City of Sanibel **MEMORANDUM**

June 14, 2013

TO: Judie Zimomra, City Manager

FROM: Kurt Miller, City Administrative Intern

RE: Reported Bicycle and Pedestrian Incidents 2006-2013 *

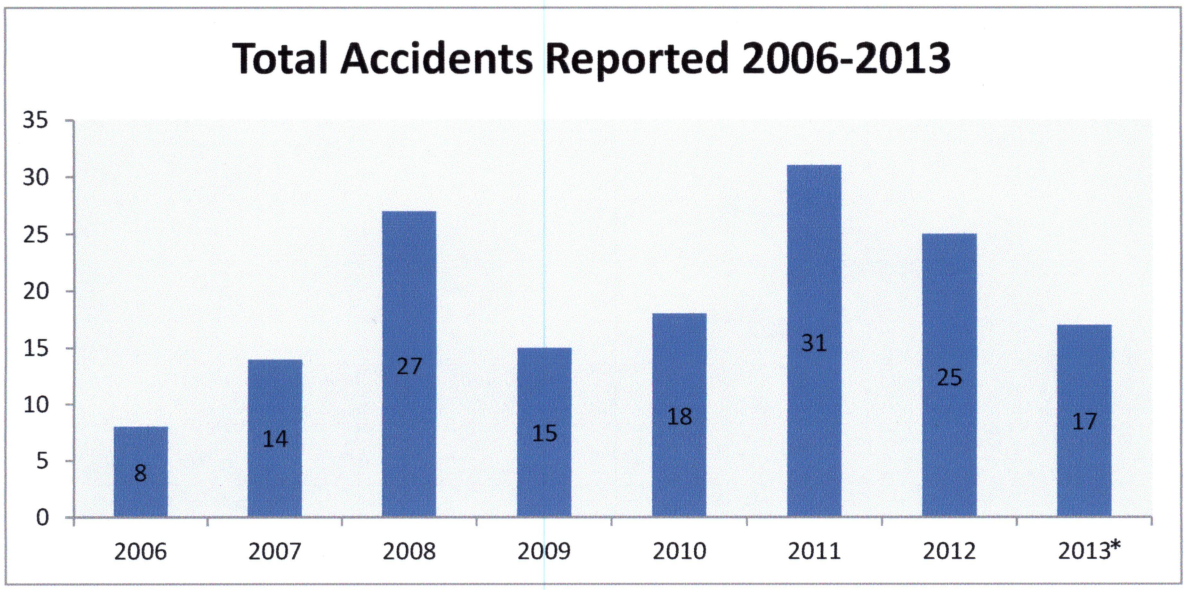
Bicycle Accidents on Shared Use Path:

Last year, a report was compiled by the city of Sanibel chronicling the safety issues between the years 2006 and 2012 that involved bicycle accidents along the Shared Use Path. Sanibel Police reports were read through and raw data was converted into a presentation neatly describing the location of the incident, then the total incident volume, incident type, location type, date of incident, time of incident, the age, residency and injuries of involved parties were analyzed to differentiate between various accidents. The purpose of this study is to update the previous report.

Total Reported Incidents by Year:

The below graph is the total all bicycle accidents for the past seven years by year.

