

Transportation

- Data Collection and Analysis
 - Concurrency – widening projects
 - Intersection Improvements
- Current Project and Budgets



Roadway Functional Classification

- The process when streets and highways are grouped into classes, or systems, according to the characteristics or service they provide.
 - Florida Department of Transportation
 - Every 10 years following the decennial Census



Functional Classifications of Roadways

- **Urban Roadways**

- Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- Local

- **Rural Roadways**

- Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- Local

Arterial Roadways

- The arterial roadway system serves as the highest degree of through traffic movement and largest proportion of total travel. (Interstate highway system)
- Arterials generally have higher design standards
 - Larger lane widths and medians

Collector Roadways

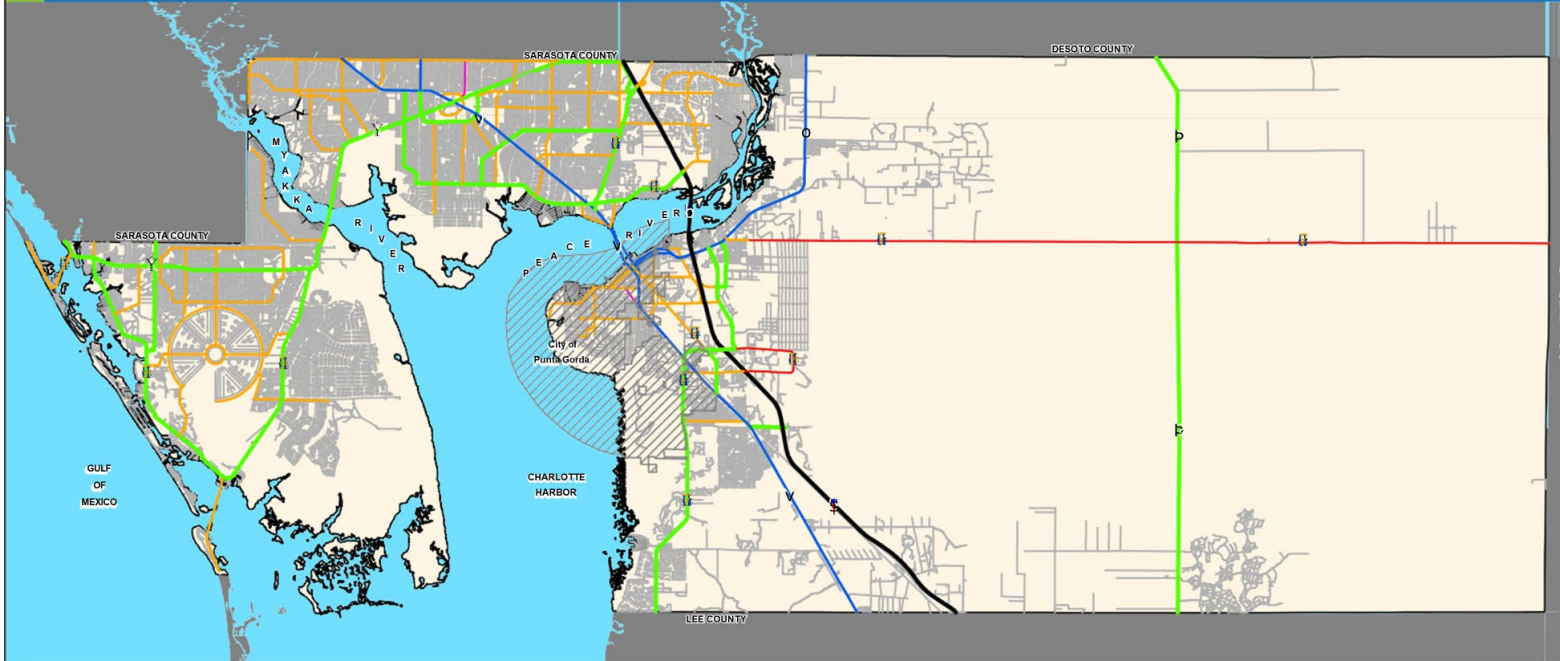
- Collector roadways are typically designed for travel at lower speeds and for shorter distances.
 - Usually, two-lane roads that collect and distribute traffic to/from the arterial system.
 - Minor collectors can connect two major collector roadways.

