
TRANSPORTATION ELEMENT

INTRODUCTION	7 - 1	<i>Big may not be better when sizing parking lots</i>	7 - 18
DEFINING THE PROBLEMS	7 - 2	<i>Visitors need to be directed to available parking</i>	7 - 19
Why Conventional Solutions Haven't Worked at Fort Myers		<i>Planning for parking</i>	7 - 20
Beach	7 - 3	4. The Future of the Bridges	7 - 21
Estero Boulevard as an Evacuation Route	7 - 4	<i>The Sky Bridge is the scene but not the cause of traffic congestion</i> ...	7 - 21
SELECTED SOLUTIONS	7 - 6	<i>Do not direct additional bridge capacity toward Times Square</i>	7 - 22
1. Mobility Using a Variety of Travel Modes	7 - 7	5. Experiment Widely	7 - 23
<i>Make it easier for visitors to arrive without a car</i>	7 - 7	LEVEL-OF-SERVICE STANDARD	7 - 24
<i>Improve trolley service</i>	7 - 8	FUTURE TRANSPORTATION MAP	7 - 26
<i>Use impact fees and gas taxes to support alternate travel modes</i>	7 - 8	GOALS - OBJECTIVES - POLICIES	7 - 27
<i>Encourage a reliable system of water taxis</i>	7 - 9	OBJECTIVE 7-A DEFINING THE PROBLEMS	7 - 27
<i>Create a hidden-path system</i>	7 - 10	OBJECTIVE 7-B CONVENTIONAL SOLUTIONS	7 - 27
2. Upgrade Estero Boulevard	7 - 11	OBJECTIVE 7-C EVACUATION ROUTE	7 - 28
<i>Expand the Times Square streetscape project</i>	7 - 11	OBJECTIVE 7-D VARIETY OF TRAVEL MODES	7 - 28
<i>Institute traffic calming measures</i>	7 - 12	OBJECTIVE 7-E UPGRADE ESTERO BOULEVARD	7 - 29
<i>Put buildings closer to the street</i>	7 - 14	OBJECTIVE 7-F OPTIMIZE THE PARKING SUPPLY	7 - 30
<i>Improve sidewalks and bikeways</i>	7 - 15	OBJECTIVE 7-G THE FUTURE OF THE BRIDGES	7 - 31
<i>Require traffic impact analyses for new development</i>	7 - 15	OBJECTIVE 7-H EXPERIMENT WIDELY	7 - 32
3. Optimize the Parking Supply	7 - 16	OBJECTIVE 7-I LEVEL-OF-SERVICE STANDARD	7 - 33
<i>Encourage shared parking lots</i>	7 - 17	OBJECTIVE 7-J PROTECTING PUBLIC ACCESS	7 - 33

TRANSPORTATION ELEMENT

INTRODUCTION

This element addresses many transportation issues, with particular attention to the traffic congestion that occurs every winter at Fort Myers Beach. Traffic congestion has proven intractable, not due to a lack of attention but because many of the potential solutions would have such major impacts on the community. Many piecemeal improvements have been made through the years, but despite these efforts, congestion is a major inconvenience every winter.

Options to improve the flow of traffic are very limited due to the density of existing development; the single road that traverses the island; and limited right-of-way for road expansion and intersection improvements. And as time has demonstrated, increased traffic flow doesn't necessarily reduce congestion; there is so much pent-up demand for travel to the beaches that the number of trips tends to increase to meet whatever road capacity can be provided.

This element attempts to demystify the subject of traffic congestion so that the public can understand the available alternatives and their potential side-effects. It gives fair consideration to the widest array of possibilities, including some that haven't been previously considered. This element identifies the approaches most likely to benefit the community, and suggests specific actions that the Town of Fort Myers Beach can take to further these approaches. This element also meets new state requirements for a transportation element, combining material often found in separate elements (such as traffic, mass transit, and ports).

This document should outlast its immediate purpose as a component of the town's first comprehensive plan. Through this element, visitors and new residents who take an interest in the island's transportation problems will be able to better understand the commonly suggested "solutions to the traffic problem." Future planning and engineering studies can also use this element as a thorough summary of data and analysis on transportation problems at Fort Myers Beach.

Because of this element's length and the many alternatives that were examined (including many not selected for action at this time), this document is organized as follows:

- **Summary of transportation issues**, including this plan's approach for the Town of Fort Myers Beach
- **Goals, objectives, and policies** to be formally adopted
- **Transportation Alternatives** (APPENDIX A)
- **Additional Transportation Data** (APPENDIX B)



Figure 1, Times Square pedestrian mall (photo courtesy Mohsen Salehi)

DEFINING THE PROBLEMS

Transportation problems are easy to find at Fort Myers Beach; they are the subject of daily conversation of residents, especially in the crowded winter months. The alternatives selected for action in this element are those that might mitigate one or more of three main areas of concern:

- ✗ **CONGESTION:** Every winter, Estero Boulevard becomes so crowded that traffic backs up, sometimes for miles in both directions. Although tourists are often unfazed by this congestion, local residents sometimes find it impossible to carry out their daily routines, especially if they involve trips off the island between mid-morning and early evening.

- ✗ **PARKING:** The shortage of beach parking in the downtown area has achieved legendary status, even though existing parking lots are not used to capacity. When visitors cannot find a parking space, they tend to wander around in their cars, worsening congestion. The welcome rebirth of commercial activity near Times Square will increase the demand for parking. Yet the problem is more complex than just a shortage of parking. A parking *surplus* can cause its own problems by inducing more people to try driving to Fort Myers Beach, offsetting the relief now being provided by public transportation and bicycling or walking.

- ✗ **SPEEDING:** Despite the virtual crawl of traffic on parts of Estero Boulevard, speeding is also a problem. The same motorists who crawl during the day near Times Square may speed at the south end of the island, or whenever traffic lightens. This is not merely an annoyance; it often results in the deadly combination of carelessness (often alcohol-induced) and vulnerable pedestrians and bicyclists. If motorists didn't speed on



Figure 2, Estero Boulevard in the peak season

Estero Boulevard, many more people would get out of their own cars and discover the pleasure of moving around a beautiful beach community on foot. A recent engineering publication describes the problem this way:

“To design for the continuous opportunities for free-flowing vehicles (as is the case with 10-foot-wide and greater travel lanes) is to create situations where most of the time passenger cars — far and away the predominate vehicle — will travel at speeds greater than are desirable for nearby pedestrians. This becomes a self-worsening situation of degradation of the pedestrian environment: faster vehicles are noisier and more dangerous to pedestrians; faster vehicles generally mean fewer pedestrians; and fewer pedestrians generally mean even faster vehicles.” (Institute of Transportation Engineers, 1997, *Traditional Neighborhood Development: Street Design Guidelines*, Proposed Recommended Practice prepared by ITE Transportation Planning Council Committee 5P-8: Washington D.C.)

Why Conventional Solutions Haven't Worked at Fort Myers Beach

Traffic congestion can be relieved with conventional engineering solutions, given enough money. Roads can be widened to handle higher volumes of traffic, as when U.S. 41 through Fort Myers was converted from a two-lane rural highway to a seven-lane urban thoroughfare in the 1970s. When widening is no longer practical, alternate routes can be built for the extra traffic (as when Interstate 75 was extended through Lee County in the same decade to relieve further congestion on U.S. 41). This cycle of extra lanes plus a network of alternate routes has managed to keep up with strong population growth in Lee County, plus the pronounced pattern of increasing automobile usage per person (the rate of vehicles per person in Lee County has grown from 0.47 vehicles per person in 1950 to 1.35 vehicles per person in 1995).

Neither of these methods would work well to ease traffic congestion at Fort Myers Beach. Estero Island has a configuration that is not conducive to developing a road network, with its long narrow shape, frequent navigable canals, and sensitive environmental resources that interfere with all routes that could provide additional access. And it would be very difficult to add lanes on Estero Boulevard, since the portions experiencing the most congestion are only 50 feet wide and also serve as one of the premier public spaces that give Fort Myers Beach its memorable character.

Many of the conventional solutions that would allow more traffic to flow along Estero Boulevard might actually be more harmful than helpful. Conventional solutions sensibly try to *reduce delay* and *improve safety*. Unfortunately, reduced delay for cars often increases delays for pedestrians and bicyclists.

In the same way, improving safety for the occupants of vehicles often degrades safety for those outside vehicles. To move cars faster, lanes are often widened, and roadside obstructions such

as trees are forbidden or removed. But when cars are traveling faster, it is more difficult to avoid collisions with pedestrians, since drivers and pedestrians both have less time to react. Up to about 25 MPH, vehicles can easily stop for pedestrians. Above 25 MPH, the danger to pedestrians increases dramatically with speed, and the difficulty in safe crossing increases correspondingly. Pedestrians hit by a car are much more likely to be killed or severely injured when the car is traveling fast.

Pedestrians and bicyclists are the lifeblood of the resort and retiree economy of Fort Myers Beach. Each car requires an enormous amount of space for movement and parking compared to a person on foot, who may be walking for recreation, to reach a specific destination, or to reach a trolley stop. Given the current congested conditions, space dedicated to cars is lost for other modes of travel. Transportation improvements that hinder mobility on foot may ultimately be no improvement at all.

With these difficulties in mind, a wide range of alternatives have been examined in search of promising means of increasing mobility and making Fort Myers Beach a better place to live and visit. These alternatives are described in detail in Appendix A, in three categories:

- Improvements that could be made within the confines of existing public rights-of-way (or with relatively modest expenditures).
- Improvements that would require major public expenditures for acquiring additional land and building roads.
- Improvements that aren't practical with today's technology, but which may hold promise for the future.

Estero Boulevard as an Evacuation Route

Besides providing access to property and serving daily traffic, Estero Boulevard is the sole evacuation route when a hurricane threatens Fort Myers Beach. Fort Myers Beach is extremely vulnerable to quickly rising waters, especially if a hurricane (or strong tropical storm) strikes land to the north of Fort Myers Beach from the Gulf of Mexico. If residents are not able to evacuate in a fairly short period of time, they will be trapped on Estero Island by rising waters.

Several ideas for reducing excessive speeding on Estero Boulevard have been dismissed by Lee County transportation officials who fear that these measures would reduce the ability of Estero Boulevard to serve as an evacuation route. Needless to say, Fort Myers Beach residents are equally concerned that their chances for safe evacuation are not reduced by any actions of government or their fellow citizens.

This subject requires an understanding of the relation between traffic volume and traffic speed. It is easy, but wrong, to assume that roads with higher speeds will automatically be able to carry more cars. In an evacuation, the critical factor is the total number of cars that can evacuate, not the speed at which individual cars are traveling. In fact, under certain conditions there is an inverse relation between the number of cars passing a given

point and their speed, such as on an arterial road like Estero Boulevard under normal operating conditions.

