elites in other regions in the realm. Pensacola offered few resources that could be exploited for amassing riches or prominence, certainly nothing that compared to the mineral wealth or more fertile soils found elsewhere in Spanish colonial America, and never fostered a merchant elite class. Pensacola's only real and lasting legacy was its location on the northern Gulf of Mexico, a location that the Spanish Crown valued for its strategic importance.<sup>2</sup> Since its formation in late 1698, the community's main purpose was to provide colonial Spain with a token defense against foreign encroachment into *La Florida*, and a safe harbor along the Gulf of Mexico's northern coast. As a consequence, Pensacola remained a small, under-funded, and lightly-defended military and administrative town throughout its colonial existence, and attracted an elite class comprised of public servants and retired officers.

To provide context, this study of Spanish colonial Pensacola's urban development includes discussion of two key subjects. First, concepts related to urban morphogenesis, and land-use models in particular, provide the background for research of urban growth and development. Second, Latin American studies offer insight into many of the peculiarities of colonial Spanish urban evolution, particularly pertaining to socioeconomic classes, races, and occupations.

### **Land-Use Models and Urban Colonial Latin America**

Much of the scholarship pertaining to colonial Latin American towns began as the result of the wide-spread acceptance of traditional land-use models proposed by

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<sup>2</sup> William S. Coker, "Pensacola, 1686-1821," in *Archaeology of Colonial Pensacola*, ed. Judith A. Bense (Gainesville: University Press of Florida, 1999), 46.

sociologist E.W. Burgess at the University of Chicago in the early twentieth century.<sup>3</sup> Burgess developed a model of urban structure that essentially divided the city into a series of concentric zones radiating from the central business district, and residential socioeconomic status increased away from the core. As elites moved into outer zones that had better living conditions, they were replaced by lower class laborers moving into the city core.

Latin American Scholars soon observed that preindustrial urban centers exhibited a residential pattern that was the exact opposite of the one proposed by Burgess, with status decreasing away from the city core.<sup>4</sup> Elites occupied the central areas and lesser groups lived beyond. As such, some referred to this urban pattern as the “Inverse Burgess” and continued applying Burgess’ human ecological approach to the study of Spanish colonial cities.

Examination of preindustrial urban form increased dramatically, however, with the publication of Gideon Sjoberg’s *The Preindustrial City* in 1960.<sup>5</sup> Sjoberg’s book

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<sup>3</sup> Ernest W. Burgess, “The Growth of the City: An Introduction to a Research Project,” *Publications of the American Sociological Society* 18 (1924); Ernest W. Burgess, “The Determination of Gradients in the Growth of the City,” *Publications of the American Sociological Society* 21 (1927): 178-184.

<sup>4</sup> Raymond Bowers, “The Ecological Patterning of Rochester, New York,” *American Sociological Review* 4 (1939): 180-189; Theodore Caplow, “The Social Ecology of Guatemala City,” *Social Forces* 28 (1949): 113-133; Floyd Dotson and Lillian Ota Dotson, “Ecological Trends in the City of Guadalajara, Mexico,” *Social Forces* 32 (1954): 367-374; Asael T. Hansen, “The Ecology of a Latin American City,” in *Race and Culture Contacts*, ed. E. B. Reuter (New York: McGraw-Hill, 1934), 124-142; Harry B. Hawthorn and Audrey E. Hawthorn, “The Shape of a City: Some Observations on Sucre, Bolivia,” *Sociology and Social Research* 33 (1948): 87-91; E. Longmore and E. Young, “Ecological Interrelationships of Juvenile Delinquency, Dependency, and Population Mobility: A Cartographic Analysis of Data from Long Beach, California,” *American Journal of Sociology* 41 (1936): 598-610.

<sup>5</sup> Gideon Sjoberg, *The Preindustrial City: Past and Present* (New York: MacMillan Publishing Co., 1960).

provided an alternative to the Burgess' zonal model and to human ecology in particular.<sup>6</sup> His model of preindustrial cities emphasizes the power and authority of centrally-located elites who would restrict membership into their class to birthright. Neighborhoods of subordinate middle classes formed loose clusters (rather than zones) beyond the core and were comprised of merchants, artisans, and unskilled workers. Outcast groups lived isolated in peripheral neighborhoods. As with the Burgess, Sjoberg incited much debate among urban scholars, and most critiques centering on Sjoberg's lack of supportive evidence.<sup>7</sup>

Latin American scholars recognized that many of the tenets proposed by Burgess and Sjoberg did not fully apply to preindustrial Latin American cities.<sup>8</sup> Initial applications of the inverse Burgess model tended to over-generalize socioeconomic classes into two groups (Spanish conquerors living in town centers and Indian servants living beyond). "The notion that wealthy white families all lived in one area near the main plaza in extended families, while nuclear families and solitaries were grouped in concentric zones peculiar to their race and class was inaccurate in most cases."<sup>9</sup>

A second residential pattern began to emerge in the literature in the late-1970s which also included elites clustered near Spanish colonial town centers, but claimed that

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<sup>6</sup> Ibid., 2-3.

<sup>7</sup> Oliver. C. Cox, "The Preindustrial City Reconsidered," *The Sociological Quarterly* 5 (1964): 133-144; John P. Radford, "Testing the Model of the Pre-Industrial City: The Case of Antebellum Charleston, South Carolina," *Transactions of the Institute of British Geographers* 4 (1979): 392-393; P. Wheatley, "What the Greatness of the City Is Said to Be: Reflections on Sjoberg," *Pacific Viewpoint* 4 (1963).

<sup>8</sup> John K. Chance, *Race and Class in Colonial Oaxaca* (Stanford, California: Stanford University Press, 1978), 199-201; Richard M. Morse, "A Prolegomenon to Latin American Urban History," *Hispanic American Historical Review* 52 (1972): 359-362.

<sup>9</sup> Linda Greenow, "Microgeographic Analysis as an Index to Family Structure and Networks," *Journal of Family History* 10 (1985): 274.

surrounding areas contained a mixture of classes with lesser degrees of groupings.<sup>10</sup> House quality varied from lot to lot and households with similar composition were frequently clustered in blocks away from the plaza by the late-colonial era. The reasons for this phenomenon are attributed to family structure changes as a result of marriages, deaths, births, and other events, and also to the renting of rooms or apartments in or near households of wealthy residents. This residential pattern has been noted in Antequera, Guadalajara, Córdoba, Cartagena, Durango, and Mexico City.<sup>11</sup>

### **Class and Urban Structure in Colonial Latin America**

More detailed studies revealed that colonial Latin American urban development was more complex and involved perceptions of class and race. Spanish conquerors formulated a complex social structure based primarily on race, with the most Spanish (or white) being the most powerful and privileged.<sup>12</sup> In attempts to help control colonial development, Spanish colonial administrators formulated urban guidelines that included site location and town layout.<sup>13</sup> Urban form in these new cities and in “invaded” Indian

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<sup>10</sup> Rodney D. Anderson, “Race and Social Stratification: A Comparison of Working-class Spaniards, Indians, and Castas in Guadalajara, Mexico in 1821,” *Hispanic American Historical Review* 68 (1988): 228; Greenow, “Microgeographic Analysis,” 274; Jay Kinsbruner, *The Colonial Spanish-American City: Urban Life in the Age of Atlantic Capitalism* (Austin: University of Texas Press, 2005), 54.

<sup>11</sup> Greenow, “Microgeographic Analysis,” 274; John K. Chance, “The Ecology of Race and Class in Late Colonial Oaxaca,” in *Studies in Spanish American Population History*, ed. David J. Robinson, Dellplain Latin American Studies, No. 8 (Boulder, Colorado: Westview Press, 1981), 93-118; John K. Chance, “The Colonial Latin American City: Preindustrial or Capitalist?,” *Urban Anthropology* 4 (1975): 211-228; Anderson, “Race and Social Stratification,” 228.

<sup>12</sup> L. N. McAlister, “Social Structure and Social Change in New Spain,” *Hispanic American Historical Review* 43 (1963): 349-370; Magnus Mörner, *Race Mixture in the History of Latin America* (Boston: Little, Brown, and Company, 1967).

<sup>13</sup> Dora P. Crouch, Daniel J. Garr, and Axel I. Mundigo, *Spanish City Planning in North America* (Cambridge, Mass: The MIT Press, 1982); Sidney D. Markman, “The Gridiron Town Plan and the Caste System in Colonial Central America,” in *Urbanization in the*

cities evolved in much the same way. Elite families that tended to live in city centers and accumulated large sums of money through economic ventures and alliances with other elite families.<sup>14</sup> Other races, and mixtures thereof, lived beyond the core areas and occupied their time in more laborious occupations.

Latin American scholars also recognize the importance of class as a determining factor in colonial urban growth.<sup>15</sup> The term “class” has understandably fostered much debate, especially as the myriad of racial and social groupings recognized by Spanish colonial administrations frequently inhibits scientific research.<sup>16</sup> Adding further confusion is a late-nineteenth century anthropological line of thought which argued a complex hierarchical labeling system for classes based on racial lineages.<sup>17</sup>

However, most scholars agree that social perceptions justified the implementation and utilization of racial labels.<sup>18</sup> Seed writes that “the social race of an individual was

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*Americas from Its Beginnings to the Present*, ed. Richard P. Schaedel, Jorge E. Hardoy, and Nora Scott Kinzer (Paris: Mouton Publishers, 1978), 471-490; Dan Stanislawski, “The Origin and Spread of the Grid-Pattern Town,” *Geographical Review* 36 (1946): 105-120; Dan Stanislawski, “Early Spanish Town Planning in the New World,” *Geographical Review* 37 (1947): 94-105.

<sup>14</sup> Chance, *Race and Class*, 119-121; Chance, “The Ecology of Race,” 102; John E. Kicza, “The Great Families of Mexico: Elite Maintenance and Business Practices in Late Colonial Mexico City,” *Hispanic American Historical Review* 62 (1982): 430; John E. Kicza, *Colonial Entrepreneurs: Families and Business in Bourbon Mexico City* (Albuquerque, New Mexico: University of New Mexico Press, 1983), 18; Susan Migden Socolow and Lyman L. Johnson, “Urbanization in Colonial Latin America,” *Journal of Urban History* 8 (1981): 33-36.

<sup>15</sup> Chance, *Race and Class*, 126-143; McAlister, “Social Structure,” 349-370; Mörner, *Race Mixture*, 57-61.

<sup>16</sup> McAlister, “Social Structure,” 356; Mörner, *Race Mixture*, 57-61; Patricia Seed, “Social Dimensions of Race: Mexico City, 1753,” *Hispanic American Historical Review* 62 (1982): 569-606.

<sup>17</sup> McAlister, “Social Structure,” 354.

<sup>18</sup> Chance, *Race and Class*, 189; Seed, “Social Dimensions,” 574; Charles Wagley, “The Concept of Social Race in the Americas,” in *The Latin American Tradition: Essays on*

related to the combination of physical appearance, economic status, occupation, and family connections, in other words, to his overall socioeconomic position as well as to physical features.”<sup>19</sup> Each racial class differed from every other class, even if the difference was subtle, and every class afforded its members unique socioeconomic rights and privileges.

When studying “class” in Latin American societies, most modern scholars prefer grouping populations into three general socioeconomic categories: elite, middle, and low class.<sup>20</sup> The elite class contained primarily rich and influential *Peninsular* merchants, officials, clergy, and large-estate owners.<sup>21</sup> The middle class included less wealthy Creoles who worked as local merchants, high-status artisans, professionals, and small land owners.<sup>22</sup> The lowest class contained mulattos and Indians who occupied less desirable labor-intensive jobs.<sup>23</sup> Historically, elites constituted the minority and congregated near city cores. The sizeable middle class occupied surrounding residential areas, and the lower classes lived closer to the periphery.

### Research Structure

Initial hypotheses suggested that Pensacola’s residential area evolved uniformly between 1781 and 1821 toward a town evenly stratified with regards to social status, race, and property value. While this was generally the case, more intensive analyses suggest

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*the Unity and the Diversity of Latin American Culture*, ed. Charles Wagley (New York: Columbia University Press, 1968), 155-174.

<sup>19</sup> Wagley, “The Concept of Social Race in the Americas,” 574.

<sup>20</sup> Chance, *Race and Class*, 155-204; John K. Chance and William B. Taylor, “Estate and Class in a Colonial City: Oaxaca in 1792,” *Comparative Studies in Society and History* 19 (1977): 454-487; McAlister, “Social Structure,” 356-358; Seed, “Social Dimensions,” 569-606.

<sup>21</sup> The term “*Peninsular*” refers to Spanish-born whites.

<sup>22</sup> The term “*Creole*” refers to American-born Spanish whites.

<sup>23</sup> The terms “mulatto” and “*pardo*” refer to mixed white-Blacks.

that the community's urban morphogenesis occurred much more sporadically, that the residential section of town developed in waves that were heavily influenced by a myriad of local, regional, and global events, and that residential patterns consisted of a mix of classes nearly devoid of socioeconomic clustering. The apparent mixing of socioeconomic classes, landowners, and living conditions throughout Pensacola's residential section sets the town apart from other late-colonial Spanish urban centers where social segregation was more apparent.

In revealing the morphogenesis of Spanish colonial Pensacola through this period, this dissertation relies on methods similar to those utilized by Robert Reed in his analysis of Spanish colonial Manila between 1521 and 1600.<sup>24</sup> Reed demonstrates how Manila evolved from a small Philippine chiefdom "into a flourishing regional metropolis and an international emporium linking the markets of South China with the New World."<sup>25</sup> Reed illustrates how local administrators implemented the Spanish grid pattern when designing and constructing Manila, and how this town plan facilitated urban development. Spanish *conquistadors* provided the blueprint by which Manila transformed in the course of a few decades into "a bustling hub of galleon commerce, one of the largest cities in Southeast Asia, a durable morphological replica of the Hispanic ideal, and a truly cosmopolitan center."<sup>26</sup>

Pensacola's town plans also facilitated local development, but in a strikingly different manner as the town evolved from a grid pattern implemented in the previous

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<sup>24</sup> Robert Reed, "From Suprabarangay to Colonial Capital," in *Forms of Dominance on the Architecture and Urbanism of the Colonial Enterprise*, ed. Nazar AlSayyad, (Aldershot: Avebury, 1992), 45-82.

<sup>25</sup> *Ibid.*, 72.

<sup>26</sup> *Ibid.*, 73.



British period (1763-1781). The plan included a centralized fort that provided protection and an orderly residential section that radiated from the town center. In 1821, Spanish administrators adopted the British plan because it provided these elements which were essential for Pensacola's survival at that time. As the second Spanish period progressed, local needs changed and required alterations to the town plan. These changes are noted in this study of Pensacola's morphogenesis from 1781 to 1821, and reflect the need for the community to adapt to a variety of local and regional developments. Vance wrote, "One of the most interesting aspects of morphogenesis is that it is most commonly an expression of institutional attitudes and practices by which a society shapes the forms to its needs."<sup>27</sup>

Community evolution is portrayed through a series of choropleth maps, each depicting specific themes at particular times. Geographer Andrew Clark utilized a similar approach in his seminal research of Prince Edward Island by providing over 150 thematic maps which illuminated the development of the island between 1758 and 1951. Clark wrote that the maps depicted patterns which were "the skeletonized frameworks upon which various geographies of various times have been erected."<sup>28</sup> Geographer Carville Earle called this approach the "locational inquiry" which is the first step in any geographical research.<sup>29</sup> Earle wrote that "the spatial method is extremely suggestive of

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<sup>27</sup> James Vance, *This Scene of Man: The role and Structure of the City in the Geography of Western Civilization*. (New York: Harper and Row, 1977), 4.

<sup>28</sup> Andrew Hill Clark, *Three Centuries and the Island: A Historical Geography of Settlement and Agriculture in Prince Edward Island, Canada* (Toronto: University of Toronto Press, 1959), 222.

<sup>29</sup> Carville Earle, *Geographical Inquiry and American Historical Problems* (Stanford: Stanford University Press, 1992), 6.

powerful explanations of human affairs, but – and this is critical – it is only suggestive.”<sup>30</sup>

As such, maps reflect the relationship between humans and their environment, relationships that can be ascertained through the “ecological inquiry” which attempts to explain this relationship in terms of causes and processes.<sup>31</sup> Mapping data illuminates spatial patterns and constructing map series reveals “patterns of change” that hint at the causes or “processes of change.”<sup>32</sup> “Causality requires the dual proofs of temporal precedence and spatial proximity or associations.”<sup>33</sup> The many maps herein provide the first necessary step in showing the effects of Pensacola’s urban development, while the analysis of historical data reveals the processes and causes.

The following chapters portray the morphogenesis of Spanish colonial Pensacola between 1781 and 1821, emphasizing the unique socioeconomic composition of its population and their patterns of residency and land ownership. Chapter two provides a literature review of five salient elements associated with Spanish colonial Pensacola’s urban residential development. These include: Pensacola’s brief duration in that location, the town’s persistent morphology, the weak and ineffective local administration, the broad regional demographic changes, and increased American involvement in the region. Each of these factors provides the bases of the investigations to be performed in this dissertation. Chapter two also gives a summary Spanish class structure, and a brief history of urban morphogenesis, land-use patterns, and Spanish town grid.

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<sup>30</sup> Ibid., 7.

<sup>31</sup> Ibid.

<sup>32</sup> Clark, *Three Centuries and the Island*, 222.

<sup>33</sup> Earle, *Geographical Inquiry*, 6-7.

Chapter three details the methods and materials used in this research. All pertinent sources are listed, including Spanish colonial censuses, real estate records, town maps, and plans. This chapter also provides definitions of key terms associated with socioeconomic classes and ethnicities. Most of the conclusions derived come directly from observations of tabulated census and real estate data. When correlated with colonial maps and plans of Pensacola, these data provide the necessary locational components that facilitate conclusions based on the locations of residents, landowners, and other important urban characteristics. Cluster analysis facilitates studying the relationship between the many variables associated with landowners and their property by assigning group membership based on similarities between landowners. Cluster analysis provides an efficient method for examining entire landowning population, and identifying the spatial distribution of socioeconomic classes through the period.

Chapter four presents the results of the analyses. Five Spanish census records offer information pertaining to race, occupation, gender, and occupations of heads of households, and show the preeminence of the administrative elite class through the period. Historic maps and land records show locations of residents and landowners, and illustrate how development occurred through a series of phases. Cluster analysis of land transactions reveals the spatial uniformity associated with Pensacola landowning classes, the location of the Black neighborhood, and the adverse effects of land speculation on urban residential development.

The final chapter summarizes Spanish colonial Pensacola's urban morphogenesis emphasizing socioeconomic classes, and discusses how Pensacola evolved from a small, sparsely settled, fortified outpost in 1781, to a congested,

traditional Spanish town by 1816. This chapter also shows how American involvement in the region spurred land speculation that deteriorated local development after 1816. The final chapter demonstrates how Spanish colonial Pensacola did not adhere to conventional models of preindustrial urban growth, and also provides a model based Pensacola that emphasizes the preeminence of the administrative class, the persistent racial composition of its population, and the absence of distinct and widespread socioeconomic clustering of residents.

## **CHAPTER 2.**

### **LITERATURE REVIEW**

Between 1781 and 1821 Spanish colonial Pensacola evolved from a relatively small military outpost into an increasingly complex administrative center. A literature review provides the historical context of Pensacola from 1781 to 1821 and illuminates many of the local and regional forces at work that contributed to the community's development. Because traditional perceptions regarding Spanish socioeconomic class structure heavily influenced Pensacola's development, this topic is also addressed. Urban morphogenetics, as a branch of urban geography, provides the method of community analysis and shows how these factors facilitated changes to Pensacola's land-use patterns and town plans.

#### **Pensacola, 1781-1821**

Previous research lays the foundation of this dissertation and reveals five factors that were of particular importance to Spanish Pensacola's urban development. First, by 1781, Pensacola had only existed in its third location for twenty-eight years, and much of that time under foreign rule. Second, Spanish officials adopted the British morphological plan of the town, which persisted with only minor revisions to 1821. Third, Pensacola was an administrative town, but of limited power and influence to promote local development. Fourth, local and regional events caused Pensacola's population to fluctuate dramatically after 1803. Fifth, American involvement in the region was on the rise after 1816, and effectively challenged the power of local administrators to maintain control.

## Pensacola's Infancy

By the beginning of the second Spanish period in 1781, Pensacola had existed in its third location since 1753. The previous two *presidios*, their locations shown in Figure 1, proved too inhospitable. French troops burned the first settlement, *Presidio Santa María de Galve*, in 1719.<sup>34</sup> Rather than rebuild at that site, Spanish officials constructed the *Presidio Isla de Santa Rosa* on Santa Rosa Island in 1722.<sup>35</sup> The second location was as low and unwelcoming as the first, and the community was destroyed by a hurricane in 1752. The Spanish moved to the mainland soon after, and began construction of the third settlement, *Presidio San Miguel de Panzacola*.<sup>36</sup> The third site, shown in Figure 2, had many benefits when compared to the previous two *Presidio* sites.<sup>37</sup> The immediate locale

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<sup>34</sup> John James Clune, "Historical Context and Overview," in *Presidio Santa María De Galve: A Struggle for Survival in Colonial Spanish Pensacola*, ed. Judith A. Bense (Gainesville: University Press of Florida, 2003), 20; William S. Coker, "Pensacola, 1698-1763," in *The New History of Florida*, ed. Michael Gannon (Gainesville: University Press of Florida, 1996), 124; Coker, "Pensacola, 1686-1821", 14; William S. Coker and R. Wayne Childers, "The *Presidio Santa María De Galve*: The First Permanent European Settlement on the Northern Gulf Coast, 1698-1722," in *Santa María De Galve: A Story of Survival*, ed. Virginia Parks (Pensacola: Pensacola Historical Society, 1998), 80; Stanley Faye, "Spanish Fortifications of Pensacola, 1698-1763," *Florida Historical Quarterly* 20 (October 1941): 158; Stanley Faye, "The Contest for Pensacola Bay and Other Gulf Ports 1698-1722, Part 2," *Florida Historical Quarterly* 24 (April 1946): 315; William B. Griffin, "Spanish Pensacola, 1700-1763," *Florida Historical Quarterly* 37 (1959): 255.

<sup>35</sup> Coker, "Pensacola, 1698-1763," 125; Coker, "Pensacola, 1686-1821," 15; Coker and Childers, "The *Presidio Santa María De Galve*," 81; Faye, "Spanish Fortifications," 160-161; Griffin, "Spanish Pensacola," 257.

<sup>36</sup> Pensacola exists to this day in the third location. Coker, "Pensacola, 1698-1763," 128; Coker, "Pensacola, 1686-1821," 16; Faye, "Spanish Fortifications," 163-164; Griffin, "Spanish Pensacola," 259.

<sup>37</sup> The landform associated with third Pensacola has changed dramatically through the years because of dredging, construction, and other modern urban activities. Figure 4 represents a composite of environmental information noted on modern and historic maps, including: Elias Durnford, *Plan of the New Town of Pensacola and Country adjacent, showing the Gardens and situation of the Blockhouses*, Public Record Office, CO 700 Florida No. 20, National Archives, London 1765; Joseph Purcell, *A Plan of Pensacola and its Environs in its Present State from an Actual Survey in 1778*, Special Collections,

was high and relatively level. Low marshy land bounded the location to the north, and fresh water streams bordered it on the east and west. Beyond these was more good land on which the new settlement could expand. The location also shortened overland and up-river communication ties to inland

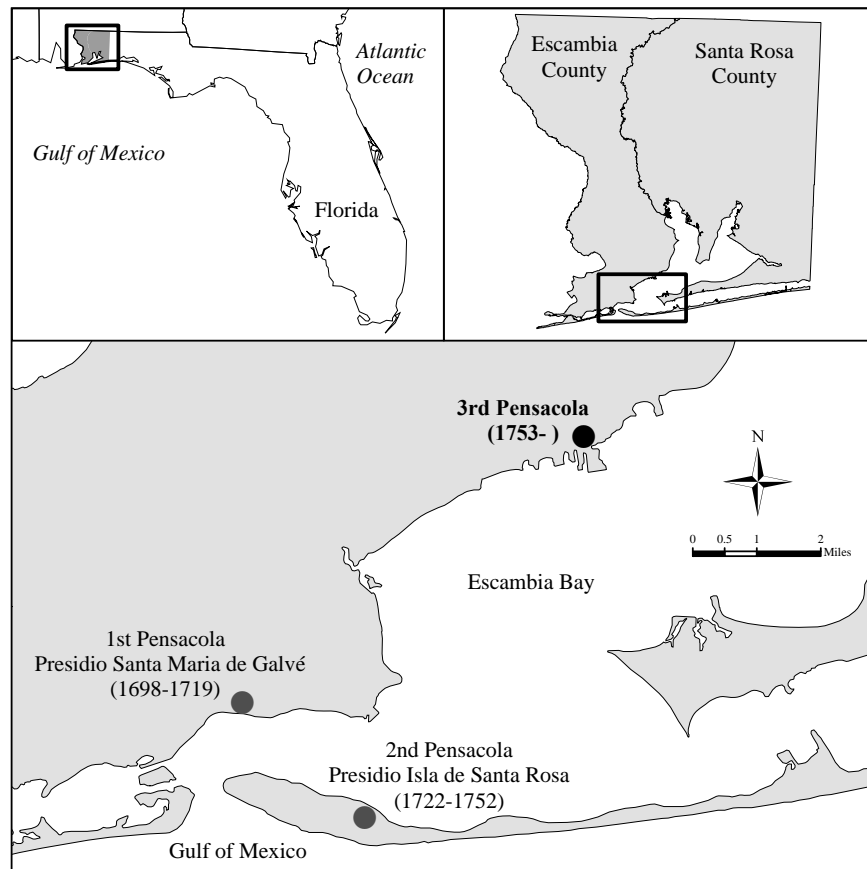


Figure 1. Location of Pensacola and West Florida

communities, while its anchorage in Escambia Bay continued to facilitate the town's reliance on sea travel and trade.

The Escambia, Blackwater, Yellow, and East Bay River systems fed the Bay and discharged into the Gulf of Mexico about ten miles below the settlement. Smaller bayous

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University of West Florida, Pensacola; United States Geological Survey, Pensacola SW 1:24000 quadrangle, 1994.

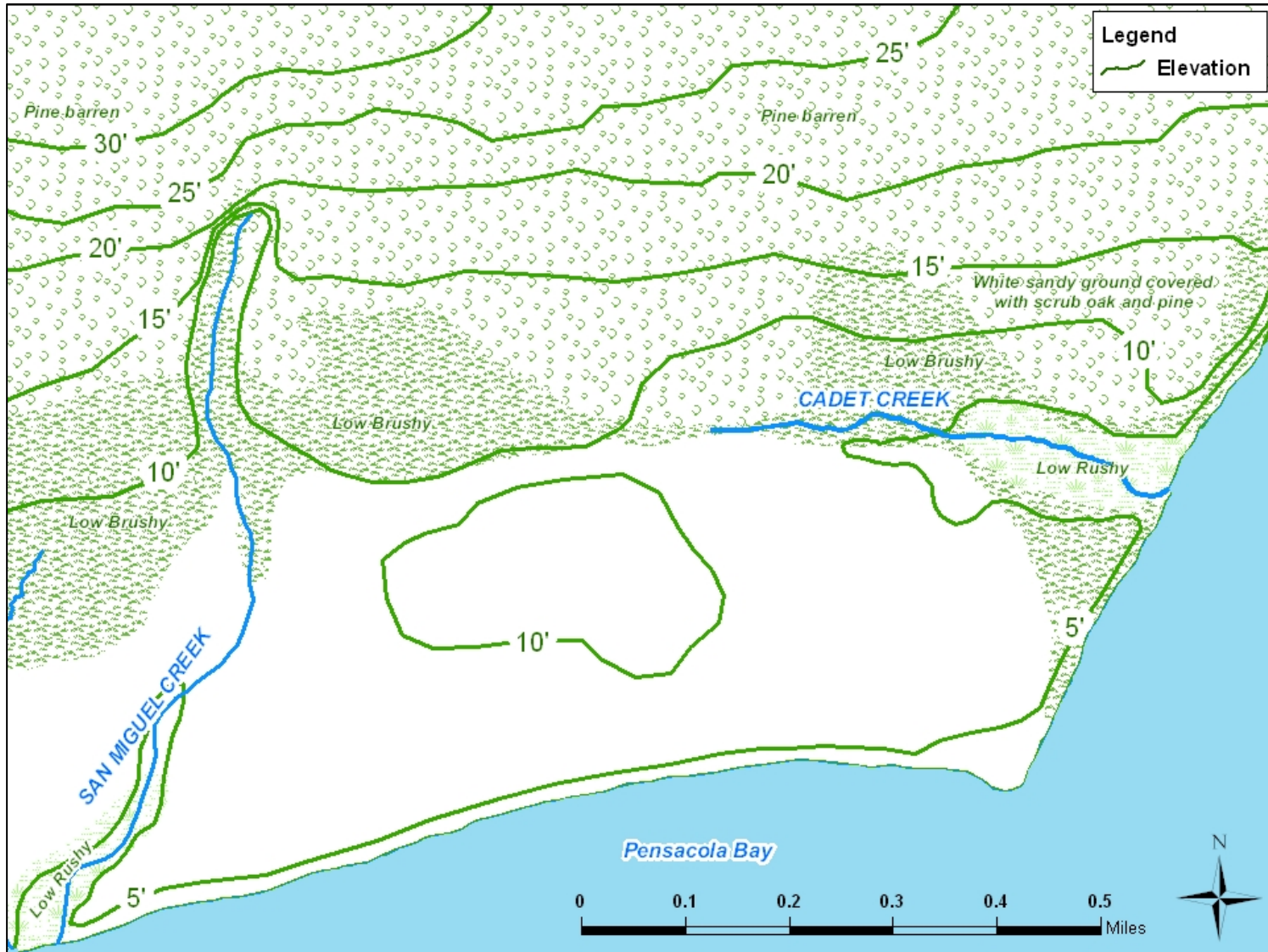


Figure 2. Environment of third Pensacola location.



and streams also fed the Bay system around Pensacola. More fertile soils existed further inland and up the Bay, as did sources of clay. There were large stands of pines and oaks in the uplands, and many good locations for the development of water-powered milling industries.<sup>38</sup>

### Pensacola's Enduring Morphology

Pensacola's morphology evolved from a town plan implemented during the previous British period in 1765. The plan provided a uniform guide that promoted orderly development. The basic town layout survived into and through the second Spanish period with only minor changes.

Before the British period, however, Spanish urban development at *Presidio San Miguel de Panzacola* only lasted about ten years between 1753 and 1763, and Spanish residents did not have time to develop their settlement. Civilians, officers, and married soldiers erected small living quarters adjacent to the fort, and soldiers built fortifications and administrative buildings within a crude palisade along the bay.<sup>39</sup> The imminent threat of Indian attack after 1760 necessitated the clearing of land adjacent to the fort and demolition of structures in that area, and all residents moved into meager dwellings inside the fort.

Great Britain acquired *La Florida* after the Seven Years' War (1756-1763) and British troops accepted control of Pensacola in August 1763.<sup>40</sup> The hundred or so

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<sup>38</sup> John C. Phillips, *The Water-Powered Industries of Northwest Florida: An Archaeological Reconnaissance* (Pensacola: Archaeological Institute, The University of West Florida, 1996), Report of Investigations, 58, 1-2; John C. Phillips, "Flood Thy Neighbor: Colonial and American Water-Powered Mills in West Florida," *Gulf South Historical Review* 14 (1998): 143-157.

<sup>39</sup> Coker, "Pensacola, 1698-1763," 128-129.

<sup>40</sup> Coker, "Pensacola, 1686-1821," 23.

existing huts and fortifications were dilapidated and in need of immediate repair.<sup>41</sup> The new British administration eventually implemented strategies designed to establish order and attract settlement and industry.<sup>42</sup> For instance, they abandoned the Spanish town design and implement a new plan that would accommodate a substantial military force tasked to protect the region, and also have room for residential civilian development. Elias Durnford, the British commanding engineer and surveyor general, devised Pensacola's town plan in 1765, shown in Figure 3 and more clearly in Figure 4.<sup>43</sup>

Subsequent urban development in Pensacola adhered to the 1765 British town plan. The town grew on the Bay between the two streams, radiating from the central fort along the shoreline. A large open area adjacent to the fort walls remained undeveloped by design in order to maintain an unobstructed line-of-sight from the fort. North of this area were public buildings. The residential section surrounded the central area, and contained ordered streets and blocks in a grid parallel and perpendicular to the shore. The blocks measured approximately four hundred by two hundred and fifty feet and each contained about twelve lots.<sup>44</sup> House lots had unique identification numbers, and also had corresponding garden lots just north of town. Unpaved, sandy streets separated town blocks.

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<sup>41</sup> Coker, "Pensacola, 1686-1821," 23; Robert L. Gold, "The Transfer of Florida from Spanish to British Control" (Ph.D. diss., State University of Iowa, 1964), 85-86, 143; L.N. McAlister. "Pensacola During the Second Spanish Period." *Florida Historical Quarterly* 37 (1959): 289-290; Robert R. Rea, "Pensacola under the British Rule (1763-1781)," in *Colonial Pensacola*, ed. James R. McGovern (Pensacola: Pensacola-Escambia County Development Commission, 1972), 57-58.

<sup>42</sup> Coker, "Pensacola, 1686-1821," 26; Robin E. A. Fabel, *The Economy of British West Florida, 1763-1783* (Tuscaloosa: University of Alabama Press, 1988), 6-21; Fabel, "British Rule," 134-136; Gold, "Transfer", 87.

<sup>43</sup> Elias Durnford, "Plan of the New Town of Pensacola and Country," (London: PRO CO 700, 1765), Florida, No. 20.

<sup>44</sup> McAlister, "Pensacola," 289-290.



Figure 3. 1765 plan of the new town of Pensacola. (Elias Durnford, *Plan*, Public Record Office, CO 700 Florida No. 20, National Archives, London 1765)

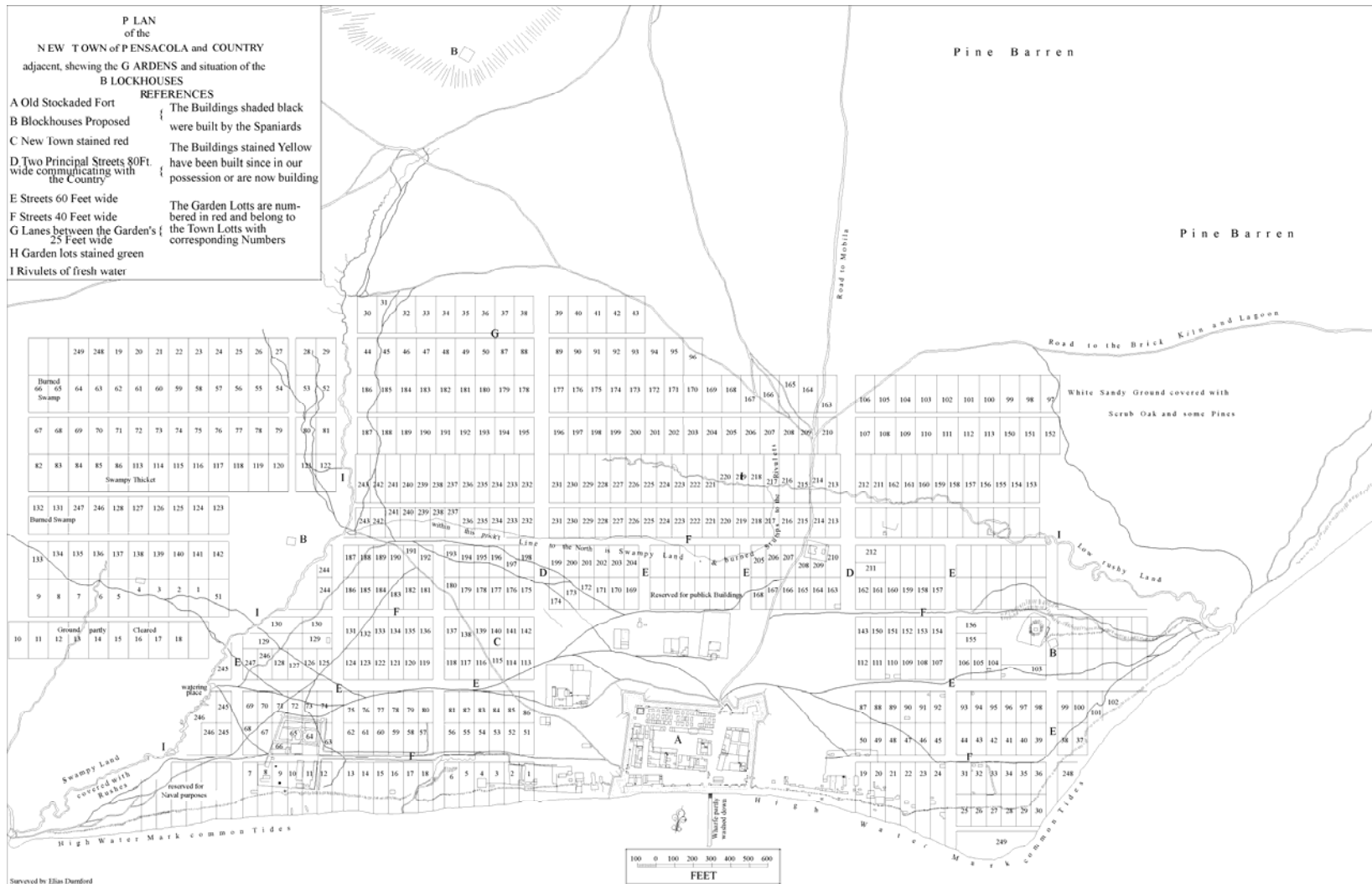


Figure 4. Digitized and enhanced version of the Durnford's 1765 plan of the new town of Pensacola. (Courtesy of Archaeology Institute, University of West Florida, Pensacola)

British ownership of Pensacola and the Floridas was short-lived, lasting eighteen years. In 1781 Spanish forces attacked and defeated British troops stationed at Pensacola and two years later the Floridas formally reverted back to Spain as a result of the Peace of Paris.<sup>45</sup> The incoming Spanish administration adopted the British town plan, thus preserving the basic morphology and numbering system for the next forty years.<sup>46</sup> The 1799 town map, shown in Figure 5, illustrates this continuity. This map shows development that occurred eighteen years into the second Spanish period and, while it does not show house lots, it does reveal town blocks and uniform streets originally surveyed in 1765. It also shows the central fort and a number of houses and out-buildings scattered throughout the residential section.

Some changes, however, were made to the town's layout. The greatest came in 1813 and 1814, and involved the redesign of the town core and the inclusion of the northern garden lots as house lots.<sup>47</sup> Many of these changes are illustrated on the 1813 and 1816 plans, shown in Figures 6-9.<sup>48</sup> At that time, the central fort no longer existed

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<sup>45</sup> Coker, "Pensacola, 1686-1821," 35-38; William S. Coker and Susan R. Parker, "The Second Spanish Period in the Two Floridas," in *The New History of Florida*, ed. Michael Gannon (Gainesville: University Press of Florida, 1996), 150-151; Robert Crider, "The Borderland Floridas, 1815-1821: Spanish Sovereignty under Siege" (Ph.D. diss., The Florida State University, 1979), x; McAlister, "Pensacola," 282-287; Peter Zahendra, "Spanish West Florida, 1781-1821" (Ph.D. diss., The University of Michigan, 1976), 22-23.

<sup>46</sup> Griffin, "Spanish Pensacola, 1700-1763," 242-262; Faye, "Spanish Fortifications," 151-168; Coker, "Pensacola, 1686-1763," 117-133.

<sup>47</sup> William S. Coker and G. Douglas Inglis, *The Spanish Censuses of Pensacola, 1784-1820: A Geneological Guide to Spanish Pensacola*, ed. Hazel P. Coker, The Spanish Borderlands Series (Pensacola: The Perdido Bay Press, 1980), 21; John Lee Williams, *A View of West Florida*. (Gainesville: University Press of Florida, 1976), 75.

<sup>48</sup> "Plan of Pensacola and Fort San Miguel and Their Environs," (Madrid, Spain: Servicio Historico Militar, 1816), No. K-b-4-6; Vicente Sebastian Pintado, "Plano," (Pensacola: Manuscripts Division, Library of Congress, 1813), MSS Div. Item 47, dated Dec. 1, 1813.

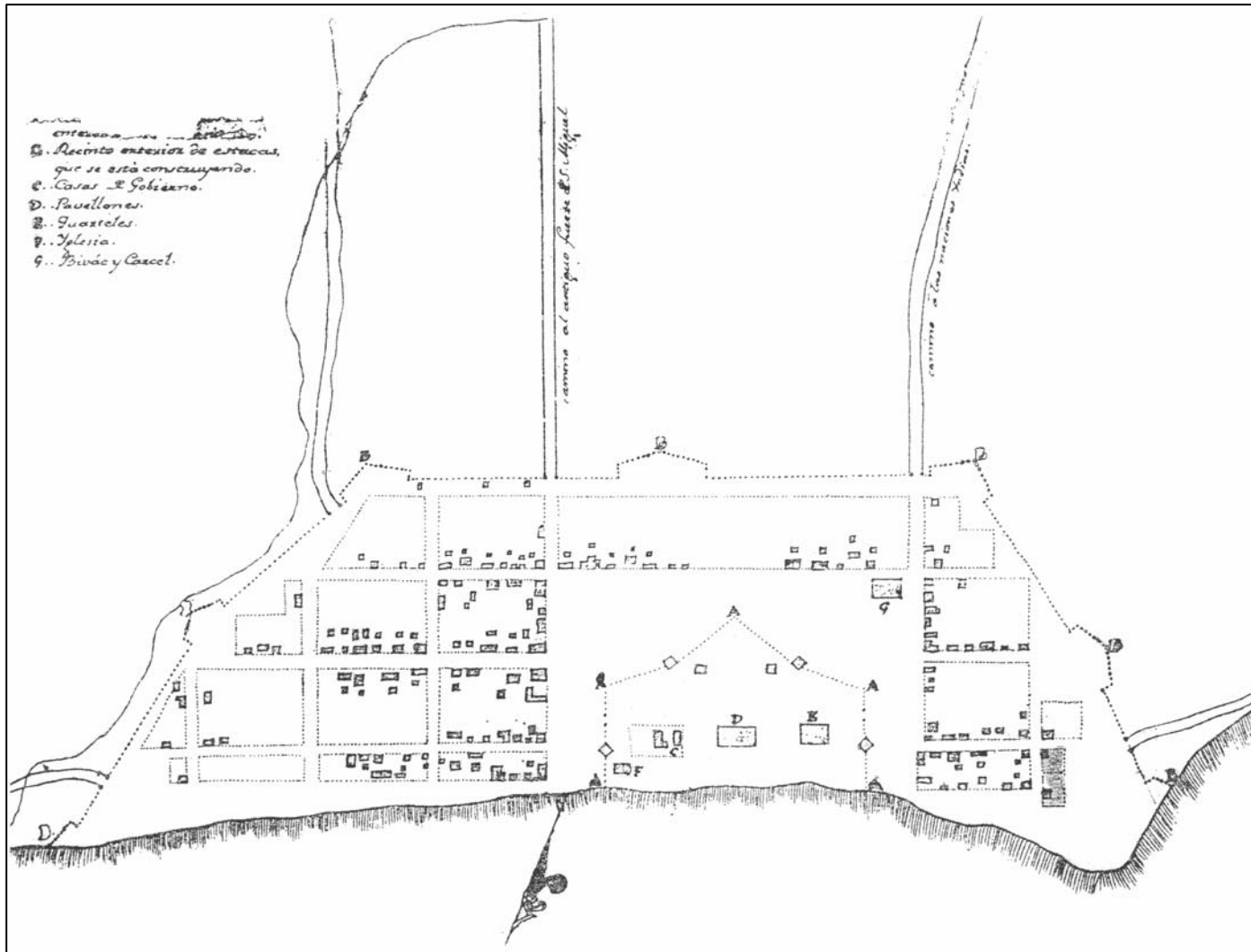


Figure 5. 1799 plan of Pensacola. (Pensacola Historical Society, Pensacola.)

and many of the buildings in that area were dilapidated. The plan for the new town core contained administrative buildings, house lots, barracks, a public jail, a hospital, a school, and a church. The new plan also called for improved streets and resized lots in some areas. Lots north of the residential section that were originally reserved for gardens were made available for sale as house lots. A visitor to Pensacola in 1820 critically observed that, “out of this massacre of order and decency, two small squares were saved, one on the east and one on the west ends of the old common: one was named the square of Seville, and the other the square of Ferdinand, each five hundred feet long by three hundred broad.”<sup>49</sup> The persistence of the town plan is perhaps best observed on maps made during the early years of the American Territorial period that began in 1821. Two maps are shown in Figures 10 and 11. House lot sizes, locations, and identification numbers were retained.

