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Urban Greenways: The Case for the Selmon Greenway

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Urban Greenways: The Case for the Selmon Greenway

by

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A thesis submitted in partial fulfillment of the requirements for the degree of
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Abstract

Across the country and world, cities are building urban greenways to achieve environmental, economic, and social objectives. Greenways are recreational trails that provide functions beyond recreation, such as stormwater management, economic development, community development, and aesthetic improvements. A plan to build an urban greenway in downtown Tampa is underway. The greenway is proposed to be built underneath and adjacent to the Selmon Expressway, in conjunction with a widening and redecking project. A feasibility study was performed and approved by the Hillsborough County Metropolitan Planning Organization; now the biggest hurdle standing in the way of the Selmon Greenway is finding funding. This thesis uses qualitative research methods to build a case for the Selmon Greenway by demonstrating the importance and usefulness of greenways and examples of other urban greenways to provide ideas for possible funding and implementation strategies. Three case studies of greenways in New York City, Minneapolis, and Miami provide real-world examples of greenways, the benefits these cities have seen, and the funding sources and implementation strategies used to develop these greenways. Additionally, an in-depth case study of Tampa and the Selmon Greenway details the planning process and status of the greenway, the potential benefits the greenway could bring to downtown Tampa, and possible sources of funding.
Chapter 1: Introduction

Cities across the United States and the world have developed urban greenways to achieve a number of environmental, economic, and social goals. Greenways are defined as “networks of land that are planned, designed, and managed for multiple purposes including ecological, recreational, cultural, aesthetic, or other purposes compatible with the concept of sustainable land use,” (Ahern, 2003, p. 35). During the past three decades, the number of urban greenways in the U.S. has exploded; however, greenways are not a new idea. The roots of the greenway movement can be traced back a century and a half. The popularity of greenways has grown because greenways fulfill many environmental, economic, and social functions, while bringing numerous benefits to the cities in which they are implemented. Greenways are an essential component of green infrastructure, which is the network of natural systems that aid in the efficient functioning of urban ecosystems and improve urban resilience. Greenways can be categorized by different typologies at varying scales, ranging from local, to regional, to statewide. However, the successful completion of a greenway requires the coordination of a number of stakeholders in various groups pooling together funds, which makes greenway development a complex and challenging undertaking.

An idea to build an urban greenway in downtown Tampa is currently underway. The trail, named the Selmon Greenway, is proposed to be built underneath and adjacent to the Selmon Expressway downtown viaduct and could bring a number of benefits to downtown Tampa if it is created. In December of 2010, the Hillsborough County
Metropolitan Planning Organization (MPO) approved the findings of the Selmon Greenway Feasibility Study. The study spanned about six months, during which time other urban greenways were researched to provide a context to build the Selmon Greenway concept from, the alignment of the greenway was determined, and the overall concept of the greenway was developed. Now that the feasibility study has been approved by the MPO, the biggest hurdle for the greenway plan to overcome is finding a source of funding.

The main purpose of this thesis is to build a case for the creation of the Selmon Greenway. This thesis does so by couching the importance of urban greenways in urban resilience theory, providing a comprehensive definition of greenways, placing them in a historical context, examining the implementation methods used by other cities to develop greenways, and relating these findings to the case of the Selmon Greenway. Specifically, this research seeks to answer the following questions: Why are greenways important to urban sustainability and how do greenways contribute to urban sustainability? What types of greenways have other cities built and how were these greenways implemented? How can Tampa implement the Selmon Greenway and what potential benefits could the greenway bring to downtown Tampa?

This research is qualitative in nature and uses previous research, newspaper articles, interviews, planning documents, and direct observations to build an argument for the Selmon Greenway and to determine possible methods of implementation and funding. This thesis is broken down into three main sections. The first section provides a literature review of relevant theories, literature, and research to provide background on the greenway movement. This section discusses the theoretical basis of the importance of
green infrastructure and the key role greenways play in green infrastructure to build urban resilience and sustainability. Following this, this research describes the definitions and typologies of greenways, details the historical roots of the greenway movement, and the past methods of analysis used by researchers to study greenways.

The second section discusses the key components to greenway development and implementation. This is supported by case studies on three existing urban greenways in New York City, Minneapolis, and Miami to provide examples to apply to the Selmon Greenway. This analysis provides an overview of the greenways, the planning process that led to the creation of the greenways, funding sources, coordination among the various stakeholders, and the benefits that have accrued to the cities in which they were built.

The third section gives an in-depth case study of the Selmon Greenway using qualitative research methods. Background on Tampa and its existing greenways is given to provide a basis for the case study of the Selmon Greenway. This section also discusses the possible benefits that the Selmon Greenway could bring to downtown Tampa. The planning process of the Selmon Greenway is discussed, beginning with the idea for the greenway up to the current status of the greenway. Possible funding options for the greenway are provided. Lessons learned from the example greenways are applied to the Selmon Greenway in the hopes of providing insight into how the greenway can be achieved.

This research is important to Tampa because it builds an argument for the creation of the Selmon Greenway and the many advantages it could bring. The Selmon Greenway is still in the planning stages and is a little known idea to Tampa residents. It has been
featured in several newspaper articles, but beyond that, the idea is not widely known to Tampa residents. It is my hope that this thesis can provide readers, whether they are scholars or laypeople, a thorough description of the importance of urban greenways, the methods of implementation, and the details of the Selmon Greenway project so that Tampa may someday see an actual greenway instead of an idea on paper.

This thesis adds to the existing research on greenways by discussing a greenway that has not yet been studied. I gained firsthand knowledge of the Selmon Greenway from working on the feasibility study. Because the Selmon Greenway is still in the planning stages, much of the information is known only to those who have been directly involved in the project. While there is previous research on greenway implementation strategies (Erickson, 1997; Hellmund and Smith, 2006), this work applies this previous research of implementation strategies to the specific case of the Selmon Greenway, along with the three case study greenways. My hope is that this thesis will make the concept of the Selmon Greenway more accessible to Tampa residents, as well as demonstrate to local officials and planners the number of ways it can be achieved.
Chapter 2: Literature Review

Theoretical Framework

**Urban sustainability.** For the first time in history, the majority of the world population resides in urban areas. By 2050, it is estimated that 70 percent of the global population will live in urban areas (Ahern, 2011). This change in the geography of settlement will greatly impact land use, resources, quality of life, and the social equity of cities, creating a need for sustainable development practices within urban areas. New infrastructure will need to be built as old, failing infrastructure is replaced or updated. This presents an opportunity to create and expand the green infrastructure that supports the natural processes in cities in order to improve sustainability. Green infrastructure is “an interconnected network of green space that conserves natural ecosystem values and functions and provides associated benefits to human populations” (Benedict and McMahon, 2002, p. 5). Greenways constitute an integral component of green infrastructure and add to the sustainability and resilience of a city.

While many in the urban planning profession see it as their mission to promote sustainable development, the idea of sustainability remains a nebulous concept with little consensus on definitions and indicators. However, in 1987, the World Commission on Environment and Development, also known as the Brundtland Commission, formulated a definition for sustainable development that has become widely accepted. They defined sustainable development as “development that meets the needs of the present without
compromising the ability of future generations to meet their own needs” (Wheeler and Beatley, 2009, p. 62).

Work in urban planning rests on the triple bottom-line of sustainability: environmental sustainability, economic sustainability, and social equity (Campbell, 1996). The environmental sustainability aspect focuses on preserving resources for future generations and reducing detrimental effects to the environment from urban processes. The economic sustainability goal attempts to preserve and create jobs to sustain economic growth of the city into the future. The social equity sustainability aspect works to ensure equal distribution of resources and access to amenities for all races and economic levels. Oftentimes, these three goals conflict, and urban planners must attempt to reconcile the differences among these three goals. For example, while economic development will create additional jobs and urban growth, the growing population will increase the burden on the local environment and resource availability. Limiting resources will drive up the costs of resources, thus burdening the poor communities.

However, each sustainability goal can be achieved when planners work together and combine their various areas of knowledge, which is known as transdisciplinary planning (Campbell, 1996). This holistic method of planning operates by including all involved parties in the planning process, including the professional fields, academic fields, and stakeholders. This creates a diverse combination of perspectives involved in the planning process that will lead to an outcome more likely to meet all three sustainability goals instead of just one (Ahern, 2010).
**Urban Resilience Theory.** A new theory has emerged that promotes sustainability through the idea of urban resilience and is carried out through transdisciplinary planning. Resilience is defined as “the ability of a system to respond to change and disturbance without changing its state” (Ahern, 2010, p. 142). This planning method plans for the city to proactively adapt to change instead of reactively, after a disturbance has occurred. While cities replace or update their existing infrastructure, they can promote urban resilience by implementing green infrastructure, including greenways.

Resilience theory works to meet ecosystem services goals. It is important to realize that cities have their own unique ecosystems with specialized functions and ecosystem services. Ecosystem services provide an economic, environmental, and social argument for the protection of landscapes. Ecosystem services are grouped into three categories: provisional (example: drinking water), regulatory (flood protection), or cultural (aesthetic benefits) (Ahern, 2010).

Urban resilience is based on non-equilibrium theory, which argues that natural systems are ever changing and inherently variable because every landscape is different. Because landscapes are heterogeneous, their susceptibility to disturbances differs by type, frequency, and the intensity of the disturbance. It is important for urban planners to identify what types of disturbances affect the city in which they work and how the landscapes react so that development can be planned to sustain any disturbance. Urban resilience, therefore, proactively works to protect urban ecosystems by planning for unexpected changes and disturbances in the environment (Ahern, 2010). This runs counter to the static urban planning solutions, such as New Urbanism or Smart Growth that operate on the standpoint that, once achieved, sustainability will persist into the
future. With urban resilience theory, the urban infrastructure is designed to adapt to change in order to minimize the effect of disturbances (Ahern, 2010).

Resilience theory offers five strategies for building urban resilience: multifunctionality, redundancy and modularization, diversity, multi-scale networks and connectivity, and adaptive capacity (Ahern, 2010). Multifunctionality involves combining functions of urban infrastructure so that multiple environmental, economic, and social functions are vertically integrated in one place. An example of multifunctionality is Portland’s Green Streets Program, in which streets also serve as natural drainage systems for stormwater management. This combines the functions of vehicular and pedestrian transportation, stormwater management, biodiversity, reducing urban climate (or the urban heat island effect), and improving aesthetics. Urban greenways are another way cities can create multifunctionality. Greenways can provide all of the functions previously mentioned in the Green Streets example, because they can include transportation, aesthetics, and stormwater management aspects (Ahern, 2010).

Redundancy and modularization is a second strategy for achieving urban resilience. Redundancy is the inclusion of multiple components that provide the same functions, which act as back-ups to each other. Modularization is the dispersion of systems over geographical areas to spread risks over multiple systems, instead of relying on a centralized system. Green infrastructure stormwater systems are an example of redundancy and modularization because they disperse stormwater throughout a landscape system instead of one point of collection as with many typical wastewater systems, which can become overburdened with runoff and waste (Ahern, 2010).
Encouraging diversity, including environmental, social, and economic, is a third strategy to increase urban resilience. Diversity can be grouped into two categories: functional diversity and response diversity. Functional diversity includes the collection of functions that the system, whether it is environmental or socioeconomic, operates on. Urban ecosystems involve a diversity of functions, including energy transmission, transportation, wildlife habitat, resource distribution, waste removal, climatic regulation, and communication (Ahern, 2010). Response diversity in biological systems involves the diversity of species within functional groups, each having their own responses to disturbances. In urban bio-physical systems, providing a diversity of modes to carry out ecosystem functions will strengthen the resilience of urban ecosystems. One way to improve urban resilience is by implementing low impact development (LID) standards, a method of stormwater management. This includes permeable pavement, bioswales, retention ponds, and native vegetation to aid in the interception of stormwater. Each element adds to the response diversity of urban stormwater systems. Adding to the urban tree canopy is one of the most effective strategies for improving urban resilience. Urban trees intercept a large portion of rainfall, greatly enhancing the resilience of urban stormwater systems. Trees also reduce the urban heat island effect, reduce air pollution and noise, and provide aesthetic benefits (Ahern, 2010).

Multiscale networks and connectivity is a fourth strategy for improving urban resilience. The sustainability of a city rests largely on its urban form, or the configuration of its land uses and transportation systems. Urban form influences ecosystem functions by affecting the flows of species, resources, transportation, information, and energy (Ahern, 2010). The degree to which these elements are connected greatly affects the
sustainability of a city. Roads present the greatest obstacle to connectivity, while urban greenways are an excellent way to improve connectivity. The use of greenways in cities is growing in popularity due to their ability to perform multiple functions, such as stormwater management, recreation, and alternative transportation, as well as connecting fragmented areas (Ahern, 2010).

The adaptive capacity of an urban plan influences how well a plan can adapt to a changing environment. Urban planning operates on imperfect knowledge about natural disturbances, which makes it difficult to plan for the future. With adaptive planning, disturbances are seen as opportunities to monitor, learn from, and then adapt urban plans in order to withstand future disturbances. Adaptive planning develops urban areas as though they are an experiment; an adaptive plan is essentially a hypothesis to be tested in the field and monitored for effectiveness. Additionally, adaptive planning is transdisciplinary and includes all affected parties in the planning process (Ahern, 2010).

As urban populations continue to rise and infrastructure begins to age, new infrastructure will need to be developed that can support larger populations. This presents an opportunity to sustainably redevelop cities based on the urban resilience method. Green infrastructure, including greenways, can help cities implement the five strategies to achieve urban resilience (Ahern, 2010).

**Green Infrastructure.** In 1999, the Green Infrastructure Work Group, a group of local, state, and federal agencies and non-governmental organizations under the guidance of The Conservation Fund and the USDA Forest Service, created a definition for green infrastructure. They defined green infrastructure as “our nation’s natural life support system – an interconnected network of waterways, wetlands, woodlands, wildlife
habitats, and other natural areas; greenways, parks and other conservation lands, working farms, ranches and forests; and wilderness and other open spaces that support native species, maintain natural ecological processes, sustain air and water resources and contribute to the health and quality of life for America’s communities and people” (Benedict and McMahon, 2002, p. 6). A simpler definition states that green infrastructure is “an interconnected network of green space that conserves natural ecosystem values and functions and provides associated benefits to human populations” (Benedict and McMahon, 2002, p. 5).

Green infrastructure networks are comprised of “hubs” and “links.” Hubs act as the anchors, or destinations for people, wildlife, or resources, while the links connect the hubs together to create an integrated system. Examples of types of hubs include nature reserves, managed native landscapes, working lands, regional parks and preserves, and community parks and natural areas. Examples of links include landscape linkages, conservation corridors, greenways, greenbelts, and ecobelts (Benedict and McMahon, 2002). Green infrastructure, especially greenways, typically reuses existing urban infrastructure, such as rail lines, hydro rights-of-way, road rights-of-way, and pipelines (Baker et al., 2009). This increases the function of these infrastructure elements from single-use to multiple uses. This addresses the multifunctionality strategy of urban resilience theory.

