

# JUPITER TRANSIT-ORIENTED DEVELOPMENT CHARRETTE REPORT



JULY 2008

THE JUPITER  
TRANSIT-ORIENTED DEVELOPMENT  
CHARRETTE  
A CITIZENS' MASTER PLAN



*prepared by*

TREASURE COAST REGIONAL  
PLANNING COUNCIL

*With and for the citizens of the Town of Jupiter*

*Acknowledgements*

Mayor Karen J. Golonka, Vice Mayor Wendy Harrison,  
Councilor Robert M. Friedman, Councilor Jim Kuretski, and  
Councilor Todd R. Wodraska

*Charrette Steering Committee*

Paul Cherry, Chair; Keith Ennis, Vice Chair; Judy Goldenberg,  
Secretary; James Aiken; Tom Boyhan; Marty Rogul; Susan Wiley;  
and Marie York.

This master plan document represents the citizens' ideas and  
vision for the future of transit stations within the Town of  
Jupiter. The designs, illustrations, and graphics included within  
this report are meant to convey that vision and are conceptual by  
nature.

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TREASURE COAST REGIONAL PLANNING COUNCIL  
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# TRANSIT IN FLORIDA? WHY NOW?

The Town of Jupiter, like most municipalities along Florida's east coast, was established with a passenger rail station located along what is now the FEC Rail Corridor. 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.

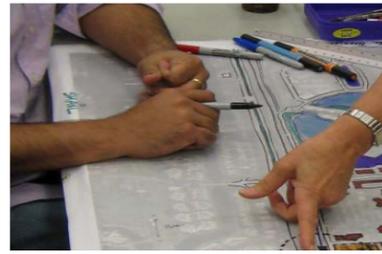
For decades, local governments, citizens, and business leaders have advocated for alternative transportation modes through southeastern Florida and the state. The region's first rail system - Tri-Rail - was established on the western CSX tracks in the late 1980s as a commuter rail running mostly west 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

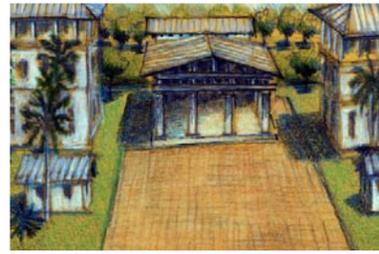
mix of land uses, comfortable pedestrian accessibility, and properly placed buildings and improvements, transit ridership tends to increase. This trend of transit-oriented development, or TOD, has been recognized by the local, state, and federal decision makers as a key component to improve the success 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 Town of Jupiter, 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 Citizen's Master Plan, the Town 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 Master Plan addresses the surrounding land use patterns to maximize the benefits of transit for the community. Over time, the implementation of the 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.



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**The Process**

The Jupiter Transit-Oriented Development Master Plan grew out of a public, seven-day charrette held from January 12th through January 18th of 2008. This master plan represents the citizens' vision for the future of transit stations within the Town of Jupiter in Palm Beach County.

The charrette was held at the Jupiter Community Center and was well attended by a diverse cross-section of the community including residents, property owners, and local business representatives. The Charrette focused on the Florida East Coast (FEC) rail corridor and the surrounding neighborhoods. Key issues addressed included identification of the best locations for transit stations; plans for station development including in some cases the redevelopment or revitalization of neighborhoods surrounding these locations; connectivity between stations and surrounding development; and revitalization and improvements to neighborhoods adjacent to the proposed train stations.

The Treasure Coast Regional Planning Council's (TCRPC) Design Studio (Michael Busha, Marlene Brunot, Kim DeLaney, Wynsum Hatton, and Dana Little) and a team of professionals that included ArX Solutions Inc. (Maximiano Maggione, Veronica Mariano, Patricio Navarro, and Patricio Rodriguez); Glatting Jackson transportation engineer Billy Hattaway; and urban designers Christina Belmonte, Juan Caruncho, Marcela Camblor, Daniel M. Cary, Steven Fett, Michelle Hipps, Shailendra Singh, and Jose Venegas. The team assisted the citizens in studying the many challenges faced by the community and proposed specific solutions. The design team also included Tom Hickey and Sue Gibbons of Gannet Fleming who are the Florida Department of Transportation's (FDOT's) lead consultants for the South Florida East Coast Corridor (SFECC) Study. The SFECC Study is re-evaluating the reintroduction of passenger transit on the FEC corridor through Miami-Dade, Broward, and Palm Beach counties.

During the week of the charrette, the design team set up its studio at town hall where the doors remained open to the public all week. Residents regularly visited the studio and made useful comments and suggestions regarding the work in progress.

A presentation of Work-in-Progress was held on Friday, January 18, 2008. Residents, property and business owners, local government staff, and elected officials were present. Since that presentation, work has continued following the initial public workshop. A series of final presentations by TCRPC staff will be held during summer of 2008. This will be a time to collect further citizen and professional input before adoption of the Citizens' Master Plan.



Photos from the public input session on Saturday

**The Meaning of "Charrette"**

Charrette means "cart" in French. Various architectural school legends hold that at the Ecole des Beaux Arts, in 19th Century Paris, work was so intense that students frequently continued to sketch even as carts carried their boards away to be juried.

Today charrette refers to a high speed, intense, and very focused creative session in which a team concentrates on specific design problems with citizens and presents solutions.



The expanded study area includes five potential transit station locations and a great diversity of neighborhoods and businesses.

**Existing Conditions within the Study Area**

The Town of Jupiter enjoys a reputation as a great place to live and work. The study area runs from Donald Ross Road at the south to Center Street at the north. This area is expected to have significant job growth in the next several years as well as an increased demand for housing. Although the study area is largely built out, a number of opportunities exist for infill development and redevelopment of older, under-utilized parcels. There are also opportunities for infill and neighborhood improvements, particularly in some of the older neighborhoods

The provision of transit stations serving the area would benefit the town's businesses, residents, Florida Atlantic University (FAU), and biotechnology uses (Scripps, Max Planck, etc.) at Abacoa and encour-

age the redevelopment of parcels fronting Toney Penna Drive and near Jupiter Medical Center. A proposed station at Indiantown Road would likely stimulate redevelopment interest in the large strip mall parcels east of Alternate A1A as well. There are also several large-parcel residential developments under single ownership that are likely to be redeveloped in the near future.

Jupiter has some very nice and affordable older neighborhoods, including Pine Gardens (north and south), which are well-planned and include the opportunity to be served with alleys. The provision of alleys and other minor improvements would improve the value and appearance of this neighborhood by allowing parking and services to occur at the rear, rather than be forced onto the street. In addition, alleys would allow the accommodation of small outbuildings and perhaps rental garage apartments.



Florida Atlantic University's northern campus at Abacoa



Jupiter Medical Center near the FEC railroad



Scripps at Abacoa



Abacoa ~ a traditional neighborhood development



Historic elementary school in the study area



Older neighborhoods in the study area

Jupiter is considered a quality address and enjoys a great reputation as a place to live, work, and play. The study area includes a diversity of housing types and affordabilities, a growing job base, and great neighborhoods, many of which remain affordable.



Intersection of Toney Penna Drive and Old Dixie Highway



Retail shopping strip on Indiantown Road



Gas station on Indiantown Road



Neighborhood north of Toney Penna Drive



Industrial uses along Toney Penna Drive



Neighborhood along 8th Street

Like all communities, Jupiter has some older neighborhoods that need attention, some opportunities for redevelopment, and a few problem areas that need to be addressed such as the intersection of Toney Penna Drive and Old Dixie Highway.

Introduction

Like most east coast Florida communities, the development of Jupiter 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 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 1980’s, the impacts of suburban sprawl and the elimination of passenger rail service to Florida’s coastal cities had become evident, and redevelopment programs were initiated in dozens of traditional downtowns with varying levels of success. North/south rail transit along 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.



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 commuter rail service from Miami-Dade north through Broward 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.

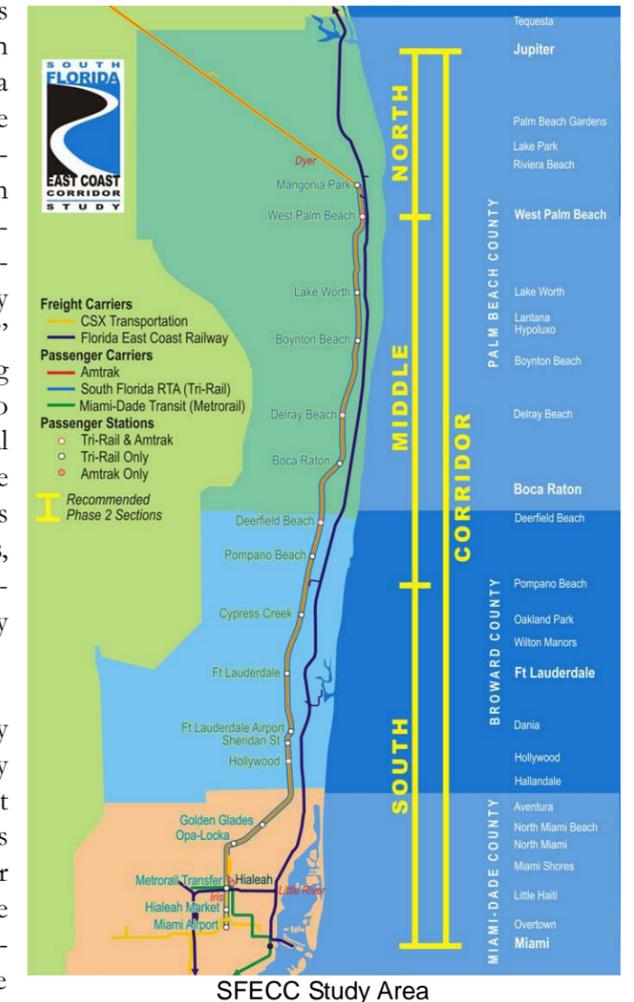
Tri-Rail currently operates with eighteen stations through the three counties and a northern terminus at Mangonia Park (central Palm Beach County). The Tri-Rail Authority was reconstituted as the South Florida Regional Transportation Authority (SFRTA) in 2003 with a broader focus including land use surrounding 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.

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 82-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 including preliminary environmental analysis, selection 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), major employers such as hospitals, business parks, universities, and major event venues. Part of the analysis includ-



**INTRODUCTION AND PROJECT OVERVIEW**

ed 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 and 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 effective and efficient. Accordingly, each station area was assigned a preliminary score and suitability rating from “low” to “high.” The map at the right indicates the preliminary land use ratings for the northern section of the corridor.

On the “SFECC Station Suitability Analysis” map to the right, preliminary station areas in Palm Beach County are represented by colored circles, whereby the size of the circle indicates projected ridership for the station location, and the colors indicate land use suitability for transit. Green and blue colors indicate land use patterns that are highly supportive of transit, and those circles are indicated in the three city centers (West Palm Beach in this map as well as Fort Lauderdale and Miami) as well as the urban cities near those central nodes. Red and orange circles indicate station areas that have lower levels of transit-supportive land use patterns or policies, which tend to occur predominately in Palm Beach County. The northern segment contained relatively lower station area ratings compared to the central and southern segments due in part to current and planned land use patterns. Therefore, greater emphasis has been placed upon land use planning along the northern segment in an effort to bolster ratings, improve anticipated system success, and increase the segment’s competitiveness to secure federal funds.

The current Tri-Rail system carries approximately 16,000 passengers per day. 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.

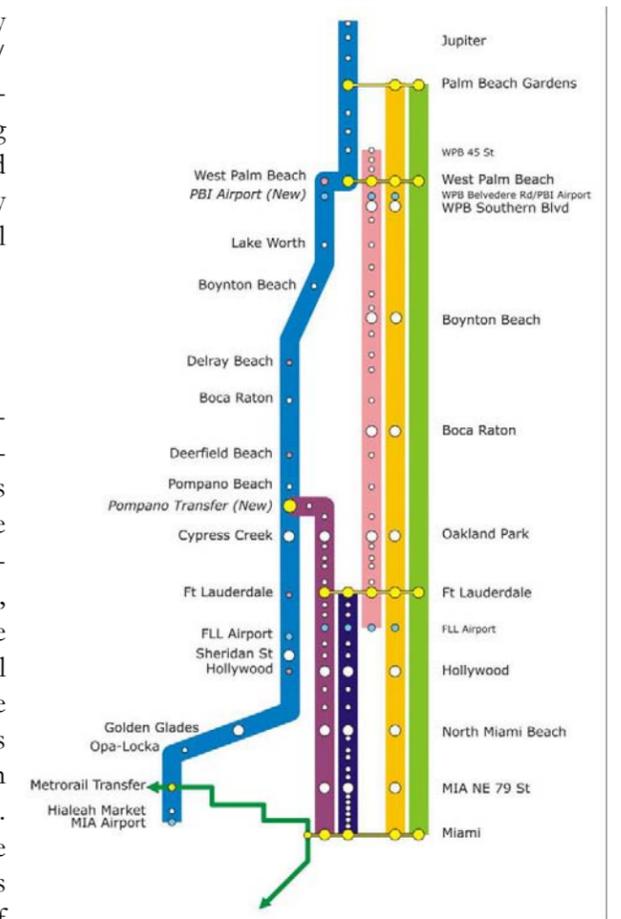


Station land suitability analysis for the northern section of the SFECC Study

The second phase of SFECC analysis is currently underway with completion anticipated in 2010/2011 including submittal to the FTA. As to funding, it is anticipated there will be three funding 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 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 right 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 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.



A diversity of service options are proposed.

**The Town of Jupiter**

As required for all Florida municipalities, the Town of Jupiter began identifying “Major Issues” for the state-mandated Evaluation and Appraisal Report (EAR) in 2005. The EAR process included a fresh look at planning and land development conditions within the town and a comparison of those conditions to existing Comprehensive Plan goals, objectives, and policies. The town identified a number of “Major Issues” through the EAR process including Major Issue #6: “The Need to Develop a ‘Transit-

Ready' Community.' TCRPC was requested to assist town staff in drafting appropriate amendments to the Comprehensive Plan to address transit-readiness. Ultimately, a range of updated goals, objectives, and policies were developed in several elements of the Comprehensive Plan including the following:

**Future Land Use Policy 1.18.1** - Encourage greater densities and intensities around regional transit stations.

**Future Land Use Policy 1.18.2** - Develop criteria which will guide the location of transit-oriented development.

**Future Land Use Policy 1.18.3** - Encourage Transit Oriented Development (TOD) that provides a development pattern with a mix of uses located within a ¼ mile radius of transit stations. Such uses may include but not be limited to: housing, retail, office, institutional and restaurant to provide 18 hours of daily activity.

**Future Land Use Policy 1.18.4** - TOD projects shall be designed utilizing the principles of traditional urban design to achieve a pedestrian friendly environment to support transit users.

**Housing Policy 1.1.5** - Provide opportunities for density bonuses for the development of affordable/workforce housing in proximity to transit.

**Intergovernmental Coordination Policy 2.3.3** - Coordinate with Tri-Rail, the Treasure Coast Regional Planning Council (TCRPC), Palm Tran and the Palm Beach County MPO as appropriate with regard to the siting of a Tri-Rail Station and expansion of Palm Tran bus service and local trolley service in the town.

**Intergovernmental Coordination Policy 2.3.4** - Coordinate with the TCRPC to encourage the development of transit supportive land uses (Transit Oriented Development - TODs) proximate to Tri-Rail stations in the town.

**Transportation Policy 2.3.1** - Continue to develop and encourage transportation linkage systems, including trains, buses, trolleys, water-taxis, boats, bicycles and pedestrians. Require commuter parking, docking facilities, and bicycle racks that support these multi-modal systems.

**Transportation Policy 2.3.2** - In the town parking program, encourage the development of maximums for the amount of off-street parking provided, to encourage less dependency on automobiles and more shifts to other forms of transportation.

**Transportation Policy 2.3.3** - Encourage the development of streetscape pattern matrix to categorize and address the pedestrian feel of the different classification of town roadways.

Jupiter's EAR-based amendments were approved on first reading by the Town Council on May 5, 2006

and transmitted to the Department of Community Affairs for review. The Town Council adopted the amendments in mid-2008.

It should be noted the Town's adoption of transit-supportive goals, objectives, and policies in its Comprehensive Plan will directly improve the FTA land use ratings for the entire system. In addition, the Town's Charrette and station area planning raise scores as well. These scores will be further increased as the Town implements the recommendations of the Charrette. All of these actions, from the Comprehensive Plan policies to the implementation of the Charrette with new development and redevelopment, will increase the Federal funding prospects for transit and ultimately improve its functionality.

**TRANSIT-ORIENTED DEVELOPMENT**

To frame the discussion and analysis of Jupiter'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 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 systems.

**OVERVIEW OF STATION TYPOLOGY**

The 82-mile segment of FEC Corridor under consideration in the SFECC 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, Neighborhood, Employment Center, Local Park-N-Ride, Regional Park-Ride, Airport/Seaport, and Special Event Venues. Several of these station types are recommended for the Town of Jupiter Study Area. A summary and brief description of these station types is included in the Appendix.

**ANALYSIS OF JUPITER’S POTENTIAL STATION AREAS**

As noted earlier in this report, the SFECC Study initially identified sixty potential station areas along the FEC corridor, which were located at key intersections near major venues and significant employers. This station inventory included two Jupiter station areas: the intersection of Donald Ross/Dixie Highway and the intersection of Indiantown Road/Dixie Highway. Due to the size of the station area (roughly one-mile diameter), the Indiantown Road station area nearly abutted Toney Penna Drive/Dixie Highway to the south and Center Street/Dixie Highway to the north. For the TOD charrette, each of these intersections was identified separately as a potential station area for analysis.

In addition, the intersection of Frederick Small/Dixie Highway was identified pursuant to its designation in the Abacoa Development of Regional Impact (DRI) as a future station location. North of Jupiter, a terminal station area had been originally identified in Tequesta along Dixie Highway. The high cost of bridge improvements across the Loxahatchee River coupled with relatively low ridership at that station led to its removal from consideration. Instead, the SFECC Study recommended the termination of service in northern Jupiter, assuming Tequesta riders could be captured slightly to the south. In summary, Jupiter's initial two station areas were expanded to five for the purposes of the SFECC Study and the TOD charrette.

TCRPC had been requested to preliminarily analyze Jupiter's potential station areas as part of the EAR process. In mid-2007 well in advance of the TOD charrette, TCRPC recommended a single station location for the town would be best located at the Toney Penna Drive/Dixie Highway location for a number of reasons including the proximity to Jupiter Medical Center (the town's major employer), the opportunity for redevelopment, and the ability to capture pedestrian-based ridership from the Pine Gardens North neighborhood. While these contextual findings remain valid, the TOD Charrette process expanded the scope and depth of analysis. A greater understanding of the variety of transit service options emerged along with the range of related station types and TOD patterns. It also became clear that Jupiter has unique characteristics that warrant multiple station locations. Jupiter's origins and destinations are far more complex than initially presumed in the SFECC Study. Additionally, it became evident that a Donald Ross station location could not provide adequate service for the biotech cluster (Scripps, Max Planck, et.al.) and FAU on Donald Ross Road. In testing the five potential station areas, it was determined that all could accommodate station platforms and supporting parking as appropriate. The town, however, only needs one southern, one central, and one terminus station.

The following report evaluates all of these locations as potential transit stops with the exception of the Tequesta Drive location which has been eliminated from consideration at this time. The report includes considerations of the station type, form, and design of the potential station at each location and also considers how surrounding areas might be improved to encourage transit ridership. Based on a public charrette process, the report is also based on the insights and recommendations of residents and business owners from the area.



Potential future transit station locations in the Jupiter Area

**Citizen Requests**

Generally, residents were strongly supportive of transit service being extended to the Jupiter area. Citizens felt that several transit station locations were needed to adequately service the area with linkages to Abacoa, FAU, the bio-tech cluster (Scripps, Max Planck, and future uses), and the Jupiter Medical Center/Toney Penna Drive employment centers. They also encouraged the strong interconnection of transit stations with surrounding destinations via shuttle or trolley service as well as by bike and trail systems. The concept of TOD around station locations, specifically around the station at Jupiter Medical Center and Toney Penna Drive, was also supported with encouragement for the relocation of existing businesses to other areas of the town, providing traffic issues at the intersection of Toney Penna Drive and Old Dixie Highway could be resolved.

Concerns were also raised regarding the need to improve existing neighborhoods near proposed train systems, maintain neighborhoods' desirability, and preserve their affordability. Residents and businesses were concerned about housing affordability and thought more affordable housing was needed. Residents also wanted to make sure that the unique character of Jupiter was maintained as well as a strong local economy.

There were several concerns raised by participants during the Saturday workshop. Primarily, there was a fear that increased service would result in more horn noise associated with trains approaching the roadway crossings. There was broad support for these intersections to be improved as part of the increased service with pursuit of "quiet crossing" designations or other methods to eliminate the requirement for horns.

Participants also noted the difficulty of east/west traffic flow, especially for emergency access, across the current FEC tracks. Safety concerns regarding delays for emergency vehicles and traffic to and from Jupiter Medical Center were noted, including the physical configuration of roadway crossings, length and frequency of freight trains, and possible tunnel or bridge connections.



Public input session on Saturday

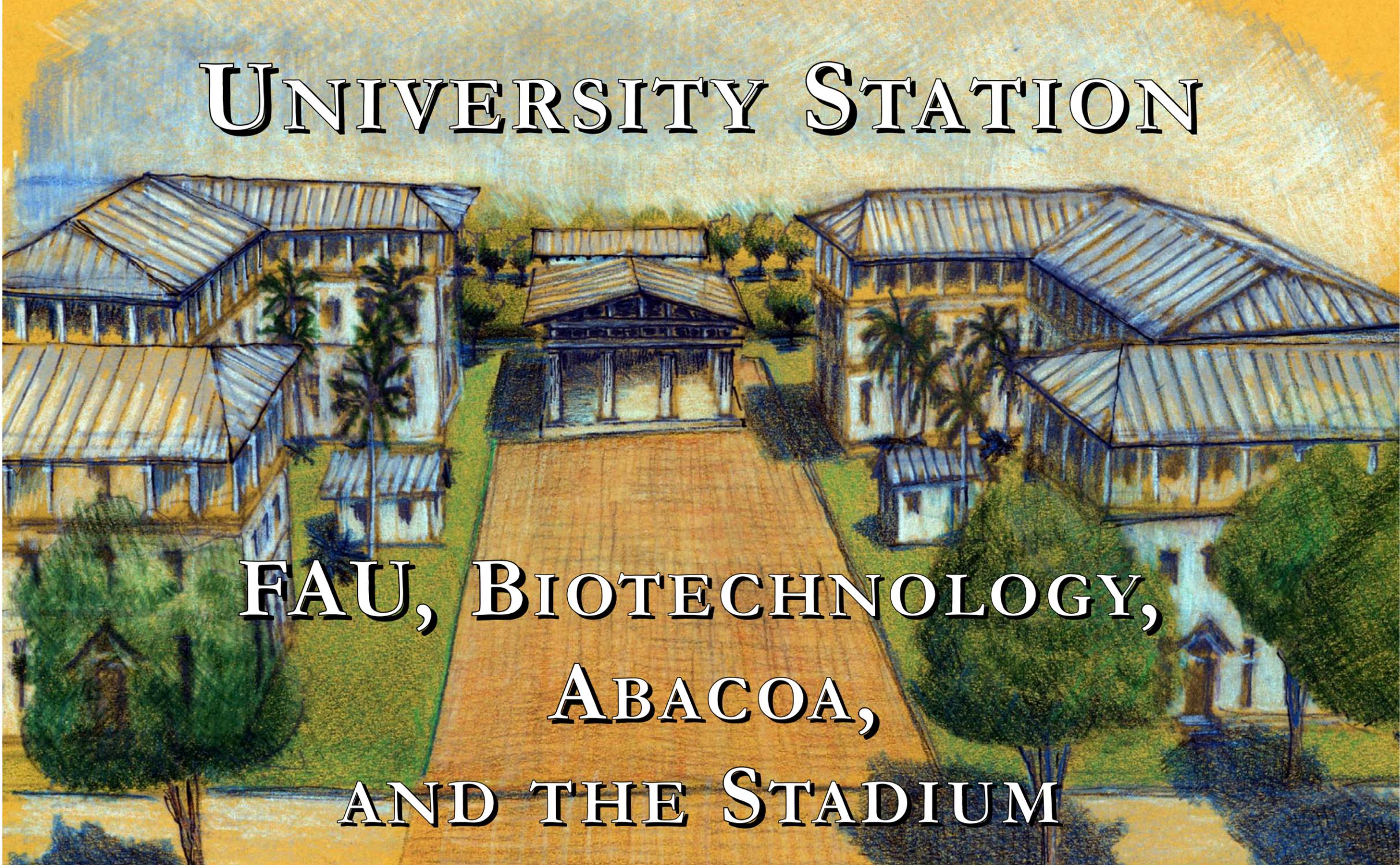
# CITIZENS' MASTER PLAN



TREASURE COAST REGIONAL PLANNING COUNCIL  
INDIAN RIVER - ST. LUCIE - MARTIN - PALM BEACH



- |  |                                  |
|--|----------------------------------|
| 1. Pine Gardens North Neighborhood             | 5. Wood Duck                     |
| 2. Indiantown Road Station                     | 6. Toney Penna Station           |
| 3. Indiantown Road/Alternate A1A Redevelopment | 7. Jupiter Medical Center Campus |
| 4. White Haven                                 |                                  |



# UNIVERSITY STATION

## FAU, BIOTECHNOLOGY, ABACOA, AND THE STADIUM

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Scripps Campus at Abacoa



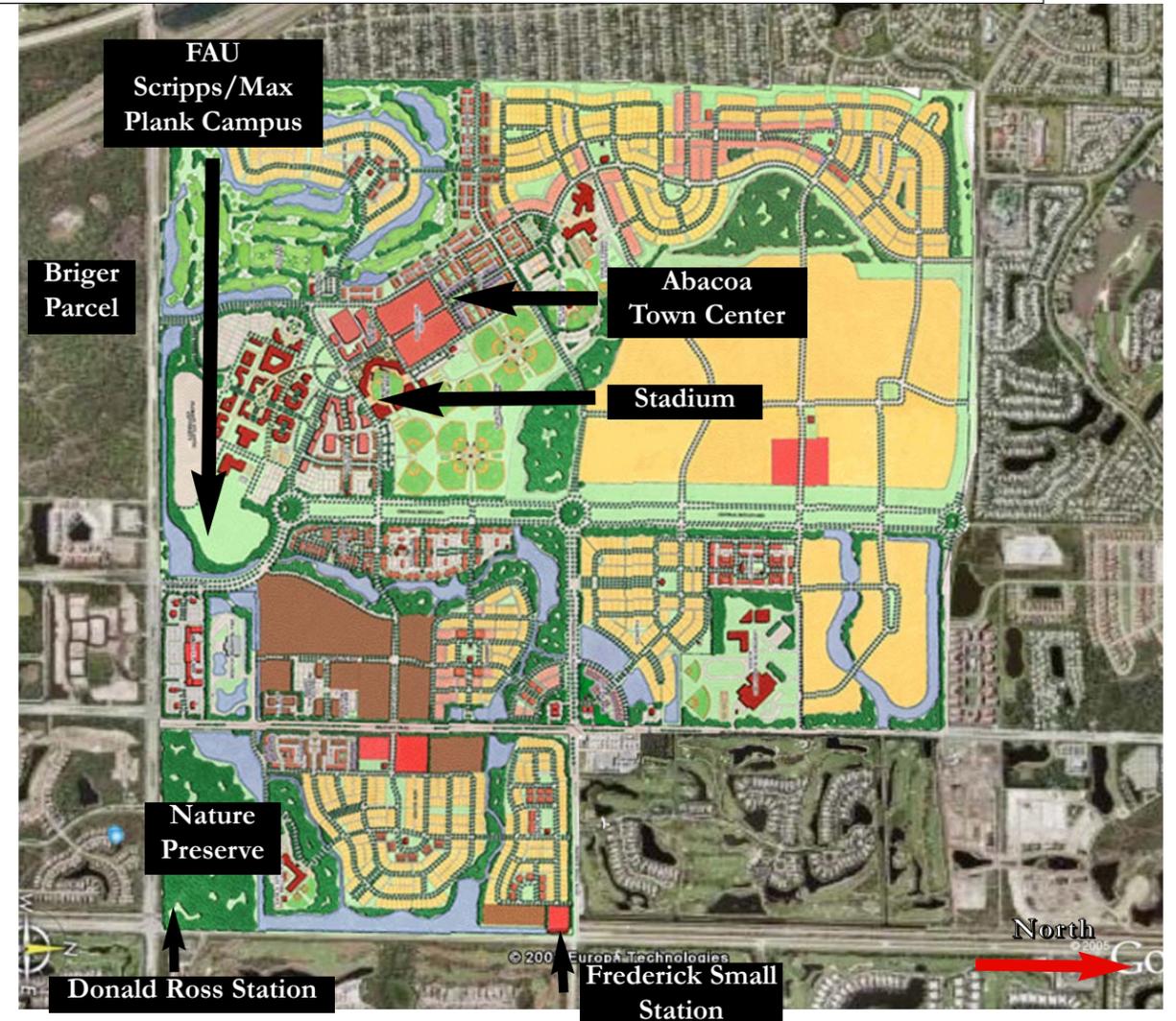
Abacoa Town Center

**University Station**

The most important destination along the proposed FEC transit route within the Town of Jupiter will be Abacoa, FAU, and the biotechnology cluster along Donald Ross Road. Abacoa is a large pedestrian-oriented community that follows traditional town planning principles and is designed to be easily and efficiently served by transit. The Abacoa development will ultimately yield nearly 6,000 residential units situated in a series of well-defined neighborhoods. Abacoa includes a central shopping and business district, a large baseball stadium, FAU's north campus, and a new biotech complex anchored by Scripps and Max Planck research facilities. In addition to the nearly 400,000 square-feet of biotechnology space currently under construction at FAU's campus within Abacoa, an additional four million square-feet of biotechnology uses is slated for south of Donald Ross Road at the Briger parcel. This would generate a combined total of 4.5 million square-feet of biotechnology uses at this cluster.

The core areas of workplace and shopping are or will be surrounded by residential neighborhoods, including a diversity of housing types and affordability. It is noted that as employment opportunities grow, housing affordability is expected to be a problem for many. A high level of transit service could help to offset housing affordability issues. Transit would provide access to a variety of housing opportunities along the FEC Corridor and could also reduce transportation costs for transit users.

At build-out, the university and biotechnology cluster, including both Abacoa and Briger properties, are expected to generate up to 40,000 jobs. As the area matures into an important research and employment center, interaction can be expected between other centers up and down the FEC Corridor. This interaction will be facilitated by a strong transit connection.

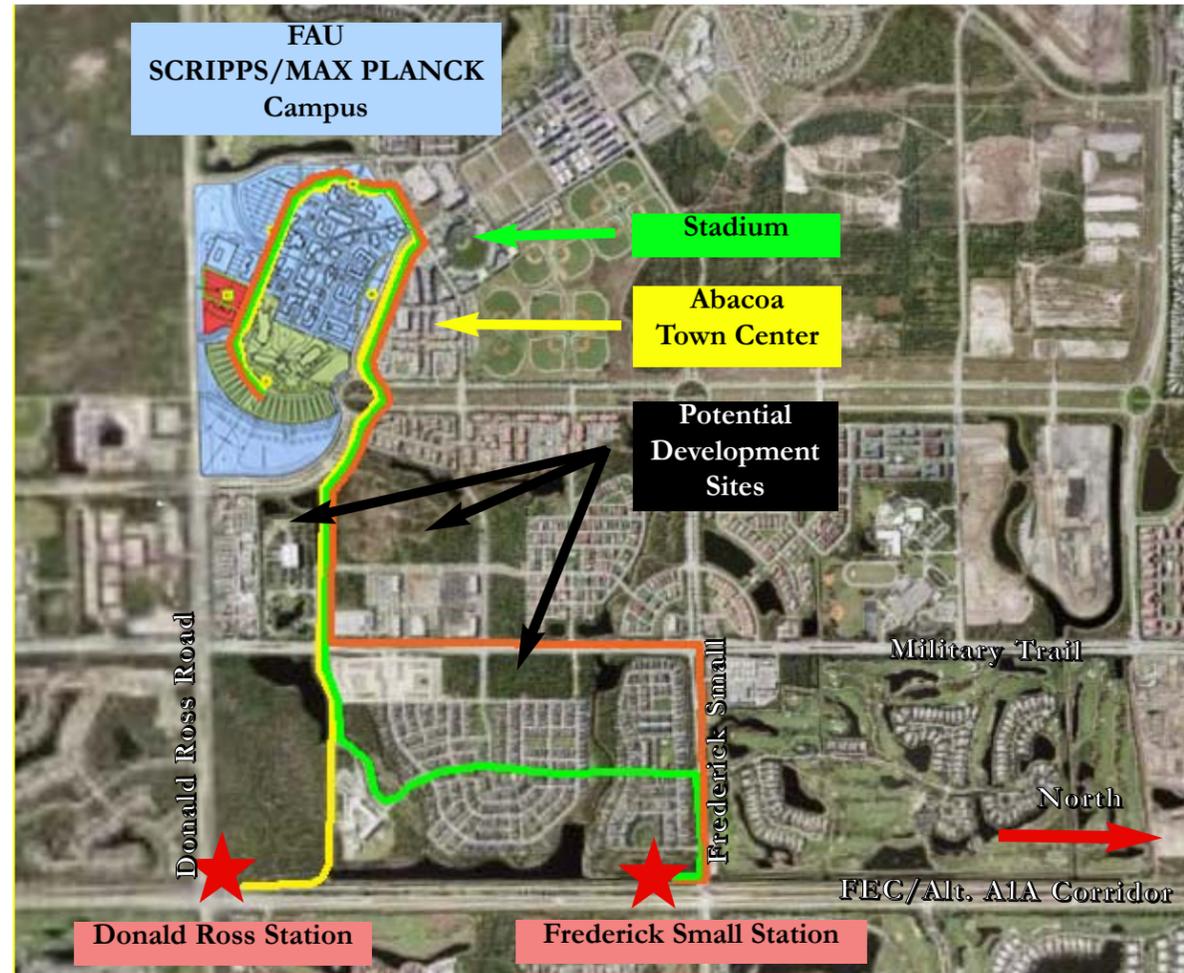


The location of Abacoa, FAU, and the biotechnology cluster relative to potential FEC corridor transit stations

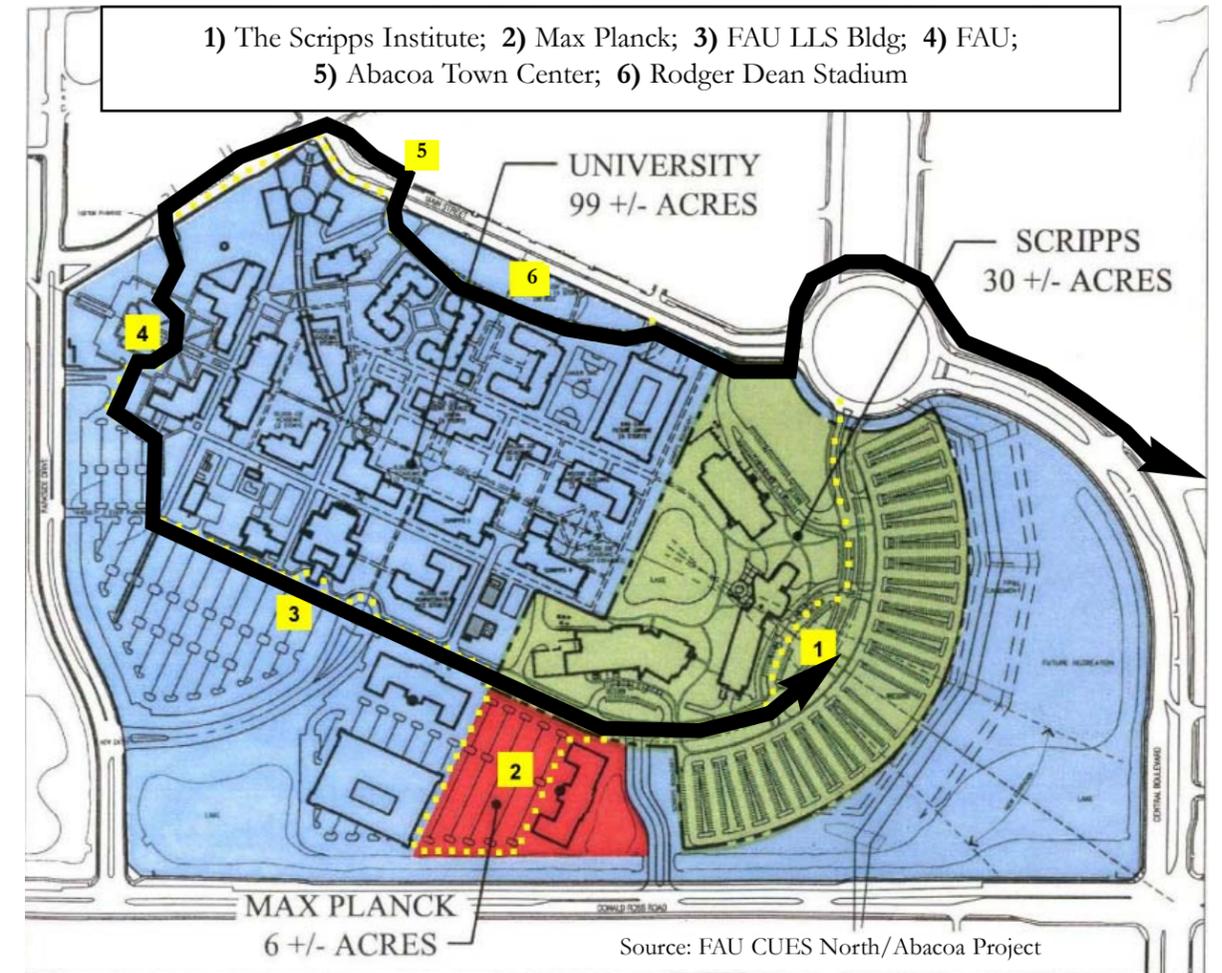
During the charrette, two alternative locations were identified to serve southern Jupiter's biotechnology cluster and university uses, Abacoa's Town Center and baseball stadium, and associated neighborhoods: one at the intersection of Donald Ross Road and the FEC and the other at Frederick Small Road.