#### Pensacola’s Spanish Administration

The third factor that affected the nature of Pensacola’s urban development through the second Spanish period pertained to the Spanish administrative system. Since West Florida’s retrocession to Spain in 1783 the colony suffered from severe economic and political difficulties that originated from international as well as local crises. The administrative system was antiquated and proved ineffective in coping with the constant problems that plagued the colony. West Florida also lacked sufficient military and economic support from the Crown. Governors found the responsibilities bestowed inappropriate and frustrating. These same problems extended to decisions regarding private land ownership and town planning.

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<sup>49</sup> Williams, *View*, 75.

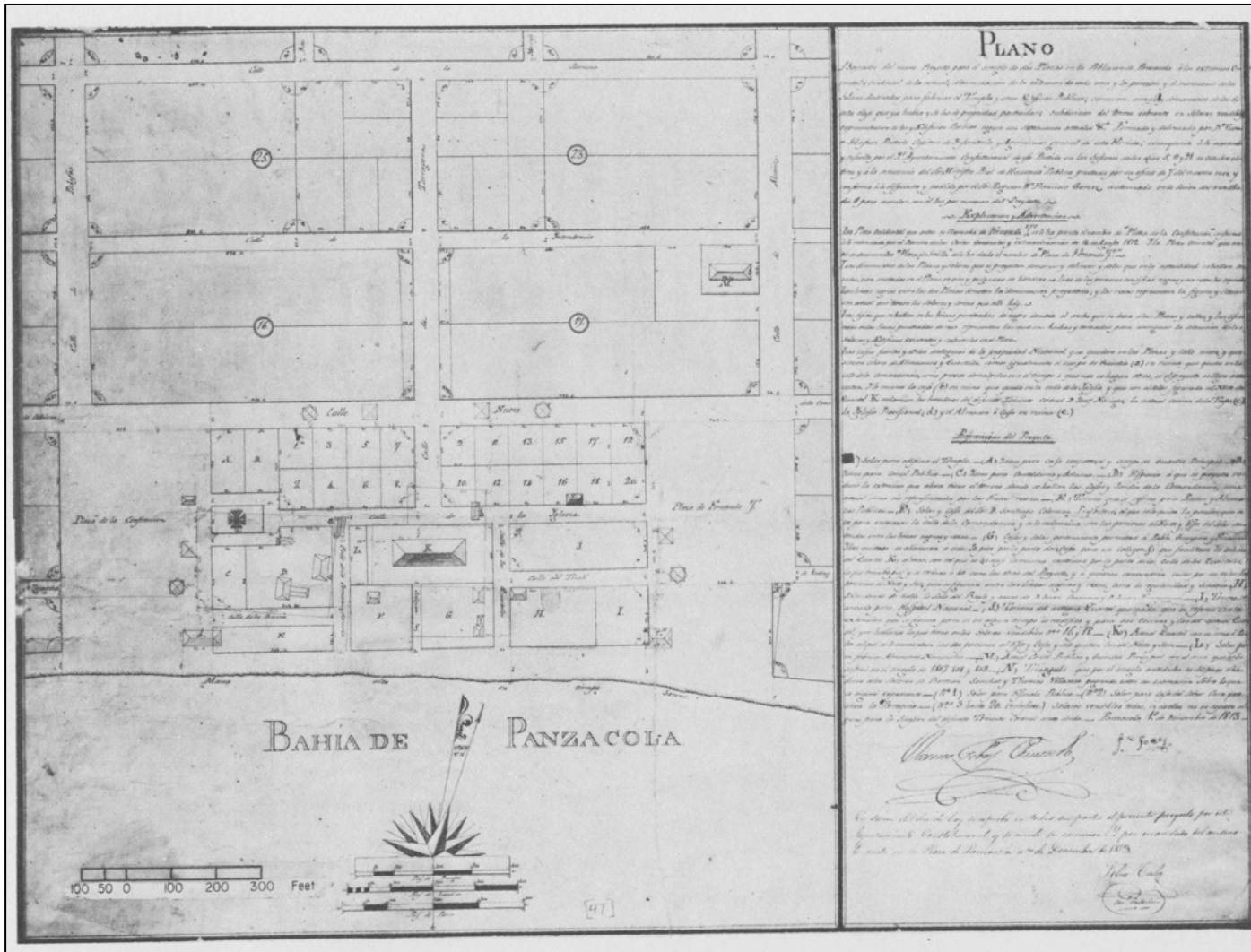


Figure 6. 1813 plan of Pensacola. (Vicente Pintado, *Plano*, Papers of Vicente Sebastian Pintado, Manuscript Division, Library of Congress, Washington)



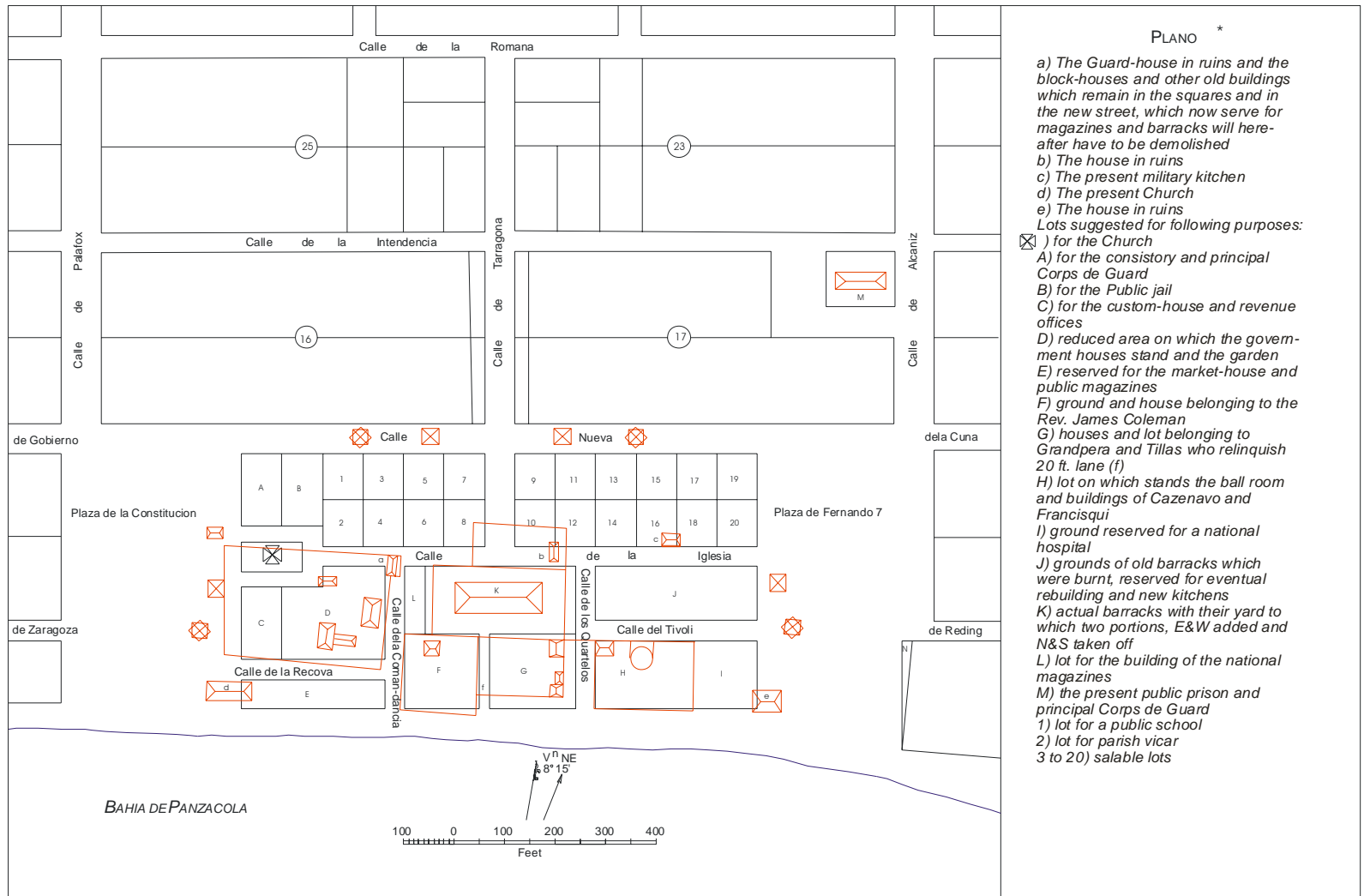


Figure 7. Digitized and enhanced version of 1813 plan of Pensacola. (Courtesy of Archaeology Institute, University of West Florida, Pensacola)

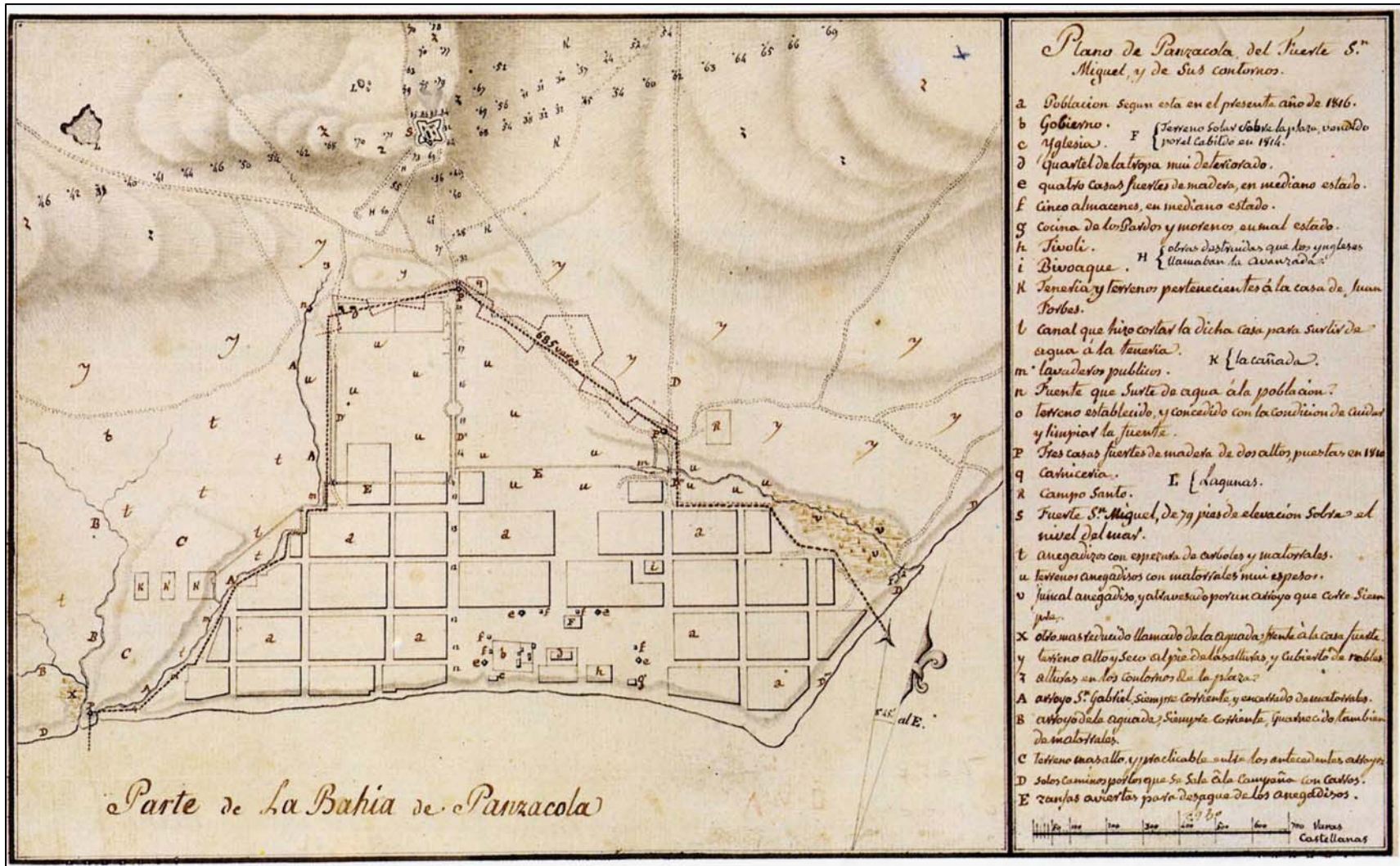


Figure 8. 1816 plan of Pensacola. (Vicente Pintado, *Plan*, K-b-4-6, Servicio Histórico Militar, Madrid)

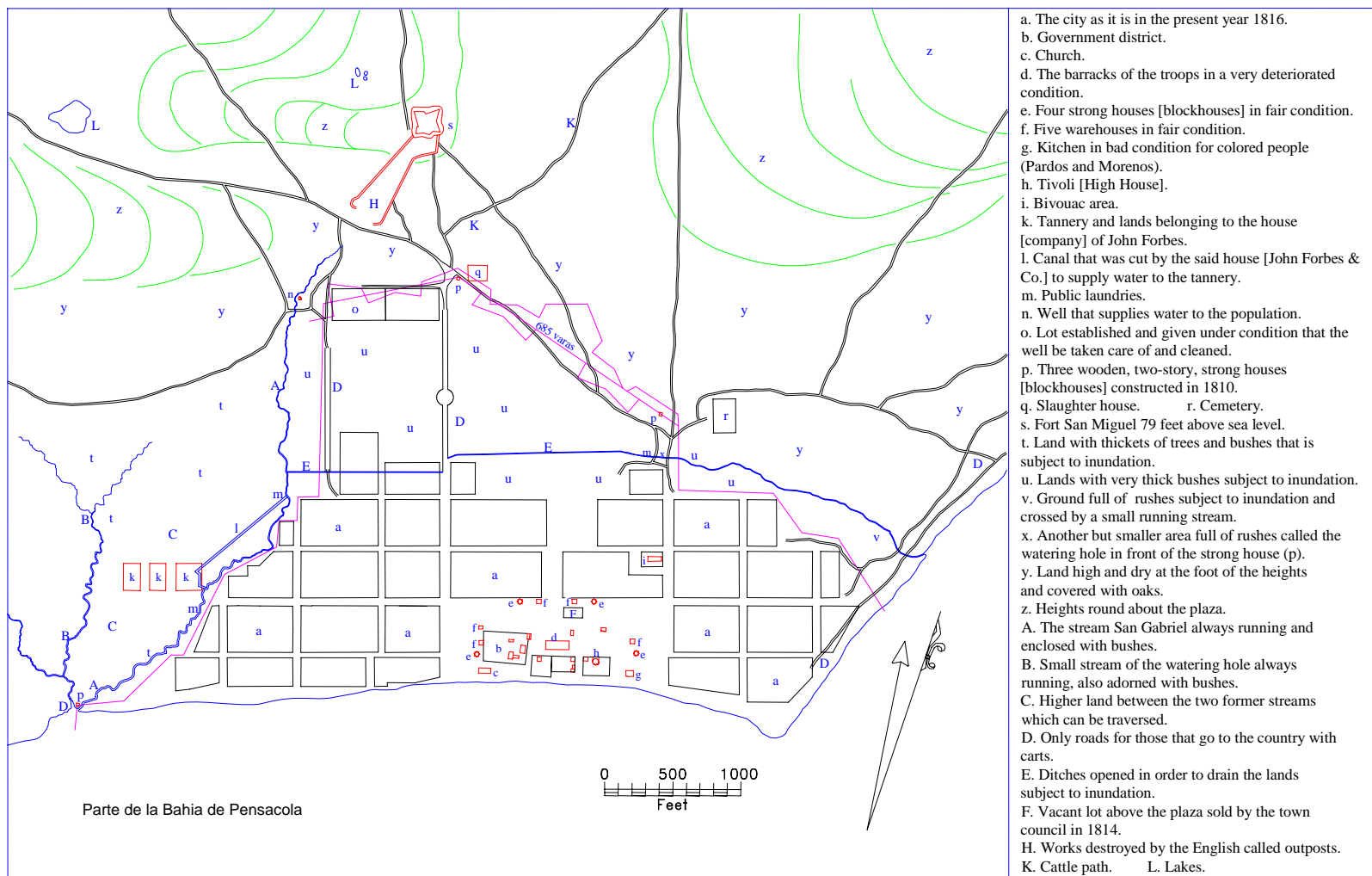


Figure 9. Digitized and enhanced version of 1816 plan of Pensacola. (Courtesy of Archaeology Institute, University of West Florida, Pensacola)



Figure 10. 1825 plan of Pensacola. (Special Collections, University of West Florida)



Figure 11. 1827 plan of Pensacola. (Special Collections, University of West Florida)

The Spanish colonial administrative system was originally designed to facilitate New World commerce and incorporated the use of hierarchical institutions that were closely tied to wealth, status, and power.<sup>50</sup> Although much of the system changed through the colonial era, particularly as a result of the Bourbon reforms of the early eighteenth century, the overriding hierarchy of positions survived into the nineteenth century.

The hierarchy in West Florida was easy to recognize but seldom observed. Before 1803, the military governor of Pensacola had authority over all West Florida and answered to the governor general in New Orleans who in turn served under the captain general of Louisiana and Florida in Havana.<sup>51</sup> After the loss of Louisiana in 1803 the position of governor general was removed and his responsibilities bestowed on the governor of West Florida in Pensacola. However, the frequent jurisdiction disputes and the power struggles frequently led many governors to take their problems straight to the captain general instead of to the governor general.

Governors also typically held short terms and had limited responsibilities. Governors were appointed for terms lasting five years, but only two of the thirteen served the full term (Arturo O'Neill 1783-1793 and Juan Vicente y Folch 1796-1811).<sup>52</sup> None enjoyed their stay in Pensacola and each left in frustration after securing positions elsewhere. The governors had the authority to make decisions pertaining to local politics and military matters, but they did not have the power to make binding resolutions

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<sup>50</sup> James Lang, *Conquest and Commerce, Studies in Social Discontinuity (Spain and England in the Americas)* (New York: Academic Press, 1975), 220-224.

<sup>51</sup> Zahendra, "Spanish West Florida", 47-48, 53-64.

<sup>52</sup> *Spanish Land Grants in Florida* (Tallahassee: Historical Records Survey, Division of Community Service Programs, Works Project Administration, State Library Board, 1941), lxiii; Zahendra, "Spanish West Florida", 64.

regarding their territory without approval of either the governor general or captain general.<sup>53</sup> This resulted in lengthy delays and the persistence of town governors making unauthorized decisions.

To complicate matters, in two instances Pensacola inhabitants voted in a democratically-elected municipal government which operated in tandem with the conventional colonial administration.<sup>54</sup> The first was in 1812 following the implementation of the liberal Spanish Constitution of the same year, and the second after its reinstatement in 1819. The former actually succeeded in replacing the military government in Pensacola and lasted two years before the Crown abrogated the Constitution. The United States acquired West Florida before the latter became implemented. In each instance, Pensacola inhabitants elected officials whose responsibilities mirrored those of the governor. In both instances the governor refused to recognize the elected officials, resulting in confusion and disputes.

By the early nineteenth century, Spain no longer had the ability to sustain its vast colonial holdings.<sup>55</sup> Years of warfare in Europe had severely reduced its treasury, and competition from foreign trade whittled at its supply network. Never as important as the mineral-rich colonies to the south, West Florida always received very little support from

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<sup>53</sup> George A. McCall, an American officer, wrote this while stationed in Pensacola in 1821. George A. McCall, *Letters from the Frontiers: A Facsimile Reproduction of the 1868 Edition* (Gainesville: University Press of Florida, 1974), 13; Unsigned, "Untitled, 1806," p.34-37, Walworth Papers, Volume 1, Box 2, Folder 1, Hill Memorial Library, Louisiana State University, Baton Rouge, 35-37; Zahendra, "Spanish West Florida", 56.

<sup>54</sup> Coker and Inglis, *Spanish Censuses*, 21, 93-95; Duvon C. Corbitt, "The Last Spanish Census of Pensacola," *Florida Historical Quarterly* 45 (1945): 59-60; Zahendra, "Spanish West Florida", 76-79.

<sup>55</sup> Walworth Papers, 25 December, 1806, 33; Geoffrey Walker, *Spanish Politics and Imperial Trade, 1700-1789* (Bloomington: Indiana University Press, 1797), 4-15, 224; Zahendra, "Spanish West Florida", 68-70; Lang, *Conquest and Commerce*, 220.

the Crown. As a result, Pensacola relied heavily on regional and local providers of food and consumer goods.<sup>56</sup> A few locals harvested feral cattle that, while “stunted and lean,” proved “necessary for the supply” of the town.<sup>57</sup> Ships from New Orleans, Mobile, and other Caribbean ports brought most of Pensacola’s food and other commodities to the local trading house, the Forbes Company, and other stores.<sup>58</sup>

### Pensacola’s Demographic Trends

Pensacola experienced dramatic demographic changes between 1781 and 1821, as shown in Figure 12. Civilian population fluctuated from around 500 before 1803, up to approximately 1,400 in 1805, and decreased to 400 in 1818 before rising again to 700 in 1820.<sup>59</sup> The town’s military strength also decreased from 474 in 1809, to 282 in 1813, and 173 in 1816.<sup>60</sup> Regional instability led to broad demographic shifts throughout the late Colonial periods in American history. Immigration further increased instability, and the continual movement of people into and out of the town led to a diverse mix of ethnicities, customs, and languages. Demographic trends heavily influenced how Pensacola evolved during this period. Migration was common in the American Southeast

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<sup>56</sup> Walworth Papers, 25 December, 1806, 33.

<sup>57</sup> Walworth Papers, 25 December, 1806, 33; “Pensacola in 1810,” *Florida Historical Quarterly* 32 (1953): 44-48.

<sup>58</sup> James Stirling to Vice-Admiral Charles Stirling, Pensacola, 15 November, 1812, in Richard K. Murdoch, “A British Report on West Florida and Louisiana, November, 1812,” p.45, *Florida Historical Quarterly* 43 (1965), 45; David H. White, “The Forbes Company in Spanish West Florida,” *Pensacola Historical Quarterly* 52 (1974): 279-285.

<sup>59</sup> Coker and Inglis, *Spanish Censuses*, 6; Coker and Parker, “Second Spanish Period,” 159; Corbitt, “Last Spanish Census,” 30-38; Jane E. Dysart, “Another Road to Disappearance: Assimilation of Creek Indians in Pensacola, Florida, During the Nineteenth Century,” *Florida Historical Quarterly* 61 (1982): 38-39; Jack D. L. Holmes, “Pensacola: Spanish Dominion 1781-1821,” in *Colonial Pensacola*, ed. James R. McGovern (Pensacola: 1974), 96; Pablo Tornero Tinajero, “Estudio De La Población De Pensacola (1784-1820),” *Anuario de Estudios Americanos* 34 (1977): 537-567.

<sup>60</sup> Holmes, “Pensacola,” 95.



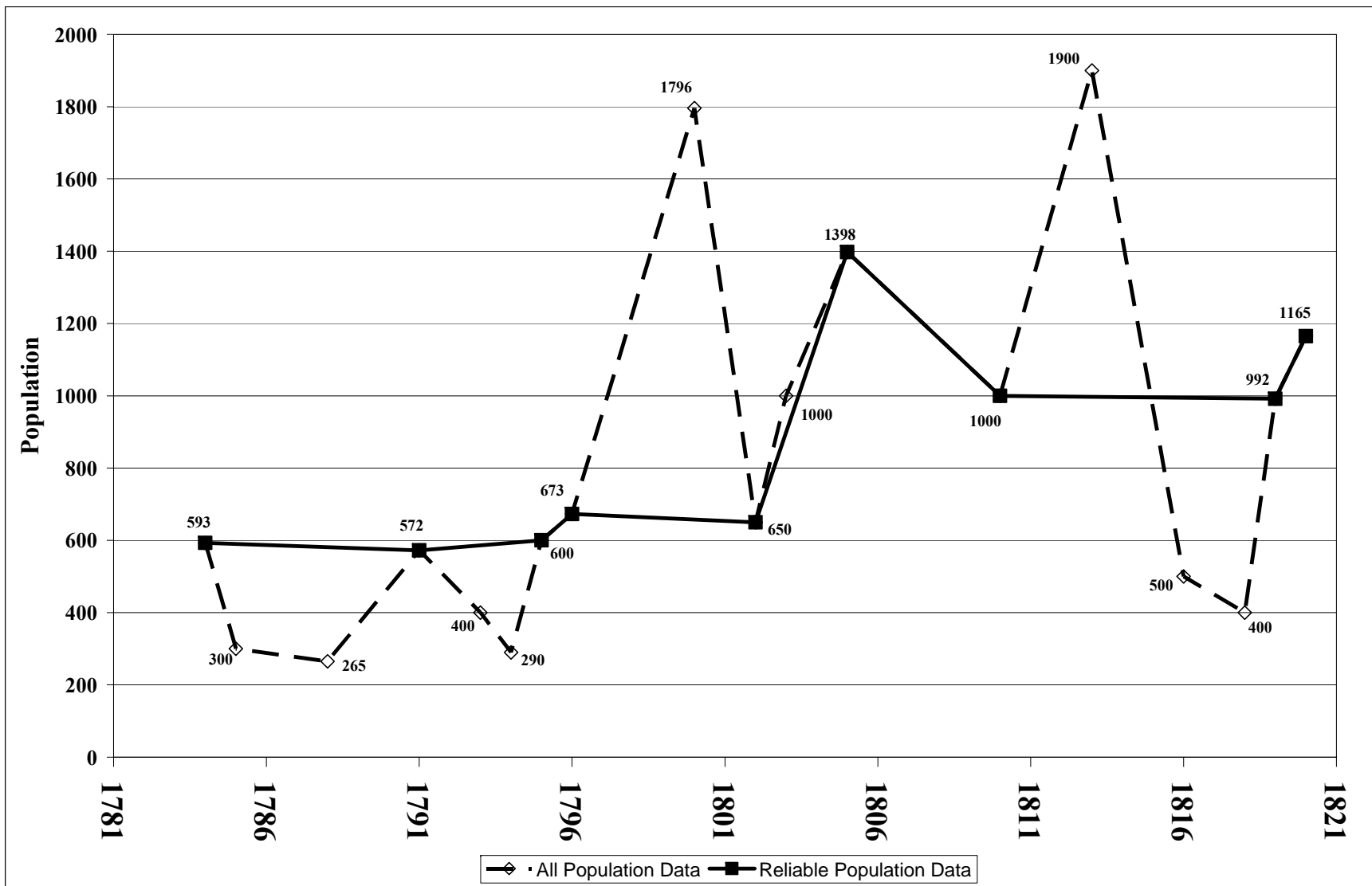


Figure 12. Pensacola population counts, 1783-1821. (Coker and Inglis, *Spanish Censuses*, 1980)

during the colonial period, especially during the late-eighteenth and early-nineteenth centuries. The passing of ownership of a colony from one European power to another typically resulted in the displacement of thousands of residents who were forced to leave to make room for incoming populations.

The Louisiana Purchase in 1803, which transferred ownership of Louisiana to the United States, prompted such an event.<sup>61</sup> The Purchase encouraged many of the French colonial residents to migrate out of Louisiana as life under the rule of the United States seemed too drastic to endure. Their nationalities, ethnicities, languages, and cultural practices differed greatly from those of the Americans who now exercised rule over Louisiana.<sup>62</sup> Perhaps the greatest difference and source of conflict involved Louisiana's reliance on a colonial form of government with European rule.<sup>63</sup> Republican government was not familiar and, when introduced by the incoming American regime, was not

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<sup>61</sup> D. W. Meinig, *The Shaping of America: A Geographical Perspective on 500 Years of History: Volume 2: Continental America, 1800-1867* (New Haven: Yale University Press, 1993), 12; Sanford Levinson and Bartholomew H. Sparrow, "Introduction," in *The Louisiana Purchase and American Expansion, 1803-1898*, ed. Sanford Levinson and Bartholomew H. Sparrow (New York: Rowman & Littlefield Publishers, Inc., 2005), 2; Merrill D. Peterson, "Louisiana!," in *The Louisiana Purchase and Its Aftermath 1800-1830*, ed. Dolores Egger Labbè, The Louisiana Purchase Bicentennial Series in Louisiana History (Lafayette, Louisiana: Center for Louisiana Studies, University of Southwestern Louisiana, 1998), 30-37; Patrick G. Williams, "Introduction," in *A Whole Country in Commotion: The Louisiana Purchase and the American Southwest*, ed. Patrick G. Williams, S. Charles Bolton, and Jeannie M. Whayne (Fayetteville, Arkansas: The University of Arkansas Press, 2005), xi.

<sup>62</sup> Peter J. Kastor, "An Identity by Any Other Name: Attachments in an Age of Expansion," in *The Louisiana Purchase and Its Peoples: Perspectives from the New Orleans Conference*, ed. Paul Hoffman (Lafayette, Louisiana: Louisiana Historical Association and Center for Louisiana Studies, University of Louisiana at Lafayette, 2004), 165; Dolores Egger Labbè, "'The Encouragement of Foreigners': A Multicultural Population in a New Land," in *The Louisiana Purchase and Its Aftermath 1800-1830*, ed. Dolores Egger Labbe, The Louisiana Purchase Bicentennial Series in Louisiana History (Lafayette, Louisiana: Center for Louisiana Studies, University of Southwestern Louisiana, 1998), 542-544; Peterson, "Louisiana!," 47.

<sup>63</sup> Kastor, "Identity," 165.

welcome. Although the United States government did not force Louisianans out, many of the latter chose to leave than endure adapting to Anglo rule.

Considerable numbers moved to Pensacola, but few stayed for more than two or three years. The small colonial town simply did not have the economic draws of neighboring regions to foster a large sedentary population. The surrounding soil was too acidic, sandy, and permeable to support agriculture. There was no mineral wealth to be had in the region, and a local tannery provided the only major industry.<sup>64</sup> The last Spanish census, issued in 1820, showed that the overwhelming majority of the town's citizenry was under the age of forty, indicating that the original 1783 population had left the area by 1820.

The migratory nature of regional populations also encouraged ethnic diversity within Pensacola. In 1820, the town's civilian citizenry consisted of a variety of races, but were predominantly French or Spanish from Louisiana and the Caribbean, free Blacks and mulattos, and Black and mulatto slaves.<sup>65</sup> Approximately one-third of the civilian population at any given time were slaves. There were also Spanish mainlanders, Americans, Indians, and smaller numbers of many other ethnicities. French, Spanish and English were the most common languages spoken, and many who lived in Pensacola knew all three.

As a military town, Pensacola had its share of illicit establishments to entertain troops, including gambling halls and brothels.<sup>66</sup> As a result, most Spanish soldiers

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<sup>64</sup> William S. Coker and Thomas D. Watson, *Indian Traders of the Southeastern Spanish Borderlands: Pantón, Leslie, & Company and John Forbes & Company, 1783-1847* (Pensacola: The University of West Florida Press, 1986).

<sup>65</sup> Coker and Inglis, *Spanish Censuses*, 93-126; Tinajero, "Estudio," 537-561.

<sup>66</sup> Walworth Papers, 25 December, 1806, 34.

stationed in Pensacola had little or no money. Some historians believe that the high number of seamstresses (n=31) and laundresses (n=25) recorded in the 1820 census is indicative of prostitution.<sup>67</sup> Historians reason that such a small colonial town would not have had need for so many laundresses, but that prostitution was common to military towns. Most of these laundresses and seamstresses were also single mothers of color. Further, the land records allude twice to a Madam Fan Fan and her establishment in the northwest section of town.<sup>68</sup> There is no record that Madam Fan Fan purchased any land in Pensacola, and she is also noticeably absent from period census records. It is quite possible that she was the proprietor of a brothel.

That such illicit ventures were not directly mentioned in public documents is hardly surprising. Local administrators would not have recorded their presence. Doing so would have brought scorn from Spanish officials in charge of allocating support, and would have also severely damaged efforts to attract new settlement and businesses to the region.

#### American Encroachment in West Florida

Anglo-immigration during this period continued virtually unabated.<sup>69</sup> Thousands of settlers moved onto recently-acquired United States territories such as Mississippi,

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<sup>67</sup> Coker and Inglis, *Spanish Censuses*, 7; Corbitt, "Last Spanish Census," 30-38; McAlister, "Pensacola," 324.

<sup>68</sup> "Proceedings of the Land Commission in West Florida," Vol. 4A, (Microfilm on file at John C. Pace Special Collections Library, University of West Florida: 1825), 46, 83, 90.

<sup>69</sup> Carville Earle, "Beyond the Appalachians, 1815-1860," in *North America: The Historical Geography of a Changing Continent*, ed. Thomas F. McIlwraith and Edward K. Muller (New York: Rowman & Littlefield Publishers, Inc., 2001), 165-168; Kenneth C. Martis, "The Geographical Dimensions of a New Nation, 1780s-1820s," in *North America: The Historical Geography of a Changing Continent*, ed. Thomas F. McIlwraith and Edward K. Muller (New York: Rowman & Littlefield Publishers, Inc., 2001), 143; Meinig, *Shaping of America, Volume 2*, 221-235.

Louisiana, and Alabama. Although many American immigrants sought and settled within U.S. holdings, others illegally crossed into and squatted on foreign lands. This was the case in Spanish West Florida, particularly between 1817 and 1821.

American interest in the Floridas was nothing new. The United States had for years negotiated with Spain to buy or trade for the peninsula. Many Americans felt that the transfer was destined to happen.<sup>70</sup> This belief was spread by a number of factors including: the increased acquisition of land by the U.S.; the propagation of the position by English and American newspapers and journals; decreased populations of Creek Indians in West Florida's borderlands; American vigilante engagements in Spanish West Florida; and the spread of American immigrants across the frontier. The predestined acquisition of the Floridas by the United States was a common theme in British and American periodicals, particularly after the War of 1812. This view no doubt propagated the same manifest destiny concept among readers. In 1820, an editor of the *Niles Weekly Register* expressed these sentiments:

The Floridas may be considered as naturally belonging to the United States-or, in other words, as rightfully to be possessed by the power holding the adjacent countries of Georgia, Alabama and Mississippi; for they are without value to any other, except as a means of annoyance to the former, in time of war, or for the encouragement of smuggling and piracy, in a season of peace. It is then accordant with every principle of reason and of right that they should be attached to the United States, who are bound to consult their own safety. As an ancient territory of Spain, though worse than useless to her, we are not prepared, just now, to assume the sovereignty on the broad plea of necessity....the Spanish government is evidently destitute of honor and honesty, and much talk about the

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<sup>70</sup> Gene A. Smith, "'To Conquer without War': The Philosophy of Jeffersonian Expansion," in *The Louisiana Purchase and Its Aftermath 1800-1830*, ed. Dolores Egger Labbè, The Louisiana Purchase Bicentennial Series in Louisiana History (Lafayette, Louisiana: Center for Louisiana Studies, University of Southwestern Louisiana, 1998), 12-13.

differences between us cannot be productive of good. (Niles Weekly Register, 22 January 1820)<sup>71</sup>

News of the proceedings between the United States and Spain, which included discussion of cession of the Floridas, was also highly publicized.<sup>72</sup>

The spread of pro-American propaganda probably encouraged settlers to move south and west into areas that the Spanish in Pensacola had valued as a buffer zone, areas that as late as 1812 belonged to the Creek Indians. For years, the Spanish relied on these regions to the north to serve as a barrier to American expansion.<sup>73</sup> By 1812, however, the Creeks had lost much of their land to the expansion movement and many were willing to take up arms against the United States. The Pensacola administration and local trading house, the Forbes Company, supported the Creeks with whatever guns and ammunition the town could spare.<sup>74</sup> When, in 1814, Spanish supplies proved to be lacking, the Indians appealed to English agents for supplies and troops to teach them. The British, who were at war with the United States at the time, saw this as an opportunity to attack the US from New Orleans through West Florida. This plan did not work, however, and American forces led by Andrew Jackson invaded Spanish West Florida, causing British troops to withdraw from Pensacola and ultimately from the Gulf coast.

Lacking in numbers and support, the Creeks were left to their own devices to fight a losing conflict.<sup>75</sup> By 1817 they had transferred most of their homeland to the United

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<sup>71</sup> *Niles Weekly Register* (Baltimore). 8, 22 January; 12 February; 18 March 1820. Part of this growing sentiment in England included that desire for the cession Cuba to Great Briton.

<sup>72</sup> *Ibid.*

<sup>73</sup> Frank L. Owsley, Jr., "Jackson's Capture of Pensacola," *Alabama Review* 19 (1966): 175-185.

<sup>74</sup> *Ibid.*; White, "The Forbes Company in Spanish West Florida," 274-275.

<sup>75</sup> Meinig, *Shaping of America*, Volume 2, 80-81.

States to be divided among the increasing wave of Anglo immigrants. Some Creeks relocated west peaceably while others defied U.S. authority and withdrew south into West Florida and harassed Americans living north of them in what was, until recently, Creek land. In 1818 Andrew Jackson and United States military forces returned to West Florida and suppressed Seminole activities. The latter eventually retreated to the Everglades Swamp in south Florida and by 1818 the Indian buffer zone above Pensacola was no more.

Jackson and his army, however, held Pensacola hostage for a time, much to the consternation of the town's inhabitants.<sup>76</sup> Claiming that the Spanish governor had allowed the Seminoles to camp near Pensacola and that the governor had provided the Indians with food, guns and ammunition, Jackson used this crisis as an excuse to invade West Florida and deport the Spanish governor to Havana along with the few Spanish troops stationed in Pensacola. Spanish officials, outraged at these developments, argued for war against the United States. U.S. officials in Washington, particularly John Quincy Adams, were already in proceedings with Spain for the transfer of the Floridas and convinced Jackson that his actions, if continued, would greatly hinder their efforts for a peaceful settlement.<sup>77</sup> After nearly nine months, Jackson retreated from the area and returned West Florida to the Spanish in early 1819. Spain sold the Floridas to the United States on 22 February 1819, and the formal transfer occurred on 17 July 1821, bringing an end to Spain's 300 year presence in North America.<sup>78</sup>

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<sup>76</sup> Crider, "Borderland Floridas", 247; William Earl Weeks, *John Quincy Adams and American Global Empire* (Lexington: University Press of Kentucky, 1992), 113.

<sup>77</sup> Paul E. Hoffman, *Florida's Frontiers* (Bloomington: Indiana University Press, 2002), 278-281; Weeks, *Adams*, 113.

<sup>78</sup> Coker and Parker, "Second Spanish Period," 164.

## Race and Class in Spanish Colonial America

Latin American scholars recognize the importance of class as a determining factor in colonial development.<sup>79</sup> As a Spanish colonial town, traditional attitudes regarding class structure pervaded life in Pensacola and are reflected in the community's land-use patterns and town plans. However, a brief discussion of Spanish colonial class structure is needed to provide context to the subsequent analysis of the relationship between resident classes and the town's morphology.

The term "class" understandably fosters much debate, as the social groupings formally and informally recognized by Spanish colonial society frequently fosters confusion rather than academic clarity.<sup>80</sup> However, colonial Spanish American class structure pertains predominantly to social perceptions related to race, traditional European estates, and economic status.<sup>81</sup> Through the colonial era, race gave way to socioeconomic influence as the major factor deciding class membership.

Lyle McAlister writes that traditional European medieval social perceptions and estates determined Spanish colonial society.<sup>82</sup> Old World estates included nobility, clerics, and commoners, each with their assigned place on the social scale. Through the middle ages, merchants and traders rose in power and influence and were increasingly recognized as nobility. Spanish colonists carried these perceptions with them to the New World, but conditions there soon facilitated divergence from Old World social order,

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<sup>79</sup> Chance, *Race and Class*, 126-143; L. N. McAlister, "Social Structure,"; Mörner, *Race Mixture*.

<sup>80</sup> McAlister, "Social Structure," 356; Mörner, *Race Mixture*, 57-61; Seed, "Social Dimensions."

<sup>81</sup> Chance, *Race and Class*, 189; Seed, "Social Dimensions," 574; Wagley, "The Concept of Social Race in the Americas," 155-174.

<sup>82</sup> McAlister, "Social Structure," 350.



caused primarily by Crown intervention into social structure and wide-scale miscegenation between Spanish, Indians, and Negros.<sup>83</sup>

McAlister promotes using the traditional estates, Spaniard-*casta*-Indian, when studying Spanish colonial development.<sup>84</sup> Miscegenation between Spaniards, Negro slaves, and Indians resulted in the mixed group commonly referred to as *castas*.<sup>85</sup> These three estates are much more identifiable, and therefore more conducive to scholarly study.<sup>86</sup> As conquerors, Spanish whites quickly assumed the social rank of nobility in the New World. They demanded respect from those they viewed of inferior classes, including persons of mixed race, Indians, and Negros. Spanish colonial law solidified their place at the top of the social order, and documentation validated their “whiteness.” *Castas* represented the broad common estate that included artisans and laborers. Whites generally deplored *castas* as “lazy, vicious, irresponsible, and a threat to social and political stability.”<sup>87</sup> Indians represented the lowest estate who, as the conquered group, quickly found themselves forced into occupations demanding intensive manual labor.

McAlister writes that New World class structure that included an upper class comprised of bureaucrats, clergymen, and owners of haciendas, mines, textile factories, and mercantile establishments.<sup>88</sup> The middle class consisted retail merchants, shopkeepers, artisans, professionals, small landowners, and lower-classed clerics and

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<sup>83</sup> Ibid., 353.

<sup>84</sup> Ibid., 357-360; McAlister uses the term “caste” which he writes is synonymous with the Spanish term “*casta*,” but was not the closed system associated with India. I utilize the term “*casta*” when referring to the mixed middle estate.

<sup>85</sup> Ibid., 354.

<sup>86</sup> Ibid., 353-356.

<sup>87</sup> Ibid., 358.

<sup>88</sup> Ibid., 362.

bureaucrats. The lowest class included of small shopkeepers, peddlers, non-guilded artisans, servants, laborers, and the unemployed.

Associations between class and race are easily identifiable in some cases, although problematic in others. Whites generally occupied the upper class, *castas* the middle, and Indians the lower. Miscegenation and intermarrying between members of classes were common occurrences and quickly led to complex socio-racial class structure. McAlister writes that the divide between whites and *castas* blurred during the eighteenth century due to increased population and miscegenation, settlement advancement, economic development, increased wealth, wide-spread social reform, and “infiltration of egalitarian doctrines from abroad.”<sup>89</sup> Many Creoles took advantage of new opportunities and emerged into the elite class. In general, Spanish colonial society class membership became less based on race and more based on social and economic prominence.

