Fruitville Road Streetscape Enhancements Project

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Engineering
D.P.C.

CITY OF SARASOTA

Why We're Here Today

Fruitville Road has become an impediment to pedestrian connectivity between the primary central business district and the Rosemary and Gillespie Park neighborhoods to the north. The current design of Fruitville Road appears as very suburban-orientated thoroughfare versus a more preferred urban boulevard distinction.

Motor vehicles dominate the existing conditions and intersections have become increasingly more difficult to traverse. Most development along the roadway lacks pedestrian scale design and a sense of quality architectural attributes. Adjacent development parcels, with few exceptions, have been slow to develop and unable to be successful in creating sustainable projects or a sense of "place".

Negative impressions and perceptions of the area have contributed to a lack of investment in recent years.

Why We're Here Today

Goal and Objectives

The goal of the project is to adjust the current suburban thoroughfare character of Fruitville Road, between U.S 41 and U.S. 301, to more closely reflect that of an urban boulevard.

Objectives include:

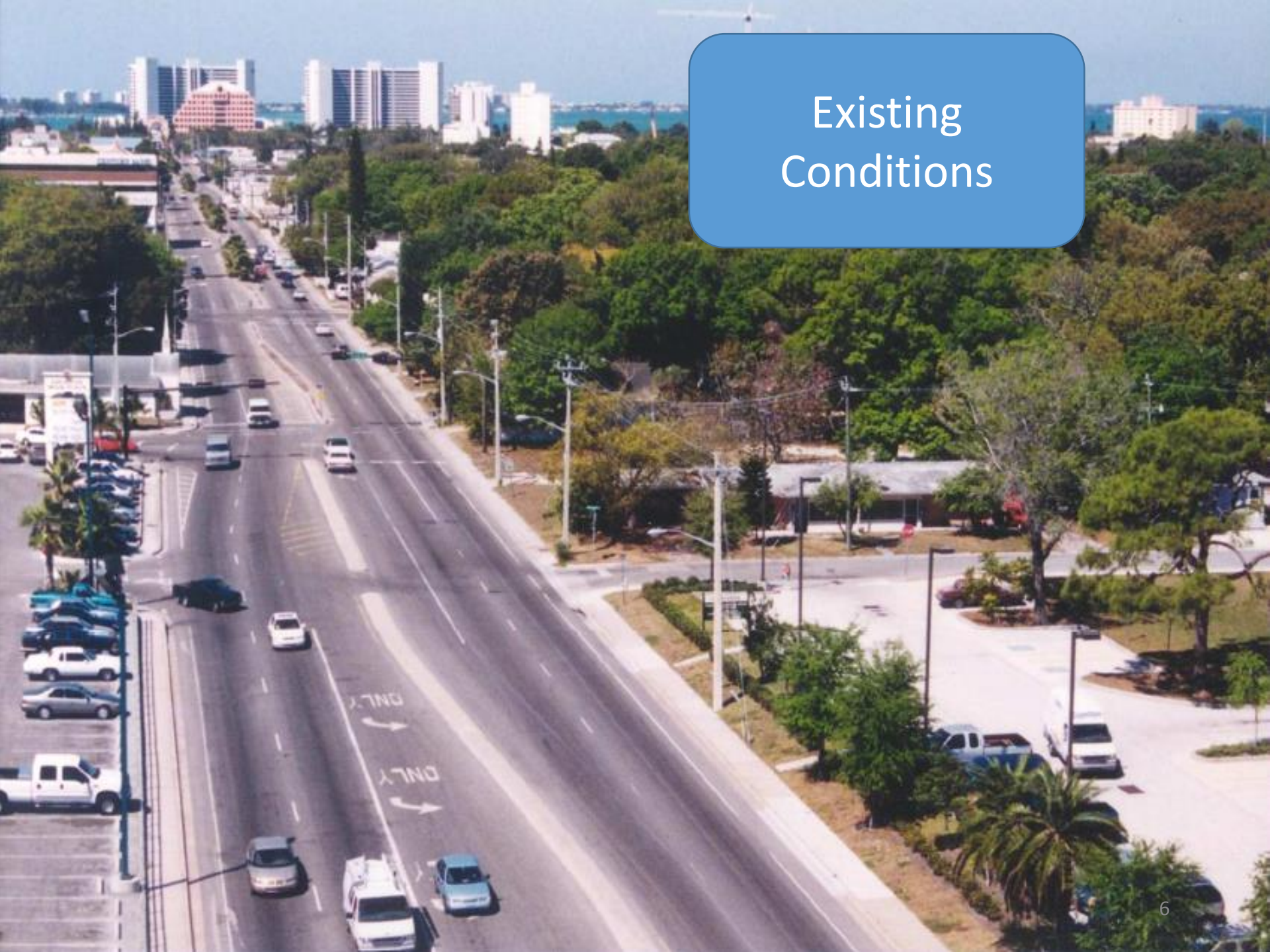
- Slowing traffic speeds without negatively impacting current levels of service
- Facilitating safe pedestrian activity and walkability between the downtown urban core and the Rosemary and Gillespie Park Neighborhoods
- Enhancing the aesthetic value of one of the primary gateways into the City
- Promotion of economic development and vitality of the corridor

With input from neighborhood district organizations, business groups, and the general public, the City will identify the opportunities that can help Fruitville Road achieve the goals and objectives of the project.

Existing Conditions

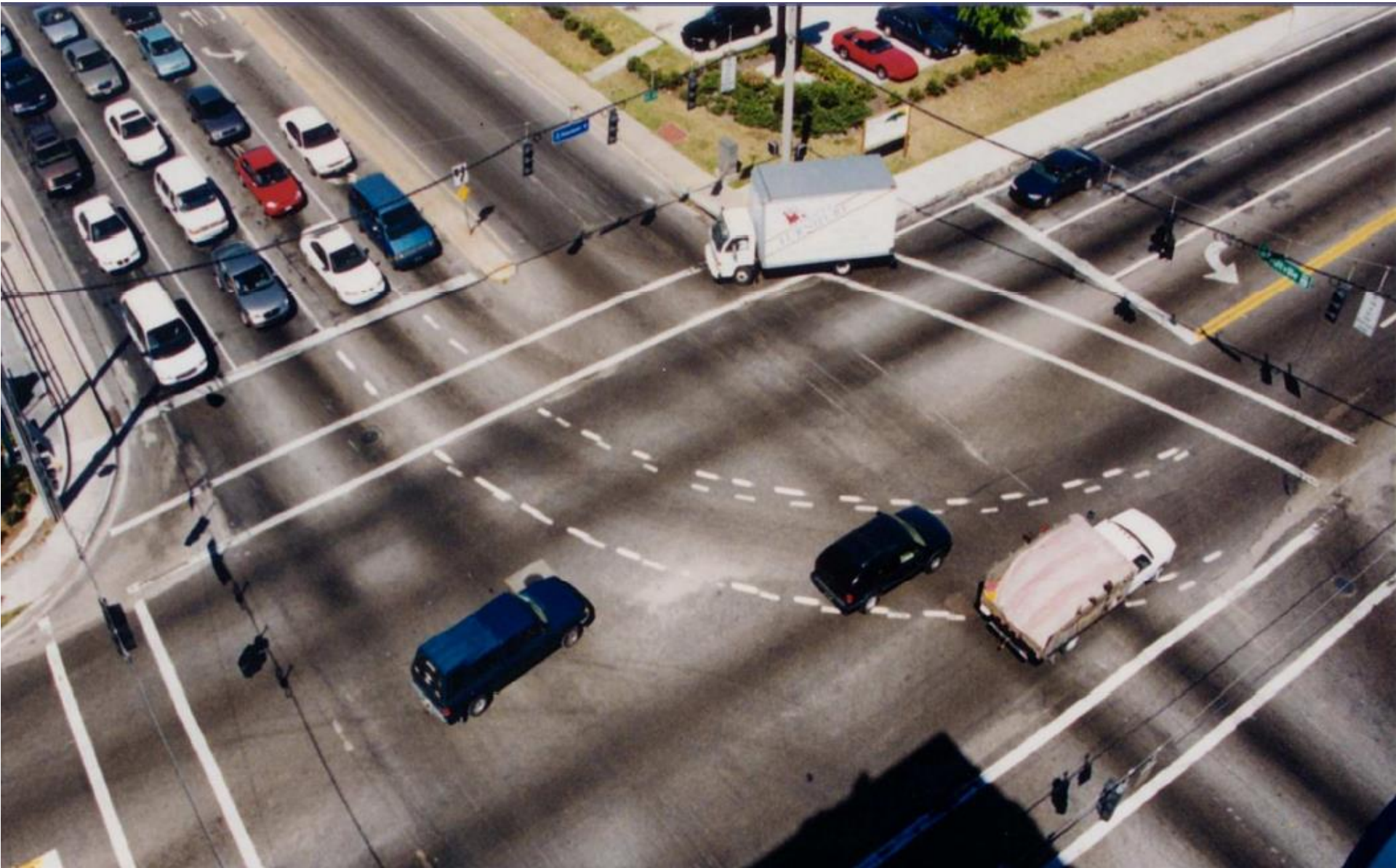
- Street scenes
- Typical section
- Turning movements
- Level of Service (LOS)
- Pedestrian counts
- Crash data
- Bus routes
- Google Streetview

