This master plan document represents the citizens’ ideas and vision for the future of a transit station and its integration into the City of Palm Beach Gardens. The designs, illustrations, and graphics included within this report are meant to convey that vision and are conceptual by nature.
Although the City of Palm Beach Gardens has never been serviced by passenger rail, the Florida East Coast (FEC) railroad corridor which runs through the city, is a testament to the vital role railways played in the development of South Florida. Passenger trains ran north/south from Jacksonville to Miami, with east/west trains at key points through the state. Towns and cities grew around these stations, emanating east to the ocean and west into agricultural lands, and the region utilized a balanced transportation network of trains, cars, marine vessels, and bicycle/pedestrian connectivity. However, in the early 1960s, passenger service was eliminated, accelerating a trend towards suburban, auto-dominated sprawling land use patterns that have nearly consumed southeast Florida. Today, auto trips continue to dominate the transportation network, with transit accounting for less than 1% of all roadway trips. State experts project the population in the three southern counties (Miami-Dade, Broward, and Palm Beach) will grow by 48% through 2025; however, highway capacity will only grow by 14%, accelerating the need for multi-modal transportation to allow continued economic expansion, mobility, and quality of life.

For decades, local governments, citizens, and business leaders have advocated for alternative transportation modes through southeastern Florida and the state. The region’s first rail system - Tri-Rail - was established on the western CSX tracks in the late 1980s as a commuter rail running mostly west of I-95, with eighteen stations along its 72 miles. Given the steady increases in roadway congestion, gasoline prices, and environmental awareness, Tri-Rail’s ridership has steadily increased over its decade of operations. In the first six months of 2008, Tri-Rail has become the fastest-growing commuter rail system in the country, with some ridership statistics indicating more than 30% increased ridership. Palm-Tran, the county bus service, has also experienced significant ridership increases, with nearly a 30% ridership increase over the past three years. The growing demand for transit has also expanded the state’s focus east to the FEC tracks, and since 2005, the state has been leading a three-county "South Florida East Coast Corridor" (SFECC) Study. This effort is examining the reintroduction of passenger transit on the 85-mile railroad that connects downtown Miami to Jupiter, which could yield tremendous benefits to individual communities and the region as a whole.

Many regions of the US have developed balanced transportation networks, with easy interconnectivity between modes. The integration of land use and transportation planning has been determined to be critical to their success. Where land use patterns are transit-supportive, with a mix of land uses, comfortable pedestrian accessibility, and properly placed buildings and improvements, transit ridership tends to increase. This trend of transit-oriented development, or TOD, has been recognized by the local, state, and federal decision makers as a key component to improve the success of transit. As a result, the SFECC Study underway in the southeast Florida region has highlighted land use planning in conjunction with transit planning along the FEC Corridor.
There are many benefits to well-integrated land use/transportation planning. Operationally, the land use pattern dictates the ease in which transit can function. For users, a transit-supportive environment improves the ease and efficiency with which the transit system can be accessed. For property owners, a well-organized land use plan that addresses the interplay of building form and pattern, mobility, and land use increases predictability and communications circulation, building patterns, and increases predictability and confidence for investors, thereby stimulating desired development. The funding arrangements for transit also rely on land use patterns. Like roadway projects, transit funding is typically a blend of federal, state, and local dollars, with federal funding playing a primary role. Increasingly, the federal government has included land use ratings in its funding decisions, and the region's opportunities to secure federal funding is increased as land use patterns become more transit supportive.

For the City of Palm Beach Gardens, the TOD charrette offered an opportunity for citizens, property owners, and others to identify and evaluate future station locations and their related land use patterns. This visioning process expanded the role of citizen input, highlighting the relationships between land use, mobility, economics, and other factors. With an adopted Citizens’ Master Plan, the City is able to clearly communicate its expectations to citizens, business owners, investors, and agencies, well ahead of the capital investments necessary to enable the transit system. With the future transit system as the core focus of the charrette, the Citizens’ Master Plan addresses the surrounding land use patterns to maximize the benefits of transit for the community. Over time, the implementation of the Citizens’ Master Plan will encourage transit-supportive development, both public and private, which will produce a more successful transit system as it evolves. This is crucial as issues of sustainability, energy, and mobility become paramount to local governance in Florida.

The Citizens’ Master Plan and charrette would not have been possible without the support, cooperation, and enthusiasm of the citizens and staff of Palm Beach Gardens. A special note of gratitude goes to:

City Council
Mayor Joseph Russo, Vice-Mayor David J. Levy, Council Member Eric Jablin, Council Member Jody Barnett, Council Member Burt Premuroso

Ron Ferris
Palm Beach Gardens City Manager

City of Palm Beach Gardens Growth Management Department:
Kara Irwin, Administrator; Allyson Black, Resource Manager; Stephen Mayer, Planner; Nilsa Zacarias, Long-Range Planning Manager.

and to our very generous sponsors

The Gardens Mall, Palm Beach Community College, Palm Beach Gardens Marriott, Seacoast Utility Authority, Nutrition S’Mart, Royal Sandwich Company, Panera Bread, and Starbucks Coffee
**Transit in Florida?**

**Why Now?**

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EXECUTIVE SUMMARY

Purpose

In coordination with the ongoing South Florida East Coast Corridor Study (SFECC), the Palm Beach Gardens Transit-Oriented Development (TOD) Charrette Master Plan provides clear design recommendations for the primary station location, transit and pedestrian linkages between parcels, and detailed urban design and redevelopment scenarios along the PGA Boulevard corridor. During the Tier One phase of the SFECC, the PGA Boulevard corridor was identified as an ideal location for a Regional Park-and-Ride station typology. This determination was made due to the proximity of the FEC corridor to the PGA Boulevard/I-95 exit, the significant job base on the Boulevard, and the regional shopping and workplace destinations also on PGA. This has been a multi-agency process including the Florida Department of Transportation (FDOT), the Palm Beach Metropolitan Planning Organization (MPO), South Florida Regional Transportation Authority (SFRTA), the Treasure Coast Regional Planning Council (TCRPC), and the elected officials, business leaders, and residents of the City of Palm Beach Gardens.

Study Area

The primary study area for the Palm Beach Gardens TOD Charrette is bounded by Military Trail to the west; Burns Road to the south; Prosperity Farms Road to the east; and Gardens Boulevard to the north. Other areas that were reviewed during the charrette process included PGA Commons and Midtown.

Palm Beach Gardens was not intended to be a “transit-supportive” city. Being as young as it is, the city was developed during a period when suburban, disconnected pods were the planning vogue. Inwardly-focused, beautifully landscaped micro-environments were held in high regard for their value and the quality of life they created.

Over time, the implications of certain planning trends are becoming clear. Vehicle miles traveled (VMT), time spent in the automobile, energy consumption, and a public realm generally given over to the car are some of the negative impacts of suburban planning. The City of Palm Beach Gardens, its residents, elected officials, and staff should be commended for taking a close look at the city and continually striving to make improvements. Cities are not static, they are constantly changing. This effort is an opportunity for the City of Palm Beach Gardens to address elements of the city that need adjusting, and celebrate those elements that make the city special.
The Palm Beach Gardens regional park-and-ride station is unique in the region as it will serve as a significant “origin” and “destination” station. The estimated 8 million square feet of retail, commercial, and office space combined with the nearly 20,000 employees on the PGA corridor are a testament to the regional nature of this endeavor. During the week-long charrette that took place from March 27, 2009 through April 3, 2009 a number of transit, redevelopment, and economic enhancements to the area were considered. This charrette report goes into extensive detail describing near-tern, intermediate, and longer-range redevelopment strategies. Key recommendations of the charrette include:

Key Recommendations

1. The Central Location (Alternate A1A and the Gosman Site) is the preferred station location;
2. Alternate A1A should be reduced from 6 to 4 lanes from Kyoto Gardens Drive south to Victoria Lake Gardens Drive;
3. Downtown at the Gardens should be reconfigured to provide vehicular access in the pedestrian mall areas;
4. Legacy Place should be expanded to accommodate office and residential uses via the construction of additional parking garages to accommodate new buildings that complete the streets;
5. A simple and consistent trolley service that connects key destinations on the corridor should be explored.
BACKGROUND
History of Transit

Like most east coast Florida communities, the development of Palm Beach Gardens and eastern Palm Beach County is inextricably tied to the Florida East Coast (FEC) railroad. Beginning in the 1880s, Henry Flagler extended his railroad south from Jacksonville along Florida’s then undeveloped east coast, through St. Augustine, Daytona Beach, and into Palm Beach County by the 1890s. Shortly thereafter, the rail line was extended south into Miami and ultimately into Key West in 1912. Rail service was critical for economic expansion and passenger travel, and cities along Florida’s east coast flourished with the convenient interconnectivity – both north and south.

In the mid-1960s, due to a labor dispute, passenger service on the FEC was terminated, shifting inland to the CSX tracks with the FEC carrying only freight through South Florida for the past half-century. The hope of reintroducing passenger transit on the FEC rail line has persisted ever since.

By the 1980s, the impacts of suburban sprawl and the elimination of passenger rail service to Florida’s coastal cities had become evident with declining downtowns surrounding many former Flagler train stations. Redevelopment programs were initiated in dozens of traditional downtowns with varying levels of success. The reintroduction of passenger rail transit on the FEC corridor had long been identified as one of the solutions to catalyze redevelopment as well as provide regional mobility, which was beginning to present an even tougher challenge by the late 1980s.

Transit Overview

The Creation of Tri-Rail

As South Florida’s population continued to increase, the historic job centers along the coast remained, surrounded to the north, south, and west by largely suburban residential development. Concerns over regional mobility intensified in the late 1980s, so when expansion plans for Interstate 95 materialized, the State of Florida’s Governor and Cabinet created the Tri-Rail Authority to provide inter-regional com-
Mutcher rail service from Miami-Dade County north through Broward County into Palm Beach County. The FEC corridor was initially evaluated for Tri-Rail, which became the region’s first rail project. However, negotiations with the FEC were unsuccessful, pushing the commuter rail west onto the CSX rail corridor.

Tri-Rail currently operates with eighteen stations through the three counties and a northern terminus at Mangonia Park (central Palm Beach County). The Tri-Rail Authority was reconstituted as the South Florida Regional Transportation Authority (SFRTA) in 2003 with a broader focus including land use surrounding the corridor and stations. In the early 2000s, the SFRTA began evaluating an extension of service north into Jupiter with a crossover from the CSX to FEC tracks north of the Mangonia Park Station. Unfortunately, methodological questions caused the agency to suspend its study efforts in 2004.

During the past three years, Tri-Rail has increased ridership by 30 percent with each passing year. The current Tri-Rail service exceeds previous ridership projections so significantly that many stations now lack adequate parking. The communities and the SFRTA have several different options to resolve the parking issue. More station area parking can be provided; transit service interconnections can be increased; or communities and the SFRTA can provide a combination of both.

The South Florida East Coast Corridor Study

In 2005, the Metropolitan Planning Organizations (MPOs) in Miami-Dade, Broward, and Palm Beach counties partnered with the Florida Department of Transportation (FDOT) to initiate the SFECC Study. This multi-year analysis is evaluating the potential reintroduction of transit on the FEC railroad along the

The Tri-Rail system is shown in orange. Existing stations are shown as white circles on the orange line, while the potential Tri-Rail extension to Jupiter is shown as small orange circles. Stations labeled with a blue box identify existing stations currently under planning study to incorporate new TOD. Purple boxes indicate locations currently under study for new stations with TOD.
85-mile stretch of railroad from downtown Miami north to the northern Palm Beach County line. The SFECC Study initially identified sixty potential “station areas” among the three counties generally located along roadways with I-95 access and/or in proximity to town centers, major employers, and residential populations. Since initiation of the study, the number of station areas under consideration has grown to more than eighty due to local requests, updated information, and the addition of overlooked station opportunities. The general study area is depicted in the map to the right.

The first phase of analysis for the SFECC Study was completed in late 2007, which included preliminary environmental analysis, review of various transit technologies (e.g., light rail, commuter rail, bus rapid transit), and the conclusion that passenger service along the FEC corridor will yield positive transportation benefits for the region, complementing the current Tri-Rail service. The 85-mile FEC corridor was divided into three distinct segments: a southern segment (from downtown Miami to Pompano Beach), a central segment (from Pompano Beach to downtown West Palm Beach), and a northern segment (from downtown West Palm Beach to Jupiter).

Within the 85-mile FEC Corridor, the first phase of the SFECC Study included the identification of sixty potential “station areas”, each of which contained a roughly one-mile diameter of land surrounding the potential station. These areas were centered around key transportation facilities (e.g., major east/west roadways with connection to I-95 or the Florida Turnpike; airports; seaports; and major employers such as hospitals, business parks, universities, and major event venues). Part of the analysis included the assignment of preliminary station area ratings. Utilizing a rating system derived from Federal Transit Administration (FTA) evaluation factors, each station area was evaluated on the basis of land use patterns, future development potential, ridership forecasts, and regulatory framework (e.g., comprehensive plans, land development regulations). National research indicates transit service in areas with more transit-supportive land use patterns tend to attract greater ridership, therefore making them more

The SFECC study is a comprehensive analysis to improve transit mobility throughout Southeastern Florida.

Above is an example of an employment center station type. This example is the Datran Center in Miami-Dade county and links regional shopping, workplace, and now housing via the Metro-Rail.
The current Tri-Rail system carries approximately 16,000 passengers per day through the three counties. At build-out, the combined Tri-Rail/FEC train network is projected to carry at least 110,000 passengers per day. Given escalating fuel prices, energy concerns, and future projected constraints of the existing roadway network, this transit capacity is critical for the continued mobility, economic vitality, and quality of life for the region’s population.

The second phase of SFECC analysis is currently underway with completion anticipated in 2010/
BACKGROUND

Indian River - St. Lucie - Martin - Palm Beach

2011 including submittal to the FTA. Funding is anticipated from three entities: 50% Federal (via FTA), 25% State, and 25% Local. The Palm Beach MPO has already begun setting aside $24 million to fund the local portion of rail service to Jupiter.

Service Options

There are a number of different service options being evaluated in the SFECC Study, utilizing both the existing Tri-Rail service on the CSX corridor as well as varied service options on the FEC corridor. The graphic to the left provides a conceptual illustration of the transit network at build-out with local, regional, and express services in place between the three counties integrated with the existing Tri-Rail service. While the ultimate service pattern will be determined through the SFECC Study, it is important to note the key differences in station spacing and numbers in the system illustration. The current Tri-Rail service was designed as a true commuter rail system with only eighteen stations spaced miles apart along its 72-mile portion of the CSX corridor. In contrast, the future transit system on the FEC Corridor is envisioned to have far more points of access with perhaps fifty or sixty stations distributed throughout its 85 miles. With a variety of service options, including local trains stopping at most stations, express trains stopping only at major downtowns, and a variety of other arrangements, the future system forecast indicates substantial ridership, which is projected to grow exponentially as the system is expanded.

TRANSIT-ORIENTED DEVELOPMENT

To frame the discussion and analysis of Palm Beach Gardens's future potential station areas, it is important to define generally the concept of Transit-Oriented Development, or TOD, as a pedestrian-friendly, mixed-use form of development designed to complement a transit station or transit corridor. TODs typically encompass a quarter- to half-mile ring around transit (10- to 15-minute walking distance) and provide an appropriate venue for regional destinations, multi-modal transit hubs, job centers, and both attainable (workforce especially) as well as market-rate housing. Because the half-mile ring repre-
BACKGROUND

represents the pedestrian catchment area for a station, each station analyzed in the charrette is identified with a half-mile circle drawn around it.

Ideally, TODs include a mix of uses (e.g., housing, retail, restaurant, office) such that eighteen hours of daily activity occur in close proximity to the transit station. TODs are characterized by easy mobility for pedestrians and bicyclists, and successful TODs are well integrated into collector transit systems, such as trolleys and buses. Parking within TODs is typically reduced and managed within the TOD district to further encourage transit ridership.

It is important to note TOD is not a one-size-fits-all solution. Rather, there are a variety of TOD types depending on station area context described in more detail below. Across the country, TOD has become the preferred land use form around existing and proposed transit stations. TOD is also a consideration for federal funding, and the federal rating criteria relies heavily upon land use patterns (both existing and anticipated) around proposed stations and along transit corridors.

OVERVIEW OF STATION TYPOLOGY

The 85-mile segment of FEC corridor under consideration in the SFCECC Study includes an incredibly varied array of land use patterns, densities, development conditions, and destinations. The corridor includes internationally prominent downtowns such as Miami, Fort Lauderdale, and West Palm Beach; international ports of call; three international airports; major sports stadiums; and several universities. It also includes hospitals, business parks, lifestyle centers, multi-story residential buildings, and shopping venues. In addition, the FEC transverses quaint historic downtowns, small-scale residential communities, parks, nature preserves, and even a few undeveloped properties. Accordingly, with the variety of station area conditions, eight different station types have been identified for the FEC Corridor, including: City Center, Town Center, Transit ridership nationwide has been trending upward. (Source: Palm Beach Post)

Despite recent increases ridership, the Tri-Rail and FEC transit corridors will require land use revisions and redevelopment efforts that are transit-supportive if they are to achieve their maximum potential.

TREASURE COAST REGIONAL PLANNING COUNCIL

Indian River - St. Lucie - Martin - Palm Beach
**Station Typologies**

**City Center Station**
The city center station should be located as close to the core of a downtown as possible. These stations should be signature or iconic symbols, and one each will be located in Miami, Fort Lauderdale, and West Palm Beach. Ample room should be provided for pedestrian activity, commuter conveniences, and spillover retail and restaurants; however, very little parking will be necessary in the dense, urban settings.

**Town Center Station**
The town center station also could be an iconic symbol of the city, yet smaller than the city center station. It would reflect the scale and character of smaller downtowns, such as Delray Beach, Boca Raton, and Lake Worth. Consideration should be given to commuter conveniences, such as coffee shops and newsstands, as well as housing and a moderate amount of parking.

**Neighborhood Station**
The neighborhood station type is for residential neighborhoods. These stations can be located within a neighborhood or at the conjunction of several neighborhoods. They should reflect the character of the surrounding neighborhoods and be carefully designed to properly integrate with the surrounding scale. Neighborhood stations should be easily accessible by neighborhood pedestrians and may offer limited park-and-ride spaces.

**Employment Center Station**
The employment center station can be urban or suburban in form and is located in or near a major employment center (e.g. hospitals, universities). While providing parking for the nearby job source is not required, these stations may offer some parking for local residents, who may also utilize the rail station. The quantity and location of parking should be carefully considered, ensuring alternative modes of transportation to the automobile are encouraged.
**Local Park-and-Ride Station**
The local park-and-ride type is a small station with commuter parking (surface lot or structured garage). It may be located as a neighborhood park-and-ride station with facilities (restrooms and seating) or slightly expanded retail uses to complement riders’ needs.

**Regional Park-and-Ride Station**
The regional park-and-ride station is larger than the local park-and-ride with significantly more parking. These stations are usually located with convenient access to an interstate or major highway to efficiently capture commuter drivers. The design must ensure the surrounding neighborhoods are not overwhelmed by commuter traffic. Some retail and restaurants are appropriate, and restroom facilities should be provided.

**Airport/Seaport Station**
The airport/seaport station is used at the beginning or end of a longer journey. Special accommodations should be made for quick and efficient junctions with other modes of transportation such as buses and taxis, yet walkability should remain the highest priority in the design.

**Special Event Venue Station**
The special event venue stations are for stadiums and convention centers. They should have minimal parking to encourage transit use and pedestrian safety. While this station type is designed to move and hold large numbers of people at one time, they also provide access for surrounding neighborhoods, creating design challenges.

**Recent TOD Studies in the Region**
The Treasure Coast Regional Planning Council has participated in a number of TOD charrette efforts in recent years. Below is a brief description and chronology of TOD activities in the region.

**West Palm Beach-2005**
The West Palm Beach TOD Village was imagined before the SFECC study began and therefore it was a City and County initiative. Western downtown West Palm Beach (between Sapodilla Avenue and Tamarind Avenue; from Hibiscus Street north to Banyan Boulevard) was largely

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*This employment center station in Dallas serves the medical center located next to the rail line.*

*Local park-and-ride stations can fit seamlessly into surrounding neighborhoods. When designed properly, these stations can also offer ground-floor retail and other use.*

*Regional park-and-ride stations contain large-scale parking, which is often structured, especially in urban areas.*
vacant and underutilized when TCRPC conducted a TOD charrette in January 2005. One significant hurdle to redevelopment was the significant amount of land in public ownership. The charrette conceived strategies to enable the local government landholders to partner with developers and fulfill particular public objectives. Since the completion of the charrette, the new Palm Tran bus transfer station and the new Department of Health building were built following the recommendations of the charrette.

**Town of Jupiter-2008**
The Town of Jupiter TOD charrette was the first process to be related to the SFECC and its coordinating agencies. TCRPC partnered with the Town of Jupiter, the Palm Beach MPO, FDOT, and the South Florida Regional Transportation Authority. The public charrette processes yielded many of the station types and locations with the Town Center station being located immediately north of the Jupiter Medical Center on Alternate A1A. Since the completion of the charrette, the town has been implementing necessary land use amendments to accommodate future transit-oriented redevelopment.

**Lake Worth-2008**
In June of 2008, TCRPC conducted another week-long, TOD charrette in the City of Lake Worth. The results included two station locations: a local Park-and-Ride at 10th Avenue North; and a Town Center station at Lake Avenue and U.S. 1. Additionally, the charrette Citizens’ Master Plan illustrates redevelopment strategies around the existing Tri-Rail station at Lake Avenue and the CSX corridor. The Citizens’ Master Plan also closely examines economic and retailing strategies for the City of Lake Worth.

**West Palm Beach FEC/CSX Connector-2010**
A critical piece of infrastructure needed for the SFECC extension of Tri-Rail service north to Jupiter is the physical, rail connector between the FEC and the CSX rail lines. Due to the close proximity of the two corridors in West Palm Beach, TCRPC is scheduled to conduct a CSX/FEC Connector charrette in January 9-15, 2010. This new rail connector will not only enable Tri-Rail to continue northward, it will also enable Amtrak to re-establish service from Jacksonville to Miami.
Amtrak
In early 2000, Amtrak, FEC, the Florida Department of Transportation (FDOT) and regional authorities agreed to a service concept to reintroduce passenger rail along Florida’s east coast on the FEC Corridor. Thirteen preliminary station locations, primarily in downtowns, were identified between Jacksonville and West Palm Beach, including Stuart, Fort Pierce, and Vero Beach. The new Amtrak long-distance service was anticipated to utilize existing FEC tracks, with limited additional track sidings as needed. An interconnection in West Palm Beach between the FEC and Chessie and Seaboard (CSX) tracks would be required to accomplish Amtrak service south to Miami. This general alignment is included in the 2006 Florida Rail Plan, which was developed by the FDOT, as a potential “East Coast Route” for long distance and new corridor rail service (carrier unspecified), and illustrated in the map graphic titled “Figure 5.6 Florida Intercity Passenger Rail Service Vision Plan – Coastal Route” (identified in blue on the map).