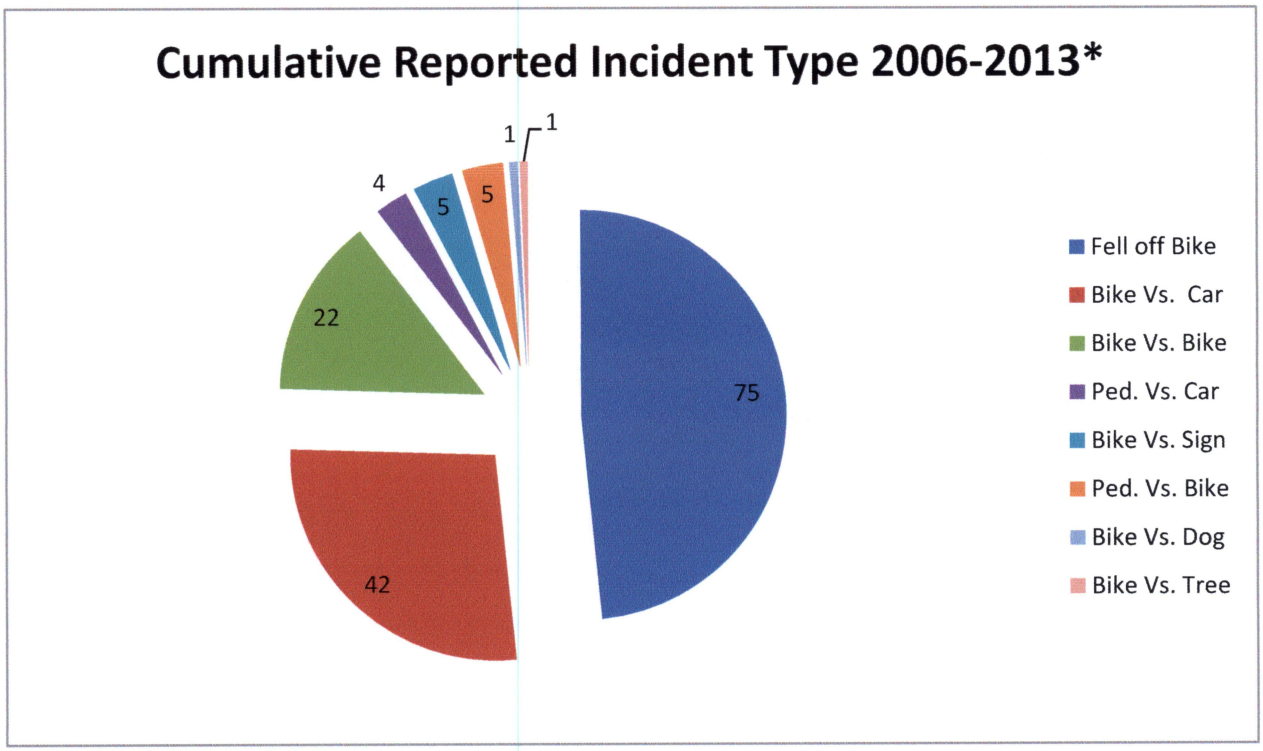
Total Reported Incidents by Year								
Year	2006	2007	2008	2009	2010	2011	2012	2013*
Incidents	8	14	27	15	18	31	25	17



*2013 represents just the data for the first six months, ending June 14, 2013

Type of incident by year:

Incident Type	Fell off Bike	Bike Vs. Car	Bike Vs. Bike	Ped. Vs. Car	Bike Vs. Sign	Ped. Vs. Bike	Bike Vs. Dog	Bike Vs. Tree	Total Per Year
2006	5	2	1	0	0	0	0	0	8
2007	8	4	2	0	0	0	0	0	14
2008	19	6	1	1	0	0	0	0	27
2009	5	5	2	1	1	1	0	0	15
2010	5	5	3	1	2	1	0	1	18
2011	12	11	5	1	1	0	1	0	31
2012	12	5	5	0	1	2	0	0	25
2013*	9	4	3	0	0	1	0	0	17
Incident Total By Year	75	42	22	4	5	5	1	1	**155**