Other scholars view Old World estates as secondary factors in determining class structure. Magnus Mörner’s *Race Mixture in the History of Latin America* emphasizes the importance of race and miscegenation among Spanish colonial *castas*. Race refers to the various characteristics that set populations apart from others, including: skin and eye color, hair type, “anthropomorphic features, and sanguineous group.”<sup>90</sup> Mörner agrees with McAlister that Spaniards sought to implement Old World ideals in the New World, and that New World circumstances led to adaptation of the hierarchical estate system. However, Mörner writes that skin color mattered most and initial encounters between the three groups, Spaniards and Indians and Negros, facilitated categorizing into three succinct classes. With miscegenation came increasing racial combinations and the need

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<sup>89</sup> Ibid., 368.

<sup>90</sup> Mörner, *Race Mixture*, 3.

to fit these new populations within the hierarchy. “Theoretically, each group that could be racially defined would constitute a social stratum of its own.”<sup>91</sup> Mörner indicates that, despite the diluting effects of miscegenation, the basic class structure survived through the colonial era.<sup>92</sup> Mörner writes:

“The peninsulars then appear as the bureaucrats and merchants par excellence, the criollos as the large landowners, the mestizos as the artisans, shopkeepers, and tenants, the mulattoes as urban manual workers, and, finally, the Indians as community peasants and manpower for different kinds of heavy, unskilled labor. (Mörner, *Race Mixture*, 61).”<sup>93</sup>

John Chance and William Taylor witness the presence of a class structure in Spanish colonial Oaxaca that emphasizes economic status.<sup>94</sup> They write that estate systems promoted by McAlister and Mörner downplay the effects of economy on class structure in colonial Spanish America. Estate systems also are too rigid, and do not fully explain the racial heterogeneity apparent in many Spanish colonial societies. “Colonial societies are held together more by political coercion and economic interdependence than by a set of shared values and understandings.”<sup>95</sup>

Chance and Taylor show many common exceptions to class structure and advancement, particularly toward the end of the colonial era. Race, occupation, and political power served as the three main indicators of class membership. The value of racial perceptions decreased as economic and political power increased. Economic

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<sup>91</sup> *Ibid.*, 54.

<sup>92</sup> *Ibid.*, 7.

<sup>93</sup> *Ibid.*, 61.

<sup>94</sup> Chance and Taylor, “Estate and Class,” 454-487.

<sup>95</sup> *Ibid.*, 482.

structures based on “forced labor and head taxes (the prerogatives of political command) gradually gave way to a system of commercial capitalism operating through an open marketplace and cash nexus.”<sup>96</sup> These sorts of adjustments allowed members of traditionally lower classes to advance into the less restricted higher classes.

To illustrate this process, Chance and Taylor analyze colonial records of Antequera (now called Oaxaca) with specific emphasis given to race, occupation, and marital status. Creoles outnumbered all other races in Antequera at that time and consisted of American-born Spanish whites. *Mestizos*, mulattos, and Indians comprised the next numerous groups. *Peninsulars* and other groups accounted for smaller percentages of the population.

Chance and Taylor parse Antequera’s population into the three general classes based on occupations noted in census records: Elite, Middle, and Low, based on occupations.<sup>97</sup> The Elite class contains prominent regional merchants, high royal officials, high clergy, and large estate owners. The Middle class contains certain professionals, artisans, high-status artisans, small land owners, shopkeepers, and miners. The Lower class contains certain labor-intensive artisans, servants, the unemployed, and slaves.

Chance and Taylor show that by 1792, traditional racial hierarchies associated with estates did not explain class structure.<sup>98</sup> The elite class consisted almost exclusively of *Peninsulars*, but also contained a few Creoles. Departure from an estate system based on race existed with the prevalence of Creoles in the low-status artisan group, and

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<sup>96</sup> *Ibid.*, 485.

<sup>97</sup> *Ibid.*, 466-472.

<sup>98</sup> *Ibid.*, 473.

mulattos and *mestizos* in higher groups. Analysis of guild elections also point to the upward mobility of traditionally lower-class races, and show the formation of guilds associated with low-status occupations operated by Creole, *mestizo*, *castizo*, mulatto, and *pardo* masters. Marriage trends also confirm these findings, and reveal high numbers of men taking wives of traditionally inferior races.

Chance's book, *Race and Class in Colonial Oaxaca*, expands his research to show the evolution of Oaxaca throughout the colonial period to 1812.<sup>99</sup> Spaniards initially settled the Oaxaca Valley in 1522 shortly after the fall of Tenochtitlán. Early Antequera grew in a manner similar to other early Spanish colonial settlements with "a small core of Spaniards occupying a carefully planned grid of streets surrounded by a number of Indian settlements."<sup>100</sup> The town contained a plaza and important social, religious, political, and economic buildings. Local Indian populations who lived in nearby barrios provided the city's labor. Interests in dyestuffs, livestock, and mining facilitated population increases in Antequera, and ultimately fed socioeconomic diversity. By 1560, traditional Spaniard-Indian-Negro boundaries appeared blurred as more racial mixtures, or *castas*, appeared.

Chance stresses that Spanish colonial Antequera does not adhere to Sjoberg's preindustrial city model, primarily because Sjoberg does not take into account the "phenomenon of colonialism."<sup>101</sup> Chance points to the instability and downward mobility of Antequera's socioeconomic classes, and the interrelationship between merchants and elites as being the major divergence from Sjoberg's preindustrial model. Chance also concludes that by 1812 Antequera's competitive capitalist economy served

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<sup>99</sup> Chance, *Race and Class*.

<sup>100</sup> *Ibid.*, 36.

<sup>101</sup> *Ibid.*, 200.

as proof that economic factors commonly associated with the modern era emerged during the colonial period.

Patricia Seed's research of late-colonial Mexico City mirrors that of Chance and Taylor in many respects, and shows that the traditional social hierarchies proposed by McAlister and Mörner which emphasize race as the determining factor in class or estate membership do not explain class structure in that city.<sup>102</sup> Race decreased in importance as economic influence increased in determining class structure toward the end of the colonial era. Racial groups commonly associated with lower levels of Spanish colonial society increasingly advanced into occupations traditionally reserved for upper level races. Seed emphasizes that, despite the evolution of economic division of labor, Spanish colonial racial labels persisted through the colonial era, and "stressed the degree to which the mixed population approached white."<sup>103</sup>

Like Chance and Taylor, Seed analyzes late-colonial census data for evidence of class structure based on occupations and race. *Peninsulars* in Mexico City, like Antequera, dominated the elite class. However, Seed notes definite correlations between racial groups and their parent groups. Many Creoles, for instance, worked as merchants and shop owners, resembling their *Peninsular* parent group, although Creole merchants concentrated in retail while *Peninsular* merchants sold wholesale. *Mestizos* toiled in more laborious jobs similar to those of their parent group, the Indians. Many mulattos worked as servants, an occupation similar to their parent group, the slaves.

Seed also examines occupations held by women and children in late-colonial Mexico City and sees correlations between gender and race in occupational classes. In

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<sup>102</sup> Seed, "Social Dimensions," 569-606.

<sup>103</sup> *Ibid.*, 601.

general, higher percentages of lower-class races claimed to work, while very few *Peninsulars* worked. Black women comprised the highest percentage of female workers. Most women worked in laborious jobs associated with manual labor. Elite *Peninsulars* women worked in privileged or skilled occupations such as schoolmistress, spinner, or weaver. Most other women occupied jobs as servants. Children also comprised a substantial percentage of the city's work force. Most were Indian children who entered the work force earlier than other groups. Creole, castizo, and *mestizo* boys had the opportunity to enter apprenticeships with craftsmen, while Indian boys and girls of all races toiled as servants. *Peninsular* girls, however, could learn spinning or sewing.

Seed compares racial designations in census records and parish registers to illustrate social mobility. Both sources consistently labeled Spaniards as such, although racially-mixed populations frequently received erroneous labels. The latter often received classification as a lighter race. Seed notes that most errors correspond to individuals who work in jobs that were commonly associated with higher racial classes. She concludes that social and racial mobility explains these errors.<sup>104</sup>

John Kicza provides one of the most comprehensive analyses of elites in colonial Mexico City between 1770 and 1821.<sup>105</sup> Kicza observes that certain "Great Families" differed from other members of the elite class by their enormous wealth, diverse investments and holdings, successful business practices, social honors, influence with the Spanish realm, ties to other great families, and traditional elite status. Great Families accumulated wealth early in the colonial period through ventures in agriculture, mining, and commerce, and maintained it in subsequent generations through diversification into

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<sup>104</sup> *Ibid.*, 598.

<sup>105</sup> Kicza, "The Great Families of Mexico," 429-457; Kicza, *Colonial Entrepreneurs*.

other economic activities. Only birthright and marriage provided entrance into this class. Marriage ties with other great families assured the longevity of this class and further added to their influence. “The Great Families of Mexico City lived in mansions clustered around the center of the city.”<sup>106</sup>

Kicza notes the difficulty in recognizing the members of the elite class from the historical records. Being Spanish, or white, did not necessarily equate to high status. Neither did it correlate with exemption from manual labor. Rather, most Spaniards in colonial Mexico City could be considered as belonging to lower classes and most also worked at manual tasks. The titles “Don” and “Doña,” commonly associated with Spanish colonial elites are also poor indicators because of their widespread use toward the end of the colonial period. “In general, in the business world any person not serving as a clerk or performing manual labor under the direction of another person could lay claim to use of this term.”<sup>107</sup> The ranks of military officers also contained increasing numbers of non-elites.

Susan M. Socolow provides a synopsis of Spanish colonial class structure which seems to corroborate the analyses of Chance and Taylor, Seed, and Kicza.<sup>108</sup> Socolow writes that her percentages, shown in Table 1, apply to all colonial Latin America and are presented as approximations. Despite lack of sources, inconsistent census data, and local

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<sup>106</sup> Kicza, “The Great Families of Mexico,” 430.

<sup>107</sup> Ibid., 431.

<sup>108</sup> Susan Socolow, “Introduction,” in *Cities and Society in Colonial Latin America*, ed. Louisa Schell Hoberman and Susan Migden Socolow, (Albuquerque: University of New Mexico Press, 1986), 15-16.



variations, these figures “do suggest that the colonial elite never rose to more than 15 percent of the urban population, while the general populace probably was 85 percent.”<sup>109</sup>

Table 1. Socolow’s colonial Latin American occupational classes.

Occupational Group	Min	Max
Large Estate Owner	1.00%	1.00%
Government Bureaucrats (elite)	1.00%	1.00%
High Clergy	0.40%	0.40%
Merchants	0.50%	3.00%
Military (elite)	0.30%	0.30%
Small Landowners	3.50%	8.00%
Government Bureaucrats (middle)	1.00%	2.00%
Religious Order	3.00%	4.00%
Secular Priests	3.00%	4.00%
Professionals	1.00%	1.00%
Shopkeepers	3.00%	11.00%
Artisans/Skilled Workers	20.00%	45.00%
Unskilled Laborers/Servants	30.00%	40.00%
Poor	5.00%	10.00%

Source: Susan Socolow, “Introduction,” in *Cities and Society in Colonial Latin America*, ed. Louisa Schell Hoberman and Susan Migden Socolow, (Albuquerque: University of New Mexico Press, 1986), 15-16.

### Urban Morphology and Morphogenesis

Urban morphogenetics provide the means for studying Spanish colonial Pensacola development by illustrating the changes in community form between 1781 and 1821 as the result of particular processes. Regarding morphogenesis, Whitehand writes that “central to the purpose of this research is the reconstruction of the historical development of the physical configurations of urban areas.”<sup>110</sup> Methods vary, but generally include research of one or more of the following three elements: land-use areas, town plans, and building forms. When analyzed through the course of a town’s history, these elements provide clues of the social, political, cultural, and economic forces at work within urban areas.

<sup>109</sup> Ibid., 16.

<sup>110</sup> J.W.R. Whitehand, “Recent Advances in Urban Morphology,” *Urban Studies* 29 (1992): 624; Burkhard Hofmeister, “The Study of Urban Form in Germany,” *Urban Morphology* 8 (2004): 5.

Urban morphology can be traced to the end of the nineteenth century to the work of German geographer, Otto Schlüter, whose interests in urban development sprang from his curiosity of settlement geography.<sup>111</sup> Schlüter presented his ‘urban landscape’ (*Stadtlandschaft*) in terms of the physical forms and general appearance of towns which, he viewed, should be the main research subject of urban geography.<sup>112</sup> “Thus a marked morphological emphasis was imparted to human geography in general and urban geography in particular.”<sup>113</sup> While at the University of Halle, Schlüter directed dissertation research of many students who continued his research of settlement geography. Walter Geisler’s examination of the urban morphology of Danzig was one of the more important examples. Geisler’s dissertation and subsequent book classified and compared the morphology of German towns by focusing on their sites, town plans, and building types.<sup>114</sup>

Due to the relative youth of the field, only a small body of knowledge existed pertaining to urban geography and urban morphology by the inter-war years.<sup>115</sup> Growing criticism existed among scholars, such as Hans Bobek, who viewed morphological studies as focusing too much on forms in landscapes and not giving enough attention to

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<sup>111</sup> J.W.R. Whitehand, *The Changing Face of Cities: A Study of Development Cycles and Urban Form*, The Institute of British Geographers Special Publications Series 21, (Oxford: Basil Blackwell, 1987), 2-3; J.W.R. Whitehand, “Recent Advances,” 624.

<sup>112</sup> J.W.R. Whitehand, “Background to the Urban Morphogenetic Tradition,” in J.W.R. Whitehand, ed. *The Urban Landscape: Historical Development and Management, Papers by M.R.G. Conzen*, (London: Academic Press, 1981), 2-3; Whitehand, *The Changing Face of Cities*, 3.

<sup>113</sup> Whitehand, “Background,” 3.

<sup>114</sup> Walter Geisler, *Die deutsche Stadt: ein Beitrag zur Morphologie der Kulturlandschaft*, (Stuttgart: Englehorn, 1924); Hofmeister, “The Study of Urban Form in Germany,” 3-4.

<sup>115</sup> Whitehand, “Background,” 6; Hofmeister, “The Study of Urban Form in Germany,” 7-8.

the various processes and functions that produced those forms. These factors served to diminish attention given to the urban morphology studies through the end of the Second World War.

M.R.G. Conzen is credited with introducing the study of urban morphology into Great Britain and English-speaking countries.<sup>116</sup> Conzen studied at the University of Berlin through the late-1920s when the Geographical Institute included a wide range of intellectuals and when German speaking countries were generally sympathetic to settlement studies and urban geography. Whitehand writes that the training that the University provided was important to geography for five reasons. These included:

first, intensive and accurate observation of geographical phenomena both in the field and on maps; secondly, the search for the processes producing such phenomena and the underlying forces involved; thirdly, unambiguous conceptualization of observed phenomena on the basis of these processes and forces and in readiness for testing and improvement by comparative study; fourthly, the devising of an appropriate cartographic expression for concepts formed; and finally, the maintenance of an interdisciplinary perspective on any geographical problem. (Whitehand, 1987, 9)

While at the University of Berlin, Conzen acquired an interdisciplinary approach of the study of settlements and urban landscapes that drew from historical geography, economic history, and geology. When Conzen immigrated to Great Britain in 1933, he introduced many of the German concepts of urban geography to the English speaking world. His morphological study of English townscapes culminated in his 1960 publication, *Alnwick, Northumberland: A Study in Town-Plan Analysis*, which analyzed the morphological evolution of the town. More importantly, the work established the “basic framework of principles

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<sup>116</sup> Whitehand, *The Urban Landscape*, 8; Hofmeister, “The Study of Urban Form in Germany,” 9.

for urban morphology” by focusing on changes noticed in three basic urban elements—town plans, building forms, and land-use.<sup>117</sup> Equally important were the underlying processes that led to the formation of towns.

Whitehand writes that, in America, urban morphology has developed from cultural geography as a weak field within urban geography, and has “arguably provided the only true urban morphology within America.”<sup>118</sup> This subfield had methods that resembled those of the rural settlement geography advocated by Carl Sauer at Berkeley, and focused on the occurrences and spread of architectural styles. Examples include Leighly’s study on Swedish and Baltic urban structures, Spencer on Chinese residences, Rickert on house facades in the Northeast United States, Bastian on the diffusion of prairie style dwellings, and Jackle on revival architecture.<sup>119</sup>

#### Land-Use Models

Although Conzenian morphogenetics encompasses the three subjects of town planning, building design, and land-use patterns, the primary concern in America has focused heavily on the latter, frequently at the expense of the others.<sup>120</sup> Scholars among

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<sup>117</sup> Whitehand, *The Urban Landscape*, 12-13; Whitehand, *The Changing Face of Cities*, 6.

<sup>118</sup> Whitehand, *The Changing Face of Cities*, 8; Hofmeister, “The Study of Urban Form in Germany,” 9-10.

<sup>119</sup> J.B. Leighly, “The Towns of Mälardalen in Sweden: a Study in Urban Morphology,” *University of California Publications in Geography*, 3 (1928): 1-134; J.E. Spencer, “The Houses of the Chinese,” *Geographical Review* 37 (1947): 254-273; J.E. Rickert, “House Facades of the Northeastern United States; a Tool of Geographic Analysis,” *Annals of the Association of American Geographers* 57 (1967): 211-238; R.W. Bastian, “The Prairie Style House: Spatial Diffusion of a Minor Design,” *Journal of Cultural Geography* 1 (1980): 50-65; J.A. Jackle, “Twentieth Century Revival Architecture and the Gentry,” *Journal of Cultural Geography* 4 (1983): 28-43.

<sup>120</sup> Whitehand, *The Changing Face of Cities*, 8-9.

this group have analyzed urban forms in terms of where people worked and lived and devised models that attempted to explain residential patterns. The more prominent members of this group included sociologist Ernest Burgess, and economist Homer Hoyt. Burgess attempted to explain the internal structure of cities and the development of residential areas in terms of theories entrenched in human ecology.<sup>121</sup> He examined early twentieth-century Chicago and witnessed a series of concentric zones radiating from the city's core; each zone housing a particular type of resident-worker. The city core contained businesses, and zones nearest the core attracted lower-class resident-workers that walked to work. Outlying zones housed more prosperous residents who commuted to work. Burgess, borrowing from his studies of plant and animal ecology, postulated that cities grew as zones migrating through the core and toward the periphery through a series of invasions and successions. As their situation improved, resident-workers of inner zones relinquished their homes in favor of improved living quarters further away from the central business district. Early twentieth century immigration into city cores heavily influenced Burgess's model, as did increased inner-city construction and improved transportation networks.

The work of Homer Hoyt complemented that of Burgess's by focusing on residential rent patterns in twenty-five cities in various U.S. regions.<sup>122</sup> The major

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<sup>121</sup> Burgess, *The Growth of the City*, 47-63; Kathleen Neils Conzen, "Patterns of Residency in Early Milwaukee," in *The New Urban History: Quantitative Explorations by American Historians*, ed. Leo F. Schnore (Princeton: Princeton University Press, 1975), 147; Karl S. Zimmerer, "Ecology as Cornerstone and Chimera in Human Geography," in *Concepts in Human Geography*, ed. Carville Earle, Kent Mathewson, and Martin S. Kenzer (Lanham, Maryland: Rowmand & Littlefield Publishers, Inc., 1996), 166.

<sup>122</sup> M. G. Bradford and W. A. Kent, *Human Geography: Theories and Their Application* (London: Oxford University Press, 1977), 72-73; H. H. Hoyt, *The Structure and Growth*

difference between Hoyt's theories and those proposed by Burgess was that Hoyt saw cities developing as a result of voluntary social segregation of the wealthy. Hoyt argued that these residents determined the location of residential areas within cities as they sought out high-rent neighborhoods as far away from low-rent areas as possible. High-rent areas were not at the city's outer limits, as Burgess had suggested. Rather, the affluent lived in sectors that tended to be adjacent to faster transportation corridors, resulting in neighborhoods that were irregular rectangular in shape extending outward from the city core. High-rent neighborhoods occupied the most valuable land in the city because they were elevated, well-drained, and free from obstructions. As these areas grew, they attracted increasing numbers of affluent people, businesses, and real estate promoters. Their rectilinear shape and perpendicular orientation to the core affected the shape and orientation of adjacent sectors.

Land-use studies have generated much more discussion than the cultural geography group within urban geography, and have led to the widespread popularity and application of land-use analysis to urban morphology, and the development of models that attempt to explain activity areas within cities.<sup>123</sup> Harris and Ullman, for example, developed a model of larger urban centers that contained multiple nuclei and noted that the majority of large U.S. cities had many different centers that were once small towns.<sup>124</sup>

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*of Residential Neighborhoods in American Cities* (Washington: Federal Housing Administration, 1939); John U. Marshall, "Formal and Narrative Models and Their Value as Instruments of Understanding," in *Concepts in Human Geography*, ed. Carville Earle, Kent Mathewson, and Martin S. Kenzer (Lanham, Maryland: Rowman & Littlefield Publishers, Inc., 1996), 305; D. I. Scargille, *The Form of Cities* (New York: St. Martin Press, 1979), 40-42.

<sup>123</sup> Whitehand, *The Changing Face of Cities*, 8-9.

<sup>124</sup> C. D. Harris and E. L. Ullman, "The Nature of Cities," *Annals of the American Academy of Political Science* 242 (1945); Scargille, *Form*, 42-43.

A number of factors facilitated the growth of large urban areas, including: the association and cooperation of similar specialized activities, the repelling effect of certain activities on others, and affordability of land. Some nuclei were quite old, while others were newly-formed, the result of grouping of certain urban functions into specific locations within the city. Although Burgess and Hoyt noted some of these factors, Harris and Ullman emphasized their importance in the growth and the eventual merging of separate nuclei within the city. The resulting city form resembled more of a patchwork than zones or sectors.

#### Urban Land-Use Models of Colonial Latin America

Latin American scholars have consistently portrayed Spanish colonial residential patterns in one of two manners. The older, more prevalent portrayal stems from land-use models and involves a residential section that is stratified with social class decreasing away from the city core. More in-depth research has revealed that Spanish colonial class structure was more complex than is traditionally portrayed and suggests that early attempts to characterize the human ecology of Spanish colonial cities probably oversimplified urban residential patterns. These observations have produced the second pattern which, while similar to the first in that it entails elites clustered near the plaza, incorporates a mixture of classes in the adjacent zones.<sup>125</sup>

The development of land-use models pertaining to colonial Latin American towns evolved in large part from the human ecological tenets proposed by Burgess and tended

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<sup>125</sup> Socolow and Johnson, "Urbanization in Colonial Latin America," 35-36; Chance, "The Colonial Latin American City," 211-228.

to focus on residential patterns.<sup>126</sup> The simplistic design and general scope of the Burgess model seemed to fit well with the basic urban form of early Latin American towns. Scholars soon noted, however, that residential patterns in Spanish colonial towns included the wealthiest and most powerful families living nearest the core and less prominent residents living away from the core, a pattern that resembled the opposite of that proposed by Burgess. As such, some referred to this urban pattern as the “Inverse Burgess” model. Examples were noted throughout colonial Latin America, and included Mérida, Mexico City, Oaxaca City, and Guatemala City.<sup>127</sup>

Gideon Sjoberg devised another popular land-use model that attempted to explain the form of historic urban areas, a model that has been applied numerous times on colonial Latin American urban areas.<sup>128</sup> Sjoberg’s preindustrial city model resembled the Inverse Burgess in many respects, including the town’s central focus and residential grouping of classes. The social arrangement of preindustrial cities placed the elite near the city’s administrative and religious core at the heart of the city.<sup>129</sup> The core was surrounded by the highest and most elaborate buildings, and city streets converged on this area. Lower classes lived “scattered centrifugally toward the city’s periphery” in smaller and less comfortable dwellings.<sup>130</sup>

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<sup>126</sup> Michael P. Conzen, “Historical Geography: Changing Spatial Structure and Social Patterns of Western Cities,” *Progress in Human Geography* 7 (1983): 97-98.

<sup>127</sup> Hansen, “Ecology of a Latin American City,” 124-142; Norman S. Hayner, “Mexico City: Its Growth and Configuration,” *American Journal of Sociology* 50 (1945): 295-304; Norman S. Hayner, “Differential Social Change in a Mexican Town,” *Social Forces* 36 (1948): 381-390; Caplow, “Social Ecology of Guatemala City,” 113-133.

<sup>128</sup> Chance, “The Colonial Latin American City,” 211-228; Griffin, *Mullet on the Beach*, 135-136; Morse, “A Prolegomenon,” 359-362; Sjoberg, *The Preindustrial City*.

<sup>129</sup> Sjoberg, *The Preindustrial City*, 323.

<sup>130</sup> *Ibid.*



Sjoberg's preindustrial city model incited much criticism, primarily for generalizing and minimizing urban structure and processes.<sup>131</sup> Points of contention included: his ignoring the impact of industry that utilized wind and water power, his exaggeration of restricted upward social mobility, his simplification of class structure, his lack of comparisons between cities, and his haphazard portrayal of city plans. Other scholars noted that Sjoberg's model failed to take account of colonialism and the resulting cultural interplay between societies.<sup>132</sup> Chance writes that the main flaw in Sjoberg's model as it applies to colonial Latin American towns is its "failure to acknowledge commercial capitalism as a socioeconomic system prior to the industrial revolution of the 19<sup>th</sup> century."<sup>133</sup>

More in-depth analysis of colonial Spanish towns and their residents led to revisions in traditional land-use models that posited class degradation away from town cores. A second residential pattern began to emerge in the literature in the late-1970s as more analytical research showed that "the rigidity of residential segregation had broken down by the late-Bourbon era."<sup>134</sup> Greenow writes that "the notion that wealthy white families all lived in one area near the main plaza in extended families, while nuclear families and solitaires were grouped in concentric zones peculiar to their race and class

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<sup>131</sup> Cox, "Preindustrial City Reconsidered," 133-144; J. Langston, "Residential Patterns in Pre-Industrial Cities: Some Case Studies from Seventeenth-Century Britain," *Transactions of the Institute of British Geographers* 65 (1975): 1-27; Wheatley, "Reflections on Sjoberg," 163.

<sup>132</sup> T. G. McGee, *The Urbanization Process in the Third World* (London: Bell, 1971), 50.

<sup>133</sup> Chance, "The Colonial Latin American City," 225.

<sup>134</sup> Rodney D. Anderson, "Race and Social Stratification: A Comparison of Working-class Spaniards, Indians, and Castas in Guadalajara, Mexico in 1821," *Hispanic American Historical Review* 68 (1988): 228.

was inaccurate in most cases.”<sup>135</sup> The second pattern concurred that elites clustered in opulent dwellings near the centers of Spanish colonial towns, but that surrounding areas contained a mixture of classes with lesser degrees of groupings. House quality also varied from lot to lot and “sometimes shacks held place on the same block as a mansion.”<sup>136</sup> John Chance’s research shows that Antequera exhibited this more mixed residential pattern. Chance relies on two statistical measures common to sociological research, including the index of dissimilarity between two groups, and the index of segregation between one group and the entire population.<sup>137</sup> By 1792 in Antequera, “class had become just as important as race as a determinant of social status in the stratification system.”<sup>138</sup> Rodney Anderson notes similar patterns in 1821 Guadalajara, but also acknowledges that “physical and social circumstances of the residents...varied considerably” with many renting rooms or apartments in or near other households.<sup>139</sup>

Although residential class mixing occurred from house to house, households with similar composition were frequently clustered in blocks by the late-colonial era.<sup>140</sup> Groups of households of solitaires, nuclear families, and extended families have been identified in town blocks in Córdoba, Cartagena, Durango, and Mexico City.<sup>141</sup> The reasons for this phenomenon pertain to traditional family values. Changes in colonial Latin American family structure from birth, death, marriage, and other factors did not

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<sup>135</sup> Greenow, “Microgeographic Analysis,” 274.

<sup>136</sup> Kinsbruner, *The Colonial Spanish-American City*, 54.

<sup>137</sup> Chance, “Ecology of Race,” 93-118; Chance, “The Colonial Latin American City,” 211-228.

<sup>138</sup> *Ibid.*, 114-115.

<sup>139</sup> Anderson, “Race and Social Stratification,” 228

<sup>140</sup> Greenow, “Microgeographic Analysis,” 274.

<sup>141</sup> *Ibid.*

necessarily equate to members leaving households. More commonly, families adjusted households to accommodate these changes.

There are many concerns among cultural geographers regarding the utility of land-use models in urban morphology studies, concerns that lead many to question whether or not developing generalized and all-encompassing urban models of land-use can and should be attempted.<sup>142</sup> Perhaps the most disturbing critique is that urban land-use studies have tended to overemphasize quantitative methods and general applications at the cost of cultural meaning. “But in the 1960s and 1970s, historical urban geography was practiced by researchers whose approaches were more urban than historical, more ecological or sociological than cultural—disciples of the quantitative revolution, whose language and technical orientation alienated them from researchers into landscape and, as critically, from the growing army of urban historians.”<sup>143</sup> Others call for equal attention to the traditional morphogenetic elements such as town plans as having the potential to provide a more informed perspective on urban development.<sup>144</sup>

### The Spanish Colonial Town Grid

Town plans, according to Conzen, are “of fundamental importance in providing the basic framework” of urban areas and are “the most conservative form complex, as its street system, and degree of discipline this imposes as an access pattern on the associated

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<sup>142</sup> Bruce London, “The Social Ecology of Latin American cities: recent evidence,” in *Urban Patterns: Studies in Human Ecology*, ed. George A. Theodorson (University Park, Pennsylvania: Pennsylvania State University Press, 1982), 374-378.

<sup>143</sup> Richard Dennis and Hugh Prince, “Research in British Urban Historical Geography,” in *Urban Historical Geography: Recent Progress in Britain and Germany*, ed. Dietrich Denecke and Gareth Shaw (Cambridge: Cambridge University Press, 1988), 11.

<sup>144</sup> Whitehand, *The Changing Face of Cities*, 8

plot pattern, is a fixed commitment of the whole urban community.”<sup>145</sup> These provide the elements for analyzing transportation systems, land ownership trends, and architectural style distribution.

Most scholars agree that the predominant and influential town plan in Spanish colonial urban areas was the town grid. The plan’s uniform simplicity and ease of implementation led to its widespread application in cities throughout the Spanish New World. “Its impact upon urban form in Spanish America and the Philippines is beyond dispute” and many scholars have studied the effects of the grid on Spanish urban development.<sup>146</sup>

The Spanish colonial town grid afforded the means of controlling colonial development by creating urban centers through which Iberian customs and ideals were spread into the New World.<sup>147</sup> The grid was devised in a series of ordinances laid out in

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<sup>145</sup> M.R.G. Conzen, “The Plan Analysis of an English City Centre,” in J.W.R. Whitehand, ed. *The Urban Landscape: Historical Development and Management, Papers by M.R.G. Conzen*, (London: Academic Press, 1981), 25; M.R.G. Conzen, “Morphogenesis, Morphological Regions and Secular Human Agency in the Historic Townscape, as Exemplified by Ludlow,” in *Urban Historical Geography: Recent Progress in Britain and Germany*, ed. Dietrich Denecke and Gareth Shaw, (Cambridge: Cambridge University Press, 1988), 255.

<sup>146</sup> Robert R. Reed, *Colonial Manila: The Context of Hispanic Urbanism and Process of Morphogenesis* (Berkeley: University of California Press, 1978), 39; Stanislawski, “Origin and Spread,” 105-120; Stanislawski, “Early Spanish Town Planning,” 94-105; Richard M. Morse, “Urban Development,” in *Colonial Spanish America*, ed. Leslie Bethell (London: Cambridge University Press, 1987), 165-202; Crouch, Garr, and Mundigo, *Spanish City Planning in North America*.

<sup>147</sup> Joseph L. Scarpaci, *Plazas and Barrios* (Tucson: The University of Arizona Press, 2005), 43-48; Hawthorn and Hawthorn. “The Shape of a City,” 87-91; Sol Tax, “The Municipios of the Midwestern Highlands of Guatemala,” *American Anthropologist* 39 (1937), 423-444; Markman, “The Gridiron Town,” 471-490; Morse, “The Urban Development of Colonial Spanish America,” 67-104; Setha M. Low, “Cultural Meaning of the Plaza: The History of the Spanish-American Gridplan-plaza Urban Design,” in *The Cultural Meaning of Urban Space*, ed. Robert Rotenberg and Gary McDonogh, (Westport, Connecticut: Bergin and Garvey, 1993), 75-94.

the Law of the Indies between 1513 and 1573 to curb the chaotic settlement efforts of conquistadors, and provided New World administrators the means by which they would choose sites and construct towns.<sup>148</sup> Before 1513, the Crown stance was to allow conquistadors a great amount of freedom in establishing and maintaining settlements. The haphazard and disorganized settlement pattern that emerged, however, led Philip II to seek improved methods of managing New World development. The ordinances in the Law of the Indies included formalized urban plan in the Law of the Indies which represented the Crown's attempt to extend its authority into colonial America.

The ordinances stressed the importance of site location for urban settlements. Optimal sites would benefit from moderate winds, natural defenses, fertile soils, and fresh water.<sup>149</sup> The town design provided specific details pertaining to the construction of the central plaza, including its size and position in relation to local wind patterns. Religious, administrative, and military buildings were positioned near the plaza, and conveyed Spanish and Catholic authority. Slaughterhouses, tanneries, and other enterprises that produced noxious odors or filth could be located just beyond town limits and down wind so as not to interfere with the clean and prosperous image of the town. The plan also provided common spaces for recreation and pasturage, and hierarchy of streets arranged in a grid extended from the plaza into the residential areas. The ordinances required that merchants be allocated lots close to the plaza, and the remaining residential lots be distributed through a lottery. Despite the stern tone of the ordinances governing urban design, Spanish town planners frequently encountered local conditions

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<sup>148</sup> Reed, *Colonial Manila*, 38-39.

<sup>149</sup> Reed, "From Suprabarangay to Colonial Capital," 61-62; Kinsbruner, *The Colonial Spanish-American City*, 23-29.

such as preexisting Native American buildings, streets, and canals, which frequently forced them to revise the plan.<sup>150</sup>

The earliest implementation of the New World urban design can be traced to Mexico City in 1524. Cortés employed elements later codified in the ordinance when constructing his new city on top of the Aztec stronghold of Tenochtitlán, elements that included a central urban focus and grid design. Other early examples of Spanish colonial towns that employed a grid pattern included Lima, Bogotá, La Paz, and Puebla, and the coastal communities of Havana, San Juan, Cartagena, and Buenos Aires.<sup>151</sup>

### Summary

Despite recent scholarship that has shed much light on colonial Spanish American society, limited understanding exists on the relationship between class and urban form. Late-colonial Spanish Pensacola provides an excellent opportunity to examine the urban morphogenesis of the community as it pertained to socioeconomic class structure, resident and landowning trends, and town plan changes. Spanish documents provide the needed demographic information, and Spanish maps and plans depict the location of residential house lots across the town. Real estate records provide the necessary link between census data and mapped house lot locations. By analyzing these records this dissertation will contribute to the literature on late-colonial Spanish urban development.

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<sup>150</sup> Edward E. Crain, *Historic Architecture in the Caribbean Islands* (Gainesville: University of Florida Press, 1994), 29; Stanislawski, “The Origin and Spread of the Grid-pattern Town,” 36, 105-106.

<sup>151</sup> Kinsbruner, *The Colonial Spanish-American City*, 27.

## **CHAPTER 3.**

### **MATERIALS AND METHODS**

The primary concern of this research is to reveal Pensacola's morphogenesis between 1721 and 1821 and to show the mixed socioeconomic residential clustering that persisted in the community. Examinations of census records, town maps, and plans illuminate class structure among the town's population, and cluster analysis of real estate transactions reveals the nearly homogenous mix of classes through the residential section. This chapter provides a summary of methods and materials used to reach these conclusions.

To facilitate more efficient research, much of the information has been incorporated into a Geographic Information System (GIS) and enterprise database, more fully explained in Appendix 3. The GIS allows the researcher to explore many of the research questions in a timely manner and present findings in esthetically pleasing thematic maps. Many of the graphics provided in this report emphasize key points and were developed during analysis and created from the GIS.

#### **Materials**

Historical, geographical and environmental information for this study originates from Spanish colonial censuses, surveys, and United States Land Office proceedings. Spanish colonial census records of the period provide demographic data vital to this research. Most censuses of West Florida contain information pertaining to Pensacola free civilians, disregarding local military personnel, slaves, and those living outside town limits. Of the many scholars who have studied Pensacola's census records, Coker and

Inglis provide the most useful analysis.<sup>152</sup> In their 1980 publication, *The Spanish Censuses of Pensacola, 1784-1820: A Genealogical Guide to Spanish Pensacola*, historians Coker and Inglis identified and translated nine censuses of second Spanish period Pensacola. This dissertation relies heavily on their work.

Five censuses provide the most useful data pertaining to the community’s social structure. Table 2 shows a summary of the type of information provided in five census records used in this study. The 1784 and 1820 censuses contain the most elaborate data for the town’s population, while the 1802, 1805, and 1819 censuses afford only a synopsis of the entire population at that time.

Table 2. Pensacola census quality.

	1784 CENSUS	1802 CENSUS	1805 CENSUS	1819 CENSUS	1820 CENSUS
<b>RACIAL GROUPS</b>	White/Non-White	White/Mulatto/Negro	White/Mulatto/Negro	White/Non-White	White/Mulatto/Negro/Mestizo
<b>FREE/SLAVE</b>	Free/Slave	Free/Slave	Free/Slave	Free/Slave	Free only
<b>GENDER</b>	Male/Female	Male/Female	Male/Female	Male/Female	Male/Female
<b>AGE GROUPS</b>	individual ages	3	6	3	individual ages
<b>MARITAL STATUS</b>	N/A	N/A	Single/Married/Widowed	N/A	Single/Married/Widowed
<b>MATRICULA</b>	yes	N/A	N/A	N/A	yes
<b>NAMES</b>	yes	N/A	N/A	N/A	yes
<b>HOUSEHOLD</b>	yes	N/A	N/A	N/A	yes
<b>BIRTHPLACE</b>	N/A	N/A	N/A	N/A	yes
<b>OCCUPATION</b>	N/A	N/A	N/A	N/A	yes

Sources: 1784, *Padrón General, Archivo General de Indias (AGI). Papeles de Cuba (PC), legajo 2360*, Seville; 1802, *AGI, PC, legajo 59*; 1805, *AGI, PC, legajo 142-B*; 1819, *AGI, PC, legajo 1876-B*; 1820, *AGI, PC, legajo 1944*; all cited in Coker and Inglis, *Spanish Censuses*.

American land records provide the bulk of historical information regarding land transactions from 1783 to 1821.<sup>153</sup> West Florida Land Commission officials compiled these records after the United States acquired the Floridas in 1821, and translated most from Spanish into English to facilitate assessing the validity of Spanish land claims. The

<sup>152</sup> Coker and Inglis, *The Spanish Censuses of Pensacola*; Jack D. L. Holmes, “Pensacola Settlers, 1781-1821,” 26. Manuscript on file at the Historic Pensacola Preservation Board. cited in William S. Coker and G. Douglas Inglis, *The Spanish Censuses of Pensacola, 1784-1820: A Genealogical Guide to Spanish Pensacola*, (Pensacola: The Perdido Bay Press, 1980), 31-32; Tinajero, “Estudio De La Población De Pensacola,” 537-561

<sup>153</sup> Proceedings of the Land Commission in West Florida.



Land Commission records are especially valuable because the original Spanish land deeds are lost or scattered among several repositories.<sup>154</sup> The Land Commission records include in excess of two thousand real estate transactions in Spanish Pensacola, and over three hundred in the surrounding countryside. The records contain a wealth of information, including: lot numbers, structure type, buyer names, seller names, transaction dates, and purchase prices. They also include other data, such as race, military affiliation, and civic position. It is important to note that American land commissioners translated “peso” as “dollar”, but retained the transaction amount. For instance, for a value of 50 pesos in a Spanish land deed, the corresponding American translation would be 50 dollars.

The American West Florida Land Commission recorded and translated the variables used in this study in a fairly accurate and consistent manner. The records also appear remarkably complete, containing a translation of nearly every land transaction. The temporal completeness of the Land Commission records, the consistent manner in which they were compiled, and the elaborate wealth of information they contained greatly facilitated this research.

Inconsistencies exist among the English translations of the Spanish land records that prohibit the use of certain information. Appendix 1 provides a sample of a Spanish colonial house lot deed and its American English translation. The Spanish version adheres to a descriptive template designed to capture the information mentioned above, while paying homage to local and regional administrators. The American translation obviously does not equate to a word-for-word translation, but rather represents another

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<sup>154</sup> John E. Walker, “The Pintado Papers,” *Surveying and Mapping* 35 (1975), 160-166.

template used by the American commission to expedite the land validation process. Commissioners took certain liberties when recording information. For example, in land deed provided in Appendix 1, the commissioners wrote that the lot's structure was a "low wooden house" while the original Spanish deed described the house as being made of brick (*ladrillo*).

The spatial information for this study is derived from historic plans and maps of colonial Pensacola. American Territorial administrators decided to maintain Spanish colonial land boundaries on validated claims. This is true of house lots in Pensacola and land grants in rural areas beyond the town. This important fact allows the integration of cultural data previously mentioned into the GIS so that complex spatial queries can be performed with relative ease.

The 1799 map and 1827 plan of Pensacola, shown in Figures 13 and 14, were chosen for inclusion in this study because they most accurately portrays the evolution of the town between 1781 and 1821, and emphasize the fact that Pensacola's design experienced very few changes through the period. Most importantly, house lot numbers in the Land Commission records correspond with spatial information on both plans. These were digitized and converted into a GIS polygon feature class and each house lot polygon retained its property number.

### **Local Demography and Class**

Before attempting to study the residential spatial patterns of Pensacola's socioeconomic classes, it is necessary to define the nature of the town's class structure. Latin American scholars generally associate "class" with physical appearance, economic

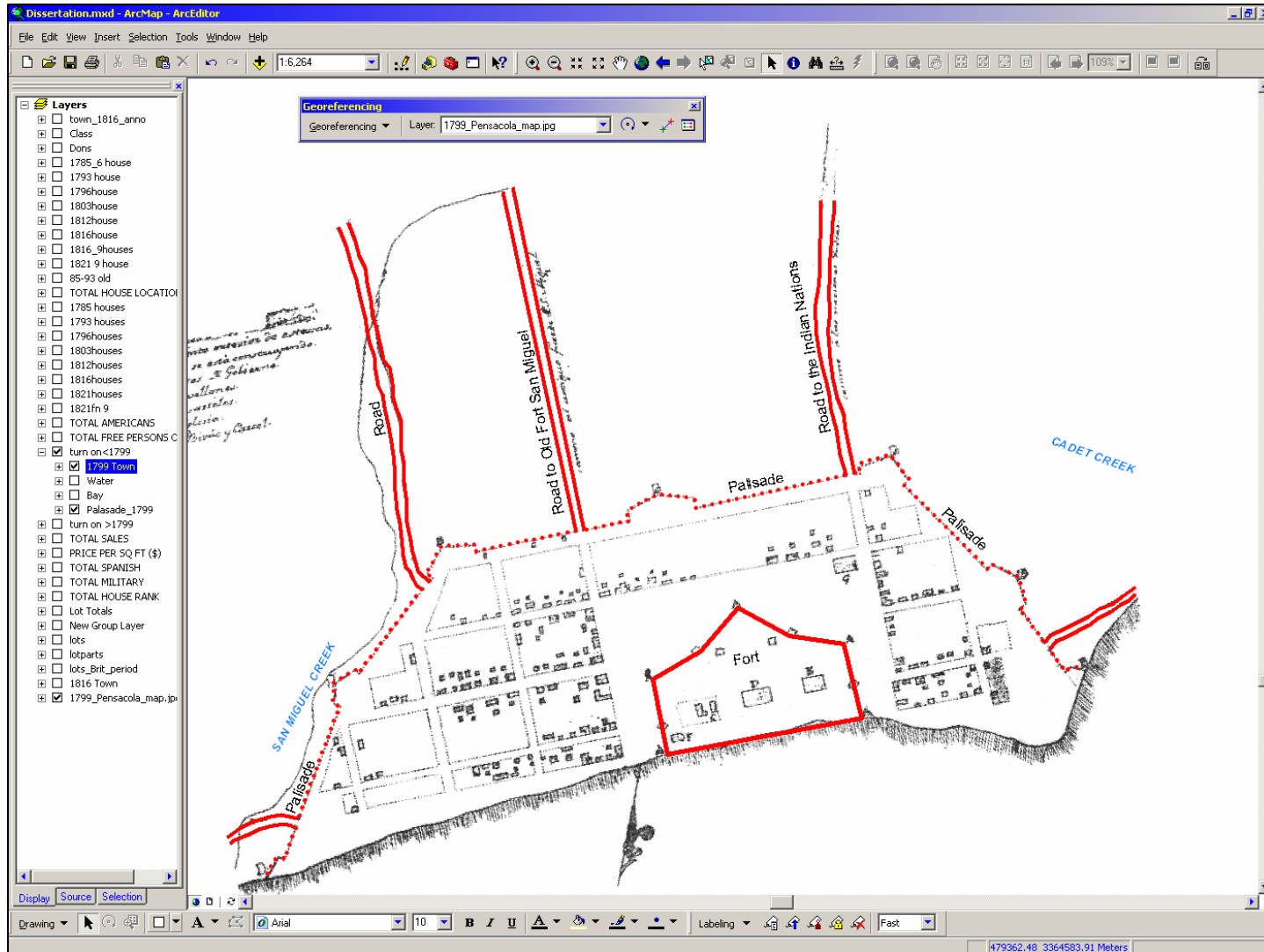


Figure 13. Integrating features from 1799 Pensacola map into GIS.