Negotiations were nearly completed between Amtrak, FDOT, and the FEC. However, in 2002, the Federal government directed Amtrak to suspend negotiations pending revisions to Amtrak’s budget and debt structure. It is TCRPC’s understanding the Federal loan provisions have been satisfied, and Amtrak began investigating new service alignments last year. In 2008, Amtrak’s budget was nearly doubled to $13 billion over five years (2009 through 2014), allowing the carrier to better expand its operations. The January 2009 economic stimulus legislation directs an additional $8 billion to states specifically to develop new corridor and long distance services and is being acted upon by states across the country.

Council discussions with Amtrak representatives indicate the Amtrak/FEC Corridor Project (Jacksonville to Miami) could be an appropriate project for Florida to request as part of the Federal economic stimulus package termed the “American Recovery and Reinvestment Plan.” New long distance and intercity corridor service would complement on-going efforts in southeastern Florida, such as the current Tri-Rail service or potential new service to be recommended by the South Florida East Coast Corridor (SFECC) Study. The SFECC study is evaluating new service in the 85-mile FEC segment in Palm Beach, Broward, and Miami-Dade counties.

The cost to carry out the Amtrak/FEC Corridor Project is estimated to be approximately $100 million. It should be noted that an Amtrak project would compete for a different source of Federal funding than either Tri-Rail or the SFECC project (Federal Railroad Administration funding versus Federal Transit Administration funding). Further, a Jacksonville/Miami Amtrak Park by the Amtrak station, Winter Park, Florida
The reintroduction of passenger transit on the FEC Corridor throughout the Region is an important component of the successful and sustainable redevelopment of the Region. The reintroduction of passenger transit on the FEC Corridor has been a high priority of the region for nearly two decades. As part of a larger state-wide transit system, expanded Amtrak service could provide enhanced inter- and intra-regional mobility as well as economic development in coastal cities. Amtrak’s regional rail service would complement the existing Tri-Rail service (commuter rail) as well as the intensive service proposed on the FEC Corridor in Palm Beach, Broward, and Miami-Dade. In October 2009, Amtrak and FDOT will make a formal application for ARRA funding and if successful, Amtrak service on the FEC, including the West Palm Beach FEC/CSX connection, could occur within three years.
Creation of the Citizens’ Master Plan
Creation of the Citizens’ Master Plan

Purpose
The charrette process was used to create the Citizens’ Master Plan. The purpose of the charrette process is to have the community work out issues and create their vision for their future. A team of professionals, also referred to as the charrette team, test to make sure the citizens’ requests are feasible and create a document that can be used to articulate the citizens’ vision.

Steering Committee
The first step of the charrette process is the creation of a steering committee to plan the logistics of the charrette. Steering committee members recommend times, locations, and strategies on how to best get the word out to the community about the charrette. Members also provided input on people and agencies to be interviewed during the pre-charrette interviews.

Pre-Charrette Interviews
The purpose of the pre-charrette interviews is for the charrette team to gain a full understanding of the area’s terrain, issues, shortcomings, and strengths. Interviewees ranged from community activities to utility providers. Each of the steering committee members and elected officials were also interviewed.

Public Workshops
The charrette steering committee recommended two public workshops to accommodate the diverse population. The first was held Friday, March 20, 2009, and the second was held Saturday, March 21, 2009. The Palm Beach Gardens Marriott hosted both the workshops with about 100 people attending both workshops.

Citizens listened to an initial presentation that outlined the issues in the area. Citizens were asked to provide a vision for their area and were specifically asked to provide a location for a park-and-ride train station along the FEC tracks. After the presentation, they dispersed to tables where they debated issues and drew their ideas on an aerial photo of the study area. At the end of the workshop, each table presented their group’s ideas to the rest of the charrette participants. Following is a summary the citizens’ requests from both public workshops.

Charrette
Charrette means “cart” in French. An architectural school legend holds that at the Ecole des Beaux Arts, in 19th Century Paris, work was so intense that students continued to sketch even as carts carried their boards away to be juried.

Today charrette refers to a high speed, intense, and focused creative session in which a team works with citizens on design problems and presents solutions.
The citizens’ drawings from the public workshop.
The citizens’ drawings from the public workshop and photo of the children’s table.
Citizens’ Requests
First of all, charrette participants suggested several locations for the park-and-ride train station: Parcel 5A, Parcel 5B, northeast corner of Old Dixie Highway and PGA Boulevard, southwest corner of Old Dixie Highway and PGA Boulevard, and underneath the PGA Boulevard flyover. The children’s table during the Saturday session suggested an additional station at Buckeye Street and Ironwood Road.

Below is a summary list of citizens’ requests:

~ relieve PGA Boulevard traffic by dispersing traffic onto other roadways
~ provide trolley and bus routes on frequent and regular schedules to encourage transit ridership
~ redevelop Loehman’s Plaza as a teaching hospital with student housing
~ use green architecture and building methods
~ expand the existing bike and pedestrian routes
~ all existing and future development should be transit-supportive
~ offer community services and convenience retail at the train station
~ create a signature station
~ connect the various areas
~ build offices and biotechnology uses at 5B parcel
~ allow no tall buildings on the north side of 5B parcel to protect adjacent residential neighborhood
~ new station and garages must be safe
~ create a transit stop at the Florida Turnpike
~ break up the area with smaller block sizes
~ mix the uses when redeveloping
~ create a city center
~ create a place for outdoor events

Studio
The charrette team listened, recorded, and took notes on the citizens’ requests. They set up a studio at the Gardens Mall March 22 – 27, 2009. The purpose was to work closely and intensely on the citizens’ ideas and allow the public to observe and offer additional input. Approximately fifty people, including elected officials, joined the team at the studio.

Work-in-Progress Presentation
Two Work-in-Progress presentations were given to the public: March 27 and April 3, 2009. Both were given at the Palm Beach Community College’s Garden Campus on PGA Boulevard. At these presentations, work completed by the charrette team to date was presented to the public, and additional comments and input were gathered. The information gathered throughout the entire charrette process was used to create this report.

Presenting requests and ideas during the public workshop.
Charrette Team

Below are members of the charrette team.

The studio was at the Gardens Mall where the charrette team worked together on the citizens’ requests.
A very special thanks to the local businesses that helped sponsor the Palm Beach Gardens Charrette:

Royal Sandwich Co.
Marriott PBG
Palm Beach Community College
The Gardens Mall
Nutrition S’Mart
Panera Bread
Starbucks Coffee
Seacoast Utility Authority

This event could not have happened without the leadership and participation of Ron Ferris, City Manager; Kara Irwin, Growth Management Administrator; Allyson Black, Resource Manager; Stephen Mayer, Planner; and Nilsa Zacarias, Long Range Planning Manager
PRINCIPLES OF PLANNING
AND URBAN DESIGN
PRINCIPLES OF PLANNING AND URBAN DESIGN

Every place is different. Each city, town, and neighborhood has unique characteristics and conditions. There are, however, fundamental principles of good urban planning that apply to all conditions. These principles are time-tested and have shaped great cities and towns for centuries. This chapter provides a detailed discussion of these planning principles which guided the designs and recommendations during the Palm Beach Gardens TOD Charrette.

Growth Trends in South Florida

The history of growth in Florida is one of real estate creation and development. In a matter of decades, swamp land and mangrove laden shorelines were drained, platted, and turned into lots for sale to northerners looking to retire, heal, or hide. The current character and DNA of south Florida has been defined by accommodating cyclical migrations of new residents from other states and countries. Growth and development has emerged as the primary economy of south Florida and enormous lessons can be learned from the way Florida has grown and why.

Climate, Agriculture, Tourism, Housing

Julia Tuttle, credited as the “Mother of Miami”, famously sent an orange blossom to Henry Flagler during the great freeze of 1895 as enticement to extend his railway to Miami. Mr. Flagler’s stops along the way became Palm Beach, West Palm Beach, Miami, and terminated at the already established city of Key West. During this time the state was offering land to those who would build railroads or drain the “swamp and overflowed” regions south of Orlando. Unlike settling other parts of the nation, settling Florida required dredging as the vast majority of “land” was sheeted over with Everglades water. Consequently, land barons and railroad companies were the primary settlers of south Florida.

By 1901, Flagler’s railroad extended south of Miami and his string of new settlements and hotels from St. Augustine to Key West proved to be a strong allure to wealthy northerners looking for winter repose in the Florida sunshine. With the wealthy vacationers came the notion of opportunity: given the will and the right equipment, a vacationing baron could convert useless muck into valuable real estate to be sold to future vacationers, retirees, and land speculators.

Henry M. Flagler was a partner in Rockefeller’s Standard Oil Company and was building the railroad that would open the East Coast of Florida for development. In addition to providing transportation, Flagler also created the destinations: luxurious hotels. The main attraction, then and now, was the region’s weather. Flagler built two hotels in St. Augustine: the Ponce de Leon (1885) and the Alcazar (1888). The architecture was fanciful and romantic, recalling the Spanish past. The fact that they were located in the oldest city in the United States, founded and settled by authentic conquistadors, added flair to the resorts. However, the emphasis was fantasy, not historicism. The architects often found their inspiration in picture books on distant locales.
Excited by the possibilities of creating more new resorts, Flagler bypassed established growing towns such as Fort Pierce and Stuart and built his next hotel on the Island of Palm Beach. In 1893, construction began on the largest hotel in the world: the Royal Poinciana. Two years later, the Palm Beach Inn which is today known as the Breakers was begun.

At the time, few people lived on the shores of the Lake Worth lagoon. Juno Beach was the county seat of Dade County. “In a few years there'll be a town over there as big as Jacksonville, and St. Augustine will be a way station for it.” Flagler was speaking of West Palm Beach, which today is the principal city of the region. The city was originally built on the shore of Lake Worth with no other initial purpose but to service Flagler Hotels, which were located across the lagoon on the barrier island. Flagler’s surveyors laid out a simple grid of rectangular blocks perpendicular to the shore. Clematis, a substantial main street, connected the train station to a ferry that would take all visitors to the island. In West Palm Beach, Flagler built housing for the many hotel workers, and he also financed the City Hall, a fire station and a Courthouse. He was not a land speculator. “I have not bought any land at Palm Beach with the expectation or desire to sell it again ... As to a matter of profit I think I can make more in one week in Wall Street than I can make in one year in real estate in Florida.”

The Town of Palm Beach grew as a winter resort. Victorian cottages, Flagler’s palatial Whitehall, and Mediterranean villas were built around the hotels. By the roaring twenties, Palm Beach had become a town, with a mixture of housing types, civic buildings and commercial structures. Flagler’s initiative evolved into a major industry: real estate development for “out-of-towners”. Many ambitious entrepreneurs followed his lead and created fantasy communities out of the swamplands. All had big plans, only some proved to be successful, but for a number of years, the American public bought most that was offered.

**Boom and Bust**

Not unlike the conditions of 2008/09, Florida’s growth has seen periods of great retraction and stagnation. The boom times of the teens and twenties slowed with the 1926 hurricane and then halted with the stock market crash of 1929. George Merrick, founder and developer of Coral Gables, went broke and could not complete his original vision for the city. Between 1926 and 1930 real estate values in Florida dropped from $623 million to $441 million. Over time, however, the allure of sunshine, warm weather, and beaches kept converting vacationers to residents.
During the 1940s and 1950s, the U.S. Army Corp of Engineers dredged miles of drainage canals throughout south Florida in an effort to better manage water flow, mitigate flooding issues, and assist in irrigation for agricultural lands. These systems of canals had the added effect of draining lands further and further inland making them prime for development interests.

In the 1950s, developers re-discovered the retirement market. In some ways, the retirement boom was similar to the original boom of the 20s. The region’s land was seen as a product that could be marketed to out-of-towners. In the twenties, marketing focused on fantasy, luxury, and good weather. After 1950, the emphasis was on affordable retirement and good weather.

Three major types of projects were developed for this market: garden apartments owned as condominiums, beach front high rises, and mobile home parks. Although the retiree market seemed to bring development and wealth, most of the housing units were small and inexpensive. Owners paid few taxes but eventually came to need public services. During this time, the region’s metropolitan areas quadrupled. The cycle of reclaiming land from the marshes, platting it, and selling it for development continues to this day.

A Living Laboratory

The preferred development formula of the 1950s and 60s had a noble goal: providing every American family with an affordable single family house. This type of development had never been possible in American history and soon became the foundation of one of the most profitable industries in the region: the construction of subdivisions, and later master planned communities, for new residents.

In the past, adequate land for residences had been limited by available means of transportation. In colonial times, these areas were limited to those that could be traveled by foot. After the industrial revolution, residents could live in neighborhoods around transit stops. With the arrival of inexpensive cars, plentiful gasoline and a magnificent network of highways linked to the interstate system, more and more land became suitable for building residences. Prices decreased and the overall quality of housing improved. Port St. Lucie was a literal interpretation of this development formula. General Development Corporation (GDC) platted 80,000 single family lots in southern St. Lucie County and began selling them in installments to people throughout the country.

Today, the City of Port St. Lucie contains thousands of homes on these lots. But the shortcomings of the development formula became evident in time. Housing, by itself, did not create complete communities.
People needed places to work and shop. Such places were not part of the development formula. In Port St. Lucie, for example, in contrast to the earlier settlements of the 1920s, there was no attempt to provide most services or to include a downtown. Eventually, the development incorporated into a city and, although great improvements have been made, many of the problems associated with the poor original planning have proved difficult to overcome.

The subdivisions of the 50s and 60s established the norms for sprawl development. City-making was reduced to a series of simplistic formulas that addressed each issue associated with growth in isolation. In new development, uses were separated and the characteristics that were perceived as more marketable were maximized. Residential developments became increasingly isolated and uniform. Shopping centers increased in size and provided enormous amounts of parking. There was no serious attempt to incorporate new developments into towns or to coordinate land use on adjacent properties. Since any parcel of land could be used for practically anything, the result was sprawl. Individually, each project provided a product that was marketable: inexpensive housing, cost-effective shopping, easy access, etc. Collectively, however, the compounded effects of so many uncoordinated decisions placed a financial burden on the existing citizens. Taxes went up to build larger roads to service poorly laid out suburban tracts, but roads continued to be congested. Green space and natural areas gave way to development. Quality of life for many citizens declined.

**A Sustainable Future?**

During the 1970s and 1980s a series of growth management laws were passed by the State in an attempt to combat the negative effects of suburban sprawl. Local government comprehensive plans were prepared and adopted which contained policies which sought to address problems and create new standards for managing growth. Protection of the natural environment became an important element of planning. Greater care was given to the provision of services as development occurred. Policies that addressed transportation, affordable housing, land use and other fundamental issues of planning were adopted and implemented. However, no desired form of development was sug-
gested, a weakness which partially undermined the intended effects of the policies. Although most comprehensive plans included outstanding policies to address development processes, no picture or vision was established for the community. The original authors of Florida’s growth management legislation felt that the concepts of consistency and concurrency would solve our problems and ultimately result in quality places to live. Some of those authors have recently acknowledged that those concepts have not been successful, and in some cases have had the unintended and undesirable effect of encouraging and increasing urban sprawl. Alternative methods to manage growth and improve quality of life need to be considered.

Today, Florida is facing new challenges. The agricultural economy of Florida has been steadily declining over the last decade. The recent housing boom has led to a glut of unattainable units and a crashed construction economy. Growing concerns exist over the availability of drinking water and the potential future effects of sea-level rise. These predicaments have been, in great part, due to an economy built on suburban sprawl. Fortunately, there are signs that Florida may have learned some lessons from its aggressive development history and is correcting its path for the future.

For the first time in 40 years ongoing discussions are engaged about restoring passenger rail service to the FEC corridor. Many coastal cities have emerged from near abandonment during the 1970s and re-cast themselves as viable, sustainable downtowns. Local governments are increasingly employing planning strategies and methods that provide predictability, balance land uses, and promote beauty in future growth. Florida residents are playing a much more active role in planning and urban design decisions. And perhaps most importantly, Floridians in general are beginning to recognize how fragile the state is ecologically and that future growth and redevelopment must be more compact, require less fuel consumption, and promote

Above: Tri Rail, currently providing passenger commuter rail in southeast Florida.
a legacy of responsibility in both the natural and built environments.

Two Patterns of Growth

The way that cities and towns grow, and how they have grown, can be reduced to two primary patterns: the Suburban Pattern and the Traditional Pattern.

Suburban Pattern

The Suburban Pattern of development segregates uses from one another by creating areas comprised of single use and disconnecting those areas from one another. In the resulting form, shopping, housing, schools, and recreation are not organized in an intrinsically connected, compact manner. In order to function, the use of an automobile is mandated to efficiently access all necessary destinations, which in turn makes parking a dominant feature in the landscape.

Sprawling, disconnected development that relies upon a limited roadway network gradually degrades the mobility of a community. This erosion means that all vehicular trips must occur on collector or arterial roads. Local roads that are comfortable and safe for pedestrians and bicyclists as well as motorists are either disconnected or no longer sufficient type to handle the vehicular demands with most of the traffic volume accommodated on fewer and fewer local roads. The connecting thoroughfares become increasing wide and auto-dominant and unable to provide a safe or desirable environment for bicyclists and pedestrians. As roadways become less desirable, new development naturally wants to “turn its back” to the road. This common development model only exacerbates the degraded physical environment making suburban development self-perpetuating and very difficult to reverse. And so the necessity of an automobile is further reinforced, the situation worsens and the more an area develops, the worse the traffic congestion.

The degree to which a community is auto-dependent is a result of its development patterns (suburban or traditional) and the network and size of its streets. The effect of the suburban pattern is particularly difficult for children and the elderly who either cannot drive or are losing their ability to drive. Many elderly residents of gated communities find they must move from their homes and neighbors when they can no longer drive. This is due, in part, to another hallmark of the suburban pattern: low density. Low density development has made the critical mass needed for a viable transit system almost impossible to achieve.
Traditional Pattern

The traditional pattern of development is simply how all cities, towns, and neighborhoods were built prior to World War II. In contrast to the suburban pattern, the traditional pattern mixes and inter-connects different uses through a dense network of streets, blocks, and public spaces. The network of streets allows for the dispersion of vehicle trips throughout the community rather than forcing all cars onto just a few through streets. Dispersing vehicular trips into multiple routes allows roadways to be smaller with fewer lanes. Smaller roadways, unlike collector or arterial roads easily accommodate bicyclists and pedestrians in a safe and often beautiful environment. One could easily travel from home to work or shopping on local streets without having to engage larger thoroughfares. Additionally, a system of interconnected neighborhood streets reduces local demand on the arterial and collector roads. Interconnected neighborhood streets allow these larger, faster moving thoroughfares to have a civilized size, serve mainly through traffic, and maintain efficiency as well.

South Florida has many fine examples of the traditional pattern of growth. These are typically the older, coastal downtowns like Stuart, West Palm Beach, Lake Worth, and Delray Beach. Each of these areas has places to live, work, and shop all within very close proximity. The densities in the areas are higher than the suburban pattern which makes them transit-supportive and livelier at all hours of the day.

A Shifting Paradigm

Unfortunately, the vast majority of the metropolitan areas in south Florida have been built as single-use, disconnected pods that rely almost entirely on the limited collector and arterial roadway networks. An interesting experiment is to visit any of the older downtowns listed above, find a major east-west roadway (Kanner Highway, Southern Boulevard, Lake Worth Road, Atlantic Avenue, etc.) and head west. What one typically finds on this exploration is the road rapidly widens while the number of cross-streets diminishes, and a public realm becomes unattractive and auto-dominant. Having lived with the impacts of the suburban pattern of development for decades, many in south Florida desire a change. Since the 1980s, a resurgence of interest in city-living has occurred. Transit rider-ship numbers continue to rise. In fact, in the past twenty years there has been a nation-wide resurgence in developing and restoring urban environments.
Neighborhoods, Districts, and Corridors

Over the past two decades, many planners, architects, and urban designers have focused their efforts on the rehabilitation and re-establishment of urban environments in the traditional form. No other organization of professionals has maintained this singular focus with more dedication than the Congress of the New Urbanism. Founded in 1993, the mission of the congress is clearly articulated in its Charter. The Charter describes the fundamental elements of a sustainable built environment from the scale of the region to the scale of the building. The following is an excerpt of the Charter of the Congress of the New Urbanism that relates to the neighborhood, the district, and the corridor.

The neighborhood, the district, and the corridor

1. The neighborhood, the district, and the corridor are the essential elements of development and redevelopment in the metropolis. They form identifiable areas that encourage citizens to take responsibility for their maintenance and evolution.

2. Neighborhoods should be compact, pedestrian-friendly, and mixed-use. Districts generally emphasize a special single use, and should follow the principles of neighborhood design when possible. Corridors are regional connectors of neighborhoods and districts; they range from boulevards and rail lines to rivers and parkways.

3. Many activities of daily living should occur within walking distance, allowing independence to those who do not drive especially the elderly and the young. Interconnected networks of streets should be designed to encourage walking, reduce the number and length of automobile trips, and conserve energy.

4. Within neighborhoods, a broad range of housing types and price levels can bring people of diverse ages, races, and incomes into daily interaction, strengthening the personal and civic bonds essential to an authentic community.

5. Transit corridors, when properly planned and coordinated, can help organize metropolitan structure and revitalize urban centers. In contrast, highway corridors should not displace investment from existing centers.

6. Appropriate building densities and land uses should be within walking distance of transit stops, permit-
ting public transit to become a viable alternative to the automobile.

7. Concentrations of civic, institutional, and commercial activity should be embedded in neighborhoods and districts, not isolated in remote, single-use complexes. Schools should be sized and located to enable children to walk or bicycle to them.

8. The economic health and harmonious evolution of neighborhoods, districts, and corridors can be improved through graphic urban design codes that serve as predictable guides for change.

9. A range of parks, from tot-lots and village greens to ballfields and community gardens, should be distributed within neighborhoods. Conservation areas and open lands should be used to define and connect different neighborhoods and districts.