Green infrastructure approaches open space preservation and creation from the standpoint that these networks are just as essential to quality of life and efficiency as grey infrastructure, such as roads and sewers. Designating natural areas and green spaces as infrastructure connotes these areas as important and not just for aesthetic purposes. Using
the terminology of infrastructure also implies that these features need to be maintained and protected instead of viewing them as self-sustaining, as the term green spaces may imply (Benedict and McMahon, 2003). Green infrastructure works with development instead of in isolation from or opposed to development, as some environmental preservationists promote (Benedict and McMahon, 2002). In the 1990’s, Florida and Maryland led the way in the green infrastructure movement by implementing statewide green infrastructure programs to identify, protect, and restore conservation areas and to link these areas together as one entire infrastructure system (Benedict and McMahon, 2002).

A report by the President’s Council on Sustainable Development in May of 1999 recognized the importance of green infrastructure by identifying it as one of five strategic areas for providing holistic sustainable community development (Benedict and McMahon, 2002). The report stated, “green infrastructure strategies actively seek to understand, leverage, and value the different ecological, social, and economic functions provided by natural systems in order to guide more efficient and sustainable land use and development patterns as well as protect ecosystems” (Benedict and McMahon, 2002, p. 9). The importance of green infrastructure, particularly parks and greenways, is demonstrated through the specific environmental, economic, and social benefits these networks bring to cities.

Environmental Benefits of Green Infrastructure. The natural environment and the built environment are not mutually exclusive entities. In her groundbreaking book, Granite Garden, Anne Whiston Spirn was one of the first scholars to address the need for nature in the built environment. She recognized that the built environment is as much a
part of nature as nature itself and therefore must be designed and developed accordingly (Spirn, 1984). Green infrastructure intertwines nature and the built environment.

Green infrastructure provides many opportunities for improved environmental sustainability and preserves and promotes the environmental character and health of the cities in which it is implemented. One way green infrastructure accomplishes this is by preserving and increasing the amount of parks and open spaces in cities. In doing so, more greenery, in the form of trees and plants, will aid in ecosystem functioning. Green spaces absorb the pollution and heat that concrete surfaces cannot (Spirn, 1984). More greenery and trees help to reduce pollution in the air by absorbing greenhouse gases (Spirn, 1984). This reduces the urban heat island effect, which occurs when pavement and buildings trap heat and raise the temperature of the downtown area. These areas also help to reduce flooding and facilitate stormwater management by absorbing large amounts of water, which would otherwise flow into the community water system. Pervious ground captures harmful pollutants that would have contaminated water resources. This can help to reduce costs to the community (Schilling and Logan, 2008).

Greenways provide alternative modes of transportation to vehicles and public transportation. “The Rails-to-Trails Conservancy estimates that one-third of weekday trail users are commuting in major urban areas, such as Washington, D.C., Seattle, and Tampa” (Benedict & McMahon, 2003, p.3). Alternative modes of transportation, such as walking and cycling, require only the energy of the person, reducing the need for gas. Greenways define growth boundaries and protect communities from encroaching development. This will lead to a more sustainable urban form of cities. Greenways also
increase connectivity among neighborhoods and ecosystems leading to a greater flow of resources, people, and information (Benedict and McMahon, 2003; Thorne, 1993).

**Economic Benefits of Green Infrastructure.** Natural areas within cities, such as parks and greenways, have evolved to provide more than just environmental and health benefits. These areas are considered amenities that can draw people to these places and foster urban growth. Parks and greenways add to the quality of life of a city, which is a major determinant for people deciding where to reside. The past two decades have seen a wealth of research about urban amenities and their effect on urban growth. Amenities are excellent predictors of growth in high-tech jobs. Young professionals, which many cities wish to draw, are attracted to residential areas geared toward recreation and consumption amenities, as opposed to the schools, churches, and neighborhood associations that generations past have been drawn to (Clark et al., 2002). Additionally, amenities attract skilled workers to cities, who are the ones to really make an influence on the local economy (Glaeser, 2011).

These areas attract people for their intrinsic aesthetic and natural qualities. Because people are naturally drawn to these areas, it is more desirable to live in close proximity. A 2001 study done by the National Association of Realtors (NAR) found that 57 percent of voters would prefer a home closer to parks and open space than a home that was not (Lewis, 2003, p.4). Linked to this is the trend of homes nearer parks and greenways retaining more value than those further away. Many studies have shown that properties closer to park space and greenways are more valuable than those further away. One study of Pennypack Park in Philadelphia showed that property values increased from $1,000 per acre at 2,500 feet from the park to $11,500 per acre at 40 feet from the park.
(Walker, 2004, 1). Parks and greenways also can attract new or relocating businesses to take advantage of the popularity of these areas (Hellmund and Smith, 2006). These new businesses within the community can help generate municipal revenue from taxes that can be put back into the community (Lewis, 2003). However, it is important to ensure that these economic benefits do not begin to exclude members of the community because increased property values mean they can no longer afford to live near these green spaces.

**Social Benefits of Green Infrastructure.** Green infrastructure brings a number of social benefits. Parks and greenways provide opportunities for gathering places where local residents can form stronger social bonds and a stronger neighborhood (University of Illinois at Urbana – Champaign, 2003). These spaces give people chances to connect with one another. Parks and open spaces can help build a sense of community and allow people to interact in a mutually loved space (Francis, 2003). When the community is connected with one another, they feel more empowered to protect and help each other. Turning vacant or unused land into landscaped parks or greenways can help prevent crime, if planned and designed properly, with appropriate lighting and visibility to the surrounding neighbors. Studies have shown that urban residents living near green spaces endure fewer quality-of-life crimes and feel safer (University of Illinois at Urbana – Champaign, 2003).

Involving the community in the planning, development, and implementation of parks and greenways ensures that these spaces reflect the needs and desires of the community, which allows for a greater chance of acceptance by local residents. Also, through the participation process, the community can learn of the benefits of a network of open, green spaces and how this network reflects community goals (Randolph, 2004).
Additionally, participation in the creation of new park space or greenways instills a sense of pride and ownership of these facilities in residents. Bringing people together through the creation of a GI network can bring “more effective and responsive management, stronger social ties and collaboration, and the cultivation of civic interaction and democratic participation” (Hellmund and Smith, 2006, 19).

Nature in cities also increases the health of nearby residents. Parks and open spaces within cities draw people outside by giving them areas for recreation. Connecting with nature provides a range of health benefits including lower blood pressure and cholesterol levels, enhanced survival after a heart attack, faster recovery from surgery, reduced minor-medical disorders, and lower self-reported stress levels (Frumkin and Eysenbach, 2003). Increasing opportunities for recreation can also lead to improved fitness and reduced obesity. Study after study shows that physical activity reduces a number of physical ailments including diabetes, heart disease, and obesity (Frumkin and Eysenbach, 2003).

Creating designated bike and walking paths increases safety for these modes of transportation and boosts the number of commuters choosing these transportation options. A 1992 poll of Americans, performed by the Louis Harris polling organization, found that fifty-three percent of Americans would bicycle to work if there were safer and separated bike paths in their communities (Flink and Searns, 1993). Increasing recreational areas in cities, especially through the use of greenways, will increase the safety of pedestrians, bicyclists, and other recreation enthusiasts on urban streets. By making other forms of transportation more visible to the community and removing more
vehicles from the streets, it is possible that drivers will reduce their speeds and become more aware of pedestrians and bicyclists.

**Greenway Background**

Greenways are key components of green infrastructure. Greenways are the links in green infrastructure networks, without which the network would not exist. When planned and executed in the right way, urban greenways tie together the environmental, economic, and social equity goals of sustainable development and lead to improved urban resilience. The following section provides a definition and typology of greenways, historical development of greenways, and previous research of greenways.

**Definition.** Greenways come in many forms and serve many different functions. Because of this, many definitions exist. Two definitions of greenways are provided below. I have chosen these two definitions because they are widely cited by greenways scholars as the definitions of greenways. The first is a comprehensive definition from Charles Little’s 1990 book *Greenways for America*, which describes the varying functions of greenways.

1. A linear open space established along either a natural corridor, such as a riverfront, stream valley, or ridgeline, or overland along a railroad right-of-way converted to recreational use, a canal, scenic road, or other route.

2. Any natural or landscaped course for pedestrian or bicycle passage.

3. An open-space connector linking parks, nature reserves, cultural features, or historic sites with each other and with populated areas.

4. Locally, certain strip or linear parks designated as parkway or greenbelt.

(Little, 1990, p. 1)
The second definition is a simplified definition of greenways, given by Jack Ahern, a greenways scholar who based his definition on literature, research, and experience in greenways planning. “Greenways are networks of land that are planned, designed, and managed for multiple purposes including ecological, recreational, cultural, aesthetic, or other purposes compatible with the concept of sustainable land use,” (Ahern, 2004, p. 35). There are five key ideas to note within this definition. The first is that greenways are based on linear systems, which aid in the transport of species and resources through an urban environment. Linkage is another important aspect of greenways because they link geographic areas, which increases ecological, economic, and social synergy. Multifunctionality is a third aspect of greenways because they achieve multiple functions across the three ecological, economic, and social goals of sustainability. This focus on the three goals of sustainability is the fourth key aspect of greenways. Greenways function not only to protect nature, but also preserve economic and social functioning within the areas they are implemented. The fifth key aspect of greenways is that they are a planning strategy intended to complement comprehensive landscape planning, not replace it (Ahern, 1995).

**Greenway Typology.** The type of greenway depends on various factors, such as size of area, location of area, and needs of the city or region (Ahern, 1995). Though there are different types of greenways, a typology of greenways can be classified based on scale, goals, landscape context, and planning strategies. Defining a typology of greenways creates a classification scheme that the general public can understand and planners can follow.
The spatial scale of the greenway is one aspect of greenway classification. Greenways vary in geographic area and thus the level of government at which they are implemented. Greenways can be created at the city, regional, state, multi-state, or national level. As a greenway grows in size, the level of intergovernmental coordination required increases (Ahern, 1995).

Greenways also vary depending on the purpose for which they are being created. Jack Ahern created a classification system for five categories of goals: biodiversity, water resources related, recreational, historical and cultural resource protection, and development control. Since greenways are multifunctional, one or all of these goals may be incorporated into a greenway plan. The scale of the greenway impacts the goals of the greenway (Ahern, 1995).

The landscape context is a third aspect that defines greenway typologies. The landscape context is the predominant land use or land cover of the geographic area in which the greenway is implemented. Some typical types of landscape contexts may include urban, rural, suburban, or agricultural. However, landscapes differ greatly across the country and the globe. Because of this, creating a definite landscape typology is nearly impossible. Thus, it is important for planners to define and understand the landscape context where the greenway is planned (Ahern, 1995).

As mentioned earlier, greenways are a planning strategy used to address multiple environmental, economic, and social functions. According to Jack Ahern, there are four principle strategy types a greenway may be based on: protective, defensive, offensive, and opportunistic. These strategies may be applied individually or in combinations, depending on the goals of the greenway plan. A protective greenway strategy is typically
employed to protect a valuable landscape from encroaching development, even as the surrounding landscape may change. A defensive greenway strategy may be implemented to halt fragmentation when the existing landscape is already fragmented. An offensive greenway strategy works toward the agreed upon goals of an envisioned landscape configuration. It differs from protective and defensive strategies in that it essentially puts nature back in fragmented or depleted landscapes to build new elements of the landscape. An opportunistic strategy utilizes unique landscape features already in place that are optimal for greenway development. Again, a greenway plan may entail one or all of these strategies (Ahern, 1995).

As stated earlier, there are numerous types of greenways depending on the scale, goals, landscape context, and planning strategies employed. However, to provide a clearer picture of the typical types of greenways seen in the United States, five examples are provided below. In his book, *Greenways for America*, one of the most well-known books on greenways, Charles Little outlined five specific types of greenways:

1. Urban riverside greenways, usually created as part of (or instead of) a redevelopment program along neglected, often run-down city waterfronts.
2. Recreational greenways, featuring paths and trails of various kinds, often of relatively long distance, based on natural corridors as well as canals, abandoned railbeds, and other public rights-of-way.
3. Ecologically significant natural corridors, usually along rivers and streams and (less often) ridgelines, to provide for wildlife migration and “species interchange,” nature study, and hiking.
4. Scenic and historic routes, usually along a road or highway (or, less often, a waterway), the most representative of them making an effort to provide pedestrian access along the route or at least places to alight from the car.
5. Comprehensive greenway systems or networks, usually based on natural landforms such as valleys and ridges but sometimes simply an opportunistic assemblage of greenways and open spaces of various kinds to create an alternative municipal or regional green infrastructure. (Little, 1990, p. 4)

**Historical Background.** Exploring the history of the greenway movement can help understand where the idea originated and how it has developed over time. Tracing the roots of the greenway movement shows that they are not a new fad, but instead a centuries-old landscape form that grew from the landscape architecture profession in the U.S. and around the world (Fabos, 2004). The purposes and functions of greenways have evolved throughout their century and a half – long history to conform to the changing needs of society. The evolution of greenways can be divided into three time periods based on evolving types and functions: generation one axes, boulevards, greenbelts, and parkways, generation two trail-oriented recreational greenways, and generation three multi-objective greenways (Searns, 1995).

This first generation were not technically greenways but provided the basis for the evolution of greenways. This generation began as axes or boulevards in Europe, followed by parkways and greenbelts in the United States and Britain during the late nineteenth century. The primary purposes of these corridors were for movement, use, and vision-experience. Axes provided connections between key destinations and incorporated natural features for aesthetic pleasure (Searns, 1995).

Frederick Law Olmsted is widely considered as the father of the greenway movement in the US. He and his partner Calvert Vaux designed parks and parkways in several US cities during the mid-nineteenth century (Little, 1990). His intention was to
extend nature into cities for the general health and well being of people and the
environment. They designed Central Park in Manhattan and Prospect Park in Brooklyn,
which some historians note as the projects that led to the landscape architects’ realization
that parks needed to be linked to one another. Perhaps Olmsted’s most famous parkway
design is the Emerald Necklace of the Boston Park System, which is twenty-five
kilometers long and links Boston, Cambridge, and Brookline, and connects to the Charles
River (Fabos, 2004). His sons followed in his footsteps by creating park systems in cities
across the country. Like their father, they believed that “a connected system of parks and
parkways is manifestly far more complete and useful than a series of isolated parks,”
(Benedict and McMahon, 2002).

The greenbelt is another important ancestral link to the modern-day greenway.
Greenbelts originated in Britain in the late nineteenth century. Ebenezer Howard is the
most notable landscape architect linked to the implementation of greenbelts, with his
Garden City concept. In his 1898 book, Garden Cities of To-Morrow, Howard proposed
the use of a belt of green around the garden city to prevent the expansion of the city
beyond its bounds and to extend nature into the garden city. His main purpose with the
garden city was to create a city contained within an agricultural landscape (Little, 1990).