Street Scenes



Existing Conditions

Motorized Traffic Dominates



Neighborhoods are isolated and unconnected to downtown

For pedestrians, the street scene experience can be unattractive, unwelcoming and unsafe

A *sense of place* is lacking

The street lighting is typical highway stock

Lacking are pedestrian scale, design and a sense of style

The median landscaping needs continuity and design

There are overhead power poles
Landscaping is neglected in places

Perceptions of disinvestment give a negative impression

Pedestrians are imperiled

Urban vitality clearly not being sustained

Transit users' knees are inches from traffic

Shell driveways spill across the sidewalk and gutter

The Pedestrian Space is narrow

CartoonStudio

SPEED
LIMIT
35

SOLD
957.3730
941-350-9747

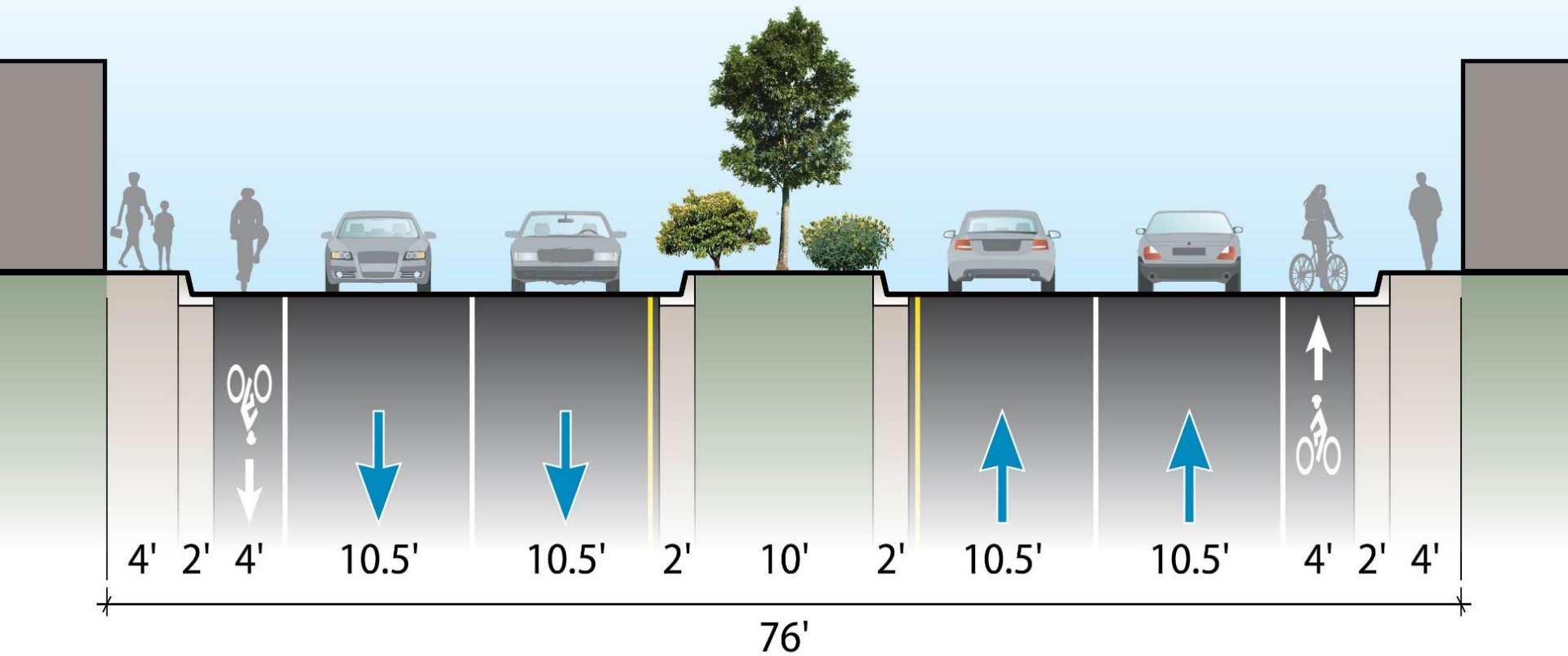