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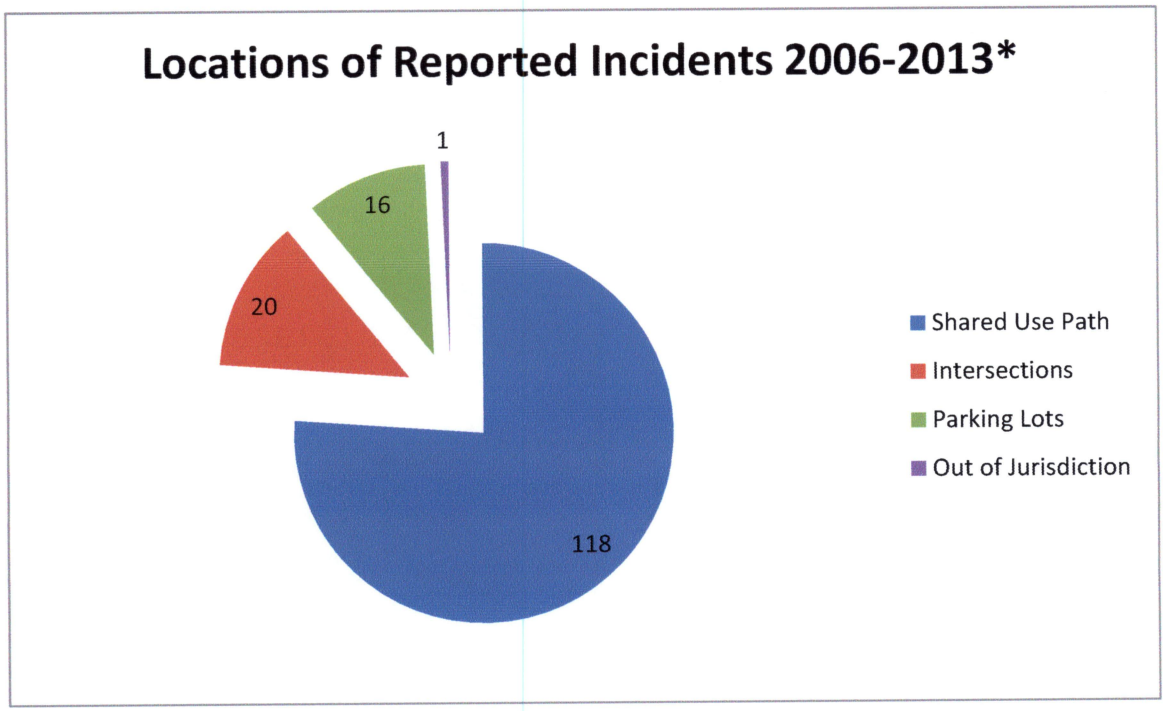
The additional data shows that the most common cause of accident remains falling off of bike with no vehicle involvement. Car vs. bike accidents are the second most common, and bike vs. bike are the third most common.

Location of Reported Incidents by Year:

Locations of Reported Incidents				
Locations of Reported Incidents by Year:	Shared Use Path	Intersections	Parking Lots	Out of Jurisdiction
2006	6	0	2	0
2007	9	2	3	0
2008	19	5	3	0
2009	10	3	2	0
2010	14	3	1	0
2011	23	4	4	0
2012	25	0	0	0
2013*	12	3	1	1
Total	**118**	**20**	**16**	**1**



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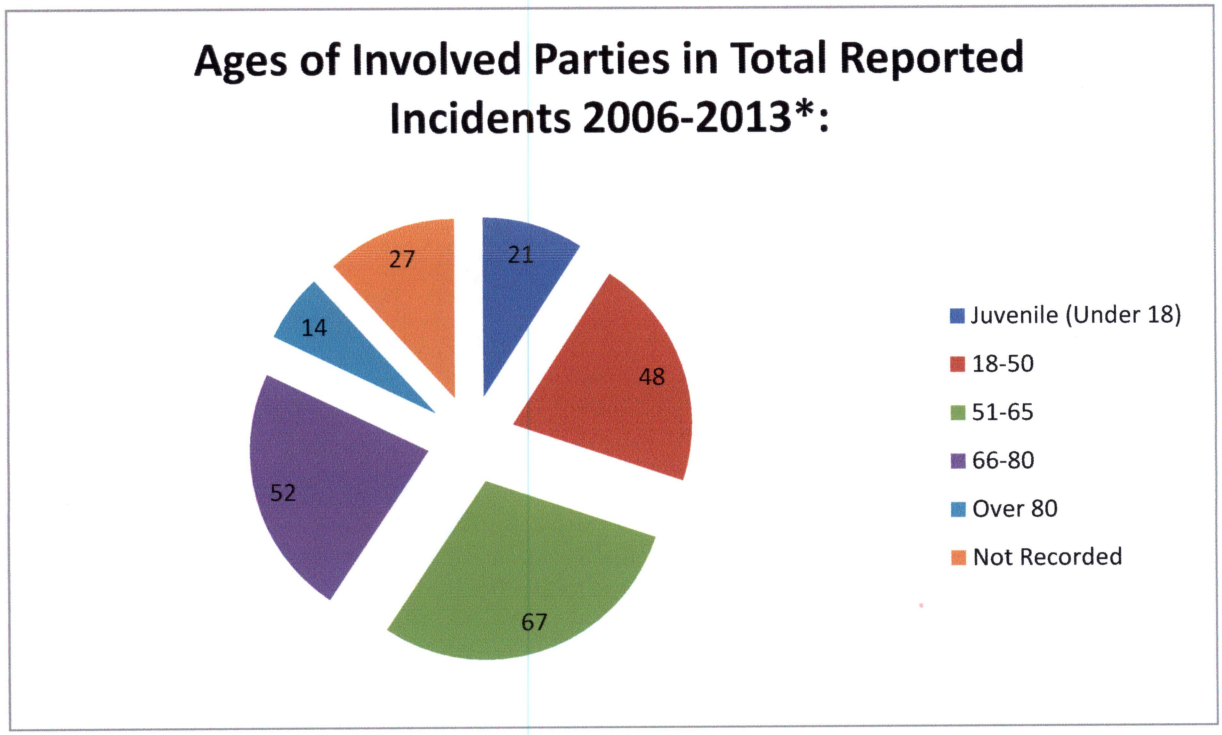
The vast majority of bike accidents occur on the shared use path. With the highest reason for accidents being falling off bike, the Shared Use Path, where the majority of bike traffic takes place, naturally represents the highest area of concentration for accidents. Bikers consistently use the path and due to higher traffic, higher injuries come consequentially. One police report came from outside the city of Sanibel jurisdiction and the reports of accidents in intersections and parking lots often times involved a vehicle.