Local Roads

- All roads below the collector system is considered local.
- Local roads provide basic access between residential properties and collectors.
- Local roads represent the largest percentage of all roadways in terms of mileage.

CHARLOTTE COUNTY

Roadway Functional Classification



Stateplane Projection
 Datum: NAD83
 Units: Feet

Source: CCGIS, Public Works,
 Community Development

Metadata available upon request

- Interstate
- Principal Arterial
- Minor Arterial
- Rural Major Collector
- Urban Major Collector
- Urban Minor Collector
- Local Road

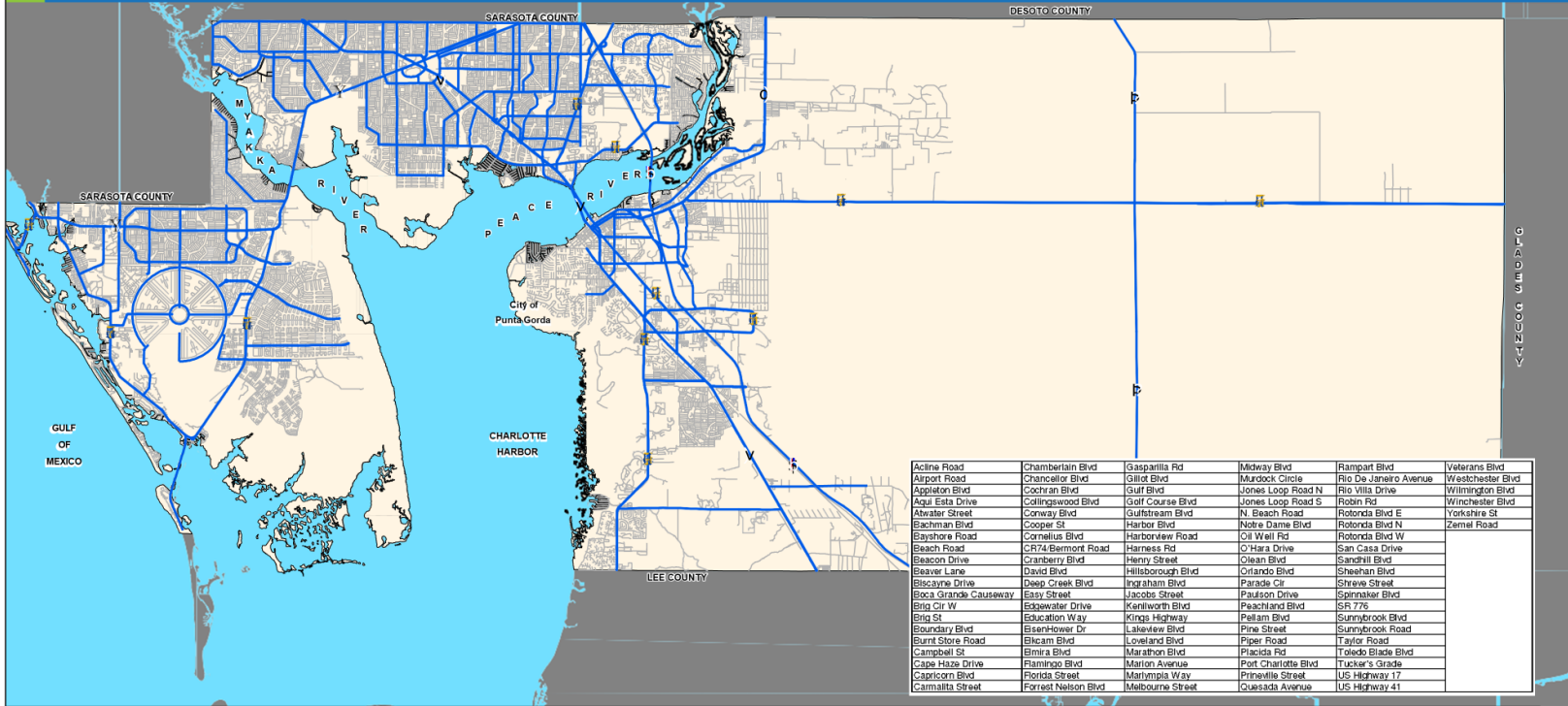
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 (Not To Scale)