Note: The entire Charter of the New Urbanism, as well as more information on the Congress of the New Urbanism, can be found at http://www.cnu.org/

The neighborhood is the increment of development in traditional towns and cities. Each neighborhood typically ranges in size from 40 to 125 acres. In larger towns, several neighborhoods may be clustered around a central business district or main street shopping area. Ideally, each neighborhood contains a diversity of uses and housing affordabilities. The residential density of a neighborhood typically averages between 6 and 10 units per acre, providing a wide range of housing options including houses on large lots, houses on small lots, attached townhouses, and multifamily apartments. Cities typically have much higher average residential densities, given the larger occurrence of multifamily buildings. With higher densities, a greater variety of services are possible within close proximity to homes.
Balancing Land Uses

Sustainable communities offer ways for their residents to obtain all their daily wants and needs met without traveling long distances. A place with balanced uses means people can live, work, shop, and recreate within the community. Having access to all of these uses does not mean people won’t travel outside the community for different reasons, but it eliminates the requirement to travel long distances currently necessitated by the prevailing sprawl pattern. A sustainable community decreases the financial burden of large, spread out infrastructure for municipalities, lessens the general population’s reliance on fossil fuels, reduces the number of vehicles a household must own, and allows children and older people to be self-sufficient longer.

Retail

People need and desire various shops and services such as clothing, food, hardware, furniture, restaurants, pharmacies, and pet supplies, etc. The closer these items are to work and home, the more sustainable a community is. In order to establish a successful retail environment that accommodates pedestrians, bicyclists, and transit riders, in addition to motorists, several considerations must be made.

Retail is generally successful along streets and corners which accommodate higher vehicular trips than neighborhood streets. Cars must be accommodated, however, unlike a sprawling pattern, the infrastructure and configuration of retail uses must elevate the pedestrian’s comfort and convenience to that of the car. Wide, shaded sidewalks must be provided. Retail buildings should line the sidewalk in a fairly continuous fashion. Window-shopping is encouraged with a canopy or colonnade that invites people towards the store to escape the sun or rain. Colonnades should encompass the sidewalk so that the pedestrian naturally passes by the storefronts and cannot circumvent the storefront using a parallel sidewalk. The primary entrance to the store should face and be accessible directly from the sidewalk.
Visibility

Retail must attract both pedestrian and drivers' attentions. Drivers are more likely to notice merchandise in slower moving traffic patterns. Ironically, open-air streets used as pedestrian malls, the rage in the 1970s, failed in almost every instance. Visibility from the car is critical; it just should not preclude a great walking experience. Large, un-tinted, bright, clean windows call attention to the merchandise for sale. When buildings are pulled up to the sidewalk, large monument signs are no longer necessary; signage should be clear and easily read from both the street and sidewalk.

Parking

Parking spaces is a necessity and can be accommodated in a number of places. Consider that drivers access stores by foot as well, which emphasizes the pedestrian experience must be superior. The location of parking is critical in shaping the environment. Parking should be accommodated within the street cross-section. These spaces have a dual role: first, they provide a physical barrier between pedestrians and moving traffic; second, they accommodate impulse stops for drivers. On-street spaces in front of the store should be turning over many times per day to provide customers with quick and convenient access. Metered spaces help stimulate retail sales by ensuring the user of the parking spot turns over periodically which also provides visibility of the store by a number of shoppers.

Other parking areas should be located in the rear of the lots or within consolidated parking areas serving the district as a whole. Since the environment is a pleasant walking experience, this strategy is not unlike the experience at conventional malls, where the car is left behind for long periods of time, while shoppers access multiple stores. Shoppers should have easy access in the form of pass throughs from parking to the front of the stores.

Employees within the district should utilize these types of spaces as an employee parking directly in
front of the store reduces visibility and access, and subtracts substantially from potential sales.

**Anchors**

The majority of the national population shops at regional and national chains. National and regional retailers serve as anchors to a retail district. The anchors can afford to spend thousands of dollars per month or more on advertising through flyers, newspapers, radio, and television. They draw in people, which in turn supports adjacent, smaller local retailers. The locals can capture foot traffic that might not otherwise pass by the store. Furthermore, the chains offer a wide variety of many different types of goods allowing the local retailer to spin-off and specialize in a thorough selection of a particular type of good.

Some communities have chosen not to allow or limit the number or type of regional or national chains into their communities by limiting square footage. Some places have maintained thriving, non-chain retail areas; however, most of these places have an organized and effective retail strategy, and are well-established, beautiful areas in their own right. For the general municipality, the more beneficial arrangement is to take advantage of the anchor store’s draw, but control the parking location and impact of large footprint stores by requiring lining the big box volume of the store with smaller storefronts. If outlawed, in most cases the general public will have to leave the community to access daily needs, lessening sustainability and sending valuable tax revenues to neighboring communities.

**Mixed Use**

Mixed-use districts involve combining uses to accommodate diverse functions within an area. The mix can be a combination of residential, commercial, industrial, office, institutional, or other land uses. Allowing a mix of uses helps the sustainability of a city by legalizing the close proximity of various destinations, which allows easy connections and continuity of all spectrums of community life: employment, healthcare, school, shopping, entertainment, and recreation.
The most successful mixed-use communities are generally compact. Compactness allows not only easy access among the uses, but also more efficiently allocates resources such as water, electricity, roads, lighting, and street furnishings. Land is utilized more efficiently, typically in the form of multi-story buildings, and compactness requires less parking since one trip in essence provides access to many uses. Compactness also supports alternative modes of transportation including walking, cycling and mass transit.

Mixed-use can occur either vertically, within a building, or horizontally across a parcel. Ideally, in a vertical arrangement, the ground floor offers retail, the second floor offers office space, and upper stories offer residential. Consideration should be given to the compatibility of uses. Residential is easily accommodated over retail or office; however, compatibility with a bar or loud restaurant, can be challenging.

Within horizontal mixed use arrangements, configuration and orientation of buildings is important to ensure compatibility. Buildings containing similar uses should face each other. Transitions between differing intensity and uses should be accommodated in the rears of buildings. Particular care must be given to transitions to residential uses in order to ensure a peaceful coexistence. Transition between residential and commercial uses can be accommodated using physical separations like rear alleys, out-buildings, or mid-block parking areas.

Transitions between Uses and Scales

In the last 10-to-15 years, a resurgence of interest in mixed-use buildings, districts, and neighborhoods has occurred. Many in south Florida recognize the benefits of compact, diverse, and pedestrian friendly environments. The re-birth of local cities like Delray Beach, West Palm Beach, Stuart, and Lake Worth are a testament to sustainable urbanism as a viable lifestyle choice. Establishing balanced land uses is vital to the long-term viability of these communities.
Transit

In order for a community to be sustainable, people need to move about efficiently to get their daily needs met. All people should be able move about their community: people with cars, people without cars, people who do not want to drive, people who cannot drive. A community should offer a full range of transportation choices: walking, driving, biking, and mass transit wherever feasible.

The focus of the Citizens' Master plan is on mass transit. Every transit trip begins and ends by walking and/or biking, so every effort should be made to ensure that pedestrians feel safe and welcome during all parts of the trip. There are five keys to transit success: safety, convenience, efficiency, comfort, and welcome.

People tend to feel safer and more comfortable when in the presence of others. By properly mixing uses and designing roadways and pathways to promote oversight from surrounding uses, settings are made safer. This type of visibility is considered “natural surveillance”. Utilizing a natural surveillance arrangement ensures the occupants of nearby buildings can’t help but notice what is happening at the transit stop or on the street. More “eyes on the street” increases safety, discourages crime, and, thereby increases the attractiveness of using transit.

With regard to transit, the concept of “convenience” includes ease of payment or other access into the transit system. New technologies allow people to pay and enter transit without searching for coins. Instead, transit users can utilize season passes, prepaid cards, prepay kiosks, and service areas offering free access.

People need to have easy access to information that is quickly and easily understood. If people do not understand how the transit system works or feel intimidated by it, they will not use it. Transit systems should provide easy-to-read schedules and maps. Time is always of the essence in modern life. Accordingly, transit patrons need to know how reliably the transit schedules are maintained. Schedule

FIVE KEYS TO TRANSIT SUCCESS

1. Safety
2. Convenience
3. Efficiency
4. Comfort
5. Welcome
information can be communicated by placards, kiosks, Internet, and cell phones. Real-time information is important to assure riders that the transit service is provided as expected. This information can be communicated at the stop and/or on the vehicle.

Anything that hinders a pedestrian from efficient access to the transit service can discourage ridership. Often, the transit services take longer than driving, or drop off locations require additional walking to reach a final destination. Transit routing and stops need to be in desired locations or correspond to higher density areas. Routes should include transit connections to other destinations that are easy and efficient to make.

Frequency is essential to successful transit and different types of transit operate with different frequencies of service. Some systems, such as regional rail, can be successful with service on an hourly basis, but hourly service might not be sufficient for commuter rail or bus service. Other transit modes require more frequent service (10 or 15 minutes between pick-ups), with every minute counting for uses to catch the next service at a transfer station.

Ideally, transit stops should be located with a focus of how people walk. People will tend to comfortably walk for a quarter-mile, which takes approximately five minutes for the average person. Accordingly, stops should be located within a quarter-mile of key destinations to establish the most comfortable pedestrian connectivity. Further distances can be workable if integrated with other transit modes (e.g. train to bus or trolley stop).

Comfort for the transit users can also increase ridership. People need to feel comfortable and sheltered from elements. At transit stops, riders should have shelter from the sun and rain along with seating and lighting. Bicyclists need secure bike racks or lockers. Basic amenities, such as transit schedules and trash receptacles are necessary. Convenient services (vending machines, newsstands, coffee shops) are desirable, if possible. Restrooms should be provided, wherever possible. Street trees and building features such as awnings and arcades provide protection along roadways to extend the reasonable pedestrian

Transit should be reliable and run frequently so people will trust and depend on it. If they miss a bus, they know they will not have to wait long for the next pick up.
capture area (“pedestrian shed”) for transit stops.

All facilities need to be clean, well-maintained, and fit within the context of the city. Cities can use shelters as a way to promote civic pride and reinforce the community’s identity. In some instances, especially in downtown settings, cities have designed unique shelters or allowed the shelters to become subjects of art and design competitions. Having comfortable, respectable facilities demonstrates that transit riders are considered valued customers. Transit employees should be helpful, informed, and courteous. The fleet and facilities should be clean, well-maintained, and attractive. Amenities create a welcoming environment. Some transit organizations offer free newspapers and television at transit stops and on transit facilities. Welcoming the rider helps remove the stigma of riding public transit.

Providing proper shelters lets residents know that the city would like them to ride transit. This woman at the barren transit stop probably does not feel welcome in the system - the sign is the only indication this space is a transit stop.

The City of Plantation has designed unique transit shelters that provide the necessary functional elements within a signature piece of city architecture.

Buses that offer clean facilities and conveniences help make the rider feel comfortable and welcomed.
Streets and Blocks

Thirty to forty percent of all developed areas are dedicated to streets, and streets are always a community’s front door. Street development should be undertaken with the same care that is given to creation of any other important public or civic space. Streets should be viewed as centers of human activity and designed to be inviting and comfortable places for people whether they are in a car or walking. Great towns have a diversity of street types serving the different community needs. Streets range in size and scale: streets in business districts usually have dedicated on-street parking lanes and wide sidewalks, to accommodate street furniture, formal landscaping and a large number of pedestrians; local streets in residential areas may have smaller travel lanes, accommodating slower vehicular speeds with sporadic, informal parking arrangements and narrower sidewalks. All streets end at intersections with other streets, forming a fine network of alternative transportation routes. Communities should never undermine the power and value of the grid by closing streets to public use or gating off neighborhoods.

According to Architectural Graphic Standards, a height to width ratio of one-to-three is the minimum height to width ratio if a sense of spatial enclosure is to result. The smaller the ratio, the higher sense of place and generally the higher the property values.
The Grid

The grid is the most efficient system of street planning. A dense network of interconnected streets provides more options for drivers. Traffic jams and bottleneck patterns of circulation are avoided when every driver has an increased number of ways to get from point "A" to point "B".

The image below has two diagrams depicting different network patterns with the same amount of lane-miles. The difference is that everyone who drives in the town on the right must use the same road regardless of their destination, even if they want to travel from east to west instead of north to south. If a tree or power line blocks a person’s path, the pattern on the left allows the resident to use another route.

A grid should be predictable. If roads do not connect or do not continue for great distances, they become less efficient, and people will find more direct routes. A grid can have variances and irregularities and may be composed of orthogonal or curvilinear streets, but it must be predictable.

The Power of Streets

The following analysis by Dover Kohl and Partners illustrates the importance of an interconnected street network (refer to opposite page). Given one origin and one destination points, (A & B), with two roads connecting them, only one possible route results to go from point A to point B. If two additional roads, parallel to each of the existing roads are added, then there are two possible routes between points A & B. As the grid or network of streets increases to a six-road grid, the number or routes begins to grow exponentially, now resulting in six possible routes from point A to point B. A grid of nine roads results in 35 routes, and the complete grid represented in these diagrams (a 12 x 16 road grid) results in 12,870 routes. This 12 x 16 grid...
PRINCIPLES OF URBAN DESIGN
**Streets**
The most critical issues in designing beautiful and active streets are the height of buildings relative to the width of the street space, the placement and alignment of buildings along the street, parking configuration, sidewalk widths, street trees and landscaping, street furnishings, and lighting.

**Height-to-Width Ratios**
Adequate building height relative to the width of the street is important to provide a sense of enclosure and definition to the street space.
The road grid is in fact the grid of Beaufort, South Carolina, which very comfortably handles millions of visitors every year without this resulting in major traffic problems.

According to Architectural Graphic Standards (Published by the American Institute of Architects), a ratio According to the Architectural Graphics Standards (published by the American Institute of Architects), a ratio of one-to-three is the minimum to create a sense of spatial enclosure. The smaller ratio is typically more desirable, as frequently indicated by higher real estate values. Consequently, recommended building heights will vary in accordance with the width of the street and sidewalks, and the building setbacks. Wider streets accommodate taller buildings, while narrower streets accommodate smaller buildings. In order to achieve the desired sense of enclosure on very wide streets, like boulevards, tall buildings frame the space, frequently reinforced with formally aligned street trees planted in medians. In lower density neighborhoods where single-family homes set back from the street, the proper enclosure can be provided with a continuous alignment of street trees.

**Building Placement and Alignment**

Controlling the building placement and alignment ensures that a predictable public realm is established. Using a “build-to-zone” rather than a minimum setback is a tool that controls the ultimate form a street has. On commercial streets or higher density areas, buildings are generally set close to the sidewalk aligned in a continuous façade to encouraging walkability and transit usage. Pedestrians and bicyclists feel safe and have a more interesting environment when buildings line the route instead of parking lots and landscape buffers. In lower density, single family areas, a generous setback to provide front yards is appropriate.

**Sidewalk Widths**

Sidewalks should be accommodated on every street. Wide sidewalks are important on commercial streets to accommodate a high level of pedestrian activity and commercial needs such as outdoor dining and merchandise displays. The minimum sidewalk width for a commercial street should be 12 feet wide, but in
large cities, with very tall buildings that are anticipated to have a great deal of pedestrian traffic, sidewalks may be up to 30 feet wide. In lower density residential areas, sidewalk widths should be sufficient so that two people can comfortably walk beside one another.

Street Trees and Landscaping

The most beautiful streets include strong alignments of formal, regularly placed street trees. In retail areas, palm trees are used to ensure the unobstructed view of signage and storefront windows from the street. Trunks should be cleared visibly to a minimum of 8 feet so that stores are easily visible from the street. Palm trees can be used in combination with arcades, but where arcades are not provided, it is preferable to use

An example of an ideal street-tree and parking configuration for a residential street.

Architectural features at special intersections announce arrival, create a sense of place, and can also double as waiting areas for school buses.
shade trees such as oaks or sycamores. Street plantings at regular, small distances from each other are also an effective traffic-calming device.

The most beautiful streets include strong alignments of regularly placed street trees. Trunks should be clear to at least 8 feet so that vehicles can easily pass and pedestrians are clearly visible. On residential streets, tall shade trees such as oaks, or sycamores are recommended.

**Parking**

On-street parking can take two forms: a dedicated lane or an informal arrangement. In commercial, mixed use or higher density areas, on-street parking should be accommodated within a dedicated lane. In lower density areas, on-street parking occurs informally frequently resulting in a yield traffic pattern whereby an on-coming driver must slow and take turns moving passed parked vehicles. This condition effectively slows neighborhood traffic without obstructing movement.

**Street Furnishings and Lighting**

Benches, shelters, fountains, and signage should be detailed and designed as furniture to be placed within the outdoor room of the city that constitutes the street. Lighting should be pedestrian in scale and full spectrum. Mixed-use and commercial districts are generally active longer than residential neighborhoods and require brighter lighting solutions to ensure safety.

**Building Types**

Buildings have fronts and backs. In order to ensure compatibility, buildings of like scale and massing, with similar uses should face each other on a street. Transitions in scale and use are best handled in midblock locations along alleys or rear property lines. Changing building heights and/or scale at these locations maintains consistency along streets. For example, a ten-story office building across the street from a one-story...
The diagram on the next page depicts a transect. The transect is a planning term that describes a slice of all of the conditions of a neighborhood. This drawing illustrates how bigger buildings along a commercial corridor transition to smaller scale multi-family buildings, which transition to one or two-story single-family homes within the space of a couple of blocks. The diagram also demonstrates the concept of designating certain commercial streets as “B” streets to accommodate service functions, including parking. Alleys and B streets are an important transition. In order to achieve “A” streets, the most superior pedestrian environments of a neighborhood, alleys or “B” streets are necessary. Accommodating diverse building types and land uses within such close proximity has been achieved successfully throughout traditional neighborhoods and cities in America by ensuring fronts of appropriate building types face each other.

Mix of Housing

A sustainable community should offer a palette of building types: single-family homes, townhouses,
multifamily buildings, mixed-use buildings, outbuildings, and estate homes. How they are arranged is para-
mount to sustainability.

When housing types are separated into large, single-type developments, the community is segregated. A balanced community requires all types of individuals earning a spectrum of incomes to create a healthy neighborhood. Wealthier people provide important services to the community and are able to donate time and money. Other people serve the community as teachers, bankers, mechanics, and janitors. When the people are separated by housing type, the roadways tend to be the link, and as discussed before, the public realm suffers.

A mix of housing types and densities allows people to stay in one community all of their lives, if they choose. For example, a college graduate returns home and gets his first job. He lives in a neighbor's garage apartment. He marries and moves into the townhouse. As his family grows, he moves into the single-family house. When his children leave home, he and his wife move to the multi-family condominium. His children, in turn, are able to repeat the cycle. Another important component is differing price points. The example shown above also shows the need for varying prices. The local government should have policies and/or programs to ensure attainable housing for populations that create a healthy and sustainable community. More information about attainable workforce housing can be found in the Workforce Housing Toolkit at http://www.tcrpc.org/special_projects/Toolkit%2012-06%20-%20LoRes.pdf

Parking

Parking is essential for every successful type of district. Sufficient parking should be provided in reason-
able proximity to the destination it serves. In a traditional development form, parking opportunities occur in many different instances, not just on-site. The other factors of traditional development already dis-
cussed, (the mix of uses, compactness, and pleasant walking environment) allow parking to be provided using on-street parking, shielded surface parking, and/or parking garages.

On-street parking should be provided whenever pos-
sible. It shields pedestrians from moving cars and allows quick, convenient access to buildings. On-
street parking lanes also calm traffic by creating an environment where drivers recognize they must be more careful. In a retail district, on-street parking has been proven to increase a retailer's revenue signifi-
cantly, allowing customers to drop in quickly to make purchases. Employees within the district should never use on-street parking, and the district may need to use metered parking to ensure the proper turnover of on-street parking.

Off-street surface parking should always be shielded from the street, to create an attractive pedestrian realm; buildings provide the best shield. Other strate-
gies for shielding include landscaped buffers or walls, but these are not preferred. Landscaping offers little of interest to engage the pedestrians’ attention,
and walkers tend to hurry past walls, worrying about what may be hiding behind them.

The test-case scenario shown is an example of how on-site parking can undermine walkability. A commercial building 134 feet by 67 feet (8,978 sf) typically must provide one parking place per 200 sf. The developer will be required to provide 45 spaces. The average size for a parking space is 9 x 18 feet or 162sf per space. Multiply the quantity by the size of the space, and 7,290sf of the site must be dedicated to parking, not including necessary drive aisles or access ways. By requiring each site to have its own parking lot, most parking requirements erode the walkability of an area and reduces the viability of other transpiration modes (walking, biking, transit). In most zoning codes, parking is calculated on a parcel-by-parcel basis.

Instead, parking requirements in a traditional development should be determined using a district-wide strategy, rather than expecting parking to be provided on a parcel-by-parcel basis. For areas intending to become or maintain “park once” environments, meaning that once parked, a shopper will likely visit multiple destinations within the pedestrian-friendly environment, reduced individual requirements and district-wide solutions are possible. In this way, land can be more efficiently utilized.

Shared parking can more efficiently utilize land. For example, a mixed-use building with commercial on the ground floor and residential on the upper floors can share parking at different times of day. Residents generally vacate parking spots during working hours, opening spots for businesses. In the evening, residents return. An added benefit of the mixed-use building is residents are able to observe the property and street in the hours after businesses are closed. In this way, mixed-use dis-
Districts do not empty at 5:00 p.m., but stay vibrant with people. In the best case of mixed use areas, residents walk to work or transit stops, without needing the car, and acquire some needs en route. They never need a space at work, at lunch, or at the store on the way home.

Civic Places and Public Open Spaces

Civic Buildings
Public buildings such as schools, churches, and temples are important components of neighborhoods. These buildings help give identity to a place and can create a sense of pride and community for many who live nearby. Significant public buildings such as city halls, libraries, courthouses, and universities should serve as centerpieces for a downtown or the municipality. These buildings should evoke civic pride and be accessible to all. Civic buildings should be landmarks in the community; the architecture should reflect their public nature. To the right is a church on a town green in New Haven Connecticut which is immediately recognizable as a building and location of special importance.

Public Open Space

Parks and open space are critical for the success and livability of any community. All agree that parks are important and desirable to have; however, to ensure the success of public open space, it must be designed properly and located in the right place. Parks need to be naturally monitored without the constant patrol of police and security personnel. By surrounding public open spaces with the fronts of buildings and interconnecting streets, natural surveillance of the space is provided throughout the day. In neighborhoods, parks are surrounded by the fronts of homes. People living and visiting will naturally observe and hear what occurs. In mixed use districts, a similar configuration is important. When mixed use buildings face civic open spaces, the park is frequented by shoppers and workers during the day, and residents in the evening. This 24-hour oversight ensures safety. The following defines open spaces from more rural to more urban.
Regional Parks

Regional parks have acres of preserved land with room for active recreation. The land for this type of open space should coincide with a natural feature in the area. Bryant Park in Lake Worth is an example of this type of regional park.