Ages of Involved Parties in Total Reported Incidents by Year:

Ages of Involved Parties in Total Reported Incidents:						
Age Range:	Juvenile (Under 18)	18-50	51-65	66-80	Over 80	Not Recorded
2006	0	6	1	0	0	4
2007	3	3	7	6	0	3
2008	3	9	11	6	1	5
2009	2	5	7	5	3	3
2010	3	6	11	4	3	3
2011	2	7	18	13	3	5
2012	5	7	9	9	3	2
2013*	3	5	3	9	1	2
Total:	**21**	**48**	**67**	**52**	**14**	**27**



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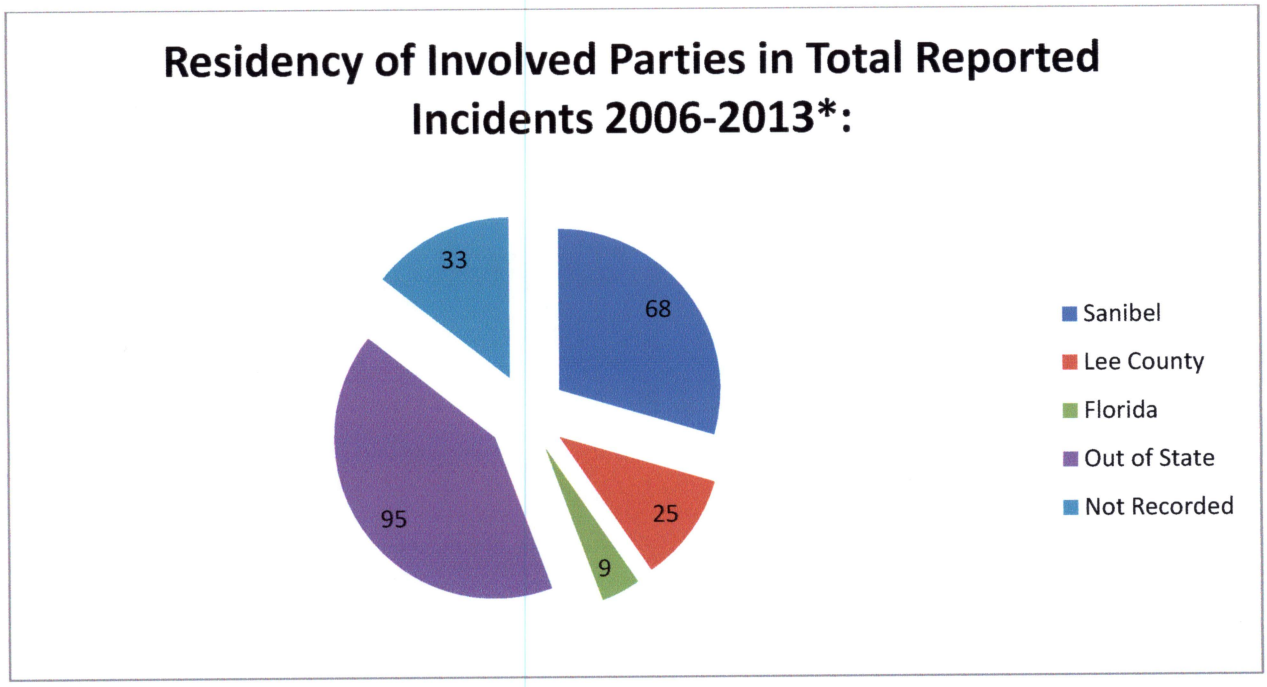
The ages of involved parties in accidents on Sanibel greatly varied and a somewhat equal distribution was present in the data. However, the largest age group affected was those over the age of 50 and specifically between the ages of 51 and 65. Historically, this age group has consistently been the most affected.

