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A pedestrian friendly environment for downtown Baton Rouge

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Louisiana State University and Agricultural and Mechanical College

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A PEDESTRIAN FRIENDLY ENVIRONMENT FOR
DOWNTOWN BATON ROUGE

A Thesis

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
In partial fulfillment of the
Requirements for the degree of
Master of Landscape Architecture

in

The School of Landscape Architecture

By
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B.D. Kobe Design University, 2001
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Abstract

As the human population has increased, the consumption of natural resources has become a serious problem for our society. With the possibilities of severe oil shortages, there is a growing need to promote a society which better suits the requirements of pedestrians. At the same time, there is a big push for urban redevelopments to rebuild a strong city center in the United States. It is important that these new redevelopments take into account the changing needs of our society by providing a good pedestrian environment.

The main objective of this thesis is to illustrate the fundamental elements that must exist to support a pedestrian friendly environment in downtown areas, to determine the potential and potential problems facing downtown Baton Rouge, Louisiana, and to offer suggestions on how to further bolster these plans in its effort to establish a healthy pedestrian downtown.

By analyzing the two selected case studies of Portland and New Orleans, three fundamental components, consisting of eleven criteria were established. These criteria were; Enhancement of the Retail Core, Promotion of Mixed-use Developments and Ground Level Retail, Provision of Restaurants and Bars, Promotion of Cultural and Entertainment Uses Through Public Events and Festivals, and Provision of Downtown Housing Opportunities. All components should work together to provide a diversity of downtown uses thereby generating the critical mass necessary to support a healthy pedestrian environment; Provision of Public Transit Systems, Establishment of Central Transportation Hub, and Enhancement of Sufficient Parking Facilities, should work to ensure accessibility to downtown and to create an environment that is compatible with pedestrians; and Size of the Downtown Area, Size of the City Blocks, and Other Elements Serving to Create a Sense of Human Scale, will condition people's perception of downtown thereby prompting people to walk. Through analysis of

downtown Baton Rouge, many positive aspects were revealed, and the study concluded that downtown Baton Rouge can achieve its goal of a pedestrian friendly downtown.

Recommendations stress the urgent need for the improvement of downtown accessibility.

Several improvements and enhancements that can further promote the pedestrian friendly environment in downtown Baton Rouge were included.

Chapter 1

Introduction

Introduction

As the human population has dramatically increased, the consumption of natural resources has become a serious problem for our society. Gasoline, which many developed countries are strongly dependant on, is not an exception. With the possibilities of severe oil shortages, there is a growing need to promote a society which better suits the requirements of pedestrians. At the same time, there is a big push for urban redevelopments in an attempt to improve city centers once again making them strong economic, social, and cultural center assuring healthy growth patterns in many cities of the United States. It is important that these new redevelopments take into account the changing needs of our society by providing a good pedestrian environment. From my experience, growing up in Tokyo, Japan, where the city is shaped by the systems of public transportation and the requirements of pedestrians, I think it is clear that we can begin to tackle the problems of the changing needs of our society, and to seek a way of life that can sustain future demands through the creation of pedestrian friendly environments.

Problem Statement

The purpose of this study is to illustrate the fundamental elements that must exist to support a pedestrian friendly environment, specifically in downtown areas where a remedy for decline is necessary, and to determine the potential and potential problems facing downtown Baton Rouge, Louisiana in its effort to establish a healthy pedestrian downtown.

Objectives

The objectives of this research are to develop, through case studies of Portland, Oregon and New Orleans, Louisiana, a set of criteria that must exist to promote and support a vibrant

pedestrian environment. Once these criteria have been formulated they will be applied to current developmental trends and future plans for development in downtown Baton Rouge to evaluate its goal of a pedestrian friendly downtown. Suggestions on how to further bolster these plans will be provided in an effort to insure that Baton Rouge attains the healthy pedestrian downtown it is seeking.

Scope

Although street beautification or street amenity enhancements are serving to enhance the quality of the pedestrian environment in many cities, the scope of this thesis does not cover site specific designs or detailed designs of pedestrian environments. Instead, this study is intended to provide a broader perspective of pedestrian environments which fits into the big picture of downtown revitalization. The goal is to improve the city center through the promotion of a healthy downtown pedestrian environment, and thus bolster the economic vitality of the downtown.

Methodology

In order to illustrate the fundamental elements that must exist to support a pedestrian friendly environment in downtown areas, and to determine the potential and potential problems facing downtown Baton Rouge, a framework for making this argument must be established. The first step requires the collection of information pertaining to American downtowns focusing on their problems as they relate to pedestrian environments and way-finding. Various responses to these problems, as well as a brief summary of the principles of downtown revitalization in an effort to demonstrate the needs for and requirements of an urban pedestrian environment and pedestrian planning strategy are discussed. The second step requires the analysis of case studies in order to determine fundamental elements that must exist to support a pedestrian friendly

environment in downtown areas. The two case studies; Portland, Oregon and New Orleans, Louisiana were selected as a result of overview of many American cities. The relevant size of Portland, and the similarities in the regional context of New Orleans made them good subjects. A set of criteria were developed through case studies of these two cities. The third step was the application of these criteria to downtown Baton Rouge in an attempt to determine its potential and potential problems in the effort to create a healthy pedestrian downtown. The final step offers suggestions on how to further strengthen the plans in an effort to insure that Baton Rouge attains the healthy pedestrian downtown that it is seeking.

Chapter 2

Literature Review

Introduction

This chapter introduces an overview of American downtowns focusing on their problems as they relate to pedestrian environments and way finding, with various responses to these problems, as well as a brief summary of the principles of downtown revitalization in an effort to demonstrate the needs for, and requirements of an urban pedestrian environment and pedestrian planning strategy.

The American's everlasting fascination with the automobile and the abundance of mother earth have resulted in conventional growth patterns in which everything is spread out and is shaped by the requirements of the automobile. This fascination also has created a cultural phenomenon in which American people tend not to walk as a means to move from place to place, however, tackling this crucial cultural problem is far beyond the scope of this thesis. The purpose of this study is to demonstrate the fundamental elements that must exist to support a pedestrian friendly environment as well as how to achieve this desired pedestrian friendly environment, especially in downtown areas which have historically been dense, compact and concentrated spaces. Much work has been done dealing with pedestrian planning which at the moment is known as downtown revitalization, yet many American cities are still struggling with the realization of their visions.

Declining Downtown and Downtown Revitalization

An Historic Perspective of Downtown

Today, many American cities are experiencing the serious problem of declining central downtown areas. The city center had once been the dominant focus of community, economic and social life. Its accessibility to the regional transportation network provided competitive

advantages for commercial and industrial activities which serve to generate more jobs, larger populations, increased activity and interaction, and more diversity in the downtown area. Due to the fact that the large populations shared a relatively compact area for a diversity of uses and activities, the physical form of a traditional downtown was dense, compact and concentrated which resulted in a human scale built environment and an active street environment which served to unite the realms of the residence and the business, or commercial sector. By reviewing the characteristics of a traditional downtown which made them a central focus of economic and social life, it seems that current trends in the downtown revitalization are merely an imitation of what a downtown used to be. “Many downtown redevelopment plans of recent decades seek to return the pedestrian downtown” (Robertson 1993, 361). Increasing housing opportunity and promoting a mixed use to foster an intensive use of downtown and to regain the vitality of downtown streets are some of the most commonly used downtown revitalization strategies. Improving transit systems in relatively large scale downtowns has gained more attention by planners in order to ensure that downtown areas become more compatible for pedestrians. Historic preservation and waterfront development are both tools used to reinforce a downtown’s strong sense of place, which is needed to enhance the pedestrian experience. These strategies are intended to regain the accessibility, diversity, concentration and intensity of use and scale and continuity which all coexisted within a small community, cumulatively enhancing the identity and interest of the vernacular downtown. Perhaps the most important characteristic of a traditional downtown, that has become lost in the contemporary city, is the priority and attention given to the pedestrian experience.

The fact that the majority of well-known ancient civilizations such as the Egyptian or Babylonian civilization, originated on land in close proximity to a body of water has

undoubtedly influenced a high percentage of downtowns, that evolved near water in order to take advantage of their easy access to transportation for materials and products which were vital for manufacturing and business activities (Burayidi 2001, 4-5). In the 18th, 19th, and early 20th centuries, American downtowns had thrived, rapidly serving as market places where people came together to produce and exchange goods and services, as a living space for a wide variety of socioeconomic levels, and as a social center where people met and exchanged information and their expertise (Paumier et al. 1988, 4). Unlike the current downtown, which has been forgotten and has lost its' importance, serves to reinforce one's perception that nothing is happening in downtown, the traditional downtown was the main stage of the general public's life and a vital economic force. Downtown's role as both a business and a residential district expanded with the emergence of public institutions such as government offices, courts, schools and other civic services (Ibid., 5).

In addition to the rich mixture of downtown manufacturing, business, residential, retail, government, and cultural activity in a compact area, pedestrians and horse-drawn carriages as primary modes of transportation in those days has resulted in the creation of a very dense, compact, and concentrated physical form of traditional downtowns (Ibid., 4). As a result, the traditional downtown was very pedestrian oriented. "To make efficient use of valuable downtown land, minimum front- and sideyard setbacks and maximum building coverage were the norm" (Ibid., 6). Quite predictably, the economic advantages of traditional downtowns made possible such an intense development. A series of small shops and businesses lined the streets, generating a high level of pedestrian activity. In order to accommodate the overflow of pedestrians, typically, between one-third and one-half of the right-of-ways were devoted for walking (Robertson 1994, 5). "Practical limitations on building height created a human scale of

development and an overall sense of continuity in the relationship of one building to another” (Paumier et al. 1988, 6). As a result, the traditional downtown has created a strong sense of spatial enclosure as well as a well defined, organized, and coherent spatial structure which was created by the grid street system of downtown building patterns (Ibid., 6).

Ironically this sounds almost like a stereotype of the desired downtown environment, which many American cities are now trying to regain. Specifically, traditional downtown was shaped for pedestrian activity which was perfectly compatible with the economic growth of the downtown marketplace. It is evident that the urban fabric, structure and spatial arrangement of traditional downtowns meet the optimum conditions for pedestrian friendly environments including diverse and intensive land uses, compact physical structure and clearly defined pedestrian access, which all coexist within a downtown area, serving to support a pedestrian friendly environment needed for a successful downtown. In other words, it is not too much to say that without such a pedestrian friendly environment, a thriving city center could not have been realized in the past.

The Advent of Declining Downtown

The advent of declining downtowns can be traced back to a time when the dramatic changes in transportation created mobility, giving people an alternative to live and work outside of downtown areas. Increased income, expanded automobile ownership, and federal incentives for highway development resulted in the rapid sprawl of populations to the fringe of a city. Downtown has gradually lost its’ residential appeal, as well as its economic advantages and retail functions. The introduction of the American’s beloved automobile, the rise of the modern movement in architecture, and zoning and land use of the urban renewal have altered the physical form of the traditional downtown from a dense, compact and concentrated pedestrian

friendly environment to the conventional development pattern in which high-rise buildings surround huge surface parking areas. Increasing distances between the destinations with the narrowed down sidewalks and the huge blank walls of parking facilities or vacant store fronts have served to exclude pedestrians from downtown streets. With the emergence of the large suburban shopping mall, which has taken more people away from downtown, downtown has become perceived by many as an inconvenient, obsolete, and unsafe place.

Since World War II, the development of a highway system and other improvements in transportation infrastructure have rapidly evolved. Originally intended to provide World War II veterans with job opportunities associated with new and improved modes of transportation and to address issues of national security, the highway system, and a new found dependence on automobile, began to shape settlement patterns as well as the overall form of the city (Trancik 1986, 5-6).

The automobile has now become one of the most essential life tools for Americans, giving them an opportunity to seek out more desired living environments, the so-called American Dream, which consists of a detached house in less populated areas at the fringe of town or city. “Housing became more affordable for the middle class because of federal mortgage insurance programs and lower down payments. Much of the new housing was built in the suburbs” (Burayidi 2001, 1). Many American cities witnessed an accelerated sprawl phenomenon which resulted in declining downtowns with little if any hope of exhibiting the vitality of days past.

Following the city’s decline as a residential district many businesses, that were once provided the thriving economic force of cities, sought new locations near highways which were more preferable in order to appeal to auto-oriented customers. Central locations with excellent access to primary travel routes, which traditional downtown used to take advantage of, are no

longer an advantage, they are now a disadvantage in terms of the costs of land development. Because the most land in downtown areas is owned by several people and is more often polluted, it is more difficult and costly to be developed than the virgin lands in the suburbs (Burayidi 2001, 1).

The emergence of the large suburban shopping malls has taken more people away from downtown. “By the 1950s it was the air-conditioned and enclosed suburban shopping mall, with ample parking, that appealed to consumers’ fancy and money” (Loukaitou-Sideris and Tridib 1998, 19). Even though many people still continued to shop in downtown in the early stage of downtown decline, taking advantage of the wide choice of goods and services, retail functions gradually decayed due to the longer travel distance from the suburbs, traffic congestion, and the difficulty in finding parking (Paumier et al. 1988, 8). Downtown has become a 9 to 5, Monday through Friday place with little human activity in the evenings or on weekends.

Changes in the physical form of downtown have been discussed in much literature concerned with urban design and planning, as well as downtown development. Trancik describes the significant difference between the traditional urban form and the modern form, which is now exhibited in many American cities, by comparing the Piazza Navona District of Rome with Houston, Texas. He points out the way that streets and squares are carved out of the building mass, giving direction and continuity to urban life and creating physical connections in the Piazza Navona District of Rome. By contrast, he uses Houston, Texas as an example of the typical pattern of most American city centers in which the urban form consists of separate buildings floating among seas of parking lots and roadways. For several decades, the physical form of downtown has been radically transformed from a pedestrian oriented environment to one that is auto-oriented in terms of scale, structure and functions.

There seems to be quite a bit of cumulative causes that have resulted in changes in the physical form of downtown. “In combination, the car and the elevator spelled trouble for downtown’s physical structure and the quality of its pedestrian environment” (Paumier et al. 1988, 9). In general an increased dependence on the automobile and the technology which produced the high-rise building are referred to as the most critical causes of alteration to the physical form of downtown. In order to accommodate the rapid increase of traffic volume and respond to the serious traffic congestion caused by traffic, downtown streets, which used to be a relatively narrow pedestrian oriented environments full of human activity, had to dedicate portions of their sidewalks to roadways (Ibid., 10). Highway structures which tend to cut through the center of a city serve as a new social boundary by creating distinct parts of a city. Along with the destruction of an active street environment, the parking needed to accommodate high-rise buildings also contributed to the anti pedestrian environment. Because it was the most inexpensive solution, surface parking lots were more commonly distributed all over the downtown areas. Burayidi points to surface parking lots as the most damaging element to a downtown usually serving to detract from downtowns’ overall value and appeal (Burayidi 2001, 19). A vast sea of surface parking lots, often lengthen the distances between destinations and people are disoriented as to which way to go. With expanded road way and high rise buildings surrounded by huge surface parking lots, the continuity and spatial enclosure, which served a critical role in pedestrian experiences in traditional downtowns, was destroyed. As a result, the walking became uncomfortable and even more unsafe causing many people to avoid walking. As more people disappeared from downtown streets, there was less activity.

Paumier also discusses the influence of the modern architectural movement on the extinction of street oriented buildings which resulted in decayed street life. “The forms, images,

and approaches that modern architects used were basically unrelated to the urban fabric and to the quality of its pedestrian experience” (Paumier et al. 1988, 15). Many buildings which were built in this period were inwardly oriented which denied the social life of downtown streets. Its dehumanizing and overwhelming scale also resulted in an unpleasant walking environments.

Trancik examines the 5 causes of transformation of the urban center in his book Finding Lost Space: Theories of Urban Design. He demonstrates how the zoning and land use of the urban renewal of the 1950s and 1960s impacted traditional qualities of urban spaces. “The impulse was to clear the ground, sanitize, and promote human welfare through the segregation of land uses into discrete zones and the substitution of high-rise towers for ground-level density” (Trancik 1986, 12). With the approval of euclidean zoning in 1926 which separates different uses into homogeneous districts for the benefit of administrative simplicity, intermingled uses of downtown, which gave traditional downtowns a potential synergism of economy, were eliminated (Paumier et al. 1988, 14). What really affected the physical form of downtowns was the idea of starting from zero, resulting in the clearance of historic buildings and shops which contributed to the downtowns’ identity and strong senses of place. Many downtown blocks were cleared and thereby thousands of small independent shops and businesses, which once lined the downtown streets, were destroyed. Due to the inadequate foresight and planning, cleared inner city sites were often abandoned, sitting vacant for decades, multiplying the physical unattractiveness of downtowns’.

In summary, the correlation between increasing auto dependence and the declining role of downtowns resulted in accelerating the loss of downtown population thereby deteriorating the downtown environment that served to reflect the negative images of downtown. Most notably, the physical form of downtowns steadily changed from pedestrian oriented environments to the

direct opposite, auto-oriented environments. Based on the fact that the decline of downtown emerged with the introduction of the automobile to our society, and accelerated the increased of auto dependence, auto-oriented environments can be determined as the most damaging element of downtown environments. The discrepancy between pedestrians and the automobile is quite obvious and often discussed topic. J. B. Jackson in his essay Landscape in Sight – Looking at America describes automobile culture as a most complicated topic to discuss, but certainly the damages which automobile culture awarded to downtown pedestrian environment were immeasurable. Comparing once thriving traditional downtowns, which were shaped by pedestrian activity, and declining downtowns, which were shaped by the requirement of automobile, proves the strong need for a pedestrian friendly environments in order to achieve their success.

The Problem and the Importance of Downtown

The problems of a declining downtown relate to three major issues; environmental, economical and social. Much literature discusses how these issues related to the decline of downtown, stressing the important role of downtown as we push to achieve a sustainable society. However, the problems of a declining downtown are not easily explained with the broadly recognized term sustainability, first defined in the Brundtland Report of 1987 as “Meeting the needs of the present generation without compromising the ability of future generations to meet their own needs” (Gilbert et al. 1996, 11). Since the term sustainability extends its meaning to the broad range of fields and degrees, interpretation of this term varies by individual. Therefore, I would like to put forth a more concrete definition of sustainability by introducing Berke’s definition of sustainable development in order to clearly explain the discrepancy between declining downtown and achieving a sustainable society. In his research, in which he guides an

evaluation of 30 comprehensive plans in 2000, Berke examines various definitions from literature in planning scholarship and practice in order to derive key characteristics for a more precise definition. One of 4 characteristics which reveal from his examination is the “reproduction” characteristic, which he describes as “The long term ability of a community to sustain healthy local social, economic, and ecological systems” (Berke 2000). If the sustainability is a goal of our society, increased air pollution caused by auto dependence, as well as the loss of farmland and open spaces caused by sprawl phenomenon must be contrary to the principle of sustaining ecological systems. Difficulty in attracting new development, as well as people, because of the image of downtown as an obsolete place, is fatal to the principle of sustaining healthy local economic systems (Robertson 1999, 274). Crime, blight unemployment and poor schools and housing remain, which were caused by separating people based on their socioeconomic levels and races of downtown areas are counter to the principle of sustaining healthy local social systems and equity based on how the present downtown condition causes many disadvantages to the low-income populations, often depriving them of basic levels of environmental health and human dignity (Keating and Krumholz 1991). The problem of declining downtown and the need to remedy it are inevitable.

Given the sustainability as the goal of our society, the most critically opposing element must be the auto dependence of our society which causes many environmental problems. Along with suburban sprawl, increasing usage of the automobile, and traffic congestion, which downtown supports in some way, degrade air quality. “The Office of Air and Radiation of the Environmental Protection Agency (EPA) predicts that by the year 2005, growth in vehicle miles traveled will begin to over take improvements in air quality from cleaner fuels and less-polluting cars” (Anderson and Tregoning 1998, 8). Accelerating suburbanization and the decline of

downtowns also results in the loss of agricultural land and open spaces. Vastly increasing the amount of paved surfaces also affects water run-off. “Runoff, or non-point source pollution, is the main reason that approximately 40 percent of rivers, lakes, and estuaries are not clean enough to allow basic uses such as fishing or swimming” (Ibid., 8). Shore suggests in his research more reasons for strong downtown. By strengthening downtowns we could reduce auto uses and simultaneously improve air and water quality (Shore 1995). The current conditions of downtowns could be harmful to the long-term health of the environment, because downtowns do not offer more efficient ways of life, including decreasing auto dependence and more efficient transit systems.

The problem of the declining downtown also extends to the economy. In 1992, Robertson conducted a survey of planning departments in 57 cities with populations between 25,000 and 50,000 which contained questions concerning the downtown’s greatest strengths and problems (Robertson 1999, 271). His survey indicated that difficulty in attracting new development was the most serious problem among the 13 problems drawn from the study (Ibid., 274). This seems to be the most crucial of downtown problems, because it has the potential to create the vital economic forces needed to create diverse housing and infrastructure that enhances community livability and the efficiency of local economic activities. Burayidi also points out considerable effects of economic activity on decentralization. Due to the fact that most businesses and populations reside outside of city boundaries, cities lose tax revenues from those businesses and households. In addition, a city’s residual population is significantly poorer and more dependent on public services (Burayidi 2001, 2). Concerned with this fiscal problem, Shore also suggests the efficiency of recentralizing businesses activities by utilizing the existing infrastructure and buildings rather than building new ones in suburbs. “A Rutgers University

study (Rutgers University Center for Public Policy Research 1992) for the New Jersey state plan approved in 1992, which calls for recentralization, estimated it would save the state \$1.3 billion in capital needs over 20 years and \$400 million a year in operating costs for municipalities and school districts, as compared to accommodating the same population and facilities in a dispersed city pattern” (Shore 1995). He also mentioned that the efficiency of remaining highly recentralized in competing with the global economy because much business is still carried on face to face and the value added per worker among firms in the same industry is greater when they are close together than when they are scattered (Ibid.). Obviously we have ignored or neglected the advantages of the economic ability afforded by a downtown which could help in sustaining healthy economic systems.

The problem of social equity seems to be the most complicated by-product created by the declining downtown and growth pattern of American cities. Dennis and Norman stress the importance of long-range downtown plans which comprehend the issues related to social policy and equity in their research of investigating and critiquing the downtown plans of the 1980s (Keating and Krumholz 1991). “Since the era of urban renewal, either the poor neighborhoods ringing downtown have been sacrificed for urban redevelopment (e.g., slum clearance and freeways) or the benefits of an increased tax and employment base have not been directed at their residents, who do not receive improved public services or new jobs downtown” (Ibid.). They warn that neglecting these issues will result in more and more patterns of uneven development, which characterize conventional American cities (Ibid.). Shore, in his research of 1995, points out how the diminution of downtown affects poor people. He analyzes the difficulties for those low-income households who reside in downtown to explore opportunities in the suburban economy because of the lack of affordable ways to access these areas (Shore 1995). Burayidi

also points out the problem of the mismatch between work place, places of residence, and low-income unemployment. “For example, about 71 percent of the black population resides in central cities, a majority of whom are low income households, but since 1948 suburban areas have received over 80 percent of the new employment in manufacturing, retail and wholesale trade” (Burayidi 2001, 1). While the better jobs, education and services are outside of downtown, many of these households who are living in central cities have no access to an automobile and can not afford to reside in the suburbs. Therefore, even though residents of low-income households who reside in the central city strive for those opportunities, it is almost impossible because transportation is costly and difficult. By contrast, the majority of people who are working in the central city, which usually are public officials or high-class executives, have to commute to the work from their residence in the suburbs. There is a huge conflict between work places and places of residence. Shore also points out that the weakness of downtown often results in isolating poor people (Shore 1995). He explains that unless there are dynamic forces of jobs, services and cultures, it is hard to draw high-income households to downtown areas. Therefore this reduces not only city tax revenues, but also the political strength needed to win a share of the diminishing federal and state aid. As a result, the city center is weakened in terms of services and education, creating a cleavage in society between rich and poor. Another of Berke’s 6 principles of sustainable development is that “Land use patterns should recognize and improve the conditions of low-income populations and not deprive them of basic levels of environmental health and human dignity. Equitable access to social and economic resources is essential for eradicating poverty and in accounting for the needs of the least advantaged” (Berke 2000). Keating and Krumholz point out that even the well-known large cities that have enjoyed their revival such as Baltimore and Boston, have not overcome this disparity (Keating and

Krumholz 1991). The problems of social equity seem to be somber and still are prevailing underground in our society.

It is obvious that the decline of the downtown discourages us from achieving a sustainable society in three major ways; environmental, economic, and social sustainability. In other words, there is much potential to fulfill the desire to become a sustainable society by improving the role of downtown and its environment. Petersen emphasizes the importance of smart growth for center cities by recognizing the relationship between regional growth patterns and a healthy central city as he describes “Strong central cities experience less abandonment and population loss than weak ones; maintaining or recreating a strong central city thus makes more productive use of this strategically located area and reduces pressures for growth in greenfields” (Petersen 1998, 46). The problems discussed earlier also demonstrate that unhealthy physical environments of downtowns generates few people with little activity on the downtown streets, serving to create a vicious circle of downtown economy and images resulting in healthier environments. Thus the strong need for revitalizing downtowns is undeniable. Specifically, the need for a hospitable pedestrian environment is crucial, because downtown need to exhibit physical healthiness, vitality and more over a healthy economic force by creating an overflow of people with livable activity on downtown streets.

Revitalization Strategies for Declining Downtown

“Downtowns are seen as definitive of overall city identity, so cities of all sizes and in all regions are committed to successful downtown redevelopment” (Robertson 1995). In response to the environmental, economic, and social problems of declining downtowns, many American cities have implemented a multitude of strategies in an attempt to revitalize their downtowns, and many urban scholars have examined these strategies. The strategies extend to the early

strategies which focused on accommodation of the automobile circulation. The next stage aimed to replicate the environment seen in the typical shopping malls in suburbs and finally the latest stage of which realizes and reinforces the importance of downtown identities and the integration of those strategies. Include are the early strategies of indoor shopping centers, pedestrian malls, transit malls, skywalks, pedestrianization, and the recent trends in historic preservation, the Main Street approach, waterfront development, brown field development. Also included are office development, special activity generators and transportation enhancement. Relating to this issue, smart growth and transit oriented development (T.O.D.) seem to be the two which were put forward as the solution for overcoming the unhealthy growth pattern of American cities and are drawing more attentions these days because of their comprehensiveness and globality.

According to the research of Filion and the others in 2004, which sought to identify downtowns of small metropolitan regions, there are three phases of downtown revitalization efforts. The first phase concentrated on accommodating automobile accessibility, the second phase duplicated the environment seen in suburban shopping malls was to compete with the great draw of suburban shopping malls, and the third phase focused on reinforcing downtown's ability to project a strong sense of place (Filion et al. 2004, 329).

The early strategies of the 1950s and 1960s of radial expressways and widened arterial roads were the device used to channel flows of automobiles towards downtowns with ample parking spaces (Filion et al. 2004, 329). "Planners sought to preserve or restore the dominant position of the downtown by replacing or complementing transit accessibility focused on the core area with similarly advantageous automobile-oriented access patterns" (Ibid., 329). The early stage of downtown revitalization seems to focus on compromising with automobile-

oriented access. Although this strategy was theoretically proper, it seems to be a careless decision and ignored the long-term effect upon the finely woven original fabric of downtown.

Indoor Shopping Malls. The second phase from the late 1950's into the early 1980's consists of a multitude of attempts to reproduce and even more to reject the environment of popular suburban shopping malls that strongly appealed to the majority of customers. The introduction of indoor shopping malls, pedestrian malls, transit malls and skywalks to the downtown core areas was intensively used in an attempt to regain suburban customers. Robertson examines indoor shopping centers as one of seven widely-used strategies in downtown redevelopment in his research of 1995. "Victor Gruen, an architect, is credited with conceptualizing and designing the first downtown mall; Midtown Plaza in Rochester, New York, completed in the early 1960s" (Robertson 1995). The projects done by Gruen seem to be fairly successful, and by following early success stories, over 100 American cities constructed enclosed shopping malls in their downtown core areas during 1970s and 1980s (Ibid.). Lorch and Smith observe two significant effects in pedestrian circulation patterns by following the opening of downtown enclosed shopping malls. They call it a fortress effect and a distance decay effect which resulted in the failure to benefit the downtown as a whole. They explained that a fortress effect restrains the spillover benefits to the surrounding small retails due to the fact that they are too isolated from the original fabric of downtown. Those shopping malls are usually inwardly-oriented and have architecture without any careful design features which could potentially weave the malls into downtown environments. Moreover a distance decay effect promotes more reduced street activity in the area located further away from the malls because of the mall's dominant magnetic pull (Ibid.). Although a duplication of the suburban shopping malls appeared to be economically successful, and it is true that retail development can be a key to revitalize

downtown, only a handful of projects using this strategy fulfilled their duty as a catalyst for downtown revival.

Pedestrian Malls and Transit Malls. The second phase also could be considered as the early stage of pedestrian movement in the United States. Many of these strategies aimed to secure a safe comfortable pedestrian environment by separating pedestrian traffic from the dominant mode of vehicle traffic. Along with the enclosed shopping malls, pedestrian malls, and skywalks have also had much criticism. Much literature related to pedestrian malls discusses their defects as well as their successes while there is much less literature on skywalks (Robertson 1993). Since the opening of Kalamazoo, Michigan in 1959 as the first downtown pedestrian mall in the United States, more than two hundred American downtowns converted major downtown streets into pedestrian malls with the hope of downtown economic revival by the late 1970s (Ibid.). As to compete with suburban shopping malls which provided convenience of access and safety as well as a comfortable pedestrian environment, “Downtown planners tried to replicate this pedestrian environment by designing nicely landscaped parklike corridors in the center of town and forbidding automobile traffic in these areas” (Ibid.). Most of the pedestrian malls built during the 1960s and 1970s were for pedestrian only, placing a ban on automobile access. At first glance, introduction of a pedestrian mall into downtown core area seems successful with increased amount and quality of downtown open spaces and human-scale amenities there, but many urban planners and scholars concluded that this strategy failed to anchor the decline of downtowns (Ibid.). Robertson analyzes that “it probably was unrealistic to expect the conversion of a single street to overcome decades of economic, social and spatial trends that have contributed to the decline of American downtowns” (Ibid.). Furthermore this strategy which aimed to separate pedestrians from vehicular traffic by prohibiting automobile

access resulted in restraining the convenient access to the downtown core and created difficulty in finding parking near by the pedestrian malls, thereby reducing more customers. Because of the consequence of the failure of pedestrian malls, many cities have opened their malls to transit systems or limited automobile traffic with the hope that introducing buses or cars, which provide a better way to access to the mall, will secure greater numbers of pedestrian flows and the reduced scale of pedestrian spaces will increase the density of people and vitality of street life on the mall (Robertson 1994, 45). According to Robertson's research of 1994, transit malls seem to be relatively more successful than any other second phase strategies. His explanation for the successes were that "The successful malls tend to be transit malls in larger cities such as Denver, Portland, Philadelphia, and Minneapolis, or traditional pedestrian streets in university town with built-in sources of pedestrian traffic" (Robertson 1995). The way that transit malls differ from the other retail developments was that the transit malls were integrated into the transportation system of city as well as downtown. As we will see in the next phase of downtown revitalization, the success of transit malls implies that they are the key to integrate a part into the whole.

Skywalks. In comparison with pedestrian malls, skywalks prove more advantageous while the defects are similar. Robertson compares these two strategies in his research of 1993, and he points out the skywalk's overwhelming popularity, which tends to remove people and commerce from the street, also promotes the deterioration of downtown street life. In the meantime, he admits to the in advantage over pedestrian malls in attracting new developments to downtown. "A skywalk system is a network of elevated interconnecting pedestrian walkways" (Robertson 1993). Intended to provide pedestrians with a separated level of access from vehicular traffic, skywalks tie together the major destinations in downtown. Unlike pedestrian malls, which were originated in European countries, skywalks were first implemented in

Minneapolis, Minnesota in 1962, relatively a large city in the United States (Ibid.). He explains that the success of skywalks was the emphasis on a convenient, comfortable and climate-controlled environment which he called a “very American-style”. This popular skywalk seems to also create a modern and utilitarian image of downtown (Ibid.). “A survey found that two-thirds of the people interviewed preferred shopping at skywalk establishments compared to street-level establishments” (Ibid.). On the other hand, Robertson observes the significant impact upon downtown retail sales and annual lease rates of street-level establishments after the skywalk system had been in operation for almost 20 years in St. Paul, Minnesota. “Street-level establishments accounted for only 25 percent of downtown retail sales and annual lease rates were more than 20 percent lower per square foot for ground-level establishments compared to skywalk businesses” (Ibid.). Based on this evidence, certainly skywalk businesses have gained more customers and sales, nevertheless Robertson questions whether it is a true growth or just a redistribution of street-level activities. He also points out the side effect of skywalk development which causes separation of people on the basis of race and class. “Most of the structures linked by skywalks house professional offices, upscale stores, luxury hotels, and expensive condominiums, signaling to many low- and moderate-income people that they are less than welcome” (Ibid.). As a result, ironically the quality of street life still continued to decline while skywalks were pulsating with people. In fact, only over thirty downtowns in the United States and Canada possess skywalk systems today (Ibid.).

