Waterfront CRA Master Plan
Traffic Circulation and Parking Study

Prepared by:

ZEVCOHEN & ASSOCIATES INC
Civil Engineering · Transportation · Environmental Services
Landscape Architecture · Planning

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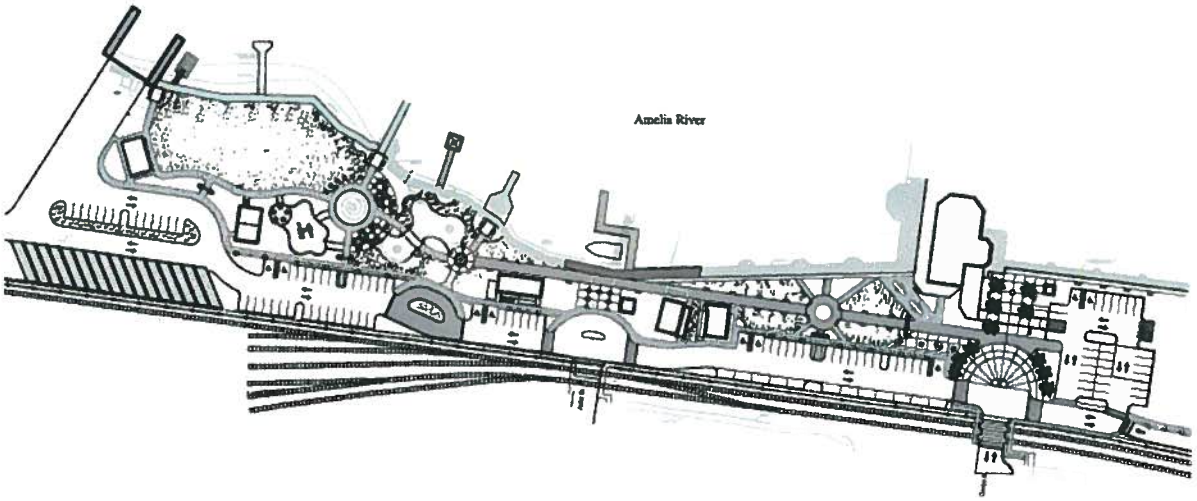
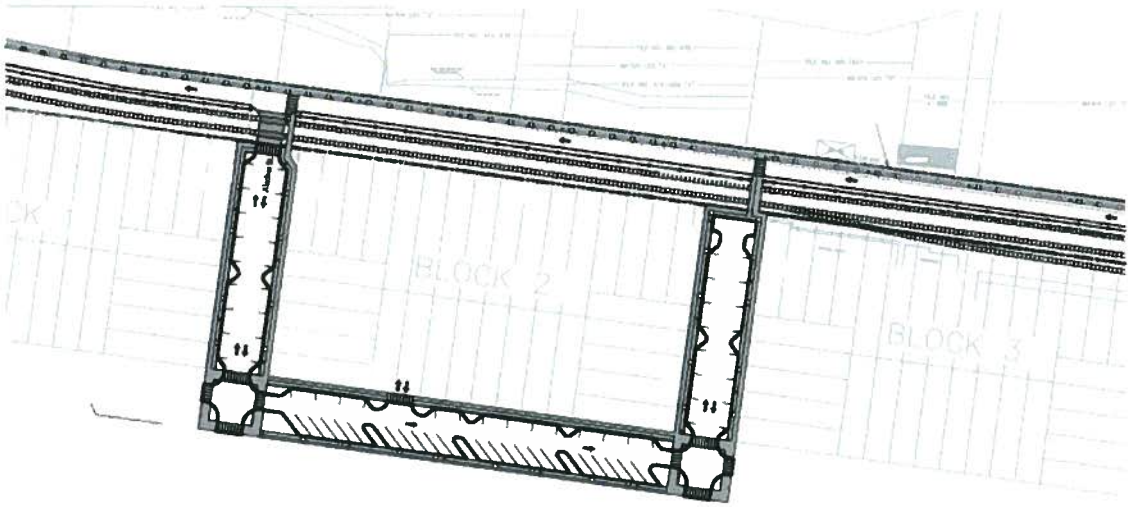
EXECUTIVE SUMMARY

The focus of this study is to determine transportation-related improvements necessary to support development and implementation of the Front Street improvements and the Waterfront Master Plan, currently under conceptual design and development, as shown below.





The Waterfront Master Plan and Front Street improvement concepts are generally consistent with and further the vision of the "Waterfront Area Community Redevelopment Plan – Amended May 2005", which encompasses the 34-acre Waterfront Community Redevelopment Area (CRA) in downtown Fernandina Beach, Florida.

Process

Previous studies and plans that have been conducted by the City were reviewed to determine the status and feasibility of previous findings and recommendations. Data was collected (traffic counts, pedestrian counts) and professional observations were made of traffic flow, parking utilization and the need for transportation improvements to support redevelopment of the area.

Findings

Previous Study Findings

These findings are from previous studies. The current status of each is noted below.

Parking Improvements	Status
Relocate waterfront parking east of RR	See Front St./Waterfront Master Plan
Evaluate public land for additional parking	See Recommendations
Enforce Regulations	Policy varies
Implement 2-3 hour limits – Centre St.	Policy implemented
Implement 6-7 hour limits – Side Streets	Policy varies
Retain City Property for parking	Varies – see recommendations
Improve signage	Varies – see recommendations
Consider fee-based system	Policy not yet implemented
Overnight permits for lots C & D	Policy not yet implemented
Prohibit overnight parking – lots A & B	Policy not yet implemented
Impose time limits or fee – lots A & B	Policy not yet implemented
Implement residential parking permits	Policy not yet implemented
Improve lighting conditions	See recommendations

Front Street Improvements	Comments
Eliminate one RR track	Not Feasible
Frontage road on E. side of RR	See Recommendations
Connect Alachua to Front St.	See Recommendations
Provide pedestrian crossing at Broome	See Recommendations

Pedestrian Improvements	Comments
Construct Sidewalks, as needed	See Recommendations
Provide pedestrian-scale lighting	See Recommendations
Develop way-finding program	See Recommendations

Waterfront Master Plan Traffic Study Findings

The following findings are a result of the Waterfront Master Plan Traffic Study.

Network Capacity – is the number of trips (volume) that can be supported on roadway links and the level of delay at intersections.

- There is ample capacity available in the existing grid transportation network in the downtown area to accommodate substantial additional development and redevelopment.
    - Centre Street, the most heavily traveled roadway in the downtown at 2,625 trips per day, is currently operating at only 36% of its daily capacity at the adopted level of service standard.
    - Centre Street and 2nd Street intersection (with future development of 900,000 sq. ft. of non-retail and 300 dwelling units) is projected to operate with a 28-second approach delay northbound and a 24-second approach delay westbound; These are both within the adopted LOS standard.

- Because the transportation network consists of numerous, highly connected roadways that provide mobility by giving more options for reaching a destination and dispersing traffic; the existing network should be adequate to handle projected increases in traffic due to even a very aggressive redevelopment program.

Network Connectivity – is the degree to which walkways and roadways allow direct pedestrian or vehicular travel between destinations.

- Pedestrian Connectivity Findings
    - Standard - Spacing of 300'- 400' between connections
    - Downtown Area – Standard is generally met with 200'-400' block sizes; exceptions are in primarily residential areas where sidewalks are missing
    - CRA area/east of Front St. – Standard is not met.
        - 475' Ash to Centre
        - 1,750' Centre to Dade
- Vehicular Connectivity Findings
    - Standard - 6 intersections
    - Downtown Area - 39 intersections – exceeds standard
    - CRA/Front St. – 3 intersections – does not meet standard. Additional connectivity is needed
- Connectivity Recommendations
    - Missing sidewalks need to be filled in to improve pedestrian connectivity. Design & Construct Sidewalks - Fill in missing links with minimum 5' wide sidewalks, pedestrian amenities, lighting and signage, as shown in the Study Recommendations. There are approximately 18,000 linear feet of missing sidewalks within the downtown area, not including the provision of sidewalks

along the length of Front Street (which are presumed to be included in the Front Street project).

- Railroad crossing(s) need to be obtained to improve connectivity along Front Street and 2nd Street.
  - Alachua Street Crossing, at a minimum
  - Ideally, crossings at Alachua and Broome

Traffic Circulation

- Front Street
  - South of Centre Street – Two-way design will allow pedestrian connectivity through provision of sidewalk and parking.
  - North of Centre Street – One-way verses two-way will depend on:
    1. Success of obtaining railroad crossing
    2. Provision of Riverwalk
    3. Provision of sidewalks on private property easements
    4. Success of redevelopment efforts and change in character of the area. Front Street design, north of Centre Street, will continue to evolve as other associated decisions are made.
- Ash Street - From an operational standpoint (truck traffic and general mobility) making Ash Street one-way is not warranted at this time.
- Truck Traffic
  - The only significant truck traffic along Ash Street occurs between Front Street and 3rd Street.
  - Truck traffic currently mixes with pedestrians along Front Street due to Front Street being part of the current truck route designation. This will not be desirable as pedestrian traffic increases in this area due to park improvements and redevelopment.
  - The only significant truck traffic along Ash Street occurs between Front Street and 3rd Street.

Parking

- Previous Study – Many of the policy recommendations from the Parking Master Plan have not been fully implemented which may indicate that parking issues have not been insurmountable to date. Many of these recommendations can be implemented through policy changes.

- Capacity - Parking capacity does not appear to be a problem currently. With 420 +/- spaces in the surface parking lots and 422 on-street parking spaces spread throughout the downtown area, these 842 spaces currently provide ample parking within a reasonable proximity to all of the areas downtown.
- Location – The walking level of service (LOS) from public parking areas is LOS B, or better, for most of the study area. Missing sidewalks cause isolated areas to operate at LOS F.
- Visibility - Visibility is a key factor for retail uses. Appropriate signage and way-finding will be an important factor in providing a "sense of visibility" for parking. Directing non-retail users (office, government) away from prime parking locations can also help address this issue.

Key Study Recommendations

The attached table summarizes the key recommendations from the traffic study. The recommendations are prioritized by short-term and longer-term improvements. The key study recommendations are graphically portrayed in the attached figure.

Next Steps

The City of Fernandina Beach should develop cost estimates for the recommended improvements and incorporate them in the City's Capital Improvement Program, in order of City priority. The following short-term recommendations would make a big impact on traffic circulation in the CRA.

- Design and construct Front Street and Waterfront Plan improvements, including associated improvements at existing and proposed crossings.
- Design and construct the 18,000 ± linear feet of missing sidewalks (and lighting). Prioritize areas and develop a program to make improvements on an annual basis. Identify and/or obtain funding for improvements. This will address connectivity concerns and parking level of service deficiencies.
- Design and construct improvements to parking lot west of City Hall and conceptually design identified improvements to potential parking locations.
- Develop Wayfinding Program – Timing is key to include signage improvements with sidewalk, park and parking improvements.
- Develop Bicycle Master Plan for City, making bicycling a more viable mode for residents and visitors.

KEY STUDY RECOMMENDATIONS

Short Term Recommendations

Land Use

- Obtain vehicular and pedestrain railroad crossing(s) at Alachua Street and/or Broome Street.
  - * Separate incompatible uses through traffic flow, buffering and landscaping once crossing is achieved.

Access and Connectivity

- ***Front Street Corridor Improvements***
  - * Create a landscaped buffer and pedestrian sidewalk/path with pedestrian-scaled amenities on both sides of the rail line north to Broome Street, subject to obtaining railroad crossing(s).
  - * Pedestrian Amenities – Provide activities and pedestrian-scaled facades along the building faces fronting the railroad.
  - * Improve the walking surface at the existing and proposed crossings of the rail lines for pedestrians.
  - * Pedestrian-scaled lighting should be installed on all existing and proposed sidewalks at an average spacing of 100 feet (50 feet staggered).
- ***Pedestrian Improvements beyond Front Street***
  - * 18,000 linear feet of missing sidewalks in residential areas should be provided.
- ***Bicycle Improvements***
  - * A designated route should be established on low volume streets to access core locations in the downtown.
  - * Bicycle parking racks should be provided in public parking lots, parks and along the bike route at other key destinations.
  - * A bicycle master plan should be developed for the island to establish safe designated bike routes and identify the need for improvements to better connect residential areas with the downtown.