Multi-Use Play Fields

Multi-use play fields are large enough to play baseball and soccer and are needed in communities. If possible, these fields could be incorporated into land dedicated to the existing schools. The possibility of sharing these fields with the public when the school is not using them could be explored.

Greens

Greens are a third type of public open space. A green is an urban, naturalistic open space surrounded by buildings. Greens are landscaped with trees at the edges and sunny lawns at the center. Greens may contain benches, pavilions, memorials, and paths.

Squares

Squares are smaller and more formal than greens. A square is a public open space that provides a setting for civic buildings and monuments. Civic buildings should be located at the center or edge of the square. The space is defined by formal tree plantings and may incorporate a hardscaped design. Squares can either be attached or detached meaning the square can either be part of the block or surrounded by streets on all four sides. The plaza, or piazza in Italian (see below) is an urban square. Typically hardscaped and surrounded by multi-story, multi-use buildings, the plaza can be intimate or enormous depending upon its function and context.

All of the mentioned types of public open space should be considered in the planning of the charrette study area. A good variety of all the types will produce a more desirable and livable neighborhood.

Traffic Calming

Speed is Key to Safety

Speeds of vehicles are paramount to pedestrian safety. The chart to the upper-left shows the increase in...
Pedestrian fatalities as vehicles travel faster. Fatality rates decrease significantly around 30 miles per hour and rise significantly at 40 miles per hour. Most state roads are posted for 45 miles per hour, yet most people travel faster since the design speed of a road does reflect the speed limit posted. Neither pedestrians nor bicyclists feel safe on roads where drivers travel more than 30 miles per hour.

Roadway Design Speed

The most effective way to keep traffic slow is to design the road for the speed vehicles are intended to travel. If the lanes are wide, and there are multiple travel lanes to use, the driver can become impatient, and speed in order to pass. On streets without on-street parking, drivers tend to be less vigilant looking for pedestrians.

The best and most efficient roadway is a low speed road. This may seem counter-intuitive at first; however, studies have shown that cars traveling on lower speed roads, while moving more slowly, are spaced more compactly through an area. As lanes are added to move more traffic volume, speeds are increased and efficiency decreases because the following distances between cars increase with the higher rates of speed. Additional lanes do not simply double or triple capacity. However, a network of parallel routes does. In addition, small roads require narrower lanes, fewer lanes, and can accommodate parking on the street.

Some local governments have realized the importance of design speed. The Seven Cities Charrette in 2004 called for the narrowing of US1 in northern Palm Beach County. Other communities have limited the number of lanes by policy or acquiring right-of-way adjacent to the road.

Horizontal Traffic Calming Devices

Most drivers find horizontal traffic calming devices such as speed bumps and speed tables undesirable. Residents plagued by fast-moving cars have asked local governments to install them only to request their removal later.

Vertical Traffic Calming Devices

The Citizens' Master Plan recommends vertical traffic calming devices such as mini circles, chokers, and
medians. If designed properly, they effectively slow traffic and can become small civic embellishments to help beautify a city.

Mini-Circles

Mini circles are small roundabouts usually within a neighborhood. They calm traffic by placing an obstacle in the middle of the road and direct traffic through an intersection. They can be elegantly and creatively treated with landscaping, sculptures, and monuments. Properly designed mini-circles do not require "Yield" signs. It does not require a lot of money to install properly designed mini-circles.

Chokers

Chokers temporarily narrow the roadway forcing drivers to slow and be careful. They can also be treated with landscaping or a transit stop. Chokers located at intersections provide the additional benefit of shortening the distance a pedestrian has to travel to cross the street.

Medians

Medians discourage drivers from driving through the intersection without stopping or slowing. Medians can also be used along a street without an intersection to redirect and slow traffic (see images to the right). They can also add civic character and beauty to a city. The medians in the photos in the City of Stuart allow the median to serve three functions: calm traffic, beautify and shade the street, and provide drainage. Medians also help pedestrians cross the street by giving them a break between conflicting lanes of traffic.

Textured Crosswalks

Textured crosswalks are beneficial in a number of ways. In addition to visually reminding a driver to slow, a slight rumble and vibration also occurs. Textured crosswalks can be pigmented and patterned to beautify the street.
EXISTING CONDITIONS
Existing Conditions

The study area for the Palm Beach Gardens TOD charrette is an approximately five square-mile area bounded by Prosperity Farms Road to the east; Military Trail to the west; Burns Road to the south; and Gardens Parkway to the north. The majority of the study area is commercial, office, and retail uses oriented towards PGA Boulevard. PGA Boulevard is currently a six-lane county arterial that is a premiere east-west facility in Palm Beach Gardens. PGA Boulevard has an interchange at I-95 and is one of the primary shopping destinations in the region with major centers that include the Gardens Mall, Legacy Place, Downtown at the Gardens, Midtown at the Gardens, and PGA Commons.

Demographics

Palm Beach Gardens has a current population of nearly 50,000 residents with an estimated population increase of 24,000 by 2020. Palm Beach Gardens is a relatively affluent city with a 2008 Median Household Income (MHI) of $67,000 annually. The charrette study area itself has a MHI of $80,000 annually. Palm Beach County had a 2008 MHI of $59,000 and nationwide, the 2008 MHI was $42,000 annually. The new household growth for Palm Beach Gardens is anticipated to be 9,800 new households by 2020 with a projected 6,800 new households in the charrette study area within that same timeframe. Despite the forecasted increase in population and households, by 2013 more than 44% of the City will be 55 years of age and older. (Data source: ESRI/ERA/AECOM; see http://www.tcrpc.org/departments/studio/palm_beach_gardens_tod/18224_working_papers.pdf).

The majority of land in Palm Beach Gardens is open space in the form of parks and recreation, conservation, public, and agricultural uses. This statistic is a testament of the City’s continued focus on the mission of its founder, John D. MacArthur, to create a “Garden City.”

Study Area Significance

Despite having only been incorporated in 1959, Palm Beach Gardens has rapidly grown into a regional destination for shopping, recreation, and raising families. The charrette study area, in particular, epitomizes the regional draw of the City. During Tier I of the South Florida East Coast
Corridor study (SFECC), the area around PGA Boulevard, I-95, the Gardens Mall, and the FEC corridor was determined to be a preferred location for a regional Park-and-Ride station. This was in large part due to the array of attractions and destinations so close to I-95. With approximately 8 million square feet of retail, commercial, and office uses within a 1-1/2 mile radius of the FEC/PGA Boulevard intersection, this area is perfectly suited as a regional TOD location. In addition, the many businesses on PGA Boulevard employ an estimated 20,000 workers who will certainly benefit from an enhanced transit system.

Current Transit Service

Palm Beach Gardens has never had passenger rail service. The FEC corridor, which runs adjacent and parallel to Alternate A1A in Palm Beach Gardens, only services freight cargo today. Current mass transit in Palm Beach Gardens is the county-operated Palm Tran bus service. Routes 1, 2, 3, 10, 20, and 21 all service Palm Beach Gardens and with the exception to Route 2, all routed stop at the Gardens Mall.

In addition to the standard weekday service (which has an average daily ridership of approximately 35,000 riders), Palm Tran has begun express bus service between Martin and Palm Beach counties that started in August 2009. The initial service will provide two bus trips leaving Martin County in the morning with two return trips from the West Palm Beach Inter-modal center in the evening. This new service will originate at Halpatiokee Park in Martin County, provide stops at the West Jupiter Recreational Center, the Gardens Mall, and its final destination is the West Palm Beach Inter-modal center (Tri-Rail station) in downtown West Palm Beach. The specially equipped buses will provide padded seating, overhead lights at each seat, and will offer WiFi service.

Connectivity

Despite all of the highly desirable and popular des-
EXISTING CONDITIONS

Some sidewalks along the PGA corridor are well maintained and beautifully landscaped.

The connectivity issues in the study area are masked by its landscaped beauty. Each of the developed parcels has done an extraordinary job with landscaping and general aesthetics. The long-term problem with PGA Boulevard is not that it is unattractive. The long-term problem with PGA Boulevard is general mobility and getting future transit riders to their destinations. The issue of connectivity is greater than just roads and sidewalks however. The urban form of the corridor and how its existing and future buildings
relate to the streets and one another will become increasingly important for transit to be fully successful.

**Figure Ground Assessments**

During the charrette the design team walked the PGA Boulevard from the FEC corridor to Prosperity Farms Road including all destinations in between. The experience of the corridor on foot is entirely different than from traveling in a vehicle. The key destinations are surprisingly far from one another. Traveling the corridor in a vehicle tends to “compress” the visual proximity of different destinations. Buildings and retail centers that appear adjacent on a map or an aerial photograph are in fact challenging distances to traverse on foot. This is not only because of the physical distance but also because of the detailing of the pedestrian realm. Due to that lack of a grid of streets, direct non-curvilinear connections are rarely provided. The pedestrian experience, despite the world class landscaping, is not particularly safe or interesting.

As an example, the Department of Motor Vehicles (DMV) facility on PGA Boulevard south of the Gardens Mall is approximately 1,700 feet (approximately a six minute walk) from the PGA entrance to Legacy Place. The DMV is also a frequently used Palm Tran stop for workers on the corridor. The pedestrian trip from the DMV to Legacy Place is deceivingly short in measured distance and surprisingly long as an experience. If given the choice, most people will drive from one of these locations to the other without giving it a second thought. Put into a larger context, 1,700 feet is equivalent to six city blocks in Boston, or three city blocks in mid-town Manhattan. These are distances easily walked in a city, where the pedestrian experience is stimulating and comfortable.

To illustrate how successfully or unsuccessfully the existing building fabric forms the public realm of streets and sidewalks in Palm Beach Gardens, a series of “figure-ground” drawings were created. Figure-ground drawings illustrate only the building footprints of an area, stripping away all of the landscaping and
New York City Figureground: This view is of a portion of Central Park South. Note Columbus Circle in the upper left corner.

San Francisco Figureground: This view is of Market Street (diagonal) in the financial district (One Bush Plaza is center-right).

Delray Beach Figureground: This view is of historic Delray Beach. Note Atlantic Avenue running left-to-right at mid-page.

West Palm Beach Figureground: The CityPlace plaza is clearly visible in this view. Note Clematis Street to the north.

Palm Beach Gardens Figureground: This is the charrette study area. The Gardens Mall is to the north and PGA Boulevard is not discernable in this view.

This is the same Palm Beach Gardens view with color added to code the different conditions. Blue is water and red is asphalt parking lots.
In each of the figure ground drawings, the places that are most interesting and memorable are those streets and plazas that are fully defined by the buildings (areas in black) around them. The Palm Beach Gardens figure ground is fascinating as it not only clearly distinguishes each project (Gardens Mall, Downtown at the Gardens, Legacy Place), but it also illustrates the great distances between each of these destinations. When you consider that a large percentage of the space between each project is asphalt parking lots, it becomes more clear why more people are not walking from place to place.

This diagram illustrates the increment and pattern of development along PGA Boulevard: very large parcels defined by collector and arterial streets with limited internal connectivity. Rarely are streets defined by buildings.
MARKET OVERVIEW
Market Overview

In order to better understand the existing market conditions within the Palm Beach Gardens TOD study area, the TCRPC team conducted a market overview and retail market analysis of various real estate sectors. This chapter provides a synopsis of the demographic and retail trends in the Palm Beach Gardens market and recommends a general retail development strategy intended to contribute towards a more sustainable commercial environment in the community.

The Median Household Income (MHI) in the charrette study area is approximately $80,000 per year. That is nearly double the MHI in the United States of $42,000. The MHI in Palm Beach County is $59,000 annually and the City of Palm Beach Gardens MHI is $67,000 citywide. The current population of Palm Beach Gardens is approximately 50,000 persons with 16,000 people living within the charrette study area. The City’s population is expected to grow by approximately 24,000 persons by 2020. This represents a nearly 50% population growth in the City within the next 11 years. The highest growth is expected among those persons aged 55-64 years.

The City is approximately 55 square miles with 55% of that area dedicated to parks, open space, public, and conservation. About 23% of the City is residential and only 3% of the area of the City is commercial or retail.

Based upon employment census tracts, Palm Beach County is expected to create 105,000 new jobs by 2016. If the city maintains its current fair share, it should expect an increase of 4,700 (+/-) new jobs by 2016. These new jobs will create a demand 1.4 million square feet of additional office space in Palm Beach Gardens (with approximately 16 million additional square feet in the county). These numbers may not
MARKET OVERVIEW

translate directly into the construction of new office space.

Prior to the charrette, Economic Research Associates developed a market overview for the charrette study area. The data generated through that study, with the expertise of Robert Gibbs, Gibbs Planning Group, served as the foundation for the recommendations. The market overview suggests that even during the current economic downturn, Palm Beach Gardens could statistically support up to an additional 229,000 square feet of retail (if financing were available). That much spending is leaving the City and going to other places. The types of retail that would be supportable include neighborhood retail, electronics, lawn and garden, an additional supermarket, and a discount department store such as Target or Costco. Incredibly, the overview also suggests that 16,000 square feet (4-6 restaurants) of additional restaurant space is also supportable. It is important to emphasize that these are statistical projections that do not take all factors into consideration (e.g. recent economic downturn and its effects on household discretionary spending).

Data source: ESRI/Claritas/ERA/AECOM; see http://www.tcrpc.org/departments/studio/palm_beach_gardens_tod/18224_working_papers.pdf

It is not the recommendation of this study that Palm Beach Gardens recruit a “big box” retailer into the City or study area, which is a policy decision of the City. The study simply shows that if desired a larg-

Why a Market Overview?
• Understand current market conditions & near-term opportunities for TOD potentials
• Identify “drivers” of demand for real estate
• Translate demographic & employment forecasts into local (study area & city-wide) demand for various uses (housing, retail/restaurants, office/biotech)

City Demographics
• Since 2000, Palm Beach Gardens’ population increased by 12,100 — to 49,900 residents in 21,300 households
• City expected to add 24,000 new residents in 9,800 new households (units) by 2020 — suggesting annual demand for 820+ new housing units every year
• Current median HH incomes: $67,000 (above the County average); expected to jump to $78,000 by 2013
• Discretionary HH spending on retail totals $19,800 per year (below national average because of high number of retirees)
er format retailer is supportable given the right location, design, and conditions. It is estimated that approximately $67 million dollars a year is currently leaving the City and being spent somewhere else. These are sales that could potentially be captured here.

The City of Palm Beach Gardens has a strong reputation of very high building and landscape standards which translates into great desirability for development. Despite the strong growth projections, Palm Beach Gardens is 95% developed (including lands accounted for as preserves, parks, public rights-of-way, etc.). There is only 5% of the total city area that is undeveloped. Considering the anticipated growth of the City, 50% in 11 years, and the fact that the City is nearly built-out, identifying areas to accommodate the growth will be a challenge. A close look at the existing land use patterns, and development intensities (particularly in the more urbanized PGA corridor areas), suggests that much of the future growth will be accommodated through redevelopment of existing developed parcels.

Retailing Trends

Retail development is a very selective and specialized industry. As recent economic experiences have indicated, retailing is so difficult because people do not have to shop. Typical families only spend 4% of their income on apparel and only 5% of their income on dining out and entertainment. When families experience economic difficulties or hardships, they stop shopping for non-necessities and eating out. Families are committed to other expenses that are not a luxury. A recent study indicated that the average American has a two-three year inventory of apparel and home furnishings. The average American could go several years without purchasing many non-perishables items. In order to remain competitive and survive, retailers must figure out ways to get people to shop. On the other hand, shopping and dining is the primary activity in terms of time and spending by most tourists, especially those living abroad.

Retailer’s marketing can become very clever. A recent trend is called “down-sizing.” This is a trend where all women’s apparel is reduced by one size: today’s size 6 is tomorrow’s size 4. When this trend was test marketed in the Mid-West, many women would give away their wardrobes to charity and buy a whole new
wardrobe to celebrate their weight loss. While this example is perhaps not the most noble form of retail merchandising, it does illustrate the degree of invention that occurs in the fiercely competitive retail world which is constantly changing and evolving.

The City needs to be clearly focused on what it wants in terms of scale and experience and separate style and trends from substance and sustainability. Not all retailing trends survive. In the 1960s nearly 200 urban shopping streets were converted to pedestrian malls in an effort to better compete with the burgeoning number of enclosed malls that were being built in the suburbs. By the late 1990s only about 30 of these pedestrian-only shopping areas were re-opened to automobile traffic. In the 1980s the Festival Marketplace concept was conceived as a method of downtown revitalization. These shopping centers, with an emphasis on eateries and specialized retail (they typically were anchor-less in strict retailing terms), were also intricately designed and ornate.

Over time, this concept too struggled to achieve sales numbers equivalent to their enclosed mall competitors. There are many reasons for this: the lack of national anchors; an over-the-top design approach that reduced visual emphasis on merchandise; and many were located in areas that were challenged for retailing. In the mid 1990s the lifestyle center became the more prevalent type of newly proposed retail centers. This approach incorporated a mix of uses including entertainment, civic, and even residential components. Presently, open-air, mixed-use centers are proving competition for some enclosed malls, many of which are showing their age. However, recent reports indicate that un-anchored, open-air lifestyle centers are not meeting sales projections.
Current retail trends suggest a growing interest of communities to create more urban places where shopping is only part of the overall experience. On-line shopping and large format discount stores are of course the exception to this. However, the mixed-use lifestyle center or “town center” projects continue to be desirable community destinations. Today there are approximately 2,700 shopping centers across the United States of which nearly 1,100 are considered distressed. Most have enormous surface parking areas that are being considered as redevelopment areas, creating mixed-use and walkable streets and building structured parking. This “urbanization” of typically suburban centers is desirable as it makes the centers active for 18-20 hours a day, it provides residential and workplace close to shopping, and it mends the urbanism of a city.

A Retail Laboratory

Palm Beach Gardens, and particularly the PGA corridor, is a fascinating assemblage of many of the retail trends described above. There is a corner power-center (Loehmann’s Plaza, 1982), there is the super-regional enclosed mall (Gardens Mall, 1988), there is a mixed-use infill project (PGA Commons, 2001), there is an open-air lifestyle center (Legacy Place, 2003), there is an open-air, pedestrian-only lifestyle center (Downtown at the Gardens, 2005), and there is a new mixed-use lifestyle center (Midtown, 2007). All of these retail centers, approximately 2.1 million square feet of commercial space, front a 1 mile stretch of PGA Boulevard.

Each of these retail centers are designed and perform in different ways. Of these six retail centers, some are performing well while some are facing challenges. Although the Palm Beach Gardens demographics could potentially support a seventh retail center, the Citizens’ Master Plan does not recommend that a new commercial center be planned and implemented at the transit station. Instead, the plan proposes that additional retailers and anchors be located within existing shopping centers to improve their sustainability. In fact, as is illustrated in Chapter VII The Citizens’ Master Plan, the recommendation is that any supportable

![Commercial Trends: All Center Types](image)

**Market Potential: Retail**
- Current City-wide retail inventory: 5.6 million SF (7.5% of County inventory)
- Palm Beach Gardens serves as a regional retail destination drawing residents of northern & western Palm Beach & Martin counties and beyond
- City-wide HH retail spending supports 1 million SF, reinforcing City’s role as regional retail destination
- Retail tenants include major national anchors & chains as well a mix of boutique local businesses
- Significant challenges in the retail industry include: bankruptcies, oversaturation in suburban locations, and consolidations/mergers – which will limit near-term opportunities
- City-wide growth in rooftops, incomes, spending & employment could generate significant demand: up to 800,000 SF of new businesses thru 2020 (not location-specific)
retail and commercial uses be allocated in a manner that enhances some of the existing centers and makes them more walkable destinations.

When considering the location for the future Palm Beach Gardens regional Park-and-Ride station, the master plan recommends that the new station be designed with land uses and a form that will strengthen the six existing centers. The one exception is Loehmann’s Plaza which, because of its age, format, and access/visibility issues, the plan is recommending that the center be completely redesigned with an emphasis on housing and workplace.

In any future redevelopment there should be a strong emphasis on employment, well-integrated housing, and the principles of urban design described in Chapter IV. One missed opportunity for Downtown at the

Demographic Trends
City of Palm Beach Gardens

The diagram above highlights the six existing town center projects within the Palm Beach Gardens TOD study area. Initial market analysis suggests that given the right conditions, there is a market for a seventh.
**General Market Observations**

- Overall, City has established reputation for high quality of life & high-quality development
- TOD development potentials will require detailed market & financial feasibility studies
- Importance of assembling contiguous parcels providing sufficient frontage, visibility & parking is critical for success
- Further oversaturation of retail at TOD should be limited to avoid cannibalizing 6 existing town centers

The diagram to the left suggests that statistically, Palm Beach Gardens could support another, or seventh, town center project.

The recommendation of the Citizens’ Master Plan is for the City not to consider a seventh town center but to utilize any supportable retail, office, and residential uses to bolster existing centers that are struggling. These considerations are relative to the new station location at Alternate A1A and the Gosman site.
Station Locations

The focus of the Palm Beach Gardens TOD charrette was to analyze and make recommendations for a future transit station location along the FEC Corridor and to identify opportunities and strategies to improve the land use patterns along the PGA Boulevard Corridor in order to support mass transit. The charrette process also allowed the community to evaluate broader land use and transportation conditions along the corridor. Accordingly, the Citizens’ Master Plan addresses the two primary issues as well as varied urban design and redevelopment recommendations to improve the function of the PGA Corridor. Some of the recommendations are relatively simple to implement while others will require longer-range strategies and planning to enable their implementation.

During two public design sessions (held on Friday March 20, 2009 and Saturday March 21, 2009), charrette participants identified five different options for a future station location in the City. The potential station locations proposed by the community included areas both north and south of PGA Boulevard, and east, west, and bridging Alternate A1A. Each of these five was preliminarily evaluated during the charrette, with a recommendation to carry three recommended locations forward for a more comprehensive evaluation. The three locations included a northern option, a central option, and a southern option. A detailed design plan was developed for each of these three sites to analyze the opportunities and constraints associated with the accommodation of a regional park-and-ride station type on the site. Through the charrette process, it was determined that each of the three sites could accommodate the station type; however, the central site outperformed the other two sites and was identified as the most suitable for the Palm Beach Gardens regional park-and-ride station.

