TRANSPORTATION ELEMENT

DATA INVENTORY AND ANALYSIS

PURPOSE

A local government which has all or part of its jurisdiction included within the urban area of a Metropolitan Planning Organization (MPO) pursuant to Section 339.175, F.S., shall prepare and adopt a transportation element consistent with the provisions of this Rule and Chapter 163, Part II, F.S. Within a designated MPO area, the transportation elements of the local plans shall be coordinated with the long range transportation plan of the MPO. The purpose of the transportation element shall be to plan for a multimodal transportation system that places emphasis on public transportation systems.

TRANSPORTATION PLANNING AREA

Surfside is located within the Beach/Central Business District (CBD) Transportation Planning Area defined by the Miami-Dade's Metropolitan Planning Organization (MPO). The Beach/CBD Transportation Planning Area has unique characteristics due to the presence of various islands and causeways. The Town of Surfside falls under Miami-Dade County's designated Transportation Concurrency Exception Areas (TCEA). A TCEA is a compact geographic area designated to support the urban infill and redevelopment to circumvent the adverse impacts of concurrency requirements. The Miami-Dade County MPO projects a 34% increase in population in the Beach/CBD Planning Area; but since the Town is almost 100% developed, not much change is expected, and the anticipated future growth will be mostly redevelopment.

As part of the TCEA, the Level of Service for major state roadways in Surfside is LOS E+20, meaning that where mass transit service having headways of 20 minutes or less is provided within a ½-mile distance, roadways shall operate at no greater than 120 percent of their capacity.

EXISTING TRANSPORATION SYSTEM

The Town is responsible for maintaining the local network program. The Town's street system is configured in a grid with most blocks 250-feet wide and 660-feet long. Surfside has two state arterials, five collectors, and fifteen local roads. The regional road network is under the State of Florida's jurisdiction. Collins Avenue and Harding Avenue are the major north-south corridors through the Town, while 96th Street is the main east-west roadway.

State Roadways

State arterial roadways include Collins Avenue, Harding Avenue and 96th Street which are all functioning at level of service standard 'D' and therefore are meeting level of service standards. Because of the compact nature of the Town, these roadways are within a ½-mile of mass transit. There are no FIHS or SIS facilities within the Town of Surfside.

SR AIA/Collins Avenue

SR A1A/Collins Avenue is a major principal arterial which runs parallel to Harding Avenue. The three-lane facility serves only northbound traffic.

SR A1A/Harding Avenue

SR A1A/Harding Avenue is a major principal arterial which runs parallel to Collins Avenue. The three-lane facility serves only southbound traffic.

SR 922/96th Street

SR 922/96th Street is a minor principal arterial and runs east-west. SR-922/96th Street connects Surfside with Bay Harbor Islands and Bal Harbour.

Primary Local Roads

The collectors are 88th Street, Bay Drive, Dickens Avenue, and Byron Avenue south of 88th Street. The major local roads are 91st Street/ Surfside Boulevard, Abbott Avenue, 95th Street, 94th Street, and 93rd Street. 91st Street/Surfside Boulevard is the only gateway to Indian Creek. A two-lane bridge on the south connects Biscaya Island to the rest of the Town.

Existing Roadway Level of Service

The following table shows the existing level of service for the state arterial roadways in Surfside.

Table 2-1 Roadway Existing Level of Service

Roadway Name	Location		Classification	Adopted Level of		Adopted LOS E+20	Pk Dir	Existing Level of	
	From	То		Service		Capacity	Volumes 2007	Service 2007	
SR-922/96th Street	Harding Ave	West of Harding Ave	State Minor Arterial	E+20	2 lanes in each direction	1,992	1,261	D	
SR-A1A/Collins Avenue	87th Avenue	SR-922/96th Street	State Major Arterial	E+20	3 lanes-one way	2,988	2,256	D	
SR-A1A/Harding Avenue	88th Avenue	SR-922/96th Street	State Major Arterial	E+20	3 lanes-one way	2,988	1,797	D	
Note:									
1) The peak hour peak direct	tion volume are d	irectly taken from the F	DOT Traffic Informa	tion DVD	2007.				
2) The adopted level of serv	ice standard thre	sholds are based on the	e FDOT Generalized	Table 4-7	for Peak Hour Directiona	l Volumes .			

Future Level of Service

As shown in Table 2-2, the state roadways within Surfside shall maintain their levels of service through 2030.