Parking

- Identify additional locations within one-quarter mile of the waterfront for parking and develop a parking lot layout to maximize number of spaces and use of the property.
  - * The City-owned property to the west of City Hall should be improved and striped for parking (at least in the near-term).
  - * The City-owned property on the southeast corner of Broome and Second Streets is a good candidate for future parking.
- Develop wayfinding program and provide signage for public parking locations and primary retail uses/areas served by those parking lots/spaces.
- Provide sidewalk connections, lighting and other pedestrian amenities along roadways to parking areas and surrounding destinations.

Long-Term Recommendations

Land Use

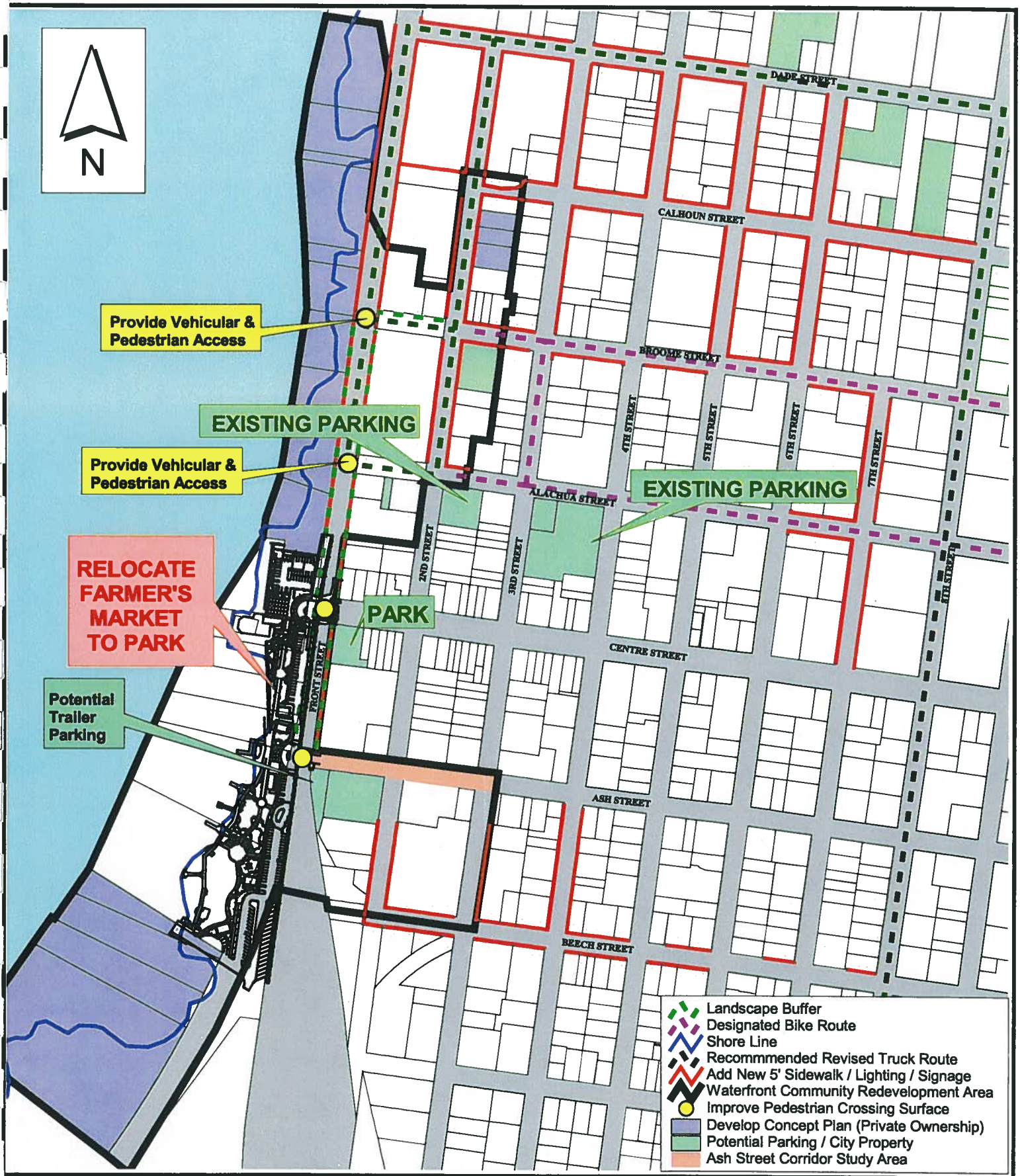
- Revise the future land use designation and zoning classifications on properties in the waterfront CRA in accordance with the provision of a new rail crossing (industrial/working waterfront to the north and waterfront mixed use/pedestrian-oriented south of the new connection).
- A development opportunity assessment should be considered for the 13 privately-owned parcels along the waterfront in order for the City to effectively implement the design of the Waterfront Park and Front Street
- If the Lane property develops as proposed, a pedestrian facility on the east side of the tracks is recommended, along with street level amenities and activities at the building face along the block.
- A corridor study should be conducted for Ash Street to identify opportunities for redevelopment.

Truck Traffic

- Revise designated truck route to provide a clear separation of industrial uses and heavy traffic from the tourist/retail and residential uses and keep heavy trucks out of these areas.
- Reduce truck traffic impacts in residential areas.

Parking

- Conduct a shared parking analysis for existing peak and off-peak private users downtown.
- Upon completion of the Waterfront Park improvements, relocate the Farmer's Market to the waterfront area.



Source : Nassau County Property Appraiser

Date : 03/12/09

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KEY STUDY RECOMMENDATIONS
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March 20, 2009

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INTRODUCTION

Purpose of the Study

The purpose of this study is to evaluate the need for transportation related improvements for the 34-acre Waterfront Community Redevelopment Area (CRA) in downtown Fernandina Beach, Florida, as shown in Figure 1. The study's focus is to recommend improvements that are necessary to support development and implementation of the Waterfront Master Plan.

Background

The Waterfront CRA was established by the City of Fernandina Beach Community Redevelopment Agency in 2005. In the three years since completion of the Redevelopment Plan, the City has achieved the following in the Waterfront CRA:

- Adopted the CRA Capital Improvements Plan
- Adopted CRA design guidelines
- Secured grant funding from Florida Inland Navigation District
- Secured grant funding from Florida Fish and Wildlife Conservation Commission (Boating Infrastructure Grant Program)
- Secured grant funding from the Waterfronts Partnership
- Established Florida Waterfronts Committee
- Created a Waterfront Mixed Use Land use category
- Completed Front Street Concept Plan

Review of Previous Studies

CRA Master Plan

The *"Waterfront Area Community Redevelopment Plan – Amended May 2005"* details the objectives, strategies and projects that were adopted to guide redevelopment. Some of the key elements of the CRA Plan relating to transportation are as follows:

Vision Statement

- Maintain views and access to the water
- Establish a sense of place along the water's edge
- Maintain the character of Fernandina Beach, as reflected in its working waterfront and historic district

Source : City of Fernandina Beach & USGS 2004 Aerial

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FIGURE 1
COMMUNITY REDEVELOPMENT AREA LIMITS MAP
WATERFRONT MASTER PLAN
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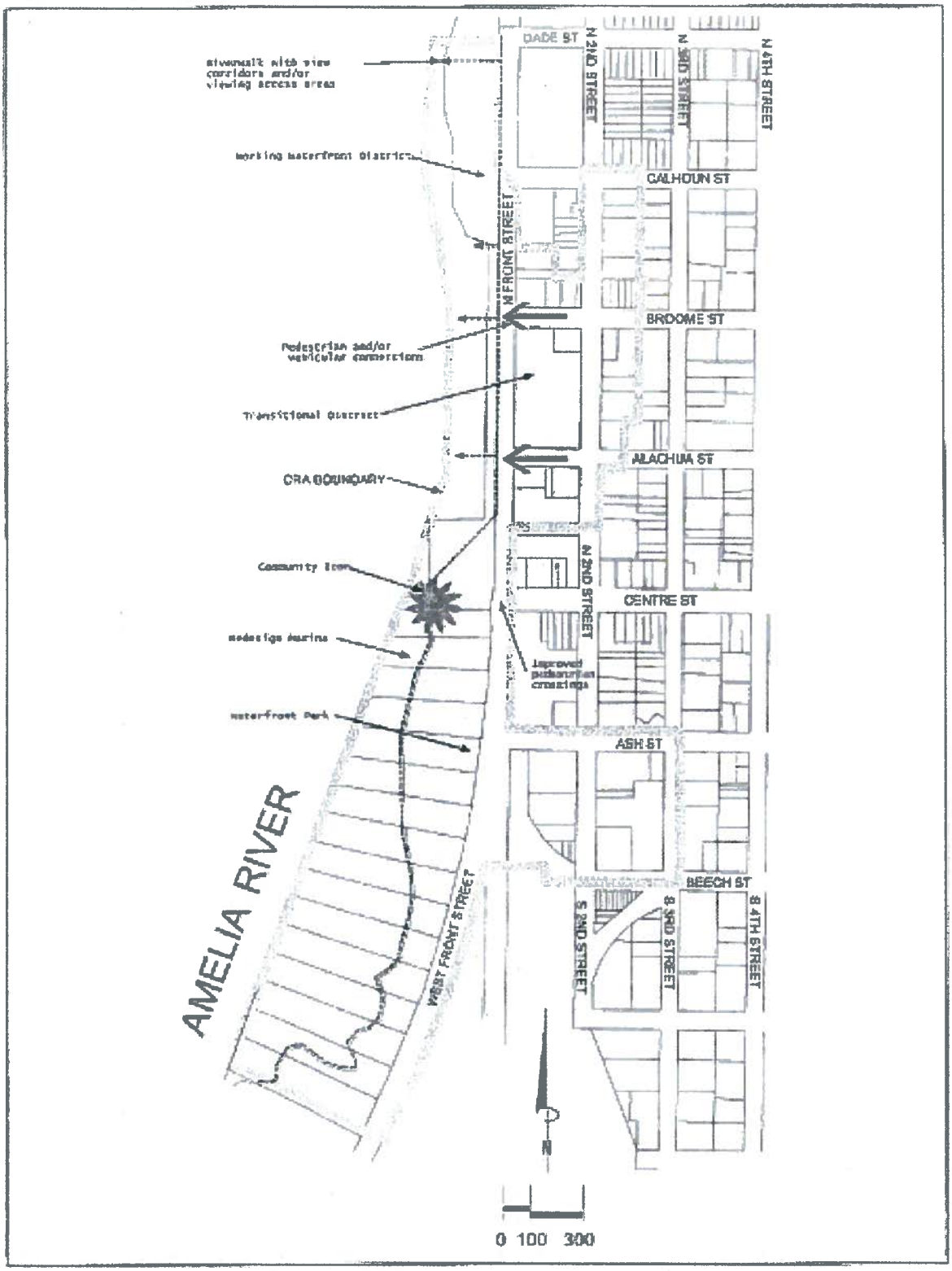
- Front Street improvements
  - Eliminate one of the railroad tracks to provide additional right of way
  - Frontage road on east side of tracks to allow frontage
  - Connect Alachua to Front Street for vehicular and pedestrian traffic
  - Provide a pedestrian crossing at Broome Street or full vehicular access with traffic calming and limitation on trucks.
  - Design elements consistent with Centre Street
- Construct sidewalks, as needed
- Pedestrian-scale street lighting throughout CRA, consistent in style with Centre Street lighting
- Develop a way-finding signage program throughout the historic downtown
- Restrict street sweeping and refuse collection to early morning and late night to avoid conflicts with pedestrian and vehicular traffic flow.
- Public access to the water
  - Redesign public waterfront lands to provide enhanced park facilities
  - Provide a community icon at Centre Street/Front Street intersection
  - Provide a riverwalk system along the water
  - Provide incentives for water views and/or pedestrian connections on private lands
- Parking – relocate waterfront parking to lands east of the railroad tracks
  - Evaluate City-owned property and rights-of-way for additional parking
  - Incorporate screening and landscape standards for new off-street parking facilities

These redevelopment objectives are portrayed graphically in Figure 2, Redevelopment Initiatives Diagram, from the Waterfront Area Community Redevelopment Plan. (Note: Waterfront designs/plans may have changed since this study.)

Parking Master Plan

A Parking Master Plan (PMP) was completed for the City of Fernandina Beach in July 2002. The PMP divided the 35-block study area from Dade Street, to Ash Street, to 8th Street to the Amelia River into three sub-areas: Downtown Sub-Area, Marina Sub-Area, and Residential/Church Sub-Area. The PMP relied on the Parking Supply/Demand

Figure 2. Redevelopment Initiatives Diagram



Source : City of Fernandina Beach
Waterfront Area Community Redevelopment Plan

Note : Waterfront designs/plans may have changed since this study.