Residency of Involved Parties in Total Reported Incidents by Year:

Residency of Involved Parties in Total Reported Incidents:					
Residency:	Sanibel	Lee County	Florida	Out of State	Not Recorded
2006	3	2	1	0	5
2007	9	1	0	10	2
2008	10	3	2	15	5
2009	7	2	0	15	1
2010	7	3	0	11	9
2011	13	8	1	19	7
2012	10	5	3	16	2
2013*	9	1	2	9	2
Total:	**68**	**25**	**9**	**95**	**33**



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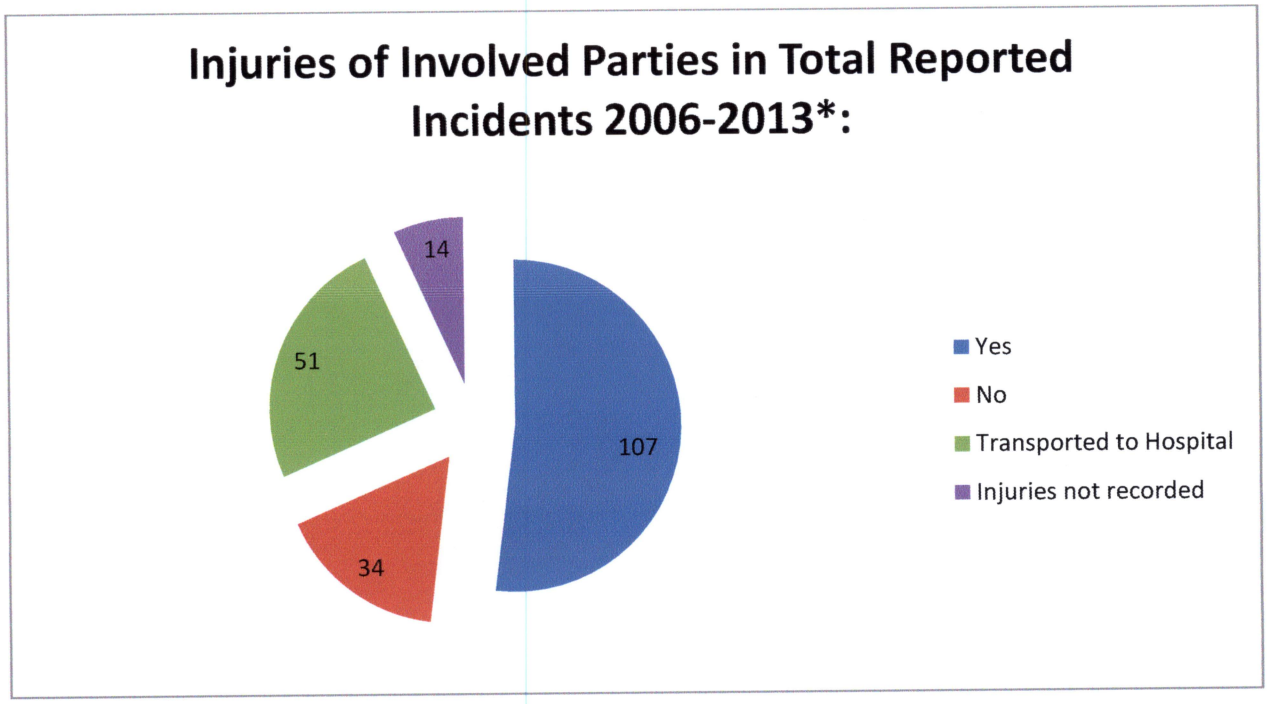
Naturally, the two most frequent users of the Sanibel Shared Use Path are Sanibel residents and out of state tourists spending time on vacation here. When tourists visit the island, even if they have been here before, their natural lack of topographical knowledge increases their chances of having an accident in an area they are not familiar with.