The second phase of downtown revitalization efforts, which tried to compete with great draw of suburban shopping malls, demonstrated the strong focus on retail development of downtown by planning stand alone projects rather than trying to integrate those into the larger downtown environment. “This strategy was grounded in the assumption that by replicating

conditions found in suburban shopping centers, downtown areas could compete successfully with suburbs” (Filion et al. 2004, 329). Robertson concludes that “A pedestrian mall, no matter how well designed, has a small chance of success in an already dying downtown with low pedestrian volume” (Robertson 1995). Consequently what was missing in these strategies was the long-term vision of downtown in a larger context which was revealed in the third phase of downtown revitalization efforts. A single project just could not anchor the decline of the downtown.

“The 1970s marked a radical departure from earlier approaches to downtown revitalization” (Filion et al. 2004, 329). Following all of those downtown revitalization efforts, the third phase was a realization and reinforcement of the importance of downtown identities which downtowns inherently possess, while it is rare to find this in the suburbs. Much literature that addresses downtown revitalization realizes the importance of the features of traditional pre-World War II downtown areas, including an active street-oriented retail scene, cultural activities, concentrations of jobs and pedestrian-friendly environments with busy sidewalks (Ibid., 331). Many American cities increasingly started focusing on reestablishing and enhancing the distinctiveness of their downtowns by incorporating historic preservation, Main Street design approaches waterfront development and pedestrianization improvements in order to project a strong sense of place. There was a restructuring of the downtown’s strength of diverse uses, its intensity and the integration of the office use, tourism, entertainment, and the market potential for downtown housing. Paumier points out the changing attitudes of the general public in this phase and the growing awareness of the environmental impacts and the understanding of the significant effectiveness of pre World War II environment’s downtown locations and existing infrastructure components (Paumier et al. 1988, 17). By taking advantages of the heritage, architecture, tradition, and natural settings, downtowns can reveal their identity and

distinctiveness and, thereby, attract larger population for tourism and entertainment. By taking advantage of their location and existing infrastructure, downtowns can be environmentally-friendly, cost effectively and cultivate opportunities for new developments. They can encourage diversity and the intensity of uses (Ibid., 17). Many cities once again increased their effort to accentuate the downtown's role as the center of business, commerce and social activity by reinforcing the assets which traditional downtowns possessed.

Historic Preservation. Earlier downtown revitalization efforts replicated an environment of bland suburban shopping centers, but later efforts of historic preservation seem to be more comprehensive in the way they are economically feasible and environmentally friendly as well as in their distinctive attractiveness. Paumier explains this historical preservation movement as the “representation of a broad-based public response to the accelerated loss of older buildings and their replacement with more anonymous modern structures” (Paumier et al. 1988, 21). Along with the environmental movement of the 1960s, which led to the national trend toward minimum environmental impact and cost effectiveness there was an increasing demand for business and leisure travel, and the need for downtowns with historic, cultural, and recreational assets that attract tourism, conventions, and conferences (Ibid., 19-21). “Historic preservation takes advantage of the facts that most downtowns have an abundance of the architecturally distinctive old buildings that many people are attracted to, and that their buildings are underused” (Robertson 1995). One of two popular preservation projects were festival marketplaces which strongly focused on entertainment and food and a mix of local specialty shops in renovated historic structures such as railroad terminals, warehouses, or industrial buildings that had been abandoned (Ibid.,). Robertson notes that festival markets were very popular during 1970s when they were introduced, nevertheless they also demonstrated

numerous failures in terms of their economic performance. People tend to stay and stroll by but not buy. Paumier explains the significance of the festival marketplace as the early form of successful mixed-use development in the way it recaptures some of the social vitality and human qualities that downtown used to have and can have again by adopting multiple-use programming and providing a quality pedestrian environment that integrates a variety of uses (Paumier et al. 1988, 20). Another popular preservation project was the creation of special historic districts. “Some large cities have created historic downtown districts, often in warehouse districts near the waterfront that house mostly entertainment uses: bars, night clubs, and boutiques” (Robertson 1995). Historic preservation still exhibits validity and effectiveness. Robertson’s recent research in 1999, which focused on the revitalization strategies of 57 small-city downtowns in North America, made use of questionnaires to seek the most frequently considered or implemented revitalization strategies in those 57 small-city downtowns. Responses indicated that historic preservation is the most popular strategy, being used in all but seven of the downtown surveyed (Robertson 1999, 275-276).

Main Street Approach. While relatively large cities implemented developments such as festival markets or historic districts, the Main Street approach seemed to be a popular and well-used strategy in relatively small cities of downtown because of their feasibility and effectiveness. “In 1977, concerned about continuing threats to traditional commercial architecture in economically sluggish downtowns across America, the National Trust for Historic Preservation launched the Main Street Project” (National Trust Main Street Center of the National Trust for Historic Preservation 2000,1). This approach consists of four principles including designs that improve the downtown’s image by enhancing visual qualities and the built environment, the organization of downtown interests and groups that play roles in the economic viability of

downtowns, the promotion and marketing the downtown's unique characteristics to shoppers, and economic restructuring and diversification by strengthening the existing downtown businesses and new businesses to provide a balanced mix, which is derived from their three-year demonstration projects (National Trust Main Street Center of the National Trust for Historic Preservation 2000,3). Robertson's recent research indicates that the Main Street approach has exceeded 78 percent of utilization among the 57 American cities surveyed. Moreover this approach ranked at the top as the most successful approach in his survey (Robertson 1999, 276).

Waterfront Development. Due to the fact that a high percentage of downtowns were originally located near water, waterfront developments were very often used as an instrument to revitalize downtown in many cities (Burayidi 2001, 3). In fact, the survey of 1999 which Robertson conducted concluded that in the 57 small American cities waterfronts ranked second as their downtown's strength or assets (Robertson 1999, 275). After the 1970s, land values of waterfront declined, and many downtowns located near the water found opportunities to think about new uses for their waterfronts (Robertson 1995). In the way that downtowns can reveal their identity by utilizing the natural settings, waterfront developments can be considered as one of the strategies to enhance and project a strong sense of place which was the main focuses of the third phase of downtown revitalization efforts. "People are naturally attracted to water, and the presence of a body of water serves to heighten one's sense of place" (Robertson 2001, 16). Human's instinctive preference toward water seems to promote this opportunity. Robertson also explains that because the natural setting such as water is usually rare in newly constructed suburban shopping centers or highway commercial areas, downtowns can take advantage of the distinctiveness of this natural amenity in the competition between the suburbs. According to McBee, the uses of waterfronts can be classified into three types including water-dependent uses

which are totally dependent on the waterfront settings such as marinas, ferry terminals and shipbuilding, water-related uses which are enhanced by a waterfront locations that also could prosper elsewhere such as resorts, aquariums, restaurants and seafood processing plants, and water-enhanced uses which can attract more patronage with waterfront amenities such as hotels and condominiums (Robertson 1995). Robertson points out two major issues of waterfront developments in his research of 1995. The problem seems to be the incompatibility of those different types of waterfront uses which create a competition between them. Another problem seems to be the privatization of waterfront and limited public access to the waterfront if the waterfront is developed by private developers. He explains that when the waterfronts are developed by private developers such as hotels or condominiums, they tend to limit the public accesses. The private developments can generate tax revenues for the city and more likely to draw larger population (Ibid.). Robertson suggests that if the focus is to link downtown to the waterfront, it seems to make more sense to develop waterfronts as linear public open spaces and to emphasize the strong connection between the water and nearby buildings (Robertson 2001, 16). Many cities such as Louisville, Kentucky, Milwaukee, Wisconsin, and Portland, Oregon have developed attractive public spaces on the waterfront that have successfully contributed to their downtown revitalization. Some cities such as Baltimore, Maryland also have successfully integrated waterfront public spaces with private development, encouraging complete public access to the water's edge (Robertson 1995). However waterfront development has some problems, it seems that it can be one of the great tools for downtown revitalization if the project is performed in an appropriate manner. According to Robertson's recent research in 1999, waterfront developments were rated as one of the best three of very successful downtown revitalization strategies among 57 American cities surveyed and ranked in the third for their

future development strategy plans. Along with historic preservation and the Main Street approach, waterfront development is recognized as a catalyst to revitalize downtown, enhancing its distinctiveness and identity of downtown and thereby generating large population for recreation, housing and retail uses.

Pedestrianization Improvements. Filion and the others note that the third phase was “...a rediscovery of the merits of pre-World War II built environments, most notably the traditional pedestrian-oriented retail street” (Filion et al. 2004, 329). “A sense of place is best experienced on foot” (Robertson 1999, 276). Robertson explains the popularity of pedestrianization improvements in the strategies of downtown revitalization which many American cities once again engaged in effort to make downtowns more pedestrian-friendly. While the early stage of pedestrianization projects such as pedestrian malls and skywalks seen in the second phase of downtown revitalization focused on the separation of pedestrians from vehicle traffic, involving only a part of downtown and ignored the impact on downtown as a whole, pedestrianization improvements of this stage comprehends the human-scale streets environment of downtown as a whole, integrating them with the land uses, zoning and architecture of downtown. The most common technique seems to be the implementation of streetscape improvements to soften the downtown environment and to encourage people to linger (Robertson 1999, 276). According to Robertson’s research of 1999, pedestrianization improvements were used in more than 70 percent of the cities surveyed following the most popular strategies of historic preservation and Main Street approach. The research of Filion and the others in 2004 also reveals that among 295, more than 60 percent of the respondents of the survey answered that pedestrian environment is “very important” factor in the success of small-metro downtowns which is one of the top two among 19 factors listed in the questionnaire along

with active retail scene (Filion et al. 2004, 331). Certainly pedestrianization improvements are one of the critical factors for strong downtowns, because they function to integrate a variety of uses and to provide for spatial quality that creates amenities for people. It seems to be inevitable that many downtowns are now trying to regain the high quality of pedestrian environment, because downtowns were originally shaped for pedestrian activity. The pedestrian environment functioned as a linking element between all parts of the city which architect Maki called “A glue of the city” (Trancik 1986, 106).

While the third phase of downtown revitalization seeks to enhance its strong sense of place and physical environment, this phase also attempts to restructure the wide range of the downtown’s role for business, commercial and social activities by adding new functions such as convention centers, arenas and stadiums which generate special activities and huge spillover benefits. Downtown housing, hotels, nightlife entertainment and cultural attractions maintain the continuous vitality of downtown areas for 24 hours, and with improved transportation systems reinforce the traditional downtown role as the center of financial, administrative, and professional services.

Special Activity Generators. “Convention centers, arenas, and stadiums are large facilities capable of drawing large numbers of visitors, many from outside the metropolitan area, into downtown” (Robertson 1995). Although the spillover benefits of these special activity generators and the stimulation of new construction such as hotel complexes nearby are assumed, there seems to be some issues related to this. Robertson points out the problem that “when a convention center is not in use, it sits in the downtown as dead space” (Ibid.). He also explains this problem that such special activity generators are difficult to integrate into finely woven downtown fabric because of the unique function and structures that are intended to accommodate

a large number of people (Ibid.). Especially stadiums or arenas seem to be more troublesome, because “people attending sports event usually do not stay downtowns as long as convention-goers do” (Ibid.). Therefore those special activity generators cannot be expected to be a catalyst to revitalize downtown although it could support a healthy downtown economic.

Supplemental Downtown Functions. On the other hand, downtown housing, hotels, nightlife entertainment and cultural activities seem to be steadily becoming a supplemental downtown function. Petersen emphasizes the importance of “a 24-hour environment, a place where people live, work, and play throughout the day and night” in order to achieve a successful downtown, illustrating the strategies and case studies of Smart Growth (Petersen 1998, 51). “By attracting people to live downtowns or to visit for entertainment and tourist activities, the potential for increasing the volume, distribution, and diversity of downtown visitors is greatly enhanced, especially at times other than 9 to 5 on weekdays” (Robertson 1999, 278). Providing downtown housing ranked second in the list of future strategies of 57 surveyed cities while “many cities have targeted tourists to broaden the mix of downtown users” according to Robertson’s recent research of 1999 (Ibid., 278). Paumeir points out that the increases in number of single individuals, childless working couples, single parents and empty nesters and the increasing cost of new suburban housing suggest that there is the market potential for downtown housing which is small, compact, convenient and relatively lower in cost (Paumier et al. 1988, 18). Robertson and Paumier and the others explain the synergy that downtown residential opportunities support by providing important support for shops, services, and restaurants as well as adding to downtown’s attractiveness as an office and shopping location (Paumier et al. 1988; Robertson 1999). Paumier adds that culture, entertainment, and recreation

activity as well as special events and activity programming are also essential in order to create a 24-hour environment and to maximize the potential for market synergy (Paumier et al. 1988, 24).

Transportation Enhancement. While the majority of strategies in the recent downtown revitalization efforts are closely related to a downtown's ability to project a strong sense of place, to create a human scale and pedestrian-friendly environment and to generate a diversity of activities, there is one critical factor which must be added in downtown revitalization efforts. The accommodation of the automobile has altered the physical form of nicely composed traditional pre World War downtowns and has led them into decline. It is a fact that the automobile is still a dominant mode of transportation in the majority of cities in the United States. Needless to say, there is a strong need for a solution to create an environment in which pedestrians and automobiles can coexist, and many downtown planners are challenged to accommodate the automobile traffic in order to achieve a successful downtown. According to Robertson's research in 1995, which sought to determine and evaluate the seven widely used downtown redevelopment strategies, many cities seems to adopt some strategies to improve downtown accessibility as a supplemental strategy (Robertson 1995). In response to the problem, the inconvenience in reaching downtown including long travel time, traffic congestion, safety anxieties and the difficulty to find parking makes people avoid going downtown, many cities are trying to improve downtown accessibility by planning mass transit to decrease automobile traffic and to provide more attractive and convenient parking facilities to avoid restraining auto customers (Ibid.). As Robertson notes that "Most cities understand that issues related to accessibility and parking play a major role in determining the viability of the downtown" , however his recent survey of 1999 indicated that transportation improvements do not get much attention from the majority of cities surveyed (Robertson 1999, 279). He explains that

“transportation is viewed as a complementary strategy that augments the more high-profile strategies associated with preservation, new development, or a new downtown function” (Ibid., 279). Although transportation improvements do not seem to be a main revitalization strategy, they must be a fundamental element to support a successful downtown in the way they are designed to serve as an instrument to physically bring people to downtown.

The third phase of downtown revitalization seeks to regain a larger population and more activity by reinforcing the identity of downtown characteristics, including the historic architecture, heritage, pedestrian-friendly environments and a densely woven diversity of land uses which made traditional downtowns prosper. Also emphasizing are the natural amenities which new suburban communities rarely possessed. This seems to be the logical response to the problems of declining downtowns. We can learn from the failure of early downtown revitalization efforts which lacked the coherency and comprehensiveness of a downtown vision as a whole. Most notably the recent downtown revitalization efforts differ from previous ones in the way several fundamental strategies are integrated into a single long term vision of downtown. All individual projects are closely related each other in order to create synergy. As many downtown revitalization strategies have demonstrated, the emphases upon pedestrian experiences in downtowns promote the images of downtown, and thereby generate larger populations and more activities. A pedestrian friendly environment can be determined as one of the most crucial elements to support a successful downtown. This characteristic also can emerge in the principles of downtown revitalization which will be discussed in the next section in this chapter.

The Principles of Downtown Revitalization

Much of the literature related to downtown suggests several principles of downtown revitalization. However the hierarchy and organization vary depending on the focus of the

literature, and the basic components seem to be relatively common. For example, Robertson elucidates eight key principles that underscore successful downtown development efforts in small cities focus more on planning and policy procedures for implementation (Robertson 2001, 9-21). On the other hand, Paumier and others suggest seven basic principles for small- and medium-sized cities focusing on ways to reshape the space-use composition and economic vitality of their downtowns (Paumier et al. 1988, 23-28). Petersen's essential elements for a successful downtown in his article of smart growth analyze and suggest 10 components similar to Paumier and others' (Petersen 1998, 46-56). Among them are seven principles for developing the downtown market that seem to be most relevant to my research in the way that the seven principles suggested by Paumier and others observe the close correlation between space-use composition and vitality of downtown. The components serve to support a pedestrian friendly environment. The scope of this thesis is limited to analyzing spatial organization and its function to support the main element of downtown revitalization efforts, including pedestrian friendly environments. Therefore the following section provides a brief overview of each principle drawn from Paumier and others' Designing Successful Downtown and discusses how those principles serve to support a pedestrian friendly environment.

Promote Diversity of Use. The main goal of downtown revitalization is to attract more people throughout the day and evening. By providing a range of choice in things to do and see and the reasons to come and stay, the downtown's diversity of uses generates a larger population, which can also contribute to a vital street environment as well as healthy economy. Therefore, maximizing the synergy and offering a wider range of pedestrian activity on the downtown streets attract and draw more people to downtown. A 24-hour downtown requires a diversity of uses including office, residential, and entertainment as well as the traditional uses of retailing,

governmental, financial, administrative functions. This downtown diversity of uses supports a crucial correlation between main attractions and complementary downtown function. For example, retail, entertainment, and special events serve to attract people while offices, housing, and hotels serve to assure those businesses of their success by providing constant customers and patrons. Nicely designed streets must effectively link these diverse uses and enhance pedestrian experiences (Paumier et al. 1988, 23-24).

This principle can be interpreted as one of the fundamentals which affect the success of pedestrian friendly environment that are needed to support a successful downtown. Providing people with a variety of reasons to come and stay downtown is a major premise in an attempt to attract and draw large populations to downtown and thereby maintaining vital activity on the downtown streets. In other words, if downtown can not provide diverse use and activity, there would be lack of people, thereby reducing pedestrian activity and moreover a need for a pedestrian friendly environment. The key is to create activity which attracts and maintains people downtown and on the streets. Intermingled uses of land take maximum advantage of the potential for attracting and drawing people to downtown.

Emphasize Compactness. The physical form of downtown should be compact and walkable with human scale structures and well-organized spatial arrangements in order to promote pedestrian activity and a vital street environment. Compactness with a tight physical structure, a sense of enclosure which is created by closely lined human scale buildings and a nicely landscaped street environment reflects peoples' perception of downtown images as a safe, comfortable and pleasant environment to be in and linger. Vacant lots, blank walls or excessive building setbacks interrupt the flow of pedestrians on downtown streets and reduce the

integration of mixed uses, thereby discouraging people from walking in downtown (Paumier et al. 1988, 24-25).

By filling up the existing gaps in the urban fabric and by reinforcing the continuity of building edges with human scale and hospitable physical structures, downtowns can enhance spatial factors which prompt people to walk. This will heighten the strong sense and identity of places and promote peoples' perceptions of downtown images thereby supporting a pedestrian friendly environment that is needed to achieve a successful downtown.

Foster Intensity. Development density assures the critical mass at the core of downtown if the projects were planned in harmony with downtown's existing character. This means that intensive use need not always mean high-rise construction. Rather low rise human scale buildings with intensive uses on the street level spaces provide pedestrians with a constant interests and activity. The downtown plan, development regulations, zoning ordinances, and review processes must address the manner in which buildings relate to the street and the quality of street level spaces (Paumier et al. 1988, 25).

Along with the compactness of downtown, the intensive use of the downtown core area assures pedestrians of maximum interests and activity.

Ensure Balance. Related to the principle of promoting diverse uses, this principle intends to avoid an over concentration of any one use by mixing retail and entertainment functions with office and business uses and distributing them equally all over downtown. Modestly balanced uses ensure a stability in the downtown population as well as their economic and business success throughout day, evening, weekdays and weekend. As many cities which created an individual development such as pedestrian malls and indoor shopping malls experienced the phenomenon that the place where located further away from the development

lost more people and activity because of the magnet pull caused by dominance of the single development. Those magnetic pull can be used as a strategic anchor that creates development potential along the pathways that interconnect them. But the focus should be given to ensure the balance between those developments rather overemphasizing one area of downtown (Paumier et al. 1988, 26).

Evenly interspersed balanced mixed uses can support a 24-hour downtown by providing a multifunctional downtown which maintains human activity through daytime and night time. This promotes safety in the downtown environment. Balance is a key to creating and ensuring the healthy downtown environment.

Provide for Accessibility. Providing efficient and convenient ways to access downtown is crucial. A positive balance between automobile traffic and pedestrian uses of the street must be established. Well designed parking locations and by encouraging the use of public transit can serve to promote easy access to downtown (Paumier et al. 1988, 26-27).

This principle is a complementary element of pedestrian friendly environments. By providing efficient and convenient accessibility to downtown, downtown can attract a critical mass and thereby support a pedestrian friendly environment which requires a critical mass of people on the downtown streets to create vital activity.

Create Functional Linkages. This principle suggests an integrated network system which weaves a diverse use of downtown and its interspersed activity into a single downtown, serving to provide a functional linkage defined by a physically attractive pedestrian environment. The key is to create a sense of continuity which supports pedestrian flow by providing a nicely designed streetscape with a series of amenity spaces. These pedestrian connections should link

all parts of downtown and avoid being interrupted by automobile traffic (Paumier et al. 1988, 27-28).

Needless to say, this principle directly refers to the importance of pedestrian friendly environments which serve as functional linkages.

Build a Positive Identity. In order to compete with suburban developments and to become more marketable as a development location, downtown must project a positive identity and strong sense of place by preserving and enhancing qualities of scale, historic characteristics and natural settings that provide environments which attract people. The quality of the downtown's physical appearance, including its streets, buildings and open spaces, plays a critical role in establishing a positive identity. The key is to provide a pleasant setting for people, especially pedestrians who best experience a sense of place on foot (Paumier et al. 1988, 28).

This principle significantly supports a pedestrian friendly environment which requires a high quality physical appearance of downtown. Strong identity and a sense of place adds great interests and attractive assets to downtowns, prompting people to walk around downtown as well as providing people reasons to come and linger there.

In sum, the all seven principles of downtown revitalization emphasize the restructuring of the traditional downtown assets which used to support economically successful downtowns and the vitality of downtown physical environments. The principles have a close correlation with the pedestrian friendly environment. It is evident that the downtown revitalization movement is moving toward the preservation and reinforcement of pre World War II downtown environments, most notably with its pedestrian friendly spatial arrangement, structure and function.

Conclusion

The early stages of thriving downtowns demonstrated how pedestrian oriented environments contributed to the success of downtowns by integrating diverse usage and activity and by providing vital activity on downtown streets. However, the success and vitality of early downtown cannot be dependent on a single element rather a combination of multiple elements which created a market synergy. The role that pedestrian friendly environment performed seems to be crucial. The decline of downtown also exhibited the failure in maintaining these traditional assets needed to support a pedestrian friendly environment and moreover a successful downtown. As a response to the declining downtown, many cities of America are once again trying to restructure the lost traditional downtown assets including the diversity of uses with their balanced and intensive distribution, physical compactness, accessibility and strong sense of place. All of these feature work together to support a pedestrian friendly environment. It seems to be necessary for pedestrian friendly environment to be given so much importance in downtown revitalization since American downtowns were originally shaped by pedestrian activity. The advent of declining downtown began with the introduction of the automobile and its increasing populations' dependence upon it. Yet it is difficult to realize the desirable pedestrian environments with the present conditions, in which automobiles are too dominant and give little room for public transportations or other components which support a pedestrian friendly environment.

The next chapter introduces the case study portion of this thesis by examining two different size downtowns – Portland, Oregon as a mid-size case and New Orleans, Louisiana as a larger case – in order to investigate the fundamental elements needed to support a pedestrian friendly environment in these two downtowns, how these elements are related each other to

support a pedestrian friendly environment and moreover how they contribute to the success of their downtowns.

Chapter 3

Case Studies

Introduction

The following chapter examines case studies of two relevant yet distinct areas; downtown Portland, Oregon and New Orleans, Louisiana. The purpose of this chapter is to determine the fundamental elements that must exist to foster and support a pedestrian friendly environment, as well as how this desired pedestrian environment has successfully been created in an effort to establish a set of guiding criteria or principles that can be applied to downtown planning strategies for the creation of successful pedestrian environments. These principles will later be used to analyze and offer suggestions intended to improve current plans of the city of Baton Rouge, Louisiana. The plans are intended to improve the city center through the promotion of a healthy downtown pedestrian environment, thus bolstering the economic vitality of downtown. Through preliminary research, the case studies were selected and pursued for the purpose of identifying the characteristics and successes related to the creation of a pedestrian friendly environment from an overview of many downtown areas. During further research of each city three key components necessary to support a pedestrian friendly environment became evident based on amenities and characteristics common to both cities. These key components are; the creation of a variety of reasons to go to downtown, the provision of efficient and convenient access to downtown, and the enhancement of spatial factors which prompt people to walk. Additional information on each city was obtained from comprehensive plans of each city found on websites maintained by the respective local governments. Further information is examined in detail to demonstrate how these three key components are closely related to the success of each city's pedestrian environment, and what efforts contribute to these three key components of each city. Even though the size and primary purpose of each downtown differ to some degree, both

case studies are comparable to downtown Baton Rouge, Louisiana, because the focus is made upon the basic concept of the spatial arrangement and its function.

Three Key Components that Must Exist to Support a Pedestrian Friendly Environment

Through preliminary research of each downtown, the three key components that must exist to support a successful pedestrian environment were revealed through master plans, land use plans, zoning ordinances, and transportation plans, as well as their physical assets. For example, a diversity of land uses which generates vital activity serves to maintain large populations in downtown for 24 hours. The efforts to create these were intensively observed in each city's master plans and land use plans. Given the major premise, that downtown needs to generate a large population in order to support a frequent and intensive usage of pedestrian areas, this component can be determined to be one of three key components that must exist to support a vital pedestrian environment. Transportation plans of each city displayed strong efforts to provide efficiency and convenience of access to downtown areas. By encouraging an alternative to automobile access with the use of transit systems, and by improving parking facilities to accommodate commuters, downtowns can reinforce its accessibility and attractiveness thereby generating larger populations. Accessibility also plays a critical role in generating a large population, especially in downtown Portland, by supporting a vital pedestrian environment. In other words, if downtown cannot provide sufficient access, regardless of whether the activities and destinations are fully provided within the quality environment, downtowns cannot generate large enough populations, resulting in a reduction of the vitality of the pedestrian environments. Therefore, the provision of efficient and convenient access to downtown can be determined to be the second key component that must exist to support a pedestrian friendly environment. While the first two key components aim to maintain a critical mass in downtown areas in order to

generate vitality in their pedestrian environments, spatial factors condition people's perceptions of downtowns. This also could be a crucial element supporting a pedestrian friendly environment. Spatial compactness and readability provide pedestrians with comfortable and pleasant experiences. Portland's strong asset of its compact city blocks contributed to the reinforcement of its goal of pedestrian friendly environments by creating an intimate pedestrian experience.

The findings from analysis of Portland, Oregon clearly exhibited three key components that must exist to support a pedestrian friendly environment in downtown areas, while the findings from analysis of New Orleans, Louisiana indicated two opposing aspects which were created due to its duality of downtown New Orleans which consists of two distinctive areas; the historic neighborhood of French Quarter (Vieux Carre) and the Central Business District (CBD). Although some aspects of CBD of New Orleans are serving to degrade a pedestrian friendly environment, the comparison between these two distinctive areas of New Orleans clearly exhibited the strength and success of a pedestrian friendly environment through conformation of the three key components. These key components are; the creation of a variety of reasons to go to downtown, the provision of efficient and convenient access to downtown, and the enhancement of spatial factors which prompt people to walk. The following sections demonstrate how these three key components are closely related to the success of each city's pedestrian environment, and the efforts and physical aspects of the three key components that serve to support such pedestrian environments.

Downtown Portland, Oregon

General Description

The city of Portland is the largest city in Oregon. It is a major Pacific seaport located about sixty miles from the west coast of the United States, situated on both sides of the Willamette River, just south of its confluence with the Columbia River (Harrison 1987,182). Within the city of Portland, downtown Portland occupies the area which is bounded by the steep hills of West Burnside on the north, the Willamette River on the east, and freeways to the south and west (Figure 3.1). Known to be “One of America’s Best Walking Cities,” (Portland Development Commission September 2004, 9) downtown Portland is relatively small, with compact city blocks and narrow streets where people can walk downtown within 15-20 minutes (Harrison 1987, 182). The city began as an inland port from which locally grown produce and other agricultural products were bought and sold (Ibid.1987, 182). Downtown Portland represents one of the earliest settled districts in the city and contains the financial, governmental, cultural, and entertainment heart of the city (Ibid.1987, 182). Many retailers, large and small, are located in the downtown area. The downtown area consists of several small sub districts, each district specializing in one or two primary uses or activities (Figure 3.1). Downtown Portland Conceptual Diagram (Figure 3.2) shows the major components of the downtown area. The central area of downtown Portland includes the densest major office core, adjacent to Fifth and Sixth Avenues, with the transit mall forming the spine of downtown. It overlaps the east-west retail core, leading from the mall to the Willamette River. Medium density offices continue to the east adjacent to the government center, Yamhill Historic District, and Skidmore Old Town Historic District. Just west of the central area is the cultural district complete with new housing developments. The south end of downtown Portland’s waterfront includes the

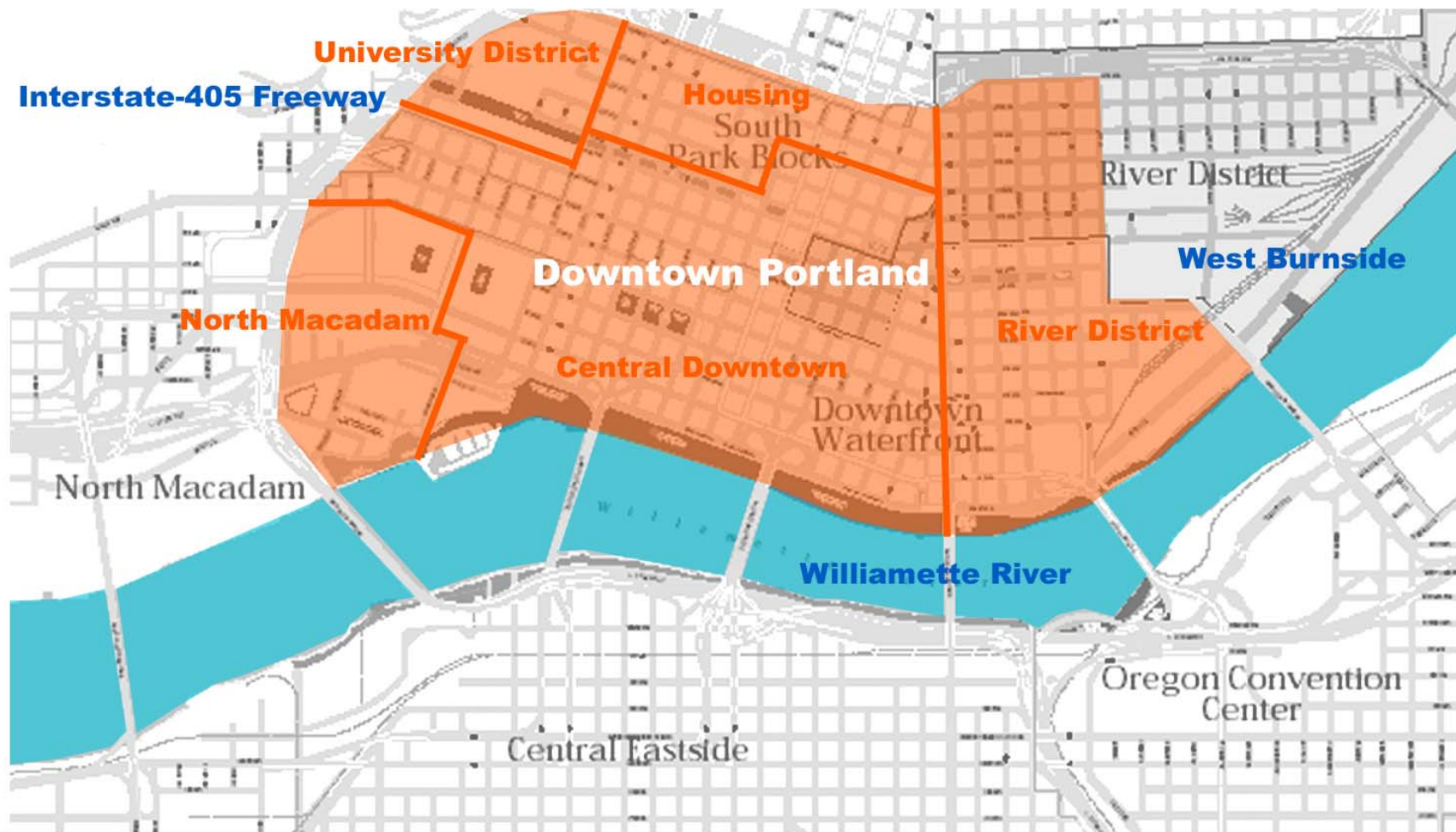


Figure 3.1 Downtown Portland Geographic Context and District Map

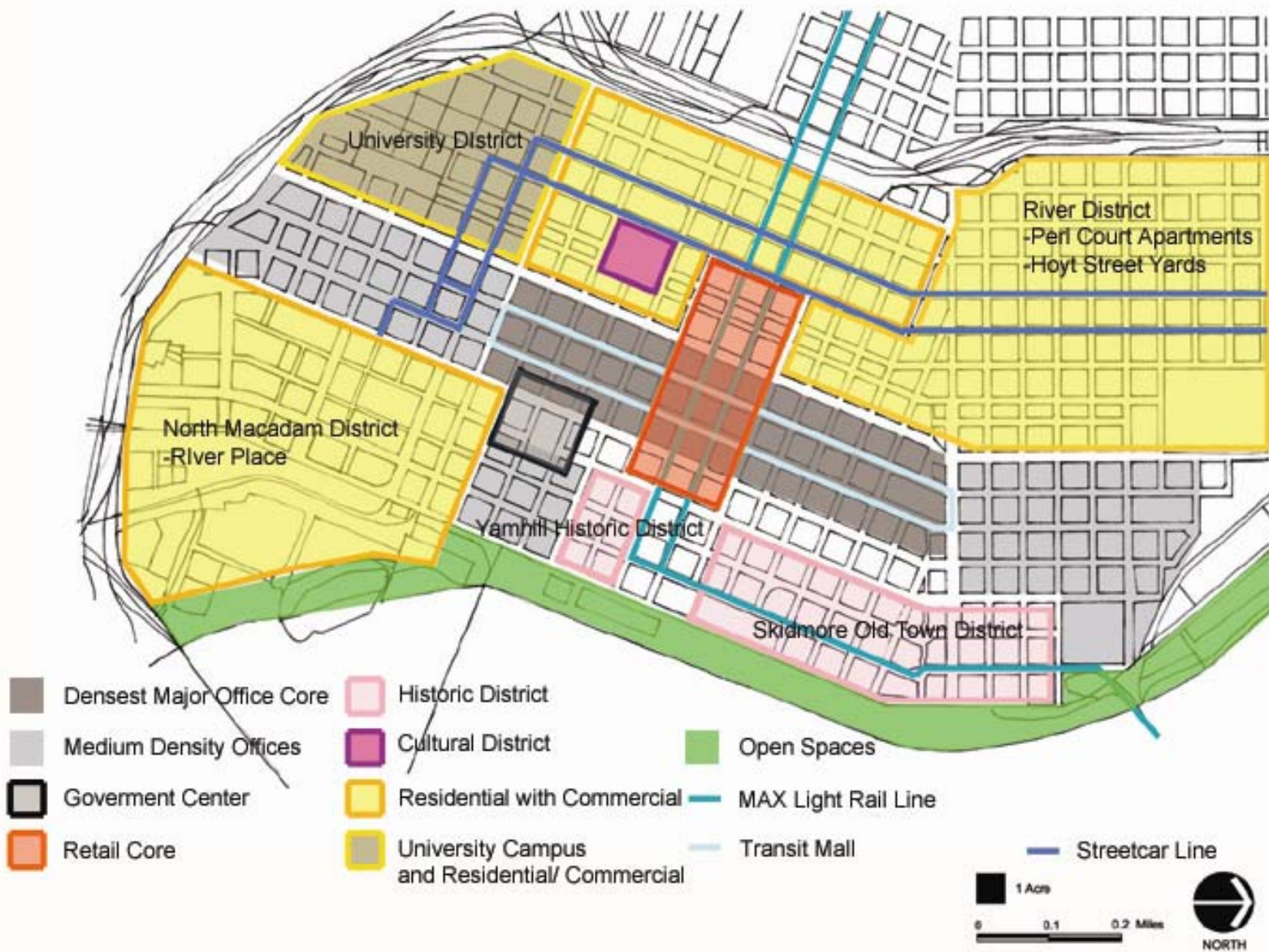


Figure 3.2 Major Elements of Downtown Portland

North Macadam District, which is slated for intensive housing, as well as commercial development. River Place, the major mixed-use, multi-phased housing project is also located in this area along the Willamette River. In addition to the downtown plan, many new housing developments are currently being pursued in the River District, located North West of downtown, including Pearl Court Apartments and Hoyt Street Yards (City of Portland Office of Transportation, 10-11). The University District, located to the southwest of downtown, was also added later in order to foster the development of a distinct sub-district having its character defined by its focus on Portland State University (Ibid., 18). Along with the scattered open spaces throughout downtown, Tom McCall Waterfront Park, running along the river, is the site of casual relaxation and occasionally, organized celebration (Ibid., 16-17). The award-winning Portland Transit Mall is set in downtown's high-density spine, which continues to attract commercial development and high public transit rider ship (Ibid., 4-5). The area is connected to the districts of Gresham, 15 miles to the east, and Hillsboro, 18 miles west of Portland, by the Max Light Rail System (Ibid., 4-5).

