AN ANALYSIS OF DOWNTOWN HOUSING TRENDS

by

JANE ADLER SEIDEN

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Signature of Author

Jane Adler Seiden
Department of Urban Studies and Planning
July 29, 1988

Certified by

Bernard Frieden
Professor of City Planning
Thesis Supervisor

Accepted by

Michael Wheeler
Chairman
Interdepartmental Degree Program in
Real Estate Development
An Analysis of Downtown Housing Trends

by

Jane Adler Seiden

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ABSTRACT

The goal of this thesis is to provide a context of the dynamics of revitalizing urban areas in which demand for downtown residential locations can be analyzed. Beginning with a brief discussion of post-War urban decline, the thesis quickly proceeds to describe gentrification, one of the processes through which the seeds of revitalization were sown in many American cities during the 1970s. Gentrifying neighborhood characteristics are described, as are the demographic characteristics of the gentrifiers. A visual method for determining the extent of neighborhood reinvestment is presented. Theories of why gentrification occurred are explored, including the urban-suburban rent gradient, CBD office development and employment, and commuting patterns. Changing demographic trends are discussed in detail.

An example of the practical application of contextual analysis is presented, using Providence, Rhode Island as a case study city. The theories are used to evaluate the current extent of reinvestment and future potential for residential development in different downtown Providence neighborhoods. Traditional market data and housing preferences are included in the analysis. Finally, potential risks and areas requiring project-specific research are identified for developers and investors.
ACKNOWLEDGEMENTS

I offer my sincerest gratitude to the following people:

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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER ONE: URBAN DECLINE &amp; THE RISE OF GENTRIFICATION</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Decline</td>
<td>9</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>9</td>
</tr>
<tr>
<td>Transportation</td>
<td>10</td>
</tr>
<tr>
<td>Population</td>
<td>10</td>
</tr>
<tr>
<td>Public Opinion</td>
<td>11</td>
</tr>
<tr>
<td>Gentrification</td>
<td>11</td>
</tr>
<tr>
<td>Housing Rehabilitation</td>
<td>11</td>
</tr>
<tr>
<td>The Gentrifiers</td>
<td>13</td>
</tr>
<tr>
<td>Race</td>
<td>15</td>
</tr>
<tr>
<td>Income</td>
<td>15</td>
</tr>
<tr>
<td>Education</td>
<td>16</td>
</tr>
<tr>
<td>Employment</td>
<td>16</td>
</tr>
<tr>
<td>Age</td>
<td>16</td>
</tr>
<tr>
<td>Marital Status/Households with Children</td>
<td>17</td>
</tr>
<tr>
<td>Inmover Origin/Previous Tenure</td>
<td>18</td>
</tr>
<tr>
<td>Renovated Neighborhood Characteristics</td>
<td>19</td>
</tr>
<tr>
<td>Gentrification as a Process: Stage Analysis</td>
<td>20</td>
</tr>
<tr>
<td>Stage One</td>
<td>20</td>
</tr>
<tr>
<td>Stage Two</td>
<td>21</td>
</tr>
<tr>
<td>Stage Three</td>
<td>21</td>
</tr>
<tr>
<td>Stage Four</td>
<td>21</td>
</tr>
<tr>
<td>Stage Five</td>
<td>21</td>
</tr>
<tr>
<td>Gentrification Summary</td>
<td>22</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHAPTER TWO: EXPLANATORY THEORIES OF REVITALIZATION</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban-Suburban Rent Gradient</td>
<td>23</td>
</tr>
<tr>
<td>Rising Land Costs</td>
<td>23</td>
</tr>
<tr>
<td>Commercial Development &amp; Downtown Residential Demand</td>
<td>26</td>
</tr>
<tr>
<td>Growth in Office Employment</td>
<td>28</td>
</tr>
<tr>
<td>Growth in CBD Office Space</td>
<td>29</td>
</tr>
<tr>
<td>Commuting and Worker Residential Origins</td>
<td>31</td>
</tr>
<tr>
<td>Topic</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Demographic Changes</td>
<td></td>
</tr>
<tr>
<td>Total Population and Age</td>
<td>35</td>
</tr>
<tr>
<td>Household Formation Rate</td>
<td>37</td>
</tr>
<tr>
<td>Female Workforce Participation</td>
<td>40</td>
</tr>
<tr>
<td>Fertility Rate</td>
<td>40</td>
</tr>
<tr>
<td>Household Size</td>
<td>42</td>
</tr>
<tr>
<td>Implications of Demographic Changes</td>
<td>43</td>
</tr>
<tr>
<td>Summary of Theories</td>
<td>43</td>
</tr>
<tr>
<td>CHAPTER THREE: A CASE STUDY ON PROVIDENCE, RHODE ISLAND</td>
<td>45</td>
</tr>
<tr>
<td>Neighborhood Stage Analysis</td>
<td>45</td>
</tr>
<tr>
<td>Recap Stages One, Two, Three, Four</td>
<td>46</td>
</tr>
<tr>
<td>Recap Stage Five</td>
<td>47</td>
</tr>
<tr>
<td>Providence Neighborhoods</td>
<td>47</td>
</tr>
<tr>
<td>College Hill</td>
<td>47</td>
</tr>
<tr>
<td>Mount Hope</td>
<td>50</td>
</tr>
<tr>
<td>Fox Point</td>
<td>50</td>
</tr>
<tr>
<td>Elmwood</td>
<td>51</td>
</tr>
<tr>
<td>Applying Stage Analysis to</td>
<td></td>
</tr>
<tr>
<td>Commercial/Industrial Neighborhoods</td>
<td>52</td>
</tr>
<tr>
<td>Waterfront District</td>
<td>54</td>
</tr>
<tr>
<td>Old Retail District</td>
<td>56</td>
</tr>
<tr>
<td>Capital Center</td>
<td>59</td>
</tr>
<tr>
<td>Stage Analysis Conclusion</td>
<td>59</td>
</tr>
<tr>
<td>Economic Growth in Providence</td>
<td>60</td>
</tr>
<tr>
<td>FIRE &amp; Service Employment Growth</td>
<td>62</td>
</tr>
<tr>
<td>Existing Office Space</td>
<td>63</td>
</tr>
<tr>
<td>Future Office Development</td>
<td>65</td>
</tr>
<tr>
<td>Office Space Absorption</td>
<td>66</td>
</tr>
<tr>
<td>Office Vacancies</td>
<td>68</td>
</tr>
<tr>
<td>Demographic Characteristics</td>
<td>71</td>
</tr>
<tr>
<td>Population</td>
<td>71</td>
</tr>
<tr>
<td>Age Structure</td>
<td>72</td>
</tr>
<tr>
<td>Income</td>
<td>72</td>
</tr>
<tr>
<td>Characteristics Unique to Providence</td>
<td>74</td>
</tr>
<tr>
<td>Commuting Patterns</td>
<td>74</td>
</tr>
<tr>
<td>Universities</td>
<td>77</td>
</tr>
<tr>
<td>Capital Center</td>
<td>78</td>
</tr>
<tr>
<td>Providence Summary</td>
<td>82</td>
</tr>
<tr>
<td>Chapter Section</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Demand for Downtown Residential Locations</td>
<td>83</td>
</tr>
<tr>
<td>Current Demand</td>
<td>83</td>
</tr>
<tr>
<td>Future Demand</td>
<td>84</td>
</tr>
<tr>
<td>Downtown Employee Buying Power</td>
<td>86</td>
</tr>
<tr>
<td>Preference &amp; Competing Neighborhood Markets</td>
<td>88</td>
</tr>
<tr>
<td>Preferences of Downtown Workers</td>
<td>88</td>
</tr>
<tr>
<td>Neighborhood Competition for Market Share</td>
<td>90</td>
</tr>
<tr>
<td>Relating Market Share to Demographics</td>
<td>92</td>
</tr>
<tr>
<td>Caveats for Downtown Residential Developers</td>
<td>93</td>
</tr>
<tr>
<td>Conclusion</td>
<td>96</td>
</tr>
</tbody>
</table>

**BIBLIOGRAPHY**

**APPENDICES**

A. The Providence Company Loan Fund Program Guidelines 102

B. Summary of Downtown Providence Employee Survey 109
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Number of Cities With Renovation Activity, 1975</td>
<td>12</td>
</tr>
<tr>
<td>2.</td>
<td>Summary of Gentrifier Demographic Characteristics</td>
<td>14</td>
</tr>
<tr>
<td>5.</td>
<td>Workplace and Residence in Urbanized Areas</td>
<td>34</td>
</tr>
<tr>
<td>6.</td>
<td>Commuter Flows in Urbanized Areas</td>
<td>34</td>
</tr>
<tr>
<td>7.</td>
<td>U.S. Median Household Size by Tenure and Location, 1970 &amp; 1983</td>
<td>42</td>
</tr>
<tr>
<td>9.</td>
<td>Estimates of Existing Office Space in Providence</td>
<td>64</td>
</tr>
<tr>
<td>10.</td>
<td>Median Household Income by Community, Providence Metropolitan Area</td>
<td>75</td>
</tr>
</tbody>
</table>
List of Figures

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>U.S. Population Age 30, 1900-2005</td>
<td>36</td>
</tr>
<tr>
<td>2</td>
<td>U.S. Population by Age, 1980 and 1990</td>
<td>38</td>
</tr>
<tr>
<td>3</td>
<td>U.S. Household Formation by Age, 1980 and 1990</td>
<td>40</td>
</tr>
<tr>
<td>4</td>
<td>Providence Neighborhood Boundaries</td>
<td>48</td>
</tr>
<tr>
<td>5</td>
<td>Providence Downtown Boundaries</td>
<td>61</td>
</tr>
<tr>
<td>6</td>
<td>Net Semi-Annual Office Space Absorption, Providence, Rhode Island</td>
<td>67</td>
</tr>
<tr>
<td>7</td>
<td>Net Average Vacancy, All Office Space, Providence, Rhode Island</td>
<td>69</td>
</tr>
<tr>
<td>8</td>
<td>Office Space Vacancy by Rent Category, Providence, Rhode Island</td>
<td>70</td>
</tr>
<tr>
<td>9</td>
<td>Total Population, Providence, Rhode Island, 1970-1987</td>
<td>73</td>
</tr>
<tr>
<td>10</td>
<td>Capital Center District and Parcel Boundaries, Providence, Rhode Island</td>
<td>79</td>
</tr>
<tr>
<td>11</td>
<td>Capital Center Illustrative Site Plan, Providence, Rhode Island</td>
<td>80</td>
</tr>
</tbody>
</table>
CHAPTER ONE: URBAN DECLINE AND THE RISE OF GENTRIFICATION

The current growth trends in American cities are best understood when viewed in a holistic framework of urban history. Therefore, Chapter One is purely descriptive in nature, laying the foundation for Chapter Two in which explanations will be offered. Historic trends are described very generally and assume that the reader is familiar with this period of urban history.

Beginning after World War II, changes in manufacturing methods and infrastructure development were implemented. The result, in conjunction with changing demographic trends, was a dramatic decrease in preference for urban residential locations. Consequently a large shift in residential locational patterns away from urban areas occurred. This chapter quickly covers this post-War era and proceeds to describe gentrification, a new trend toward revitalization.

Urban Decline

Manufacturing. Previously, manufacturing had been based on a piece-goods method. Each worker produced a product from beginning to end. This production method required multi-story facilities, centrally located close to population centers, and also close to rail and shipping transportation, the predominant means of product distribution at the time (Long in Laska & Spain, 1980; Lipton, 1977).

After World War II, production methods became more specialized, relying on the assembly line method in which each
A worker contributes a small portion of the finished product. This manufacturing method requires large one-story facilities (Long in Laska & Spain, 1980), which were built in suburban areas on plentiful acreage.

**Transportation.** Manufacturing relocation preceded the development of new transportation routes and methods. In response to the manufacturers' growing requirements for decentralized transportation routes, the Federal government began its development of the interstate highway network during the late 1950s. As a result, decentralized distribution by truck increasingly replaced centralized ship and rail as the dominant means of transportation for distribution of goods. Manufacturers could now locate outside of urban areas where land was plentiful and cheap, while accessing trucking as a new, low cost and efficient means of distribution. (Long in Laska & Spain, 1980)

Manufacturers were not the only ones to take advantage of the new highway system. Quick and easy access to large geographic areas where jobs were increasingly concentrated fueled demand for suburban housing.

**Population.** Shifts in employment opportunity were not the only changes which affected residential location patterns. The fertility rate is a measure of how quickly the population is replacing itself. During the peak of the baby boom in the 1950s, the fertility rate rose to a high of 3.690 children (Hughes & Sternlieb, 1987). This rate is 71% greater than the current replacement rate of 2.1 children (Alonso in Gau, 1983; Hughes &
Sternlieb, 1987). With such a tremendous increase in the very young population during those years, it is not surprising that residential locational choices revolved around child-oriented issues such as schools and neighborhood environment. Clean, new suburbs were viewed as the optimal location to raise children, and migrations continued to flow from urban to suburban areas.

Public Opinion. The shift of manufacturing capital and residents out of urban areas and into the suburbs had great consequences for cities. The more affluent whites were moving to suburbia, leaving cities populated with low-skilled, low-income black and other minority populations (Long & Dahmann, 1980). As early as 1948, public opinion polls revealed that the public preferred to live in more rural areas (Louis Harris Assoc., 1978). The trend continued and accelerated through the 1950s and 1960s.

In the 1960s, as many as 91% of all married couples without children preferred to live in single family, suburban homes, while the figure for older married couples whose children no longer resided at home was 84% (Michelson, 1968). By the late 1970s, 82% of all Americans viewed large cities as the worst place to raise children, citing poor schools and housing, high tax and crime rates as reasons prompting this viewpoint (Louis Harris Assoc., 1978).

Gentrification

Housing Rehabilitation. Even as public opinion of urban
life was declining, small but important changes in urban populations were beginning to occur. By 1975, it was estimated that 48% of all cities with populations greater than 50,000 people were experiencing "some degree of private-market, non-subsidized housing renovation in older, deteriorated areas" (Black in Laska & Spain, 1980). Renovation activity was greatest in the largest cities, diminishing with decreasing population size.

