

Crash Analysis

*Carolina Crossroads
I-20/26/126 Corridor Project
Lexington and Richland Counties, South Carolina*

Draft 01 February 2016



Prepared for South Carolina Department of Transportation
and the Federal Highway Administration

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I-20/26/126 Corridor Improvements

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Draft 01 February 29, 2016

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Prepared by



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Appendix E—Southbound I-126 Collision Diagrams

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Appendix G—I-26 Arterial Roadway Collision Diagrams

Appendix H—I-20 Arterial Roadway Collision Diagrams

Appendix I—I-126 Arterial Roadway Collision Diagrams

Appendix J—Frontage Roadway Collision Diagrams

Crash Analysis

1 Data Collection

Crash data for the study area was provided by the SCDOT Safety Office staff for three years, from January 01, 2012 to December 31, 2014. The collision locations were coded into a database along with other collision characteristics such as time, date, longitude/latitude coordinates, manner of collision, collision severity, lighting condition, and pavement surface condition.

Each reported accident was classified based on manner of collision. The various manner of collision classifications are:

- No Collision with Motor Vehicle
- Rear End
- Head On
- Rear-to-Rear
- Angle 1
- Angle 2
- Angle 3
- Sideswipe Same Direction
- Sideswipe Opposite Direction
- Backed Into
- Unknown

Injury severity was broken into five categories ranging from INJ0 (no injury or PDO) to INJ4 (fatality). The injury status codes are:

- INJ0 – No Injury/Property Damage Only (PDO)
- INJ1 - Possible Injury
- INJ2 - Non Incapacitating Injury
- INJ3 - Incapacitating Injury
- INJ4 - Fatality

Each reported accident was classified as one of the following nine pavement surface conditions:

- Dry
- Wet
- Snow
- Slush
- Ice
- Contaminate
- Water (standing)
- Other
- Unknown

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Each reported accident was classified as one of the following seven lighting conditions:

- Daylight
- Dawn
- Dusk
- Dark (lighting Unspecified)
- Dark (street lamp lit)
- Dark (street lamp not lit)
- Dark (no lights)

Crash data was provided from mile marker (MM) 62.600 (west of Exit 63) to MM 65.820 (east of Exit 65) along I-20, from MM 100.500 (west of Exit 101) to MM 110.330 (east of Exit 110) along I-26, and from MM 0.00 (at the I-26/I-126 split) to MM 3.680 (Huger Street/Elmwood Avenue) along I-126. Crash data on these interstate routes included accidents occurring on the mainline segments and the on/off-ramps.

Crash data was also provided for the following roadway segments within the study area interchanges and frontage roads:

- Broad River Road (US 76/US 176) from Columbiana Drive to Western Lane (I-26 Exit 101)
- Lake Murray Boulevard (SC 60) from Columbiana Drive to Kinley Road (I-26 Exit 102)
- Harbison Boulevard (S-32-0757, S-40-0757) from Saturn Parkway to Parkridge Drive (I-26 Exit 103)
- Piney Grove Road (S-32-671/S-40-1280) from eastbound Ramp to westbound Ramp (I-26 Exit 104)
- St. Andrews Road (S-32-0036/S-40-0042, St. Andrews Road from Woodland Hills Road to Fernandina Road (I-26 Exit 106)
- Burning Tree Drive (S-40-2893) from St. Andrews Road to eastbound Slip Ramp (I-26 Exit 106)
- Bush River Road (S-40-0031) from Zimalcrest Road to Latonea Drive (I-26 Exit 108)
- US 378 (Sunset Boulevard) from Harbor Drive to McSwain Drive (I-26 Exit 110)
- Bush River Road (S-32-273) from Outlet Point Boulevard to Rockland Road (I-20 Exit 63)
- Broad River Road (US 176) from Briargate Drive to Long Creek Drive (I-20 Exit 65)
- Colonial Life Boulevard (S-40-2963) from I-126 to Colonial Life Boulevard (I-126)
- Greystone Boulevard (S-40-3020) from Candi Lane to Stoneridge Drive (I-126)
- Huger Street (US 21) from I-126 to Laurel Street & Elmwood Avenue (US 321) from I-126 to Gadsden Street (I-126)
- Rockland Road (S-32-1241) from Bush River Road to Bush River Road
- Berryhill Road (S-32-1551) from Woodland Hills Road to Bush River Road
- Jamil Road (S-32-1791) from Piney Grove Road to St. Andrews Road
- Saturn Parkway (S-32-1792) from Harbison Boulevard to Bower Parkway
- McSwain Drive (S-32-1814) from Dead End to Sunset Boulevard
- Fernandina Road (S-32-1842) from Piney Grove Road to St. Andrews Road
- Giles Court (S-32-1924) from Saturn Parkway to Dead End
- Colonial Life Boulevard/Gracern Road (S-40-2890) from Dead End to Arrowwood Road
- Frontage (Road S-40-2891) from Bush River Road to Lawand Drive

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- Burning Tree Drive/Browning Road (S-40-2893/S-32-1841/S-40-2892) from St. Andrews Road to Fairhaven Drive
- Fernandina Road (S-40-3021/S-32-1925/S-40-3045) from Woodcross Drive to Piney Grove Road
- Columbiana Extension (S-40-3048) from Broad River Road to Lake Murray Boulevard

This study analyzed the crash data, identified the “hot spots” and summarized economic loss resulting from the crashes.