Project History

While downtown Portland is now considered one of the most livable and successful downtowns in the United States, supporting a vigorous retail and commercial economy as well as cultural, entertainment and housing options, it has also experienced the same downtown decline as other cities across the country in the 1960's (City of Portland Office of Transportation, 1). With the emergence of suburban shopping malls, the retail and economic vitality of downtown Portland declined, and activity became a 9 to 5, Monday through Friday occurrence, with little human activity, resulting in a loss of character and its role as the regional employment center (Ibid., 1). "By 1970, Portland experienced a grassroots movement to reclaim the city, to orient

Portland toward people rather than automobiles” (Ibid., 1). The need for a strong Downtown Plan grew, leading to the adoption of the nation’s first comprehensive land use planning strategy in 1973, which established the urban growth boundaries around municipalities, serving to save agricultural lands and open spaces to encourage development inside central cities throughout Western Oregon (Ibid., 2). A group of influential local citizens, supported by extensive public involvement, developed a comprehensive study of the development needs and patterns throughout downtown. “11 citizen goals, four major plan-wide guidelines, and 21 planning districts, each with its own guidelines” were established (City of Portland, 8). Key elements of the Downtown Plan include; “an emphasis on pedestrian comfort, promoting features like street trees, wide sidewalks, and limits on building heights; concentration of retail, office and government facilities in various sectors of downtown; easy-to-find parking facilities; improved transit; more and better designed parks and plazas; historic preservation; and the creation of diverse downtown housing” (City of Portland Office of Transportation, 2). Through these revitalization efforts, the central city has benefited from more than one billion dollars in private and public investment (Ibid., 3). Downtown Portland is once again the region’s business center and a major destination for the region’s residents by day and night, both weekday and weekend (Ibid., 3). As a result of the successful downtown revitalization plan, downtown Portland has also become a destination for urban planners and others interested in revitalizing urban communities around the world (Ibid., 3).

Through the process of reviewing the Downtown Plan, many efforts by the city and its citizens and physical aspects, which constitute the three key components that must exist to foster and support a pedestrian friendly environment, became evident. The following sections discuss further details in the planning and the design of the Downtowns, focusing on each key

component of a pedestrian friendly environment in order to demonstrate the success of the strategies and assets employed to create and support a pedestrian friendly environment.

Destinations – Create a Variety of Reasons to Go to Downtown

As one of the key components that must exist to support a pedestrian friendly environment, downtown Portland offers a variety of destinations and continuous activity which generates and maintains a critical mass in downtown areas throughout day, night, weekday and weekend. Downtown Portland's efforts to generate and maintain a critical mass in the downtown areas, and to provide pleasant and convenient pedestrian activity, was primarily demonstrated in two ways; first, the enhancement of the retail core with a promotion of high-density mixed-use developments utilizing ground floor retail space to create activity both day and night and to ensure continuous pedestrian flows, and second the creation of 24-hour downtown by the provision of bars and restaurants, which ensures the activities both night time and day time, the promotion of cultural and entertainment uses, which captures a critical mass for weekend as well as weekday, and the provision of downtown housing developments, which reinforces a sense of security as well as supports a vibrant retail economy.

Enhancement of the Retail Core. In order to achieve one of the goals of the Downtown Plan, which is to “Enhance downtown’s role as a leading center for retail goods and consumer services by providing an atmosphere conducive to investment” (City of Portland Office of Transportation, 6), the Downtown Plan exhibits an intensive concentration in the retail core with several distinct retail districts overlapping and connecting with the retail core thus creating a variety of destinations (Figure 3.3). According to the Downtown Portland Retail Strategy, the downtown Portland area currently has 1.9 million square feet of retail space (Economic Research Associates 2002, 4). Of the total 1.9 million square feet of downtown retail

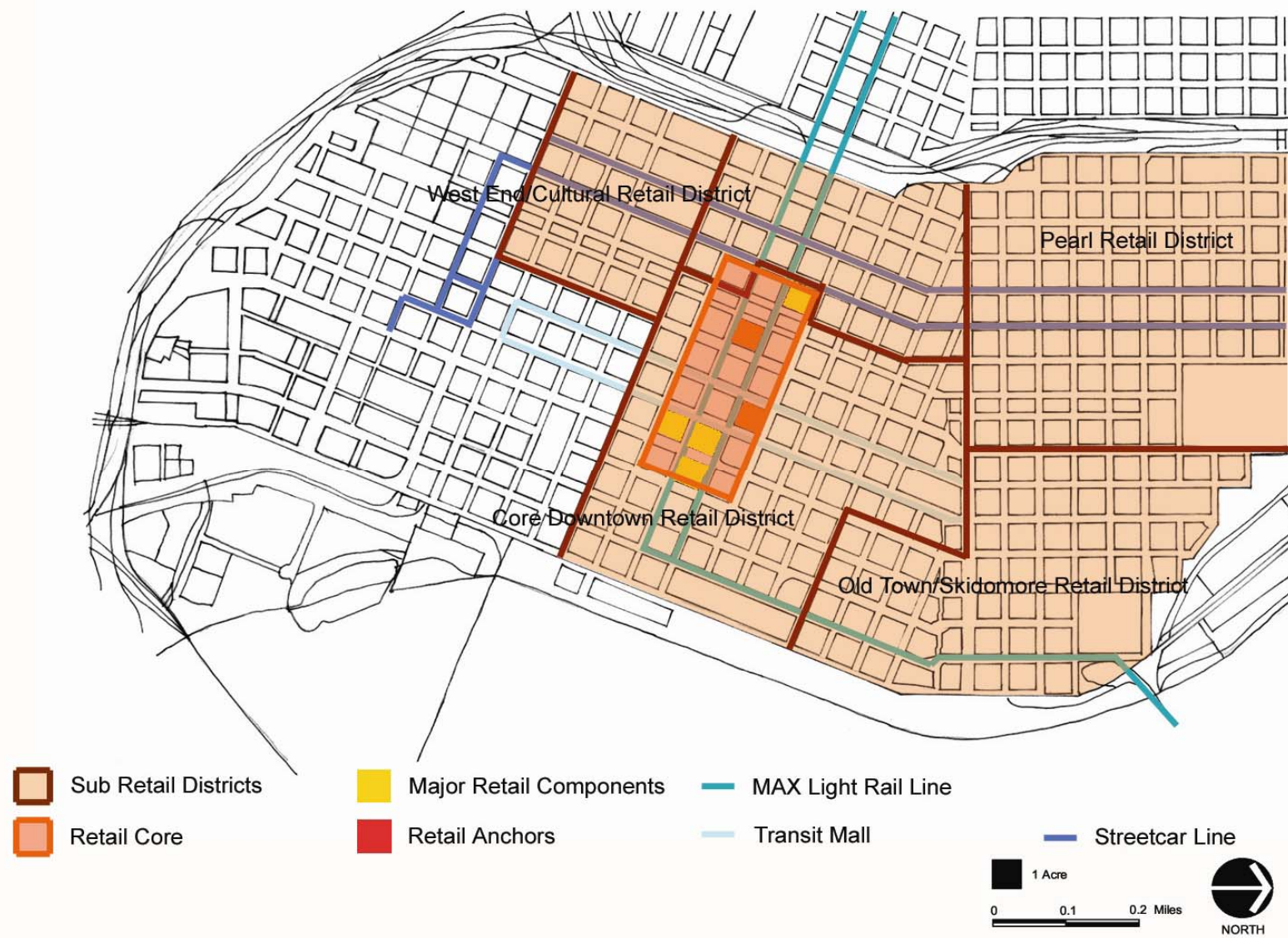


Figure 3.3 Downtown Portland Retail Uses

and entertainment space, approximately 75% is concentrated in the retail core area (Keyser Marston Associates, Inc. 2000). Meier & Frank and Nordstrom are the two important retail anchors. The effective retail core area consisting of department stores, mixed-use retail complexes such as Pioneer Place and Galleria, and street front retail, all within a reasonable walking distance of the 17 square block downtown retail area (Ibid.) (Figure 3.3). This intense concentration of downtown retail has contributed to the creation of a continuous flow of retail storefronts, helping to reinforce the critical mass necessary to provide pleasant shopping environments and desired pedestrian experiences.

Promotion of Mixed-use Developments and Ground Level Retail. Most new developments and extensive rehabilitation projects increasingly are devoted to the form of mixed-use developments in which retail spaces are constructed at the lower levels of the projects with office, residential or hotel uses on the upper levels (Economic Research Associates 2002, 5). Downtown Waterfront Development Projects prepared by the Portland Development Commission shows that almost one third of the projects in the Riverfront District are mixed-use projects, devoting their ground level spaces to retail activity, thereby reinforcing the continuity of pedestrian activity (Figure 3.4). River Place, Pioneer Place, and Fourth & Yamhill Parking Garage are the city's premier examples of mixed-use development. The 34 new office buildings, completed between 1972 and 1999, and an extensively upgraded existing office building were developed in harmony with street-level pedestrian access and amenities (City of Portland, 27). The regulations reduced the number of zones used in downtown to three; Commercial (C1), Manufacturing and Central Service (MX), and Apartment Residential (AX), made it possible to promote this intensive mixed-use development (Ibid., 40). Especially, the C1 zone, later amended to CX (Central Commercial) permitted a broad range of uses including office, retail,

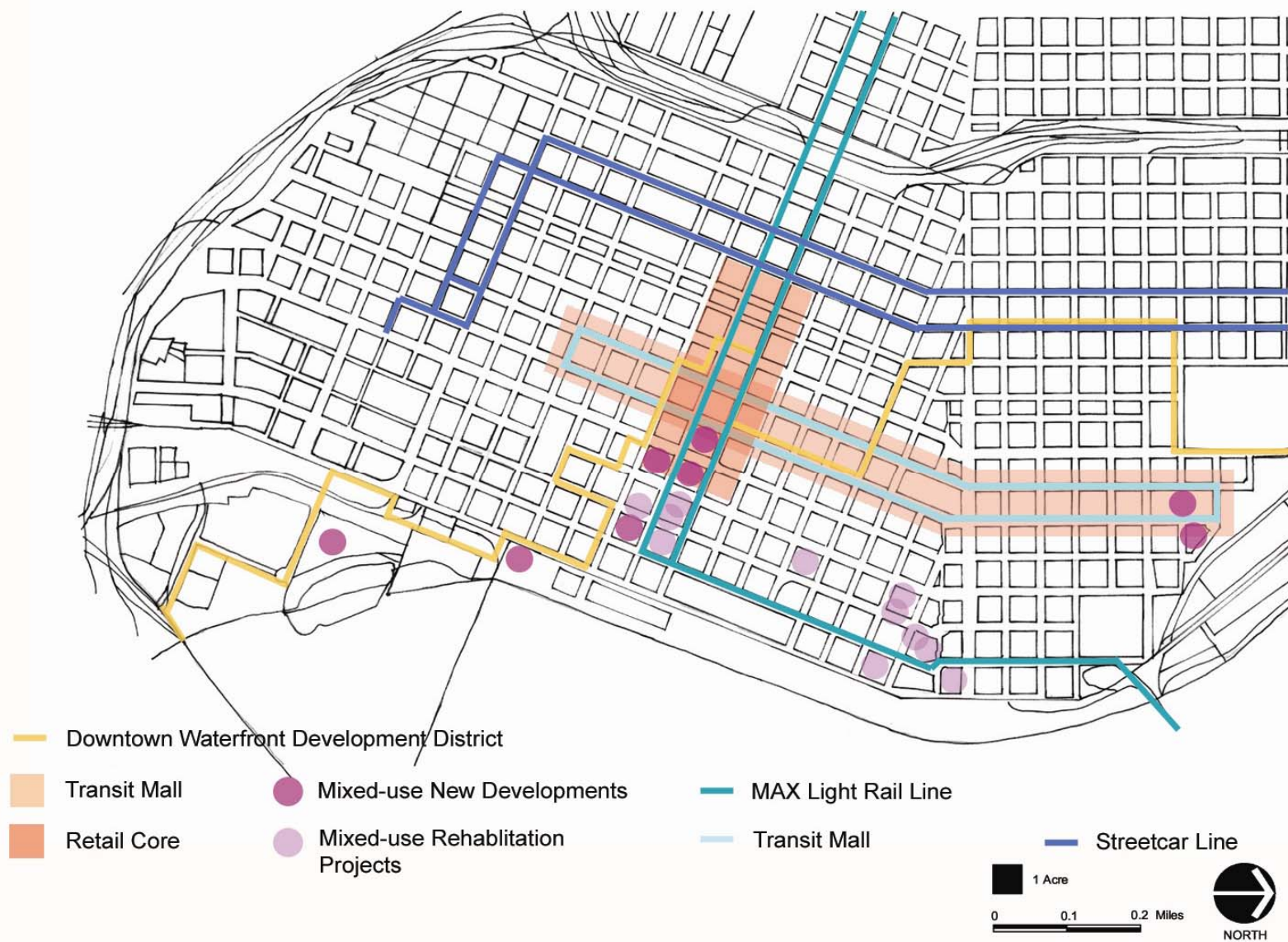


Figure 3.4 Mixed-use Developments within Downtown Portland Waterfront Development Projects Area

entertainment, housing, and institutional and service uses that would support diversifying downtown Portland as a commercial, cultural, and governmental center. Z (Downtown Development Zone) defined development requirements and strongly encourages the usage of the ground level spaces for retail sales or businesses which generate substantial customer traffic (Ibid., 41). In the retail core 50 percent of the ground floor space must be devoted to retail or other business uses (Ibid., 41). These efforts resulted in maximizing the effectiveness and convenience of pedestrian access at ground floor level increasing vital activity, thereby enhancing a pedestrian friendly environment.

Provision of Restaurants and Bars. In addition to the enhancement of the retail core to provide a variety of destinations, the Downtown Plan demonstrated that the provision of day and night activities could potentially create a 24-hour downtown by encouraging restaurants and bars as one of the primary retail uses. It is remarkable that the restaurants and bars, which enhance downtown activity both day and night, account for 24% of all retail use ranking it as the second primary retail use in the downtown area, following general merchandise the primary use (Economic Research Associates 2002). “Downtown Portland has garnered a national reputation as a center for excellent regional cuisine” (Ibid.,27). Obviously a variety of bars and restaurants helps to maintain a critical mass in downtown not only at lunch time on weekdays, but also during the evening on weekends, thereby creating a positive image of a safe and healthy downtown.

Promotion of Cultural and Entertainment Uses Through Public Events and Festivals. In addition to the provision of bars and restaurant uses, the promotion of cultural and entertainment uses, such as public events and festivals are playing critical roles in generating a variety of specialized activities throughout the year in downtown Portland. These destinations

include; the Performing Arts Center, which contains three theaters as is home to the Oregon Symphony Orchestra; the Civic Auditorium, which contains the 3000 seat civic auditorium and is the setting for many popular touring musicals; and the Theaters on Broadway, which strengthen the existing concentration of theaters, restaurants, and hotels along Broadway by adding more entertainment activities (City of Portland, 35-36). The 16-theater Fox Tower and the new seven-screen cinema complex in Pioneer Place, phase II, will significantly enhance the number of movie theaters Downtown, thereby creating more destinations (Ibid., 35-36). The nationally known Rose Festival, Saturday Market, and Waterfront Park Celebrations including Cinco de Mayo, NeighborFair, Oregon Brewers Festival, the Bite, the Waterfront Blues Festival, and the FunCenter part of Rose Festival are all important activity generators. Especially, the Saturday Market which annually grosses revenues of \$10 million with approximately 750,000 people visiting the Market each year (Ibid., 37). As a result, downtown Portland has become a popular visitor destination, with an estimated 2.5 million people from outside the region visiting the downtown area in 1998 (Downtown Retail Council and Portland Development Commission 1999, 2).

Provision of Downtown Housing Opportunities. The Downtown Plan envisages the high priority of increasing the number of residential units in the downtown area, which is essential to the growth, stability, and general health of the downtown (City of Portland, 27). The provision of residential opportunities supports a 24-hour downtown. One that is vibrant and active at all times of the day and night throughout the year. One which fosters and supports a pedestrian friendly environment by enhancing the sense of security, as well as by maintaining a critical mass in the downtown area. Residents greatly support the entertainment industry, local restaurants and bars, and small businesses by providing basic services. In fact, 40% of the

market support segments of downtown retail are primarily trade area residents, who reside within a 10 mile radius of the downtown core area (Downtown Retail Council and Portland Development Commission 1999, 3). Increasing housing opportunities has strongly contributed to healthy downtown retail activity, as well as maintaining people and enhancing a sense of security in the downtown area. Housing supports the hundreds of businesses by giving employees the option to live closer to work. Given the fact that “In twenty years the number of people working downtown has grown from 59,000 to 94,000, and the amount of office space has increased from 5.3 million to 14million square feet” (Langdon 1992), strong demand for housing are steadily increasing these days. “Responding to a strong mandate for housing in the Downtown Plan, the city used tools such as a required housing zone and bonus densities for the provision of housing, as well as tax abatements and other financial incentives to set the stage for increasing housing units” (City of Portland Office of Transportation, 10). Since 1972, the central city has added 5,560 housing units, bringing the total number of housing units in the downtown area to approximately 8,155 (Portland Development Commission 2000, 18). It is important to note that the housing supply is not homogenous across the downtown area, instead, it provides a balanced housing opportunities for all different income levels. Based on the fact that low and moderate-income housing accounts for 72.6% of the total downtown housing stock compared to middle and upper-income housing of only 27%, the goal of the Downtown Target Area is to improve the gap by focusing on the development of new middle and mixed-income housing (PDC Housing Department 2001, ii). These efforts to provide balanced housing opportunities in the downtown area will ensure the vitality and stability of the downtown population, thereby fostering a pedestrian friendly environment.

Many of the efforts discussed above are the pieces of a large puzzle which when placed together support a pedestrian friendly environment. They create a variety of destinations and activities generators and thus provides a critical mass at all times of the day and night throughout the year.

Accessibility –Provide Efficient and Convenient Access to Downtown

It is important to note that the Portland transportation system has changed the nature of downtown from the way it looks to the way people move through it. The Downtown Plan concept demonstrates a strong effort to provide accessibility to downtown which is critical to ensuring a critical mass in town, thereby bringing about the need for a pedestrian friendly environment. Research indicated that there are two primarily ways to reinforce efficient and convenient access to and within the downtown area; extensive public transit systems, and enhanced parking facilities. The award-winning Portland Transit Mall, the heart of the transportation project, Metropolitan Area Express (MAX), Central City Streetcar, Intermodal Transportation Center, and Smart Park Garages are playing a critical role by providing efficient and convenient access to the Downtown Area.

Public Transit System. The Downtown Plan emphasizes the integration of diverse land uses with the transit systems. The first project, the Transit Mall on Fifth and Sixth Avenues, was completed in 1978. It made the downtown's high density spine into the concentrated office and retail core area on a north-south axis in the city center (City of Portland Office of Transportation, 4) (Figure 3.5). "The city of Portland dedicated a set of north/south streets almost exclusively to bus and pedestrian transportation" (Ibid., 4). This north-south spine serves as an attractive and efficient transit mall for the entire region with widened sidewalks paved in brick, fountains, public art, new trees and plantings, and well designed bus shelters, continuing to attract

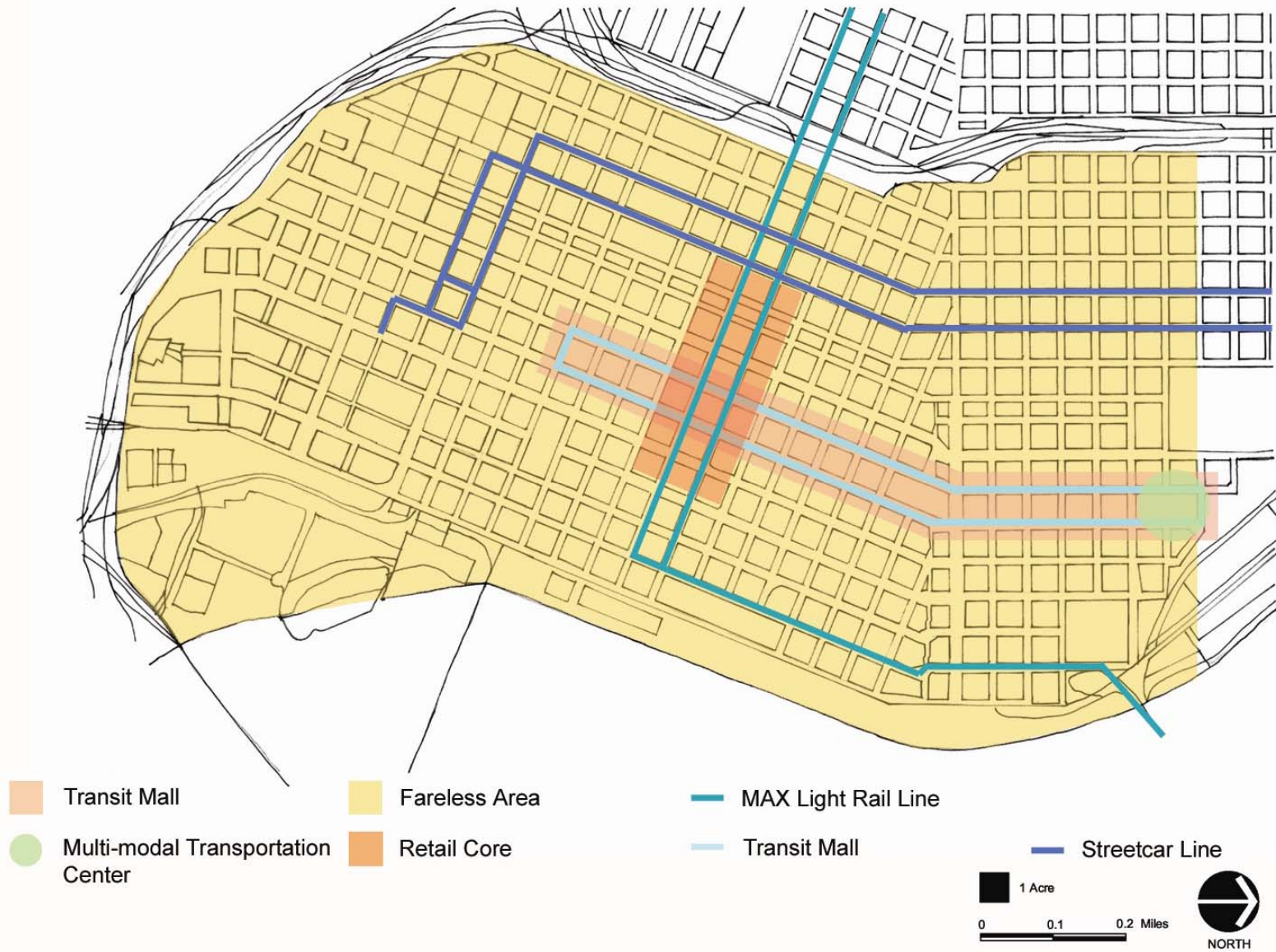


Figure 3.5 Downtown Portland Public Transit Systems

commercial development and high transit ridership (Ibid.,4). Following the success of the Transit Mall, the city developed another corridor designed for the regional light rail system called Metropolitan Area Express (MAX) (Figure 3.5). The first MAX line linked Portland to Gresham, 15 miles to the east, and the second MAX line continued Gresham line to Hillsboro, 18 miles west of Portland. Intended to relieve congestion on a heavy traffic corridor and to leverage investment in high density housing and business development, this regional light rail gained nearly 40% of the work trips to downtown, carrying about 80,000 passengers every weekday. Some \$1.9 billion worth of development under construction or completed immediately adjacent to the light rail stations, expanding its services by more than 150% (Langdon 1992; Turner). The MAX line also runs within the retail core area, providing another corridor with amenities similar to the Transit Mall (City of Portland, 15-16). Within the downtown area, passengers ride transit for free.

A new independent city tram line (Portland Streetcar) connects a 2.4 mile route in the university district through an alignment on the Western side of the city center with a new housing estate Northwest of the central city (Figure 3.5). It moves people through the central city. In its first year of operation in 2001, the streetcar served over 1.35 million passengers (City of Portland Office of Transportation 2003-2004). These three primary public transit systems serve to generate pedestrian circulation within the downtown core by interweaving the diverse land uses into an urban fabric, as well as helping to generate a critical mass, needed to support a vital pedestrian environment.

Transportation Hub. Located on the north edge of the Transit Mall, the Intermodal Transportation Center, Union Station, lie adjacent to a Greyhound bus terminal, a Tri-Met City bus terminal facility, and the North Transit Mall extension, serves to function as an active

transportation hub (City of Portland Office of Transportation, 5) (Figure 3.5). A future light rail line may pass near the station, further reinforcing its role as a multi-modal transportation center (Ibid., 5). Portland's Transit Mall, exhibits the importance of locating a multi-modal transportation hub in a convenient location within the downtown area in order for riders to enjoy easy access to a city's mass transit system, thereby to ensure the accessibility of downtown.

Parking Facilities. Along with the provision of alternatives to automobile access by promoting the public transit systems, downtown Portland assures an adequate, but not overabundant supply of inexpensive Parking for downtown visitors. The city operates 6 Smart Park Garages with approximately 3,500 spaces designed to serve low cost short term parking for the visitors in the downtown retail core, bringing the total of all parking spaces in the downtown area to 47,394 (City of Portland Office of Transportation 2003-2004) (Figure 3.6). In addition, the city of Portland and the Association for Portland Progress (APP) operate a system called "Free Park" which allows retailers to relieve shoppers' parking costs by stamping their garage tickets (City of Portland, 17-18). This plan calls for several downtown parking garages and lots (totaling 5,000 parking spaces) to offer two hours of free parking at any time during the day (Ibid., 17-18). In addition, unlimited free parking is offered on holidays and weekends and after 6 p.m. daily (Ibid., 17-18). While such efforts were made in an attempt to ensure an adequate supply of parking for downtown visitors, the city also limits the maximum parking capacity allowed at particular sites or within a particular area, especially in growing commercial centers in order to ensure that the downtown is convenient and pleasurable for people on foot (Langdon 1992). To further bolster the pedestrian experience the Downtown Plan insisted that new buildings, including parking garages, have stores or other pedestrian attracting uses at street level (Ibid.).