Annual Data Collection

- Conduct traffic counts 1x per year
 - Some arterials –
 - US41, US17, and SR776
 - On all collectors in segments and some local roads
 - Not all segments of roadways have the same volume of traffic
 - The counts are taken at several segments of roadways where applicable

CHARLOTTE COUNTY

TRAFFIC COUNT LOCATION ROADWAYS



Acina Road	Chamberlain Blvd	Gasparilla Rd	Midway Blvd	Rampart Blvd	Veterans Blvd
Airport Road	Chancellor Blvd	Gillet Blvd	Murdock Circle	Rio de Janeiro Avenue	Westchester Blvd
Appleton Blvd	Cochran Blvd	Gulf Blvd	Jones Loop Road N	Rio Villa Drive	Wilmington Blvd
Aqui Esta Drive	Collingswood Blvd	Golf Course Blvd	Jones Loop Road S	Robin Rd	Winchester Blvd
Atwater Street	Conway Blvd	Gulfstream Blvd	N. Beach Road	Rotonda Blvd E	Yorkshire St
Bachman Blvd	Cooper St	Harbor Blvd	Notre Dame Blvd	Rotonda Blvd N	Zemel Road
Bayshore Road	Cornelius Blvd	Harborview Road	Oil Well Rd	Rotonda Blvd W	
Beach Road	CR74/Bermont Road	Harness Rd	O'Hara Drive	San Casa Drive	
Beacon Drive	Cranberry Blvd	Henry Street	Olean Blvd	Sandhill Blvd	
Beaver Lane	David Blvd	Hillsborough Blvd	Orlando Blvd	Sheehan Blvd	
Biscayne Drive	Deep Creek Blvd	Ingraham Blvd	Parade Cir	Shreeve Street	
Boca Grande Causeway	Easy Street	Jacobs Street	Paulson Drive	Spinnaker Blvd	
Brig Cir W	Edgewater Drive	Kenilworth Blvd	Peachland Blvd	SR 776	
Brig St	Education Way	Kings Highway	Pellam Blvd	Sunbrook Blvd	
Boundary Blvd	Eisenhower Dr	Lakeview Blvd	Pine Street	Sunbrook Road	
Burnt Store Road	Ellicam Blvd	Loveland Blvd	Piper Road	Taylor Road	
Campbell St	Elmira Blvd	Marathon Blvd	Placida Rd	Toledo Blade Blvd	
Cape Haze Drive	Framingo Blvd	Marion Avenue	Post Charlotte Blvd	Truckee's Grade	
Capricorn Blvd	Florida Street	Marlympia Way	Prineville Street	US Highway 17	
Carmalita Street	Forrest Nelson Blvd	Melbourne Street	Quezada Avenue	US Highway 41	

Stateplane Projection
 Datum: NAD83
 Units: Feet

— TRAFFIC COUNT LOCATION ROADWAYS

Source: CCGIS, Public Works

(Not To Scale)

Roadway Level of Service

Roadway Level of Service – A qualitative measure that describes the operating condition of a road based on traffic volume, lane capacity, and geometric design of the road. (how “full” the roads are)

The level of service of a facility is designated with a letter, A to F, with A representing the best operating conditions and F the worst.