**Donald Ross Station**

The location at Donald Ross Road has been identified in the preliminary SFECC Study as a potential site. It has the best and shortest connection time to the major destinations within Abacoa and Briger.



Potential university station locations showing destinations and trolley connecting routes



Detail of Trolley Routes and Destinations at Abacoa

However, as designated in the Abacoa DRI, this property currently exists as a Gopher Tortoise preserve of approximately 50 acres and therefore is constrained for development. Because a station at this location would be surrounded by preserve area, it would have little if any pedestrian traffic from surrounding neighborhoods.

**Frederick Small Station**

The Frederick Small location has been identified as a potential transit station by the Town of Jupiter as part of the Abacoa DRI. This area includes seven acres of undeveloped land, two acres of which are designated for transit use. The Frederick Small location also has potential for strong, quick transit connections with the destinations throughout Abacoa. In addition, the location could easily be developed as a neighborhood station and would serve nearby residents of the New Haven neighborhood.

Although either station location could be easily connected to Abacoa and the university/biotechnology destinations with quick and efficient connecting trolley service, only one of the station locations would be needed. The Donald Ross Road location would likely provide the shortest connection time between key destinations and the station. The Frederick Small site would provide a slightly longer connection time, but provide the opportunity to service more existing and future work place destinations, particularly if the connecting trolley route included Military Trail.

Potential connecting trolley routes are indicated at the above left. The proposed trolley routes could be serviced by rail connections or by rubber tire vehicles. The proposed routes attempt to minimize travel time while providing access to existing and future high transit ridership destinations.



Plan for the proposed university station at Donald Ross Road



University station and environmental center

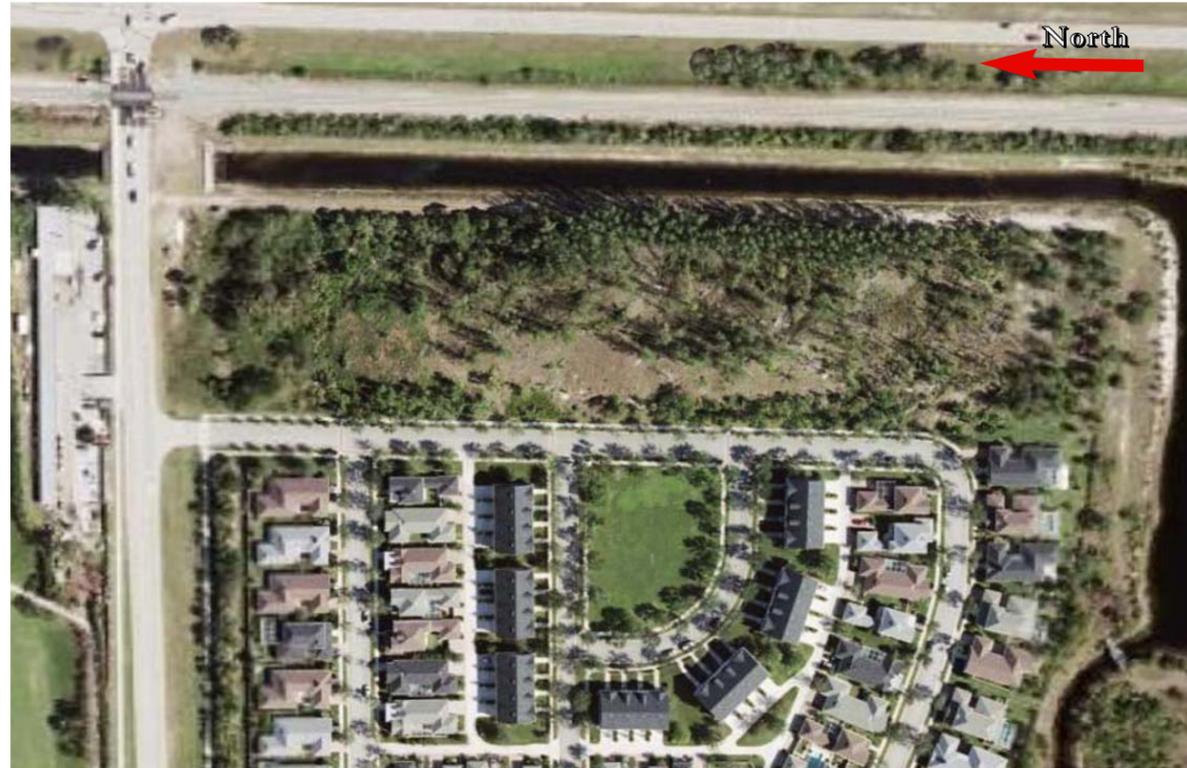
**University Station at Donald Ross Road**

A station at the Donald Ross location would be located at the eastern edge of an existing Gopher Tortoise preserve. The proposed station design minimizes impacts to the preserve by locating all facilities within the FEC right-of-way or within ecologically disturbed areas of the property. No parking is proposed, but a small drop-off/pick-up area is included along Donald Ross Road. The station would consist of a platform and either a shelter or small building to accommodate rest-rooms and ticketing. A small building might also support the preserve area functioning as both station and a nature educational center. The paved path along the FEC corridor and the western edge of the preserve area is a proposed trolley route, which avoids conflicts with Donald Ross Road traffic and would provide one-way connectivity for trolleys only.

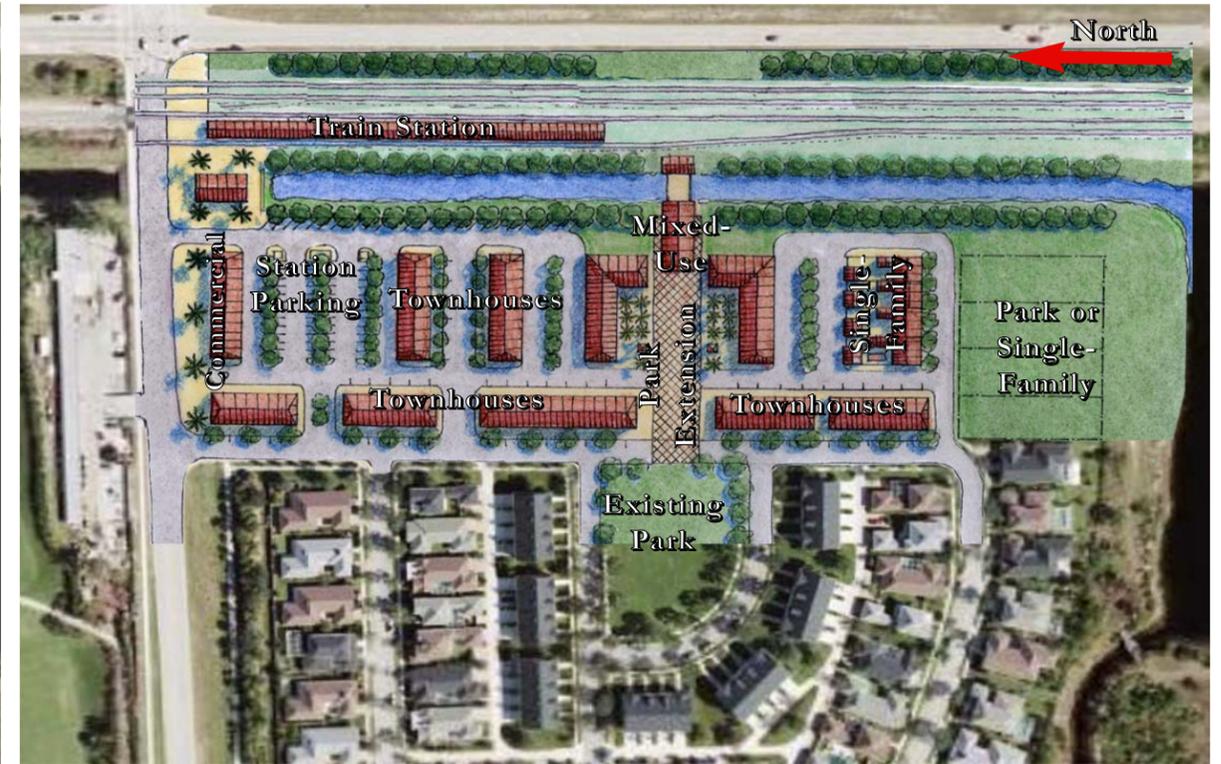
This location would provide the shortest travel times by trolley to destinations at Abacoa, FAU, the biotechnology cluster, and the stadium. Passengers would disembark at this location and be met by waiting trolleys for shuttle to their destination. No significant pedestrian traffic would be expected given the surrounding land use.



University station as simple platform and shelter



Existing condition at the proposed university station at Frederick Small Road



Proposed university station at Frederick Small Road including infill development

**University Station at Frederick Small Road**

The Frederick Small location has been designed as a neighborhood station with a modest amount of parking (40 - 50 spaces) and intended to blend into the fabric of the adjacent New Haven residential neighborhood.

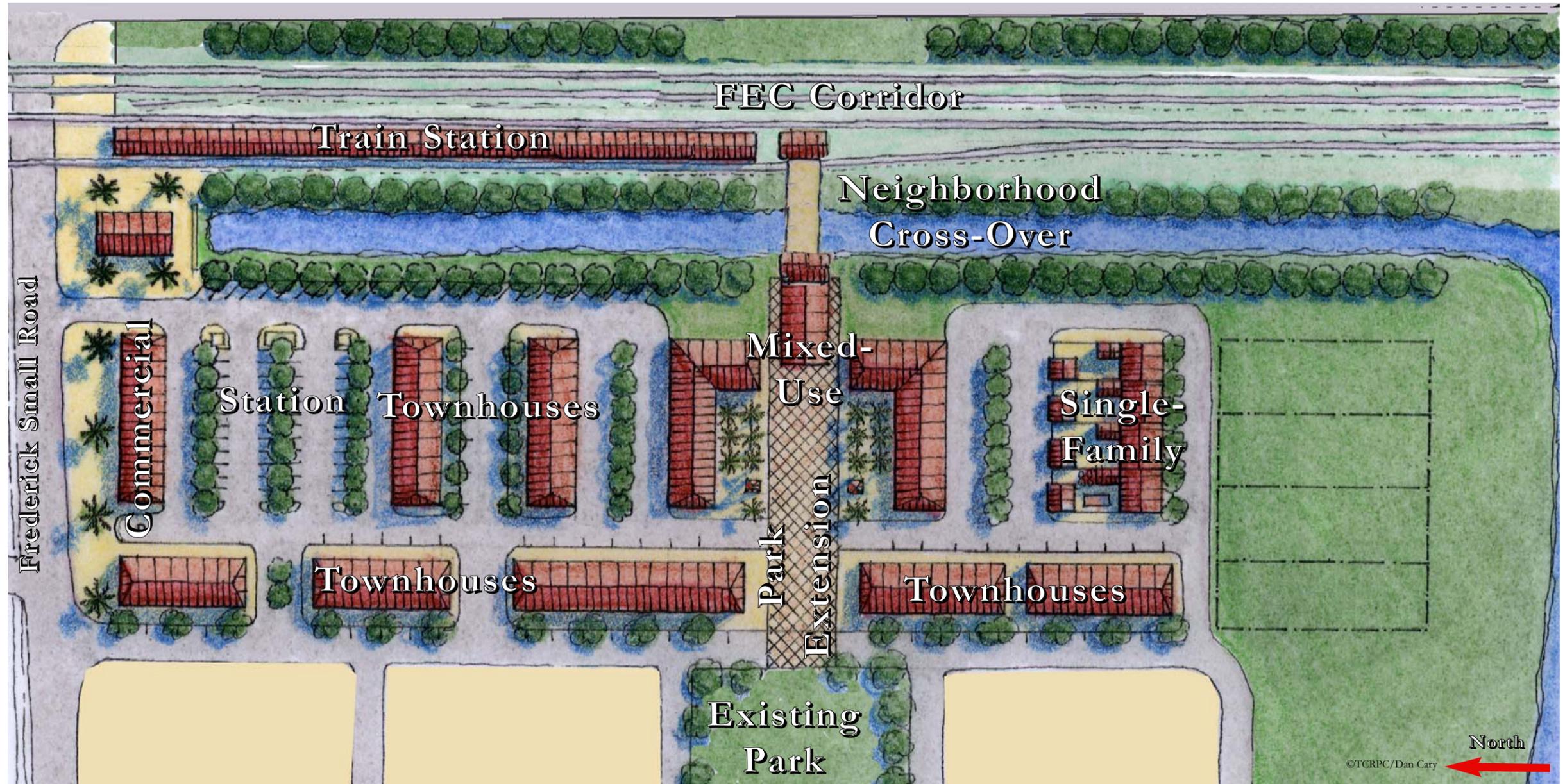
The existing vacant property consists of two parcels of land including two acres adjacent to Frederick Small Road, which according to land use and zoning, could accommodate the station, 25,000 square-feet of community commercial, and 17 residential units. The remaining five acres are designated for 76,000 square-feet of research industrial and 28 additional residential units.

The Citizens' Master Plan would instead provide a neighborhood station, a modest amount (3,000 - 5,000 square-feet) of neighborhood commercial, and approximately 72 residential units. The majority of the units would follow the townhouse format established around the existing New Haven neighborhood park. Four single-family lots are also included that represents a continuation of the building type immediately to the west; however, these lots could also serve as a lakefront park.

This proposed design would be more compatible with the existing New Haven neighborhood than the uses that are currently provided by existing land use and zoning regulations. Workplace and a mix of uses are ideal at train stations, and it is possible to design attractive workplace buildings. However, it is unlikely that adequate parking could be constructed to support the zoned development program of 101,000 square-feet of non-residential uses.

The proposed station at Frederick Small Road would have slightly longer travel times to the destinations at Abacoa than the Donald Ross Road location, but travel times would be short enough to represent a good level of service for commuters using the system. A clear advantage of a transit stop at Frederick Small Road is its ability to accommodate a modest amount of parking, as illustrated in the plan above. Furthermore, since the station is incorporated into the New Haven neighborhood, it would have potential riders within easy walking or bicycle distance from the station, which is not the case at Donald Ross Road.

Comparing the Donald Ross and Frederick Small sites, Frederick Small would represent the preferred site providing the development approach is protective of the existing neighborhood as illustrated here.



Proposed Plan for University Station at Frederick Small Road Including Infill Development

The plan shields the proposed neighborhood station and parking from the existing residential neighborhood with Townhouse unit types that match those that currently surround the existing New Haven park. The existing park is extended to the station, allowing residents to access the station via the park rather than along Frederick Small Road. Special architecture is proposed at the cross-over to anchor the park and public plaza.



©TCRPC/Juan Caruncho

Example of a transit station designed as a multi-purpose building that could include a small neighborhood restaurant or other public uses

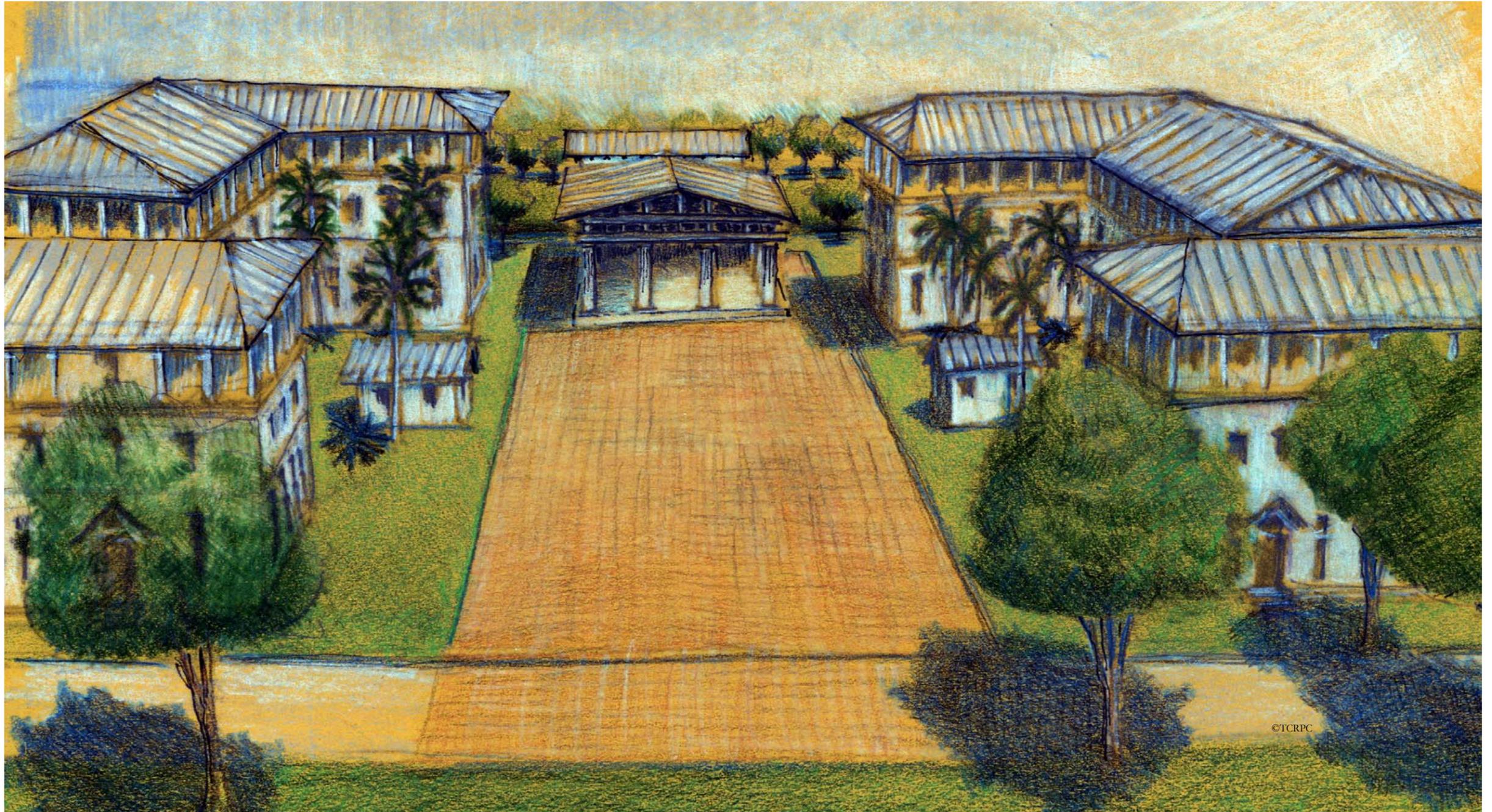
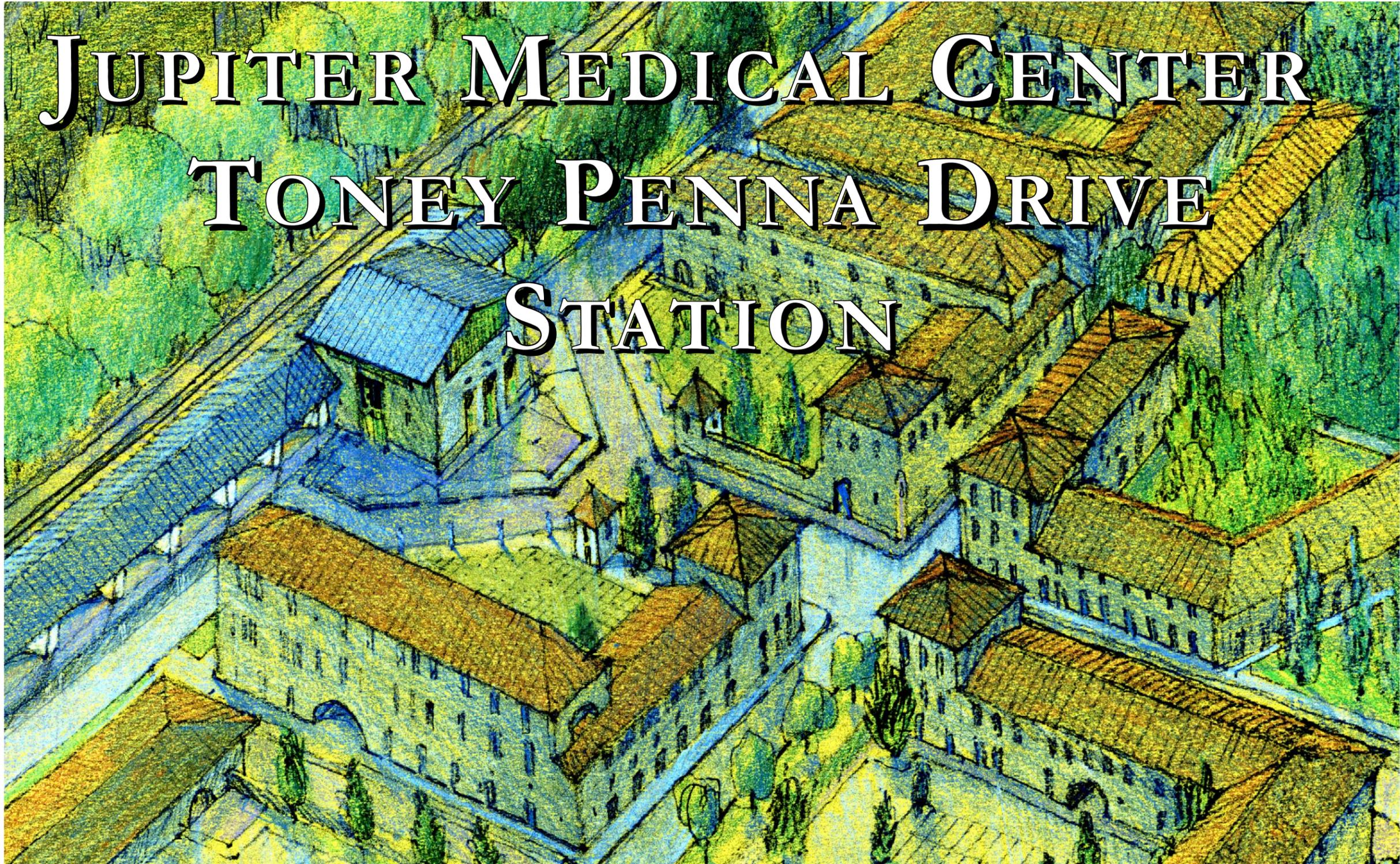


Illustration of the park extension, civic building, and neighborhood cross-over to the proposed Train Station from the New Haven neighborhood. The buildings surrounding the park-extension plaza would include townhouses similar to those surrounding the existing neighborhood green.



JUPITER MEDICAL CENTER  
TONEY PENNA DRIVE  
STATION

T R E A S U R E C O A S T R E G I O N A L P L A N N I N G C O U N C I L  
I N D I A N R I V E R - S T . L U C I E - M A R T I N - P A L M B E A C H

Jupiter Medical Center Station at Toney Penna Drive

North of the two alternatives for a university station, another transit station opportunity exists near Jupiter Medical Center and Toney Penna Drive. The area has a number of characteristics that makes it interesting as a transit stop. First, Jupiter Medical Center is one of the largest employers within the Town of Jupiter and is located immediately adjacent to the FEC corridor just south of Toney Penna Drive. Second, the medical center is growing with the potential for regional education, and there is the opportunity for significant infill development on this property. In addition, significant redevelopment opportunities exist for land uses fronting Toney Penna Drive providing prospect for the area to develop and mature in TOD form. There is a significant amount of residential development within walking or bicycle distance from a station located in the area and finally, there is the opportunity for shared parking structures that could efficiently serve the hospital, businesses, and transit riders.

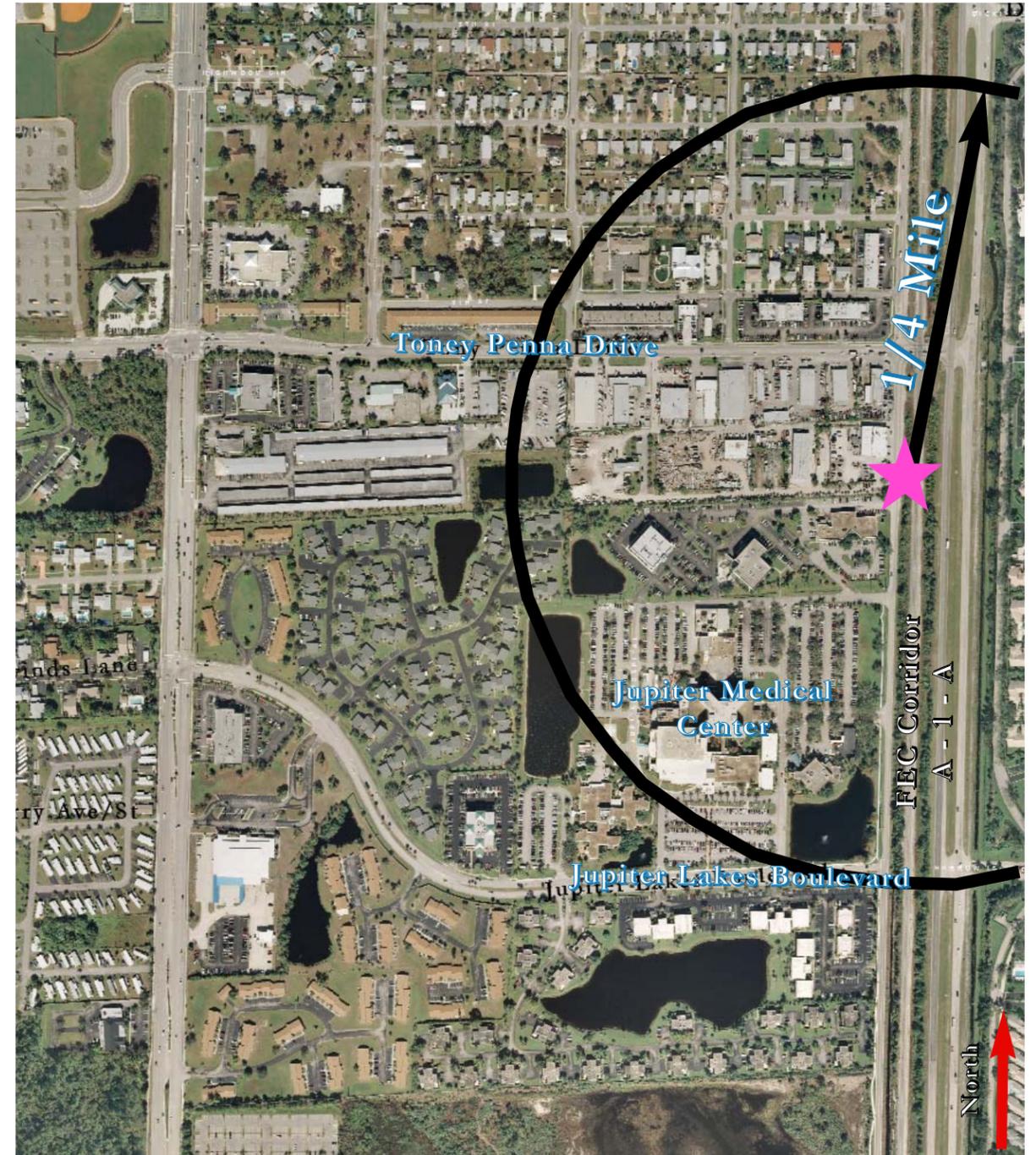
Currently, the Jupiter Medical Center relies entirely on surface parking. Use of structured parking alternatives could increase both the amount and convenience of parking and allow significant expansion of the hospital and associated uses. Toney Penna Drive is surrounded by a mix of older, low intensity uses, including residential, light industrial, office, and retail uses. Most of these uses exist within one-story buildings supported by surface parking lots. These properties could be redeveloped at higher densities than currently exist, and together the opportunities at the Jupiter Medical Center and Toney Penna Drive represent the chance to build a well-designed TOD district. Intensification of land uses within this area would be beneficial to transit, and a transit station at this location would support both the medical center and surrounding professional office uses, and facilitate the redevelopment of the existing uses along Toney Penna Drive.

Redevelopment would also provide the opportunity to rectify traffic problems in the area particularly at the intersection of Toney Penna Drive and Old Dixie Highway. Correcting existing traffic issues will require improvements to street connectivity that will also catalyze redevelopment and improve access in the area. Such improvements are best implemented as part of a comprehensive redevelopment strategy that is described in this report and illustrated in the Citizens' Master Plan.

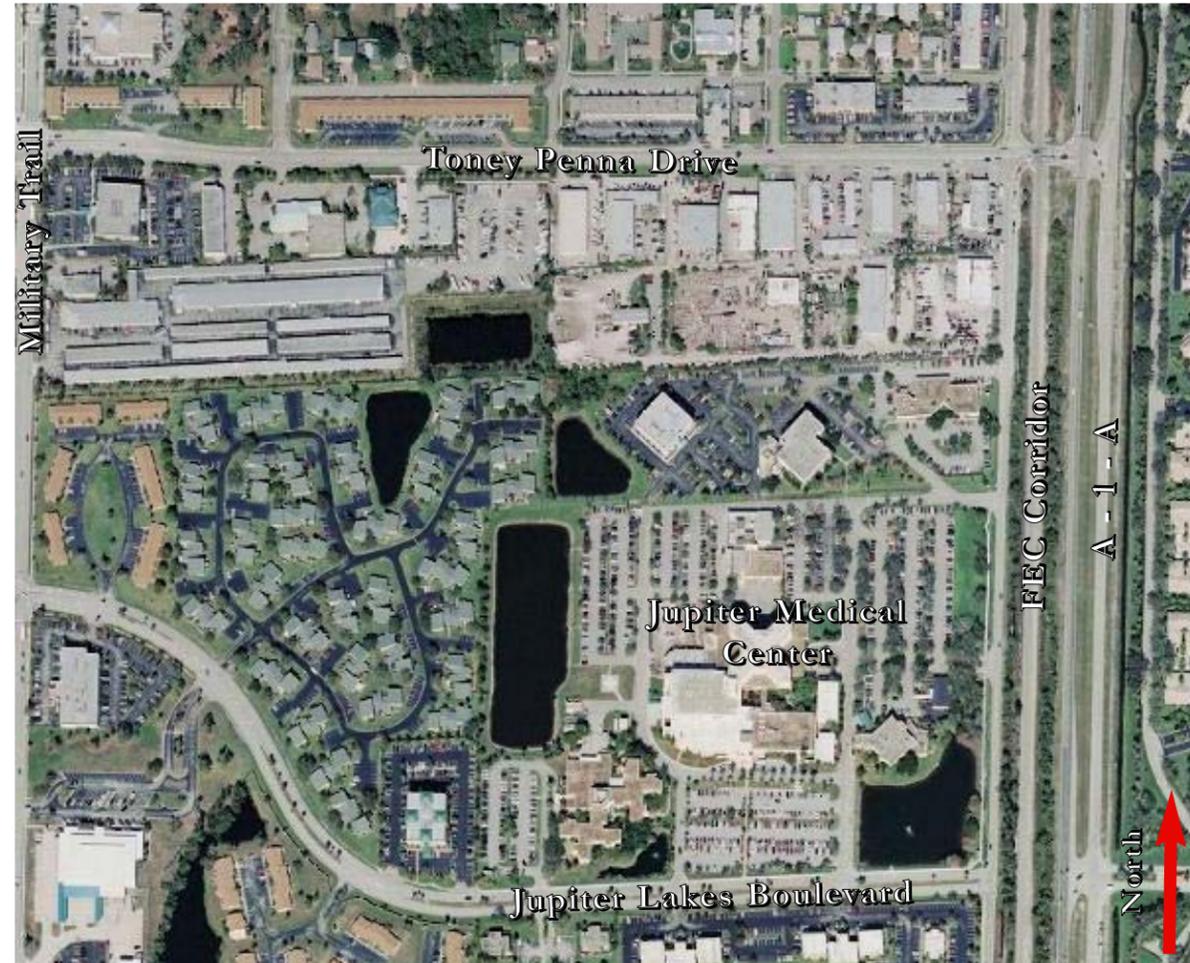


Low density commercial and industrial uses along Toney Penna Drive

If redevelopment and infill occurs in a manner that supports transit, the Jupiter Medical Center/Toney Penna Drive location should be viewed very favorably as a future transit stop.



Existing conditions in the vicinity of Jupiter Medical Center and Toney Penna Drive



Existing Conditions - Jupiter Medical Center and Toney Penna Drive

Jupiter Medical Center shares what amounts to a mega-block with a commercial/industrial area along Toney Penna Drive and a residential area just east of Military Trail. The edges of the block include Old Dixie Highway, Toney Penna Drive, Military Trail, and Jupiter Lakes Boulevard. The lack of a well-connected grid of streets serving the area results in traffic congestion and creates a difficult intersection condition at Toney Penna Drive and Old Dixie Highway.