1.1 Collision Diagrams

Collision diagrams were created for the various segments outlined in the report. The segments are based on the mileposts associated with interchange ramp mileposts coded in the South Carolina Statewide Highway GIS network file. The collision data was similarly sorted by these mileposts. The crash locations were plotted on an aerial photograph background based on the longitude and latitude coordinates coded in the individual crash data. This allows for accurate placement of collisions for those locations where coordinates were accurately entered. Crashes where coordinates were either missing or were improperly entered (placing the crash away from the area being summarized in the collision diagram) will not show up on the collision diagram.

Alternative methods of plotting the crashes, such as using the coded milepost location, were considered. It was found that all crashes that had occurred on interchange ramps would be improperly shown in the collision diagrams as occurring on the mainline segment – in essence, the collision diagrams would lead one to infer that no crashes ever took place on any of the ramps in the study area.

For more accurate crash location on the diagrams, it was decided to use the coordinates to plot the crashes, even though in some instances, some of the collisions would not appear on individual diagrams due to missing or improperly coded coordinates.

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2 Interstate Crashes

A total of 3,351 crashes occurred between January 1, 2012 and December 31, 2014 along the three interstate routes within the study area.

I-26 experienced the most crashes within the study area. A total of 2,370 crashes (approximately 71 percent of the total interstate crashes) occurred along I-26. These crashes were approximately evenly split between crashes occurring on the southbound lanes (1,171 crashes) and those occurring on the northbound lanes (1,199). There were 796 crashes (approximately 24 percent) along I-20. Of these crashes, the majority (571 crashes or about 71 percent) occurred on westbound I-20. I-126 experienced the fewest crashes, with 185 crashes (approximately five percent of all crashes on the study area interstate routes). Northbound I-126 had the majority of crashes, with 100 accidents (about 55 percent of the I-126 crashes) compared to 85 for the southbound direction.

The most prevalent crash type within the study area was No Injury/Property Damage Only (PDO). The total PDO crashes were 2,730 (about 81 percent). There were 609 crashes resulting in injury (about 18 percent). Twelve crashes resulted in fatalities.

Table 2-1 summarizes the crash data based on injury severity, lighting and pavement surface conditions. As shown in the table, most of the crashes within the study area occurred during daylight and on dry pavement.

Table 2-1: Crash Data Summary - Interstate Routes

Freeway Name	Direction	Total Crashes	Injury Severity			Lighting Condition			Surface Condition		
			Fatality	Injury	Property Damage	Day Light	Dark		Dry	Wet	Snow
							Lighted	Not Lighted			
Interstate 26	Southbound	1171	4	209	958	961	34	176	906	263	2
	Northbound	1199	3	201	995	983	37	179	915	283	1
	Total	2370	7	410	1953	1944	71	355	1821	546	3
Interstate 20	Eastbound	225	1	42	182	184	0	41	183	40	2
	Westbound	571	2	99	470	459	16	96	479	92	0
	Total	796	3	141	652	643	16	137	662	132	2
Interstate 126	Southbound	85	1	28	56	64	4	17	71	13	1
	Northbound	100	1	30	69	68	11	21	68	31	1
	Total	185	2	58	125	132	15	38	139	44	2
Study Area Total		3351	12	609	2730	2719	102	530	2622	722	7
Percentage (For Overall Study Area)			0.4%	18.2%	81.5%	81.1%	3.0%	15.8%	78.2%	21.5%	0.2%

Table 2-2 summarizes the crash data based on collision type. Along I-20 and I-26, *rear end* collisions (about 62 percent) were most frequent, followed by same direction sideswipe accidents (approximately 18 percent) and *no collision with motor vehicle* (approximately 17 percent).

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Table 2-2: Collision Type by Interstate Route

Collision Type	I-26				I-20				I-126				Overall Study Area	
	Southbound	Northbound	Total	Percentage	Eastbound	Westbound	Total	Percentage	Southbound	Northbound	Total	Percentage	Total	Percentage
No Collision with Motor Vehicle	192	207	399	16.8%	51	64	115	14.4%	26	32	58	31.4%	572	17.1%
Rear End	715	761	1476	62.3%	100	426	526	66.1%	31	50	81	43.8%	2083	62.2%
Head On	1	0	1	0.0%	2	0	2	0.3%	1	0	1	0.5%	4	0.1%
Angle	25	32	57	2.4%	12	15	27	3.4%	5	5	10	5.4%	94	2.8%
Sideswipe Same Direction	236	195	431	18.2%	59	66	125	15.7%	19	12	31	16.8%	587	17.5%
Sideswipe Opposite Direction	1	2	3	0.1%	1	0	1	0.1%	3	1	4	2.2%	8	0.2%
Other	1	2	3	0.1%	0	0	0	0.0%	0	0	0	0.0%	3	0.1%

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Rear end collisions were also the most frequent type of collision (approximately 44 percent) along I-126. However, the *no collision with motor vehicle* crashes on I-126 were about double (approximately 31 percent) the percentage of similar type collisions reported on I-26 (about 17 percent) and I-20 (about 14 percent).

Of the 12 fatal crashes along the interstate routes within the study area, seven took place along I-26 (four in the southbound and three in the northbound directions), three on I-20 (one eastbound and two westbound) and two on I-126 (one in each direction). **Table 2-3** summarizes the details of the twelve fatal accidents within the study area.