Of the five different station locations/configurations identified during the public participations sessions at the charrette, three were determined to be the most viable and therefore developed further. The diagram above identifies these three station locations/configurations.
Each of the three station location sites was evaluated utilizing the following criteria:

1. Station Visibility
2. Automobile Access (ingress and egress)
3. Bus and Trolley Accommodations
4. Parking Quantity and Access
5. Economic Development Benefits
6. Pedestrian Access
7. Proximity to Jobs and Housing

The “Wedge”

The “Wedge” site is a triangular parcel that was created by the construction of the Alternate A1A southbound on-ramp onto I-95. The approximately 2.8-acre parcel, not including RCA Center Drive, is immediately west of RCA Center Drive and north of PGA Boulevard (see location map to right). Currently used as storm-water retention for the on-ramp, this site became “found” land during the design process and was thought to be suitable to accommodate some of the required station parking. During the charrette, it was determined that the Northern Palm Beach County Improvement District owns the parcel and would consider its use for station parking. The “Wedge” property is located centrally, within a half-mile of each of the three primary station locations, and its size appears to allow a small parking structure with a total of 400 spaces on four levels of parking. Therefore, in the evaluation of the three station locations, the “Wedge” site with a 400-space parking structure was incorporated into each concept consistently.

The image above illustrates the limited visibility from the northern station location, at Parcel 5A, due to the structural wall supporting the I-95 on-ramp from Alt. A1A.

This view is of the “Wedge” site taken from Alt. A1A. The site is located between the PGA overpass and the I-95 on-ramp from northbound Alt. A1A.
THE NORTHERN SITE: Parcel 5A

Parcel 5A is an 84.2-acre parcel immediately north of PGA Boulevard and the “Wedge” site, between Alternate A1A and I-95. The parcel is owned by Catalfumo Construction and Development, Inc. and was identified by charrette participants as one of the primary station location options. The FEC right-of-way is adjacent to the eastern parcel boundary, which is parallel to Alternate A1A (see location map to right). A new road, RCA Center Drive, has been constructed underneath the new PGA Boulevard flyover, connecting this parcel to Parcel 5B to the south. Additionally, Kyoto Gardens Drive has been extended through the parcel to I-95 where a new northbound on-ramp has been constructed. North of Kyoto Gardens Drive is a nature preserve.

The immediate station area plan for Parcel 5A developed during the charrette includes:

- 750 structured parking spaces along Kyoto Gardens Drive
- Pedestrian accessible station platform (for north bound and southbound trains)
- 400 structured parking spaces provided at the “Wedge” site
- 45,000 square feet of retail (as a reconfiguration of the Catalfumo site plan)
- A central public plaza
- NOTE: Parcel 5A can accommodate a significant amount of additional development beyond the area necessary to accommodate the station infrastructure.

The preferred station location in the Parcel 5A option is the southwest corner of the Kyoto Gardens Drive and Alternate A1A intersection. This location is the only opportunity to provide for at-grade pedestrian access to the platform, which is the preferred means for access. Unfortunately, the platform would be virtually invisible from Alternate A1A due to the existing bearing walls supporting the Alternate A1A/I-95 access ramp. This lack of station visibility, which is important for rider safety by allowing natural surveillance, is a significant concern regarding this option.
Evaluating access to this site yields a mixed review. Vehicular access to and from the station and I-95 is convenient. However, due to the configuration of RCA Center Drive and the presence of a significant sewer lift station near the FEC tracks, there is insufficient room on the site to accommodate bus/trolley service adjacent to the platform. Although an ample amount of structured parking can fit on the site along Kyoto Gardens Drive, the physical constraints on the site creates challenges to pedestrian connectivity eastward. East/west pedestrian connectivity is also compromised by the narrow sidewalk areas provided along Kyoto Gardens Drive underneath the Alternate A1A/I-95 on-ramp. The many turning movements and frequent through traffic expected at this intersection makes for a difficult and potentially unsafe pedestrian environment.

Access from I-95 to the Parcel 5A parking garage per the charrette analysis is indicated in red above.

The Parcel 5A parking garage has excellent access to northbound I-95 as indicated in red above.

This rendering illustrates the design proposal developed during the charrette for Parcel 5A. Looking east from RCA Center Drive, south of Kyoto Gardens Drive, this view captures the station, the front plaza/drop-off area, and the architecturally enhanced parking garage beyond.
THE SOUTHERN SITE: Parcel 5B

Parcel 5B is located immediately south of the PGA Boulevard overpass and west of and adjacent to the FEC corridor. Parcel 5B is a Planned Unit Development (PUD), which is roughly 70% built-out. The property is owned and developed by Catalfumo Construction and Development, Inc.. Treasure Coast Regional Planning Council staff has assisted the Catalfumo corporation periodically since 2004 to help improve the transit-supportive aspects of the site’s land design plans. It is important to note the PUD site plan approval for Parcel 5B includes a condition requiring the site accommodate a transit station. Currently the parcel has approximately 300,000 square feet of retail and office uses, including the main offices for the Catalfumo Construction and Development corporation and others, a number of home furnishing retailers, and a five story parking garage.

The preferred station location for the Palm Beach Gardens regional park-and-ride at Parcel 5B is between the FEC corridor and RCA Center Drive at the eastern end of Design Center Drive. This area is relatively constrained by a large retention lake to the south and the configuration of RCA Center Drive itself. The charrette design illustrates new transit functions and retail uses surrounding a public plaza adjacent to the platform. The charrette plan also indicates new infill buildings along Design Center Drive and RCA Center Drive.

The immediate station area plan for Parcel 5B developed during the charrette includes:

- 900 structured parking spaces north of the retention lake
- Station platform with required elevated pedestrian access over the tracks
- 400 structured parking spaces provided at the “Wedge” site
- Transit facilities plus ancillary retail and office uses at the station
- A central public plaza
- NOTE: Parcel 5B can accommodate a significant amount of additional development beyond the area necessary to accommodate the station infrastruc-
Vehicular access to the station from I-95 is somewhat circuitous, requiring motorists to maneuver through several 90-degree turns through Parcel 5B. Access to I-95 from the station for northbound motorists is straightforward, with a direct connection from RCA Center Drive to Kyoto Gardens Drive. Southbound I-95 access from Parcel 5B, like Parcel 5A, is best achieved by driving north on RCA Center Drive to Kyoto Gardens Drive, east to Victoria Lake Gardens Drive, and then accessing southbound I-95 from PGA Boulevard. Bus/trolley access and loading, as well as pick-up/drop-off functions, would be challenging at this location due to the size and geometry of the site.

The rendering above shows the entry plaza to the station for Parcel 5B. The tower building houses the station functions, provides vertical circulation over the tracks, and can become an architectural icon for the City of Palm Beach Gardens if designed properly.
THE CENTRAL OPTION: Alternate A1A

A third station location was identified for further evaluation and design at Alternate A1A immediately north of the PGA overpass. This design incorporates the “Wedge” parcel for parking as well as the “Gosman” property, which is located across Alternate A1A and immediately north of the PGA access road to Alternate A1A (see location map to right). In this option, a portion of Alternate A1A ~ from Kyoto Gardens south ~ would be reduced from six to four lanes. (Alternate A1A is currently four lanes south of Lake Victoria Gardens Drive, six lanes from Lake Victoria Gardens Drive to Kyoto Gardens, and six lanes north of Kyoto Gardens). This lane reduction would provide room for bus pull-off and stacking, slow motorists on Alternate A1A, and establish a safer environment for pedestrians crossing Alternate A1A.

The plan for the Alternate A1A site developed during the charrette includes:

• 900 structured parking spaces at the “Gosman” site
• Station platform with required elevated pedestrian access over the tracks
• 400 structured parking spaces provided at the “Wedge” site
• Lane reductions on Alternate A1A
• NOTE: The plan for this option also illustrates an additional 250,000 square feet (approximate) of office space and the requisite structured parking also on the “Gosman” site.

This site affords the greatest ease of access of the three site location options tested. Vehicular access to the “Gosman” parcel is easily made from I-95 via PGA Boulevard and Lake Victoria Gardens Drive. Additionally, the “Gosman” site provides the most direct access to I-95 southbound. I-95 northbound access requires crossing Alternate A1A at Kyoto Gardens Drive.
The detailed design developed for the Central Option station during the charrette (left) incorporates many elements that should help the corridor over time. It was determined during the charrette that this option provides perhaps the best opportunity for economic development spin-off of the three station locations.

The Central Option design proposes a new east-west street through the existing parking lot on the "Gosman" site. This street, lined with street trees and designed with a landscape median, connects into the existing office building and the assisted living facility. A public space is incorporated for residents of the facility.

In this design, the current development rights of the "Gosman" property are maintained and developed on the south end of the parcel towards PGA Boulevard. The north portion of the site would be permitted for a five level garage (900 spaces) and additional residential and non-residential uses. Anchoring this corner with TOD development will be beneficial to Downtown at the Gardens as well.
Station Evaluations

Detailed designs were developed to test each site and to better analyze their opportunities and constraints. Each of the three station location sites was evaluated utilizing the following criteria:
1. Station Visibility
2. Auto Access (ingress and egress)
3. Bus and Trolley Accommodations
4. Parking Quantity and Access
5. Economic Development Benefits
6. Pedestrian Access
7. Proximity to Jobs and Housing

Station Visibility

Parcel 5A, because of its proximity to the PGA Boulevard on-ramp from Alternate A1A, has very poor visibility which could generate safety issues over time. Parcel 5B has good visibility from Design Center Drive and RCA Center Drive; however, visibility and access from Alternate A1A is limited. The Alternate A1A location has excellent visibility from RCA Center Drive, Alternate A1A, and PGA Boulevard.

Auto Access

All three sites share the “Wedge” as one of the parking garage locations so the evaluation regarding access is relative to the location of the second, larger garages at Parcel 5A, Parcel 5B, and the “Gosman” property. Each of these locations benefits from easy access to and from I-95, and there are no significant distinctions with this criterion.

Bus and Trolley Accommodations

Both parcels 5A and 5B contain site constraints that will create challenges for auto circulation as well as bus/trolley access. The Alternate A1A location, especially if the roadway is reduced from six to four lanes, appears to provide the best accommodations for bus and trolley service.

Parking Relationships

All three locations can be designed to include an adequate supply of parking for a “regional park-and-ride” station in close proximity to the likely station/platform locations. However, the manner in which the parking could be designed differs among the sites. On Parcels 5A and 5B, the parking structures would likely present awkward street frontages as there is little room to screen or “line” the garages with habitable uses. Though façade treatments can be designed to visually improve the impact of large garages, habitable space is preferred to establish activity around the station and to provide informal oversight of the area. For the Alternate A1A site, it appears possible to locate a garage on the “Gosman” parcel that could be fully lined with office and retail uses.

Economic Development Benefits

Of all the criteria used to evaluate the station locations, economic development potential and spin-off represent perhaps the greatest long-term implications for the City, especially along the PGA Corridor.
writing of this report, two key developments within the Study Area (Downtown at the Gardens and Loehman’s Plaza) were in foreclosure proceedings. It will be critical for the City to consider the positive, off-site impacts generated by future investment decisions. The Alternate A1A site, which includes the “Gosman” property, will provide the greatest economic benefit to the area by anchoring the southwest corner of Downtown at the Gardens. Although the station alone will not fix all of the existing challenges with this development, it would nonetheless help energize the site and provide a catalyst for the much-needed pedestrian, mobility, and mix-of-use enhancements for the site. Loehmann’s Plaza is a significant redevelopment opportunity for the City and is discussed in detail later in this chapter.

Pedestrian Access to/from the Platform

This criterion is largely dependent upon the future physical environment of the subject sites. Currently, the land use pattern on Parcel 5B is auto-dominated, and it does not contain a well-developed pedestrian environment. The most recent site plan developed for Parcel 5A, which was submitted to the City in the month preceding the charrette, is auto-dominated as well, with a proposed land use pattern that leaves the pedestrian “exposed” at the edge of large surface parking lots (rather than “protected” by building frontages adjacent to sidewalks). The Alternate A1A site could become a pedestrian-friendly environment if the necessary improvements are made to the roadway (e.g., roadway reduction to four lanes; safe harbor for pedestrians in median and along roadway; construction of station plaza along roadway edge).

Jobs/Housing within ½ Mile

Each of the station locations is located in close proximity to a considerable amount of jobs and housing within a half-mile radius. When evaluated individually, the central and northern sites (Parcel 5A and Alternate A1A) appear slightly more desirable in this criterion versus the southern site (Parcel 5B) as the southern site is further removed from housing than the other two sites. (Although the Legacy Place housing is immediately across Alternate A1A from 5A, there is no direct connection for these residents to access the station.)

The Palm Beach Gardens TOD charrette is unique in that one station location did not quickly emerge as the clear preference for the regional park-and-ride. There were so many variations on the three primary locations presented during the charrette, a matrix was developed with the afore-described criteria in addition to the urban design plans to evaluate the sites with multiple methods. It was found that any of the three sites could possibly accommodate a regional park-and-ride station type. However, based upon the evaluation measures, the Palm Beach Gardens Citizens’ Master Plan recommends the Central Site (Alternate A1A), utilizing parking on the “Gosman” property, be considered the preferred station location for the Palm Beach Gardens’ station.

These are renderings of the preferred station location at Alternate A1A and the “Gosman” parcel.
**Downtown at the Gardens**

Downtown at the Gardens is a 350,000 square foot open-air, lifestyle/entertainment center that opened in 2005. The center is anchored by a 16-screen Cobb Theater and a Whole Foods Market. Other successful retailers include Cheesecake Factory, Too-Jays deli, Yard House restaurant, and, until recently, Starbucks Coffee. Unfortunately, and for a variety of reasons, the center has lost numerous tenants and has become symbolic of the currently struggling economy.

In its current configuration, the center has an internal, open-air, pedestrian mall that is oriented north-south with a central plaza at the theater entry. The theater is the northern anchor and is only accessible from the second floor. The center is designed as a hybrid of an internalized shopping mall with elements of an urban lifestyle center. There are externally facing storefronts (as is the case with Too-Jays, Whole Foods Markey, and Yard House, etc.) however, these stores are often separated by service and loading bays. Unlike a typical enclosed mall, where the entire shopping experience is controlled in-doors and pedestrians are discouraged from walking along the exterior perimeter and encountering service and loading areas, at Downtown at the Gardens, the shopping and loading/service areas are comingled in some locations. As has been reported recently in the Palm Beach Post, these conditions have caused distress with some tenants.

The charrette plan recommends somewhat ambitious measures be taken to enhance the viability of Downtown at the Gardens to take advantage of the enormous investment in the project. As is discussed in the Market Overview chapter, the strong recommendation is that existing retail centers in Palm Beach Gardens, particularly those under duress, be augmented and reconfigured to become successful and not discarded. The additional supportable retail, commercial, and residential square footage, as outlined in the market overview, should be used to prop-up centers like Downtown at the Gardens.
Key master plan design features for Downtown at the Gardens include:

1. Open the pedestrian mall to 2 lanes of traffic with on-street parking;
2. Internalize delivery, trash, and compaction functions;
3. Complete the perimeter streets with new residential and office development;
4. Build a new parking garage completely lined with habitable uses.

Above is the proposed redevelopment concept for Downtown at the Gardens. The rendered roofs represent new buildings with a variety of uses including office and residential. The pedestrian “mall” areas have been opened to vehicles and all efforts are focused on creating streets, blocks, and public open spaces to enhance the pedestrian realm and increase the long-term viability of the center.

During the charrette, the design team measured the width of the pedestrian mall areas in different locations to ensure that the proposed travel lanes will fit. The travel lanes can be accommodated however, the on-street parking will not work in all locations. The proposal does not recommend removing any storefronts.

The existing pedestrian only “mall” areas of Downtown at the Gardens as they exist today.

The rendering above illustrates how travel lanes would be retrofitted into the center with on-street parallel parking provided in some areas.
The Gardens Mall

The Gardens Mall is a 1.4 million square foot regional enclosed mall that, since its opening in 1988, has been a significant destination for the city and the Treasure Coast region. Considered one of the top retail centers in the nation, the Gardens Mall, its owners, its retailers, and its management staff have been active in the Palm Beach Gardens community. In fact, the mall hosted the design studio for the week long charrette and its construction manager, Tom Cairnes, served on the Charrette Steering Committee.

The Gardens Mall is a very important element in the local Palm Beach Gardens economy. As a successful, internalized regional mall, it performs exactly the way it was intended: the mall provides a safe, positive shopping experience inside and ample parking outside. This retailing model creates the “fried-egg” urban form in that the mall itself (the yolk), is surrounded by thousands of surface parking spaces (the egg white). While not intended as a critique of the world-class shopping experience provided by the Gardens Mall, this description of the mall’s urban form is important when considering the long-range urban design enhancements proposed in the area.

The regional draw of the Gardens Mall makes the provision of so many parking spaces necessary for its success. It also makes the perimeter, or edges, of the mall very difficult to urbanize into the form of walkable streets and habitable buildings. Because the mall is the destination within its approximately 115 acres, any pedestrian trips are typically to and from the car, or entirely within the building.

When the mall first opened in 1988, it was one of the few destinations on PGA Boulevard. Over time, many new developments and uses emerged around the mall’s perimeter. As the employment base around the mall has burgeoned, so has the ridership of Palm Tran buses whose riders are traveling to and from the corridor for work. Within the study area, and within 1 ½ miles of the Gardens Mall, there are five full-service hotels and millions...
of square feet of office, retail, and restaurant uses. In fact, the mall management, observing that their eastern parking lots had become an un-official Palm Tran transfer station, formalized the station with shelters, signage, and benches.

While the purpose and function of the Gardens Mall has not radically changed since its opening, the context of the mall has changed. Where there were no destinations within walking distance in 1988, now many neighboring destinations exist. The Citizens’ Master Plan recognizes the success of the business model of the Gardens Mall and only makes recommendations for future redevelopment along the western perimeter to better connect the mall with the Landmark residences, the new Hilton Garden Inn hotel, and Downtown at the Gardens. Additionally, pedestrian connections, in the form of new sidewalks, are also recommended. Currently, pedestrians have to walk through and around the perimeter landscape buffers and traverse the busy roadways as no sidewalks or crosswalks are provided around the mall.

This aerial highlights the western edge of the Gardens Mall where the Citizens’ Master Plan recommends future infill redevelopment to urbanize the area and better connect to the Landmark and Downtown at the Gardens.

Above is the charrette design for the proposed future western redevelopment of the Gardens Mall parcel. The plan recommends replacing surface parking areas with buildings and streets that better connect to the adjacent parcels. The new road alignments are on axis with the major entries to Nordstrom’s increasing the mall’s presence from the west.

This perspective illustrates the new streets and buildings and their relationship the existing Nordstrom’s department store. Note the new parking garage to the north. This garage contains all of the surface parking spaces that are removed to create development sites. This is a standard theme throughout the charrette master plan: the removal of surface parking to intensify development at key locations.
Mobile home parks have been a part of the Florida landscape since the 1950s. Originally intended as retirement communities, mobile home parks have become increasingly prevalent as concentrations of affordable housing. While affordable, the units themselves are highly susceptible to severe weather. In some areas, parks have developed a stigma as enclaves of poverty and crime. These issues can make them vulnerable to redevelopment pressures in some municipalities. However, the fate of mobile home parks often lies in their ownership structure. Those parks which have a condominium structure, whereby the residents are owners of their units as well as a percentage of the land itself, are often less likely to redevelop in the near term.

Mobile home parks where the land is under single ownership, and lots are rented to the owners of the units, are often very susceptible to redevelopment. This is the case of the Meadows mobile home park which is located in the charrette study at the northeast corner of PGA Boulevard and Prosperity Farms Road. The Meadows park, from observation...
before and during the charrette, appears to be well maintained and stable. Because of the single ownership issue, the design team developed a master plan for the park in the event redevelopment is proposed in the future.

The design of the Meadows area incorporates a new network of streets that allows easy circulation within the site and provides multiple connections to adjacent parcels and roads. This degree of connectivity is especially important at this significant intersection in order to minimize congestion. The proposed design incorporates multi-family units, townhouses and some single-family houses. The purpose of developing this proposal is not to advocate for the redevelopment of the Meadows mobile home park but to provide the City with a site plan that maintains a comparable number of residential units and is consistent with the principles of urban design outlined in this report.
Palm Beach Community College

The Palm Beach Gardens campus of Palm Beach Community College (PBCC) is located on PGA Boulevard within the charrette study area. The campus opened in 1982 and has an annual student population of approximately 10,000 students. Due to its status as a community college, PBCC is restricted from providing campus housing for students and it is not the intent of the college to provide housing in the future. Therefore, PBCC is, and shall remain, a commuter college, meaning that all students, faculty, and staff must drive or take some other mode of transport to get to the campus.

In observing the PBCC campus during the charrette, the design team noted a few important items for consideration:

1. The campus is beautifully maintained with an impressive amount of vegetation and landscaping;
2. Transit riders going to the campus have a long, unsheltered walk between the transit stops and the campus buildings;
3. The walk from the PGA Boulevard transit stop to the campus is particularly difficult;
4. All of the campus parking, approximately 2,100 spaces, are surface spaces in very large fields of asphalt;
5. The campus has no physical or axial presence onto the two main entry roads (PGA Boulevard and Campus Road).

Considering the recent, and significant increase in student enrollment and the likely future expansion of campus buildings and activities, the design team developed a plan for the PBCC campus. The proposed design essentially leaves all existing buildings in place and proposes future buildings to be located where the large surface parking lots are today. Over time, surface parking would be replaced with structured parking, thereby freeing land for new buildings and additional green space. The placement and alignment of future buildings in the proposed plan are careful and deliberate; they begin to make formal quadrangle spaces that create elegant entrances from PGA Boulevard and Campus Road and enrich the academic environment. These formalized spaces are the tradition of the most desirable college campuses in the world because they foster informal student interaction and establish campus identity. With careful planning, these spaces can be implemented over time.

Initial discussions with the PBCC provost after the charrette regarding this proposal were positive. Obviously expanding and developing on an existing campus has many challenges; however, the idea of creating more green space (a priority of the college) and enhancing the campus’s overall presence seemed desirable.
The charrette plan for future expansion of the Palm Beach Community College is illustrated above. The proposed new buildings are illustrated in green as they are intended to be examples of environmentally sensitive structures. Over time, surface parking lots are removed and parking is provided in new structures. The reduction of surface parking spaces will make parking more efficient for users by having greater concentrations of spaces in closer proximity to destinations; it will allow for redevelopment and building expansion of the facilities on-campus; and it will reduce the overall campus heat gain and provide more opportunities for native vegetation.