An important factor is the space needed between cars for drivers to stop safely if the car in front brakes suddenly. The standard rule for a safe following distance is to leave two seconds between vehicles. The two-second rule translates into varying distances, depending on the speed being traveled. At 60 MPH, 176 feet of space is required, but at 20 MPH, only 59 feet are required (see Table 7-1). Figure 3 illustrates this spacing, showing the higher density of cars (cars per mile at a given instant) at lower speeds. This higher density allows more cars to pass, up until the point where more cars try to use a road than its capacity allows. At that point the density of cars continues to go up, but speeds (and traffic volumes) drop dramatically because when any one car slows, the cars immediately behind must do the same, causing “waves” of very slow travel speeds.

Table 7-1 — Safe Spacing Between Vehicles

<i>Speed in MPH</i>	<i>Speed in feet/second</i>	<i>Two-second spacing</i>
60 MPH	88	176 feet
50 MPH	73	147 feet
40 MPH	59	117 feet
30 MPH	44	88 feet
20 MPH	29	59 feet
10 MPH	15	29 feet

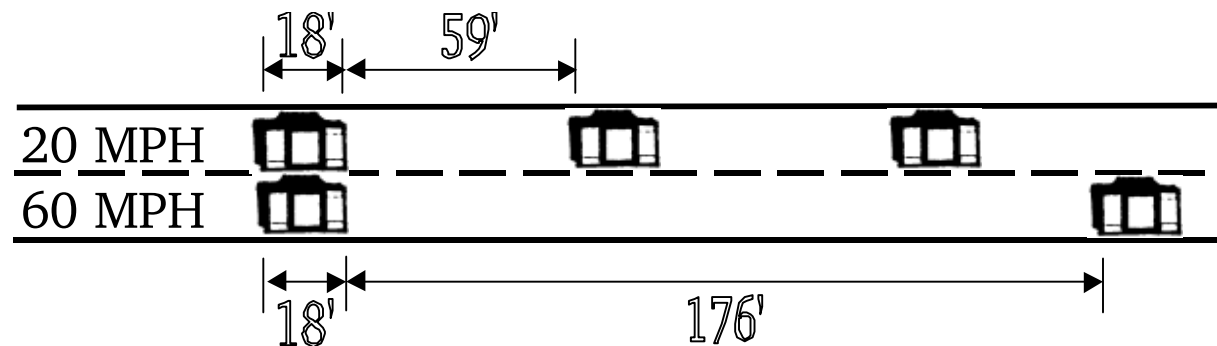


Figure 3, Safe vehicle spacing at 20 MPH & 60 MPH (w/o interference by driveways/intersections/parking)

This complex relationship is illustrated in Figure 4 which shows the classical parabolic speed-to-volume curve. High speeds are at the upper left and low speeds are at the lower left. The curve begins in the upper left corner, where high speeds of 70 MPH result in quick movement for light traffic volumes. As the curve moves down and to the right, lower speeds require less space between cars, resulting in higher traffic densities. Note, however, that the curve reverses suddenly around 30 MPH. At just above this speed, a road like Estero Boulevard can carry its highest volume of traffic (although at a poor level of service).

As more drivers attempt to use a road than it can carry, speeds quickly drop below 30 MPH. The number of cars able to traverse a road goes *down* instead of up once the road's capacity is ex-

ceeded because of the stop-and-go pattern. Under full bumper-to-bumper conditions, the density of cars is very high, but speed and volume approach zero. This is true even behind the point of the actual bottleneck, where long lines of traffic quickly develop. These lines cannot dissipate until the number of motorists wishing to use the road drops below the number that can pass through the bottleneck.

This digression into the theory of traffic flow is important because it demonstrates that efforts to reduce speeding on Estero Boulevard do not inherently conflict with its role as an evacuation route. It also helps in understanding how various proposed road improvements might affect travel flow and safety at Fort Myers Beach.

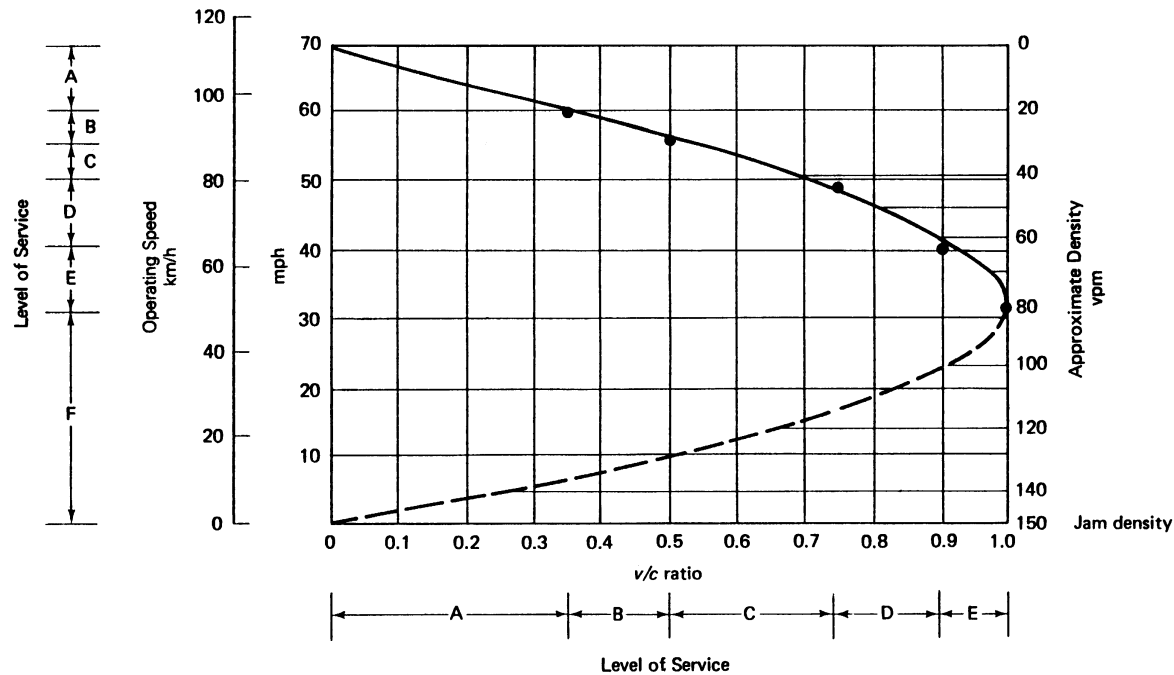


Figure 4. Conceptual relationship of levels of service to some measures of quality of flow under ideal uninterrupted flow conditions (SOURCE: Transportation and Traffic Engineering Handbook, Institute of Transportation Engineers, 1982, Figure 16.1b)

SELECTED SOLUTIONS

Transportation problems are usually solved by finding ways to move more cars faster; new roads are designed for this sole purpose. If sidewalks are provided at all, they often become dangerous places at the curbs' edge. Public involvement is minimal; who is able to argue effectively about the technicalities of traffic flow or the dictates of traffic engineering manuals?

One observer notes:

“The mentality of “freeway” (with all its misleading implications of freedom of action and for free) has come to so dominate the building of roads that sections of city streets have been seen as compromised extensions of the free, unencumbered movement. They have been measured first by the capacity to move traffic and only very secondarily by their capacity to sustain the life of the city around them.”

(Donlynn Lyndon in *Places*, Summer 1997)

This element avoids the “freeway approach” to transportation planning in two ways. Mobility *outside of cars* is taken very seriously; and the streets are emphasized for their urban design value as well as mobility needs.

This approach has important implications for a community that relies heavily on tourism. Many great tourist destinations are overrun by cars during peak periods; yet visitors persist as long they remain great tourist destinations. Fort Myers Beach has a combination of beautiful beaches and a relaxed, outdoor-oriented public life that is the envy of many resort locations. Rather than apologizing that *“the traffic problem still hasn't been solved,”* the town's message needs to become *“we welcome you, but you may be better off leaving your car at home.”* To make this approach realistic, the town needs to make it easier for people to move around Estero Island without having to drive a car for every trip.

1. Mobility Using a Variety of Travel Modes

A mobility-oriented strategy requires a balanced transportation system, with several improvements beyond what is available today. The most important components will be described briefly in this section:

- **Make it easier for visitors to arrive without a car** (such as convenient airport limousine service that is integrated with trolley and taxi stops).
- **Improve trolley service** to make it more attractive to visitors and residents.
- **Use impact fees and gas taxes to support alternate travel modes** such as walking, trolleys, and water transportation.
- **Encourage a reliable system of water taxis** and scheduled water shuttle service.
- **Create a hidden-path system** parallel to Estero Boulevard.

(A more thorough discussion of alternate travel modes can be found on pages 7-A-5 to 7-A-18 of Appendix A.)

Make it easier for visitors to arrive without a car

Tourists headed to Fort Myers Beach nearly always arrive by car, despite the pedestrian-friendly nature of the community. Out-of-state visitors to Lee County stay an average of seven nights, while Florida visitors average less than four nights. Many of the short-term visitors arriving by air would happily avoid the expense of renting a car if they had economical transportation to Fort Myers Beach and reliable means of moving around upon arrival.

The majority of tourists arrive in Lee County by airplane (68% in 1996). Slightly fewer continue their visit to Lee County with a rental car (60% in 1996); the remainder are met by friends or relatives, or use a taxi or shuttle bus to reach their destination.

In spite of the large number of visitors to Fort Myers Beach, there is no regularly scheduled airport shuttle service. On-request service is available to patrons of larger motels and resorts, and three taxi companies operate on the island. If scheduled limousines or shuttle buses were available, fewer vehicles would be driven to Fort Myers Beach.

Tourist lodgings at Fort Myers Beach are spread out across the island, and many are very small operations. It would be difficult for a scheduled service to drop passengers at all of their destinations. The Town of Fort Myers Beach should encourage scheduled airport service and the designation of a central drop-off point that would include a trolley stop and taxi stand. These services at a single location would create a small transit terminal. Business locations near a terminal would also provide good opportunities for coffee shops, news stands, and rentals of bikes, motorbikes, roller blades, and even cars for off-island trips.

Improve trolley service

Fort Myers Beach has been served by Lee Tran trolley buses for a decade with varying success. The trolleys have proven more popular than conventional buses, but have not achieved their potential as a reliable travel mode for visitors. The trolley system has received varying subsidies from grants, the Estero Island CRA, and the town itself, with ridership increasing when service is more frequent and when fares were eliminated. However, the subsidies have been an ad-hoc response to a perennial congestion problem, and no long-term funding or operational plan has been developed.



Figure 5, Trolley bus

There is some public distaste for subsidizing visitors' trolley trips by eliminating fares, but even when fares are charged, public transportation still requires a subsidy. When compared to the various costs of building more road capacity to accommodate tourists, improved transit service can be an inexpensive alternative.