Study conducted previously in 1999. Extensive consensus building was undertaken to address parking issues and identify potential future parking location and number of spaces. The PMP did not address the portion of the CRA located to the west of the RR that is outside of the Marina Sub-Area. The PMP Action Plan high and medium priority recommendations are summarized as follows:

Downtown Sub-Area

- Enforce parking regulations on a consistent and regular basis
- Implement two to three hour time limits or a fee based system along Centre Street
- Implement six to seven hour time limits or fee based system along perpendicular roads
- Retain some of City property for future parking, especially in high demand areas
- Add a parking requirement or an in-lieu fee to the Zoning Ordinance
- Increase patrol officer visibility during business closing hours
- Improve signage to/from parking areas
- Consider a fee-based system

Marina Sub-Area

- Implement overnight parking permits for lots C and D
- Prohibit overnight parking for lots A and B
- Implement time limits or fee based system for lots A and B

Residential Church Sub-Area

- Implement a residential parking permit in problematic areas – where businesses and residential units are merged in close proximity to each other
- Improve lighting conditions to encourage residents to walk to and from downtown

Land Development Traffic Assessment for Lane Company Downtown Fernandina Project

This study was conducted in September 2006 to project the traffic impacts from the proposed development of 3 parcels of land, consisting of 3.3 acres and 8,000 sq. ft. of retail with 4 lofts above and 32 townhouse units. The project was projected to generate 566 daily trips and 36 p.m. peak hour trips. The general findings of this study were:

- There will be no failing roadway links within the project impact area.

Front Street/2nd Street Traffic Circulation Scenarios

A study was conducted in June 2008 to evaluate various scenarios for traffic circulation on Front Street and Centre Street, based on future development of the Waterfront CRA. The future development assumptions included 400,000 square feet of light industrial/warehouse, 300 residential dwelling units, 100,000 square feet of office, and 400,000 square feet of retail, which was assumed to be a maximum development level. The primary purpose of the analysis was to determine the potential for opening the Alachua Street railroad crossing and the possible impacts of closing the Centre Street crossing. The following are the stated conclusions of the study:

- In the future motorists will experience significant delay in the area around Centre and 2nd Streets *(Note: Centre/2nd St. intersection – westbound - 24 seconds approach delay – LOS C; northbound - 28 seconds approach delay - LOS D)*
- Closing the Centre Street crossing would be detrimental to the goals of the City of Fernandina Beach.

ANALYSIS

Study Area

As stated earlier, the purpose of this study is to evaluate the need for transportation related improvements for the Waterfront Community Redevelopment Area (CRA). The study's focus is to recommend improvements that are necessary to support development and implementation of the Waterfront Master Plan. The primary study area will focus on the area of the CRA that is west of the railroad tracks, along the waterfront.

In order to properly evaluate traffic flow and circulation and the level of connectivity needed along the waterfront, it is important to understand key travel origins and destinations, major generators and the characteristics of the *surrounding* street network. To better understand the transportation context, the study area, shown on Figure 1, is defined as follows:

Primary Study Area (PSA)

Waterfront Community Redevelopment Area property west of the railroad

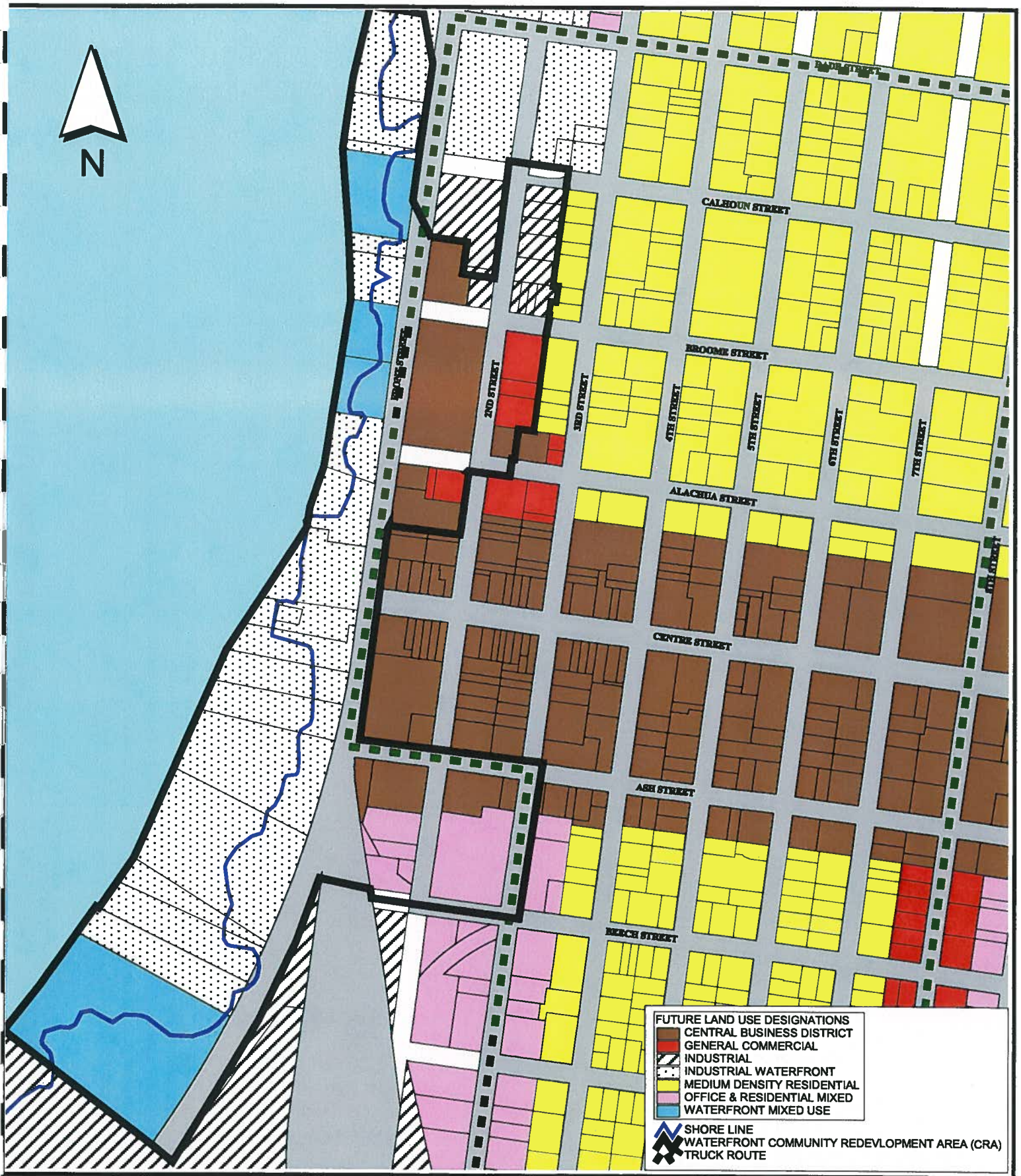
Secondary Study Area (SSA)

- Dade Street on the north
- 8th Street on the east
- Beech Street on the south
- Amelia River on the west

Land Use

Primary Study Area (PSA)

The PSA, located to the west of and including the RR consists of 13 private parcels and seven City-owned parcels. To the north along the water front are the Port Facility and Smurfit Stone Paper Plant and to the south is Rayonier Paper Plant. The RR and marine industries characterize the area. The existing land uses consist of marina, marine industrial, commercial fuel docks, and restaurant.



Source : Nassau County Property Appraiser
& City of Fernandina Beach
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FIGURE 3
CRA FUTURE LAND USE DESIGNATIONS
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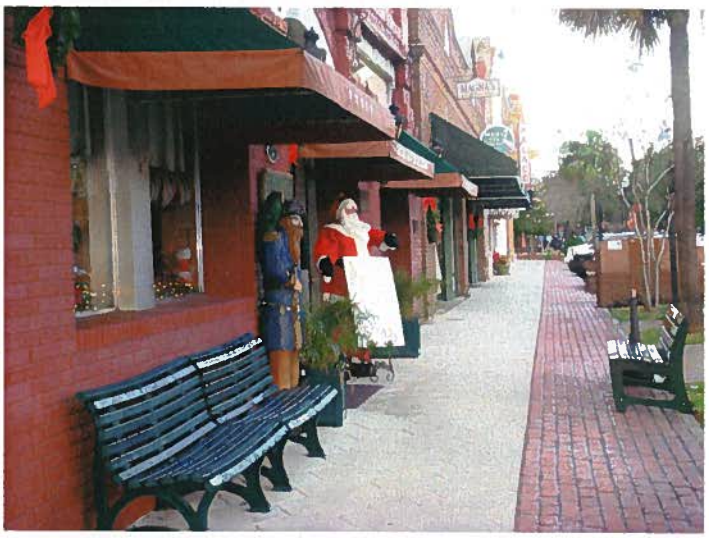
designation. The CRA Waterfront Development Plan proposed a somewhat larger area that would incorporate 6 parcels. (Note that the northernmost parcel that was changed to Waterfront Mixed Use was envisioned as part of the Working Waterfronts area {not mixed use} in the Waterfront Area Community Redevelopment Plan.)

The allowable zoning is reflective of Coastal High Hazard Area restrictions on the increase in entitlements and the City's desire to maintain the characteristics of a working waterfront at a scale of development consistent with the historic development pattern.

Much of the Primary Study Area (waterfront) has physical development constraints that, along with City and State regulations and adopted CRA design guidelines, will limit the scale and impact of redevelopment. There are, however, opportunities for private and public/private redevelopment. The City of Fernandina Beach has developed a concept plan for improvements to Front Street and is currently designing a waterfront park for the seven City-owned parcels.

Land use and site design of the redevelopment of waterfront parcels will determine if the CRA becomes predominantly an auto-dominated or a pedestrian-oriented area. The site design of the building, circulation, parking and landscaping will create the context for a walkable environment or a driving environment. With Front Street lacking connectivity to the larger grid system, the small shallow lots on the waterfront leaving no other opportunities for connectivity, and parking provided between uses and Front Street, the creation of an urban pedestrian environment will be a challenge. Alternatively, allowing the PSA to become a predominantly vehicular environment creates conflicts with the City's Vision Statement to establish a sense of place along the water's edge, maintain views and access to the water, and provide public access to the water. A vehicular-driven development pattern will likely restrict development opportunities of private development parcels along the waterfront.

Secondary Study Area (SSA)



Directly across the railroad from the waterfront properties is the Secondary Study Area located between 8th Street on the east, the rail line on the west, Dade Street on the north and Beech Street on the south and consisting of the downtown and portions of the Historic District. Unlike the CRA, most of the Historic District has a substantially built out sustainable mix of uses with a highly walkable commercial

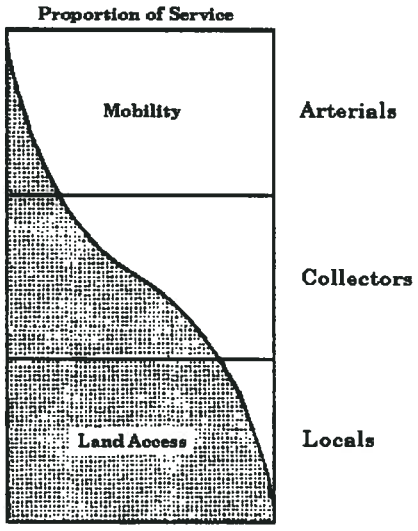
core, civic and recreational uses, and a diverse residential area. This is an area where people enjoy living, working, playing and visiting time and again.
While the SSA is substantially built out, there are some opportunities, primarily for redevelopment (First Baptist Church, the post office, etc.). Please refer to Figure 4, Development/Redevelopment Opportunities. The likelihood is that the majority of redevelopment over time will come from the continued increase in the attraction of Downtown/Historic Fernandina to tourist and daily visitors. This will cause continued intensification from small scale redevelopment in and around Centre Street.

The scale of the development and redevelopment allowed by City regulations along with the size of parcels within the tightly defined urban block and street grid will limit the severity of traffic impacts from the limited number of individual projects.

Mobility

The City's overall downtown roadway network with short blocks and frequent connections (intersecting streets) provides excellent mobility, by dispersing traffic and offering multiple route choices. In a downtown network, the primary purpose of most of the roadways is to provide pedestrian and vehicular *access* to properties in the downtown. Access is an inverse function of mobility, as shown in the figure. The more access a roadway provides to properties, the less mobility it provides.