Roadway Level of Service

- Charlotte County adopted Level of Service - D
- Staff uses FDOT methods to determine Level of Service
 - Current Level of Service
 - Projected failing level of service of roadway segment

Roadway Level of Service

CHARLOTTE COUNTY: 2024 ROADWAY LEVEL OF SERVICE DATA SHEET - PEAK HOUR TWO-WAY

WV SNO	Roadway	Station	From	To	Context Class	Lanes	2024 AADT	Level of Service Calculations ¹								
								K100	100 th Hr Vol.	Level of Service Limits (Pk. Hr. Two-way Vol.)				Level of Service		Percent (%) Capacity Used
										B	C	D	E	Adopted	Current	
1	Acline Road	167	U.S. 41	Taylor Rd.	C3C	2-Lane	1,865	0.092	172	*	1104	1560	*	D	C	11%
2	Acline Road	191	Burnt Store Rd.	U.S. 41	C3R	2-Lane	1,563	0.092	144	*	1408	1616	*	D	C	9%
3	Airport Road	249	Cooper St.	Taylor Rd.	C3R	2-Lane	5,688	0.092	523	*	1408	1616	*	D	C	32%
4	Airport Road	169	Taylor Rd.	I-75	C3C	2-Lane	6,333	0.092	583	*	1104	1560	*	D	C	37%
5	Airport Road	168	I-75	Golf Course Blvd.	C3C	2-Lane	4,591	0.092	422	*	1104	1560	*	D	C	27%
6	Appleton Blvd	211	San Cruz Waterway	C.R. 771	C3R	2-Lane	3,619	0.092	333	*	1408	1616	*	D	C	21%
7	Aqui Esta Drive	170	Bal Harbor Blvd.	U.S. 41	C3R	2-Lane	9,234	0.092	850	*	1408	1616	*	D	C	53%
8	Cooper Street	250	U.S. 41	Airport Rd.	C3R	2-Lane	6,065	0.092	558	*	1104	1560	*	D	C	36%
9	Atwater Street	25	Peachland Blvd.	Veterans Blvd.	C3R	2-Lane	4,107	0.092	378	*	1408	1616	*	D	C	23%
10	Bachman Blvd		Atwater St.	Yorkshire St.	C3R	2-Lane	1,139	0.092	105	*	1408	1616	*	D	C	6%
11	Bayshore Road	27	Sibley Bay St.	Edgewater Dr.	C3C	2-Lane	2,381	0.092	219	*	1104	1560	*	D	C	14%
12	Bayshore Road	312	Edgewater Dr.	U.S. 41	C3R	2-Lane	2,824	0.092	260	*	1408	1616	*	D	C	16%
13	Beach Road	118	Gulf Blvd.	S.R. 776	C3R	2-Lane	8,831	0.092	812	*	1408	1616	*	D	C	50%
14	Beacon Drive	234	Westchester Blvd.	Elmira Blvd.	C3R	2-Lane	2,902	0.092	267	*	1408	1616	*	D	C	17%
15	Beacon Drive	235	Elmira Blvd.	Olean Blvd.	C3R	2-Lane	3,088	0.092	284	*	1408	1616	*	D	C	18%
16	Beacon Drive	220	Olean Blvd.	Midway Blvd.	C3R	2-Lane	3,463	0.092	319	*	1408	1616	*	D	C	20%
17	Beaver Lane	222	Hancock Ave.	Westchester Blvd.	C3R	2-Lane	4,061	0.092	374	*	1408	1616	*	D	C	23%
18	Biscayne Drive	1	Cornelius Blvd.	Chancellor Blvd.	C3R	2-Lane	3,244	0.092	298	*	1408	1616	*	D	C	18%
19	Biscayne Drive	3	SR-776	Cornelius Blvd.	C3R	2-Lane	3,072	0.092	283	*	1408	1616	*	D	C	17%
20	Brig Cir W		Harness Rd	Brig St	C3R	2-Lane	242	0.092	22	*	1408	1616	*	D	C	1%
21	Brig St		Brig Cir W	Boundary Blvd.	C3R	2-Lane	551	0.092	51	*	1408	1616	*	D	C	3%
22	Boundary Blvd		Cape Haze Dr.	Rotonda Blvd S	C3R	2-Lane	1,344	0.092	124	*	1408	1616	*	D	C	8%
23	Burnt Store Road	187	Lee County line	Zemel Rd.	C3R	4-Lane	15,221	0.092	1,400	*	3245	3528	*	D	C	40%
24	Burnt Store Road	186	Zemel Rd.	Acline Rd.	C3R	4-Lane	18,500	0.092	1,702	*	3245	3528	*	D	C	48%
25	Burnt Store Road	171	Acline Rd.	U.S. 41	C3R	4-Lane	20,745	0.092	1,999	*	3245	3528	*	D	C	54%

Roadway Level of Service

- Roads may temporarily fall below adopted levels of service
 - Traffic patterns could change due to various factors
- Sometimes segments of roadway can fall below our level of service
- Because a road falls below our adopted levels of service, immediate action may NOT be required. This is a planning tool to provide data so projects can be identified.