Table 1

Number of Cities With Renovation Activity in 1975

<table>
<thead>
<tr>
<th>Population Size</th>
<th># of Cities Qualifying</th>
<th># of Cities w/ Renov.</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>500,000 and over</td>
<td>26</td>
<td>19</td>
<td>73%</td>
</tr>
<tr>
<td>250,000-500,000</td>
<td>30</td>
<td>19</td>
<td>63</td>
</tr>
<tr>
<td>100,000-250,000</td>
<td>79</td>
<td>46</td>
<td>58</td>
</tr>
<tr>
<td>50,000-100,000</td>
<td>125</td>
<td>40</td>
<td>32</td>
</tr>
<tr>
<td>Total</td>
<td>260</td>
<td>124</td>
<td></td>
</tr>
</tbody>
</table>


However, Black estimates that the renovation was occurring in "predominantly small areas of less than 500 units" in each city, for a total of approximately 55,000 housing units renovated between 1968 and 1977 (Black, 1980). Other estimates of the extent of gentrification, which generally arise from studies of low income household displacements, cite figures of 100-200 units annually per city, accounting for approximately 4.3% of urban household movers in the Northeast during the period 1974-76.
Academic researchers began to define the preconditions necessary for cities to experience renovation and other downtown residential growth. High rates of downtown white collar employment, strong growth rates in CBD office space, long commuting distances to new housing developments, and the rising cost of suburban housing are mentioned numerous times in the literature as reasons for growth in downtown residential development. (Berry in Peterson, 1985; Clay, 1979; Frieden, 1964; Black, 1977; Allen in Palen & London, 1984; Real Estate Research Corp., 1982; Smith & Williams, 1986; Smart, 1985; Sternlieb & Ford in Bryce, 1979) These explanatory theories of urban revitalization will be discussed in greater detail in Chapter Two.

The Gentrifiers

The characteristics of gentrifying populations are reported to be similar across geographically varying localities. Table 2 is a data matrix which summarizes various characteristics of this population. The matrix is comprised of survey results completed mostly during the mid to late 1970s.

As revealed by the gaps in information contained in the Table, the studies completed during this time period tended to focus on certain aspects of the population in question. That is, no two studies were identical, and thus complete comparisons are difficult to make. Few of these studies provide information with
### Table 2

#### Summary of Gentrifier Demographic Characteristics
From Selected Studies

<table>
<thead>
<tr>
<th>Description</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
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<tbody>
<tr>
<td>% White</td>
<td>avg 90%</td>
<td>avg 82%</td>
<td>92%</td>
<td>94%</td>
<td>40%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>mid-to-upper</td>
<td>64% &gt; $20k</td>
<td>90% &gt; $15k</td>
<td>66% &gt; City avg. HH inc.</td>
<td>per cap inc. 5x &gt; City per cap</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>47% w/ grad deg</td>
<td>97% w/ coll deg; 77% w/ grad deg</td>
<td>39.5% w/ coll deg; 25.4% w/ grad deg</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td>Mgr/Prof</td>
<td>37-75%</td>
<td>74%</td>
<td>75%</td>
<td>76%</td>
<td>13-27%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Origin</td>
<td>City</td>
<td>33-40%</td>
<td>80%</td>
<td>66%</td>
<td>52.1%</td>
<td>29.5%</td>
<td>18.4%</td>
<td>70%</td>
</tr>
<tr>
<td>Suburb</td>
<td>avg 9%</td>
<td>20%</td>
<td>25-30%</td>
<td>10-20%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Resident</td>
<td>50%</td>
<td>49.5%</td>
<td>&gt;50%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previous Tenure</td>
<td>Own Rent</td>
<td>4%</td>
<td>66%</td>
<td>46%</td>
<td>49.5%</td>
<td>50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital Status</td>
<td>Married HH</td>
<td>49%</td>
<td>55%</td>
<td>35%</td>
<td>30%</td>
<td>65%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>40% were 25-45 yrs</td>
<td>&gt;50%</td>
<td>80% were 25-44 yrs</td>
<td>50%</td>
<td>48%</td>
<td>45 yrs</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(45 yrs)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HHs w/ Kids</td>
<td>62.5%</td>
<td>21%</td>
<td>1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources:
A) Legates & Hartman in Smith & Williams, 1986.
C) Spain & Laska, 1980
E) Landauer Assoc., 1979
F) Earsy & Colton, 1974
G) James, in Solomon, 1980
H) Berry in Peterson, 1985
regard to the statistical significance of individual survey results, making data interpretation even more difficult. Furthermore, in the write-up of survey results, several of these researchers make generalizations with regard to the U.S. population as a whole from data for which statistical significance is unreported. Therefore, reliability of these generalizations is unknown. These problems aside, the similarity of gentrifier characteristics across survey sites is striking.

Race. In stark contrast to the heavy concentrations of minorities in urban areas during the period of decline, survey results revealed that new downtown residents were almost uniformly white. The lower proportion of whites obtained in Survey E, conducted in Boston in 1967, might be explained by the early time period in which this study was completed.

Income. Unfortunately, two of the studies reported incomes in then-current dollar figures without relating these figures to median or average household incomes. This makes comparison difficult, however, by assuming that the large percentages of the gentrifying population having incomes greater than the absolute figures given, one can conclude that these groups were relatively affluent. This is confirmed by other studies included in the table where incomes were noted to be "well above City and SMSA medians" (Legates & Hartman in Smith & Williams, 1986) and that per capita incomes in downtown Boston in 1974 were found to be five times greater than the per capita income in the City as a whole (Earsy & Colton, 1974).
Education. The gentrifiers were highly educated relative to the general population. Surveys reported that between 25.9% and 77% of the gentrifiers in different studies had received graduate degrees. This would indicate that high proportions of the population must have completed college degrees, as one obviously must finish college before continuing to graduate school. Indeed, in the neighborhood with 77% gentrifiers having graduate degrees, 97% of the population was reported to have completed college. The highly educated nature of this population explains the above-average earnings described above.

Employment. In the majority of the study sites, approximately three-quarters of the population was managerially or professionally employed. Two of the studies noted that between one-eighth and one-third of the gentrifiers were clerically employed. The implication therefore arises that the new downtown residents were almost uniformly employed in offices. The high percentage of professional/managerial workers again reinforces the high income profile of the majority of this population.

Age. In the majority of the studies, approximately half of the gentrifiers were between 25 and 44 years of age, or were less than 45 years old. In one study, the proportion of this age group ran as high as 80%, while in another the proportion was a substantially lower 40%. Contrasting the strong representation of the 25-44 age group in most of these surveys, one study determined that only 40% of the gentrifiers fit this age profile.
This same study noted a population of clerical workers. It is possible that an even younger population, employed as clerical personnel, was present in this survey group which reduced the proportion of those in the older age category.

Marital Status/Households With Children. Results for household marital status ranged somewhat widely. Further, this variable was unfortunately excluded totally from several of the studies, reducing the reliability of those results presented. Two studies reported approximately one-half of the gentrifier households to be married, while a third reported only 35% as married.

Survey results for the number of households with children are even more disparate, ranging from 3%-62.5%. Although Spain & Laska (1980) explain the high proportion of households with children in their New Orleans study as resulting from a heavy concentration of Catholics, a better explanation might be the housing characteristics of the neighborhood in question. That is, the New Orleans survey site was located adjacent to the CBD and contained predominantly single family housing stock. The majority of the other survey sites were more urban in nature, and the Boston study, for instance, included specifically high rise dwellers.

Fortunately, the symbolism of studying proportions of married couples and households with children can be captured directly by looking at household formation and fertility rates by age, as will be discussed in Chapter Two. Therefore, the lack of
good data in the two study questions above is relatively insignificant.

Inmover Origin/Previous Tenure. One of the most conclusive and significant pieces of evidence to emerge from these studies was refutation of the idea that the majority of the gentrifiers were of suburban origin. In fact, most studies revealed that the majority of inmovers came from other locations within the same City. Urban inmover origin ranged as high as 80-90% in some studies. With regard to suburban returnees to the city, figures ranged as high as 30%, however, the average is consistently somewhere between 10-20%. Only three of the studies included estimates of the proportion of inmovers who were totally new to the area; these ranged from 12-50%. The large variance is problematic in terms of interpretation, and unfortunately occurs in an area in which little data appears to have been collected.

In response to low rates of suburban immigrants to the city, one study concludes that "(i)f these figures are even roughly representative of resettlers in other cities, they suggest that most are first time home buyers. It is likely that they migrated to the city to attend college or graduate school or to take employment there" (Gale, 1979). Berry (in Peterson, 1985) also concludes that most of these suburban immigrants are first time buyers, noting that 60-90% spent their childhood in rural areas, small towns or suburbia, and that they came to the city for college and decided to stay.
Renovated Neighborhood Characteristics

As was shown to be the case with characteristics of the gentrification population, the characteristics of downtown residential neighborhoods experiencing revitalization are relatively homogeneous.

Time and again, renovated neighborhoods are described as containing distinctive Victorian architecture. Buildings are at least one hundred years old or 75-100 years old, with special distinctive and interesting architectural details. Many neighborhoods are designated historic districts, and are located close to the CBD. (Clay, 1979; Black, 1977; Gale, 1979; Berry in Peterson, 1985)

One multi-site study found that, in addition to the characteristics noted above, 81% of the surveyed gentrifying neighborhoods were located near areas of non-residential upgrading, and that half of the neighborhoods were within one mile of the CBD and 38% of those neighborhoods were within 1/2 mile of the CBD (Clay, 1979).

Other sometimes-noted characteristics include clearly defined boundaries and an expectation that other rehabilitation will occur and that other middle class people will move to the neighborhood (Black, 1977; Berry in Peterson, 1985); an expectation that government services will be improved (Berry in Peterson, 1985); and a positive outlook on the investment potential for the neighborhood (Gale, 1979).
Gentrification as a Process: Stage Analysis

To this point, the issue of how neighborhoods become gentrified has not been discussed. Gentrification is a long process which starts almost unnoticed by the casual observer, but is also one which many times ends in large sections of inner cities becoming repopulated and revitalized.

One should note that urban renewal is specifically excluded from this paper. The impetus for urban renewal was to revitalize cities, and, in many cities, renewal may have been a factor which lead to the current day interest in downtown living. However, the goal of this thesis is to explain the necessary market, demographic, and economic conditions for successful private investment in downtown living. Therefore, government sponsored renewal projects have not been considered.

The process of gentrification is usually described as occurring in three phases. The descriptions of these stages are anecdotal in nature, but nonetheless, Clay (1979), Berry (in Peterson, 1985), and Gale (1979), have separated the process in a useful manner.

Stage I. The very earliest gentrifiers are those with the greatest tolerance for risk. They may be artists, young single men, or young childless couples. Mortgage money is difficult to obtain, and the loan to value ratio of loans granted is typically lower than in established neighborhoods. Therefore, much sweat equity is put into the renovation. Many of the structures being renovated are vacant shells. Most are single family or duplex
housing. The renovation area is usually confined to a few blocks. Little, if any, public attention is given to the area.

Stage II. Activities from Stage I continue. Small scale speculative fix-up and reselling may occur. Some media attention is given, and realtors begin actively pushing the area. Inmover age begins to rise; former suburbanites, single women and couples with children appear.

Stage III. Activities from Stages I and II continue. Prices begin to escalate. Media and government interest is pronounced. Public physical improvements are be visible. Small developers undertaking their first projects start buying and holding. Mortgage money is easily available under conventional terms. More middle class inmovers. The area is popularly referred to as "gentrifying."

Additionally, Clay (1979) identifies Stage Four. Area residents may seek historic designation. A growing number of rental units come on to the market (for singles and divorced people). Buildings which were previously bought and held for appreciation now come onto the market for sale. Specialized retail shops and professional services emerge if the area is adjacent to the CBD. Residents are business/managerial middle class.

I argue that an additional Stage Five occurs in many cities. This phase is a continuation and enhancement of the previous phases in which luxury housing comes onto the market. This housing may be rental or condominium, according to the overall
strength of real estate market conditions. Residents are increasingly high income professionals with other demographic characteristics as previously discussed. High-end retail boutiques emerge, as do trendy restaurants and nightclubs. Substantial public and private investment in these and other recreational and cultural amenities are already in the works, if not already completed.

Gentrification Summary

In cities across America during the 1970s, population segments of very similar characteristics began to migrate to inner city neighborhoods which were also strikingly similar across locations. The phenomenon became known as gentrification. The process of gentrification can be described as occurring in relatively uniform, incremental stages. In the next chapter, underlying conditions which may have prompted gentrification are discussed.
CHAPTER TWO: EXPLANATORY THEORIES OF REVITALIZATION

In this chapter, some of the most common explanations for why certain neighborhoods are able to move successfully from Stage I to Stage V will be explored. The necessary urban preconditions and underlying trends which appear to contribute to success will be defined. Demographic trends which affect specified target populations will be discussed, as will the effect of these trends on residential locational preferences.

Urban-Suburban Rent Gradient

A frequently-occurring explanation for the increase in downtown residential development relies on supply-side economics. As demand for suburban development increased and demand for inner city housing decreased, costs associated with suburban development outpaced those associated with inner city development, and therefore suburban housing prices exceeded urban housing prices. As gains in income failed to keep pace with rising suburban housing costs, the group of people known as gentrifiers were willing to accept and pay for relatively affordable urban housing, creating demand for these units.

Rising Land Costs. In the simplest economic terms, when the quantity demanded goes up, more supply is produced. But when the demand for the product keeps pace with or exceeds the quantity produced, prices rise. In real estate, the situation is exacerbated by the fact that the quantity of land available is
fixed. That is, society cannot produce more land, and therefore, as more land is developed, the total supply of available land is reduced, leading to increased acquisition prices.

The concept of "the careless attrition of agricultural lands" for suburban residential development (Sternlieb & Ford in Bryce, 1979) has taken hold as numerous suburban and rural municipalities adopt stringent land use controls and permitting procedures (Smart, 1985; Real Estate Research Corp., 1982; ULI, 1986). The time required for suburban developments to successfully overcome these obstacles increases costs by lengthening the development timetable.

This situation reduces the developer's return in two ways. First, previously developers could acquire cheap agricultural land for quick development and sellout. Now, in order to mitigate the risk posed by the possibility that permits may not be forthcoming after lengthy negotiations with municipalities, developers are forced to purchase options from landowners. In return for a sum of money from the buyer, a land-seller agrees to keep the land off the market for an agreed-upon period of time, which is hopefully long enough for the developer to negotiate assured permits from the municipality. The cost of the option reduces the developer's return if not reimbursed, and therefore the developer increases the sale price of the product in order to be compensated.

The second way in which stringent land controls work to increase housing prices is through the increasingly common
requirement that private suburban developers bear part or all of the burden of infrastructure upgrading or installation (James in Solomon, 1980; Smart, 1985; Real Estate Research Corp., 1982). When construction costs increase, developers are forced to assume higher loans and therefore pay higher interest costs. Again, increased costs reduce the developer's return, and therefore they seek to be reimbursed.

Franklin James (in Solomon, 1980) cites land cost as an important element in housing affordability, stating that, in particular, inflation in the costs of vacant land in suburbs has outpaced inflation in the other components of housing costs ... restrictive local controls by suburban governments on land use and residential construction in recent years appears to have had an inflationary impact on land costs.

The Urban Land Institute (1986) estimates that land price inflation is the second largest cost in new housing, preceded only by construction cost. Between 1980 and 1985, median national prices for house lots rose 42%, while median prices for raw land increased by 80%. Single family house lots now account for an average of 22% of the purchase price of new single family homes. Additionally, in some areas, trends toward smaller lots and zero lot line zoning mean that buyers may be actually receiving less land in exchange for more money.