While the concept of greenways was established by the parkways and greenbelts
of the mid-to-late nineteenth century, the term “greenway” did not arise until the mid-
twentieth century. Most greenway scholars and historians credit William H. Whyte with
the naming of greenways. Whyte coined the term greenway in his 1959 monograph
Securing Open Space for America, published by the Urban Land Institute. He advanced
the concept of greenways through a number of published articles and books during the
mid-twentieth century. In his book, *The Last Landscape*, Whyte explains, “there are all sorts of opportunities to link separated [open] spaces together, and while plenty of money is needed to do it, ingenuity can accomplish a great deal” (Little, 1990, p. 24).

Between 1960 and 1985 a new generation of greenways developed. This second generation of greenways involves the evolution of greenways to recreational multi-use trails. The hike-bike, automobile-free path defines this generation of greenways. River corridors began to be utilized as areas appropriate for greenway implementation. One prominent greenway created during this period that led the evolution of the greenway to recreational uses was the High Line Canal in Denver, CO. In the 1960s, the road running parallel to the canal was turned into a walking, biking, and horseback riding trail (Erickson, 2003). Denver continued their greenway trend with the creation of the Platte River Greenway. Between 1974 and 1982, the greenway project converted the polluted South Platte River into a clean waterway with a 10-mile recreational corridor including parks and kayak chutes (Searns, 1995, p. 69). Also during this generation, the first comprehensive greenway system in the country, the Capital Area Greenway, was implemented in the early 1970s in Raleigh, North Carolina. The system, created by a graduate student named Bill Flournoy working on his thesis, went into great detail specifying how greenways could be built, how to plan for greenways, and the benefits of greenways. The Capital Area Greenway acts as a model for thirty-five local greenway systems in North Carolina cities and numerous other municipalities across the country (Little, 1990).
The Rails-to-Trails movement began during this generation and greatly influenced the greenways movement. As freight trucks began to absorb much of the freight movement along rail lines, abandoned railways provided excellent opportunities for creating greenways, since right-of-way was already established (Searns, 1995). Beginning in the 1960s, civic leaders, especially leaders in heartland states such as Iowa, began promoting the conversion of rail lines to recreational trails and ecological corridors. From 1988 to 1998, the Rails-to-Trails Conservancy (RTC) converted over 10,000 miles of abandoned railroads into greenway trails (Ahern, 2003, p. 52). In 1999, the Department of Transportation, the White House and the RTC developed the Millennium Trails Program, to recognize and promote the trails movement in the USA. The program seeks to connect communities with trails, and groups greenways into three categories: National Millennium Trails, Millenium Trails, and community trails (Ahern, 2003).

From 1985 to present is the third generation of greenways. This generation of greenways differs from the previous generations in that, besides providing linear recreational areas that are aesthetically pleasing, they now focus on enabling other objectives. These objectives include stormwater management, habitat preservation, educational and artistic enhancement, economic development, and growth management. During this generation greenways evolved to provide more than a passive experience; greenways now help achieve social, environmental, and economic objectives of cities, states, regions, or the nation (Searns, 1995). Greenways are now considered an integral part of a number of conservation initiatives, such as green infrastructure and smart
growth (Walmsley, 2006). The amount of research focused on various aspects of greenways has grown substantially, due to the growing usefulness of greenways in achieving the environmental, economic, and social objectives of municipalities.

**Greenway Planning and Research.** During this third generation, the importance of greenways as a planning strategy grew, as well as the existing research on greenways. Two documents helped spread the greenway movement: the 1987 U.S. President’s Commission on American Outdoors Report and the publishing of Charles Little’s *Greenways for America* in 1990 (Fabos, 2004). The Commission’s 1987 report recommended a national system of greenways as “a vision for the future: A living network of greenways… to provide people with access to open spaces close to where they live, and to link together the urban and rural spaces in the American landscape…threading through cities and countrysides like a giant circulation system” (Fabos, 2004, p. 327). Charles Little’s seminal book, *Greenways for America*, was the first book to comprehensively examine the historical background, research, and planning of greenways, and provided sixteen summaries of greenways in the U.S. (Little, 1990). The most important impact of *Greenways for America* was that it widely publicized the greenway movement like no other scholar had done before (Fabos, 2004).

Greenway plans now exist at the local, regional, state, multi-state, and national level. One well-known regional greenway plan is the New England Regional Plan, which built upon the work of Olmsted and coordinates greenway planning for all six New England states, comprising an area of over 42 million acres (Ahern, 2003). The planning for the greenway network was performed by ten Master degree candidates at the University of Massachusetts in collaboration with local advisory boards (Fabos, 2004).
This plan provided a framework for a national plan, called Greenways and Greenscapes for the United States. The team assembled for the project first mapped all existing and proposed greenway areas. Following this, the team determined the areas most suitable for inclusion into the national greenways project. The final map produced includes 136,677 miles of interconnected trails across the country (Fabos, 2004, p. 399).

Statewide greenway plans exist in Florida and Maryland. In 1991, the Conservation Fund of Washington, D.C. and 100 Friends of Florida initiated the Florida Greenways Program to conserve critical components of Florida’s ecosystems, restore and maintain connectivity among diverse ecosystems, facilitate these diverse ecosystems to function as an integrated system, and to maintain the evolutionary potential of these ecosystems to adapt to future environmental change (Hoctor et al., 2003). The Florida Greenways Program was guided by a 40-member, Governor-appointed Florida Greenways Commission that developed a vision statement and greenways map for the state of Florida (Benedict and McMahon, 2003). University of Florida researchers created the map using Geographic Information Systems to identify the areas most suitable for greenways (Hoctor et al., 2003).

After the publishing of *Greenways for America*, scholarly articles and books began to arise. Prominent books released after *Greenways for America* include *Ecology of Greenways* by Smith and Hellmund (1993), *Greenways: A guide to planning, design, and development* by Flink and Searns (1993), and *Ecological networks and greenways: concept, design, and implementation* edited by Jongman and Pungetti (2004). However, numerous other books on the subject have also been published. The scholarly journal, *Landscape and Urban Planning*, distributed two special issues focusing on greenways.
research, one in 1995 and one in 2004. As the functions of greenways have increased, the scope and number of studies performed on greenways has also expanded. Research on greenways during the past two decades has focused on a range of concepts from environmental impacts, social impacts, quality-of-life measurements, and economic impacts. The following are only a few of the now numerous scholarly articles published on the subject of greenways.

Many studies have evaluated various environmental impacts greenways have on the areas in which they are implemented. Greg Lindsey (2003) used a case study approach to investigate the sustainability of the Indianapolis, Indiana greenways system. Lindsey evaluated the city’s achievement of sustainability goals by using the framework of six sustainability indicators and measured the achievement of these factors against master plan goals. These six indicators include harmony with nature, livable built environments, place-based economy, equity, polluters pay, and responsible regionalism. The study provides a framework upon which planners can conduct similar studies on greenways in their own communities to evaluate achievement of sustainability goals.

In another study of the sustainability of greenways, James Thorne (1993) studied the way in which ecological integrity can be improved through the use of greenways. Ecological integrity is characterized by having natural levels of plant productivity, high biological diversity, low rates of erosion and nutrient loss, and clean water. He identified six basic functions that greenways perform: habitat, conduit, barrier, filter, source, and sink. Greenways specifically can help to connect fragmented ecosystems for better flow of resources and species.
Bryant (2006) studied the impact of greenways on urban biodiversity by analyzing the role of ecological greenways and parks in urban species conservation. The research is based on a greenways pilot study, the Cameron Run Watershed, in Washington, D.C., which worked to create a framework for exchange of scientific information and to analyze the current state of biodiversity in the watershed through the combination of published studies and spatial analyses using geographic information systems. Bryant used the results of the Cameron Run study and existing literature and planning documents on greenways to make recommendations for integrating ecological objectives into greenway plans at the local level.

Besides environmental impacts, greenways also bring social impacts as well. Equal access to a greenway is important for planners to consider when developing a greenway plan. Lindsey et. al (2001) performed a study of greenways in Indianapolis using GIS to measure the equity of access to the greenways for various demographic and socio-economic groups. They used eight demographic and socio-economic variables to conduct their study: population density, proportion of African Americans, educational level achieved by the adults of the households, median household income, median house value, proportion of persons in poverty, proportions of households without vehicles, and number of assault cases per capita. They found that minority populations had disproportionately higher access to the greenways within Indianapolis. They surmised that the linear structure of greenways allows for greater access for all socio-economic and demographic groups.

Paul Gobster and Lynne Westphal (2004) analyzed six human dimensions of greenways: cleanliness, naturalness, aesthetics, safety, access, and appropriate
development. They used both qualitative and quantitative methods to carry out their study of the Chicago River corridor. Focus groups of various people ranging from greenway users to nearby neighbors helped the researchers evaluate the perceptions of the focus groups on the six human dimensions. They found an inherent interdependence among the six dimensions, which points to the importance for the integration and focus on all of these aspects in greenway development.

Schafer et. al (2000) studied three greenway trails in Texas to gauge user perceptions of quality of life and in what way the greenways contributed to quality of life. This study was based on the theory that implementing greenways can improve quality of life, mostly by providing recreational areas for people to improve their health. The researchers surveyed greenway users on three trails over three consecutive days and were asked a series of questions relating to quality of life. Through their study they found that greenway users felt the trails contributed to quality of life in the areas of recreation and health, the natural, open space provided, better land use, and resident pride.

Luymes and Tamminga (1995) addressed the importance of the perception of safety by greenway users in order to achieve the full benefits that urban greenways can offer. They provided five safe communities principles that should be considered when planning a greenway: visibility to others, visibility by others, choice and control, environmental awareness, and solitude without isolation (Luymes and Tamminga, 1995, 395).

Lindsey et al. (2004) performed a study of greenways in Indiana to determine the affect greenways have on property values. They used residential real estate sales data from 1999, GIS, and hedonic price modeling to perform their study. They found that
most, but not all, of the greenways studied have statistically significant positive impacts on residential property values.

While the existing research on greenways and green infrastructure points to the environmental, economic, and social benefits that accrue from greenway development, the implementation of a greenway is not an easy task (Erickson, 2003). Donna Erickson of the University of Michigan, Ann Arbor, studied seven metropolitan greenway networks to analyze their differing planning, implementation, and funding strategies. Erickson studied Chattanooga, Chicago, Indianapolis, Toronto, Portland (Oregon), Minneapolis, and the state of Maryland. Four implementation factors were studied in each of these cities or states, in Maryland’s case: institutional structures, funding, policy frameworks, and ownership and management. She compared how each of the cities and states fulfilled these four implementation factors to determine similarities and differences among them. Through her analysis, Erickson concluded that a lack of coordination among the various agencies and groups involved in the greenway project is the biggest impediment to implementation. Additionally, the future of greenway projects lies in the inclusion of private corporate or philanthropic groups to secure funding and the expansion of the project to cover an array of issues beyond just recreation opportunities.

In a more recent study, Donna Erickson performed a comparative case study of greenway networks in Milwaukee, Wisconsin and Ottawa, Ontario, two cities with well-connected networks of greenways (Erickson, 2004). She asked two questions in her research. The first question she asked was how early local planning efforts affected the structure of the greenway networks seen in these cities. To answer this, Erickson studied the history of open space planning and the physical change in greenway development in
these cities. The second question she asked was how the histories of these two cities’
greenway networks have led to the current institutional structure of local government
used to implement the greenway networks. To study this, Erickson compared
organizational structures, inter-governmental cooperation, leadership, and objectives
between the two cities. Erickson used qualitative research methods to perform her in-
depth case studies by using historic documents, planning reports, key informant
interviews, and site visits. She found that both cities have historic corridors that the
greenway networks were based on but both lack influential leaders to implement
contemporary greenways that serve multiple objectives. She concluded by stating that
visionary thinking combined with strong leadership and a cooperative structure is
necessary for successful implementation of contemporary greenway networks.

The remainder of this thesis focuses on the implementation aspect of urban
greenways in order to acquire information useful to the implementation of the Selmon
Greenway. This thesis uses qualitative research methods, including case studies, to
answer the research questions presented in the introduction to the thesis. The specific
methods and sources of data used and the reasons for using these are discussed in the
following chapter.
Chapter 3: Methods

Urban greenways offer numerous benefits to the cities in which they are implemented, but much work goes into the creation of a greenway. The purpose of this research is to use qualitative research methods to determine how other cities funded and implemented urban greenways and how these findings relate to the proposed Selmon Greenway. This research provides an in-depth case study of the Selmon Greenway Feasibility Study, as well as background on greenways and trails in Tampa. The research also seeks to examine examples of other greenways in other cities across the country to gain insight into methods used to plan and implement greenways. I researched three urban greenways to provide a contextual background for the Selmon Greenway case study to build upon. These greenways are the High Line in Manhattan, the Minneapolis Midtown Greenway, and the M-Path in Miami. Specifically, I researched the planning processes, stakeholders involved, levels of coordination, and sources of funding for these three example greenways. Qualitative research methods are most appropriate for this type of study. I used the case study method to perform my research and used interviews, planning documents, and direct observations.

Qualitative research is the method of research used for this study. Qualitative research embodies five characteristics: “naturalistic, draws on multiple methods that respect the humanity of participants in the study, focuses on context, is emergent and evolving, and is fundamentally interpretive” (Marshall & Rossman, 2006, p. 2). This type of research will allow me to build a thorough background on Tampa, upon which I can create an explanatory study that applies theoretical and factual findings from the other
greenways to the Selmon Greenway. Qualitative research is appropriate for this study because its purpose is to examine how the example cities planned and implemented their greenways in order to provide guidance to the implementation of the Selmon Greenway. Forcing this type of study into a quantitative framework may limit the amount of valuable data found by imposing strict operational variables upon it (Marshall & Rossman, 2006). Using qualitative methods will also present the findings of this study in a format that is useful to policymakers, practitioners, and academics.

A qualitative research study requires flexibility on the part of the researcher in being able to refine the research questions when gathering data, as new ideas and questions may arise. However, the researcher must be careful not to veer off-course. For this reason, I am providing a detailed design and methodology to follow. Qualitative research has been criticized for researcher bias because the researcher chooses which units to study and which to exclude. However, it is impossible with qualitative research to include all possible data sources, so the researcher must use his or her judgment when deciding what data is most appropriate for the purposes of their study. For this study, my units of analysis are the greenways and their respective planning processes, stakeholders, levels of coordination, and funding sources. The biggest hurdle facing the Selmon Greenway is finding funding. This research looks into how other cities overcame this hurdle in order to provide examples and guidance to the Selmon Greenway.