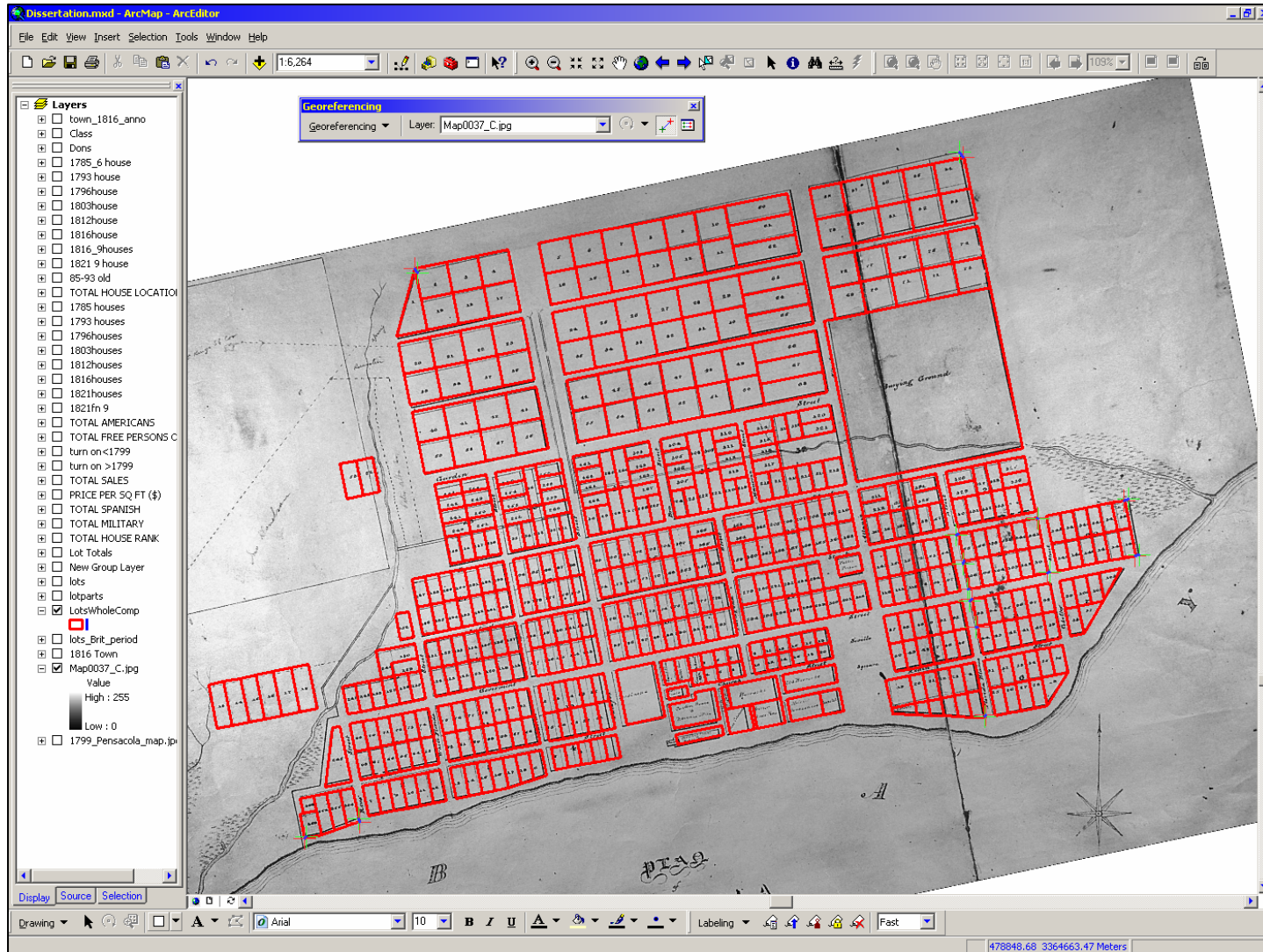


Figure 14. Integrating features from 1827 Pensacola plan into GIS.

status, occupation, and family influential power.<sup>155</sup> Skin pigmentation was an important factor influencing social standing, although it diminished through the colonial era.<sup>156</sup> Still, most Spanish censuses tended to categorize populations according to skin colors and ethnic mixtures. Spanish Pensacola censuses, for instance, utilized four categories, including: *Blancos* (white Creoles and *Peninsulars*, combined into one group in census records), *pardos* (mulattos), *Negros* (free Blacks), and *mestizos* (white-Indian mix).

In Spanish colonial society, however, class membership entailed less emphasis of racial perceptions and more of economic and political power. Chance and Taylor note that opportunities for social advancement increased among all races in Antequera, and Seed observes similar trends in Mexico City.<sup>157</sup> The Elite class, once dominated by *Peninsular* whites, increasingly included upwardly-mobile Creoles who occupied positions as prominent regional merchants, high royal official, high clergy, and large estate owners. The Middle class still included many Creoles, but also many mixed races, and included certain professionals, artisans, high-status artisans, small land owners, shopkeepers, and miners. Mixed races, Indians, and slaves continued to dominate the Lower class, and included labor-intensive artisans, servants, the unemployed, and slaves. White residents also frequently employed the titles “Don” and “Doña” as signifying respect for elite and middle class individuals.

To reveal Pensacola demographic trends, census data is analyzed and general observations made according to race, free vs slave, gender, and age. The 1820 Pensacola

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<sup>155</sup> Seed, “Social Dimensions,” 569-606; Wagley, “Concept of Social Race in the Americas,” 574.

<sup>156</sup> Mörner, *Race Mixture*, 9-20.

<sup>157</sup> Chance and Taylor, “Estate and Class,” 454-487; Seed, “Social Dimensions,” 569-606.

census includes the occupations of resident workers, allowing the utilization of the socioeconomic classification system employed by Chance and Taylor, Seed, and Socolow, which categorizes populations into Elite, Middle, and Low classes.<sup>158</sup> Certain modifications are made to the classification system when applying to Pensacola's population. For instance, each of the four merchants is placed in the Elite category because of their small number and importance to the community. Given the administrative and military foci of the town, the thirteen civil servants are also positioned in the Elite class, as are the active and retired military officers. Pensacola had no large landowning elite class, and the eleven local farmers and two ranchers are placed in the middle class small landowner category because their land was small and of low value. Summary tables are generated that portray the relationship between class, occupation, race, and gender among Pensacola's occupational classes.

### **Places of Residents**

Identifying residential patterns is especially difficult because no records of individual household locations exist at any time through the period. Two types of general inferences are possible, however. The first involved certain town maps and plans that show the locations of houses and house lots in specific years, such as the 1799 map shown in Figure 13. Although maps such as this do not reveal the owners or occupants of these houses, they do reveal general residential development through the period.

The second general inference is based on the assumption that those who owned only one house lot at any given time lived at that property. Those with two or more properties left no record of which was their place of residence. Single-property owners

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<sup>158</sup> Chance and Taylor, "Estate and Class," 454-487; Seed, "Social Dimensions," 569-606; Socolow, "Introduction," 15-16.

are identified by querying the real estate records of a given year for individuals who owned only one house lot, and by linking the results to the Pensacola town plan. Single-property landowners are depicted on GIS choropleth maps that show the results of cluster analyses, explained below.

### **Land Ownership**

Analyzing urban residential land ownership trends involves summarizing real estate records according to specific variables, and is accomplished in three steps. The first step entails summarizing all land transactions between 1781 and 1821 which provides a synopsis of the entire second Spanish period and affords a reference for comparison to specific years and phases. The second step involves reviewing land transactions for particular years which provides more detailed information through the period. This facilitates the third step which entails determining groups of years or phases that exhibit similar real estate trends that are markedly different from adjacent phases.

#### **Statistics and Maps for the Entire Period**

To provide a synopsis of urban residential development for the entire second Spanish period, summary statistics are generated for all Pensacola land transactions as they pertain to the variables related to ownership and land lots. Variables include: total sales, total revenues, total sales to whites, total sales to military personnel, total sales to Blacks, and total sales to Americans. An examination of residents who used the traditional Spanish titles “Don” and “Doña” is also performed. Choropleth GIS maps of these variables illuminate spatial trends, and afford reference data to which subsequent GIS analyses are compared.

## Yearly Statistic

Summary statistics for each year provide detailed information on the evolution of the community, and are provided in tables. Variables include: total yearly sales, new sales, repeat sales, lots owned, total yearly revenue, average yearly lot price, buyer/seller race, buyer/seller American, and buyer/seller military or civilian. Distance from town core was also used, and was determined from a fixed point near the center of the town and along the bay. More importantly, yearly statistics facilitate the identification of phases as groups of consecutive years with similar statistics. A new phase begins with a marked change in summary statistics. For instance, Phase 1 may have low yearly sales for each of a number of years. Phase 2 will begin in the next year that contains noticeably higher sales, and will continue until another apparent change in statistics.

## Cluster Analysis of Phases

Isolating and examining groups of similar land owners is vital to this dissertation, as is showing how these groups evolved through the period. Determining similarity involves comparing real estate and land owner variables for every house lot in a particular phase. Studying group evolution entails comparing the tabular and mapped results of cluster analyses of each phase. This portion of the research requires methods that are capable of handling the enormous amount of real estate data. Cluster analysis, facilitated by SPSS software and personal computer hardware, provides the means for accomplishing this goal.



Hierarchical cluster analysis identifies natural groupings, or clusters, of selected variables.<sup>159</sup> For the current research, house lot numbers are used as individual cases. These are given group membership depending on their similarities with, or distance from, other cases within the group. Cluster analysis begins by assigning each case into an individual group (one group per house lot). It then examines all groups with the most similar characteristics, as provided by their respective variables. Next it combines similar groups. This process is repeated until the final groups are as unique as possible and contain cases that are as similar as possible.

Cluster analysis requires a method of measuring distance between cases and the final number of groups. For this research, the furthest distance between similar groups, commonly referred to as “furthest-neighbor,” is employed. This ensures that, during every iteration, each group takes into account the characteristics of every other group while searching for potential merging partners. Analysis of yearly statistics reveals the presence of seven phases: 1781-1785, 1786-1793, 1794-1796, 1797-1803, 1804-1812, 1813-1816, and 1817-1821. Initial analysis suggests that the data for the first five phases are best parsed into six groups. Increasing the number of groups produces only slight variations while decreasing over-generalizes populations. The final two phases includes a wider variety of real estate trends and requires a greater number of groups. Cluster analysis of the final phase parses the data into nine groups to account for increased diversity.

Cluster analysis is performed for the ending year of each phase and identifies groups of residential lots with similar variables. To insure that land transactions with

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<sup>159</sup> A. Stewart Fotheringham, Chris Brunsdon, and Martin Charlton, *Quantitative Geography: Perspectives on Spatial Analysis* (London: Sage Publication, 2000), 188-189.

zero property values do not skew results, these records are omitted from cluster analysis. For each phase, tables present the analysis results and choropleth maps illuminate the geography of group membership through the residential section of town. More importantly, mapping group membership reveals changes in the locations of groups through the period. For example, the absence of clustering would suggest a more uniform population, with respect to the variables used in this study. The persistence of specific groups in the same locations would strongly support the notion of socioeconomic clustering and neighborhood formation in particular areas. Although data pertaining to houses are not used in cluster analysis, maps depict the location of houses mentioned in land records to help show residential development. To account for changes made to Pensacola's morphology after 1812, the figures will rely on the 1799 town map for analysis of phases before 1812 and the 1827 town map for analysis of phases after 1812.

The same two variable sets are used for each cluster analysis, these being related to ownership and land lots. Summary information is also used for comparisons, but not directly used in cluster analyses. Variables pertaining to specific owners are: buyer/seller race, buyer/seller military status, and buyer rank. Through the period, real estate and census records typically used the same descriptors when referring to race. For example, individuals are defined as "white," "Black," "mulatto," or "Free Person of Color." "Military Status" refers to owners' direct affiliation to the military as indicated by land records. Cluster analysis requires that variables be in a quantified in a format that can be measured. Buyer/seller race and buyer/seller military status are recorded as continuous data as either the value "1" if the criteria is satisfied or the value "0" if the criteria are not met. For example, if the buyer was white, the transaction would be assigned the value

“1” in the “Buyer White” column, otherwise it would be assigned the value “0”. This method facilitates measuring variable influence on the data population. For instance, a mean value of 0.15 with respects to “Seller Black” would translate into 15 percent of transactions having Black sellers. “Buyer Rank” is a summary function of all data recorded in interval scale, and represents the total number of lots a specific person owned. For example, an individual who owned a total of ten properties would have a rank of ten. Variables pertaining to specific lots are: acres, purchase price, and cost per acre. “Acres” is the size of each lot as indicated by the land records. “Purchase Price” refers to the amounts paid by the lot owners, and “Cost per Acre” is the purchase price divided by the acreage of each lot.

## **CHAPTER 4.**

### **RESULTS**

Years of research by the author regarding Spanish Colonial West Florida have generated much knowledge pertaining to Pensacola's morphogenesis between 1781 and 1821. Land records illuminate the development of the town's residential section, and reveal very little clustering of socioeconomic classes. Growth occurred sporadically, evolving through phases that were heavily influenced by a myriad of local, regional, and global events. The reactions to these events are evident by closely examining Spanish colonial documents, such as Spanish censuses, maps, and plans, that reveal Pensacola demographic trends related to race, class, and occupations.

#### **Race, Class, and Occupation**

Five Spanish censuses provide the bulk of information pertaining to race, gender, age, and occupation of Pensacola residents, and supply the necessary data to identify socioeconomic classes. The censuses taken in 1802, 1805, and 1819 consist of summary information for the entire population, while the 1782 and 1820 censuses provide much more detailed information for each resident. The 1820 census does not include slave data and none of the census records include information about the local military force.

Population statistics for Pensacola during the second Spanish period reveal a fairly consistent composition before 1803. The ratios of males-to-females (~3:2), free-to-enslaved (~8:3), and white-to-Black (~7:4) are similar as revealed by the censuses of 1784 (Table 3) and 1802 (Table 4). White populations contained high numbers of adults between the ages of 15 and 50, and children below the age of 16. The slight increase in free persons of color and slaves represent the only notable changes. Their nearly-equal

totals in 1784 and 1803 suggest very little changes in Pensacola's population before the Louisiana Purchase.

Table 3. 1784 Pensacola population summary.

1784 FREE						
	WHITE		MULATTO AND NEGRO		TOTAL FREE	
	Male	Female	Male	Female	Male	Female
1-15	77	69	2	8	79	77
15-50	140	85	8	9	148	94
50-100	8	2	0	1	8	3
TOTAL	225	156	10	18	235	174
TOTAL	381		28		409	
TOTAL	409 Free					

1784 SLAVE			1784 TOTAL POPULATION		
	MULATTO AND NEGRO				
	Male	Female		Male	Female
1-15	24	19	1-15	103	96
15-50	77	64	15-50	225	158
50-100	0	0	50-100	8	3
TOTAL	101	83	TOTAL	336	257
TOTAL	184 Slave		TOTAL	593 Total	

Source: 1784, *Padrón General, Archivo General de Indias (AGI). Papeles de Cuba (PC), legajo 2360*, Seville; cited in Coker and Inglis, *Spanish Censuses*, 31-45.

Table 4. 1802 Pensacola population summary.

1802 FREE						
	WHITE		MULATTO		NEGRO	
	Male	Female	Male	Female	Male	Female
1-15	66	69	23	10	2	0
15-50	115	72	9	12	2	12
50-90	20	7	0	2	0	2
TOTAL	201	148	32	24	4	14
TOTAL	349		56		18	
TOTAL	423 Free					

1802 SLAVE				
	MULATTO		NEGRO	
	Male	Female	Male	Female
1-15	9	16	35	14
15-50	7	8	57	54
50-90	0	0	13	14
TOTAL	16	24	105	82
TOTAL	40		187	
TOTAL	227 Slave			

1802 POPULATION						
	TOTAL FREE		TOTAL SLAVES		TOTAL POPULATION	
	Male	Female	Male	Female	Male	Female
1-15	91	79	44	30	135	109
15-50	126	96	64	62	190	158
50-90	20	11	13	14	33	25
TOTAL	237	186	121	106	358	292
TOTAL	650 Total					

Source: 1802, *AGI, PC, legajo 59*; cited in Coker and Inglis, *Spanish Censuses*, 77-78.

The most dramatic demographic changes to Pensacola occurred shortly after the Louisiana Purchase in 1803 when the town's total population jumped from 650 to 1398 (+115%). The town's free population rose from 423 to 949 (+124%), and the number of slaves increased from 227 to 449 (+98 %). The 1805 census reflects many of these changes, as shown in Table 5, and divides the town's population into classes pertaining to race, but also into groups reflecting marital status.

By 1819, Pensacola's population decreased to just under a thousand individuals, as shown in Table 6. While the 2:1 ratio of free persons to slaves remained constant, the ratio of free persons of color to whites increased slightly from 1:2 in 1805 to 2:5 in 1819. The number of males nearly equaled females, although female free persons of color continued to be high.

The 1820 Pensacola census contains more details concerning the town's population, much of which reflects the complex relationship between race and occupational classes. The census, summarized in Tables 7 and 8, reveals information pertaining to demographic changes during the final phase of the second Spanish period.

Of particular interest is the ethnic diversity of the town's population, with seventeen locales represented. A little over half were from Pensacola, while twenty percent were from Louisiana. About nine percent were from Spain. The majority were whites, followed by lesser numbers of free mulattos and Blacks, and relatively few *mestizos*.

Although the number of Creole immigrants from Louisiana seems relatively high, it does not reflect the dramatic population increase that moved into West Florida

Table 5. 1805 Pensacola population summary.

1805 FREE																		
	WHITE						MULATTO						NEGRO					
	Single		Married		Widowed		Single		Married		Widowed		Single		Married		Widowed	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
0-7	67	69	0	0	0	0	19	18	0	0	0	0	8	6	0	0	0	0
7-16	48	59	2	5	0	0	18	15	0	0	0	0	7	6	0	0	0	0
16-25	36	21	3	23	0	0	8	10	0	0	0	0	0	4	0	0	0	0
25-40	133	5	32	48	0	8	8	13	2	0	0	0	2	26	0	0	0	0
40-50	93	0	16	15	3	10	2	3	0	0	0	0	0	8	0	0	0	0
50+	24	10	8	6	3	5	0	0	0	0	0	0	0	12	0	0	0	2
<b>TOTAL</b>	<b>401</b>	<b>164</b>	<b>61</b>	<b>97</b>	<b>6</b>	<b>23</b>	<b>55</b>	<b>59</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>17</b>	<b>62</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>
<b>TOTAL</b>	565		158		29		114		2		0		79		0		2	
<b>TOTAL</b>	752 White						116 Free Mulatto						81 Free Negro					
<b>TOTAL</b>	949 Free																	

1805 SLAVE													
	MULATTO						NEGRO						
	Single		Married		Widowed		Single		Married		Widowed		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
0-7	6	12	0	0	0	0	31	16	0	0	0	0	
7-16	8	18	0	0	0	0	46	42	0	0	0	0	
16-25	3	7	0	0	0	0	16	14	1	0	0	0	
25-40	13	8	0	1	0	0	95	56	1	6	0	0	
40-50	5	3	0	0	0	0	13	15	0	0	0	0	
50+	0	0	0	0	0	0	10	3	0	0	0	0	
<b>TOTAL</b>	<b>35</b>	<b>48</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>211</b>	<b>146</b>	<b>2</b>	<b>6</b>	<b>0</b>	<b>0</b>	
<b>TOTAL</b>	83		1		0		357		8		0		
<b>TOTAL</b>	84 Mulatto Slave						365 Negro Slave						
<b>TOTAL</b>	449 Slave												

1805 POPULATION																		
	TOTAL FREE						TOTAL SLAVE						TOTAL POPULATION					
	Single		Married		Widowed		Single		Married		Widowed		Single		Married		Widowed	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
0-7	94	93	0	0	0	0	37	28	0	0	0	0	131	121	0	0	0	0
7-16	73	80	2	5	0	0	54	60	0	0	0	0	127	140	2	5	0	0
16-25	44	35	3	23	0	0	19	21	1	0	0	0	63	56	4	23	0	0
25-40	143	44	34	48	0	8	108	64	1	7	0	0	251	108	35	55	0	8
40-50	95	11	16	15	3	10	18	18	0	0	0	0	113	29	16	15	3	10
50+	24	22	8	6	3	7	10	3	0	0	0	0	34	25	8	6	3	7
<b>TOTAL</b>	<b>473</b>	<b>285</b>	<b>63</b>	<b>97</b>	<b>6</b>	<b>25</b>	<b>246</b>	<b>194</b>	<b>2</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>719</b>	<b>479</b>	<b>65</b>	<b>104</b>	<b>6</b>	<b>25</b>
<b>TOTAL</b>	758		160		31		440		9		0		1198		169		31	
<b>TOTAL</b>	949 Free						449 Slave						1398 Total					

Source: 1805, *AGI, PC, legajo 142-B*; cited in Coker and Inglis, *Spanish Censuses*, 89-90.

Table 6. 1819 Pensacola population summary.

1819 FREE						
	WHITE		FREE COLORED		TOTAL FREE	
	Male	Female	Male	Female	Male	Female
0-14	66	79	32	39	98	118
14-45	115	113	33	81	148	194
45+	53	6	8	24	61	30
<b>TOTAL</b>	<b>234</b>	<b>198</b>	<b>73</b>	<b>144</b>	<b>307</b>	<b>342</b>
<b>TOTAL</b>	<b>432</b>		<b>217</b>		<b>649</b>	

1819 SLAVE		
	Male	Female
0-14	44	48
14-45	89	99
45+	37	26
<b>TOTAL</b>	<b>170</b>	<b>173</b>
<b>TOTAL</b>	<b>343</b>	

TOTAL POPULATION		
	Male	Female
0-14	142	166
14-45	237	293
45+	98	56
<b>TOTAL</b>	<b>477</b>	<b>515</b>
<b>TOTAL</b>	<b>992</b>	

1819 POPULATION										
	Males			Female			Total Population			TOTAL
	0-14	14-45	45+	0-14	14-45	45+	0-14	14-45	45+	
WHITE	66	115	53	79	113	6	145	228	59	432
FREE COLORED	32	33	8	39	81	24	71	114	32	217
SLAVE	44	89	37	48	99	26	92	188	63	343
<b>TOTAL</b>	<b>142</b>	<b>237</b>	<b>98</b>	<b>166</b>	<b>293</b>	<b>56</b>	<b>308</b>	<b>530</b>	<b>154</b>	<b>992</b>

Source: 1819, *AGI, PC, legajo 1876-B*; cited in Coker and Inglis, *Spanish Censuses*, 91-92.

Table 7. 1820 Pensacola population summary.

1820 FREE POPULATION									
	WHITE		PARDO		MESTIZO		NEGRO		TOTAL
	Male	Female	Male	Female	Male	Female	Male	Female	
1-14	75	87	50	54	3	2	8	3	
14-45	100	99	33	39	0	2	7	26	
45+	65	23	4	10	1	0	7	11	
<b>TOTAL</b>	<b>240</b>	<b>209</b>	<b>87</b>	<b>103</b>	<b>4</b>	<b>4</b>	<b>22</b>	<b>40</b>	
<b>TOTAL</b>	<b>449</b>		<b>190</b>		<b>8</b>		<b>62</b>		
<b>TOTAL</b>	<b>709 Free</b>								

Source: 1820, *AGI, PC, legajo 1944*; cited in Coker and Inglis, *Spanish Censuses*, 93-126.

immediately after the Louisiana Purchase in 1803. Rather, it suggests that most of these individuals had left the region by the time this census was taken in 1820. The opposite can be said of Pensacola's mulatto population. Their high numbers from Louisiana and Pensacola suggests that this group remained in town through these final years. Table 9 provides a synopsis of races in 1820 according to the occupational classes and Table 10 breaks each class down according to occupations and socioeconomic groups. These



Table 8. Birthplaces and races in 1820.

COUNTRY	White	Mestizo	Pardo	Negro	Total
Africa	1	1		17	19
Canada	1				1
Canary Islands	13				13
Caribbean	2		2	4	8
Central America	8				8
England	2				2
France	7				7
Germany	3				3
Indian Nation		1	2	3	6
Ireland	1				1
Italy	4				4
Louisiana	84		55	22	161
Pensacola	248	6	127	13	394
Portugal	2				2
Scotland	1				1
Spain	64				64
United States	8		4	2	14
Unknown				1	1
<b>Total</b>	<b>449</b>	<b>8</b>	<b>190</b>	<b>62</b>	<b>709</b>

Source: 1820, *AGI, PC, legajo* 1944; cited in Coker and Inglis, Spanish Censuses, 93-126.

Table 9. Racial composition of occupational classes in 1820.

Race		Elite	Middle	Low	Grand Total
Peninsular	F			2	2
	M	7	45	19	71
<b>Peninsular Total</b>		<b>7</b>	<b>45</b>	<b>21</b>	<b>73</b>
White	F		3	14	17
	M	15	21	32	68
<b>White Total</b>		<b>15</b>	<b>24</b>	<b>46</b>	<b>85</b>
Mestizo	F			1	1
	M			1	1
<b>Mestizo Total</b>				<b>2</b>	<b>2</b>
Pardo	F		1	29	30
	M		2	26	28
<b>Pardo Total</b>			<b>3</b>	<b>55</b>	<b>58</b>
Negro	F			22	22
	M		1	10	11
<b>Negro Total</b>			<b>1</b>	<b>32</b>	<b>33</b>
<b>Grand Total</b>		<b>22</b>	<b>73</b>	<b>156</b>	<b>251</b>

Source: 1820, *AGI, PC, legajo* 1944; cited in Coker and Inglis, Spanish Censuses, 93-126.

Table 10. Socioeconomic groups in Pensacola, 1820.

Pre-industrial Class	Occupational Group	Occupation	Total	Pre-industrial Class	Occupational Group	Occupation	Total
<b>Elite</b>	Civil Servant	Civil Servant	13		Low-status Artisans	Baker	9
		Civil Servant Total	13			Blacksmith	4
	Merchant	Local Merchant	2			Bricklayer	3
		Merchant	2			Carpenter	19
		Merchant Total	4			Cartwright	2
	Military Official	Militia sargeant	1			Cigar Maker	2
		Military Official Total	1			Dressmaker	1
	Retired Military	Captain Retired	1			Fisherman	12
		Sargeant Retired	2			Guide	10
		Sublieutenant retired	1			Gunsmith	1
	Retired Military Total	4	Interpreter	1			
<b>Elite Total</b>			<b>22</b>			Pastry cook	1
<b>Middle</b>	Secular Clergy	Sacritan	1			Port Captain	1
		Secular Clergy Total	1			Shoemaker	21
	High-status Artisans	Barber	1			Tailor	4
		Doctor	1			Low-status Artisans Total	91
		Hairdresser/barber	1	Laborer	Cowboy	1	
		Sailmaker	1		Day Laborer	3	
		Silversmith	3		Kitchen helper	1	
		Surgeon	1		Laundress	25	
		High-status Artisans Total	8		Saleslady	2	
	Small Landowner	Farmer	11		Seamstress	31	
		Rancher	2		Servant	1	
		Small Landowner Total	13		Laborer Total	64	
	Shopkeeper	Billiard Parlor Keeper	2		Slave	Slave	1
		Grocer/Tavern Keeper	18			Slave Total	1
		Shopkeeper	16	<b>Low Total</b>			<b>156</b>
		Shopkeeper Total	36				
	Sailor	Sailor	15	<b>Elite Total</b>		<b>22</b>	<b>8.76%</b>
	Sailor Total	15	<b>Middle Total</b>		<b>73</b>	<b>29.08%</b>	
<b>Middle Total</b>		<b>73</b>	<b>Low Total</b>		<b>156</b>	<b>62.15%</b>	
			<b>Grand Total</b>		<b>251</b>	<b>100.00%</b>	

Source: 1820, *AGI, PC, legajo* 1944; cited in Coker and Inglis, *Spanish Censuses*, 93-126.

figures apply to only those individuals who provided the nature of their profession in the census.

The 1820 Pensacola census includes mention of four distinct races among occupational classes. These include whites, *mestizos*, mulattos, and Blacks. Because the census also provides birthplaces, we can further break down whites into Creoles and *Peninsulars*. Pensacola's 1820 work force included near equal numbers of Creoles (n=85) and *Peninsulars* (n=73), and fewer mulattos (n=58) and Blacks (n=33). Among *Peninsulars*, there are only two females including a seamstress and a shoemaker. The remaining males work primarily in middle-class occupations as shopkeepers. Only seven can be considered as elite, these being retired military officers. The remaining twenty-one labored in low-class professions, including: baker, blacksmith, carpenter, cartwright, cigar maker, day laborer, fisherman, guide, port captain, shoemaker, and tailor.

Creoles included slightly more females (n=17) working in middle and low class occupations than female *Peninsulars*. Creole females who worked in middle class occupations included farmer, sailor, and billiard hall keeper. Low class professions among women were baker, dressmaker, guide, laundress, seamstress, and shoemaker. Creole men occupied the most elite occupations (n=15), being retired military officers, merchants, and civil servants. Middle class Creole men (n=24) worked as barbers, doctors, farmers, grocers, ranchers, sacristans, sailors, shopkeepers, and silversmiths. Low class Creole men (n=32) labored as bakers, blacksmiths, carpenters, cartwrights, cigar makers, cowboys, fishermen, guides, gunsmiths, interpreters, shoemakers, and tailors.

Blacks included twenty two females who worked in low class professions such as kitchen helpers, laundresses, pastry cooks, seamstresses, and servants. Only one Black worked in a middle class job. He was a barber. The remaining ten men worked as bakers, blacksmiths, bricklayers, carpenters, day laborers, fishermen, laundresses, and shoemakers. The census indicates only one *mestizo* who claimed a profession. He was a bricklayer, a low-class occupation.

Mulattos included thirty women, one of which was a middle class shopkeeper. The remaining twenty-nine were lower class laborers, and included laundresses, salesladies, seamstresses, and shoemakers. Two males mulattos can be considered working in middle class professions. These include a sailor and a shopkeeper. Twenty-six male mulattos worked in low class jobs, including: bakers, blacksmiths, bricklayers, carpenters, fishermen, laundresses, shoemakers, and tailors.

The 1820 census provides insight into the relative size and distribution of the three basic socioeconomic classes near the end of the second Spanish period. Much of the town's traditional socioeconomic class composition suffered from recent out-migration. By 1820, the town contained a small and powerful elite class, a sizable middle class of professional and skilled laborers, and a large semi-skilled work force.

Unlike other Spanish colonial towns where merchants outnumbered other elites, civil servants dominated the elite class in Pensacola. The small number of elite merchants might be a reflection of the out-migration of this class. However, their widespread persistence according to real estate records suggests that this was not the case. Recent scholarship also suggests that the small colonial town simply did not

promote entrance into the elite class through economic activities.<sup>160</sup> Neither did it attract many elites from other regions. Administrative activities took preeminence over every other activity in West Florida. This was especially true toward the end of the second Spanish period when Americanization threatened.<sup>161</sup>

The middle class was roughly three times as populous as the elite class, and included a variety of professionals, high-status artisans, and landowners. Among the professionals, shopkeepers outnumbered every other occupation in town. These operated small business from their family homes which were scattered throughout the town. Many of these were tavern keepers or billiard hall owners.

The lower class was the most populous group, and contained a variety of occupations commonly associated with strenuous manual labor. The town contained a large number of low-status artisans, and an abundance of carpenters, indicative of the continual need for construction and repair. There were also a large number of servants and slaves.

With regard to race, male *Peninsulars* clearly outnumbered other groups, as shown in Figure 15, but only a few were among the elite class. Most *Peninsulars* labored in middle class occupations, primarily as small shopkeepers. Creole males nearly equaled *Peninsulars*, and comprised most of the civil servants in the elite class. Creole males also constituted most of the high-status artisan group. Female mulattos and Blacks outnumbered their male counterparts, and worked in low class jobs. Women clearly constituted a major part of Pensacola's work force in 1820 (Figure 16), and worked

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<sup>160</sup> Coker, "Pensacola, 1686-1821," 46.

<sup>161</sup> Coker and Watson, *Indian Traders*, 370.

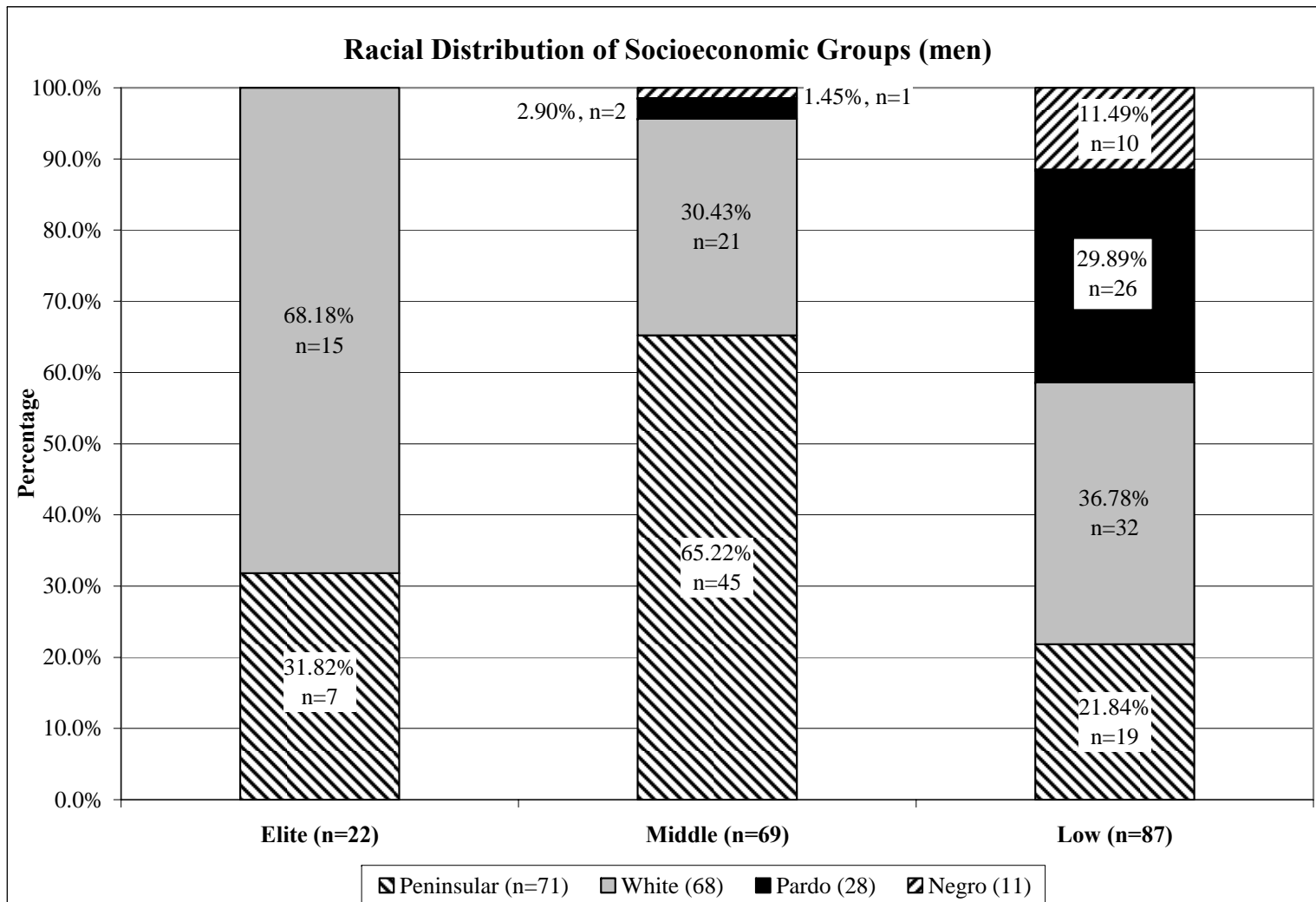


Figure 15. Racial distribution of socioeconomic groups (men) in 1820. (1820, *AGI, PC, legajo* 1944; cited in Coker and Inglis, *Spanish Censuses*, 93-126.)

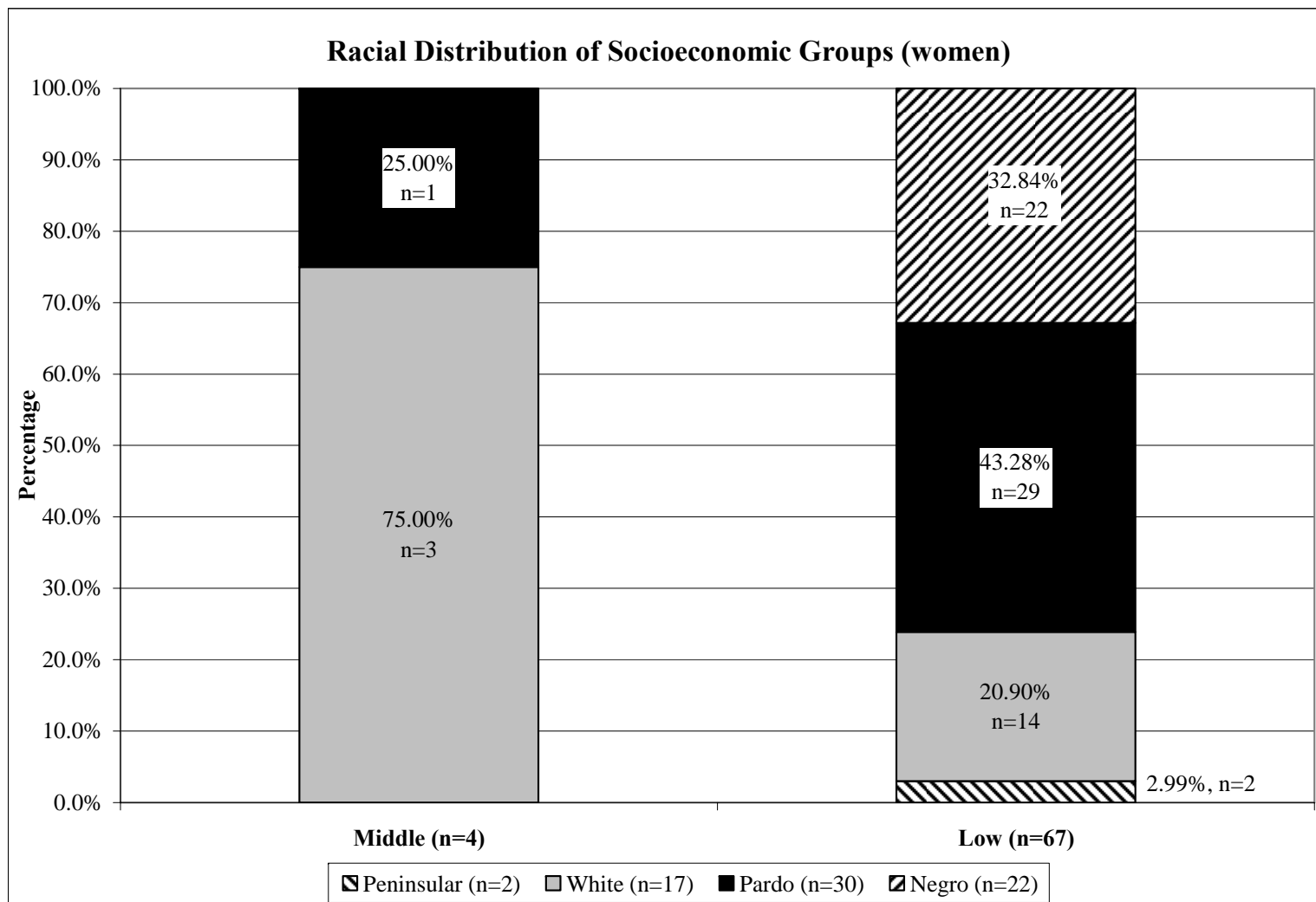


Figure 16. Racial distribution of socioeconomic groups (women) in 1820. (1820, *AGI, PC, legajo* 1944; cited in Coker and Inglis, *Spanish Censuses*, 93-126.)

predominately in lower class occupations commonly associated with manual labor. Most women were Black or mulatto laundresses or seamstresses.

### **Residential and Landownership Patterns**

Examinations of residential and landownership patterns rely on information regarding squatters and renters, “Don” and “Doñas,” and landowners. These suggest a mixture of socioeconomic classes across the residential section. Analysis of land records for the whole period, and for individual phases, further validates this hypothesis.

#### **Squatters and Renters**

Households listed in census records consistently outnumbered private property owners enumerated in land deeds. For instance, the 1784 Spanish census lists eighty-nine households, but only thirty-five lots were owned by that year. The obvious conclusion is that the town supported more residents than landowners. Those who did not own house lots fell into two groups, squatters and renters, who left only clues as to the locations of their residences.

As in St. Augustine, squatting was common in Pensacola during this period, especially through the early years before the Louisiana Purchase.<sup>162</sup> Most British residents evacuated West Florida by 1783 before having sold their property.<sup>163</sup> In 1784, Pensacola had over two hundred houses across the residential section, but only thirty-three lots were privately-owned.<sup>164</sup> Many of these unowned houses can be seen on the British map made in 1778, shown in Figure 17, and consisted of galleried multi-room

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<sup>162</sup> Griffin, *Mullet on the Beach*, 163-165

<sup>163</sup> McAlister, “Pensacola,” 290-291.

<sup>164</sup> Ibid.





Figure 17. 1778 map of Pensacola. (Joseph Purcell, *A Plan of Pensacola and its Environs in its Present State from an Actual Survey in 1778*, Manuscript Division, Library of Congress, Washington)

structures and simple cottages with less than four rooms.<sup>165</sup> Before 1803, many Pensacola residents lived in these houses essentially as squatters.