Relationship of functionally Classified Systems in Serving Traffic Mobility and Land Access



As such, the desired characteristics for a typical downtown roadway network do not focus on roadway capacity but rather focus on:

- **Slow speeds** – this is achieved through side friction (parking, etc. along the street), short blocks with stop controlled intersections and other traffic calming devices, such as pavement treatments for pedestrian crossings. The City's network generally exhibits these characteristics. The **highest recorded average speed** on the downtown network was **20.7 mph** on westbound Beech Street.
- **Evenly dispersed traffic volumes** - this is achieved through the provision of a network of multiple intersecting roadways, providing a variety of route choices. The downtown network generally exhibits low traffic volumes, due to the dispersed traffic patterns. Centre Street is the highest volume roadway, at 2,625 vehicles per day. The other streets in the network typically experience less than 1,000 trips per day, as follows.

Source : Nassau County Property Appraiser & 2004 USGS True Color Aerial

Date : 03/11/09

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FIGURE 4
DEVELOPMENT / REDEVELOPMENT OPPORTUNITIES
WATERFRONT MASTER PLAN
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- **Pedestrian-oriented environment** – this is achieved through the provision of pedestrian-scaled amenities such as furnishings, and architecture to evoke a sense of place, providing a secure environment though lighting and safe crossings. The SSA network generally exhibits these characteristics, while the PSA significantly lacks these characteristics. More detailed information regarding the pedestrian environment is provided in the connectivity section of this report.

The Existing Transportation Facilities are shown in Figure 5. Pedestrian and vehicular transportation facilities are shown, as well as the designated truck route through the area. In general, the SSA network is an excellent high-capacity grid network, both for vehicles and pedestrians. There are some missing links of the network that hinder it from operating at its maximum level of efficiency.

Vehicular classification counts were taken the week of December 14, 2008. This information is shown in Figure 6, Existing Daily Traffic Volumes, and is provided in Appendix A, Existing Daily Traffic Volumes. The data collected includes average speed, vehicle class (truck, motorcycle, passenger car, etc.), and volumes. Additional information is provided in the Vehicular Mix/Truck Traffic section of this report. Key count locations are summarized below.

Street	Link	Count[1]	LOS C Capacity	% Capacity Used
Centre St.	2nd to 3rd	2,625	7,280	36%
Centre St.	Front to 2nd	1,868	7,280	26%
Ash St.	Front to 2nd	1,223	7,280	17%
Front St.	Centre to Ash	944	7,280	13%
Alachua St.	2nd to3rd	730	7,280	10%
2nd St.	Centre to Alachua	514	4,400[2]	12%

Notes: [1]24-hour volume; [2]one-way segment

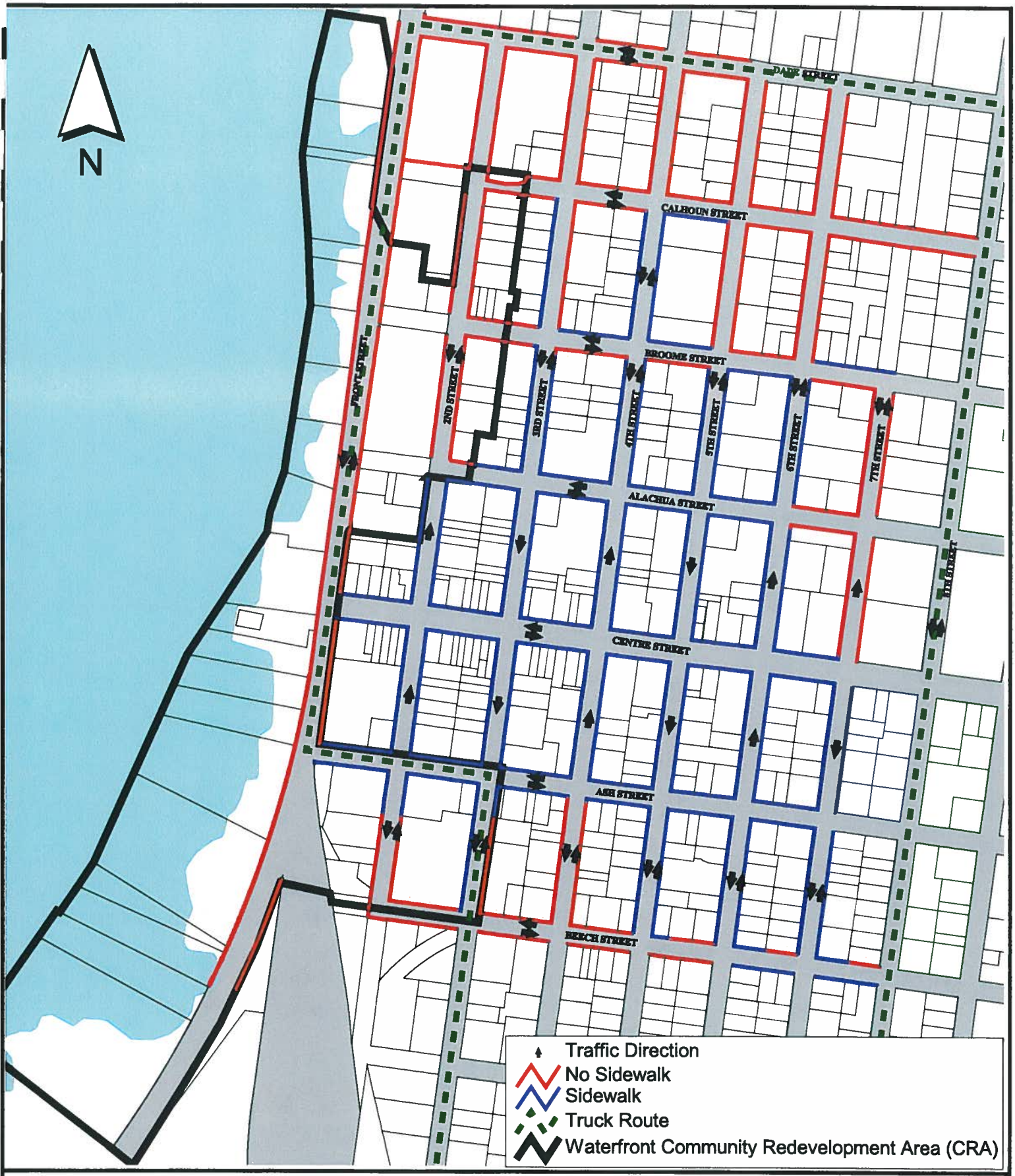
Primary Study Area – Front Street

The 24-hour volume counts for southbound (SB) and northbound (NB) Front Street are shown on Figure 7, Directional Daily Traffic Volumes, and are summarized below:

Front St. Link	SB	NB	Total
Dade to Centre	135	115	250
Centre to Ash	494	450	944
South of Ash	108	74	182

Centre Street to Ash Street

Existing traffic volumes on Front Street are low, particularly north of Centre Street and south of Ash Street. Most of the traffic on Front Street is between Centre and Ash. Of that, nearly half of the traffic (41% inbound and 30% outbound) from Centre Street is



Source : Nassau County Property Appraiser

Date : 03/11/09

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FIGURE 5
EXISTING TRANSPORTATION FACILITIES
WATERFRONT MASTER PLAN
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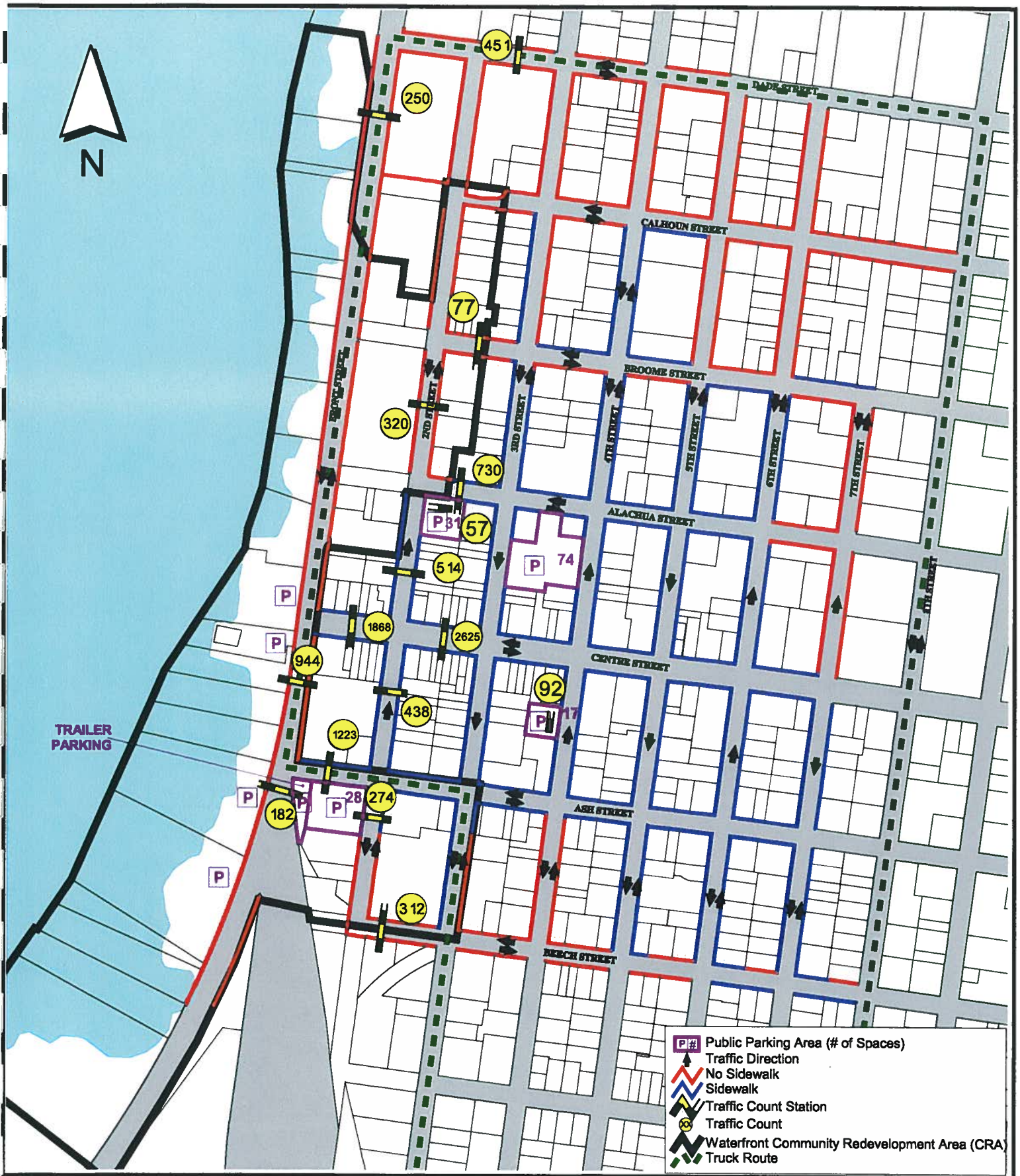