Projected Roadway Level of Service

- Projections are done based current level of services calculations and a projection factor. This projection factor is based on the proposed development along the corridor.
- Staff evaluates projected level of service of roadways yearly to account for possible changes in market and traffic patterns.

Roadway Level of Service

Charlotte County currently has two roadway segments that fall below the current adopted Level of Service

- Kings Highway (between Sandhill Blvd. and Desoto County line)
- Sandhill Blvd. (between Kings Highway and Deep Creek Blvd.)

Projected Roadway Level of Service

Charlotte County has 7 roadways/segments that are projected to fall below the current adopted Level of Service in the next 15 years

- Edgewater (between Midway and Collingswood) - 2035
- Edgewater (between Collingswood and 776) – 2042
- Harborview (between Melbourne and Date) – 2040
- Harborview (between Date and I75) – 2038
- Burnt Store Road - 2030
 - East/West Connector (Burnt Store Road to US41)
- Burnt Store Road 6 lane – 2040
- Taylor Road (US41 to Airport) - 2034

Intersection Improvements

Intersections are studied for a variety of reasons (not specific to development)

- Traffic volumes increase
- Crash volumes have increased
- Complaints from citizens

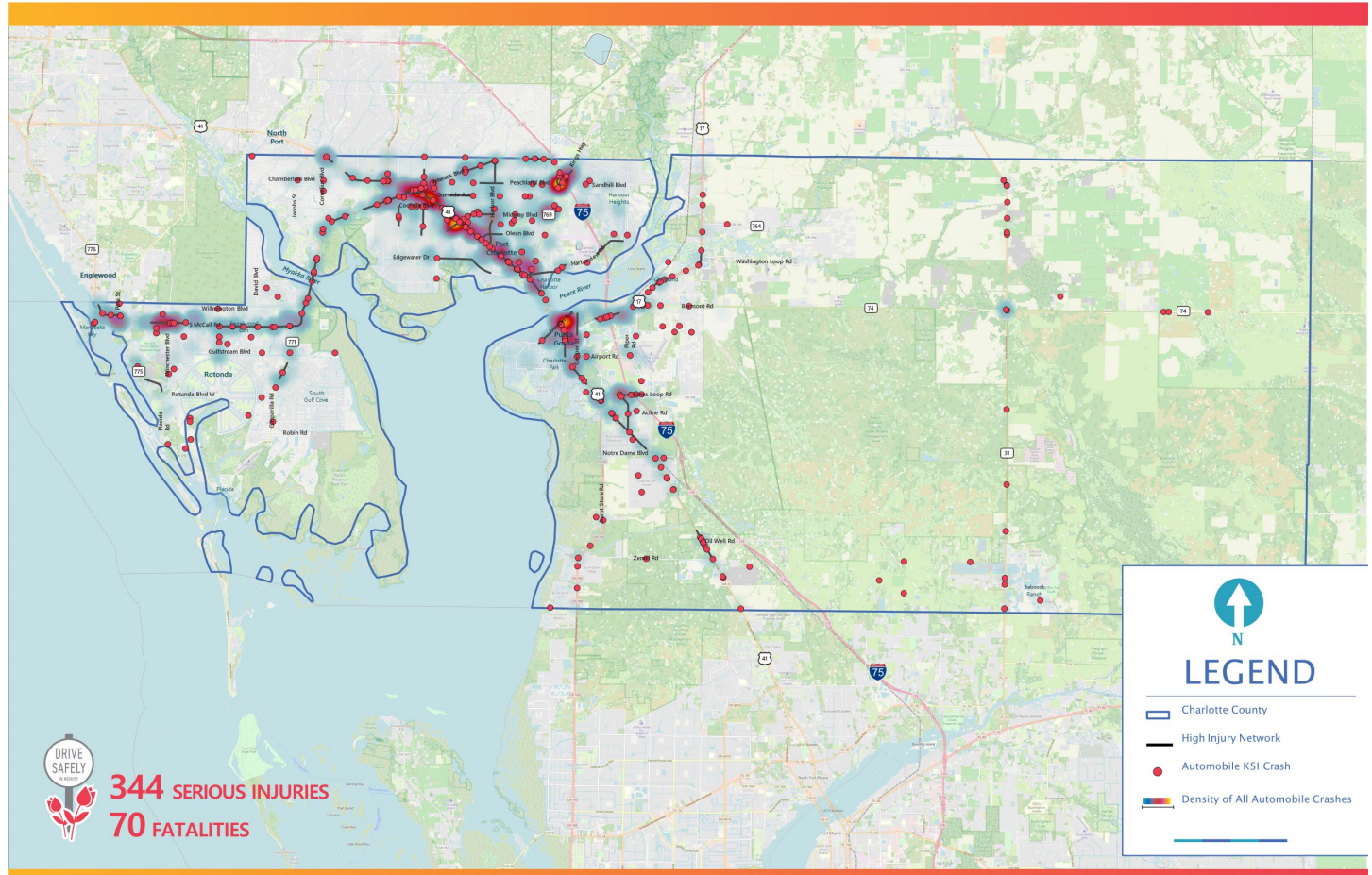
Intersection Improvements

Intersection studies include

- Data Collection
 - Traffic counts, turning motions, crashes (how many and type), and pedestrian/bicycle movements
- Data Analyzation
 - Using standard transportation engineering practices and FDOT guidelines
- Recommendations

Staff is looking into AI software to help with planning and alternatives to help with traffic issues

CHARLOTTE COUNTY PUNTA GORDA COMPREHENSIVE SAFETY ACTION PLAN
AUTOMOBILE CRASHES HEAT MAP (2018-2022)



344 SERIOUS INJURIES