Renting property was also common in Pensacola, especially after 1803, and equally as difficult to analyze. The most revealing clue pertaining to renters is the growing number of individuals who owned multiple properties. Buyer ranks, which measures the number of house lots owned by individuals, rose through the period from 1.7 per landowner in 1781 to 8.6 in 1821 (Appendix 2). Some sixty-three percent of these lots mention houses in the land deeds, further suggesting that landowners rented out house lots to other residents. Unfortunately, without detailed information regarding squatters and renters, there is no way of analyzing patterns of residences concerning these two groups.

#### Socioeconomic Classes and “Dons”

The locations of landowner socioeconomic classes in 1820 are presented in Figure 18 and suggest that middle class owned the most house lots throughout the residential section, and many near the town core. Low classes bought house lots nearer the edge of town, and elites owned few properties which were scattered around town. While intriguing, this view is hampered by the inability of identifying landowners in the census records, particularly among the populous low class. In actuality, only fifty-nine individuals owning a total of 146 properties are identified on Figure 18. Of these, middle class owned the most residential lots, as noted in Table 11.

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<sup>165</sup> Coker and Inglis, *Spanish Censuses*, 9-15.



Figure 18. Location of land owned by classes in 1820.

Table 11. Class structure of landowners in 1820.

Class	Count	Properties	Average
Elite	6	14	2.33
Middle	33	88	2.67
Low	20	44	2.20
Total	59	146	2.47

Source: 1820, *AGI, PC, legajo* 1944; cited in Coker and Inglis, *Spanish Censuses*, 93-126; Proceedings of the Land Commission in West Florida.

An examination of individuals who utilized the titles “Don” or “Doña,” however, suggests that residential patterns were more dispersed. Incidents of the titles recorded in census records increased from twenty-six in 1784 to 243 in 1820 while the population rose only slightly, as shown in Table 12. The rates of Dons/Doñas per white population, per total population, and per household also increased. These titles were given exclusively to white *Peninsulars* and Creoles in 1784, but also to the children of these two groups by 1820. Doñas listed in the 1820 census consisted primarily of widows, wives, and daughters while Dons were heads of households and sons. The widespread use of “Don” and “Doña” by Creoles by 1820 strongly suggests that the importance placed on these titles waned by the end of the colonial period, and the locations of Dons and Doña property owners (Figure 19) show no distinguishable spatial groupings across the residential section. Dons and Doñas lived interspersed with other town residents.

Table 12. Use of titles “Don” and “Doña” in 1784 and 1820

YEAR	TOTAL POPULATION	WHITE POPULATION	HOUSEHOLDS	DON	DONA	<19	% POPULATION	% WHITE POPULATION	HOUSEHOLDS WITH DON/DONA	% HOUSEHOLD
1784	593	381	89	20	6	0	4.38%	6.82%	18	20.22%
1820	695	441	176	113	130	111	34.96%	55.10%	100	56.82%

Sources: 1784, *Padrón General, AGI, PC, legajo* 2360, Seville; 1820, *AGI, PC, legajo* 1944; cited in Coker and Inglis, *Spanish Censuses*.

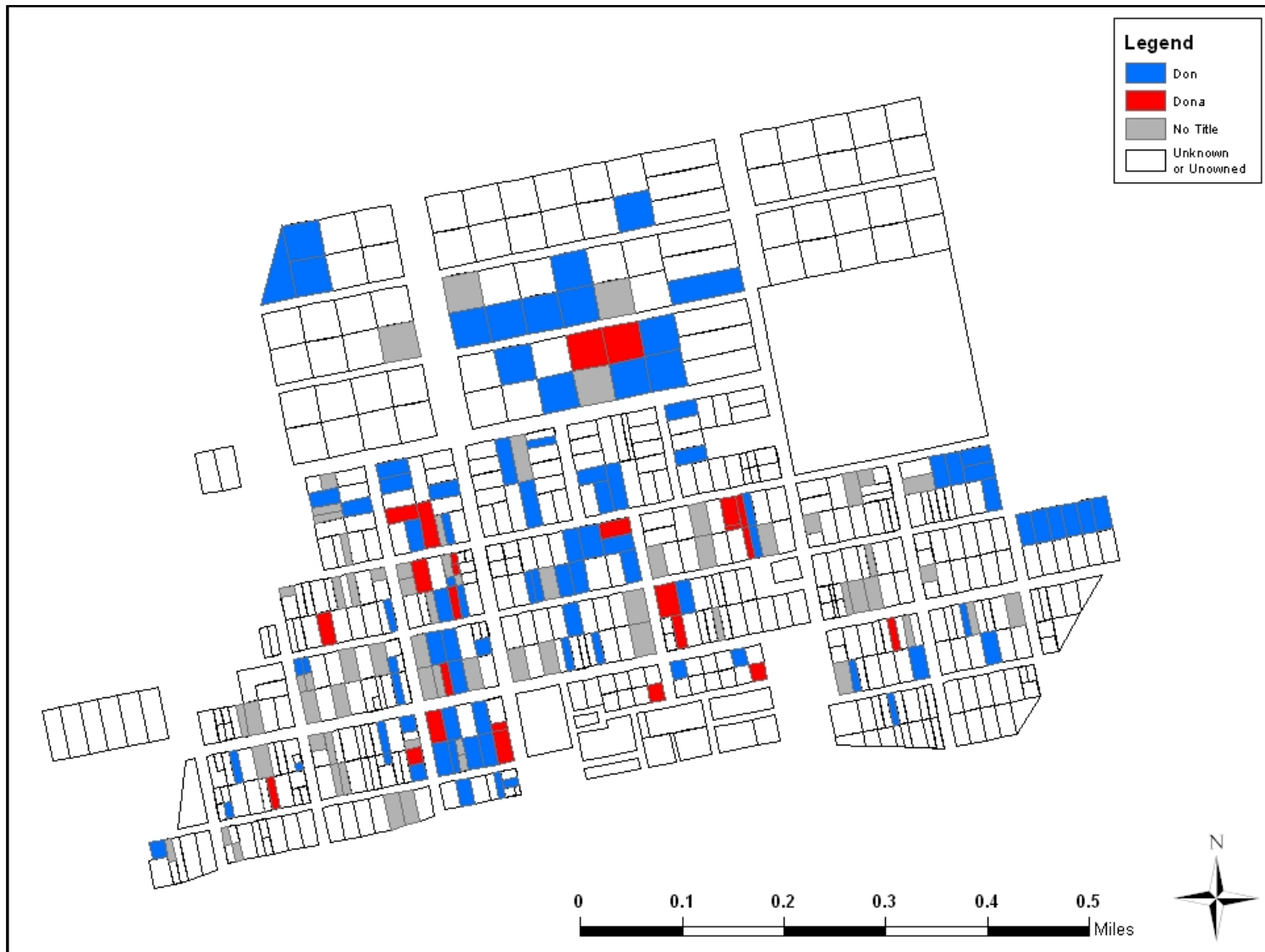


Figure 19. Location of land owned by “Dons” and “Doñas” in 1820.

## Summary Real Estate Information of the Entire Period

Much can be gleaned from examining the land transactions of the entire period. Such a “snapshot” of the period illuminates a degree of cultural and spatial trends, and also provides a baseline for comparison. Specifically, it shows that the real estate market in Pensacola was quite active, with multiple social groups involved in the transactions. There are strong indications of neighborhood development where ethnic and social classes began to congregate.

There were a total of 1113 sales of house lots through the period from 1781 to 1821. New sales and repeat sales were nearly the same, at 557 and 556 respectively. There were a total of 565 lots owned by 1821. The total revenue generated from the sale of house lots was \$734,865.55, for a yearly average of \$17,923.55, and an average lot price of \$660.26.<sup>166</sup> In Pensacola, 243 sales were unimproved lots, accounting for 21.83% of all sales, while 870 sales were improved lots, accounting for 78.17% of all sales. Prices for unimproved lots sold for as much as \$5000.00, and averaged \$210.62. The maximum price of improved lots was \$9165.00, and the average price was \$1019.52.

The majority of sales were exclusively between whites (853 out of 1113, or 76.64%) with only 13.39% (149) included Blacks and mulattos. Further, twenty-seven sales were exclusively between Blacks or mulattos. The total revenue generated from Black and mulatto transactions was \$71,882.00, and the average lot price was \$482.43. The average distance from the core for all lots was about 370 meters (444.52 meters for undeveloped lots and 305.84 meters for developed lots). Lots averaged 0.31 acres.

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<sup>166</sup> This analysis does not take into account the effects of economic factors such as inflation.

The average purchaser owned 7.82 lots in Pensacola, while the average seller owned 5.36. About three-fourths (859 buyers and 873 sellers) of the transactions were between civilians. Civilian total revenues from sales exceeded those from military personnel, but military buyers' average prices were the highest at \$871.43 per lot. Civilian buyer average prices were the lowest at \$597.82 per lot. American sales totaled 136 and accounted for 12.22% of all sales during the period. Of these, 125 were purchases while only nine were sales. The total revenue generated from American transactions was \$70,702.95 and the average lot price was \$519.87.

When the data are matched to the 1825 Pensacola plan, spatial patterns emerge for the following variables: total lot sales, total lot values, sales to whites, persons of color, Americans, military personnel, and house ranks. Total sales are shown in Figure 20 and reveal that certain lots sold quite often through the period. While some lots sold as many as ten to fifteen times, it was more common for lots to sell less than seven times. Few did not sell at all. Generally speaking, most sales occurred in the western residentially area. Lots in the northern and eastern sectors did not sell as often. Specific areas of high sales included those along the shoreline, in the middle-western residential area, and immediately adjacent to the core's east. Lots on the periphery, by contrast, seldom sold more than twice. The same is true of property north of the town's core.

A portrayal of total lot values is provided in Figure 21 and illustrates that certain areas fetched higher prices through the period. Values are in dollar amounts, and were derived by dividing the sum total of sale amounts for each lot by the total number of sales for each lot. While some lots sold for over \$9000 per acre, it was more common for lots to sell for less than \$1000 per acre. The spatial trends closely resemble those pertaining

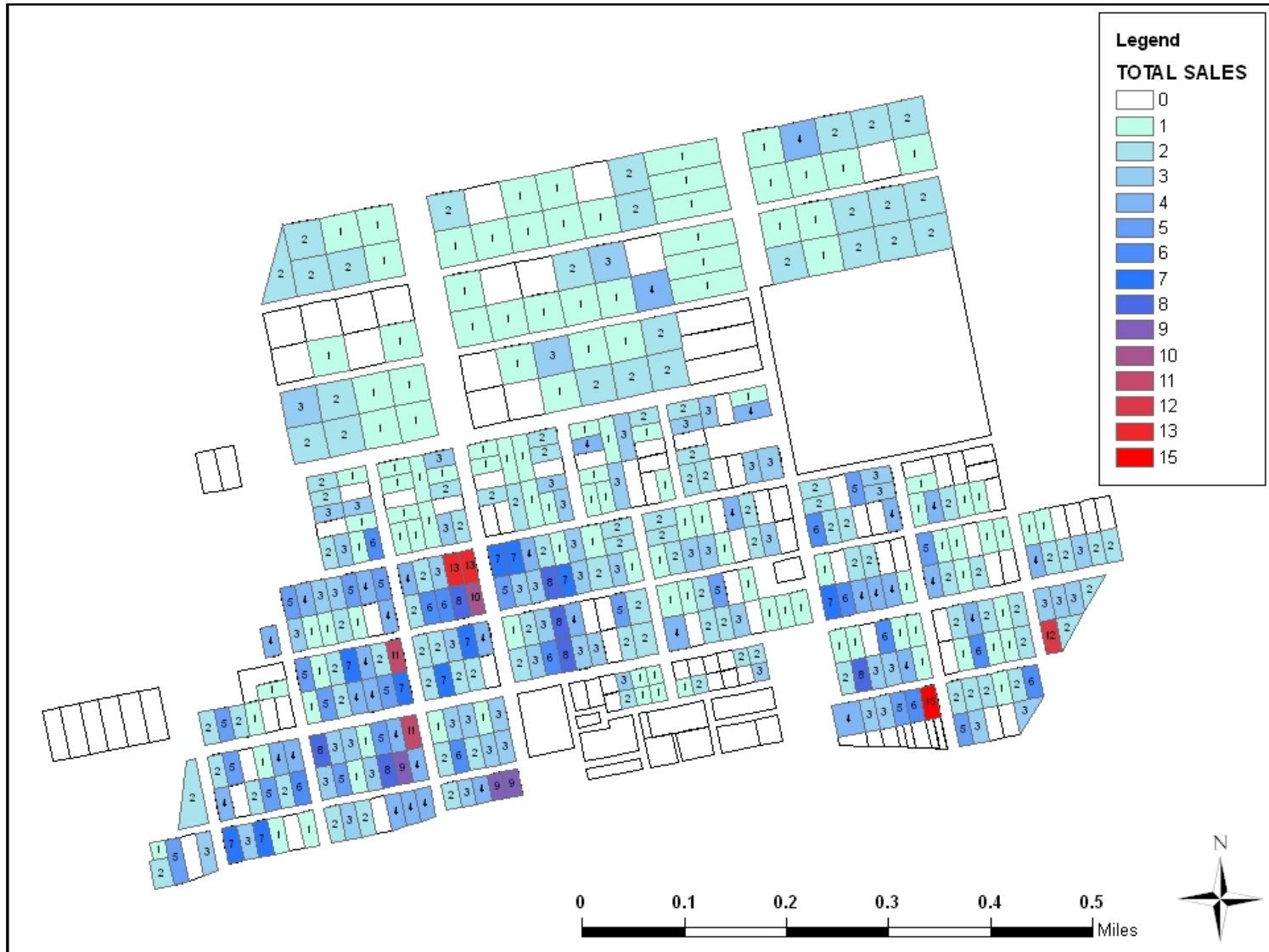


Figure 20. Total sales, 1781-1821.



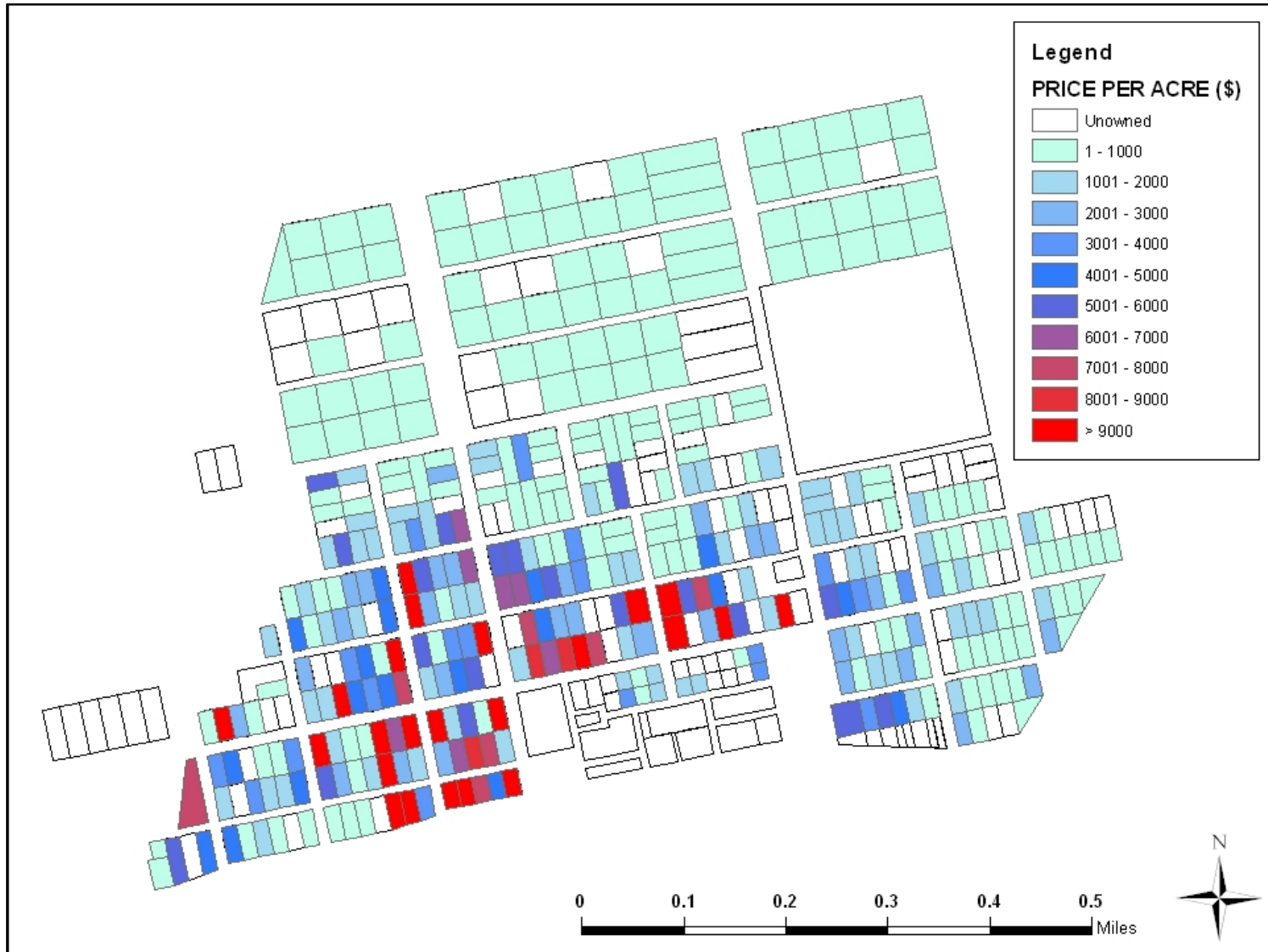


Figure 21. Lot values, 1781-1821.

to total sales, with the most valuable lots located along the shoreline and in the western portion of the residential section. Lots adjacent to the town's core were generally more valuable, particularly immediately north and east of the core. Less valuable property existed in the periphery, particularly in the northern and eastern sections.

Total sales to whites and to military personnel, shown in Figures 22 and 23, also closely resemble the information for all sales, with high turnover rates in the western-central sector of the residential section. This seems obvious as the overwhelming majority of sales were to whites who were affiliated with the military. Sales to free persons of color, however, were more evident in specific areas. Figure 24 provides this data. Total sales per lot among this class seldom reached above three during the period, though the highest was nine transactions. This class of people bought land away from the town's core, particularly along the western periphery. There were many scattered sales in the east, but these were not as grouped as those in the west. Sales to Americans, shown in Figure 25, also reveal distinct geographical trends. It is obvious, for instance, that most sales to Americans occurred in the northern and eastern sectors of town that were away from the town's core. Americans did not buy many lots, the highest lot turnover being three.

Through the second Spanish period local craftsmen erected Creole cottages made of timber harvested near the town.<sup>167</sup> These usually had a small loft on the second floor that was accessible from a narrow central staircase. Cottages typically had four rooms of near-equal size on the ground floor and included two brick fireplaces positioned back-to-back that were located in the walls that divided the front rooms from those in the rear. A

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<sup>167</sup> Coker and Inglis, *Spanish Censuses*, 9-15..

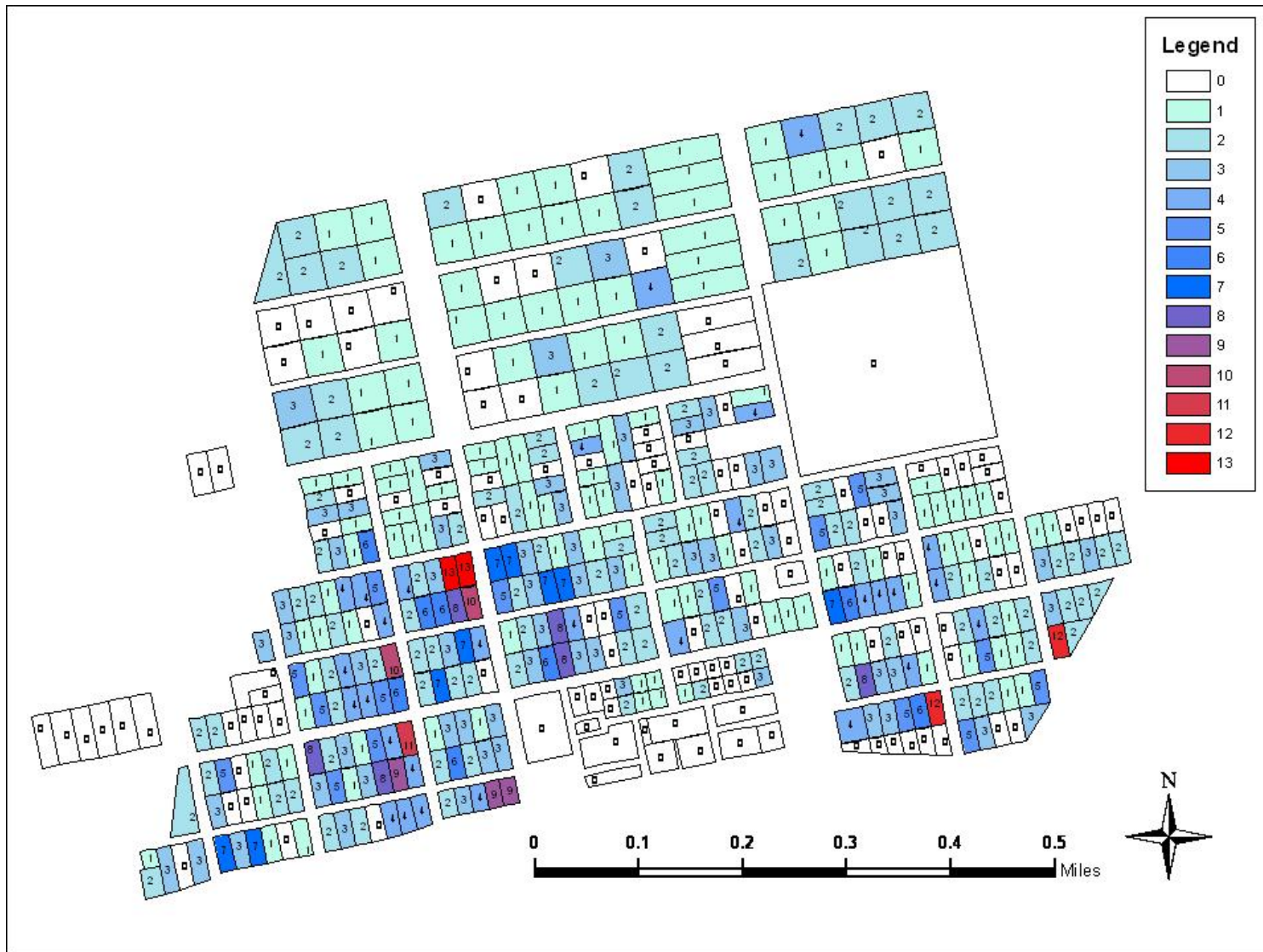


Figure 22. Total sales to Spanish whites, 1781-1821.

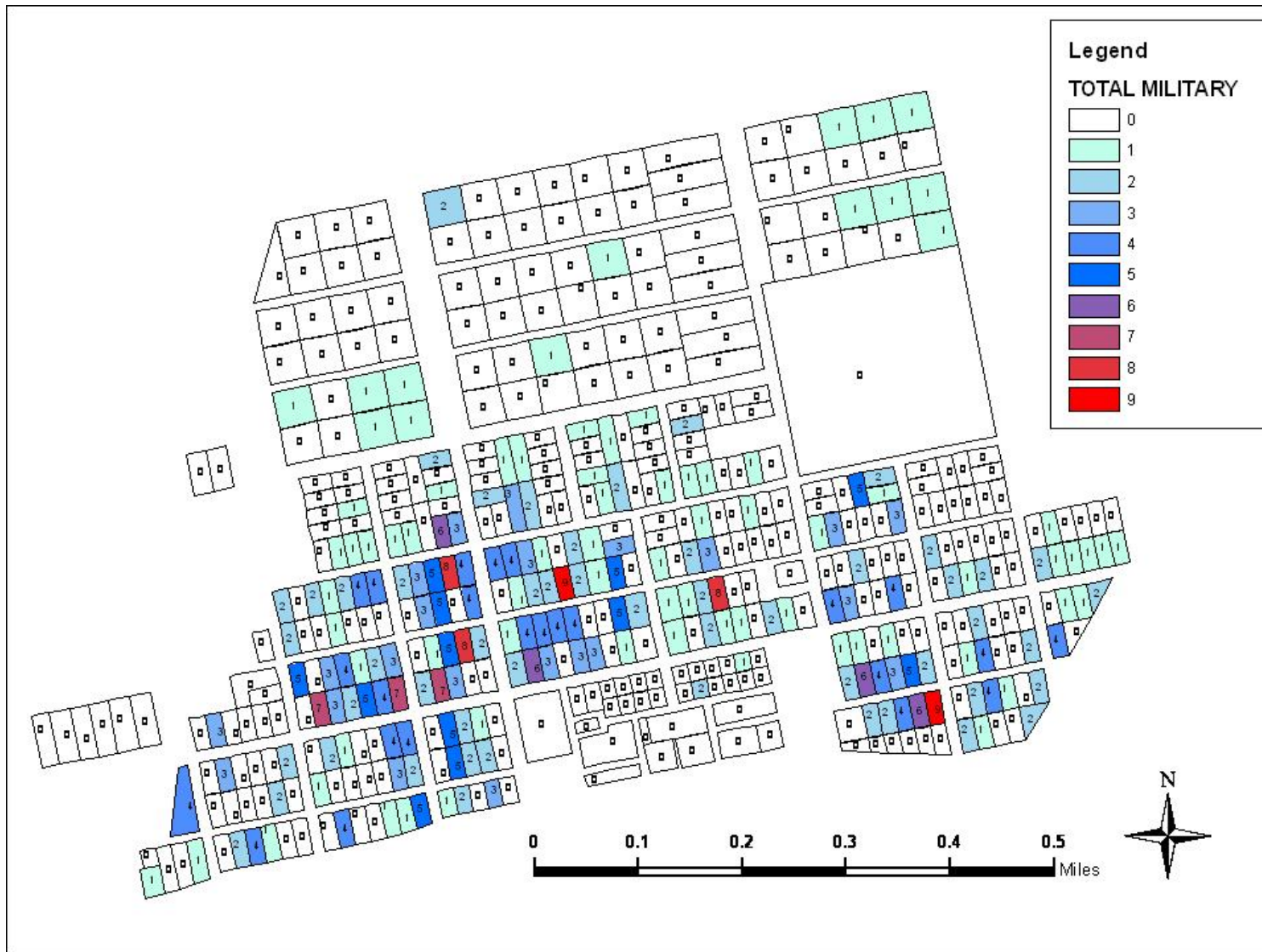


Figure 23. Total sales to military personnel, 1781-1821.

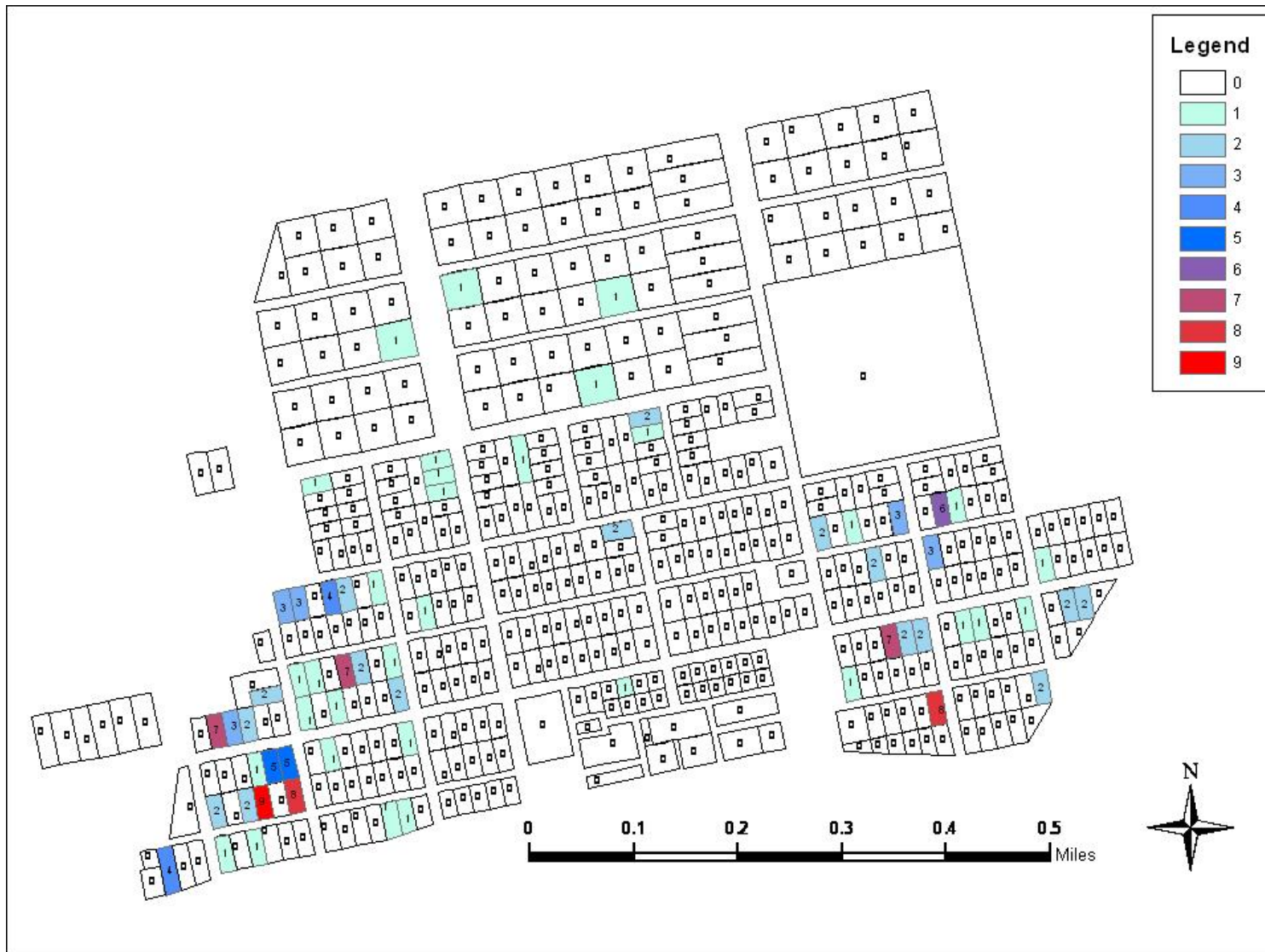


Figure 24. Total sales to free persons of color, 1781-1821.

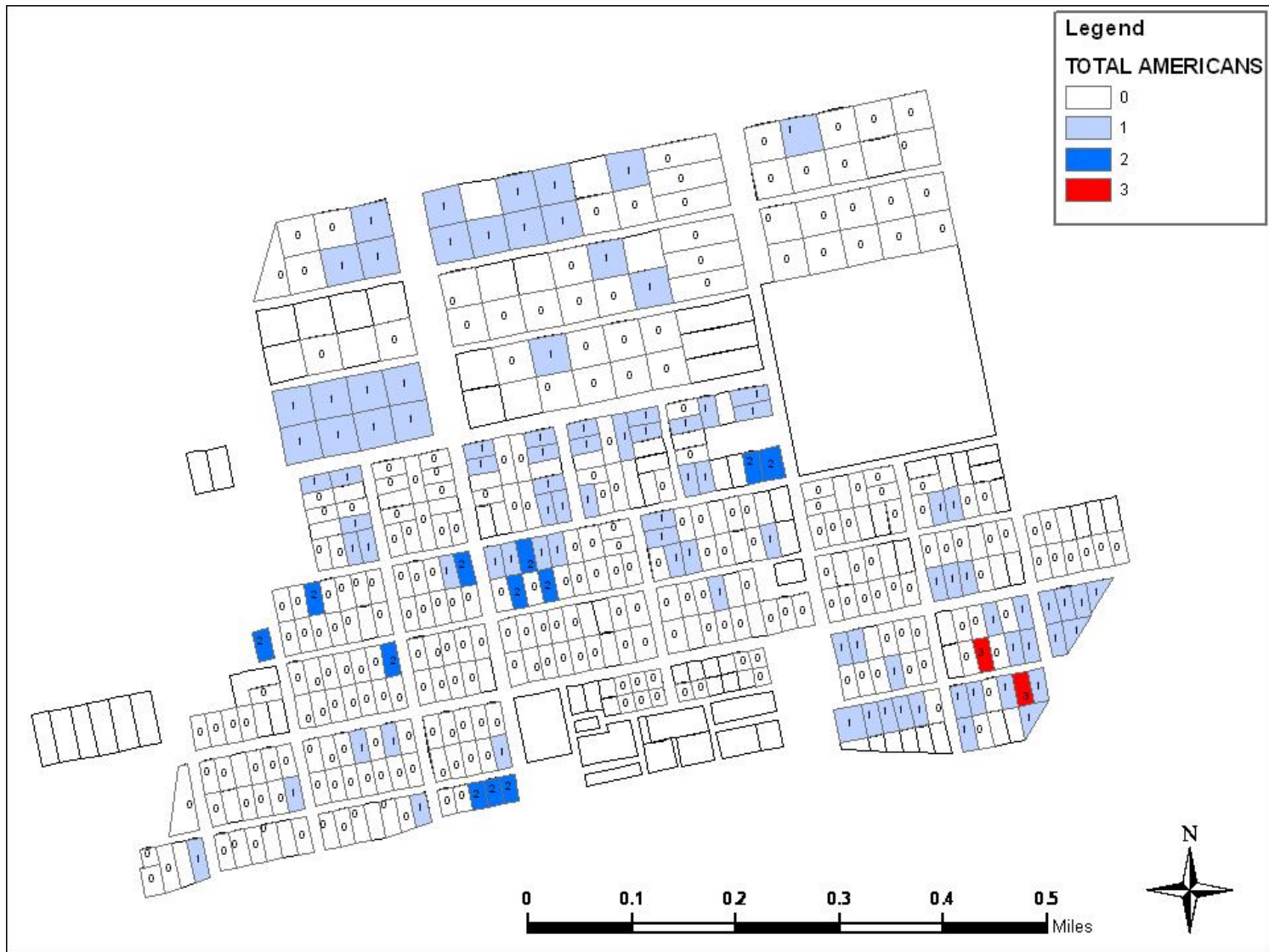


Figure 25. Total sales to Americans, 1781-1821.

porch and overhang lined the front of the cottage and large doors provided access into the two front rooms. Brick piers supported the entire structure and helped insure against damage from dampness and flooding. Cottages usually included detached privies and kitchens.

The land records provide some information regarding structures that existed on house lots. Figure 26 illustrates the dispersion of structures according to the highest rank, a qualitative value based on their description in the land records. Table 13 provides the breakdown of structure descriptions and ranks. According to the land records, about half of the lots had structures on them by 1821. The most common structures were given the rank of “1” and were small, generally one per lot, and were found across the residential section. The land records offered generic descriptors “house,” “wooden house,” and “building,” to most, but also provided more detail to other structures, including those described as a “low wooden house” or “small wooden house.” Lots with two or more houses were fewer and generally closer to the city core. These probably represent houses that were rented. The four houses of partial brick construction and the three stores were also within two blocks of the center of town.

### **Review of Phases**

Closer examination of the summary statistics, and the results of cluster and discriminate analyses of pertinent variables, provide more insight into Pensacola’s urban development and further indicate the lack of socioeconomic grouping of residents.

Appendix 2 gives a breakdown of the summary statistics by year through the period, and strongly suggests that urban development fluctuated between periods of high and low

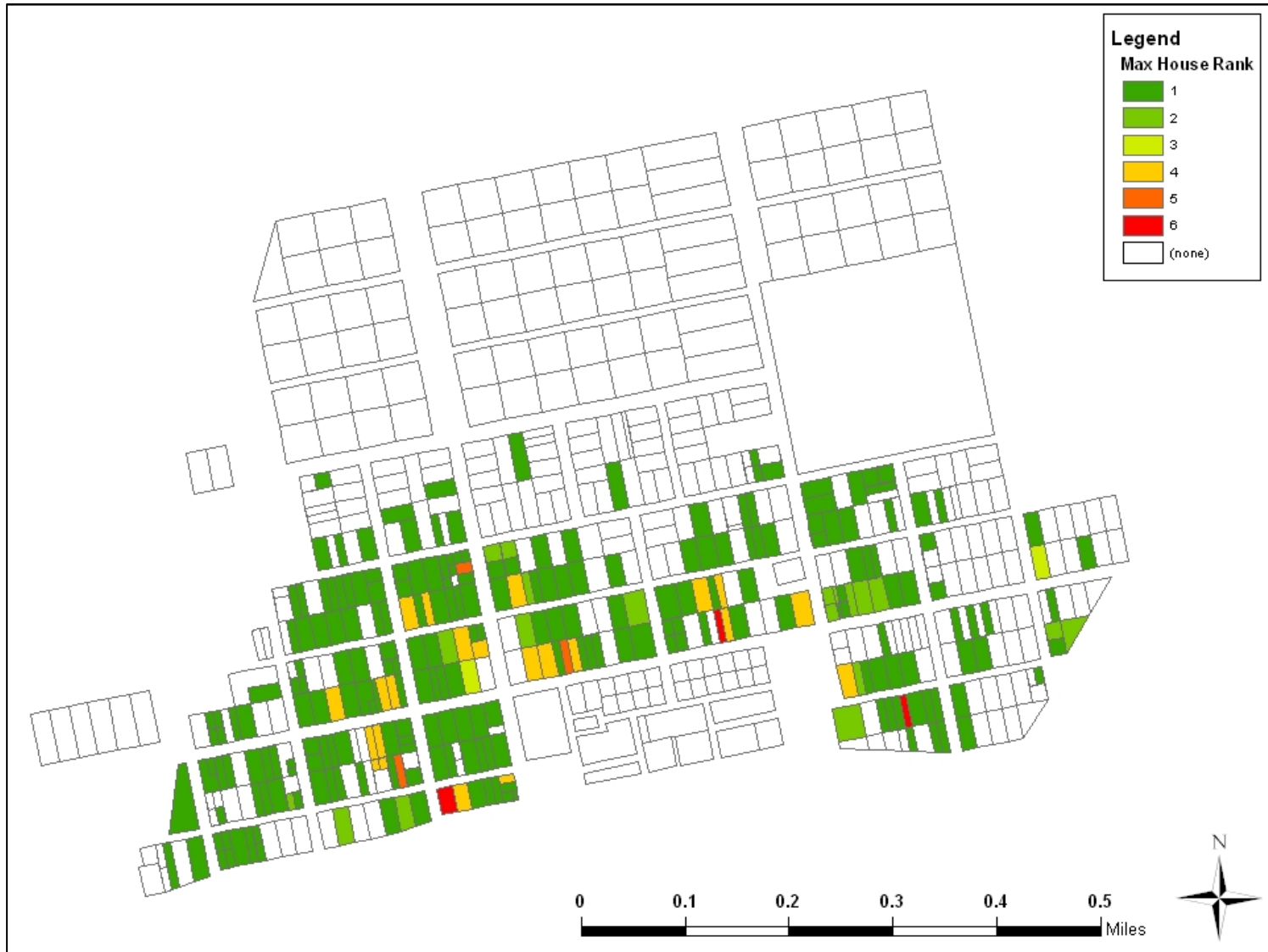


Figure 26. Maximum house rank, 1781-1821.



Table 13. House ranks based on all descriptions in land records, 1781-1821.

Structure Description	Rank	Count	%	Structure Description	Rank	Count	%
(none)	0	512	46.00%	2 houses	2	18	1.62%
house	1	235	21.11%	2 wooden houses	2	3	0.27%
wooden house	1	85	7.64%	2 small houses	2	2	0.18%
buildings	1	53	4.76%	2 small wooden houses	2	2	0.18%
low wooden house	1	47	4.22%	2 small cabins	2	1	0.09%
small wooden house	1	20	1.80%	houses,improvements	2	1	0.09%
small house	1	19	1.71%	<b>Rank 2 Total</b>	<b>2</b>	<b>27</b>	<b>2.43%</b>
dwelling house	1	12	1.08%	3 small houses	3	2	0.18%
improvements	1	11	0.99%	several houses	3	1	0.09%
house,buildings	1	8	0.72%	3 houses	3	1	0.09%
wooden house,kitchen	1	8	0.72%	<b>Rank 3 Total</b>	<b>3</b>	<b>4</b>	<b>0.36%</b>
house,kitchen	1	6	0.54%	2 story house	4	13	1.17%
frame house	1	5	0.45%	high house	4	5	0.45%
house,kitchen,buildings	1	5	0.45%	high wooden house	4	5	0.45%
building	1	3	0.27%	2 story wooden house	4	4	0.36%
small low wooden house	1	3	0.27%	2 story high house	4	1	0.09%
low wooden house and kitchen	1	2	0.18%	2 story high house,buildings	4	1	0.09%
dwelling house,buildings	1	1	0.09%	2 story house,buildings	4	1	0.09%
house body	1	1	0.09%	large dwelling house	4	1	0.09%
house,other buildings	1	1	0.09%	<b>Rank 4 Total</b>	<b>4</b>	<b>31</b>	<b>2.79%</b>
kitchen	1	1	0.09%	wood and brick house	5	2	0.18%
old hospital ruin	1	1	0.09%	wood and brick house,buildings	5	1	0.09%
old house	1	1	0.09%	wood brick house,kitchen,outs	5	1	0.09%
small house,kitchen	1	1	0.09%	<b>Rank 5 Total</b>	<b>5</b>	<b>4</b>	<b>0.36%</b>
small low wooden house,kitchen	1	1	0.09%	store	6	2	0.18%
wooden house out buildings	1	1	0.09%	house,store,other buildings	6	1	0.09%
wooden house,kitchen,buildings	1	1	0.09%	<b>Rank 6 Total</b>	<b>6</b>	<b>3</b>	<b>0.27%</b>
<b>Rank 1 Total</b>	<b>1</b>	<b>532</b>	<b>47.80%</b>	<b>Grand Total</b>	<b>1.26 μ</b>	<b>1113 Total</b>	<b>100.00%</b>

growth, and occurred seven distinct phases: 1781-1785, 1786-1793, 1794-1796, 1797-1803, 1804-1812, 1813-1816, and 1817-1821. Breaks in phases are identified as noticeable changes in yearly sales data provided in Appendix 2, the reasons of which are provided in Table 14.

Table 14. Identification of phases.

Phase	Reason For Ending Phase
<b>1 (1781-1785)</b>	decreased lot values in 1786
<b>2 (1786-1793)</b>	increased sales in 1794
<b>3 (1794-1796)</b>	decreased sales in 1797
<b>4 (1797-1803)</b>	increased sales in 1804
<b>5 (1804-1812)</b>	increased new sales and decreased average lot price in 1813
<b>6 (1813-1816)</b>	increased sales and decreased average lot price in 1817
<b>7 (1817-1821)</b>	cession to United States in 1821

The initial phase (1781-1785) was a time of transition between the incoming Spanish and outgoing British administrations and citizenry. The abrupt nature of the Spanish defeat of British Pensacola forces in 1781 did not afford town residents much time to sell their land holdings. The few that succeeded did so with the help of agents who stayed behind after cession. Few residential lots sold during the initial phase, as the unstable political and economic environment served as deterrents to development. Population growth occurred quite slowly, and residential growth even slower. As a result, most residential land remained the property of the Spanish Crown. Figure 27 gives the location of properties that sold by 1785 and Table 15 provides the results of cluster analysis of the thirty-three lots that were not gifts or grants. Only thirty-five privately-owned residential lots existed by 1785, two of which were given away. All landowners were white, although groups four and six indicate two American buyers. About half owned two or more properties in town and nearly one-third were associated with the military.