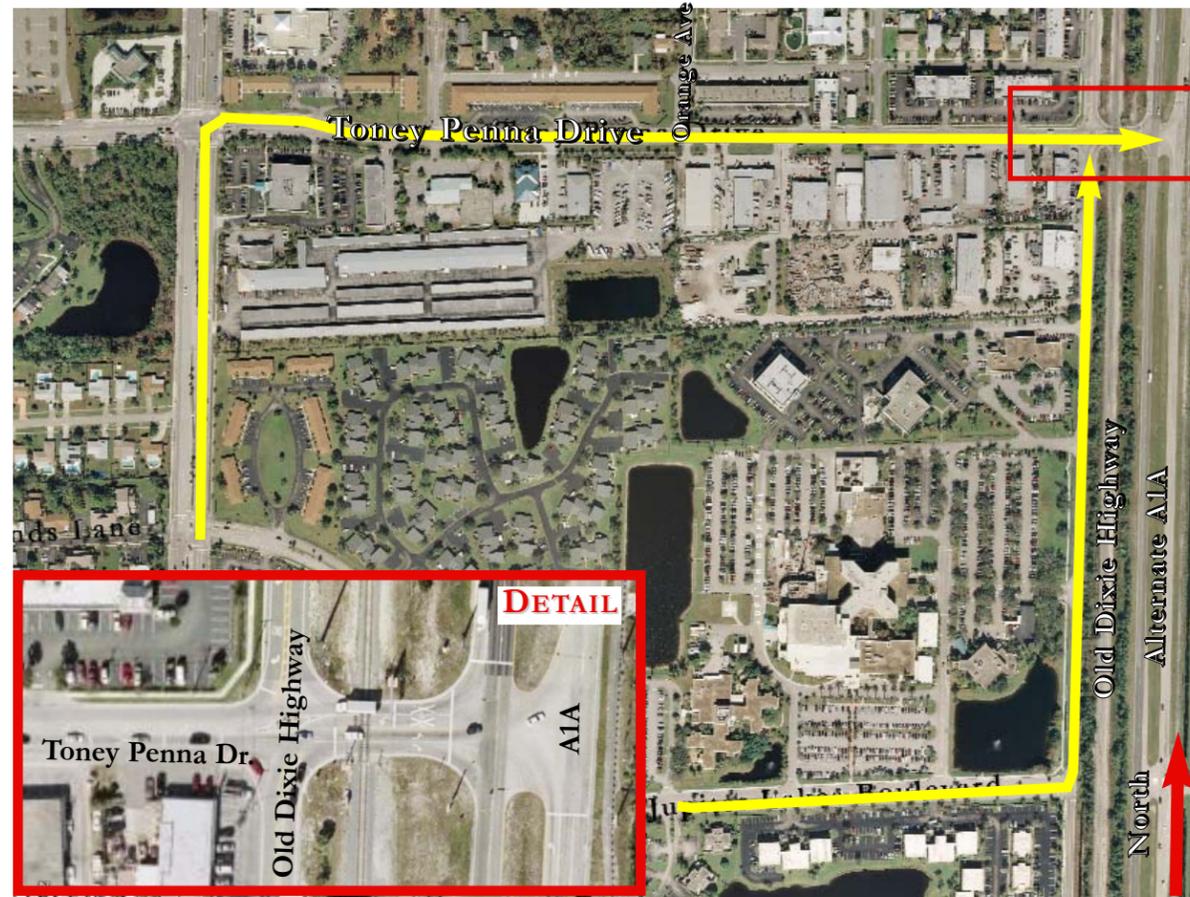
Existing development patterns have a low to moderate density and rely entirely on surface parking. Most of the uses along Toney Penna Drive are housed within one-story buildings, and the area is likely to redevelop at higher densities because of its location. Some of the residential neighborhoods west of the medical center are rentals under single ownership, which are often candidates for future redevelopment.



Traffic queue on Toney Penna Drive that blocks Old Dixie Highway



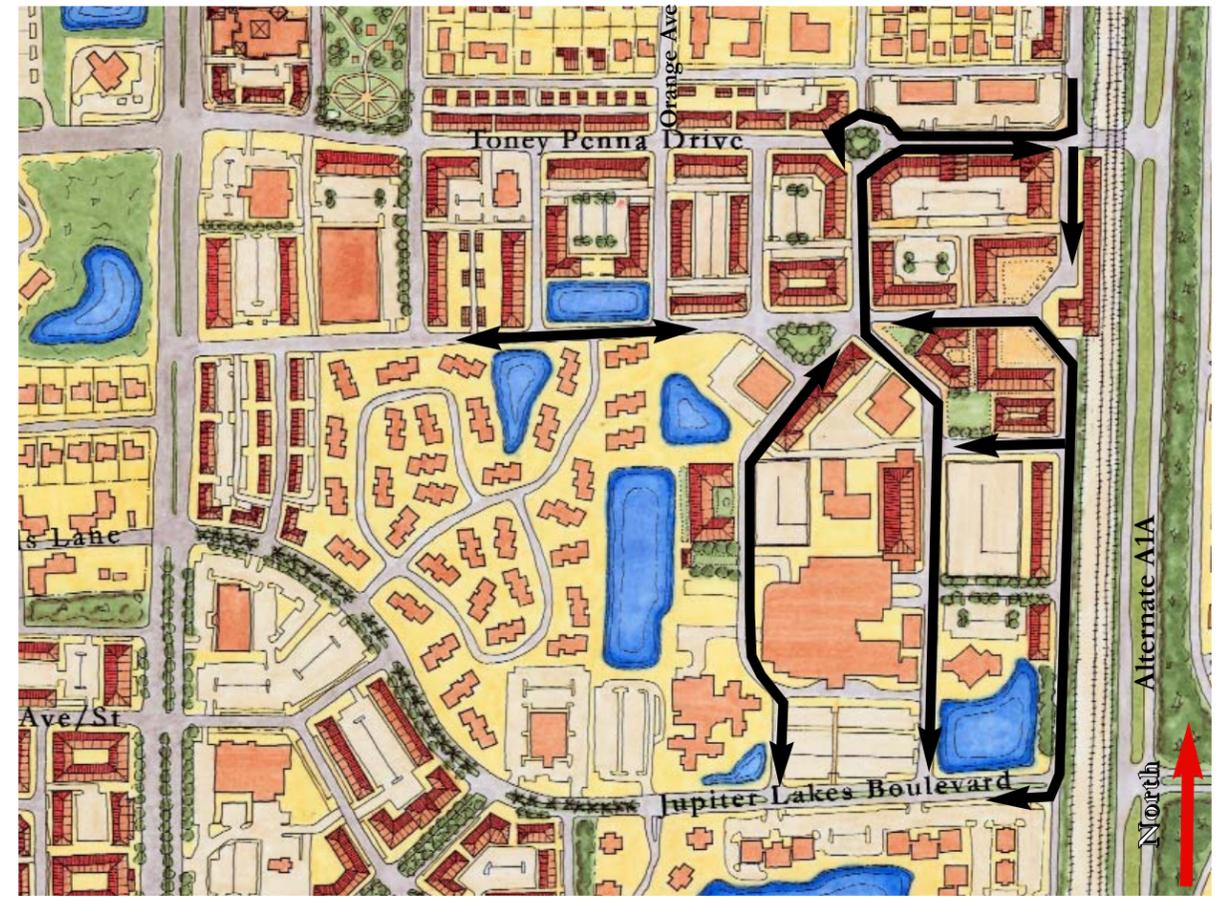
Traffic queue on Old Dixie Highway waiting to turn east onto Toney Penna Drive



**Existing Condition: The Intersection of Toney Penna Drive and Old Dixie Highway**

Toney Penna Drive becomes badly congested at its intersection with Old Dixie Highway, the FEC, and Alternate A1A. Because Old Dixie Highway is immediately adjacent to the FEC Rail Corridor and Alternate A1A, there is insufficient stacking along Toney Penna Drive to accommodate traffic attempting to turn east across the FEC to Alternate A1A from Old Dixie Highway resulting in severe traffic congestion. Compounding this problem is the fact that the land bounded by Toney Penna Drive to the north and Jupiter Lakes Boulevard to the south, east of Military Trail, is functionally a super block with no alternative travel routes passing through the block. Even in the absence of a difficult intersection configuration, limited north south and east west alternatives would result in unnecessary congestion. Drivers are forced to use the Toney Penna/Old Dixie Highway intersection

The superblock condition also limits easy access to the Jupiter Medical Center. Currently, the Jupiter Medical Center can only be accessed from Jupiter Lakes Boulevard or Old Dixie Highway. Access to the hospital would be improved by a connection to Toney Penna Drive as well as Military Trail.



**Original Proposal**

The Citizens' Master Plan resolves traffic problems in two ways. First, it divides the existing super block with an interconnected grid of streets that provide alternative ways for traffic to move through the area. Second, the plan resolves the conflicts at the intersection of Toney Penna Drive and Old Dixie Highway by effectively moving that intersection west to Orange Avenue. Traffic moving north along Old Dixie Highway or from Jupiter Lakes Boulevard would be diverted to a new southern extension of Orange Avenue, which would intersect with Toney Penna Drive via a traffic circle. This would provide extensive stacking prior to the intersection with the FEC Rail corridor and Alternate A1A and would allow an easy way for vehicles moving south along Old Dixie Highway to maneuver east across the FEC Railroad corridor by using the traffic circle at Orange Avenue to return east. Old Dixie Highway between the new train station and Toney Penna Drive would be one-way southbound. The plan would also provide multiple access routes to Jupiter Medical Center.

The Original Plan

Two plans have been developed for expansion of the Jupiter Medical Center and redevelopment of uses along Toney Penna Drive. The original plan provides the existing superblock with an interconnected network of streets, which divide the existing commercial/industrial area just south of Toney Penna Drive into small blocks and create a new east/ west street between the industrial area and the hospital property. Orange Avenue is effectively extended south to Jupiter Lakes Boulevard, providing an alternate north/south route through the existing block as a new entrance to the hospital from Toney Penna Drive.

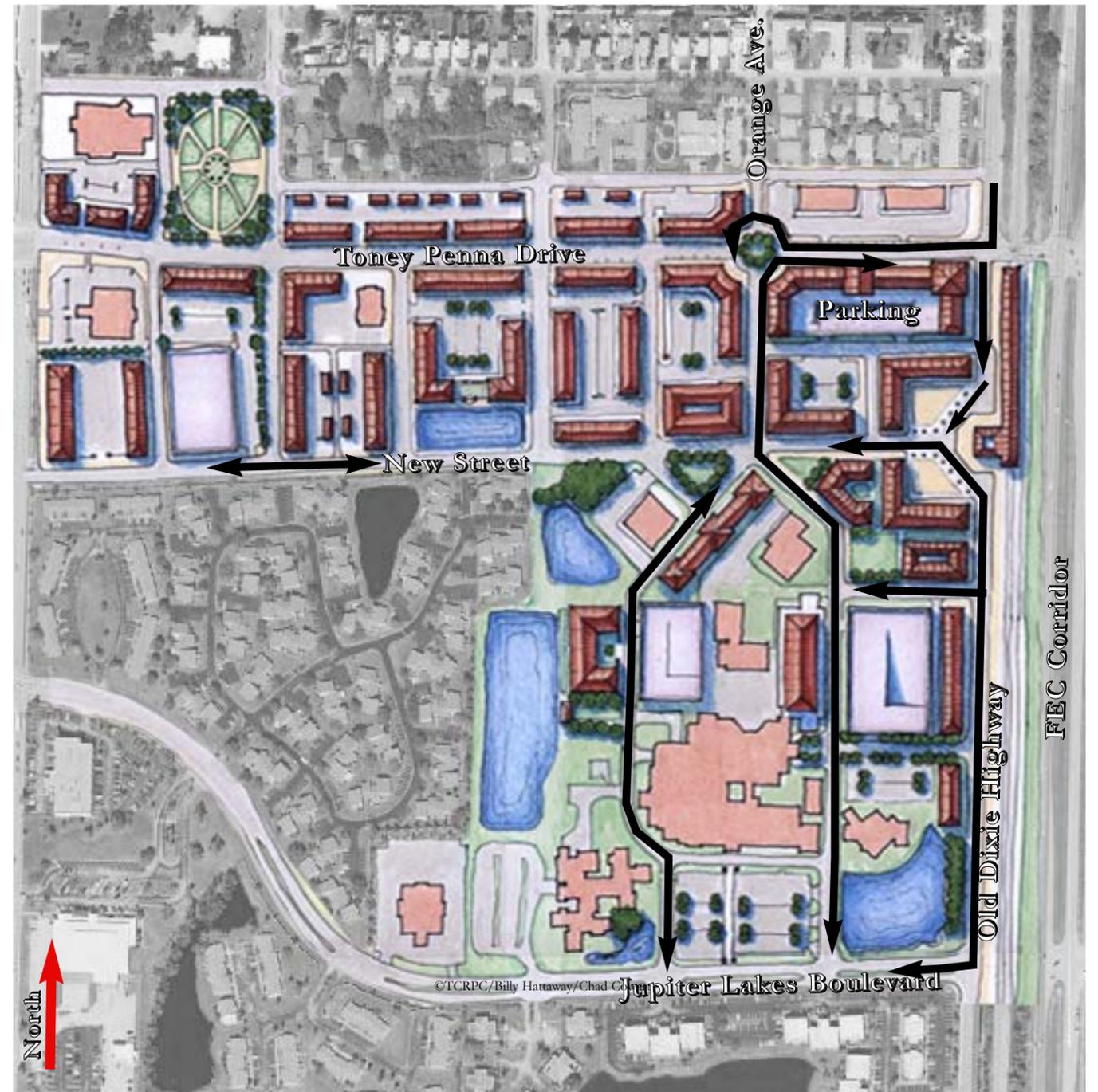
This street configuration resolves the conflicts that currently exist at the intersection of Toney Penna Drive and Old Dixie Highway, as previously discussed, and will improve traffic flows in the area by providing alternate travel routes.

The proposed transit station is located just south of Toney Penna Drive and is serviced by a new parking garage designed to support the station as well as retail and office uses within the mixed-use TOD district that surrounds it. As envisioned, the area east of Orange Avenue along Toney Penna Drive and south of Toney Penna Drive along Orange Avenue would have ground floor retail uses with office or residential above allowing the area to function as a neighborhood shopping and business center. Buildings are envisioned to average two to three stories east of Orange Avenue with elements that could reach four stories. West of Orange Avenue and away from the train station, buildings would average two stories.

Dividing the commercial/industrial area into smaller blocks provides greater flexibility in how the properties might redevelop and allows for very different use types to occur close to one another. The plan shows a variety of building types organized to form attractive streets. Buildings should have a front door and attractive face towards the street, but they could include workspace at the rear.

The plan also shows how the Jupiter Medical Center could easily expand by converting surface lots to structured parking and using the surplus land for new buildings. The recommended plan deliberately separates the new parking structure from the hospital with a street. A well-designed street will serve as attractive civic space and will not act as a barrier. Further, the street helps the function of the campus so access to it should not be blocked.

Jupiter Medical Center expressed concern about a street at this location and that the plan did not reflect their current redevelopment proposal for a parking structure at the north end of the campus. The plan was revised to better reflect the hospital's actual proposal.



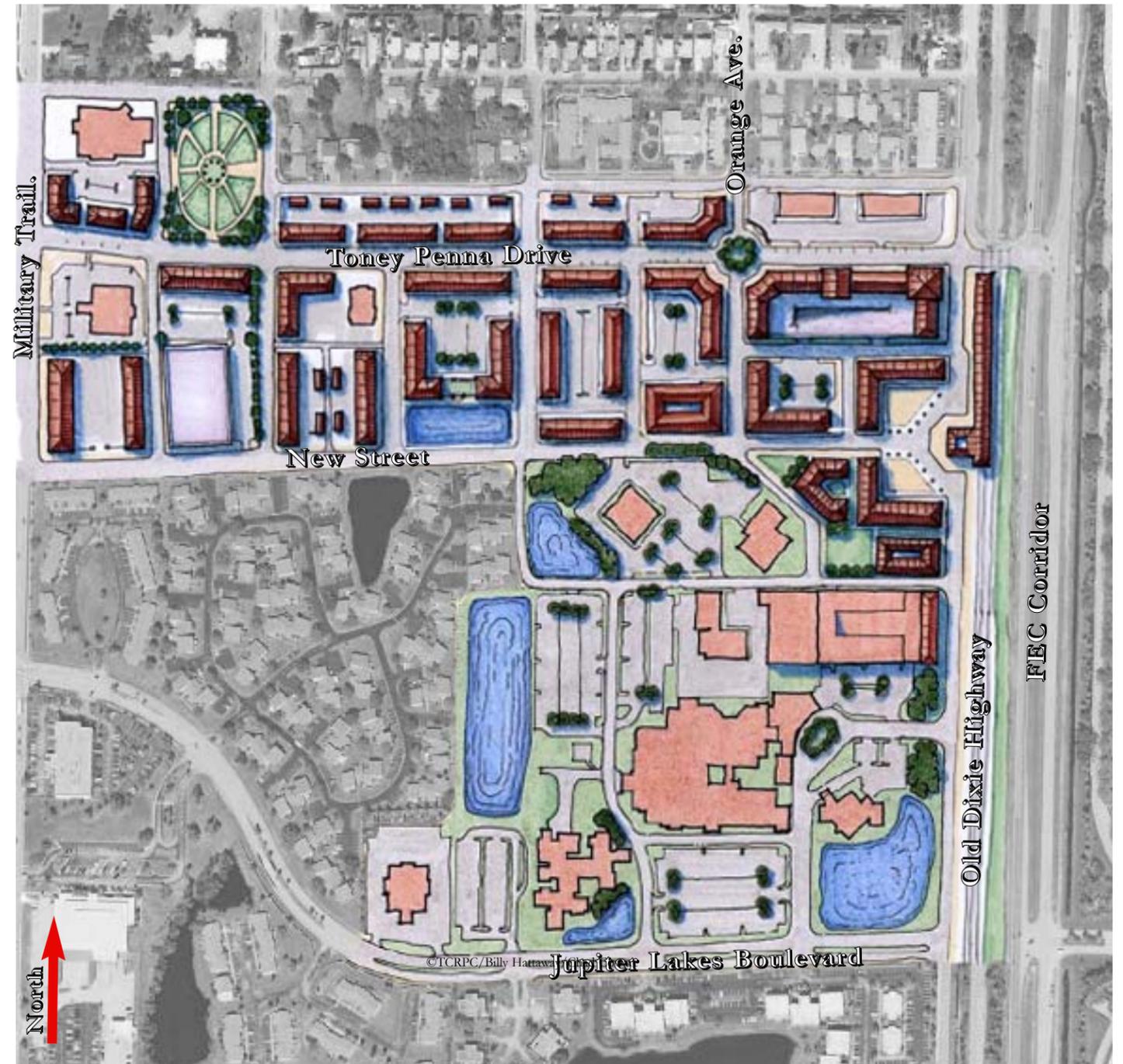
Original plan for Jupiter Medical Center and Toney Penna Drive

Revised Plan

As noted, Jupiter Medical Center raised some concerns during the charrette process regarding the idea of extending Orange Avenue through their campus south to Jupiter Lakes Boulevard and separating the proposed parking garage from the core area of the hospital. The plan to the right incorporates the preliminary concept for the hospital expansion. This plan is identical to the recommended plan except with regard to the hospital property.

Although under the revised plan it is still possible to resolve traffic conflicts that currently exist at the intersection of Toney Penna Drive and Old Dixie Highway, the hospital's pedestrian connectivity to the train station is diminished as the proposed parking garage acts somewhat as a barrier. It is important to note that if the garage is built at this location, every effort should be made to make the pedestrian experience through and around the garage as pleasant as possible. This would include the provision of wide sidewalks, street trees, and elegant detailing inside the garage connection between the hospital entry and the extension of Orange Avenue south.

The conceptual plan developed by Jupiter Medical Center for its campus was created prior to the charrette process and was not intended to reflect redevelopment opportunities outside of the Medical Center campus. That said, the hospital still remains connected to the TOD district and is vital in the overall redevelopment of the area. The Revised Plan, while conceptual in nature, does strive to accommodate current and future hospital development plans as well as illustrate the vital elements for connectivity with adjacent redevelopment parcels.



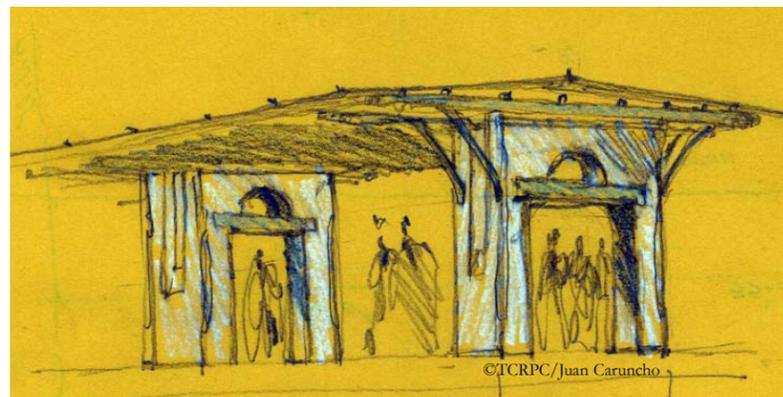
Revised plan for Jupiter Medical Center and Toney Penna Drive

The Station District as a Transit-Oriented Development

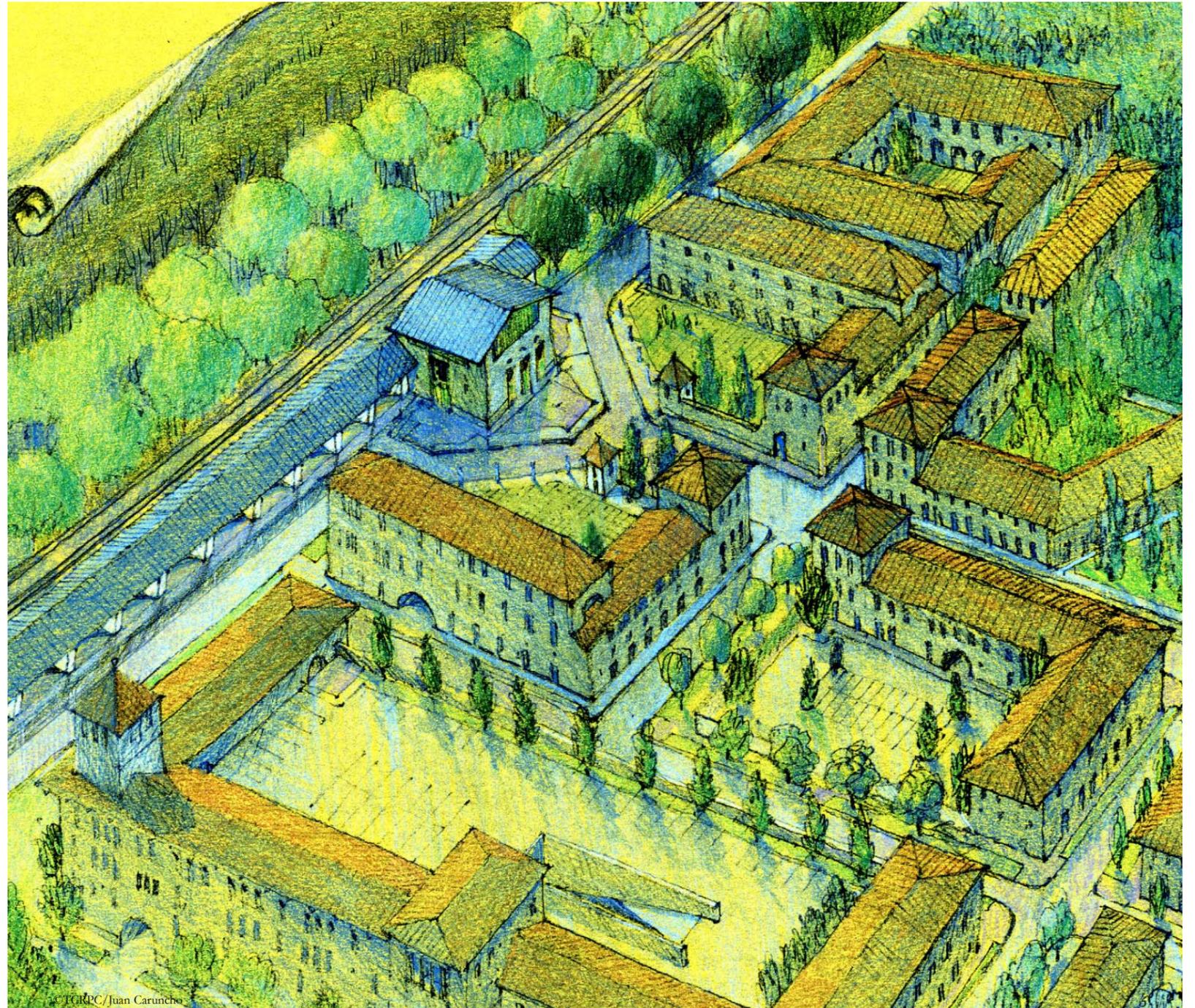
The blocks surrounding the proposed transit station just south of Toney Penna Drive should be redeveloped as TOD district. This model calls for a fairly compact and dense mix of uses within walking distance of the station, or a quarter of a mile.

As illustrated, the station should be designed as a beautiful civic centerpiece for the mixed-use district that surrounds it. Buildings of three to four stories would occur closest to the station and could include a mixture of office and residential uses with retail on the ground floor of the busiest pedestrian streets. Industrial uses do not typically occur within such districts unless they include a high density of employees.

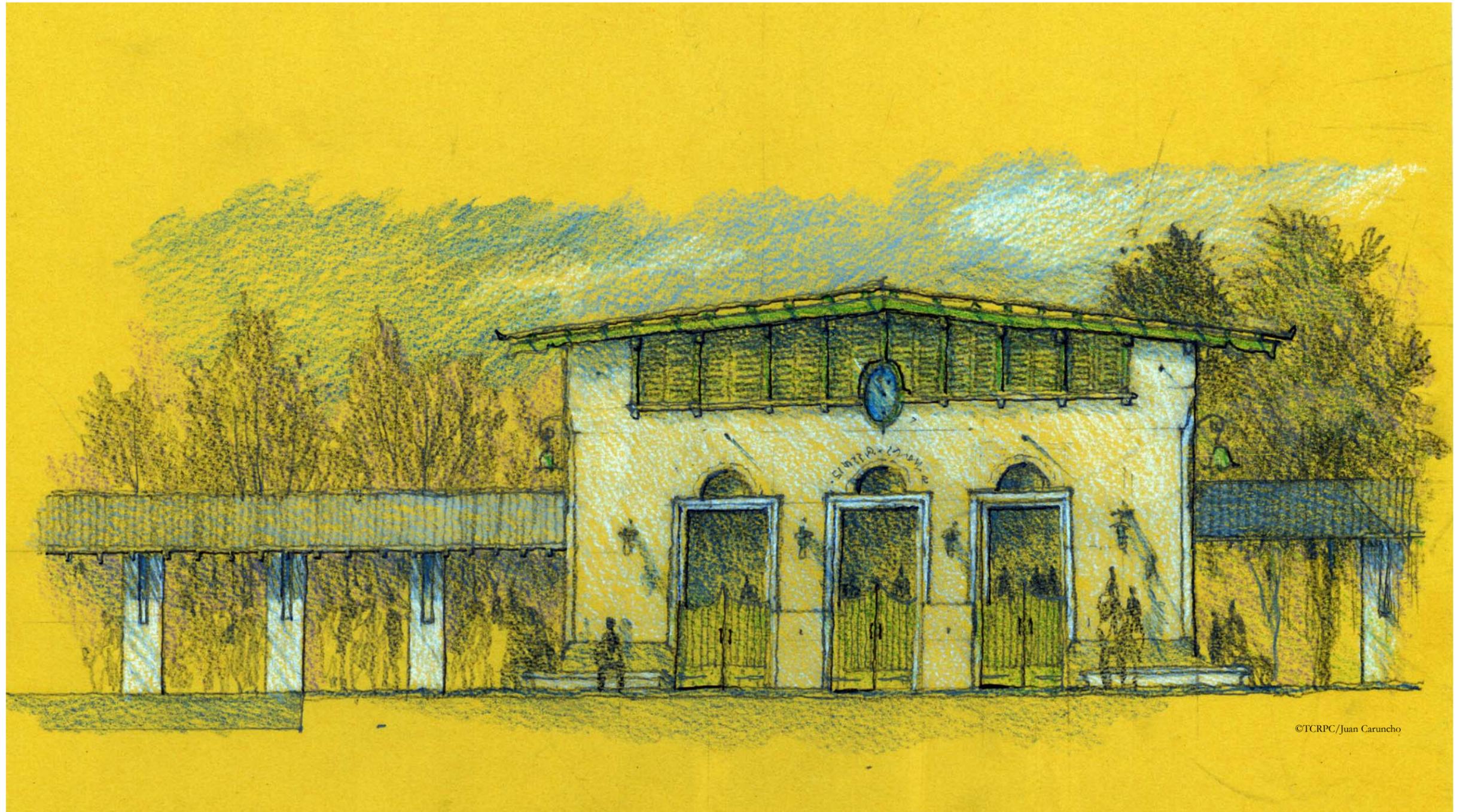
Structured parking is typical within TODs and supports both the transit station and the higher density of buildings that occur within the district. Care is taken in the design of the streets to ensure they provide an attractive pedestrian environment that encourages walking. It is important to note that every transit trips starts and ends with a pedestrian trip. Therefore, streets must be activated for the pedestrian and detailed attractively with wide sidewalks, street trees, pedestrian-scaled lighting, storefronts pulled up to the sidewalk, and parking hidden behind buildings away from the street face.



Detail of train platform



Aerial view of the proposed station and TOD at Jupiter Medical Center and Toney Penna Drive



Proposed design of the train station and platform as a beautiful civic structure that could serve as the centerpiece of the Jupiter Medical Center TOD district



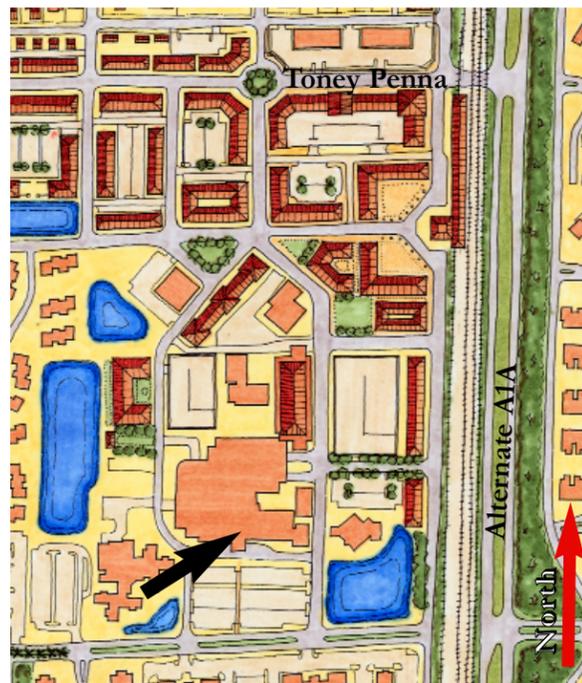
The image illustrates ultimate build-out of Alternate A1A. Simulation of the proposed transit station and surrounding blocks just south of Toney Penna Drive



Simulated view of Jupiter Medical Center from the south



View north along the proposed extension of Orange Avenue through the medical center



The angle of the view in the image above is looking north east across the Jupiter Medical Center. In the background (top of image) is the medical center's proposed structured parking deck with a new liner of occupied space just visible behind it. It is envisioned that building liners of habitable uses would be designed for at least the east side of this garage. The inclusion of liners would help activate the street, and the additional occupiable space could be additional professional offices for the hospital or residential apartments for staff.

Very wide sidewalks and on-street parking is recommended throughout the campus.



In the image above, on-street parking, street trees, pedestrian lighting, and wide sidewalks are shown along the proposed extension of Orange Avenue through the Jupiter Medical Center campus.

On the left in the above simulation is the existing hospital with the proposed parking garage to the east of the street. As noted, the parking garage should ideally be lined with office or residential uses on the side facing the street. This would help activate the street and make it more attractive for pedestrians. Active uses would also help slow traffic through the Jupiter Medical Center campus.

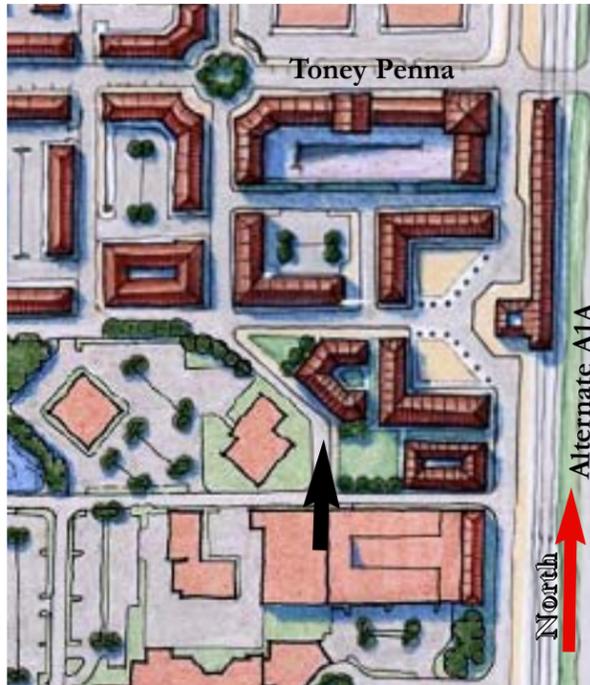
NOTE: These illustrations represent the continuation of Orange Drive directly into the hospital campus as suggested in the Original Plan.



View north along the southern extension of Orange Avenue



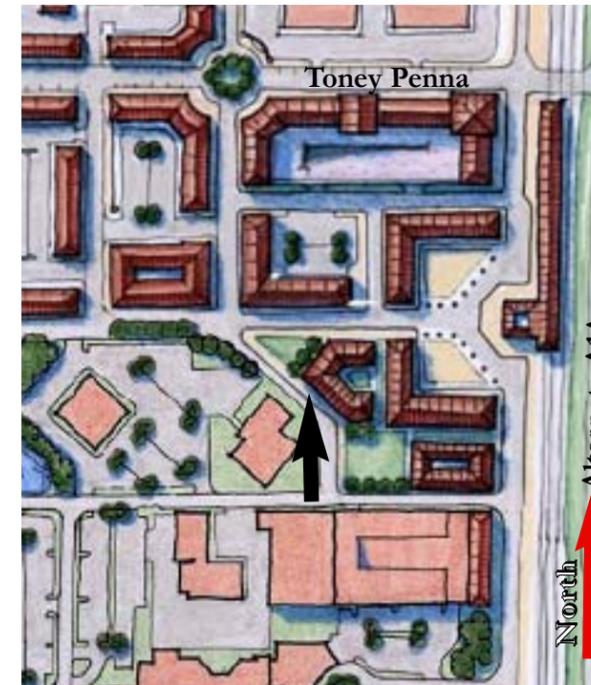
View north along the extension of Orange Avenue from the new hospital garage



In the image above, on-street parking and carefully designed landscape features help slow traffic through the campus of Jupiter Medical Center.