The image to the right is of a typical traditional college campus quadrangle or green. These formal gathering spaces often become icons of the college or university. The charrette master plan for PBCC (above) recommends that future campus expansion positions buildings so that they create formal, iconic spaces. The charrette plan proposes that a new “quad” or green be created west of the central campus and extend to Campus Road. These formal spaces will also help to extend the presence of the campus to the major access roads, Campus Road and PGA Boulevard.
Immediately to the west of the PBCC Palm Beach Gardens campus are a number of parcels bounded by Campus Road to the east, Fairchild Avenue to the south, Fairchild Gardens Avenue to the west, and PGA Boulevard to the north. Many of the parcels accommodate public uses, including the North County Government Center, the Palm Beach Gardens Public Library, the Department of Motor Vehicles (DMV), and the Palm Beach Gardens Post Office. In addition to all of the public parcels and uses, there is the Merrill Lynch office tower and Toys-R-Us, both facing PGA Boulevard.

Centered about all of the uses is a large city-owned parcel, approximately 16 acres in size, that was acquired by the County for preserve land. The City’s linkage plan proposes extending Gardens Mall Drive, which currently provides access to the Toys-R-Us and the DMV, south to Fairchild Avenue as development occurs. At the time of the charrette the precise alignment of the road had not been determined however, it was expected to bifurcate the preserve parcel.

The charrette team developed a plan for this entire area using the following objectives:
1. Illustrate redevelopment scenarios for the Toys-R-Us and the DMV parcels (both are currently one-story buildings);
2. Re-align the future Gardens Mall Drive extension to connect directly into the library parking area, which maintains the 16 acre preserve as a unified parcel;
3. Relocate the postal facility and redevelop that parcel as multi-family housing geared toward the student population at PBCC, which is only ½ mile away;
4. Provide a plan for the preserve.

In the proposed master plan, the Toys-R-Us parcel is redeveloped as a multi-story mixed-use building with a smaller scale (4-6 stories) than the Merrill Lynch office building immediately to the west. The DMV and county parcels are developed with townhouse buildings that screen the large parking lots at the North County Governmental Facility and create a formal entry into the new preserve/park. The new preserve is illustrated with active and passive uses and includes a sculpture garden keeping with the great tradition of public art in Palm Beach Gardens.

A very important feature of the design for these parcels is the provision of a frontage road along PGA Boulevard, immediately east of Merrill Lynch that extends to Campus Road. This frontage road is very important as it provides: a landscaped separation of building fronts from PGA Boulevard, parallel on-street parking for new buildings fronting PGA (critical for retail), and an alternate parallel route to PGA. This last point is key as PGA Boulevard, as concluded in the
County’s Long Range Transportation Plan, has been determined to have a future trip demand that would justify expansion to an 8-lane facility. During the charrette it was made clear that widening PGA is not the desire of Palm Beach Gardens residents nor its elected officials. The provision of a frontage road along PGA reduces the number local trips that now must engage PGA Boulevard because of the limited connectivity. Designed properly, the frontage road can also create superior pedestrian environment along the corridor.

The rendering above illustrates an urban frontage road condition proposed by the Citizens’ Master Plan.

This drawing is a detail of the proposed frontage treatment along PGA Boulevard. New redevelopment projects should do everything possible to reduce local trips on PGA Boulevard. Creating a new frontage road is an excellent method for reducing local trip impacts onto major corridors.
Legacy Place is a 469,000 square foot lifestyle center that, unlike Downtown at the Gardens, is built with a network of streets. Legacy Place opened in 2003 and is located south of PGA Boulevard directly across from the Gardens Mall. Legacy Place has a very strong tenant mix which includes Publix Greenwise Market, Michael’s, Best Buy, Loehmann’s (which left its namesake Loehmann’s Plaza to move into Legacy Place), Barnes and Noble, Capital Grille, and many others. Where Downtown at the Gardens can be characterized as a hybrid lifestyle center/enclosed mall project, Legacy Place is a hybrid lifestyle center/power center project. Legacy Place has urban shopping streets with diagonal on-street parking, but these streets quickly erode into very large surface parking areas faced by the larger format retailers. One of the more prominent design features of Legacy Place is the roundabout on the main shopping street which opens out to a very picturesque water retention feature. Unfortunately, this feature does not appear to be aiding the success of the retailers at of the writing of this report, the three main retail spaces fronting the roundabout are vacant. The charrette master plan recommends strategic infill of new buildings to make the existing shopping streets as continuous and active as possible.

As already noted, Legacy Place has a fantastic array of tenants, which makes it a very desirable shopping destination. The physical form of the center is somewhat erratic as some areas are very walkable and others are not. Two of the centers national chain restaurants are positioned as out-parcels within the project and surrounded by surface parking in a standard suburban layout. This condition results in people driving from one location to another within the center. Unlike other non-hybrid lifestyle centers, like CityPlace in West Palm Beach, Legacy Place is not a truly park-once environment where all destinations are easily accessible on foot.

Legacy Place is mixed use, with a residential component; however, the residences are not integrated into the project. In fact, at the location where the residential buildings are in closest proximity to the retail uses, no pedestrian connections link the two. The charrette master plan recommends that over time, the urban retail streets be completed with new infill development providing residential units that are fully integrated within the project. Additionally, the plan recommends that when future infill development establishes cohesive connections between the uses, the majority of surface parking could be put into structures that are lined at the streets with habitable uses.

Legacy Place has the potential to become a truly mixed-use village over time. The fact that Legacy Place does have a network of multi-modal streets is an enormous benefit to its long-term future. With careful and strategic infill development, Legacy Place and the City could both benefit from a more diversified and urban form.
The detailed charrette plan for long-range infill redevelopment of Legacy Place is provided above. The plan recommends "completing the streets" of Legacy Place and the development of new structured parking to accommodate additional uses. The rendered roofs above represent the locations of new buildings. The plan also incorporates four new parking garages.

This is another view of an urban frontage road treatment. The frontage road provides alternate routes for local trips parallel to PGA Boulevard.

The charrette plan recommends that over time, a frontage road be developed along PGA Boulevard in front of Legacy Place. The frontage road will provide on-street parallel parking that will activate the Legacy Place storefronnts, many of which remain locked today.
The NorthCorp Center began construction in 1960 as a corporate office park and broadcasting center. The center has 297,000 square feet of office space arranged on a sprawling, 26 acre campus of one- and two-story buildings. Currently the center is more than half leased and its current users include WPBF Channel 25, a Nova Southeastern University campus, the Chesterbrook Academy, Stayin Alive Fitness Center, and John C. Bills Properties, Inc. who developed and owns the center.

The NorthCorp Corporate Park also includes parcels and uses south of NorthCorp Parkway. During the charrette a plan was developed for the medium to long-range redevelopment of this area (from RCA Boulevard south to Burns Road; from Riverside Drive east to East Park Drive). This total area is approximately 50.6 acres and has a total of approximately 553,500 square feet of commercial, office, and warehouse uses in multiple buildings.

The redevelopment plan for this area is based upon creating a street and block system that is defined by walkable streets and public open spaces. The design is organized around a large public green that would serve as required water retention in a form that is usable and fronted by buildings. Parking is handled in surface lots behind buildings, on-street parallel spaces, and four parking garages. The charrette design proposes approximately 987,000 square feet of Regional Bio-Tech support space with allowances for some neighborhood-oriented retail and residential uses. Understanding that this proposal is not likely to happen soon, it is important that the City have a vision for redevelopment parcels such as these.
The charrette plan for the future redevelopment of NORTHCORP Center is illustrated above. The plan includes the entire NORTHCORP Corporate Park area east of RCA Boulevard. Rendered roofs represent new buildings positioned to create streets and blocks creating a more pedestrian appropriate environment. The central green is an organizing design element as well as storm-water retention that is treated as a public amenity.
Parcel 5B, know as the PGA Design Center, is a 26-acre parcel that is approved for 300,000 square feet of retail and office/light industrial uses. Located immediately south of PGA Boulevard and east of RCA Boulevard, the PGA Design Center is approximately 70% built-out. The approval of this project included a condition that a site be reserved (to be purchased from owner/developer Catalfumo Construction and Development, Inc. at a later date) for a future transit station as the property is immediately adjacent to the FEC corridor. Since 2004, Council staff has worked with Catalfumo representatives to develop preliminary ideas about the station and the adjacent development to ensure it is as transit-supportive as possible.

The current tenants in the center include home furnishing retailers and the main offices of Catalfumo Construction and Development, Inc. Discussions about future users include a hotel near the intersection of RCA Center Drive and Design Center Drive. Since the initial discussions with the center representatives regarding the transit station, more details have emerged regarding the preferred station type for Palm Beach Gardens. As discussed earlier, because of its unique location, demographics, and concentration of destinations, the Palm Beach Gardens station will be a regional Park-and-Ride requiring approximately 1,500 parking spaces.

The amount of parking required has put the PGA Design Center (5B) parcel at a disadvantage for the preferred station location due to the limited amount of area available east of RCA Center Drive. The curvature of RCA Center Drive, in addition to the retention lake immediately south, makes this location for the station challenging.

The charrette master plan illustrates the strategic infill of new buildings along the Design Center road network which, with the buildings that already exist, will complete the streets. Framing the public rights-of-way with continuous building facades will greatly enhance the walkability of the center. Currently it is very difficult to cross-shop the various tenants without driving from one building to another. In addition to new buildings, the charrette master plan illustrates a new public plaza at the terminus of Design Center Drive. This is a prominent site that should be reserved for special treatment whether the station is located on this parcel or not.
Above is the charrette plan developed to analyze the potential station location at Parcel 5B. The rendered roofs are proposed new building locations. The station is located at the end of Design Center Drive and includes a public plaza, station functions, and ancillary retail uses. The 900 space parking garage is located south of the station and is immediately north of the existing retention lake (see previous page). Although Parcel 5B is not the recommended station location, the charrette plan illustrates how over time the remaining development parcels on 5B can be infilled to complete the street and block system already established in the development plan. Additionally, the site at the end of Design Center Drive, where the station is identified above, should remain an important location for a premium use and some form of public open space.
Loehmann’s Plaza is an approximately 110,000 square foot power center that is in the southeast quadrant of the PGA Boulevard/I-95 interchange. Loehmann’s was one of the first commercial centers on PGA and has fallen into decline (the center was recently reported as being in foreclosure proceedings). There is tremendous retail activity and pressure on the PGA corridor which, along with Loehmann’s outdated format and limited visibility, has made this center a likely candidate for a complete reconstruction in the future.

Participants of the Palm Beach Gardens TOD charrette repeatedly acknowledged the Loehmann’s site as an ideal location for a corporate campus, perhaps related the growing bio-science industry in north Palm Beach County. No access to the site is avail-
able from PGA, which strengthens the argument that whatever replaces the center in the future should not be predominantly retail.

The charrette design team developed a plan for the Loehmann’s parcel that includes 707,700 square feet of regional workplace uses, with opportunities for some live/work and retail uses fronting RCA Boulevard. The parcel is divided into streets and blocks with the bulk of on-street parking located behind the larger office buildings adjacent to I-95. The charrette proposal also links the parcel directly to the Marriott parcel thereby creating an internal road network to help relieve pressure on RCA Boulevard. Additionally, the proposed site design provides structured parking, direct connections to through streets across RCA Boulevard, and creates a public plaza along RCA.
The site is part of the Palm Beach Gardens Bioscience Research Protection Overlay designation in the city’s Comprehensive Plan. There is currently a site plan under review at the City of Palm Beach Gardens for the development of this site as 450,000 square feet research and development space, 450,000 square feet of office space, a 260 room hotel, 45,000 square feet of retail, surface parking lots and 836 structured parking spaces proposed in five separate garages. Parcel 5A was analyzed as one of the station locations however, issues of station visibility, site constraints, and limited bus access made this site less preferable.

The schematic site plan submitted to the City for Parcel 5A will not create an environment that is pedestrian or transit supportive. The arrangement of the individual buildings, each surrounded by surface parking, is the classic sub-urban sprawl model of office park development. Each of the design interventions provided within this charrette report is an effort to enhance overall mobility and transit viability within the study area. With Parcel 5A, a unique opportunity exists to build a proper mixed-use, transit-supportive project with the existing program from its inception; it would be unfortunate to have to retrofit the desired urban design elements after the project is built.

The charrette master plan recommends that Parcel 5A be designed with a central green that provides a vista to the hotel which situated in a park-like environment on the west end of the site. There is a public plaza surrounded by the proposed retail uses along RCA Center Drive. Instead of buildings sitting in parking lots, the charrette design creates a series of “A” and “B” streets. “A” Streets are the primary streets, anticipated to become superior environments, lined with the active fronts of buildings. These streets are held to the highest design standard with continuous wide sidewalks, shade trees, and on-street parking.

“B” Streets are the secondary streets, which are fronted by the sides and backs of buildings and accommodate service uses including parking, loading, and trash facilities. The charrette master plan provides the same program as the site plan

Parcel 5A, immediately north of PGA Boulevard, is pictured above.
submitted by the applicant with 16 proposed buildings (vs. the submitted version of 15 buildings) and 2 structured parking garages (vs. the submitted version of 5 garages). The charrette plan illustrates design and urban planning principles that should be required for any future development sites in the City, especially those within the TOD study area. These principles do not reduce development potential nor do they force a scale or architectural style. These principles provide a physical framework of streets, buildings, and open spaces that establish a sustainable pattern of growth for the City.

Above is the submitted site development plan for Parcel 5B. The plan can be characterized as a conventional suburban office park with a number of buildings separated from one another by vast fields of surface parking. Ironically, this proposal includes five parking garages yet parking lots are a dominant feature of the plan.

During the charrette there was much discussion regarding Transit-Oriented Development (TOD) versus Transit-Adjacent Development (TAD). TOD projects are designed to take full advantage of existing and proposed transit infrastructure. Every transit ride begins and ends with a pedestrian trip. For TOD projects to be successful, they must accommodate all modes of mobility and do so in a manner that is convenient and safe for all modes, including the pedestrian. TAD projects are not designed to safely and successfully accommodate all transit modes. These projects happen to be adjacent to transit infrastructure however, they do not take full advantage of that infrastructure. This is the case for most of the existing Tri-Rail stations which were retrofitted into previously planned office parks and industrial areas. Parcel 5A has a great opportunity to become a TOD however, the current site plan must be significantly altered to do so.
The charrette plan developed for Parcel 5A is illustrated above. This redesign of the submitted site plan emphasizes the creation of streets and blocks to ensure a positive and safe pedestrian environment. This goal is also achieved through disciplining the location and frontages of the new buildings. The fronts of buildings always face one another and surface parking lots and service areas are located behind the buildings.

Parcel 5A Program (per the charrette re-design)

~ 450,000 square feet R&D uses
~ 450,000 square feet Office
~ 45,000 square feet Retail
~ 260 room Hotel
~ 16 Buildings (2-4 floors)*
~ 2 Parking Garages (1,600 spaces)*

* the submitted development plan proposes 15 new buildings (2-6 floors) and 5 parking garages for a total of 836 spaces.
This aerial rendering of the charrette design for Parcel 5A clearly illustrates the proposed Primary and Secondary street network. Primary streets have parallel on-street parking, sidewalks, and they are lined with shade trees. These streets are fronted by buildings which create the public space of the street. The Secondary streets are behind the buildings and are characterized by surface parking lots and service areas for the buildings. The central green provides areas for storm-water retention and is an organizing element of the plan. This green becomes a public open space, well-defined with buildings on either side, and it is terminated with the hotel to the west. The two parking garages are shielded from the Primary streets and back-up to the PGA Boulevard overpass.

Parcel 5A, for many reasons listed previously in this report, is not the recommended station location for Palm Beach Gardens. However, this site will be developed and has the opportunity to exemplify the planning and urban design principles described in this document. As Parcel 5A is one of the few remaining “in-town”, sizable development parcels, it is very important that the City of Palm Beach Gardens hold this development to the highest design standards.
TRANSIT, MOBILITY, AND CONNECTIVITY
Existing Conditions
The potential South Florida East Coast Corridor commuter rail system and its associated station in Palm Beach Gardens provides the opportunity for the City to increase the availability for true multimodal transportation options.

Several “town centers” have been created providing opportunity for shopping, dining, and entertainment, and significant employment, housing, and Palm Beach Community College all exist within the study area. The community has invested heavily in creating well landscaped corridors in some locations that are attractive when driving through the area.

Street Network
The mobility challenge created for all users, but especially pedestrians and bicyclists, results from the suburban development patterns where most developments are deliberately disconnected from one another by landscaping, berms, lack of sidewalks, and a disconnected street network to keep anyone from “passing through.” The result is a sparse network of streets that often lacks connectivity. A fine grained network of streets should have a block perimeter of approximately 1,500 feet or so. Many of the developments (due to the lack of access for through traffic) have “block structures” that comprise the entire site, yielding a “superblock”. Palm Beach Community College campus is a superblock, framed by PGA Blvd., Prosperity Farms Rd., RCA Blvd., and Campus Drive. The connectivity challenge is further exacerbated by the extensive use of “access management” treatments along PGA Boulevard, which limit turning movements and opportunities to cross the street. Restrictive medians and other treatments require vehicles to drive longer distances by allowing only right turns. Consequently, in order to get to a property across PGA Boulevard, the driver has to turn right, drive down PGA some distance, u-turn and drive back to the destination, which is across the street from the origin.

Free movement is further restricted by the railroad, which passes through the study area, and the long bridge crossing of PGA over the railroad and Old Dixie Highway. Finally, many of the streets in the area
are four lane roads, even where traffic volumes do not warrant more than a two-lane road or a two-lane road with left turn lanes at some intersections.

The approach to dealing with roadway network in the study area seems to be focused on providing a limited number of roadways that are routinely sized at four and six lanes with large intersections that provide dedicated turn lanes in every direction.

This approach sharply contrasts with places that are walkable and safe and convenient for pedestrians and cyclists, where block sizes are much smaller and the network of streets is much more extensive. Going back to Palm Beach Community College as an example, this campus could have an extensive street network, which would greatly increase the potential for bike and pedestrian use in addition to vehicles. Instead, the current perimeter road has to be used by cars for every trip across campus. Most of the development projects are similar to the campus; no internal street network forces the use of cars for every trip within the community. These same developments consistently have large surface parking lots with the buildings located in the center of a sea of parking, so the stage is set to discourage walking, except from the parking lot to the destination building the parking lot serves.

PGA Boulevard
PGA Boulevard is seen by many in the community as their “main street.” The traffic projections for PGA show that the boulevard would have to be 10 lanes by 2030 to handle the expected growth in vehicle trips; however, the corridor is constrained to 6 lanes. Since growth is expected to continue in Palm Beach Gardens, the projected transportation needs will have to be accommodated through other modes. In order for other modes to be successful, this corridor needs to undergo some change.

While there are many efforts to landscape the corridor in some locations, in order to improve the aesthetics, the overall treatment of the street results in motor vehicles travelling at fairly high speeds during most of the day. There are several reasons why speeds are relatively high through the corridor. As a state road, the overall design is intended to allow vehicles to move quickly with little delay at as high a speed as is practical. The design of this street accomplishes this in several ways:
• On-street parking is not allowed, reducing friction to through moving traffic.
• Buildings are set back from the roadway so there is no sense of enclosure, which increases the drivers’ comfort with faster speeds.
• Signal spacing ranges from 1,000-3,400’, which tends to increase speeds since most of the crossing streets have relatively low volumes and the dominant movement is east-west through the study area.
• The wide roadway cross-section causes drivers to feel comfortable driving at speeds above the speed limit.
• Several dedicated right turn lanes (at both signals and driveways) have relatively long deceleration lanes, allowing turning vehicles to turn without reducing speed.
• The six-lane cross-section combined with dedicated turn lanes creates very large intersections where pedestrians are not comfortable crossing the road.
• Access management is an important treatment to reduce the potential for conflicting movements, and can enhance vehicle safety. Along this corridor the access management is highly controlled such that there are few connections to PGA. At Palm Beach Community College, the driveway only allows for right turn movements when leaving. The highly controlled access also allows drivers to feel more comfortable driving faster due to the reduced points of vehicle access to the corridor.

In addition to these treatments of the roadway, the buildings adjacent to PGA are generally set significantly back from the sidewalk, reducing the desirability for walking. Where newer buildings have been built and are placed at or near the sidewalk, many of the entrance doors are locked or have missing door handles on the outside, effectively forcing pedestrians to go around the building to the side served by the large surface parking lots “behind” the building.

The net effect of all of these elements is that the speeds along PGA are well in excess of speeds that are comfortable for pedestrians or cyclists and while the road moves vehicles very quickly, is not hospitable and therefore does not encourage walking along or across PGA Boulevard. During our walking tour, the
few cyclists we saw on PGA were riding on the sidewalk due to the vehicular speeds and lack of accommodations for cyclists. Finally, the businesses that line the corridor within the study area are not sited to serve pedestrians and where they are placed properly, do not take advantage of the entrances that were designed to provide access to pedestrians along PGA Boulevard.

Pedestrian and Bicycle Infrastructure
During the Charrette, citizens requested a connected network of safe and comfortable streets. A study conducted by the design team analyzes the pedestrian and cycling infrastructure in the study area. Pedestrian and cycling infrastructure refers to the system of sidewalks, crossings, landscaping along the sidewalks, and street furnishings.

Existing Conditions
The City has a good network of sidewalks along its major roadways. It is evident that the City has taken great care in the detailing and beautification of its streets. Sidewalks range in size from five to ten feet and are in good repair. However, the street network is sparse and disconnected offering few route choices. Consequently, the pedestrian infrastructure is disconnected. A large number of the sidewalks in the study area feel unsafe and uncomfortable to use since they are directly adjacent to the travel lanes of high-speed roads. In some areas, limited tree plantings offer sparse or no shade. The area lacks adequate street furniture at transit stops or even for recreational purposes.

Principles for Achieving the Citizens’ Request
Streets should have a hierarchy of users, with the pedestrian as the first consideration for every trip; no matter what the mode of travel, every trip begins and ends as a pedestrian. Pedestrian access should be designed for people of all ages and abilities including the physically challenged and the visually impaired. Furthermore, walking and cycling offer a sustainable alternative to the car. In order to integrate walking and cycling, sidewalks must be considered an essential part of the street network. Sidewalks should follow the roadway. Sidewalks along the street create a predictable and more intuitive route for navigating rather
than creating a separate sidewalk system. A dense network of sidewalks offer choices and disperses foot and bike traffic throughout an area instead of concentrating it on one or two routes. Additionally, it is generally more cost effective to install pedestrian and cycling infrastructure the same time as constructing a road.

**Cyclists on the Sidewalks**

Cycling should be accommodated on the sidewalk in most of the study area since most of the roads in the study area have high vehicle speeds. Only the bravest cyclist will ride on the roadway. Consequently, sidewalks along these high-speed roads should be wide enough to accommodate pedestrians and cyclists safely. On slower vehicle-speed streets, bike lanes should be provided, or if traffic speeds are low enough, cyclists can ride with traffic.