Most lots owned during this phase were relatively close to the fort and along the Bay. These were adjacent to the major transportation routes. Not many partial lots existed, and land values were generally low across the town, but a few lots near the waterfront sold for slightly higher than average prices, shown in Figure 27 as groups four, five, and six. The land records reveal that most of the privately-owned lots had houses on them.

The second phase (1786-1793) witnessed a considerable slowing of land transactions. There were only seven new sales during this phase, as shown in Figure 28,

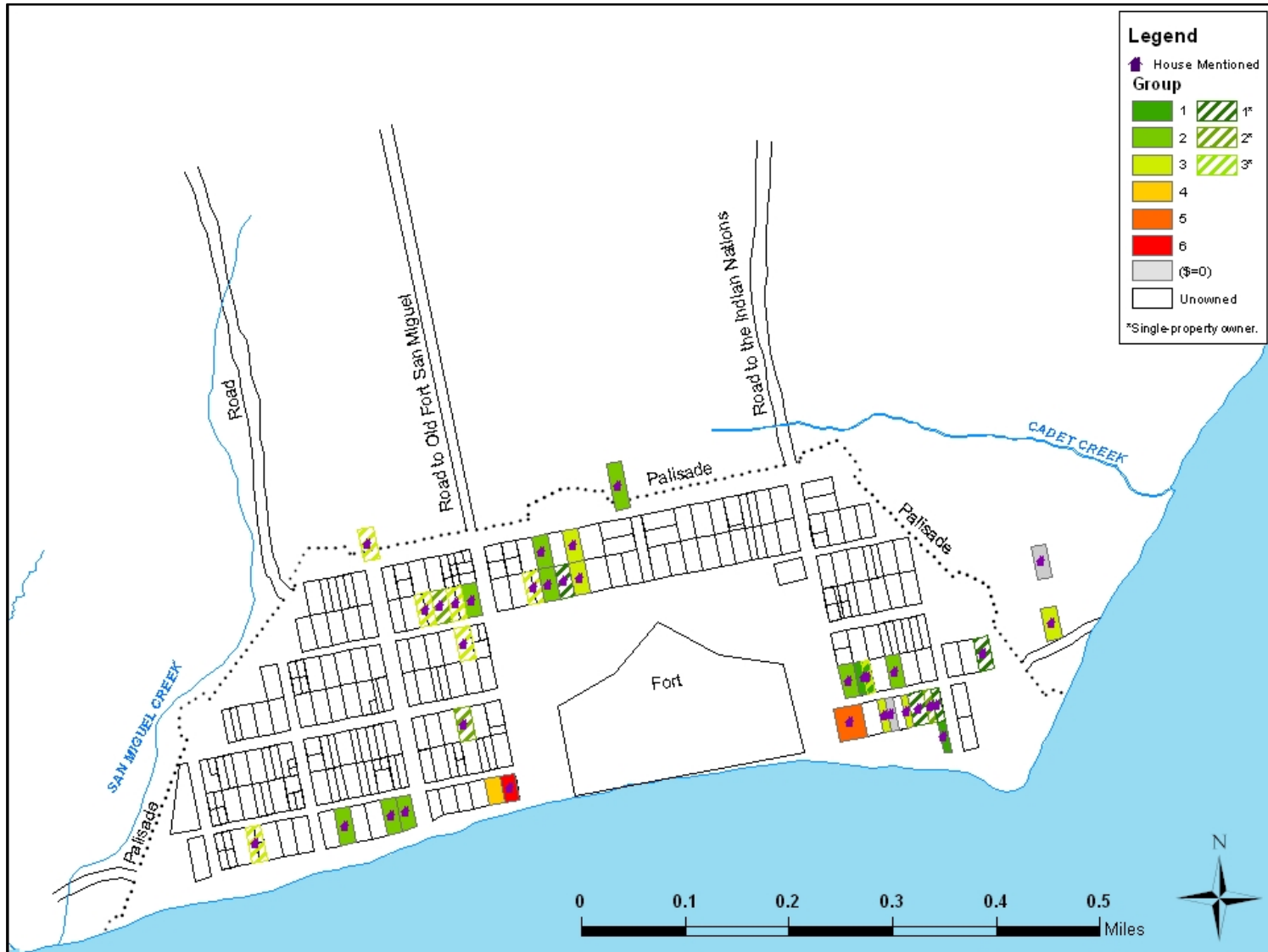


Figure 27. Cluster analysis results of Phase 1 ending in 1785 emphasizing groups, single-property owners, and houses.

Table 15. Summary of Cluster Analysis of Phase I ending in 1785 (header legend on page 111).

Gro up	Value	W_W	B_W	BUY_ RN	BUY_ MIL	BUY_ CIV	BUY_ W	BUY_ A	SELL_ RN	SELL_ MIL	SELL_ CIV	SELL_ W	SELL_ B	PURCHASE	ACRES	COST_ ACRE	CORE
<b>1</b>	N	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	Minimum	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	90.00	0.15	288.62	143.13
	Mean	1.00	0.00	1.50	0.33	0.67	1.00	0.00	1.00	1.00	0.00	1.00	0.00	309.50	0.26	1224.84	232.36
	Maximum	1.00	0.00	3.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	600.00	0.31	1952.62	328.70
	% of Total N	18.20%	18.20%	18.20%	18.20%	18.20%	18.20%	18.20%	18.20%	18.20%	18.20%	18.20%	18.20%	18.20%	18.20%	18.20%	18.20%
<b>2</b>	N	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	Minimum	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	35.00	0.16	102.77	109.31
	Mean	1.00	0.00	2.50	1.00	0.00	1.00	0.00	2.00	0.17	0.83	1.00	0.00	200.00	0.31	646.22	269.60
	Maximum	1.00	0.00	4.00	1.00	0.00	1.00	0.00	3.00	1.00	1.00	1.00	0.00	400.00	0.44	1283.63	425.23
	% of Total N	36.40%	36.40%	36.40%	36.40%	36.40%	36.40%	36.40%	36.40%	36.40%	36.40%	36.40%	36.40%	36.40%	36.40%	36.40%	36.40%
<b>3</b>	N	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	Minimum	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	100.00	0.16	324.33	143.13
	Mean	1.00	0.00	1.58	0.00	1.00	1.00	0.00	1.42	0.00	1.00	1.00	0.00	241.67	0.27	932.02	289.74
	Maximum	1.00	0.00	3.00	0.00	1.00	1.00	0.00	2.00	0.00	1.00	1.00	0.00	400.00	0.34	1598.31	566.01
	% of Total N	36.40%	36.40%	36.40%	36.40%	36.40%	36.40%	36.40%	36.40%	36.40%	36.40%	36.40%	36.40%	36.40%	36.40%	36.40%	36.40%
<b>4</b>	N	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Minimum	0.00	0.00	2.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1600.00	0.25	6400.32	193.04
	Mean	0.00	0.00	2.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1600.00	0.25	6400.32	193.04
	Maximum	0.00	0.00	2.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1600.00	0.25	6400.32	193.04
	% of Total N	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
<b>5</b>	N	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Minimum	1.00	0.00	2.00	0.00	1.00	1.00	0.00	2.00	0.00	1.00	1.00	0.00	2200.00	0.56	3908.28	97.82
	Mean	1.00	0.00	2.00	0.00	1.00	1.00	0.00	2.00	0.00	1.00	1.00	0.00	2200.00	0.56	3908.28	97.82
	Maximum	1.00	0.00	2.00	0.00	1.00	1.00	0.00	2.00	0.00	1.00	1.00	0.00	2200.00	0.56	3908.28	97.82
	% of Total N	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
<b>6</b>	N	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Minimum	0.00	0.00	2.00	0.00	1.00	0.00	1.00	3.00	0.00	1.00	1.00	0.00	400.00	0.25	1608.23	158.18
	Mean	0.00	0.00	2.00	0.00	1.00	0.00	1.00	3.00	0.00	1.00	1.00	0.00	400.00	0.25	1608.23	158.18
	Maximum	0.00	0.00	2.00	0.00	1.00	0.00	1.00	3.00	0.00	1.00	1.00	0.00	400.00	0.25	1608.23	158.18
	% of Total N	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
<b>Total</b>	N	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
	Minimum	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	35.00	0.15	102.77	97.82
	Mean	0.94	0.00	1.94	0.42	0.58	0.94	0.06	1.61	0.24	0.76	1.00	0.00	344.15	0.29	1157.72	259.25
	Maximum	1.00	0.00	4.00	1.00	1.00	1.00	1.00	3.00	1.00	1.00	1.00	0.00	2200.00	0.56	6400.32	566.01
	% of Total N	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Proceedings of the Land Commission in West Florida.

**Legend of variables used in cluster analysis, column headers in Tables 12-18.**

W\_W – White to White sales, White to White=1, others=0.

W\_B – White to Black sales, White to Black = 1, others=0.

B\_W – Black to White sales, Black to White=1, others=0.

B\_B – Black to Black sales, Black to Black=1, others=0.

BUY\_RN – Buyer Rank (average number of lots owned by every lot owner).

BUY\_MIL – Buyer Military, Buyer Military=1, others=0.

BUY\_CIV – Buyer Civilian, Buyer Civilian=1, others=0..

BUY\_W –Buyer White, Buyer White=1, others=0.

BUY\_B –Buyer Black, Buyer Black=1, others=0.

BUY\_A –Buyer American, Buyer American=1, others=0.

SELL\_RN –Seller Rank (average number of lots owned by every lot owner).

SELL\_MIL –Seller Military, Seller Military=1, others=0.

SELL\_CIV – Seller Civilian, Seller Civilian=1, others=0.

SELL\_W –Seller White, Seller White=1, others=0.

SELL\_B –Seller Black, Seller Black=1, others=0.

SELL\_A –Seller American, Seller American=1, others=0.

PURCHASE – Average Lot Price.

ACRES – Average Lot Acres.

COST/ACRE – Average Cost per Acre.

CORE – Average Distance from town core.

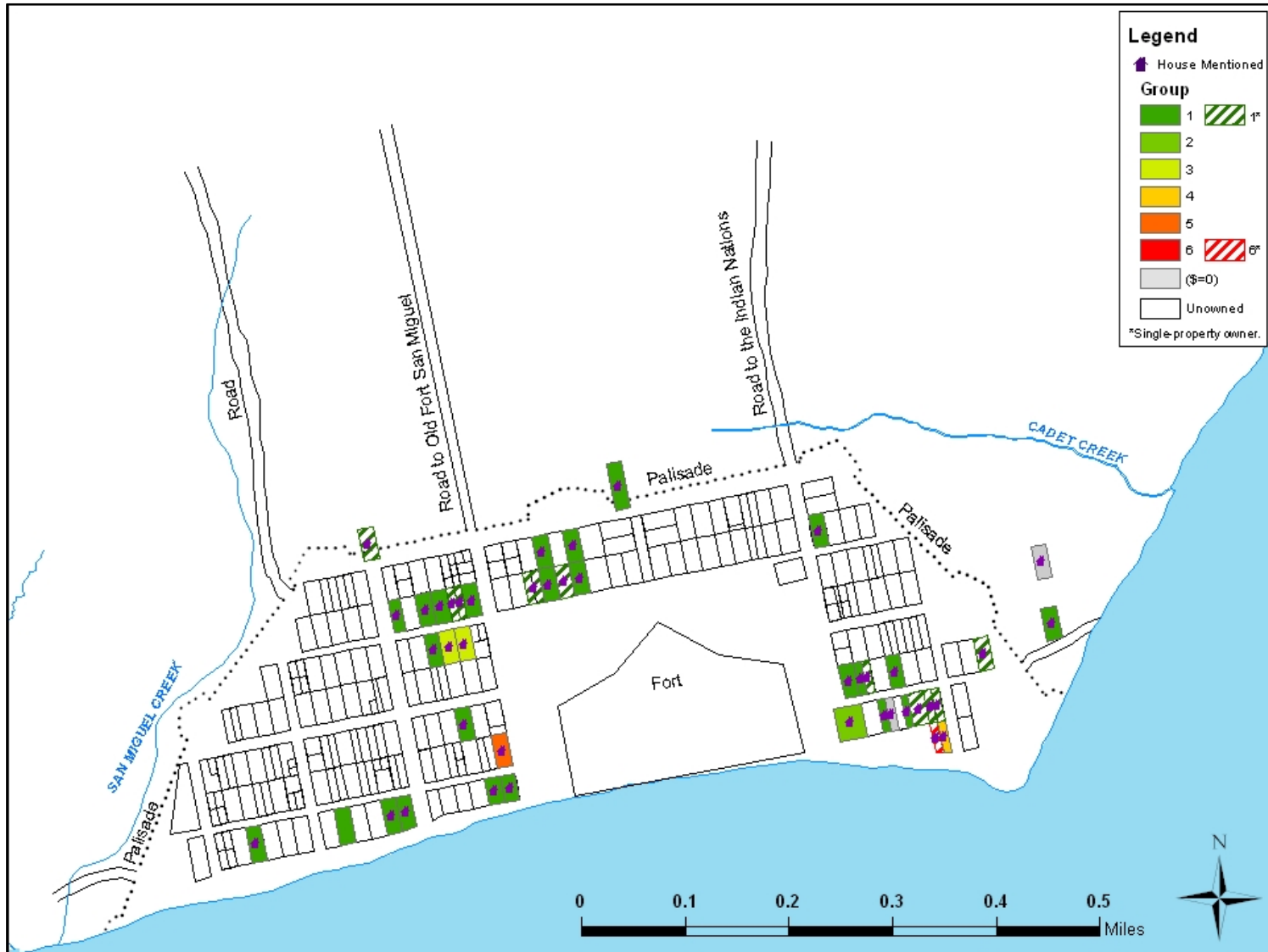


Figure 28. Cluster analysis results of Phase 2 ending in 1793 emphasizing groups, single-property owners, and houses.

Table 16. Summary of Cluster Analysis of Phase 2 ending in 1793 (header legend on page 111).

Group	Value	W_W	W_B	B_W	BUY_RN	BUY_MIL	BUY_CIV	BUY_W	BUY_B	BUY_A	SELL_RN	SELL_MIL	SELL_CIV	SELL_W	SELL_B	PURCHASE	ACRES	COST_ACRE	CORE
<b>1</b>	N	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34
	Minimum	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	35.00	0.14	102.77	109.31
	Mean	1.00	0.00	0.00	2.29	0.44	0.56	1.00	0.00	0.00	2.74	0.24	0.76	1.00	0.00	249.06	0.28	943.72	267.40
	Maximum	1.00	0.00	0.00	7.00	1.00	1.00	1.00	0.00	0.00	16.00	1.00	1.00	1.00	0.00	590.00	0.44	2372.14	566.01
	% of Total N	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%
<b>2</b>	N	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Minimum	1.00	0.00	0.00	6.00	0.00	1.00	1.00	0.00	0.00	2.00	0.00	1.00	1.00	0.00	430.00	0.56	763.89	97.82
	Mean	1.00	0.00	0.00	6.00	0.00	1.00	1.00	0.00	0.00	2.00	0.00	1.00	1.00	0.00	430.00	0.56	763.89	97.82
	Maximum	1.00	0.00	0.00	6.00	0.00	1.00	1.00	0.00	0.00	2.00	0.00	1.00	1.00	0.00	430.00	0.56	763.89	97.82
	% of Total N	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
<b>3</b>	N	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	Minimum	1.00	0.00	0.00	2.00	1.00	0.00	1.00	0.00	0.00	17.00	1.00	0.00	1.00	0.00	800.00	0.31	2565.50	261.46
	Mean	1.00	0.00	0.00	2.00	1.00	0.00	1.00	0.00	0.00	17.00	1.00	0.00	1.00	0.00	800.00	0.31	2566.39	269.99
	Maximum	1.00	0.00	0.00	2.00	1.00	0.00	1.00	0.00	0.00	17.00	1.00	0.00	1.00	0.00	800.00	0.31	2567.27	278.51
	% of Total N	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
<b>4</b>	N	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Minimum	0.00	1.00	0.00	2.00	0.00	1.00	0.00	1.00	0.00	5.00	1.00	0.00	1.00	0.00	160.00	0.15	1064.65	253.01
	Mean	0.00	1.00	0.00	2.00	0.00	1.00	0.00	1.00	0.00	5.00	1.00	0.00	1.00	0.00	160.00	0.15	1064.65	253.01
	Maximum	0.00	1.00	0.00	2.00	0.00	1.00	0.00	1.00	0.00	5.00	1.00	0.00	1.00	0.00	160.00	0.15	1064.65	253.01
	% of Total N	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
<b>5</b>	N	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Minimum	0.00	0.00	0.00	3.00	0.00	1.00	0.00	0.00	1.00	2.00	0.00	1.00	1.00	0.00	250.00	0.31	802.73	154.56
	Mean	0.00	0.00	0.00	3.00	0.00	1.00	0.00	0.00	1.00	2.00	0.00	1.00	1.00	0.00	250.00	0.31	802.73	154.56
	Maximum	0.00	0.00	0.00	3.00	0.00	1.00	0.00	0.00	1.00	2.00	0.00	1.00	1.00	0.00	250.00	0.31	802.73	154.56
	% of Total N	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
<b>6</b>	N	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Minimum	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	2.00	0.00	1.00	0.00	1.00	50.00	0.14	352.05	253.01
	Mean	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	2.00	0.00	1.00	0.00	1.00	50.00	0.14	352.05	253.01
	Maximum	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	2.00	0.00	1.00	0.00	1.00	50.00	0.14	352.05	253.01
	% of Total N	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
<b>Total</b>	N	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
	Minimum	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	35.00	0.14	102.77	97.82
	Mean	0.93	0.03	0.03	2.35	0.43	0.58	0.95	0.03	0.03	3.45	0.28	0.73	0.98	0.03	273.95	0.28	1005.06	259.49
	Maximum	1.00	1.00	1.00	7.00	1.00	1.00	1.00	1.00	1.00	17.00	1.00	1.00	1.00	1.00	800.00	0.56	2567.27	566.01
	% of Total N	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Proceedings of the Land Commission in West Florida.

giving a total of forty-two privately-owned residential lots throughout the town. Table 16 provides the results of cluster analysis and summarizes each group for the forty lots that sold above 0\$. Major roads near the northwest corner of the fort and along the shoreline continued to attract the most sales. Little diversity existed among either landowners or their properties and nearly all land owners were white. There were few partial lots, and land along the Bay was the most expensive, as indicated by groups three and four. Groups one, two, five, and six represent less expensive land. Transactions increased through the third phase (1794-1796), thanks in large part by the sale and resale of thirteen lots owned by David Hodge, a citizen during the previous British period.<sup>168</sup> Hodge's agent, Thomas Durnford, came to Pensacola in 1794, and sold Hodge's holdings. The urgency of these transactions is obvious in the land records as most of the lots sold over a four day period (17 November – 20 November), and each brought low prices ranging from \$15.00 to \$201.00. These lots would sell several more times before 1796, but never for much more than their original price. Figure 29 shows the peripheral location of many of Hodge's lots, which are in group one along the Bay, and in the northwest residential section. Table 17 provides summary information of each group defined by cluster analysis of this phase. Property near the fort's northwest corner increased in value, represented in Figure 29 as group two. Most other property values remained much lower, as depicted by groups three through six.

Although the fourth phase (1797-1803) brought a decrease in yearly sales, development continued to occur as more property passed into private hands. Residents bought land away from the town core, away from the shoreline, and away from the major

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<sup>168</sup> Clinton N. Howard, *The British Development of West Florida 1763-1769* (Berkeley: University of California Press, 1947), 85.



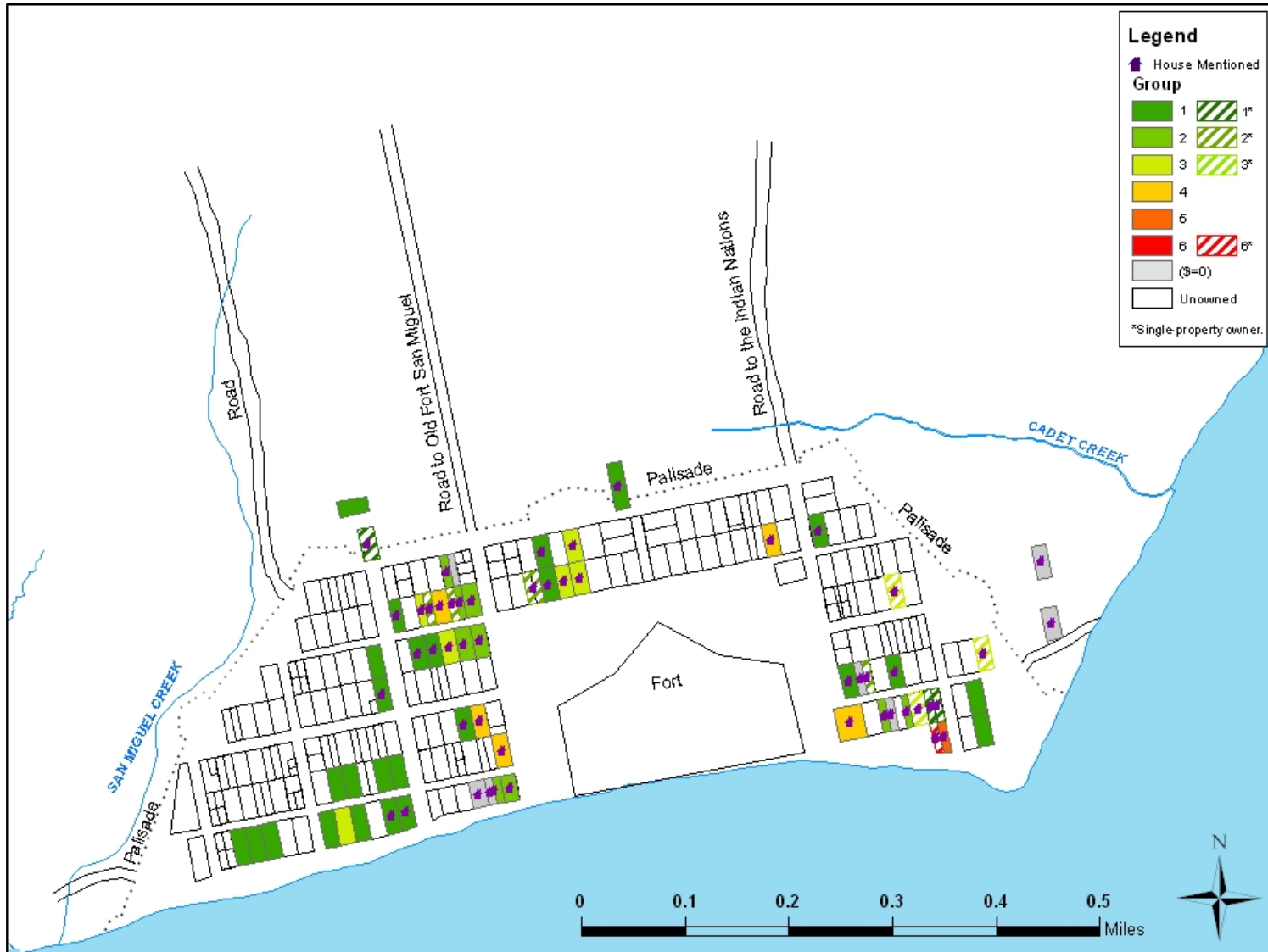


Figure 29. Cluster analysis results of Phase 3 ending in 1796 emphasizing groups, single-property owners, and houses.

Table 17. Summary of Cluster Analysis of Phase 3 ending in 1796 (header legend on page 111).

Group	Value	W_W	W_B	B_W	BUY_ RN	BUY_ MIL	BUY_ CIV	BUY_ W	BUY_ B	SELLER_ RN	SELL_ MIL	SELL_ CIV	SELL_ W	SELL_ B	PURCHASE	ACRES	COST_ ACRE	CORE
<b>1</b>	N	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
	Minimum	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	15.00	0.16	52.06	109.31
	Mean	1.00	0.00	0.00	3.76	0.62	0.38	1.00	0.00	4.76	0.00	1.00	1.00	0.00	143.57	0.31	495.03	347.16
	Maximum	1.00	0.00	0.00	9.00	1.00	1.00	1.00	0.00	12.00	0.00	1.00	1.00	0.00	400.00	0.44	1855.53	589.13
	% of Total N	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%
<b>2</b>	N	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
	Minimum	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	100.00	0.14	500.02	143.13
	Mean	1.00	0.00	0.00	2.00	0.08	0.92	1.00	0.00	2.00	0.00	1.00	1.00	0.00	426.92	0.22	1897.48	231.59
	Maximum	1.00	0.00	0.00	3.00	1.00	1.00	1.00	0.00	3.00	0.00	1.00	1.00	0.00	925.00	0.31	3331.00	352.49
	% of Total N	22.40%	22.40%	22.40%	22.40%	22.40%	22.40%	22.40%	22.40%	22.40%	22.40%	22.40%	22.40%	22.40%	22.40%	22.40%	22.40%	22.40%
<b>3</b>	N	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
	Minimum	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	35.00	0.16	102.77	198.13
	Mean	1.00	0.00	0.00	1.78	0.44	0.56	1.00	0.00	4.33	1.00	0.00	1.00	0.00	298.44	0.30	1025.08	275.60
	Maximum	1.00	0.00	0.00	3.00	1.00	1.00	1.00	0.00	17.00	1.00	0.00	1.00	0.00	800.00	0.34	2567.27	425.23
	% of Total N	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%
<b>4</b>	N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Minimum	1.00	0.00	0.00	6.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	115.00	0.31	368.96	97.82
	Mean	1.00	0.00	0.00	11.80	0.40	0.60	1.00	0.00	2.20	0.00	1.00	1.00	0.00	315.72	0.36	889.24	186.88
	Maximum	1.00	0.00	0.00	15.00	1.00	1.00	1.00	0.00	5.00	0.00	1.00	1.00	0.00	633.62	0.56	2034.50	286.97
	% of Total N	8.60%	8.60%	8.60%	8.60%	8.60%	8.60%	8.60%	8.60%	8.60%	8.60%	8.60%	8.60%	8.60%	8.60%	8.60%	8.60%	8.60%
<b>5</b>	N	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Minimum	0.00	1.00	0.00	2.00	0.00	1.00	0.00	1.00	5.00	1.00	0.00	1.00	0.00	160.00	0.15	1064.65	253.01
	Mean	0.00	1.00	0.00	2.00	0.00	1.00	0.00	1.00	5.00	1.00	0.00	1.00	0.00	160.00	0.15	1064.65	253.01
	Maximum	0.00	1.00	0.00	2.00	0.00	1.00	0.00	1.00	5.00	1.00	0.00	1.00	0.00	160.00	0.15	1064.65	253.01
	% of Total N	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%
<b>6</b>	N	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Minimum	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	2.00	0.00	1.00	0.00	1.00	50.00	0.14	352.05	253.01
	Mean	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	2.00	0.00	1.00	0.00	1.00	50.00	0.14	352.05	253.01
	Maximum	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	2.00	0.00	1.00	0.00	1.00	50.00	0.14	352.05	253.01
	% of Total N	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%
<b>Total</b>	N	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58
	Minimum	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	15.00	0.14	52.06	97.82
	Mean	0.97	0.02	0.02	3.67	0.43	0.57	0.98	0.02	3.81	0.17	0.83	0.98	0.02	244.62	0.29	932.96	293.09
	Maximum	1.00	1.00	1.00	15.00	1.00	1.00	1.00	1.00	17.00	1.00	1.00	1.00	1.00	925.00	0.56	3331.00	589.13
	% of Total N	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Proceedings of the Land Commission in West Florida.

roads. Figure 30 shows the location of privately-owned property and Table 18 provides the results of cluster analysis and summarizes each group. New transactions included some inexpensive and undeveloped lots, but also two valuable properties shown as group landowners remained low, although Blacks began buying land during this phase, as is indicated by the two lots in groups two and four.

The initial phase after the Louisiana Purchase from 1804 to 1812 brought dramatic changes to Pensacola's residential section, including the removal of the central fort and the inclusion of government buildings and house lots in that area. They made available several lots north of town that were initially set aside for gardens, and moved the palisade to encompass these additions to the town's layout. To meet increased demands for land, local administrators stepped up attempts to sell unowned property, and frequently held public sales of residential lots. The largest occurred on 9 and 10 July, 1804 when twenty-two properties sold to private landowners. These lots were scattered around town, each containing a house, and fetching average of \$360.00. Figure 31 shows the location of privately-owned property and Table 19 provides the results of cluster analysis and summarizes each group, and shows that by 1812 there were few lots not privately owned in these areas.

Sales along minor residential streets increased in the western section and along the Bay. Most of these lots appealed to two classes of landowners. The first were the military officers who were briefly stationed in Pensacola. The second were white civilians who owned several properties throughout these sections and probably were landlords renting these house lots to other residents. Both groups stayed in Pensacola for

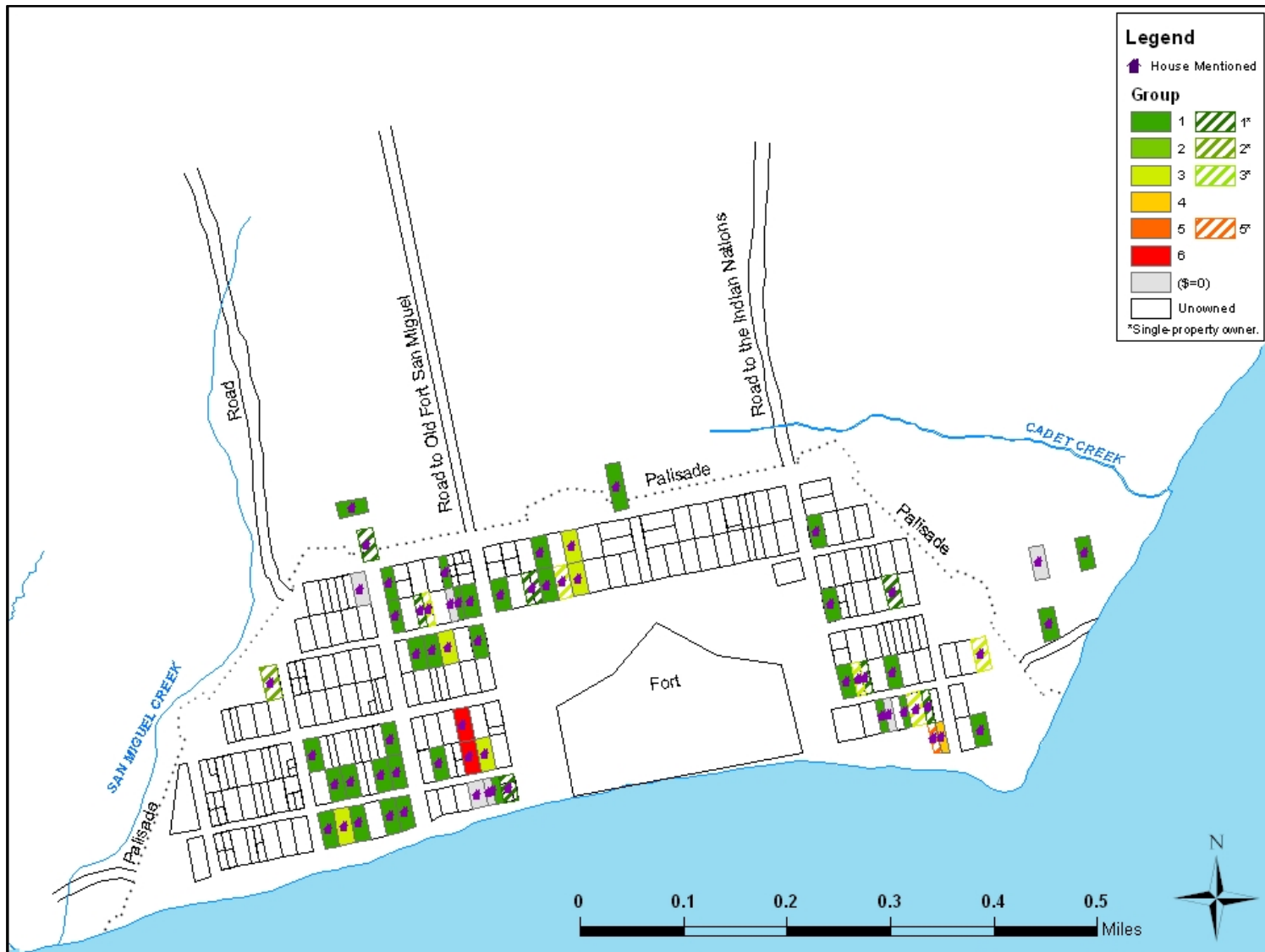


Figure 30. Cluster analysis results of Phase 4 ending in 1803 emphasizing groups, single-property owners, and houses.

Table 18. Summary of Cluster Analysis of Phase 4 ending in 1803 (header legend on page 111).

Gro up	Value	W_W	W_B	B_W	B_B	BUY_RN	BUY_MIL	BUY_CIV	BUY_W	BUY_B	SELL_R	SELL_MIL	SELL_CIV	SELL_W	SELL_B	PURCHASE	ACRES	COST_ACRE	CORE
<b>1</b>	N	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
	Minimum	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	15.00	0.12	52.06	97.82
	Mean	1.00	0.00	0.00	0.00	4.95	0.40	0.60	1.00	0.00	3.67	0.00	1.00	1.00	0.00	304.46	0.29	1172.78	301.79
	Maximum	1.00	0.00	0.00	0.00	20.00	1.00	1.00	1.00	0.00	12.00	0.00	1.00	1.00	0.00	1004.00	0.56	8110.21	589.13
	% of Total N	76.00%	76.00%	76.00%	76.00%	76.00%	76.00%	76.00%	76.00%	76.00%	76.00%	76.00%	76.00%	76.00%	76.00%	76.00%	76.00%	76.00%	76.00%
<b>2</b>	N	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Minimum	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	171.50	0.29	584.39	499.54
	Mean	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	171.50	0.29	584.39	499.54
	Maximum	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	171.50	0.29	584.39	499.54
	% of Total N	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%
<b>3</b>	N	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
	Minimum	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	35.00	0.14	102.77	143.13
	Mean	1.00	0.00	0.00	0.00	4.69	0.23	0.77	1.00	0.00	6.00	1.00	0.00	1.00	0.00	598.77	0.28	2100.63	259.07
	Maximum	1.00	0.00	0.00	0.00	15.00	1.00	1.00	1.00	0.00	19.00	1.00	0.00	1.00	0.00	2180.00	0.34	6981.64	425.23
	% of Total N	17.30%	17.30%	17.30%	17.30%	17.30%	17.30%	17.30%	17.30%	17.30%	17.30%	17.30%	17.30%	17.30%	17.30%	17.30%	17.30%	17.30%	17.30%
<b>4</b>	N	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Minimum	0.00	1.00	0.00	0.00	2.00	0.00	1.00	0.00	1.00	5.00	1.00	0.00	1.00	0.00	160.00	0.15	1064.65	253.01
	Mean	0.00	1.00	0.00	0.00	2.00	0.00	1.00	0.00	1.00	5.00	1.00	0.00	1.00	0.00	160.00	0.15	1064.65	253.01
	Maximum	0.00	1.00	0.00	0.00	2.00	0.00	1.00	0.00	1.00	5.00	1.00	0.00	1.00	0.00	160.00	0.15	1064.65	253.01
	% of Total N	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%
<b>5</b>	N	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Minimum	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	2.00	0.00	1.00	0.00	1.00	50.00	0.14	352.05	253.01
	Mean	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	2.00	0.00	1.00	0.00	1.00	50.00	0.14	352.05	253.01
	Maximum	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	2.00	0.00	1.00	0.00	1.00	50.00	0.14	352.05	253.01
	% of Total N	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%
<b>6</b>	N	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	Minimum	1.00	0.00	0.00	0.00	3.00	0.00	1.00	1.00	0.00	20.00	1.00	0.00	1.00	0.00	5000.00	0.31	15938.78	214.03
	Mean	1.00	0.00	0.00	0.00	3.00	0.00	1.00	1.00	0.00	20.00	1.00	0.00	1.00	0.00	5000.00	0.31	15972.92	216.65
	Maximum	1.00	0.00	0.00	0.00	3.00	0.00	1.00	1.00	0.00	20.00	1.00	0.00	1.00	0.00	5000.00	0.31	16007.05	219.28
	% of Total N	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%
<b>Total</b>	N	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75
	Minimum	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	15.00	0.12	52.06	97.82
	Mean	0.96	0.01	0.01	0.01	4.71	0.35	0.65	0.97	0.03	4.47	0.21	0.79	0.97	0.03	473.59	0.29	1708.05	293.45
	Maximum	1.00	1.00	1.00	1.00	20.00	1.00	1.00	1.00	1.00	20.00	1.00	1.00	1.00	1.00	5000.00	0.56	16007.05	589.13
	% of Total N	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Proceedings of the Land Commission in West Florida.



Figure 31. Cluster analysis results of Phase 5 ending in 1812 emphasizing groups, single-property owners, and houses.

Table 19. Summary of Cluster Analysis of Phase 5 ending in 1812 (header legend on page 111).

Group	Value	W_W	W_B	B_W	B_B	BUY_ RN	BUY_ MIL	BUY_ CIV	BUY_ W	BUY_ B	SELL_ R	SELL_ MIL	SELL_ CIV	SELL_ W	SELL_ B	PURCHASE	ACRES	COST_ ACRE	CORE
<b>1</b>	N	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	Minimum	0.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	50.00	0.01	352.05	253.01
	Mean	0.00	0.00	1.00	0.00	1.60	0.10	0.90	1.00	0.00	1.80	0.00	1.00	0.00	1.00	395.00	0.16	6192.49	475.52
	Maximum	0.00	0.00	1.00	0.00	5.00	1.00	1.00	1.00	0.00	4.00	0.00	1.00	0.00	1.00	1200.00	0.31	43887.02	705.64
	%of Total N	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%
<b>2</b>	N	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	Minimum	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	2.00	0.00	0.00	1.00	0.00	2000.00	0.04	14265.87	80.96
	Mean	1.00	0.00	0.00	0.00	3.20	0.20	0.80	1.00	0.00	9.60	0.40	0.60	1.00	0.00	4015.00	0.18	29391.95	244.03
	Maximum	1.00	0.00	0.00	0.00	9.00	1.00	1.00	1.00	0.00	20.00	1.00	1.00	1.00	0.00	7600.00	0.32	51117.68	593.35
	%of Total N	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%
<b>3</b>	N	188	188	188	188	188	188	188	188	188	188	188	188	188	188	188	188	188	188
	Minimum	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	15.25	0.05	63.97	80.55
	Mean	1.00	0.00	0.00	0.00	5.65	0.35	0.65	1.00	0.00	5.01	0.34	0.66	1.00	0.00	747.23	0.24	3790.64	309.04
	Maximum	1.00	0.00	0.00	0.00	20.00	1.00	1.00	1.00	0.00	21.00	1.00	1.00	1.00	0.00	3500.00	0.56	25559.85	627.60
	%of Total N	79.00%	79.00%	79.00%	79.00%	79.00%	79.00%	79.00%	79.00%	79.00%	79.00%	79.00%	79.00%	79.00%	79.00%	79.00%	79.00%	79.00%	79.00%
<b>4</b>	N	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
	Minimum	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	62.50	0.08	348.71	109.31
	Mean	0.00	1.00	0.00	0.00	3.31	0.00	1.00	0.00	1.00	3.44	0.50	0.50	1.00	0.00	491.53	0.23	2323.71	420.89
	Maximum	0.00	1.00	0.00	0.00	10.00	0.00	1.00	0.00	1.00	9.00	1.00	1.00	1.00	0.00	158.100	0.43	6436.93	593.35
	%of Total N	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%
<b>5</b>	N	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	Minimum	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	30.00	0.11	192.87	195.93
	Mean	0.00	0.00	0.00	1.00	1.42	0.00	1.00	0.00	1.00	1.75	0.00	1.00	0.00	1.00	106.13	0.16	655.49	409.26
	Maximum	0.00	0.00	0.00	1.00	3.00	0.00	1.00	0.00	1.00	4.00	0.00	1.00	0.00	1.00	212.00	0.29	1352.57	705.64
	%of Total N	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
<b>6</b>	N	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	Minimum	1.00	0.00	0.00	0.00	2.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	330.00	0.81	407.41	0.00
	Mean	1.00	0.00	0.00	0.00	10.50	1.00	0.00	1.00	0.00	1.00	0.50	0.50	1.00	0.00	2190.00	0.81	2707.77	321.99
	Maximum	1.00	0.00	0.00	0.00	19.00	1.00	0.00	1.00	0.00	2.00	1.00	1.00	1.00	0.00	4050.00	0.81	5008.12	643.99
	%of Total N	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%
<b>Total</b>	N	238	238	238	238	238	238	238	238	238	238	238	238	238	238	238	238	238	238
	Minimum	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.25	0.01	63.97	0.00
	Mean	0.84	0.07	0.04	0.05	5.05	0.29	0.71	0.88	0.12	4.76	0.32	0.68	0.91	0.09	832.34	0.24	4701.45	325.98
	Maximum	1.00	1.00	1.00	1.00	20.00	1.00	1.00	1.00	1.00	21.00	1.00	1.00	1.00	1.00	7600.00	0.81	51117.68	705.64
	%of Total N	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Proceedings of the Land Commission in West Florida.

only a few years before selling their properties and moving out of the region, and the effects of their land transactions reflected Figure 31 and Table 19 as group three.

Although the most landowners continued to be white, increasingly more free Blacks bought house lots during this phase, as shown by the thirteen lots in groups one, four, and five. Blacks purchased property away from the core and away from the most valuable land. They acquired lots in the eastern section and along the western periphery of town, areas which were primarily unimproved and of relatively low value. Many of these owned only one property in town, presumably their residence.

The phase between 1813 and 1816 witnessed many changes put forth by the municipal government, or *ayuntamiento*. The Spanish liberal constitution of 1812 authorized towns with a thousand or more residents to elect an *ayuntamiento* that was comprised of local officials, a regulatory council of citizens, and a town delegate. This governing body went to great efforts to improve the town, including establishing a public school and a priest house, improving roadways, and making more lots available for sale. Figure 32 illustrates the location of these and other privately-owned lots and Table 20 provides summaries of each group defined by cluster analysis. Although Pensacola's constitutional *ayuntamiento* lasted for only two years, its changes to the town's morphology persisted through the remainder of the period. Sales remained high and property values continued to rise. With the inclusion of the garden and central lots for sale as residential property, the sales of private property extended into all sectors of town. Sales to Blacks also rose during this phase, particularly in 1814, and sales between Blacks also increased. Blacks continued to buy inexpensive lots in the eastern section





Figure 32. Cluster analysis results of Phase 6 ending in 1816 emphasizing groups, single-property owners, and houses.

Table 20. Summary of Cluster Analysis of Phase 6 ending in 1816 (header legend on page 111).