Practical measures to improve trolley usage include:

- Recurring subsidies from tourism sources so that service can be enhanced and congestion minimized during heavy seasonal traffic;
- Pull-offs at important stops along Estero Boulevard so that passengers can safely board and to keep trolleys from blocking the flow of traffic. Pull-offs could be built during other improvements to Estero Boulevard, or could be Land Development Code requirements during the redevelopment process.
- Clear signs at every stop with full route and fare information;
- Bus shelters at key locations, with roofs, benches, and transparent (or open) sides; and

- Replacement of the existing trolleys with clean-fuel vehicles so that businesses won't object to having trolleys stop at their front doors.

Tram-style vehicles have also been considered; passenger can board quickly through their multiple gates. The slow travel speeds of most trams (and the difficulty in collecting fares with multiple gates) makes them unsuitable for use on busy streets, but they may be useful for shuttle service to Bowditch Point.

Use impact fees and gas taxes to support alternate travel modes

The Town of Fort Myers Beach collects impact fees from new development and receives a share of county and state gasoline taxes. These funds have various limitations but must be used for transportation purposes. Although road maintenance must not be compromised, some of these funds can be used to support alternate modes rather than being spent solely on more roads.

The town has inherited Lee County's road impact fee ordinance, and can amend it to suit the town's needs (within legal limits for impact fees). There is no reason to dedicate these funds solely to road improvements when other travel modes are available to supplement the road system. This program may be expandable to pay for capital improvements such as improved mass transit, better sidewalks, elevating roads to prevent flooding, and providing off-island parking areas.

Any major success in getting visitors to leave their cars on the mainland will depend on the creation of a balanced transportation system. For instance, airport limousines and interceptor parking lots only work with a reliable system of public transportation. In the same way, a bus or trolley trip usually involves some walking at each end. If that walk is of reasonable length and is a pleasant experience, people will use public transportation much more often. (Fortunately, walkways that are safe,

beautiful, and interesting are just as desirable to permanent residents as they are to visitors.)

Encourage a reliable system of water taxis

Few resort communities have as much potential for water transportation as Fort Myers Beach. Water transportation is a classic example of making the trip part of the experience, because of its novelty plus the potential for seeing wildlife along the way. Matanzas Pass and its adjoining canals provide an ideal water transportation network for recreational trips. This network could use a mix of on-call water taxis plus regularly scheduled water shuttles, stopping at landing sites such as those shown in Figure 6. For the 13 sites shown that are at restaurants, motels, and marinas, the owners would have to agree to provide dockage. The agreement would ensure public access to the system while providing positive exposure to the business,

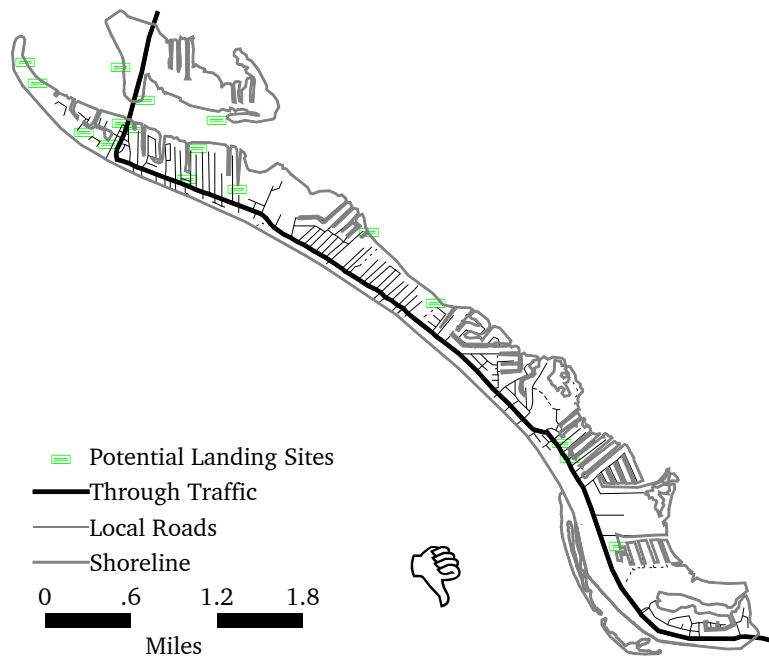


Figure 6, Some potential landing sites for water transportation

enabling them to expand their patronage.

Water transportation is hindered by logistical problems including limited dockage; manatee slow-speed zones; potential for foul weather; and existing regulations that require dedicated parking spaces at each stop. Although boat service would be a private-sector activity, there are some steps that the town can take to encourage water transportation, including formal policies in this comprehensive plan supporting water transportation to lay the groundwork for repealing regulations that work against water shuttles (such as parking requirements that consider a water shuttle or taxi to be a business requiring a separate pool of parking spaces at each stopping point).

Water taxis are operating successfully as private businesses in Miami and Fort Lauderdale. In downtown Miami, a water shuttle runs continuously for a one-way fare of only \$3.50. Water taxi service is available to and from Miami Beach for \$7.00 each way; this is an on-call shared-ride service. Identical water taxi service is available in Fort Lauderdale. These boats load and unload from the front, allowing them to dock in tight locations without special facilities (see Figure 7).



Figure 7, Water taxi unloading at a Fort Lauderdale hotel

Create a hidden-path system

A new pedestrian concept emerged from public workshops during the preparation of this comprehensive plan, a quiet network of “hidden paths” to run parallel to Estero Boulevard on the Bay side to provide an alternative to walking and cycling along Estero Boulevard. This network is described further in the Community Design Element of this plan, and is shown conceptually in Figure 8.

The “hidden path” network would expand the use of cycling and walking to school as an alternative to walking along busy Estero Boulevard (many students live close to the elementary school but now take the bus or are driven to school). The “hidden paths” would also provide an alternative walking and bicycling environment that could replace some single-occupant-vehicle trips. This would be particularly true where parts of the path system link important centers of activity. These paths could also

alleviate a gap in the future transportation network by connecting water- and land-based transportation.

The successful implementation of such an idea would require extensive community involvement and a close working relationship between residential neighborhoods and law enforcement agencies to ensure a safe and secure path. A good first step may be working with the Lee County School District to encourage parents nearest the school to participate materially (through donation of easements) and financially (where their property is not involved). School trips are the most effective way of ensuring steady foot and cycling traffic, which would ensure safety and immediate community involvement. Presence of law enforcement, particularly Sheriff’s department bike patrols and VOICE volunteers, would help ensure the successful implementation of the hidden path concept. The facility must be designed with adequate visibility to ensure the safety of users and adjoining property owners.

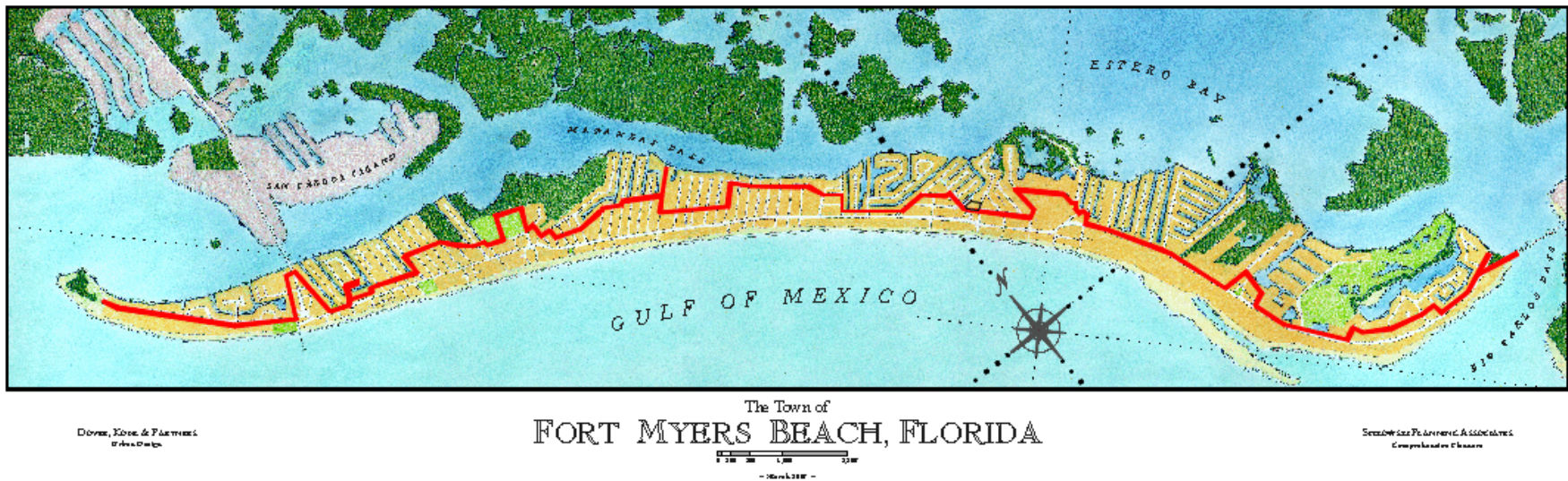


Figure 8, Conceptual plan for a network of “hidden paths”

2. Upgrade Estero Boulevard

Improvements to Estero Boulevard must balance travel needs with the many other functions of this premier public space. A foremost objective must be to enhance Estero Boulevard's role as the spine of the community and avoid any changes that would make into a barrier between the beachfront and the rest of Estero Island. If it were to become a barrier, the easy movement between these two portions of the island, a kind of social and physical porosity, would end.

The most important components of the town's strategy toward Estero Boulevard will be described briefly in this section:

- **Expand the Times Square streetscape project**, beginning with the Bay-side sidewalk from Times Square, and continuing southward.
- **Institute traffic calming measures**, especially passive measures along Estero Boulevard.
- **Put buildings closer to the street** in pedestrian zones
- **Improve sidewalks and bikeways** along Estero Boulevard across the entire island
- **Require traffic impact analyses for new development**

(A more thorough discussion of Estero Boulevard issues can be found on throughout Appendices A and B.)

Expand the Times Square streetscape project

Fort Myers Beach has outstanding opportunities to increase pedestrian and bicycle activity, and is undertaking many specific improvements to this end. In 1996 the Estero Island CRA completed its first construction phase, including a pedestrian mall at Times Square and wide new sidewalks on the beach side of Estero Boulevard from Times Square to the Lani Kai.

These improved sidewalks have already made walking even more popular; the sidewalks are raised above a curb and are surfaced with colorful pavers that match the new look of the Times Square pedestrian mall. Similar sidewalks should be extended as far south as the public library, linking the elementary school and Bay Oaks to the Times Square area.

If even a few feet of additional right-of-way can be obtained, these sidewalks could be wider, or the coconuts could be planted in a grass strip between the curb and the sidewalk. If necessary, costs could be reduced somewhat by using the decorative pavers only at intervals between sections of standard concrete sidewalk. For capital planning purposes, cost should be budgeted at \$1,000,000 per mile for improvements similar to those now in place, or double that for full sidewalks on both sides of Estero Boulevard.

During the design phase of these improvements, many related matters can be considered, such as stormwater improvements and trolley shelters and pull-offs at key locations.