**Sidewalk Network**

The area has large block sizes with a low-density network of streets. In order for pedestrians to reach destinations effectively, a more complete sidewalk network is being proposed. A pedestrian and cyclist friendly development has streets every 300 to 600 feet, which is the recommended block size for development. The proposed sidewalk network attempts to introduce a network every 300 to 600 feet and considers how people use transit stops. These new network connections could become
streets as the area matures and redevelops.

The nine diagrams in this section (see following pages) show a visual analysis of the pedestrian and cycling infrastructure. The solid red line indicates where sidewalks are, and the red dotted line indicates proposed sidewalks. A solid purple line shows existing demarcated crosswalks, and a purple dashed line indicates proposed crosswalks.

Footbridges should be avoided unless local topography or other conditions make them necessary. Footbridges oftentimes are not surrounded by passers-by or overlooked by buildings. However, several footbridges are needed to connect over drainage areas and complete the sidewalk network. These areas should be designed to be as safe as possible.

**Pedestrian Containment**

The study area is mainly comprised of pods separated by wide high-speed roads. This situation acts as “containers” for non-vehicle movement. The internal pedestrian infrastructure of these pod developments range from good to not so good. Regardless of the level of pedestrian infrastructure within the development, citizens and visitors feel that they must drive to the adjacent development since wide high-speed roads discourage walking or cycling. Pedestrian containment involves more than adding sidewalks. A comprehensive strategy will be required. Short-term solutions could include traffic calming strategies such as roundabouts, bump-outs, pedestrian crossings made of textured pavers, and giving the impression of street constriction with street trees. The long-term solution would be during infill and redevelopment. The suburban pattern of development should become a...
more traditional pattern of development with smaller blocks and more frequent and narrower streets at lower vehicular speeds.

Some developments are completely fenced from the neighboring development. This forces pedestrians and cyclists to take a long, inefficient route. The City should look at ways to connect and integrate neighboring developments with new roads, sidewalks, and bike routes. If an existing street is closed, it should remain open to pedestrians and cyclists.

**Streets as Public Space**
Sidewalks should be part of the public realm and accessible to all members of the public. Sidewalks should never be blocked or impeded as a primary conduit of people on foot or bike. If a sidewalk is blocked for repair or construction, a safe and convenient detour should be provided for pedestrians and cyclists.

Pedestrian areas and sidewalks should be well drained and not subject to standing water. Additionally, puddles should not accumulate on the car’s portion of the street to prohibit the sidewalk users from being splashed by passing cars.

**Natural Surveillance**
Sidewalks being part of the street allow supervision from passing motorists, cyclists, pedestrians, and surrounding buildings. Being seen by others creates a greater sense of security. Some of the sidewalks in the study area are shielded from the street or have no buildings to watch over the sidewalk.

**Vehicle Speeds**
In creating a transit-friendly area, the streets should be designed to keep vehicle speeds down. Slowing traffic increases safety and promotes other modes of non-vehicular travel. As the City infills and redevelops, the street section should be designed for slower vehicle speeds. Traffic calming devices should also be used to control vehicular traffic.

**Design of Sidewalk**
Sidewalks should be on both sides of the street to encourage walking and discourage dangerous jay-walking or walking along the asphalt of a motoring road. Crossings should be every 300 to 600 feet to allow pedestrians to get to their destinations safely and efficiently.

**Sidewalk Widths**
At a minimum, a sidewalk should be wide enough for two people to walk side-by-side comfortably. Widths can be varied between different types of streets to take account of pedestrian volumes and composition. Streets where people walk in groups, near schools, or shops need wider sidewalks. In areas of high pedestrian flow, the quality of the walking experience can deteriorate unless sufficient width is provided. Pedestrian congestion through insufficient capacity should be avoided, for it may encourage people to step into the roadway.

**Examples of the Types of Streets**
Note that the definition influences the appropriate type of pedestrian infrastructure.

*main street* – principal thoroughfare in a town or downtown oftentimes with retail (wider sidewalk with generous places for people to rest, plenty of crossings)
Legend
- Existing Sidewalk
- Proposed Sidewalk
- Existing Crosswalk
- Proposed Crosswalk
- Bus Stop
- Building
- Registration Point

TRANSIT, MOBILITY, AND ENHANCED CONNECTIONS

TREASURE COAST REGIONAL PLANNING COUNCIL
Indian River - St. Lucie - Martin - Palm Beach
This development has an internal roadway network but a significant lack of sidewalks.

Retail area pedestrian infrastructure can be treated differently than most other areas. Palm trees can be used if other shade, such as an arcade or overhang, is provided. Pedestrians find the above sidewalk hot, for the arcade does not shelter the sidewalk. The quasi-arcade is only decoration and offers no functional use.

Wide high-speed roads break the continuity of pedestrian and bike travel into isolated pods.
alleys – passage between or behind a continuous row of buildings or lots (informal with low amounts of vehicular traffic)

retail street – street predominately retail (wider sidewalk with generous places for people to rest, plenty of crossings)

mixed-use street – street with a mixture of uses usually retail, commercial, and/or offices (wider sidewalk with generous places for people to rest, plenty of crossings)

boulevard – broader street with landscaping in the center median (center resting place for pedestrians may be provided)

residential – should be designed for low speeds (sidewalks should be provided with informal or formal street trees)

Landscaping
If properly planned and provided, street trees can serve three purposes: beautification, protection, and shelter. The City has done an excellent job using trees to beautify its streets as its rich and lush landscaping demonstrate.

Protection
Trees between the sidewalk and the roadway protect those on the sidewalk from passing cars. These can typically be accommodated within engineering requirements for tree-street separation. Most existing sidewalks within the study area have sufficient space between the sidewalk and roadway to accommodate a row of shade trees. In this way, pedestrians will not feel vulnerable to speeding vehicles and large trucks. On narrower roads, the trees will naturally slow drivers. The trees create the impression of constriction, and drivers become more alert to pedestrians and what occurs on the sides of the street.

Some of the sidewalks within the City are immediately adjacent to a high-speed road. In most of these instances, sufficient right-of-way exists to move the sidewalk and plant an appropriate buffer.

Shelter
Protecting and shading pedestrians and cyclists help increase the walkability and connectivity of the City. The street trees should be a type of species that provides shade from the sun. Palm trees are the most frequent trees in the area, yet they yield a sparse canopy for shelter. Shade trees, such as the live oak, are also found within the area and offer ample shading where used properly. In some areas, shade trees are provided but are planted too far from the sidewalk to offer any shading. Shade trees

This development’s pedestrian network is incomplete. On the left side lies a sidewalk, but the other has none.
should be placed so that a tree’s canopy covers the sidewalk. Trees may be used on both sides of the sidewalk in appropriate areas such as residential areas and non-retail frontages.

Care needs to be taken in the planting of shade trees so it does not diminish the visibility of the sidewalk from natural surveillance. In a few areas, too much landscaping buffers the sidewalk from the roadway. In the photo in the center of the next page, a person would feel uncomfortable walking through this section of sidewalk alone or after dark. Trees should protect and shelter the pedestrian, but providing transparent views from the roadway and nearby buildings will create natural surveillance and make sidewalk users feel safe. The photos below offer sidewalks with trees and lots of opportunities for over-sight.

**Maintenance**

Trees close to sidewalk should be maintained and trimmed such that the spread does not interfere with using the sidewalk. Areas near the sidewalk should also be kept trim so cyclists and pedestrians can travel unimpeded.

**Meandering Sidewalks**

While meandering sidewalks offer picturesque and leisurely strolls, people who want to walk or bike efficiently prefer straight sidewalks. They often create their own paths to straighten the route.

**Obstructed Routes**

Pedestrians and cyclists should feel that the sidewalk belongs to them and can move freely along it. Obstructions such as streetlights and utility equipment squeeze the pedestrian space. Streetlights, utility poles, and street furnishings should be arranged in such a way that the pedestrian path is unobstructed. Routes should avoid the need for cyclists to dismount.

Sidewalk and pedestrian areas around transit stops should be wide enough to accommodate passing through cyclists and pedestrians and those waiting for the bus or trolley. Sidewalks should not be blocked or partially blocked by vehicle parking or service vehicles. Pedestrian through traffic should be paramount.

**Street Furniture**

Seating on key pedestrian routes should be considered every 300 to 600 feet to provide rest and to encourage street activity. Seating should be located where there is good natural surveillance. This encourages street activity and offers respite to those who may be physically disadvantaged or visually impaired.

The excessive or insensitive use of traffic signs and other street furniture has a negative impact on the
The intersection radius determines the speed of the turning vehicle. The greater the angle, the slower the vehicle must drive to make the turn. The tighter radius also allows a straighter and more desired pedestrian and bike crossing, and it is easier for the visually impaired to navigate. Unfortunately, many of the radii in the study area are designed to encourage speeding quickly through the turn, which does not afford sufficient time to watch for pedestrians. As the area redevelops, intersections should be redesigned with tighter radii to give pedestrians and cyclists safe and efficient crossings.

Example of a street section. The center median would create a shorter crossing distance for pedestrians and cyclists.

Crossings
Crossings have the greatest potential for hazards, for it is the point where pedestrians, cyclists, and vehicles have ownership of the same space. Following are principles to make the crossing safer for all.

Crossing Materials
All crossings should be provided with tactile paving. Tactile paving signals the driver that he or she should slow. It indicates the pathway for the pedestrian and cyclists to follow and is especially important for the visually impaired.

Corner Radii
Whenever possible, crossings should be aligned with sidewalk and crossings on the other side of the street. Corner radius can impact where the crossing should be placed.

This section of the pedestrian infrastructure hides the public’s view of the walkway. Low-level bushes obstruct the view from the roadway on the left. To the right, the terrain slopes down to a drainage pond. No one is able to observe this section of sidewalk, and a woman would feel unsafe walking alone here.

Meandering sidewalks create inefficient routes.

The success of the street as a place. Too many signs compete for a driver’s attention. Messages on the street should be necessary and not distract the driver. Important messages should not be competing with unnecessary messages.

The City should use locally distinctive, durable, and maintainable materials for street furniture. Pedestrian-scaled lighting in appropriate places will encourage use by cyclists and pedestrians.
Streets and routes identified for use as bus/trolley routes should consider that buses need a larger sweep at intersections. Care needs to be given for both the safety of cyclists and pedestrians crossing at these intersections.

**Shortening the Crossing Distance**

In order for mass transit to function properly, pedestrian and cycling networks need to disperse people conveniently and efficiently throughout the area. Since the street network is not dense or connected, an effective pedestrian and sidewalk network will have to use crossings where vehicle roadway intersections are not. Where the network and destinations are separated by heavily trafficked roads, care needs to be taken to ensure safe pedestrian and bike crossings.

Pedestrian refuges, medians, and curb build-outs can be used to shorten the crossing distance. Traffic calming devices such as roundabouts and on-street parking should be used to slow vehicles and make crossing safer. As the area redevelops, the road section should use design speeds to create safer crossings. Tactile crossings should always be used to signal the driver to slow.

Drainage ponds within the study area prohibit easy crossings. Footbridges can be used to cross these areas. Care should be taken in the location and design of the footbridge to make them part of the public realm with the associated natural surveillance.

**Signalization**

Busier roads require signalized crossings timed to ensure safety. Many municipalities are using signalized pedestrian crossing with traffic lights at mid-block crossings to promote pedestrian safety.

**Maintenance**

Sidewalks and their surroundings should be consistently maintained just as a roadway is maintained. While the majority of the City’s sidewalks are highly maintained, there are a few places where more attention is needed. In the photo below, scrub is overtaking the sidewalk.

Unkempt landscaping encroaches upon a sidewalk leading to Palm Beach Community College.
Vehicular Parking

On-street parking enhances the retail environment and protects pedestrians from passing vehicular traffic. Ideally, on-street parking should be broken up by a landscape bulb or pedestrian resting place to create a sense of place by breaking up the visual impact of cars dominating the street.

Bike parking

Many people will prefer to bike quickly through the area rather than walk. Cycling is a more sustainable mode of transportation, and its infrastructure requires less land than car parking. Bike parking should be made as convenient as car parking and considered as part of the necessary infrastructure as car parking. Bike storage should be considered in the design of new buildings and when renovating older buildings.

Retail and office bike parking requirements will be different from residential bike parking. Retail and
office parking should be conveniently near the entrances of the building but should not interfere with pedestrian spaces. The bike parking area should be located in an area with natural surveillance.

Residents prefer to park their bikes in a sheltered and secure place. In single-family residences, bikes are usually stored in the car garage. In multi-family residences, consideration should be given to bike parking in the design of the building, for several options are available. Units can be given individual storage space within the unit. If units are located on different floors, the size of the elevator should be designed to accommodate the bike’s transport up to the appropriate floor. Another option is to provide a secured storage area for the bikes. This storage can be designed as part of the building or an out building. This area should be located in a well-lit and often used common area with natural surveillance.

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**TRANSIT AND MOBILITY RECOMMENDATIONS**

Continue the high level of beautification and attention to detail to the City’s streets and pedestrian infrastructure.

Fill in gaps in the sidewalk infrastructure.

Use large canopy trees such as live oaks to shade sidewalks and other places pedestrians gather. Place the trees at an appropriate distance so sidewalks are sufficiently shaded.

Place trees between the sidewalk and roadway to protect pedestrians from vehicular traffic.

Ensure that the landscaping around sidewalks has transparency to ensure natural surveillance.

Design sidewalks as efficient and direct routes with no obstacles in the pedestrian movement area.

Provide traffic-calming strategies to slow vehicular traffic and make crossing busy roads safer.

As area redevelops, the City should maximize every opportunity to internally connect within the development and connect development to neighboring developments with new roads, sidewalks, and bike routes.
Transit
The potential South Florida East Coast Corridor commuter rail system and its associated station in Palm Beach Gardens provides the opportunity for the City to increase the availability for true multimodal transportation options. The community has invested heavily in creating well landscaped corridors that are attractive when driving through the area. Several “town centers” have been created providing opportunities for shopping, dining and entertainment, there is significant employment, housing and Palm Beach Community College all within the study area. The challenge created for pedestrian and bicyclist connections to the rail station and between activity centers is how the built environment creates almost complete dependency on the automobile. The separation of land use, very large block structure with large surface parking lots, in combination with the wide, fast PGA Boulevard and the barrier created by the railroad, creates an environment where walking and bicycling is a challenge. This built environment makes walking and bicycling a daunting and undesirable way to travel.

Palm Tran Bus Service
Palm Tran operates Palm Beach County’s extensive public bus service, and bus service is currently available in Palm Beach Gardens. Their service in the study area consists of five primary routes travelling east-west along PGA Boulevard and north-south along Military Trail, Old Dixie Highway and Prosperity Farms Road. The schedules show 20 minute headways for some routes and 60 minutes for others during the peak
travel times. The Gardens Mall currently has a transfer center located on the east side of the Mall with 111 buses using this center each day. There is a desire for two circulators within Palm Beach Gardens to facilitate trips between local destinations.

Our observation of the transit stop in front of the Community College revealed the stop was located at the end of an acceleration lane (left) instead of near the entrance to the College. Our understanding from discussions with Palm Tran representatives was that the stops were dictated to them by FDOT. For transit to be successful, transit stops should be determined based on convenient access to destinations. It is also clear from this photo that there is no provision for pedestrians in terms of shade or separation from fast moving traffic. We did not observe seating for transit riders except at the transfer center. Such treatment of transit riders generally yields users who have no other choice for transportation. Supporting commuter rail and other transit modes requires greater attention to these details to make Palm Tran a more attractive choice.
Walking
The best way to encourage transit is to make walking safe and pleasant. Every transit rider starts and ends his or her trip as a pedestrian. To enhance walking conditions, the city should focus on the strategies in the Principles of Urban Design section of this report, such as, wide sidewalks buffered from the street by on-street parking (where possible) and lined with street trees for shade and further protection.

Pedestrians want a safe and interesting walk, and this can be accomplished with well-maintained buildings pulled to the street where parking is not the most dominant feature. Auto traffic must be slowed so pedestrians feel safe; the provision of on-street parking is an excellent technique to slow cars down. As it moves forward, the city should make the pedestrian experience a critical factor when contemplating redevelopment proposals in the area.

Bicycles
Charrette participants stated that Palm Beach Gardens is not supportive to bicycling and want to see access and circulation improved for bicyclists. The market for passengers on Commuter Rail can be increased by providing convenient routes and access for cyclists, therefore the City should seek to increase the use of bicycling to access Commuter Rail in lieu of driving automobiles to the station, which will reduce parking requirements for cars.

There are many types of bicyclists with different levels of comfort biking on roads. Some bicyclists share streets with traffic, and on these streets, it is important that auto speeds are low. Bike lanes should be provided on the busier and faster streets (those with posted speeds 25 mph or higher). Bike routes and trails should be provided for those who find the busier roads uncomfortable. These bike routes should be made easily available to the public. The city may consider forming a bicycle advisory committee to gather input on routes and trails, ways to encourage bicycling, and explore strategies to make bicycling safer. The MPO’s Bicycle and Pedestrian Advisory Committee may be a good resource in this area.

One alternative to the existing four lane undivided roads in the study area would be to reduce the roadway to two lanes, with bike lanes on the outside and a median in the center with left turn lanes at intersections with driveways or others streets. This approach could greatly increase the use of bicycling, improve the appearance of those streets and reduce vehicle speeds and would not require the drainage systems to be replaced. In fact the landscaped median would also reduce drainage requirements.

Bike Racks
Just as a city plans for parking, the city should plan...
for bike parking as well. Ample and suitable bike racks should be provided wherever possible. The city may consider mandatory bike racks at all commercial and multi-family buildings. The city could also consider requiring a minimum number of bike racks when approving a building or development similar to parking requirements.

Transit

There is a desire by those in the community to have shorter route trolley or shuttle services between the various “town centers” and other major employment centers. There are systems within the region that the City may want to evaluate.

One local service to look at is the West Palm Beach trolley (www.cityofwpb.com/trolley.htm), which connects City Place to the Clematis Street district. Its ridership is approximately 25,000 to 30,000 people per month, and there is no cost to the riders.

The Boynton Beach CRA operates a trolley as well (http://www.boyntonbeachtrolley.com/). This service operates at no cost to riders and transports roughly 13,500 passengers per month.

The Coral Gables Trolley (http://www.coralgables.com/cgweb/trolley.aspx) runs from SW 8th Street to the Douglas Road MetroRail station. The original projection was 20,000 riders per month, but as of 2008, the service has been carrying 80,000 passengers per month. The trolley is also free to riders.

The City might consider performing some surveys to determine the demand for such a service, especially if the Commuter Rail service becomes a reality. They may find that there is a need to look at rerouting Palm Tran or adding shuttles or a trolley which the “town centers” and major employers could assist in subsidizing the service and therefore reduce the cost to the City.

Neighborhood Electric Vehicles

A variety of cities, businesses, and private developments use neighborhood electric vehicles. Many people have begun to find them charming and welcoming when seeing them in the community. They are often operated as an entrepreneurial endeavor, so cities need only license their operation, but not fund it. The vehicle can operate with fares paid to the driver. If the city is concerned about competition with taxis, these vehicles can operate on tips to the driver.

Disconnected Streets

As discussed previously, there is no fine grain street network, and even those that exist do not necessarily connect at intersections with other streets. Therefore there is
not much real network in the study area. This situation combined with the large surface parking lots and isolated parcels creates an environment that does not support cycling or walking. The redevelopment of sites over time will allow the installation of a gridded network and smaller block sizes to increase pedestrian and bicycling, and will allow the creation of streets with proper shade trees, on street parking, and buildings that frame the street.

There are locations where connection of streets could be evaluated such as between The Gardens Mall perimeter road and Kyoto Gardens Drive. The lack of connectivity increases driving by motor vehicles unnecessarily and eliminates the possibility for pedestrians or bicyclists to conveniently move around.

Pedestrian Crossings
In the area of the proposed station, modifications to Alternate A1A are proposed to improve pedestrian comfort and safety. Since the station’s location would result in increased pedestrian activity, it is important to slow vehicles down and reduce the crossing distance for pedestrians. Much of the traffic accessing the parking garages illustrated in the master plan would be on the west side of the rail corridor or crossing Alternate A1A. There are two roadway crossings of the rail corridor adjacent to the proposed station, so there are opportunities for traffic to redistribute during peak loading to the proposed 1,300 parking spaces.

Traffic volumes from 2007 FDOT traffic studies are approximately 14,300 average daily trips, and based on the need to improve this section for pedestrians using the station, the Citizens’ Master Plan proposes reducing Alternate A1A to a four lane divided roadway between the PGA loop and Kyoto Gardens. This modification, in addition to properly timed signalization, should not have a significant impact on vehicle movement and will provide additional space for the bus transfer facility proposed on A1A, greatly increasing pedestrian safety and comfort. The train station, parking garages, and potential development around the station will generate significant pedestrian activity in this area, and it is important to reduce speeds for pedestrian safety and comfort. The master plan illustrates the treatment of Alternate A1A in this area.

Parking
The plans for parking at this station include accommodations for 1,500 cars, which will be provided by structured parking. The parking garage(s) planned to support those driving to the proposed station were located to ensure adequate circulation and access to and from the station to and from I-95, which will be the primary access route. The following graphics show the locations evaluated during the charrette and the potential circulation patterns to and from those sites.
MOBILITY RECOMMENDATIONS

1. Make walking and biking the easiest form of transportation to enhance mass transit
2. Identify transit needs unmet by Palm Tran and determine if it is better to work with Palm Tran to enhance their service or add some circulator or shuttle service funded by activity centers
3. Investigate other modes of alternative transportation such as neighborhood electric vehicles
4. Improve connectivity between developments and create new network and connectivity during redevelopment of sites
5. Improve crossing for pedestrians at proposed station by reducing the lanes of Alternate A1A south of Kyoto Gardens Drive
6. Evaluate conversion of four lane roadways to three lane sections with bike lanes on both sides or install medians with turn lanes at appropriate intersection
IMPLEMENTATION
The Palm Beach Gardens Citizens’ Master Plan provides many recommendations for enhancing the PGA Corridor and establishing its presence as a premier transit destination. The Implementation chapter of this report provides a step-by-step framework for policy decisions and staff actions.