As noted, the wide sidewalks for pedestrians should ideally be complemented with canopy trees to provide shade, shelter, and further constriction of the street. A continuous planting of shade trees helps to enclose the space of the street along with the proper height of facing buildings. This enclosure makes the space feel like an outdoor room and calms and slows traffic. The more the street space is treated like an outdoor living room, the better cars will behave.

In the distance at the termination of the vista, the same image shows a building that is part of the mixed-use retail portion of the neighborhood center clustered around the train station.



Buildings close to this transit station should average three stories in height and have higher density than might be appropriate in other areas of Jupiter. Higher densities maximize the number of people living and working close to transit and help increase ridership.

A small public green and plaza occur on the right side of the street. The wide sidewalks, plazas, and greens help to make the street feel like public space, and they should be provided with street furnishings such as benches and fountains.

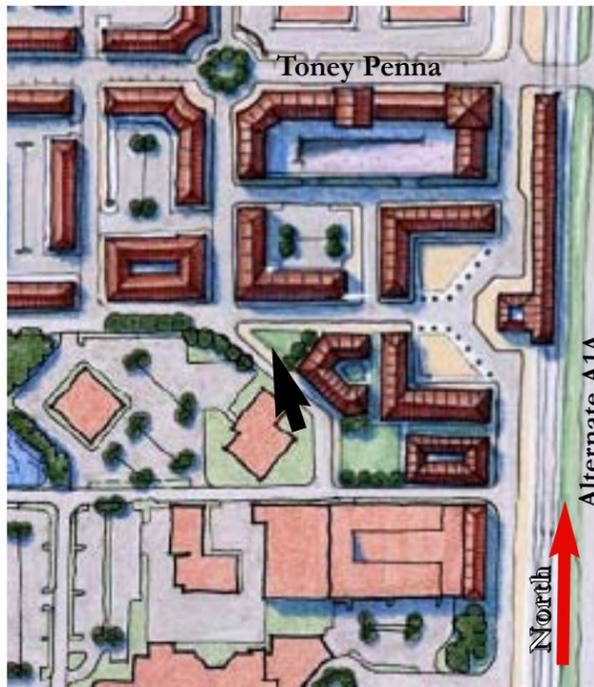
The medical center district with the expectation of a train station and the most meaningful TOD opportunity in Jupiter should represent significantly increased property values. Further, it has the highest and most concentrated employment base (hospital and existing and proposed medical offices).



View north on the extension of Orange Avenue towards the new street

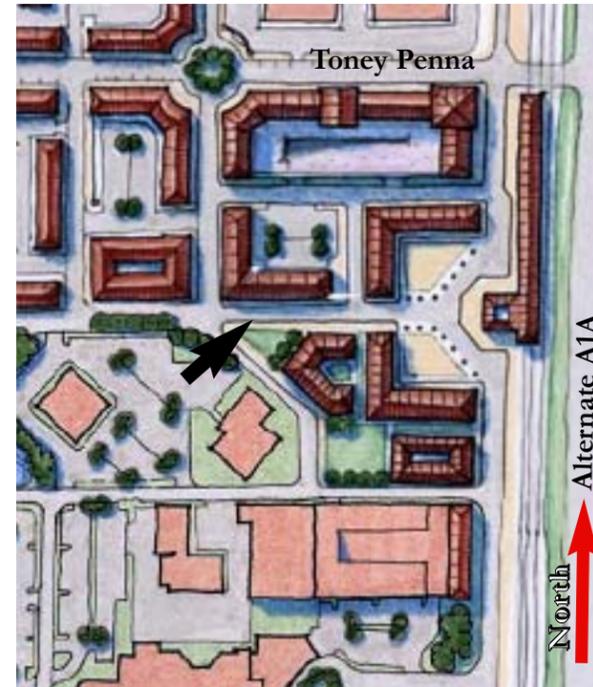


View across the plaza at the intersection of Orange Avenue and the new street



Density should be maximized close to the transit station. The buildings illustrated above are representative of the minimum densities that should occur close to a station. Uses could include office, workplace, or residential with the ideal residential uses being rental apartments or workforce housing. Service-oriented retail should be in key locations.

Interestingly, one of easiest ways to make housing more affordable is to reduce the necessity of having to own and operate multiple automobiles per household. The cost of owning and operating a single vehicle can cost as much in monthly payments as an additional \$50,000 to \$100,000 mortgage. Money saved from car ownership and maintenance could be put toward a mortgage.



The proposed plaza would be surrounded by retail uses at the ground floor, particularly by uses that generate a lot of pedestrian traffic and street activity. Cafes, ice cream shops, restaurants with outdoor seating, and newsstands/sundry shops are examples of appropriate uses.

People are attracted to spaces that are full of people and avoid spaces that are perceived as having minimal human activity. Except in dense urban areas, it is therefore important that plazas and greens not be oversized, or there will never be enough activity for the space to feel comfortable and alive.

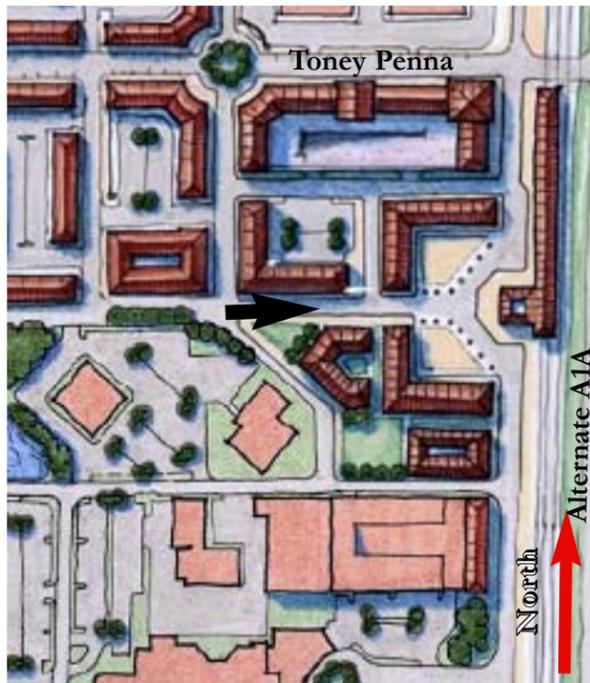
Spaces can also be programmed with activities and attractions such as fountains, but the best spaces are activated by heavily trafficked uses surrounding an appropriately-scaled space.



View east along the New Street toward the proposed transit station



View of the proposed transit station and its associated plaza



The train station has been deliberately located to terminate the vista looking east on the new street. If the station is built as a beautiful civic building, it will help to create a desirable address for the entire street and will help maintain or ensure strong property values.

Generally, not enough attention is paid to the architecture and quality of civic buildings. Great buildings create value for surrounding properties and provide residents with a sense of pride in place. This was well understood by George Merrick, the developer of Coral Gables, Florida. In Coral Gables, great civic buildings and gateways were built even before people began to construct homes as a way of encouraging land sales. These investments helped Merrick sell lots and assured Coral Gables would become one of the great locations in Florida.



The proposed plaza should be surrounded by a variety of uses including retail shops and restaurants with outdoor seating. Uses above the ground floor could include office or residential apartments. Residential uses should be encouraged within the mix because they generate activity at different hours of the day and evening than shops and office uses.

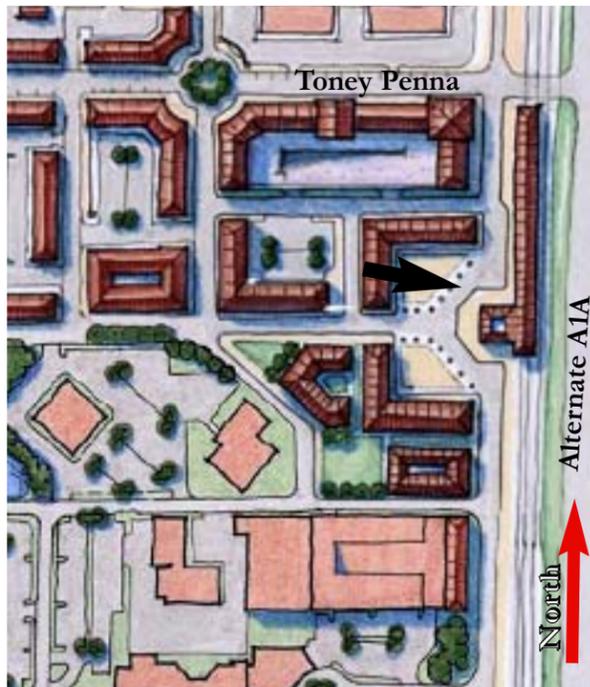
Since this particular plaza is designed to accommodate cars, buses, pedestrians, and bicycles, it is important that it be designed to naturally calm vehicle traffic. Heavy bollards should separate vehicle and pedestrian portions of the space, and rough cobblestone pavers are recommended on the street within the plaza to discourage all but the slowest vehicle and bicycle speeds. Trees and vegetation should be of a type that will not block the views of either pedestrians or drivers.



Close view of the transit station and street with the street as a plaza

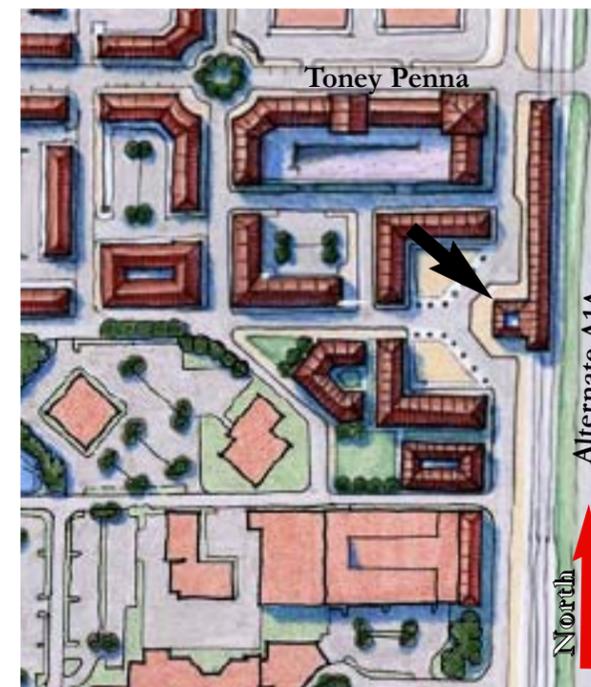


View of the proposed transit station



The rough cobblestone pavers surrounding the proposed station building are designed to both decorate the civic space as well as slow vehicle traffic. The slowing of traffic is not just from the roughness of the pavement, but drivers are also signaled that they have entered an important public place where vehicles must behave.

The transit vehicles shown in the background are similar to those used by Tri-Rail. The actual vehicle type that will be used to service the proposed system has not been chosen. Consideration is being given to a system similar to that used by Tri-Rail as well as light rail, bus rapid transit, and other options.

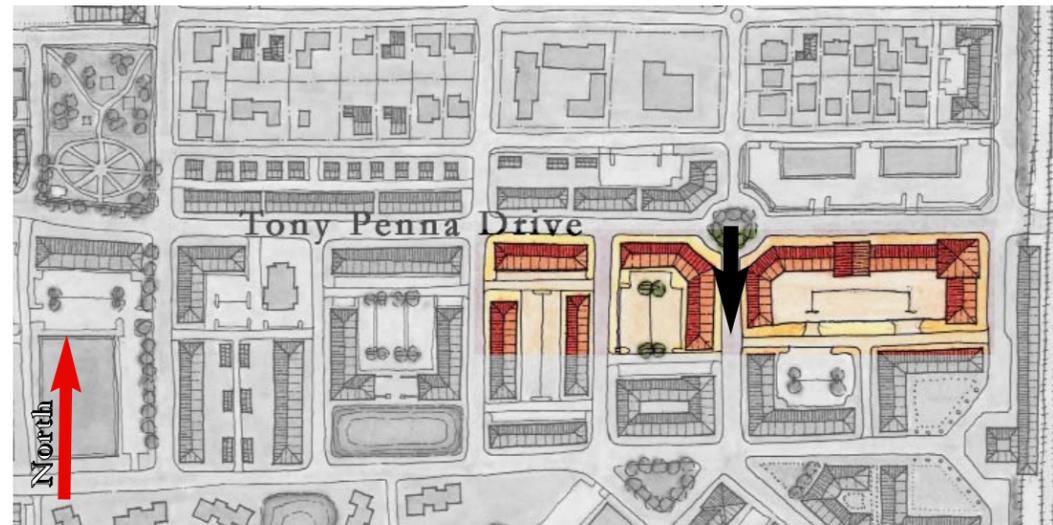


Throughout the FEC Corridor, station designs should vary from location to location and be tailored to the neighborhoods and districts they will serve. The design above is appropriate for a town center type station and includes ample sheltered waiting areas, restrooms, and ticketing facilities. Such a facility might also include bike rentals, storage lockers for bikes, scooters, and "flex-cars" or similar hourly/daily vehicle rentals.

The proposed station at Toney Penna Drive is within bicycle or walking distance of a large number of residential neighborhoods and businesses including the Jupiter Medical Center.



Elevation of the first three blocks on the south side of Toney Penna Drive. Left to right corresponds to east to west along the street. The largest buildings are those closest to the transit station to the east, and buildings become shorter as they move west away from the station towards the more residential section of the street.



Southeastern portion of Toney Penna Drive Frontage

The elevation at the top of the page illustrates the recommended redevelopment concept along Toney Penna Drive. The largest buildings should be located closest to the FEC Corridor and gradually step down as they move west along Toney Penna Drive. In the first block west of the FEC Corridor, buildings of three to five stories shield a shared parking garage. The building has a varied height with occasional tower elements to break up its massing and prevent it from looking like a large box. In the second block, the mixed-use building is proposed at three stories transitioning to townhouses at two or three stories to the west.

The drawing to the right looks south along the proposed extension of Orange Avenue from the proposed traffic circle at the intersection of Orange Avenue and Toney Penna Drive.



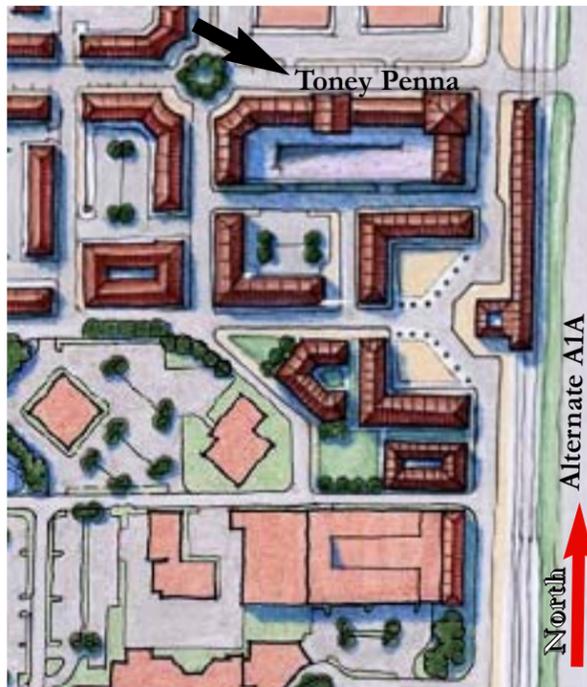
View from proposed traffic circle south along the extension of Orange Avenue



View of the south side of Toney Penna Drive approaching the FEC corridor crossing



View of the boarding platform just south of Toney Penna Drive

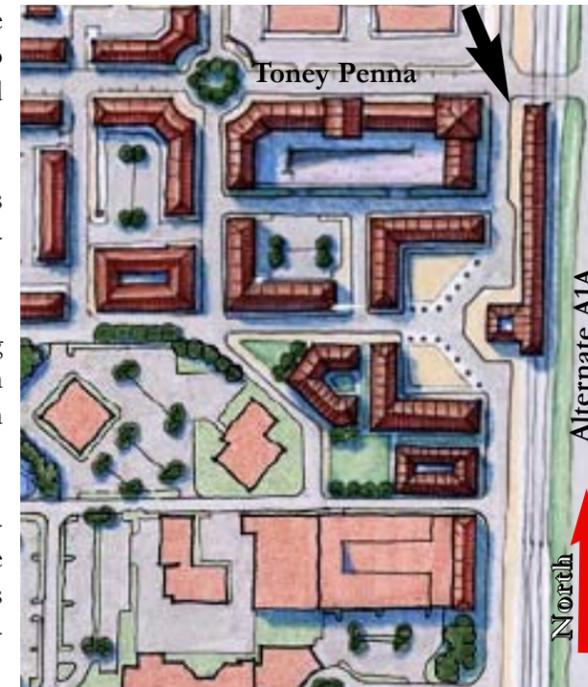


The proposed building at the corner of Old Dixie Highway and Toney Penna Drive is envisioned to include retail uses and storefronts on the ground floor with office or residential uses above.

The building conceals a parking garage that serves users of the building, the transit station, and perhaps other buildings in the district.

The building is illustrated as a four-story building with taller tower elements. This would be an appropriately scaled building for its location immediately adjacent to a transit station.

Toney Penna Drive is shown as a three-lane facility with on-street parking on both sides of the street. On-street parking is critical to the success of retail uses with each space contributing significantly to annual sales.



Whenever possible, the boarding platforms are located adjacent to a street crossing. This provides pedestrians the opportunity to access the platform without having to use an elevated crossing of the rail lines.

The platform has been designed to match the architectural character of the proposed redevelopment area and should, in all cases, be constructed beautifully as civic architecture.

Uses such as Burger King or other fast food restaurants, which may typically be associated with suburban drive through configurations also exist as storefront uses in many urban areas. A suburban design at this location would destroy the fabric and character of the area as a pedestrian environment.



Detail of the proposed building at the corner of Old Dixie Highway and Toney Penna Drive showing the at-grade access to the boarding platform



Detail of the north portion of the proposed transit station with what was formerly Old Dixie Highway transformed into a one-way, bus and vehicle access drive.

TONEY PENNA DRIVE REDEVELOPMENT

Block A

- # Acres: 2.7
- DU/Acre: 14

Building	Foot Print	#of Stories	D/U
1	16,000 Sq/ft.	4st. Mixed Use	40

Total D/U: 40

Block E

- # Acres: 3.4
- DU/Acre: 25

Building	Foot Print	#of Stories	D/U
14	16,200 Sq/ft.	3st. Mixed Use	27
15	12,000 Sq/ft.	3st. Residential	30
16	12,000 Sq/ft.	3st. Residential	30

Total D/U: 87

Block B

- # Acres: 5.3
- DU/Acre: 25

Building	Foot Print	#of Stories	D/U
2	1,700 Sq/ft.	4st. Mixed Use	42
3	6,400 Sq/ft.	4st. Mixed Use	16
4	6,000 Sq/ft.	4st. Mixed Use	15
5	8,400 Sq/ft.	4st. Mixed Use	21
6	4,900 Sq/ft.	4st. Mixed Use	12
7	18,600 Sq/ft.	3st. Mixed Use	31

Total D/U: 137

Block F

- # Acres: 3.3
- DU/Acre: 25

Building	Foot Print	#of Stories	D/U
17	12,000 Sq/ft.	3st. Mixed Use	20
18	13,000 Sq/ft.	3st. Residential	32
19	13,000 Sq/ft.	3st. Residential	32

Total D/U: 84

Block C

- # Acres: 2.3
- DU/Acre: 41

Building	Foot Print	#of Stories	D/U
8	19,800 Sq/ft.	3st. Mixed Use	33
9	25,200 Sq/ft.	3st. Residential	63

Total D/U: 96

Block G

- # Acres: 6.8
- DU/Acre: 14

Building	Foot Print	#of Stories	D/U
20	12,000 Sq/ft.	3st. Mixed Use	20
21	15,600 Sq/ft.	3st. Residential	39
22	15,600 Sq/ft.	3st. Residential	39

Total D/U: 98

Block D

- # Acres: 2.5
- DU/Acre: 38

Building	Foot Print	#of Stories	D/U
10	12,000 Sq/ft.	3st. Mixed Use	20
11	10,500 Sq/ft.	3st. Residential	26
12	15,000 Sq/ft.	3st. Residential	26
13	10,000 Sq/ft.	3st. Residential	25

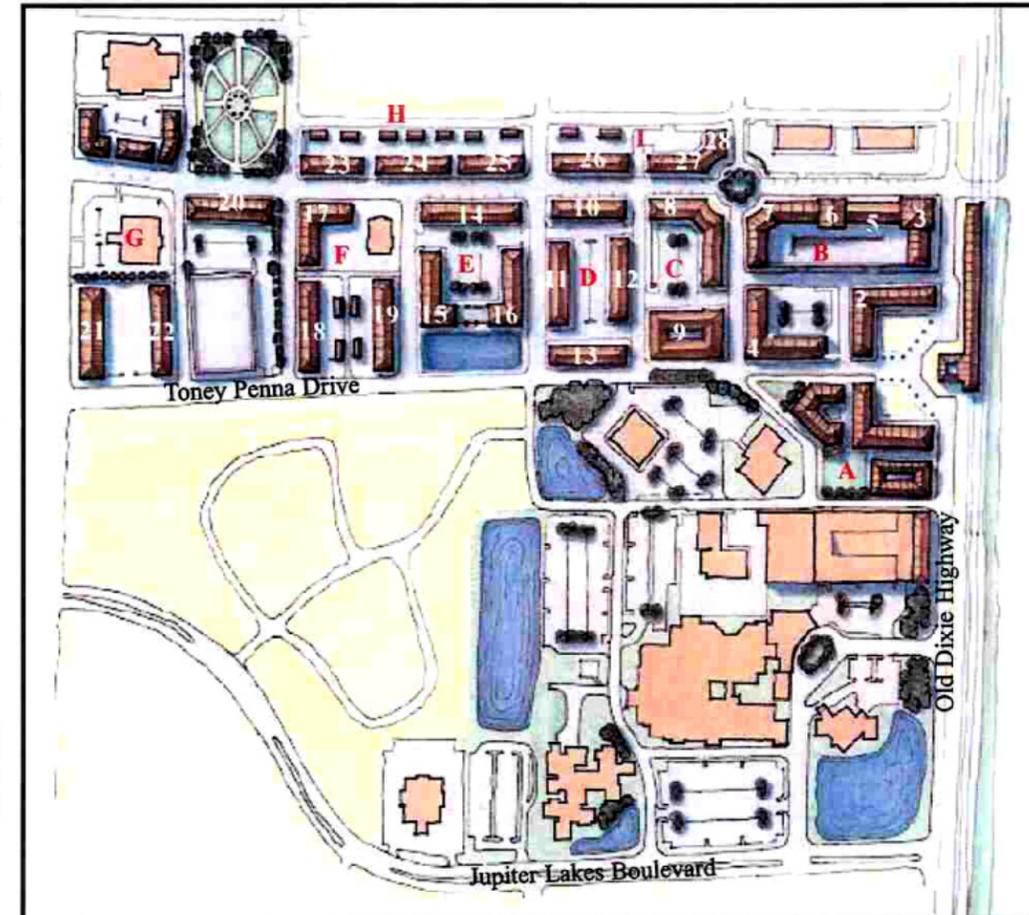
Total D/U: 97

Block H

- # Acres: 2
- DU/Acre: 16

Building	Foot Print	#of Stories	D/U
23	8,000 Sq/ft.	Rowhouse + Garage Apt	6+3=9
24	12,000 Sq/ft.	Rowhouse + Garage Apt	6+3=9
25	8,000 Sq/ft.	Rowhouse + Garage Apt	6+3=9

Total D/U: 27



Block I

- # Acres: 1.6
- DU/Acre: 23

Building	Foot Print	#of Stories	D/U
26	7,500 Sq/ft.	2st. Residential	12
27	6,500 Sq/ft.	2st. Residential	10
28	10,000 Sq/ft.	3st. Mixed Use	16

Total D/U: 38

Block J

- # Acres: 2.9
- DU/Acre: 7

Building	Foot Print	#of Stories	D/U
29	13,000 Sq/ft.	3st. Mixed Use	21

Total D/U: 21

Toney Penna Drive Area Totals

- Total # Acres: 32.8
- Total # D/U: 725
- Total DU/Acres: 22.1

Attachment E

These density calculations are based upon the designs of the Jupiter TOD Charrette Citizens' Master Plan and are intended to inform any Comprehensive Plan and Land Development Regulations modifications the Town pursues in order to implement the charrette recommendations.

INDIANTOWN ROAD/ ALTERNATE A1A REDEVELOPMENT

Block A

- # Acres: 2.8
- DU/Acre: 20

Building	Foot Print	# of Stories	D/U
1	23,400 Sq/ft.	3st. Mixed Use	39
2	6,500 Sq/ft.	3st. Mixed Use	10
4	5,000 Sq/ft.	3st. Mixed Use	8

Total D/U: 57

Block B

- # Acres: 1.6
- DU/Acre: 46

Building	Foot Print	# of Stories	D/U
5	6,000 Sq/ft.	3st. Residential	15
6	6,000 Sq/ft.	3st. Residential	15
7	17,600 Sq/ft.	3st. Residential	44

Total D/U: 74

Block C

- # Acres: 2.9
- DU/Acre: 45

Building	Foot Print	# of Stories	D/U
8	32,500 Sq/ft.	3st. Residential	81
9	14,700 Sq/ft.	3st. Residential	36
10	6,000 Sq/ft.	3st. Residential	15

Total D/U: 132

Block D

- # Acres: 2.3
- DU/Acre: 28

Building	Foot Print	# of Stories	D/U
11	10,800 Sq/ft	3st. Residential	27
12	10,800 Sq/ft.	3st. Residential	27
13	15,000 Sq/ft	Townhouse	12

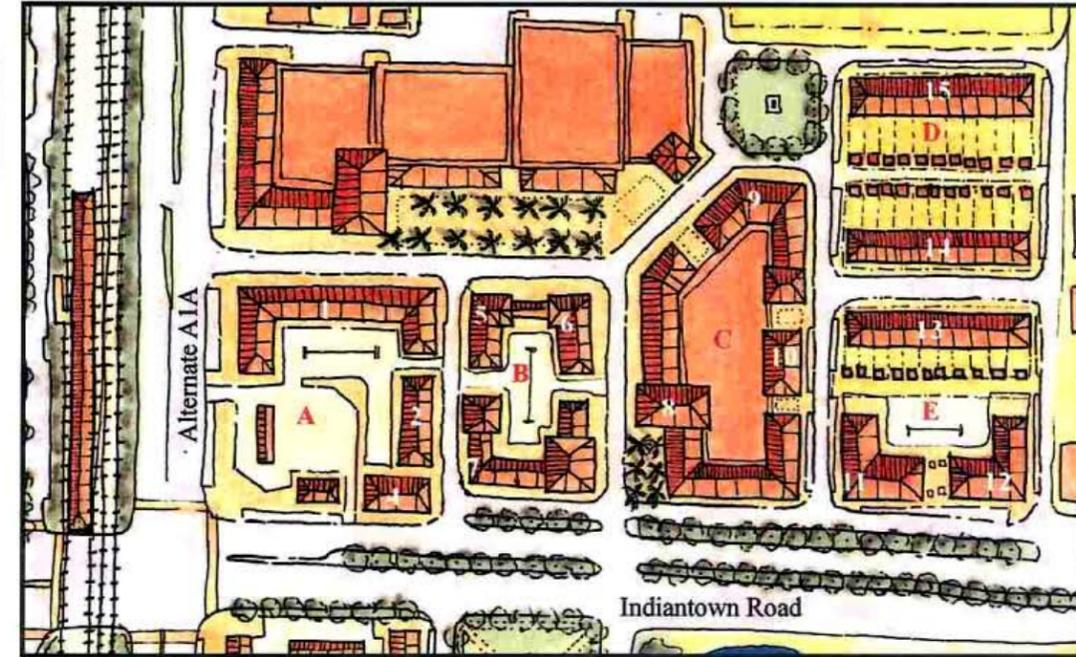
Total D/U: 66

Block E

- # Acres: 2.3
- DU/Acre: 9

Building	Foot Print	# of Stories	D/U
14	15,000 Sq/ft	Townhouse	12
15	15,000 Sq/ft	Townhouse	12

Total D/U: 24



Indiantown Road/Alternate A1A

Area Totals

- Total # Acres: 20.2
- Total # D/U: 353
- Total DU/Acres: 17.5

These density calculations are based upon the designs of the Jupiter TOD Charrette Citizens' Master Plan and are intended to inform any Comprehensive Plan and Land Development Regulations modifications the Town pursues in order to implement the charrette recommendations.

WHITE HAVEN AND WOOD DUCK REDEVELOPMENT

Block A

- # Acres: 2
- DU/Acre: 23

Building	Foot Print	#of Stories	D/U
1	13,500 Sq/ft.	3st. Mixed Use	22
2	7,500 Sq/ft.	2st. Residential	12
3	7,500 Sq/ft.	2st. Residential	12

Total D/U: 46

Block B

- # Acres: 1.9
- DU/Acre: 10

Building	Foot Print	#of Stories	D/U
4		Single Family	19

Total D/U: 19

Block C

- # Acres: 2
- DU/Acre: 26

Building	Foot Print	#of Stories	D/U
5		Single Family	36
6	9,000 Sq/ft	2st. Residential	15

Total D/U: 51

Block D

- # Acres: 3
- DU/Acre: 38

Building	Foot Print	#of Stories	D/U
7	16,000 Sq/ft.	3st. Residential	40
8	7,500 Sq/ft.	3st. Residential	18
9	7,500 Sq/ft.	3st. Residential	18
10	16,000 Sq/ft.	3st. Residential	40

Total D/U: 116

Block E

- # Acres: 1.3
- DU/Acre: 25

Building	Foot Print	#of Stories	D/U
11	10,000 Sq/ft	2st. Residential	16
12	6,650 Sq/ft.	2st. Residential	5
13	14,800 Sq/ft.	2st. Residential	12

Total D/U: 33

Block F

- # Acres: 2
- DU/Acre: 9

Building	Foot Print	#of Stories	D/U
14		Single Family	18

Total D/U: 18

Block G

- # Acres: 2.2
- DU/Acre: 17

Building	Foot Print	#of Stories	D/U
15		Single Family	38

Total D/U: 38

Block H

- # Acres: 1.2
- DU/Acre: 25

Building	Foot Print	#of Stories	D/U
16	4,000 Sq/ft.	2st. Residential	6
17	6,400 Sq/ft.	2st. Residential	10
18	9,000 Sq/ft.	2st. Residential	15

Total D/U: 31

Block I

- # Acres: 1.3
- DU/Acre: 10

Building	Foot Print	#of Stories	D/U
19	3,600 Sq/ft.	2st. Residential	6
20	5,000 Sq/ft	2st. Residential	8

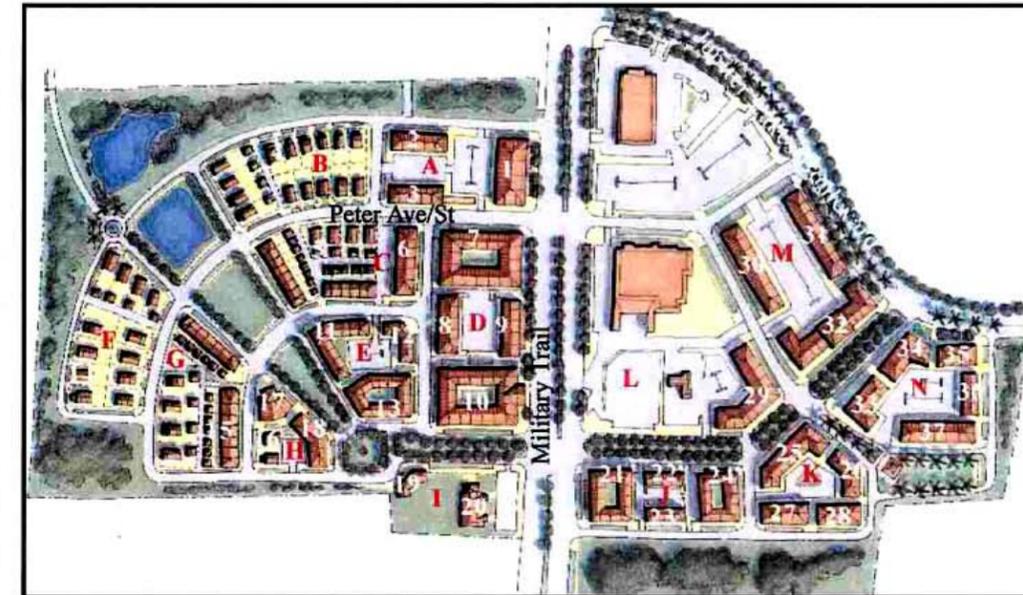
Total D/U: 14

Block J

- # Acres: 1.6
- DU/Acre: 57

Building	Foot Print	#of Stories	D/U
21	14,400 Sq/ft.	3st. Residential	36
22	4,000 Sq/ft	3st. Residential	10
23	4,000 Sq/ft	3st. Residential	10
24	14,400 Sq/ft.	3st. Residential	36

Total D/U: 92



Block M

- # Acres: 3
- DU/Acre: 40

Building	Foot Print	#of Stories	D/U
30	12,500 Sq/ft.	3st. Residential	31
31	12,500 Sq/ft.	3st. Residential	31
32	23,200 Sq/ft.	3st. Residential	58

Total D/U: 120

Block K

- # Acres: 2
- DU/Acre: 42

Building	Foot Print	#of Stories	D/U
25	12,500 Sq/ft	3st. Residential	31
26	6,000 Sq/ft.	3st. Residential	15
27	7,800 Sq/ft.	3st. Residential	19
28	7,800 Sq/ft.	3st. Residential	19

Total D/U: 84

Block L

- # Acres: 6.2
- DU/Acre: 6

Building	Foot Print	#of Stories	D/U
29	16,800 Sq/ft.	3st. Residential	42

Total D/U: 42

Block N

- # Acres: 2.7

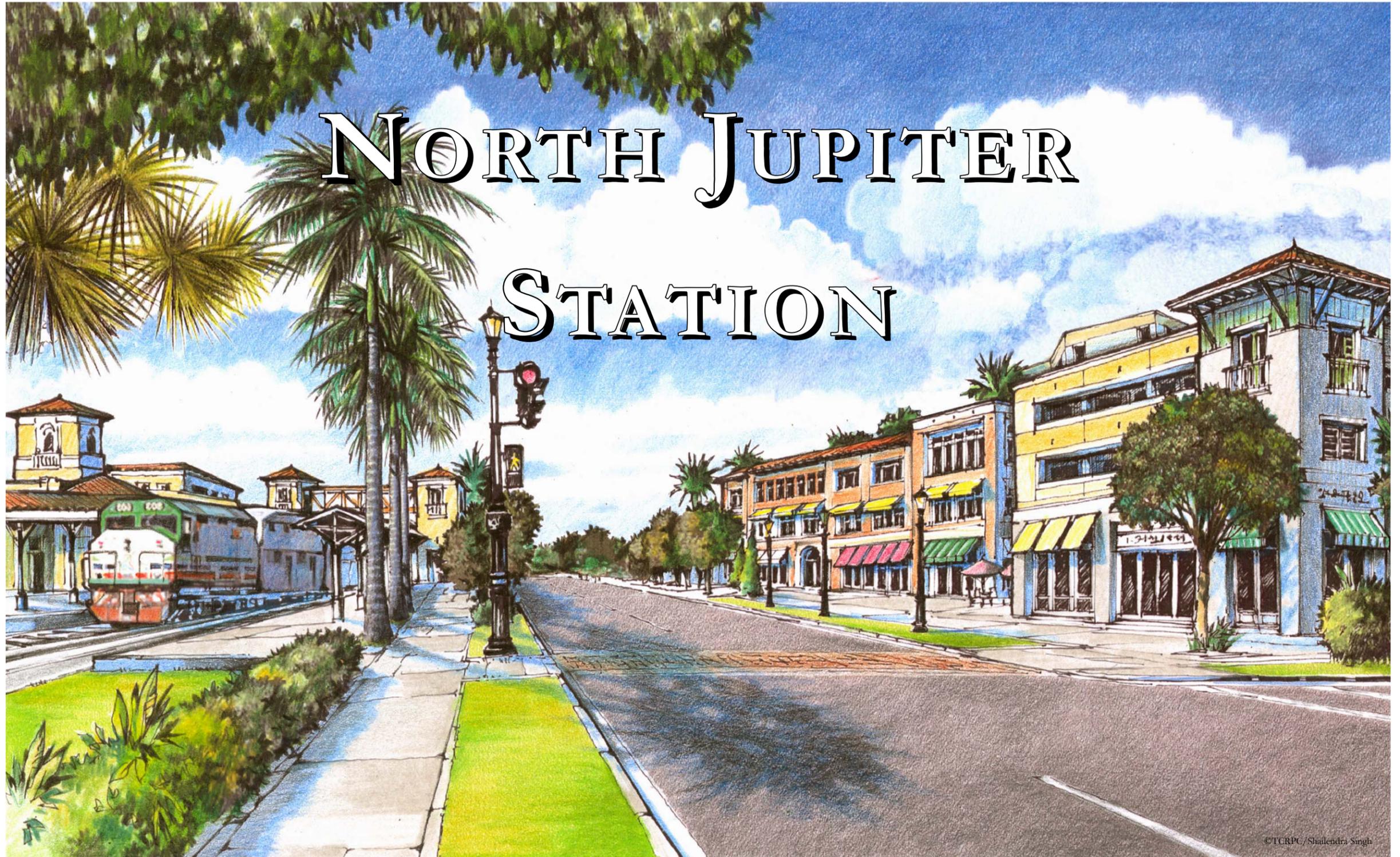
Building	Foot Print	#of Stories	D/U
33	9,700 Sq/ft.	3st. Residential	24
34	7,200 Sq/ft	3st. Residential	18
35	6,000 Sq/ft.	3st. Residential	15
36	5,500 Sq/ft.	3st. Residential	13
37	9,000 Sq/ft.	3st. Residential	22

• DU/Acre: 34  
Total D/U: 92

White Haven and Wood Duck Area Totals

- Total # Acres: 42.1
- Total # D/U: 738
- Total DU/Acres: 17.5

These density calculations are based upon the designs of the Jupiter TOD Charrette Citizens' Master Plan and are intended to inform any Comprehensive Plan and Land Development Regulations modifications the Town pursues in order to implement the charrette recommendations.