70 FATALITIES

LEGEND

- Charlotte County
- High Injury Network
- Automobile KSI Crash
- Density of All Automobile Crashes

Intersection Improvements

Prioritization

- Traffic Volume
- Crash Data
- Available Funding
- Policy Changes/FDOT design standard changes

Intersection Improvements

Priority list

Gasparilla at Ingram – signal
Gasparilla at Rotonda Blvd E – Signal
Gasparilla at Keystone – Turn lane
Gasparilla at San Domingo – Turn lane
Veterans at Atwater – Turn lane
Veterans at Torrington – RCUT and Turn lane
SR 776 at Enterprise – Turn lane

Hillsborough at Prineville – signal or roundabout
Deep Creek Elementary @ Harborview – Bypass
Veterans at Harbor – Turn lane
Peachland at Harbor – Turn lane
Veterans at Loveland – Turn lane
Veterans at Norman – Turn lane

Proposed Roadway Budgets

East/West Connector

- Interest from developers to build roadway for impact fee credits
- Need to start design as soon as possible
- If did not work out
 - County is not out anything but moving up design costs

Proposed Projects

	2025	2026	2027	2028	2029	2030	2031	Total
Edgewater Road Project								
Edgewater Phase 3 - construction			41,360					41,360
Edgewater Phase 4 - construction				31,416				31,416
Edgewater Phase 5 - construction			41,040					41,040
Edgewater Total:			82,400	31,416				113,816
Harborview Road Project								
Harborview ROW - (Segment 1)		27,399						27,399
Harborview Construction (Segment 1)				56,031				56,031
Harborview ROW - (Segment 2)		18,594						18,594
Harborview Construction (Segment 2)				33,858				33,858
Harborview Total:		45,993		89,889				135,882
Burnt Store Rd Area Corridor E-W Connector								
Design				4,409				4,409
R/W					6,263			6,263
Construction						34,111		34,111
E-W ConnectorTotal				4,409	6,263	34,111		44,783
Totals:		45,993	82,400	125,714	6,263	34,111		294,481

Questions