Source : Nassau County Property Appraiser

Date : 03/05/09

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FIGURE 6
EXISTING DAILY
TRAFFIC VOLUMES
WATERFRONT MASTER PLAN
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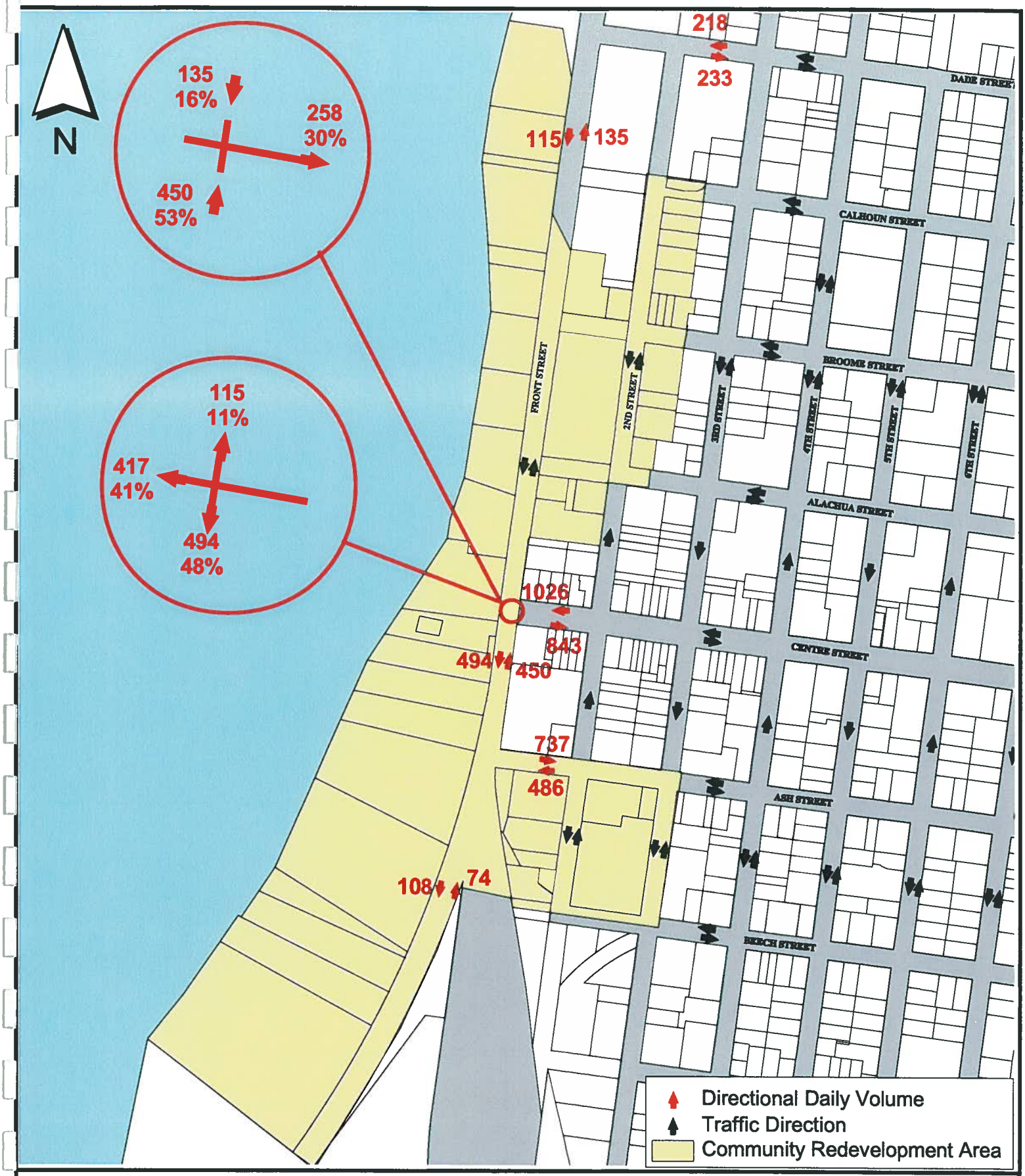

Source : Nassau County Property Appraiser

Date : 03/11/09

200 0 200 400 Feet

FIGURE 7
DIRECTIONAL DAILY VOLUMES
WATERFRONT MASTER PLAN
FERNANDINA BEACH, FLORIDA

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coming from/to the parking lots and not directly accessing Front Street for any significant distance. This traffic circulation pattern could change, depending on how the waterfront area is built-out. If parking remains a primary use along the waterfront, the traffic circulation pattern between Centre and Ash Streets is not likely to change significantly.

Dade Street to Centre Street

Between Dade Street and Centre Street, only 11% of the 1,026 trips heading westbound on Centre Street at Front Street proceed north on Front Street to Dade Street. About 16%, (135 trips) of the eastbound trips at Centre Street are heading southbound on Front Street. The peak direction for Front Street, between Centre and Dade is currently southbound. The directional split is 54% (southbound), which is pretty typical for a peak directional flow.

Front Street could operate effectively, between Dade and Centre, as a one-way facility, from a mobility standpoint. However, the one-way facility will further limit vehicular accessibility and further amplifies the need for additional connections to Front Street (at Alachua and/or Broome). The assessment of whether Front Street should be one-way is also dependent on how the properties along Front Street redevelop.

South of Ash Street

The count for Front Street, south of Ash was 182 bi-directional trips per day. It has a predominantly southbound (SB) directional flow (59%). About 7 heavy trucks use this segment per day (5 SB and 2 NB).

Secondary Study Area

The City has an excellent grid transportation network in the downtown area, providing many route choices. Centre Street is the major roadway running east-west through the downtown. It is a 2-lane undivided facility with diagonal parking along both sides. As expected, Centre Street carries the most traffic (2,625 trips per day) of any downtown roadway. The maximum service volume of Centre Street at LOS C is 7,280 vehicles per day. **Centre Street, the most heavily traveled roadway in the downtown, is currently operating at only 36% of its daily capacity.**

The low volumes indicate that the City has substantial capacity available in the existing roadway network to accommodate additional development and redevelopment. Because the SSA is an effective network of highly connected internal roads that provide mobility by giving more options for reaching a destination and dispersing traffic, the road network should be able to handle projected increases in traffic due to even a very aggressive redevelopment program.

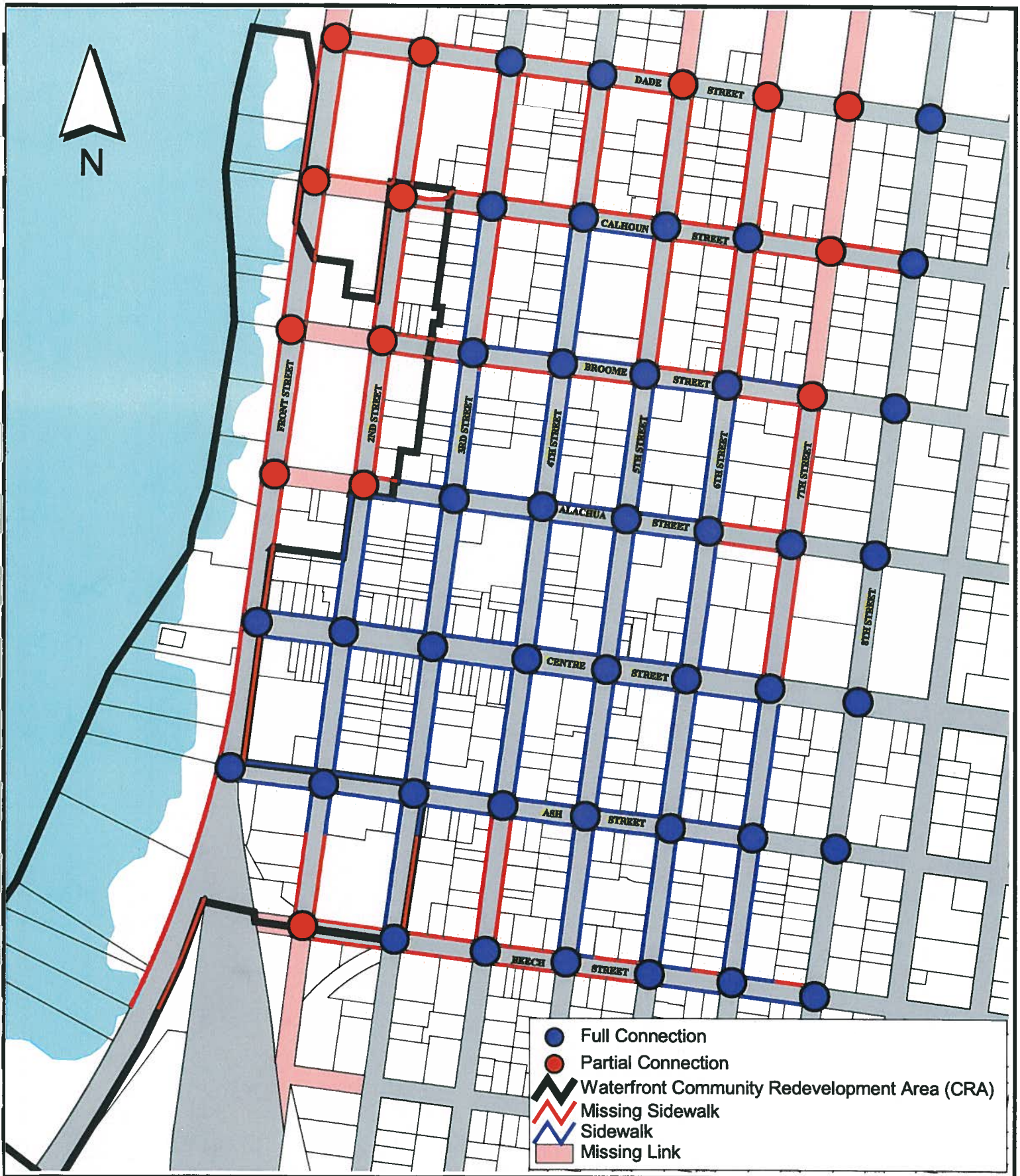
Network Connectivity

Network connectivity is the degree to which walkways and roads are connected to allow direct travel between destinations. The overall network is shown on Figure 8, Network Connectivity. A connectivity index can be used to quantify how well a roadway network connects destinations. Indices can be measured separately for vehicular and pedestrian travel, as noted below.

Primary Study Area Connectivity

Within the Primary Study Area, the City's finding of necessity Resolution identified inadequate street layout (connectivity), and lack of pedestrian or bicycle facilities and parking as blighting influences. Front Street and the PSA exhibit the following characteristics:

- **Vehicular**
  - **Internal Connectivity:** This area is not well connected to an internal road network. Front Street is the only roadway facility west of the RR tracks, with properties accessing the roadway directly. There is no internal street network.
  - **External Connectivity:** This area is not well connected to an external roadway system with only three connections (Dade, Centre, and Ash) in the eight-block area. In comparison, the adjacent SSA system has eight connections in the eight-block area.
- **Pedestrian**
  - **Connectivity:** Walkable communities limit block sizes to 300 feet to 400 feet. The spacing of connections (effective block size) along Front Street ranges from approximately 475 feet between Ash Street and Centre Street to 1,750 feet between Centre Street and Dade Street.
  - **Recommended Spacing:** The **recommended spacing for pedestrian connections is 330 feet**. The recommended spacing is a challenge, due to the regulations restricting the spacing of railroad crossings, as noted below.
- **Railroad:** The rail line is an unsightly physical barrier. Although the railroad is critical to the City's port facility and economic well being, it is also a major design constraint to the redevelopment of the CRA. Front Street is the only street providing vehicular access for the waterfront. Running north and south, Front Street is a two-way street squeezed tightly along the west side of the rail line (six feet or less from the edge of track – three feet from the edge of a railroad car when a train is present). In certain areas, the tracks sit at a significantly higher grade than the neighboring property to the east, creating a substantial separation and visual barrier. The rail cars sitting on the most westward track for lengthy periods of time add to the physical barrier effect, creating a constraint to achieving an urban level of vehicular and pedestrian



Source : Nassau County Property Appraiser

Date : 03/11/09

200 0 200 400 Feet

FIGURE 8
NETWORK CONNECTIVITY
WATERFRONT MASTER PLAN
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accessibility. An application for a new crossing has been made by the City of Fernandina Beach for a new railroad crossing at Alachua Street and Front Street. It is currently under review by the Florida Department of Transportation, CSX railroad and Railtec (the short-line operator). **Railroad crossings are typically required to be spaced at least one-half mile (2,640 pedestrian crossings/connections every 300 feet and vehicular connections every 1,320 feet.**

Summary: The PSA has poor accessibility and connectivity that are not conducive to redevelopment.

Because of the limitations in the PSA described above, every opportunity to create a more walkable and interconnected business environment should be incorporated into the design of the Waterfront Master Plan. Obtaining a railroad crossing at Alachua Street is a core improvement, key to obtaining a more walkable, interconnected environment. A traditional urban environment would mimic Centre Street with parking located on the street and behind buildings, with a continuous line of attached building fronts oriented to the street. This will not occur in its ideal form within the PSA due to physical constraints, but measures taken to improve urban form will increase opportunities for redevelopment.

Secondary Study Area Connectivity

Within the SSA, the small city block (average of 200 feet by 400 feet) and street grid system, located between 8th Street on the east, the Rail line on the west, Dade Street on the north and Beech Street on the South is a well connected network and provides good accessibility. The short blocks create frequent stop-controlled intersections, keeping speeds low. It should be noted that this level of connectivity is diminished for the blocks located between 2nd Street and the rail line because there is no form of public access (vehicular or pedestrian) on the west side of the blocks adjacent to the railroad.