A similar pattern of urban sidewalks should be built in the future around the Villa Santini Plaza. The shopping plaza and its high-rise neighbors provide the basis for another high-quality pedestrian zone at the south end of the island.

Institute traffic calming measures

“Traffic calming” refers to a variety of practices that make streets more hospitable to pedestrians and bicyclists, most often on side streets where cars have begun to speed through residential neighborhoods. In these situations, undesirable though traffic is “calmed” with physical techniques such as speed humps, narrowed lanes, landscaping, traffic diverters, jogs, or traffic circles at intersections. These can be considered “active” traffic calming techniques, which are intended to reduce speeding, or even reduce the capacity of the road, to discourage its use as a shortcut. Active traffic calming is rarely suitable for arterial roads like Estero Boulevard. Local roads are seldom used as shortcuts because of Estero Island’s long and narrow shape, so active traffic calming will have only limited application at Fort Myers Beach.

There are also “passive” measures that calm speeding traffic. These measures can play a major role in controlling speed without diminishing the number of vehicles that can use the road. As discussed earlier in this element, Fort Myers Beach suffers from excessive speeding along Estero Boulevard. With the number of bicycles and pedestrian sharing Estero Boulevard, this speeding is extremely dangerous, especially with the nightlife and bars that are patronized by Lee County residents who then drive themselves home.

“Passive” traffic calming measures do not interfere with the number or continuity of travel lanes in a road (although they sometimes reduce lane widths slightly). Typical techniques include providing curbs and street trees; allowing buildings nearer the road; and creating interesting vistas for drivers. These measure make the road more attractive and usable for pedestrians, and also discourage speeding by ending the resemblance of the road to a rural highway whose wide travel lanes, minimum curvature, and wide breakdown lanes are designed for high-speed vehicles.

Passive traffic calming along Estero Boulevard would help reduce speeding and maintain the “Main Street” feel that will otherwise be diminished. A new FDOT standard would allow most passive (and even some active) traffic calming measure on state-maintained arterial roads in residential corridors or areas of high pedestrian activity.

The precise design of intersections also has great impacts on travel behavior and pedestrian safety. Sharp corners (with a short radius) require drivers to slow down before turning. When the corner has a larger radius, vehicles can turn at faster speeds and crosswalks must be longer, making crossing much more dangerous. Some corners are designed with a channelized turn lane with a very large radius; these are extremely dangerous to pedestrians, although a raised island can be provided as a refuge for pedestrians. Figure 9 illustrates these types of intersections.

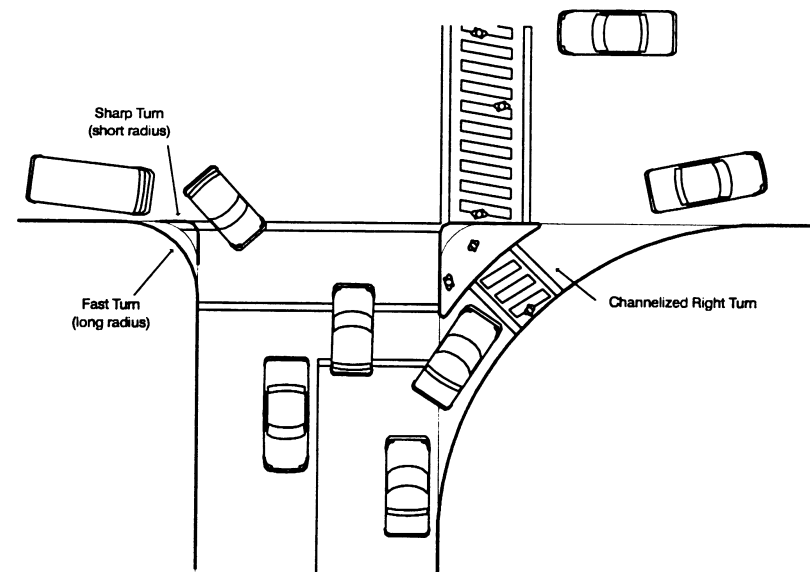


Figure 9, Examples of pedestrian-vehicle conflicts

Landscaping and street trees provide a hospitable environment for pedestrians and thus pedestrian-oriented commercial activities. The presence of pedestrians passively calms traffic. Motorists understand the nature of a more urban street and tend to slow down, not just for fear of being cited for speeding, but because there are inherent uncertainties about what lies ahead. As a bonus, these roads are more interesting to drive along, even when congestion slows traffic to a crawl.

Parts of Estero Boulevard, especially from Times Square to the library, already have many passive traffic calming measures including sidewalks, heavy pedestrian usage, power poles and buildings near the road, and even the jogs in the right-of-way (at Times Square and the library). Extending the Times Square streetscape south of the Lani Kai will further calm traffic while better protecting pedestrians from reckless drivers (through the curbs and street trees).

These sidewalks should be made safer for pedestrians by placing the rows of coconut palms in the traditional location between the curb and the sidewalk (the current design places the trees at the outer edge of the right-of-way, where they provide no protection whatever to pedestrians). The existing design is shown in Figure 10, and a computer-enhanced view of the proposed plan is shown in Figure 11. With this change, pedestrians will be better protected from reckless drivers than at present. The beautiful palm trees will have a pleasant calming effect on motorists. Since full curbs are being provided, motorists are reasonably separated from the trees. (According to design standards of the American Association of State Highway and Transportation Officials, the edge of tree trunks must be at least 1½ feet beyond a full curb.)

The potential effects of specific traffic calming measures need to be carefully considered. Travel speeds and accident patterns should be studied and various traffic-calming techniques evaluated to avoid alternatives that will cause traffic hazards or interfere with emergency vehicles.



Figure 10, Existing design



Figure 11, Alternate plan

Put buildings closer to the street

The three most important activity centers along Estero Boulevard are shown in Figure 12. Each has reasonable access (or potential for access) by trolleys, by sidewalks, and by dockage for boats.

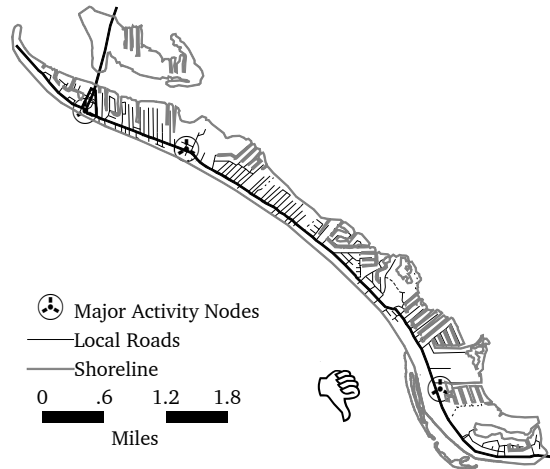


Figure 12, Major activity nodes

The complex of civic buildings around the public library and the Times Square/Old San Carlos are close enough together (just over a mile) that can anchor the ends of the most important pedestrian zone at Fort Myers Beach. The aging Villa Santini Plaza at the south end of the island is ripe for redevelopment and can become a second high-quality pedestrian zone to serve residents in that area.

The commercial centers of both pedestrian zones should have their buildings and display windows placed directly adjoining wide sidewalks. Locating the buildings this way is critical to sustaining a pedestrian atmosphere. If stores are separated from the sidewalk by a large parking lot, even nearby residents are less likely to walk across the inhospitable expanse of hot asphalt (see Figure 13).

When existing stores are separated from the street, extensions can be added so that at least part of the building reaches the public sidewalk. Rearranged parking is still available, but is less visible from the street, and pedestrians now have a path to the main store without crossing the parking lot. Over time, pedes-

trian usage increases and less parking is required. Ultimately, frontage on the public sidewalk can become the most valuable space, with the parking lot and water retention areas increasingly moved *behind* the stores, or under elevated commercial space.

Detailed building facades also make walking more enjoyable because they provide unique visual sequences. When the walk is interesting, its distance is noticed less. And when sidewalks are covered by awnings or canopies, pedestrians are protected from sun and rain, further improving the experience and encouraging walking. Building or zoning codes that discourage or prohibit these arrangements, or which require excessive front setbacks, need to be quickly updated.

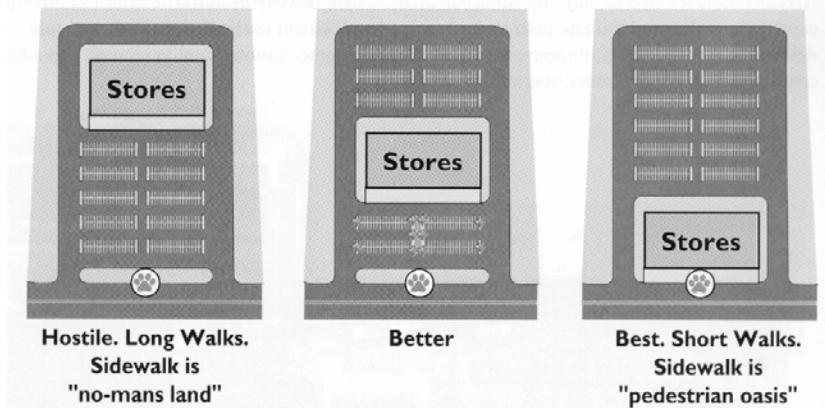


Figure 13, Relation of stores to parking lots

Improve sidewalks and bikeways

Fort Myers Beach has outstanding opportunities to increase pedestrian and bicycle activity. The physical layout of the community encourages walking and biking, with all homes within just a short distance from the beach and active commercial areas. Currently there are sidewalks on one side of most of Estero Boulevard, and Lee County has imminent plans to fill one gap from Buccaneer to Estrellita Drive using federal funds. The town should make every effort to have this project expanded to fill the other gap from the Villa Santini Plaza to Bay Beach Lane. Future sidewalk projects would include sidewalks on the opposite side of Estero Boulevard, which would also improve safety and congestion by reducing the number of pedestrian crossings. In some areas, wide rights-of-way allow many design choices; in others, deep drainage ditches could be put underground and covered with new sidewalks.

Bicycles and pedestrians often share sidewalks, but that situation is not ideal, especially where the number of pedestrians is high and the sidewalks are narrow. Where the right-of-way is wide, separate bike paths and sidewalks can be built. In areas with limited right-of-way, bicyclists could be provided with extra-wide travel lanes (14 feet wide); bicyclists would then be able to ride with the flow of traffic, leaving the sidewalk to pedestrians. The ultimate result would be a resort environment that truly supports walking, bicycling, and public transportation.

There are several funding sources for sidewalks and bikeways, including federal “transportation enhancement” funds, gasoline tax proceeds, and (potentially) road impact fees. Another option would be the establishment of a special taxing or assessment districts (MST/BU), which could be used in conjunction with lighting or other special districts.

Require traffic impact analyses for new development

Under current regulations, the traffic impacts of new development play almost no role in the approval or denial of development orders. The Diamondhead convention center, for instance, is being built between two of the most important nodes of activity on Fort Myers Beach, and will have great impacts on both. Under current rules, however, no traffic circulation analysis was required except for a determination of whether to build a single turn lane. (Further analysis wasn’t required because no rezoning was needed and the number of trips generated in the peak hour fell below a fixed county-wide threshold.)