As the land market worked to increase suburban housing prices over the years, urban housing prices were declining due to decreased demand for urban locations. The resulting price differential has been termed the "urban-suburban rent gap."

As increases in household income failed to keep up with
increases in suburban house prices, fewer potential buyers could afford to purchase suburban homes. Franklin James (in Solomon, 1980) estimates that the before-tax cost of owning a new single family home as a percent of median income rose from 34% in 1967 to 42% in 1975, while the after-tax cost of the same home as a percent of median income rose from 29% to 36% during the same period. Obviously, fewer and fewer households could support the cost of new homes.

The price gap was exacerbated in the late 1970s by high mortgage interest rates. Although interest is partially reimbursable to homeowners through its tax deductible status, homeowners must have incomes high enough to support the mortgage in order to gain this advantage. Unfortunately, this was not the case for increasingly large numbers of first time and middle class buyers during this period of time. From within this unaccommodated market segment came the originators of inner city rehabilitation, as described in Chapter One.

**Commercial Development and Downtown Residential Demand**

Although affordability is an important element in the explanation of the urban-suburban rent gradient, it does not include a demand component. The urban-suburban rent gradient is indeed a necessary but not sufficient supply side condition for gentrification to occur; the process has to be activated by demand side shifts rooted in professional job growth anchored in downtown offices ... (Berry in Peterson, 1985).

In a 1964 study in which urban-suburban rent gradients were
calculated, Bernard Frieden showed that in cities with strong central employment and cultural bases, rents were higher in the central area, dropping off with decreasing proximity to the central area.

Frieden's study included a strong core city (New York), a moderately strong core city with complicating factors (Hartford), and a decentralized city (Los Angeles). The urban-suburban rent gradient in New York decreased with distance from the core, while in Hartford and Los Angeles, the gradient was relatively flat.

Frieden's results seem to be in direct conflict with the rent gradient described in part one of this chapter. However, this work underscores the importance of CBD office employment as a precondition to downtown residential demand. The willingness to pay higher prices for central locations in cities with strong and growing downtown employment indicates that locational preferences in housing demand are, at least in part, generated by employment location. This suggests that some portion of workers employed in CBD locations would prefer to live nearby in downtown residential developments.

More recently, the Urban Land Institute noted that "cities without clearly definable downtowns or activity centers like Houston, Phoenix, or Los Angeles have had difficulty in drawing housing development to downtown" (ULI, 1986), further reinforcing the importance of a strong core.

Statistically significant results were obtained using measures of white and blue collar employment as a predictor for
the number and percent of census tracts having median family incomes and median educational attainments greater than those for the SMSA in twenty U.S. cities (Lipton, 1977). Strong positive correlations were proven to exist between white collar activity in the urban core and high rates of above-median income and education levels within the cities. Conversely, negative correlations were found between blue collar activity and above-median income and educational attainment. Lipton summarized his results by saying that,

(t)hose cities whose major centers are dominated by white collar employment and also have the longest commuting distance to the farthest suburbs have strong, high status cores.

Growth in Office Employment

During the 1960s, growth in the urban service employment sector began to increase. In a survey of the eleven largest cities during the period 1960-1967, employment in the sectors of Finance, Insurance and Real Estate (FIRE), Services, and Government increased by an average of 4.6% during the period (Black in Solomon, 1980). In Boston between 1962-1964, FIRE employment grew by a total of 2.3% (James D. Landauer Assoc., 1967).

During the 1970s, the trend toward urban service employment growth continued to emerge and grow stronger, especially in certain cities. In a survey of ten metropolitan areas between 1970 and 1975, half of the cities experienced increases in service employment ranging from +6.5% in Washington, D.C. to
+24.59% in San Francisco. However, the other half of the cities were still losing service jobs, with losses ranging from -1.4% to -15.6%. (Black in Solomon, 1980) See Table 3.

Between 1970 and 1983, managerial and professional jobs increased by 60% over the previous national average, while clerical and sales jobs increased only 36% during the same time period. Between 1982 and 1985, 8 million new service sector jobs were created, an increase of 12% over a three year period. (ULI, 1986) ULI estimates that 60% of all service sector jobs are office-based. Using this figure, along with a conservative estimate of 240 square feet per worker, national office absorption as a result of new jobs created during this three year period alone was 1.152 billion square feet. Clearly, the growth of this employment sector is fueling the demand for office space. The breadth of this demand in CBD locations is discussed below.

Growth in CBD Office Space

Another means of examining service sector employment growth is to look at the growth rate in office space, for service jobs are located in office buildings. Although the survey years are not totally compatible, several cities experienced concurrently positive service sector employment growth and positive office space growth. These cities were Atlanta, Denver, San Francisco, and Washington, D.C. Surprisingly, cities such as Boston, Baltimore and New York, which today have successfully cultivated downtown office employment and residential development, were
# Table 3

Service Employment in Selected U.S. Cities, 1970-75  
(Thousands of Workers)

<table>
<thead>
<tr>
<th>Area</th>
<th>1970</th>
<th>1975</th>
<th>Amount</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlanta SMSA</td>
<td>195.8</td>
<td>255.6</td>
<td>+ 59.8</td>
<td>+ 30.5</td>
</tr>
<tr>
<td>Central City</td>
<td>155.4</td>
<td>165.6</td>
<td>+ 10.2</td>
<td>+ 6.6</td>
</tr>
<tr>
<td>Suburbs</td>
<td>40.4</td>
<td>90.0</td>
<td>+ 49.6</td>
<td>+122.8</td>
</tr>
<tr>
<td>Baltimore SMSA</td>
<td>236.3</td>
<td>317.0</td>
<td>+ 80.7</td>
<td>+ 34.1</td>
</tr>
<tr>
<td>Central City</td>
<td>147.5</td>
<td>138.9</td>
<td>- 8.6</td>
<td>- 6.1</td>
</tr>
<tr>
<td>Suburbs</td>
<td>88.8</td>
<td>178.1</td>
<td>+ 89.3</td>
<td>+100.6</td>
</tr>
<tr>
<td>Boston SMSA</td>
<td>668.2</td>
<td>692.4</td>
<td>+ 24.2</td>
<td>+ 3.6</td>
</tr>
<tr>
<td>Central City</td>
<td>354.0</td>
<td>348.2</td>
<td>- 5.7</td>
<td>- 1.6</td>
</tr>
<tr>
<td>Suburbs</td>
<td>314.2</td>
<td>344.2</td>
<td>+ 30.2</td>
<td>+ 9.6</td>
</tr>
<tr>
<td>Denver SMSA</td>
<td>154.3</td>
<td>202.2</td>
<td>+ 47.9</td>
<td>+ 31.0</td>
</tr>
<tr>
<td>Central City</td>
<td>109.0</td>
<td>120.7</td>
<td>+ 11.7</td>
<td>+ 10.8</td>
</tr>
<tr>
<td>Suburbs</td>
<td>45.3</td>
<td>81.5</td>
<td>+ 36.2</td>
<td>+ 79.9</td>
</tr>
<tr>
<td>New Orleans SMSA</td>
<td>136.9</td>
<td>158.6</td>
<td>+ 21.7</td>
<td>+ 15.8</td>
</tr>
<tr>
<td>Central City</td>
<td>109.5</td>
<td>108.1</td>
<td>- 1.4</td>
<td>- 1.3</td>
</tr>
<tr>
<td>Suburbs</td>
<td>27.4</td>
<td>50.5</td>
<td>+ 23.1</td>
<td>+ 84.0</td>
</tr>
<tr>
<td>New York SCA</td>
<td>3408.4</td>
<td>3414.9</td>
<td>+ 6.5</td>
<td>+ 0.2</td>
</tr>
<tr>
<td>Central City</td>
<td>2089.3</td>
<td>1963.8</td>
<td>-125.0</td>
<td>- 6.0</td>
</tr>
<tr>
<td>Suburbs</td>
<td>1319.1</td>
<td>1451.1</td>
<td>+132.0</td>
<td>+ 10.0</td>
</tr>
<tr>
<td>Philadelphia SMSA</td>
<td>791.1</td>
<td>897.3</td>
<td>+106.2</td>
<td>+ 13.4</td>
</tr>
<tr>
<td>Central City</td>
<td>478.1</td>
<td>476.4</td>
<td>- 1.7</td>
<td>- 0.4</td>
</tr>
<tr>
<td>Suburbs</td>
<td>313.0</td>
<td>420.9</td>
<td>+107.9</td>
<td>+ 34.5</td>
</tr>
<tr>
<td>St. Louis SMSA</td>
<td>265.5</td>
<td>286.7</td>
<td>+ 21.2</td>
<td>+ 8.0</td>
</tr>
<tr>
<td>Central City</td>
<td>140.3</td>
<td>118.5</td>
<td>- 21.8</td>
<td>- 15.6</td>
</tr>
<tr>
<td>Suburbs</td>
<td>125.2</td>
<td>168.2</td>
<td>+ 43.0</td>
<td>+ 34.3</td>
</tr>
<tr>
<td>San Francisco SMSA</td>
<td>456.8</td>
<td>498.6</td>
<td>+ 41.8</td>
<td>+ 9.1</td>
</tr>
<tr>
<td>Central City</td>
<td>215.9</td>
<td>269.6</td>
<td>+ 53.7</td>
<td>+ 24.9</td>
</tr>
<tr>
<td>Suburbs</td>
<td>240.9</td>
<td>229.0</td>
<td>- 11.9</td>
<td>- 4.9</td>
</tr>
<tr>
<td>Washington, D.C. SMSA</td>
<td>836.8</td>
<td>959.7</td>
<td>+122.9</td>
<td>+ 14.6</td>
</tr>
<tr>
<td>Central City</td>
<td>448.2</td>
<td>477.3</td>
<td>+ 29.1</td>
<td>+ 6.5</td>
</tr>
<tr>
<td>Suburbs</td>
<td>388.6</td>
<td>482.4</td>
<td>+ 93.8</td>
<td>+ 24.1</td>
</tr>
</tbody>
</table>

From: J. Thomas Black, 1977
still losing service employment during the survey years. However, at the time the building was occurring, it is probable that projections for these cities were for increases in service sector employment, resulting in some early overbuilding which was subsequently absorbed.

Between 1970 and 1978, the average percentage increase of CBD office space in selected cities was 42.9%, while the average absolute increase in office space during these years was 21.63 million square feet (Black in Solomon, 1980). See Table 4.

Again, making the conservative assumptions that only one-half of this space represents true business expansion, and that each worker consumes only 200 s.f., the average increase in employment in these cities was greater than 6,700 workers annually.

Commuting and Worker Residential Origins

Nationally, the total average number of miles travelled increased 6.4% between 1981 and 1983, while at the same time the number of miles of highways provided increased by only 1.2%, and the latter increments were primarily in local roads. A disproportionate share of the growth in miles travelled occurred in urban areas, where increases totalled 9.9%. (ULI, 1986) The urban area increases probably result from the employment growth these areas have been experiencing.

While workers in the suburbs and the growth rate for this same category still exceed those who work in the city, the number
<table>
<thead>
<tr>
<th>City</th>
<th>1970</th>
<th>1978</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlanta</td>
<td>10.8</td>
<td>16.9</td>
<td>56.5</td>
</tr>
<tr>
<td>Baltimore</td>
<td>8.0</td>
<td>10.0</td>
<td>25.0</td>
</tr>
<tr>
<td>Boston</td>
<td>28.5</td>
<td>38.0</td>
<td>33.3</td>
</tr>
<tr>
<td>Chicago</td>
<td>57.8</td>
<td>77.8</td>
<td>34.6</td>
</tr>
<tr>
<td>Cincinnatti</td>
<td>10.1</td>
<td>10.5</td>
<td>4.0</td>
</tr>
<tr>
<td>Cleveland</td>
<td>16.5</td>
<td>18.7</td>
<td>13.3</td>
</tr>
<tr>
<td>Dallas</td>
<td>15.0</td>
<td>20.4</td>
<td>36.0</td>
</tr>
<tr>
<td>Denver</td>
<td>7.8</td>
<td>15.8</td>
<td>102.6</td>
</tr>
<tr>
<td>Detroit</td>
<td>11.5</td>
<td>18.0</td>
<td>56.5</td>
</tr>
<tr>
<td>Houston</td>
<td>13.9</td>
<td>22.2</td>
<td>59.7</td>
</tr>
<tr>
<td>Indianapolis</td>
<td>10.4</td>
<td>12.4</td>
<td>19.2</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>33.0</td>
<td>45.0</td>
<td>36.4</td>
</tr>
<tr>
<td>Milwaukee</td>
<td>9.0</td>
<td>11.5</td>
<td>28.0</td>
</tr>
<tr>
<td>Minneapolis</td>
<td>10.0</td>
<td>14.8</td>
<td>48.0</td>
</tr>
<tr>
<td>Newark</td>
<td>2.8</td>
<td>4.6</td>
<td>64.3</td>
</tr>
<tr>
<td>New Orleans</td>
<td>5.5</td>
<td>8.5</td>
<td>54.5</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>24.1</td>
<td>32.2</td>
<td>33.6</td>
</tr>
<tr>
<td>Pittsburgh</td>
<td>8.7</td>
<td>13.2</td>
<td>51.7</td>
</tr>
<tr>
<td>San Francisco</td>
<td>25.0</td>
<td>35.0</td>
<td>40.0</td>
</tr>
<tr>
<td>Seattle</td>
<td>4.5</td>
<td>7.2</td>
<td>60.0</td>
</tr>
</tbody>
</table>

Average Percentage Increase 42.9

From: J. Thomas Black, 1977
of workers employed in central city locations increased by 25.6% between 1970 and 1980. See Tables 5 and 6. In terms of workers' residential locations, more workers still live in the suburbs, too, however, the number of workers living and residing in central cities increased by 14.8% between 1970 and 1980. The growth rate for reverse-commuters from cities to suburbs was approximately half that for city resident-workers. However, the absolute number of these workers in this category was substantially smaller.