Pedestrian crossing exposure is long

Curb side bike lane

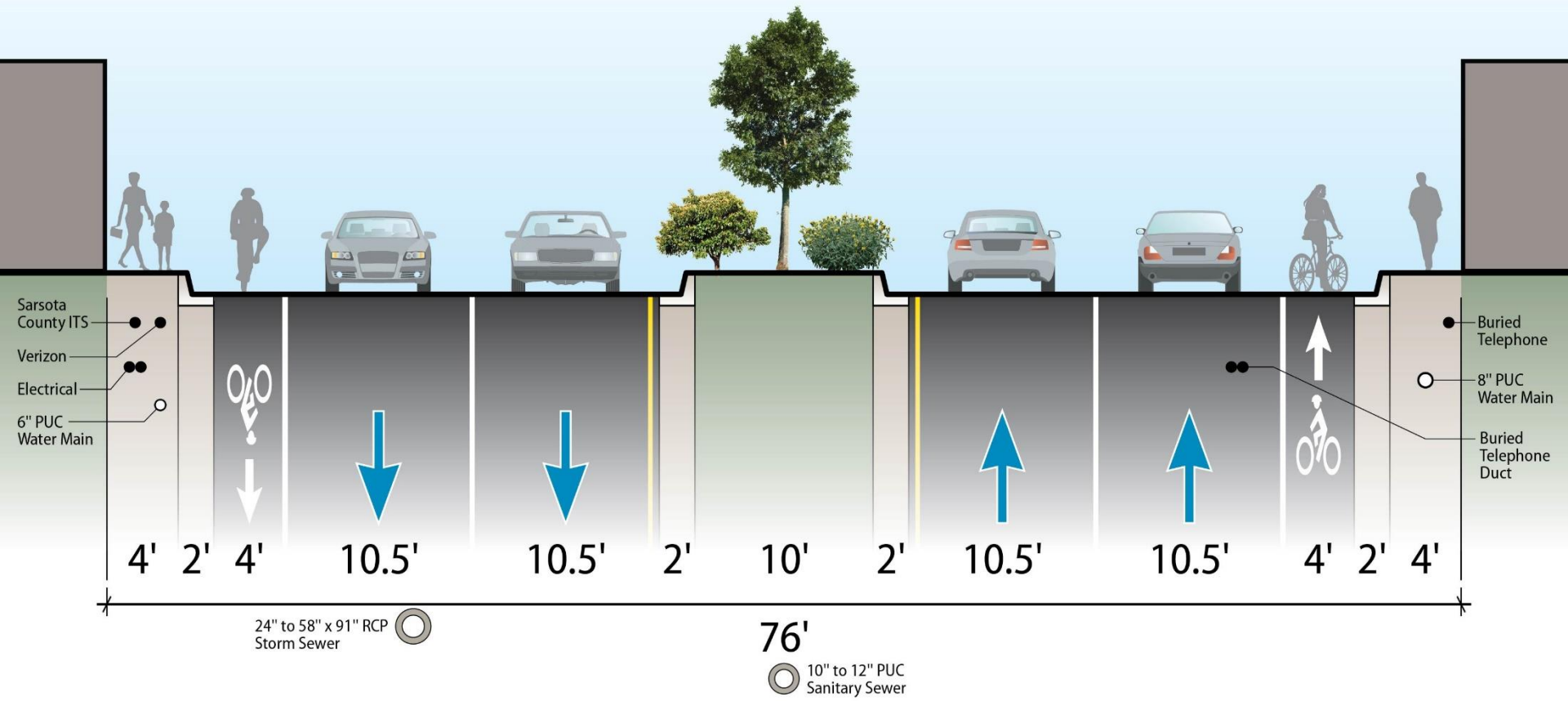
Bike lane at intersection

Typical Section

Existing Fruitville Rd. Facing East



Existing Fruitville Rd. Facing East

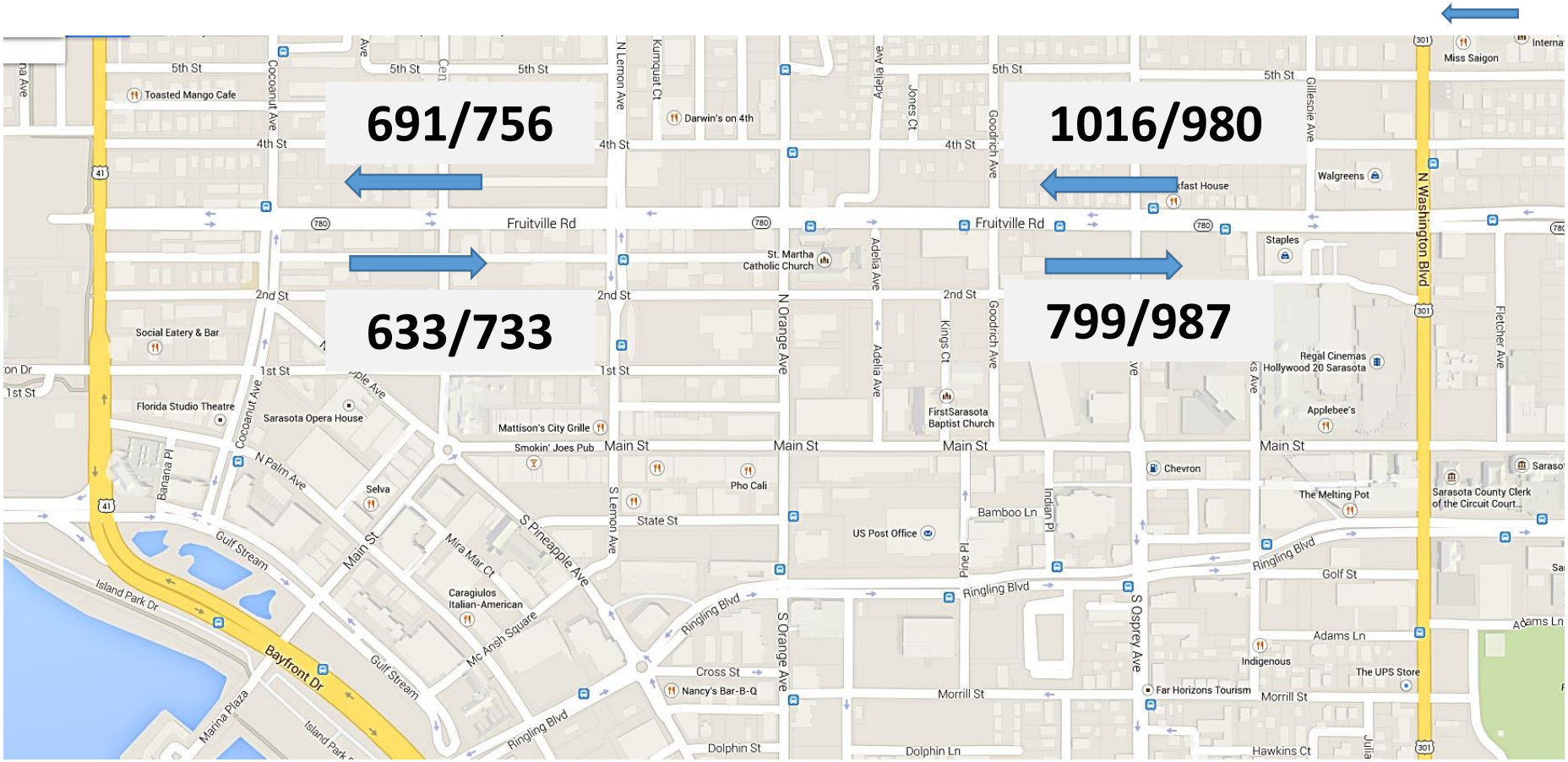


Turning Movements

Fruitville Road, Sarasota, FL

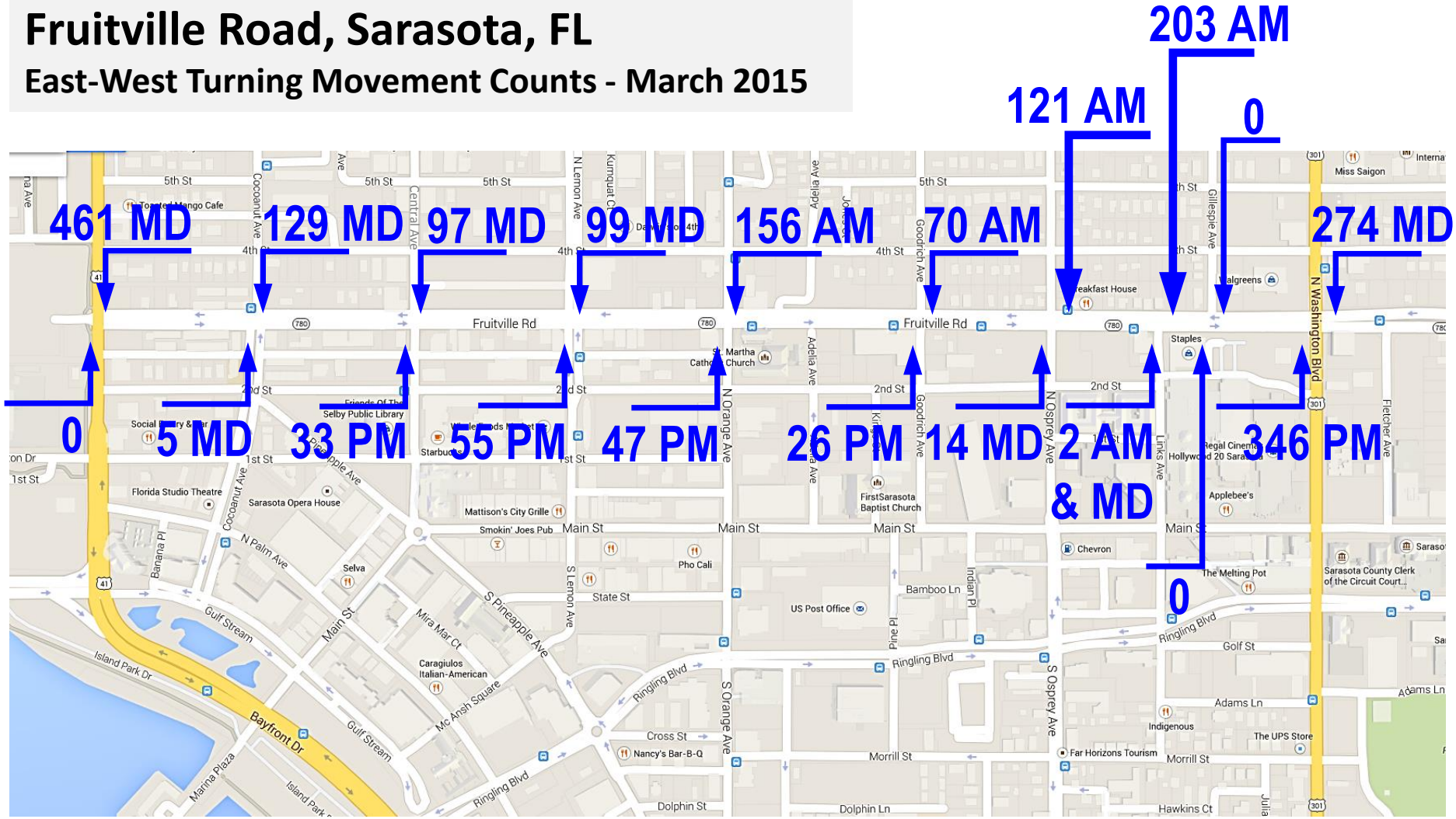
East-West Traffic Volumes - March 2015

AM (8-9 AM)/**PM** (4:30-5:30)



Fruitville Road, Sarasota, FL

East-West Turning Movement Counts - March 2015



Level of Service

Level of Service Criteria for Signalized Intersections

Level-of-Service (LOS)	Average Delay
A	≤ 10.0 seconds
B	> 10.0 and ≤ 20.0 seconds
C	> 20.0 and ≤ 35.0 seconds
D	> 35.0 and ≤ 55.0 seconds
E	> 55.0 and ≤ 80.0 seconds
F	> 80.0 seconds

Source: Transportation Research Board. Highway Capacity Manual, 2010.