The town needs to ensure that its development regulations do not allow this situation to continue, and which consider the cumulative impacts of existing and potential development. The Land Development Code needs to be amended to lower the thresholds for requiring traffic impact analyses and to establish the type of analysis that will aid the town’s decision-making process. Proper technical analyses must be required, with the results used to determine whether impacts are acceptable and whether an improved design could offset some of the impacts (as in the previous example in Figure 13 where stores separated from the sidewalk will reduce usage by pedestrians and increase traffic impacts). Another example might be parking limitation criteria whereby new trips generated as a result of new or expanded land uses could not trigger a demand for additional parking. The town will need to hire a specialized transportation consultant to create the specifications that developers would be required to follow in preparing traffic impact analyses for their proposed developments.

3. Optimize the Parking Supply

Fort Myers Beach needs a comprehensive approach to its parking problems. Although this is widely understood, most responses to the “parking problem” are still short-sighted. The two most recent examples are Lee County’s current plan to go from no parking whatever at Bowditch Point to a very large lot there, and local merchants’ towing of illegally parked vehicles (rather than charging a fee for using surplus parking spaces).

The demand for parking varies greatly depending on the season. In all likelihood, any additional parking spaces that can be provided will be consumed during the peak season if they are close enough to popular beaches. But each extra vehicle that is driven to Fort Myers Beach during the peak season adds to the existing congestion. Parking spaces quite a distance from the beaches, especially if on the mainland and served by trolleys, are less likely to be used, but are far better from the standpoint of congestion and improving the pedestrian environment; the difficulty is in making them convenient or appealing enough to attract more than occasional users.

The *location* of public parking must be balanced with actual demand and connected to popular destinations with comfortable sidewalks or public transportation. Likewise, the total *supply* of parking spaces must be balanced with overall road capacity. It does visitors little good to have enough parking spaces if they cannot be reached without an interminable wait in traffic. A surplus of on-island beach parking can work directly against the success of off-island parking and public transportation. In fact, many communities find that a moderate parking shortage reduces unnecessary car trips and encourages walking and the use of public transportation.

A net increase in public parking is needed, but some existing lots are not being used to capacity. Public or private efforts to meet the full theoretical “peak season demand” for parking would be

as counter-productive as widening Estero Boulevard as much as needed to eliminate traffic congestion.

As with road improvements, parking improvements must serve the community without overwhelming it. The most important components of the town’s parking strategy will be described briefly in this section:

- **Encourage shared parking lots**
- **Big may not be better when sizing parking lots**
- **Visitors need to be directed to available parking**
- **Planning for parking**

(A more thorough discussion of parking problems and various solutions can be found on pages 7-A-19 to 7-A-30 of Appendix A.)

Encourage shared parking lots

It has been widely demonstrated that parking lots serving a variety of land uses require much less space than separate on-site lots for each business. Fort Myers Beach can make walking more pleasant by wasting as little land as possible on parking lots. Shared parking lots are ideal when businesses are relatively small, clustered together, and have different busy periods (as at Times Square). An excellent example is the paid parking lots along Las Olas Boulevard in Fort Lauderdale (see Figure 14), which are located behind a thriving business district that faces a tree-lined boulevard.

Another example is the joint lots which provide free parking behind stores in the main business district of the new town of Celebration near Orlando (see Figure 15).

The most thorough analysis of parking at Fort Myers Beach was conducted by the Estero Island CRA in 1993. Their study recommended 165 more on-street parking spaces near Times Square, some diagonal and some parallel. These spaces would serve beachgoers and area shops (although some of these spaces would merely replace spaces lost to new recreational facilities at Lynn Hall Park).

In addition to the new on-street spaces, the CRA study suggested creating a reservoir of shared parking behind businesses along Old San Carlos Boulevard. Storefronts would be built up to the right-of-way line of Old San Carlos, improving the pedestrian character of the street by replacing individual front parking lots with continuous storefronts. The result would be a high-quality urban streetscape similar to Los Olas Boulevard and Celebration as described above.

This concept has not been implemented to date. The Town of Fort Myers Beach needs to undertake the planning and engineering studies to determine if this concept is feasible and acceptable to the many property owners involved. If it is not, then parking

will have to be provided in other ways, most likely in one or more parking garages that will cost considerably more and be less compatible with the pedestrian environment envisioned by the Estero Island CRA. The adopted redevelopment plan for Times Square depends on a suitable parking solution; if one cannot be found, the plan itself is not feasible

If the shared parking plan is feasible, the town needs to move forward with a phased implementation plan. This plan would have a regulatory component, with landowners required to conform their building plans to the concept, and a construction component for at least the on-street parking spaces. Landowners benefitting from the additional parking will be expected to pay proportionally to their benefit. This payment could take the form of assessments against their land, or possibly fee-in-lieu payments for each parking space that they no longer have to provide on their own site. TDC grant funds should be sought for the portion of these spaces used by beachgoers. Parking revenues would help repay part of the costs.



Figure 14, Sign advertising shared parking behind stores along Los Olas Boulevard in Fort Lauderdale

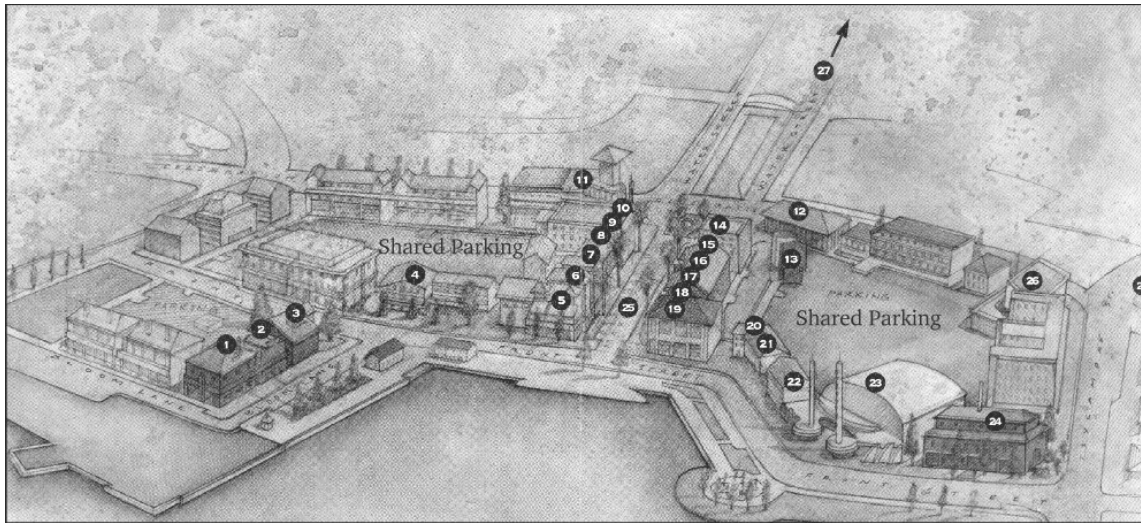


Figure 15, Shared parking behind Celebration storefronts (indicated by numbered dots)

Big may not be better when sizing parking lots

The need for a parking garage near Times Square has been debated almost continuously for a decade. Lee County seriously considered building a garage as an alternative to building an on-site parking lot at Bowditch Point Park. In recent years, several groups of investors have considered a parking garage as a business venture. A parking garage seems like an ideal solution because a single construction project, no matter how difficult to initiate, would provide the abundance of parking that promises to relieve a chronic problem at Fort Myers Beach.

By contrast, smaller parking lots would be more acceptable to many residents of Fort Myers Beach who fear either the bulk of a parking garage at a highly visible Times Square location or the extra traffic that a parking garage might attract. Despite some obvious disadvantages of small parking lots (including a higher cost per space and extra traffic caused by those searching for a parking space), a number of small public lots is probably a more desirable parking solution than one large lot. Large lots are inherently hostile to pedestrians (although good design can make them less so). Small lots can be surrounded by garden

walls or hedges, yet because of their size drivers can quickly see if any spaces are available. Small lots can also be added incrementally, avoiding the possibility of building too many parking spaces.

Regardless of size, public parking needs to be fairly convenient for users yet not placed in the center of pedestrian activity. This is one of the reasons that the Estero Island CRA plan recommended shared parking behind new shopfronts along Old San Carlos; those heading for the beaches would walk along Old San Carlos, rejuvenating it as a public place. For the same reason, if a parking garage were to be built, an ideal location would be on the existing cruise

ship parking lot next to Snug Harbor, rather than at the foot of the bridge. The Snug Harbor location would also have the advantage of interfering less with the majestic view of the Gulf of Mexico that now greets motorists as they cross the Matanzas Pass Sky Bridge.

If a parking garage were to be built by the Town of Fort Myers Beach, the town could select the best location based on community needs and its long-range planning. If the private sector builds a garage, the town is limited to approving or denying whatever site is selected and placing appropriate conditions on the zoning approval. However, the CRA study concluded that only those parking facilities located closest to the beach are highly utilized, and that any deficits exist only during a relatively short 3-4 month peak season. They questioned whether parking utilization during a 3-4 month season was sufficient to justify a publicly financed parking garage.

An on-island parking garage is often promoted as a way to reduce traffic congestion by getting drivers in search of parking off of the road. Countering this benefit, however, are the *addi-*

tional drivers who had been dissuaded from driving to Fort Myers Beach by the legendary parking shortages. Whether the additional drivers would more than offset those previously circling the island in search of parking cannot be assessed through any simple analytical technique. The possibility, however, suggests caution in advocating a parking garage, especially if it adds additional parking rather than replacing existing spaces.

A critical point is that traffic circulation must be considered together with the location and design of a parking garage. For instance, an extra incoming lane on the Matanzas Pass Sky Bridge would help accommodate the additional traffic that would be drawn to a parking garage along Old San Carlos.

Visitors need to be directed to available parking

A brief 1993 survey of beach parking lots showed the two most convenient lots were nearly full from 11:00 A.M. to 3:00 P.M., but the metered lot under the sky bridge never had more than 37% of its 62 spaces occupied. This under-utilization is attributed to inadequate signage advising visitors of its location, as well as its relative distance from the beach.

The surplus space in these lots, in the midst of an apparent parking shortage, emphasizes the importance of disseminating information about *where* parking is available. A positive step is Lee County's plan to install "variable message signs" across San Carlos Boulevard to advise drivers whether spaces remain available in the proposed parking lot at Bowditch Point.

This technology could also be linked to other public parking lots as well, through telephone lines or radio signals. This technology has the potential for widespread use in promoting the use of park-and-ride lots and reducing unnecessary trips onto the island when no parking is available (see an example in ?). It could also

provide an estimate of delays due to traffic congestion.