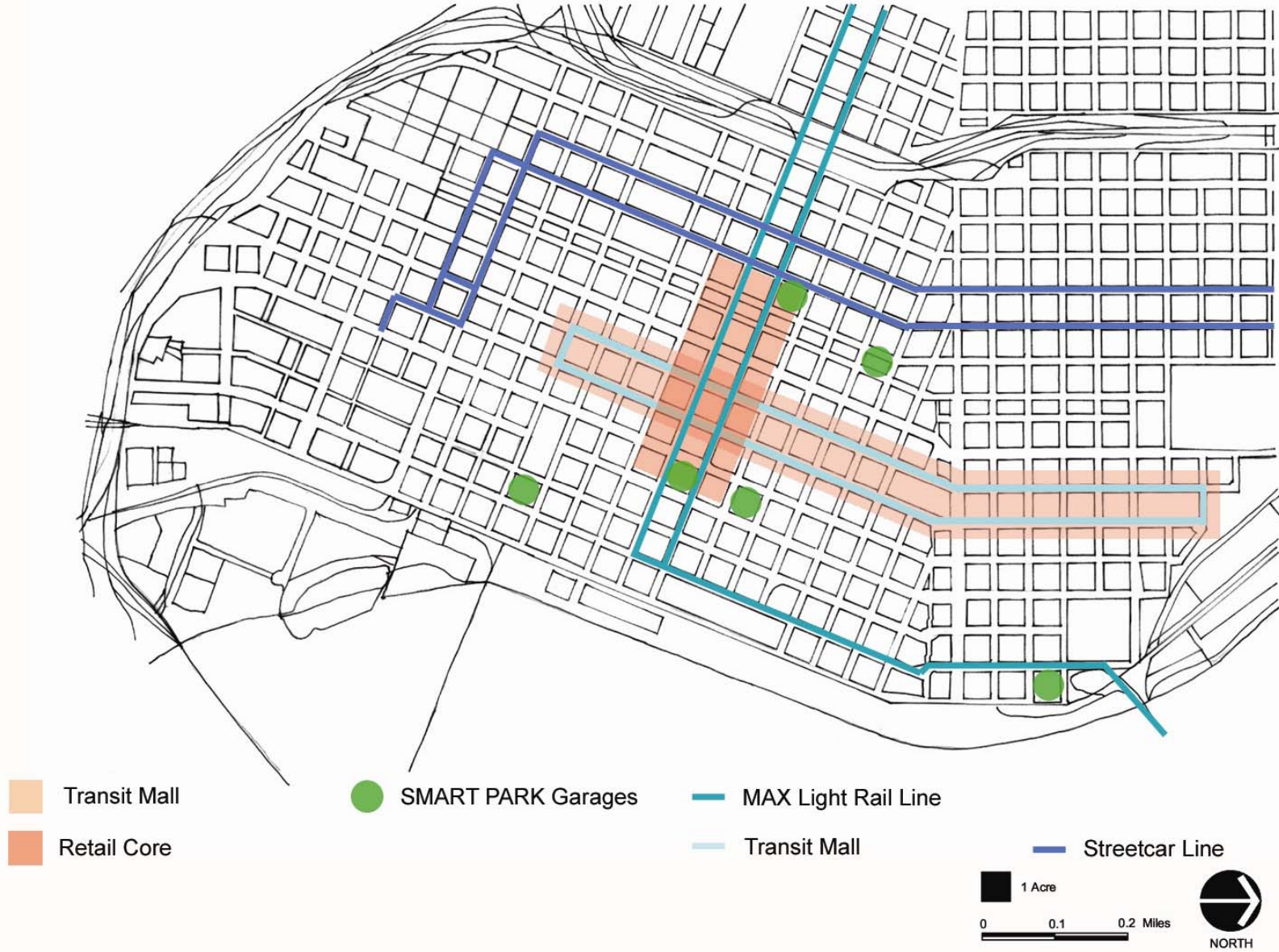


Figure 3.6 Downtown Portland SMART PARK Garages

In 1975, the City of Portland set an overall capacity of approximately 40,000 parking spaces downtown, including existing and new parking facilities (Ibid.). The city's specific parking ordinances were established to prohibit the creation of vast surface parking lots (City of Portland, 17-18). Although the capacity was increased to about 44,000 spaces by the 1980's and increased again in the 1990's, the City is generally satisfied with its parking policies and believes it has helped increase transit use from 20-25% in the early 1970's to 48% in the mid-1990 (Ibid.). The sufficient yet not overabundant supply of parking facilities as well as the careful design of parking facilities has helped ensure the development of a healthy pedestrian environment and provided convenient access to downtown.

Overall, transportation planning has played a critical role in the support of a pedestrian friendly environment in downtown Portland by providing efficient and convenient access to and within the downtown area, thus ensuring a critical mass necessary to support a pedestrian friendly environment as well as creating an environment that is compatible to pedestrians. It is not too much to say that the extremely high reputation of downtown Portland as a walkable city strongly relies upon the many efforts in transportation planning which ensures the accessibility and comfort of people on foot.

Perceptions – Enhance Spatial Factors which Prompt People to Walk

Downtown Portland highlights special spatial factors which prompt people to walk. This was accomplished by taking advantage of the physical assets, by reinforcing them with the establishment of special requirements and added amenities. Spatial factors which condition people's perception of downtown also are crucial in providing the support for the pedestrian friendly environment. Among the many factors which prompt people to walk and provide a comfortable experience for people on foot, three spatial factors appear to be critical; the

concentrated compact size of a downtown area, compact city blocks, and other elements serving to create a sense of human scale, such as limits of building height.

Size of the Downtown Area. Downtown Portland occupies approximately 550 acre, containing more than 100 compact blocks. A series of avenues runs parallel to the river from the west bank of Willamette River toward the hillside, approximately north-south, and a second series of narrow streets run almost east-west, together forming regular 200-by-200-foot blocks in the city center (Harrison 1987, 182). The downtown area is moderately small and compact allowing many people to walk downtown within 15-20 minutes (Ibid., 182). Although the intensive developments around the downtown expanded the downtown area, to include some new sub-districts such as River District and University District, downtown Portland can still be considered to be a small downtown when compared to those that consist of several divisions with special distinctive functions, such as New Orleans, Louisiana. The moderate size of downtown Portland promotes one's perception of the city. Pedestrians find it comfortable and easy to orient themselves, which gives them a choice to walk around downtown. The well-established public transit systems also encourage people to walk. There is no reason for people to drive around due to the area being so compact that people can walk to every destination or utilize the free public transit system.

Size of the City Blocks. In addition to the relatively small size of the downtown area, downtown Portland consists of compact city blocks and narrow streets. Each block is 200 ft (60 m) square. By comparison, Seattle's city blocks are 240 by 320 feet (70 by 100 m), and Manhattan's east-west streets are divided into blocks that are from 600 to 800 feet (180 to 240 m) long. These 200'-by-200' blocks were divided into quarters, and each quarter is divided in half, providing human scaled storefronts. Also playing a crucial role in providing a human scale,

most streets are 60 feet (20 m) wide, so the combination of compact blocks and narrow streets make the downtown more pedestrian-friendly.

Other Elements Serving to Create a Sense of Human Scale. Height controls were included in particular areas such as in and adjacent to historic districts, within major view corridors, adjacent to public open spaces, and other locations to ensure variety and appropriate scale. On specific blocks, part of the buildings must extend to the property line to maintain the continuous storefront and 60 percent of the wall at pedestrian level must be transparent, serving to reinforce pleasurable pedestrian experiences.

Portland makes significant efforts to reinforce and enhance its physical assets, which downtown inherently owns. Each element significantly conditions the people's perceptions of the downtown area as perceived on foot. An important thing to note from Portland's success is that human scale is a critical element in any attempt to achieve a desired pedestrian environment.

The findings from analysis of Portland, Oregon clearly exhibited the three key components that must exist to support a pedestrian friendly environment in downtown areas; the creation of a variety of reasons to go to downtown, the provision of efficient and convenient access to downtown, and the enhancement of spatial factors which prompt people to walk. The next section examines downtown New Orleans, another distinctive case study portion of this research. Compared to Portland, which receives wide recognition as a highly walkable city, revealing its strength as a well-planned and well-ordered created by conforming to its comprehensive downtown master plan, New Orleans is somewhat weaker in terms of its pedestrian friendly environment, yet is extremely unique in the way the city has grown to become a world famous tourist destination, without having any plan that directed or controlled its growth and development until recently. The size of the downtown New Orleans area is much

larger than that of Portland or Baton Rouge. Moreover, the fact that tourism is a vital economic force results in the unique development patterns. Regardless of its quality, it is true that downtown New Orleans is a city where people walk around and stop to linger. Considering this uniqueness, the study area was chosen to support the findings of the case study of downtown Portland. The study was conducted by reviewing online resources available from websites maintained by the New Orleans local government and the writer's own observations and analysis of the site. This clear comparison between the well-planned city of Portland and the freely grown city of New Orleans provides more useful guiding criteria for many cities of America as to how best achieve desired pedestrian environment.

Downtown New Orleans, Louisiana

General Description

The city of New Orleans, the region's largest metropolis, is located at the crescent of the Mississippi River, about 110 miles north of its confluence with the Gulf of Mexico (New Orleans City Planning Commission 1991). The city is also situated on the southern shore of Lake Pontchartrain, maximizing its relationship with the great natural resources surrounding it (Ibid.). "The city of New Orleans is rich in unique cultural, historical, architectural, and natural assets" (ULI-the Urban Land Institute 1998, 7). Since 1718, when New Orleans was founded by the French, becoming the capital of French Louisiana, New Orleans has been influenced by the French, Spanish, and Creole French which comprise the unique mixture of cultures in New Orleans these days (Encyclopedia). After the Louisiana Purchase of 1803, New Orleans became Louisiana's state capitol until 1849, then again from 1865 to 1880 (Ibid.). During the American Civil War, "the city was spared the destruction suffered by many other cities of the American South" (Ibid.), thus retaining the great heritage as an early colonial city, most notably the French

Quarter (Vieux Carre), which now is a world famous tourist destination, as well as retaining its original function as a historical residential neighborhood. The natural setting of New Orleans has also contributed to its uniqueness. Surrounded by bodies of water, much of the city is located below sea level, providing a quite unique experience and strong sense of place for people (Ibid.). Yet, there are various environmental constraints caused by the close relationship with the bodies of water as well. “The river and lakes, canals, wetlands and levees present many barriers to development and free flow of people and goods” (New Orleans City Planning Commission 2004, 1). However, its strategic location on the Mississippi River resulted in the stability of the city’s industry growth, including the port which is the second largest port in the nation, the oil and gas industry, and the New Orleans Regional Medical Complex (NORMC) which steadily broadens of the local job base (ULI-the Urban Land Institute 1998, 8). In addition to an increasing economic stability, the city is also well known for its rich cultural heritage, especially its music and cuisine, continuing to promote tremendous growth in tourism (Ibid., 17).

According to the 1999 Land Use Plan by the New Orleans City Planning Commission, the city of New Orleans is defined by thirteen planning districts (City Planning Commission 1999). Of the thirteen planning districts, Planning District 1 contains the Central Business District, French Quarter (Vieux Carre), and the Warehouse District, the major components of the city’s economic base (Figure 3.7). Generally downtown New Orleans refers to the Central Business District and the Warehouse District excluding the French Quarter (Vieux Carre). The French Quarter (Vieux Carre) is considered to be a separated district. However, the focus of this thesis is upon the area related to the pedestrian environment, thus it is crucial to include the contiguous area of the French Quarter (Vieux Carre), because the French Quarter, the origin of

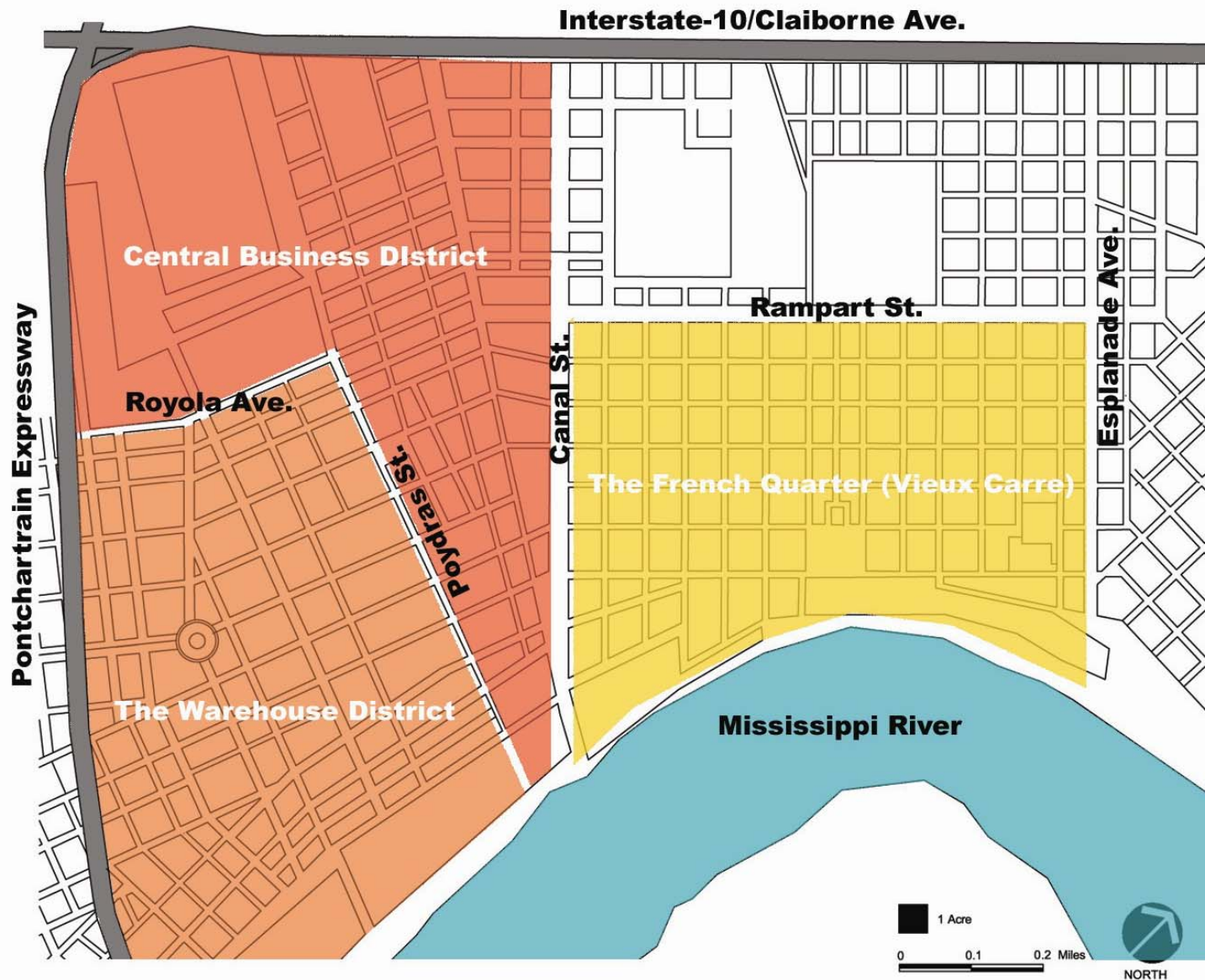


Figure 3.7 Downtown New Orleans Geographic Context and District Map

the city of New Orleans, exhibits many aspects of a traditional downtown, exhibiting its strength as a pedestrian friendly environment. Therefore for the purpose of this paper, downtown New Orleans refers to the area of the Central Business District, French Quarter (Vieux Carre), and the Warehouse District which is defined as Planning District 1. This area is roughly bordered by the Mississippi River on the east, Ponchartrain Expressway on the south, Interstate-10/ Claiborne Avenue on the west, and Esplanade Avenue on the north (Figure 3.7). The area of downtown New Orleans is large, occupying approximately 930 acres, thus the public transit system plays a critical role within the area (Ibid).

Now, downtown New Orleans is the center of the city's economic activity, including the Convention Center and the French Quarter (Vieux Carre), which draw a large share of tourist dollars; the downtown businesses and the medical district which helps broadening the city's employment base, and the Warehouse District which is the city's cultural center for the arts and entertainment (New Orleans City Planning Commission 1999). The area of downtown New Orleans consists of three districts, including the Central Business District, which is primarily used for office space and medical facilities, the French Quarter (Vieux Carre), which provides for residential, neighborhood, commercial, retail and tourism needs, and the Warehouse district which, specializes in the combination of office space, residential use, and increasing tourism use with hotels and the convention center (Figure 3.7). Downtown New Orleans Conceptual Diagram (Figure 3.8) shows the major components of the area. Each district has own special function, yet the retail activity, cultural interest, and tourist attractions are scattered through the area, varying its land uses. The French Quarter (Vieux Carre), the National Register Historic District, occupies roughly one third of the north east of this district along the Mississippi River. Centered by Jackson Square, a three hundred year old plaza, the 66-block neighborhood consists

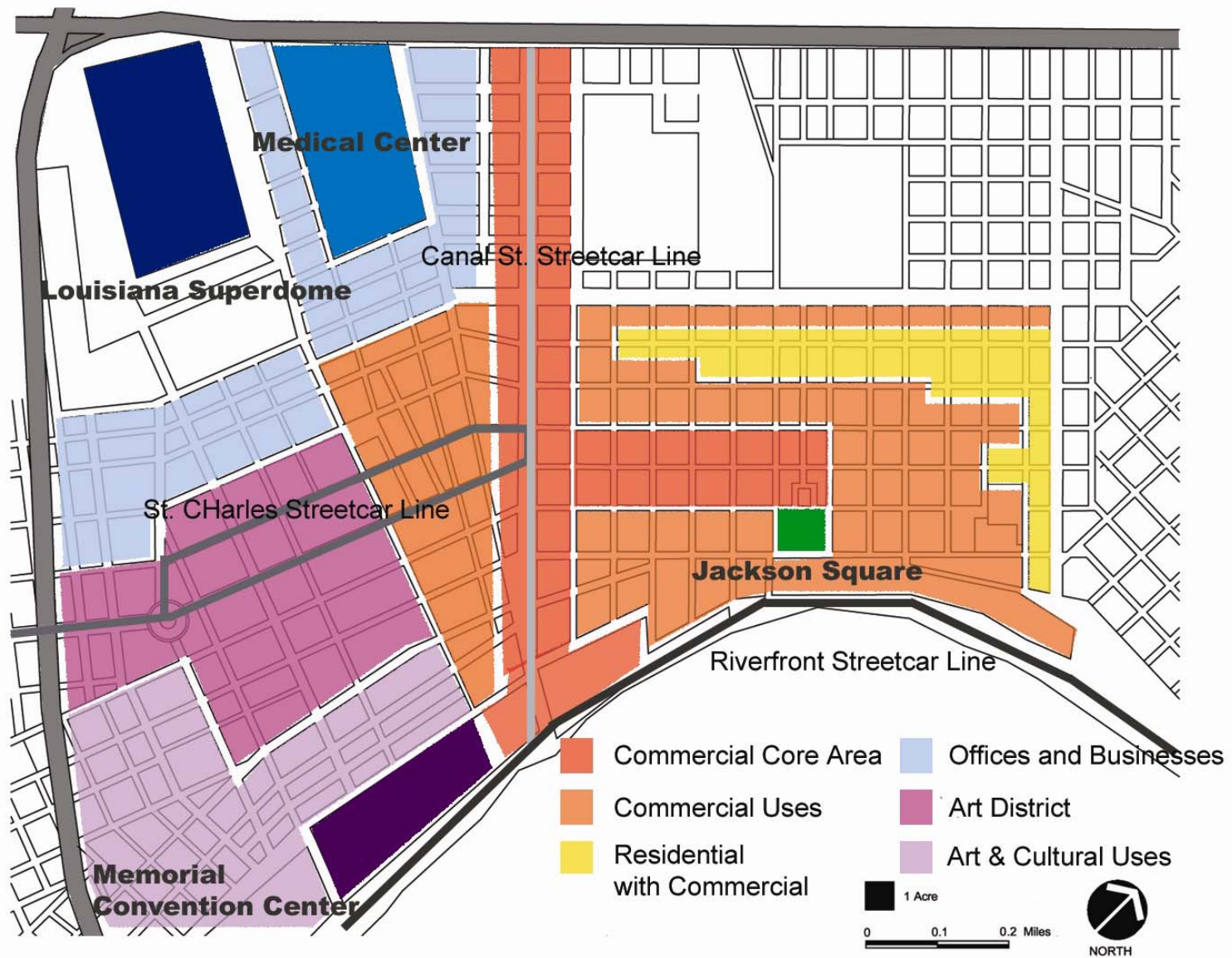


Figure 3.8 Major Elements of Downtown New Orleans

of residences located on upper floors of structures and commercial businesses at the street level with storefronts lining the streets (New Orleans City Planning Commission 1999). The major tourist attractions are located within this area, including an abundance of bars, restaurants and night clubs on Bourbon Street and adjacent streets (Ibid.). Bounded by Canal Street, the southern French Quarter (Vieux Carre) until Poydras Street is the Central Business District (CBD). This area contains two revenue-building assets within the neighborhood, the New Orleans Regional Medical Complex (NORMC) and the Louisiana Superdome (Ibid.). 90% of the office space in New Orleans is located in this area, revealing its primary importance as the center of business (Ibid.). In addition to the many corporations located here, two historic districts are in this area, Picayune Place and Canal Street, contributing to the charm of this area as well as providing a mixture of retail and tourist services (Ibid.). Canal Street has historically provided retail business for the downtown area (Ibid.). However the retail business on Canal Street has declined with the changing nature of retailing and the development of suburban shopping malls, but this area still provides tourist services such as hotels and restaurants with some tourist oriented retail stores (Ibid.). The southern part of downtown, bounded by the Mississippi Rive, Pontchartrain Expressway, Loyola Avenue and Poydras Street is the Warehouse District. This area used to be “filled with 19th century warehouses that once served the industrial needs of the CBD, the Warehouse District is now the arts center of New Orleans” (Ibid.). The area contains many historical sites such as Gallier Hall and Julia Row, and “a concentration of art galleries and studio/loft space anchored by the Contemporary Arts Center and the Louisiana Children’s Museum” (Ibid.). The area is also being further developed into a mixed use urban neighborhood with services for residents who typically work in the CBD (Ibid.). Along with the Convention Center located on the riverfront, the Warehouse District continues to

grow as an art and cultural center as well as serving residential and office uses. All three of these districts of downtown intersect along the riverfront area (Figure 3.8). Along the Mississippi River, many tourist attractions, including the Convention Center, Riverwalk Market Place, Aquarium, Woldenberg Park and French Market are linked by both interior and exterior spaces. However the linkage between the riverfront and the rest of downtown is somewhat weak, especially in the Warehouse District, but the Riverfront area plays an important role for recreation and entertainment drawing a critical mass to downtown New Orleans. The downtown area has access to 59 bus routes that provide access to virtually every part of city, and three fixed-rail streetcar lines, with another line in planning (New Orleans City Planning Commission 2004, 33-34). A majority of these bus routes converge at Canal Street, providing people with an alternative to automobile access to downtown. The New Orleans's unique assets of three streetcar lines serve as both a means of public transit for local residents, students and workers, and as a tourist attraction, carrying people to and within the downtown area.

Project History

As Borah criticized, (Borah 2001), this historically important city seems to have been missing a master plan to guide the growth and development of a community until 1992, when “the City Planning Commission adopted the New Century New Orleans Master Policy Plan, which articulated the goals, policies and strategies that citizens agreed comprised their vision of the City in the future” (New Orleans City Planning Commission). Through the enormous efforts of the City Planning Commission, many improvements and plans such as the Strategic Land Use Plan, 1999 Land Use Plan, Arts and Culture Tourism Management Historic Preservation Economic Development Plan, and Transportation plan have been adopted, yet there still seems to be lacking of a master plan that comprehends all elements of a master plan. The area of

downtown New Orleans is covered in each plans as Planning District 1, yet even at the recommendation of ULI- Urban Land Institute- to develop a master plan for downtown New Orleans in their study of development potential for Canal Street (ULI-the Urban Land Institute 1998, 14), there is no master plan that specifically states the future vision of downtown New Orleans.

Destinations – Create a Variety of Reasons to Go to Downtown

The diverse uses and activities are one of downtown New Orleans’s strongest assets, serving to generate a critical mass thereby supporting a pedestrian friendly environment in downtown. The intensive uses of cultural and entertainment uses as well as retail uses attract approximately 30,000 visitors daily and 8 million visitors annually. As a world famous tourist destination, downtown New Orleans shows much originality and strength in capturing the critical mass that must exist to support and foster a pedestrian friendly environment. All elements except the provision of housing exist in downtown New Orleans supporting a pedestrian friendly environment by generating a critical mass in the downtown area at all times of the day and night through the year, especially in the French Quarter (Vieux Carre) where the highest diversity of uses have developed.

Enhancement of Retail Core. Downtown New Orleans is blessed with dynamic force of retail activity, strongly supported by the tourist dollars. “The commercial land uses account for the largest portion of land in the district, covering more than 515 acres which is 55.6% of the district’s total acreage” (New Orleans City Planning Commission 1999). Downtown New Orleans Major Retail Uses (Figure 3.9) shows dominant yet scattered retail activities. Retail is found throughout downtown area, yet the concentration seems weak when compared to downtown Portland which has a clearly defined retail core in the middle where all its major

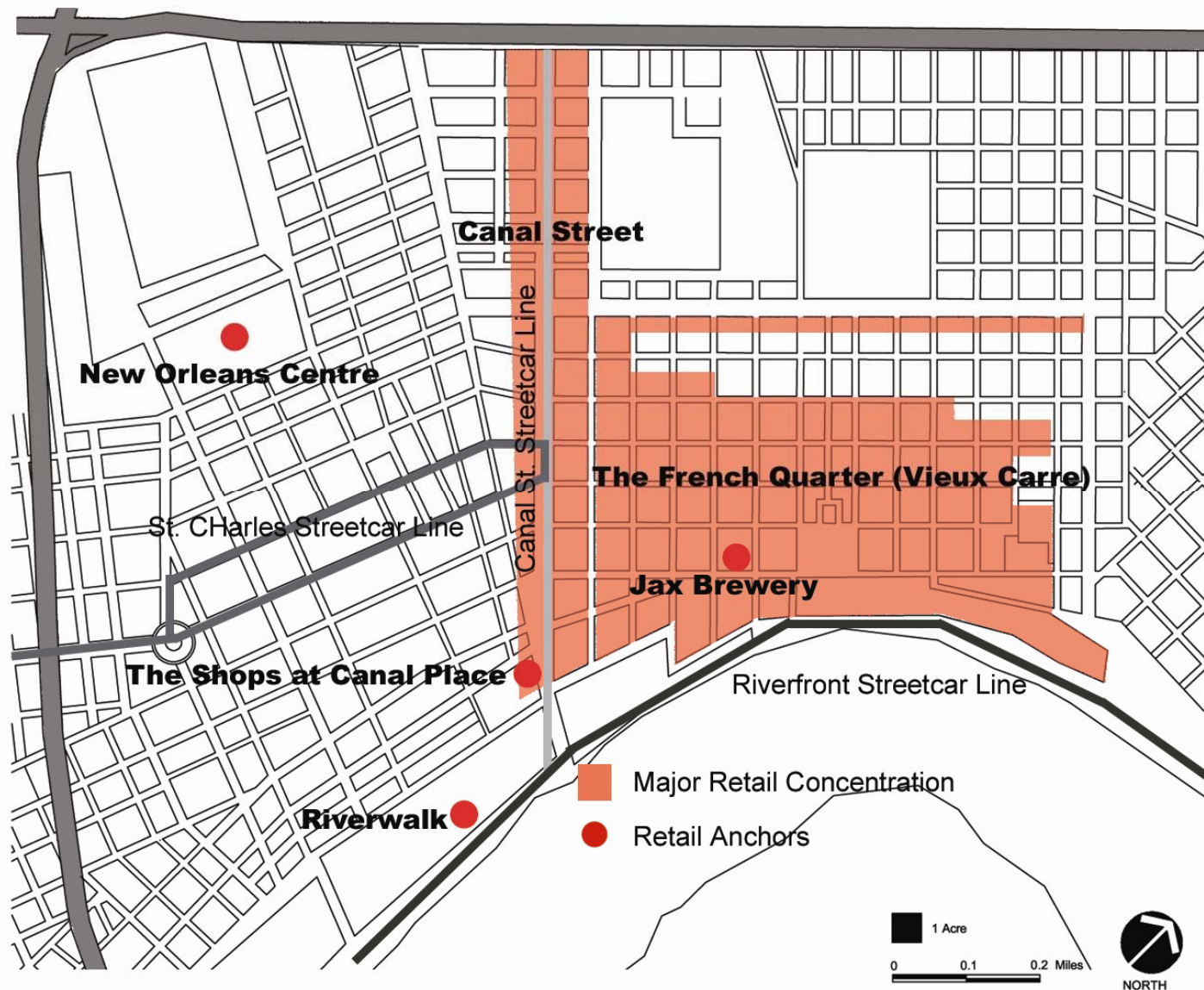


Figure 3.9 Downtown New Orleans Major Retail Uses

elements intersect. The New Orleans retail area contains several enclosed shopping centers, complete with national chain stores acting as retail anchors, including The Shops at Canal Place, Riverwalk, Jax Brewery, and New Orleans Centre (Figure 3.9). These shopping complexes are too scattered to increase the synergy between them, however, Jax Brewery, which is located in the main retail core area of the French Quarter (Vieux Carre), benefits from interaction with the large pedestrian populations in this section of the quarter. In terms of the retail concentration, the most successful area seems to be around the French Quarter (Vieux Carre), providing a series of small retail stores, bars, restaurants, and night clubs within the small area. But, when looking at the area as a whole, the declined role of Canal Street, which used to be the traditional shopping district of downtown New Orleans serving local residents, is causing a significant problem as to how best create a intensive retail core area in order to provide shoppers with pleasant shopping experiences thereby supporting a pedestrian friendly environment throughout the entire downtown district. As I observed, the further from the French Quarter (Vieux Carre) one moves, the less people there are walking around. This phenomenon clearly exhibits the importance of concentrated retail core area in order to create a pedestrian friendly environment.

Promotion of Mixed-use Developments and Ground Level Retail. Overall, the downtown area seems to have successfully devoted their ground level usages to retail or other attractive uses, especially in the historic French Quarter (Vieux Carre) neighborhood, where the original development patterns remain. This area is an excellent example of a vernacular form of mixed-use development. The finely woven human scale blocks with narrow streets lined with storefronts, and the naturally developed vertical zoning with residences above seems to be the ideal pattern of retail development in any effort to create a pedestrian friendly environment

(Figure 3.10). The masses of people in this district throughout the year, demonstrates its success at capturing a critical mass with extensive mixed-use and street level usages.



Figure 3.10 Examples of Downtown New Orleans Mixed-use Development

Many new developments currently occurring in the Warehouse District are also mixed-use projects (New Orleans City Planning Commission 1999). Yet, these same projects generate complains about the unpleasant environment being created by parking that causes street level storefronts being used for garages, with a lack of landscaping around the many surface lots (Ibid.). Within the CBD and Warehouse District, there are ample of surface parking lots that create large gaps between the destinations, distracting the continuous pedestrian experience. As the development pattern of the French Quarter (Vieux Carre) and Portland's intense effort to promote a mixed-use development clearly demonstrated, the positive impacts of mixed-use development and street level retail uses seem to be one of the keys to supporting a pedestrian friendly environment.

Provision of Restaurants and Bars. There are not many cities that can compete with New Orleans in terms of entertainment, including restaurants, bars, and night clubs. The area is one of the world's famous tourist destinations, attracting between 27,000 and 30,000 visitors on

any weekday in addition to approximately 122,000 workers and 8,000 residents (ULI-the Urban Land Institute 1998, 20). There are countless of restaurants and bars, and it could be asserted that the city gains more people as it gets later at night especially on weekends. The provision of day and night activities creates a 24-hour downtown encouraging restaurants and bars, obviously the strongest asset of downtown New Orleans along with the numerous cultural events that attract large numbers of visitors. The French Quarter (Vieux Carre), as an example of a 24-hour city, proves the increased sense of safety brought on by the existence of restaurants, bars, night clubs and residences, thus resulting in the promotion of a pedestrian friendly environment of the area.

Promotion of Cultural and Entertainment Uses Through Public Events and Festivals. “New Orleans is an events-driven city” (ULI-the Urban Land Institute 1998, 20). Downtown New Orleans is a city strongly supported by its tourism and hospitality industries, further enhancing the growth of downtown retail activity as well as its economic base. The city attracts more than 8 million visitors annually for conventions and major special events such as the Sugar Bowl, the Jazz and Heritage Festival, the Essence Festival, Mardi Gras, and many other international and local events unique to New Orleans. As the Downtown New Orleans Opportunities of Arts & Culture, Tourism and Entertainment (Figure 3.11) shows the distribution of existing arts, cultural, and tourism activity centers, and entertainment destinations, including museums and theaters are concentrated in this area especially in the French Quarter (Vieux Carre) and Art District. In addition to this concentration of cultural facilities, there are some defined entertainment corridors (Figure 3.11). Bourbon Street in the French Quarter (Vieux Carre) is the most well known for its variety of entertainment comprised of restaurants, bars, and night clubs. Rampart Street between Canal and Esplanade has a concentration of music clubs,

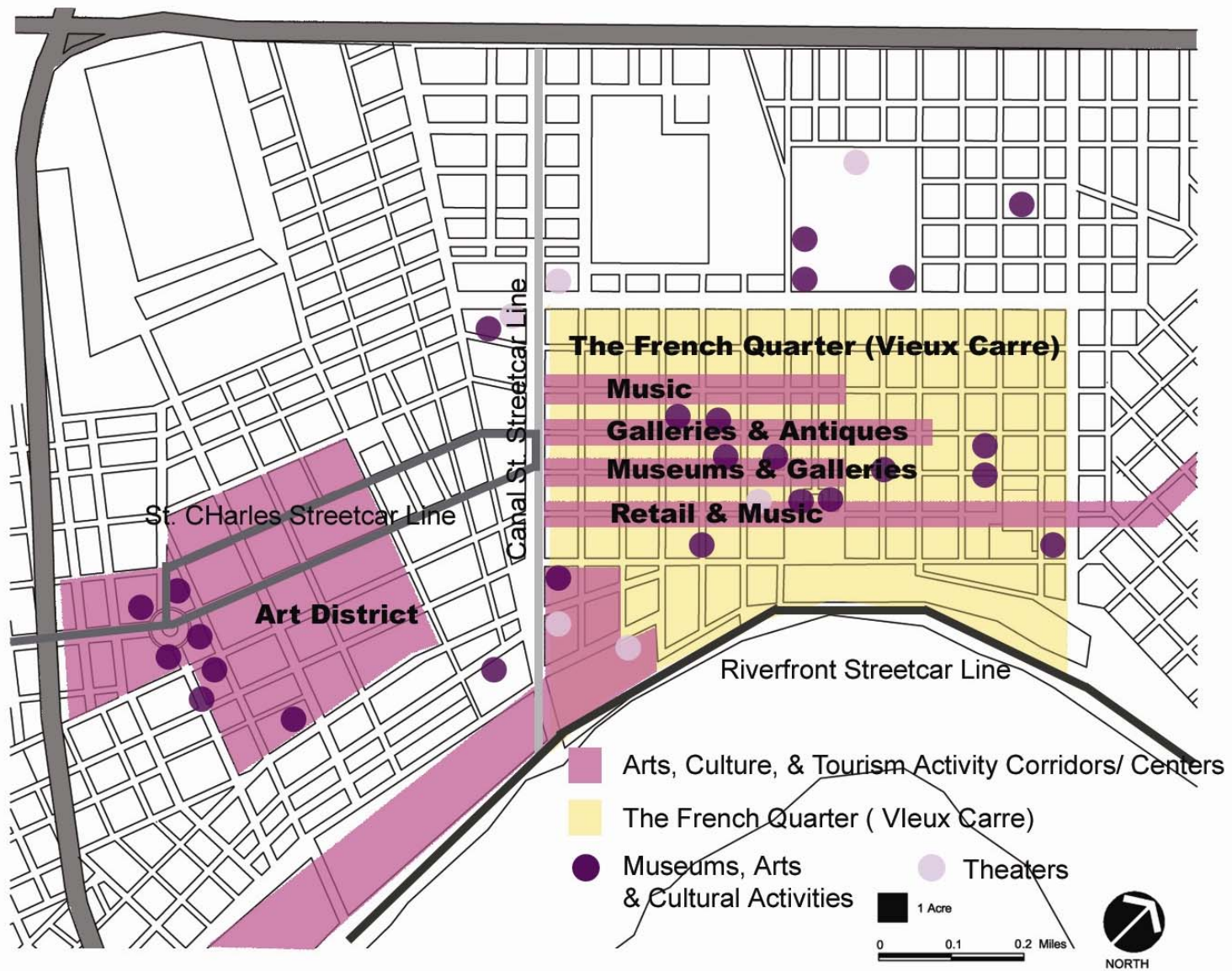


Figure 3.11 Downtown New Orleans Opportunities of Arts & Culture, Tourism and Entertainment Diagram

Decatur Street between Canal and Esplanade is lined with music venues, restaurants, and the French Market (New Orleans City Planning Commission 1999). Along with abundant choices in restaurants and bars, New Orleans reveals its strength in capturing a critical mass needed to support a pedestrian friendly environment in downtown throughout the year by providing countless cultural events and entertainment opportunities.