# NORTH JUPITER STATION

©TCRPC/Shalendra Singh

T R E A S U R E C O A S T R E G I O N A L P L A N N I N G C O U N C I L  
I N D I A N R I V E R - S T . L U C I E - M A R T I N - P A L M B E A C H

## NORTH JUPITER STATION

In its initial phase of implementation, transit service within the FEC Corridor is not planned to be extended north of the Loxahatchee River primarily due to the cost of bridging the river. As a result, an end of line station is proposed somewhere south of the Loxahatchee River.

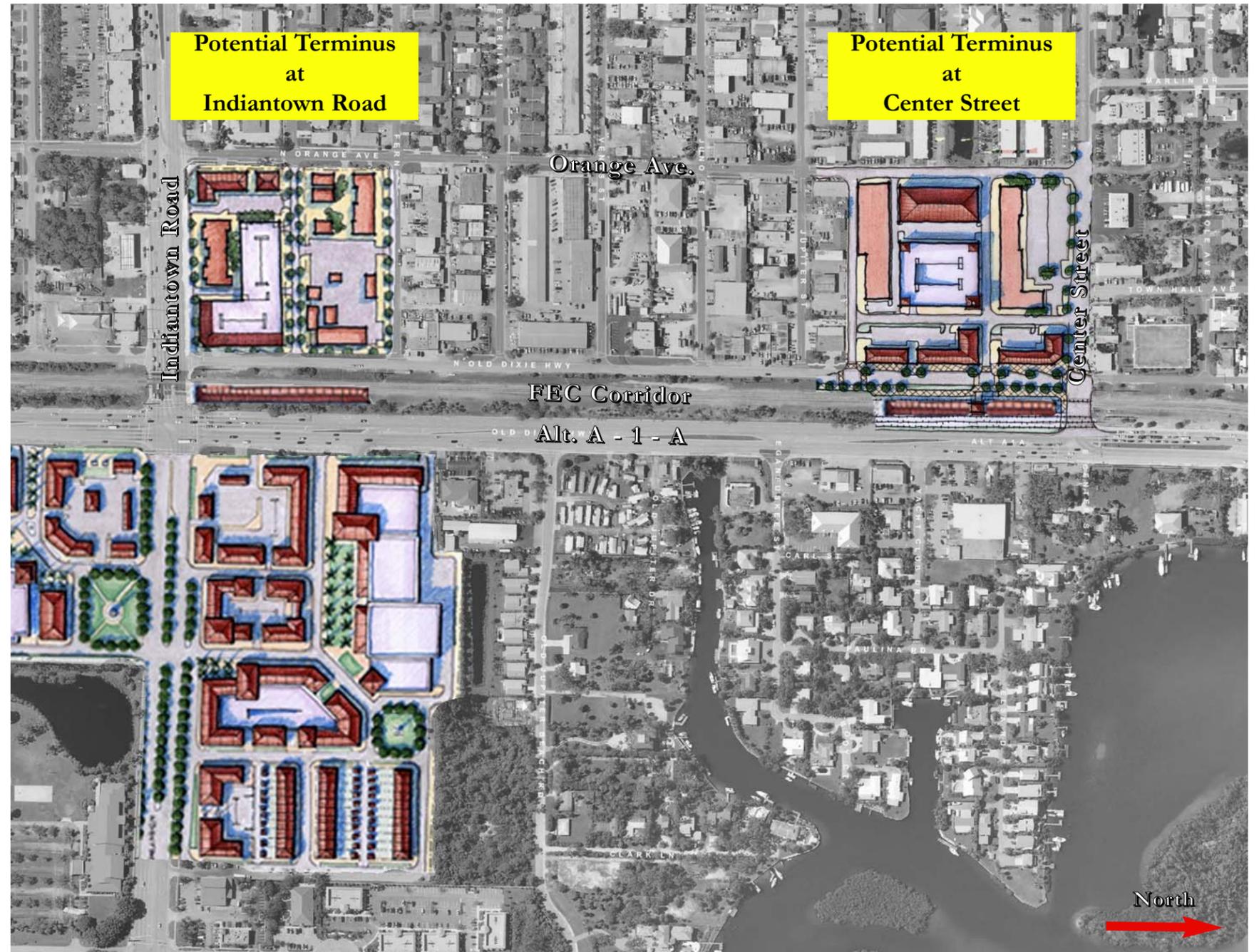
At the terminus, trains will be held overnight until commencement of service the following day. Terminus stations require enough room to stack trains overnight and should have the potential to be park-and-ride stations since the terminus can be a good place for commuters to catch morning trains heading south.

Two locations were evaluated during the charrette process as possible terminus stations. The most northerly location was at Center Street. The second was slightly to the south at Indiantown Road.

As potential terminus stations, both locations have the potential to store trains and provide parking. However, there are several limiting and negative factors at the Center Street location. The grade changes that occur north of Center Street as the lands falls towards the river, the curvature of the track at this point, and train storage would need to occur next to a residential neighborhood. These factors reduce the attractiveness and function of the Center Street location.

In comparison, Indiantown Road has far improved storage conditions with more than 2,500 feet of uninterrupted rail line next to an industrial use. The site can also be easily accessed by park-and-ride commuters. With the eventual redevelopment of the shopping plazas east of Alternate A1A, this location has the potential to evolve into a true TOD.

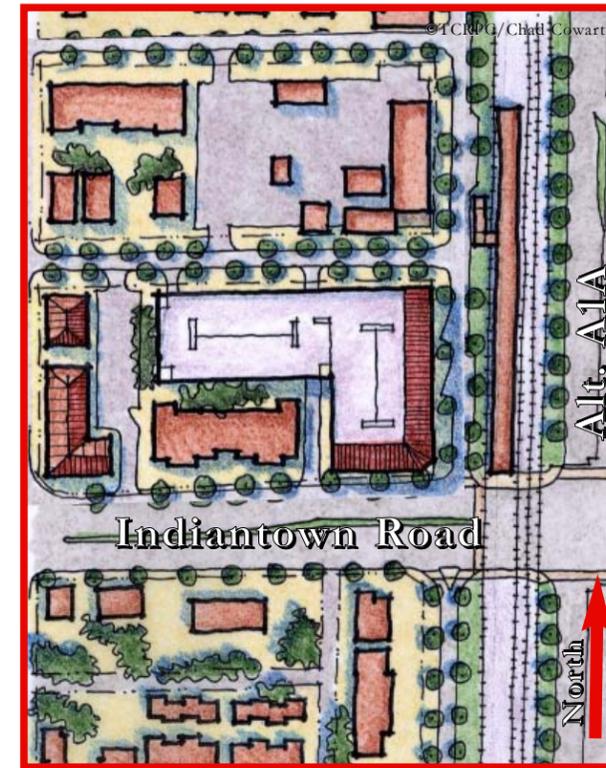
As a result, the Citizens' Master Plan recommends that the terminus station be located just north of Indiantown Road.



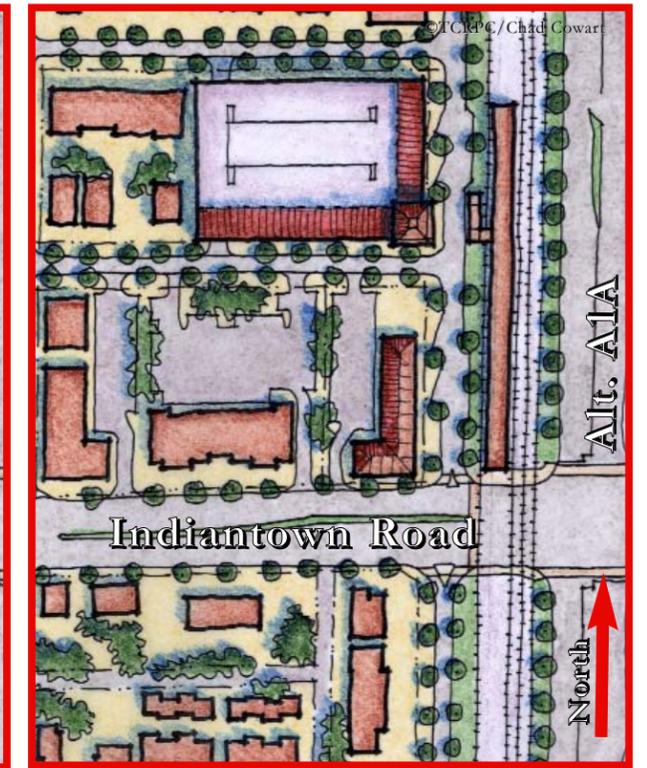
Potential terminus station locations at Indiantown Road and Center Street



Existing conditions at Indiantown Road proposed terminus site



Station Design Option A



Station Design Option B

**The Indiantown Road Terminus Location**

As already noted, locating the transit terminus station at Indiantown Road has a number of advantages. The location has more than 2,500 feet of storage space for overnight trains. The storage area is straight and level. Storage would take place adjacent to an industrial area without impact to residential neighborhoods. The site provides at least two relatively simple options for construction of a park-and-ride garage with either option able to accommodate between 400 and 600 parking spaces. The site can be easily accessed and has the potential to serve a broad area given its location at the corner of Alternate A1A and Indiantown Road. The site can be accessed by pedestrians from a nearby neighborhood. Finally, the location has the potential to evolve into a true TOD district if the shopping areas immediately adjacent to the site and east of A1A are redeveloped in such a format.

In its existing condition, the site is somewhat sparsely populated with industrial buildings, a few of which would need to be demolished to accommodate the station and garage. The site would be surrounded by industrial buildings when completed, and therefore, the garage would not impact single-family homes.

Option A, the preferred option, locates an “L”-shaped garage at the corner of Old Dixie Highway and Indiantown Road. The garage wraps around an existing building facing Indiantown Road and is lined with occupied space where it fronts Indiantown Road and Old Dixie Highway. Option A is the preferred option because this design places the station (located in the liner of the garage) closest to the at-grade access to the boarding platform and is the easiest garage location for commuter access. As a local park-and-ride facility, it is important that a large number of vehicles can easily and quickly access the garage. Access appears easiest to provide in design option A.

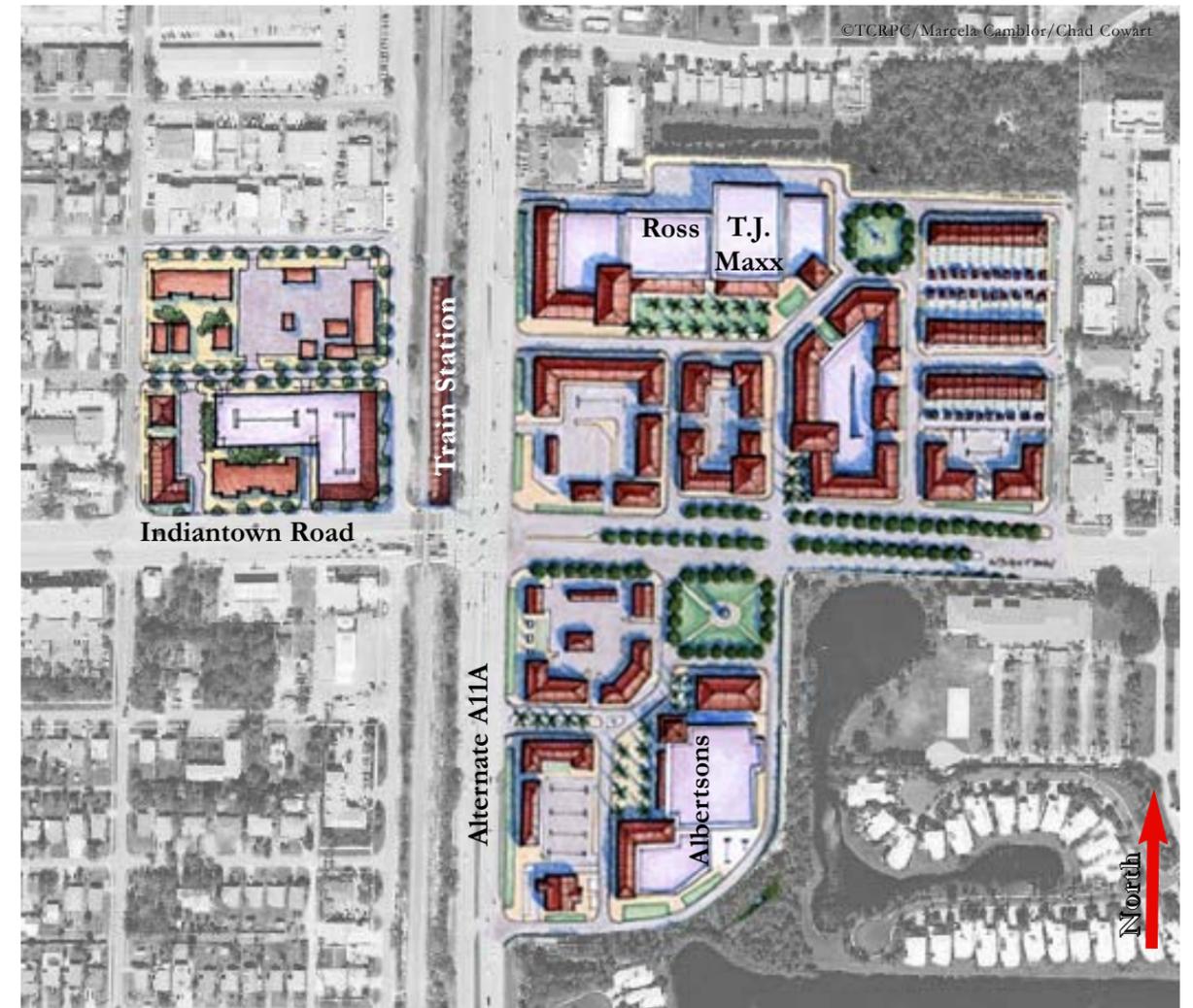
Option B locates the garage a short block north of Indiantown Road at a location that is more difficult to access and see. Although Option B has a less advantageous location than the corner property, it does provide an alternate location that would work if acquisition or public/private partnering with owners of the corner parcel becomes difficult.



View of Terminus Station (Option A) at Indiantown Road, looking south along Old Dixie Highway. Storefronts shield the parking structure serving the station.



Existing conditions at proposed Indiantown Road terminus site



Proposed terminus station and TOD

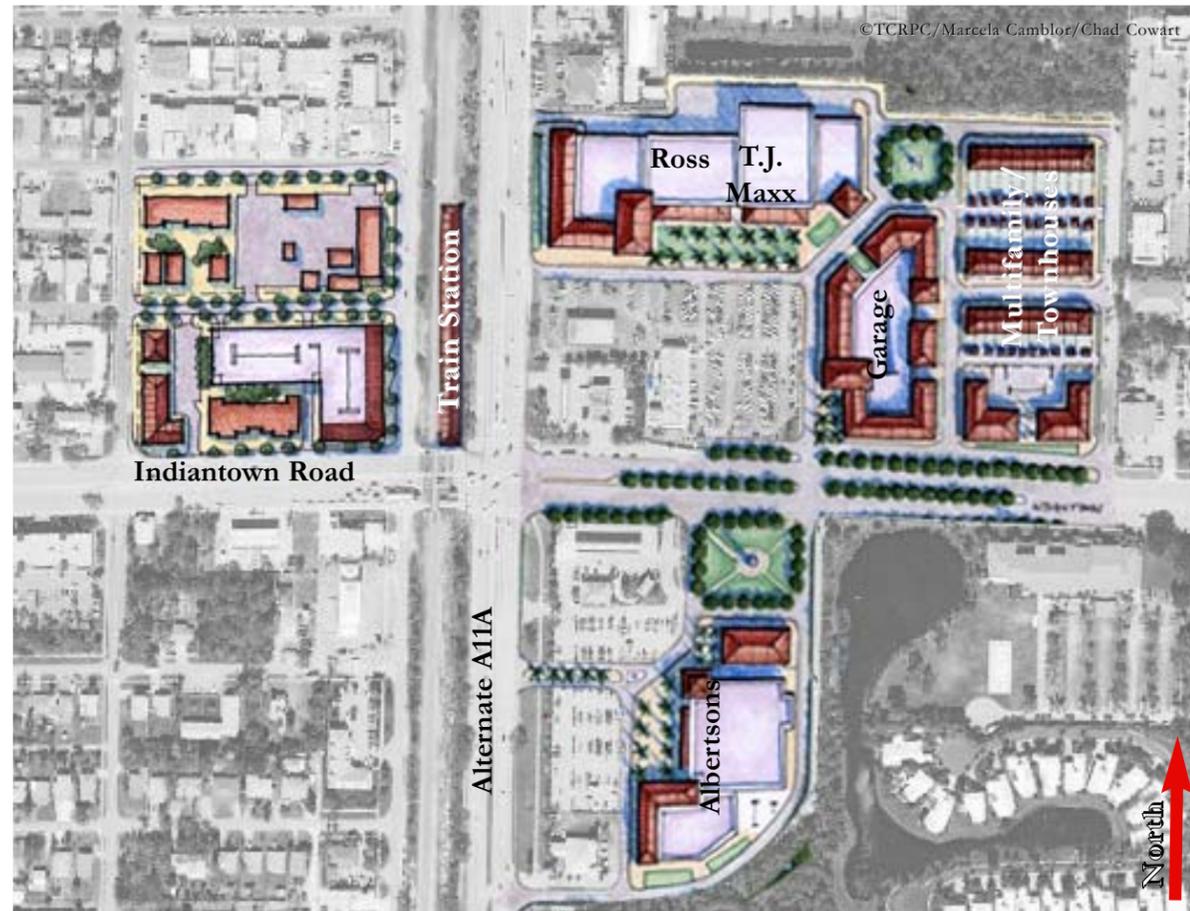
**The Potential for a TOD at Indiantown Road**

The Indiantown Road terminus station has the potential to evolve into a TOD district. It is surrounded with workplace uses to the north and residential neighborhoods to the east all within easy walking distance of the proposed station. The area east of Alternate A1A currently is a series of neighborhood strip malls the largest of which is anchored by Ross and T.J. Maxx retail stores and the other by Albertsons Supermarket.

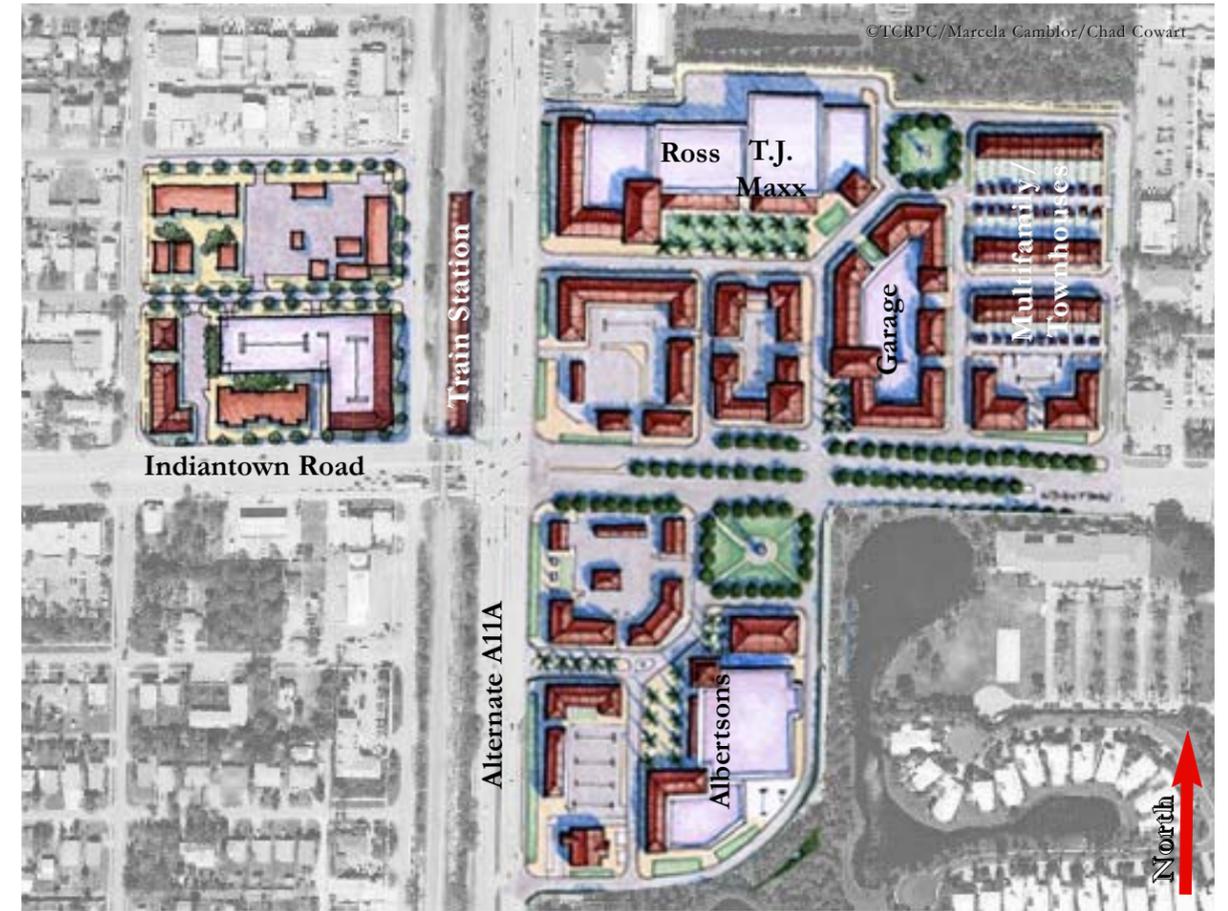
Although many of the buildings appear to have been recently renovated, the buildings are older and the

locational value of these properties is likely to improve with the development of the terminus station at Indiantown Road. When this occurs, these properties could be redeveloped as Transit-Oriented Districts, as illustrated above.

The proposed development plan retains many of the key uses in their current configurations but adds a parking garage, which would allow much of the existing surface parking area to be replaced with mixed-use buildings including additional retail, office, and residential. As proposed, the existing strip malls would be converted into a pedestrian-oriented neighborhood center with shopping, entertainment, services, residential and civic uses.



Redevelopment - Phase I



Redevelopment - Phase II

The first phase of redevelopment would likely occur after the terminus station at Indiantown Road was completed. At this point, a number of new visitors would be drawn to the site on a daily basis creating the impetus for re-evaluating the best use of the existing property.

The first phase of development proposed here would be the construction of a parking garage lined by a mix of uses including ground-floor retail with office or residential uses above. The west side of the garage should be lined with residential on all floors. Townhouses or apartment buildings would also be appropriate on the property east of the garage.

Key tenants could be retained with any upgrades to the existing buildings that might be necessary to integrate the older buildings into a town center design.

In Phase II, parking would shift to the already constructed garage, and the existing surface parking lots would become construction sites for new mixed-use buildings. As envisioned in the Citizens' Master Plan, buildings would vary in size from one to three stories increasing the density of the site and adding additional uses to make it compatible with its location next to a transit station.

The proposed plan pulls buildings of appropriate scale up to the street to help enclose the space of the street and make it feel like a great outdoor room attractive to both pedestrians and vehicles. Buildings would pull up to and face the street and be fronted by wide sidewalks and on-street parking wherever possible to encourage pedestrian use.

Although Alternate A1A acts as a barrier between the train station and properties to the east, a strong project will ensure interaction and benefit to both.

**The Reverse Gas Station**

The typical modern gas station and convenience store site plan often includes a building at the center of the parcel, which functions as a convenience store, and pumps arranged either on the street side or both the front and rear of the property. With no building holding the street, these uses have a very negative effect on the streetscape and prevent the proper enclosure of the street space, which is necessary to make it feel comfortable to both pedestrians and motorists.

Within retail areas, service stations represent a sufficiently large disruption in the street frontage that they interfere with pedestrian activity. Shoppers will walk a fair distance so long as they are presented with interesting retail storefronts. When faced with any significant break in the retail frontage, they will often stop walking and turn back.

Gas stations are a particular problem at major intersections, which traditionally should be the "Main and Main" center of shopping activity. They prefer these locations as ideal places to capture auto traffic, but their presence damages a potentially strong main street retail opportunity.

The negative impact of service stations could be reduced by moving them away from Main and Main intersections and by requiring them to pull their convenience store up to the street like a traditional corner store with their pumps and car-related services placed in the rear. This arrangement is illustrated in the photo to the right. The key is to require the stations to contribute to holding the space of the street by facing it with storefronts with sufficient massing to properly enclose the street. On very wide streets, these buildings must often be two-story structures to maintain proper street width-to-height ratios.



A two-story reverse gas station where the associated building and convenience store are pulled up to the corner of the street like a traditional corner store. Service bays and pumps are hidden behind the building.



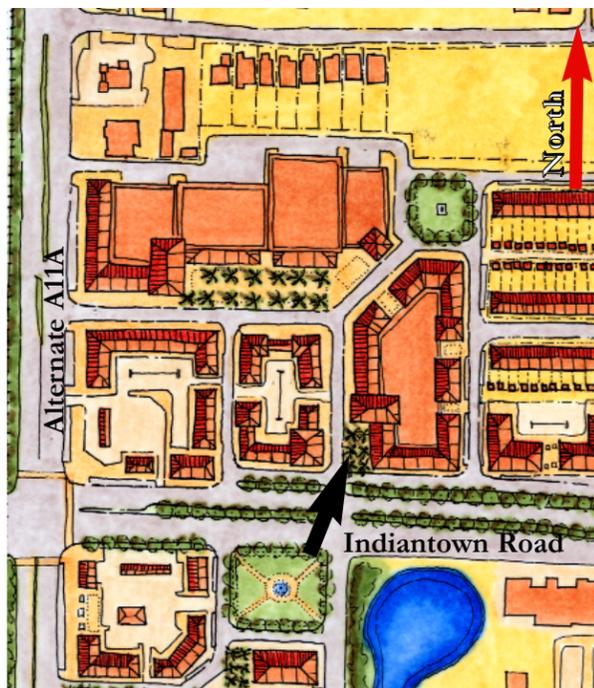
Proposed mixed-use building fronting Indiantown Road at the core of the redeveloped shopping area. Retail uses occur on the ground floor and include restaurants with outdoor dining. Residential or offices uses occur above.



View of mixed-use building fronting on Indiantown Road



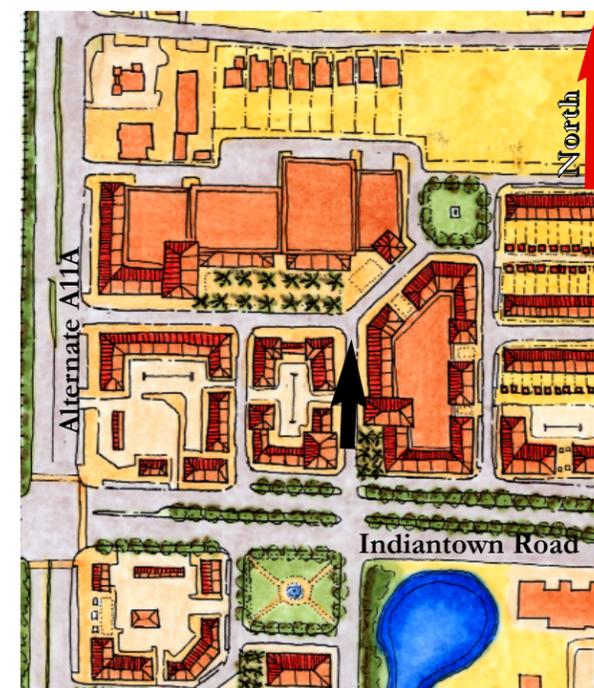
View north from Indiantown Road towards the heart of the redeveloped commercial district



At the entrance to the redeveloped mixed-use shopping district is a large building with retail uses on the ground floor and residential above. This building shields a large parking garage that supports the retail uses surrounding the central plaza of the shopping area, as well as the residential uses.

Conversion of the existing strip uses with more of a town center approach would increase the development potential of these properties and create a stronger relationship to the transit station.

Conversion could be phased with the surface parking areas redeveloped after structured parking lots are built. Many of the existing uses are retained and incorporated into the more urban format.



On the right side of the street are liner buildings that hide a large structured parking facility that replaces existing surface parking.

In the distance is the central plaza of the district and existing retail uses that have been retained as part of the plan.

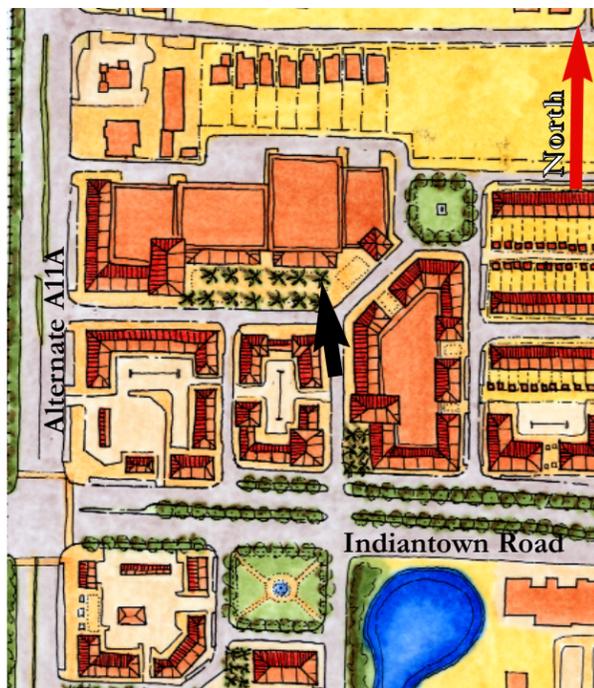
Streets are provided with wide sidewalks, on-street parking, street trees, pedestrian-scale lighting, and street furnishings such as benches and shelters. The streets should be designed and detailed to be a beautiful part of the public realm to be enjoyed by people and not just used by cars.



Detail of the street approaching the central plaza of the commercial district



View of shops facing the central plaza space

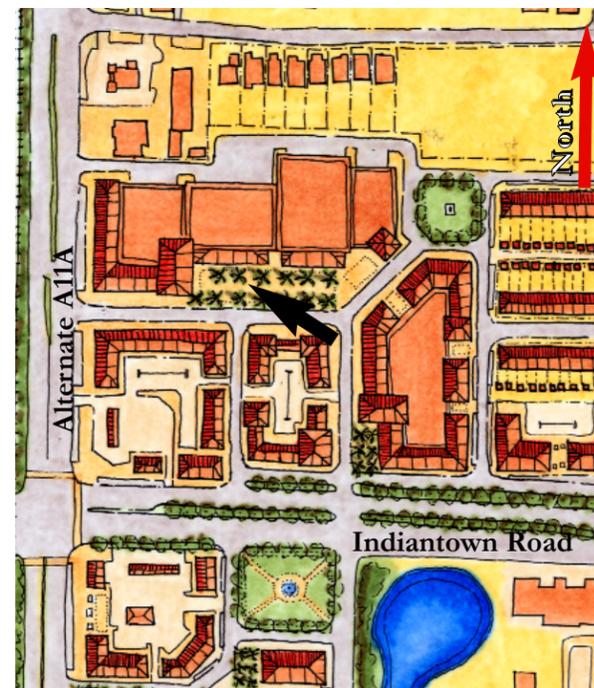


Wide sidewalks have been provided along the retail frontages to accommodate outdoor dining opportunities as well as pedestrian traffic. Storefronts are shown with arcades to provide pedestrians with shade and shelter from the rain.

Streetscapes would include street trees, pedestrian lighting, and street furnishings such as benches and bus shelters.

On-street parking is provided in support of retail frontages and is essential to the success of retail. Each storefront parking space adds significantly to annual sales.

Parking can be metered to ensure that spaces are not used for all day storage of vehicles, but time limits should not be excessively short.



The uses at the far side of the plaza (Ross and T.J. Maxx) are those that currently exist. The Citizens' Master Plan recognizes that many of the existing uses could be retained as part of the plan. However, these buildings could alternatively be replaced with taller buildings retaining retail on the ground floor with other uses such as office or residential above.