Table 2-3: Summary of Fatal Crashes

Route	Day	Date	Time	Crash Type	First Harmful Event	Cause	Surface	Lighting
I-26 SB	Saturday	1/21/2012	03:50 AM	Rear End	Motor Vehicle In Transport	-	Wet	Dark (lighting Unspecified)
I-26 NB	Tuesday	3/6/2012	03:41 AM	No Collision with Motor Vehicle	Embankment	DUI	Dry	Dark (lighting Unspecified)
I-20 WB	Tuesday	5/22/2012	01:08 AM	Rear End	Motor Vehicle In Transport	DUI	Dry	Dark (no lights)
I-126 NB	Tuesday	11/6/2012	02:25 AM	No Collision with Motor Vehicle	Guardrail Face	DTFFC	Dry	Dark (street lamp lit)
I-20 WB	Monday	12/3/2012	01:33 PM	No Collision with Motor Vehicle	Other (Wall, Building, Tunnel, Etc.)	DUI	Dry	Daylight
I-26 SB	Monday	12/24/2012	01:25 PM	Angle 2	Motor Vehicle In Transport	DTFFC	Wet	Daylight
I-26 NB	Tuesday	6/11/2013	12:00 PM	No Collision with Motor Vehicle	Overturn/Rollover	DUI	Dry	Daylight
I-26 NB	Thursday	8/29/2013	11:24 AM	No Collision with Motor Vehicle	Guardrail End	ROR	Dry	Daylight
I-26 SB	Monday	9/16/2013	06:46 AM	Rear End	Motor Vehicle Stopped	DTFFC	Wet	Dawn
I-20 EB	Saturday	11/16/2013	03:45 PM	No Collision with Motor Vehicle	Guardrail Face	DUI	Dry	Daylight
I-26 SB	Wednesday	6/11/2014	03:45 PM	No Collision with Motor Vehicle	Overturn/Rollover	DTFFC	Dry	Daylight
I-126 SB	Wednesday	6/11/2014	09:08 PM	Rear End	Motor Vehicle In Transport	SPEED	Dry	Dark (lighting Unspecified)

There were six fatal accidents that occurred in 2012, four in 2013 and two in 2014. The two fatal accidents in 2014 occurred on the same day, but on two different routes and were separated in time by over five hours. Four crashes occurred on Tuesday, three on Monday, and two on Wednesday. Only one of the crashes could be considered to have occurred during a weekday peak period (the September 16, 2013 crash occurred at 6:46 AM). Seven of the twelve fatal crashes were due to *no collision with a motor vehicle* crashes, while four were due to *rear end* crashes. Five crashes were attributed to *driving under the influence* (DUI), four were attributed to *driving too fast for conditions* (DTFFC) and one each for *ran off road* (ROR) and for speed. Nine crashes occurred on dry pavement and three on wet pavement. Seven crashes occurred at dawn or in daylight, with five occurring in dark conditions.

Analyses of the crash data was performed for each interstate within the study area as well as arterials within the study area interchanges and frontage roads.

2.1 Southbound I-26

A total of 1,171 crashes were reported along southbound I-26 within the study area. There were four fatal crashes reported. Two of the fatal crashes were caused by *rear end* collisions, one by an *angle* collision and one by a *no collision with motor vehicle* collision. Approximately 82 percent of the crashes (958 crashes) caused PDO. The remaining 209 reported crashes resulted in incapacitating injury, non-incapacitating injury, or possible injury (approximately 18 percent of all crashes reported). The two incapacitating injury crashes consisted of one *no*

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collision with motor vehicle crash and one *rear end* crash. Of the 24 non-incapacitating injury crashes, eleven were the result of *no collision with motor vehicle* crashes and nine were the result of *rear end* crashes.

Table 2-4 summarizes crash data along southbound I-26 based on collision type and injury severity. As presented in the table, *rear end* collisions are the most frequent type of collision (approximately 61 percent) along eastbound I-26. Approximately 17 percent of all *rear end* collisions resulted in injuries.

Sideswipe collisions are the next most frequent collision type, accounting for approximately 20 percent of all crashes.

There were 192 collisions (approximately 16 percent) that were classified as *no collision with motor vehicle* type accidents. About half of these crashes (97 total) involved collisions with the median barrier (46 crashes), collisions with other moveable objects (27 crashes) and collisions into a ditch (24 crashes).

Approximately 28 percent of all *no collision with motor vehicle* type collisions resulted in incapacitating, non-incapacitating or possible injuries. Of the 12 incapacitating or non-incapacitating injuries resulting from *no collision with motor vehicle* crashes, four each were caused by two-wheeled vehicle spills or collisions with the median.

Most of the crashes along southbound I-26 occurred during daylight, as shown in **Table 2-5** which summarizes crash data by injury severity, lighting and pavement surface condition.

About 22 percent of the crashes occurred on wet pavement. Three of the four reported fatal crashes occurred on wet pavement. Approximately 22 percent of all *non-incapacitating injury* crashes and 25 percent of all PDO crashes occurred on wet pavement.

Crash data along southbound I-26 was summarized by day of the week and time of day. This crash data is presented in **Figure 2.1**.

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Table 2-4: Southbound I-26 Crash Summary – Collision Type and Injury Severity

Collision Type	Injury Severity					Total	Percentage
	Fatality	Injury			Property Damage		
		Incapacitating	Non-incapacitating	Possible			
No Collision with Motor Vehicle	1	1	11	41	138	192	16.4%
Rear End	2	1	9	111	588	711	60.7%
Head On	0	0	0	0	1	1	0.1%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	1	0	1	5	18	25	2.1%
Sideswipe Same Direction	0	0	3	25	208	236	20.2%
Sideswipe Opposite Direction	0	0	0	1	0	1	0.1%
Backed Into	0	0	0	0	4	4	0.3%
Other	0	0	0	0	1	1	0.1%
Totals	4	2	24	183	958	1171	100.0%