Greenways scholars typically use qualitative research methods to carry out their studies. Case studies using historical records, planning documents, scholarly articles, and direct observations are commonly cited as the sources of data for greenway research. Many studies use comparative studies or historical studies to make recommendations for
contemporary greenway planning. Greenways researchers often use case studies because they provide an actual case upon which to gather and analyze data. A case study is an “in-depth examination of a single instance of some social phenomenon” (Babbie, 2004, p. 293). A case study may yield insights of a particular case that can be applied to other cases. For this paper, an explanatory case study of artifacts, the greenways, is performed. However, this method has its drawbacks because not all cases are equal and generalizing results can lead to inaccuracies. Robert Yin (1994) described two criticisms of case studies that are applicable to my study, and the ways to overcome these criticisms. The first is lack of systematic handling of data, which Yin suggests overcoming by reporting all evidence discovered, in a systematic way. The second is that findings cannot be scientifically generalized. Yin argues that findings can be generalized to theoretical conclusions, instead of to the population (Yin, 1994). The advantages of the case study method for this research outweigh these criticisms. This study will allow me to perform an in-depth study of downtown Tampa and the Selmon Greenway, and will reveal information that would not have been able to be obtained using more analytical methods.
Table 1. The Greenways

<table>
<thead>
<tr>
<th>Greenways</th>
<th>Location</th>
<th>Length</th>
<th>Year Opened</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Line</td>
<td>New York, NY</td>
<td>1.45 miles</td>
<td>2009</td>
<td>$150 million</td>
</tr>
<tr>
<td>Midtown Greenway</td>
<td>Minneapolis, MN</td>
<td>5.5 miles</td>
<td>2000</td>
<td>$15 million</td>
</tr>
<tr>
<td>M-Path</td>
<td>Miami, FL</td>
<td>9 miles</td>
<td>1983</td>
<td>$3 million (for improvements); $4.5 million (for connection to South Dadeland Greenway)</td>
</tr>
<tr>
<td>Selmon Greenway</td>
<td>Tampa, FL</td>
<td>1.7 miles</td>
<td>N/A</td>
<td>$2 million (proposed)</td>
</tr>
</tbody>
</table>

Hundreds of greenway trails exist across the country presenting numerous urban greenway examples to study. The three example greenways, which vary in implementation strategies, funding sources, scale, and function, were chosen for various reasons. I chose to study the High Line because it is popular and well-known to New York City residents and people across the globe. The High Line is largely successful as shown through the number of visitors each year and the amount of publicity it receives. There was a plethora of data available to include in this research and provided and base upon which I could build research on the other greenways. The Minneapolis Midtown Greenway was included in this research because it is a popular recreational trail located in downtown Minneapolis that provided a different implementation process than the High Line. The Midtown Greenway is closer in scale to the Selmon Greenway in terms of amount of funding and level of design than the High Line. The Midtown Greenway records high numbers of bicyclists along its path, even in the winter months, which will be discussed further in the next chapter. The M-Path was included in this research for two
reasons. First, the M-Path is located in Miami, which is useful because the Florida Department of Transportation is involved in both greenway projects, which can provide a good comparison to the Selmon Greenway. The M-Path is also located underneath the Metrorail right-of-way, which bears similarities to the proposed placement of the Selmon Greenway underneath the Selmon Expressway right-of-way. Together, these greenways provide a broad array of greenway implementation strategies, funding sources, and functions that may be useful to the implementation of the Selmon Greenway.

I chose to base my thesis research on the Selmon Greenway for several reasons. First, I have been a Tampa resident my entire life and entered into urban planning with the hopes of improving the quality of life in Tampa in some way. During my studies in the urban planning program, I became concerned with the lack of bicycle and pedestrian friendliness in Tampa. Luckily, I earned an internship with Renaissance Planning Group, where my primary focus was the Selmon Greenway Feasibility Study. As I worked on the project, it became clear that the Selmon Greenway presents an opportunity to improve the pedestrian and bicyclist environment in downtown, as well as other quality of life elements such as environmental sustainability, economic development, and community development. While the feasibility study is complete, the fate of the Selmon Greenway rests in the ability of the local government to secure funding to execute the greenway. This research seeks to make a case in support of the Selmon Greenway by identifying the benefits the greenways have brought to these communities and how these cities have overcome the hurdles of funding and implementation.
Sources of Data

**Interviews.** In-depth interviews of the planners involved and the grassroots supporters helped provide inside information on the Selmon Greenway planning process to supplement the planning documents from the feasibility study. Interviews are useful for gauging opinions of the interviewees and for finding information that might not be found anywhere but in the minds of the participants. Interviews can also reveal a large amount of information in a short amount of time (Marshall & Rossman, 2006). The interviews were in-depth and conversational as opposed to a structured format. I chose my interviewees because they have profound knowledge of the Selmon Greenway, are involved in the grassroots greenway efforts in Tampa, or work for one of the stakeholder agencies of the greenway. I interviewed Alan Steinbeck of Renaissance Planning Group who was the project manager for the Selmon Greenway Feasibility Study to be brought up-to-date on the progress of the project since the end of my internship six months prior. I interviewed Karen Kress of the Tampa Downtown Partnership to gain insight into the background of the Selmon Greenway. She referred me to my next interviewee, Nico Stearley of HOK Architects, who, along with her colleague Anna Vazquez, led the grassroots effort for the Selmon Greenway in Tampa.

**Documents.** Documents are useful to case studies to establish a baseline of data and to allow for systematic classification to guide further research (Marshall and Rossman, 2006). For the case studies of the three example greenways, the typical documents included newspaper articles, government documents, and scholarly articles. The Selmon Greenway case study also includes newspaper articles and planning documents. Many of the documents used for the case study of the Selmon Greenway
were from the Selmon Greenway Feasibility Study. I aided in the creation of several of these useful documents or maps during my internship with Renaissance Planning Group. Other documents used were local planning documents, such as the Tampa Greenways and Trails Master Plan. I also used the documentation of grassroots effort meetings for the Selmon Greenway to provide background on the grassroots efforts.

**Direct Observations.** Direct observations can be useful to supplement other sources of information. “Observation entails the systematic noting and recording of events, behaviors, and artifacts (objects) in the social setting chosen for study” (Marshall and Rossman, 2006, p.98). Direct observations of the High Line and the Selmon Greenway and Tampa were used in this research. I visited the High Line to observe the greenway firsthand to gain a clearer perspective of why this greenway is so popular. As a Tampa resident, I have firsthand knowledge of the city and the Selmon Expressway. I used observations and general knowledge, which I gained from working on the feasibility study. My first week at my internship, my colleagues and I walked the entire length of the downtown viaduct of the Selmon Expressway to observe the existing conditions and to determine whether a greenway is feasible under this structure.

**Electronic Sources.** Electronic sources were useful to add to the background information on the cities. Government websites were helpful in accessing information on the cities and locating planning documents. Grassroots websites, such as the Friends of the High Line, the Midtown Greenway Coalition, and the M-Path to Enlightenment, helped build a background on the grassroots efforts in these cities. Blogs help provide insight into the opinions of users of the greenways and ways in which Tampa can move forward with its own grassroots effort.
The Selmon Greenway is still in its planning stages; therefore no quantifiable data exists since the greenway has not yet been built. Thus, the findings in this research of the three example greenways can only be applied theoretically to the case study of the Selmon Greenway. It is my hope, however, that this analysis will provide useful information to planners and government officials in Tampa in seeing the Selmon Greenway through to completion.
Chapter 4: Case Studies of Example Greenways

This section analyzes three urban greenways in order to glean information helpful to the implementation of the Selmon Greenway. The greenways discussed include the High Line in Manhattan, the Minneapolis Midtown Greenway, and the M-Path in Miami. These greenways represent a broad range of urban greenway models across geographic location, scale, function, and implementation methods. The purpose of studying these greenways is to provide examples of successful urban greenways that demonstrate various ways of implementation, funding, and coordination of stakeholders.

The planning and implementation of a greenway can be complicated but rewarding; the degree of complexity varies depending on its scale, function, and geographic location. Because of this, there is no clear-cut way to make a greenway happen. However, there are several key components necessary for a greenway to become a reality. These key components include stakeholder commitment, grassroots support, strong leadership, a plan of action, education, and funding (Erickson, 1997).

Often, the idea for a greenway comes from the grassroots supporters. However, strong leadership and commitment from elected officials or public agencies is necessary to gather support and funding. Stakeholder commitment enables the push for the greenway to persist. Since greenways typically require the coordination of multiple organizations, both public and private, a strong leader to organize the greenway movement is vital. A plan of action to follow that is agreed upon by all of the interested parties is necessary to guide the development of the greenway and provide a roadmap to the final result: a completed greenway. Educating the public about the greenway and
involving them in the planning process is important to create a sense of ownership of the greenway in the public, which will help to ensure its success after its completion. However, the greenway will never be constructed without funding sources. The first five components are necessary for the final component: funding. Since several groups or public entities may be involved in a greenway project, funding at all levels may come from a variety of sources (Erickson, 1997).

The following three cases present examples of the various methods used by multiple stakeholders to create an urban greenway. While each greenway was achieved differently, these greenways embody the key components necessary for the implementation of a greenway. The High Line provides an example of how a grassroots effort mobilized New York City to save the abandoned infrastructure of an old rail line to create a magnificent public space. Additionally, the High Line shows how a public-private partnership can work to create a greenway, through the coordinated efforts of the Friends of the High Line non-profit and the city’s elected leaders and public agencies. The Minneapolis Midtown Greenway also involved a grassroots effort, which ignited the idea of the greenway. The Midtown Greenway also demonstrates intergovernmental coordination, led by a central organizing agency, Hennepin Community Works. The Miami M-Path entailed a grassroots effort to help along two aspects of the M-Path: updating the current path and extending it to connect with another trail. The M-Path also demonstrates intergovernmental coordination to achieve funding and for the implementation.
High Line

The High Line is arguably the most famous greenway in the United States. Located in Manhattan, the High Line is a 1.45-mile long, 6.7-square-acre, 30-foot-high linear park running through Manhattan’s Chelsea and West Village neighborhoods (Sternbergh, 2007). Modeled after the Promenade Plantee in Paris, the High Line is an elevated, linear park that reused abandoned rail infrastructure to create a beautiful and unique public space. With 2 million visitors per year, and an average of 15,000 each day, the High Line serves as the paragon of greenways, in planning, funding, design, and operation alike. It was created through a hard-fought grassroots battle that eventually garnered the support of elected officials, wealthy philanthropists, celebrities, and the general public.

The High Line was originally built in the 1930s to transport goods by rail to the refrigerated meat and dairy warehouses of the West Side. It was elevated in order to remove dangerous freight traffic from the street and for more efficient movement of goods (Schwartz, 2004). It replaced the train track running along Tenth Avenue that was nicknamed “Death Avenue” for the frequent number of pedestrian deaths due to trains. However, soon after its construction, a combination of the Depression and the rising popularity of freight truck transport greatly decreased traffic on the High Line (Sternbergh, 2007). In the 1960s, part of the High Line was torn down, leaving a segment running from Gansevoort to 34th Street (Schwartz, 2004). The last train ran on the High Line was in 1980, after which the structure was abandoned and left to rust and became grown over with weeds (Sternbergh, 2007).

For twenty years, the High Line stood vacant while the city, local landowners, and Conrail, the railroad that owned the High Line, fought legal battles over who should pay
to tear it down (Sternbergh, 2007). However, West Side residents Joshua David and Robert Hammond, saw an opportunity to transform the structure into a unique public space (Schwartz, 2004). The pair met at a community board meeting about the High Line, which they both attended in the hopes of joining a “Save the High Line” group, but found that there was not one in existence. So they created Friends of the High Line, a non-profit 501(c)(3) organization, and began spreading the word about saving the High Line (Sternbergh, 2007).

At the time, the High Line was not open to the public, so David and Hammond had to devise a way to show the uniqueness of the High Line to the public in order to advertise and sell the idea of its reinvention. Joel Sternfeld, a photographer who had shot ruins of Rome, was recommended to them. Sternfeld captured images of the High Line over the course of a year, showing the structure through the seasons. On the following page is one of the images taken by Sternfeld. The images were compiled into a book to sell the idea to the public and demonstrate that the High Line was worth saving, in order to garner more grassroots support and catch the attention of influential leaders (Sternbergh, 2007). They quickly gathered the support of local residents, civic organizations, businesspeople, and elected officials including City Councilmember Christine Quinn, Council Speaker Gifford Miller, and City Planning Director Amanda Burden (Schwartz, 2004).
Near the end of his career as Mayor of New York City, Rudy Guiliani approved the demolition of the High Line and Hammond and David decided to sue to save it. Friends of the High Line held its first fundraiser to gather $60,000 to pay for legal fees. At that point, celebrities and high level elected officials began to bring visibility to the campaign (Sternbergh, 2007). The election of Michael Bloomberg as Mayor was a crucial turning point in the fight to save the High Line. Bloomberg quickly changed the course of action from demolishing the High Line to preserving it (Schwartz, 2004).

In December of 2002, the City began the first steps in the planning process of converting the High Line into a public space by filing a petition with the Surface Transportation Board (STB) for a Certificate of Interim Trail Use (CITU). This would
allow the City to negotiate with the railroads to open the High Line to the public. In September of 2004, a joint petition among the City, the State of New York, CSX Transportation (the owner of the rail at the time), and Conrail (the owner prior to CSX) was filed to the STB to convert the line into public space through the federal rail-banking program. Rail-banking allows rail line owners to grant easements for rail to be used as public open space, typically used by the Rails-to-Trails initiative (New York City Department of City Planning, 2004).

The Friends of the High Line held an open design competition to come up with a design for the High Line. The Steering Committee, comprised of representatives from the City of New York and Friends of the High Line, made the final decision on the design group. The selection process began in March of 2004 with an open Request for Qualifications (RFQ). The fifty-two respondents were narrowed down to four in May of 2004 and the finalists were announced in August of 2004. The winning teams were architecture firm Diller Scofidio and Renfro and landscape architecture firm Field Operations. The horticulturist Piet Oudolf was chosen to select plant materials used throughout the High Line (New York City Department of City Planning, 2004).

One of the reasons the High Line has been so successful is because of its high-quality, unique design elements. Rail tracks adorned with attractive plantings remain intact to remind visitors of what this stretch of land was at one point in time. The linear park offers a variety of uses as users meander along the path, such as a sundeck, seating plaza overlooking the street, and areas for vendors or artists to display their work. The second phase of the development is intended to create a more intimate experience, including a lawn area and a fertile valley (Kilgannon, 2010).
In order to assure proper development around the High Line, the Planning Commission allowed a rezoning of the West Chelsea District. The West Chelsea Comprehensive Plan, which won the American Planning Association’s Outstanding Planning Award for a Special Community Initiative in 2006, used traditional zoning tools to transform the West Side of Manhattan into a vibrant, mixed-use neighborhood. The plan included preserving and transforming the High Line into public space, creating new housing, protecting the West Chelsea art district, and ensuring the proper amounts of light and air around the High Line. The plan entailed an inclusionary zoning component that required that twenty-two percent of all new housing is affordable for low-to-moderate income households (New York City Department of City Planning, 2006). The rezoning also fostered new growth in the area, with new buildings designed by famed architects cropping up around the High Line. Before the rezoning was even approved, developers were capitalizing on the possible future economic growth the High Line could create. Since the approval of the rezoning, twenty-seven new residential projects have come on the market in West Chelsea (Kershaw, 2010). The new development in the neighborhood has stimulated the local economy, with some business owners saying the current economic recession ended for them with the revamping of the High Line. It has been estimated that over the next thirty years, the High Line will generate $900 million in tax revenue that goes to the City (The Graduate Center, CUNY, 2010).