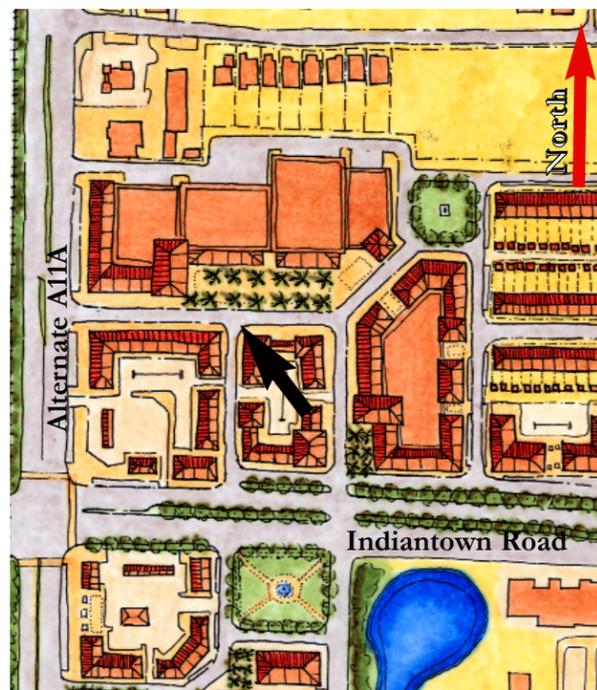
Consideration should be given to including residential apartments within neighborhood centers. Such residential could be particularly popular with several segments of the population since services, shopping, restaurants, and entertainment would be more closely available without the necessity of driving. Higher density residential also supports transit when it is affordable by workers.



Aerial view of the central plaza space



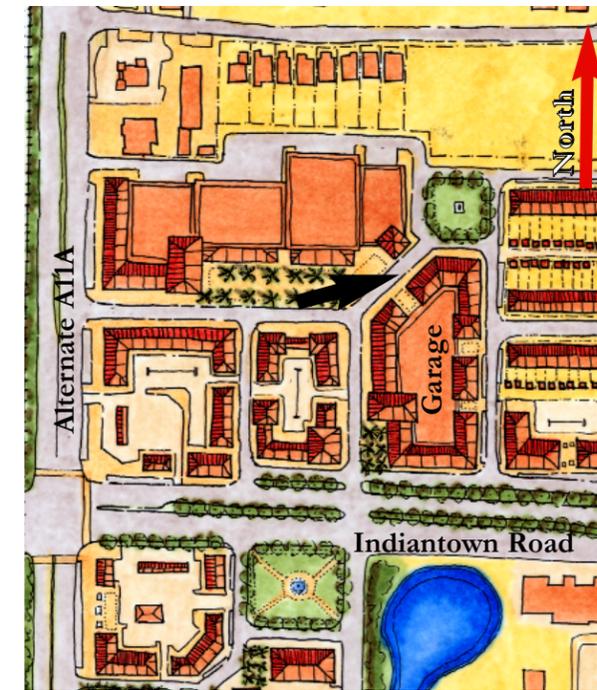
View of the street and liner of the proposed parking garage



It is important that public plazas be designed to always be full of people. In order to accomplish this goal, it is important that the plaza be surrounded by uses that generate a lot of pedestrian traffic at different times of the day. Use of the plaza space should be encouraged for outdoor dining and even kiosk vendors.

Studies of plazas and public spaces indicate that spaces are perceived as dead when they fail to attract a critical density of people. They are perceived as attractive when they are full of people. The size of the plaza should not be so large that it seems empty and perceived as unsafe.

People just like being with and watching other people making the plaza a very safe and interesting place.



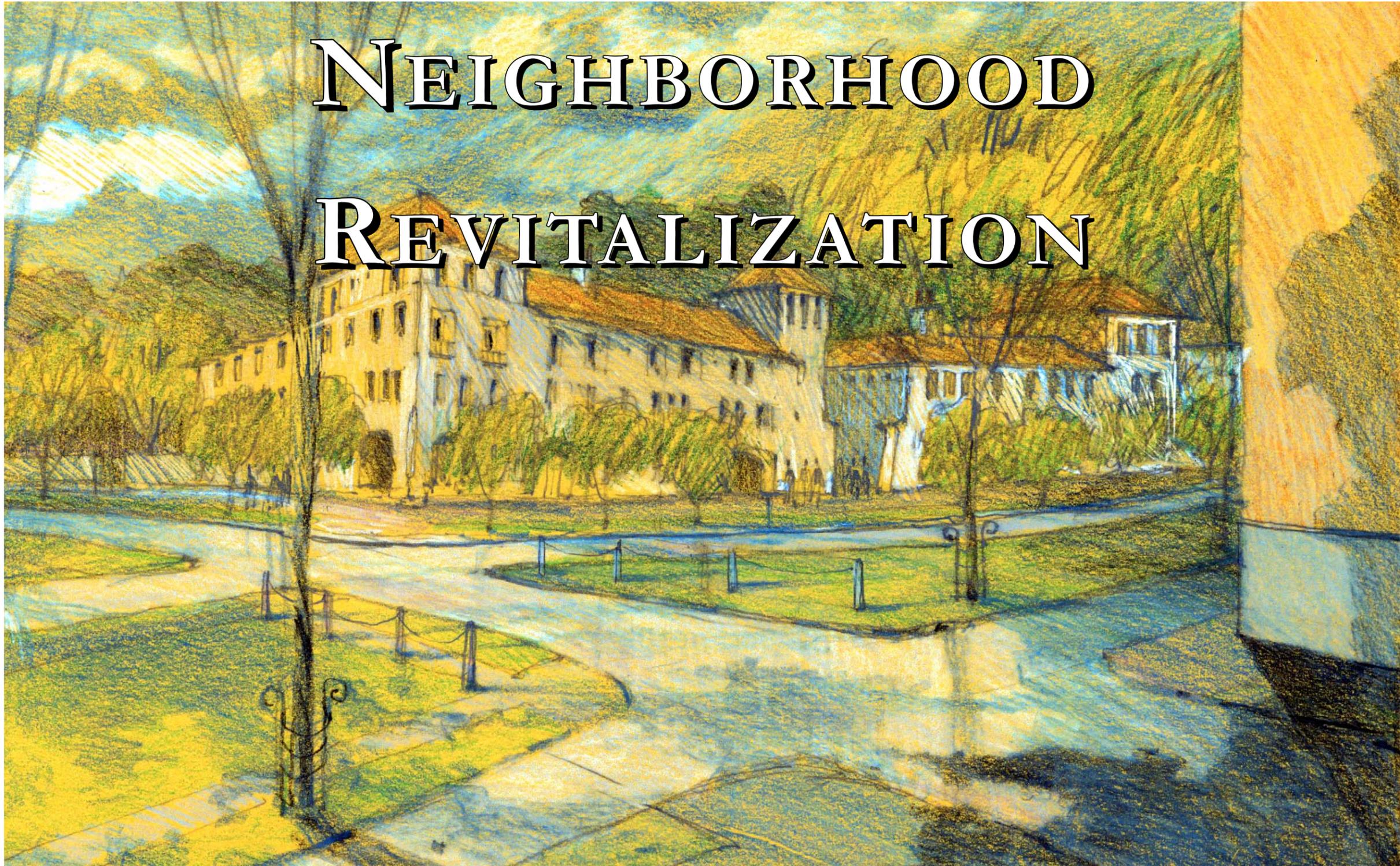
The proposed parking garage is lined on all sides by three stories of occupied space. Facing the core of the district, the ground floor should be occupied by retail and the upper levels by either office or residential uses.

Facing the east, in the direction of the proposed residential area, the garage should be lined with residential uses on all floors.

Throughout the project, wide sidewalks are proposed as well as on-street parking.



Residential neighborhood and neighborhood green immediately east of the core shopping district



# NEIGHBORHOOD REVITALIZATION

T R E A S U R E   C O A S T   R E G I O N A L   P L A N N I N G   C O U N C I L  
I N D I A N   R I V E R   -   S T .   L U C I E   -   M A R T I N   -   P A L M   B E A C H



Characteristics of the Cities, Towns, and Neighborhoods

Towns are made up of neighborhoods with each neighborhood ranging in size between 40 and 125 acres. Where there are multiple neighborhoods, these are typically clustered around a central business district or main street shopping area. Within neighborhoods, there are a diversity of uses and housing affordabilities with densities of residential averaging between 6 and 10 units per acre across the entire neighborhood. Some houses occur on large lots, and some units are clustered at higher densities in the form of multifamily apartments or townhouses. Cities may have much higher average densities, and at higher densities, a greater variety of services are possible within close proximity to homes. Towns and cities recognized by their citizens to be great places to live share these and the following characteristics.

**A well defined center and edge** - The best towns have a strong sense of place. You know when you have arrived, and you know when you leave. They do not sprawl and merge into one another, and they have a recognizable center and heart. The center is the place people go to shop, conduct business, get news, and see their neighbors. The center usually occurs at an important intersection (Main and Main) where shops have maximum access and exposure. The town center is typically anchored by some important community civic building such as a town hall, library, or community church. The civic building is typically situated on a public green or plaza that serves as a recognized gathering place for residents.

**A hierarchy of interconnected streets** - Great towns have a diversity of street types serving all of the different purposes the community requires and providing strong interconnection between a diversity of land uses. Streets terminate at intersections with other streets forming a fine network of alternative transportation routes. The best places to live never undermine the value of the grid by closing streets to public use or gating off neighborhoods.

**Beautiful streets designed for both cars and pedestrians** - Streets are designed and viewed as part

of the public realm to be used equally by both cars and people. Equal attention is given to the functionality of the street to pedestrians, children, and cars and its attractiveness as an desirable location. Great towns recognize that large portions of the community do not have independent access to an automobile yet still need to be able to move around. The ability to own and operate an automobile should not be the prerequisite to enjoying a good quality of life. However in much of Florida, this is exactly the case. Significant portions of the population are either too young or too old to drive, and others cannot easily afford a car. In the best communities children can walk to a playground, and the elderly are not forced to abandon their homes of many years because they can no longer drive a car.

**THE ULTIMATE TEST OF SUCCESS**

**THE EXTENT TO WHICH IT IS POSSIBLE TO ENJOY A HIGH QUALITY OF LIFE WITHIN A COMMUNITY WITHOUT HAVING ACCESS TO AN AUTOMOBILE.**

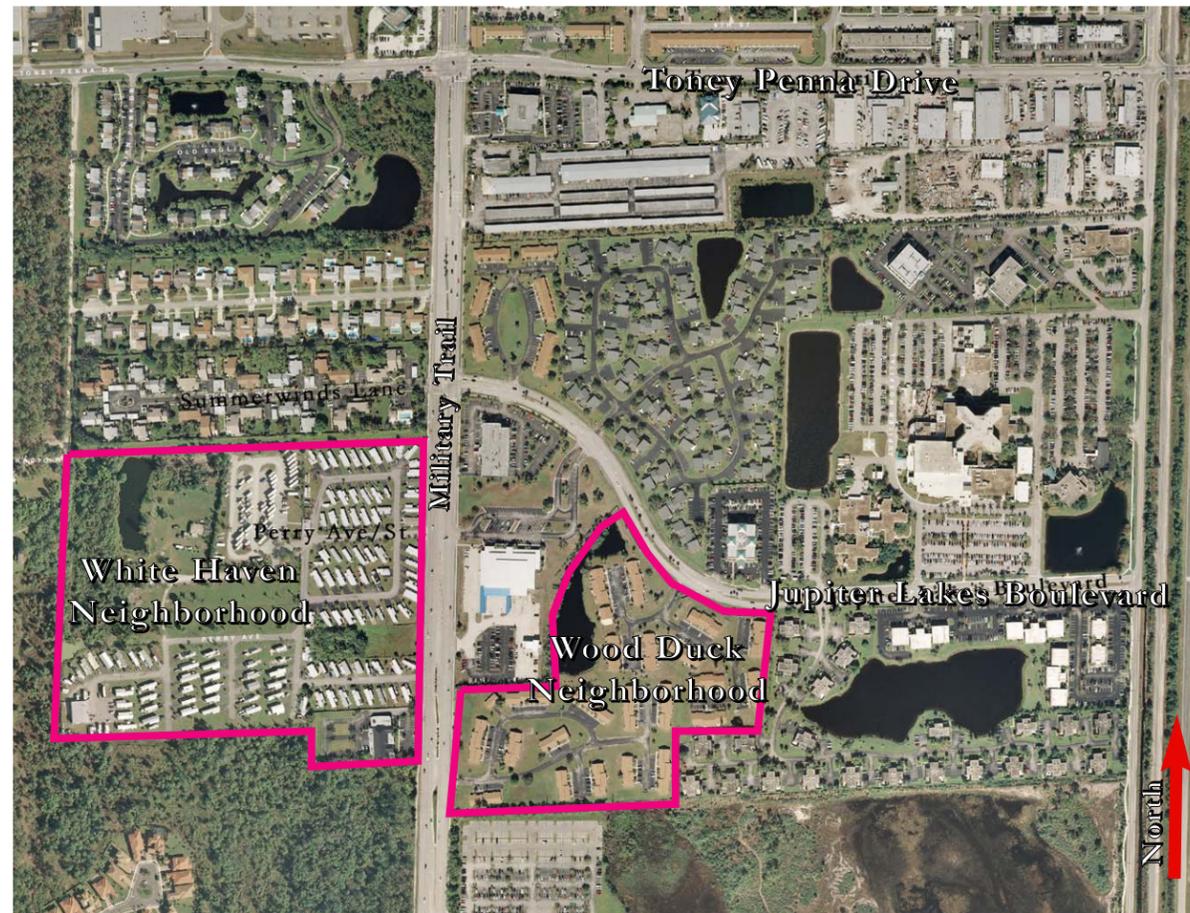
**A diversity of housing types and affordabilities** - All members of the community must be able to find a suitable place to live within the community. Communities need a great variety of people to function well including physicians, bankers, carpenters, shopkeepers, teachers, and babysitters. If the community is not attractive to a few wealthy individuals, there may be no one to donate money to build a library. Without skilled and unskilled labor, there would be no one to repair a car or maintain landscaping.

**Places for work and shopping in proximity to housing** - Quality of life is improved when people are able to live in close proximity to workplaces and frequently used shopping destinations. Ideally, many residents should be able to reach centrally-located work place and shopping destinations by walking or by very short vehicle trips.

**Appropriately located sites for civic buildings** - Well designed communities have specially created and prominent locations for placement of their important civic buildings such as churches, libraries, schools, theatres, and community meeting halls.

**Provision of a variety of parks and open spaces** - Communities have a variety of open space needs including recreation fields, quiet places for meditation, and small open spaces where young children can safely play within shouting distance of their homes.

**Neighborhoods** - Neighborhoods have many of the characteristics that make for great towns and cities. Due to their limited area and population, they typically do not support large amounts of shopping or workplaces but are located close to such districts. However, neighborhoods can include some retail and services and often include civic buildings such as a community building or small church. Like towns, they should include a diversity of housing types, a diverse and interconnected system of streets, and a variety of open space types including small shouting distance parks that can be used by children for play.



The location of White Haven and Wood Duck neighborhoods

**White Haven and Wood Duck Neighborhoods**

Within a short bicycle ride (approximately 1/2 mile) from the Jupiter Medical Center transit station at Toney Penna Drive are two neighborhoods that are likely to be redeveloped in the near future. The first is White Haven, a mobile home community just west of Military Trail and south of Jupiter Lakes Boulevard, that currently includes approximately 158 homes. The second is Wood Duck, a multifamily affordable housing community, which will soon be released from federal requirements to maintain the affordability of the existing 118 housing units.

There are multiple factors pushing the likelihood that these parcels will be proposed for redevelopment. Jupiter is viewed as a desirable place to live. The area is forecast to have strong growth. Both parcels are large; have consolidated ownership, well-located adjacent to Military Trail; and have short travel times from growing job markets, the proposed transit system, services and the beach. Both projects are

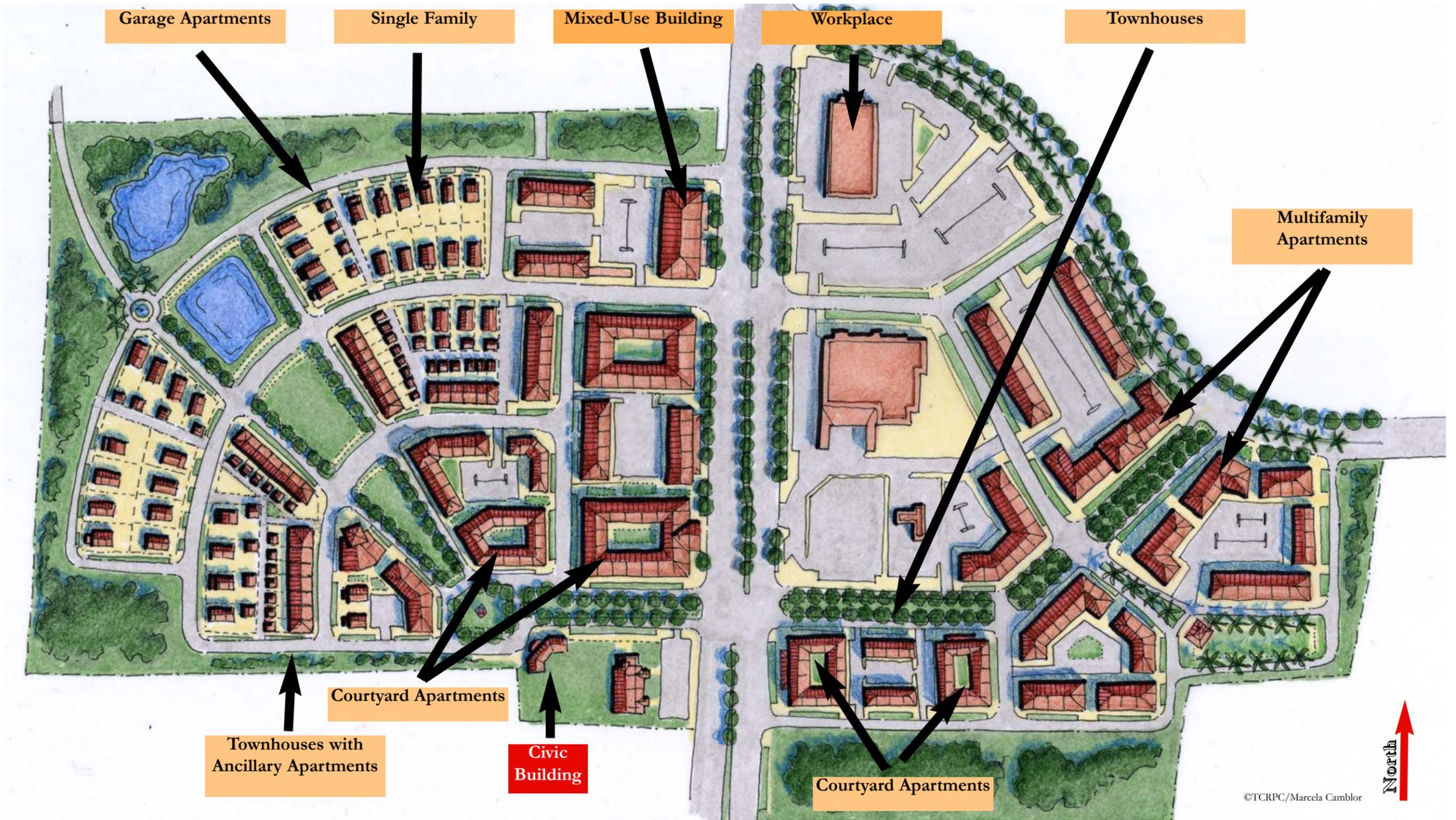


The proposed redevelopment plan for White Haven and Wood Duck neighborhoods

very inefficiently developed each with a single product type. Finally, both properties are located adjacent to a large greenway system and nature preserve.

In anticipation of the likelihood of future development proposals for these parcels, the Citizens' Master Plan proposes an approach to development of these parcels that will help ensure they become strong neighborhoods that continue to include housing that is affordable to the growing workforce. The proposed plan is based on traditional neighborhood and town planning principles that include provision of a hierarchy of interconnected and beautiful streets, a diversity of housing types and affordabilities, housing in proximity to workplace and shopping, a diversity of parks and open space, and well-located civic buildings.

Following traditional planning principles, it is estimated that 293 units could be built on the White Haven parcel using a diversity of types and approximately 300 units on the Wood Duck parcel.



Redevelopment plan for White Haven and Wood Duck illustrating the application of neighborhood and town planning principles: a hierarchy of interconnected street types, a diversity of housing types and affordabilities, a variety of parks and open space, a diversity of uses and well-placed civic buildings.



©TCRPC/Juan Caruncho

View of the massing and scale of buildings proposed for the densest parts of White Haven close to Military Trail

**Location**

The graphic to the right emphasizes the great location occupied by White Haven and Wood Duck. Both neighborhoods are approximately 1/2 mile from Jupiter Medical Center and the proposed mixed-use Toney Penna Drive business district and less than three miles from the FAU/Scripps campus at Abacoa.

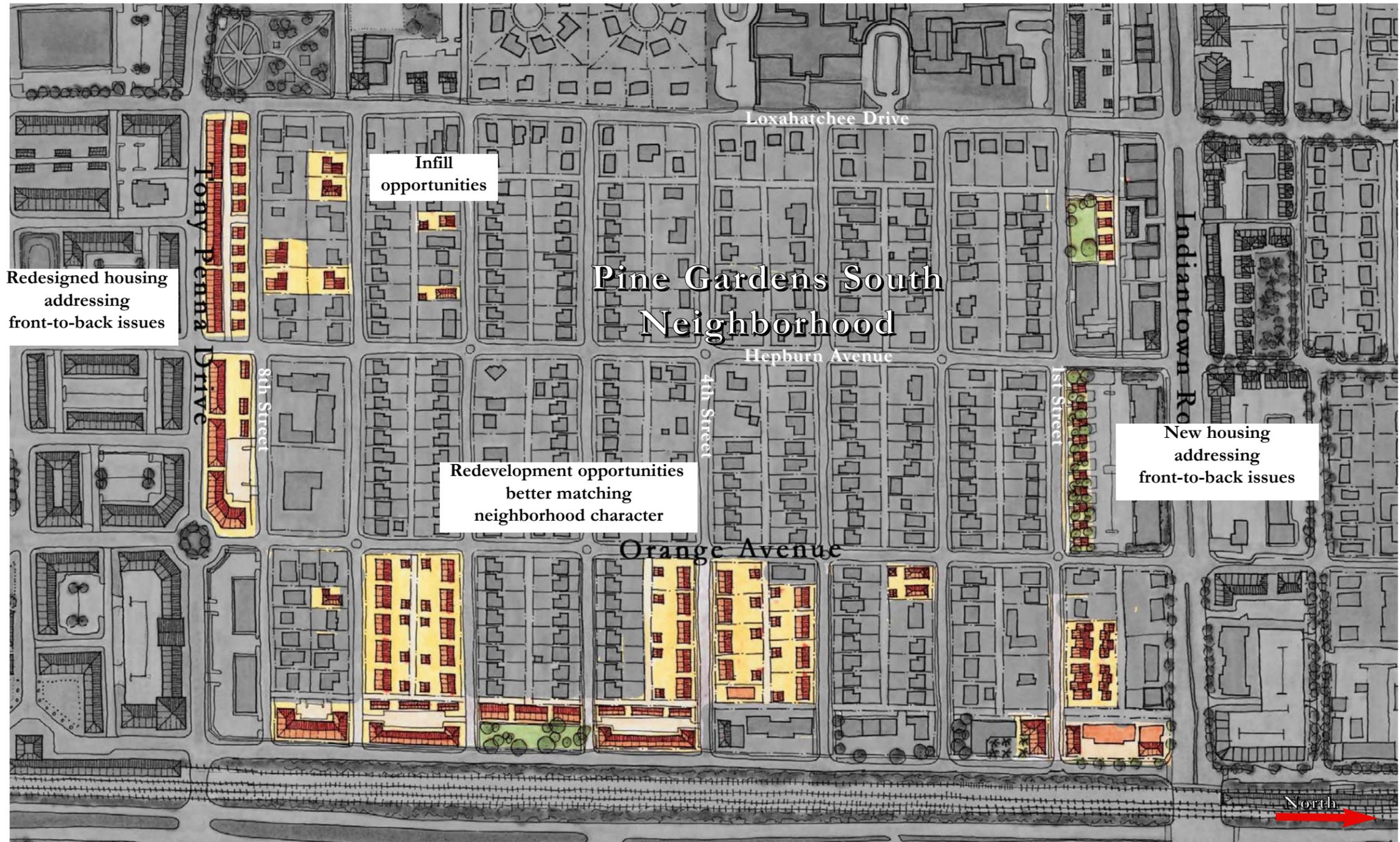
Although these neighborhoods are outside the 1/4 mile walking distance threshold that assures significant transit use, they are within a short bicycle distance from a variety of destinations including the transit station. Proximity to work and services contributes significantly to housing affordability particularly where things are close enough to reduce the number of cars per household. Currently, transportation costs are the largest annual expenditure for many families, amounting on average to more than 30% of all expenditures.

The White Haven and Wood Duck neighborhoods are well-located as workforce housing and should include a diversity of unit types and affordabilities that reflect the diversity of jobs in the area. Currently, these neighborhoods entirely consist of affordable housing. The redeveloped neighborhood should include affordable housing as well as units that are more expensive.

The best neighborhoods include a variety of housing types, although some streets may be more exclusive and expensive than others. It is desirable to have people living within the neighborhood who can afford to fund a statue in the park as well as those willing to mow lawns or babysit. Genuine communities are made up of a diversity of people and incomes, not just a narrowly defined segment of the community.



The relationship of White Haven and Wood Duck to other components of the Citizens' Master Plan



The Pine Gardens South neighborhood is a healthy working-class neighborhood that should be protected and improved. Most issues needing to be addressed involve affordable housing projects that were poorly designed or edge (front-to-back) issues that can be resolved.

**Pine Gardens Neighborhood**

Pine Gardens is an older, strong, and healthy working class neighborhood that requires minor interventions to prevent its deterioration. Many of the problems observed within the neighborhood were the result of poorly designed projects that did not match the character of the neighborhood and appeared to be inserted with little thought to what was already there. Most of the problem areas are at the edges of the neighborhood close to Toney Penna Drive or Old Dixie Highway.

As one example, Pine Gardens Apartments occurs as a long, single-story bar building set back from Toney Penna Drive. These apartments have parking in the front and a rear side that fronts awkwardly on 8th Street with a chain link fence. This adversely impacts the single-family housing that fronts on 8th Street and damages the neighborhood.

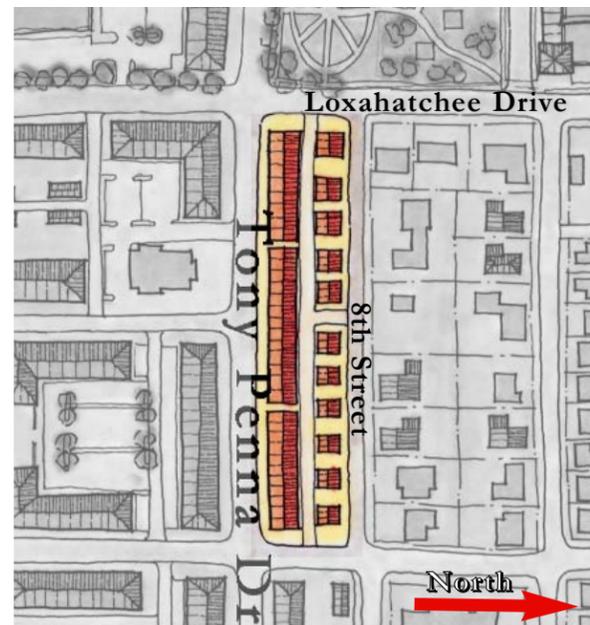
The existing building is only one story, and should be replaced with a series of two-story townhouse units that would pull up to the sidewalk along Toney Penna Drive with garages at the rear for parking. The proposed design, detailed on the following page, provides for small apartments above the garages. These ancillary apartments, or "granny flats," are great affordable housing for students and singles starting out. They can also help make the primary unit affordable by providing a revenue source in rent. Rental of such apartments should be encouraged as long as the owner of the building occupies the primary unit.



Front of Pine Gardens Apartments facing Toney Penna Drive



Aerial view of apartment building



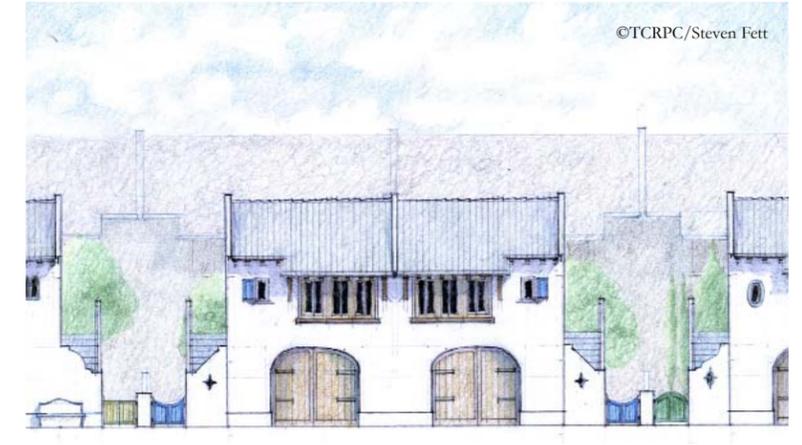
Proposal to correct design problem



Rear of Pine Gardens Apartments facing 8th Street



Front of propose Pine Gardens Townhouses facing Toney Penna Drive



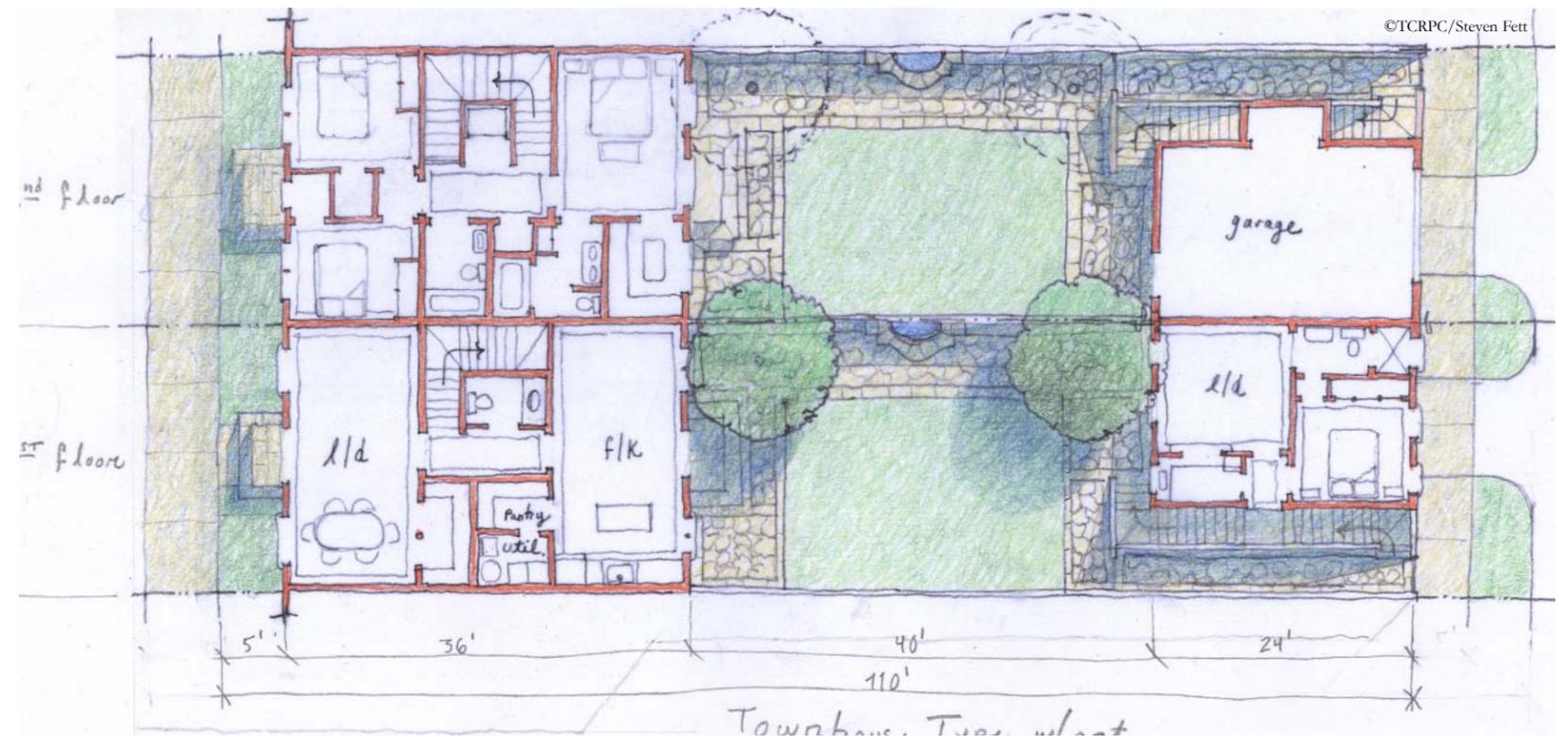
Garage Apartments at rear of townhouses

**Townhouse Design for  
Parcel between Toney Penna Drive and 8th Street**

The proposed townhouse units are pulled up to the sidewalk along Toney Penna Drive with their front stoops facing the street. The units have a small courtyard that occurs between the main building and a small garage that faces 8th Street. The garage includes an apartment above with its front from either 8th Street or the courtyard. This provides an improved condition on 8th Street and increases the affordable housing stock by providing a unit that can be used to increase the size of the main unit or rented as an efficiency apartment.

Garage apartments should be allowed and encouraged as an efficient method for dealing with affordable housing shortages. Although such apartments would not be large enough for a family, they can accommodate singles and by being available freeing housing stock of larger units that would otherwise have to be rented.

Garage apartments are ideal for students and are sometimes rented partially in exchange for yard work or babysitting duties to the benefit of both parties. Garage apartments are also self-policing when the owner of the unit lives in the main unit.



Plan for Pine Gardens Townhouses with courtyard and garage apartment at the rear. The upper portion of the plan is the ground floor; the lower portion illustrates the second floor.



Existing condition along east side of Pine Gardens Neighborhood

**Alleys**

Pine Gardens appears to have alley right-of-ways that have never fully been developed. Consideration should be given to paving these alleys. Alleys allow trash pickup and utility services to be provided at the rear of buildings thus improving the look of the fronting street, which should always be viewed as part of the civic space of a neighborhood. Alleys also allow cars to access the rear of properties rather



Proposed condition with alleys and outbuildings added

than being stored at the front.

Allowing garage apartments that face the alley diversifies the housing stock within the neighborhood and increases the availability of affordable housing. Garage apartments increase the effective size of a home as families are growing, and they also provide supplemental income to a family that chooses to rent the space to someone who needs a small apartment or studio.