Table 2-5: Southbound I-26 Crash Summary - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark		Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
		Lighted	Not Lighted						
Fatality	3	0	1	1	3	0	0	4	0.3%
Incapacitating Injury	2	0	0	2	0	0	0	2	0.2%
Non-incapacitating Injury	20	1	3	16	8	0	0	24	2.0%
Possible Injury	146	9	28	139	43	1	0	183	15.6%
Property Damage Only	810	24	124	748	209	1	0	958	81.8%
Total	981	34	156	906	263	2	0	1171	
Percentage	83.8%	2.9%	13.3%	77.4%	22.5%	0.2%	0.0%		

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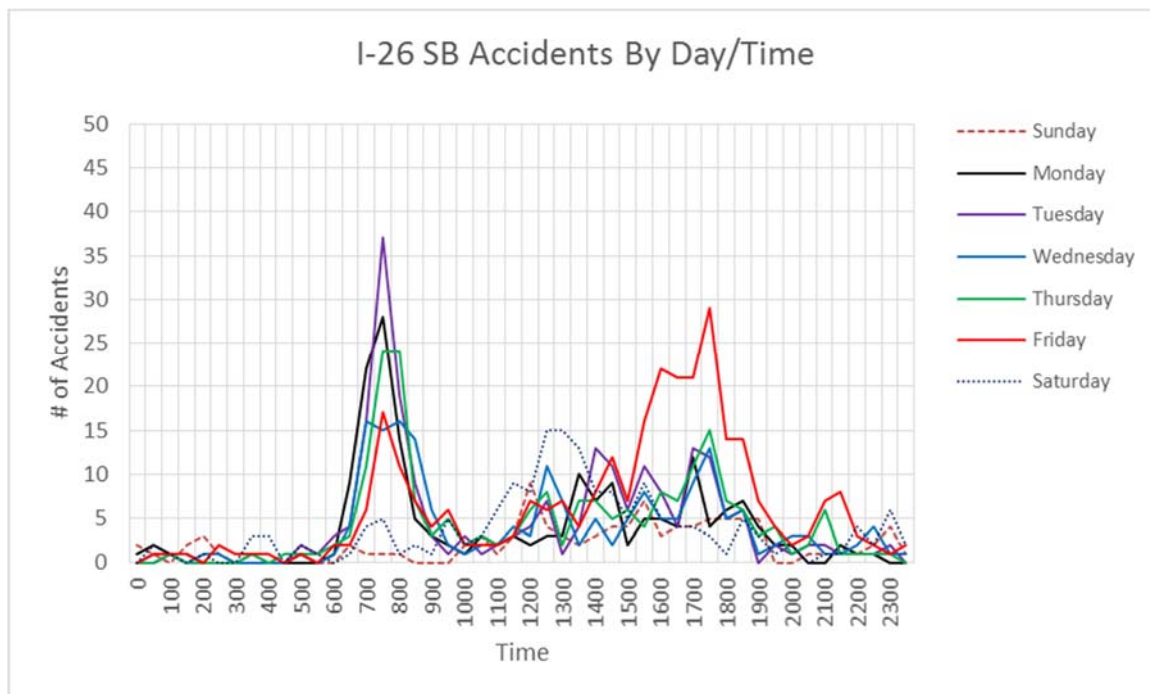


Figure 2.1: I-26 Southbound Crash Summary - Day of the Week and Time of Day

As can be seen from **Figure 2.1**, the total number of crashes was highest on Tuesday during the morning peak period. A large number of crashes occurred during the morning peak period on the other weekdays. During the afternoon peak period, the highest number of accidents occurred on Friday. The highest occurrence of accidents on the weekends occurred during midday on Saturday.

Southbound I-26 accident data was further grouped into the following eighteen segments:

- West of the southbound off-ramp to Exit 101 (MM 100.500-100.911)
- Within Exit 101 between the southbound off-ramp and on-ramp (MM 100.911 - 101.639)
- Within Exit 102 between the southbound off-ramp and on-ramp (MM 101.639 - 102.623)
- Between the southbound on-ramp from Exit 102 and the off-ramp to Exit 103 (MM 102.623 - 103.031)
- Within Exit 103 between the southbound off-ramp and on-ramp (MM 103.031 - 103.618)
- Between the southbound on-ramp at Exit 103 and the off-ramp at Exit 104 (MM 103.618 - 103.874)
- Within Exit 104 between the southbound off-ramp and on-ramp (MM 103.874 - 104.662)
- Between the southbound on-ramp at Exit 104 and the off-ramp to Exit 106 (MM 104.662 and MM 105.986)
- Within Exit 106 between the southbound off-ramp and the southbound on-ramp (MM 105.986 and 106.578)
- Weaving segment between the southbound on-ramp at Exit 106 and the off-ramp to westbound I-20 at Exit 107 (MM 106.578 and 106.7)
- Weaving segment at Exit 107 between the off-ramp to westbound I-20 and the loop on-ramp from westbound I-20 (MM 106.7 and 106.992)

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- Weaving segment at Exit 107 between the loop on-ramp from westbound I-20 to the loop off-ramp to eastbound I-20 (MM 106.992 and 107.09)
- Weaving segment at Exit 107 between the southbound loop off-ramp to eastbound I-20 and the on-ramp from eastbound I-20 (MM 107.09 and 107.278)
- Weaving segment between the on-ramp from eastbound I-20 at Exit 107 and the I-26/I-126 split at Exit 108 (MM 107.728 and 107.613)
- Between the I-26/I-126 split and the on-ramp from northbound I-126 (MM 107.613 and MM 108.528)
- Between the on-ramp from northbound I-126 and the southbound off-ramp to Exit 110 (MM 108.528 and MM 109.177)
- Within Exit 110 between the southbound off-ramp and on-ramp (MM 109.177 and MM 110.176)
- East of the southbound on-ramp at Exit 110 (MM 110.176 and MM 110.330)

Table 2-6 summarizes the accident data for each segment by collision type, lighting and pavement surface condition. Crash data for individual segments were summarized by collision type and accident severity in **Table 2-7**.