The High Line was created through a relentless grassroots effort. Since 1999, the Friends of the High Line non-profit gathered $150 million for the construction of the High Line (The Graduate Center, CUNY, 2010). Sources of funding came from city, state, federal, and private funds (Kilgannon, 2010). While the amounts raised are
probable only in a large city like New York, it demonstrates that getting the attention of elected officials and local elites can generate funding. The Friends of the High Line host annual fundraisers for the completion and maintenance of the High Line. The first phase of the High Line, running from 20th Street near 10th Avenue to the corner of Gansevoort and Washington Streets, is complete and officially opened to the public on June 8, 2009 (Ayer, 2009). The total cost of the first phase was $86 million (Kilgannon, 2010). The second phase, stretching from 20th Street through West Chelsea north to 30th Street, is slated to open this spring, with a total estimated cost of $67 million (Kilgannon, 2010). The Friends of the High Line are in charge of the maintenance and operation of the High Line while the City pays for security (The Graduate Center, CUNY, 2010). The success of the High Line can also be seen through the waiting list of volunteers hoping to become a part of the popular park. The High Line volunteer program accepts applications for volunteers to help with the spring plantings and upkeep of the foliage along the High Line. Volunteers also help with information and greeting park visitors (Friends of the High Line, 2011).

The High Line demonstrates the use of the key components necessary to create a greenway discussed in the beginning of this section: stakeholder commitment, grassroots support, strong leadership, a plan of action, education, and funding. These key components led to the successful implementation of the High Line. Stakeholders were committed to the High Line redevelopment throughout the entire planning and implementation process, beginning with the grassroots support followed by the support of elected officials and local leaders. The Friends of the High Line grassroots support sparked the idea for the redevelopment of the High Line and continues to work to
complete and maintain the elevated park. John Hammond, one of the founders of the
Friends of the High Line, believes that the early opposition to the preservation of the
High Line from Mayor Guiliani helped bring people together for the common cause of
saving the High Line and sticking with it (The Graduate Center, CUNY, 2010). Due to
the efforts of the Friends of the High Line to generate support from above, they gained
the strong leadership of Mayor Michael Bloomberg, in addition to other local and state
elected officials and leaders. There was productive collaboration among Friends of the
High Line and public agencies including parks, city planning, transportation, and
economic development. The West Chelsea Comprehensive Plan served as the plan of
action for the implementation of the High Line, which included the redevelopment of the
High Line, the rezoning of West Chelsea, and an affordable housing element. The Friends
of the High Line educated the public about the idea of redeveloping the structure through
the use of photography capturing the natural beauty of the High Line through the seasons.
The Friends of the High Line also held, and still hold, fundraisers and run a website with
updates about the progress of the High Line and events. The funding of the High Line
came from a mixture of sources including city, state, and federal funds, as well as private
donations.

While the High Line is the paragon of urban greenways, valuable lessons can be
applied to other greenway projects. Allowing the Friends of the High Line to remain
active participants in the creation and maintenance of the project gave the community a
sense of ownership of the High Line. It demonstrates how a public-private partnership
can work together to achieve a public good other than a sports complex. The Friends of
the High Line maintains and operates the High Line, which helps New Yorkers retain a
sense of ownership over the facility. Once the public saw the benefits that the High Line would bring, it gained unwavering support. Now the High Line is a highly marketable tool that is widely appreciated by both New Yorkers and visitors from abroad.

**Minneapolis Midtown Greenway**

In the Midwest, the Minneapolis Midtown Greenway presents an example of a smaller-scale funded greenway than the High Line. The important lesson to be learned from the Minneapolis Midtown Greenway is the effect that intergovernmental coordination, funding leadership by a central organizing agency, and grassroots efforts can have on the development of a greenway. The idea for the greenway began with the Minneapolis Midtown Greenway Coalition, which fought to make the Midtown Greenway project a priority to local officials (Midtown Greenway Coalition, 2008 d). Hennepin Community Works (HCW), an urban redevelopment program created by Hennepin County in 1994, helped initiate the creation of the Midtown Greenway by taking the lead on the funding of the project (Martin and Jacobson, 2008).

The Minneapolis Midtown Greenway is a five-and-a-half mile long recreational trail built upon a former railroad corridor in south Minneapolis, Minnesota. The trail is divided into a two-lane bicycle path and a pedestrian path to increase safety and transportation efficiency. The greenway runs from the Minneapolis Chain of Lakes in the west to the Mississippi River in the east and connects with other recreational paths at its western and eastern terminuses as well as along the greenway. It passes through and connects seventeen economically and ethnically diverse neighborhoods and parallels Lake Street, a retail strip lined with shops, restaurants, and other businesses (Midtown Greenway Coalition, 2008 a). Along the greenway, parks, plazas, and gardens have been
or will be created to serve as destinations points. There are several park areas and community gardens in existence and plans for additional park space along the route (Midtown Greenway Coalition, 2008 c).

The trail is owned by the Hennepin County Regional Railroad Authority and is maintained by the City of Minneapolis (Midtown Greenway Coalition, 2008 a). The greenway was built in three phases. Phase one of the greenway comprised the first 2.8-miles on the western portion of the greenway. This phase began in 1997 and completed in 2000 (Martin and Jacobson, 2008). HCW provided $1.2 million to the startup fund for the greenway (City of Minneapolis, 2006). Federal grants covered another $1.1 million, while the City of Minneapolis, the Hennepin County Regional Railroad Authority, and the Minnesota Department of Transportation gave $670,000, $350,000, and $170,000, respectively (City of Minneapolis, 2006). The central segment, Phase Two, opened in 2004 and comprises 1.5-miles of the greenway. Federal grants funded $3.2 million of this phase and the City of Minneapolis funded $500,000 (City of Minneapolis, 2006). Phase three of the greenway, the easternmost section, finished in 2007, and brought the total cost for the Midtown Greenway to $15,250,000, as of 2008 (Martin and Jacobson, 2008, 317).

Hennepin Community Works took the lead in financing the rehabilitation of the railroad corridor into the Midtown Greenway by offering up the first $1.2 million towards the project. Other public agencies then followed suit, designating their own amounts of funding. HCW demonstrates the role that counties can play in the development of their municipalities. HCW began in 1994 as a program designed to increase property values and the tax base through the use of transportation improvements, parkways, green space,
and greenways. HCW projects work toward five primary goals: enhancing the tax base, helping troubled neighborhoods, improving transportation, creating and protecting green space, and creating new jobs (Martin and Jacobson, 2008). As of 2008, HCW helped fund nineteen infrastructure improvement projects in Minneapolis and Hennepin County, totaling $197.5 million (Martin and Jacobson, 2008, 311). These infrastructure improvements have had a positive impact the community by augmenting green space, improving transportation options, and reinvigorating the local economy.

The Midtown Greenway was the second major project administered by HCW. The Midtown Greenway project included two other projects besides the remediation of the railroad corridor into a greenway. These two projects increased the total cost to $29.5 million (Martin and Jacobson, 2008, 318). The first project created the Midtown Community Works Partnership to manage redevelopment along the Midtown Greenway-Lake Street Corridor. The MCW Partnership works to coordinate public and private investments within this corridor (Midtown Community Works, 2011). The MCW Partnership purchased land along the greenway corridor and Lake Street to set aside for future residential and commercial development (Martin and Jacobson, 2008). The other project created a unique pedestrian/bike suspension bridge over Hiawatha Avenue and the light rail line intersection (James, date unknown). Previously, greenway users had to cross seven lanes of traffic (James, date unknown). The bridge made a safer crossing area for greenway users as well as a new landmark (Martin and Jacobson, 2008).

Although HCW was influential in the funding of the greenway, a grassroots effort mobilized the local officials to ensure this project was carried out. The Minneapolis Midtown Greenway Coalition is the grassroots, non-profit organization that campaigned
for the Midtown Greenway. They advocated their mission to local public agencies and achieved the successful creation of the Midtown Greenway. Their mission is to “empower communities to develop, improve, protect, and enjoy the Midtown Greenway as a green urban pathway to improve people’s lives” (Midtown Greenway Coalition, 2008 a). They have developed a number of policy recommendations for the greenway ranging from native plant installation resolutions, open space resolutions, trail improvement resolutions, and streetcar connection resolutions (Midtown Greenway Coalition, 2008 e). A Board of Directors with one seat for each of the seventeen neighborhoods along the greenway path and four at-large seats lead the coalition. There are also three committees that inform and guide decisions about the greenway. These are the Executive Committee, Land Use and Transportation Committee, and Safety Committee (Midtown Greenway Coalition, 2008 d).

Through the use of donor contributions, the organization continues to advocate for the Midtown Greenway as well as other greenways in the city. They organize community volunteers to help with maintenance and cleanups. The organization installed and maintains the community gardens, including planting 2,000 trees along the greenway. They distribute a seasonal newsletter updating greenway enthusiasts about their latest accomplishments and activities. Other activities organized by the Coalition include organizing group bike rides, greenway cleanups, public art projects, outreach, and safety (Midtown Greenway Coalition, 2008 d).

The greenway brought many new benefits to the surrounding community including economic development, transportation and recreation options, and community development. Several new developments occurred along the corridor due to the greenway
and its infrastructure improvements. A former Sears store that sat vacant for over a decade was redeveloped into the Midtown Exchange, a mixed-use development. The Midtown Exchange includes the Allina Corporation headquarters, a six-story hotel, the largest indoor public market in Minneapolis, 219 rental units, and 140 condominiums and townhomes for sale, with fifty-two of these as affordable units (Martin and Jacobson, 2008, 318). A MCW Partnership project called the “Urban Village” is another mixed-use development occurring along the greenway. This project reused abandoned industrial land to create 192 residential units with commercial development (Martin and Jacobson, 2008, 318). A rezoning of the area surrounding the Midtown Greenway was adopted in April of 2010 to guide future development along the greenway. The rezoning recognizes that the Midtown Greenway is a unique community asset and that new development along the corridor should be appropriate in keeping the character and usability of the greenway. Several parcels zoned to industrial uses were rezoned to commercial. Residential densities were increased in some areas, but with height restrictions so buildings do not tower over the greenway and block natural light (City of Minneapolis, 2010).

The greenway improved and increased transportation connections and recreational options. The greenway will connect with the future Southwest Light Rail Transit (LRT) line, which is set to open in 2017 (Southwest Transitway, 2011). A proposal to build a streetcar along the greenway alignment is in the works. In the fall of 2011, a study will begin that analyzes options for implementing streetcar transit along the greenway path. The Midtown Greenway Coalition is fully supportive of this initiative and sees it as a positive way to guide future development while preserving the greenness of the greenway
(Springer and DeWitt, 2010). Besides connections to rail transit, the greenway trail creates connections with other recreational trails along its alignment to create an interconnected system of trails. Since it was built upon an abandoned railroad corridor, the greenway is almost entirely grade-separated from the street level. It either passes under bridges with roads passing overhead, or passes over streets with traffic below making it safe for pedestrians and bicyclists. The increased safety draws many more bicyclists who utilize the trail for transportation purposes and not just recreational uses. The Midtown Greenway achieves high counts of cyclists, even in winter months. Thousands of bicyclists and pedestrians use the trail. On June 1, 2008, the greenway reached a new one-day record of 5,336 cyclists (Brandt, 2008).

The greenway aided in community development in a number of ways. The greenway creates opportunities for social interaction along its pathway. The Midtown Greenway Coalition has been important in facilitating greenway related activities open to the community. The coalition itself, comprised of representatives from the seventeen neighborhoods along its corridor, is an opportunity for people with similar interests to gather together to support a common cause. The group organizes group bike rides, group cleanups, and neighborhood outreach (Midtown Greenway Coalition, 2008 d).

The key implementation components of greenways were integral to the construction of the Minneapolis Midtown Greenway. The Midtown Greenway Coalition, the City of Minneapolis, and Hennepin County have been committed to completing the Midtown Greenway. The grassroots efforts of the Midtown Greenway Coalition brought awareness to government agencies and leaders to convert the abandoned railway into a recreational trail. The Coalition was committed to the greenway from the outset and is
still involved with the greenway, facilitating events and maintaining the trail. Hennepin Community Works took the lead in the funding of the greenway by providing the “first dollar” of the project, which is often the biggest hurdle for a greenway project since multiple stakeholders exist. The Hennepin Community Works Midtown Greenway project and its associated redevelopment projects acted as the plan of action for the Midtown Greenway. The Midtown Greenway Coalition educated the public about the greenway since the beginning and continues to advocate for the greenway and events associated with the greenway. The funding of the greenway gained momentum after HCW provided the initial funding source. Other sources of funding came from federal grants, the City of Minneapolis, the Hennepin County Regional Railroad Authority, and the Minnesota Department of Transportation.

**Miami M-Path**

A little closer to Tampa is the M-Path greenway in Miami, Florida. The M-Path is a nine-mile long, six to eight-foot wide multi-use recreational trail located in Miami-Dade County. The trail runs along the Miami Metrorail right-of-way from SW 67th Avenue in South Miami to SW 3rd Street north of the Miami River in downtown Miami (Miami-Dade County MPO, 2007). The Metrorail is a twenty-two mile elevated rapid transit rail system that connects south Miami to northwest Miami-Dade County, cutting through downtown Miami (Miami-Dade County Transit, 2011). The M-Path was built in 1983 with the construction of the Metrorail in order to provide a bicycle and pedestrian path connecting the Metrorail stations. The path, which is owned and operated by Miami-Dade Transit (MDT), currently connects six Metrorail stations: Brickell, Vizcaya,
Coconut Grove, Douglas Road, the University of Miami, and South Miami (Miami-Dade County MPO, 2007).

While not a tourist attraction like the High Line or a heavily trafficked bicycle path like the Minneapolis Midtown Greenway, the M-Path is appears to be a cherished recreational path for nearby residents, as demonstrated through the grassroots blog support. This greenway example is also different from the others in that it provides a story of a greenway already in existence but in desperate need of upgrading and expansion. It presents an example of how a city can upgrade and expand existing trail infrastructure when various entities work together to achieve improvements to a trail.

Since its original construction in 1983, the trail has been rerouted or completely removed to accommodate growing development in the Miami metro area. In 2007, the Miami-Dade MPO produced the Metrorail M-Path Master Plan with the purpose of fixing operational issues and areas of concern. Specifically, the Master Plan was created to fix substandard design, missing trail segments, poor visibility, lack of trail continuity and connectivity, encroachment of the trail, limited signage, and deteriorating pavement conditions (Miami-Dade County MPO, 2007).

The M-Path Master Plan outlined two guiding principles. The M-Path was constructed prior to the creation of broad-based trail design guidelines. One of the guiding principles created with the M-Path Master Plan is to apply consistent trail standards throughout the trail. Applying consistent trail standards will allow for a steady and safe trail experience. The other guiding principle is to develop an identity for the M-Path. This is to increase trail users and give it an identity beyond just an asphalt path underneath an elevated transit system. The total cost for the improvements was estimated
at $3,195,960.37, with short-term improvements costing $683,524.55 and long-term improvements costing $2,512,435.82 (Miami-Dade County MPO, 2007, p. 13). The County surmised that funding sources would come from a combination of sources including Miami-Dade Transit, Miami-Dade County, Florida Department of Transportation, developer agreements, and grant sources (Miami-Dade County MPO, 2007). However, up to this point, only a few improvements have been made since the creation of the Master Plan.