- **Vehicular:**
  - **Internal Connectivity:** Within the SSA described above there are **39 intersections within a one-quarter square mile**. An index of 25 intersections per square mile (**6.25 intersections per one-quarter square mile) is indicative of a highly connected system**. As apparent by the index, the network is a very highly connected grid system, providing the highest level of route choice, connectivity and mobility.
  - **External Connectivity:** Neighborhoods within the area have connections to the larger external street system at every block, or approximately at one-eighth mile intervals. An index of connections to the larger street system at every one-quarter mile is indicative of a highly connected system; Fernandina's network

performs twice as good as the standard indicator. A few streets at the outer edges of the SSA (2nd, Beech, 7th) are not continuous, as shown on Figure 7. However, due to the location of these "missing links", the low traffic volumes, and strong grid around these areas, the lack of connectivity on these few segments is not much of a constraint for the overall network.

- **Pedestrian:**
  - **Connectivity:** Walkable communities limit block sizes to 300 feet to 400 feet. The spacing of connections throughout the SSA ranges from approximately 400 feet between east-west streets to 200 feet between north-south streets. The pedestrian connectivity throughout the SSA is excellent.
  - **Recommended Improvements:** Some areas (primarily residential) do not have sidewalks, as shown on Figure 8, Network Connectivity. The areas without sidewalks can be improved by the addition of sidewalks to the grid system over time.

Summary: The area has excellent accessibility and connectivity, with the exception of missing sidewalk connections for pedestrians., particularly in the residential areas.

Vehicle Mix/Truck Traffic

Informal interviews of various business owners, City Staff and Port Authority Staff were conducted to determine loading and delivery locations, parking issues and truck routes. Summaries of key interviews are provided in Appendix D. The following information was obtained from the discussions:

- Business deliveries generally occur in loading zones on side streets and the merchandise is carted to the business.
- Existing loading/delivery options appear to work acceptably. No specific changes regarding loading and delivery in the downtown are recommended at this time.

In addition to interviews, vehicular classification counts were collected the week of December 14, 2008, to determine the vehicle mix on the area roadway network. The Federal Highway Administration uses 13 classes to categorize vehicles, as follows:

Class 1- Motorcycles
Class 2- Passenger Cars
Class 3- Other Two-Axle, Four-Tire, Single Unit Vehicles
Class 4- Buses
Class 5- Two-Axle, Six-Tire, Single Unit Trucks
Class 6- Three-axle Single unit Trucks
Class 7- Four or More Axle Single Unit Trucks

Table 1: Summary of Vehicle Classification Counts

Roadway	Segment	Direction	Speed (mph)		Vehicle Class				Daily Volume	
					1 - 3	4	5	6 - 13		
			85th Percentile	Average	Private Vehicle	Bus	Delivery Truck	Heavy Truck	Directional	Total
Alachua	2nd/3rd	Eastbound	19.7	15.6	97.0%	0.0%	2.2%	0.9%	597	730
		Westbound	22.6	16.9	96.3%	0.0%	2.3%	1.5%	133	
Ash	Front/2nd	Eastbound	21.9	17.5	95.2%	2.3%	3.1%	1.4%	737	1223
		Westbound	24.6	19.1	95.7%	0.0%	2.9%	1.4%	486	
Beech Street	2nd/3rd	Eastbound	19.9	16.9	84.1%	2.8%	11.2%	1.9%	107	312
		Westbound	23.7	20.7	93.7%	0.0%	5.9%	0.5%	205	
Broome	2nd/3rd	Eastbound	17.4	14.0	96.1%	0.0%	3.9%	0.0%	51	77
		Westbound	18.6	15.9	96.1%	0.0%	3.8%	0.1%	26	
Centre	Front/2nd	Eastbound	13.4	10.5	98.5%	0.0%	1.2%	0.0%	843	1868
		Westbound	13.2	10.8	97.5%	0.0%	1.3%	1.3%	1026	
Centre	2nd/3rd	Eastbound	13.6	10.9	98.6%	0.2%	1.1%	0.0%	1166	2625
		Westbound	14.5	11.7	97.8%	0.3%	1.6%	0.2%	1459	
Dade	2nd/3rd	Eastbound	21.0	15.3	83.7%	0.4%	3.4%	12.4%	233	451
		Westbound	22.1	16.9	87.1%	0.9%	1.4%	10.6%	218	
2nd	Alachua/Centre	Northbound	17.0	13.6	97.8%	0.0%	1.8%	0.4%	514	514
2nd	Broome/Alachua	Northbound	22.1	18.6	96.8%	0.0%	2.5%	0.6%	150	313
		Southbound	22.8	18.5	96.1%	0.0%	1.6%	2.9%	163	
Front	South of Dade	Northbound	19.5	15.1	93.9%	0.0%	4.3%	1.8%	115	250
		Southbound	19.2	15.2	94.8%	0.7%	0.0%	4.4%	135	
2nd	Ash/Beech	Northbound	21.3	16.7	94.9%	0.0%	4.6%	0.5%	194	274
		Southbound	20.6	15.3	93.9%	0.0%	6.3%	0.0%	80	
2nd	Centre/Ash	Northbound	17.2	12.9	98.0%	0.0%	1.8%	0.2%	438	438
Front	Centre/Ash	Northbound	20.1	15.6	95.8%	0.0%	2.7%	1.6%	450	944
		Southbound	20.6	16.3	93.7%	0.4%	2.2%	3.6%	494	
Front	South of Ash	Northbound	19.7	14.1	94.6%	0.0%	2.4%	2.8%	74	182
		Southbound	18.6	14.8	92.6%	0.0%	2.8%	4.6%	108	

Class 8- Four or Less Axle Single Trailer Trucks
Class 9- Five-Axle Single Trailer Trucks
Class 10- Six or More Axle Single Trailer Trucks
Class 11- Five or Less Axle Multi-Trailer Trucks
Class 12- Six-Axle Multi-Trailer Trucks
Class 13- Seven or More Axle Multi-Trailer Trucks

More detailed descriptions and representative samples of the 13 classes are provided in Appendix B. For purposes of this analysis, the 13 classifications were combined into four overall categories:

1. Class 1-3 (Passenger vehicles/primarily private use),
2. Class 4 (Buses),
3. Class 5 (Fed-Ex style trucks/EMS vehicles), and
4. Class 6 and above (big trucks)

PSA

Front Street serves some heavy truck traffic and is part of the City's designated truck route as shown on Figure 5. Because of the mix of uses along Front Street (industrial, public, retail), there is also a mix of traffic. Pedestrians are currently forced to interact with trucks, trains and other heavy vehicles. This conflict will escalate as the waterfront develops and increased pedestrian activity occurs in this area.

SSA

Truck traffic has been an issue for some of the residential areas. Neighborhood complaints along Dade Street include: trucks parking in a no parking zone, staging work east of 3rd Street, blocking of access, and safe flow of traffic.

The truck traffic from the port utilizes 8th Street to Dade Street and generally avoids Front Street and the downtown. Trucks utilize the same route in-bound and out-bound. Likewise, Smurfit Stone to the north utilizes 8th Street and 14th Street. Rayonier to the south utilizes Gum Street for access to its site. Therefore, some of the heaviest users are able to avoid routing trucks through the downtown.

Florida Petroleum utilizes 2nd Street, north to Dade for its bulk facility. For the facility located on Front Street, trucks proceed down Front Street to Ash to 3rd to Gum Street.

If a vehicular crossing were obtained (at Alachua or Broome Street), Florida Petroleum could route southbound trucks on Front Street across the new connection to Second Street north to Dade Street and out to 8th Street. This would provide many advantages:

1. The more industrial nature of the working waterfront uses could be better defined and separated from the tourist-oriented commercial and public uses along the waterfront (by making the land use north of the new connection

industrial/working waterfront and the land south of the new connection waterfront/mixed use).

2. Industrial (truck) traffic could be separated from the pedestrian-oriented uses on Front Street south of the new connection.

3. The crossing would be centrally located between the current crossings at Dade Street and Centre Street.

4. Homeland Security issues require that pedestrians be kept off of the Florida Petroleum property. Any pedestrian connections at Broome should route pedestrians along the south side of the right of way and buffer the Florida Petroleum site from unintended pedestrian access.

5. If the crossing (at Alachua or Broome) is not provided, Front Street will need to accommodate large trucks, which do not mix well with the pedestrian-oriented nature of the park and waterfront.

In order to pursue a crossing at Broome Street, Railtec will need to be consulted to determine options to storing rail cars on the western-most track.

There are decisions regarding truck traffic that need to be addressed to reduce the conflict between incompatible traffic mixes. If a connection is made to Front Street from (Alachua Street or Broome Street) the truck route could be re-designated to reduce impacts along Front Street and in the office/residential mixed use areas to the south of downtown.

Traffic Circulation

<u>One-Way Streets Overview</u>

Several streets in the SSA are one-way for one block north and one block south of Centre Street, as shown in Figure 5, Existing Transportation Facilities. The north/south streets alternate direction, beginning at 2nd Street (northbound) and continuing with 3rd Street (southbound) to 6th Street (northbound). 7th Street is one-way northbound north of Centre Street and one-way southbound south of Centre Street. These one-way sections are one lane, with diagonal and parallel parking. They function acceptably from a mobility standpoint, as traffic volumes are relatively low and the grid network is highly efficient.

Ash Street

The question of whether to make Ash Street one-way eastbound to facilitate truck traffic exiting the downtown has been raised by the City. The only significant truck traffic along Ash Street occurs along the 2 blocks between Front Street and 3rd Street. Florida Petroleum trucks travel down Front Street to Ash Street. From Ash Street, they turn south on 3rd Street to Gum Street to access the Rayonier site. This would not warrant making Ash Street one-way.

The benefits of making Ash Street one-way include the ability to provide diagonal parking (if it is reduced to a single lane) and creating additional pedestrian/landscaped area. This could spur redevelopment and additional private investment along Ash Street. Besides Centre Street (and one block of Second/Front Street), Ash Street is the only area downtown that has a Central Business District Future Land Use designation and is zoned C-3, which allows high intensity development. In addition, lots of record can develop at a density of 17 dwelling units per acre.

Further, one-way streets are typically created in parallel pairs. That is, if Ash Street were one-way eastbound, Centre Street or Beech Street should be evaluated for one-way westbound. This could provide an opportunity, in the future, to route more traffic down Ash Street to help spur redevelopment.

From an operational standpoint, (truck traffic and general mobility), making Ash Street one-way is not warranted at this time.

Front Street

One of the alternatives in the Front Street Concept Plan is to make Front Street a one-lane, one-way roadway between Dade Street and Centre Street. Based on the current daily traffic volumes along Front Street, as shown on Figure 6, Front Street does not need to be a two-lane facility. Just south of Dade, the traffic count is 250 vehicles per day (vpd); between Centre and Ash Streets it is 944 vpd; and, south of Ash it is 182 vpd. Southbound is the peak travel direction, as follows:

Link	SB	NB	Total
South of Ash –	108	74	182
Centre St. to Ash St.-	494	450	944
South of Dade -	135	115	250

It will be easier to make Front Street a one-lane, one-way facility if heavy vehicles do not have to be accommodated in the design (turning radius, width, etc.). This could be accomplished by redefining the truck route and obtaining a new railroad crossing at Alachua Street.

Making Front Street a one-lane, one-way facility will also make it easier (by reducing the right-of-way required for the roadway lanes) to achieve the objectives and strategies that were identified in the Waterfront CRA Plan for Front Street improvements, as follows:

- "Eliminate one of the railroad tracks to provide additional right of way.
- Frontage road on east side of tracks to allow frontage.
- Connect Alachua to Front Street for vehicular and pedestrian traffic
- Provide a pedestrian crossing at Broome Street or full vehicular access with traffic calming and limitation on trucks.
- Design elements consistent with Centre Street"

Parking

Previous Studies

The City's Comprehensive Plan, adopted May 4, 2004, specifically addressed parking downtown, as follows:

> Objective 2.08. Downtown Parking
>
> The City shall ensure an adequate parking supply to serve downtown businesses, while maintaining the character of the downtown area and retaining the integrity of residential neighborhoods. The City shall ensure that an inadequate parking supply does not detract from the economic viability of downtown businesses.
>
> Policies
>
> *2.08.01.* The City shall prepare and implement a financially feasible plan for providing downtown parking.
> *2.08.02.* The City shall monitor the supply and demand for parking facilities in the downtown area. The City shall determine fiscally responsible alternatives for resolving parking issues, while preserving the character of the downtown area and the integrity of the residential neighborhoods within and adjacent to the downtown."