Table 2-2 Future (2030) Peak Hour Peak Direction Level of Service Analysis

Location		Classification	Adopted	T	Adopted LOS	2030	T/	,	Pk Hr Pk Dir	Future Level of
From	То	Classification	Service	Lanes	E+20 Capacity	Volumes	K	D	Volumes 2030	Service 2030
Harding Ave			E+20	2 lanes in each direction	1,992	34,454	0.095	0.5500	1,800	D
87th Avenue		3	E+20	3 lanes- one way	2,988	27,292	0.095	-	2,593	D
88th Avenue			E+20	3 lanes- one way	2,988	27,006	0.095	-	2,566	D
	From Harding Ave 87th Avenue	From To Harding Ave West of Harding Ave 87th Avenue SR-922/96th Street 88th Avenue SR-922/96th	From To Classification Harding Ave West of Harding Ave Harding Ave Roterial SR-922/96th State Major Arterial SR-922/96th State Major Street SR-922/96th State Major	From To Classification Level of Service Harding Ave Harding Ave Harding Ave State Minor Arterial 87th Avenue SR-922/96th State Major Arterial 88th Avenue SR-922/96th State Major F±20	From To Classification Lewel of Service Harding Ave Harding Ave Arterial SR-922/96th State Major Arterial SR-922/96th State Major Arterial SR-922/96th State Major Arterial SR-922/96th State Major SR-922/96th SR-922/9	From To Classification Service Level of Service Lanes E+20 Capacity Harding Ave West of Harding Ave Arterial SR-922/96th State Major Street Arterial SR-922/96th State Major E+20 3 lanes- one way SR-922/96th State Major E+20 3 lanes- 2.988	From To Classification Service Lanes Los E+20 Capacity Volumes Harding Ave Harding Ave Harding Ave State Minor Harding Ave Street Arterial E+20 3 lanes one way 87th Avenue SR-922/96th State Major Arterial SR-922/96th State Major Arterial SR-922/96th State Major E+20 3 lanes one way 88th Avenue SR-922/96th State Major E+20 3 lanes one way 87th Avenue SR-922/96th State Major SR-922/96th State Major E+20 3 lanes one way 88th Avenue SR-922/96th State Major SR-922/96th	Classification Clas	Adopted Level of Service Lanes LOS Daily Volumes LOS Daily L	Classification Capacity Cap

¹⁾ The bi-directional volumes are directly taken from the Miami Dade County MPO 2030 Long Range Transportation Plan (LRTP).

²⁾ The adopted level of service standards are based on the FDOT Generalized Table 4-7 for Peak Hour Directional Volumes.

³⁾ The peak hour factor (K) and directional factor (D) are directly taken from the FDOT Quality/Level of Service Handbook .

Capital Improvement Projects

Currently, the only roadway capital improvements planned in Surfside are FDOT resurfacing projects that do not affect level of service.

Table 2-3 FDOT Five Year Work Plan (FY10-FY14)

FDOT Projects							
Project Name	Location	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	Total
SRAIA/CollinsAvenue	150 feet						
Resurfacing	north of						
FDOT Item No.	75the Steet						
4198581	to north of			¢5 516 000			\$5,516,000
	96 th Street			\$5,516,000			
SRA1A/Harding	75 Street to						
Avenue Resurfacing	91 st Street						
FDOT Item No.				\$1,462,000			\$1.462.000
4198601				\$1,462,000			\$1,462,000
SRA1A/Harding	From Bal						
Avenue Resurfacing	Harbor Shop						
FDOT Item No.	Entrance to		\$1.056.000				\$1.056.000
4198231	to 94 th Street		\$1,056,000				\$1,056,000
Total Cost of FDOT Pr	Total Cost of FDOT Projects						
			\$1,056,000	\$6,978000			\$8,034,000

Source: FY2010-2014 Transportation Improvement Program, Miami-Dade Metropolitan Planning Organization

Economic Development

SR A1A is currently divided into a one-way pair that includes Collins Avenue and Harding Avenue. Each roadway consists of three lanes with parallel parking along both sides. The current A1A one-way pair has proved to be inefficient and caused many frustrated commuters to redirect their routes into the surrounding neighborhood streets. The local traffic using the one-way pair is frequently forced to make many unnecessary turns to access businesses, particularly on Harding Avenue. This results in a greater vehicular delay along with an unfriendly pedestrian environment. However, while the vehicle delay is significant at the intersections because of the large number of left-turns, speeding is a concern at many of the stretches along the one-way pair and on the neighborhood streets. Originally, both Collins Avenue and Harding Avenue were two-way roadways.

A 2006 Design Charrette identified the opportunity to explore reverting from the current one-way pairs of Collins Avenue and Harding Avenue to their original two-way configuration. The Charrette recommended that Collins Avenue be converted to a four-lane divided roadway with two sidewalks and no parking while Harding Avenue is converted to a two-lane roadway with two sidewalks. Additionally, bike lanes would be added along both sides of Harding Avenue south of 93rd Street.

The conversion of Collins Avenue may allow the roadway to become an upscale boulevard with a beautifully landscaped median which is more in tune with the surrounding multi-story buildings. Similarly, the conversion of Harding Avenue may allow the street to become more in scale with the surrounding single family homes and townhomes.