One study was conducted of railroad commuters to New York City in 1978 (Sternlieb & Ford in Bryce, 1979). Of 678 commuters interviewed, 10.3% responded that they plan to move into the City. The results for suburban commuter inmovers to the city are similar to those for all suburban inmovers to the city, and suggest that although this population does contribute to downtown residential demand, the majority of downtown inmovers do not originate in suburbia. Therefore, the significance of the growth in downtown employment must not be just that this population works there, but a growing number of them choose not to leave the city for suburban residence and long commuting distances to work downtown.
Table 5
Workplace and Residence in Urbanized Areas
(Number of Workers in Thousands)

<table>
<thead>
<tr>
<th>Workers Living In:</th>
<th>Workers</th>
<th>Increase 1970-1980</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1970</td>
<td>1980</td>
</tr>
<tr>
<td>Central City</td>
<td>22,594</td>
<td>25,604</td>
</tr>
<tr>
<td>Suburbs</td>
<td>19,900</td>
<td>30,363</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Workers Working In:</th>
<th>Workers</th>
<th>Increase 1970-1980</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1970</td>
<td>1980</td>
</tr>
<tr>
<td>Central City</td>
<td>24,856</td>
<td>31,210</td>
</tr>
<tr>
<td>Suburbs</td>
<td>17,638</td>
<td>24,756</td>
</tr>
</tbody>
</table>

Source: Special census tabulations by Joint Center for Political Studies, from ULI, 1986

Table 6
Commuter Flows in Urbanized Areas
(Number of Workers in Thousands)

<table>
<thead>
<tr>
<th>Workers Living In</th>
<th>Workers</th>
<th>Increase 1970-1980</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central City and</td>
<td>1970</td>
<td>1980</td>
</tr>
<tr>
<td>Working In:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central City</td>
<td>18,115</td>
<td>20,802</td>
</tr>
<tr>
<td>Suburbs</td>
<td>4,479</td>
<td>4,802</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Workers Living in</th>
<th>Workers</th>
<th>Increase 1970-1980</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suburbs and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working In:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central City</td>
<td>6,741</td>
<td>10,408</td>
</tr>
<tr>
<td>Suburbs</td>
<td>13,159</td>
<td>19,955</td>
</tr>
</tbody>
</table>

Source: Special census tabulations by Joint Center for Political Studies, from ULI, 1986
Affluent two worker families may, of course, inherently be attracted to near-downtown residence because of the proximity to their jobs in government, communications, finance or law. Indeed, analyses ... of metropolitan growth ... have identified the professional/managerial group as the biggest losers: because of the high degree of centralization of their jobs in some cities, this group may face the longest commute. The situation is even more acute for two worker professional families living in the peripheral suburbs. Such families often spend twice as much time and money in commuting downtown as a one worker family. Peripheral residence restricts access to cultural amenities and recreational opportunities that loom large in the budgets of the more affluent (Berry in Peterson, 1985).

Lipton (1977) mentions the identical argument for two worker households commuting from the suburbs to downtown. Female labor force participation and other demographic trends are discussed below.

Demographic Changes

Changes in office development and employment occurred almost simultaneously with shifts in demographic trends. The confluence of these economic and demographic changes has exerted influence over residential location patterns.

Total Population and Age. The 1980 Census counted the total U.S. population at 226.5 million people (Garnick in Gau, 1983). The total number of baby boomers, those born roughly between the years of 1945 and 1965, is estimated to be 78 million people (ULI, 1986). The total number of people in the U.S. aged thirty is expected to peak in the late 1980s, drop slightly during the early 1990s and then begin to drop more sharply during the late 1990s (Clay, 1979). See Figure 1.
Figure 1

United States
Number of People (in millions)
reaching age 30, in each five-year period 1900-2005

Source: Boston Redevelopment Authority and Massachusetts Office of State Planning, calculations from 1977 U.S. Census, from, Philip S. Clay, 1977
Figure 2 shows the changing composition of the U.S. population by age, and is simply another way of representing Clay's table in the context of more information. The aging of the baby boom generation shows up first in increases in the 20-34 and 45-54 year old groups between 1970 and 1985. By 1990, the 20-34 year old group is decreasing in size, as baby boomers age and more move into the 45-54 cohort, which continues to increase.

Household Formation Rate. The household formation rate is defined as the change in the number of households which is not accounted for by age and migration (Masnick, 1983). Demographers were aware that the large population increase known as the baby boomers would lead to rising household formation rates, however, the demographers were unable to anticipate the changing characteristics of the new households.

Between 1970 and 1980, married couples accounted for only 28% of the growth in the number of households, but accounted for approximately 45% this growth in 1980. In 1970, 39% of all new households had children, while by 1980 the figure had fallen to 30%. During this same decade, single headed, never married households accounted for 42% of total household growth. (Masnick, 1983)

Baby boomers form households at twice the rate of the general population, and by 1990, it is estimated that one-half of all the households in the U.S. will be headed by a member of the baby boom generation. Fifty-six percent of baby boomers are married, and 75% of these married couples have children.
Figure 2

U.S. POPULATION BY AGE

Of the 44% who are single, just under one-half head their own household, and these "single boomers" still account for one third of the total 19+ million single households nationally. (ULI, 1986) Household formation by age is shown in Figure 3.

In the 1970s, when baby boomers were waiting longer to get married, the household formation rate was comprised mostly of single person households. When the large baby boom population finally began to marry, the married couple household formation rate increased, with the single person household formation rate decreasing proportionately. These are the swings in household formation rates to which Masnick refers when he states that, "what forecasters failed to anticipate ... was that the fraction of unmarried adults who head their own households would also rise dramatically" (Masnick, 1983).

It has been estimated that between 1970 and 1976, almost two thirds of the net growth in metropolitan households occurred in married couples under 35 years old, other non-elderly households with two or more members; and one person households. (James in Solomon, 1980).

One group which is anticipated to undergo increased household formation rates in the future is the so-called "empty nesters." These are currently the parents of the baby boomers whose adult children no longer live at home. While currently this population group is not experiencing growth, growth in this cohort will pick up in approximately 2000 when the first group of baby boomers reach 55 years old.
Figure 3

U.S. HOUSEHOLD FORMATION
BY AGE

Millions of Households

Additionally, the household formation rate for those aged 65 years and older has already increased since 1980, presumably both because of medical technology which allows for longer life spans and also because of increasing options for living arrangements for this segment of the population.

Female Workforce Participation. A component of the household formation rate is the growing participation of women in the labor force. It is estimated that in 1985, 56.5% of all women worked. By 1990, female workforce participation is projected to increase to 59.6% of all women. (Gruen, 1982) Alonso (in Gau, 1983) attributes this increased participation to the rising cost of housing, and believes that the argument of work force participation forcing the postponement of childbearing among baby boomers to be "quite credible."

Fertility Rate. The fertility rate is a measure of the number total births a statistical woman would have to give in a lifetime, adjusted for male/female bearing chances and mortality, in order to keep the population at its current level. The replacement rate is currently 2.1 children. (Alonso in Gau, 1983)

The fertility rate at the peak of the baby boom was 3.690 children between 1955 and 1959 (Sternlieb & Hughes, 1987). The last year the fertility rate exceeded the replacement rate was sometime around 1970, when it was approximately 2.662. The U.S. fertility rate continued to decrease to its current rate of 1.8 children (14% lower than the replacement rate), while the
fertility rate in New England is 1.4 children (33% less than the replacement rate). (Alonso in Gau, 1983)

Household Size. The effects of postponement of marriage, children, and increased household formation rates, has been to reduce the number of people living in each housing unit. The average number of people per household has been steadily decreasing to its 1985 national low average of 2.69, from its former high of 3.67 in 1940. Furthermore, the median owner-occupied household size in central cities has historically been lower than the national average, and the median central city household size for renters is even lower than that for owner-occupied units.

Table 7
U.S. Median Household Size by Tenure and Location 1970 and 1983

<table>
<thead>
<tr>
<th>Median Household Size</th>
<th>1970</th>
<th>1983</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Persons/Household)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owner Occupied</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. Total</td>
<td>3.0</td>
<td>2.5</td>
</tr>
<tr>
<td>Central Cities</td>
<td>2.8</td>
<td>2.4</td>
</tr>
<tr>
<td>Renter Occupied</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total U.S.</td>
<td>2.3</td>
<td>2.0</td>
</tr>
<tr>
<td>Central Cities</td>
<td>2.1</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Implications of Demographic Changes. Household formation and fertility rates, along with decreasing household size, are of great importance to the market for downtown residential housing.

First, large increases in household formation rates provide demand for residential units even in urban areas experiencing population losses. This trend is aided by the decreasing number of people living in each housing unit.

Secondly, and perhaps more importantly, the huge decreases in the fertility rate meant that residential locational choices no longer center on child-oriented issues. Thus, career oriented singles and couples were free to opt to live near places of employment in the CBD, without worrying about the quality of central city schools or neighborhood environment for children.

Finally, the increase in female workforce participation means that households now have an additional employment factor upon which to base the residential locational decision. In addition, for married couples, two incomes provided the added purchasing power which was necessary to afford rising housing costs.

Summary of Theories

A number of explanations for resurging interest in downtown residential locations were offered in this chapter. Economic explanations included the urban suburban rent gradient, and growing CBD employment opportunities. Additionally, demographic trends toward postponement of childbearing and increased
household formation rates were shown to be related to changes in locational preference.
CHAPTER THREE: A CASE STUDY OF PROVIDENCE, RHODE ISLAND

This chapter will provide a practical application of theories discussed in Chapters One and Two by using Providence, Rhode Island as a case study. Using the case study city as an example, guidance will be provided for developers and investors on trends and characteristics which should be researched in order to evaluate the potential for successful downtown residential development. Advice on important characteristics to look for in existing neighborhoods will be offered, as will an analysis of economic growth potential.

The case study begins with a description and Stage Analysis of residential neighborhoods in Providence by comparing their characteristics to those of gentrification neighborhoods in other cities, which were outlined in Chapter One. Included throughout the chapter are comparisons of Providence to prototype cities, which were described in Chapter Two. The chapter concludes by describing characteristics unique to Providence which work to encourage redevelopment in its downtown core.

Neighborhood Stage Analysis

Providence is comprised of several distinct residential neighborhoods, each of which is endowed with a unique atmosphere created by legacies of primarily Colonial and Victorian architecture. Varying degrees of gentrification and revitalization have occurred in each area since the 1970s. The stage analysis is a quick, visual method of assessing the extent
of reinvestment. The analysis should be completed by developers who are undertaking downtown residential projects so that an understanding of what housing alternatives are available which might compete for the same target market.

Before presenting the analysis, characteristics of the Stages, summarized from Chapter One, are provided. Remember that the progression from stage to stage is cumulative.

Recap Stage One. Young single men or childless couples of high risk tolerance and relatively modest incomes rehabilitate single family or duplex dwellings for owner occupancy. Geographically, the area is confined to a few blocks. Sweat equity contributions are high due to low mortgage loan to value ratios. Little public interest or attention is focussed on the area.

Recap Stage Two. Small scale developer speculative rehab and reselling may occur. Inmover age and income begins to rise. The population begins to include single women and couples with children. Realtors begin to actively market the area.

Stage Three. Prices escalate. Inmover profile is typically middle class. Speculative buying and holding increases. Mortgage money becomes available. Public physical improvements are visible, and the area is commonly referred to as "gentrifying."

Stage Four. Area residents may seek historic designation. Rental units come onto the market, as do some of the buildings bought and held for appreciation in Stage Three. Specialized
retail shops appear. Inmover profile is business/managerially employed and solidly middle class.

Stage Five. Luxury housing comes onto market, catering to high income inmover profile. High end retail boutiques, restaurants and clubs emerge. Substantial public and private investment is visible.

Providence Neighborhoods

The case study neighborhoods chosen for inclusion are located within a one-half to one mile radius of the CBD. The downtown area is distinctly defined by topographical features. Located in a river valley, downtown Providence is surrounded by College Hill to the east; Smith Hill, on which the State House is situated, to the north; and Federal Hill to the northwest. Route 95 forms the western boundary. The downtown area extends southward along the Woonasquatucket, Moshassuck and Providence Rivers to the top Narragansett Bay. Rough residential neighborhood boundaries are presented in Figure 4.

College Hill - Stage Five. Located on a hillside adjacent to the CBD, Brown University and Rhode Island School of Design (RISD) were founded and located here during the last quarter of the 18th century (Woodward, 1986), and hence the origination of the neighborhood's name. College Hill has assimilated successfully into the East Side, a traditionally wealthy neighborhood.

The majority of the housing stock is Colonial and Victorian
Figure 4
Providence Neighborhood Boundaries

Legend
- College Hill
- Old Retail District
- Fox Point
- Mt. Hope
- East Side
- Waterfront
- Capital Center
- Elmwood
era single and multi-family structures, most of which are visibly in excellent condition. Much of the rehabilitation occurred during the 1970s. Fine examples of Greek Revival, Italianate and other period architectural styles are present, and were originally built by wealthy merchants, mostly during the latter half of the 18th century and first half of the 19th century. Many homes capture the excellent views of the State House, the CBD, and even the bay formed by the Providence and Seekonk Rivers.

New and rehab luxury condominium projects are becoming common. The small scale of these projects is befitting of the neighborhood context, and adds to the area's exclusivity. Upscale restaurants, shops and art galleries are mixed among student and neighborhood conveniences, primarily on Hope and Thayer Streets.

Table 8 provides a comparison of 1986 and 1987 median sale prices for the East Side and the rest of the City.

Table 8
1986 and 1987 Median Sale Prices
East Side and Providence

<table>
<thead>
<tr>
<th></th>
<th>East Side</th>
<th></th>
<th></th>
<th>Providence</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family</td>
<td>$180,000</td>
<td>$164,750</td>
<td>$59,000</td>
<td>$83,000</td>
<td></td>
</tr>
<tr>
<td>Condominium</td>
<td>$116,000</td>
<td>$125,000</td>
<td>$80,500</td>
<td>$78,900</td>
<td></td>
</tr>
</tbody>
</table>

Prices for the East Side are high relative to the rest of the City. However, shifts in median prices between single family and condominium stock for the two years indicate that changes are occurring. Judging from median prices, demand for single family homes in the East Side is falling, while it is rising in other areas of the City. Additionally, condominium demand is increasing in the East Side, while it is falling off slightly in other areas of the City.

The increased demand for condominiums in this neighborhood might indicate an influx of singles or childless couples in response to growing employment opportunities in the adjacent CBD. Employment and commercial development trends will be discussed in a subsequent section.

Mount Hope - Transitional from Stage One to Stage Two. This neighborhood is also located on the hillside, adjacent to College Hill on its northern edge. The housing stock on Mount Hope is primarily Victorian, however, the single family homes are somewhat more modest than those found on College Hill, and more multi-family stock occurs. An additional factor constraining price inflation is the presence of a subsidized housing project.

Rehabilitation has become noticeable in this neighborhood in the past few years, but does not predominate. Undoubtedly, some of this investment at least partially results from spillover demand pressures of those priced out of the College Hill/East Side market.

Fox Point - Early Stage Three. Fox Point borders College
Hill/East Side on the southern edge and extends southward to the transitional waterfront district (discussed below). Traditionally an immigrant neighborhood, the majority of the housing stock dates to the latter half of the 19th century and is primarily two to four family structures (Woodward, 1986). More recently, Fox Point is known as a stable, lower middle class, Portugese enclave, and as such, much of the housing stock has always been well kept.

As exterior rehabilitation of the residential stock is unnecessary, the spillover effects of College Hill/East Side demand are primarily exhibited in the changing nature of the Wickendon Street shopping area. Residential Properties, a realty firm associated with the East Side, recently opened a branch office in a newly renovated commercial building. A small art gallery appears further down the street, as does a health food supermarket.