Further the Waterfront CRA Plan recommended the following Parking objectives and strategies:

- Relocate waterfront parking to lands east of the railroad tracks
    - Evaluate City-owned property and rights-of-way for additional parking
    - Incorporate screening and landscape standards for new off-street parking facilities

The Parking Master Plan Action Plan high and medium priority recommendations are summarized as follows:

Downtown Sub-Area

- Enforce parking regulations on a consistent and regular basis
- Implement two to three hour time limits or a fee based system along Centre Street
- Implement six to seven hour time limits or fee based system along perpendicular roads
- Retain some of City property for future parking, especially in high demand areas
- Add a parking requirement or an in-lieu fee to the Zoning Ordinance
- Increase patrol officer visibility during business closing hours
- Improve signage to/from parking areas
- Consider a fee-based system

Marina Sub-Area

- Implement overnight parking permits for lots C and D
- Prohibit overnight parking for lots A and B
- Implement time limits or fee based system for lots A and B

Residential Church Sub-Area

- Implement a residential parking permit in problematic areas – where businesses and residential units are merged in close proximity to each other
- Improve lighting conditions to encourage residents to walk to and from downtown

Analysis

Part-Time Impacts

The weekly farmers' market attracts a large number of visitors, causing crowded on-street parking within the block surrounding the 7th Street location, spilling over into the

residential areas. In support of Policy 2.08.02, above, the City should consider relocating the Farmer's Market activities to the waterfront park area, once improvements are made to accommodate it.

The downtown and surrounding neighborhoods are impacted by a variety of special events (approximately 30) in the months of March through December. Some of these events are external, but spill over to Downtown and others are held within the Downtown or waterfront areas. Please refer to Appendix C for a detailed list of special events. Overflow parking is available for these events at the public park and the middle school, east of Eighth Street (off of Centre Street).

Pedestrian Level of Service

Figure 9 shows ¼-mile distance from the public parking. The entire downtown area is within ¼-mile of public parking (actually most of it is substantially less than 1/4-mile). Figure 10, Pedestrian Level of Service (LOS), provides a detailed assessment of walking level of service from public parking areas. For purposes of this assessment, walking routes were deemed acceptable if they had a sidewalk on at least one side of the road. Those roadway links without a sidewalk on either side were not included as a viable route for pedestrians (and as such, are de facto LOS F). LOS A is defined as a walk distance (acceptable surfaces, security, etc. is assumed) of 400'. LOS B is defined as a walk distance of 800' and LOS C is defined as a walk distance of 1200'. Even with the "missing" sidewalk links, most of the network operates at an acceptable level. Provision of these sidewalks would improve the pedestrian LOS.

Especially with the 422 on-street parking spaces spread throughout the downtown area, there is ample parking within a reasonable proximity to all of the areas downtown. Further, general observation indicated that parking is generally about 70% occupied. Parking capacity does not appear to be a problem currently.

However, one of the findings of the Parking Master Plan conducted in 2002 was that desired parking locations for users along Centre Street had less to do with how far they had to walk and more to do with **line of sight** to the destination. **Visibility is a key factor for retail uses. Appropriate signage and way-finding will be an important factor in providing a "sense of visibility" for parking.**

Source : Nassau County Property Appraiser

Date : 03/12/09

300 0 300 600 Feet

FIGURE 9
1/4 MILE FROM PUBLIC PARKING
WATERFRONT MASTER PLAN
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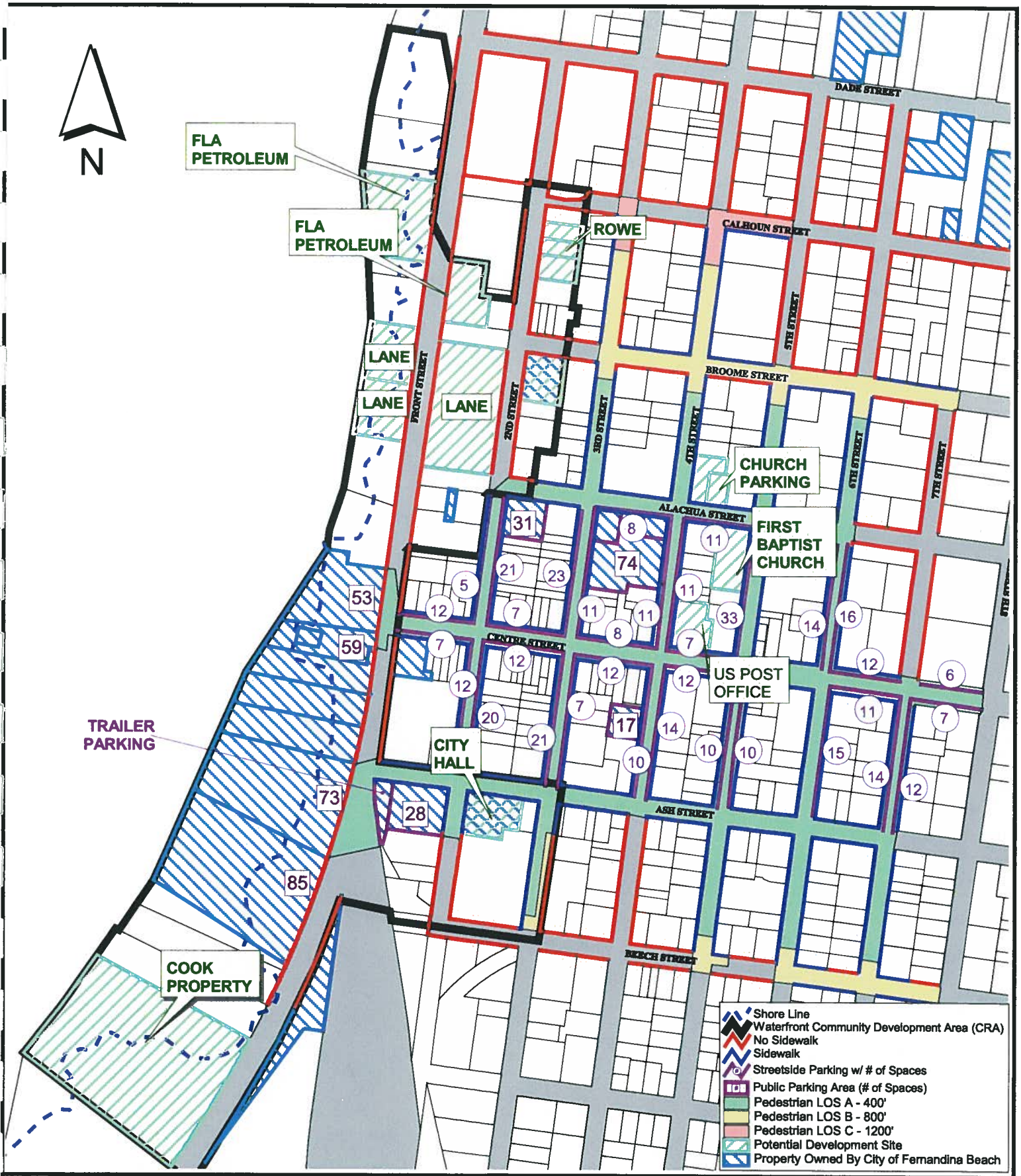

Source : Nassau County Property Appraiser

Date : 03/12/09

200 0 200 400 Feet

FIGURE 10
PEDESTRIAN LOS
FROM PUBLIC PARKING
WATERFRONT MASTER PLAN
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Table 2: Downtown Public Parking Spaces

Street Name	Roadside	Cross Street 1	Cross Street 2	Parking Spaces
2nd Street	West	Ash Street	Centre Street	12
2nd Street	West	Centre Street	Alachua Street	5
2nd Street	East	Ash Street	Centre Street	20
2nd Street	East	Centre Street	Alachua Street	21
3rd Street	West	Ash Street	Centre Street	21
3rd Street	West	Centre Street	Alachua Street	23
3rd Street	East	Ash Street	Centre Street	7
3rd Street	East	Centre Street	Alachua Street	11
4th Street	West	Ash Street	Centre Street	10
4th Street	West	Centre Street	Alachua Street	11
4th Street	East	Ash Street	Centre Street	14
4th Street	East	Centre Street	Alachua Street	11
5th Street	West	Ash Street	Centre Street	10
5th Street	West	Centre Street	Alachua Street	33
5th Street	East	Ash Street	Centre Street	10
6th Street	West	Centre Street	Alachua Street	14
6th Street	East	Ash Street	Centre Street	15
6th Street	East	Centre Street	Alachua Street	16
7th Street	West	Ash Street	Centre Street	14
7th Street	East	Ash Street	Centre Street	12
Alachua Street	South	3rd Street	4th Street	8
Alachua Street	South	4th Street	5th Street	11
Centre Street	North	2nd Street	3rd Street	7
Centre Street	North	3rd Street	4rth Street	8
Centre Street	North	4rth Street	5th Street	7
Centre Street	North	6th Street	7th Street	12
Centre Street	North	7th Street	8th Street	6
Centre Street	North	Front Street	2nd Street	12
Centre Street	South	2nd Street	3rd Street	12
Centre Street	South	3rd Street	4rth Street	12
Centre Street	South	4rth Street	5th Street	12
Centre Street	South	6th Street	7th Street	11
Centre Street	South	7th Street	8th Street	7
Centre Street	South	Front Street	2nd Street	7
Total On-street Parking				*422*
Parking Lot D				85
Parking Lot C				73
Ash Street Lot		Front Street	2nd Street	28
Parking Lot B				59
Parking Lot A				53
4th Street Lot		Centre Street	Ash Street	17
Alachua Street & 2nd Street Lot				31
Alachua Street Lot		3rd Street	4th Street	74
Total Public Parking Lots				*420*
TOTAL PARKING				**842**

RECOMMENDATIONS

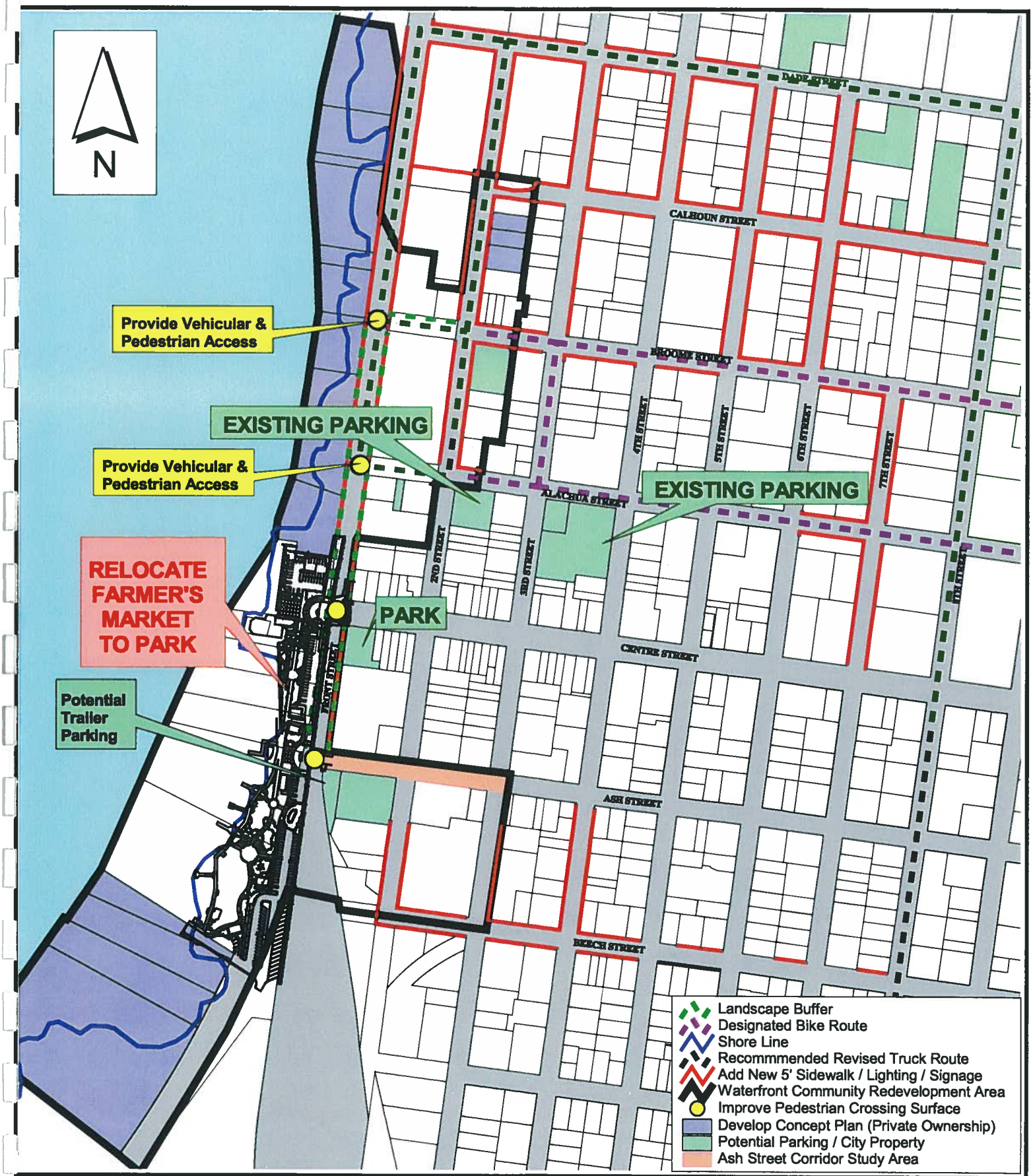
Recommendations, by subject area, are provided below. Figure 11, Recommended Transportation Improvements, graphically highlights some of the key recommendations.