In general LOS A to mid-LOS D is acceptable (45 seconds of delay or better)

LOS Results Review

Intersection of Tamiami Trail (US 41) and Fruitville Road:

- The overall intersection operates with LOS D during the AM, MD and PM peak hours.
- The three major approaches operate with LOS C to LOS E during all peak hours.

Intersection of Washington Blvd. (US 301) and Fruitville Road:

- The overall intersection operates with LOS D during the AM peak hour and LOS E during MD and PM Peak hours.
- All four approaches operate with high-LOS D to LOS F during the three peak hours.

Intersection of Orange Avenue and Fruitville Road:

- The overall intersection operates with LOS C during the AM and MD peak hours and with LOS D during the PM peak hour.
- The westbound and eastbound approaches operate with LOS C or D during all peak hours.

Other (six) intersections excluding the intersections at US 41, US 301 and Orange Avenue:

- All six intersections are operating with LOS A, B or C during three AM, MD and PM peak hours.
- All eastbound and westbound approaches at these six intersections are operating with LOS A, B or C during the three peak hours.

2015 Existing Conditions Level of Service

#	Intersection & Approach	Weekday AM					Weekday MD					Weekday PM				
		Lane Group	LOS	Delay (sec)	v/c Ratio	Queue Length (ft)	Lane Group	LOS	Delay (sec)	v/c Ratio	Queue Length (ft)	Lane Group	LOS	Delay (sec)	v/c Ratio	Queue Length (ft)
1	US Route 41 N. Tamiami Trail and Fruitville Road															
	Eastbound	LT					LT					LT				
		R					R	F	86.4	0.27	15	R				
	Westbound	L	E	76.9	0.74	280	L	F	124.9	1.01	500	L	E	67.8	0.58	309
		LT	E	77.2	0.74	346	LT	F	80.5	0.76	484	LT	E	67.8	0.58	309
		R	A	8.9	0.45	60	R	B	10.0	0.51	37	R	C	28.1	0.71	244
	Northbound	L	C	33.0	0.11	7	L	C	22.0	0.11	8	L				
		TR	E	60.5	0.95	812	TR	D	48.5	0.95	1050	TR	E	67.5	1.05	1449
	Southbound	L	E	69.0	0.87	555	L	F	160.9	1.16	356	L	F	277.8	1.45	367
		T	B	17.1	0.70	703	T	C	20.1	0.70	634	T	B	14.9	0.64	507
		R					R					R				
		Int.	D	42.6			Int.	D	47.3			Int.	D	54.2		

2015 Existing Conditions Level of Service

#	Intersection & Approach	Weekday AM					Weekday MD					Weekday PM				
		Lane Group	LOS	Delay (sec)	v/c Ratio	Queue Length (ft)	Lane Group	LOS	Delay (sec)	v/c Ratio	Queue Length (ft)	Lane Group	LOS	Delay (sec)	v/c Ratio	Queue Length (ft)
2	Cocoanut Avenue and Fruitville Road															
	Eastbound	L	A	7.3	0.02	3	L	A	7.0	0.03	5	L	B	13.0	0.03	4
		TR	B	13.8	0.31	192	TR	B	15.2	0.31	168	TR	C	21.8	0.31	237
	Westbound	L	A	5.0	0.18	22	L	A	6.7	0.30	29	L	B	19.1	0.23	96
		TR	A	5.5	0.32	94	TR	A	8.8	0.38	189	TR	C	25.3	0.40	411
	Northbound	LT	F	80.6	0.58	68	LT	F	126.4	0.97	225	LT	F	85.4	0.81	290
		R	A	8.0	0.45	0	R	B	15.9	0.61	35	R	A	9.8	0.55	77
	Southbound	L	D	49.3	0.32	91	L	D	52.1	0.50	128	L	D	48.1	0.44	88
		TR	D	51.7	0.48	144	TR	D	46.8	0.38	164	TR	D	43.0	0.27	133
		Int.	**B**	**17.2**			**Int.**	**C**	**24.1**			**Int.**	**C**	**30.3**		

2015 Existing Conditions Level of Service

#	Intersection & Approach	Weekday AM					Weekday MD					Weekday PM				
		Lane Group	LOS	Delay (sec)	v/c Ratio	Queue Length (ft)	Lane Group	LOS	Delay (sec)	v/c Ratio	Queue Length (ft)	Lane Group	LOS	Delay (sec)	v/c Ratio	Queue Length (ft)
3	Central Avenue and Fruitville Road															
	Eastbound	L	A	4.9	0.03	6	L	A	4.2	0.09	8	L	A	3.9	0.13	12
		TR	A	4.7	0.28	103	TR	A	4.3	0.34	126	TR	A	3.7	0.38	90
	Westbound	L	A	2.4	0.18	8	L	A	7.2	0.30	55	L	A	9.4	0.17	58
		TR	A	1.7	0.36	34	TR	A	4.9	0.35	163	TR	A	9.8	0.36	326
	Northbound	L	D	51.4	0.18	33	L	E	61.1	0.43	80	L	C	30.8	0.28	45
		TR	D	38.3	0.27	70	TR	D	47.1	0.61	120	TR	C	31.4	0.67	107
	Southbound	L	E	78.0	0.75	163	L	F	129.1	0.94	105	L	D	45.7	0.57	62
		TR	D	42.2	0.39	104	TR	E	55.6	0.50	100	TR	C	22.9	0.28	53
		Int.	**B**	**12.7**			**Int.**	**B**	**17.0**			**Int.**	**B**	**11.9**		

2015 Existing Conditions Level of Service

#	Intersection & Approach	Weekday AM					Weekday MD					Weekday PM				
		Lane Group	LOS	Delay (sec)	v/c Ratio	Queue Length (ft)	Lane Group	LOS	Delay (sec)	v/c Ratio	Queue Length (ft)	Lane Group	LOS	Delay (sec)	v/c Ratio	Queue Length (ft)
4	**Lemon Avenue and Fruitville Road**															
	Eastbound	L	A	4.4	0.04	5	L	A	5.7	0.09	14	L	B	10.4	0.26	38
		TR	B	11.1	0.38	237	TR	B	12.7	0.43	281	TR	B	17.0	0.46	300
	Westbound	L	A	2.0	0.26	5	L	A	4.7	0.29	28	L	B	10.8	0.26	37
		TR	A	1.5	0.40	24	TR	A	5.1	0.42	108	TR	B	15.5	0.46	209
	Northbound	L	D	51.9	0.17	24	L	D	53.7	0.39	77	L	D	54.8	0.36	73
		T	E	71.2	0.33	37	T	E	71.2	0.48	78	T	F	80.1	0.68	153
		R	A	3.8	0.29	0	R	B	19.5	0.59	41	R	B	13.5	0.60	0
	Southbound	L	E	65.6	0.55	78	L	E	56.6	0.45	82	L	D	54.5	0.36	74
		TR	D	41.9	0.35	50	TR	D	49.7	0.36	47	TR	D	49.6	0.16	45
		Int.	**B**	**11.1**			**Int.**	**B**	**14.8**			**Int.**	**C**	**22.3**		