Elmwood - Stage One. Although rooted even earlier in history, the Elmwood area grew most rapidly during the latter half of the 1800s. Originally a wealthy street car suburb, the urban fringe neighborhood contains superb examples of Victorian one and two family structures, many of which can still be considered mansions. Gothic Revival, Italianate, Queene Anne, and other Victorian era architectural styles predominate. (Rhode Island Historical Preservation Commission, 1979)

The area is located to the south and slightly to the west of the old downtown retail district. Elmwood Avenue, (Route One) is
the major commercial artery serving the area.

Elmwood is a classic example of gentrification in action. After a long period of decline and influx of low income blacks and other minorities, rehabilitation of both residential and commercial structures is increasingly visible, although still geographically confined to small pockets. Purchase prices are low relative to other urban and suburban neighborhoods, reflecting the urban-suburban rent gradient which has been explained as a factor promoting demand in Chapter Two.

A recent *Sunday Journal Magazine* (7/10/88) article featured the story of an inmover couple to Elmwood. The Schultzes, in their mid-thirties and parents of an infant child, left their Chinatown apartment in Boston in 1986 in search of affordable housing. Although they describe parts of Elmwood as "downright decrepit," the homes on their street are well tended and refurbished. Reflecting the relative revitalization stages of different Providence neighborhoods, this couple described the College Hill/East Side neighborhood as, "too staid, too formal" and with prices that are "a little high."

**Applying Stage Analysis to Commercial/Industrial Neighborhoods.** The stage analysis was originally developed to describe changes in residential neighborhoods. Although commercial and industrial neighborhoods do undergo transitional stages of redevelopment, in Providence, the transition appears to be advancing more rapidly in these areas than in traditionally residential areas. Some of the reasons why these Providence
neighborhoods are different from other areas are discussed below, before the stage analyses for two example neighborhoods are presented.

Zukin (1982), studied conversion of manufacturing space to residential lofts in New York's SoHo neighborhood in the 1970s. She found that these conversions were initiated by individuals as opposed to by developers. The manufacturing buildings were underutilized, as exhibited by rising vacancies in that particular type of space. High vacancies reduced the value of the manufacturing space to the point where it was affordable to individuals, who purchased and converted the buildings into residential space for their own habitation. These new owners sold raw space to other individuals for renovation and habitation. In SoHo, the demand for loft space eventually increased to the point where building values rose, individuals could no longer afford to purchase, and professional developers began to purchase and convert the space.

In the old retail district in Providence, the precondition of rising vacancy rates exists, just as it did in SoHo (Zukin, 1982). However, in the case study city, development is skipping the initial stage found in SoHo where individuals purchased and renovated. The transition in Providence appears to be proceeding directly to the stage where conversion is completed by professional developers for market rate residential use. In fact, new luxury residential construction is planned in one former industrial neighborhood in Providence, even before
industry has completely abandoned the neighborhood. This indicates that these areas have already increased in value so much that purchase and renovation by individuals is not economically feasible.

A special and rare precondition exists in Providence, one which explains the dramatic increase in value of underutilized buildings. Providence is in the unique position of having 62 acres of prime downtown land planned for development as a new commercial district. This area, known as the Capital Center project, is located between the State House and the Financial district/Kennedy Plaza area. The huge amount of public and private reinvestment already occurring in Capital Center is the factor which accounts for the rapid transition in adjacent commercial and industrial neighborhoods. The stage analysis for Capital Center is presented at the end of this section, and the project is described in greater detail later in this chapter.

Waterfront District - Transitional Stage Three to Stage Four. This area is defined by Fox Point to the north and the beginning of Narragansett Bay to the south. The waterfront was historically an industrial area, and is a good example of the rapid transition discussed above. Although some of the new uses in this neighborhood are already visible, the majority are still under construction. However, sales of the most expensive luxury housing in the history of downtown Providence have been underway since fall of 1987 in this area, and account for its status as transitional from Stage Four to Stage Five.
One of the first new uses to appear was a nightclub, which opened in 1983. Recently, two upscale restaurants have joined this lonely but successful commercial establishment.

Additional retail and office space is available in recently-completed Corliss Landing, a small mixed-use rehab project, which also includes a 56 slip marina and 69 residential condominiums. The condominiums were sold to investors, who took advantage of investment tax credits, and placed the units on the market as rentals. One bedroom units rent for $775 per month, and two bedroom units rent for $1000 per month. (The Providence Company, 1988)

A second residential development in this neighborhood is the India Point Club. Approximately one-half of the 126 waterfront luxury condominium units have been sold since the sales office opened in October 1987. Amenities at India Point Club will include a health club, outdoor olympic-sized pool, common library, 24 hour concierge and valet parking, private dining room, ball room for private functions, two observation decks, and numerous outdoor sitting areas. The project is not yet under construction, and will require two years to complete.

The country club atmosphere, along with sale prices of $185,000-$1.2 million, has appealed primarily to empty nester couples from North Providence and the East Side, according to sales agent Carol Smith. However, Ms. Smith also noted that several units have been purchased by Narragansett residents as second homes in the City. The willingness to pay very high
prices in this transitional urban core area is a vote of confidence in the City's ability to successfully revitalize. The India Point buyer's profile also includes a small number of younger married couples, but very few of these couples have children. The project appears to be successful in attracting a very elite group of buyers oriented toward an adult lifestyle.

India Point Park is a narrow strip of land bordering the waterfront. The City has already begun construction of its $2.1 million improvement project for this previously underutilized asset. When complete, facilities will include an ferry docks for planned harbor cruises, an amphitheater, a waterfront boardwalk with gazebo, renovated landscaping, and parking. Longer term plans also include water taxi service along the Providence River, linking the waterfront to the CBD. (Providence Journal, 6/26/88)

The fact that much of the planned private and public investment in this neighborhood is not completed at this time accounts for the Late Stage One categorization of this neighborhood. If public and private development plans are completed as scheduled, the categorization should advance to Stage Three in approximately two to three years.

Old Retail District - Early Stage One. Located to the north of Elmwood and to the West of the Financial district, this area grew into a strong retail area beginning primarily in the 1850s.

The last of the department stores fell prey to suburban competition in 1981. A small portion of the stock now has been rehabilitated into Class B office space, however; the majority of
the structures are utilized as Class C space, and vacancy rates in this neighborhood have been rising steadily as new construction providing Class A space comes onto the market. Office vacancy rates are discussed in a subsequent section, however, it is important to note the rising Class C vacancies which are occurring in conjunction with falling Class A vacancies. The adjacency of this area to the employment core of the financial district and also to Capital Center (see below), along with the historic but underutilized nature of the building stock, make it a prime candidate for adaptive reuse as a residential neighborhood. The narrow streets lined with three to seven story Victorian commercial structures, when rehabilitated, would lend an atmosphere similar to the SoHo section of New York City.

The City of Providence is making efforts to stimulate redevelopment in this neighborhood. In the early 1960s, the western portion of Westminster Street was converted into a pedestrian mall, which was renovated in the late 1970s (Providence Journal, 7/5/88). As was the case with many similar projects, the solo effort was an unsuccessful revitalization tool. The importance of vehicular traffic to retail sales has now been recognized, and plans to reopen the mall to cars are being coordinated today.

A second, and perhaps more important, stimulus for redevelopment was the recent formation of The Providence Company (TPC). TPC was created by the Greater Providence Chamber of
Commerce and the City of Providence, for the purpose of administering a $20 million loan fund targeted specifically to residential projects in the old retail district. Loans are structured as five year bullets at 75% of prime. Application guidelines are presented in Appendix A.

Two adaptive reuse projects are already planned. The conversion of the 1891 Outlet Department Store building, a registered National Historic Landmark, into residential Providence Square was announced recently. An important component of this adaptive reuse project will be a courtyard carved from the center of the building's mass, in order to reduce the depth to proportions appropriate for residential space. When complete, the project will contain approximately 50,000 square feet of commercial and retail space, 481 parking spaces, 228 one bedroom units and 62 two bedroom units offering several different floor plans and sizes. Project amenities will include "gourmet" kitchens, individual washer/dryer and HVAC units, some units with balconies overlooking "lavishly landscaped" courtyard, high ceilings and large windows, community room, and 24 hour concierge service. (The Providence Company, 1988) As the great majority of these units will be one bedrooms averaging 872 square feet, the project has obviously been targeted to singles and young couples without children.

Construction is planned to be complete in late 1988 on conversion of The Conrad Building into 24 residential and three commercial condominium units. A five story Victorian commercial
structure constructed in 1885, the building's design was recently described as, "highly eclectic and imaginative," the centerpiece of which is "a four story, cast-iron corner tower ... containing windows of various shapes, sizes, and styles" (Woodward, 1986). Sale are expected to begin at $85,000. (The Providence Company, 1988)

This price compares very favorably to the $125,000 median condominium sale price for College Hill/East Side, and is also more than 7% lower than the 1987 median condominium sale price for the rest of the City (see Table 8, page 49). Assuming a 30 year, 10.5% fixed rate mortgage at 80% of value, the low-end unit is affordable on a modest income off $26,800.

Capital Center. Although Capital Center is an "economic development" project which is oriented primarily toward office development, according to James Gaffney, Project Director, one element of this project will be luxury housing. Congress Group Ventures plans to build 90 luxury condominiums with sale prices anticipated to begin at $500,000. Making the same mortgage assumptions noted above, an income approximately $158,000 would be required to support the purchase of one of these luxury units. This price range indicates that prices will be much higher in Capital Center than will be those in the revitalizing retail district. At $500,000, this project will be competing with the high end of the East Side market and the India Point Club market.

Conclusion - Stage Analysis. It appears that the number of urban residential alternatives is growing in Providence. Due to
differing neighborhood characteristics and widely varying price ranges, many of these neighborhoods are appropriately targeted to different segments of the downtown residential market. However, some degree of market overlap may become increasingly evident as downtown locational alternatives increase. See pages 90-93 for a further discussion of market overlap.

Economic Growth in Providence

In order to determine the strength of the demand for downtown residential dwellings, a discussion of current and projected economic growth in Providence is necessary. The boundaries of the downtown area were described in the introduction to the stage analysis, above. Figure 5 denotes the boundaries of various commercial districts.

The integral relationship between CBD office employment and downtown residential demand was discussed in Chapter Two. Additionally, earlier chapters revealed that downtown residents are likely to young singles and double-income married couples without children. In order to evaluate downtown residential demand, economic and demographic characteristics for Providence are discussed below, and are compared to prototype cities when possible.

Office employment can be measured in two ways. One method is to look at employment bases and growth for office workers in service industries and in Finance, Insurance and Real Estate (FIRE). Alternatively, office employment can be derived from
Figure 5
Providence Downtown Boundaries and Districts

Legend

- Downtown Boundary
- Old Retail District
- Capital Center District
- Financial District

61
base occupancy, vacancy and absorption rates for office space.

These methods will be used to determine office employment in Providence and, when possible, will be compared to prototype cities. Potential target markets and other characteristics unique to Providence also will be discussed in this section.

FIRE and Service Employment Sector Growth. Growth rates for each employment sector are linked to national and global economies, and sometimes are projected using macroeconomic models. Woods & Poole is an example of a data base which utilizes this methodology. However, extrapolating from macroeconomic models to city-specific rates is a complicated process, and can therefore be unreliable. Figures derived from locally projected office space occupancy and projected development provide a better source of information.

It is estimated that in 1985, the average number of workers employed all sectors in Providence numbered 124,081, representing 28.92% of all of the total 429,100 jobs located in the State (derived from New England Economic Project (NEEP) and Rhode Island Department of Economic Development (RIDED), 1986). This employment figure compares conservatively to another local source, which estimated 127,000 workers in 1980, increasing to 134,000 in 1987 (The Providence Company, 1988).

Of the average 124,081 employees, 12,512 or 10.08% were employed in the FIRE sector (RIDED, 1986). RIDED's source was the State Department of Employment Security tax rolls, and therefore should be accurate. RIDED's estimate of 7,600 exempt
government workers has been added to obtain total employment figures.

A 1980 estimate of FIRE as a percent of total employment in the Providence metropolitan area was 12.22%, slightly higher than the later 10.08% figure noted above. Although FIRE has been and is projected to be an expanding employment sector, growth in service sector employment has been even stronger, and thus accounts for the decreasing proportion of FIRE with regard to total employment. This can be seen as a positive shift toward a more diversified economic base.

Total service employment in Providence in 1985 was estimated to be 40,891 workers (RIDED, 1986). The number of office-based service workers business and legal enterprises, is 8,047. Adding 7,600 federal, state and local government employees (RIDED, 1986) to the FIRE and service employment bases, the total number of office workers in the City of Providence is approximately 28,159.

Total employment in FIRE, services and government, hospitals and education are projected to increase by 38% to 93,911 in the City by the year 2010 (The Providence Company, 1988). At this rate, 1,175 new jobs per year would be added to the City's employment base. Assuming that seventy-five percent of this growth occurs in office-based employment, and further making the conservative assumption that each new employee would absorb 200 square feet of office space, this growth would require 235,086 square feet of new office space per year between 1988 and 2010.

Existing Office Space. It is important to identify how much
space of what quality exists in the CBD for two reasons. First, an estimate of existing occupied CBD office space is necessary for derivation of a comparison office employment figure. Additionally, relative vacancy and rental rates are useful for determining patterns of demand.

Several widely varying estimates of total office space do exist, as noted below:

Table 9

<table>
<thead>
<tr>
<th>Source</th>
<th>Date</th>
<th>Total S.F.</th>
</tr>
</thead>
<tbody>
<tr>
<td>New England Real Estate</td>
<td>4/88</td>
<td>4,735,000</td>
</tr>
<tr>
<td>Directory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Providence Foundation</td>
<td>12/86</td>
<td>6,595,700</td>
</tr>
<tr>
<td>Carr, Lynch</td>
<td>3/86</td>
<td>6,400,000</td>
</tr>
</tbody>
</table>

Some of the difference between may be attributable to buildings removed from stock between different survey periods. However, a greater portion is attributed to differing survey techniques. NERED's survey, conducted by Ryan-Elliott, does not include owner-occupied space in its total, whereas the other two surveys do. NERED's survey also includes buildings which are already permitted for construction even if construction has not yet commenced, but does not account for owner-occupied space or for buildings which did not respond to the survey. With the exception of not including non-respondents in calculations, NERED's method is the industry standard which is used to calculate vacancy rates.
In 1985, Carr, Lynch Associates (1986) estimated that a total of 5.549 million square feet of occupied Class A and B office space existed in the Financial, Retail, and North & South Main Street districts. At 200 square feet per worker, this translates into 27,745 downtown area office workers. Comparing to the city-wide office employment figure above, almost all office-based employment in the City is concentrated in and around the CBD.

A base of 940,000 s.f. of Class A space exists in three bank headquarter developments located in the financial district: Hospital Trust Tower, Fleet Center, and Old Stone Bank (NERED, 4/88; RIDED, 12/86; The Providence Foundation, 1986). Class A space is defined as recent new construction renting in the top quartile (approximately $22.50-$25.00) per square foot.