The crash data summaries for the individual interstate segments also include collisions on the ramps. Of the 1,171 crashes along southbound I-26, 133 crashes were identified in the crash data as occurring on ramps.

Crash Analysis

Table 2-6: Southbound I-26 Segment Summary

Segment	Mile Posts	Injury Severity					Lighting Condition			Surface Condition				Total	Percentage
		Fatality	Injury			Property Damage	Day Light	Dark		Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
			Incapacitating	Non-Incapacitating	Possible			Lighted	Not Lighted						
West of the southbound off-ramp to Exit 101	(MM 100.500 - 100.911)	0	0	1	1	5	6	0	1	6	1	0	0	7	0.6%
Within Exit 101 between the southbound off-ramp and on-ramp	(MM 100.911 - 101.639)	0	0	0	4	23	22	0	5	17	10	0	0	27	2.3%
Within Exit 102 between the southbound off-ramp and on-ramp	(MM 101.639 - 102.623)	1	0	2	9	44	52	1	3	40	16	0	0	56	4.8%
Between the southbound on-ramp from Exit 102 and the off-ramp to Exit 103	(MM 102.623 - 103.031)	0	0	0	3	40	35	1	7	38	5	0	0	43	3.7%
Within Exit 103 between the southbound off-ramp and on-ramp	(MM 103.031 - 103.618)	0	0	1	10	44	43	0	12	49	6	0	0	55	4.7%
Between the southbound on-ramp at Exit 103 and the off-ramp at Exit 104	(MM 103.618 - 103.874)	0	0	1	3	28	28	0	4	20	12	0	0	32	2.7%
Within Exit 104 between the southbound off-ramp and on-ramp	(MM 103.874 - 104.662)	0	0	1	8	66	66	1	8	57	18	0	0	75	6.4%
Between the southbound on-ramp at Exit 104 and the off-ramp to Exit 106	(MM 104.662 - 105.986)	0	0	1	32	149	162	3	17	138	43	1	0	182	15.5%
Within Exit 106 between the southbound off-ramp and the southbound on-ramp	(MM 105.986 - 106.578)	0	0	6	25	113	118	5	21	94	50	0	0	144	12.3%
Weaving segment between the southbound on-ramp at Exit 106 and the off-ramp to westbound I-20 at Exit 107	(MM 106.578 - 106.700)	0	0	0	13	59	62	3	7	64	8	0	0	72	6.1%
Weaving segment at Exit 107 between the off-ramp to westbound I-20 and the loop on-ramp from westbound I-20	(MM 106.700 - 106.992)	1	0	1	17	76	78	1	16	80	15	0	0	95	8.1%
Weaving segment at Exit 107 between the loop on-ramp from westbound I-20 to the loop off-ramp to eastbound I-20	(MM 106.992 - 107.09)	0	0	0	3	9	9	0	3	9	3	0	0	12	1.0%
Weaving segment at Exit 107 between the southbound loop off-ramp to eastbound I-20 and the on-ramp from eastbound I-20	(MM 107.090 - 107.278)	0	1	3	10	72	74	1	11	68	18	0	0	86	7.3%
Weaving segment between the on-ramp from eastbound I-20 at Exit 107 and the I-26/I-126 split at Exit 108	(MM 107.278 - 107.613)	1	0	1	11	73	74	3	9	70	16	0	0	86	7.3%
Between the I-26/I-126 split and the on-ramp from westbound I-126	(MM 107.613 - 108.528)	0	1	4	15	67	63	4	20	66	20	1	0	87	7.4%
Between the on-ramp from westbound I-126 and the southbound off-ramp to Exit 110	(MM 108.528 - 109.177)	0	0	0	3	25	18	2	8	24	4	0	0	28	2.4%
Within Exit 110 between the southbound off-ramp and on-ramp	(MM 109.177 - 110.176)	1	0	2	13	61	67	7	3	62	15	0	0	77	6.6%
East of the southbound on-ramp at Exit 110	(MM 110.176 - 110.330)	0	0	0	3	4	4	2	1	4	3	0	0	7	0.6%
Total		4	2	24	183	958	981	34	156	906	263	2	0	1171	
Percentage		0.3%	0.2%	2.0%	15.6%	81.8%	83.8%	2.9%	13.3%	77.4%	22.5%	0.2%	0.0%		

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Table 2-7: Southbound I-26 Segment Summary by Collision Type and Injury Severity