Gro up		W_W	W_B	B_W	B_B	BUY_RN	BUY_MIL	BUY_CIV	BUY_W	BUY_B	BUY_A	SELL_RN	SELL_MIL	SELL_CIV	SELL_W	SELL_B	SELL_A	PURCHASE	ACRES	COST_ACR	CORE	
1	N	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	
	Minimum	0.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	8.00	0.01	352.05	253.01	
	Mean	0.00	0.00	1.00	0.00	4.27	0.20	0.80	1.00	0.00	0.00	2.47	0.00	1.00	0.00	1.00	0.00	348.53	0.17	1974.93	474.14	
	Maximum	0.00	0.00	1.00	0.00	20.00	1.00	1.00	1.00	0.00	0.00	9.00	0.00	1.00	0.00	1.00	0.00	1200.00	0.31	3855.75	705.64	
	% of Total N	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%
2	N	231	231	231	231	231	231	231	231	231	231	231	231	231	231	231	231	231	231	231	231	231
	Minimum	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	15.25	0.05	46.23	5.80	
	Mean	1.00	0.00	0.00	0.00	5.09	0.27	0.73	1.00	0.00	0.00	5.13	0.33	0.67	1.00	0.00	0.00	770.20	0.24	3870.54	319.26	
	Maximum	1.00	0.00	0.00	0.00	20.00	1.00	1.00	1.00	0.00	0.00	21.00	1.00	1.00	1.00	0.00	0.00	4700.00	0.56	26384.72	757.65	
	% of Total N	72.40%	72.40%	72.40%	72.40%	72.40%	72.40%	72.40%	72.40%	72.40%	72.40%	72.40%	72.40%	72.40%	72.40%	72.40%	72.40%	72.40%	72.40%	72.40%	72.40%	72.40%
3	N	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	Minimum	1.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00	2.00	0.00	1.00	1.00	0.00	0.00	2000.00	0.04	33110.25	128.35	
	Mean	1.00	0.00	0.00	0.00	5.50	0.00	1.00	1.00	0.00	0.00	3.75	0.00	1.00	1.00	0.00	0.00	2275.00	0.06	41820.28	247.79	
	Maximum	1.00	0.00	0.00	0.00	9.00	0.00	1.00	1.00	0.00	0.00	9.00	0.00	1.00	1.00	0.00	0.00	2600.00	0.08	51117.68	352.32	
	% of Total N	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%
4	N	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
	Minimum	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	30.00	0.04	192.87	195.93	
	Mean	0.00	0.00	0.00	1.00	2.17	0.00	1.00	0.00	1.00	0.00	2.83	0.00	1.00	0.00	1.00	0.00	162.42	0.15	1506.09	451.96	
	Maximum	0.00	0.00	0.00	1.00	10.00	0.00	1.00	0.00	1.00	0.00	9.00	0.00	1.00	0.00	1.00	0.00	560.00	0.31	7100.67	705.64	
	% of Total N	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%
5	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
	Minimum	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	15.00	0.08	40.01	63.20	
	Mean	0.00	1.00	0.00	0.00	3.45	0.00	1.00	0.00	1.00	0.00	6.64	0.36	0.64	1.00	0.00	0.00	344.31	0.27	1722.57	391.26	
	Maximum	0.00	1.00	0.00	0.00	10.00	0.00	1.00	0.00	1.00	0.00	33.00	1.00	1.00	1.00	0.00	0.00	1200.00	0.82	6436.93	613.93	
	% of Total N	6.90%	6.90%	6.90%	6.90%	6.90%	6.90%	6.90%	6.90%	6.90%	6.90%	6.90%	6.90%	6.90%	6.90%	6.90%	6.90%	6.90%	6.90%	6.90%	6.90%	6.90%

Source: Proceedings of the Land Commission in West Florida.

Table 20. Summary of Cluster Analysis of Phase 6 ending in 1816, continued (header legend on page 111).

Group		W_W	W_B	B_W	B_B	BUY_RN	BUY_MIL	BUY_CIV	BUY_W	BUY_B	BUY_A	SELL_RN	SELL_MIL	SELL_CIV	SELL_W	SELL_B	SELL_A	PURCHASE	ACRES	COST_ACR
6	N	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	Minimum	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	33.00	0.00	1.00	1.00	0.00	0.00	13.50	0.17	16.43
	Mean	1.00	0.00	0.00	0.00	4.53	0.18	0.82	1.00	0.00	0.00	33.00	0.00	1.00	1.00	0.00	0.00	165.68	0.37	738.22
	Maximum	1.00	0.00	0.00	0.00	20.00	1.00	1.00	1.00	0.00	0.00	33.00	0.00	1.00	1.00	0.00	0.00	340.00	0.83	1479.91
	%of Total N	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%	5.30%
7	N	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	Minimum	1.00	0.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00	20.00	1.00	0.00	1.00	0.00	0.00	5000.00	0.25	15938.78
	Mean	1.00	0.00	0.00	0.00	2.33	0.00	1.00	1.00	0.00	0.00	20.00	1.00	0.00	1.00	0.00	0.00	5866.67	0.29	20793.65
	Maximum	1.00	0.00	0.00	0.00	3.00	0.00	1.00	1.00	0.00	0.00	20.00	1.00	0.00	1.00	0.00	0.00	7600.00	0.31	30435.11
	%of Total N	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%
8	N	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Minimum	0.00	1.00	0.00	0.00	10.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	5500.00	0.31	17578.36
	Mean	0.00	1.00	0.00	0.00	10.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	5500.00	0.31	17578.36
	Maximum	0.00	1.00	0.00	0.00	10.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	5500.00	0.31	17578.36
	%of Total N	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%
9	N	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	Minimum	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	2.00	0.00	0.00	1.00	0.00	0.00	25.00	0.81	22.53
	Mean	1.00	0.00	0.00	0.00	12.88	0.25	0.75	1.00	0.00	0.00	9.50	0.13	0.88	1.00	0.00	0.00	542.38	0.93	667.01
	Maximum	1.00	0.00	0.00	0.00	20.00	1.00	1.00	1.00	0.00	0.00	12.00	1.00	1.00	1.00	0.00	0.00	4050.00	1.11	5008.12
	%of Total N	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Total	N	319	319	319	319	319	319	319	319	319	319	319	319	319	319	319	319	319	319	319
	Minimum	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	0.01	16.43
	Mean	0.82	0.07	0.05	0.06	4.93	0.22	0.78	0.87	0.13	0.00	6.68	0.28	0.72	0.90	0.10	0.00	730.40	0.25	3930.57
	Maximum	1.00	1.00	1.00	1.00	20.00	1.00	1.00	1.00	1.00	0.00	33.00	1.00	1.00	1.00	1.00	0.00	7600.00	1.11	5117.68
	%of Total N	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Proceedings of the Land Commission in West Florida.

and western periphery, as indicated in Figure 32 as groups four and five. Most Blacks owned only one property, presumably their home, and most were single mothers who worked as either laundresses or seamstresses. Increasing numbers of Blacks sold property to other Blacks (n=18), suggesting strong social ties among this group.

The final phase between 1817 and 1821 witnessed increased American involvement the region, and speculators bought property throughout the town. By 1821, they owned most of the lots in the northern sections, and also many of the properties east of the core (Figure 33, Table 21). Groups one and three show the location of these lots which were of relatively low value and tended to sell several times during this brief phase. Speculators also bought many properties from established Pensacola residents situated in the newly-forming Black neighborhood. Most Black landowners (groups five, six, and seven) retained their properties, however, and continued to live in Pensacola through this phase. The majority of the landowning population remained white who possessed lots scattered in every section of town, as indicated by group two (n=105). Members of this group owned an average of six properties, suggesting that they rented houses to other residents.

### **Summary**

An examination of classes, land ownership, and residents shows the active and vibrant nature of Pensacola's urban morphogenesis between 1781 and 1821. Fluctuations in demographics and real estate trends suggest that the town developed in a series of seven phases. However, many of the fluctuations regarding real estate transactions noted before 1804 appear as anomalies that correspond with isolated and extraordinary events



Figure 33. Cluster analysis results of Phase 7 ending in 1821 emphasizing groups, single-property owners, and houses.

Table 21. Summary of Cluster Analysis of Phase 7 ending in 1821 (header legend on page 111).

Gro up		W_W	W_B	B_W	B_B	BUY_RN	BUY_MIL	BUY_CIV	BUY_W	BUY_B	BUY_A	SELL_RN	SELL_MIL	SELL_CIV	SELL_W	SELL_B	SELL_A	PURCHASE	ACRES	COST_ACR	CORE
1	N	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166	166
	Minimum	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00	10.00	0.08	16.43	5.26
	Mean	1.00	0.00	0.00	0.00	6.95	0.04	0.96	1.00	0.00	0.00	65.10	0.00	1.00	1.00	0.00	0.00	293.93	0.41	1430.31	444.77
	Maximum	1.00	0.00	0.00	0.00	36.00	1.00	1.00	1.00	0.00	0.00	192.00	0.00	1.00	1.00	0.00	0.00	1750.00	1.11	8370.25	951.31
	% of Total N	35.70%	35.70%	35.70%	35.70%	35.70%	35.70%	35.70%	35.70%	35.70%	35.70%	35.70%	35.70%	35.70%	35.70%	35.70%	35.70%	35.70%	35.70%	35.70%	35.70%
2	N	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105
	Minimum	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	10.00	0.05	34.88	5.80
	Mean	1.00	0.00	0.00	0.00	6.29	0.50	0.50	1.00	0.00	0.00	12.45	0.69	0.31	1.00	0.00	0.00	900.76	0.26	4065.60	304.98
	Maximum	1.00	0.00	0.00	0.00	25.00	1.00	1.00	1.00	0.00	0.00	192.00	1.00	1.00	1.00	0.00	0.00	4100.00	0.44	20000.00	757.65
	% of Total N	22.60%	22.60%	22.60%	22.60%	22.60%	22.60%	22.60%	22.60%	22.60%	22.60%	22.60%	22.60%	22.60%	22.60%	22.60%	22.60%	22.60%	22.60%	22.60%	22.60%
3	N	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87
	Minimum	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	10.00	0.08	63.91	97.82
	Mean	0.00	0.00	0.00	0.00	17.64	0.01	0.99	0.00	0.00	1.00	9.77	0.24	0.76	0.93	0.07	0.00	503.37	0.41	2029.23	442.82
	Maximum	0.00	0.00	0.00	0.00	34.00	1.00	1.00	0.00	0.00	1.00	192.00	1.00	1.00	1.00	1.00	0.00	3000.00	0.83	14384.75	882.69
	% of Total N	18.70%	18.70%	18.70%	18.70%	18.70%	18.70%	18.70%	18.70%	18.70%	18.70%	18.70%	18.70%	18.70%	18.70%	18.70%	18.70%	18.70%	18.70%	18.70%	18.70%
4	N	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46
	Minimum	0.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	700.00	0.03	7017.06	80.55
	Mean	0.96	0.00	0.00	0.00	4.67	0.00	1.00	0.96	0.00	0.04	4.48	0.07	0.93	1.00	0.00	0.00	2638.70	0.19	17171.69	288.20
	Maximum	1.00	0.00	0.00	0.00	25.00	0.00	1.00	1.00	0.00	1.00	20.00	1.00	1.00	1.00	0.00	0.00	7000.00	0.44	51117.68	705.64
	% of Total N	9.90%	9.90%	9.90%	9.90%	9.90%	9.90%	9.90%	9.90%	9.90%	9.90%	9.90%	9.90%	9.90%	9.90%	9.90%	9.90%	9.90%	9.90%	9.90%	9.90%
5	N	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	Minimum	0.00	1.00	0.00	0.00	9.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	5500.00	0.31	17578.36	328.50
	Mean	0.00	1.00	0.00	0.00	9.00	0.00	1.00	0.00	1.00	0.00	3.00	0.33	0.67	1.00	0.00	0.00	7943.33	0.32	24820.26	363.44
	Maximum	0.00	1.00	0.00	0.00	9.00	0.00	1.00	0.00	1.00	0.00	4.00	1.00	1.00	1.00	0.00	0.00	9165.00	0.33	29260.98	406.14
	% of Total N	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%

Source: Proceedings of the Land Commission in West Florida.

Table 21. Summary of Cluster Analysis of Phase 2 ending in 1821, continued (header legend on page 111).

Group		W_W	W_B	B_W	B_B	BUY_RN	BUY_MIL	BUY_CIV	BUY_W	BUY_B	BUY_A	SELL_RN	SELL_MIL	SELL_CIV	SELL_W	SELL_B	SELL_A	PURCHASE	ACRES	COST_ACR	CORE
6	N	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
	Minimum	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	30.00	0.08	40.01	109.31
	Mean	0.00	1.00	0.00	0.00	3.70	0.00	1.00	0.00	1.00	0.00	41.50	0.30	0.70	1.00	0.00	0.00	436.36	0.33	2442.10	435.27
	Maximum	0.00	1.00	0.00	0.00	9.00	0.00	1.00	0.00	1.00	0.00	192.00	1.00	1.00	1.00	0.00	0.00	1500.00	0.83	9612.96	738.07
	% of Total N	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%
7	N	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	Minimum	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	40.00	0.08	128.44	219.27
	Mean	0.00	0.00	0.00	1.00	2.07	0.00	1.00	0.00	1.00	0.00	2.93	0.00	1.00	0.00	1.00	0.00	196.43	0.17	1540.40	454.89
	Maximum	0.00	0.00	0.00	1.00	9.00	0.00	1.00	0.00	1.00	0.00	9.00	0.00	1.00	0.00	1.00	0.00	560.00	0.31	7100.67	593.35
	% of Total N	3.20%	3.20%	3.20%	3.20%	3.20%	3.20%	3.20%	3.20%	3.20%	3.20%	3.20%	3.20%	3.20%	3.20%	3.20%	3.20%	3.20%	3.20%	3.20%	3.20%
8	N	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
	Minimum	0.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	8.00	0.01	352.05	195.93
	Mean	0.00	0.00	1.00	0.00	4.00	0.24	0.76	1.00	0.00	0.00	1.76	0.00	1.00	0.00	1.00	0.00	370.47	0.17	2100.49	424.37
	Maximum	0.00	0.00	1.00	0.00	17.00	1.00	1.00	1.00	0.00	0.00	6.00	0.00	1.00	0.00	1.00	0.00	1200.00	0.31	3857.32	625.79
	% of Total N	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%
9	N	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	Minimum	0.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	168.00	0.07	536.63	216.54
	Mean	0.00	0.00	0.00	0.00	2.50	0.00	1.00	0.67	0.17	0.17	3.00	0.00	1.00	0.00	0.00	1.00	919.67	0.24	5179.76	368.61
	Maximum	0.00	0.00	0.00	0.00	8.00	0.00	1.00	1.00	1.00	1.00	4.00	0.00	1.00	0.00	0.00	1.00	1700.00	0.31	15345.29	517.12
	% of Total N	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%
Total	N	465	465	465	465	465	465	465	465	465	465	465	465	465	465	465	465	465	465	465	465
	Minimum	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	8.00	0.01	16.43	5.26
	Mean	0.68	0.05	0.04	0.03	8.13	0.14	0.86	0.72	0.08	0.19	30.32	0.22	0.78	0.91	0.08	0.01	765.30	0.33	3965.49	395.02
	Maximum	1.00	1.00	1.00	1.00	36.00	1.00	1.00	1.00	1.00	1.00	192.00	1.00	1.00	1.00	1.00	1.00	9165.00	1.11	51117.68	951.31
	% of Total N	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Proceedings of the Land Commission in West Florida.

that had the effect of skewing the results for these years. These anomalies include isolated sales for much higher than usual prices, and sales of multiple lots for low prices. In actuality, the period before 1804 exhibited remarkable consistency, with regard to land transactions and population changes, and can be considered one long phase.

The period, therefore, evolved through three phases rather than seven, each corresponding with demographic trends noted in censuses. The first lasted to 1804, and included a small population living near the central fort of which few bought land. The second began in 1804 when increased populations moved into Pensacola from Louisiana. Heightened demands for land facilitated development throughout the residential section of town, and limited social clustering began among Blacks on the western edge of town. The third phase began in 1816 with heightened American activity and speculation in the region. The following chapter provides a more in-depth summary of each phase and integrates the demographic information pertaining to socioeconomic classes.



## **CHAPTER 5.**

### **CONCLUSIONS**

The main goals of this dissertation are to show the lack of spatial groupings of socioeconomic classes in Spanish colonial Pensacola's residential section, and to reveal the morphogenesis of the town through three distinct phases between 1781 and 1821. Spanish colonial and American Territorial records reveal these trends, and suggest that Pensacola evolved in a manner different from other Spanish colonial urban centers. Pensacola as a whole developed dramatically as a result of land transactions after 1781, and by 1821 most of the town was sold to its citizenry and the majority of the lots had houses built on them. As available land diminished, many land owners took advantage of the situation by dividing and selling parts of their lots. Increased demands for land heightened real estate values resulting in more money pumped into the local economy. Land transactions amounted to \$734,865.55, quite a tidy sum for a colonial outpost feeling the pinch of scarce support from the Spanish Crown and local economic activities. Urban development occurred in three phases, each as a result of specific regional and local trends, and each facilitating morphological changes to the town plan. Despite fluctuations in Pensacola's population, demographic ratios remained consistent through the period. Residential clustering of specific socioeconomic classes was rare. Instead, throughout the final colonial period in Pensacola's history, people of varying socioeconomic classes lived side-by-side across the residential section.

#### **The Early Years (1781-1803)**

The first phase began shortly after Spain retained possession of Pensacola in 1781 and lasted to 1803. The town provided a virtual clean slate for urban development

for incoming Spanish administration and residents. Although the Law of the Indies required that newly-acquired towns be revised to conform to the Spanish town grid, Pensacola administrators decided to maintain the British plan through this phase for four reasons. First, the central fort, and the military forces that it accommodated, provided protection through these tumultuous years. Second, the British town in 1781 was comprised of orderly lots arranged in blocks radiating from the fort, a design that suited the Spanish needs for facilitating and controlling residential urban development. Third, population totals remained low before 1804, and the hundreds of houses abandoned by the British adequately accommodated Spanish Pensacola residents through this phase. Fourth, civic improvements took time and resources, two luxuries that the incoming Spanish administration did not have. Rather than convert Pensacola's center to a conventional *plaza* and modify the remainder of the town to adhere to the Law of the Indies, administrators maintained the British town morphology through this phase.

The demand for residential land was of minor significance before the Louisiana Purchase, and the town's free population remained low and racially consistent due to the unattractive qualities of the town. A few white residents owned land during this period, while the majority of the population lived on Crown land essentially as squatters.<sup>169</sup> The most important factor in determining residential growth during the years before the Louisiana Purchase was proximity to the central fort and major roadways. Most purchases occurred in these areas, and there was very little deviation from this pattern. Many of these private properties remained the most developed and valuable lots through

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<sup>169</sup> Squatting on Crown land also occurred in St. Augustine during this period. See Griffin, *Mullet on the Beach*, 163-165.

the second Spanish period, and several of their owners stayed in Pensacola after the Louisiana Purchase and into the subsequent American Territorial Period.

The military presence at the center of Pensacola played a key role in determining residential development during this initial phase for two reasons. First, the fort afforded protection for Pensacola during the early years. Residents could retreat within its walls when the community was threatened by enemy attack or natural disaster. Second, the centrally-located military presence provided Pensacola with a steady market for many local merchants. Small businesses, some of which were illicit, operated from family homes near the fort and catered to the military.

Pensacola's early transportation network was also an important factor for urban growth. Major roadways fostered economic activities within Pensacola and into the surrounding region. Family businesses situated on the larger and most traveled roads had the benefit of greater visibility which, in turn, could potentially lead to a greater customer base than rival businesses in more remote and less visible areas. The larger roads also provided better communicative ties.

Proximity to the fort situated in the town core took preeminence before 1804, but nearness to similar socioeconomic class members remained relatively low. The resulting pattern reflected these values, with residents and landowners of differing classes living side-by-side in the house lots nearest the fort's gates, as shown in Figure 34.

### **Post-Louisiana Purchase (1804-1815)**

The years after the Louisiana Purchase brought incredible changes to Pensacola, and prompted immediate revisions to the town's residential section. Population swelled

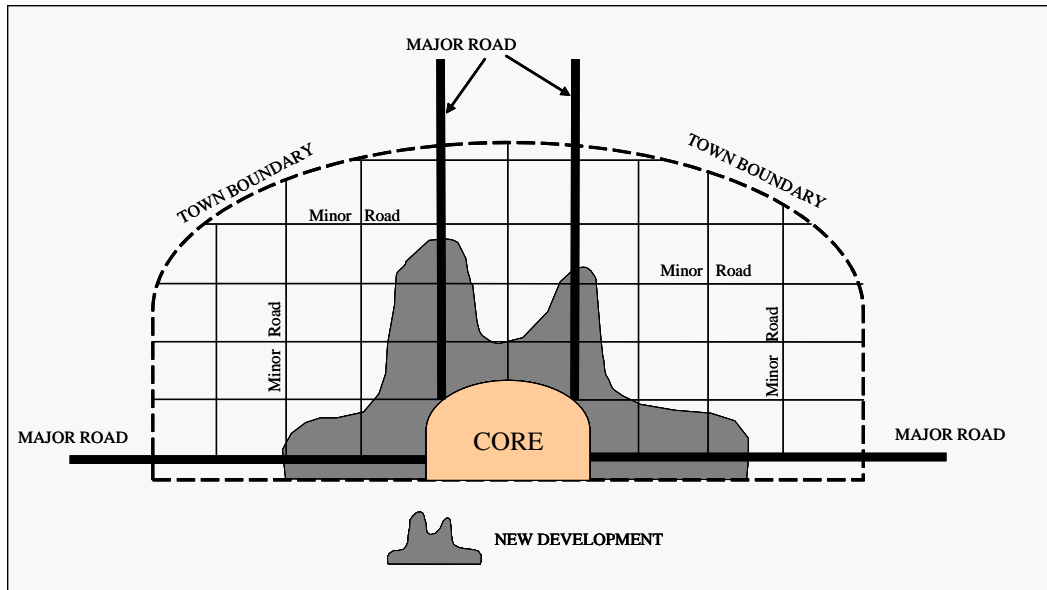


Figure 34. Initial urban development concentrated near town center.

from about 650 in 1802 to nearly 1400 by 1805.<sup>170</sup> Whereas the previous twenty-three years had witnessed the number of privately-owned lots rising to only eighty-four by 1803, the subsequent eighteen years would bring that total to 565 in 1821.

By 1804, much of the town's British morphology survived intact, but the increased residency forced local administrators to modify the town plan. The town's brief local constitutional government accomplished many of these revisions between 1812 and 1814, and their actions cannot be overemphasized. The Spanish liberal constitution of 1812 authorized towns with a thousand or more residents to elect an *ayuntamiento* comprised of local officials, a regulatory council of citizens, and a town delegate. The group met regularly and exercised their control over local matters that included civic improvements. One of the first issues that the *ayuntamiento* addressed involved modifying the town's layout to accommodate increased demand for residential land. The constitutional *ayuntamiento* modified the town plan into a more conventional

<sup>170</sup> Coker and Inglis, *Spanish Censuses of Pensacola*.

Spanish urban center by making the peripheral land available for sale and development as house lots, moving the palisade accordingly, and restructuring the town core by removing the central fort and including more house lots and administrative buildings. Ironically, the constitutional *ayuntamiento* looked to ordinances in the Laws of the Indies developed in the sixteenth century for guidance on urban morphology.<sup>171</sup> Local representatives voted to implement changes to Pensacola's town plan to adhere to the traditional Spanish colonial urban grid plan.

Heightened demand on land after 1804 prompted increases in local land values, and as property availability decreased average house lot size decreased. Owners began selling more partial lots and new houses sprang up across the residential section. Ethnic diversity among landowners also rose, and although the majority continued to be white throughout the entire period more non-white bought house lots. This included a sizable Black population, but also immigrants from many different locations.

Increased demand on land occurred only after the Louisiana Purchase, and as a direct result of the dramatic increase in Pensacola's population. The most important factor determining urban residential development between 1804 and 1816 was availability of land. Although still important, proximity to the town core and major roadways became secondary factors. The pattern for land acquisition involved residents buying lots that were not yet owned. Because house lots in areas nearest to the core and along major roadways to the town limits were already privately-owned, primarily by

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<sup>171</sup> Records of the proceedings to alter Pensacola's town plan are found in: "Proceedings of the Land Commission in West Florida," Vol. 2A, pages 21-34, (Microfilm on file at John C. Pace Special Collections Library, University of West Florida: 1825).

prominent members of the community, most incoming residents bought land along minor streets in areas closer to the town's periphery.

Free Blacks made their appearance as landowners after 1803, and remained in Pensacola through the remainder of the Spanish period. Free Blacks bought available land that was increasingly located toward the periphery in the west. In the eastern residential section, they purchased house lots that happened to be more interspersed with whites. Many Black residents were women and some were single mothers. Their presence near the western periphery represents one of the most permanent residential neighborhoods in town.

The western intermediate zone between the town core and the periphery attracted two types of land owners. The first type consisted of military officers who lived in houses in this zone during their brief tour of duty in Pensacola. The second type consisted of white civilians who also stayed for only a few years in town, but who bought several properties in this zone that they rented to other residents.

Residents after 1804 also valued proximity to the town core, but found that the only available lots for sale existed along secondary streets and adjacent to previously-owned lots. New residents bought available lots nearest the core first, and those in outlying areas later, as shown in Figure 35. Limited socioeconomic clustering occurred in isolated areas among low-class Blacks near the western periphery.

### **The Final Years (1816-1821)**

Enclosed you will find the plot of remote land which I promised to send you. At the first glance you will be satisfied of the future value of our speculation and indeed did I suffer myself to indulge in castle building I should already fancy

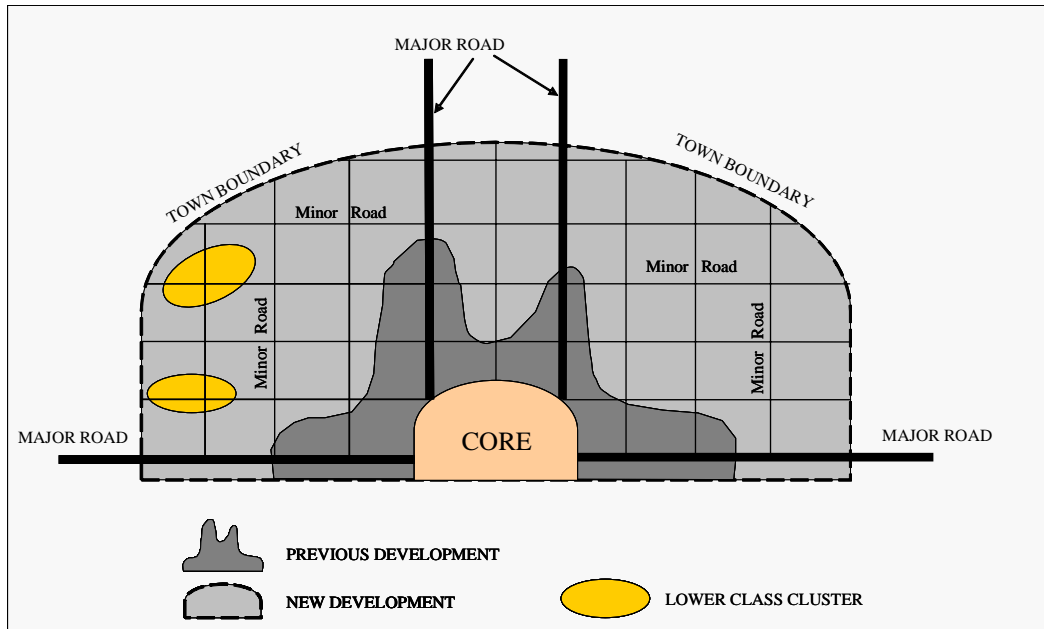


Figure 35. Later urban development radiating from core.

I was rich. If Pensacola ever becomes a place of only one half the importance you suppose it will, and of which I make no doubt, the town must grow over our land, and the road leading up the valley, as laid down on the plot, being the great highway to the upper country, may, with a little enterprise, and capital, be made, in process of time, to Pensacola, what King Street is to Charleston and Howard Street is to Baltimore....The sooner we lay off our lots and offer a part of them for sale, after the occupancy of the Floridas by the US the better—the lots within the limits of the town will be held so extravagantly high that persons will prefer making improvements in the suburbs where lots can be had on good terms. (Colonel William King to Colonel A.P. Haynes, 1819)<sup>172</sup>

King's remarks summarize speculation as the most important real estate trend during the final phase of the period. Speculation began as early as 1816, and reached its height with the American occupation of West Florida led by General Andrew Jackson between May, 1818 and February, 1819. During that time, the Governor of the American Occupation Colonel William King oversaw no less than 101 lot sales, 42 of which involved Americans. In fact, there were only 100 lot sales after early 1819 when

<sup>172</sup> Colonel William King, Pensacola, to Colonel A.P. Haynes, Philadelphia, 17 June 1819, Innerarity-Hulse Papers, 68-11, 23, Special Collections, Pace Library, University of West Florida, Pensacola, Florida.

American forces pulled out of Pensacola. Colonel King also bought land in and around town, and in a letter to Colonel Haynes, some of which is quoted above, King refers to developing a land grant purchased adjacent to Pensacola's northern periphery. The widely-publicized proceedings between the United States and Spain in 1818 led to heightened land speculation in Pensacola, and the limited neighborhood formation noted in previous phases began to disintegrate as many Pensacola residents sold their holdings and left the region.

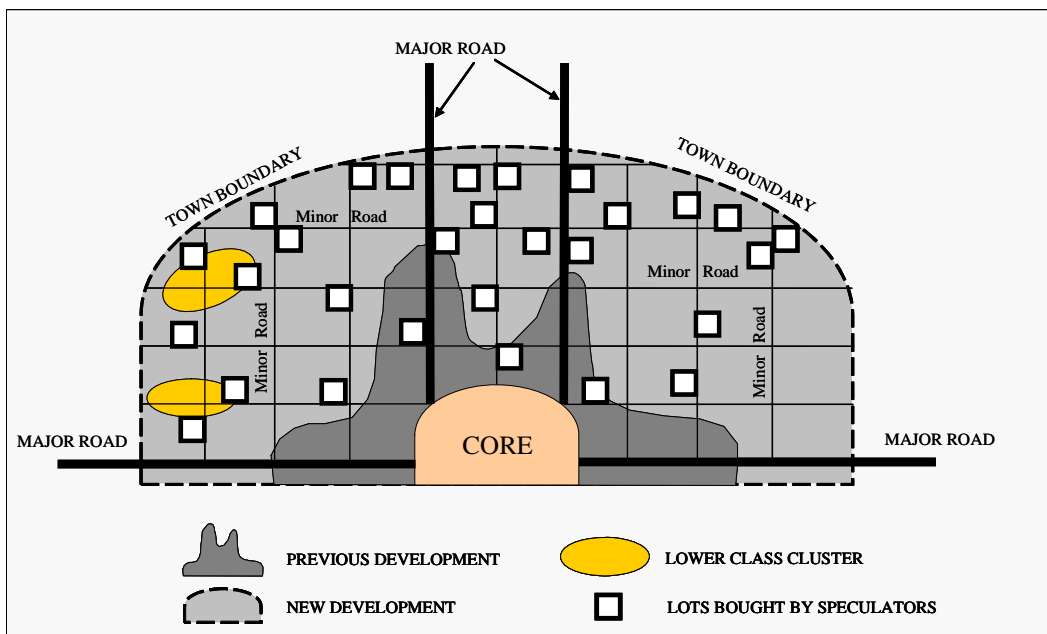


Figure 36. Effects of speculation after 1816.

Despite widespread out-migration and land speculation during the latter years of the period, much of the town's socioeconomic class structure persisted. Creoles outnumbered other ethnic groups and used their power as elite administrators in presiding over the affairs of local government. Several retired military officials also enjoyed their place among the local elite class. Skilled artisans, local merchants, and professionals comprised the town's middle class, and catered to the local military market. The middle class included mostly male *Peninsulars* and Creoles, while the lower class contained



mostly Creoles and free persons of color who worked in the most laborious and unskilled tasks. Women, and Black single mothers in particular, comprised much of the lower class. The town's population remained ethnically diverse through this latter phase, although many white immigrants who moved into Pensacola after the Louisiana Purchase left the area by 1820. Some residents retained their land to 1821, including many Blacks who lived on their modest holdings scattered throughout the eastern section and near the western edge of town.

### **Discussion**

This dissertation has shown Spanish colonial Pensacola's morphogenesis by presenting data gleaned from historical census and land record onto town maps and plans through a series of static thematic maps, and has generated conclusions related to the relationship between Pensacola's residents and their properties, a relationship that includes consideration of Spanish colonial socioeconomic classes, global and regional geopolitical events, Spanish colonial town planning, and the local environment. The results of this "ecological inquiry" have shown that the static data presented herein actually represent the dynamic nature of Pensacola's development from a small fortified outpost in 1781 to a vibrant and diverse administrative center in 1821.<sup>173</sup>

While this study does not attempt to prove or disprove the applicability of preindustrial urban city models, certain observations can be made concerning the inverse-Burgess and Sjoberg models. Throughout the second Spanish period (1781-1821) Pensacola's morphology exhibited a central focus, and its distinctly visible town core included military installations, churches, government buildings, markets, and wharves.

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<sup>173</sup> Earle, *Geographical Inquiry*, 7.

The core remained the center of social and administrative activities through the period and the residential section radiated from that area.

However, the socioeconomic differences that existed between Pensacola's residents did not fully lead to the stratified urban patterns noted by scholars in other Spanish colonial cities.<sup>174</sup> Neither does it appear that the few Pensacola elites clustered near the center of town as in other urban areas.<sup>175</sup> While some loose grouping occurred in specific areas across Pensacola's residential section that can be associated with race and class, particularly among Blacks, this was not the norm. More apparent was the mixing of differing socioeconomic classes, occupations, and real estate values.

It is also clear that the landowning class remained remarkably consistent during each of the three phases. Middle-class whites comprised the overwhelming majority of Pensacola's landowning population and members of this group owned several properties in town. Their presence is noted before and after the 1804 population explosion, and through the final years of the period. The few elites and lower class landowners also appeared in every phase, but were far less numerous.

In searching for explanations for the spatial homogeneity of the residential section, three factors are important. The most important factor involves the stagnant local economy and the lack of merchant elites. Traditionally, race and class determined

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<sup>174</sup> Caplow, "Guatemala City.,"; Chance, *Race and Class*, 119-121; Chance, "Ecology of Race and Class," 102; Hansen, "Ecology.,"; Hawthorn and Hawthorn, "Sucre, Bolivia.,"; Hayner, "Mexico City.,"; Hayner, "Differential Social Change.,"; Kicza, "Great Families of Mexico," 18; Socolow and Johnson, "Urbanization in Colonial Latin America," 33-36; Tax, "Municipios," 423-444.

<sup>175</sup> Anderson, "Race and Social Stratification," 228; Greenow, "Microgeographic Analysis," 274; Kinsbruner, *The Colonial Spanish-American City*, 54; Chance, "Ecology of Race," 93-118; Chance, "The Colonial Latin American City," 211-228; Anderson, "Race and Social Stratification," 228.

social stratification in Spanish colonial societies, but economic prowess rose in importance toward the end of the colonial era so that the elite class included larger numbers of upwardly-mobile Creoles.<sup>176</sup> Pensacola's population was no exception as more Creoles claimed the elite titles of "Don" and "Doña" for themselves and their children (Table 11) by 1820. Bense notes similar findings in local archaeological remains which reveal that access to wealth allowed racial groups which were traditionally firmly entrenched in middle or lower classes to move into upper classes.<sup>177</sup> Bense concludes that class became more associated with wealth and less with ethnicity through the late colonial period.

However, Pensacola never obtained the commercial importance of other Spanish colonial urban centers, and West Florida's economic stagnation inhibited the formation of a sizable merchant elite class.<sup>178</sup> Historically, Pensacola's worth rested in its strategic location along the Gulf of Mexico and in the remote periphery of the Spanish colonial realm. The region contained no viable impetus for settlement or economic endeavors. As a consequence, Pensacola's population remained small and consistently relied on the Spanish Crown for support. A traveler to Pensacola in 1803 wrote:

There is no kind of manufacturing attempt here, so that almost every inhabitant of the place is supported either directly or indirectly by the pay of the Spanish Government. And very miserable support it is, the supply of money

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<sup>176</sup> Chance and Taylor, "Estate and Class," 454-487; Seed, "Social Dimensions," 569-606.

<sup>177</sup> Bense, Judith A. "Historical and Archaeological Context and Comparisons," In *Archaeology of Colonial Pensacola*, ed. Judith A. Bense. (Gainesville: University Press of Florida, 1999), 207-230.

<sup>178</sup> The only exceptions are the few merchants associated with the Panton, Leslie & Company and the subsequent John Forbes and Company. See: Coker and Watson, *Indian Traders*; White, "The Forbes Company," 274-275.

coming from Mexico at long intervals, and with great uncertainty. (Unsigned Document, 1803)<sup>179</sup>

Most residents had lower class occupations associated with strenuous manual labor. Creoles and Negros worked as low-status artisans while Negros labored as servants and slaves. Nearly every working woman claimed lower-class jobs as seamstress or laundress. The middle class was approximately three times as populous as the elite class, and included a variety of professionals, high-status artisans, and landowners. *Peninsulars* operated small shops out of family homes that were scattered throughout the town. Creole tavern keepers or billiard hall owners catered to the local military crowd. The few members of the elite class were retired military officers and local administrators who lived in various locations in town. Although a few elites were *Peninsulars*, most were Creoles.

It should be mentioned here that Pensacola's occupational classes closely resemble those of other Latin American urban areas in many respects, with regard to Susan Socolow's estimates of colonial Latin American occupational groups, provided in Tables 22 and 23.<sup>180</sup> Pensacola's population was small, and included no large estate owners, high clergy, middle class government bureaucrats, or members of religious orders. There were similar percentages of merchants and small landowners, less secular priests, and unskilled laborers and servants, and more elite bureaucrats, military elites, professionals, shopkeepers, artisans, and skilled workers. Pensacola's elite class accounted for only 8.76 percent, and while this figure appears high, it is lower than

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<sup>179</sup> Unsigned Document, 1803, Volume 1, Box 2, Folder #1, Walworth Papers, Document on File, Hill Memorial Library, Baton Rouge.

<sup>180</sup> Pensacola census records provided no information regarding the town's poor and unemployed. Socolow, "Introduction," 15-16.

Socolow's elite threshold of fifteen percent. The large difference in the low class percentages also conforms to Socolow's figures.

Table 22. Occupational groups in colonial urban Latin America and Pensacola.

Occupational Group	Min	Max	Mean	Pensacola	Difference
Large Estate Owner	1.00%	1.00%	1.00%	0.00%	-1.00%
Government Bureaucrats (elite)	1.00%	1.00%	1.00%	5.18%	4.18%
High Clergy	0.40%	0.40%	0.40%	0.00%	-0.40%
Merchants	0.50%	3.00%	1.75%	1.59%	-0.16%
Military (elite)	0.30%	0.30%	0.30%	1.99%	1.69%
Small Landowners	3.50%	8.00%	5.75%	5.18%	-0.57%
Government Bureaucrats (middle)	1.00%	2.00%	1.50%	0.00%	-1.50%
Religious Order	3.00%	4.00%	3.50%	0.00%	-3.50%
Secular Priests	3.00%	4.00%	3.50%	0.40%	-3.10%
Professionals	1.00%	1.00%	1.00%	9.16%	8.16%
Shopkeepers	3.00%	11.00%	7.00%	14.34%	7.34%
Artisans/Skilled Workers	20.00%	45.00%	32.50%	36.25%	3.75%
Unskilled Laborers/Servants	30.00%	40.00%	35.00%	25.90%	-9.10%
Poor	5.00%	10.00%	7.50%	0.00%	-7.50%

Table 23. Class structure in colonial urban Latin America and Pensacola.

Class	All	Pensacola	Difference
Elite	4.45%	8.76%	4.31%
Middle	22.25%	29.08%	6.83%
Low	75.00%	62.15%	-12.85%

Source: Susan Socolow, "Introduction," in *Cities and Society in Colonial Latin America*, ed. Louisa Schell Hoberman and Susan Migden Socolow, (Albuquerque: University of New Mexico Press, 1986), 15-16.

The second factor that influenced the mixed residential pattern stems from the first and involves the large number of middle class residents in Pensacola who dominated the landowning population throughout the period. Lower and elite class residents consistently owned far fewer properties. The overwhelming numbers of the middle class landowners, most of whom now claimed the titles "Don" or "Doña" for themselves and their children, facilitated a mixed residential landscape as these residents owned land of similar values in every section and rented their property to military personnel in the middle section.

A third factor involved the small size of the community which measured about a mile wide and deep, and was constricted on its front by Pensacola Bay and on its sides by marshlands. Between the years 1781 and 1821, the town consistently provided more than enough land for purchasing and developing. Pensacola's available private property never fully reached its carrying capacity, although it came close near the end of the period, and speculators such as Colonel King began buying land adjacent to the town predicting future urban development. Strains on the availability of land, especially after the Louisiana Purchase, led to the extension of the town's residential section and increased sales of partial lots.

The population explosion on Pensacola's residential development had the effect of increasing the rate of growth but did not alter its character. The demographic composition of the community remained the same before and after the event. Given the socioeconomic consistency of the landowning class through the period, it seems logical to assume that, had the immigration increases after the Louisiana Purchase not occurred in Pensacola, the town's residential section would have evolved into much the same manner, but at a slower rate. The town would have contained a smaller resident population and many more unowned house lots near the periphery. The population explosion in Pensacola after the Louisiana Purchase only served to accelerate the process by facilitating increased demands for land. Further, the only real deterrent to development came with land speculation toward the end of the period, and even speculators could not uproot the more permanent residents.

Possibilities for future research could include a more detailed examination of Pensacola's Spanish East Florida neighbor, St. Augustine, which may have exhibited a similar mixing of residential classes, having been influenced by many of the same local and regional trends. St. Augustine was also a small Spanish colonial town that emphasized its military and administrative activities, and also passed through the same series of colonial phases before transferring to the United States in 1821. St. Augustine had a similar centrally-focused morphology, although environmental restrictions led to the town evolving in an elongated fashion. Demographic trends in 1785 also resembled those in Pensacola, and consisted of people from many different countries, including: Spain, Florida, Great Britain, Germany, Switzerland, Minorca, Mallorca, Corsica, Italy, and many others.<sup>181</sup> Although Johnson noted residential clustering along St. Augustine's waterfront, near military installations, and close to the plaza, and Griffin emphasized Minorcan neighborhood formation on the northern periphery, closer examination may reveal more mixed patterns of residential socioeconomic classes based on occupation and race.<sup>182</sup>

The opportunity also exists for comparing Spanish Pensacola development to North American urban centers. Research of North American towns reveal mixed residential patterns similar to that seen in Spanish colonial Pensacola.<sup>183</sup> However, most

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<sup>181</sup> Sherry Johnson, "The Spanish St. Augustine Community, 1784-1795: A Reevaluation," *Florida Historical Quarterly* 68 (1989), 27-54; James G. Cusick, "Creolization and the Borderlands," *Historical Archaeology* 34 (2000): 49.

<sup>182</sup> Johnson, "Spanish St. Augustine Community," 28-29; Griffin, *Mullet on the Beach*, 135-183.

<sup>183</sup> Conzen, "Historical Geography," 88-107; Robert Fishman, *Bourgeois Utopias: The Rise and Fall of Suburbia* (New York: Basic Books, Inc., 1987), 7-8; Thomas Hanchett, *Sorting out the New South City: Race, Class, and Urban Development in Charlotte, 1875-1975* (Chapel Hill: University of North Carolina Press, 1998), 9; Paul Johnson,

scholars agree that commercial activities in North America provided the impetus for industrialization, and that the “commercial city” preceded the “industrial city.”<sup>184</sup>

Another research topic exists in extending this study into the subsequent Florida Territorial period (1821-1845) and statehood (1845-present) to determine how Pensacola developed into its present state. American administrators adopted the Spanish town plan, honored most landowner claims, and allowed Spanish residents to remain in Pensacola into the Florida Territorial period. The continuity between the colonial and modern eras is still apparent in Pensacola today in the buildings and streets in the city’s historic central district, and among the many residents who are descendants of Spanish colonists.