Land Use

Providing additional accessibility will have a significant impact on shaping the development patterns and the ability to redevelop the waterfront area. The following actions are recommended:

1. **Separate incompatible uses** through traffic flow, buffering and landscaping. This can be achieved by providing **a vehicular railroad crossing (at Alachua Street or Broome Street)**. This will enable the property north of the connection to continue to transition to more industrial uses, while allowing the property south of the new connection to become more pedestrian-oriented. By providing a new crossing, Florida Petroleum trucks can use this crossing and avoid using Front Street, south of the new crossing.
2. **Revise the future land use designation and zoning classifications** on properties in the waterfront CRA in accordance with provision of a new rail crossing (industrial/working waterfront to the north and waterfront mixed use/pedestrian-oriented south of the new connection). This will provide a framework for development of the waterfront and encourage private investment consistent with the City's vision.
3. A development opportunity assessment should be considered for the 13 privately-owned parcels along the waterfront in order for the City to effectively implement the design of the Waterfront Park and Front Street improvements. This will provide a better understanding of potential uses and timeframes for development of undeveloped or underutilized parcels, which will better enable the City to plan for the impacts associated with the development of these parcels. A **concept plan** could be developed **for each site**, or the top priority sites, as desired by the City. Part of this analysis should include an assessment of the economically obsolete industrial buildings adjacent to Front Street.

4. It will be important to provide good access (both pedestrian and vehicular) along Front Street for the properties between 2nd Street and Front Street to become fully utilized. If the Lane property develops as proposed, **a pedestrian facility on the east side of the tracks is recommended, along with street level amenities and activities at the building face along the block.**



Source : Nassau County Property Appraiser

Date : 03/12/09

200 0 200 400 Feet

FIGURE 11
KEY STUDY RECOMMENDATIONS
WATERFRONT MASTER PLAN
FERNANDINA BEACH, FLORIDA

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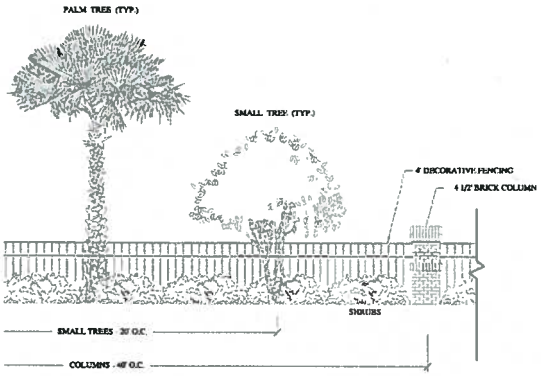
5. Ash Street has high intensity C-3 zoning, which allows a floor area ratio of 2.0. This is the same intensity as the development along Centre Street. However, as currently developed, Ash Street has a mix of lower intensity office and retail uses (with some residential mixed in). A **corridor study should be conducted for Ash Street** to identify opportunities for redevelopment. Streetscape and other roadway improvements should be considered as part of the study.

Access and Connectivity

There is no question that a key factor affecting the waterfront area's ability to experience redevelopment is lack of access and visibility. Greater access and visibility is needed between east side and west side of tracks. The Lane Company development will need to be raised to create adequate street-level views across the tracks.

1. **Front Street Corridor Improvements**

   A. **Create a landscaped buffer and pedestrian sidewalk/path** with pedestrian-scaled amenities on **both sides** of the rail line north to Broome Street, subject to obtaining the railroad crossing at Broome Street. The sidewalk/pedestrian path located on the east side of the rail line may require acquisition of an easement. Regulatory bonus incentives should be considered to facilitate this action. There will be some significant grade issues between the height of the rail line and ground elevations of the adjacent property.



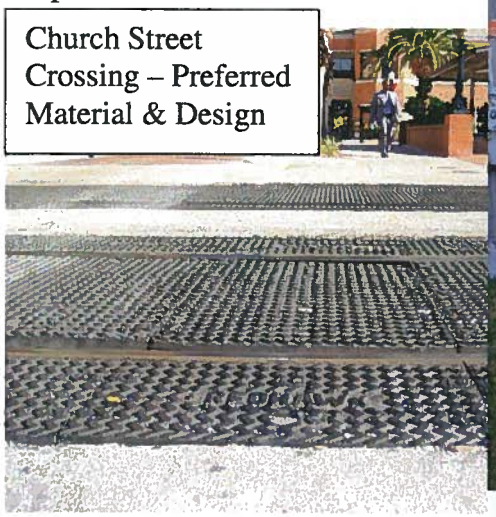
   B. **Pedestrian Amenities** – Provide street furniture designed to complement and connect to Centre Street and the historic district.

   C. **Street-level Activity** – Provide activities and pedestrian-scaled facades along the building faces fronting the railroad. The function of the pedestrian pathway on the east side of the rail line would be greatly enhanced if the City required existing buildings to create windows on the

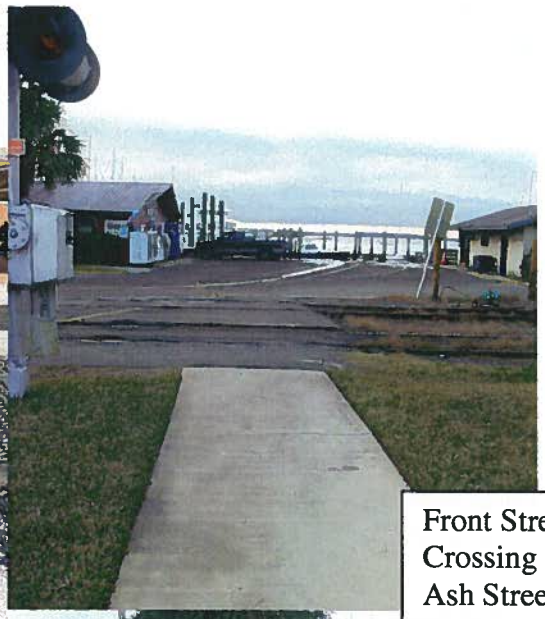
Front Street
Fernandina

pathway facing west. New buildings should be located on a build-to-line at the edge of the pathway and have a traditional urban character. This character should incorporate architectural elements that are interesting, attractive and scaled to the pedestrian. Likewise, if the rail cars cannot be relocated, perhaps they could be painted with interesting advertising or tourist information relative to the history, etc. of Fernandina Beach (if the same cars are used each day).

D. **Crossings** - Improve the walking surface at the existing and proposed crossings of the rail lines for pedestrians.



Church Street Crossing – Preferred Material & Design



Front Street Crossing at Ash Street

E. **Lighting** - Successful mixed use environments are active day and night and require a high level of safety lighting. Pedestrian-scaled lighting designed to complement and connect to Centre Street and the historic district should be installed on all existing and proposed sidewalks and proposed pedestrian pathways at an average spacing of 100 feet (50 feet staggered on either side of the street).

2. **Pedestrian Improvements beyond Front Street** - Improvements to add sidewalks and pedestrian pathways throughout the Historic District will not only create a safe, walking environment; the added connectivity will benefit the Downtown and CRA businesses through increased visibility and activity. The improvements should include:

A. Residential Areas – "Missing" sidewalks in residential areas should be provided, as shown on Figure 11, Key Study Recommendations. New sidewalks should be a minimum of five feet wide and include pedestrian amenities that will serve to increase this alternate mode of travel and also serve as traffic calming devices.

B. Provide landscaping/buffering along the Florida Petroleum property next to the railroad tracks until such time as this use redevelops. If the rail cars will remain, landscape/buffer along Broome Street to discourage pedestrian movements to the north of Broome Street.

C. The Waterfront Park will attract heavy pedestrian users. This will change the mix of traffic along Front Street and calls for the following considerations:
   - Safe pedestrian crossings
   - Slow speeds
   - Good Signage

3. **Bicycle Improvements -** Amelia Island is 13 miles long and four miles wide, making the downtown easily accessible by bicycle and providing a viable mode of travel from residential areas throughout the island. The Bed and Breakfast facilities and hotels located downtown may also provide bicycles for use by visitors. The following improvements are recommended:

   A. **Bicycle Master Plan** - A bicycle master plan should be developed for the island to establish safe designated bike routes and identify the need for improvements to better connect residential areas with the downtown.

   B. **Establish Designated Route Downtown** - A designated route should be established on low volume streets to access core locations in the downtown and the CRA. Bicycle-compatible roadways should comprise a bicycle network of parallel routes with effective spacing of one-half mile.

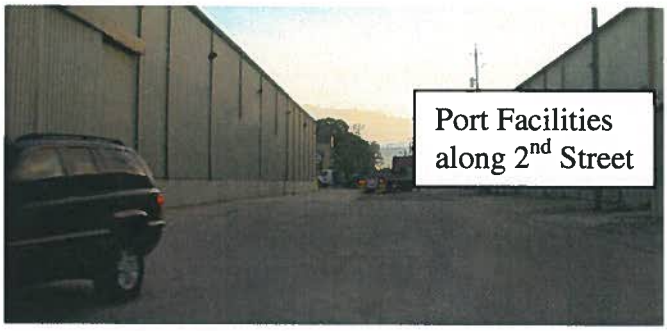
   C. **Bicycle parking racks** should be provided in public parking lots, parks and along the bike route at other key destinations.

Truck Traffic

1. **Revise designated truck route** to remove Front Street, south of Alachua (or Broome), Ash Street and 3rd Street as part of the designated route. Add: New connection (Alachua or Broome) from Front to 2nd and 2nd from Broome to Dade.

   This will provide a clear separation of industrial uses and heavy traffic from the tourist/retail and residential uses and keep heavy trucks out of these areas. *This recommendation is contingent on obtaining a railroad crossing at Alachua Street or Broome Street.*

2. **Reduce truck traffic impacts in residential areas.** Strategies to reduce the impacts of heavy trucks on residential areas should be identified and implemented. These could include buffering, evaluating time of day to determine if operational shifts can be made, staging and parking requirements, policies regarding motor idle times, and enforcement of current laws and regulations.


Port Facilities along 2nd Street

Parking

The recommendations in the 2002 Parking Master Plan should continue to be implemented, as reviewed earlier in the report. In addition, consider the following, relative to parking:

1. Identify additional locations within one-quarter mile of the waterfront for parking.

   a. The City-owned property to the west of City Hall should be improved and striped for parking (at least in the near-term). A parking lot layout should be completed to maximize spaces and use of the lot.
   b. The City-owned lot on the southeast corner of Broome and Second Streets is another good candidate for future parking and a parking lot layout should be completed on this parcel, as well.


City-Owned Property at Broome/2nd

2. Relocate the weekend Farmer's Market to the waterfront area, once the park improvements are complete and can accommodate it. This will eliminate weekend morning parking conflicts in the residential areas and will create a safer environment for pedestrians.


Parking from Farmer's Market

3. If the City is considering purchasing the Baptist Church site for a performing arts center, the associated church parking would have the added benefit of being available for downtown parking during the day, when the performing arts center was not likely to be fully utilized.

4. Conduct a shared parking analysis for existing peak and off-peak private users downtown. For example, using church parking lots for public parking during off-peak periods for the church.

5. Provide wayfinding signage for public parking locations and primary retail uses/areas served by those parking lots/spaces.

6. Provide sidewalk connections, lighting and other pedestrian amenities along roadways to parking areas and surrounding destinations.