Provision of Downtown Housing Opportunities. “Downtown New Orleans accommodates the city’s most dense and varying land uses” (New Orleans City Planning Commission 1999). While the area intensively provides for commercial, retail, tourism and business uses, it also provides for residential uses, diversifying the potential downtown users. Currently, the area contains 5,762 housing units, and there are approximately 6,500 residents living in the area (Ibid.). A majority of them are living in the historic French Quarter (Vieux Carre) neighborhood with an increasing number of residences in the Warehouse District (ULI-the Urban Land Institute 1998, 19) (Figure 3.12). Compared to downtown Portland who envisages the high priority of increasing the number of residential accommodations in the downtown area to 8,155 total housing units, the housing supply in downtown New Orleans seems to be less than what it could be, especially if one considers its size which is almost twice as large as that of Portland. In New Orleans “New residential construction activity in the region was less than 10 % in the mid-1990s” (Ibid., 19). There have been several individually constructed projects, including conversion of older warehouses and surplus office space, but “these tended to be small and to add relatively few units to the city’s housing inventory” (Ibid., 19). With continuing abandonment and the demolition of deteriorated housing stock, the area has resulted in losing residents. According to the 1999 Land Use Plan, there has been a growing interest in residential uses in the CBD, especially on Canal Street where many vacant buildings

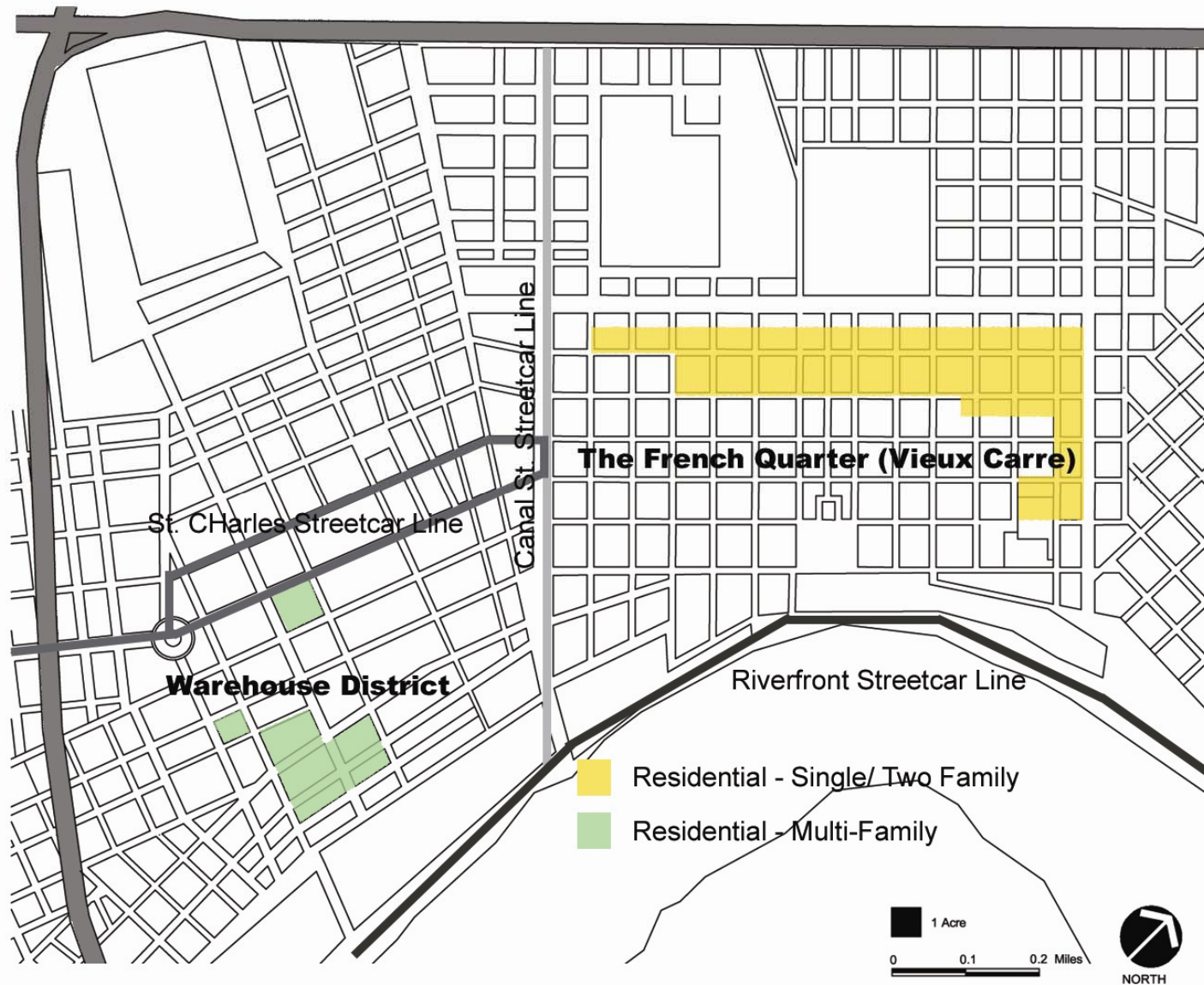


Figure 3.12 Downtown New Orleans Housing Opportunities

have been left since the closing of locally owned department-store chains like Krauss Department Store, Woolworth's, and Maison Blanche (New Orleans City Planning Commission 1999). Although there seems to be some potential areas to be developed for downtown residential uses, in the present condition, the predominance of tourism, commercial, and business uses are competing against the downtown residential function, causing problems for the residents of the area. In an effort to diversify the downtown users and assure the stability of a 24-hour downtown, the housing stock in downtown is crucial. But, the New Orleans case demonstrates the dynamic economic base of tourism rather than residential use to support a 24-hour downtown, ensuring the vitality and stability of the downtown population, thereby fostering the pedestrian friendly environment in downtown.

Although some components exhibited weakness, overall, the all components that are discussed are working together, serving to create a variety of destinations, and activities thereby generating and maintaining a critical mass in downtown New Orleans. The key is to ensure the balance between these diverse uses, including commercial, retail, tourism, business, and residential uses, thus capturing the large populations necessary to support a pedestrian friendly environment in downtown.

Accessibility – Provide Efficient and Convenient Access to Downtown

Because “New Orleans is a city founded on the idea of transportation and its prosperity” (New Orleans City Planning Commission 2004, 1), the accessibility of downtown New Orleans has been developed since the late 1800s when the early trolley system along St. Charles Avenue was still a horse drawn system (Ibid., 18). This historic streetcar system was developed to an electrified streetcar system in 1893, and had been further increased its usage by the World War II, providing nearly every neighborhood of New Orleans with an access at that time (Ibid., 18).

With the emergence of private automobile dependency, the system rapidly declined, and there are now only three fixed lines remaining with another line in planning. Yet this system is playing a critical role in providing efficient and convenient access to and within the downtown areas thereby supporting a pedestrian friendly environment. Along with the city bus system provided by the Regional Transit Authority (RTA), the streetcar system serves to link elements between the districts of the large downtown areas. While the mature public transit system of New Orleans serves to support a pedestrian friendly environment by promoting accessibility to downtown and providing convenience moving around downtown, the provision of a transportation hub and sufficient parking facilities have raised issues, affecting the qualities of pedestrian environment.

Public Transit System. The Regional Transit Authority (RTA), which has one of the highest rates of ridership per capita in the nation, provides an extensive public transit system in the area of New Orleans, including 59 bus routes that provide access to virtually every part of the city, and three fixed-rail streetcar lines, with another line in planning, and annually providing over 54 million riders with access to these public transit systems (New Orleans City Planning Commission 2004, 33-34) (Figure 3.13). New Orleans reveals its uniqueness and strength in its public transit system, which serve to reinforce efficiency and convenient downtown accessibility thus ensuring a critical mass and enhancing the pedestrian friendly environment. Citizens' reliance on public transportation to access jobs accounts for 18.7% in 2000, which is still a small portion, compared to auto reliance, yet it is much greater than the national average of 4.7%. While the bus system has projected some problems, the streetcar lines serves "as both a means of public transit for local residents, students and workers, and a tourist attraction in its own right" (Ibid., 34), providing people with a great efficiency and convenient access to and within

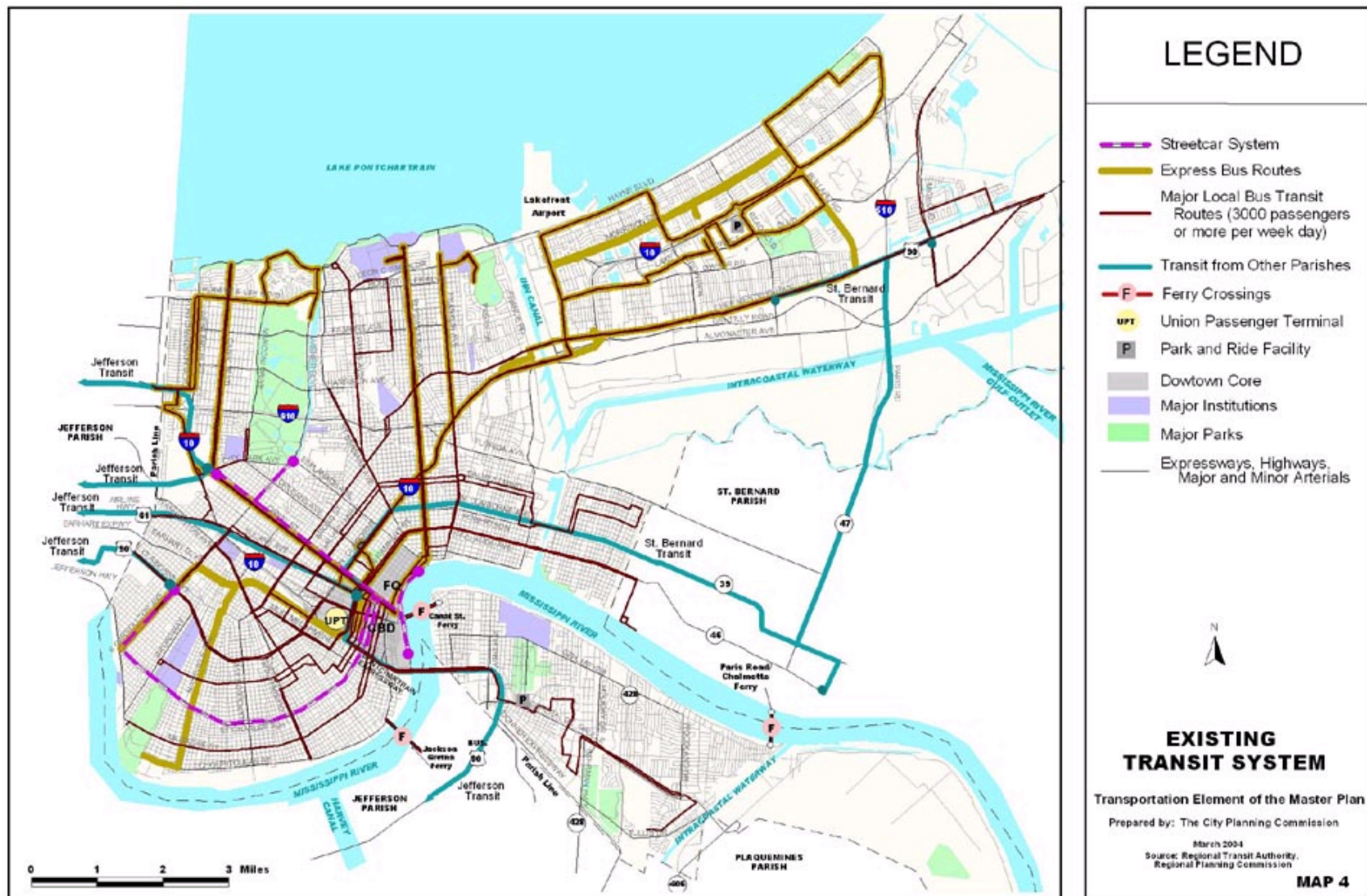


Figure 3.13 City of New Orleans Existing Transit Systems

downtown New Orleans.

Regardless of its high rates of ridership, the bus system has some problems concerned with the image of riders' safety and convenience. "The system is based on the pre-WWII 'core downtown' concept where most transit facilities converge on downtown, and where transfers to other bus routes are made" (Ibid., 33). This can be confusing since the system consists of 59 bus routes converging at Canal Street in the CBD without any structured facilities to accommodate riders. The bus service operates on a regularly scheduled timetable, utilizing 288 buses at peak hours (Ibid., 33). RTA buses seem to provide adequate services, carrying many workers to their CBD or French Quarter jobs, however, the preferred mode of transportation in the area is still private automobiles. The reason seems to be the persistent negative image of the bus service which is unsafe and primarily serves a low-income population, or the inconvenience of transfer points which have created excessive crowds of passengers waiting for multiple buses on a particular area of Canal Street in the CBD.

As opposed, the streetcar system wins more popularity, providing uniqueness to New Orleans as well as efficiency and convenience particularly in downtown and the adjacent areas. The three existing lines are the St. Charles Avenue Streetcar, the Riverfront Streetcar, and the Canal St. Streetcar (Figure 3.14). The St. Charles Avenue Streetcar line, the oldest continuously operated streetcar line in the world, runs from Canal Street upriver along the curvature of St. Charles Avenue to its terminus at the intersection of Carrollton Avenue and Claiborne Avenue, serving as a means of public transit for local residents, students and workers, and tourists (Ibid., 34). The Riverfront Streetcar line runs along the riverfront between the edge of the French quarter at Esplanade Avenue and the Morial Convention Center at John Churchill Chase Street, primarily serving tourists (Ibid., 35). "With completion of the Canal Street Streetcar, there is

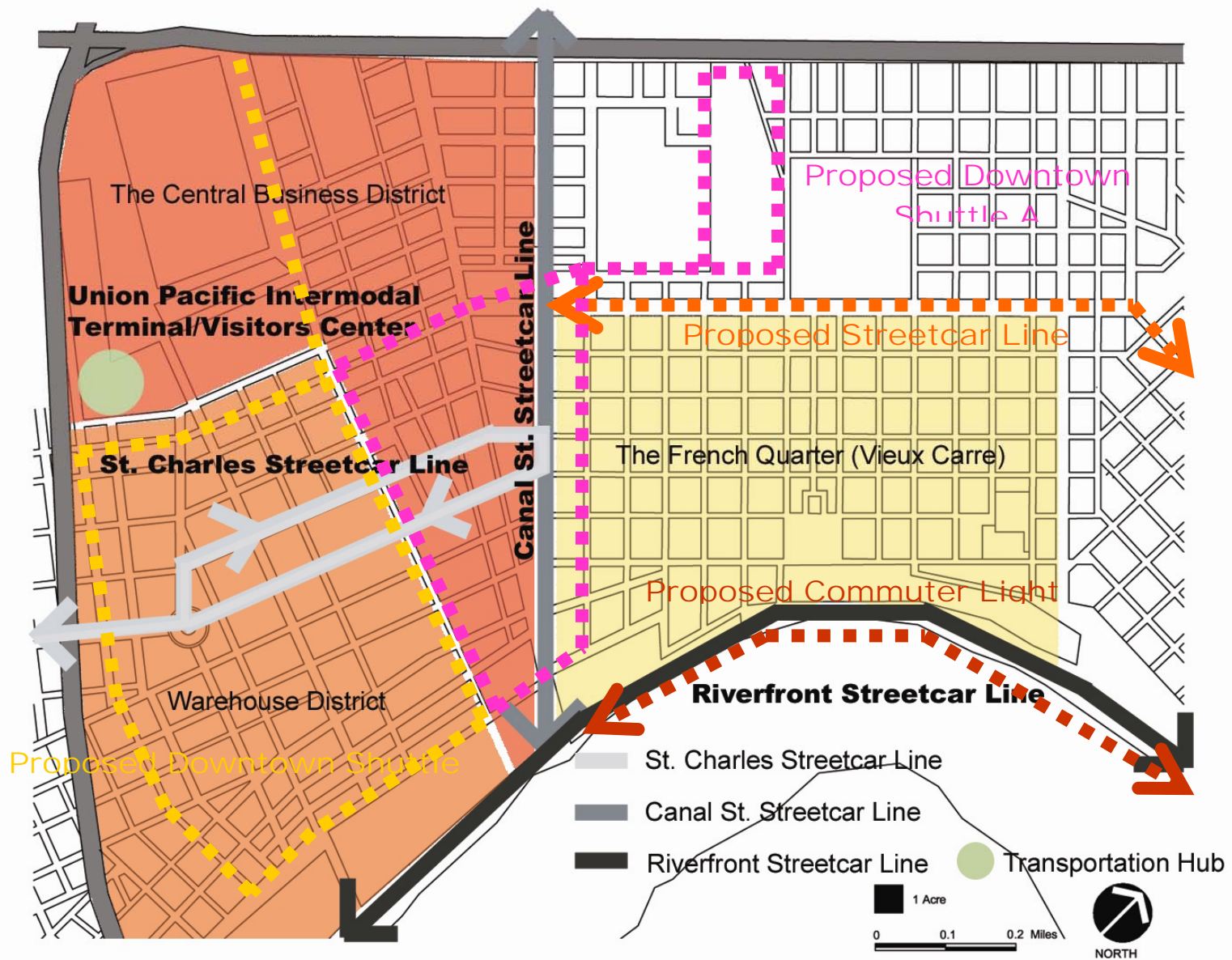


Figure 3.14 Downtown New Orleans Public Transit Systems

now a connection with the Canal St/Carton Spur Streetcar and the St. Charles Avenue Streetcar” (Ibid., 35), increasing convenience navigating downtown. The Canal Street Streetcar line runs from the riverfront to the historic cemeteries at City Park Avenue, replacing the traditional buses on Canal Street and providing passengers with a more convenient way to access the downtown area (Ibid., 35). It is important to note that the streetcar system plays a critical role in the downtown area by linking several distinct areas of downtown and the adjacent areas. It may be surmised that the walkability of the entire downtown area is strongly dependent on this public transit system, and the area could lose its walkability if this supportive transportation system did not exist. In downtown New Orleans, the small pedestrian friendly areas are successfully linked with the streetcar system. While the transit system of Portland serves to support a pedestrian friendly environment by providing a convenient and efficient access to the downtown area, the transit system of New Orleans serves as a means of linking elements that enable people to get around on foot.

In Addition to these existing transit systems, there are currently several possible ongoing projects, including “the extension of the Riverfront Streetcar line, the construction of a light rail train from Armstrong Airport to the CBD, and the construction of the Desire Streetcar line on Rampart Street/ St. Claude Avenue” (Ibid., 214) (Figure 3.14). This positive attitude towards the provision and enhancement of the public transit system will help support the growth of New Orleans as well as help create a more pedestrian friendly environment.

Transportation Hub. The provision of a transportation hub seems to be one of the weakest points of downtown New Orleans’ transportation plan. Therefore the primary mode of access to downtown strongly relies on the automobile, thus creating parking problems, and reducing pedestrian comfort. The improvements made possible by a transportation hub is an

issue addressed in the New Century New Orleans Draft Transportation Plan which needs to be implemented in order to further enhance a pedestrian friendly environment.

Currently, the area contains some potential transportation nodes, yet these are not satisfactorily located and designated. The Union Pacific Intermodal Terminal (UPT), which accommodates both Amtrak train and Greyhound Bus services, is located on the periphery of downtown New Orleans (Figure 3.14). As described in the plan “the station needs strong links to other transportation modes and could be developed into a mixed use hub in that portion of the CBD” (New Orleans City Planning Commission 2004, 57), yet currently the UPT has provided little convenience for passengers because of its location and correlation between other transportation modes. On the riverfront area, adjacent to the French Quarter, there is a bus stop with a small visitor information facility. On Canal Street, adjacent to the riverfront area, is the terminus of several public transit lines. However, none of them are clearly defined as a transportation hub or take advantage of its strategic location, which could potentially increase downtown accessibility, thus enhancing the pedestrian friendly environment.

Parking Facilities. Downtown New Orleans seems to be struggling to meet the existing needs for parking facilities. Due to the extremely high demand of parking spaces created by intensive tourism and entertainment uses as well as businesses, the city has had to devote their precious land to parking spaces. Certainly, the parking issue is deteriorating the pedestrian friendly environment that is created by the city’s unique assets. Compared to downtown Portland, the supply, distribution, and design of parking facilities for downtown New Orleans seems to be unresolved.

According to the New Century New Orleans Draft Transportation Plan, the area contains approximately 51,640 parking spaces (New Orleans City Planning Commission 2004, 43). Of all

parking spaces in the downtown area, 13,660 spaces, or 26%, are supplied by surface parking lots, 35,180 parking spaces, or 68%, are available in parking garages, and the other 2,800 spaces are on-street parking at meters (Ibid., 43). At first glance, the parking supply seems to be abundant and relatively successful in terms of the form of parking facilities, with a majority of parking spaces in parking garages which could be compatible with a healthy pedestrian environment if appropriately designed with careful design features ensuring good environments on the street level. However, the city is struggling with the problem of parking demand which greatly exceeds the available supply in the CBD” (Ibid., 43). The New Orleans Downtown Circulations and Parking Plan (Figure 3.15) shows the existing parking garages, surface parking lots, and proposed mixed-use developments with parking garages (Figure 3.15). The majority of surface parking lots are distributed mainly in the CBD and the Warehouse District, raising concern for the pedestrian environment and comfort. In comparison, the historic neighborhood of the French Quarter (Vieux Carre) has much less surface parking lots. The area is strongly dependent on the several large surface lots along the riverfront. As observed in the New Orleans Downtown Circulations and Parking Plan (Figure 3.15), the locations of many of the large scale, lesser used lots, lie further away from the heart of downtown, and there is other transit systems or pedestrian facilities that would serve to carry those people who commute and park their cars at periphery of downtown to the city’s major destinations are under planning.

There are some weakness in the transportation plan of New Orleans, thus the pedestrian friendly environment, created by the city’s unique assets, are degraded to some extent. However, it is fact that the city of New Orleans has been intensively developing its transportation system, and the New Century New Orleans Draft Transportation Plan exhibits the positive aspects of

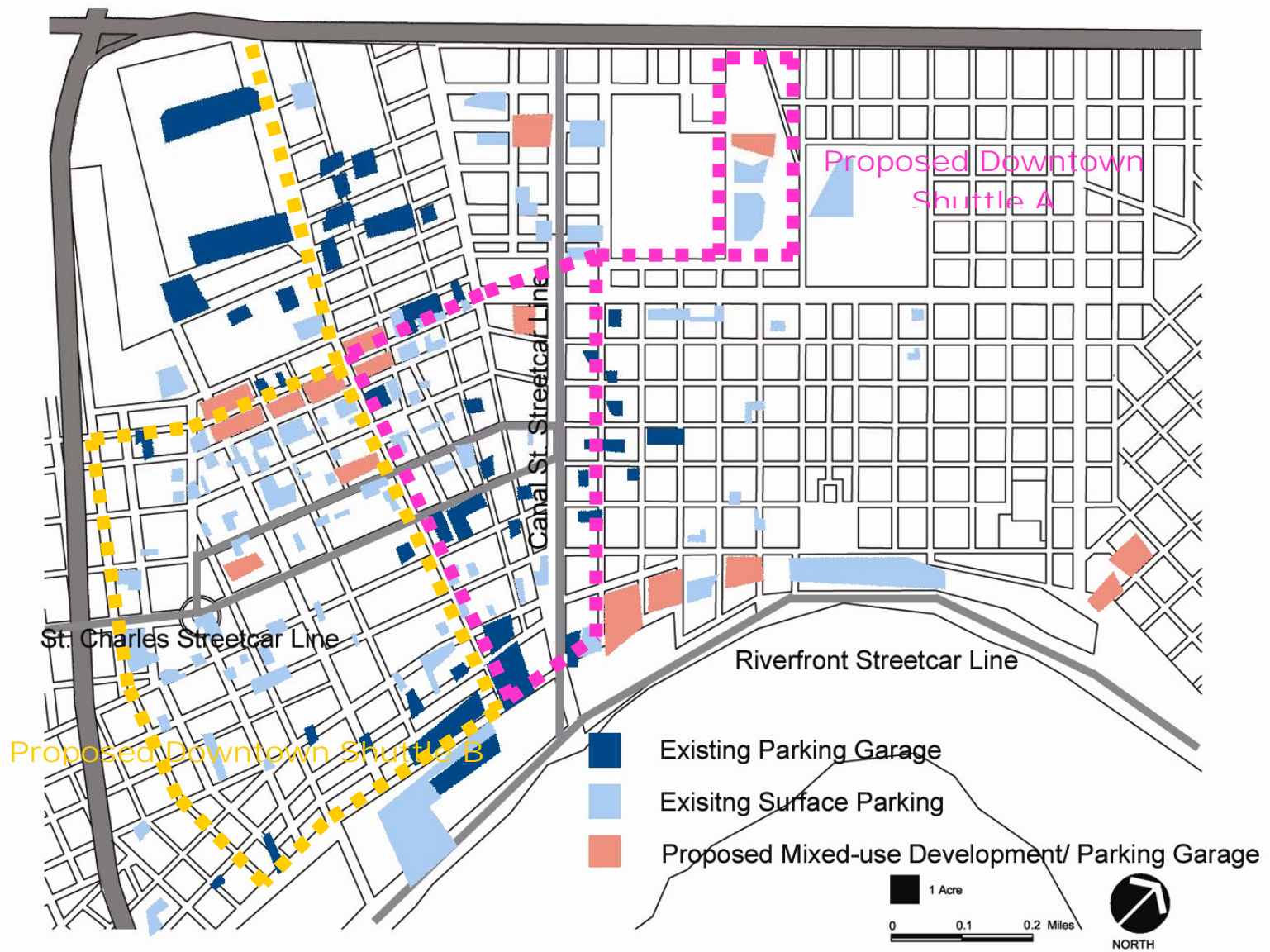


Figure 3.15 Downtown New Orleans Circulations and Parking Plan

future plans and its clear vision of providing efficient and convenient access to downtown with a system that is fully compatible with a pedestrian friendly environment.

Perceptions – Enhance Spatial Factors which Prompt People to Walk

Spatial factors in larger city tend to be the primary negative aspect of a pedestrian friendly environment. The area tends to become larger, because of its economic strength, in order to accommodate larger populations. Usually the original city blocks have been modified to larger sizes that oppose the finely woven compact city blocks of a pedestrian friendly environment, especially with the urban renewal projects of the 1950's and 1960's. High-rise corporate buildings shape the skyline of the city, intimidating people on foot. This phenomenon can be observed in downtown New Orleans especially in the area of CBD, yet the uniqueness of New Orleans still maintain the traditional downtown assets that strongly contribute to a pedestrian friendly environment, especially in the French Quarter. The large gap between historic French Quarter neighborhood and the CBD demonstrates a significant impact upon people's perception created by the distinctive spatial factors of each district, revealing the important components of a successful pedestrian environment in the French Quarter.

Size of the Downtown Area. As was noted, the area of downtown New Orleans is considered to be relatively large, especially if the adjoining areas that are equally important in terms of destinations and activities are added. The area occupies approximately 930 acres which is about double the size of downtown Portland. Compared to the compact size of downtown Portland or downtown Baton Rouge, it is obviously difficult to get around the entire downtown area only on foot. However, each district is a nice compact size, enabling people to walk around within each district. In fact, many small areas that are fully walkable, such as French Quarter and Arts District are linked by streetcars, enabling pedestrians to travel between areas that are

not satisfactorily designed for pedestrians. Therefore, streetcars have received a high reputation by serving as a convenient means of travel between one area to another for people on foot. This seems to be a primary factor in the way downtown New Orleans has supported its pedestrian friendliness. The large size of the downtown area is largely supported by the public transit system and other transportation modes, revealing the importance of its public transit system.

Size of the City Blocks. Due to the fact that downtown New Orleans exhibits a high degree of diversity, it is no surprise that city blocks are not unified. The size of the city blocks varies from a relatively compact size in the French Quarter, to the larger size in the CBD where gigantic high-rise buildings are concentrated. But clearly, the smaller blocks in the French Quarter take much more advantage of their size in an effort to create a pedestrian friendly environment, than the CBD area. The original city blocks can be observed in the historic French Quarter (Vieux Carre) neighborhood. Here approximately 330' square city blocks are laid out with narrow streets parallel to and vertical to the Mississippi River. The blocks are further divided by several small storefronts, creating a series of continuous pedestrian activities and adding a rhythm to movement on the street. On the other hand, the blocks of the CBD are larger, some approximately 500' square. Individual blocks are occupied by a few large buildings or surface parking lots, discouraging pedestrian access and comfort. This comparison proves the importance of city block size, which affects people's perception, and is critical in supporting a pedestrian friendly environment.

Other Elements Serving to Create a Sense of Human Scale. Currently in New Orleans, there are many efforts to support a pedestrian friendly environment through the enhancement of spatial factors which condition people's perception while they travel within the area. The city has developed regulations that serve to ensure continuity and amenities such as

sidewalks which are critical to support a pedestrian friendly environment. “City ordinance designates the adjacent property owner responsible for sidewalk cleanliness, maintenance and repairs” (New Orleans City Planning Commission 2004, 41). “New developments are required to install sidewalks as a part of their overall development plan” (Ibid., 41). In addition, the city owns four pedestrian malls and auto-free zones, which devote the streets exclusively to pedestrians, revealing its priority to pedestrians, including Bourbon Street Pedestrian Mall, Royal Street Pedestrian Mall, Jackson Square Pedestrian Mall, and Lafayette Street Pedestrian Mall. In addition to these efforts, the City Planning Commission (CPC) in the 1980’s, proposed “a system of interconnected sidewalks, public allays, designated ways, and various public spaces and squares” (Ibid., 41). Much importance is emphasized upon accessibility to the riverfront area, “new projects are generally required to preserve at least a fifty foot zone for continuous pedestrian movement along the riverfront” (Ibid, 41). Over the last several decades, many efforts to enhance the pedestrian environment by ensuring continuity and accessibility have been made. CPC and DDD are working together to further enhance pedestrian assets within the city by implementing projects such as the Downtown Sidewalk Enhancement Program, and the development of a comprehensive plan for Canal Street aimed at regaining its vitality and a pedestrian friendly environment that once thrived.

As observed in the analysis of downtown Portland, New Orleans also makes significant efforts to reinforce and enhance its physical assets. Spatial factors that condition people’s perception, prompting people to walk in downtown is a critical element along with the other two key components.

Conclusion

The findings from the case studies of two distinctive downtowns; Portland, Oregon and New Orleans, Louisiana both exhibited the three key components that must exist to foster and support a pedestrian friendly environment. First, the creation of a variety of reasons to go downtown. Second, the provision of efficient and convenient access to downtown. And third, the enhancement of spatial factors which prompt people to walk. While downtown Portland, well known for its well-ordered city planning, exhibited a balance between all three key components, downtown New Orleans exhibited a weakness of in some elements, which serve to degrade the pedestrian environment, yet the city itself has been known as a pedestrian friendly city as well.