There are several more benefits of the two-way configuration other than just the aesthetic appeal. Safer pedestrian crossing on the two-way streets may occur with narrower lanes and middle islands, further increasing public safety. The reduction in turns may be more convenient and safer for local drivers and

pedestrians. The reduction in speeds will lead to less severe crashes. The aforementioned A1A modifications would encourage a multi-modal traffic circulation system that accommodates the future land use map.

Neighborhood Traffic

The Town of Surfside is currently facing the challenges of fast growth in the South Florida area. The Town of Surfside was not designed and built to accommodate high speed and high volume traffic. As a result, the Town is experiencing high speed cut-through traffic on the Town's local streets in an attempt to avoid the congested arterials. The Town is striving to provide excellent quality of living for its residents and visitors, while maintaining the character of the Town. Some traffic calming has been used to address the issues of speeding and cut-through traffic problems. The Town conducted a series of public input meetings known as the Surfside Charrette to identify the existing problems and solutions to achieve the Town's vision.

Bicycle and Pedestrian Ways

There are sidewalks on Collins Avenue, Harding Drive, and parts of Abbot Avenue. Map TRN-5 shows the existing and future sidewalks. No new sidewalks or bike paths are planned.

Transit

PUBLIC TRANSPORTATION SYSTEM

Six bus routes from Miami-Dade Transit travel through the Town, most of which run along Collins Avenue. The following are the route numbers, service areas and features.

Route	Service Areas	Features
G	NW 27 Avenue/163 Street, Bunche Park, Opa-locka, Bal Harbour, Collins Avenue, City of Miami Beach, Lincoln Road, Convention Center Drive	Wheelchair Bike
Н	North Miami Beach, Skylake Mall, The Mall at 163rd Street, Sunny Isles Boulevard, Bal Harbour, Bal Harbour Shops, City of Miami Beach, Collins Avenue, Lincoln Road Mall, South Beach, Rebecca Towers	Wheelchair
K	Omni Bus Terminal, Downtown (Miami) Bus Terminal, Federal Building, MacArthur Causeway, South Beach, Washington Avenue, City of Miami Beach, Haulover Marina, Winston Towers, Hallandale Beach Boulevard (Broward County), Diplomat Mall (Broward County)	Wheelchair Metrorail
R	City of Miami Beach, Alton Road, Mount Sinai Hospital, Miami Heart Institute, Collins Avenue, Hawthorne Avenue, 96 Street/Harding Avenue	Wheelchair
S	Downtown (Miami) Bus Terminal, Main Library, Historical Museum, Miami Art Museum, Government Center Metrorail Station, Omni Bus Terminal, MacArthur Causeway, City of Miami Beach, South Beach, Lincoln Road, Collins Avenue, 192 Street Causeway, Aventura, Aventura Mall	Wheelchair
120 Beach	Downtown (Miami) Bus Terminal, Main Library, Historical Museum, Miami Art Museum, Government Center Metrorail	Wheelchair Bike

Route	Service Areas	Features
MAX	Station, Miami-Dade College Wolfson Campus, Omni Bus Terminal, Julia Tuttle Causeway, City of Miami Beach,	Metrorail
	Collins Avenue, Surfside, Bal Harbour, Haulover Park Marina	

Additionally, the Town has its own bus system which complements the Miami-Dade County Transit system. The Town's mini-buses circulate between the business district and residential areas.

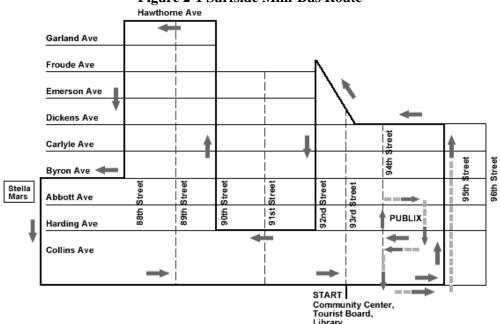


Figure 2-1 Surfside Mini-Bus Route

FUTURE TRANSIT

The MPO Long Range Transportation Plan (2030) indicates that premium transit is planned for A1A from 81st Street to the Broward County line. However, at this time it is a Priority IV unfunded project and therefore, because of the uncertainty of implementation, the route has not be added to the Existing and Future (2030) Transit map.

EXISTING MODAL SPLIT AND VEHICLE OCCUPANCY RATES

According to journey-to-work data collected in the 2000 census, single-occupant automobile trips account for approximately 78.8% of all trips to and from work reported by residents in Surfside. Carpools account for approximately 9.9%, public transit for approximately 2.1%, and walking for approximately 2.5% of all trips. Residents working at home total 5.4% of the population. For those commuting by private automobile, including carpooling, average vehicle occupancy for Town residents was 1.07 persons, which is less than the 1.10 reported for Miami-Dade County. The Southeast Florida Regional Travel Characteristics Study, also completed in 2000, reported that the average vehicle occupancy for Miami-Dade County was 1.34 persons per vehicle.