Segment	Mile Posts	Accident Types									Total	Percentage
		No Collision with Motor Vehicle	Rear End	Head On	Rear-to-Rear	Angle	Sideswipe Same Direction	Sideswipe Opposite Direction	Backed Into	Other		
West of the southbound off-ramp to Exit 101	(MM 100.500 - 100.911)	4	2	0	0	0	1	0	0	0	7	0.6%
Within Exit 101 between the southbound off-ramp and on-ramp	(MM 100.911 - 101.639)	10	10	0	0	2	5	0	0	0	27	2.3%
Within Exit 102 between the southbound off-ramp and on-ramp	(MM 101.639 - 102.623)	20	26	0	0	3	7	0	0	0	56	4.8%
Between the southbound on-ramp from Exit 102 and the off-ramp to Exit 103	(MM 102.623 - 103.031)	12	25	0	0	0	6	0	0	0	43	3.7%
Within Exit 103 between the southbound off-ramp and on-ramp	(MM 103.031 - 103.618)	5	44	0	0	0	5	0	1	0	55	4.7%
Between the southbound on-ramp at Exit 103 and the off-ramp at Exit 104	(MM 103.618 - 103.874)	6	15	0	0	2	9	0	0	0	32	2.7%
Within Exit 104 between the southbound off-ramp and on-ramp	(MM 103.874 - 104.662)	7	57	0	0	2	8	0	1	0	75	6.4%
Between the southbound on-ramp at Exit 104 and the off-ramp to Exit 106	(MM 104.662 - 105.986)	20	131	0	0	2	28	0	0	1	182	15.5%
Within Exit 106 between the southbound off-ramp and the southbound on-ramp	(MM 105.986 - 106.578)	34	85	0	0	5	18	0	2	0	144	12.3%
Weaving segment between the southbound on-ramp at Exit 106 and the off-ramp to westbound I-20 at Exit 107	(MM 106.578 - 106.700)	5	47	0	0	1	19	0	0	0	72	6.1%
Weaving segment at Exit 107 between the off-ramp to westbound I-20 and the loop on-ramp from westbound I-20	(MM 106.700 - 106.992)	5	67	0	0	1	22	0	0	0	95	8.1%
Weaving segment at Exit 107 between the loop on-ramp from westbound I-20 to the loop off-ramp to eastbound I-20	(MM 106.992 - 107.09)	2	7	0	0	0	3	0	0	0	12	1.0%
Weaving segment at Exit 107 between the southbound loop off-ramp to eastbound I-20 and the on-ramp from eastbound I-20	(MM 107.090 - 107.278)	16	39	0	0	2	29	0	0	0	86	7.3%
Weaving segment between the on-ramp from eastbound I-20 at Exit 107 and the I-26/I-126 split at Exit 108	(MM 107.278 - 107.613)	8	58	0	0	0	19	1	0	0	86	7.3%
Between the I-26/I-126 split and the on-ramp from westbound I-126	(MM 107.613 - 108.528)	25	28	0	0	4	30	0	0	0	87	7.4%
Between the on-ramp from westbound I-126 and the southbound off-ramp to Exit 110	(MM 108.528 - 109.177)	3	10	0	0	0	15	0	0	0	28	2.4%
Within Exit 110 between the southbound off-ramp and on-ramp	(MM 109.177 - 110.176)	7	57	1	0	1	11	0	0	0	77	6.6%
East of the southbound on-ramp at Exit 110	(MM 110.176 - 110.330)	3	3	0	0	0	1	0	0	0	7	0.6%
Total		192	711	1	0	25	236	1	4	1	1171	
Percentage		16.4%	60.7%	0.1%	0.0%	2.1%	20.2%	0.1%	0.3%	0.1%		

Crash Analysis

The Actual Crash Rate (ACR) for each of the segments along southbound I-26 was calculated to compare the segments against the statewide average ACR. For freeway segments, the statewide average ACR for all crashes is 92.2 per one hundred million vehicle miles (HMVM). The statewide average injury and fatality ACR for freeway segments is 27.5 HMVM and 0.77 HMVM respectively.

The ACR for all crashes for each segment, including the ramp crashes associated with those segments, are shown in **Table 2-8**. The ACR for all injury crashes are shown in **Table 2-9**.

As can be seen from **Table 2-8**, all but one of the segments of southbound I-26 exceed the statewide average ACR for freeway segments. The only segment that does not exceed the statewide average ACR is the northern most segment west of the southbound off-ramp to Exit 101.

As can be seen from **Table 2-9**, eleven of the eighteen segments of southbound I-26 exceed the statewide average for the overall Injury ACR. These segments include:

- Within Exit 103 between the southbound off-ramp and on-ramp
- Eight consecutive segments between the southbound on-ramp at Exit 104 to the on-ramp from westbound I-126 south of Exit 108
- The two southernmost segments between the southbound off-ramp to Exit 110 to the south end of the study area south of Exit 110.

The four fatal crashes that occurred along southbound I-26 took place on four separate segments. Each of these segments exceed the statewide average ACR for fatal crashes:

- On the southbound on-ramp at Exit 102 (ACR of 2.0)
- Within the weaving segment between the off-ramp to westbound I-20 and the loop on-ramp from westbound I-20 at Exit 107 (ACR of 5.6)
- Within the weaving segment between the on-ramp from eastbound I-20 at Exit 107 and the I-26/I-126 split at Exit 108 (ACR of 6.7)
- Between the southbound off-ramp and on-ramp at Exit 110 (ACR of 2.4).

Crash Analysis

Table 2-8: I-26 Southbound Segments - Actual Crash Rate (Total Crashes)