For the charrette recommendations and the following initiatives to be realized, the coordination and cooperation of many local governments and agencies will be necessary. It is imperative that the City confirm the results of this public design process are representative of the desired future of the City, and further, that the following actions occur:

**CHARRETTE PROCESS INITIATIVES**

I. City adoption of the Citizens’ Master Plan and its key recommendations
   a. Recognize the proposed “Center Station” as the preferred station location
   b. Prioritize overall connectivity on PGA Boulevard (for all modes of mobility)

II. Authorization for City staff to begin working on the following steps of implementing the plan
   a. Transit-Oriented Initiatives
   b. Connectivity Initiatives
   c. Regulatory Initiatives

**TRANSIT-ORIENTED INITIATIVES**

I. Gosman Property Site Analysis
   a. Confirm existing entitlements
   b. Establish mechanism for increased development capacity to accommodate the station plus existing development rights
   c. Survey site for unforeseen conditions
   d. Enter private-public partnership to ensure station area reservation

II. “Wedge Site” Analysis
   a. Initiate discussions with Northern Palm Beach County Improvement District
   b. Initiate discussions with FDOT regarding site utilization for parking structure
   c. Enter into interlocal agreement between City, FDOT, Palm Beach County, and Northern Palm Beach County Improvement District to use site for transit parking
   d. Conduct surveys to delineate utilities, easements, and boundary of site
   e. Contract for schematic designs of garage to estimate construction costs

III. Alternate A1A “Road Diet”
   a. Adopt City resolution in support of lane reduction of Alternate A1A from Kyoto Gardens south to Victoria Lake Gardens Drive (from 6 lanes to 4 lanes)
   b. Initiate discussions with FDOT, MPO, and Palm Beach County regarding feasibility of proposed lane reductions to accommodate station functions
   c. Enter into Interlocal agreement with FDOT, MPO, and Palm Beach County in support of lane reductions on Alternate A1A
d. Initiate discussions with Palm Tran regarding future relocation of bus transfer functions from The Gardens Mall to new transit station area (along Alternate A1A) as proposed in charrette master plan.

IV. Frontage Road on PGA Boulevard
   a. City to further analyze ability to reconfigure PGA Boulevard (from Alternate A1A to Prosperity Farms Road) as “4 plus 2” lane configuration, with 4 center lanes for through traffic and 2 side lanes for local traffic.
   b. Working with FDOT, MPO, and Palm Beach County, City to further analyze transit and circulation improvements yielded by roadway reconfiguration, including volume and speeds of center lanes versus “frontage lanes”, locations of transit stops, pedestrian connectivity and safety, roadway safety, additional on-street parking along frontage lane, and added economic benefit to storefronts abutting frontage lanes.

V. Trolley Analysis
   a. City to prioritize future trolley service, initially linking limited transit/destination locations
   b. City to develop limited, initial-phase trolley route connecting existing transit stops with key destinations within ¼ mile east of I-95
   c. City to develop business plan for limited, initial-phase trolley service (including equipment costs, operational costs, expected ridership demand, cost-benefit analysis)
   d. City to develop a “Best Practices” guide of successful trolley operations (see Chapter VIII of this report) and begin soliciting support from business community on PGA Boulevard

The provision of permanent bus/trolley shelters that are designed for Palm Beach Gardens and made with materials that are elegant and durable, sends a powerful message of the City’s commitment to mass transit. The City could hold a design competition for shelter designs at key locations.
CONNECTIVITY INITIATIVES

I. Pedestrian Realm Improvements
   a. Prioritize sidewalk connections in the following locations:
      i. The Gardens Mall to PGA Boulevard
      ii. PGA Boulevard to PBCC
      iii. The Gardens Mall to Downtown at the Gardens
      iv. Downtown at the Gardens to Gosman site
      v. Legacy Place to Legacy Place Residences
   b. City to develop “A-to-B” connection priorities
      i. Pedestrian connections to follow most direct alignment possible
      ii. Curvilinear connections to destinations shall be discouraged
      iii. City to require the planting of shade tree along all sidewalks and pedestrian paths

II. Permanent Bus Shelters
   a. City to define permanent bus shelters with the following characteristics:
      i. Site designed and site built structures
      ii. Designs to be unique to Palm Beach Gardens
      iii. Structures built of durable materials that age with dignity
   b. City to prioritize locations for permanent shelters as follows:
      i. PGA at PBCC
      ii. PGA at The Gardens Mall
      iii. Legacy Place
      iv. Marriott Hotel
      v. NORTHCORP Center

REGULATORY INITIATIVES

I. Zoning Incentives
   a. Develop Zoning Incentive Program for:
      i. Sites within ½ mile of station location
      ii. Projects designed consistent with Chapter IV: Principles of Planning and Urban Design
      iii. Projects that further the goals of connectivity and balanced land uses as presented in this report
   b. Incentives to include (but not limited to)
      i. Increased building height
      ii. Increased density
      iii. Flexibility in uses
      iv. Flexibility/assistance with parking
      v. Administrative approval (limited or no public hearing for “pre-approved” projects)
IMPLEMENTATION

II. Regulatory Triage for Distressed Projects
   a. City to initiate Comprehensive Plan and Land Development Plan amendments with the following consideration:
      i. Focus shall be upon key destination projects within study area that represent economic distress
      ii. Redevelopment plans for select projects under this initiative must comply with the recommendations of the Citizens’ Master Plan
   b. Incentives under this program shall be time-limited to compel faster economic reinvestment

III. Require Connectivity
   a. City shall mandate parcel-to-parcel connectivity for all new projects, especially between projects (off the roadway network) to reduce trips on the roadway network
   b. City shall establish a timetable with a four-year deadline for existing projects to provide connections to adjacent parcels

IV. Revise Land Development Regulations for PGA Boulevard
   a. Mandate frontage road condition with on-street parking
   b. Allow for increased building height for buildings fronting PGA Boulevard

Implementation of the Citizens’ Master Plan can occur incrementally and over time however, the components listed above should be considered the highest priority action items. Not all improvements need be paid by the local government. The following is a list of possible funding sources that should be considered as resources for implementing the citizens’ vision.

Funding Sources

Tax Increment Financing Revenues - Tax Increment Financing (TIF) revenue is typically the major source of funding for redevelopment projects within the boundaries of a community redevelopment agency. Authorized under the Florida Community Redevelopment Act, TIF revenues can be utilized for capital projects, land acquisition, local leverage for public/private partnerships, or any other purpose authorized in an adopted community redevelopment plan. The procedure for bonding against future TIF revenues is currently being reviewed at the State Supreme Court in the Escambia County vs. Strand case.

Redevelopment Revenue Bonds - Section 163.385, Florida Statutes empowers community redevelopment agencies to issue Revenue Bonds to finance redevelopment projects whereby the security of the bonds is based on the anticipated assessed valuations of the completed redevelopment project. In this way, "tax increment" is used to finance the long-term bond debt.

Interest on Redevelopment Trust Fund - Any interest that may be earned from deposit of Trust Fund monies may become a part of the funds used for redevelopment activities.

Industrial Revenue Bonds - Chapter 159, Florida Statutes, cites the Florida Industrial Development Act, which authorizes the use of Industrial Development Revenue Bonds to finance certain types of capital projects for private development.
General Obligation Bonds - Some jurisdictions have also issued General Obligation Bonds for redevelopment projects similar to particular Citizens’ Master Plan recommendations. These bonds are secured by debt service millage on the real property within the city and typically must receive voter approval. For example, sports stadiums are often partially funded by such bonds.

Special Assessment Districts – Under these districts, property owners within the district agree to pay an additional fee (either a flat fee or an ad valorem tax) to raise funds for specific capital projects that will benefit them. Funding in these districts can be arranged by either assessed value or linear foot along a corridor, and improvements can be specified by use category (commercial, single-family, residential, multi-family residential) and specific improvement (streetscaping, transit infrastructure).

Land Sales and Leases - Municipalities may acquire and sell land or property for public, private, or joint use.

Contributions and Donations - Voluntary contributions by private companies, service organizations, individuals, or foundations are a potential source of income for special or popular projects, particularly those of a high civic nature such as building parks or perhaps a beautiful bridge or public building.

Foundations - Several communities have researched the purpose and intent of foundations and designed portions of their Plan to attract grants from a particular foundation. Foundation money is often a good source for training and education programs.

Public/Private Ventures and Partnerships - Some redevelopment projects have been designed to stimulate additional private investment and were accomplished through public/private ventures or partnerships. The city or CRA can assist developers regarding the assembly of land for a private development. In return, the developer may be obligated for building renovations or new construction; street, landscaping, sidewalk, and other redevelopment improvements; or programmatic components, such as setting aside a portion of units to become workforce housing. The private contribution may also be through direct contributions or payment to assessment districts.

Community Contribution Tax Credit Program - This program was created by the Florida Legislature to encourage corporate involvement in community revitalization. This program promotes businesses with a 50% tax credit of Florida corporate income tax or insurance premium tax for donations to eligible local community development projects. Donations must be made through an eligible non-profit corporation conducting a city-approved community development project such as affordable housing or recreational facilities.

Direct Borrowing – Cities and CRAs are empowered to fund redevelopment projects and programs through direct borrowing of funds. Depending on the particular projects, both short and long-term borrowing can be utilized for these activities.

Enterprise Zone Investment - This program is designed to encourage increased business activity and investment in distressed areas. The state provides property tax credits, jobs tax credits, partial building sales tax refunds, and partial sales tax refunds on business equipment purchased.

Utility Enterprise Funds - Several communities in Florida have used "enterprise funds" to fund infrastructure improvements in their redevelopment areas.
Private Business Development Program with Banks - Banks may incorporate a subsidiary to provide loan assistance not normally permitted for commercial banks. The loans are used to help start or expand business operations as long as the purpose is related to community development and not a conventional commercial loan.

Bank Reinvestment Pools - Many municipalities have developed a cooperative approach with local lending institutions to supplement funding for their community redevelopment programs. The Community Reinvestment Act of 1977 requires banks to define a service area, assess local credit needs, and make efforts to meet the community's needs. The Citizens’ Master Plan may serve as the basis for the City and/or CRA to initiate a dialogue with local lenders, establish common goals, identify collaborative opportunities with local lending institutions.

Property Improvement Grant Programs - Several communities have established grant programs that are used for facade improvements and building rehabilitation and renovation. These programs are usually directed towards improvements that have a high potential for stimulating additional private development in the area. Several communities have used TIF funds, state programs, and private investments to initiate revolving grant programs. For example, Chapter 80-249 of the Laws of Florida offers a 50% credit against state corporate income taxes for contributions of up to $200,000 for community development with the contributions used as a direct grant or to start a revolving loan fund.

County, State, and Federal Grant Programs - Funding may be available from several Federal and State agencies, such as the Department of Community Affairs, the FDOT, the Palm Beach Metropolitan Planning Organization, and the Federal Transit Administration. Eligible components of the Citizens’ Master plan could include land acquisition, parking improvements, streetscaping, bicycle/pedestrian improvements, and transit-supportive infrastructure.

Economic Development Administration Grants - This federal agency provides grants to fund public works projects. This grant/loan program assists distressed communities with finding capital improvements to attract industries and encourage business expansions. It primarily focuses on generating long-term, private sector employment opportunities.

Small Business Administration (SBA) - The Small Business Administration is a federal agency that provides low-interest loans to business people who cannot qualify for standard commercial loans. This loan program has been used to encourage economic development by assisting small business start-up and expansion within CRA districts.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>arcade</td>
<td>a covered, unglazed portion of a building extending over the sidewalk, open to the street forming an archway or passageway. Arcades are typically used in front of shops.</td>
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<tr>
<td>attainable housing</td>
<td>dwelling units whose total housing costs are deemed &quot;affordable&quot; to a group of people within a specified income range.</td>
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<tr>
<td>berm</td>
<td>a bank of earth or raised barrier separating two areas.</td>
</tr>
<tr>
<td>bond</td>
<td>A certificate of debt that is issued by a government or corporation in order to raise money with a promise to pay a specified sum of money at a fixed time in the future and carrying interest at a fixed rate. Generally, a bond is a promise to repay the principal along with interest on a specified date of maturity.</td>
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<tr>
<td>build-out</td>
<td>within a defined plan and/or area, the point that all allowable and potential development has been completed.</td>
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<tr>
<td>bulb-outs</td>
<td>a traffic-calming device on streets whereby a portion of the sidewalk extends to the outside edge of a travel lane, typically capturing the end of an on-street parking lane. Bulb-outs narrow the width of roadways, decreasing crossing distances for pedestrians and expanding sidewalk areas to accommodate landscaping, benches, and/or transit shelters.</td>
</tr>
<tr>
<td>Burt Harris Act</td>
<td>a Florida Statute that provides in part that when a specific action of a governmental entity has inordinately burdened an existing use of real property or a vested right to a specific use of real property, the property owner of that real property is entitled to relief that may include compensation for the actual loss to the fair market value of the property caused by the action of government.</td>
</tr>
<tr>
<td>circulator</td>
<td>a road or bus system to distribute traffic or people through an area</td>
</tr>
<tr>
<td>civic anchor</td>
<td>a place that serves to attract people to a particular neighborhood or area i.e. church, theatre, shopping district.</td>
</tr>
<tr>
<td>civic realm</td>
<td>public place in a community where people can freely gather usually associated with a civic or public use building such as a post office or courthouse.</td>
</tr>
<tr>
<td>colonnade</td>
<td>series of columns set at regular intervals, usually supporting a roof or series of arches.</td>
</tr>
<tr>
<td>community retail</td>
<td>shops and services providing for the daily needs of the surrounding area.</td>
</tr>
<tr>
<td>connectivity</td>
<td>the ability to travel from one destination to another with many choices of routes and/or modes of travel i.e. bicycle, foot, bus, and train, automobile.</td>
</tr>
</tbody>
</table>
**GLOSSARY**

**Community Redevelopment Agency (CRA)**
Florida statutes permit local governments to create a CRA for eliminating and preventing the development of slum and blighted areas or for the provision of affordable housing in areas in need of redevelopment.

**curb cut**
any opening of the stone or concrete curb that surrounds a street; most often refers to driveways and access points to parking lots

**density**
number of units per given parcel size, most often given in number of dwellings per acre

**Enterprise Zone**
an area in which businesses are exempt from certain taxes and are given other incentives as an inducement to locate there and employ residents

**façade**
the wall of a building that faces the street

**Floor Area Ratio**
a planning method regulating development in an area or parcel based upon the ratio between the floor area of a building and the lot size. Is contrasted in this document with planning based upon traditional community-building concepts.

**General Obligation Bond**
A municipal bond secured by the taxing and borrowing power of the municipality issuing it, used to raise capital for local government day-to-day activities and for specific projects (usually pertaining to development of local infrastructure such as roads, sewerage, hospitals etc.)

**green**
a public open space, such as a park, usually designed for passive uses consisting of lawn with either formally or informally arranged landscaping

**Industrial Revenue Bond**
Bond used to finance the construction of manufacturing or commercial facilities for a private user

**infill**
building upon or utilizing a vacant or under-used parcel or parcels, usually in redevelopment areas

**lending consortium**
a group of lenders working collaboratively with a municipality offering specialized terms to facilitate priority community projects.

**market absorption**
rate at which a market can absorb additional units of supply without causing market saturation and severe price distortions

**median**
1. term used in statistics to describe the middle number in a series of numbers.
2. strip of land that divides opposing lanes of traffic
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>mixed-use</td>
<td>more than one use in an area or building, the uses which compliment each other i.e. grocery store next to residential uses</td>
</tr>
<tr>
<td>neighborhood electric</td>
<td>speed-limited battery electric vehicle used as an alternative to fossil fueled vehicles</td>
</tr>
<tr>
<td>neighborhood retail</td>
<td>shops and services providing for the daily needs of the surrounding neighborhood.</td>
</tr>
<tr>
<td>neighborhood station</td>
<td>a small transit station located within a residential neighborhood or at the conjunction of several neighborhoods, easily accessible by pedestrians and occasionally offering limited parking.</td>
</tr>
<tr>
<td>Palm Tran</td>
<td>public bus transportation provider for Palm Beach County</td>
</tr>
<tr>
<td>parcel</td>
<td>a piece of land</td>
</tr>
<tr>
<td>park and ride</td>
<td>a facility collocating public parking spaces with transit access</td>
</tr>
<tr>
<td>park-once</td>
<td>an urban pattern whereby a driver can park in a district and walk to several destinations without needing to drive the car</td>
</tr>
<tr>
<td>passive cooling</td>
<td>in pedestrian and public areas, ways to protect pedestrians from the sun and heat without air conditioning i.e. trees, colonnades, transit shelters</td>
</tr>
<tr>
<td>plaza</td>
<td>an open public area usually paved and arranged in a formal way</td>
</tr>
<tr>
<td>pocket parks</td>
<td>a lot or small parcel of land used as a public park either for passive or playground uses.</td>
</tr>
<tr>
<td>power center</td>
<td>an unenclosed shopping centre with 250,000 square feet to 750,000 square feet of gross leasable area that usually contains three or more big box retailers and various smaller retailers with a common parking area shared among the retailers. It is also known as a retail park.</td>
</tr>
<tr>
<td>primary arterial roads</td>
<td>highways designed for through traffic, usually on a continuous route</td>
</tr>
<tr>
<td>promenade</td>
<td>public walking space, usually arranged in formal way</td>
</tr>
<tr>
<td>public realm</td>
<td>outdoor areas accessible to the public</td>
</tr>
<tr>
<td>public spaces</td>
<td>places the general public has a right to occupy without paying a fee</td>
</tr>
<tr>
<td>Glossary Term</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
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</tr>
<tr>
<td>redevelopment area</td>
<td>an area designated by a local government, usually an older developed area, in which the local government wants to eliminate blight to achieve desired development, reconstruction, and rehabilitation including residential, commercial, industrial and retail</td>
</tr>
<tr>
<td>redevelopment</td>
<td>Private bonds issued to finance certain acquisition, clearance, rehabilitation, and relocation activities for redevelopment purposes by a governmental entity in designated blighted areas</td>
</tr>
<tr>
<td>retail anchor</td>
<td>A store (usually a major chain store or department store) in a shopping area or mall whose presence attracts business to smaller shops within the center.</td>
</tr>
<tr>
<td>retail leakage</td>
<td>a situation whereby residents of an area are unable to obtain goods and services so they shop at another area to obtain goods and services</td>
</tr>
<tr>
<td>Request for Proposals</td>
<td>formal procedure whereby an organization asks for proposals for a specific task or project.</td>
</tr>
<tr>
<td>roundabout</td>
<td>traffic safety control device that forces drivers to slow and navigate through the roundabout. Optimum speeds for roundabouts are between fifteen and twenty-three miles per hour. Roundabouts can be circular or oval.</td>
</tr>
<tr>
<td>Right-of-Way (ROW)</td>
<td>land reserved for public use or benefit such as a road or electrical transmission</td>
</tr>
<tr>
<td>Special Assessment</td>
<td>source of funding for certain capital improvement projects that will benefit a specific designated area</td>
</tr>
<tr>
<td>suburban pattern</td>
<td>land use pattern characterized by predominantly low-density residential uses, which are physically separated from limited commercial and civic uses</td>
</tr>
<tr>
<td>synergy</td>
<td>combined effort of two or more entities that produce a benefit</td>
</tr>
<tr>
<td>Tax Increment</td>
<td>Method of financing used by local governments to encourage redevelopment and stimulate the local economy. Taxes derived from increases in assessed values of property within a specified district, typically a Community Redevelopment Area, are used to fund and leverage projects.</td>
</tr>
<tr>
<td>terminus</td>
<td>the end of a marked route, as in the terminus of a road, rail, etc.</td>
</tr>
<tr>
<td>traffic calming</td>
<td>the use of certain devices or techniques, such as narrow lanes, trees lining the street, and bulb-outs to slow or restrict traffic, especially in residential areas</td>
</tr>
<tr>
<td>Transit-Adjacent</td>
<td>land use pattern that is next to a transit station. The function of the transit station does not integrate or enhance transit, hence the term &quot;adjacent&quot;</td>
</tr>
</tbody>
</table>

**Treasure Coast Regional Planning Council**
Indian River - St. Lucie - Martin - Palm Beach
<table>
<thead>
<tr>
<th>Term</th>
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<tr>
<td>Transition area</td>
<td>Areas are used between areas of two different and distinct characteristics to allow a smooth transition from one characteristic to another. Oftentimes the transition area is a mix of all characteristics.</td>
</tr>
<tr>
<td>Transit-Oriented</td>
<td>Land use pattern and built form of development that supports and enhances transit located ¼ to ½ mile around a transit stop.</td>
</tr>
<tr>
<td>Urban pattern</td>
<td>A land use pattern integrating medium or high density residential uses with commercial and civic uses within a concentrated area, i.e. a neighborhood, village or city.</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
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<td>---------</td>
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<tr>
<td>ARRA</td>
<td>American Recovery and Reinvestment Act</td>
</tr>
<tr>
<td>CRA</td>
<td>Community Redevelopment Agency</td>
</tr>
<tr>
<td>CSX</td>
<td>Chessie and Seaboard (Railroad)</td>
</tr>
<tr>
<td>DMV</td>
<td>Department of Motor Vehicles</td>
</tr>
<tr>
<td>FDOT</td>
<td>Florida Department of Transportation</td>
</tr>
<tr>
<td>FEC</td>
<td>Florida East Coast (Railroad)</td>
</tr>
<tr>
<td>FTA</td>
<td>Federal Transit Administration</td>
</tr>
<tr>
<td>GDC</td>
<td>General Development Corporation</td>
</tr>
<tr>
<td>LEED</td>
<td>Leadership in Energy and Environmental Design</td>
</tr>
<tr>
<td>MHI</td>
<td>Median Household Income</td>
</tr>
<tr>
<td>MPO</td>
<td>Metropolitan Planning Organization</td>
</tr>
<tr>
<td>PBCC</td>
<td>Palm Beach Community College</td>
</tr>
<tr>
<td>PBG</td>
<td>Palm Beach Gardens</td>
</tr>
<tr>
<td>PUD</td>
<td>Planned Unit Development</td>
</tr>
<tr>
<td>SBA</td>
<td>Small Business Administration</td>
</tr>
<tr>
<td>SFECC</td>
<td>South Florida East Coast Corridor Study</td>
</tr>
<tr>
<td>SFRTA</td>
<td>South Florida Regional Transportation Authority</td>
</tr>
<tr>
<td>TAD</td>
<td>Transit Adjacent Development</td>
</tr>
<tr>
<td>TCRPC</td>
<td>Treasure Coast Regional Planning Council</td>
</tr>
<tr>
<td>TIF</td>
<td>Tax Increment Financing</td>
</tr>
<tr>
<td>TOD</td>
<td>Transit Oriented Development</td>
</tr>
<tr>
<td>VMT</td>
<td>Vehicle miles traveled</td>
</tr>
</tbody>
</table>