A separate but equally important project is being administered by the Florida Department of Transportation. Beyond enhancing and updating the trail, another issue with the M-Path is its discontinuity with the South Dadeland Greenway just south of its terminus at 67th Avenue. These two trails are separated by the on-ramp for State Road 878/Snapper Creek Expressway. The South Dadeland Greenway is a trail that runs along the right-of-way of the South Dixie Highway. Connecting these two trails will create a thirty-one-mile greenway that has already been named as a link in the East Coast Greenway, a proposed three thousand-mile greenway connecting Key West to Maine (Viglucci, 2010). In late 2010, the Florida Department of Transportation District Six agreed to pay $4.5 million to connect the two greenways (Viglucci, 2010).

The project consists of three components. The main purpose of the project is to create a mile-long bicycle and pedestrian connection between the two greenways. To safely cross the on-ramp of the State Road 878/Snapper Creek Expressway, FDOT is constructing a bicyclist and pedestrian-only bridge. Another aspect of the project is installing lighting, signage, and fencing at the Dadeland South and Dadeland North Metrorail stations. Environmental remediation is the third component of the project.
Sediment in the Snapper Creek Canal will be removed to improve its water flow. Additionally, a wall will be installed along the south bank of the Snapper Creek Canal. (FDOT Miami-Dade, 2011). The project officially broke ground on January 7, 2011 and is expected to complete on November 29, 2011. The total cost of the extension, creek remediation, and enhancements is estimated at $4,474,510.00 (FDOT Miami-Dade, 2011).

These two projects have required the coordination of public and private entities. The Miami-Dade County MPO Bicycle and Pedestrian Advisory Committee were instrumental in their advisory role to guide the development of the M-Path. The Green Mobility Network, a local grassroots bicycle and pedestrian organization, has been working for years to make these improvements to the M-Path. The Green Mobility Network organized a “Complete the M-Path” campaign, which was instrumental in creating awareness of the M-Path and its need for updates and improvements (South Florida Bike Coalition, 2010). Online blogs, such as The M-Path to Enlightenment and Transit Miami, have also been helpful in providing interested parties updates on the project.

In the years since the creation of the M-Path Master Plan, few of the plan recommendations have been carried out. In May 2009, the Miami-Dade County Commission approved $700,000 from a stalled project to the M-Path to begin work on the M-Path. However, this is only a small portion of the estimated $3 million needed to make all of the improvements (Spokes ‘n’ Folks, 2009). Supporters of the M-Path, such as the Green Mobility Network, hope that the funding from FDOT will galvanize Miami-Dade County to fulfill the M-Path Master Plan recommendations (Vilgucci, 2010). David
Henderson, Miami-Dade County’s bicycle and pedestrian planner says that voter-approved bonds will cover $1.4 million in improvements coming from the Master Plan. However, specific projects have not yet been planned (Vilgucci, 2010). The completion and updates to the M-Path are far from over, but progress is occurring and the wheels are in motion.

The Miami M-Path updates and connector projects demonstrate the key components to implementation. The stakeholder commitment to the M-Path is demonstrated by the grassroots stakeholders that use the greenway and who fought for the updates and the extension. The Green Mobility Network and their “Complete the M-Path” campaign took the lead as the grassroots effort behind the M-Path project. The Miami-Dade MPO acted as the leaders in the updates to the M-Path and the Florida Department of Transportation District Six took the lead on the extension of the M-Path. The Miami-Dade MPO created the M-Path Master Plan, but took years to begin the actual work on the M-Path. Education about the M-Path was extended to the public through the use of blogs updated by the Green Mobility Network and other frequent users of the M-Path. These blogs updated blog visitors about the campaign to complete the M-Path, as well as areas along the trail that were blocked or under construction along with advice on how to get around these areas. The funding of the extension is coming from FDOT while the funding for the updates to the trail are set to come from the Miami-Dade County, however, other sources will most likely be utilized as well.

Both Miami and Tampa are Sunbelt cities that developed around automobile usage. This made for automobile-oriented, sprawling cities less attuned to bicyclists and pedestrians. The M-Path and the Selmon Greenway share many similarities, which will
be useful in going forward with the design and development of the Selmon Greenway.
The M-Path is similar to the proposed Selmon Greenway in its unique location underneath the Metrorail line, an elevated rail transit system. Like the proposed Selmon Greenway, the M-Path utilizes the existing right-of-way of the Metrorail to provide a recreational path. The M-Path also crosses busy streets, which will occur along the Selmon Greenway. The trail itself varies from a separated asphalt trail to concrete sidewalks, which is another similarity to the proposed Selmon Greenway (Miami-Dade County MPO, 2007). Its level of use is similar to the potential level of use the Selmon Greenway may see. The M-Path is a useful example of how a greenway can be constructed and function underneath the right-of-way of an elevated transportation structure, whether it is a rail system or an expressway. This example may come in handy in the future, not only to draw realistic parallels between funding sources and stakeholders, but also in the design and functioning of the greenway.

The three greenways analyzed in this chapter display the various ways cities achieve greenways. While they all differ in their functions as greenways, funding sources, and the methods of implementation to create them, useful lessons from them can be applied to the Selmon Greenways. The lessons taken from these greenways will be discussed further after the Selmon Greenway case study is presented in the next chapter. The table below summarizes the stakeholders, funding sources, and implementation plans for each of the greenways.
Table 2. Stakeholders, funding sources, and implementation plans

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Funding Sources</th>
<th>Implementation Plan</th>
</tr>
</thead>
</table>
| **High Line** | • Friends of the High Line  
• Mayor Bloomberg  
• New York City  
• Federal grants  
• City  
• State  
• Private donations | • West Chelsea Comprehensive Plan |
| **Midtown Greenway** | • Hennepin Community Works  
• Midtown Greenway Coalition  
• Hennepin County Regional Railroad Authority  
• HCW  
• Federal  
• City  
• HCRRA  
• MDOT | • Hennepin Community Works Midtown Greenway Project and Community Works Partnership |
| **M-Path** | • Miami-Dade Transit  
• FDOT District 6  
• Miami-Dade County  
• Green Mobility Network  
• FDOT  
• Miami-Dade County | • M-Path Master Plan |
Chapter 5: Selmon Greenway Case Study

Background on Tampa

Tampa is located in Hillsborough County on the mid-west border of Florida and the Gulf of Mexico. Tampa is one of three municipalities in the county and is the county seat. Tampa is included in the Tampa-St. Petersburg-Clearwater metropolitan statistical area (MSA), which had an estimated population of 2,747,272 as of July 2009, making it the nineteenth most populous MSA in the country (United States Census Bureau, 2009 a). The estimated population living within the City of Tampa as of July 2009 was 343,890 making it the fifty-fourth most populous incorporated area in the United States (United States Census Bureau, 2009 b). Downtown Tampa is located at the top of Hillsborough Bay and is bounded by the Hillsborough River to the west, the Channelside District to the east, Garrison Channel and Harbour Island to the south, and I-275 to the north. Downtown Tampa is very compact for a downtown, with an area of 0.81 square miles, or 520.8 acres (Hillsborough Community Atlas, 2011).

The warm climate and location near bodies of water make Tampa a prime location for year-round recreation. Walking, jogging, cycling, and rollerblading are typical recreational activities occurring throughout Tampa. In 2008, Forbes magazine ranked Tampa as the fifth best city for the outdoors (Ruiz, 2008). Tampa has a collection of greenways and trails throughout its jurisdiction. As of November 2009, there were approximately sixty-four miles of trails including off-road multi-use trails, on-road bike lanes, and hiking trails (City of Tampa, 2009 b). The Tampa Greenways and Trails
Master Plan calls for a citywide system of 125 miles of greenways and trails. The Master Plan update recommends a system of over 200 miles of greenways and trails (City of Tampa, 2009 e).

In April of 1999, the City of Tampa led a coordinated effort to guide the development of greenways in Tampa by creating the Tampa Greenways and Trails Citizen Advisory Committee (GTCAC) to begin the process of creating a Master Plan for greenways. The CAC consisted of neighborhood association representatives, government workers, and interest group leaders who met monthly after their first meeting April in order to complete the Master Plan. The Master Plan document was created as a guide to the development and maintenance of greenways and trails in Tampa. The recommendations from the Master Plan focused on three areas: governmental action and coordination, segment implementation, and public education and awareness (City of Tampa, 2001). The Master Plan final document and map were approved by the City Council in February 2001 (City of Tampa, 2009 a).

In June of 1999, the City of Tampa held a series of four workshops to allow the public to participate in the Master Plan map-making process. Those who attended the workshops drew routes they recommended on City maps, which were later decided upon by the committee by performing field reviews of the proposed routes. A final map was created that displayed the committee’s recommendations for greenway routes. In March 2000, this final map was shown at four community workshops to gather feedback. Final changes were made and the Master Plan map was included in the Master Plan document (City of Tampa, 2009 a).
In 2005, the Tampa GTCAC and the City of Tampa Parks and Recreation Department updated the Master Plan. Like the first Master Plan planning process, a series of four workshops were conducted to gain feedback from the public on proposed amendments to the Master Plan. The amendment process yielded sixty new miles of recommended trails, including on-road bike trails, off-road bike routes, sidewalk connections, and off-road multi-use bicycle and pedestrian paths (City of Tampa, 2009 c).

There are six greenway areas in Tampa as identified by the City of Tampa Parks and Recreation Department. These include the Bayshore Boulevard Greenway (5.02 miles), Hillsborough River Greenway (14.17 miles), McKay Bay Greenway (3.11 miles), New Tampa Greenway (19.21 miles), South Tampa Greenway (5.6 miles), and West Tampa Greenway (12.16 miles). In each of these greenway areas, there are greenway projects under development (City of Tampa, 2009 d). The Bayshore Boulevard Greenway, the Hillsborough River Greenway, and the McKay Bay Greenway are located near downtown Tampa.

Two additional greenways or recreational paths are located in downtown Tampa. The Meridian Street Greenway was created by the Tampa-Hillsborough County Expressway Authority (THEA) in the late 2000s. The greenway runs along Meridian Street and links the Channelside District on the southeastern side of downtown to the Tampa Riverwalk and north to the Selmon Expressway (City of Tampa, 2009 f). The other is the Tampa Riverwalk, a project coordinated by the City of Tampa. The Riverwalk is intended to be a continuous pathway running along Garrison Channel on the southern end of downtown, north to the Hillsborough River, creating a 2.2-mile path.
along the downtown waterfront. However, there are currently gaps in the Riverwalk, which will require additional funding sources. The total cost for the Riverwalk was estimated at $40 million (City of Tampa, 2010). However, about $27 million is needed to complete the Riverwalk: $13.5 from private funds and $13.5 from public funds (City of Tampa, 2010).

A base of support for greenways and trails already exists in Tampa as shown by the number of pedestrian and bicyclist organizations and advocacy groups in the Tampa Bay area. There is a need and desire by these organizations to improve the cycling and pedestrian conditions in Tampa to create safe areas for these activities. The South West Florida Bicycle United Dealers (SWFBUD) is a nationally recognized bicycle advocacy organization of twelve bicycle retail stores and three bike advocacy lawyers fighting to grow cycling in the Tampa Bay area. The group, which was created by Alan Snel, organizes bicycle events around Tampa Bay and posts a blog with updates about bicycling events, policies, and news around Tampa Bay (Snel, 2011). The Green Artery, formerly known as the Central Tampa Green Space Initiative, is a new organization aimed at increasing pedestrian and bicycle transportation and safety in Central Tampa. Currently, the group is working on creating a trail infrastructure map for Central Tampa, which will be presented to the Tampa City Council in the hopes of further developing the Tampa Greenways and Trails Master Plan (Conley, 2011). The Tampa Downtown Partnership, the non-profit organization that stewards downtown Tampa through an annual contract with the City of Tampa, promotes pedestrian and bicyclist safety in downtown Tampa and organizes cycling events in downtown. They held their 5th annual
Tampa BayCycle Campaign that encourages commuters to cycle to work during the month of March, which is National Bike Month (Tampa Downtown Partnership, 2011).

**The Selmon Greenway**

The Selmon Greenway is a proposed 1.7-mile long, fifteen foot wide, multi-use recreational trail to run underneath and adjacent to the Selmon Expressway through downtown Tampa. Currently, the space under the expressway is used as public parking. The concept for the greenway includes providing transportation connections, pocket parks, educational and public art elements, stormwater management techniques, and amenities such as lighting and benches. The greenway will create a critical connection within the downtown trails network and to the trails networks beyond the downtown limits.

The greenway is proposed to be built in conjunction with the redecking and widening of the Selmon Expressway from four to six lanes through downtown Tampa. In May of 2009, the Tampa Hillsborough County Expressway Authority (THEA) began a Project Development and Environment (PD&E) study to determine improvement options for the thirty-year-old Selmon Expressway and the creation of the Selmon Greenway. The deck of the expressway, which has not been replaced since its construction, was deemed functionally obsolete in 2007, after several localized deck failures occurred. The expressway needs widening due to the expected increase in traffic that will occur when the expressway is connected to Interstate 4, which is currently under construction. THEA saw the redecking and widening project as an opportunity to implement the Selmon Greenway, which they say has been an idea for more than a decade (Wilkens, 2011).

Below is a downtown context map displaying the Selmon Expressway, Selmon
Greenway, Riverwalk, Meridian Street Greenway, TECO Historic Streetcar System, and existing and proposed bicycle routes.

![Figure 2: The Selmon Greenway context map (Hillsborough County MPO, 2010)](image)

**The Planning Process**

**Grassroots effort.** Many people or local organizations, including THEA, claim the Selmon Greenway as their idea. While the concept of turning the parking underneath the Selmon Expressway into a recreational trail may have existed in the minds of others, Nico Stearley and Anna Vazquez were the first to act on it. The two women realized the need for a trail through downtown Tampa to connect its bisected communities. The two
young women are architects who work for HOK Architects, an international design firm located in downtown Tampa. Ms. Stearley lives in Hyde Park, west of downtown Tampa, and Ms. Vazquez lives in Channelside, east of downtown Tampa. The two women, who are active bicyclists, found that there is no easy way to navigate between these two neighborhoods or to Ybor City to the north. The Selmon Expressway currently acts as a bisector among the various neighborhoods surrounding downtown Tampa. They saw an opportunity in the Selmon Expressway to reuse the existing infrastructure to create a useful and aesthetically pleasing space. They sought to utilize the shade and connectivity inherent with the expressway to convert “the wastelands,” as they refer to it, underneath the expressway into a friendly and attractive public area (Stearley, personal communication, February 23, 2011).