Segment	Mile Posts	Total Crashes	Segment Length	Segment AADT	Actual Crash Rate (per 100 MVM)
West of the southbound off-ramp to Exit 101	(MM 100.500 - 100.911)	7	0.411	51,400	60.5
Within Exit 101 between the southbound off-ramp and on-ramp	(MM 100.911 - 101.639)	27	0.729	71,500	94.6
Within Exit 102 between the southbound off-ramp and on-ramp	(MM 101.639 - 102.623)	56	0.984	93,200	111.5
Between the southbound on-ramp from Exit 102 and the off-ramp to Exit 103	(MM 102.623 - 103.031)	43	0.408	93,200	206.5
Within Exit 103 between the southbound off-ramp and on-ramp	(MM 103.031 - 103.618)	55	0.587	104,700	163.5
Between the southbound on-ramp at Exit 103 and the off-ramp at Exit 104	(MM 103.618 - 103.874)	32	0.256	104,700	218.1
Within Exit 104 between the southbound off-ramp and on-ramp	(MM 103.874 - 104.662)	75	0.788	115,500	150.5
Between the southbound on-ramp at Exit 104 and the off-ramp to Exit 106	(MM 104.662 - 105.986)	182	1.324	115,500	217.4
Within Exit 106 between the southbound off-ramp and the southbound on-ramp	(MM 105.986 - 106.578)	144	0.592	133,600	332.5
Weaving segment between the southbound on-ramp at Exit 106 and the off-ramp to westbound I-20 at Exit 107	(MM 106.578 - 106.700)	72	0.122	133,600	806.8
Weaving segment at Exit 107 between the off-ramp to westbound I-20 and the loop on-ramp from westbound I-20	(MM 106.700 - 106.992)	95	0.292	112,500	528.2
Weaving segment at Exit 107 between the loop on-ramp from westbound I-20 to the loop off-ramp to eastbound I-20	(MM 106.992 - 107.09)	12	0.098	112,500	198.8
Weaving segment at Exit 107 between the southbound loop off-ramp to eastbound I-20 and the on-ramp from eastbound I-20	(MM 107.090 - 107.278)	86	0.188	112,500	742.7
Weaving segment between the on-ramp from eastbound I-20 at Exit 107 and the I-26/I-126 split at Exit 108	(MM 107.278 - 107.613)	86	0.335	81,000	578.9
Between the I-26/I-126 split and the on-ramp from westbound I-126	(MM 107.613 - 108.528)	87	0.915	81,000	214.4
Between the on-ramp from westbound I-126 and the southbound off-ramp to Exit 110	(MM 108.528 - 109.177)	28	0.649	81,000	97.3
Within Exit 110 between the southbound off-ramp and on-ramp	(MM 109.177 - 110.176)	77	0.999	77,600	181.4
East of the southbound on-ramp at Exit 110	(MM 110.176 - 110.330)	7	0.154	77,600	107.0

Crash Analysis

Table 2-9: I-26 Southbound Segments - Actual Crash Rates (Injury Crashes)

Segment	Mile Posts	Total Injury Crashes	Segment Length	Segment AADT	Actual Crash Rate (per 100 MVM)
West of the southbound off-ramp to Exit 101	(MM 100.500 - 100.911)	2	0.411	51,400	17.3
Within Exit 101 between the southbound off-ramp and on-ramp	(MM 100.911 - 101.639)	4	0.729	71,500	14.0
Within Exit 102 between the southbound off-ramp and on-ramp	(MM 101.639 - 102.623)	11	0.984	93,200	21.9
Between the southbound on-ramp from Exit 102 and the off-ramp to Exit 103	(MM 102.623 - 103.031)	3	0.408	93,200	14.4
Within Exit 103 between the southbound off-ramp and on-ramp	(MM 103.031 - 103.618)	11	0.587	104,700	32.7
Between the southbound on-ramp at Exit 103 and the off-ramp at Exit 104	(MM 103.618 - 103.874)	4	0.256	104,700	27.3
Within Exit 104 between the southbound off-ramp and on-ramp	(MM 103.874 - 104.662)	9	0.788	115,500	18.1
Between the southbound on-ramp at Exit 104 and the off-ramp to Exit 106	(MM 104.662 - 105.986)	33	1.324	115,500	39.4
Within Exit 106 between the southbound off-ramp and the southbound on-ramp	(MM 105.986 - 106.578)	31	0.592	133,600	71.6
Weaving segment between the southbound on-ramp at Exit 106 and the off-ramp to westbound I-20 at Exit 107	(MM 106.578 - 106.700)	13	0.122	133,600	145.7
Weaving segment at Exit 107 between the off-ramp to westbound I-20 and the loop on-ramp from westbound I-20	(MM 106.700 - 106.992)	18	0.292	112,500	100.1
Weaving segment at Exit 107 between the loop on-ramp from westbound I-20 to the loop off-ramp to eastbound I-20	(MM 106.992 - 107.09)	3	0.098	112,500	49.7
Weaving segment at Exit 107 between the southbound loop off-ramp to eastbound I-20 and the on-ramp from eastbound I-20	(MM 107.090 - 107.278)	14	0.188	112,500	120.9
Weaving segment between the on-ramp from eastbound I-20 at Exit 107 and the I-26/I-126 split at Exit 108	(MM 107.278 - 107.613)	12	0.335	81,000	80.8
Between the I-26/I-126 split and the on-ramp from westbound I-126	(MM 107.613 - 108.528)	20	0.915	81,000	49.3
Between the on-ramp from westbound I-126 and the southbound off-ramp to Exit 110	(MM 108.528 - 109.177)	3	0.649	81,000	10.4
Within Exit 110 between the southbound off-ramp and on-ramp	(MM 109.177 - 110.176)	15	0.999	77,600	35.3
East of the southbound on-ramp at Exit 110	(MM 110.176 - 110.330)	3	0.154	77,600	45.9

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The accidents occurring during the morning and afternoon peak periods for each day of the week and on typical weekdays (Tuesday through Thursday) were plotted on graphs. The resulting graphs are shown in **Figures 2.2 through 2.9**. From the graphs, the general locations of the most frequently occurring crashes can be identified. For example, in **Figure 2.2**, the southbound segments with the most crashes occurred between 7:00 and 8:00 AM within Exit 104, between Exit 104 and Exit 106, within Exit 106, and at Exit 107 between the loop off-ramp to eastbound I-20 and the I-26/I-126 split.