2015 Existing Conditions Level of Service

#	Intersection & Approach	Weekday AM					Weekday MD					Weekday PM				
		Lane Group	LOS	Delay (sec)	v/c Ratio	Queue Length (ft)	Lane Group	LOS	Delay (sec)	v/c Ratio	Queue Length (ft)	Lane Group	LOS	Delay (sec)	v/c Ratio	Queue Length (ft)
5	Orange Avenue and Fruitville Road															
	Eastbound	L	B	13.3	0.10	14	L	A	9.3	0.19	16	L	B	12.8	0.35	28
		TR	B	16.6	0.53	197	TR	B	17.3	0.59	381	TR	C	24.8	0.60	499
	Westbound	L	C	34.2	0.70	119	L	C	32.8	0.59	87	L	C	33.3	0.41	133
		TR	A	9.3	0.56	76	TR	D	37.2	0.60	575	TR	D	47.1	0.60	586
	Northbound	L	C	32.3	0.22	41	L	D	36.5	0.34	88	L	D	36.9	0.32	106
		TR	D	43.5	0.39	148	TR	E	66.9	0.84	314	TR	E	75.8	0.91	460
	Southbound	L	C	33.5	0.24	66	L	D	42.6	0.51	93	L	D	43.9	0.48	79
		TR	E	68.4	0.84	314	TR	E	55.4	0.63	241	TR	D	46.6	0.38	197
		Int.	**C**	**23.8**			**Int.**	**C**	**34.4**			**Int.**	**D**	**42.5**		

2015 Existing Conditions Level of Service

#	Intersection & Approach	Weekday AM					Weekday MD					Weekday PM				
		Lane Group	LOS	Delay (sec)	v/c Ratio	Queue Length (ft)	Lane Group	LOS	Delay (sec)	v/c Ratio	Queue Length (ft)	Lane Group	LOS	Delay (sec)	v/c Ratio	Queue Length (ft)
6	**Goodrich Avenue and Fruitville Road**															
	Eastbound	L	A	0.5	0.02	0	L	A	1.4	0.04	1	L	A	1.2	0.12	2
		TR	A	0.5	0.31	13	TR	A	1.5	0.42	60	TR	A	2.4	0.40	27
	Westbound	L	A	5.7	0.16	51	L	A	7.1	0.20	32	L	A	1.8	0.20	4
		TR	A	8.8	0.39	486	TR	A	6.1	0.40	295	TR	A	1.0	0.37	28
	Northbound	LTR	E	64.8	0.13	32	LTR	E	74.4	0.54	77	LTR	F	88.7	0.66	129
	Southbound	LTR	D	52.4	0.37	27	LTR	D	46.7	0.20	18	LTR	D	52.9	0.20	30
		Int.	**A**	**6.3**			**Int.**	**A**	**6.2**			**Int.**	**A**	**6.1**		

2015 Existing Conditions Level of Service

#	Intersection & Approach	Weekday AM					Weekday MD					Weekday PM				
		Lane Group	LOS	Delay (sec)	v/c Ratio	Queue Length (ft)	Lane Group	LOS	Delay (sec)	v/c Ratio	Queue Length (ft)	Lane Group	LOS	Delay (sec)	v/c Ratio	Queue Length (ft)
7	Osprey Avenue and Fruitville Road															
	Eastbound	L	A	6.2	0.04	4	L	A	4.8	0.09	10	L	A	6.6	0.11	12
		T	A	5.0	0.34	158	T	B	10.6	0.49	505	T	B	11.1	0.50	624
	Westbound	L	B	15.1	0.39	125	L	B	14.5	0.45	41	L	B	12.7	0.25	27
		T	B	12.1	0.47	424	T	A	8.1	0.51	194	T	B	10.7	0.47	207
	Northbound	LTR	D	54.7	0.64	162	LTR	E	65.5	0.85	233	LTR	E	69.3	0.86	384
	Southbound	LTR	F	82.4	0.82	224	LTR	E	61.9	0.66	117	LTR	D	38.0	0.26	79
		Int.	**B**	**17.0**			**Int.**	**B**	**17.4**			**Int.**	**B**	**19.6**		

2015 Existing Conditions Level of Service

#	Intersection & Approach	Weekday AM					Weekday MD					Weekday PM				
		Lane Group	LOS	Delay (sec)	v/c Ratio	Queue Length (ft)	Lane Group	LOS	Delay (sec)	v/c Ratio	Queue Length (ft)	Lane Group	LOS	Delay (sec)	v/c Ratio	Queue Length (ft)
8	Links Avenue and Fruitville Road															
	Eastbound	LTR	A	6.7	0.34	217	LTR	A	6.8	0.50	74	LTR	B	17.5	0.55	717
	Westbound	L	A	7.9	0.52	112	L	A	9.7	0.37	57	L	B	17.5	0.37	57
		T	A	3.3	0.45	167	T	A	6.1	0.44	205	T	B	11.7	0.44	316
	Northbound	L	E	71.7	0.37	43	L	E	58.1	0.37	101	L	D	51.5	0.23	74
		R	E	71.9	0.34	50	R	F	83.1	0.77	147	R	F	86.4	0.87	268
		Int.	A	7.0			Int.	B	12.0			Int.	C	23.2		

2015 Existing Conditions Level of Service

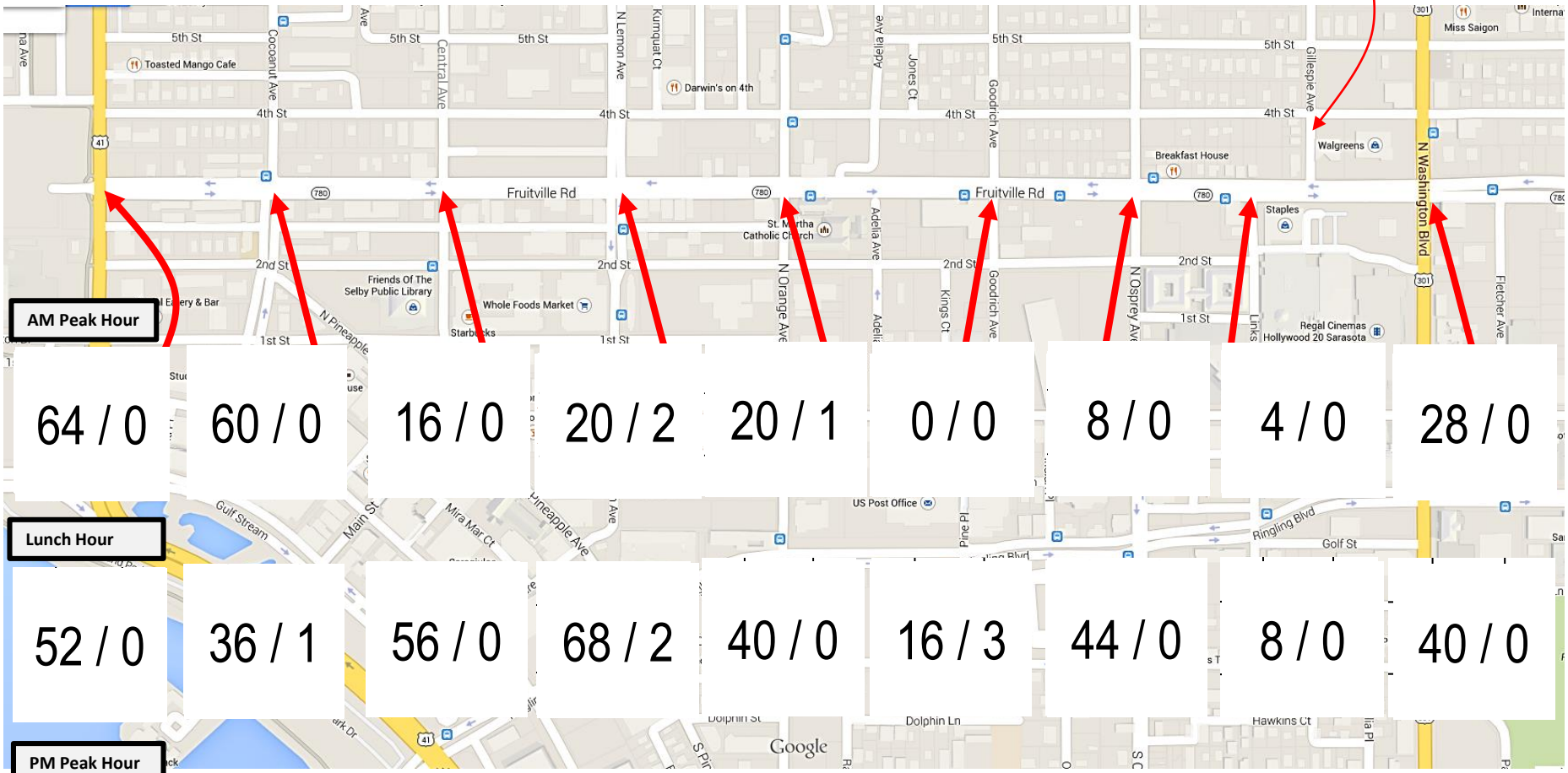
#	Intersection & Approach	Weekday AM					Weekday MD					Weekday PM				
		Lane Group	LOS	Delay (sec)	v/c Ratio	Queue Length (ft)	Lane Group	LOS	Delay (sec)	v/c Ratio	Queue Length (ft)	Lane Group	LOS	Delay (sec)	v/c Ratio	Queue Length (ft)
10	**Washington Boulevard and Fruitville Road**															
	Eastbound	L	D	45.2	0.69	62	L	D	52.5	0.79	176	L	E	72.7	0.93	213
		TR	E	56.5	0.73	434	TR	F	100.6	0.95	737	TR	F	115.4	0.98	867
	Westbound	L	C	34.8	0.56	105	L	E	61.9	0.83	187	L	D	43.1	0.64	105
		T	E	62.0	0.88	647	T	E	62.4	0.86	637	T	E	65.8	0.86	590
		R	B	16.4	0.51	175	R	C	21.0	0.50	215	R	C	30.4	0.56	273
	Northbound	L	D	48.1	0.62	84	L	D	39.2	0.54	104	L	D	36.8	0.50	83
		TR	E	60.2	0.79	514	TR	E	78.5	0.97	704	TR	F	92.8	1.04	827
	Southbound	L	E	68.3	0.91	293	L	F	104.1	0.98	367	L	F	175.0	1.22	404
		T	E	55.9	0.85	705	T	D	54.8	0.74	535	T	D	50.1	0.68	505
		R	C	25.6	0.50	271	R	B	12.8	0.34	107	R	B	10.3	0.28	67
		Int.	**D**	**52.4**			**Int.**	**E**	**67.9**			**Int.**	**E**	**79.4**		