The town needs to urge Lee County and the Florida DOT to use this type of technology to advise motorists of traffic and parking congestion, thus allowing drivers to avoid contributing to the congestion when they have an acceptable alternative. This knowledge, added to the alternatives suggested elsewhere in this element, provides great promising in managing the inevitable peak season congestion.



Figure 16, Variable message sign for parking management

Planning for parking

The “parking problem” cannot be addressed in isolation from other community objectives such as relieving congestion, encouraging walking and public transit, pleasing visitors, and strengthening local businesses. Fort Myers Beach needs a comprehensive approach to parking and transportation rather than piecemeal efforts that may conflict with each other.

Many aspects of such a strategy have already been discussed here, and others are suggested in Appendix A of this element. For instance, parking rates can be used as a congestion management technique. There is no reason to discourage parking in the off-season or in off-hours, so parking during those hours would be at the current low rates. But rates could be increased during peak periods. This would discourage some people from parking (and driving) during those periods, and help pay for the cost of providing peak-season parking spaces that will sit unused during most of the year. Graduated rates could also favor short-term parking; or lower rates can be charged for the less convenient parking lots; or higher rates could be charged for arrivals or departures that coincide with peak traffic congestion.

When the private sector controls the supply of public parking, parking rates are effectively set by the market, allowing parking operators to sense emerging shortages of parking that they can turn into business opportunities. But at Fort Myers Beach, the availability of parking is closely related to road congestion because the difficulty in parking discourages some people from driving. The town should play a direct role in managing parking in publicly owned lots, and its equally important role in setting parking requirements for new or expanding businesses, and guiding private-sector parking ventures through incentives and regulations.

In addition, many existing parking spaces are located partially or wholly within public rights-of-way. Most of these spaces are currently used by adjoining businesses, and are often marked as if they are private spaces, complete with signs threatening the public with towing if they park there. Where these spaces are located fully on the public right-of-way, they are actually public parking that has been appropriated for private use.

The Town of Fort Myers Beach needs to take several specific steps in developing a comprehensive approach to parking:

- Parking occupancy study: The single-day survey in 1993 is not an adequate basis for parking planning. A more detailed survey is needed, covering weekdays *and* weekends throughout the peak season.
- Detailed parking plan for Times Square: The shared parking plan along Old San Carlos needs to be fully designed and implemented, or rejected in favor of some other alternative. This plan should be part of the larger streetscape design for Old San Carlos (and perhaps Crescent Street).
- In-depth exploration of “variable message signs” to report parking availability and congestion to motorists before they reach Fort Myers Beach: Ideally this study should be undertaken by Lee County or the Metropolitan Planning Organization, and would evaluate various approaches, determine approximate costs, and verify the feasibility of the overall concept.

4. The Future of the Bridges

Motorists approach Fort Myers Beach from either end by crossing bridges with dramatic views of the Gulf of Mexico. At the north end, the Matanzas Pass Sky Bridge is also the point where four traffic lanes narrow to two, leading some drivers to conclude that a wider bridge, or another bridge, would solve the congestion.

Since toll bridges to barrier islands are common, other drivers suggest that a toll booth here would reduce the number of people using the bridge, thus relieving congestion. Still others suggest that re-striping the existing bridge to three lanes would improve the flow of traffic. Further complicating these alternatives, the existing bridge, although built only 20 years ago, will need to be replaced in the not-to-distant future, making it reasonable to consider how access might be improved at that time. (Appendix A contains a brief analysis of four other bridge alignments.)

The Town of Fort Myers Beach is sure to learn much more about these very complex issues in the future. At present, the most important components of the town's policy will be described briefly in this section under these headings:

- **The Sky Bridge is the scene but not the cause of traffic congestion**
- **Additional bridge capacity should not be directed toward Times Square**

(A more thorough discussion of these issues can be found throughout Appendix A.)

The Sky Bridge is the scene but not the cause of traffic congestion

During the winter tourist season, traffic is often at a standstill on the sky bridge. However, there is little evidence that those conditions result from any inadequacy of the bridge itself. In fact, the “capacity” of the bridge is much higher than the capacity of Estero Boulevard, even though both have the same number of lanes. Traffic engineers have calculated the capacity of the sky bridge at 2,610 vehicles per hour in each direction, compared to 1,316 for Estero Boulevard just south of Crescent Street (see pages 7-B-15 to 7-B-20 of Appendix B). The capacity of the sky bridge is high because there is no interference from intersecting streets, parking spaces, or pedestrians crossing the street. It is the congested conditions *south* of the bridge that cause traffic to back up on the bridge.



Figure 17, Sky bridge over Matanzas Pass (photo courtesy Mohsen Salehi)

Since some traffic flowing onto the island from the sky bridge travels north to Lynn Hall Park or Bowditch Point, a third lane on the bridge could be used for this northbound traffic only. This would provide quicker access to the north end of the island, and would be especially suited to providing better access to the new parking lot at Bowditch Point or parking lots or a future garage along Old San Carlos. These benefits would have to be weighed against the following drawbacks:

- some drivers would attempt to circumvent this lane's purpose by merging into the center lane on the bridge, (or circling under the bridge and re-entering Estero Boulevard southbound from Crescent Street);
- this plan would also attract more cars to Estero Island without creating any more road capacity for vehicles

- that may decide to travel further south; and
- the breakdown lane on the bridge, which is also used by bicyclists, would be reduced to 2–3 feet.

The previous section of this element stressed the need to balance parking capacity with road capacity. Equally important is a balance between road capacity *to the island* and road capacity *on the island*. There is little reason to widen the sky bridge unless Estero Boulevard were widened south of Times Square.

It may be possible for the Town of Fort Myers Beach to take responsibility for the sky bridge from Florida DOT (as discussed on pages 7-A-44 to 7-A-46 of Appendix A). There are many liabilities associated with this approach, especially rebuilding the bridge after its useful life is over or if damaged by a hurricane. The main advantage would be if this were the only way to integrate the bridge with peak-period tolls, off-island parking lots, and mass transit into a complete congestion management system. If drivers were aware of congestion levels and were able to save money (if not time) by using convenient mass transportation, a shift in the current car-dominated travel picture could take place. This concept would require bridge tolls (at least in the winter); variable message signs; adequate off-island parking lots just after the signs but before the toll booth; and much-improved trolley or water shuttle service to Fort Myers Beach.

Do not direct additional bridge capacity toward Times Square

The strategies suggested in this element tries to make the best of living with congestion. Congestion levels are acceptable during most of the year, and many residents find them unpleasant but acceptable even during the tourist season. If congestion levels increase to clearly intolerable levels, the Town of Fort Myers Beach may be faced with a decision as to the best (or least harmful) method of increasing road capacity.

Many methods of increasing capacity have been reviewed (see full descriptions in Appendix A). Some hold some promise and deserve further analysis, but none are clearly superior to the others (or to the strategies recommended in this element). A combination of two particular approaches, however, would be the least damaging to Fort Myers Beach if an increase in road capacity were deemed necessary. A new bridge from the easterly end of Main Street on San Carlos Island to just north of Bay Oaks Park (see Figure 29 in Appendix A) could be combined with major boulevard-type improvements to a portion of Estero Boulevard, thus allowing through traffic to bypass the most congested portions of Estero Boulevard south of Times Square.

Because a new bridge would allow more traffic to reach Fort Myers Beach, improvements to Estero Boulevard would be needed from Bay Oaks southward for some distance. The least damaging improvement would be a European-style boulevard with an extended pedestrian realm that includes a pair of tree-lined medians and a one-way access road on each side (see pages 7-A-55 to 7-A-57 of Appendix A for a fuller discussion of this concept).

5. Experiment Widely

Although many resort communities have severe traffic problems, the exact nature of the problems can differ greatly. Although Lee County and Florida DOT have tried to address traffic problems at Fort Myers Beach, their attention is inevitably divided across their entire jurisdiction. The Town of Fort Myers Beach needs to constantly search for innovative solutions to long-standing problems and to new problems as they develop.

Many traffic engineering solutions can be tried as closely monitored experiments. The town can be a catalyst for those experiments, and may wish to retain a creative traffic engineer to provide advice on a continuing basis. This would be especially helpful if the town experiments with complex changes such as reversible lanes (see pages 7-A-35 to 7-A-39 of Appendix A).

An official spirit of experimentation will allow creative ideas to be tested without any stigma of failure if they prove unpopular or unproductive. The following list of experiments and data needs has been compiled from citizen comments during the preparation of this plan:

- Signalized pedestrian crossing at Times Square: This important pedestrian crossing was recently provided with a full traffic signal, actuated by pedestrian push-buttons. Since Estero Boulevard has only two lanes here, and traffic often moves slowly around the bend, pedestrians often tire of waiting for the light to change and cross when they see a gap in traffic. Motorists are then forced to stop for no apparent purpose. This signal might operate better as a continuously flashing yellow, especially if pedestrians had a more protected refuge between the lanes. If such an experiment failed to allow pedestrian crossings at an acceptable level of safety, a pedestrian overpass may be able to reduce the number of pedestrians in the crosswalk without discouraging foot traffic in this

highly congested area.

- San Carlos Boulevard approach to the Matanzas Pass Sky Bridge: The widening of San Carlos Boulevard from the mainland has created severe problems on the approach to the sky bridge where its five lanes are reduced to two lanes. Initial experiments have already been tried to discourage drivers from using side streets on San Carlos Island to get ahead of the line of cars waiting to enter the bridge. Another problem is cars that pass the waiting line and then take advantage of polite tourists by slipping in at the front of the line, greatly lengthening the wait for all other drivers. Creative experimentation is certainly called for here.
- Variable message signs: These signs were discussed earlier as an ideal way to advise motorists of congestion delays and available parking. The signs themselves and their data-collection devices will require creative planning and engineering to fulfill their promise.
- Origin/destination data: The December 1993 origin/destination survey was a good source of data but needs to be repeated at different times of the year to provide truly meaningful information for transportation and tourism planning. This may be accomplished through the Metropolitan Planning Organization's proposed "Barrier Island Travel Survey." This 1999 survey will include roadside origin/destination and on-board transit surveys on Estero Boulevard and may be co-sponsored by the Sanibel and Fort Myers Beach councils.

- Transportation demand management (TDM): This concept attempts to reduce the number of single-occupant vehicles during peak traffic periods, either by eliminating some trips completely, or by accommodating existing trips in fewer vehicles, or by moving some trips before or after the most congested periods. TDM techniques are often implemented by employers; at Fort Myers Beach, tourist-related employers have many low-paid employees who could benefit from employer-sponsored transportation between the workplace and off-island locations (such as interceptor parking lots, or major bus transfer points). Ideally such transportation would be combined with shift changes that avoid peak periods on the roads.

The Lee County MPO has adopted its own TDM plan with similar goals. As a result, Lee Tran has begun a commuter assistance program who works with employers to establish carpool and vanpool program and to market other Lee Tran services.