Injuries of Involved Parties in Total Reported Incidents by Year:

Injuries of Involved Parties in Total Reported Incidents:				
Injuries:	Yes	No	Transported to Hospital	Injuries not recorded
2006	7	1	2	0
2007	9	1	3	4
2008	18	6	7	3
2009	10	3	6	2
2010	12	5	5	1
2011	20	7	12	4
2012	20	5	7	0
2013*	11	6	9	0
Total:	107	34	51	14



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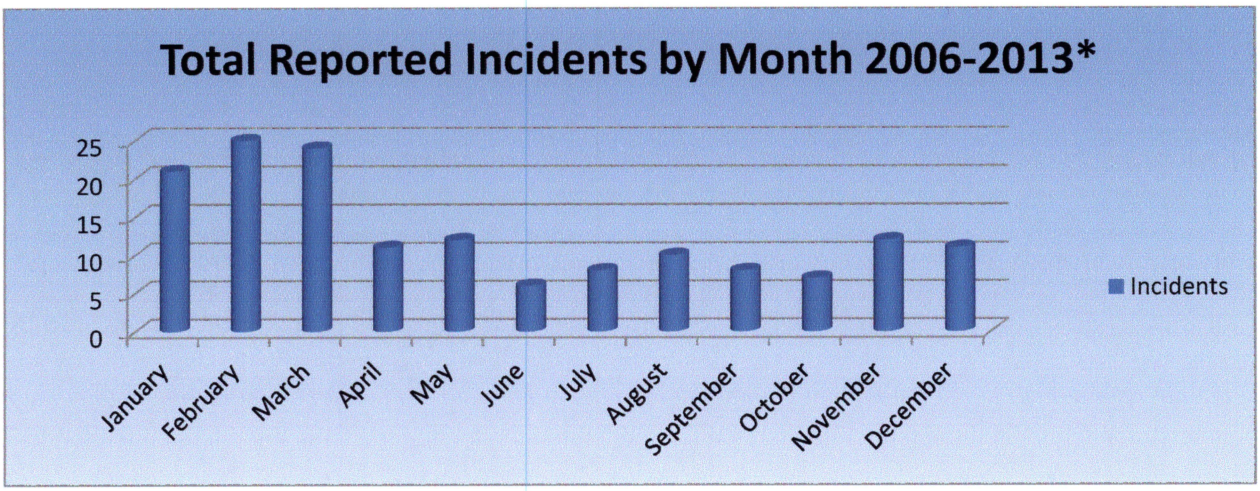
While many accidents caused injuries, the majority of them were minor and less than half of accidents required hospitalization. The number of accidents is definitely high, as nearly every accident involved minor injury, but the severity of most the injuries were very minor. Fortunately, most injuries stopped at minor abrasions and lacerations, but several resulted in minor concussions.

Dates of Reported Incidents by Month 2006 – 2013*:



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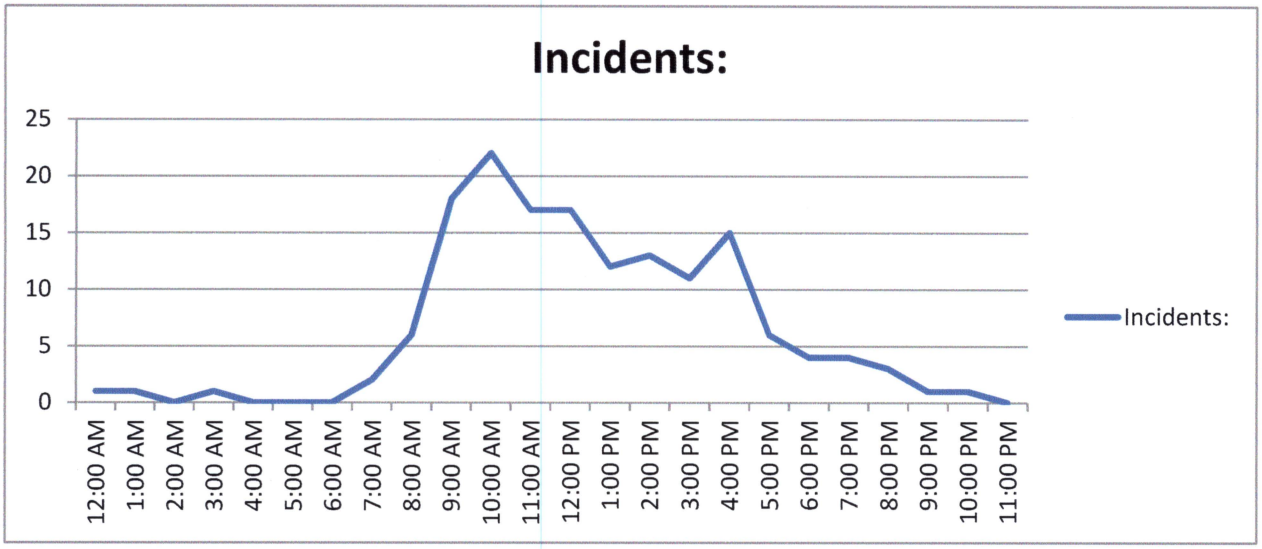
The majority of accidents occurred in the cooler months, most likely reflecting an influx in traffic due to better riding conditions. Also, with many residents only spending half of the year on Sanibel, many more are on island in the first three months during the winter months up north.

Times of Reported Incidents by Hour 2006 – 2013*:



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Most accidents occurred during the day from the end of rush hour to the end of the lunch hour. In the tenth hour of the day, the accident rates were at their highest. After ten, the number declined until approximately four p.m. where it spiked again. After four, the amount of accidents only continued to decline.

Number of Tickets Issued in result of accidents:

Tickets Issued for Reported Incidents 2006-2013*	
Year:	Number of Tickets Issued:
2006	0
2007	1
2008	4
2009	3
2010	3
2011	4
2012	0
2013*	3
Total	**18**

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As most accidents had no culprit, there was no need for punishment for the majority of them. A few, however; which usually involved vehicles or walking pedestrians, required some form of citation to reprimand the responsible.

Conclusion:

After examining police reports and analyzing data, accidents have increased. The total accidents from 2006 to 2013 are 155. This data continues a slight upward trend and it would not be surprising to see the total bicycle accidents for 2013 hit 25 or higher. Looking at the total cumulative report of bicycle accidents on the island since 2006, while there have been spikes in accident frequency, in 2008 and 2011, those spikes are becoming closer to the average amount. In short, accidents are going up.

Possible Solutions:

- Make sure that signs clearly mark rules and regulations for Shared Use Path. As the following summary of the police reports states, the first report involved a missing sign from the path.
- Make sure people are aware of helmet laws.
- Possibly divide Shared Use Path into one section for fast moving users (bikers, skaters, runners, etc.) and slow moving users (i.e. walkers).
- Continue to enforce traffic laws to ensure the safety of residents and visitors on the Shared Use Path system and Sanibel at large.

Police Report Analysis

The very first police report, starting on April 4, 2012, that involved the Shared Use Path, involved not an accident, but a complaint that "SIGN WARNING VEHICLES OF BIKES IS DOWN." The Report States "WILL PUT IN CORRECTION REPORT FOR DPW-OFC-FELICIANO."