Future Office Development. The stock of Class A office space will expand substantially in the coming years as development in the Capital Center district is completed. A minimum of 3 million square feet of office space is expected to be generated by this development district over the next ten years. The 54.5% increase over existing office space in Providence over a ten year period compares favorably to the average 42.9% increase noted by Brian Berry (in Chapter Two) in selected revitalizing cities during the period 1970-1978. A related discussion on absorption follows below.

The first Capital Center project to come onto the market is the renovated Union Station. Approximately 28,000 square feet
has been completed and occupied by the Providence Chamber of Commerce and related organizations. The remaining approximately 38,000 s.f. is scheduled to be completed in the near future. The first new construction to come onto the market in Capital Center will be the 234,000 s.f. Citizens Bank headquarters, on which construction already has just begun. An additional 110,000 s.f. of new Class A space in Capital Center will be completed within three years.

Office Space Absorption. Semi-annual absorption has been on an upswing since July of 1986, when it bottomed out at just over 40,000 s.f. (see Figure 6). The majority of the extreme high of 451,960 s.f. reached in 1985 is attributed to lease-up of the then-new Fleet Center. Absorption in 1987 crept up to near 200,000 square feet annually, reasonably within the range of that necessary to achieve anticipated employment growth.

Providence experts predict that absorption will remain strong, fueled by local business expansion and branch office openings by out of state tenants from Massachusetts and Connecticut. In 1987 and 1988, branch office openings included Camp, Dresser & McKee; Ropes & Gray; Codman Company; and several personnel agencies (NERED, 4/88); while local expansion included AT&T, Textron, Duffy & Shanley (advertising), and Downing Corp. (real estate) (Providence Journal, 2/13/88).

It is important to note that absorption of Classes A and B+ space has been stable or high since late 1985, while Classes B and below have been experiencing continuously weak absorption.
Figure 6

NET SEMI-ANNUAL OFFICE SPACE ABSORPTION
Providence, Rhode Island

Thousands of Square Feet

Time in Six Month Periods

during the same period. The weak absorption in the lowest rent categories is exhibited through continuously high vacancies. This is a continuation of the 1985-1986 period, which was described as "a lateral shift to better quality space ... not offset by tenants seeking or expanding in lower quality space" (The Providence Foundation, 1986). This indicates that office demand in Providence has shifted to higher rent levels of mostly in Class A space which provides large, contiguous floor areas.

Office Vacancies. Net average vacancy rates for all office space have been steadily decreasing, with the exception of one period in 1987 (see Figure 7). The addition of Fleet Center to supply kept vacancies relatively high in 1985. However, the market has been able to absorb the additional space and reduce the vacancy rate at the same time, indicating strong demand.

In Class A space, the vacancy rate in early 1988 was estimated to be 13.2% (Providence Journal, 2/13/88). Class B+ space "in the $15.00-19.99 category has remained very stable during the last two years, staying in the 8.5% range" (NERED, 4/88). Class B space includes many rehabilitated office buildings, and also includes old bank headquarters buildings. Class C space (< $12/s.f.) vacancies were estimated to have increased to 24% at the same time that the high end vacancies were decreasing. (NERED, 4/88) See Figure 8.

In conjunction with the increasing demand for Class A space, the rising vacancy rate for Class C space is an indication that the latter building stock is underutilized. The great majority
Figure 7

NET AVERAGE VACANCIES,
ALL OFFICE SPACE

Providence, Rhode Island

Source: Ryan, Elliott of Rhode Island, Inc.
Figure 8

OFFICE SPACE VACANCY
BY RENT CATEGORY

Providence, Rhode Island

% Vacant

Source: Ryan, Elliott of RI, Inc.
of this underutilized space is located in the old retail district. As was discussed in the Stage Analysis, the conditions seem ripe for adaptive reuse to moderate income residential space.

Demographic Characteristics

The third category of information necessary to complete an evaluation of potential demand for downtown residential development consists of population and income characteristics.

Population. In 1986, Rhode Island's population was estimated to be 975,000 people. Between 1980 and 1986, the State gained a total of 28,000 new residents, growing at an average annual rate of .48%. (RIDED, 1987). In 1987, the State population grow at a rate of 1.1%, representing an additional 11,000 new residents for a total of 986,000 (The Providence Company, 1988).

This growth exceeded the rate of .9% projected locally for the period by the New England Economic Project (NEEP, 1988). NEEP makes conservative projections due to the "slowing trend of the overall U.S. economy," which are based on "the somewhat heroic assumption that the national economy avoids recession for the eighth straight year."

Various estimates have been for population of the City of Providence. The Rhode Island Department of Economic Development (RIDED) estimates that between 1980 and 1985, the Providence population dropped from 156,804 to 154,600, a total decrease of 1.4%. However, more recent estimates show that, although
population did bottom out at 153,600 in 1985, the City's population actually increased by 5,100 people in 1986 and 1987 (The Providence Company, 1988). This translates into a growth rate of 1.66% annually. See Figure 9.

Age Structure. The median age of the Providence population was 34.66 years in 1987, and is predicted to rise to 39.18 years by the year 2005. This is higher than the median U.S. population ages of 31.93 years in 1987 and 36.45 2005. (RIDED, 1987) Gary Ciminero, Chief Economist for Fleet National Bank of Providence, notes that "only Florida has an even older average age" than Rhode Island (NEEP, 1988). However, if office development and employment occur as planned for the downtown area, then the median age may be reduced somewhat, in response to an influx of resident employees, the beginnings of which may be the immigration noted above.

Income. Between 1981 and 1984, per capita income in Rhode Island increased by 7.3% annually. During the period 1984-87, the increase slowed to 5.7%/year, but is expected to rise to 6.5%/year for the period 1987-1990 as unemployment stays in the vicinity of its current rate of 3.4% (Providence Journal, 7/10/88). Average wage growth is expected to remain in the 5-5.5% range annually between 1988-1990. This figure will be supported by higher than average non-manufacturing wage growth of 5.5-5.7% annually. (NEEP, 1988)

Per capita income (current dollars) in Rhode Island in 1987 was estimated to be $15,325 (New England Economic Project, 1988),
Figure 9

TOTAL POPULATION 1970-1987
Providence, Rhode Island

Thousands of People

Source: Rhode Island Division of Planning,
approximately ten percent lower than the same-year estimate for Massachusetts of $16,865 (Woods & Poole, 1987). Per capita income growth in Rhode Island, as noted above, lagged that for Massachusetts by 0.2-1% during various years between 1983-1987. However, in 1987-1990, Rhode Island's estimated per capita income growth rate of 6.5% (NEEP, 1988) will exceed that of 6.15% (Woods & Poole, 1987) for Massachusetts during 1987-1990.

The median household income in Providence in 1987 was estimated to be $23,900, approximately 22% lower than the median household income of $30,630 for the total fourteen communities included in the survey (The Providence Company, 1988). See Table 10. Although every community in the survey had median household income growth totalling approximately 60% during the period 1979-1987, growth for Providence exceeded that for every other community in the survey.

**Characteristics Unique to Providence**

Several characteristics unique to Providence increase the potential population of downtown residential dwellers. These characteristics include centralized mass transit locations in the CBD, and a large downtown student population. Additionally, details provided on the Capital Center project reveal its importance to creating the adult-oriented, urban lifestyle which is so necessary for successful downtown residential development.

**Commuting Patterns.** Of the total 124,081 workers employed in Providence, it is estimated that 72,954 commute to the city
<table>
<thead>
<tr>
<th>City</th>
<th>Median Household Income</th>
<th>Households With Incomes Greater Than Median</th>
</tr>
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<tr>
<td></td>
<td>1979</td>
<td>1987</td>
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<tr>
<td>Providence</td>
<td>$15,000</td>
<td>$23,900</td>
</tr>
<tr>
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<td>Central Falls</td>
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<td>Warwick</td>
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<td>East Greenwich</td>
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<tr>
<td>Attleboro, MA</td>
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<td>$30,900</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of the Census, Rhode Island Statewide Planning Program, Rhode Island Department of Economic Development; The Providence Company; from The Providence Company (1988)
from elsewhere (derived from RIDED, 1986). Mark Therrien of the Rhode Island Public Transit Authority (RIPTA), estimates that 38,000 people commute daily by bus. The destination for approximately 28,000 of these riders is Kennedy Plaza in the heart of downtown Providence. Kennedy Plaza is a newly refurbished, centralized mass transit area, located between the Capital Center and Financial districts.

As noted in Chapter Two, the Urban Land Institute estimates that nationally, between 1970 and 1980, the number of workers living and working in central city areas increased by a total of 14.8% (ULI, 1986). The 28,000 commuters to downtown Providence could be easily targeted in a marketing program for specific downtown residential projects.

Commuters by rail to Boston represent an additional potential source of downtown dwellers. The brand new Amtrak station, which opened in 1987, is centrally located in the Capital Center district. Commuter rail service was reinstated on February 1, 1988, after a seven year lapse of service. Ridership has increased by 38.5% to a current total of 455 people who leave Providence Station daily in their commute to Boston. The Rhode Island Department of Transportation (RIDOT) expects this number to continue to increase at the rate of approximately 7% per month, or 384 additional commuters per year.

A survey conducted by RIDOT in March of 1988 revealed that 45% of the riders come from Providence neighborhoods, while an additional 15% come from suburban Warwick/West Warwick, and
smaller proportions come from various outlying suburbs. The survey also revealed that 63% of the regular commuters drive themselves to the station by automobile, and that 57% of these commuters think that parking rates are excessive. A properly targeted project-specific marketing campaign aimed specifically at this group might be quite successful in developing demand for downtown residential locations from which commuters could walk to the station.

Furthermore, 42% of the regular ridership deboards at Back Bay Station, and 56% deboards at South Station. Sixty-one percent of these commuters walk to work after leaving the train. A marketing campaign targeted to rail commuters could be extended to these locations in order to lure more of the Boston workforce to live in downtown Providence within walking distance of the train station.

Universities. Partially as a result of the large university community, Providence is endowed with many fine restaurants, art galleries, and museums. Rhode Island School of Design (RISD) is nationally acclaimed for its fine arts curriculum. Johnson & Wales College is foremost in the field of culinary arts. Brown University is one of the oldest ivy league institutions in America. These universities, along with Providence College and others, are significant elements of a flourishing, adult-oriented lifestyle in Providence.

In addition to the universities' cultural contributions, the resulting student population should not be overlooked as a
potential source of downtown residential dwellers. Of the 15,180 RISD, Brown and Johnson & Wales combined total student body, approximately 7,585 live off campus. Rents being paid by these off campus residents ranges from a low of $100 to a high of $560 per month per student. (The Providence Company, 1988) At $500 per month per student, rents of $1500 for a three-bedroom apartment could be afforded. Even at the middle level of $300/month, the buying power would equal $900/month for a three bedroom apartment.

Capital Center: A Driving Development Force. The office development and employment components expected to be generated by development in Capital Center have been outlined previously in this chapter. In addition to the positive economic changes resulting from this project, the large scope of this project will also radically improve the visual and recreational appeal of the downtown area. Therefore, additional background and details are provided below. District and parcel boundaries, and a preliminary site plan are shown in Figures 11 and 12.

Capital Center is an "economic development project" which is "transportation driven," according to James Gaffney, the State's Project Director. Rhode Island was fortunate to have received federal funding for the new $40 million Amtrak station and track relocation, the completion of which resulted in the availability of 62 acres of prime downtown developable land. Although the idea for the project was conceived in 1979, it was not formally launched until October, 1987. The nationally recognized design
Figure 10

Capital Center District and Parcel Boundaries

Source: Capital Center Commission, 1987
Figure 11

Capital Center Illustrative Site Plan

Source: Capital Center Commission, 1987
firm of Skidmore, Owings & Merrill prepared program and design guidelines for the district. (Capital Center Commission, 1987)

The original project timetable called for a twenty year development schedule. Kathleen Field, Associate Director of Planning for the City of Providence, explained that the City originally anticipated that it would require five years to market the twelve parcels to private developers. However, in the ten months since project initiation, nine of the twelve parcels are already spoken for. Not only is the time required for completion expected to be substantially less than originally anticipated, but the baseline three million square feet and 10,000 new jobs to be generated are also expected to be exceeded.

Several projects planned for this district will improve the quality of urban life in Providence. Plans for Providence Place, a $300 million mixed use hotel/retail/office project, reported to include the Ritz-Carlton as one of its flagship tenants, were announced several months ago. The project team is rumored to include national retail developer Melvin Simon & Associates. Additionally, the State is planning for a convention center complex, and The Beacon Company is planning a 260 suite Guest Quarters hotel.

Thirty of the project's sixty-two acres will be devoted to public uses. Parklands and walkways encompassing several acres have been designed so that the focal points of the majority of this open space will be the 1891 Statehouse designed by McKim, Mead & White, and the Moshassuck and Woonasquatucket Rivers.
Until the Capital Center project was planned, the City's rivers had been forgotten assets which had been covered with roadways decades ago. The uninformed visitor would not even have known that the rivers were there. Forty million dollars is being spent on uncovering these waterways, restoring them to their natural beauty, and utilizing them as the design assets which they can be. Water Place, a park planned to encompass several acres, includes the reconstruction of the historic Providence Cove as its center piece. Walkways through the park and along each riverbank are planned to connect the CBD to the waterfront district. Several new bridges will span the rivers between downtown and the bottom of College Hill.

**Providence Summary**

Providence is a changing city, one which has invested much time, effort and money into high quality planning for redevelopment. When these efforts are considered in conjunction with the availability of adult-oriented recreation, strong economic demand, and the architectural ambiance of the City as a whole, it appears that prospects are good for a period of growth. In the next chapter, the elements of demand set forth above will be linked together so that the strength of the demand may be evaluated.
CHAPTER FOUR: EVALUATING DEMAND AND POTENTIAL RISK

In Chapter Three, neighborhood characteristics and economic growth potential for the case study city were described. This chapter will complete the evaluative process by defining the depth of demand for downtown dwellings in Providence. Demographic characteristics and locational preferences will be briefly revisited. Although these elements are described in terms of Providence, all are critical considerations for downtown residential development in any revitalizing city. Evaluative caveats are interspersed throughout the analysis. Other risks inherent to both evaluation of demand and to residential development in general round out the analysis.

Demand for Downtown Residential Locations

Current Demand. In 1985, Melvin F. Levine Associates (Carr, Lynch, 1986) conducted a survey of downtown office workers in order to determine how many of these workers might be interested in living downtown. The downtown area defined in the survey is roughly equivalent to that used throughout this paper, described on page 47, and in Figures 4 and 5.

Approximately ten percent of the CBD employment base was surveyed, from which a representative sample of more than one thousand questionnaires was used to extrapolate demand. Selected survey results are reported below and are compared to figures derived from separate sources. A complete summary of the
survey is attached as Appendix B.

Survey results revealed that 4,600 workers, or 15% of the downtown employment base, definitely would be interested in living downtown if housing were available. An additional 5,930, or 19.38% of the downtown workforce, answered that they might be interested. This represents a total potential downtown residential market of 10,530 workers, or almost 35% of the current downtown office employment base.