DESIGN GUIDELINES  
FOR  
COMMERCIAL AND  
RESIDENTIAL STREETS

T R E A S U R E C O A S T R E G I O N A L P L A N N I N G C O U N C I L  
I N D I A N R I V E R - S T . L U C I E - M A R T I N - P A L M B E A C H



The ideal commercial street

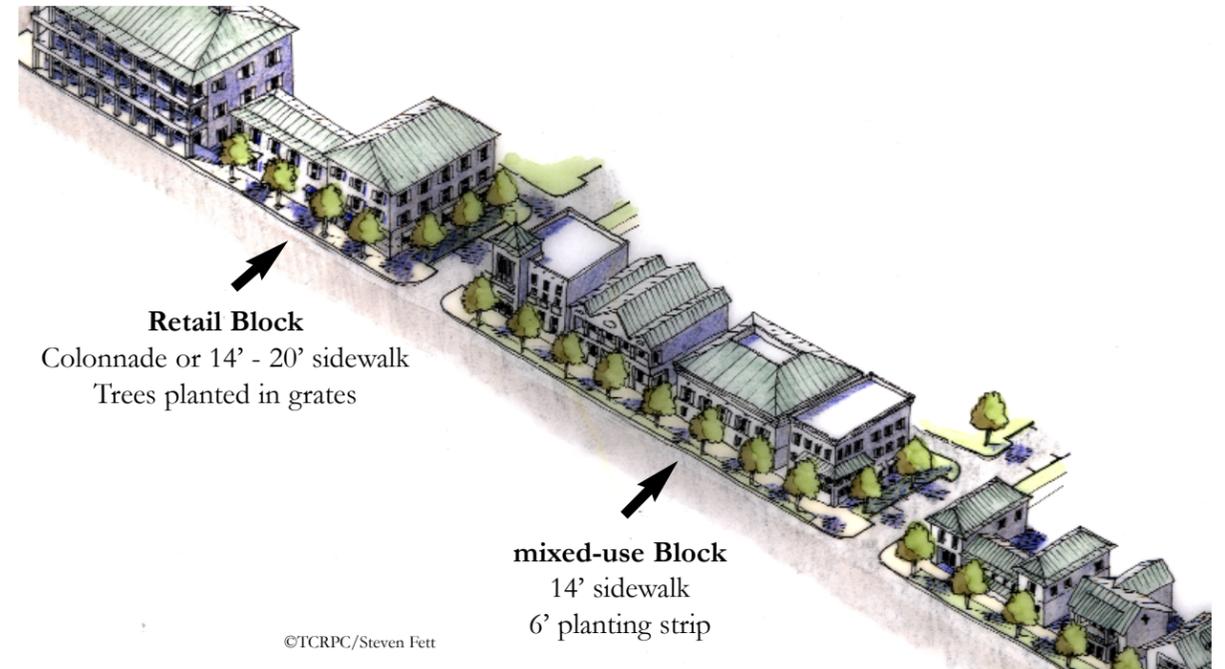
**Design Guidelines for Beautiful Commercial Streets**

The building of streets 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 should be designed to be inviting and comfortable places for people to be, whether they are in a car, on a bike, or on foot.

The most critical issues in designing beautiful and active commercial streets include the height of buildings relative to the width of the street space, the placement and alignment of buildings along the street, sidewalk widths, street trees and landscaping, adequate parking, and how the street is furnished and lighted.

**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. Recommended heights will vary with the width of the street and sidewalks. For four-lane boulevards, building heights should range between 3 and 6 stories. For smaller three-lane roadways such as Toney Penna Drive, building heights should range between 2 to 4 stories. When designed properly, smaller commercial streets can feel good with smaller buildings and function successfully.

**Building Placement and Alignment** - A fairly continuous facade of appropriately scaled buildings, set close to the street can transform an unsightly highway that divides the community into a beautiful public space that serves as a unifying central main street and front door to the area. The consistent



Relationship of buildings to the street

alignment of building facades form the walls of the great outdoor room that the street occupies.

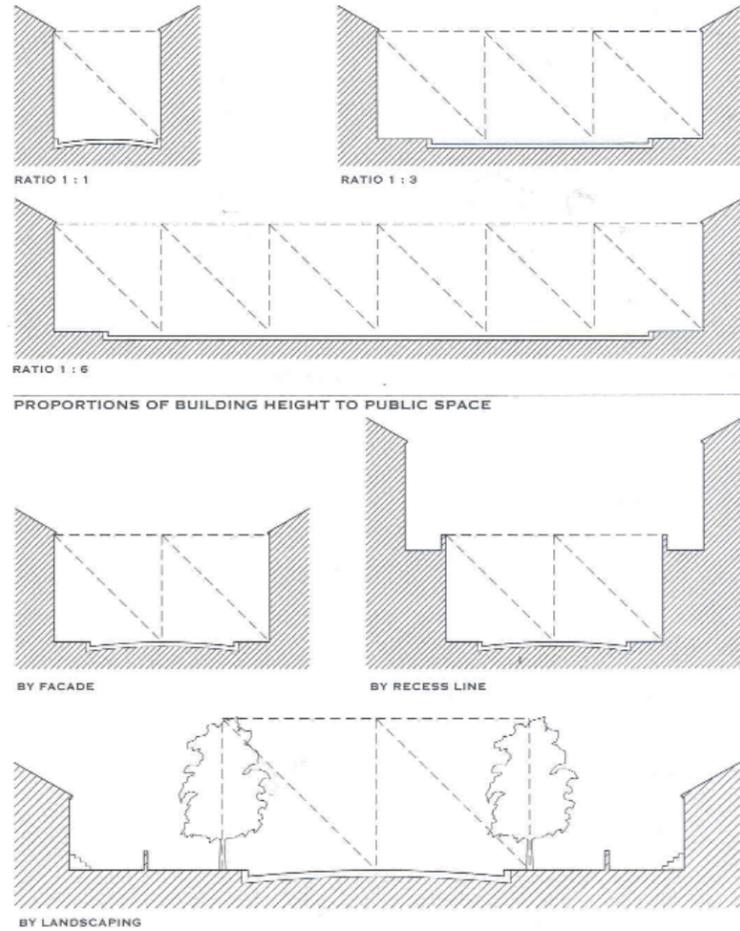
**Sidewalk Widths** - Sidewalks should be very wide on commercial streets. Minimum sidewalk width for a commercial streets should be 15 feet, but in important commercial areas that are anticipated to have a great deal of pedestrian traffic, sidewalks might be 40 feet wide. Wide sidewalks provide space for pedestrians and bicycles and sufficient space for tables, chairs, lighting, street furniture, and street trees.

**Street Trees and Landscaping** - The most beautiful streets include strong alignments of regularly placed street trees. Trunks should be clear to at least 12 feet so that retail is easily visible from the street. Palm trees can be used in combination with arcades, but where arcades are not provided it is much preferable to use shade trees such as oaks, black olives, or sycamores.

**Parking** - Wherever possible, on-street parking should be provided at storefronts. Parking lots and garages should be provided at the rear of buildings and hidden from street view. Parking lots should never front the street in a commercial retail district.

**Street Furnishings and Lighting** - Benches, shelters, fountains, and signage should be detailed and designed as furniture to be placed within the living room of the town. Lighting should be pedestrian scale and full spectrum.

**Height-to-Width Ratios for Streets**



Examples of ideal street sections showing height-to-width ratios

The height-to-width ratio of any space generates spatial enclosure, which is related to the physiology of the human eye. If the width of a public space is such that the cone of vision encompasses less street wall than sky opening, the degree of spatial enclosure is slight. The ratio of 1 increment of height to 6 of width is the absolute minimum if a sense of spatial enclosure is to result. As a general rule, the tighter the ratio, the stronger the sense of place and, often, the higher the real estate value. Spatial enclosure is important on all streets, but it is particularly important for shopping streets that must compete with shopping malls, which provide very effective spatial definition.

In the absence of opportunities to provide spatial definition by building facades, provision of disciplined tree planting is an alternative. Trees aligned for spatial enclosure are necessary on thoroughfares that have substantial front yards and setbacks.

A proper height to width ratio enhanced further by street trees



A continuous facade of buildings with minimum heights of 3 to 4 stories and street trees along the sidewalks will provide the enclosure needed transform many of Jupiter's roadways into a beautiful boulevard



Examples of pedestrian-oriented commercial streets. Wide sidewalks provide space for pedestrians, children on bicycles, strollers, and a variety of street activities including dining. Sidewalks in commercial areas should never be narrower than 15 feet, and sidewalks in busy areas may be wider than 40 feet.



The greatest and most beautiful commercial streets include a combination of wide sidewalks and formal alignments of shade trees. Random plantings of different species are inappropriate in formal urban commercial landscapes. Trees should be of a single species and size and planted in straight lines.



Wherever possible, on-street parallel parking should be provided at the front of retail shops and businesses.

Parking lots and parking garages should always be placed at the rear of buildings; they should never front on a commercial street.

**Parking**

On-street parking provides short-term parking for shoppers and patrons, buffers the sidewalk from street noise and traffic, defines the space of the sidewalk just as buildings define the space of the street, and calms and slows traffic on the street. Where traffic slows as a result of on-street parking, it is easier for motorists to see storefronts, and it is easier for pedestrians to cross the street.

It is impossible to create a beautiful and comfortable street environment when parking lots are allowed to front the street. Gaps formed by surface parking lots undermine the critical objective of providing enclosure to the street space. Gaps in the continuous facade of retail storefronts and businesses also discourage pedestrian shoppers, and consequently, hurt the value of the retailing environment.



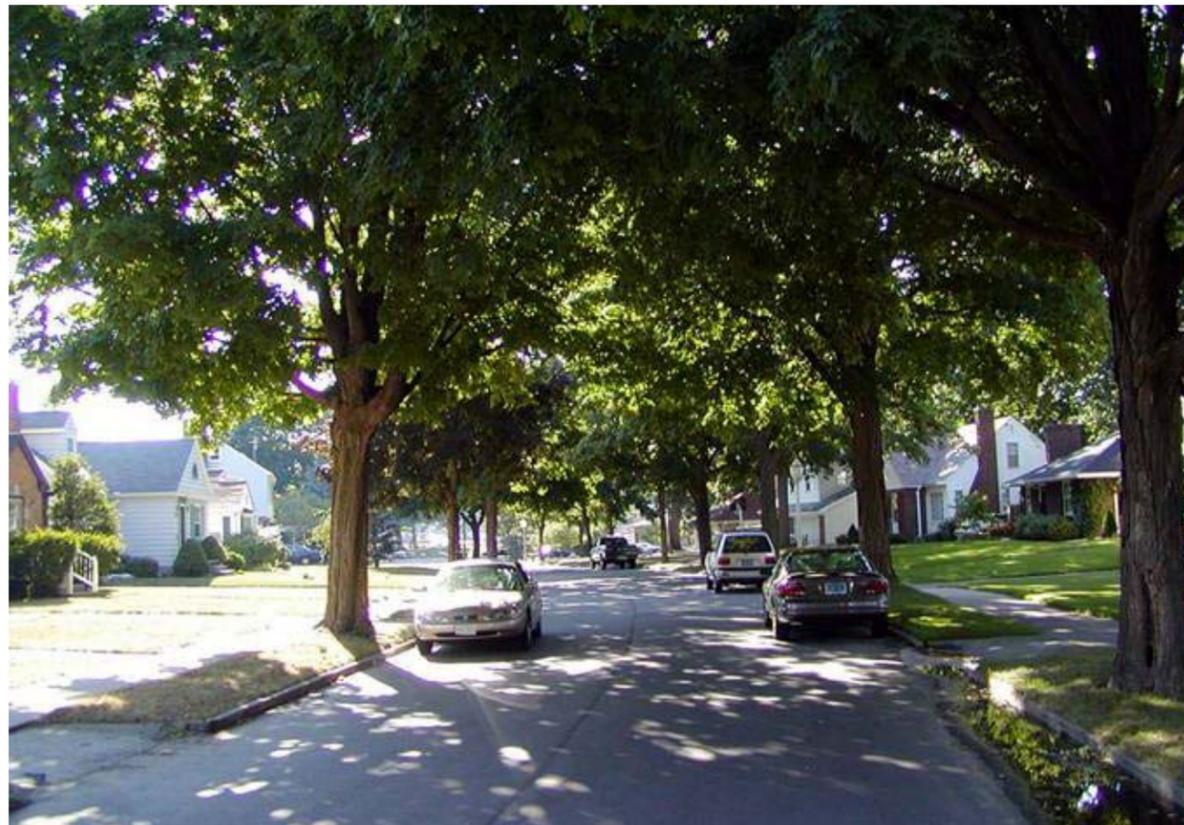
Main streets should be viewed as the living room of the town. In great commercial spaces, as much care is taken in the furnishing and detailing important commercial street space as would be taken in furnishing one's living room.

**Design Guidelines for Beautiful Residential Streets**

The most critical issues in designing beautiful residential streets are similar to those for commercial streets and include the height of buildings relative to the width of the street space, the placement and alignment of buildings along the street, sidewalk widths, street trees and landscaping, adequate parking, and how the street is furnished and lighted.

**Height-to-Width Ratios** - In high density residential neighborhoods where buildings sit close to the street, adequate building height relative to the width of the street is important to provide a sense of enclosure and definition to the street space. Where streets are wide, as in the case of boulevards, the sense of enclosure can be enhanced by the use of tall, formally aligned street trees planted in medians.

In lower density single-family neighborhoods where homes may be set back from the street, the enclosure necessary to make the street feel like an outdoor room can be provided with a continuous alignment of street trees as illustrated in the image at the lower left of this page.



Ideal residential street with a large front setback uses street trees to enclose the space

**Building Placement and Alignment** - Regardless of the setback, it is beneficial to have buildings align to a build-to line. In higher density areas, this might be at or close to the sidewalk, and for single-family areas, it might include a generous setback to provide for front yards.

**Sidewalk Widths** - Ideally, sidewalk width should be sufficient so that two people can comfortably walk abreast to one another even in lower density residential areas. In some neighborhoods where streets are narrow and traffic is extremely sparse, sidewalks are unnecessary, and pedestrians can comfortably walk in the streets.

**Street Trees and Landscaping** - The most beautiful streets include strong alignments of regularly placed street trees. Trunks should be clear to at least 12 feet so that vehicles can easily pass and pedestrians are clearly visible. On residential streets, tall shade trees such as oaks, black olives, or sycamores are recommended.

**Parking** - Whenever possible on-street parking should be provided. Within urban residential neighborhoods, on-street parking functions to calm and slow traffic. Parking lots and garages that support higher density multifamily buildings should be provided at the rear of building and hidden from street view. Parking lots should never front the street.

**Street Furnishings and Lighting** - Benches, shelters, and signage should be detailed and designed as furniture to be placed within the public street space. Lighting should be pedestrian-scale and full spectrum.

Within residential areas, street furnishings can include architectural features that differentiate neighborhoods or streets such as the street entry feature illustrated at the right, which includes a sitting place for children to wait for the school bus.



Entry feature and waiting place

Traffic Calming Strategies

Traffic calming strategies include narrowing of streets, planting of street trees close to the pavement edge, on-street parking, placing monuments and plantings at mid-intersection, pavers at crosswalks, bulb-outs to narrow ingress and egress points where streets intersect, and many other methods. The objective of traffic calming is to slow traffic while still allowing it to travel through a neighborhood.

The best traffic calming methods create psychological barriers to speed rather than physical barriers. By planting large shade trees close to the edge of the pavement and creating a canopy over the street, drivers feel they are in a tight space and slow down. In addition, the trees worry them as do cars parked along the sides of the street.

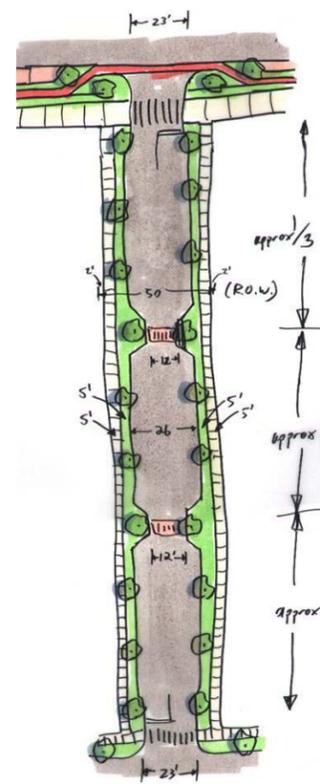
Some traffic calming methods can also be used to beautify the neighborhoods and call attention to them. At intersections, small islands can be created like the ones illustrated on this page that can include attractive tree plantings, markers, and monuments.

As connections and street improvements are made to improve connectivity within the study area, consideration should be given to including traffic calming strategies into the design of the improved street sections. Incorporation of appropriate traffic calming measures will minimize the impact of traffic from the introduction of new connections to existing neighborhoods.

Consistent with the principle that streets should be viewed as part of the civic realm of public spaces and should be designed as beautiful places attractive to both people and vehicles, all proposed measures should be beautifully designed and built with high quality materials.



Residential neighborhood street calmed by use of median plantings and a stone monument



Periodically narrowing the street and installing slightly raised platforms of a rough surface texture slows traffic on neighborhood streets making them safer for pedestrians and children



The power of trees to enclose space and calm traffic



Traffic circle at intersection of neighborhood streets



Great residential streets include the same components as beautiful commercial streets building alignment, wide sidewalks, street trees, lighting and on-street parking. The best residential streets are narrow with on-street parking on both sides and large street trees planted close to the curbs all combining to dramatically slow and constrain traffic flow. They differ from commercial streets in having greater (but still uniform) building setbacks, narrower sidewalks (5 to 6 feet), subdued lighting, and more landscaping.



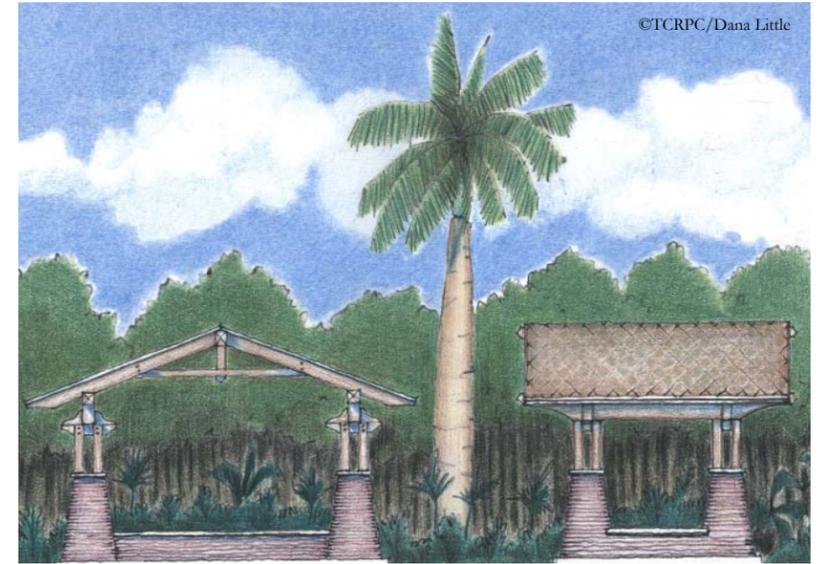
# Design Guidelines for Parks and Greenways

T R E A S U R E C O A S T R E G I O N A L P L A N N I N G C O U N C I L  
I N D I A N R I V E R - S T . L U C I E - M A R T I N - P A L M B E A C H



Following are examples of parks and greenways. Parks and greenways should include a diversity of landscapes, some formal and others naturalistic. In all cases, they should be managed and maintained as if they were a botanical garden, rather than leftover land.

Landscaped to include a tiered sitting area and a formal row of shade trees. A stormwater management facility can be converted into a very special dual-purpose park space.



Park lands should be designed with beautiful views and focal points. Focal points such as sculptures and interesting buildings encourage pedestrians to walk. Shelters, fountains, and large-scale sculptures can provide accents and interest to paths and streets within the park.



# MARKET OVERVIEW

T R E A S U R E C O A S T R E G I O N A L P L A N N I N G C O U N C I L  
I N D I A N R I V E R - S T . L U C I E - M A R T I N - P A L M B E A C H

# Market Overview

The information provided in this summary is based upon the work of Tom Lavash of Economic Research Associates in Washington DC. The information is provided in outline form as an overview of the market. This overview is intended to help provide an understanding of current market conditions, near-term development opportunities. The market data is also intended to provide long-term perspective for the recommended development program both in quantity and the type of development. It also identifies drivers of demand for real estate and translates demographic and employment forecasts into town-wide demand for various uses such as housing, office, retail, and industrial. A copy of the market study report is maintained as a reference document of the charrette and available in Town Hall or on the project website at [www.tcrpc.org/departments/studio/jupiter\\_tod/jupiter\\_tod\\_home.htm](http://www.tcrpc.org/departments/studio/jupiter_tod/jupiter_tod_home.htm)

## Town Demographics

Since 2000, Jupiter’s population increased by 6,800 to 47,800 residents in 22,000 households.

The town expects to add 16,000 new residents in 6,600 new households (units) by 2020, suggesting annual demand for 500+ new housing units every year.

Current median household incomes of \$70,000, (23% higher than County) are expected to jump to \$86,000 by 2012

Discretionary household spending on retail totals \$23,500 per year, which is good for retail potentials.

## Economic Profile

Current job base is 23,000 (4% of County’s total 552,000 jobs).

Primary job sectors are Service and Retail.

Biotechnology is important as an economic development engine.

Palm Beach County added 53,000 new jobs in the past 7 years with 114,000 new jobs expected over the next 13 years.

Jupiter is expected to add 6,700+/- new jobs by 2020, enhancing market opportunities for office, industrial, and retail space town-wide.

## Market Potential: Housing

Town contains 6,700 housing units.

Town issues an average of 200 multifamily and 520 single-family permits annually, 6% of Palm Beach County’s total.

Timing of market recovery will determine demand for new housing opportunities.

Growth forecasts suggest 500+ new housing units annually town-wide through 2020.

Keys to determining TOD potentials include: land assembly, zoning, density levels, and competition with other locations.

## Market Potential: Office

Countywide leasing activity, a key measure of the strength of an office market, is strong at 605,000 square-feet per year.

Jupiter is an “emerging” office submarket with 2.3 million square-feet (5% of County inventory) with moderate vacancies, and absorption (leasing).

New job growth is expected to fuel additional demand.

Town-wide demand of 100,000+ square-feet of office space/per year through 2020.

Key assets (i.e. Scripps, Max Planck, Florida Atlantic University) should create additional job opportunities (unknown at this time).

## Market Potential: Industrial

Industrial market is oriented to local demand (e.g., mom and pop businesses, auto repair, residential construction).

Inventory includes aging, obsolete space likely to be redeveloped as property values rise.

Assemblage and redevelopment of properties in key locations creates opportunities for higher intensity mix of uses.

Redevelopment along Toney Penna Drive may require relocation strategies to keep viable businesses in town.

A more detailed feasibility study is required to determine market potentials.

**Market Potential: Retail**

Current town retail inventory is approximately 2.8 million square-feet.

Jupiter serves as a “main street” retail center drawing residents of northern and western Palm Beach and southern Martin counties.

Retail tenants include a mix of “mom and pop” local businesses and national retailers.

Redevelopment will require higher rents, which may displace undercapitalized tenants raising issues of relocation.

Growth in rooftops, incomes, spending, and employment are expected to generate higher demand of approximately 500,000 – 700,000 square-feet of retail space through 2013.

**General Market Observations**

Overall, the town has established a reputation for high quality of life and high-quality development.

Development potentials surrounding the Medical District TOD site will require detailed market and financial feasibility studies.

The importance of assembling contiguous parcels, providing sufficient frontage, visibility, and parking is critical for success.

Historic industrial uses along Toney Penna Drive may require environmental remediation.

Mix of housing and workplace uses will enhance transit ridership.

The hospital is a key anchor and will fuel demand for housing and related workplace uses.

Public realm improvements (e.g., landscaping, public plazas, open space) will enhance overall marketability.

# IMPLEMENTATION



T R E A S U R E C O A S T R E G I O N A L P L A N N I N G C O U N C I L  
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**The Importance of the Citizens' Master Plan**

The Town of Jupiter has the opportunity to capture three transit stops along the FEC corridor at such time as transit service is expanded to include this important transit route. Transit will bring enhanced mobility options to the area. In addition, new transit service will provide significant redevelopment and revitalization opportunities to the areas surrounding these stations. In order to ensure that station development and associated redevelopment improves the quality of life within the community and enhances property values in surrounding neighborhoods, it is important that redevelopment conforms to a Citizens' Master Plan for the area adopted by the the Town of Jupiter.

For a redevelopment effort to fully succeed, it is essential that there be a clear and well-defined understanding of how the area should develop and how properties should interact to create the best value and environment where people will live and work. This vision must be articulated in the form of a detailed master plan that forms the primary basis for reviewing development proposals within the area. The Citizens' Master Plan contains multiple objectives. The first is to maximize the value of the area in terms of property values and its contribution to the quality of life of residents. The master plan also provides assurance to developers and potential investors in the area that their properties will increase in value as neighboring properties are developed. Developers need to understand what specific objectives the town is working to achieve and what is likely to happen on adjacent parcels of land in the

future. They need assurance that what will happen next door will not adversely impact the value of their own investment.

In the absence of a detailed master plan, most redevelopment efforts will fall well short of realizing their maximum potential. In some cases, the effort will simply fail. Absence of a clear vision articulated in a master plan will cause confusion and apprehension. Without direction from a master plan, property owners often fail to invest in redevelopment for fear of missing out on some hoped for future opportunity or out of fear of what might happen on neighboring parcels. Often what development is proposed without the guidance of an overall strategy for redevelopment turns its back on the surrounding properties and tries to wall or gate itself off from neighboring parcels. The development becomes concerned with only its site. The result is unfortunate, for a handful of properties may redevelop, a corridor-stretch of well-integrated properties fail to materialize never realizing their full potential to the community.

Because of this need for assurance and certainty, it is equally important to have an adopted well-thought-out master plan, the plan is very rarely is changed, and never altered to accommodate a particular project. If the development community perceives that the town is not committed to its plan, uncertainty rears its head, and quality developers will shy away.

Fortunately, the Town of Jupiter has a good track record of planning and administration, and this tradition should be continued into the future.

### **Keys to Success**

As noted, the Town of Jupiter has the opportunity to capture three transit stations within its boundaries. These stations will not only improve the mobility options available to town residents but also facilitate the redevelopment and/or revitalization of lands surrounding these stations. In order to successfully take advantage of the opportunities offered by the proposed expansion of transit service along the FEC corridor, two things are key. First, the town should continue to do everything that it can to ensure that the proposed stations are viewed as attractive locations by the transit authority. Already the town has positioned itself well by amending its Comprehensive Plan to include policies supporting transit-oriented development, and by preparing a plan for the optimal location of stations that further includes proposals to enhance ridership through the encouragement of transit-oriented development patterns within the areas surrounding the stations.

The second key is to ensure that projects proposed within the FEC corridor and study area are designed to interact and support transit, one another, and the area as a whole. The best way to ensure this is by requiring a high degree of consistency with the Citizens' Master Plan.

T R E A S U R E C O A S T R E G I O N A L P L A N N I N G C O U N C I L

I N D I A N R I V E R - S T . L U C I E - M A R T I N - P A L M B E A C H

**Priorities and Project Management**

The Citizens’ Master Plan represents a vision intended to guide governmental actions and investments toward a well-defined objective. The plan is comprehensive and includes a large number of proposed improvements and redevelopment opportunities. Not all of these opportunities can or should be pursued immediately. Instead, attention and resources should be focused on those opportunities that are strategically most important to achieving the long-term objectives of the plan.

**Items requiring Immediate Attention**

The Town of Jupiter should assign an experienced senior-level redevelopment team with responsibility of shepherding all existing and proposed development within the study area to be consistent with the Citizens’ Master Plan. The established team should work together and regularly communicate. It will take months to develop and adopt into law the range zoning code and comprehensive plan changes that may be needed to ensure that redevelopment proceeds in the manner proposed in the Citizens’ Master Plan.

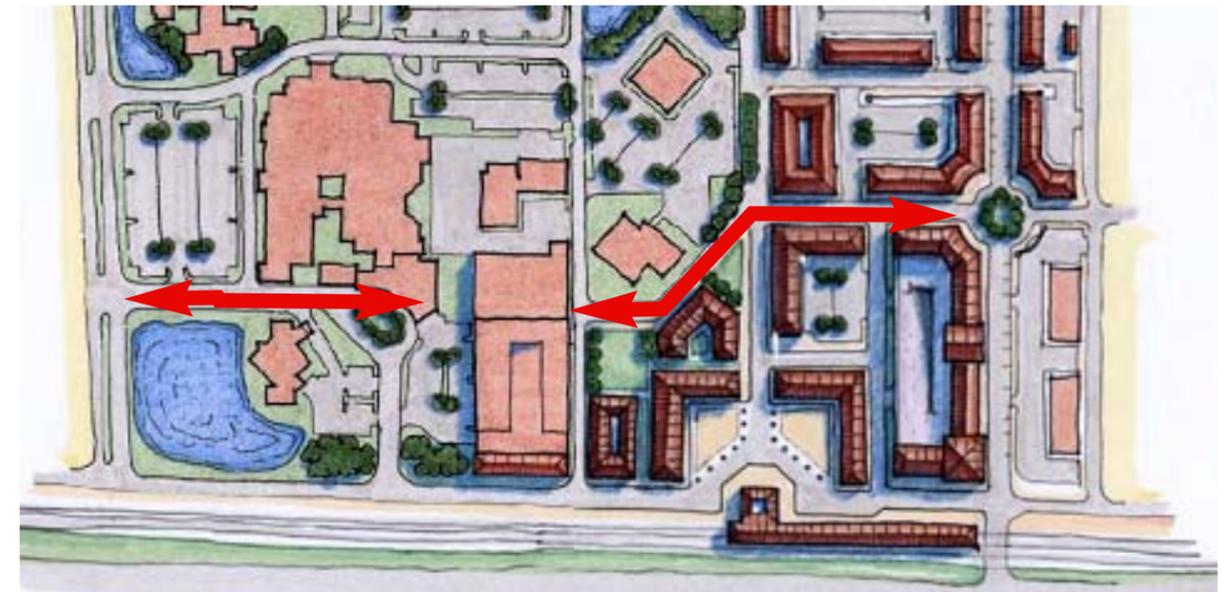
Until this process is complete, the town cannot rely on the normal development review and approval process alone to be successful. During this interim period while plans and implementing ordinances are being developed and adopted, Jupiter must be creative and persuasive to accomplish its objectives. It is vital that the team work aggressively and in partnership with developers to encourage and facilitate full implementation of the plan. The key to success will be to demonstrate to developers that being consistent with the plan will be more profitable, quicker, and easier than not being consistent.

The Town of Jupiter should work with property owners along Toney Penna Drive and with the Jupiter Medical Center to allow the extension of Orange Avenue south to Jupiter Lakes Boulevard, as proposed by the Citizens’ Master Plan. This extension will help traffic flows in the area of the hospital and provide the hospital with a new entrance and access point from Toney Penna Drive. Provision of the Orange Avenue extension would mitigate traffic associated with the hospital and would improve flows in the area.



Jupiter Medical Center

Consistent with the plan, and at the time of the street extension south, the traffic circle at the intersection of Toney Penna Drive and Orange Avenue should be constructed.



Proposed extension of Orange Avenue from Toney Penna Drive south to Jupiter Medical Center.

**High Priority Items**

The Town of Jupiter should adopt the Citizens’ Master Plan by resolution as its vision for the ultimate build-out of the FEC corridor. This is a critical first step toward moving forward with the revitalization of the corridor.

The town should assign an individual or team the responsibility of shepherding the Citizens’ Master Plan and all required implementing ordinances through the review, approval, and adoption process. It is important that an individual or key group be designated as the person responsible for ensuring that the process of adoption reaches its end. Steps include the expeditions adoption by resolution of the Citizens’ Master Plan for the corridor and the development and adoption of any necessary comprehensive plan, zoning, and land use changes for the plan to be implemented. The study area includes a number of attractive redevelopment opportunities, and the area is already experiencing development pressure (e.g. consolidation of land, proposals to expand Jupiter Medical Center). Achieving the objectives of the plan requires that land use and zoning policies be established to ensure that new development proceeds as envisioned. It is recommended that a team representing planning, design, and legal considerations be assigned the responsibility.

The Citizens’ Master Plan is geared toward a form-based code that places emphasis on the location and massing of buildings rather than conventional approaches such as Floor Area Ratio (FAR). The most difficult task may be to accommodate the form-based approach within the existing FAR approach to

**IMPLEMENTATION**

zoning. It is necessary to ensure that no Burt Harris taking claims result from the conversion. This can be achieved ensuring that landowners have as much or more development potential after the conversion as they did before. Ideally, the revised code should provide incentives for redevelopment of lands, but this must be done in such a way that the value of the property is not increased without desired redevelopment occurring. If land value is increased without requirements for construction of the desired product, it may be counterproductive, slow the redevelopment process, and cause land speculation and over-pricing via entitlements.

This problem is perhaps best addressed by providing limited duration zoning incentives. With this approach, a significant increase in development potential consistent with the goals of the plan is provided for a limited and defined period of time and becomes effective only if the required building type is actually built within the specified time frame. This is a “use it or lose it incentive.” Nothing prevents a landowner from proceeding with development of the base amount allowed in the plan after the incentive period runs out, but the bonus of density (or other specified incentive) is only granted if development actually occurs within typically a 4 or 5-year period. This limited duration incentives allow the local government to provide incentives that do not permanently increase the value of land, which is very important to maintaining growth and market stability.

**The Town of Jupiter should begin negotiations with FDOT regarding proposed design changes to the intersection of Old Dixie Highway and Toney Penna Drive.** As quickly as possible, the Town of Jupiter should initiate multi-party discussions with FDOT and Palm Beach County to share the recommended design objectives for this key intersection. Concurrently, the town should begin working with the FDOT to develop funding and implementation strategies. Attention should be focused on ensuring any improvements to this intersection are designed in conformance to the proposed vision included within the plan. There is a fairly long lead time required to coordinate and implement intersection changes, and it is critical that the FDOT be made aware of the proposed design changes as quickly as possible so opportunities are not lost.



Existing condition at Toney Penna Drive and Old Dixie Highway

**The Town of Jupiter Community Redevelopment Area (CRA) Plan should be updated to ensure consistency with the adopted Master Plan.** - Such action is necessary to give the CRA the authority to implement aspects of the plan.