Destinations are a critical component in both downtowns, serving as foundations to generate the critical mass necessary to support a pedestrian friendly environment. Strong efforts to create a variety of reasons to go downtown at all times of the year are common to both cities, creating a stability in each downtown. The enhancement of the retail core area and the promotion of mixed-use developments, which encourage ground floor level usages, are observed in downtown Portland. The provision of restaurants and bars, and the promotion of cultural and entertainment uses, through public events and festivals are playing a critical role in creating a vital 24 hour downtown at all times of year in each city. The increasing housing opportunities of downtown Portland also serves to enhance a 24-hour downtown by maintaining people downtown and increasing the sense of security. Regardless of the weakness of some elements exhibited by downtown New Orleans, all these elements serve together to create a rich mixture of uses, thereby generating and maintaining the critical mass necessary to support a pedestrian friendly environment. Accessibility to each downtown is a positive feature of each city.

Downtown Portland exhibited an excellent balance between the extensive public transit systems and enhanced parking facilities in order to ensure convenient and efficient accessibility to downtown areas as well as to enhance the quality of the pedestrian environment. Downtown New Orleans exhibited the strength of its historically important public streetcar transit system, which strongly supports a pedestrian friendly environment by creating linkages between the downtown districts and adjoining areas, as well as providing people with efficient access to downtown. The distinctive transportation plan of each city proved the importance of extensive public transit systems, a central transportation hub, and enhanced parking facilities that create an environment which is compatible to pedestrians. Finally, the third key component, the enhancement of spatial factors which prompt people to walk are exhibited in the physical assets of each city. The human scale spatial arrangements are common in both cities, serving to enhance the pedestrian experiences.

In sum, the elements which constitute a pedestrian friendly environment are verified through case study of these two distinctive cities. These elements can be divided into three main categories. The first group; 1) Enhancement of the Retail Core, 2) Promotion of Mixed-use Developments and Ground Level Retail, 3) Provision of Restaurants and Bars, 4) Promotion of Cultural and Entertainment Uses Through Public Events and Festivals, and 5) Provision of Downtown Housing Opportunities, which all work together to provide a diversity of downtown uses thereby generating the critical mass necessary to support a healthy pedestrian environment. The second group; 6) Provision of Public Transit Systems, 7) Establishment of Central Transportation Hub, and 8) Enhancement of Sufficient Parking Facilities, which all work together to ensure accessibility to downtown and to create an environment that is compatible with pedestrians. And the final group; 9) Size of the Downtown Area, 10) Size of the City

Blocks, and 11) Other Elements Serving to Create a Sense of Human Scale, which condition people's perception of downtown thereby prompting people to walk. These elements combined serve to support a pedestrian friendly environment, resulting in vibrant downtowns. Although each city's success in achieving a pedestrian friendly environment differ to some degree, overall, the findings in each city demonstrate the need to conform to those elements in order to support a pedestrian friendly environment in downtown of any city.

The next chapter analyzes the current downtown plan for Baton Rouge, Louisiana, including their future vision plan, and determines the potentials and potential problems for downtown Baton Rouge in effort to foster a pedestrian friendly environment, by assessing these plans based on the key components established through the case study of Portland and New Orleans. Then, the research will conclude with several suggestions intended to improve current plans on how to best achieve the desired pedestrian environment in downtown Baton Rouge.

Chapter 4

Analysis of Downtown Baton Rouge: Assessing Its Goal of a Pedestrian Friendly Environment

Introduction

The following chapter analyzes Baton Rouge's current downtown plan, including the future vision plans, by applying the criteria which were established in the case studies of both Portland and New Orleans in the preceding chapter. Recommendations will be made to best achieve the desired pedestrian environment in downtown Baton Rouge in the following chapter. The purpose of this chapter is to demonstrate the potential and problems of downtown Baton Rouge. Suggestions to remedy these problems will be offered in order to achieve a pedestrian friendly environment as a means of improving the city center through the promotion of a healthy downtown pedestrian environment. This would help to reinforce the economic vitality of downtown, and its role as a center of business, commercial, cultural and social life. Due to the fact that downtown Baton Rouge is in the early stages of its revitalization process, little literature was available for comparing it to the two cities discussed in the preceding chapter. Therefore, the information gathered was limited and mainly derived in three ways. 1) The review of the first draft of Plan Baton Rouge, which in 1998 was elaborated as "a blueprint for the re-development of downtown Baton Rouge into a 24-hour city that will attract workers, students, tourists, and local residents" (Plan Baton Rouge). The plan is the result of an intensive community involvement processes performed in order to examine the downtown's existing problems and the potential for promoting a pedestrian friendly downtown in the not too distant future. 2) Two interviews were conducted, the first with Mr. Jeffery Fluhr, Assistant Director of DDD (Downtown Development District) and the second with Ms. Elizabeth "Boo" Thomas, Director of Plan Baton Rouge. These interviews were conducted to clarify the projects' present

status and future orientation. 3) And finally, the writer's own site visitations and observations were conducted to reinforce findings from research and to determine the possibility of the creation of a pedestrian friendly environment in downtown Baton Rouge in the foreseeable future.

Thesis Study Area – Downtown Baton Rouge-

General Description

The city of Baton Rouge is Louisiana's state capital located in the south-central portion of the United States (Baton Rouge Downtown Development District). It sits on the east bank of the lower Mississippi River Valley, 230 miles up stream from the Gulf of Mexico, heavily relying on its significance as the forth largest port in the nation (Ibid.). "The greater Baton Rouge consists of East Baton Rouge Parish and eight contiguous parishes..." (Ibid.), within the total area of Baton Rouge, downtown Baton Rouge occupies about 550 acre in the Midwestern area of East Baton Rouge Parish, defined by the Capital Lake on the north, the Mississippi River on the west, and freeways to the south and east (Figure 4.1). As it currently exists it is hard to say that downtown Baton Rouge is fairly walkable, although the area is relatively compact comparable to the size of downtown Portland and the similarity of their geographic context, with both downtown's bordered by a river on one side, freeways to the other two sides, and the fine street grid pattern is forming compact city blocks.

The city of Baton Rouge is rich in culture and history. By the 1810s, under the influence of France, England, and Spain, the city of Baton Rouge was created and became the Louisiana's state capital in 1849 (Baton Rouge City Parish Government). "During the Civil War the capital was relocated several times; however in 1882 the center of government was returned to Baton Rouge" (Ibid.). At the turn of the century, "the city began to develop industrially due to its

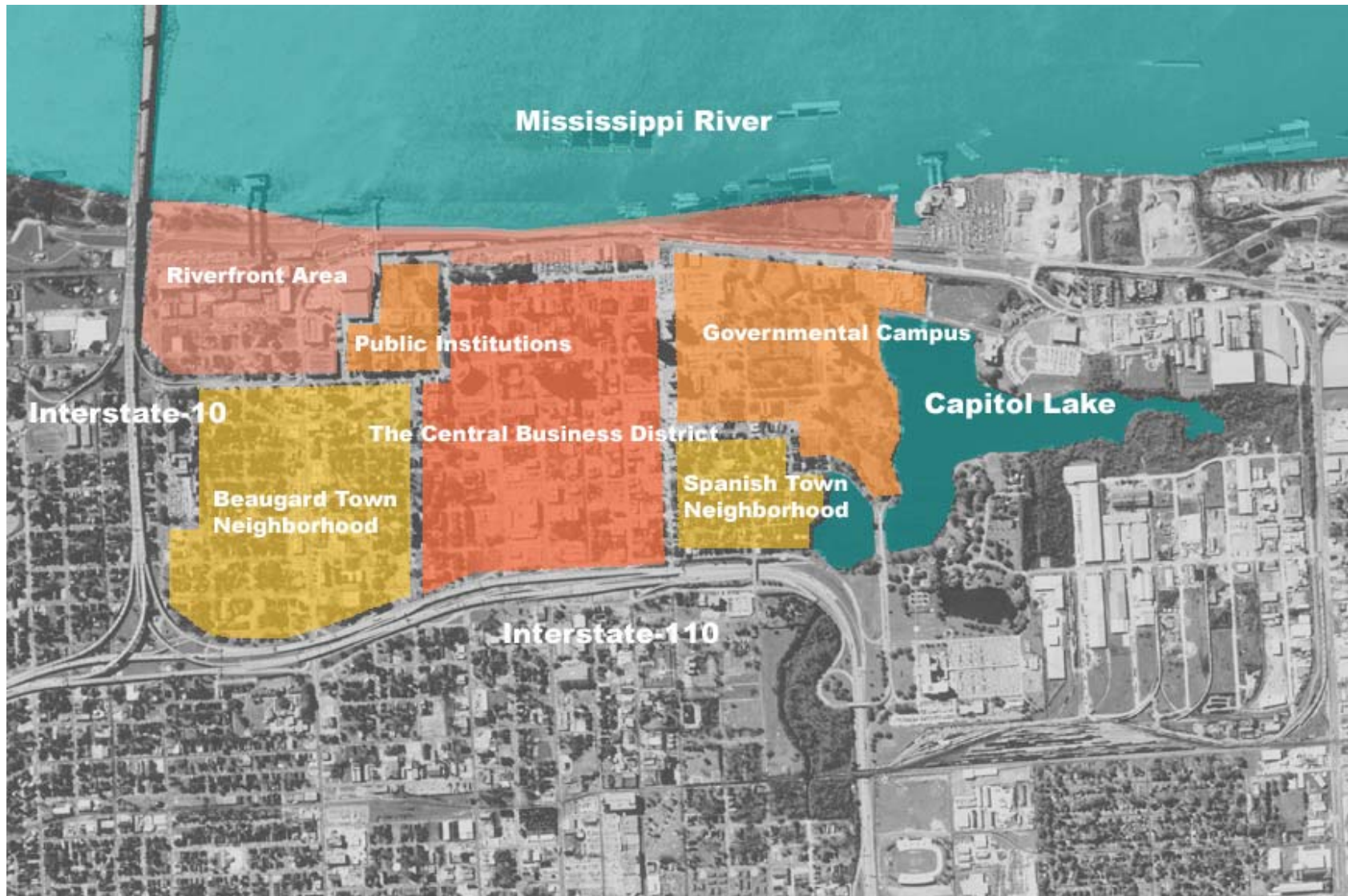


Figure 4.1 Downtown Baton Rouge Geographic Context and District Map

strategic location on the first bluff along the Mississippi River north of the Gulf of Mexico” (Ibid.). Now, downtown Baton Rouge represents the governmental, financial and professional center of the metropolitan area, hosting over 22,000 persons in their permanent places of business, with an additional 100,000 traveling to the area daily to conduct business (Baton Rouge Downtown Development District). In addition, approximately 2,000 residents are living in the downtown area. Over 40,000 students have access to downtown from the conveniently located Louisiana State University and Southern University, creating a vast pool of potential for downtown users (Ibid.).

“Downtown Baton Rouge is comprised of five geographic districts: the riverfront, two historic neighborhoods (Beauregard Town and Spanish Town), the governmental campus, and the Central Business District” (Baton Rouge Downtown Development District) (Figure 4.1). The Downtown Baton Rouge Conceptual Diagram (Figure 4.2) shows the major components of the downtown area. The southern riverfront, known as Catfish Town, is mainly comprised of visitor’s destinations, including hotels, casinos, and the convention center. Just north of this area is dominated by the civic buildings such as the court house, library, city hall and old state capitol. Beauregard town, one of the two historic neighborhoods in downtown, expands the rest of the south east downtown area defined by North Boulevard and St. Ferdinand. The area between North Boulevard and Main Street is considered the Central Business District intended to specialize in entertainment and retail functions as well as businesses. The Central Business District is made up of three primary streets. Centered by the Third Street, a series of retail shops and restaurants, the Fourth Street which mainly contains offices, and the Lafayette Street which has established its street identity as an art district with ongoing art and cultural mixed

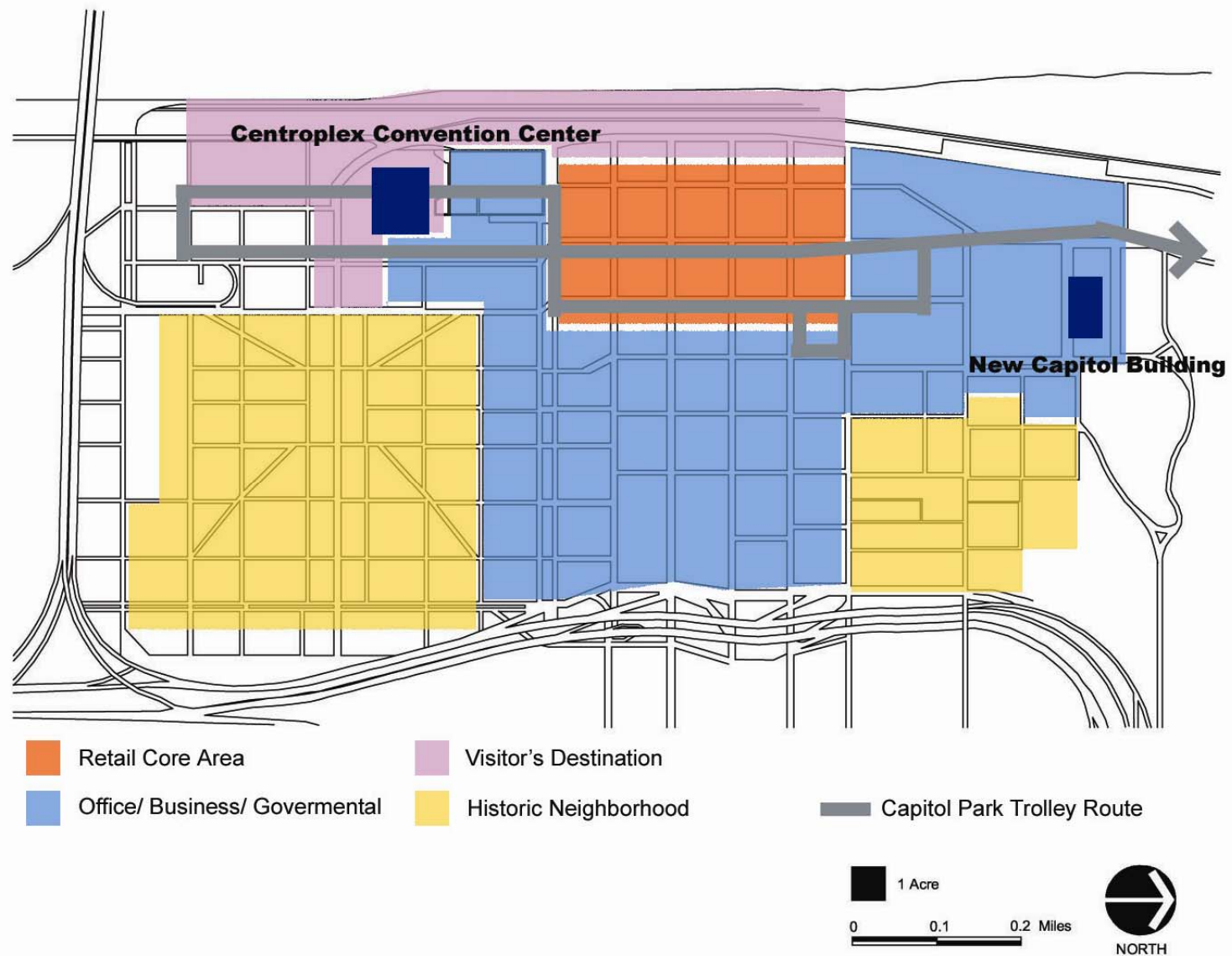


Figure 4.2 Major Elements of Downtown Baton Rouge

developments, complete the core of this area. Another typical yet less desirable feature of the Central Business District are the many vacant storefronts and surface parking lots. Although the linear space along the Riverfront currently contains some museums and Riverfront Plaza, and improvements and new developments are underway, the adjacent high speed traffic of River Road entirely disconnects this area from downtown. The north east section of the Central Business District is mainly occupied by governmental complexes with ample of open spaces around the New State Capitol. Just west of this area, consisting of approximately 15 blocks, is another historic neighborhood called Spanish Town, extending the west edge adjacent to the Interstate. The new transit system within downtown, called Capitol Park Trolley has been implemented for about a year. It operates Monday through Friday from 10:30am till 2:30pm, linking 15 major destinations within downtown, intended to provide for downtown workers and neighborhoods with free access to almost anywhere downtown within 5 minutes walk from the stops (Figure 4.2).

Currently, downtown Baton Rouge is in the middle of revitalization process, thus many of their storefronts and lots are still either vacant or under construction. But the attributes of a downtown revival are surely emerging.

Project History

Over the last 30 years, with the accelerated development of its suburban area, the city of Baton Rouge has experienced the steady decline of its city center, as suburbanization became a national trend and pattern of growth in the United States. Plan Baton Rouge, a group devoted to guiding the development of downtown, has noted that “Downtown Baton Rouge had made a significant progress in the past ten years under the leadership of Davis Rhorer, Executive Director of DDD (Downtown Development District) but still has empty storefronts, vacant

buildings and numerous surface parking lots” (Plan Baton Rouge). The first major footstep of the revitalization effort of downtown Baton Rouge dates back to April of 1997, when Stefanos Polyzoides, one of the founders of the Congress of New Urbanism, came to Baton Rouge and gave a lecture on New Urbanism (Ibid.). “Polyzoides lectures on New Urbanism inspired the Baton Rouge Area Foundation and Forum 35 to investigate the principles of New Urbanism to see how they could be applied to Baton Rouge” (Ibid.). The focus was given to a plan for the redevelopment of downtown, intended to serve as a model to be used in other areas of the city (Ibid.). Duany-Plater Zyberk and Company was hired as the lead consultant with a fund of \$450,000 contributed by The Metro-Council and the State of Louisiana (Ibid.). “Duany Plater-Zyberk assembled a team of experts including Alexander Garvin, the implementation expert, Robert Gibbs, retail consultant, and Walter Kulash, traffic consultant. Elizabeth “Boo” Thomas was hired as part of the consultant team to serve as a liaison between the consultant team and the client (City-Parish, the State of Louisiana, and the Baton Rouge Area Foundation)” (Ibid.). Through a public participatory process, which took place from June 26th to July 2nd of 1998 at the Old State Capitol Building, the Master Plan for downtown Baton Rouge, known as Plan Baton Rouge, was created (Plan Baton Rouge). “The plan is intended to guide the growth already occurring in downtown, to preserve and strengthen the two historic neighborhoods of Spanish Town and Beauregard Town, and to restore the pedestrian character and sense of place of downtown for all of its citizens to enjoy” (Plan Baton Rouge 1998). The plan demonstrates the key principles of New Urbanism including “neighborhoods should be diverse in use and population; communities should be designed for pedestrian and transit use as well as the car; cities and towns should be shaped by physically defined and universally accessible public spaces and community institutions; urban places should be framed by architecture and landscape design

that celebrate local history, climate, ecology and building practice” (Ibid.1998). After 6 years of revitalization efforts under the Plan Baton Rouge, downtown Baton Rouge has been steadily moving forward to creating more destinations and activity, slowly regaining the vitality of a 24-hour city center.

The next section of this chapter examines the potentiality and problems of downtown Baton Rouge in its effort to achieve a desired pedestrian environment by applying the three fundamental elements that must exist to support a pedestrian friendly environment which were established through case studies in the preceding chapter.

Examining the Three Fundamental Elements that Must Exist to Support a Pedestrian Friendly Environment

Destinations – Create a Variety of Reasons to Go to Downtown

New developments and revitalization efforts are strongly visible in downtown Baton Rouge. With an enhancement underway of the retail core area of Third Street and Lafayette Street, redevelopment of the Riverfront area with new housing opportunities, and an effort to renew Catfish Town (Baton Rouge Landings), downtown Baton Rouge is regaining its role as a cultural and entertainment destination, in addition to its business and governmental function.

Enhancement of the Retail Core. As recommended in Plan Baton Rouge, the retail core is situated along Third Street between North Boulevard and Main Street. The adjacent streets of Lafayette Street, characterized by nice human scale structures and an emerging art and cultural function, and Fourth Street an area of concentrated office uses, strengthen the area of Third Street as the retail core of downtown Baton Rouge (Figure 4.3). Many infilling developments are occurring in this area, bringing several new retail establishments including 11 restaurants, antique stores, convenience stores and other services since the execution of Plan Baton Rouge in 1998. The Shaw Center which is located in the corner of North Boulevard and

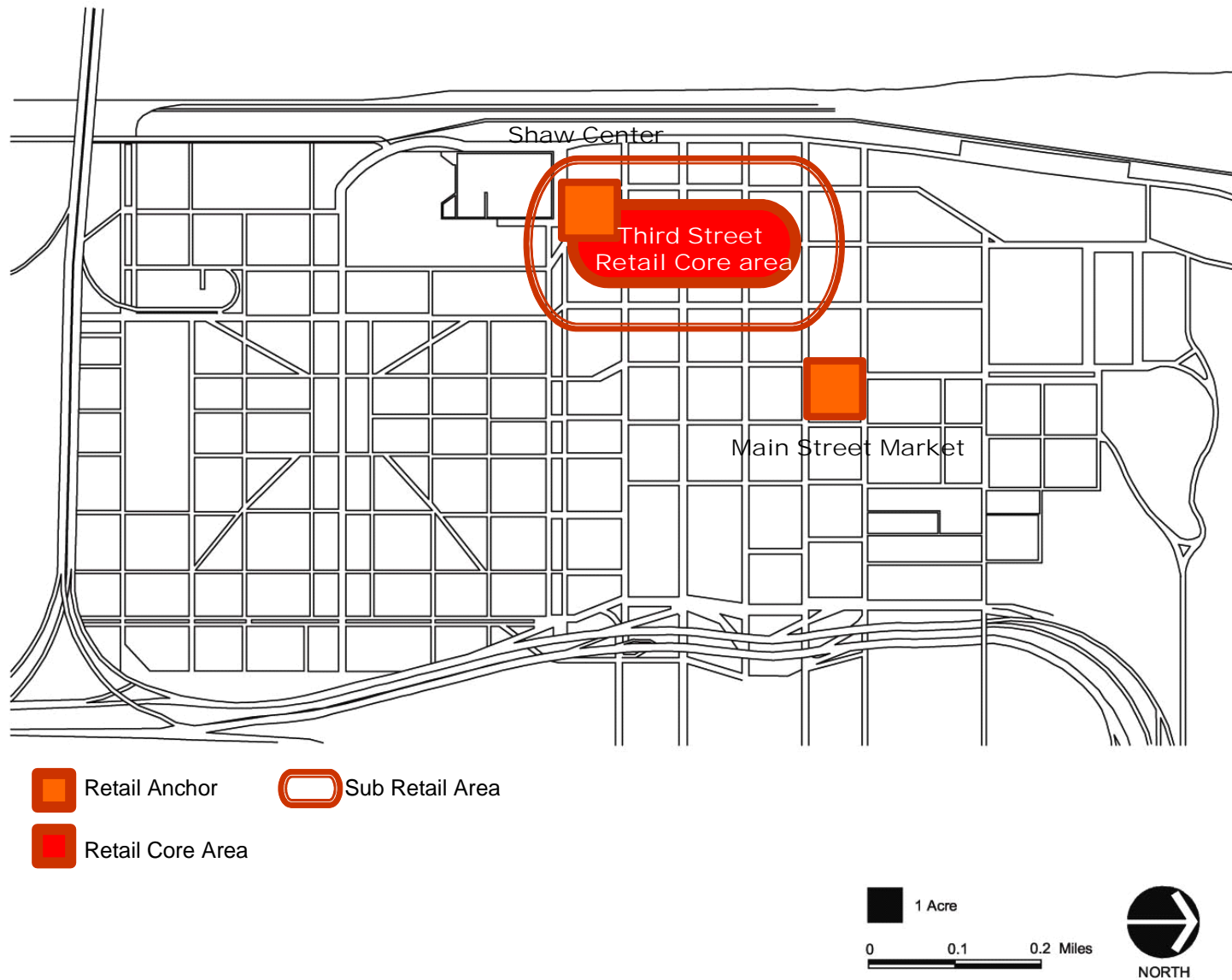


Figure 4.3 Downtown Baton Rouge Retail Uses

Third Street will open in March of 2005, containing a theater, a museum, and retail uses. This new development has the potential to become another retail anchor, along with Main Street Market located on the corner of Fourth Street and Main Street, expanding the retail core area. Development underway on the first four blocks of Lafayette Street such as the renovation of the old Auto Hotel expected to be completed in early 2006, and a new mixed use development River Place Condominiums which is also expected to be completed in the late 2006 will further enhance this area as a retail core.

Implementation of Plan Baton Rouge, largely conducted by the efforts of DDD, and the City Planning Commission has substantially enhanced the retail core area, yet there seems to be a significant problem. According to Ms. Elizabeth "Boo" Thomas, Director of Plan Baton Rouge, many vacant storefronts and surface parking lots have remained, because of the landowners' high expectation for the increased land value in the future, making them become conservative about devoting their land to new development at this point. DDD is trying to promote a low interest loan program which provides new businesses with an added advantage for locating in downtown, yet the landowners have still been slow to make decisions at this point. However, the newly opened Main Street Market, located on the corner of Fourth Street and Main Street seems to be fairly successful, introducing 4 new restaurants and 5 retail stores to the business core. Some concerns have arisen over its function and location as a retail anchor, which needs to be conveniently located and strongly appeal to the critical mass. As a retail anchor, Main Street Market seems to be weak, because it is located further away from the existing retail core area of Third Street, hindering a continuous pedestrian experience (Figure 4.3). The strong connection between the Third Street retail core and Main Street Market is essential to creating a synergy between them. The tenants of Main Street Market are dominated by local individual stores.

Inclusion of national tenants and a good tenant mix in Main Street Market may result in capturing larger population from the region, thereby reinforcing its role as a retail anchor.

Overall, the enhancement of the retail core area has been successfully implemented, energizing the area during the lunch time, and promising the future success of attracting a critical mass in this area. However, the problem of conservativeness of landowners is a crucial problem. Further promotion of advantages for landowners who are willing to devote their land to new development is needed. There are also some improvements needed to best synthesize the strong retail core area desired, such as a connection between Main Street Market and the Third Street retail core area. The future success of this area as a retail core is moving in a positive direction based on the research findings especially if the growth and development continues to occur during the next 10 to 20 years.

Promotion of Mixed-use Developments and Ground Level Retail. Although there are no regulations or ordinances that control the ground level usages of new developments, new projects tend to apply theories of mixed use development, utilizing the ground floor for retail and restaurant uses. Several current developments including; Sheraton Baton Rouge Convention Center, which contains some shops and restaurants on the first floor; Shaw Center, which will contain a museum, a theater and shops; the new parking garage on the corner of Third Street and Convention Street, which will have retail establishments on the ground level underneath the parking; the Auto Hotel renovation, which will contain small shops and restaurants on both the top and bottom floor; and River Place Condominiums, which will surely have retail establishments on the lower level, below the housing units (Figure 4.4). The area located 2 blocks north of the Auto Hotel is now huge surface parking lots, but is anticipated to be developed as mixed use, based on the success of River Place Condominiums, expected to be

completed in the late 2006. It is hard to measure the total amount of mixed use developments and the area devoted to retail establishments due to the fact that downtown Baton Rouge is in its



Figure 4.4 Example of Mixed-use Development, Riverplace Condominiums

early stages of its revitalization process. But according to Ms. Elizabeth "Boo" Thomas currently about 25% of Third Street is estimated to devote their ground level to retail usages. She explains that once all projects being completed within 6 years are finished, the ratio of ground floor retail space will be raised to 90% on Third Street.

The trend of mixed use developments and ground floor retail usages in downtown Baton Rouge indicate a positive trend towards development that ensures the interest and comfort of pedestrians by providing continuous activities on the ground level.

Provision of Restaurants and Bars. As was noted, the area of downtown Baton Rouge has gained 11 new restaurants since 1998, bringing the total to 42 restaurants. To promote downtown dining DDD and the Downtown Merchants Association have created a Restaurants Listing and Downtown Restaurants Open for Breakfast, publications with nicely designed maps which help inform visitors and customers what local restaurants offer and where they are located.

These same groups also promote the Downtown Card Special Program, which offers discounts, give-aways, and special sales to the card holders. In addition to these efforts of DDD and the Downtown Merchants Association, legislation passing the outdoor dining with alcohols policy which enables restaurants and bars to serve foods and alcohol outside of the building was approved in July 2004, bringing more activity outside. This policy can enhance the distinctiveness of downtown highlighting how it differs from suburban shopping malls, thereby attracting more people to downtown.

Although their success at capturing people during lunch on a weekday is evident, it is questionable that those restaurants alone are sufficient catalysts to attract a critical mass at night. Only a handful of the 42 restaurants currently serve dinner. According to Ms. Elizabeth "Boo" Thomas there needs to be at least three nice restaurants that serve dinner as well as lunch and breakfast in order to support a critical mass downtown, thus reinforcing a vitality of 24-hour downtown. Several bars and lounges, such as Red Star, Swamp Mama's, Marrazil, and the just opened SoGo Live are located in downtown, which provide live entertainment at night. Argosy Atrium Lounge, Rhythms, and Skyview Atrium Bar are all located in riverfront casinos, which tend to limit the spillover benefit to surrounding area.

As currently structured downtown restaurants and bars seem to be undermining a positive pedestrian experience in that many restaurants still close before 5pm. But ongoing projects such as Shaw Center, River Place Condominiums, and Third Street Parking Garage will contain restaurants and cafes which have the potential to draw residents and visitors at night.

Promotion of Cultural and Entertainment Uses Through Public Events and Festivals. According to Downtown Market Characteristics by DDD, "It is estimated over three million individuals annually visit downtown Baton Rouge" (Baton Rouge Downtown

Development District). It is quite notable that downtown Baton Rouge captures such a large population, even more than the estimated number of people who visited downtown Portland from outside the region in 1998. Baton Rouge contains quite a few cultural landmarks including; several existing museums such as the USS KIDD Naval Museum, the Fire Fighters Museum, and the Old Arsenal Museum; some museums slated to open in 2005 such as the Louisiana State Museum and the LSU Museum and Performing Arts Center (Shaw Center); theaters, and a planetarium. It also boasts historical landmarks such as the old and new state capitols, the Pentagon Barracks, and the Old Governor's Mansion and Museum (Figure 4.5). The area of the riverfront, in close proximity to the Third Street retail core has several cultural facilities concentrated in the small area, distinguishing the area as a cultural hub. The casinos located along the waterfront provide entertainment for both locals and tourists, however they tend to be very self-sufficient not seeking to encourage momentum from their establishment to others around it.

In addition to the richness of cultural facilities, there are annually over 60 cultural events and festivals, including; a Farmers Market on every Saturday morning, a free after work street concert called Live After Five held almost every Friday, and the monthly Baton Rouge Arts Market. The big annual event, the Mardi Gras parade in February or early March, plays a vital role in attracting visitors from outside of the region as well as the community. River Center Convention, currently under expansion and opening in December 2004, is expected to be a catalyst as well. Beginning in February of 2005, the ABC Championship Tournament of American Bowling Congress at the River Center Convention will bring an estimated 60,000 bowlers from around the world over a five month period.