Pedestrian Counts

Fruitville Road, Sarasota, FL

Pedestrian/Bicycle Counts - March 2015

	AM Peak Hour	Lunch Hour	PM Peak Hour
	0 / 4	8 / 0	36 / 3

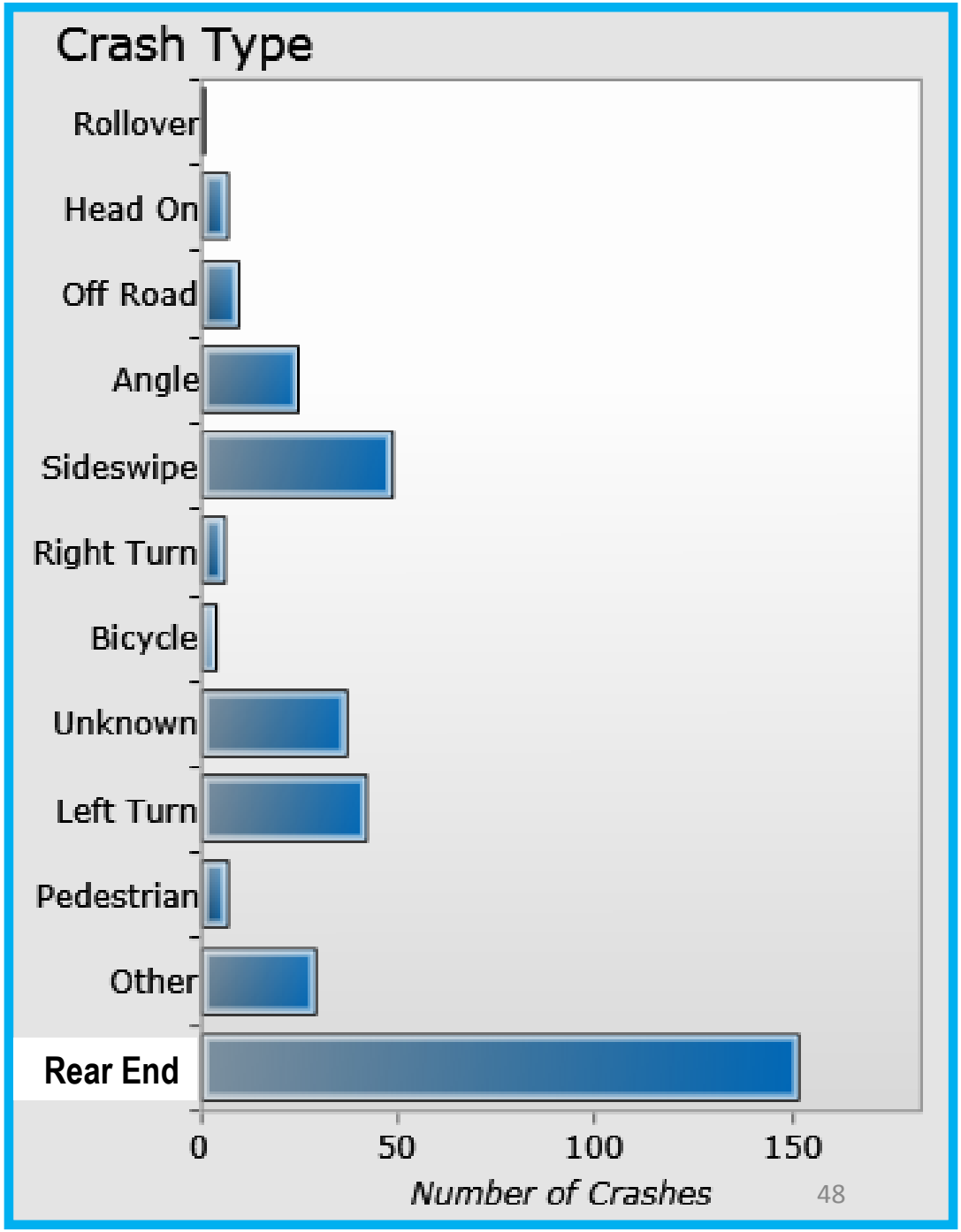


AM Peak Hour	64 / 0	60 / 0	16 / 0	20 / 2	20 / 1	0 / 0	8 / 0	4 / 0	28 / 0
Lunch Hour	52 / 0	36 / 1	56 / 0	68 / 2	40 / 0	16 / 3	44 / 0	8 / 0	40 / 0
PM Peak Hour	32 / 1	52 / 2	240 / 0	84 / 4	40 / 1	16 / 0	32 / 0	36 / 1	32 / 1

Crash Data

All Crashes: 369
Oct. 2010 — Oct. 2015

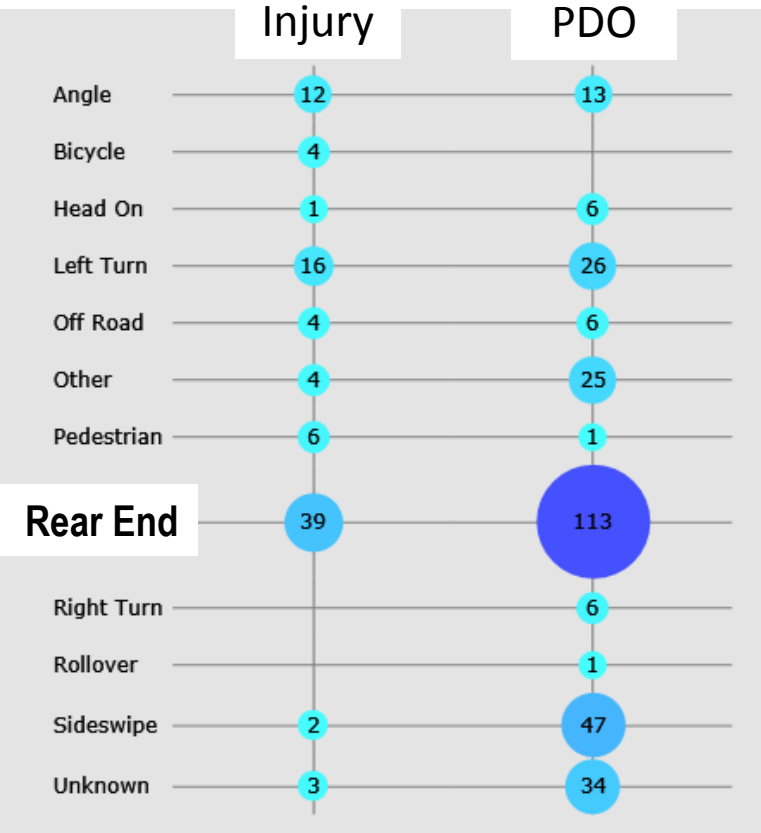
About 155 rear-end crashes are about 42% of the total 369 crashes. The national rate for rear-end crashes is 40%.