As both active cyclists and architects working for a well-know architecture firm in downtown Tampa, they knew the right combination of people to get their idea heard. They began speaking with various bicycle and pedestrian groups to spread the word about the idea to convert the space underneath the Selmon Expressway into a greenway. Their employer, HOK, allowed them to campaign for the greenway under their name to give them more credibility. Ms. Stearley kept a log of all of the meetings and presentations she and Ms. Vazquez attended pertaining to the greenway, which she graciously shared with me. They also started an online blog through HOK with posts related to the greenway. On August 7, 2009, the women met with Marty Stone of the Tampa-Hillsborough County Expressway Authority (THEA) to discuss the greenway concept, who had heard the women were talking to stakeholders in the community about the greenway concept. THEA was in the process of working with the City to incorporate
stormwater drainage elements in the viaduct widening in the hopes of achieving federal funding through a Transportation Investment Generating Economic Recovery (TIGER) grant. Mr. Stone was careful to point out that there was no money outside of the grant to fund the greenway. However, including the concept of a greenway with the viaduct widening could increase their chances of securing federal funding. Renaissance Planning Group was brought in to work with HOK to develop the greenway concept and create a concept map. The TIGER grant was applied for in September of 2009, so they had little time to develop the concept of the greenway before filing the application.

During the TIGER application process, Ms. Stearley and Ms. Vazquez continued giving presentations to interested organizations around the community. Over a two-month period, they presented the greenway concept to the Tampa Bicycle Committee, the University of South Florida Campus and Community Sustainability Conference, and the Mayor’s Office. They wished to achieve the Mayor’s written support of the greenway to include with the grant application. They presented their idea to the mayor along with the concept map and on September 11, 2009, the mayor of Tampa, Mayor Iorio, gave her seal of approval to the greenway project. However, in February 2010 the TIGER grant recipients were announced and the Selmon Greenway did not achieve funding.

In 2009, THEA conducted a Project Development and Environment (PD&E) study to determine the construction options for the downtown viaduct widening and redecking project. Part of this PD&E was evaluating the concept of including a greenway with the project. A public hearing was held on December 15, 2009, in which the attendants reviewed the description of the project, project alternatives, costs, and work schedule. The attendants could then fill out a comment form on aspects of the PD&E
study, including the greenway. The feedback on the greenway was supportive and positive. This was the opportunity for the public to make any recommendations to the greenway concept (Tampa-Hillsborough Expressway Authority, 2010).

In January of 2010, the Hillsborough MPO’s Livable Roadways Committee put their full support behind the project. On February 2, 2010, the Hillsborough MPO approved initiating a feasibility study for the greenway. Renaissance Planning Group was hired to perform the feasibility study with a budget of $50,000. After the feasibility study was given the go-ahead, the ball was in the local government’s court. Ms. Stearley and Ms. Vazquez, while still very supportive of the greenway and present at local meetings and presentations, allowed the local government organizations to take over.

**The Feasibility Study.** During the summer of 2010, I interned for Renaissance Planning Group (RPG), the local planning consulting firm hired by the Hillsborough County Metropolitan Planning Organization (MPO) to perform the greenway feasibility study. The purpose of the feasibility study was to analyze and identify a final recommended greenway alignment, facility types, constraints, opportunities for enhancements, and other related uses.

In early May of 2010, RPG staff walked the entire length of the Selmon Expressway downtown viaduct, starting at the Riverwalk and ending at Meridian Street. This was done in order to gain firsthand knowledge of the current conditions underneath the expressway and the overall feasibility of putting a greenway in this location. Much of the land underneath the Selmon Expressway is used as public parking for the City of Tampa. Along the path, pictures were taken to document current conditions. Areas of
conflict were noted, such as mid-block crossings or other locations where the greenway may face difficulties in continuity or safety.

Other urban greenways were researched in order to provide a basis upon which to develop the concept of the Selmon Greenway. The two greenways that were presented as examples were the Minneapolis Midtown Greenway and the Rose Kennedy Greenway in Boston. These greenways were chosen for their representation of the concept ideas to be included in the Selmon Greenway, such as park space, public art, and sustainability aspects. RPG staff reviewed sources of funding for these projects and various elements such as parks and public art that were included with these greenways to help create a conceptual basis to plan the Selmon Greenway upon. These two greenways guided the development of the Selmon Greenway concept and provided an estimate of how much urban greenways may cost.

An additional aspect of the feasibility study identified overall goals for the Selmon Greenway. The goals represent the holistic concept of the greenway and were written out to guide the development of the idea of the greenway. The goals are as follows:

**Goals.**

1. Create a safe, convenient, and desirable multi-use trail for pedestrians, bicyclists and transit users through downtown Tampa.

2. Connect residents and visitors to downtown Tampa, Ybor City, and the Channel District with downtown employment, entertainment, cultural, and educational venues.

3. Connect the Greenway to larger citywide trails and transit facilities including the Downtown Riverwalk, the Meridian Street Greenway, Bayshore Boulevard, the TECO Historic Streetcar, and the Marion Street Transitway.
4. Minimize impacts to surface parking under and adjacent to the Selmon Expressway.

5. Create more green space and recreational areas in downtown Tampa to foster a healthier and more active community.

6. Provide for the safety and comfort of Greenway users through the use of lighting, benches, fountains, and other park amenities.

7. Incorporate art, history, and educational elements along the Greenway to add aesthetic and informative value to the Greenway and downtown Tampa.

8. Incorporate innovative stormwater management techniques to minimize impacts to the environment.

A stakeholder meeting was held open to the public on June 10, 2010 to present the concept as developed up to that point and to receive feedback on the progress of the study. The stakeholders reviewed and commented on the initial goals of the greenway, which received positive feedback. Respondents were given worksheets, shown in Appendix A, which listed the goals and were asked to rank what they believed to be the most important goals. Sustainability, safety, and aesthetics were most frequently reported as the most important goals of the greenway.

An Issues and Opportunities map was provided to the attendants of the meeting to gather feedback on the concept up to that point. The map showed locations and ideas for the topic areas, which included: parks and open space, art and education, stormwater, transportation connections, parking, and materials and specifications. Participants were asked to provide feedback on the map and add their own ideas. An example of the worksheet is provided in Appendix B. Some of the feedback included ideas for dog parks, community gardens, bicycle and skate rental, outdoor classroom, fountains, and removing as much surface parking as possible.
Throughout the feasibility study, updates of progress were reported to the Livable Roadways Committee (LRC) of the Hillsborough County Metropolitan Planning Organization. The committee is comprised of volunteers from the public and private sectors and provides feedback and recommendations to roadway projects and policies. Presentations were given to the LRC on May 26, June 30, and July 28, during my internship. At each meeting, the feasibility study and developing greenway concept received positive feedback and support from the committee.

On August 9, the final concept of the greenway was presented to the Planning Commission. This presentation stressed the importance of inter-agency coordination among the Tampa Hillsborough Expressway Authority, City of Tampa, Florida Department of Transportation, and the Hillsborough County Metropolitan Planning Organization in order to move forward with the greenway. Other challenges identified in the meeting included continuity and crossings, parking, stormwater management, safety and security. Maps displaying existing conditions were created to identify the number of parking spaces, placement of new expressway columns created during the widening and redecking project, and locations of lost parking spaces due to the widening of the expressway and the greenway.

The Selmon Greenway Feasibility Study held an Open House for the public on August 18th 2010, at Union Station in downtown Tampa. The open house presented the findings from the feasibility study, including the final recommended alignment of the greenway (shown below in Figure 2) and the recommendations for the various topic areas covering parks and open space, stormwater management, art and historical elements, transportation connections, and parking. The open house allowed attendants to view the
concept maps and presentation boards and provide feedback on these components. There was almost unanimous support after the open house, which is notable because this does not happen often with public infrastructure projects. Typically, there is at least one person in opposition to an infrastructure project.

![Figure 3: The Selmon Greenway proposed alignment (Hillsborough County MPO, 2010)](image)

**Potential Benefits to Downtown Tampa**

The Selmon Greenway could bring numerous benefits to downtown Tampa including transportation connections, pedestrian and bicyclist safety, environmental sustainability, health, economic development, aesthetic improvements, and community development. Many of these benefits have a synergistic effect on one another, which will be explained further in this section.
Transportation Connections. In 2010, Forbes magazine ranked the Tampa-St. Petersburg-Clearwater MSA as the worst commute in the country. The study measured travel time, road congestion, and travel delays for the sixty most-populous MSAs in the United States. Tampa developed around the automobile, creating a city oriented towards the automobile. Public transportation is mediocre with only a bus system to provide transportation other than the automobile. Tampa is one of two of the top twenty-five most populous MSAs without a rail transit system (Levy, 2010).

The Selmon Expressway provides Tampa residents a critical connection between South Tampa, Brandon, and surrounding areas. However, the portion of the expressway within downtown Tampa has the opposite effect by separating the central business district (CBD) in the north from the convention and entertainment areas to the south and the Channelside Residential District to the southwest. One of the main goals of the Selmon Greenway is to connect these disjointed areas to create an integrated and well-connected downtown Tampa through increased transportation connections.

The 1.7 mile, 15-foot wide greenway will connect with Bayshore Boulevard linear park and the Tampa Riverwalk in the western edge of downtown, meander along the Selmon Expressway through downtown Tampa, and connect to the Meridian Greenway in the east of downtown. This configuration will make a loop of trails within downtown and connect to the larger trails network in Tampa. Along the greenway path, connections to existing and proposed bike routes will be made. The greenway will also intersect with the TECO Historic Streetcar System that runs from southern downtown to Ybor City. The hope is that increased transportation connections will lead to increased
transportation options. The transportation connections map, shown below, displays the increased connections that will be created by the Selmon Greenway.

Figure 4: The Selmon Greenway transportation connections map (Hillsborough County MPO, 2010)

Safety. In a 2009 study performed by Transportation for America, the researchers ranked metropolitan statistical areas (MSA) with populations over one million from most to least dangerous for pedestrians based on the number of pedestrian deaths per 100,000 people between the years of 2007 to 2008. The Tampa-St. Petersburg-Clearwater MSA was ranked the second most dangerous for pedestrians, behind the Orlando-Kissimmee MSA (Ernst and Shoup, 2009). Creating a greenway in downtown Tampa will help to improve the safety of pedestrians and bicyclists by making these transportation options
more visible to motorists and make motorists more aware of pedestrians and bicyclists. The greenway will incorporate signs that warn motorists that greenway users are present. There are several mid-block crossings that will incorporate recommendations from the Manual on Uniform Traffic Control Devices to ensure safe crossing areas for greenway users. The greenway will also include accommodations for persons with disabilities, to create a universally designed greenway that does not exclude any potential user.

**Environmental Sustainability.** Another goal of the proposed greenway is to add to the environmental sustainability of downtown Tampa. This will be done through incorporating pocket parks along the greenway and including stormwater management techniques in appropriate areas. Converting impervious surfaces into green park space or stormwater management areas will help reduce the urban heat island effect and manage stormwater runoff. Trees will be added, which will increase the urban tree canopy. Adding trees and vegetation will decrease the amounts of carbon dioxide emissions and other greenhouse gases in the air. The feasibility study identified six areas along the greenway suitable for conversion to park space, which are displayed in the map below. The park space would vary from recreational fields, community gardens, dog parks, and simple open park space. Native plants would be used for landscaping, which would help to manage stormwater (Schilling and Logan, 2008; Benedict and McMahon, 2003; Spirn, 1984; Thorne, 1993).
Figure 5: The Selmon Greenway proposed park spaces (Hillsborough County MPO, 2010)

The greenway will also increase the environmental sustainability of the area by providing transportation alternatives to the automobile. The greenway will provide an easier connection to downtown, which may mobilize people living or working near downtown to choose walking or biking instead of driving. In fact, this is where the idea for the greenway came from, as discussed previously in the grassroots development section. Anna Vazquez and Nico Stearley, residents living near downtown and working in downtown, saw an opportunity to utilize the existing Selmon Expressway right-of-way as a means of transportation. Parking in downtown Tampa is expensive and can be hard to find, so the greenway will be a welcome addition. Reducing the number of vehicles on
the road with self-sustaining modes of transportation will reduce the amounts of greenhouse gas emissions in and around downtown Tampa (Benedict and McMahon, 2003).

**Health.** The greenway may increase the health of nearby residents by offering more recreation opportunities within downtown Tampa (Frumkin and Eysenbach, 2003). The greenway will provide a linear recreational opportunity that allows users to get to destinations across downtown Tampa. Not only will it provide transportation options to get across downtown, but it may also propel downtown employees to get out of the office and get some fresh air. Additionally, the new park space will increase the recreation areas in downtown. Fitness equipment could be installed to give greenway users areas to stop and exercise.

**Economic Development.** Downtown Tampa has been struggling to invigorate its economy. During the workweek, downtown Tampa bustles with working people, but on weeknights and weekends, it lacks many visitors. New condominium buildings have been built in recent years to draw new residents to downtown. New amenities, such as the Curtis Hixon Waterfront Park, the Tampa Museum of Art, the Glazer Children’s Museum, the Riverwalk, and the Tampa History Center, have been built to bring more people into downtown. The Selmon Greenway could add to the efforts to bring more residents and businesses into downtown to make it a 24-hour city. Trail-oriented development is utilizes greenway trails as amenities around which residential and commercial development occurs (Rails to Trails Conservancy, 2007). Amenities that improve the quality-of-life of residents are an important draw for new residents and help generate economic development (Glaeser, 2011). As discussed earlier, numerous studies
have documented the affect that greenways can have on property values and economic development (Walker, 2004). Greenways and park spaces are urban amenities that attract homebuyers. Greenways and park space can also draw new businesses that are hoping to capitalize on the increased pedestrian and bicycle traffic through downtown (Hellmund and Smith, 2006; Lewis, 2003; Little, 1990).

**Aesthetic Improvements.** The greenway could improve the aesthetic appeal of downtown Tampa. Vacant land and parking lots will be converted into the greenway or park space, making the area along the expressway more visually pleasing. Vast, concrete vacant spaces and parking lots become hot deserts of asphalt in the summertime, making these areas even more unpleasant. Vegetation, landscaping, and trees will help soften the appearance of the underside of the expressway and make this space, and downtown as a whole, more approachable. Public art elements may be installed along the greenway, which will also add to the visual appearance of the land under the Selmon Expressway.

**Community Development.** The greenway and new park spaces could aid with community development. Recreational areas provide areas for people to gather and socialize (University of Illinois at Urbana – Champaign, 2003). When designed properly, greenways and parks can act as anchors for the community in which they are implemented and may instill a sense of ownership and pride in residents for these areas (Francis, 2003). The greenway presents an opportunity for people recreating along the greenway to stop and socialize. Children’s play areas, dog parks, and community gardens provide chances for interaction among people sharing similar interests.
Current Status

A TIGER II federal transportation grant was applied for in August 2010 to receive funds to widen the Selmon Expressway, complete the Tampa Riverwalk, and create the Selmon Greenway. However, the grant request was not approved. On December 14, 2010, the Hillsborough County Metropolitan Planning Organization approved of the feasibility study’s findings (Wilkens, 2011). However, a funding source, or sources, for the $2 million greenway has yet to be identified. Where this funding source will come from is unknown at this point, but there are a few possibilities.