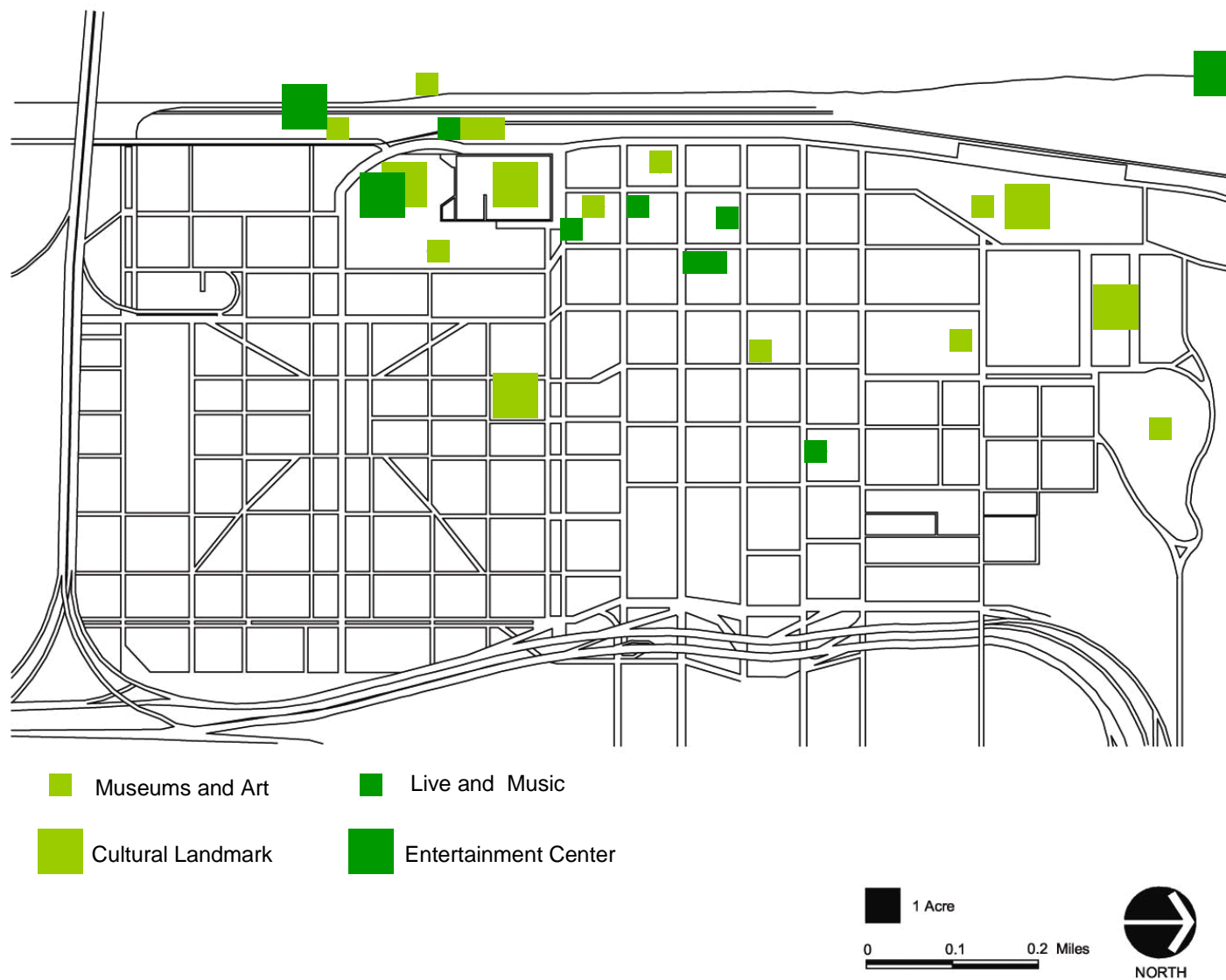


Figure 4.5 Downtown Baton Rouge Opportunities of Arts & Culture, Tourism and Entertainment Diagram

The promotion of culture and entertainment, as well as the events and the festivals seem to be one of the strength of downtown Baton Rouge. Plan Baton Rouge, the DDD staff and the Downtown Merchants Association are working together to improve parking authority and scheduling to best organize and accommodate those multiple events occurring downtown.

Provision of Downtown Housing Opportunities. Currently, there are approximately 2,000 residents, living in the two historic neighborhoods of Beauregard Town and Spanish Town (Baton Rouge Downtown Development District). In addition to the intensive renovation of hundreds of multi- and single-family units in historic neighborhoods, the proposed Seventh Street Corridor in Plan Baton Rouge will link the two distinct neighbors, providing residents with nice comfortable pedestrian access to the downtown core area (Figure 4.6).

“Work is underway to increase the number of residents to 4,000 within the next five years” (Ibid.). Several residential developments are in planning, including; River Place Condominiums a proposed 36 stories high rise building overlooking Mississippi River, containing 99 units and expecting to be completed in late 2006; the second phase of Shaw Center which will contain several housing units on upper levels; another luxury condominium building on the riverfront next to River Place Condominiums; and Richard Preis’ Residential Development, consisting of approximately 6 rental units on Third Street and 3 units on Lafayette Street, will increase the number if residents downtown (Figure 4.6).

The expansion of downtown housing opportunities seems to be following due course, bringing great opportunities to increase the customer base of downtown businesses and to create a sense of safety vital to the success of a pedestrian environment. Yet many developments are still in the planning phase, waiting to see some of the successes and trends of other developments. There are several already existing apartments in the northern downtown area such as River Palms,

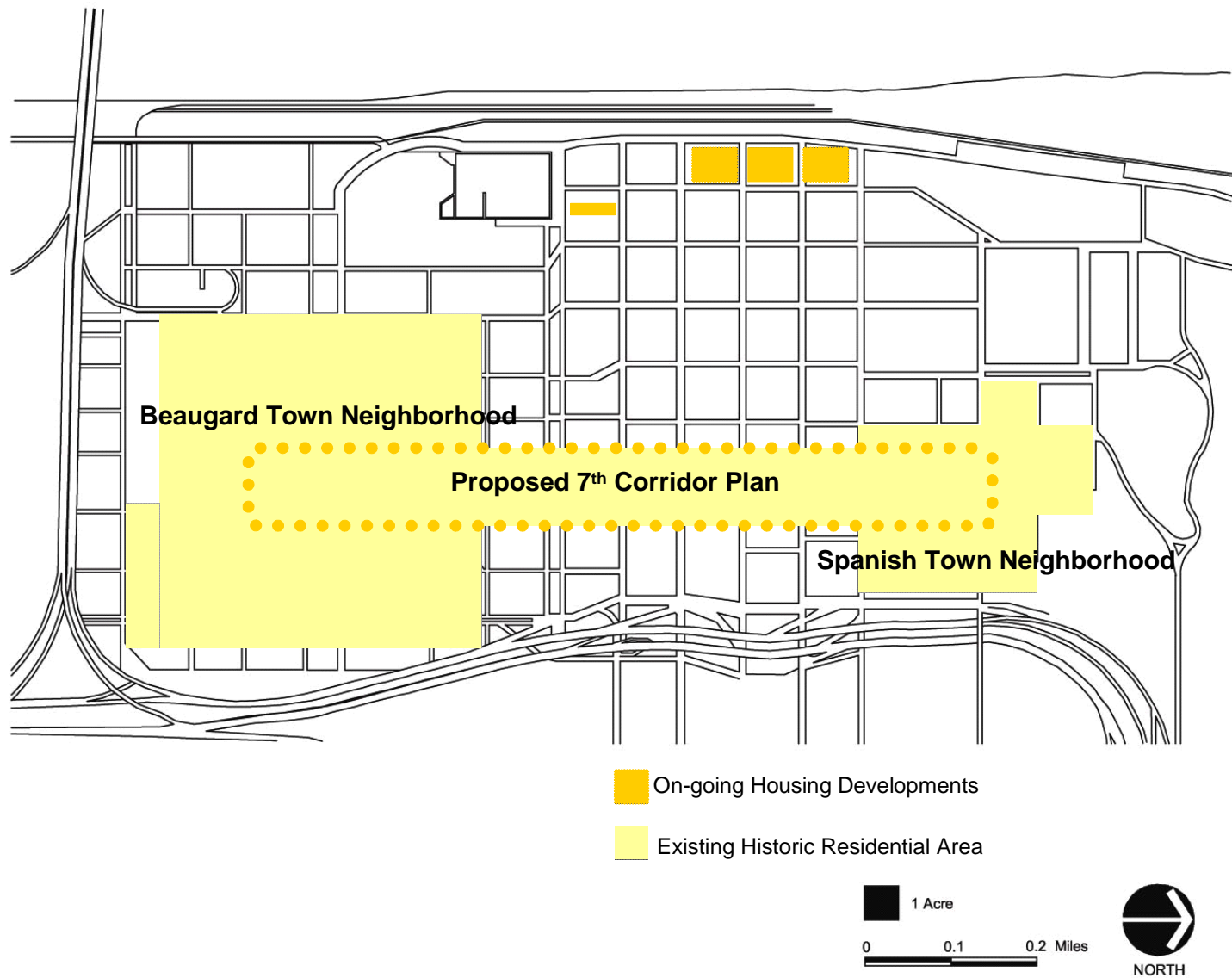


Figure 4.6 Downtown Baton Rouge Housing Opportunities

New Richmond Place Apartments and Lake Shore Place. Well designed pedestrian access from these apartments to the downtown core area is needed in order to promote their market potential. Plan Baton Rouge is currently working on the redevelopment of the area between downtown and the Louisiana State University campus called the Old South Baton Rouge Neighborhood projects (Plan Baton Rouge). With a \$18.6 million grant, “the plan will provide for the removal of the existing public housing buildings (171 units, on two sites) and the development of 126 replacement units, and associated infrastructure development” (Ibid.). This promises increased provision of housing opportunities in close proximity to the downtown area, capturing the large population from the secondary trade segment of the downtown market, thus maintaining a critical mass in downtown which will support a 24-hour downtown and its pedestrian environment.

Overall, the provision of destinations and activities, and the enhancement of downtown aesthetics is underway intended to create reasons to go downtown. Centered by the Third Street retail core area, many new developments are occurring. Together with the existing attractions such as the Casinos, the New State Capitol Parks and several museums, the plan envisages the positive aspects that will capture a critical mass in downtown Baton Rouge.

Accessibility –Provide Efficient and Convenient Access to Downtown

When contrasted against the other two cities studied, the transportation plan of downtown Baton Rouge is immature. Much focus is given to the improvement of traffic flow and parking accommodation while the provision of mass transit systems or an alternative to automobile is considered to be financially unfeasible at this point except for the successfully implemented the transit jitney service called the Capitol Park Trolley.

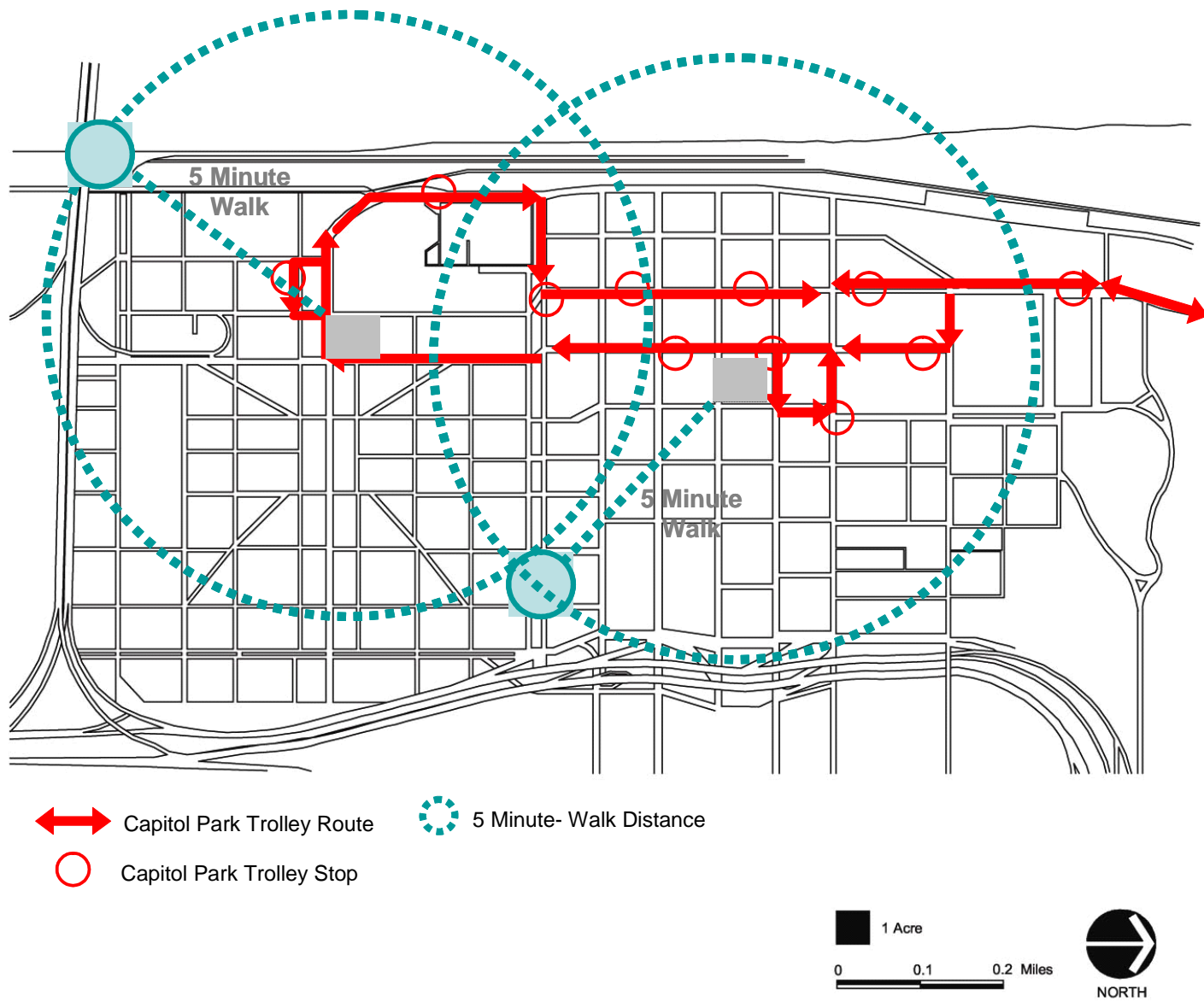


Figure 4.7 Downtown Baton Rouge Capitol Trolley Route

Public Transit System. Capitol Transportation Corporation (CTC), with its terminal located on the periphery of downtown Baton Rouge, provides people with bus services, including 17 primary routes around the Baton Rouge area. Among these bus services, CTC currently operates the route 16 also called Capitol Park Trolley which links 15 major destinations within the downtown area including the retail core of Third Street and the office core of Fourth Street, providing downtown visitors, workers and residents with free access to almost anywhere downtown within a 5 minutes walk from the stops (Figure 4.7). According to Mr. Jeffery Fluhr, Assistant Director of DDD, the new transit jitney service is fairly successful, receiving a good reputation among downtown workers, with considerations of extending the current operation hours of 10:30 am till 2:30 pm during weekdays to the longer hours. The Capitol Park Trolley arrives at stops every 6 minutes. This frequency seems to be one of the key components of its success. CTC has also expanded the Downtown Tiger Transit System which provides people with opportunities to come downtown before and after the LSU home football games for the entertainment provided in the city center (Baton Rouge Downtown Development District).

Following the recommendations of Plan Baton Rouge, the access to downtown Baton Rouge from the peripheral area has been slightly improved, providing people with an opportunity to come downtown without driving. “CTC provides additional bus service downtown along Florida Street (Gold Line) and Highland Road (Purple Line)” (Plan Baton Rouge). These improvements bring the total to four routes coming into downtown from the greater Baton Rouge area, including; Route 46 and 47- Highland (Purple Line) which operates throughout the LSU campus and areas further South in Baton Rouge; Route 44- Florida carries people along the Florida Street between downtown and Cortana Place; Route 14- Downtown runs along Government Street, St. Ferninand Street, and River Road, stopping at the New State Capitol,

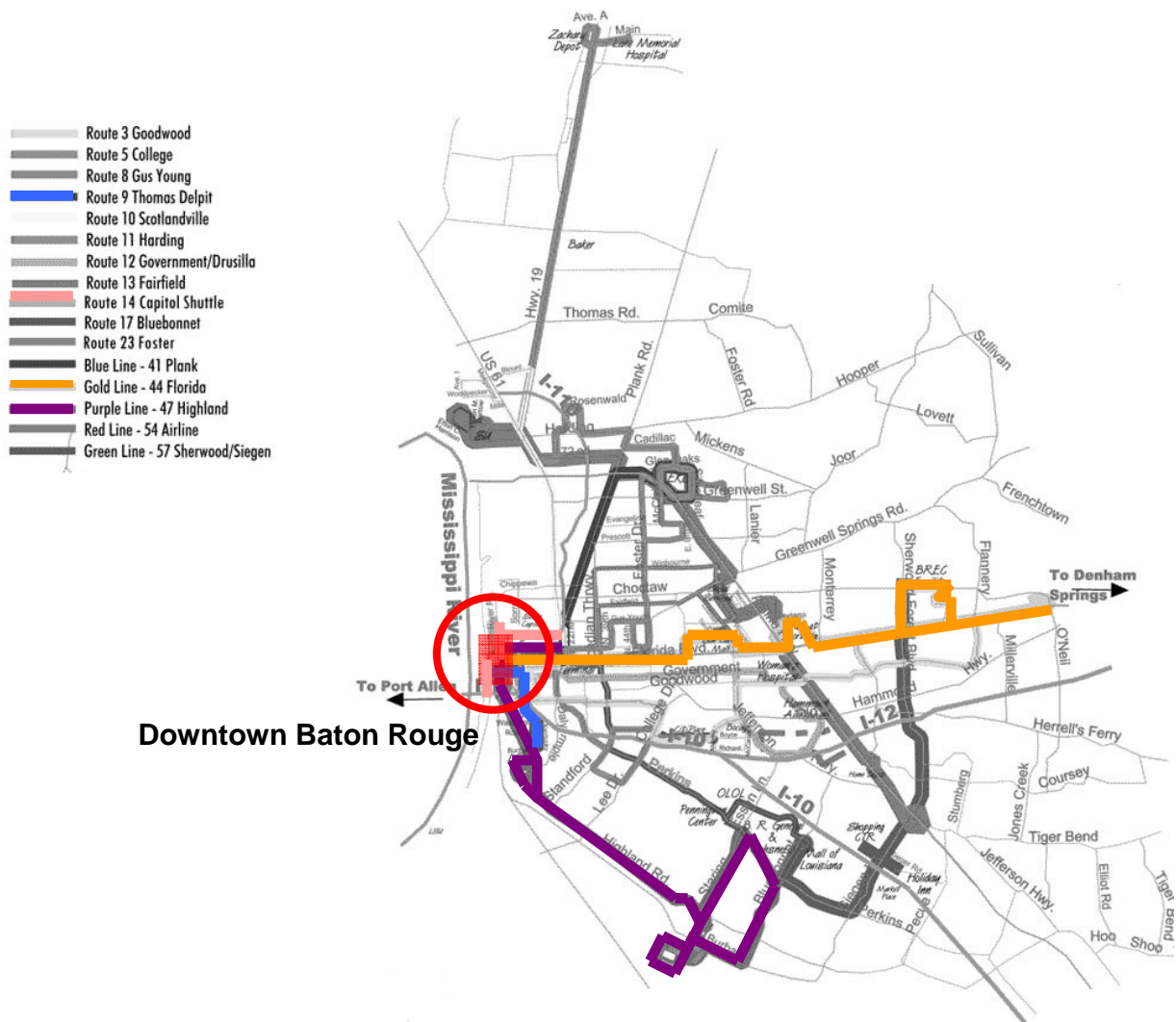


Figure 4.8 CTC Bus Service Routes to Downtown Baton Rouge

Spanish Town Road and Casino Rouge; Route 9- Thomas Delpit which operates through North Street, Third Street, North Boulevard, Forth Street and Main Street, and the neighborhood of Thomas Delpit (Figure 4.8). However, it is hard to say that the CTC bus service fulfills its goal as an alternative to the automobile providing convenience and comfortable access to the downtown area. One of the primary reasons creating inconvenience and underutilization of the public transit system provided by CTC seems to be the location of the bus terminal and the

frequency of service operation. The CTC bus terminal is located along Florida Street but further away from the downtown core area. To get downtown, one has to overcome some unpleasant condition for a person on foot. The structure of the elevated highway created a significant boundary between downtown and adjacent communities. Pedestrian linkage through the elevated highway structure is obviously weak and poorly designed (Figure 4.9). Moreover, Florida Street on which the CTC bus terminal is located is one of the primary arterial roads and the street environment discourages people from walking along it (Figure 4.9).



Figure 4.9 Photos of Florida St. through Interstate-10 toward Downtown Baton Rouge

In addition, the four CTC bus routes that carry people through the downtown area operate every 20 to 30 minutes at the most frequent time of the day. Some routes only operate every 40 to 50 minutes. The frequency of operation on weekends becomes almost hourly. These inconveniences seem to result in making the CTC bus services being restrained their full potential to become a more popular and effective way to access to downtown, and as an alternative to the automobile.

Plan Baton Rouge recommends further study to identify the potential market for a Baton Rouge Light Rail which will potentially connect the Baton Rouge Airport, Southern University, downtown Baton Rouge, and the northern fringes of LSU's campus by utilizing the railroad tracks running along the riverfront and through downtown (Plan Baton Rouge 1998). Through meetings with industrial plants to enlist their cooperation and participation on this light rail project, the Baton Rouge Downtown Transportation Plan concluded that "there is potential for a light rail system to connect Downtown to other activity areas but this potential can only be realized if the transit system is part of the long-range vision for Baton Rouge which includes transit as an alternative to highway access" (Ibid.1998). In addition, Plan Baton Rouge recognizes that Baton Rouge will eventually restore the regional rail service to important supporting towns and cities. The Louisiana DOTD completed an extensive study of the feasibility of restoring passenger rail service to Baton Rouge and examined the possibilities for intercity rail connections between Baton Rouge and New Orleans (Ibid.1998). "The study identified a demand for potential commuter travel that could captured by a passenger rail service" (Ibid.1998). However, according to Ms. Elizabeth "Boo" Thomas these two transit systems are not financially feasible at this point, and will take at least 20 years to be implemented.

While the transit system within downtown was fully improved with the implementation of the Capitol Park Trolley, only the minor improvements have been done to provide better access from the area of greater Baton Rouge as well as the region to downtown. Considering the fact that light rails and regional rail services are both financially unfeasible at this time, a remedy for the lack of alternatives to automobile to access to downtown is necessary. Improvement of CTC bus service routes and frequency of operation, and relocation of the transit hub in the

downtown core area could provide people who use those public transit systems with further convenience and comfort. Considering the fact that there are over 40,000 students living in the contiguous areas of downtown, the CTC bus can target bringing students to downtown by improved services.

Transportation Hub. As already noted, the Capitol Transportation Corporation (CTC) terminal is located on the periphery of downtown area. The Greyhound bus terminal is also located on the periphery of the downtown area, along Florida Boulevard which is about five blocks west of the CTC bus terminal. Obviously, downtown Baton Rouge currently lacks a central transportation hub. But Mr. Jeffery Fluhr explains there is the possibility to locate a transportation hub in the riverfront area in conjunction with upgrading the Riverfront Plaza. In fact, the most recent plan of Downtown Visitors' Amenity Plan by DDD, Washer Hill & Lipscomb Architects, Eskew+Dumez+Ripple, and Reich Associates indicates a proposed Riverfront Transit Center adjacent to the Riverfront Plaza, existing Planetarium and the LASM museum (Figure 4.10). Although a concrete plan for this Riverfront Transit Center is still obscure, the Capital Region Planning Commission (CPRC) and CTC seem to be enthusiastic with the opportunity provided by this project as well as its impact in improving the public transit system.



Figure 4.10 An Image of Riverfront Transit Center

Parking Facilities. Regardless of revitalization efforts, the sea of surface parking lots still overwhelms the image of the downtown Baton Rouge. According to Plan Baton Rouge, “A majority of the surface parking lots are the result of buildings that were razed to provide parking for the office high-rises constructed in the 1950’s and 1960’s” (Plan Baton Rouge 1998). Provision and enhancement of parking facilities are frequently discussed in Plan Baton Rouge. The plan generally envisages the promotion of on-site and on-street parking lots and parking garages which will be compatible with pedestrian comfort if they are properly planned and carefully designed with features that create human scale intimacy especially in areas facing to the streets.

Currently there are a total of 5 existing parking garages with 2 proposed garages to provide downtown parking (Figure 4.11). Two of existing parking garages, LaSalle Garage which accommodates 2,000 cars, and Main Street Market Garage which accommodates 2,000 cars are located on Main Street. The design of the Main Street Market Garage seems more successful than LaSalle Garage, because Main Street Market Garage is masked with restaurants and small shops on the ground level, maintaining the continuous interest and activity for people at street level (Figure 4.12). Compared to Main Street Market Garage, LaSalle Garage is less attractive because the ground level is dominated by the YMCA’s sports gym and additional parking spaces tend not to lure people walking on the street (Figure 4.13). In addition to these existing parking garages, a new parking garage on the corner of Third Street and Convention Street is underway, scheduled to be completed in 2005 with the opening of Shaw Center. This garage will accommodate 468 cars, and contain retail shops and restaurants on the lower level. The existing Government Street Parking Garage has been updated by cleaning the stairwells and installing new lighting (Ibid. 1998). In addition to the existing 20,000 on-street parking lots, 168

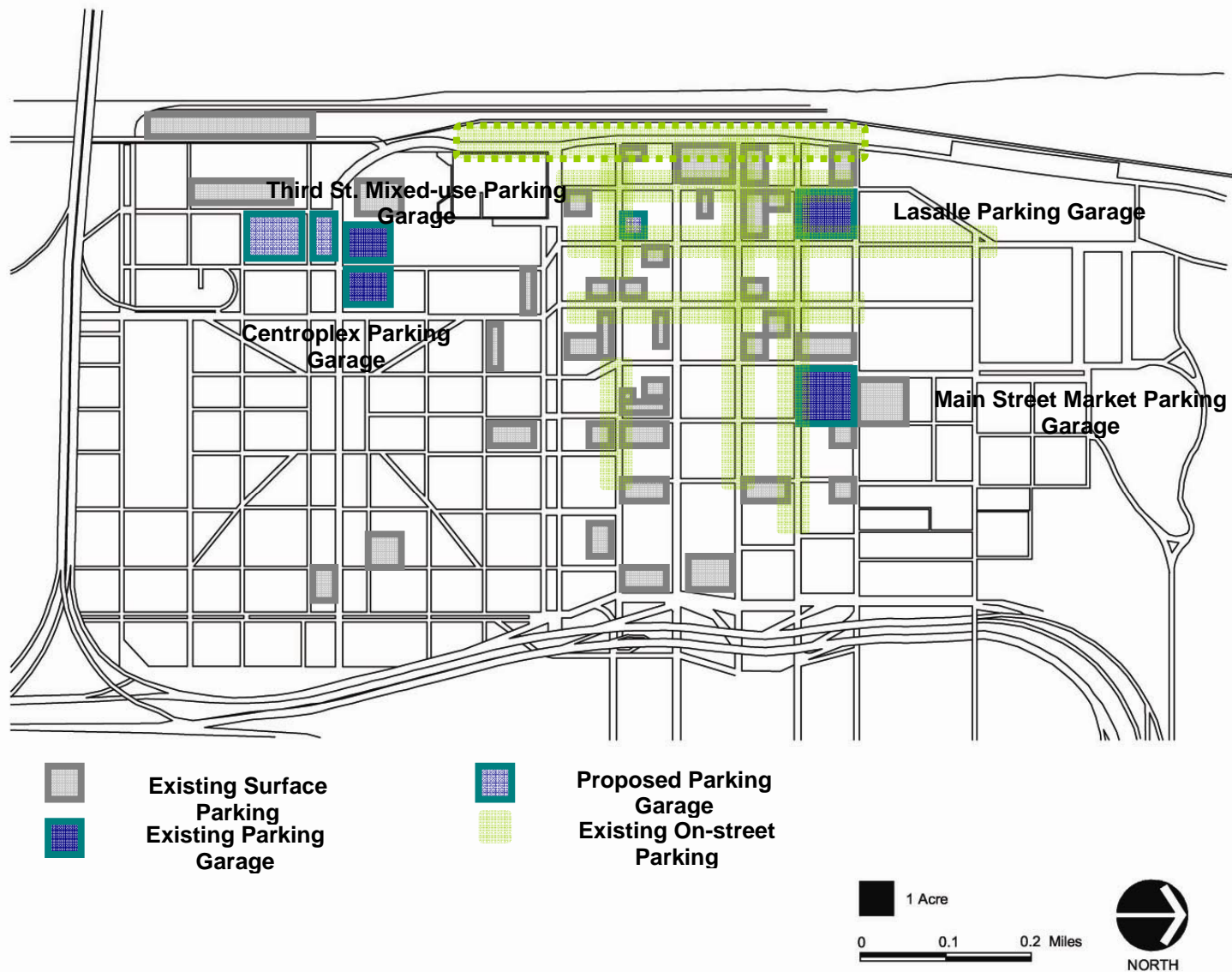


Figure 4.11 Downtown Baton Rouge Parking Diagram



Figure 4.12 Design Features of Main Street Market Garage



Figure 4.13 Design Features LaSalle Garage

new spaces are provided mainly along the retail core area of Third Street, Fourth Street, and Lafayette Street, with 50 additional spaces being provided along River Road with the redesign of River Road. Two new landscape ordinances have just been enacted in order to restrict the creation of new surface parking lots and to enhance the appearance of surface parking lots and streetscape. According to the ordinances, no demolition of building for surface parking lots is

allowed unless there is a special permit. “Parking may not be located between the street and building façade unless screened with a six foot (minimum) masonry wall” (Ibid.1998).

Intensive effort to improve the parking environment and to provide sufficient amount of parking spaces for downtown visitors and shoppers are evident. It seems to be proper that the plan focuses on the improvement of parking facilities due to the fact that the existence of surface parking lots are too dominant providing pedestrians with little comfort or pleasantness. However at this time it is improper to demolish the surface parking lots, because a majority of high-rise buildings are still dependent upon them to provide employee parking. Although DDD is currently conducting a downtown parking study, there is no accurate count of parking spaces. An accurate number of existing parking spaces should be obtained and the parking plan needs to reflect the information derived in order to avoid creating a parking jungle.

Overall, transportation plans, intended to ensure the accessibility of downtown Baton Rouge, are showing signs of achieving their objectives through the implementation of public transit services within the downtown area, improvement of parking facilities, and the enforcement of landscape ordinances to enhance the pedestrian environment. Work on the Mississippi River Levee bike and walking path began in July 2004 with the initial phase linking the LSU campus and downtown Baton Rouge, enabling people to access by walking, jogging or biking (Figure 4.14).

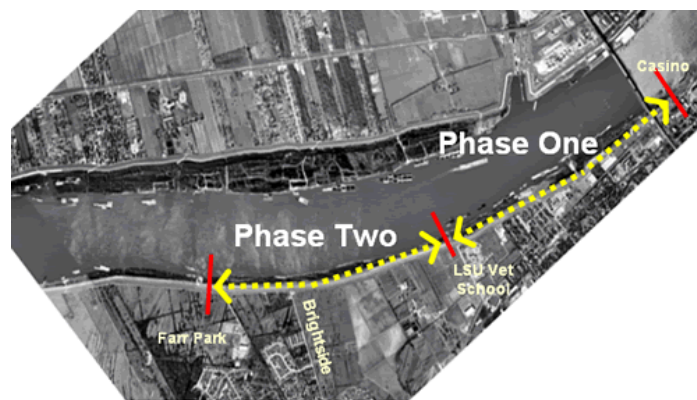


Figure 4.14 Mississippi River Levee Bike and Walking Path

In addition, one of the capitol projects which DDD and Plan Baton Rouge have been focusing on, A Master Plan for the New River District of Baton Rouge prepared by Michael Van Valkenburgh Associates with Dana Nunez Brown Landscape Architect in 2003, demonstrates a strong focus on the transformation of the riverfront area into a vibrant and beautiful urban environment by improvement of pedestrian environments and access from the downtown core area. These on-going projects have strong potential to energize downtown and to enhance its walkability of downtown Baton Rouge in conjunction with the proposed Riverfront Transit Center. Although there are still many weaknesses in the transportation plans, including; the unfeasibility of light rail and regional rail systems; the persistence of surface parking lots, and a series of confusing one-way streets, there is strong potential to improve these weakness if downtown Baton Rouge will continue to provide more destinations and activities, capturing a critical mass which will economically support these transportation infrastructures.

Perceptions –Enhancing Spatial Factors which Prompt People to Walk

Spatial factors which condition people's perception of an area are one of the fundamental elements in achieving a pedestrian friendly environment. Since downtown Baton Rouge is rich in history and culture, and these aspects are still remained in the area, there is the potential to establish a strong pedestrian environment. However, the seas of surface parking lots accompanied with the high-rise buildings create incorrigible problems, discouraging people from walking.

Size of the Downtown Area. As was noted, the area of downtown Baton Rouge is about 550 acres, 8 blocks wide running east-west between the Mississippi River and Interstate 10, about 16 blocks long running north-south between the Capitol Lakes and Interstate 110, comprised of approximately 100 total blocks. The downtown block structure is formed by a

regular grid pattern, creating regular 320-by-320-foot blocks in the area. Nevertheless it is hardly to say that downtown Baton Rouge is fairly walkable, although the area is relatively compact comparable to the size of downtown Portland both sharing a common geographic context with each downtown contained by a river on one side, freeways to the other two sides, and the fine grid pattern forming compact city blocks. Although the sea of surface parking lots and other undesirable elements tends to discourage people from walking, the size of the area itself has the advantage of becoming a pedestrian friendly downtown, as in downtown Portland.

Size of the City Blocks and Street Width. Downtown Baton Rouge consists of relatively compact city blocks and narrow streets. Compared to the fine compact city blocks of Portland, each city blocks of Baton Rouge is approximately 330 ft square, which is relatively compact, but more than and a half times larger than those in Portland. However, 330 ft square can still provide a comfortable human scale experience especially when the blocks are composed of smaller unit storefronts as it primarily is in downtown Baton Rouge. Especially in the retail core area of Third Street and Lafayette Street, where the blocks are divided by several narrow storefronts, providing pedestrians with a series of human scale spaces defined by the storefronts, sidewalks and street amenities such as benches and plants (Figure 4.15).