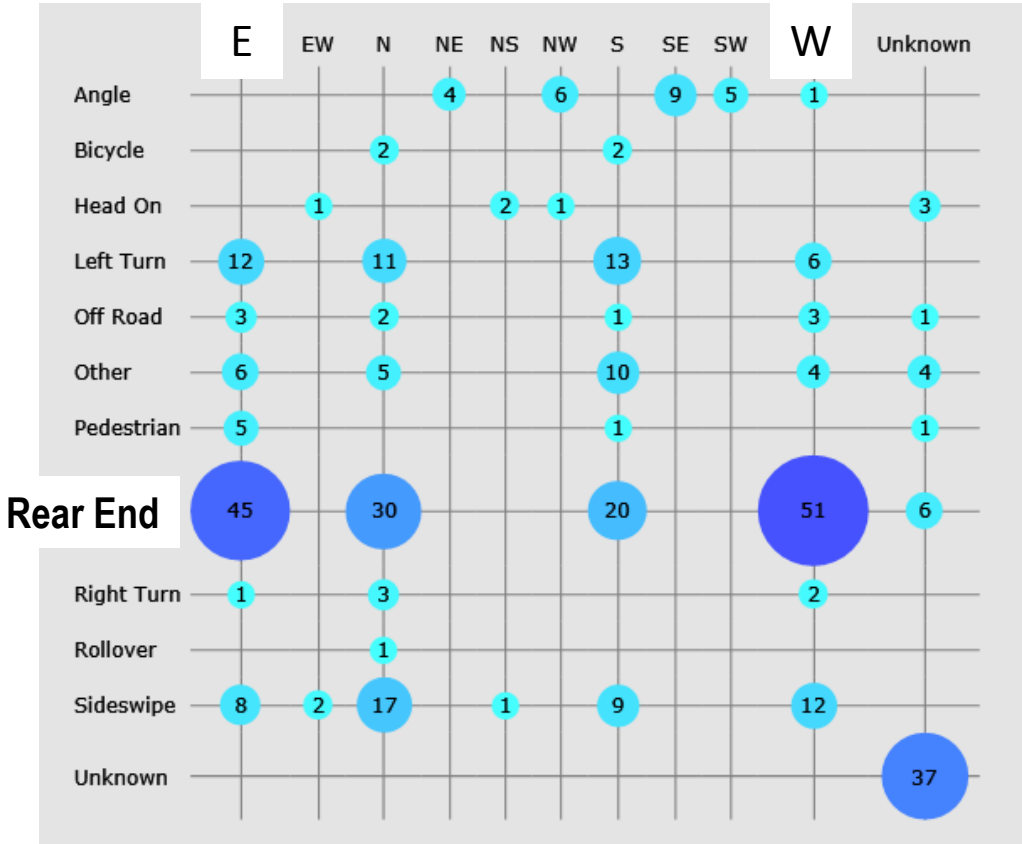
5-Year Crash Data from 2010 to 2015

- Speed, unsafe lane change, tailgating and inattentions are major causes of the rear-end collisions.
- Time of day diagram shows a higher crash rate during the mid-day (lunch time) hours. The total traffic volumes during MD and PM peak hours are almost the same.
- There are total 11 pedestrian/bicyclist crashes during the 5-year period. A large number of these crashes occurred at the Cocoanut Ave., Lemon Avenue and Orange Avenue. The nearby land uses might be the major factor for these type of crashes.