PARKING FACILITIES

The Town conducted a survey of parking facilities within the Town in 2008. The following parking estimates were collected:

Metered Parking - 671 Spaces Non-metered - 31 Spaces Residential - 1545 Spaces Private - 217 Spaces

Map FLU 1 Existing Land Uses shows the locations of parking within the Town. Surfside businesses have indicated a desire for more parking. Therefore, the Town would like to investigate the feasibility of creating a parking trust fund to finance structured parking to support comprehensive plan goals and objectives.

EVACUATION

Miami-Dade County has identified three hurricane evacuation zones based upon potential storm surge. Surfside is located in Zone A, as designated by the Miami-Dade Department of Emergency Management and Homeland Security, with Miami Beach and all islands lying within Biscayne Bay, including Sunny Isles Beach, Bal Harbour, Bay Harbor Islands, Indian Creek Village, Surfside, and North Bay Village. *Map CST-2* shows the evacuation route along 96th Street/Broad Causeway. The Zones are designated based upon the SLOSH model developed by the storm surge group at the National Hurricane Center working with the U.S. Army Corps of Engineers, the U.S. Geological Survey and the Federal Emergency Management Agency in cooperation with state and local offices of emergency management. (Note: SLOSH is an acronym for "Sea Lake and Overland Surge from Hurricanes.")

Miami-Dade Transit will activate specific Emergency Evacuation Bus Pick-Up Sites by zone. These buses will only travel between the Emergency Evacuation Bus Pick-Up Site and the Hurricane Evacuation Center. The Surfside Town Hall is an evacuation pick up site. The closest Evacuation Center designated by Miami-Dade County is Charles Drew Middle School at 1801 NW 60th Street, Miami, Florida 33142.

EVACUATION TIMES

The Miami-Dade County Comprehensive Emergency Evacuation Plan provides clearance times for critical evacuation routes. The closest evacuation route is 96th Street/Broad Causeway. The following tables show clearance times for 96th Street/Broad Causeway at low and high capacities.

Table 2-4 Miami-Dade Clearance Times (Low Capacity)

Critical Roadway Segment	Clearance Times A Low Occ	Clearance Times B Low Occ	Clearance Times C Low Occ
I-95 northbound at Ft Pierce	20.89	39.64	44.50
Florida Turnpike northbound at Glades Rd in P Bch County	22.14	42.14	47.21
I-95 northbound out of Miami - Dade	8.53	14.17	17.23
Florida Turnpike northbound out of Miami - Dade	9.43	16.00	19.07
I-75 west/northbound out of Miami - Dade	5.25	7.28	10.04
US 27 northbound out of Miami - Dade	7.28	11.47	14.83
US 41 westbound out of Miami - Dade	8.95	15.43	20.05
Lehman Causeway	7.06	7.26	9.26
Sunny Isles Causeway	4.73	4.73	6.73
Broad Causeway	8.06	8.28	10.28
Kennedy Causeway	8.56	8.56	10.56
NW 79th at I-95	12.24	15.76	17.76
Julia Tuttle Causeway	6.20	6.20	8.20
Venetian Causeway	7.28	7.28	9.28
MacArthur Causeway	11.39	11.39	13.39
Homestead Ext of Fla Turnpike south of US 27	6.03	8.90	14.10

Source: Miami-Dade Comprehensive Emergency Management Plan, 2008

Table 2-5 Miami–Dade County Clearance Times (High Occupancy)

Critical Roadway Segment	Clearance Times A High Occ	Clearance Times B High Occ	Clearance Times C High Occ
I-95 northbound at Ft Pierce	27.86	50.36	58.25
Florida Turnpike northbound at Glades Rd in P Bch County	30.00	55.71	62.71
I-95 northbound out of Miami - Dade	10.07	16.23	19.33
Florida Turnpike northbound out of Miami - Dade	11.23	18.43	21.53
I-75 west/northbound out of Miami - Dade	5.78	8.09	10.84
US 27 northbound out of Miami - Dade	8.31	13.28	16.64
US 41 westbound out of Miami - Dade	10.66	17.82	22.38
Lehman Causeway	7.74	7.98	9.98
Sunny Isles Causeway	5.07	5.07	7.07
Broad Causeway	8.72	8.94	10.94
Kennedy Causeway	9.02	9.02	11.02
NW 79th at I-95	13.15	16.76	18.76
Julia Tuttle Causeway	6.53	6.53	8.53
Venetian Causeway	7.50	7.50	9.50
MacArthur Causeway	11.86	11.86	13.86
Homestead Ext of Fla Turnpike south of US 27	6.73	10.23	15.47

Source: Miami-Dade Comprehensive Emergency Management Plan, 2008