The development of effective TDM programs at Fort Myers Beach could be approached as a public/private partnership, with pilot programs to test potential TDM strategies. Fort Myers Beach has the dubious advantage of so much peak season congestion that TDM strategies wouldn't seem unrealistic or more of a constraint on freedom than sitting in traffic.

- Delivery vehicles: Large delivery vehicles often block roads and sidewalks while unloading goods for area stores and restaurants. This situation has reached intolerable levels, especially near Times Square and the Villa Santini Plaza. Sometimes emergency vehicles are blocked by these trucks. Other older communities have been forced to limit the hours of these deliveries, since it is difficult to retrofit older build-

ings with off-street loading areas. To avoid interference with traffic and pedestrian flow, the town needs to work with local businesses to develop a strategy to limit commercial deliveries during peak traffic periods.

- Flooding of roadways: During periods of minor flooding, the town has a unique opportunity to monitor the performance of roadside drainage systems to detect problems that could prematurely halt evacuations. These problems could be inadequate drainage for rainfall, or low-lying areas subject to tidal flooding. This monitoring should extend beyond Estero Island, since there are low points off the island both directions that could block an evacuation prematurely.

LEVEL-OF-SERVICE STANDARD

This comprehensive plan must establish a minimum "level of service" standard for roads. This standard is required by the concurrency provisions of Florida law; no development or building permits can be issued if it will be exceeded.

Fort Myers Beach faces an unusual problem in establishing such a standard. Its major road, Estero Boulevard, already operates at what is considered an unacceptable level of service in the winter. This congestion is caused by a combination of high tourism demand for its beaches and past over-building relative

to road capacity. Concurrency standards cannot have much of an influence in managing growth at Fort Myers Beach because nearly all remaining land has been platted or otherwise vested for development rights.

Despite this lack of control, the town has responsibility for managing the resulting peak-season congestion. This comprehensive plan seeks to manage congestion levels and encourage alternate means of mobility including walking, bicycling, and trolleys.

Fortunately for residents, the peak period of congestion lasts only about three months of each year. However, the shortness of this period could change. This plan contains many efforts to improve the vibrancy and livability of Fort Myers Beach. These changes might attract so many more visitors that the period of extreme congestion lengthens to an intolerable portion of each year. Therefore the level-of-service standards adopted into this plan (see Policy 7-I-2) is based on capping the number of months each year that traffic congestion will be tolerated.

Before setting this standard, traffic counts from Lee County's permanent count station on Estero Boulevard near Donora were examined (see details on pages 7-B-15 through 7-B-20 of Transportation Appendix B). Table 7-2 shows a summary of this count data, organized to show the average hourly traffic levels during the busiest time of day (10:00 A.M. to 5:00 P.M.) averaged for each month. Note the relation of these numbers to the theoretical capacity of Estero Boulevard of about 1,300 vehicles per hour (which is between the capacities of 1,240 and 1,316 vehicles, as reported in Tables 7-B-12 and 7-B-13).

The minimum standard selected for this comprehensive plan is that average traffic flows on Estero Boulevard from 10:00 A.M. to 5:00 P.M. do not exceed this capacity for more than four calendar months in any continuous twelve-month period, using counts from the permanent count station at Donora Boulevard.

Table 7-2 — Traffic Counts on Estero Boulevard at Donora, 1995-1998

<i>Month & year</i>	<i>Average hourly counts from 10:00 A.M. to 5:00 P.M.</i>	<i>Above peak capacity?</i>
October 1995	1,100	
November	1,260	(close)
December	1,176	
January 1996	1,283	(close)
February	1,310	YES
March	1,288	(close)
April	1,266	(close)
May	1,098	
June	1,014	
July	1,022	
August	1,018	
September	937	
October	1,065	
November	1,262	(close)
December	1,176	
January 1997	1,269	(close)
February	1,016	
March	1,207	
April	1,225	
May	1,075	
June	1,020	
July	1,056	
August	1,035	
September	781	
October	1,091	
November	1,248	(close)
December	1,168	
January 1998	1,269	(close)
February	1,287	(close)
March	1,177	

Source: Summary of raw counts provided by the Lee County Department of Transportation, averaged by month (both directions)

FUTURE TRANSPORTATION MAP

A future transportation map is required in all transportation elements by Florida law. Figure 18 shows the future transportation map for the Town of Fort Myers Beach. This map includes arterial, collector, and local roads; sidewalks; mass transit routes; and waterways.

Many facilities usually shown on these maps are not present at Fort Myers Beach, and therefore are not shown:

- limited and controlled access roads;
- public transit rights-of-way and exclusive corridors;
- transportation concurrency areas;
- airports, water ports, and rail lines; and
- intermodal terminals.



Figure 18, Future transportation map

GOALS - OBJECTIVES - POLICIES

Based on the analysis of transportation issues in this element, the following goals, objectives, and policies are adopted into the Fort Myers Beach Comprehensive Plan:

GOAL 7: To improve peak-season mobility without reducing the permeability of Estero Boulevard to foot traffic or damaging the small-town character of Fort Myers Beach. The town seeks to reduce speeding, improve evacuation capabilities, and improve mobility through balanced transportation improvements such as a continuous system of sidewalks and bikeways, a network of trolleys and water taxis linked to off-island systems, and parking options matched to road capacity.

OBJECTIVE 7-A DEFINING THE PROBLEMS — Through this plan, the Town of Fort Myers Beach will address its three major transportation problems: congestion (by supporting public transit and pedestrian improvements), parking (by improving public parking near Times Square), and speeding (through passive traffic calming on Estero Boulevard).

POLICY 7-A-1 CONGESTION: Every winter, Estero Boulevard becomes so crowded that traffic backs up, sometimes for miles in both directions. Much of this congestion is caused by visitors, who will continue to frequent the beaches regardless of development levels on Estero Island. Despite the road congestion, the

town welcomes visitors and intends to provide mobility alternatives as described in this plan.

POLICY 7-A-2 PARKING: Even though existing parking lots are not used to capacity, parking is not abundant at Fort Myers Beach. The welcome rebirth of commercial activity near Times Square will increase the demand for parking. The Town of Fort Myers Beach will address parking shortages through the methods outlined in this plan.

POLICY 7-A-3 SPEEDING: Despite the virtual crawl of traffic on parts of Estero Boulevard, speeding is also a problem. If motorists didn't speed on Estero Boulevard, many more people would get out of their own cars. The town will protect the pedestrian environment along Estero Boulevard and will not widen travel lanes or discourage safe pedestrian movement across the boulevard.

OBJECTIVE 7-B CONVENTIONAL SOLUTIONS — The usual response to traffic congestion is widening roads or building alternate routes. Estero Island's long narrow shape, frequent navigable canals, sensitive environmental, and highly urbanized character preclude these solutions. Congestion management at Fort Myers Beach must aim to reduce delay and improve safety, not just for motorists but for pedestrians and bicyclists as well.

POLICY 7-B-1 DELAY AND SAFETY: The town recognizes that many efforts to reduce delay and improve safety for motorists have the opposite effect on pedestrians. Creative solutions will be required to address both concerns.

POLICY 7-B-2 **WIDENING:** Under no circumstances shall conventional four-laning of Estero Boulevard be considered as a desirable means of improving traffic circulation on Estero Island.

POLICY 7-B-3 **IMPROVEMENTS TO ESTERO BOULEVARD:** The Town of Fort Myers Beach shall initiate additional pedestrian and streetscape improvements along Estero Boulevard beginning in 1999, and shall negotiate with Lee County for the turnover of responsibility for its maintenance if necessary to carry out these improvements or to further other town policies.

OBJECTIVE 7-C EVACUATION ROUTE — Estero Boulevard’s critical function as the sole evacuation route for Fort Myers Beach shall be considered in all planning and development activities.

POLICY 7-C-1 **EVACUATION CAPACITY:** Evacuation routes do not need to be designed as high-speed roadways. The critical factor is the total number of cars that can evacuate in a given period of time. The town shall evaluate all efforts by Lee County or by the town to reduce speeding on Estero Boulevard during the design phase to ensure that these efforts will not hinder an effective evacuation.

POLICY 7-C-2 **FLOODING:** The town shall analyze actual flooding of evacuation routes that occurs due to tropical storms or hurricanes, and shall initiate physical improvements that can avoid future flooding at those locations.

OBJECTIVE 7-D VARIETY OF TRAVEL MODES — The Town of Fort Myers Beach shall make efforts every year to improve mobility for its residents and visitors, striving for a balanced transportation system that allows safe movement even during peak periods of traffic congestion. These efforts may include further subsidies to improve the trolley system, the use of impact fees to improve sidewalks, and creation of critical links on the hidden-path system.

POLICY 7-D-1 **ARRIVE WITHOUT A CAR:** Fewer vehicles would be driven to Fort Myers Beach if scheduled airport shuttle service were available. The town shall encourage this service and the designation of a central drop-off point that could include a trolley stop and taxi stand.

POLICY 7-D-2 **IMPROVE TROLLEY SERVICE:** Trolley ridership increases when service is more frequent and when fares are low or free, yet no long-term funding or operational plan has been developed for providing higher service levels. Practical measures to improve trolley usage include:

- i. Recurring subsidies from tourism sources so that service can be enhanced and congestion minimized during heavy seasonal traffic;
- ii. Pull-offs at important stops along Estero Boulevard so that passengers can safely board and traffic is not blocked excessively; these pull-offs could be built during other improvements to Estero Boulevard or required by the Land Development Code during the re-development process.

- iii. Clear signs at every stop with full route and fare information;
- iv. Bus shelters at key locations, with roofs, benches, and transparent sides;
- v. Replacement of the existing trolley buses with clean-fuel vehicles so that businesses won't object to having trolleys stop at their front doors; and
- vi. Accommodation of the special needs of the transportation disadvantaged.

POLICY 7-D-3 **ALTERNATE TRAVEL MODES:** The town shall support alternatives to car travel to free up road capacity for trips that do require a car. Public funding sources shall include county/state gasoline taxes and road impact fees. The town shall modify its road impact fee ordinance by 1999 to allow these fees to be spent (within legal limits) on capital improvements that relieve road congestion, such as better sidewalks, trolley improvements, and off-island parking areas. The town seeks to at least double the usage of the trolley system by the year 2001 (from its 1996 total ridership level of 238,754).

POLICY 7-D-4 **ENCOURAGE WATER TAXIS:** Fort Myers Beach has great potential for water transportation, with its canals, natural waterways, and high levels of tourism. To encourage the private sector to provide this service, the town shall ease regulations that require a water taxi to provide dedicated parking spaces at every stop and shall encourage restaurants, motels, and marinas to provide dockage for water taxis. Where possible, water taxi drop-off sites should avoid areas of high manatee concentration, or use protective measure such as propeller guards, jet propulsion, or electric motors.

POLICY 7-D-5 **HIDDEN-PATH SYSTEM:** The town shall support the creation of a quiet network of "hidden paths" running on the Bay side parallel to Estero Boulevard. This network would provide an alternative to walking and cycling along Estero Boulevard (as described further in the Community Design Element). Initial land acquisition shall begin in 1999.