Of the respondents, approximately 45% currently reside elsewhere in Providence, another 44% reside elsewhere in Rhode Island, and 11% commute to downtown Providence from locations in Massachusetts.

The break-out of current residence roughly follows inmover patterns for other revitalizing cities outlined in Chapter One. In those study cities, the majority of downtown inmovers originated in other in-city locations. Of the remainder, 10-20% originated in suburbia, 12-50% were totally new to the area, and an additional 10% were commuters to the downtown core. Relating these figures to Providence, the high percentage of workers already residing in the City, along with those commuting from outside the State, should be viewed as indications which reinforce the survey results for existing demand.

Future Demand. Levine Associates (Carr, Lynch, 1986) projected office employment growth of 700 workers per year based on absorption of 140,000 s.f. of office space at 200 s.f. per worker in their 1985 survey. Applying the 35% ratio of workers
definitely and potentially interested in downtown dwelling units, they arrived at a demand for 245 additional downtown residential units annually through the year 2000.

The Levine Associates study was conducted before the Capital Center project was formally launched, and therefore before strong developer interest in Providence was exhibited. Additionally, growth in potential target markets such as commuters by rail to Boston, described in Chapter Three, also are not accounted for. Thus, Levine's projected demand figures might be viewed today as minimum levels for what can be expected in the future. Adjusted demand figures are presented below.

Office absorption increased by approximately 40,000 s.f. annually since this 1985 survey (see Figure 7), providing two hundred additional workers annually to the downtown employment base. Making assumptions somewhat more conservative than the Levine study, if only those workers expressing a definite interest in downtown living were to actually move there, this demand would require an additional 30 units annually.

To derive a high-end estimate, use of Levine's 35% proportion is appropriate. Applying the 35% proportion of those definitely and potentially interested in downtown residency to projected growth in employment, demand would increase by a total of 70 units per year, for a new total annual demand of 315 units. Thus the range of projected annual growth in demand for downtown residencies is estimated to be 245 to 315 units.

Two alternative means of calculating projected demand can be
used to compare the above figures. Deriving demand from employment growth figures in Chapter Three provides an almost identical figure to that calculated above. Assuming that 80% of the projected 1,175 new jobs in the City (see pages 62-63) will be located downtown, and using the high and low proportions described above, demand for downtown dwellings projected by this method would be 141 to 329 units annually.

A second means of comparison is to consider, in very general terms, growth projected to result from the Capital Center project. Assuming that ten years will be required to generate a total of 10,000 new jobs, the range of projected annual housing demand would be 150 to 350 units.

Assuming that Levine's survey correctly identified the 4,600 downtown workers as being definitely interested in living downtown, it is clear that a strong latent demand exists for downtown residential development. Additionally, this demand is projected to increase by 140-350 units annually while Capital Center is being developed.

Downtown Employee Buying Power. In the 1985 Levine survey (Carr, Lynch, 1986), of the 10,530 total workers expressing interest in downtown housing, just over 50% earned less than $35,000 annually. This indicates a very strong demand for affordable units. No breakdown of this income category is included, but for example, assuming that this income category includes many clerical or young single income households earning $25,000, rents of $583 a month could be afforded without
exceeding 28% of income.

Although demand is strongest in the lowest income category, relatively strong demand also exists in the upper income categories. Almost 25%, or 2,600 units, of the total housing demand occurs in the $35,000-$50,000 income range. This income group has the buying power for rents or mortgages of $816-1,167/month, assuming that 28% of income is spent on housing. Extrapolating purchase prices from these monthly figures, assuming an 11% mortgage for 30 years with 20% downpayment, purchase prices of $86,000 to $122,500 would be affordable for this group. The low figure is the approximate starting price for condominium units in The Conrad development in the old retail district.

Demand in the $50,000 and up income category totalled an additional 2,380 units of housing. Income breakdowns were not included, but making mortgage assumptions identical to those above, a $75,000 income provides monthly purchasing power of $1,750, or a sale price of $184,000. This is the starting price for units in the India Point Club.

In some respects, the buying power of those interested in downtown residential development seems to be somewhat depressed. Remembering that Levine's survey was conducted in 1985, and also that non-manufacturing wage increase was approximately 5.7% during the period 1984-1987 (NEEP, 1988), the buying power of these downtown workers has already increased. When considered in terms of rental units, the 1985 moderate and upper income range
affordability range of $816-1,750 per month is adequate to support market rate and some luxury housing accommodations.

Additionally, the workers generating this downtown residential demand are the pioneers of a new downtown Providence lifestyle. Once the lifestyle becomes more visible, the prospects of luring additional upper income earners to downtown residences will increase.

Preference and Competing Neighborhood Markets

As the existence of a latent and growing demand for downtown residential locations has been established, the question turns to what kind of housing these urbanites would prefer to live in. Preference is related not only to income, but also to age and demographic characteristics. Additionally, the existence of fringe CBD residential locations implies that new core locations may have to compete for market share of certain populations. Potential areas of market competition between neighborhoods will be defined, and prescriptions for capturing certain markets will be offered.

Preferences of Downtown Workers. In the study conducted by Melvin F. Levine & Associates (Carr, Lynch, 1986), all income groups indicated that townhouses or garden apartments were the most preferred type of residence. Almost 4,100 workers, or 38%, of the 10,530 possibly and definitely interested in downtown residency would prefer this housing design. This is somewhat problematic, given the nature of the existing building stock in
the downtown area.

One way that a portion of this preference could be satisfied would be to provide penthouse units on top of existing commercial buildings (i.e., in the old retail district) which would be adaptively reused for residential space. However, some portion of this group might also be persuaded to substitute other housing types of high quality design with a good marketing campaign. Therefore, although further research should be conducted on this subject before a specific project is undertaken, this preference does not necessarily represent an insurmountable obstacle.

In the lower income group, 39%, or 2,200 of 5,550 possible, of those responding positively toward downtown residential alternatives expressed preferences for apartments in adaptively-reused commercial space and do-it-yourself rehab for loft and studio spaces. The latter preference probably would be more workable considering the modest buying power of this group. In the two upper income groups, just over 1,900 workers, or 39% of all possible, also expressed interest in both of these types of housing.

These preferences are another indication that the currently underutilized commercial space in the former retail district could be successfully adapted and marketed for residential use. This idea was supported in the Carr, Lynch downtown development survey (1986).

Preferences were somewhat strong across all income groups for apartments in mid and high rise buildings. Almost 2,300
workers, or 22% of all positive respondents, expressed interest in mid and high rise apartments. Presumably this demand will be satisfied through new construction in Capital Center. Strong developer interest in acquiring land in this district already may have exerted pressure on land prices resulting in pricing the lower income group out of this housing segment unless some type of subsidy is provided. Therefore, without a subsidy, it is likely that the upper income group will be the primary target market for the residential component in Capital Center.

As was mentioned in Chapter Three, The Providence Company is administering $20 million of funds for residential development in the old retail district. Therefore, for the most part, low to moderately priced housing probably will occur in the retail district, while high end new construction will be developed in Capital Center. In fact, the two residential developments already announced for Capital Center were luxury apartments and condominiums with sale prices beginning at $500,000.

Neighborhood Competition for Market Share. Currently, the only existing high end competition for Capital Center is the College Hill/East Side neighborhood. As was noted in the Stage Analysis in Chapter Two, demand in this neighborhood is shifting from single family to condominium units. When luxury units become available in Capital Center, some of the buyers most likely will be those who currently live in the College Hill/East Side area. The luxury India Point Club development in the waterfront district is already competing successfully for these
residents. The College Hill/East Side buyers at India Point are typically empty nesters (see page 55). The second source of residents will be suburban inmovers, suburbanites in other cities accounted for only 10-20% of the inmover population. However, it is possible that project-specific suburban inmover rates can exceed city-wide rates with proper marketing, as appears to be the case at India Point Club.

Competition for low and moderate income groups also will occur among the different neighborhoods. However, even today, alternatives for the less than $35,000 income group are relatively limited. Apartments in multi-family stock in the Fox Point and Elmwood neighborhoods will most likely provide the largest sources of competition. As this income group probably contains clerical and other entry level personnel, provision of housing alternatives will be important to ensure that the labor pool is large enough to attract new businesses to the City.

The moderate income group will probably be spread out in a variety of neighborhoods. Some of this group will opt for appropriately priced housing in the retail district, while another portion will opt for single family rehab opportunities in the Elmwood area. The high end earners of this group are close to within purchasing power of median-priced College Hill/East Side condominiums. As some of the high-end demand in that neighborhood is siphoned off by new construction in Capital Center, prices may ease up and become more affordable to this income group.
Relating Neighborhood Market Share to Demographics.

Although the demand for downtown residential locations clearly exists in Providence among CBD office workers, changing demographic trends are an important element which any residential developer should consider.

In Chapter Two, the baby boomers and their tendencies to marry late and postpone parenthood were discussed at length, as was the resulting shift toward adult-oriented lifestyles as one factor promoting the desirability of urban residential locations. It was also noted that the median age of the baby boomers has now reached 30 years. Fast approaching the end of childbearing years, this generation finally has begun to bear children, although at a very low fertility rate.

It is unclear whether urban baby boomers will return to the suburbs to raise their children. It is also unclear at what rate this population will reproduce. In terms of downtown housing for Providence, a childbearing trend could mean that single family oriented urban fringe neighborhoods such as Elmwood could provide a stronger competition, or it could even mean a return to suburban outmigration.

However, even a large shift toward family orientation should not pose a serious problem in terms of reduction of the population of potential downtown dwellers until the median age of this generation passes forty years. When this occurs around the turn of the next century, the supply of younger people interested
in living downtown could be inadequate to substitute for a population out-migration due to childbearing reasons.

Furthermore, it is entirely possible that many people of the baby boom generation, the originators of the new urban lifestyle, will choose to remain in downtown locations while raising their children. Perhaps this is one reason why the City of Providence is engaged in a $75 million project to upgrade its school system (The Providence Company, 1988). One way that developers might be able to help keep childbearing baby boomers in the City is to poll current and potential residents, and provide daycare services in their projects when appropriate.

Additional Caveats for Downtown Residential Developers

This thesis provides methods for evaluating downtown residential development potential in revitalizing areas by placing traditional market analysis in the larger context of the dynamic nature of cities. Although comprehensive in scope, this theoretical framework and case study analysis include implicit assumptions which should be individually examined by developers of downtown projects.

One of the largest assumptions upon which the Providence residential analysis is based is the premise that office development will occur as planned. Inherent to this assumption are others regarding prospects for regional and even national economic health. That is, should the larger economy decline, then the pool of potential businesses capable of expanding would
be reduced, and the ability of developers to attract tenants to new space would be seriously impaired. If this were to occur, then the prospects for increased office employment would be poor, and therefore demand for downtown residential locations would decrease.

In the case analysis, historic office development and employment figures for other cities experiencing revitalization were compared to projected figures for Providence. Providence may be similar to those cities in terms of its current stage in the redevelopment process. However, commercial development is highly related to larger economies, and therefore the validity of making comparisons of two different time periods without accounting for differing interest rate climates, etc. presents a problem. The comparison was included so that the planned increase in size of the case study city could be made relative to other cities, and should be viewed as such.

Median income and wage growth rates were provided in the Providence case study. Some income levels were included for the downtown office survey respondents. However, more detailed information, especially on the vaguely-presented high and low end, would be required in order to appropriately price and target a specific project. Additionally, downtown residential demand figures were derived from Levine Associates' extrapolation from a sample population. The underlying assumptions of the extrapolation should be carefully examined.

The Levine survey provides a good base of information
regarding preferences for housing design attributes by income level. This is an area which would require project-specific research, either through additional market surveys or by consultation with marketing professionals.

A fifth caveat relates to design review. Currently, the City of Providence does not have a formal design review process. The absence of a time consuming review process is in the developer's favor, mostly in terms of cost savings. However, many cities do have strict design guidelines, particularly in areas of architectural significance. Working through mazes of government and public review can be very difficult, and is an area which prudent developers should consider when planning projects in unfamiliar territory.

A component of the demand for downtown residential development in Providence is expected to be satisfied through adaptive reuse of former commercial buildings. Adaptive reuse is a highly specialized form of development which differs radically from new construction in terms of design and coordination. The developer's selection of architect should reflect this consideration. Additionally, delivery and storage of construction materials and equipment can be particularly difficult in congested urban locations, and should be factored into the project timetable and selection of the project team members.

Finally, as in any development effort, the developer should consider his/her tolerance for risk with regard to the level of
risk required to complete an individual project. Being the first to develop successfully in an empirically untested market can provide high financial rewards. However, test market projects can also fail dismally, as can otherwise excellent projects which are ill-timed with regard to supply and absorption. An objective assessment of factors both internal and external to the project which might go wrong is always required to properly assess project risk.

**Conclusion**

The evidence indicates that downtown residential development in Providence has a good chance of succeeding. All of the preconditions are present, accompanied by strong latent and growing demand. The key will be continued absorption of new Class A office space and generation of new employment. In general, a thorough evaluation of potential for downtown residential development should include not only a typical demand survey, but also a look at the contextual dynamics of urban areas, especially when unique circumstances exist such as in Providence. The importance of examining underlying assumptions for local and national growth projections cannot be overemphasized. As was proven in the disastrous overbuilding of Houston, it is not always profitable to myopically predict the future based on past trends. Therefore, supply must also be monitored closely so that projects come to market with good timing. A careful consideration of all of the elements and
underlying assumptions will provide a balanced equation for success in downtown residential development.
BIBLIOGRAPHY


INTRODUCTION:
The Providence Company was established jointly by the Providence Foundation, the Greater Providence Chamber of Commerce and the City of Providence for the purpose of creating a downtown neighborhood by encouraging residential development within the historic, commercial, retail and industrial heart of the city. To support this endeavor, the Providence Company administers a fund of approximately $20 million to be loaned to qualified projects at 75% of prime rate. New construction and proposals that successfully utilize the existing architecture, maintain the human scale of the city and contribute to the revitalization of Downtown Providence are encouraged.

LOAN PROCEDURE:
The Providence Company will assist developers in compiling the necessary information for loan application and preparation of Board presentation. After presentation to the Board of Directors and upon its approval, the project is referred to the Loan Committee. The Loan Committee, comprised of four senior bank officers and a City representative, then appoints one of its members to work with the developer to achieve loan feasibility. Upon acceptance of the financial package by the Loan Committee, the proposal is presented to the Board for final approval.

PURPOSE:
To be a catalyst for the redevelopment of downtown Providence and to stimulate and strengthen the growth of a viable neighborhood through financing residential projects in the Downtown and Jewelry Districts of Providence.
OBJECTIVES:

To loan $20 million to a series of residential projects which will support the architectural integrity and human scale of the target area.

Downtown is zoned to permit retail and we encourage retail as a component of our projects and as an integral component of revitalization.

The Providence Company also supports efforts of the City's Parking Authority to create additional structured parking facilities to serve the downtown area.