Severity

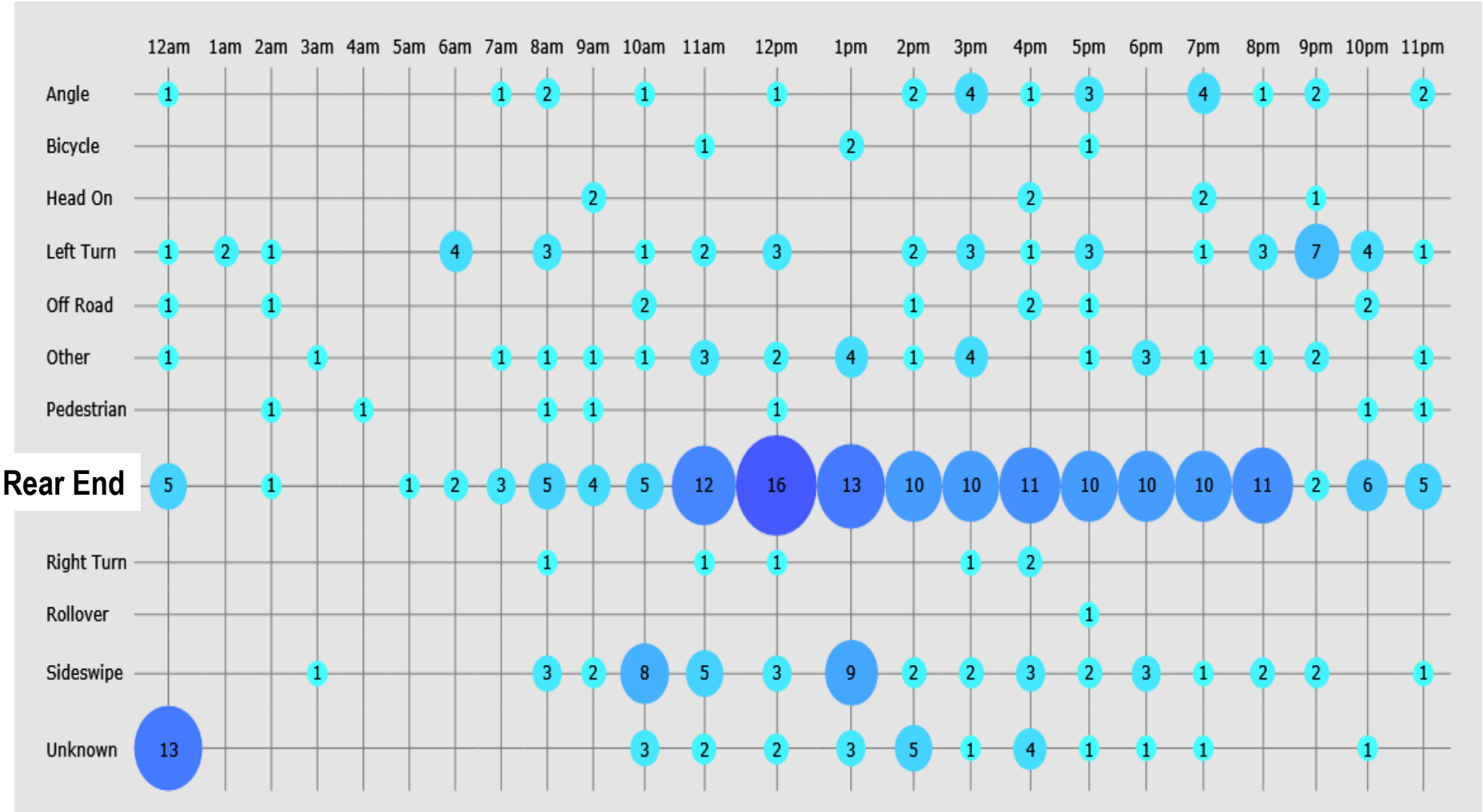


Direction of Travel

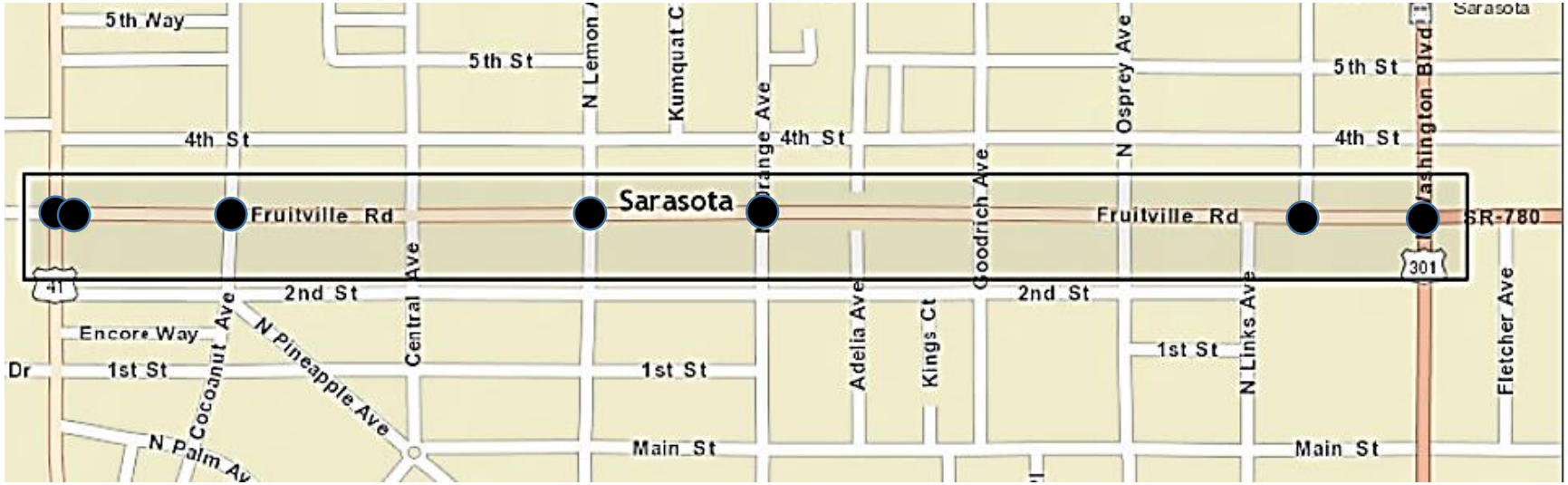


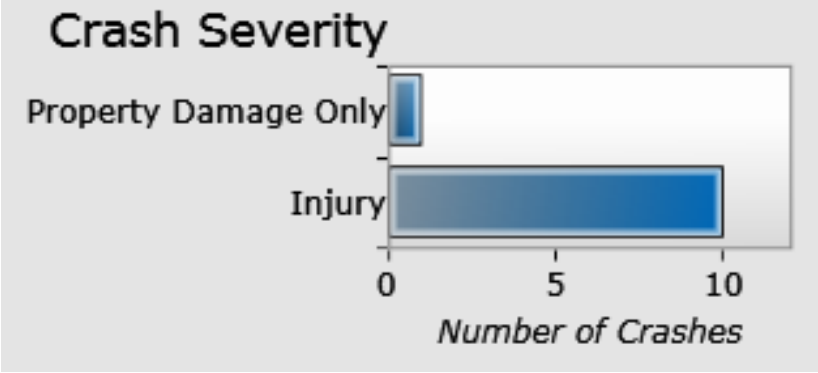
PDO=Property Damage Only

Time of Day


12am 1am 2am 3am 4am 5am 6am 7am 8am 9am 10am 11am 12pm 1pm 2pm 3pm 4pm 5pm 6pm 7pm 8pm 9pm 10pm 11pm
Angle 1 1 2 1 1 2 4 1 2 2 4 1 3 4 1 2 2
Bicycle 1 2 1
Head On 2 2 2 1
Left Turn 1 2 1 4 3 1 2 3 2 3 1 3 1 3 7 4 1
Off Road 1 1 2 1 2 1 2
Other 1 1 1 1 1 1 3 2 4 1 4 1 3 1 1 2 1
Pedestrian 1 1 1 1 1 1 1
Rear End 5 1 1 2 3 5 4 5 12 16 13 10 10 11 10 10 10 11 2 6 5
Right Turn 1 1 1 1 2
Rollover 1
Sideswipe 1 3 2 8 5 3 9 2 2 3 2 3 1 2 2 1
Unknown 13 3 2 2 3 5 1 4 1 1 1 1

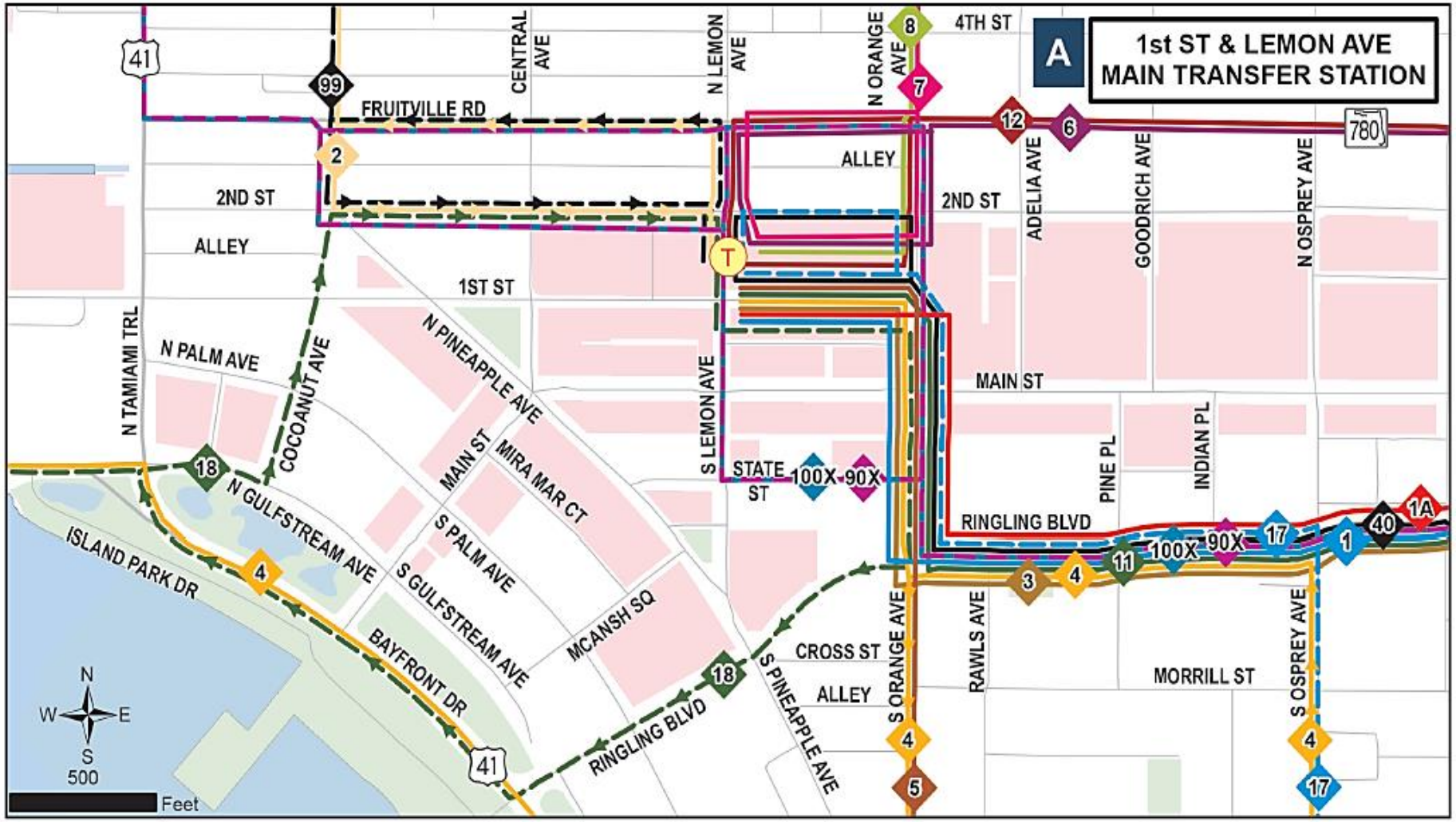
Bike/Pedestrian Crashes: 11
Oct. 2010 — Oct. 2015





Bus Routes

NORTH COUNTY System Map Details



Google Streetview

The project website

www.SarasotaGov.org\Projects\FruitvilleStreetscape.cfm

You can leave comments there, too.

Sam
Schwartz
Engineering
D.P.C.

CITY OF SARASOTA