Figure 4.15 Third St. Narrow Storefronts and Street Amenities

The street widths in the downtown area vary from 53 to 70 feet. The majority of residential streets in historic neighborhoods have approximately 53 feet of the rights of way. The major arterial streets such as Convention Streets, Florida Street, Forth Street, Government Street, and Main Street have 64 to 70 feet of right of way. The retail core area of Third Street and Lafayette Street both have 53 ft narrow streets, providing nice enclosure for pedestrians with relatively low building height and finely woven compact blocks. Contrasting against these intimate scale streets, some streets such as Convention Street, Forth Street, North Boulevard, and Main Street create an overwhelming impression to people on foot (Figure 4.16).



Figure 4.16 View of Fourth Street

Some improvements are needed on these streets such as planting trees which will help create a more human scale built environment. Overall, the street widths seem to be appropriate for the function and can be altered to support a pedestrian friendly city.

Although the characteristics of the composition of blocks and streets differ from area to area and street to street, there are some areas that need to be improved to create a more intimate

scale for pedestrian comfort. The general organization of city blocks and streets has good potential to create the desired pedestrian environment, especially if efforts are made to accommodate pedestrians as well as automobiles.

Building Height and Storefront. According to Mr. Jeffery Fluhr, the average building height in the downtown Baton Rouge area is approximately 14 to 15 stories. This number is way bigger than the building height that one perceives by walking around the area. This average may be increased by several landmark buildings including; the New State Capitol building, the tallest state capitol building in the United States, which is 450 feet tall with 34 floors, One American Place located on Forth Street and North Street which is 24 stories; and Bank One Centre located on Florida Street which is also 24 stories. There is currently no limit on building height in zoning ordinances. The average building height indicated seems to be pretty high, but since both infill and new developments are making efforts to best utilize the ground level for pedestrian activities, it prevents those high-rise buildings from overpowering the pedestrian experience with the immensity of the buildings.

According to Mr. Jeffery Fluhr, the Downtown Storefront Grant Program which provides up to \$2,500 grants for improvements including awnings, table and chairs for sidewalk cafes, signage, window treatments, and restoration of facades has been fairly successful. \$30,000 has already been used in this year with an additional \$20,000 requested.

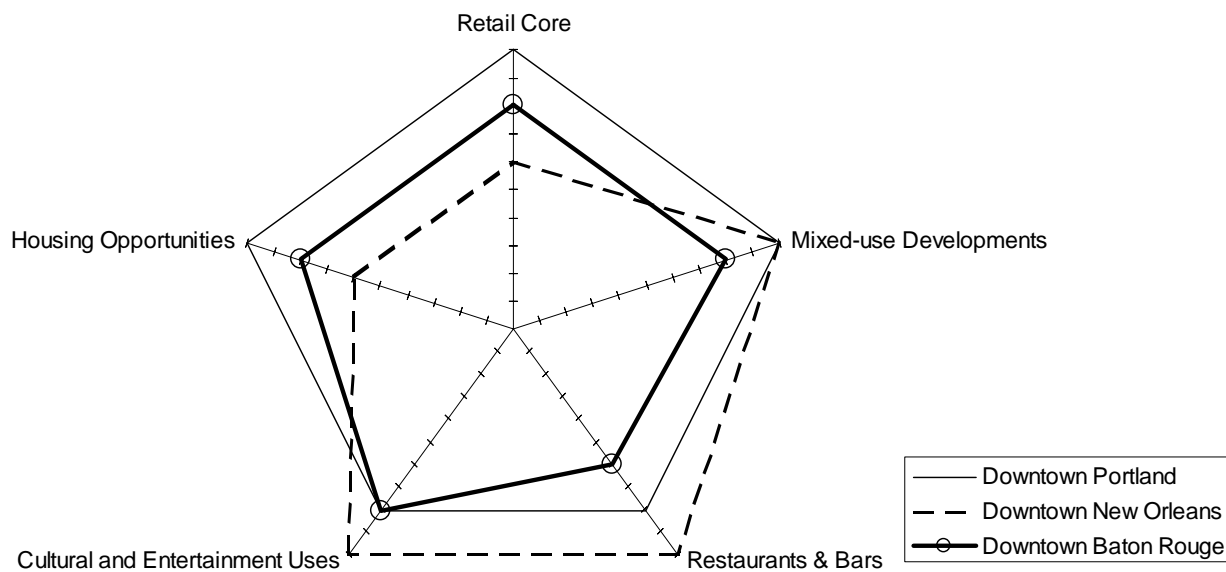
In summary, downtown Baton Rouge still has many physical assets which can be used to reinforce and enhance the pedestrian environment. Along with the Downtown Visitor's Amenity Plan which envisages the enhancement of visitor's amenities by providing signage, lightings, opens paces, and landscaping, the mode of new developments seems to be on the right track, ensuring the comfort of pedestrian experiences. However, the physical assets have been

destroyed by the development of huge surface parking lots accompanying high-rise buildings in the past, reducing the virtue of historic and inherent assets. The future challenges will be to remedy the parking needs of the high-rise buildings with solutions other than surface parking lots in order to rehabilitate the physical assets that downtown Baton Rouge once possessed.

Conclusion

Through the analysis of downtown Baton Rouge, based on the criteria which were established through the case studies of Portland and New Orleans in the preceding chapter, downtown Baton Rouge exhibits the strong potential for achieving a pedestrian friendly environment. Although the results from the analysis of Baton Rouge indicate a weakness in the accessibility, the other two key components of destinations and perceptions demonstrated the positive factors that could potentially support a pedestrian friendly environment in downtown Baton Rouge.

Table 4.1 Evaluations of the Destinations in Three Downtowns



In order to clearly demonstrate the results of the analysis of each city, an evaluation system was established. Based on the analysis of the criteria for the three cities, the success of each criterion was graded ranging from 1 to 5 points referring very poor to very good ratings. The grades were formulated into the graphs to demonstrate which criteria are weaknesses and which are strengths in each city. Table 4.1 through 4.4 show the results of the evaluation of each criterion in downtown Baton Rouge by comparison to other two case study areas. Table 4.1 clearly demonstrates the successes of each downtown in providing destinations in its effort to generate the critical mass necessary to support a pedestrian environment. Downtown Baton Rouge exhibits a balance between all criteria which serve to promote a variety of reasons to go to downtown, proving its potential to capture a critical mass, and to thereby substantially increase the use of pedestrian areas.

Table 4.2 Evaluations of the Accessibility in Three Downtowns

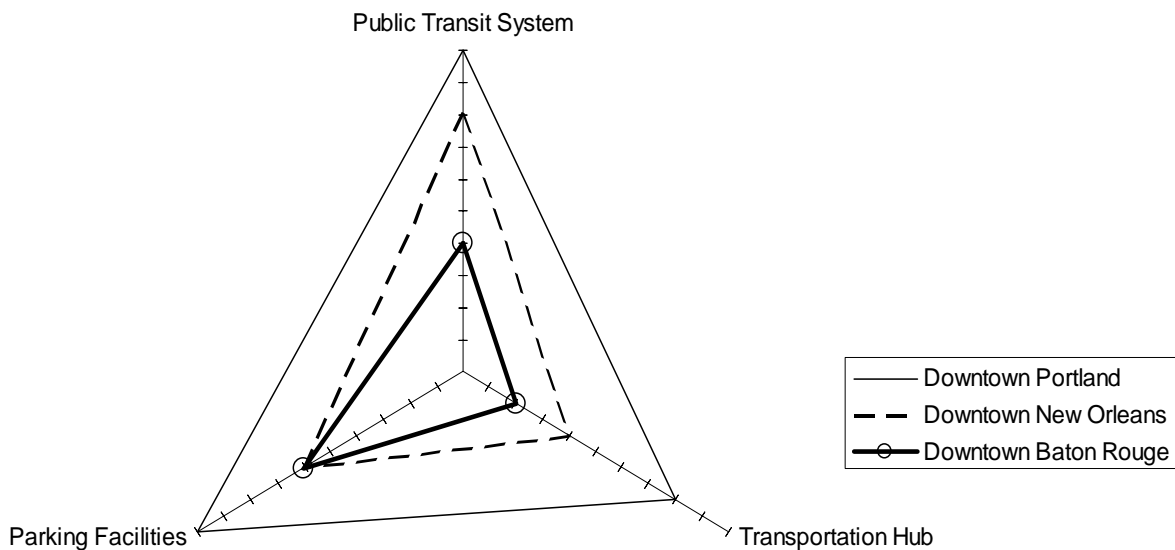
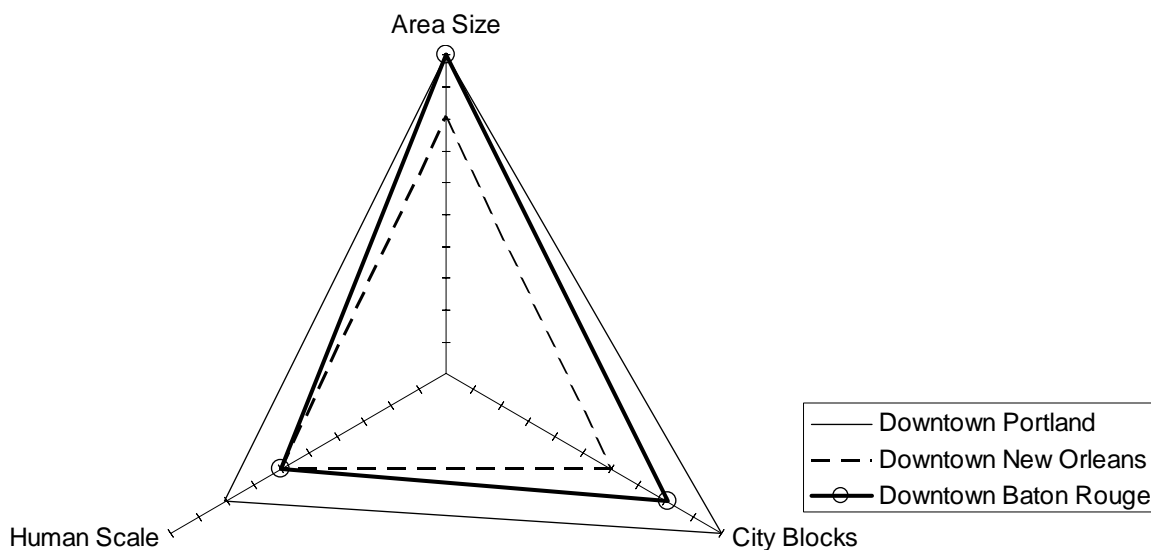


Table 4.2 demonstrates the weakness of downtown Baton Rouge in ensuring efficient and convenient access to downtown, especially when compared with the other two cities which possess mature public transit systems. The improvement of the public transit system and the

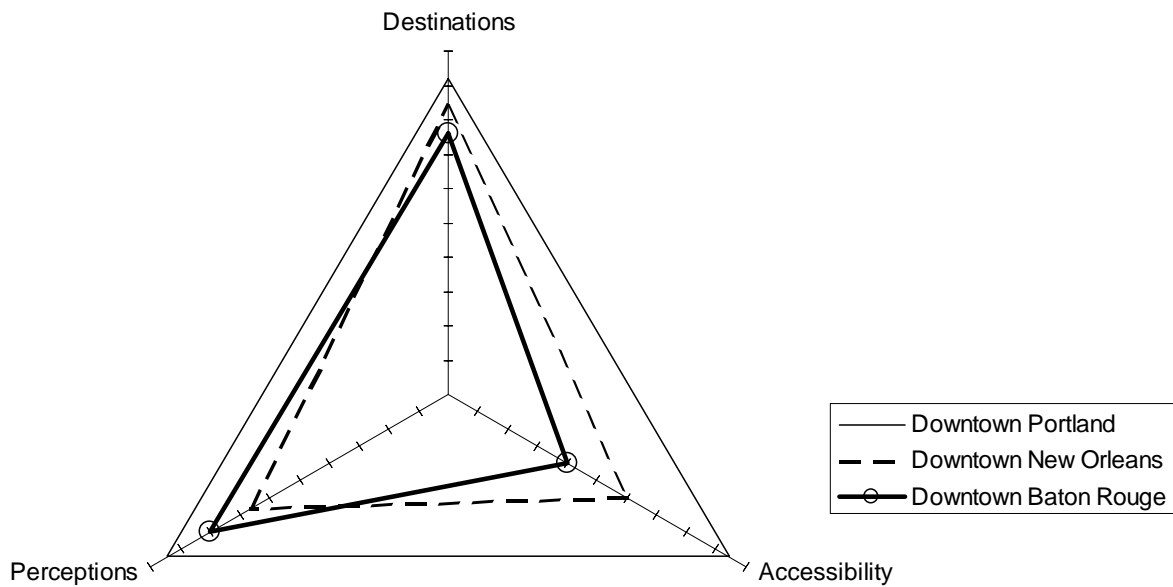
establishment of a central transportation hub that will provide efficient and convenient access to the downtown core area are strongly recommended, thereby promoting the critical mass needed to support a pedestrian friendly environment as well as to enhance the downtown area making it compatible with pedestrians. Table 4.3 demonstrates the physical and psychological assets of each downtown that contribute to the creation of a pedestrian friendly environment. Notably, these results exhibit the high degree of downtown Baton Rouge’s human scale physical assets that enhance the pedestrian environment.

Table 4.3 Evaluations of the Perceptions in Three Downtowns



In summary, the overall results of the analysis of each city are shown in Table 4.4. The three key components of downtown Baton Rouge create an isosceles triangle, revealing its strength in destinations and perceptions, and its weakness in accessibility. By comparison, downtown Portland, which receives wide recognition as a highly walkable city, formed almost a perfect triangle, which represents the evenly balanced success of each key component.

Table 4.4 Evaluations of the Three Key Components in Three Downtowns



Downtown New Orleans, which is known to be relatively pedestrian friendly, formed a triangle which is smaller than that of Portland, revealing both successes and problems in its pedestrian environment. The existing conditions in downtown Baton Rouge exhibit several weaknesses, forming a smaller triangle when compared to the one for Portland, however, development trends and the future direction of downtown Baton Rouge indicates strong potential toward growth of a pedestrian friendly environment. Downtown Baton Rouge is in the middle of its growth, and the results of this analysis have determined that the cumulative efforts of Plan Baton Rouge, DDD, and the City Planning Commission will have a positive impact upon the creation of a pedestrian friendly environment in the future.

The next chapter offers several suggestions on how to further strengthen their plans in an effort to insure that Baton Rouge attains the healthy pedestrian downtown it is seeking.

Chapter 5 Recommendations

Recommendations on how to further strengthen plans efforts that will insure that Baton Rouge attains a healthy pedestrian downtown are offered in this chapter. It stresses the strong need to remedy accessibility to downtown which was demonstrated to be one of the weakest points in downtown Baton Rouge. The recommendations also include several improvements and enhancements that can further promote and intensify the pedestrian friendly environment of the developments that are occurring in downtown Baton Rouge.

First, 1) The improvement of the CTC bus services and its route to target students of Louisiana State University and Southern University, and 2) the implementation of the proposed River Transit Center to create a central transportation hub, are highly recommended in order to reinforce the accessibility to the downtown area from greater Baton Rouge.

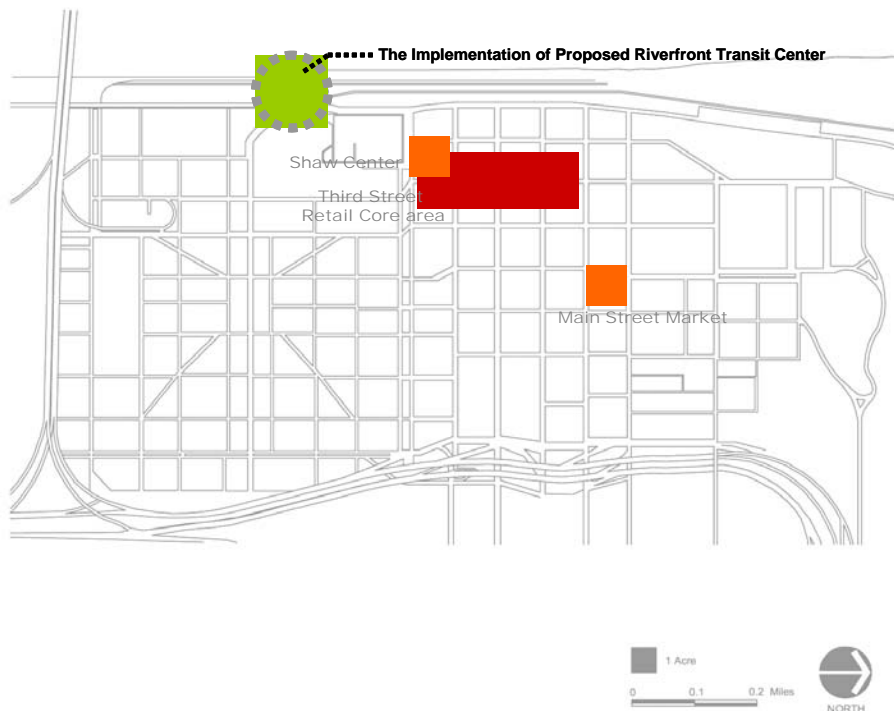


Figure 5.1 Implementation of Proposed Riverfront Transit Center

3) Extending the successfully implemented Capitol Park Trolley's current hours of operation from 10:30 am to 2:30 pm during weekdays to longer hours can facilitate the future demand that is expected with the completion of capital developments such as an expansion of the Centroplex Convention Center and the construction of the Shaw Center within the downtown area.

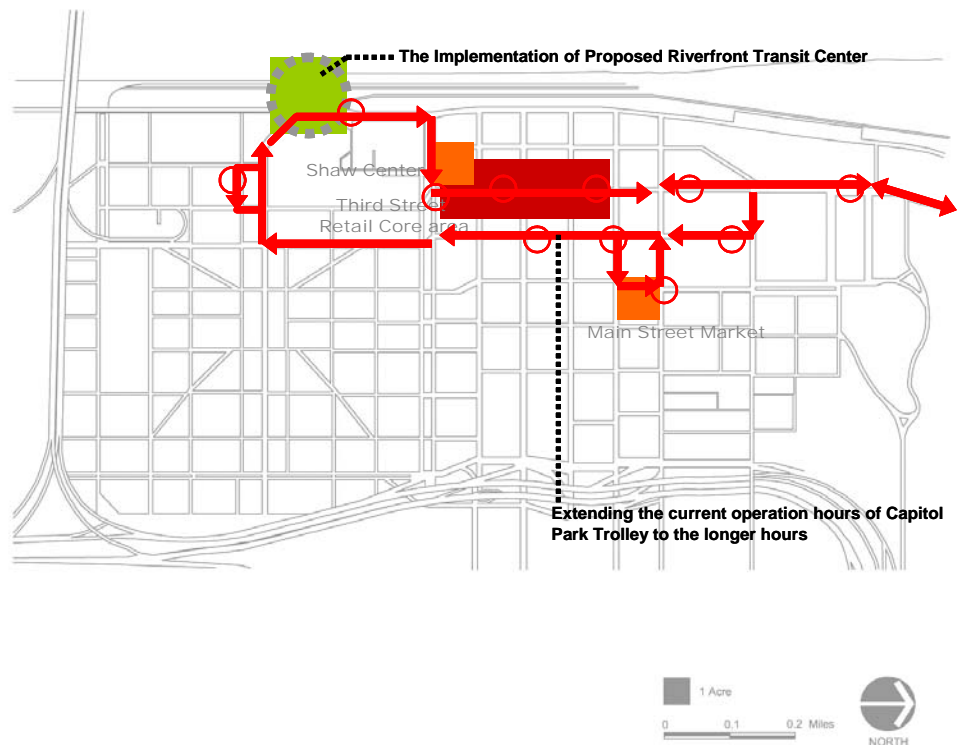


Figure 5.2 Extending the Current Hours of Operation of the Capitol Park Trolley

Second, the emphasis on the pedestrian linkage between the retail core area of Third Street and the retail anchor of the Main Street Market seems to be crucial in order to ensure concentration of the retail activity. 4) The establishment of another sub retail corridor on Main Street, between Third Street and Fifth Street will further strengthen the market synergy of the two shopping areas. This should be accomplished through the promotion of infill developments. 5) To locate another retail anchor on Main Street in conjunction with the retail core area of Third Street will further reinforce the retail activity of Third Street as well as to link the two separated

retail areas of Third and the Main Street Market. 6) Planting trees and providing street amenities on Main Street also would reinforce the pedestrian linkage between these two critical areas.

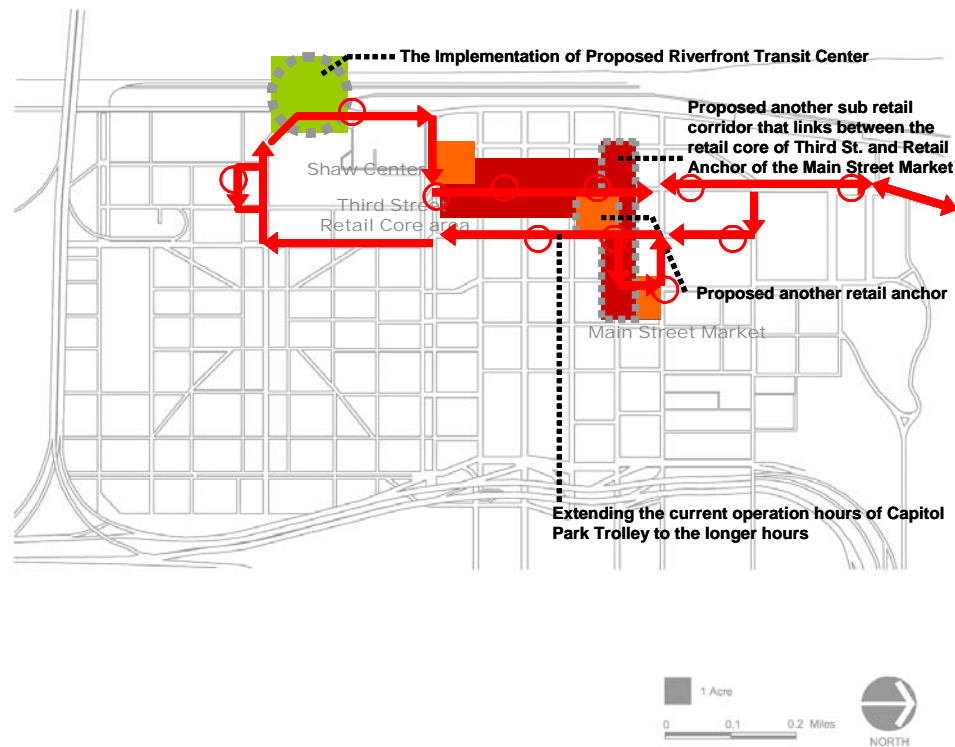


Figure 5.3 Proposed Sub Retail Corridors and a New Retail Anchor on Main Street

Third, diversifying the land uses through promotion of mixed-use development especially along the riverfront area where the several new mixed-use developments have already been occurring and the CBD where the homogeneity of uses needs a remedy for is recommended. 7) The area of the riverfront adjacent to the Third Street retail core area can be defined as another residential district that specializes in both commercial and residential uses by promoting mixed-use developments. This will help to ease the serious problem of existing surface parking lots in the riverfront area by transforming them into the mixed-use developments with the parking garages on the lower level which masked with small retail shops with the residences above. 8) To introduce mixed-use developments in the core of the CBD where the office uses are dominant

and less activity is provided in order to diversify the land uses, and thereby ensuring vitality of the pedestrian environment. 9) The promotion of restaurants and bars which serve dinner is also recommended in an attempt to further reinforce the critical mass after 5pm and during weekends.

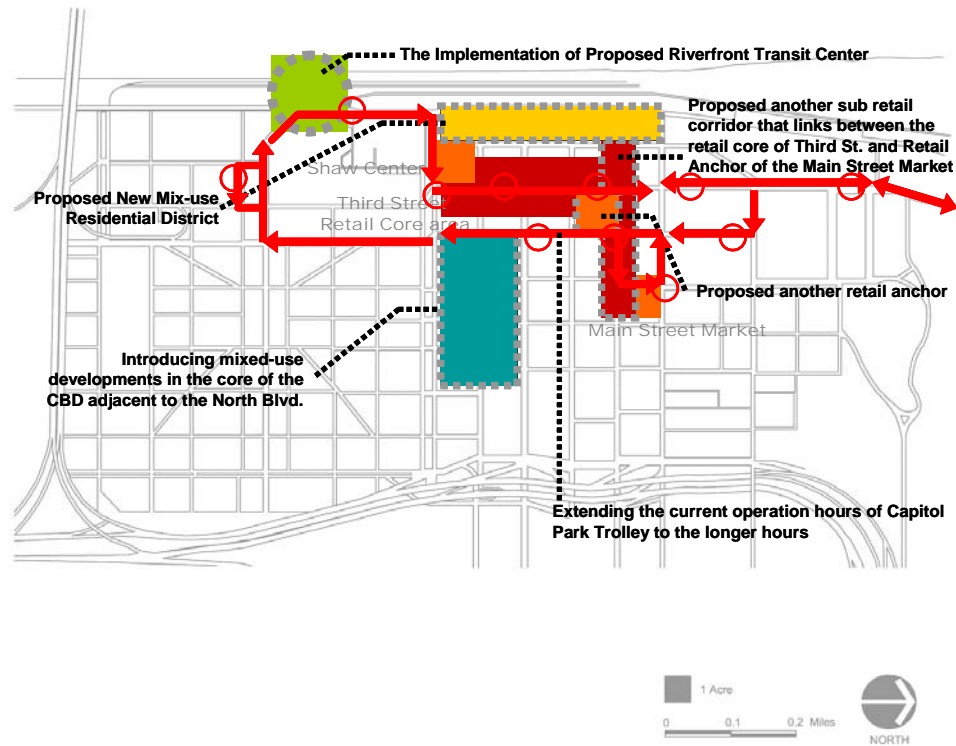


Figure 5.4 Proposed Mixed-use Developments Target Areas

Fourth, 10) The remedy for the sea of the existing surface parking lots can be achieved through the construction of mixed-use parking garages or landscaping of the surface parking lots especially in the CBD in order to ensure the physical assets of downtown Baton Rouge which are relatively compact and is human-scale. 11) The continuous efforts to promote the Downtown Storefront Grant Program which provides up to \$2,500 grants for improvements including awnings, tables and chairs for sidewalk cafes, signage, window treatments, and restoration of facades is strongly encouraged.

As was concluded in the preceding chapter, the development trends and the future direction of downtown Baton Rouge indicate strong potential towards growth of a pedestrian friendly environment and the results of this analysis have determined that the cumulative efforts of Plan Baton Rouge, DDD, and the City Planning Commission will have a positive impact upon the creation of a pedestrian friendly environment in the future. Therefore, implementation of these recommendations should enable downtown Baton Rouge to insure its pedestrian friendly environment into the foreseeable future.

Chapter 6

Conclusion

The purpose of this thesis was to illustrate the fundamental elements that must exist to foster and support a pedestrian friendly environment, specifically in downtown areas where remedy for remarked decline is necessary, and to determine the potentials and potential problems facing downtown Baton Rouge, Louisiana in its effort to create a healthy pedestrian downtown.

The objectives of this research were to develop, through a case study of Portland, Oregon and New Orleans, Louisiana, a set of criteria that must exist to promote and support a vibrant pedestrian environment. Downtown Baton Rouge's goal of a pedestrian friendly downtown was evaluated by assessing these criteria in relation to current and proposed plans, and to offer suggestions on how to further strengthen their plans in an effort to insure that Baton Rouge attains the healthy pedestrian downtown it is seeking.

Based on the results, I conclude that downtown Baton Rouge can positively attain its goal of a pedestrian friendly environment with the continued efforts of Plan Baton Rouge, DDD, and the City Planning Commission, which are determined to make a positive impact upon the creation of a pedestrian friendly environment in the future, based on the three fundamental elements and eleven criteria that were established through case study. Through review of available literature related to American downtowns, it was evident that a healthy pedestrian environment is playing a critical role in downtown revival by improving its economic, social, and environmental function. It was also indisputable that there are substantial needs to promote a healthy pedestrian environment in an attempt to revitalize the declining city centers and to offer an alternative to an auto-dependent society in order to respond to the changing needs of our society. By analyzing the two selected case studies of Portland and New Orleans, three

fundamental components, consisting of eleven criteria were established. These criteria were; 1) Enhancement of the Retail Core, 2) Promotion of Mixed-use Developments and Ground Level Retail, 3) Provision of Restaurants and Bars, 4) Promotion of Cultural and Entertainment Uses Through Public Events and Festivals, and 5) Provision of Downtown Housing Opportunities. All components should work together to provide a diversity of downtown uses thereby generating the critical mass necessary to support a healthy pedestrian environment; 6) Provision of Public Transit Systems, 7) Establishment of Central Transportation Hub, and 8) Enhancement of Sufficient Parking Facilities, should all work together to ensure accessibility to downtown and to create an environment that is compatible with pedestrians; and finally 9) Size of the Downtown Area, 10) Size of the City Blocks, and 11) Other Elements Serving to Create a Sense of Human Scale, will condition people's perception of downtown thereby prompting people to walk. These criteria were the most evident factors in the successes of each downtown's pedestrian environment, resulting in their vitality. Through evaluation of downtown Baton Rouge, many positive aspects were revealed which could potentially support a healthy pedestrian downtown. Downtown Baton Rouge's variety of destinations indicates that intensive efforts to generate the critical mass necessary to support a healthy pedestrian environment by providing a variety of reasons to go downtown is beginning to take root. Downtown Baton Rouge's human scale and other physical assets positively condition pedestrians' perceptions and receive a high score, suggesting a future potential for a pedestrian friendly downtown. However, there were also a few weaknesses in the current plans. These were the 6) Provision of a Public Transit System, 7) Establishment of a Central Transportation Hub, and 8) Enhancement of Parking Facilities, which serve to ensure accessibility to downtowns and to create an environment that is compatible with pedestrians. The weaknesses of these criteria were considered to be significant, however efforts,

such as the successfully implemented new Capitol Park Trolley, within the downtown area were evident, and the expectations of the other two key components were tremendously high, therefore, the study concluded that downtown Baton Rouge can achieve its goal of a pedestrian friendly downtown if the growth, which has been occurring over the past 10 years, is maintained for another 10 or 20 more years. Recommendations on how to further strengthen the plans in an effort to insure that Baton Rouge attains a healthy pedestrian downtown stress the urgent need for 1) the improvement of CTC bus services and its routes to target students of Louisiana State University and Southern University, and 2) the implementation of the proposed River Transit Center to create a central transportation hub, in order to insure accessibility to downtown. The recommendations also included several improvements and enhancements that can further promote and intensify the pedestrian friendly environment through the developments that are occurring in downtown Baton Rouge.

Although the creation of a pedestrian friendly environment is one of the critical elements of downtown revitalization, it is just a small portion of urban redevelopment efforts, and is not the only way of achieving the desired results of downtown revitalization. Instead, the creation of a pedestrian friendly environment can serve as a foundation or a framework for city planning, providing an opportunity to enhance the growth and environment of urban centers especially when integrated into a master plan with multiple elements. The area covered by this study was one way of evaluating downtown Baton Rouge's potential for achieving a pedestrian friendly environment. The eleven criteria were derived from the case studies of Portland and New Orleans where the success of their pedestrian environments are obvious and unique. This thesis was intended to act as an informational tool for the local leaders and policy makers of downtown Baton Rouge in their goal of attaining a pedestrian friendly downtown, thus creating a strong city

center. Although the study focuses on one particular geographic location, the same approach can be applied to other cities and downtown areas. However, it is important to note that each city has its own character and it is possible that there might be some instances that do not meet all of these criteria but that still possess a successful pedestrian environment.

This study, like all studies, has some limitations. As defined by the scope of the thesis, site specific design or design details were not addressed. Therefore, climate, vehicle circulation, and other elements that are particularly site specific were put aside, because they are not within the scope of this study. However, these specific elements are playing important roles in the creation of pedestrian friendly environments by affecting people's perceptions. Instead, this study looked at the larger perspective of pedestrian environments, and demonstrated what the basics are in the creation of a pedestrian friendly environment. This study also did not address the successful implementation of a pedestrian friendly environment. Instead, this study demonstrated the strengths and weaknesses of downtown Baton Rouge in the creation of a pedestrian friendly environment, and offered suggestions on how to better achieve the desired results. But implementation and site specific design and design details are another important part of the process of achieving this goal. The next step of this study should be to examine the implementation strategies, including how to gain the cooperation of public and private sectors, and how to coordinate with new developments. Creating guidelines for a successful pedestrian design, especially focusing on people's perceptions by studying examples of successfully designed pedestrian spaces, is needed to further provide a standard for the implementation process.

In this time, when sustainability is getting more attention from our society, it is important to rethink development patterns that strongly affect our way of life, thereby creating a risk of

conflict with our goals. Suburban sprawl and downtown decline are phenomena created by the short-term vision of city planning. The creation of pedestrian friendly environments is one of many approaches that can possibly solve crucial problems in our society. But the current conditions of many cities in the United States reveal them struggling with the realization of their plans. Hopefully, as more developments related to this topic occur and prove the tremendous success of these approaches, it will become a standard in urban redevelopment, insuring a better future for our society.

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