Determining the effects of industrialization on Pensacola development is another avenue for research. Pensacola transferred to the United States on 17 July 1821, on the eve of industrialization and still very much a colonial town devoid of the commercial sectors and residential neighborhoods. These urban elements came later. North American scholars write that neighborhoods based on social classes formed as a result of economic changes associated with industrialization, which also facilitated improved and more extensive transportation networks away from the city core, and the formation of

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*Shopkeeper's Millennium: Society and Revivals in Rochester, New York 1815-1837* (New York: American Century Series, 1978), 48; Michael B. Katz, *The People of Hamilton, Canada West: Family and Class in a Mid-Nineteenth-Century City* (Cambridge: Harvard University Press, 1975), 334; Paul Knox, *Urban Social Geography, an Introduction* (Essex: Longman Scientific & Technical, 1995), 24.

<sup>184</sup> Conzen, “Historical Geography,” 98; Carville Earle, *The American Way: A Geographical History of Crisis and Recovery*. New York: Rowman & Littlefield Publishers, Inc., 2003, 70, 368-374; John P. Radford, “The Social Geography of the Nineteenth Century Us City,” in *Geography and the Urban Environment: Progress in Research and Applications*, ed. D.T. Herbert and R.J. Johnson (London: John Wiley, 1981), 218.



distinct business districts.<sup>185</sup> Archeologist John Phillips has noted that the impact of steam-powered milling on West Florida development, especially in the rural areas surrounding Pensacola.<sup>186</sup> The effects of industrialization on Pensacola, however, remain to be determined.

The initial proposal of this research also included analyzing Spanish colonial West Florida rural development along with that of Pensacola. Previous research suggests that rural development also occurred in a series of phases, with a few scattered farms around Escambia Bay before 1816, a rush-on-land up the Escambia River among Spanish timber barons after 1816, and an influx of Anglo-American squatters along the Alabama border and down the River after 1817.<sup>187</sup> However, the growth that occurred in the countryside surrounding the town remains largely unexplored. Further analysis of rural Spanish West Florida would supplement the current urban research and provide a more holistic view of regional development during the second Spanish period.

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<sup>185</sup> Hanchett, *Sorting*, 9; Sam Bass Warner, Jr., *Streetcar Suburbs: The Process of Growth in Boston (1870-1900)* (Cambridge: Harvard University Press, 1982).

<sup>186</sup> Phillips, *Water-Powered Industries*; Phillips, "Flood Thy Neighbor."

<sup>187</sup> Harry J. Wilson, "The Americanization of the Second Spanish Period West Florida Interior," *Gulf South Historical Review* 15 (1999), 6-17.

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APPENDIX 1. EXAMPLE OF SPANISH LAND DEED  
AND ENGLISH TRANSLATIONS BY THE AMERICAN LAND COMMISSION

Sepan que yo D.<sup>o</sup> Manuel Gonzales Interpretado de las  
Leyes Indias, y vecino de esta Plaza, otorgo que vengo  
voluntariamente y con efecto a D.<sup>o</sup> Manuel Arias, una casa  
de madera y tabicada, construida sobre un pedio solar, con  
cuyo valor el numero 186, comprado de quarenta pies  
de frente, y cuatro de fondo, poseyendo frente a  
la Calle de la Intendencia, y lindando por su dere-  
cha, con casa del nombrado Bartolomeo Arco, y por  
su izquierda, con solar del vecino de esta Plaza D.<sup>o</sup>  
Simón, la misma que me pertenece por haver  
sido comprada de D.<sup>o</sup> Pedro Reguero, por escritura  
en este Archivo publico en don de los correutes  
y es la que vengo al Estado D.<sup>o</sup> Manuel Arias  
con todas las entradas, salidas, y otras costumbres  
y derechos, libre de gravamen e hipoteca, lo  
que no consta en este Archivo haber alguno  
el precio de quarenta reales y cinco pesos, que al  
comprador ha sido devuelto, de cuyo valor  
por haber sido en presente a mi satisfaccion  
la entrega, otorgo formal recibo y carta de

M. G. 1814

Page 1 (of 4) of Spanish Land Deed of Lot 186, Manuel Gonzales to Manuel Arias, 5 April 1814, Pensacola, Miscellaneous Manuscripts, Box 11, Folder 9, Pensacola Historical Society, Pensacola.

pago en forma: Mediante lo qual, no quite y  
Sepase del derecho de propiedad, posesion, util, do-  
minio y Sección que a esta Casa y medio Solar,  
havia y havia, y todo lo cede, renuncio y traspose  
en el comprador, o en quien sea causa y donatario  
bien para que como legatario deudo, lo ponga, en  
vida, viuda, o exague a su voluntad, en virtud de esta  
escritura que a su favor otorgo en Suál de mal  
cédula, con lo que ha de ser visto, haver adquirido  
la posesion sin que necesite de otras pruebas, de que  
se releve, y me obligo a la eviccion, seguridad y  
resarcimiento de esta venta en toda forma de dño  
con sus presentes y futuros, yodero y Sección  
a las partes de Suál y Clausula, que se sigue  
que doy a que por incerto para que a su cum-  
plimiento se me aprueve. Testando presente yo  
el citado D. Manuel Arias, el otorgamiento de  
esta escritura, ha acepto a mi favor, y por ella  
recibe comprada la expresada Casa y medio Solar

Page 2 (of 4) of Spanish Land Deed of Lot 186, Manuel Gonzales to Manuel Arias, 5 April 1814, Pensacola, Miscellaneous Manuscripts, Box 11, Folder 9, Pensacola Historical Society, Pensacola.

en el precio, y conformidad, que me ha vendido de  
lo que me doy por entregado a mi voluntad  
que se valen el largo formal recibo y carta  
de pago conforme. En cuyo testimonio es fecho  
presente en Pensacola a cinco de Abril de  
año de ochenta y cuatro. Yo D. Martin de  
Madrid Pinar regidor de esta Ayuntamiento  
exerciendo funciones de Alcalde Constitucional  
de esta Plaza, y en cargo del Archivo Publico  
de ella, Cristobal conserje al otorgante y aceptante  
que asistieron y firmaron, siendo testigos Ins-  
trumentales D. Antonio Molina, D. Juan Lopez  
y D. Juan Lavalle, y de asistencia por falta  
de escribano, Domingo Saura y Anastasio Mor-  
tes de Oca, y un amigo Subscripcion Me-  
suel. Generales= Manuel Arias= Acto unip  
Martin de Madrid= Domingo Saura= Mas  
tano Montes de Oca=  
Yo D. Joseph Esteban Carr, Notario Publico de la Plaza

Page 3 (of 4) of Spanish Land Deed of Lot 186, Manuel Gonzales to Manuel Arias, 5 April 1814, Pensacola, Miscellaneous Manuscripts, Box 11, Folder 9, Pensacola Historical Society, Pensacola.



De Pensacola y Territorio de Florida  
Certifico: que la copia, que antecede, es conforme  
me a su Original, que queda Arqueada en el Protocolo  
de Instrumentos Publicos del corriente año del 1814, el folio  
14 vuelta en el oficio de mi cargo a que me recivio, y a p  
dimiento de parte, doy la presente firmada de mi mano  
y sellada con el sello de mi oficio en Pensacola, a  
los Diez y nueve dias del mes de Agosto de 1822  
Dios, S. Arias  
Joseph E. Caro  
Not. Pub.  
Confirmed by the Commission  
of land claims  
Joseph E. Caro  
Secretary to  
the Board  
Manuel Arias  
1814

Page 4 (of 4) of Spanish Land Deed of Lot 186, Manuel Gonzales to Manuel Arias, 5 April 1814, Pensacola, Miscellaneous Manuscripts, Box 11, Folder 9, Pensacola Historical Society, Pensacola.

466.

Wash. 186.  
No. 186.

KNOW all men by these presents, that I, Manuel Gonzales, Indian Interpreter and an Inhabitant of this Town, do covenant, that I sell and convey to Manuel Arias, (resident), a low Mocha Town situate upon one half Lot known in this Town by the Number One hundred and eighty six, (186) containing forty five front or Intendary Feet, by one hundred and seventy feet deep, bounded on the right by Simon Ramirez and on the left by Lot and house of Bartolomeo Ocas, which house and lot I purchased of Peter Paganudo by an act of sale executed in this Archdeacon's Office on the 26th of the present month and year, and I sell the same, with all the appurtenances, privileges, and commodities to the same belonging in any way appertaining, free from incumbrance or mortgage, and appearing in the Archdeacon's Office for and in consideration of the sum of One hundred and twenty five dollars cash in hand to me well and truly paid by the purchaser, the receipt whereof is hereby acknowledged and receipt therewith fully satisfied and contented; In consideration whereof I relinquish and give up of the right of property, possession, claim and Demand in and over the said house and lot by me had and held, and the whole is hereby read, renounced and transfer into the purchaser his heirs administrators and assigns, in order that he may as lawful owner thereof, enjoy, possess, sell, alienate or dispose of the same premises at his will, in virtue of this deed which I make in this town in token of real delivery, whereby it is shown that he has acquired possession of the premises above stated, without the necessity of any other proof, with which I believe him, and I bind myself to the execution, delivery and warranty of this sale in due form of law, with my property, power and to come, with power and authority to the Justice of the Majesty and clause of guarantee which I grant hereby as inserted, to compel me to the fulfilment of the same. And I the said Manuel Arias being present at the making of this deed, do accept the same in my own name, and as purchaser, the house and half lot above mentioned for the sum and agreeably as herewith set to me, acknowledging the same as delivered to my disposal, and in token thereof I grant a formal receipt and discharge in due form. In testimony whereof, the present is done in the Town of Pensacola on the Fifth of April, one thousand eight hundred and fourteen. I Don Martin de Mendez, first Archdeacon of this Ayuntamiento, exercising the office of Constitutional Secary of the Town, and charged with the Public Archives of the Town aforesaid, do hereby certify, that I know the parties who have thus acknowledged and signed the foregoing, being instrumental witnesses Antonio Melino, Juan Saez, and Francis Roberts, and as assisting witnesses for want of a regular Clerk, Domingo Ponce and Anastasio Mont. de Oca, who herewith sign their names with me. Signed Manuel Gonzales. Manuel Arias. Before me. Martin de Mendez. Domingo Ponce. Anastasio Mont. de Oca.

Vol. 10. 420.

KNOW all men by these presents, that I

1825 English translation of Land Deed of Lot 186, Manuel Gonzales to Manuel Arias, 5 April 1814, Pensacola, Proceedings of the Land Commission in West Florida. 4A, page 466. Microfilm on file at John C. Pace Special Collections Library, University of West Florida, Pensacola.

**APPENDIX 2. SUMMARY INFORMATION OF LAND TRANSACTIONS, 1781-1821**  
 Summary Information, 1781-1821.

Year	Total Yearly Sales	New Sales	Repeat Sales	Lots Owned	Running Sales Total	Running Sales/ Year	Total Yearly Revenues	Price Max	Price Min	Average Yearly Lot Price	Running Revenue Total	Running Revenue/ Year	Running Average Lot Price	Average Buyer Rank	Average Seller Rank
1781	24	8	16	16	24	24.00	10605.00	2200.00	0.00	441.88	10605.00	10605.00	441.88	1.69	1.31
1782	19	17	2	33	43	21.50	2765.00	400.00	0.00	145.53	13370.00	6685.00	310.93	2.03	2.12
1783	3	0	3	33	46	15.33	287.00	127.00	35.00	95.67	13657.00	4552.33	296.89	2.03	1.94
1784	4	1	3	34	50	12.50	1750.00	600.00	300.00	437.50	15407.00	3851.75	308.14	2.50	1.76
1785	6	1	5	35	56	11.20	1940.00	400.00	200.00	323.33	17347.00	3469.40	309.77	2.63	2.00
1786	4	1	3	36	60	10.00	736.00	258.00	100.00	184.00	18083.00	3013.83	301.38	2.67	1.97
1787	7	2	5	38	67	9.57	3490.00	800.00	150.00	498.57	21573.00	3081.86	321.99	3.00	2.03
1788	6	0	6	38	73	9.13	2925.00	800.00	50.00	487.50	24498.00	3062.25	335.59	2.37	2.95
1789	4	0	4	38	77	8.56	1399.50	570.00	150.00	349.88	25897.50	2877.50	336.33	2.42	2.89
1790	6	3	3	41	83	8.30	980.00	270.00	35.00	163.33	26877.50	2687.75	323.83	2.29	3.22
1791	4	1	3	42	87	7.91	890.00	350.00	140.00	222.50	27767.50	2524.32	319.17	2.29	3.31
1792	0	0	0	42	87	7.25	0.00	0.00	0.00	0.00	27767.50	2313.96	319.17	2.29	3.31
1793	3	0	3	42	90	6.92	500.00	250.00	50.00	166.67	28267.50	2174.42	314.08	2.33	3.36
1794	17	14	3	56	107	7.64	1416.00	300.00	15.00	83.29	29683.50	2120.25	277.42	2.95	5.00
1795	13	3	10	59	120	8.00	2390.12	633.62	15.00	183.86	32073.62	2138.24	267.28	3.19	4.05
1796	15	6	9	65	135	8.44	4718.62	925.00	0.00	314.57	36792.24	2299.52	272.54	3.71	3.77
1797	3	2	1	67	138	8.12	1600.00	900.00	0.00	533.33	38392.24	2258.37	278.20	3.69	3.69
1798	4	3	1	70	142	7.89	1436.00	478.00	100.00	359.00	39828.24	2212.68	280.48	3.64	3.54
1799	7	3	4	73	149	7.84	3370.00	570.00	400.00	481.43	43198.24	2273.59	289.92	3.77	3.57
1800	7	4	3	77	156	7.80	2200.00	600.00	0.00	314.29	45398.24	2269.91	291.01	3.84	3.84
1801	4	1	3	78	160	7.62	1750.00	920.00	0.00	437.50	47148.24	2245.15	294.68	3.81	3.76
1802	9	3	6	81	169	7.68	6610.50	2180.00	160.00	734.50	53758.74	2443.58	318.10	4.48	3.84
1803	7	3	4	84	176	7.65	14133.00	5000.00	325.00	2019.00	67891.74	2951.81	385.75	4.55	4.38
1804	54	38	16	122	230	9.58	19602.00	1710.00	0.00	363.00	87493.74	3645.57	380.41	4.98	4.48
1805	28	22	6	144	258	10.32	15429.00	1800.00	0.00	551.04	102922.74	4116.91	398.93	4.86	4.96
1806	27	15	12	159	285	10.96	21721.00	3000.00	50.00	804.48	124643.74	4793.99	437.35	4.54	5.43
1807	30	10	20	169	315	11.67	53466.00	7600.00	50.00	1782.20	178109.74	6596.66	565.43	5.01	5.35
1808	26	18	8	187	341	12.18	17755.00	3000.00	0.00	682.88	195864.74	6995.17	574.38	4.93	5.08
1809	40	20	20	207	381	13.14	51124.50	3500.00	0.00	1278.11	246989.24	8516.87	648.27	5.03	5.11
1810	60	43	17	250	441	14.70	47227.00	4050.00	0.00	787.12	294216.24	9807.21	667.16	4.73	4.62
1811	49	22	27	272	490	15.81	33260.00	3000.00	0.00	678.78	327476.24	10563.75	668.32	4.60	4.38
1812	37	19	18	291	527	16.47	24891.99	6000.00	0.00	672.76	352368.23	11011.51	668.63	4.75	4.50
1813	42	36	6	327	569	17.24	9931.99	2200.00	13.50	236.48	362300.22	10978.79	636.73	4.85	6.53
1814	37	19	18	346	606	17.82	18890.50	5500.00	0.00	510.55	381190.72	11211.49	629.03	4.88	6.37
1815	42	27	15	373	648	18.51	39893.00	4700.00	0.00	949.83	421083.72	12030.96	649.82	4.86	6.44
1816	29	4	25	377	677	18.81	23277.00	3500.00	8.00	802.66	444360.72	12343.35	656.37	4.74	6.25
1817	138	100	38	477	815	22.03	34070.04	5000.00	0.00	246.88	478430.76	12930.56	587.03	7.99	4.87
1818	195	61	134	538	1010	26.58	121124.79	7000.00	0.00	621.15	599555.55	15777.78	593.62	8.86	5.80
1819	47	12	35	550	1057	27.10	81751.00	9165.00	0.00	1739.38	681306.55	17469.40	644.57	8.81	5.73
1820	28	6	22	556	1085	27.13	26239.00	4100.00	67.00	937.11	707545.55	17688.64	652.12	8.76	5.79
1821	28	9	19	565	1113	27.15	27320.00	4000.00	40.00	975.71	734865.55	17923.55	660.26	8.58	5.61
Total	1113	557	556	565	1113	27.15	734,865.55	9165.00	0.00	660.26	734865.55	17923.55	660.26	7.82	5.36

Land Sales Involving Blacks and Mulattos, 1781-1821.

Year	Total Sales	Buyer Black	Buyer Mulatto	Seller Black	Seller Mulatto	Total Black	Total Mulatto	Total Buyer	Buyer Black or Mulatto Revenues	Buyer Black or Mulatto Average Lot Price	Total Seller	Seller Black or Mulatto Revenues	Seller Black or Mulatto Average Lot Price	Total Black & Mulatto	% Black & Mulatto	% Non-White	% White
1781	24			1		1					1	0.00	0.00%	1	4.17%	4.17%	95.83%
1782	19																100.00%
1783	3																100.00%
1784	4																100.00%
1785	6																100.00%
1786	4																100.00%
1787	7	1				1		1	150.00	150.00				1	14.29%	14.29%	85.71%
1788	6		1				1	1	50.00	50.00				1	16.67%	16.67%	83.33%
1789	4			1		1					1	150.00	150.00	1	25.00%	25.00%	75.00%
1790	6		1				1	1	160.00	160.00				1	16.67%	16.67%	83.33%
1791	4																100.00%
1792	0																0.00%
1793	3				1		1				1	50.00	50.00	1	33.33%	33.33%	66.67%
1794	17																100.00%
1795	13																100.00%
1796	15																100.00%
1797	3																100.00%
1798	4																100.00%
1799	7																100.00%
1800	7																100.00%
1801	4																100.00%
1802	9	1		1		2		1	171.50	171.50	1	171.50	171.50	2	22.22%	22.22%	77.78%
1803	7																100.00%
1804	54	3	3			3	3	6	505.00	84.17				6	11.11%	11.11%	88.89%
1805	28		1	1	1	1	2	1	1300.00	1300.00	2	1200.00	600.00	3	10.71%	10.71%	89.29%
1806	27	2	1		1	2	2	3	1117.00	372.33	1	150.00	150.00	4	14.81%	14.81%	85.19%
1807	30	1	3		3	1	6	4	1866.00	466.50	3	400.00	133.33	7	23.33%	23.33%	76.67%
1808	26	2	1	1	3	3	4	3	485.00	161.67	4	1940.00	485.00	7	26.92%	26.92%	73.08%
1809	40	2	4	4	1	6	5	6	3114.50	519.08	5	933.50	186.70	11	27.50%	27.50%	72.50%
1810	60	2	3	1	1	3	4	5	1750.00	350.00	2	450.00	225.00	7	11.67%	11.67%	88.33%
1811	49	1	4	1	2	2	6	5	1600.00	320.00	3	400.00	133.33	8	16.33%	16.33%	83.67%
1812	37	1	5	3	3	4	8	6	1300.00	216.67	6	2460.00	410.00	12	32.43%	32.43%	67.57%
1813	42	3		2		5		3	363.00	121.00	2	335.00	167.50	5	11.90%	11.90%	88.10%
1814	37	12		5		17		12	9473.25	789.44	5	2760.00	552.00	17	45.95%	45.95%	54.05%
1815	42	5		6	1	11	1	5	1155.00	231.00	7	2310.00	330.00	12	28.57%	28.57%	71.43%
1816	29	1		1	1	2	1	1	800.00	800.00	2	208.00	104.00	3	10.34%	10.34%	89.66%
1817	138	5	3	5	2	10	5	8	1737.00	217.13	7	996.75	142.39	15	10.87%	10.87%	89.13%
1818	195	2		4		6		2	600.00	300.00	4	1620.00	405.00	6	3.08%	3.08%	96.92%
1819	47	3	1	2		5	1	4	19730.00	4932.50	2	700.00	350.00	6	12.77%	12.77%	87.23%
1820	28	2			2	2	2	2	1600.00	800.00	2	750.00	375.00	4	14.29%	14.29%	85.71%
1821	28	2	2	2	2	4	4	4	2115.00	528.75	4	615.00	153.75	8	28.57%	28.57%	71.43%
Period	1113	51	33	41	24	92	57	84	51142.25	608.84	65	18599.75	286.15	149	13.39%	13.39%	86.61%

Land Sales Involving Americans, 1781-1821.

Year	Total Sales	Buyer American	Seller American	Total American	% American	American Total Revenue	Am Average Lot Price
1781	24	2		2	8.33%	2000.00	1000.00
1782	19						
1783	3						
1784	4						
1785	6						
1786	4						
1787	7						
1788	6						
1789	4						
1790	6	1		1	16.67%	250.00	250.00
1791	4						
1792	0						
1793	3						
1794	17						
1795	13						
1796	15						
1797	3						
1798	4						
1799	7						
1800	7						
1801	4						
1802	9						
1803	7						
1804	54						
1805	28						
1806	27						
1807	30						
1808	26						
1809	40						
1810	60						
1811	49						
1812	37						
1813	42						
1814	37						
1815	42						
1816	29						
1817	138	20	1	23	16.67%	5734.74	249.34
1818	195	85	3	88	45.13%	43545.21	494.83
1819	47	11	1	12	25.53%	10950.00	912.50
1820	28		2	2	7.14%	1043.00	521.50
1821	28	6	2	8	28.57%	7180.00	897.50
Period	1113	125	9	136	12.22%	70702.95	519.87

### Land Sales Involving Military Personnel and Civilians, 1781-1821.

Year	Buyer Military	% Buyer Military	Buyer Military Revenues	Buyer Military Average Lot Price	Buyer Civilian	% Buyer Civilian	Buyer Civilian Revenues	Buyer Civilian Average Lot Price	Seller Military	% Seller Military	Seller Military Revenues	Seller Military Average Lot Price	Seller Civilian	% Seller Civilian	Seller Civilian Revenues	Seller Civilian Average Lot Price	Total Yearly Sales	Total Yearly Price
1781	1	4.17%	90.00	90.00	23	95.83%	10515.00	457.17	3	12.50%	600.00	200.00	21	87.50%	10,005.00	476.43	24	10605.00
1782	1	5.26%	220.00	220.00	18	94.74%	2545.00	141.39	11	57.89%	1575.00	143.18	8	42.11%	1,190.00	148.75	19	2765.00
1783	2	66.67%	162.00	81.00	1	33.33%	125.00	125.00	2	66.67%	160.00	80.00	1	33.33%	127.00	127.00	3	287.00
1784	1	25.00%	600.00	600.00	3	75.00%	1150.00	383.33	3	75.00%	1450.00	483.33	1	25.00%	300.00	300.00	4	1750.00
1785	4	66.67%	1440.00	360.00	2	33.33%	500.00	250.00	4	66.67%	1300.00	325.00	2	33.33%	640.00	320.00	6	1940.00
1786	3	75.00%	616.00	205.33	1	25.00%	120.00	120.00	1	25.00%	120.00	120.00	3	75.00%	616.00	205.33	4	736.00
1787	2	28.57%	1600.00	800.00	5	71.43%	1890.00	378.00	3	42.86%	1890.00	630.00	4	57.14%	1,600.00	400.00	7	3490.00
1788	4	66.67%	2500.00	625.00	2	33.33%	425.00	212.50	2	33.33%	1600.00	800.00	4	66.67%	1,325.00	331.25	6	2925.00
1789	0	0.00%	0.00	0.00	4	100.00%	1399.50	349.88	2	50.00%	679.50	339.75	2	50.00%	720.00	360.00	4	1399.50
1790	2	33.33%	195.00	97.50	4	66.67%	785.00	196.25	0	0.00%	0.00	0.00	6	100.00%	980.00	163.33	6	980.00
1791	1	25.00%	350.00	350.00	3	75.00%	540.00	180.00	2	50.00%	340.00	170.00	2	50.00%	550.00	275.00	4	890.00
1792	0	0.00%	0.00	0.00	0	0.00%	0.00	0.00	0	0.00%	0.00	0.00	0	0.00%	0.00	0.00	0	0.00
1793	1	33.33%	200.00	200.00	2	66.67%	300.00	150.00	1	33.33%	250.00	250.00	2	66.67%	250.00	125.00	3	500.00
1794	0	0.00%	0.00	0.00	17	100.00%	1416.00	83.29	7	41.18%	646.50	92.36	10	58.82%	769.50	76.95	17	1416.00
1795	2	15.38%	670.00	335.00	11	84.62%	1720.12	156.37	3	23.08%	870.00	290.00	10	76.92%	1,520.12	152.01	13	2390.12
1796	2	13.33%	25.00	12.50	13	86.67%	4693.62	361.05	4	26.67%	725.00	181.25	11	73.33%	3,993.62	363.06	15	4718.62
1797	0	0.00%	0.00	0.00	3	100.00%	1600.00	533.33	2	66.67%	700.00	350.00	1	33.33%	900.00	900.00	3	1600.00
1798	1	25.00%	100.00	100.00	3	75.00%	1336.00	445.33	0	0.00%	0.00	0.00	4	100.00%	1,436.00	359.00	4	1436.00
1799	1	14.29%	500.00	500.00	6	85.71%	2870.00	478.33	0	0.00%	0.00	0.00	7	100.00%	3,370.00	481.43	7	3370.00
1800	3	42.86%	980.00	326.67	4	57.14%	1220.00	305.00	1	14.29%	600.00	600.00	6	85.71%	1,600.00	266.67	7	2200.00
1801	0	0.00%	0.00	0.00	4	100.00%	1750.00	437.50	1	25.00%	920.00	920.00	3	75.00%	830.00	276.67	4	1750.00
1802	2	22.22%	3100.00	1550.00	7	77.78%	3510.50	501.50	4	44.44%	1335.00	333.75	5	55.56%	5,275.50	1055.10	9	6610.50
1803	5	71.43%	12933.00	2586.60	2	28.57%	1200.00	600.00	4	57.14%	3808.00	952.00	3	42.86%	10,325.00	3441.67	7	14133.00
1804	13	24.07%	5370.00	413.08	41	75.93%	14232.00	347.12	22	40.74%	10000.00	454.55	32	59.26%	9,602.00	300.06	54	19602.00
1805	11	39.29%	6960.00	632.73	17	60.71%	8469.00	498.18	8	28.57%	4980.00	622.50	20	71.43%	10,449.00	522.45	28	15429.00
1806	12	44.44%	11404.00	950.33	15	55.56%	10317.00	687.80	7	25.93%	8204.00	1172.00	20	74.07%	13,517.00	675.85	27	21721.00
1807	13	43.33%	26616.00	2047.38	17	56.67%	26850.00	1579.41	12	40.00%	20900.00	1741.67	18	60.00%	32,566.00	1809.22	30	53466.00
1808	5	19.23%	1140.00	228.00	21	80.77%	16615.00	791.19	12	46.15%	10290.00	857.50	14	53.85%	7,465.00	533.21	26	17755.00
1809	13	32.50%	13050.00	1003.85	27	67.50%	38074.50	1410.17	10	25.00%	6200.00	620.00	30	75.00%	44,924.50	1497.48	40	51124.50
1810	23	38.33%	27037.00	1175.52	37	61.67%	20190.00	545.68	28	46.67%	23347.00	833.82	32	53.33%	23,880.00	746.25	60	47227.00
1811	10	20.41%	5410.00	541.00	39	79.59%	27850.00	714.10	12	24.49%	7700.00	641.67	37	75.51%	25,560.00	690.81	49	33260.00
1812	15	40.54%	8196.99	546.47	22	59.46%	16695.00	758.86	12	32.43%	4420.00	368.33	25	67.57%	20,471.99	818.88	37	24891.99
1813	4	9.52%	1960.00	490.00	38	90.48%	7971.99	209.79	8	19.05%	1935.00	241.88	34	80.95%	7,996.99	235.21	42	9931.99
1814	8	21.62%	8459.00	1057.38	29	78.38%	10431.50	359.71	7	18.92%	2566.00	366.57	30	81.08%	16,324.50	544.15	37	18890.50
1815	14	33.33%	13570.00	969.29	28	66.67%	26323.00	940.11	5	11.90%	3310.00	662.00	37	88.10%	36,583.00	988.73	42	39893.00
1816	7	24.14%	6474.00	924.86	22	75.86%	16803.00	763.77	4	13.79%	5454.00	1363.50	25	86.21%	17,823.00	712.92	29	23277.00
1817	15	10.87%	9707.00	647.13	123	89.13%	24363.04	198.07	11	7.97%	2319.00	210.82	127	92.03%	31,751.04	250.01	138	34070.04
1818	32	16.41%	21356.99	667.41	163	83.59%	99767.80	612.07	19	9.74%	12849.46	676.29	176	90.26%	108,275.33	615.20	195	121124.79
1819	15	31.91%	25100.00	1673.33	32	68.09%	56651.00	1770.34	2	4.26%	300.00	150.00	45	95.74%	81,451.00	1810.02	47	81751.00
1820	4	14.29%	2550.00	637.50	24	85.71%	23689.00	987.04	1	3.57%	4100.00	4100.00	27	96.43%	22,139.00	819.96	28	26239.00
1821	2	7.14%	700.00	350.00	26	92.86%	26620.00	1023.85	0	0.00%	0.00	0.00	28	100.00%	27,320.00	975.71	28	27320.00
<b>Total</b>	<b>254</b>	<b>22.82%</b>	<b>221341.98</b>	<b>871.43</b>	<b>859</b>	<b>77.18%</b>	<b>513523.57</b>	<b>597.82</b>	<b>240</b>	<b>21.56%</b>	<b>148443.46</b>	<b>618.51</b>	<b>873</b>	<b>78.44%</b>	<b>586,422.09</b>	<b>671.73</b>	<b>1113</b>	<b>734,865.55</b>

Distance from Town Core for Lots Sold, 1781-1821.

Year	Core Max	Core Min	Core Ave
1781	566.01	97.82	288.03
1782	425.23	109.31	242.35
1783	425.23	253.01	310.42
1784	246.92	143.13	201.97
1785	286.97	143.13	227.85
1786	300.67	198.13	251.21
1787	431.98	97.82	242.96
1788	278.51	198.55	247.56
1789	246.92	193.04	214.56
1790	425.23	154.56	274.28
1791	431.98	219.73	314.16
1792	0.00	0.00	0.00
1793	298.72	253.01	279.57
1794	589.13	199.85	379.88
1795	494.46	154.56	308.73
1796	431.98	143.13	276.97
1797	443.57	158.18	264.93
1798	521.47	178.91	282.46
1799	335.34	178.91	241.56
1800	352.49	128.35	234.93
1801	464.14	215.70	303.83
1802	499.54	189.27	303.35
1803	331.35	167.83	248.60
1804	546.06	101.04	289.63
1805	626.72	81.21	321.78
1806	626.72	80.92	324.18
1807	427.96	80.75	248.42
1808	627.60	80.96	329.51
1809	643.99	82.86	364.68
1810	705.64	80.55	355.43
1811	573.53	80.55	357.55
1812	705.64	101.04	406.65
1813	861.38	5.26	374.20
1814	866.13	5.80	369.65
1815	629.67	150.44	355.42
1816	644.90	101.04	356.55
1817	951.31	81.05	506.08
1818	951.31	6.43	435.78
1819	695.37	5.26	311.45
1820	722.51	80.96	322.58
1821	705.64	5.26	381.89
<b>Period</b>	<b>951.31</b>	<b>5.26</b>	<b>369.37</b>

House Ranks from Land Record Descriptions, 1781-1821.

Structure Description	Rank	Count	%	Structure Description	Rank	Count	%
(none)	0	512	46.00%	2 houses	2	18	1.62%
house	1	235	21.11%	2 wooden houses	2	3	0.27%
wooden house	1	85	7.64%	2 small houses	2	2	0.18%
buildings	1	53	4.76%	2 small wooden houses	2	2	0.18%
low wooden house	1	47	4.22%	2 small cabins	2	1	0.09%
small wooden house	1	20	1.80%	houses,improvements	2	1	0.09%
small house	1	19	1.71%	<b>Rank 2 Total</b>		<b>27</b>	<b>2.43%</b>
dwelling house	1	12	1.08%	3 small houses	3	2	0.18%
improvements	1	11	0.99%	several houses	3	1	0.09%
house,buildings	1	8	0.72%	3 houses	3	1	0.09%
wooden house,kitchen	1	8	0.72%	<b>Rank 3 Total</b>		<b>4</b>	<b>0.36%</b>
house,kitchen	1	6	0.54%	2 story house	4	13	1.17%
frame house	1	5	0.45%	high house	4	5	0.45%
house,kitchen,buildings	1	5	0.45%	high wooden house	4	5	0.45%
building	1	3	0.27%	2 story wooden house	4	4	0.36%
small low wooden house	1	3	0.27%	2 story high house	4	1	0.09%
low wooden house and kitchen	1	2	0.18%	2 story high house,buildings	4	1	0.09%
dwelling house,buildings	1	1	0.09%	2 story house,buildings	4	1	0.09%
house body	1	1	0.09%	large dwelling house	4	1	0.09%
house,other buildings	1	1	0.09%	<b>Rank 4 Total</b>		<b>31</b>	<b>2.79%</b>
kitchen	1	1	0.09%	wood and brick house	5	2	0.18%
old hospital ruin	1	1	0.09%	wood and brick house,buildings	5	1	0.09%
old house	1	1	0.09%	wood brick house,kitchen,outs	5	1	0.09%
small house,kitchen	1	1	0.09%	<b>Rank 5 Total</b>		<b>4</b>	<b>0.36%</b>
small low wooden house,kitchen	1	1	0.09%	store	6	2	0.18%
wooden house out buildings	1	1	0.09%	house,store,other buildings	6	1	0.09%
wooden house,kitchen,buildings	1	1	0.09%	<b>Rank 6 Total</b>		<b>3</b>	<b>0.27%</b>
<b>Rank 1 Total</b>		<b>532</b>	<b>47.80%</b>	<b>Grand Total</b>	<b>1.26 μ</b>	<b>1113 Total</b>	<b>100.00%</b>



Variable Means from Cluster Analysis for Lots Owned at the Ends of Phases.

VARIABLE	1785	1793	1796	1803	1812	1816	1821
W W	0.9143	0.9048	0.9538	0.9506	0.8448	0.8286	0.6830
W B	0.0000	0.0238	0.0154	0.0123	0.0686	0.0714	0.0509
B W	0.0286	0.0476	0.0308	0.0247	0.0397	0.0457	0.0333
B B	0.0000	0.0000	0.0000	0.0123	0.0469	0.0543	0.0313
BUY RN	1.9143	2.3333	3.7077	4.4815	4.7329	4.7514	8.2955
BUY MIL	0.4571	0.4524	0.4462	0.3580	0.3141	0.2400	0.1389
BUY CIV	0.5429	0.5476	0.5538	0.6420	0.6859	0.7600	0.8611
BUY W	0.9429	0.9524	0.9846	0.9753	0.8845	0.8743	0.7241
BUY B	0.0000	0.0238	0.0154	0.0247	0.1155	0.1257	0.0841
BUY A	0.0571	0.0238	0.0000	0.0000	0.0000	0.0000	0.1918
SELL RN	1.5714	3.3571	3.7692	4.4938	4.6065	6.4171	33.0548
SELL MIL	0.2286	0.2619	0.1692	0.1975	0.2852	0.2600	0.2074
SELL CIV	0.7714	0.7381	0.8308	0.8025	0.7148	0.7400	0.7926
SELL W	0.9714	0.9524	0.9692	0.9630	0.9134	0.9000	0.9119
SELL B	0.0286	0.0476	0.0308	0.0370	0.0866	0.1000	0.0763
SELL A	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0117
PURCHASE	324.4857	280.9000	218.2788	438.5138	728.5651	664.9927	696.4090
ACRES	0.2886	0.2800	0.2774	0.2814	0.2288	0.2497	0.3227
COST/ACRE	1091.5666	957.2000	832.4886	1581.5294	3958.2685	3477.5943	3491.9793
CORE	261.8066	261.6100	291.4378	293.0709	325.8175	343.1472	395.7784

KEY

W\_W – White to White sales, White to White=1, others=0.

W\_B – White to Black sales, White to Black = 1, others=0.

B\_W – Black to White sales, Black to White=1, others=0.

B\_B – Black to Black sales, Black to Black=1, others=0.

BUY\_RN – Buyer Rank (average number of lots owned by every lot owner).

BUY\_MIL – Buyer Military, Buyer Military=1, others=0.

BUY\_CIV – Buyer Civilian, Buyer Civilian=1, others=0..

BUY\_W –Buyer White, Buyer White=1, others=0.

BUY\_B –Buyer Black, Buyer Black=1, others=0.

BUY\_A –Buyer American, Buyer American=1, others=0.

SELL\_RN –Seller Rank (average number of lots owned by every lot owner).

SELL\_MIL –Seller Military, Seller Military=1, others=0.

SELL\_CIV – Seller Civilian, Seller Civilian=1, others=0.

SELL\_W –Seller White, Seller White=1, others=0.

SELL\_B –Seller Black, Seller Black=1, others=0.

SELL\_A –Seller American, Seller American=1, others=0.

PURCHASE – Average Lot Price.

ACRES – Average Lot Acres.

COST/ACRE – Average Cost per Acre.

CORE – Average Distance from town core

### **APPENDIX 3. DATABASE ENTERPRISE AND GIS**

From its earliest conception, the Geographic Information System (GIS) adheres to an enterprise database design that allows easy data development, integration, access, and analysis. Each table contains particular information, such as census data or land record information, and common attributes that facilitates joining with other tables. Due consideration is given to the format of tables to be used, and I utilize an Access database which facilitates table creation, data entry, and non-spatial analysis. ESRI GIS software has the ability to read Access databases as Personal Geodatabases (PGD) which are single files that can contain a number of tables and GIS feature classes. All new tables and GIS feature classes are created within a single PGD to facilitate ease of use and portability.

In order to enable joining information from the various datasets unique identifiers are developed that corresponded with each individual in census records and also to house lots. This ensures that each individual and each house lot had its own unique numeric identifier. To create identifiers for individuals, tables for the 1784 and 1820 census records are developed and compared. Differences in name spellings and name changes as a result of marriages are considered in this process. The unique identifier is recorded in the appropriate field that corresponded to the person's record in each table. For example, Manuel Gonzales is given the unique identifier "27" in both the 1784 and 1820 census tables. Developing unique identifiers for real estate involves utilizing house lot numbers that are used by both land deeds and maps/plans.

Spanish colonial census records prove invaluable in providing information about Pensacola's population. Five censuses contain the most useful data pertaining to the

community's social structure. Historians William Coker and Douglas Inglis identified, translated, and compiled these census records in their 1980 publication, *The Spanish Censuses of Pensacola, 1784-1820: A Genealogical Guide to Spanish Pensacola*.<sup>188</sup>

Census records vary in quality and quantity of information, as shown in Table 2. The 1784 and 1821 censuses contain the most elaborate data for the town's population. The former include individual data pertaining to names, households, genders, ages, races (white/non-white), and free or slave statuses. The latter provide similar information for the free population, but also marital statuses (single, married, widowed), birthplaces, and occupations. The 1802, 1805, and 1819 censuses give only a synopsis of the entire population at those times, and include the total numbers of races, free and enslaved persons, genders, and age groups. The 1805 census also provides the totals for marital status groups. None included military personnel stationed in Pensacola.

Given the fact that the 1802, 1805, and 1819 censuses provide only information for the general population, these datasets are used as references and were not integrated into the GIS. The more detailed nature of the 1784 and 1820 censuses, however, leads to the assumption that these datasets are more valuable for analysis of individual residents. As such, these two censuses are tabularized and integrated into the GIS.

Conceptualizing and developing tables for the 1784 and 1820 censuses proves relatively easy, as each contained only a handful of possible data types for each resident. The tables include fields for specific information, including: last name, household, name, age, race, marital status, free/slave, relationship to head, and birthplace and occupation for the 1820 census. All fields are alpha values except for age, which was numeric to

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<sup>188</sup> Coker and Inglis, *The Spanish Censuses of Pensacola, 1784-1820*.

facilitate analysis. A field is added and includes the numeric value “1” for each member to allow calculating totals. Another field records citation information, and a final field allows for notes.

American land records provided the bulk of historical information regarding land transactions from 1783 to 1821.<sup>189</sup> The process of integrating land records into the GIS includes developing a table that captures information pertinent to the current questions, but also records other data in the hopes that future research would address other issues. From its inception, the land record table is designed to be as comprehensive as possible. Fields include information pertaining to: buyer/seller last name, complete name, military affiliation, social status, race, lot numbers, lot sizes, purchase prices (numeric), structure type/quality, date (yyyymmdd, numeric), year (yyyy, numeric), notes, and citation. As with the census tables, a field is added in the land record table and includes the numeric value “1” for each member to allow calculating totals. The unique identifiers that corresponded with individuals are also integrated into the table to facilitate linking and joining with other datasets. Manuel Gonzales, from the above example, is given the unique identifier “27” in the land record table. Each land transaction recorded in the American Land Commission records is tabulated according to the fields mentioned above, with one row in the table corresponding to one transaction.

The spatial information for this study was derived from historic plans and maps of colonial Pensacola. House lot boundaries and their respective designation numbers were maintained through the Spanish colonial and American territorial periods, and into statehood. This fact allowed the relatively easy integration of locational information on

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<sup>189</sup> Proceedings of the Land Commission in West Florida.

maps and plans into the GIS. Colonial maps were georeferenced and house lot boundaries and other features digitized as GIS polygon feature classes. Each house lot polygon retained its numeric designation in the attribute table of the feature class to facilitate linking and joining to other datasets. The 1799 map and 1827 plan of Pensacola, shown in Figures 13 and 14, were chosen for inclusion in this study as GIS feature classes because they most accurately portrayed the evolution of the town between 1781 and 1821, and emphasize the fact that Pensacola's design experienced very few changes through the period.

While analysis of the census records, land deeds, and maps and plans of Pensacola by themselves is critical to this research, integrating these datasets in the GIS environment allows researching these datasets in tandem, and provides a more holistic perspective of Pensacola's growth between 1781 and 1821. Unique identifiers associated with individuals and houses make it possible to perform complex geospatial queries concerning landowners, their census information, and their respective properties. By integrating all land records between 1781 and 1821, research questions concerning the timeline of development can also be addressed.

Perhaps most importantly, the enterprise database design and integrated GIS allows for future research by providing the structure for integrating more information. The current design has already addressed many of the methodological issues that are common to historical geographic analysis. The hallmark of this approach is the ease with which newly identified information is incorporated into the enterprise for analysis and presentation. For example, the 1825 United States Land Commission records also include information pertaining to East Florida and St. Augustine in particular. These

records are in the same general format that can easily be tabulated for inclusion into this study. Resident information from census records and house lot locations from town plans can also be integrated in a similar manner.

The three most important considerations regarding developing and maintaining the database enterprise pertain to time, resources, and data familiarity. Firstly, Identifying, evaluating, integrating, and managing information into this or any system takes time. The current database enterprise was developed over the course of twelve years and will, no doubt, evolve as new information is incorporated and new research questions generated. Secondly, this sort of endeavor requires hardware and software that is capable of developing such a system. As vital is the familiarity of the user with the resources, the system, and with geographical techniques that will steer research. Thirdly, analyzing historical data requires an in-depth level of familiarity with the information to provide context. The current research relies heavily on knowledge of local, regional, and global events which shaped events in Pensacola and led to changes in the town's morphology.

## VITA

Harry J. Wilson was born in Fredonia, Kansas, and spent much of his childhood in rural Jefferson County, Florida. He earned his Bachelor of Arts degree from the Florida State University in anthropology in 1994 and his Master of Arts degree from the University of West Florida in historical archaeology in 2000.