OBJECTIVE 7-E UPGRADE ESTERO BOULEVARD — As part of its congestion avoidance strategy, the town shall methodically upgrade Estero Boulevard to reduce speeding and encourage walking, as higher traffic speeds and car-oriented businesses are antithetical to its pedestrian character. (If a suitable partnership to this end cannot be achieved with Lee County, the town may consider taking on maintenance responsibility for Estero Boulevard.)

POLICY 7-E-1 **TIMES SQUARE STREETScape:** The town shall begin work by 1999 toward extending southward the curbs, colorful sidewalks, and street trees installed by the Estero Island CRA in 1996. Similar sidewalks should be placed on both sides of Estero Boulevard as far south as the public library, including drainage, lighting, and trolley improvements. Unspent funds from the Estero Island CRA should be sought from Lee County toward this end. Generous urban sidewalks should also be built in the future around the Villa Santini Plaza as part of its redevelopment (as described in the Community Design Element).

POLICY 7-E-2 **TRAFFIC CALMING:** The town shall support two types of traffic calming to reduce speeding, which endangers lives and diminishes the quality of the pedestrian environment of Fort Myers Beach:

- i. The first is “active” or traditional traffic calming along residential streets, using physical techniques such as speed humps, narrowed lanes, landscaping, traffic diverters, jogs, or traffic circles at intersections.
- ii. The second is “passive” traffic calming along Estero Boulevard, to control speeding without reducing the number of vehicles that can use the road. Techniques include full curbs and sidewalks separated by street trees; buildings nearer the road; interesting vistas for drivers; and avoidance of overly wide travel lanes or intersections.

POLICY 7-E-3 **BUILDINGS CLOSE TO THE STREET:** Where pedestrian levels are high, buildings should adjoin the sidewalk rather than be separated by parking spaces. Front walls of stores, offices, and restaurants should have large windows rather than blank walls, preferably shaded by awnings or canopies. Access to parking areas shall be off side streets wherever possible. The town’s Land Development Code shall implement these concepts beginning in 1999.

POLICY 7-E-4 **SIDEWALKS AND BIKEWAYS:** The town shall work toward major expansion of sidewalks and bikeways. In addition to the next phase of Estero Boulevard sidewalks (see Policy 7-E-1 above), the town shall support the following projects:

- i. Support Lee County’s imminent plans to fill the gaps from Buccaneer to Estrellita Drive and from the Villa Santini Plaza to Bay Beach Lane using federal funds;
- ii. Initiate extensive improvements by 1999 to Old San Carlos and Crescent Street in conjunction with parking improvements (see Policy 7-F-2);
- iii. Initiate engineering studies by 1999 for bikeways and additional sidewalks on the second side of Estero Boulevard and improved pedestrian crossings, including consideration of a pedestrian overpass at Times Square.

OBJECTIVE 7-F OPTIMIZE THE PARKING SUPPLY — Off-island parking facilities served by convenient public transportation should be provided to meet peak-season demands. For year-around demand, the town shall provide additional on-island public parking spaces, based in part on a new peak-season occupancy survey of existing public parking spaces.

POLICY 7-F-1 **ENCOURAGE SHARED PARKING LOTS:** Parking lots serving a variety of land uses require much less space than separate on-site lots for each business. Shared lots waste less land and encourage walking because businesses aren’t separated by large parking lots. The town shall encourage shared parking lots when businesses are relatively small, are clustered together, and have different busy periods.

POLICY 7-F-2 **SHARED PARKING NEAR TIMES SQUARE:** The Estero Island CRA recommended a reservoir of shared parking behind businesses along Old San Carlos and adding 165 on-street parking spaces near Times Square (although some of these spaces would merely replace spaces lost to new recreational facilities at Lynn Hall Park). The town shall investigate the feasibility of this concept in 1998-1999 and proceed toward implementation, or create an alternate plan that may include a parking garages near Times Square.

POLICY 7-F-3 **BETTER PARKING LOTS:** Large parking lots or garages are usually more cost-efficient to build and maintain, but may not be the best solution for Fort Myers Beach. Disadvantages of large lots include high capital costs; the possibility of providing more parking than is needed or can be handled by the road system; and the unsightliness of most large parking lots and garages.

POLICY 7-F-4 **DIRECT VISITORS TO AVAILABLE PARKING:** Many visitors are unaware of existing parking lots; others would be dissuaded from driving if they were aware of the shortage of parking. Variable message signs can aid both situations. The town should encourage Lee County and FDOT to install these signs with information about all major parking areas, including the state park at Lovers Key.

OBJECTIVE 7-G THE FUTURE OF THE BRIDGES — Match bridge capacity to Estero Island with the capacity of Estero Boulevard.

POLICY 7-G-1 **ADEQUACY OF THE SKY BRIDGE:** There is little evidence that traffic congestion at Fort Myers Beach is caused by any inadequacy of the Matanzas Pass Sky Bridge, which unlike Estero Boulevard has no interference from intersecting streets, parking spaces, or pedestrians crossing the street.

POLICY 7-G-2 **CHANGES TO THE SKY BRIDGE:** If parking lots at Bowditch Point or Times Square greatly increase demand for north-bound turns at the foot of the bridge, striping a third lane on the existing bridge might be considered, as might a reversible third lane during the peak season.

POLICY 7-G-3 **RESPONSIBILITY FOR THE SKY BRIDGE:** FDOT may be willing to turn over responsibility for the Sky Bridge to the Town of Fort Myers Beach. This would be advantageous to the town only if part of a congestion management system with peak-period tolls, off-island parking lots, and improved mass transit .

POLICY 7-G-4 **ADDITIONAL BRIDGE CAPACITY:** Additional bridge capacity should not be directed to Times Square (except for the potential restriping in Policy 7-D-2). New lanes to Old San Carlos or Crescent Street would also be undesirable, as most congestion is caused by conditions on Estero Boulevard south of Times Square. Previously proposed bridges from Winkler Road or Coconut Road are infeasible from environmental and financial standpoints and need not be considered further.

OBJECTIVE 7-H EXPERIMENT WIDELY — The town shall constantly search for innovative solutions to long-standing traffic problems and to new problems as they develop, and shall coordinate its efforts with those of the Lee County Metropolitan Planning Organization. The town shall serve as a catalyst for traffic engineering experiments that would evaluate minor improvements that might improve traffic flow at Fort Myers Beach. Some potential improvements are described in the following policies.

POLICY 7-H-1 **PEDESTRIAN OVERPASSES:** Although pedestrian overpasses are often ignored by pedestrians, an overpass providing a panoramic view of the Gulf might be attractive enough to reduce at-grade crossings at Times Square without discouraging foot traffic in this highly congested area. Even without an overpass, the pedestrian-actuated stop light may be replaceable with a flashing caution light to minimize effects of the crossing on traffic flow.

POLICY 7-H-2 **SAN CARLOS BOULEVARD:** The five-laning of San Carlos Boulevard has created severe problems near the approach to the Sky Bridge. Creative experiments are needed to discourage drivers from using the right-hand lane, or side streets on San Carlos Island, to bypass the line of cars waiting to enter the bridge.

POLICY 7-H-3 **RESERVED**

POLICY 7-H-4 **VARIABLE MESSAGE SIGNS:** These signs could advise motorists of congestion delays as well as available parking. The town should urge the detailed study of this con-

cept by Lee County, FDOT, and the Metropolitan Planning Organization.

POLICY 7-H-5 **ORIGIN/DESTINATION DATA:** Better data is needed on the origins and destinations of motorists during the peak season, and the town supports the MPO's efforts to obtain this data.

POLICY 7-H-6 **TRANSPORTATION DEMAND MANAGEMENT:** This part of a congestion avoidance strategy reduces the number of single-occupant vehicles during peak traffic periods, either by eliminating some trips completely, or by accommodating existing trips in fewer vehicles, or by moving some trips before or after the most congested periods. This strategy may alleviate peak-season traffic congestion if implemented aggressively in cooperation with area businesses.

POLICY 7-H-7 **DELIVERY VEHICLES:** To avoid interference with traffic and pedestrian flow, the town shall develop a strategy to limit commercial deliveries during peak traffic periods.

POLICY 7-H-8 **FLOODING:** During periods of minor flooding, the town shall monitor the performance of roadside drainage systems on and off Estero Island to identify areas where an evacuation could be prematurely halted.

POLICY 7-H-9 **PROFESSIONAL ASSISTANCE:** The town may wish to retain a creative traffic engineer to provide advice on these experiments on a continuing basis.

POLICY 7-H-10 **CONNECTIONS TO ESTERO BOULEVARD:** An excessive number of streets and driveways have direct access to Estero Boulevard, reducing its ability to handle peak-

season traffic. The town shall take advantage of any suitable opportunities to consolidate street connections into fewer access points onto Estero Boulevard.

OBJECTIVE 7-I LEVEL-OF-SERVICE STANDARD — Maintain minimum acceptable levels of service for the transportation system.

- POLICY 7-I-1 Traffic congestion is a serious problem at Fort Myers Beach, caused by a combination of high tourism demand for its beaches and past over-building relative to road capacity. Neither factor is within the control of the Town of Fort Myers Beach, although its residents must tolerate congestion every winter. This comprehensive plan seeks to manage congestion levels and encourage alternate means of mobility including walking, bicycling, and trolleys.
- POLICY 7-I-2 The peak capacity of Estero Boulevard's congested segments is 1,300 vehicles per hour. The minimum acceptable level-of-service standard for Estero Boulevard shall be that average monthly traffic flows from 10:00 A.M. to 5:00 P.M. during each month do not exceed that level for more than four calendar months in any continuous twelve-month period. Measurements from the permanent count station at Donora Boulevard shall be used for this standard.
- POLICY 7-I-3 Figure 18 of this element is hereby adopted as the future transportation map of the Town of Fort Myers Beach.

OBJECTIVE 7-J PROTECTING PUBLIC ACCESS — Although no future right-of-way needs have been identified, some existing town and county rights-of-way are substandard and few are wider than needed. The town shall not vacate or acquiesce in the vacation of existing rights-of-way except where no public purpose would be served by retaining the right-of-way.

- POLICY 7-J-1 **RIGHTS-OF-WAY:** Town and county rights-of-way are needed for the undergrounding of utilities; for the expansion of sidewalks and bike paths; for water accesses; for on-street parking; for public transit and road improvements; and for other public purposes. The town shall strictly limit vacations of rights-of-way and easements to preserve future access for these purposes.
- POLICY 7-J-2 **TRAFFIC IMPACT ANALYSES:** A thorough traffic impact analysis is currently required only for major rezonings and very large development orders. The town shall amend its Land Development Code during 2010 to:
- i. decrease the thresholds for requiring traffic impact analyses;
 - ii. require them to study the cumulative impacts of potential development; and
 - iii. use the results in assessing whether impacts are acceptable, and whether an improved design could offset some of the impacts.