The housing financed by The Providence Company should reflect the heterogeneous nature of our city. Therefore, The Providence Company encourages projects - apartments or condominiums - that provide housing opportunities for downtown office workers, students, artists and professionals of both, moderate and substantial means thereby reflecting the diversity of income and lifestyle that make a city a city.

1. APPLICANT ELIGIBILITY:

   A. Applicant may be a qualified individual, trust, partnership or corporation.

   B. Applicant must own or have purchase and sales agreement on project property.

2. ELIGIBLE DEVELOPMENTS

   A. The project property must be in the City of Providence within the target area. (see map)

   B. The project must be available to the general public.

   C. The project must comply with applicable state and local and federal building and health codes and city's zoning ordinance.

   D. The project should be primarily residential in focus.

   E. Residential units must be year-round and provide for living, sleeping, dining, cooking and sanitation.
3. ELIGIBLE ACTIVITIES:

A. **Acquisition of Property** - Funds may be used for purchase of property in conjunction with rehabilitation or construction.

B. **Construction or Rehabilitation** - Funds may be used for hard construction costs, interior or exterior.

C. **Professional Fees** - Funds may be used for the purpose of architectural, engineering, legal, title and appraisal fees necessary to prepare plan and cost estimates. Because of the nature of this financing, we expect fees to be held to a moderate and reasonable level.

D. **Carrying Costs** - Funds may be used for interest, real estate taxes, insurance and points during construction.

E. **Marketing Study**

4. PROGRAM REQUIREMENTS:

A. **Design Approval**

Because of The Providence Company's intention to create a neighborhood of human scale and historic beauty, every effort is encouraged to preserve both building and area integrity. Any new design must be consistent with the intent of surrounding structures. This does not mean duplication of original design but does signal sensitivity to the historic environment.

B. **Parking**

Adequate parking arrangements must be included in the proposal. This includes sufficient parking spaces, design of parking area and security.

C. **Security**

Security for residents, both safe passage from the parking area to the building and within the building itself, is essential and must be adequately addressed.
D. **Affirmative Action Policy**

It is the policy of The Providence Company to encourage the participation of qualified minorities and females as development team members, contractors, subcontractors and members of the work force.

5. **LOAN TERMS & CONDITIONS:**

A. Loans will be made to a maximum of $4,500,000 for first mortgage and $2,500,000 for a second mortgage.

B. Interest rate will be 75% of Fleet National Bank's prime rate, per annum adjusted daily.

C. The Providence Company is able to provide both first and second mortgages.

A typical first mortgage loan would be structured as follows:

- Providence Company Loan: 80% of Cost
- Developer Equity: 20% of Cost

A typical second mortgage loan would be structured as follows:

- Conventional financing: 60% of Cost
- Providence Company Loan: 30% of Cost
- Developer Equity: 10% of Cost

In a situation where the Providence Company is providing first mortgage financing, it will have a superior lien position and will also have approval rights of any and all junior lien positions that a developer may wish to add.

D. The term of the loan will not exceed 5 years.

E. Personal Guarantees will be required.

F. **Fees:**

1) Application fee of $250 is payable upon submission of application to The Providence Company.

2) A loan origination fee of 1.25% of the loan, 50% due upon acceptance of the commitment letter and 50% at closing.
G. Recipient will pay closing costs including The Providence Company's legal fee for closing.

H. In consideration of the subsidized financing offered, The Providence Company may negotiate profit participations as part of the financing package.

6. APPLICATION PROCEDURE:

Each application shall be accompanied by the following material:

A. Property Information
   1) Property location (address) and general description of area
   2) Description of property - plat, lot, square footage, general layout, frontage and depth, zoning, unusual conditions
   3) Evidence of ownership or site control

B. Improvements
   1) General description - number of stories, gross square feet, number of units - size and breakout of types
   2) Cost estimate including all hard and soft costs
   3) A set of plans and specifications - completed and stamped by a registered engineer or architect.

C. Budget & Loan Request
   Amount and term of loan requested, budget and equity injected

D. Project Feasibility
   1) Proforma covering 5 years required
   2) Cash flow statements
   3) Market feasibility plans
   4) Appraisals
   5) Management plan
E. **Project Team**

Experience and ability of all people involved in project including: contractor, architect, builder, law and accounting firms, management company, marketing company

F. **Borrower Information**

For each borrower:

1) Name, address
2) Current financial statement signed and dated, prepared in accordance with generally accepted account-principals
3) Tax returns for last three years, signed
4) Credit references
5) Resume or other business experience information

7. **AFTER APPLICATION:**

If The Providence Company approves the loan, a commitment letter will be issued to borrower listing all terms and conditions for the loan to close. Commitment fee will be due upon acceptance of commitment letter. Borrower will typically have sixty (60) days in which to meet requirements.

8. **LOAN DOCUMENTATION:**

The loan will be closed and documented in accordance with The Providence Company's requirements by its counsel.
APPENDIX B

SUMMARY

DOWNTOWN PROVIDENCE EMPLOYEE SURVEY: SEPTEMBER 1985

Prepared for
CITY OF PROVIDENCE/DEPARTMENT OF PLANNING AND DEVELOPMENT

Prepared by
MELVIN F. LEVINE & ASSOCIATES, INC.
This is a summary of a questionnaire survey of employees in five office buildings in downtown Providence, undertaken during the middle of September 1985.

A total of 3,950 questionnaires was distributed as follows:

- AMICA building: 1,100
- Federal building: 950
- Fleet building: 900
- Telephone Co. building: 600
- Old Stone Bank building: 400

Total: 3,950

A sample of 1,010 completed questionnaires was drawn from those returned from these buildings in proportion to the numbers of employees in each building. The questionnaires were edited and the results tabulated by the Research Center in Business and Economics, College of Business Administration, University of Rhode Island. The results are believed to represent a reasonably accurate record of the downtown travel, shopping and lunch experience of the office employee population of downtown Providence (estimated at 30,600 in 1985) and a fair representation of potential demand for housing in downtown Providence by employees as well.
DOWNTOWN PROVIDENCE EMPLOYEE SURVEY

Phase I: AMICA/Federal/Fleet/Old Stone/Telephone Co.

1. Place of residence?
   Providence 45.1%
   Other Rhode Island 43.9%
   Massachusetts 11.0%

2. How travel to work?
   Drive or ride in car 63.6%
   Local or intercity bus 30.3%
   Walk, other 6.0%

3. How many minutes to get to work?
   Mean travel time: 22.5 minutes

4. If drive, where park?
   Pay lot or garage 69.4%
   Company lot or garage 17.1%
   On street 13.6%

5. How much pay to park?
   13.6% of those who park pay nothing.
   79.8% of those who pay by the day pay $3.00 or more/day.
   70.2% of those who pay by the month pay $40 or more/month.

6. If had choice, work downtown or elsewhere?
   Work downtown 52.1%
   Work elsewhere 25.1%
   Never 22.8%

7. How often buy lunch downtown?
   Average (including 0) 2.57 times/week
   Never 14.4%

8. How much spend for lunch?
   Average $3.68

   Annual expenditure for lunch: 2.57 x $3.68 x 50 weeks = $473.

9. How often shop downtown?
   At lunchtime: 2.6 times/month
   Never/less than once 34.4%
   After work .4 times/month
   Never/less than once 68.8%

   Average times shop downtown: 3.0 times/month
10. Average (including 0) $ 20.58

Annual shopping expenditure: 3.0 x 12 x $ 20.58 = $ 741.

11. How would the following things affect shopping frequency?

<table>
<thead>
<tr>
<th></th>
<th>Increase</th>
<th>Little effect</th>
<th>No effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. More apparel stores</td>
<td>47.9%</td>
<td>30.0%</td>
<td>22.1%</td>
</tr>
<tr>
<td>b. New department store</td>
<td>65.6%</td>
<td>20.6%</td>
<td>13.9%</td>
</tr>
<tr>
<td>c. More specialty stores</td>
<td>37.0%</td>
<td>37.6%</td>
<td>25.4%</td>
</tr>
<tr>
<td>d. Better parking</td>
<td>61.8%</td>
<td>14.9%</td>
<td>23.3%</td>
</tr>
<tr>
<td>e. Evening shopping hours</td>
<td>24.7%</td>
<td>30.2%</td>
<td>45.1%</td>
</tr>
<tr>
<td>f. Clean up Westminster Mall</td>
<td>61.8%</td>
<td>20.7%</td>
<td>17.6%</td>
</tr>
<tr>
<td>g. Open Mall to traffic</td>
<td>12.9%</td>
<td>28.2%</td>
<td>58.8%</td>
</tr>
<tr>
<td>h. Shuttle service to Mall</td>
<td>19.1%</td>
<td>30.4%</td>
<td>50.5%</td>
</tr>
<tr>
<td>i. More restaurants on Mall</td>
<td>32.2%</td>
<td>33.7%</td>
<td>34.1%</td>
</tr>
<tr>
<td>j. More entertainment downtown</td>
<td>28.7%</td>
<td>29.9%</td>
<td>41.4%</td>
</tr>
<tr>
<td>k. More movies downtown</td>
<td>22.8%</td>
<td>28.2%</td>
<td>49.0%</td>
</tr>
<tr>
<td>l. More concerts/plays/ opera</td>
<td>32.7%</td>
<td>27.8%</td>
<td>39.4%</td>
</tr>
</tbody>
</table>

12. Do you live in downtown Providence?
   Yes 1.9% (Hh income $35-50K, .4% over $50K, .6%)

13. Would you want to live in the downtown area if housing units were available at reasonable rents and prices, and the area was well-maintained and secure?

<table>
<thead>
<tr>
<th></th>
<th>All Employees</th>
<th>Hh incomes $ 35,000 - $ 50,000</th>
<th>Hh income or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. In a mid-rise or high-rise apartment</td>
<td>Yes 8.2%</td>
<td>5.9%</td>
<td>4.5%</td>
</tr>
<tr>
<td></td>
<td>Depends 9.1%</td>
<td>8.3%</td>
<td>6.2%</td>
</tr>
<tr>
<td>b. In a townhouse or garden apartment</td>
<td>Yes 18.2%</td>
<td>14.6%</td>
<td>12.6%</td>
</tr>
<tr>
<td></td>
<td>Depends 12.9%</td>
<td>12.6%</td>
<td>9.0%</td>
</tr>
<tr>
<td>c. In an apartment in a remodelled office building</td>
<td>Yes 6.4%</td>
<td>5.4%</td>
<td>4.5%</td>
</tr>
<tr>
<td></td>
<td>Depends 10.9%</td>
<td>12.3%</td>
<td>5.7%</td>
</tr>
</tbody>
</table>
13. Would you want to live in the downtown area if housing units were available at reasonable rents and prices, and the area was well-maintained and secure?

(continued)

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>Hh incomes $35,000</th>
<th>Hh incomes $50,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employees</td>
<td>$35,000 $50,000</td>
<td>or more</td>
</tr>
<tr>
<td>d. In a loft-space apartment or studio to fix-up yourself</td>
<td>Yes</td>
<td>8.6%</td>
<td>7.9%</td>
</tr>
<tr>
<td></td>
<td>Depends</td>
<td>6.2%</td>
<td>4.9%</td>
</tr>
<tr>
<td>e. With a roommate to help pay the rent</td>
<td>Yes</td>
<td>8.6%</td>
<td>7.9%</td>
</tr>
<tr>
<td></td>
<td>Depends</td>
<td>6.1%</td>
<td>2.5%</td>
</tr>
<tr>
<td>f. Not at all</td>
<td></td>
<td>64.9%</td>
<td>69.5%</td>
</tr>
<tr>
<td>g. &quot;Yes&quot; &amp; &quot;Depends&quot;</td>
<td></td>
<td>35.1%</td>
<td>30.5%</td>
</tr>
</tbody>
</table>

Number of respondents (% of respondents): 831 (100%) 232 (27.9%) 214 (25.7%)

Note: Responses (a) through (d) are multiple choices and are not additive.

14. How long worked in downtown Providence?
   Average: approximately 7 years
   54.5% for 6 or more years

15. Sex?
   Male: 39.0%
   Female: 61.0%

16. Number of persons in household?
   Average: approximately 2.9
   1 person/Hh: 13.9%
   2 persons/Hh: 29.8%

17. What is your total household income per year?
   Average annual household income: $35,608.
   Hh income $35-50K: 27.9%
   Hh income over $50K: 25.7%
RHODE ISLAND HOSPITAL: EMPLOYEE HOUSING SURVEY

The Downtown Providence Employee Survey questionnaires were distributed to the professional staff at the Rhode Island Hospital (approximately 1,500 resident physicians and nurses) to ascertain potential interest in downtown housing by RIH staff. The responses to the downtown housing question are summarized below:

Would you want to live in the downtown area if housing units were available at reasonable rents and prices, and the area was well-maintained and secure?

<table>
<thead>
<tr>
<th></th>
<th>All Respondents</th>
<th>Hh incomes $ 35,000 to $ 50,000</th>
<th>Hh incomes $ 50,000 or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. In a mid-rise or high-rise apartment</td>
<td>Yes 4.8% 1.7% 5.5%</td>
<td>Depends 7.1% 3.3% 7.3%</td>
<td></td>
</tr>
<tr>
<td>b. In a townhouse or garden apartment</td>
<td>Yes 19.3% 6.7% 18.2%</td>
<td>Depends 12.6% 6.7% 14.5%</td>
<td></td>
</tr>
<tr>
<td>c. In an apartment in a remodelled office building</td>
<td>Yes 6.7% 1.7% 7.3%</td>
<td>Depends 9.3% 6.7% 5.5%</td>
<td></td>
</tr>
<tr>
<td>d. In a loft-space apartment or studio to fix-up yourself</td>
<td>Yes 13.0% 0% 10.9%</td>
<td>Depends 5.2% 3.3% 3.6%</td>
<td></td>
</tr>
<tr>
<td>e. With a roommate to help pay the rent</td>
<td>Yes 7.8% 3.3% 3.6%</td>
<td>Depends 3.0% 1.7% 5.5%</td>
<td></td>
</tr>
<tr>
<td>f. Not at all</td>
<td>65.4% 81.7% 67.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. &quot;Yes&quot; &amp; &quot;Depends&quot;</td>
<td>34.6% 18.3% 32.7%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number of respondents (% of respondents) 269 (100%) 60 (22.3%) 55 (20.4)

This sample (17.9%) expanded to the total professional staff population of approximately 1,500 produces the following indications of interest in downtown housing opportunities:
1. 518 have positive feelings about living downtown ("Yes" or "Depends"). This includes 61 with household incomes of $35 to $50K, and 100 with household incomes of $50K or more.

2. a. 56 upper-income staff would prefer apartments in mid/high rises,
   b. 145 upper-income staff would prefer townhouses/garden apartments.
   c. 67 upper-income staff would prefer apartments in remodelled office buildings.
   d. 56 upper-income staff would prefer loft-space apartments or studios to fix-up themselves.

These responses are multiple choices: total latent demand would be from 161 upper-income staff (household incomes of $35K or more).