Location: 2075, PERIWINKLE WAY

Correction report form sent to DPW for repair on 4/4/12

2012

Location of Accident:	**Incident Type**:	**Place**:
Shared Use Path	Bike vs. Ped	671, E GULF DR
Shared Use Path	Fell off bike	3325, W GULF DR
Shared Use Path	Fell off bike	SANIBEL CAPTIVA RD/MM 3.O
Shared Use Path	Bike vs. Bike	SANIBEL CAPTIVA RD/GULF PINES DR
Shared Use Path	Bike vs. skate	1539, PERIWINKLE WAY
Shared Use Path	Bike vs. Bike	SAN-CAP / TARPON BAY
Shared Use Path	Bike vs. Bike	701, OPRE AVE #E SECTOR
Shared Use Path	Fell off Bike	DIXIE BEACH (See report for full location)
Shared Use Path	Fell off skates	1676, M GULF DR
Shared Use Path	Fell off Bike	PERIWINKLE WAY/MARTHA'S LN

4/4- 4:46 p.m
7/30- 2:24 p.m
9/6- 7:01 a.m
9/30- 3:22 p.m
11/17- 9:40 a.m
11/21- 2:51 p.m
11/24- 11:11 a.m
12/2- 9:52 a.m
12/22- 5:44 p.m
12/26- 11:43 a.m
10 accidents total

2013

Location of Accident:	**Incident Type:**	**Place:**
Shared Use Path	Fell off Bike	PERIWINKLE WAY/TULIP LN
Intersection	Car vs. Bike	2163, PERIWINKLE WAY
Shared Use Path	Fell off Bike	1451, MIDDLE GULF DR
Shared Use Path	Fell off Bike	909, DIXIE BEACH BLVD
Shared Use Path	Bike vs. Bike	3840, SANIBEL CAPTIVA RD
Shared Use Path	Fell off Bike	BOWMANS / SAN-CAP
Shared Use Path	Fell off Bike	1700, PERIWINKLE WAY
Parking lot	Car vs. Bike	1201, PERIWINKLE WAY/IFO HUXTERS
Shared Use Path	Fell off Bike	CASA YBEL / ALGIERS
Shared Use Path	Fell off Bike	1, WILDLIFE DR

Shared Use Path	Bike vs. Bike	5050, SANIBEL CAPTIVA RD
Intersection	Fell off Bike	2255, WEST GULF DR
Shared Use Path	Bike vs. Bike	2173 PERIWINKLE WAY
Shared Use Path	Bike vs. Ped	City Park
Intersection	Car vs. Bike	1451, MIDDLE GULF DR
Shared Use Path	Fell off Bike	1451, MIDDLE GULF DR
Off Jursidiction	Car vs. Bike	3445, SANIBEL-CAPTIVA RD

Date: 1/26- 10:57 a.m
1/28- 10:48 a.m
1/29- 10:33 a.m
2/4- 6:17 p.m
2/16- 11:24 a.m
2/17- 3:16 p.m
2/18- 12:14 p.m
2/20- 10:34 a.m
2/20- 10:44 a.m
2/21- 12:17 p.m
3/10- 10:21 a.m
3/12- 3:44 p.m
3/17- 10:57 a.m
3/17- 8:15 p.m
4/3- 5:04 p.m
4/28- 6:59 p.m
5/24- 3:04 p.m
17 accidents total

Overall accidents from 4/4/12-6/5/13: **27**

Age:	**Place of Residence:**	**Citations:**	**Injuries:**
2012			
54,82	Out of state, Sanibel	None	No
30	Out of state	None	Yes, transported to hospital
63	Lee County	None	Yes, not transported
54,71	Sanibel, Lee County	None	No
47, 14	Florida, Sanibel	None	Yes, transported to hospital
11, 46	Out of state, out of state	None	Yes, transported to hospital
56	Florida	None	Yes, not transported
66	Sanibel	None	Yes, transported to hospital
43	Out of State	None	Yes, transported to hospital
16	Out of State	None	No
2013			
79	Sanibel	None	Yes, transported to hospital
78, 20	Sanibel, out of state	None	No

85	Sanibel	None	Yes, not transported
37	Sanibel	None	Yes, transported to hospital
72	Out of state	None	Yes, transported to hospital
54	Out of state	None	No
NR	NR	None	No
47, 15	Florida, out of state	One	No
66	Out of state	None	Yes, transported to hospital
74	Florida	None	Yes, not transported
68, 15	Sanibel, out of state	None	Yes, transported to hospital
77	Sanibel	None	Yes, transported to hospital
55, 72	Out of state, out of state	None	No
35, 70	Sanibel, Lee County	One	Yes, transported to hospital
43, 11	Out of state, Sanibel	One	Yes, transported to hospital
56	Sanibel	None	Yes, transported to hospital
NR	NR	None	No