In an interview with the Selmon Greenway Feasibility Study project manager, Alan Steinbeck of Renaissance Planning Group, he explained to me the complicated funding situation (A. Steinbeck, personal communication, January 13, 2011). While the Tampa-Hillsborough County Expressway Authority (THEA) operates the Selmon Expressway and collects the tolls for elevated expressway, the Florida Department of Transportation (FDOT) is in charge of the redecking and widening of the Selmon Expressway downtown viaduct. FDOT sent out a request for proposals (RFP) to hire a contractor to facilitate the design/build of the Selmon Expressway redecking and widening. It is up to the contractors applying whether they include the greenway in their proposals or not, depending on whether they can fit it into their budget. The overall total for the Selmon Expressway Mobility Improvements and Refurbishment is $130,160,000 and the Selmon Greenway totals $2,000,000 (City of Tampa and Tampa Hillsborough Expressway Authority, 2010). The breakdown in the total project costs is shown in the table on the following page.
Table 3. Widening, redecking, and Selmon Greenway costs

<table>
<thead>
<tr>
<th>PROJECT ELEMENTS</th>
<th>PROJECT COSTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selmon Expressway Mobility Improvements and Refurbishment</td>
<td>$130,160,000</td>
</tr>
<tr>
<td>Sustainable Stormwater Solutions</td>
<td>$1,675,000</td>
</tr>
<tr>
<td>Renewable Energy Installations</td>
<td>$125,000</td>
</tr>
<tr>
<td>Selmon Multi-use trail</td>
<td>$1,425,000</td>
</tr>
<tr>
<td>Pedestrian Lighting and Safety Improvements</td>
<td>$350,000</td>
</tr>
<tr>
<td>Pedestrian Amenities and Landscape</td>
<td>$225,000</td>
</tr>
</tbody>
</table>

(City of Tampa and Tampa-Hillsborough County Expressway Authority, 2010)

Part of the decision in determining the contractor for the Selmon Expressway Mobility Improvements and Refurbishment project is whether the greenway is included in their proposal and how the contractor designed it. Thus, it is a bargain for the contractor: if they include the greenway, it takes $2 million from their budget that could be used for the expressway improvements, but if they do not include the greenway, they risk not being chosen for the job. Ultimately, it is up to FDOT if the chosen proposal for the project includes the greenway. If the contractor chosen for the project does not include the greenway in their proposal, other sources of funding will need to be identified. This is where it gets even more complicated. Four local public entities could have a possible stake in the funding of the greenway: THEA, FDOT, the City of Tampa, and the MPO.

One agency could step up to fund the greenway or it could be a combination of these entities. Since THEA pursued the greenway feasibility study, and since the greenway will run along the Selmon Expressway right-of-way, THEA will likely be a
funder of the greenway. THEA is a toll agency, which means that THEA must
demonstrate that any money borrowed to create the greenway can be repaid, or is
“bondable.” THEA is currently undergoing a bond defeasance with FDOT in order to pay
down current bonds (Tampa-Hillsborough Expressway Authority, 2010). An agreement
was reached between the two agencies for THEA to use settlement funds from the
Reversible Express Lanes lawsuit, in which the elevated expressway lane collapsed.

If THEA is not able to fund the entire greenway itself, a coordinated effort among
all or some of the agencies will be necessary. The City of Tampa, MPO, and FDOT
would need to take money from other projects, or restructure budgets, which take much
time. Another option is for the contractor chosen for the Selmon Expressway Mobility
Improvements and Refurbishment project to include the construction of a portion of the
greenway in their budget and leave the remainder for the local agencies to cover.

A problem with multiple stakeholders involved in funding the greenway is
determining who will maintain and operate the greenway once it is built. Part of THEA
revenue from tolls goes to maintenance. One option is for the other local agencies to fund
the construction of the greenway while THEA commits to maintaining and operating the
greenway itself. The management of the parks created along the greenway alignment
will most likely be deferred to the City of Tampa Parks and Recreation Department.

Another obstacle that might stand in the way of the greenway is right-of-way. The
greenway alignment is designed to run along the expressway right-of-way, but public or
private land may need to be purchased in order to create the greenway. This is not an
ideal scenario because it adds another stakeholder to coordinate with and another funding
hurdle to overcome. The map below displays the publicly owned properties along the
Selmon Expressway right-of-way. THEA owns much of the property along the alignment, but areas that are privately owned can also be seen along the right-of-way.

Figure 6: Publicly owned parcels (Hillsborough County MPO, 2010)

The process for determining the contractor for the project has been long and is not yet done. The Florida Department of Transportation sent out the request for proposals for the project in early 2010 with a response deadline of January 29, 2010 (Florida Department of Transportation, 2010 a). On February 23, 2010, the longlist of contractors was released and on March 12, 2010 the shortlist of selected contractors was released. The final selection for the contractor will be determined on June 24, 2011, at which time it
will be known whether the greenway is included in the budget for the project and if other sources of funding must be found (Florida Department of Transportation, 2010 b).

**Additional Possible Funding Sources**

The Selmon Greenway will most likely require a number of funding sources in order to be built. Besides the possible funding sources identified earlier, the following are other possible sources of funding to tap into to construct the Selmon Greenway. These funding sources include federal and state government programs and private or non-profit organizations. This is not an exhaustive list of possible sources of funding, but shows that there is money available to create the Selmon Greenway.

The Recreational Trails Program, run by the U.S. Department of Transportation and the Federal Highway Administration (FHWA), provides grants for up to $50,000 for recreational trails. The funds are generated from the Federal Highway Trust Fund and a portion of the motor fuel excise tax. The FHWA distributes the funds evenly among the fifty states, which then distribute the funds where they deem appropriate (Federal Highway Administration, 2010). The Florida Department of Environmental Protection administers the funds for Florida. The McKay Bay Trail-Bike Connector, which the Selmon Greenway will connect with if constructed, received $50,000 for its construction (City of Tampa, 2001).

At the state level is the Florida Department of Environmental Protection’s (FDEP) Recreation Development Assistance Program (FRDAP). This is a competitive grant program that provides local governments up to $200,000 to develop public outdoor recreational areas. Grant matching ratios are required, and vary depending on the overall project cost. In the case of the Selmon Greenway, the grantee share is fifty percent of the
project cost. The Office of Information and Recreation Services evaluates and scores the applicants and FDEP then submits a recommended list to the Florida Legislature for funding approval (Florida Department of Environmental Protection, 2009).

There are many private and non-profit organizations with funds available to grant to recreation and open space projects. The Trust for Public Land (TPL) is a national non-profit organization that works with government agencies to conserve land for recreational use. TPL has been working on a greenway project in the Neighborhood of Overtown in Miami for the past several years (Trust for Public Land, 2011). The Kodak American Greenways Program is a collaboration among the Eastman Kodak Company, the Conservation Fund, and the National Geographic Society that supports greenway projects across the country and awards communities annually with funds to create greenways (The Conservation Fund, 2011). The National Endowment for the Arts Our Town grant provides funds to projects that create more livable and sustainable neighborhoods with a sense of place. Funds range from $25,000 to $250,000 (National Endowment for the Arts, 2011). These are only three out of hundreds of grant programs available for greenways from private corporations or non-profits. Many other sources are out there, it will just take diligence and creativity to identify and apply for these various grant programs.
Chapter 6: Conclusion

While urban greenways are beneficial to cities, they are not easy projects to complete. Greenways require commitment and coordination beyond the norm for roads or other transportation projects. Finding funding is often the hardest step in implementing a greenway because it requires creativity and most importantly, time. Both attitudinal barriers and practical concerns make the development and implementation of a greenway difficult. The conformity and acceptance of the automobile as the primary mode of transportation makes it much easier for local officials to justify the need for a new road as opposed to the need for a new recreational trail. However, as demonstrated throughout this thesis, green infrastructure deserves to be regarded as equally as important as grey infrastructure. Roads serve one purpose: to provide an area for the movement of vehicles. Conversely, greenways serve multiple functions, beyond just transportation. Even so, the culture of conformity makes greenway projects much more difficult to implement than roads, even though they are typically a fraction of the cost.

Downtown Tampa has the opportunity to create a unique and useful infrastructure improvement with the Selmon Greenway. The greenway could bring an abundance of benefits to downtown Tampa and its residents and employees, besides just a new recreational space. Environmental sustainability, safety, economic development, aesthetic improvements, and community development are some of the fringe benefits that the Selmon Greenway may bring. It has support from local government officials and
agencies, as well as the general public. The only thing standing in its way now is finding funding.

The three example greenways presented provide ideas for how to implement a greenway. While each of the greenways varied in scale, function, and funding sources, they provide valuable insight into how different cities implement a greenway. In each of the cases underutilized or abandoned infrastructure was reused to create a public asset. The High Line began at the grassroots level without the support from the top. The Friends of the High Line spread the word about the idea to as many influential people as they could think of. While they may have annoyed some people at first, their persistence paid off. They also marketed the idea to the public by using photographer Joel Sternfeld’s photographs of the High Line to show the public the potential of the High Line space. As the idea for the preservation of the High Line and its conversion to a public space began to gain traction and support of the public, the elected officials and community leaders put their support behind the project. The Friends of the High Line remain actively involved in the planning and fundraising of the project, and still maintains the linear park.

The Minneapolis Midtown Greenway also began with a grassroots effort that galvanized local officials to create the greenway along the unused rail system. The Midtown Greenway Coalition utilizes a website and newsletter to update interested people in the developments and activities associated with the greenway. The funding sources for the greenway came from a variety of organizations. The Hennepin County Regional Railroad Authority, City of Minneapolis, Hennepin County, and the Minnesota Department of Transportation pooled their funds to finance the land acquisition and construction of the greenway. This is strikingly similar to the public entities involved in
the Selmon Greenway project: the Tampa-Hillsborough Expressway Authority, City of Tampa, Hillsborough County Metropolitan Planning Organization, and Florida Department of Transportation. It demonstrates that this combination of public organizations can work together to secure funding for a greenway project like the Selmon Greenway.

The Miami M-Path greenway is perhaps the most applicable greenway example for the Selmon Greenway. The greenway, which was constructed with the creation of the Miami Metrorail, generated an ardent grassroots following of trail users. While the trail was constructed many years ago, gaps and inefficiencies were scattered throughout its right-of-way. The grassroots supporters started a blog to update users of the M-Path problems and to campaign for improvements. The M-Path shares many similarities with the Selmon Greenway. Its location underneath an elevated rail system right-of-way is similar to the location of the proposed Selmon Greenway underneath the Selmon Expressway right-of-way. The FDOT is also involved in both projects. FDOT District Six stepped up to fund the improvements and extension of the M-Path, a project twice the amount of the proposed Selmon Greenway. FDOT District Seven could follow the lead of District Six and help fund a transportation project besides roads, which would greatly benefit Tampa. To fix the inefficiencies along the path, the county took money from another project that had been halted in order to fund the improvements to the M-Path. This may be a possibility for FDOT District Seven to consider.

A better solution would have been for FDOT to require the inclusion of the greenway project in the request for proposals. Two million dollars is negligible compared to the $130 million for the project as a whole. This brings the argument for the greenway
back to the attitudinal barriers that make greenway development a difficult endeavor.

While FDOT is beginning to increase its pedestrian and bicycle projects, roads are clearly still the organization’s primary focus. FDOT is not the Department of Roads; they are the Department of Transportation. The implementation of multimodal transportation projects in Tampa could, and should, be increased. There is a culture of conformity to continue with transportation projects as business as usual, with roads being the primary objective and other modes of transportation as afterthoughts. This has led to Tampa consistently being ranked as one of the most dangerous cities for pedestrians and bicyclists. There is a need to overcome the submission to the road that is so prevalent in Tampa and other sunbelt cities that developed to accommodate the personal vehicle and not the pedestrian or bicyclist. One solution could be for all large-scale highway or road projects to include a multimodal component, so that the focus is not just about the vehicle but about all modes of transportation to create “complete streets.”

There are some rays of hope shining in Tampa, however. The Tampa Riverwalk, which the Selmon Greenway would connect to, is being built a section at a time. This has allowed for Tampa residents to see firsthand the benefits the linear park that borders along the Hillsborough River provides to Tampa. Many cities have used this method in their development of greenways, which has helped generate support for the completion of these structures and garner more grassroots support and funding. This method could be used for the Selmon Greenway. A small section connected to the Riverwalk could demonstrate to the general public the potential improvements the greenway could bring.

Without a doubt, creativity will be necessary in acquiring funding for the greenway. Various agencies will need to work together to secure the funds to create the
greenway. Two million dollars is minimal compared to the money that goes into road and highway projects in Tampa. It is time that Tampa agencies and leaders take charge and create a unique and beneficial infrastructure improvement. At this point in the implementation process, inter-agency coordination is more important than grassroots support. However, while grassroots support may not directly influence the funding of the greenway, the more people supporting the greenway, the more likely local officials will take notice and take action. The grassroots support has gotten the project this far. It went from a grassroots idea to inclusion in federal grant requests. The overwhelming public support throughout the planning process bolstered THEA’s commitment to the greenway project. The support of an influential local leader could propel the involved agencies to see the greenway through. Newspaper articles about the Selmon Greenway have been helpful in spreading the word about the greenway. The use of interactive materials, such as the Selmon Greenway website, will also be useful in getting the message out to the public about the greenway and to explain the concept of the greenway. Many greenway advocacy groups are turning to Facebook fan pages to argue their causes, which is another possible way to spread the word about the Selmon Greenway.

Tampa has the potential to create a unique trail that could bring a wealth of benefits to the community. This thesis has demonstrated the importance of urban greenways in promoting urban resilience, the potential benefits the Selmon Greenway could bring to Tampa, and the key components of implementation to see the greenway through to completion. It is my hope that at the very least, this thesis will educate the general public about the Selmon Greenway and its potential benefits. However, I hope
this thesis helps bolster the fight for the greenway and that Tampa will one day see a stretch of green underneath the Selmon Expressway instead of a desert of asphalt.


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Appendices
Appendix A

Selmon Greenway Feasibility Study

Stakeholder Group Meeting June 10, 2010

Draft Greenway Goals

1. Create a safe, convenient, and desirable multi-use trail for pedestrians, bicyclists and transit users through downtown Tampa.

2. Connect residents and visitors to downtown Tampa, Ybor City, and the Channel District with downtown employment, entertainment, cultural and educational venues.

3. Connect the Greenway to larger city-wide trails and transit facilities including the Downtown Riverwalk, the Meridian Street Greenway, Bayshore Boulevard, the TECO Historic Streetcar and the Marion Street Transitway.

4. Minimize impacts to surface parking under and adjacent to the Selmon Expressway.

5. Create more green space and recreational areas in downtown Tampa to foster a healthier and more active community.

6. Provide for the safety and comfort of Greenway users through the use of lighting, benches, fountains, and other park amenities.

7. Incorporate art, history and educational elements along the Greenway to add aesthetic and informative value to the Greenway and downtown Tampa.

8. Incorporate innovative stormwater management techniques to minimize impacts to the environment.

Discussion:

Is there something here that is not accurate or appropriate?

______________________________________________

Are there issues that need to be added to these goals?

______________________________________________
Please identify the three goals that are most important to you:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Other feedback:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

___________ Name
(optional):_______________________________________________________________
Appendix B

Selmon Greenway Feasibility Study

Stakeholder Group Meeting June 10, 2010

Issues and Opportunities

Please provide comments and additions during the Issues and Opportunities portion of the discussion.

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