**LAUDERHILL STATE ROAD 7 IMPROVEMENT PROJECT**

**LAMP & LAMPOST**  
**MANUFACTURER:** HOLOPHANE CORPORATION  
 214 OAKWOOD AVENUE  
 NEWARK, OHIO 43055  
 1.740.345.9631

**MODEL NO:** GRANVILLE FLUTED STYLE WITH FA 13/13POST  
**FINISH:** POST: INTERIOR/LAMP CASTINGS PAINTED  
**COLOR:** POST: GREY/LAMP CASTINGS BLACK

**QUANTITY REQ'D:** \_\_\_\_\_  
**UNIT COST:** \$ \_\_\_\_\_.00

**SPECIFICATIONS:**

**PROJECT: LAUDERHILL**

Preliminary Construction Cost  
Worksheet  
(as of March 2004)

Item Description	Unit	Quantity	Unit Cost	Total Cost
Allowance Account	LS			
Mobilization	LS			
Indemnification	LS			
Performance Bond	LS			
Maintenance of Traffic (MOT)	LS			
Demolition	LS			
Grading/Subgrade Base	SY			
Adjust Manholes/Valves	EA			
Concrete Curb and Gutter	LS			
Concrete Curb	LS			
Concrete Gutter	LS			
Concrete Sidewalk	SY			
Asphalt Concrete Paving	SY			
Catch Basins/Piping	EA			
Soil/Soil	SY			
Irrigation	LS			
Shrub Trees	EA			
Plant Trees	EA			
Tree Guards	EA			
Tree Guacols	EA			
Street Lights	EA			
Trash Cans	EA			
Benches	EA			
Banners	EA			
Banner Buckets	EA			
Equipment	LS			
Street Signage	LS			
Thermoplastic Marking	LF			
Parking Meter	EA			
General Conditions	LF			
Water	LS			
Sewer	LS			
Storm Water	LS			
Electric	LS			
Fill/Excavation	LS			
Building Construction	SF			
AK&F Fees	LS			
Contingency	LS			
<b>SUBTOTAL</b>				
Other				
<b>TOTAL</b>				

TREASURE COAST REGIONAL PLANNING COUNCIL  
Indian River • St. Lucie • Martin • Palm Beach

Example of “project tear sheets”

**Moderate Priority Items**

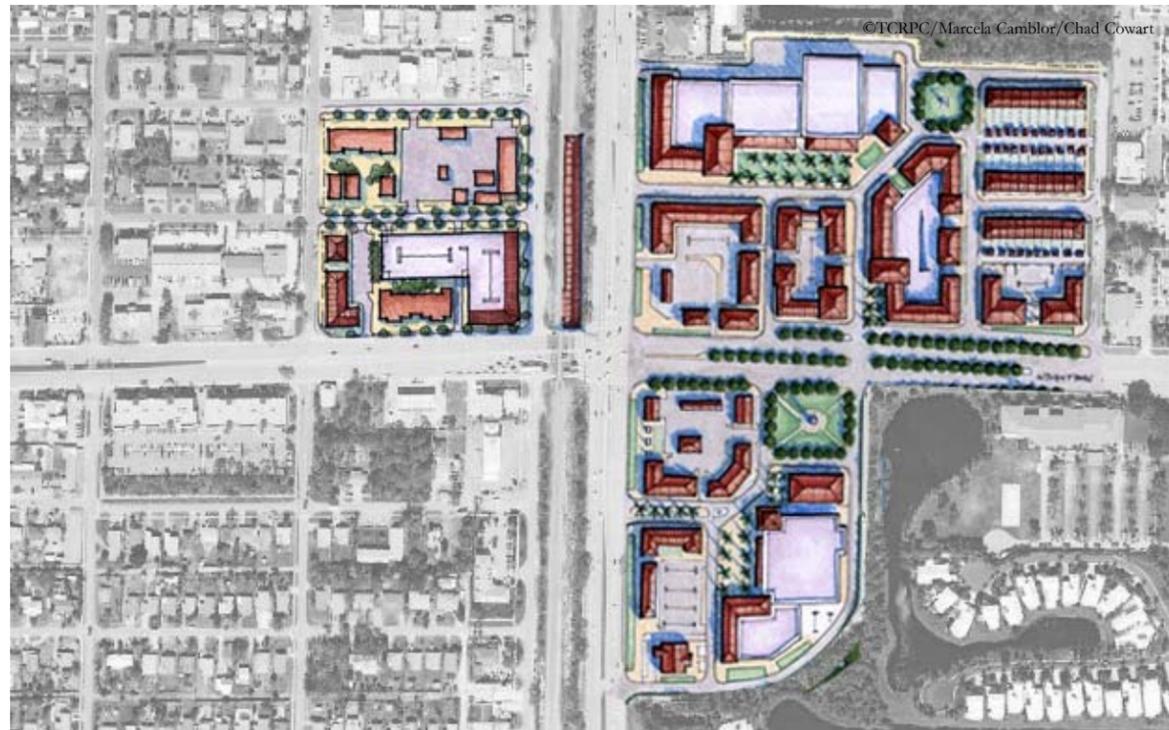
**The town and CRA should develop a series of “Project Tear Sheets” that describe in detail each of the projects proposed within the Master Plan, and should use these during the budget process to prioritize projects for funding.** - Illustrated above are examples of project tear sheets. Sheets may be simple and short or for complex projects like the provision of street infrastructure to a large project may be several pages long. The tear sheets summarize all essential information regarding the project including its goals, objectives, estimates of cost, information for management responsibility, and funding sources. These concise documents are extremely helpful in prioritizing projects for funding and promoting projects with other agencies. The development of tear sheets takes the implementation of the plan a step forward beyond the conceptual level in the direction of construction.

**The Town of Jupiter should request as part of the implementation program for the extension of rail service along the FEC to Jupiter all intersections be configured as necessary to eliminate the need for train horns.** It is recommended that this request be forwarded to FDOT, FDOT's consultants, the SFECC Study participants, and the South Florida Transportation Authority for inclusion in their budget proposals.

**The Town of Jupiter should establish an expedited review process for projects within the study area.** A process should be established that makes it easy for developers to get approvals for projects that are consistent with the adopted master plan and zoning code. Expedited reviews are provided as incentives to projects that are found to conform to the adopted master plan and implementing ordinances.

**Longer-Term Priorities**

**The Town of Jupiter should work with the landowners of the large parcels east of Alternate A1A to encourage their redevelopment as transit-oriented mixed-use centers.** As transit service is extended north to Jupiter along the FEC corridor, there will be a strong incentive to redevelop the existing strip shopping centers east of Alternate A1A to more intense forms of development. These



properties would ideally be developed as mixed-use centers that include retail, office, and residential uses in a form that would serve as a neighborhood center and gathering place for residents. The proposed TOD form included within the master plan would also support transit. Increased ridership, better connectivity, and comprehensive parking strategies will help improve the federal funding prospects for the transit extension.

**Funding Sources**

**Tax Increment Revenues:** Tax Increment Revenue is typically the major sources of funding for redevelopment projects under the State of Florida *Community Redevelopment Act* for a development within a community redevelopment boundary.

**Redevelopment Revenue Bonds:** Section 163.385, *Florida Statutes* empowers the town to issue Revenue Bonds to finance redevelopment projects whereby the security of the bonds based on the anticipated assessed valuations of the completed community redevelopment. 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 the Citizens' Master Plan recommendations. These bonds are secured by debt service millage on the real property within the town and typically must receive voter approval. For example, sports stadiums are often partially funded by such bonds.

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

**Land Sales and Leases:** Municipalities may acquire and sell land or property.

**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 town can assist a developer in the assembly of land for a private development. In return, the developer may be obligated for building renovations, street, landscaping, sidewalk, and other redevelopment improvements. The private contribution may also be through direct contributions or payment to assessment districts.

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

**Direct Borrowing:** The town is empowered to fund redevelopment projects and programs through direct borrowing of funds. Depending on the particular projects, the town may utilize both short and long-term borrowing.

**Enterprise Zone Investment:** This program is designed to encourage increased business 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 the 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 goal establishment and planning by local lending institutions.

**Property Improvement Grant Programs:** Several communities have established grant programs that are used for facade improvements and building renovation. These programs are usually directed toward improvements that have a high potential for stimulating additional private development in the area. Several communities have used 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, 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 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.

#### Ongoing Assistance

The Town of Jupiter has a very competent professional staff with wide-ranging and extensive planning and redevelopment experience. Their greatest difficulty with implementing the recommendations of this report will undoubtedly be time. A large amount of work will be needed to move this plan forward expeditiously.

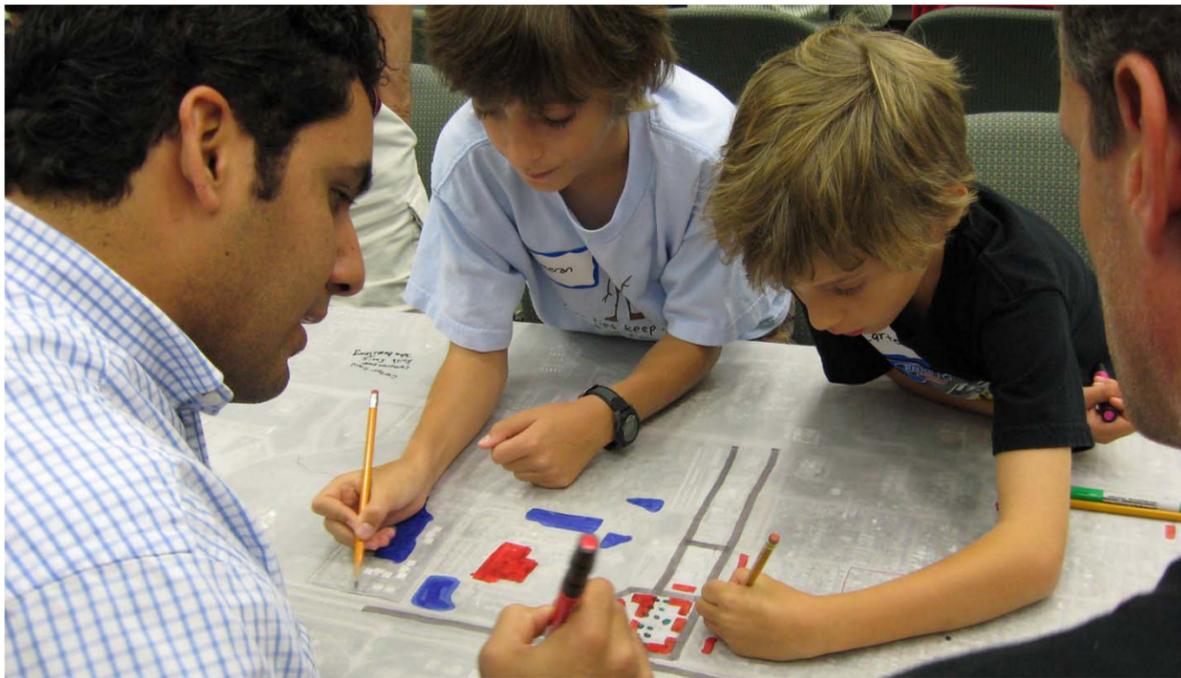
The Treasure Coast Regional Planning Council has developed a team of experts who can provide local governments with supplemental staffing and experience should time constraints make such assistance necessary. Council can direct town staff to model ordinances, requests for proposals, models for design competitions, and development regulations and codes that can simplify the task of developing these documents. Assistance in actually preparing such documents is available on a contractual basis.

Notes:

# THE CHARRETTE PROCESS



T R E A S U R E C O A S T R E G I O N A L P L A N N I N G C O U N C I L  
I N D I A N R I V E R - S T . L U C I E - M A R T I N - P A L M B E A C H



Views of the residents drawing and sharing their ideas



Views of the residents drawing and sharing their ideas



Table 1



Table 2

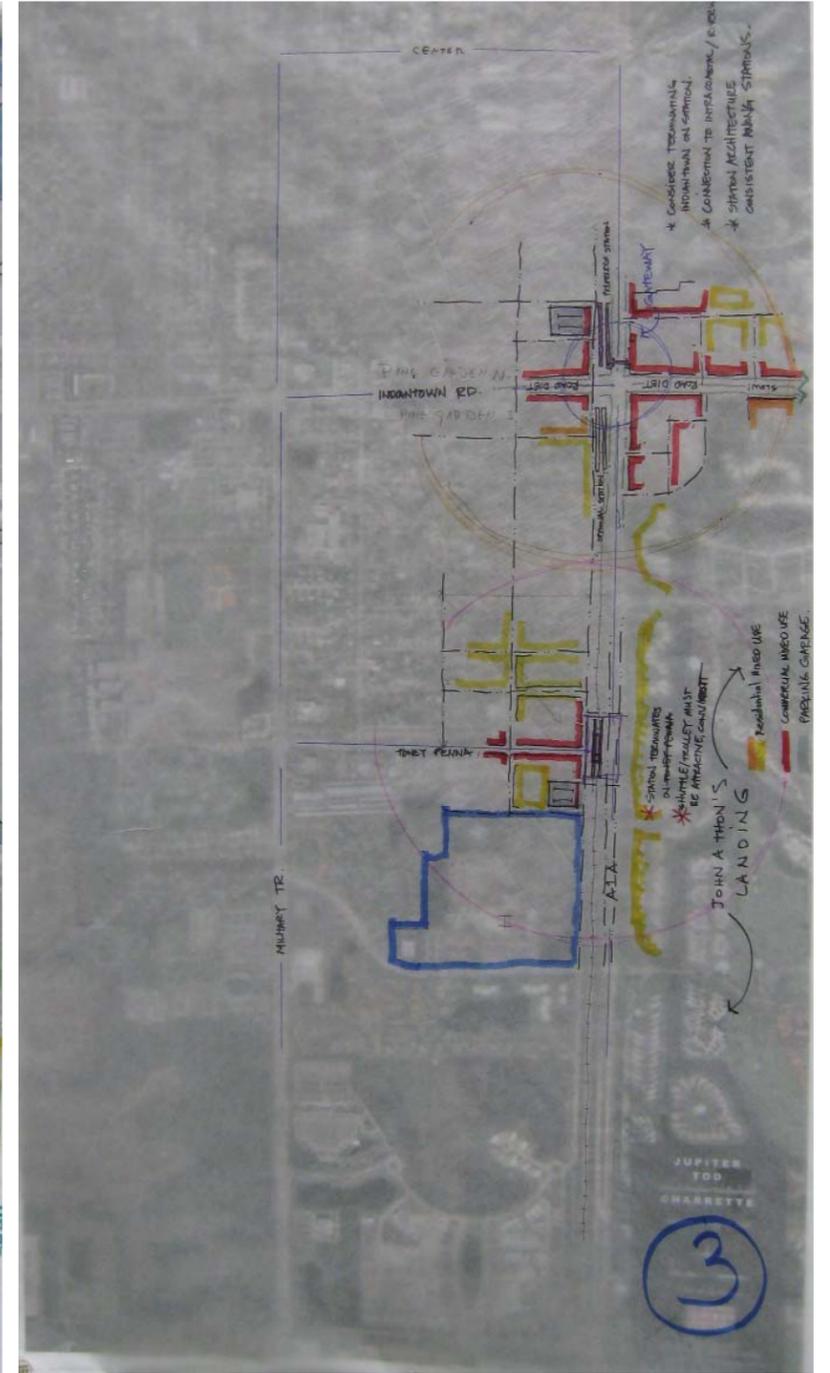


Table 3



Table 4



Table 5



Table 6



Table 7

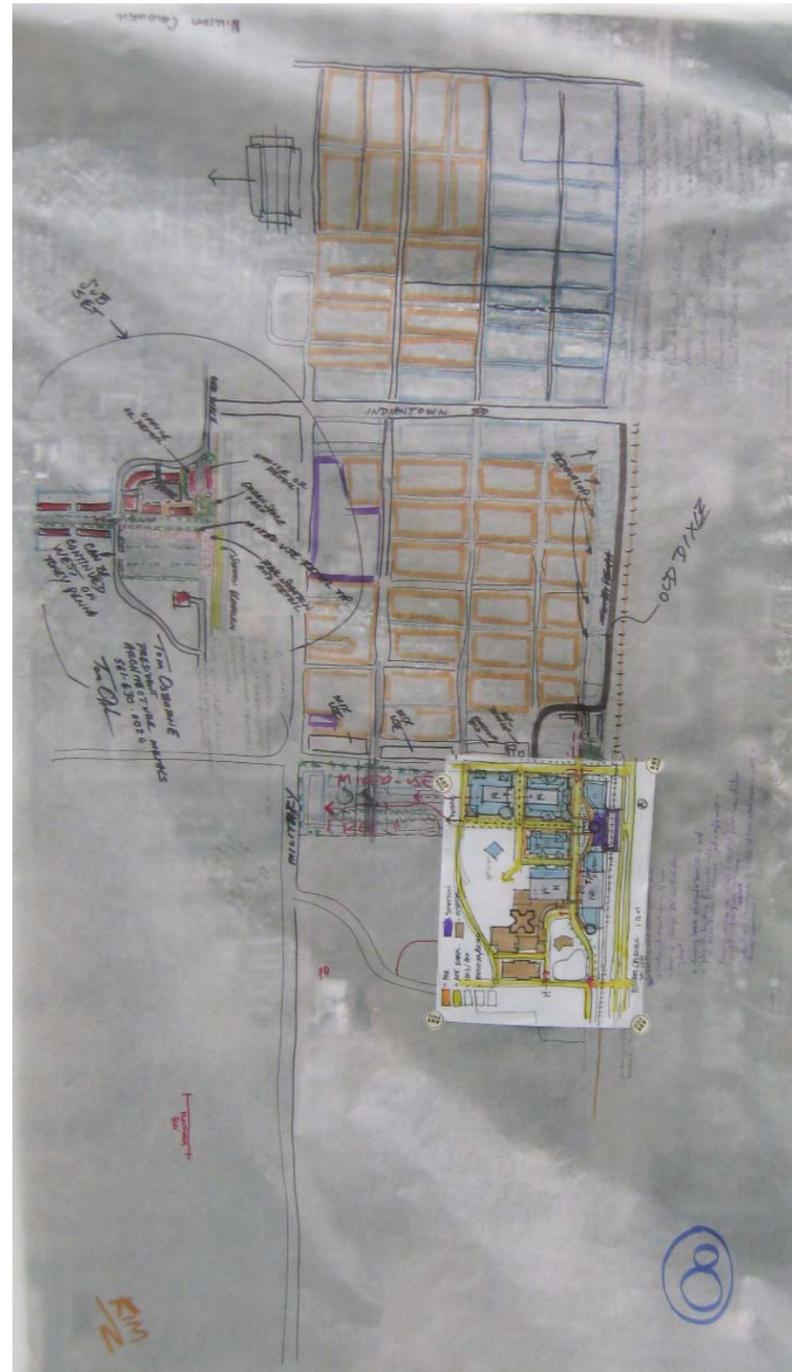


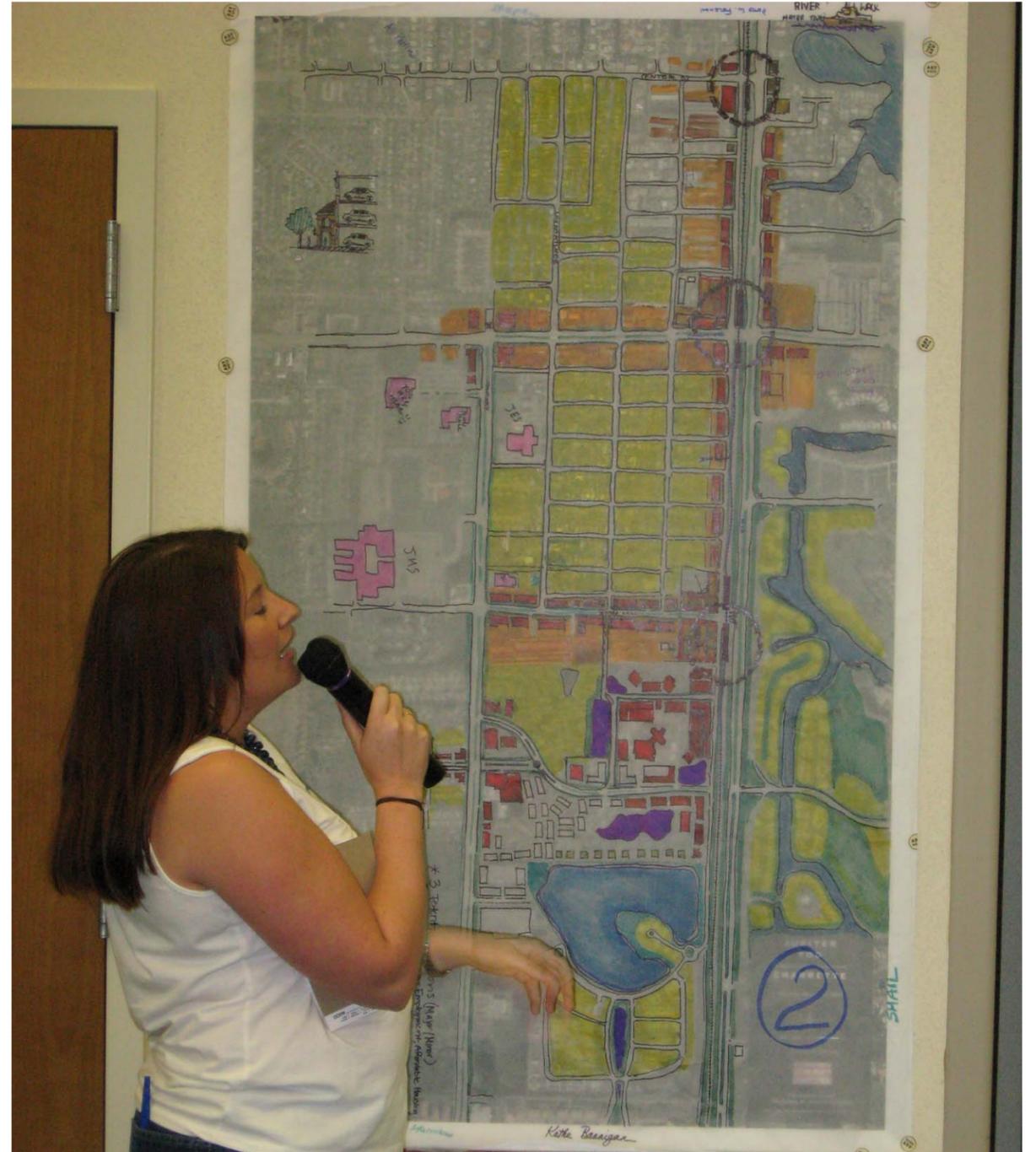
Table 8



Table 9



Views of the residents presenting their ideas



Views of the residents presenting their ideas



Views of the residents presenting their ideas



Views of the residents presenting their ideas



Views of the residents presenting their ideas



Views of the residents presenting their ideas



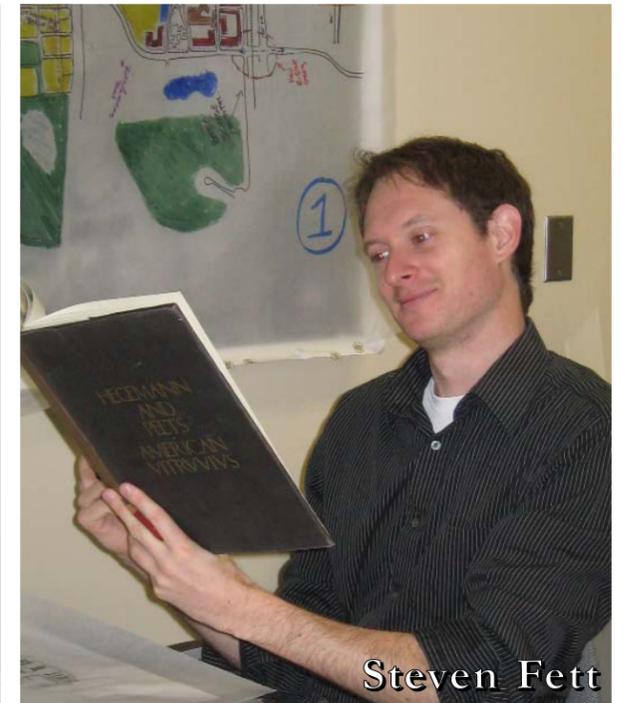
Dana Little



Marcela Cambior



Wynsum Hatton



Steven Fett



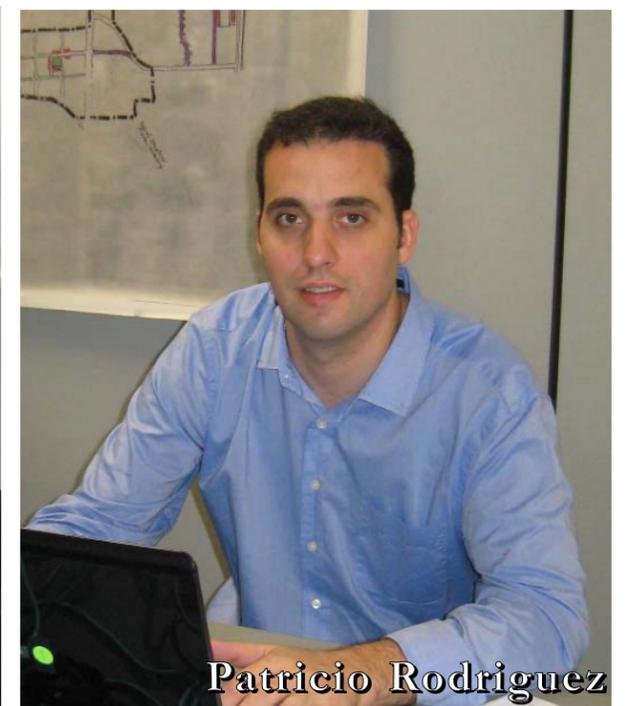
Patricio Navarro



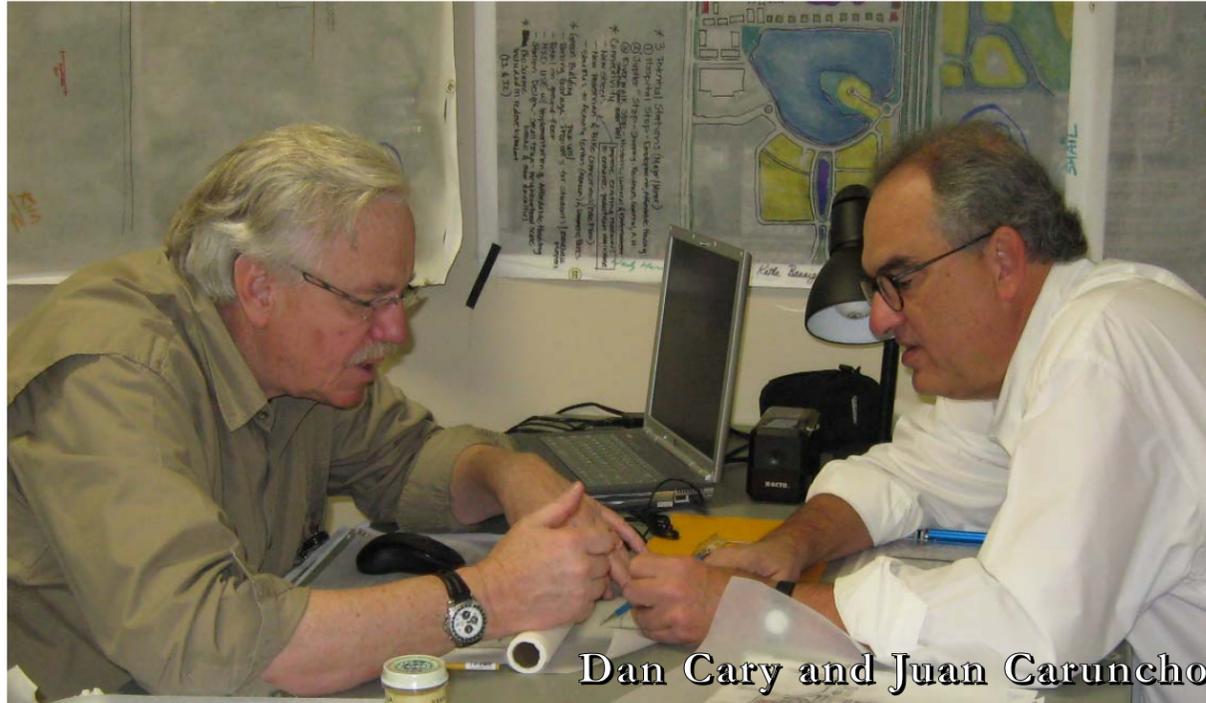
Veronica Mariano



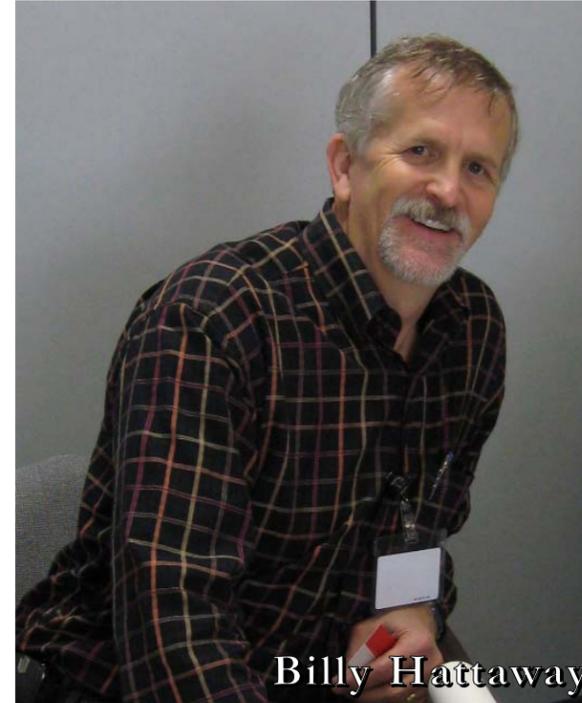
Maximiano Maggione



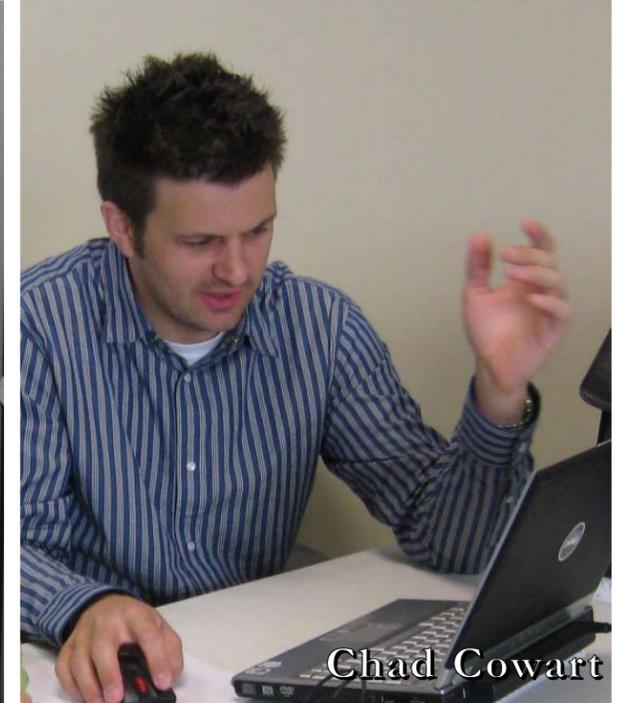
Patricio Rodriguez



Dan Cary and Juan Caruncho



Billy Hattaway



Chad Cowart



Michelle Hipps



Jose Venegas



Christina Belmonte



Shailendra Singh



Kim DeLaney



Marlene Brunot



Tom Hickey



"Transit Sue" Gibbons



**THE CHARRETTE PROCESS - THE DESIGN TEAM**

TREASURE COAST REGIONAL PLANNING COUNCIL

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Terry L. Hess, AICP	Deputy Director
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Zachary Davis	Regional Planner
Kim DeLaney	Growth Management Coordinator
Anthea Gianniotis	Urban Designer/Town Planner
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Elizabeth L. Gulick	Administrative Supervisor
Wynsum W. Hatton	Planning Technician
Stephanie Heidt	Administrative Assistant
Michelle Hipps	Urban Designer
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Penny Myszkowski	Secretary/Receptionist
Gregory P. Vaday	Economic Development Coordinator
Joan Young	Accounting Clerk

301 East Ocean Boulevard, Suite 300  
 Stuart, Florida 34994  
 (772) 221-4060 (phone) (772) 221-4067 (fax)

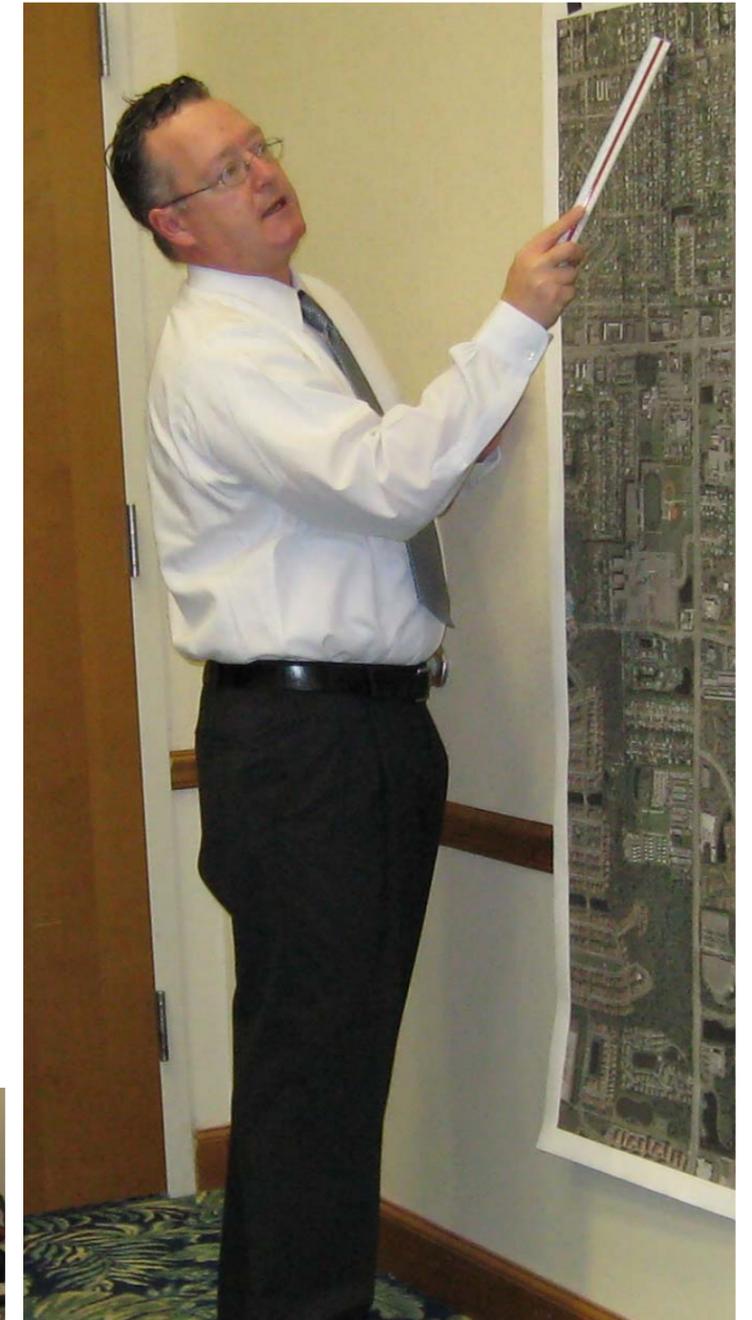


THE DESIGN TEAM

**TCRPC Design Studio:** Marlene Brunot, Kim DeLaney, Anthea Gianniotis, Wynsum Hatton, Dana Little  
**ArX Solutions Inc.:** Maximiano Maggione, Veronica Mariano, Patricio Navarro, Patricio Rodriguez  
**Gannet Fleming:** Sue Gibbons, Tom Hickey  
**Glatting, Jackson, Kercher, Anglin, Lopez, Rinehart:** Billy Hattaway  
**Urban Designers:** Christina Belmonte, Marcela Camblor, Juan Caruncho Dan Cary, Steven Fett, Michelle Hipps, Shailendra Singh, Jose Venegas

TOWN OF JUPITER

Andrew D. Lukasik	Town Manager
Thomas J. Baird	Attorney
Robert H. Lecky	Director of Building
John Sickler	Director of Planning and Zoning
Stephanie Thoburn	Assistant Director, Planning and Zoning
Thomas Driscoll	Director of Engineering and Public Works
Chuck Haas	Interim Director of Finance
Jackie Wehmeyer	Director of Human Resources
Melinda S. Miller	Director of Information Systems
Russell A. Ruskay	Director of Parks and Recreation
Frank Kitzerow	Police Chief
David L. Brown	Director of Utilities



Images from the January 2008 Jupiter Transit-Oriented Development Charrette

**ACRONYM LIST**

**NOTES:**

CSX	Seaboard Coastline Railroad
DRI	Development of Regional Impact
EAR	Evaluation and Appraisal Report
FAR	Floor Area Ratio
FAU	Florida Atlantic University
FDOT	Florida Department of Transportation
FEC	Florida East Coast (Railway)
FTA	Federal Transit Authority
MPO	Metropolitan Planning Organization
SFECC	South Florida East Coast Corridor (Study)
SFRTA	South Florida Regional Transit Authority
TCRPC	Treasure Coast Regional Planning Council
TOD	Transit-Oriented Development