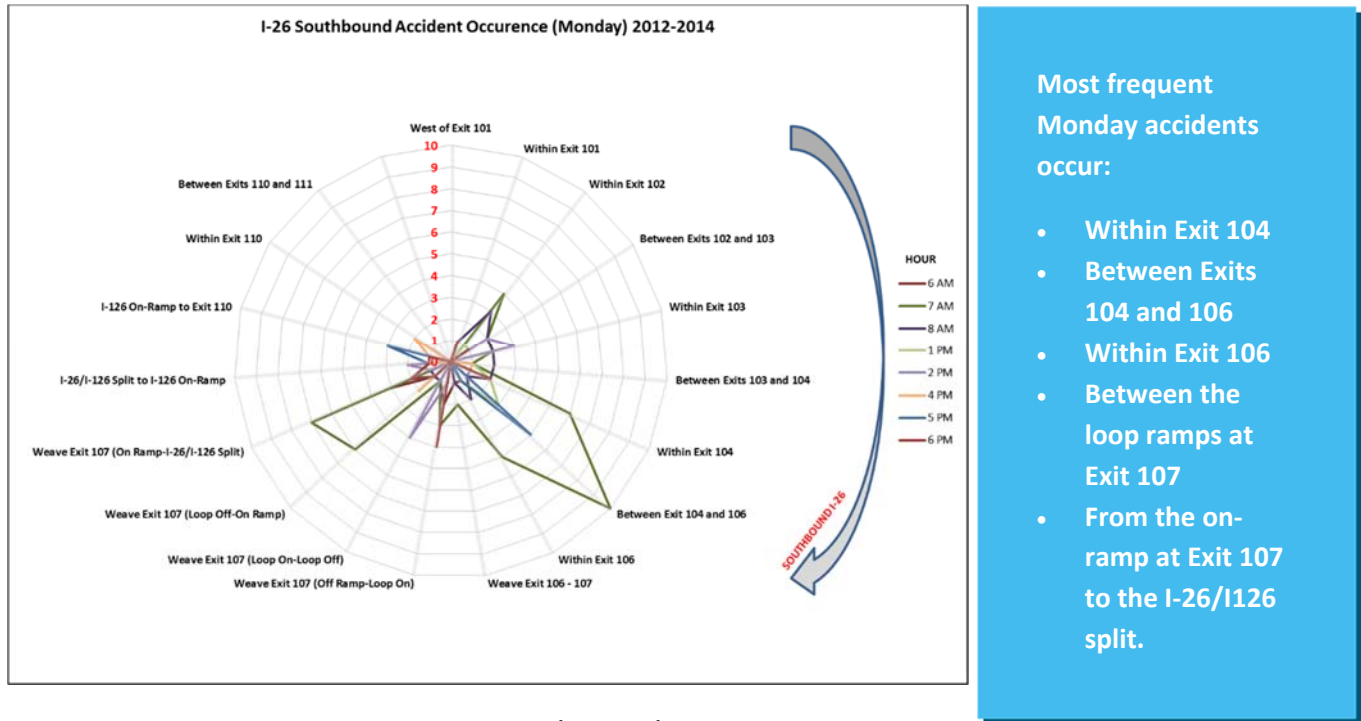
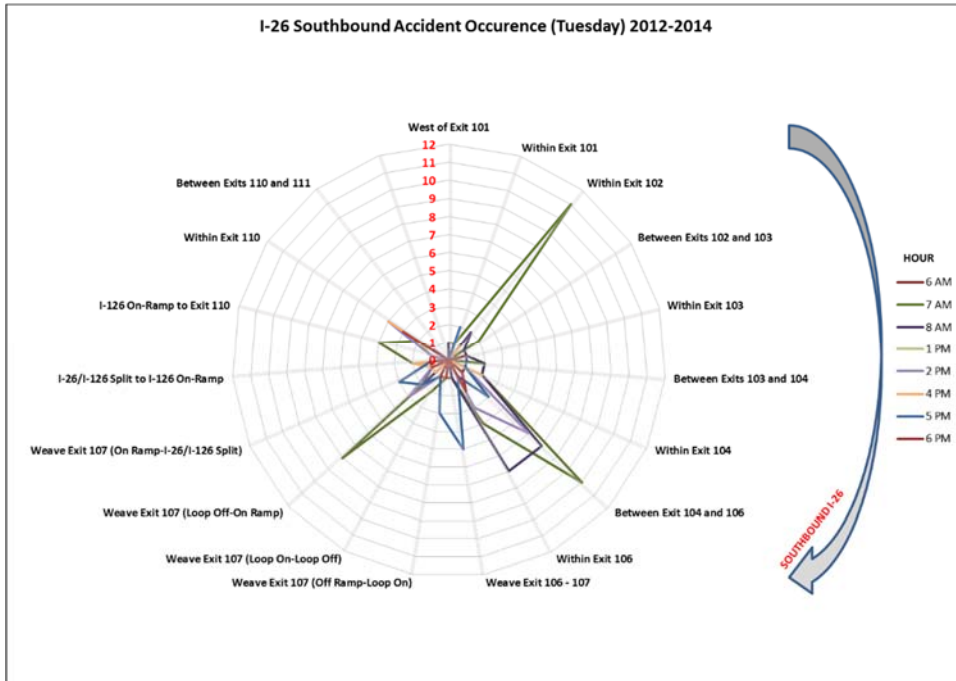


Figure 2.2: Southbound I-26 Accident Occurrence (Monday)

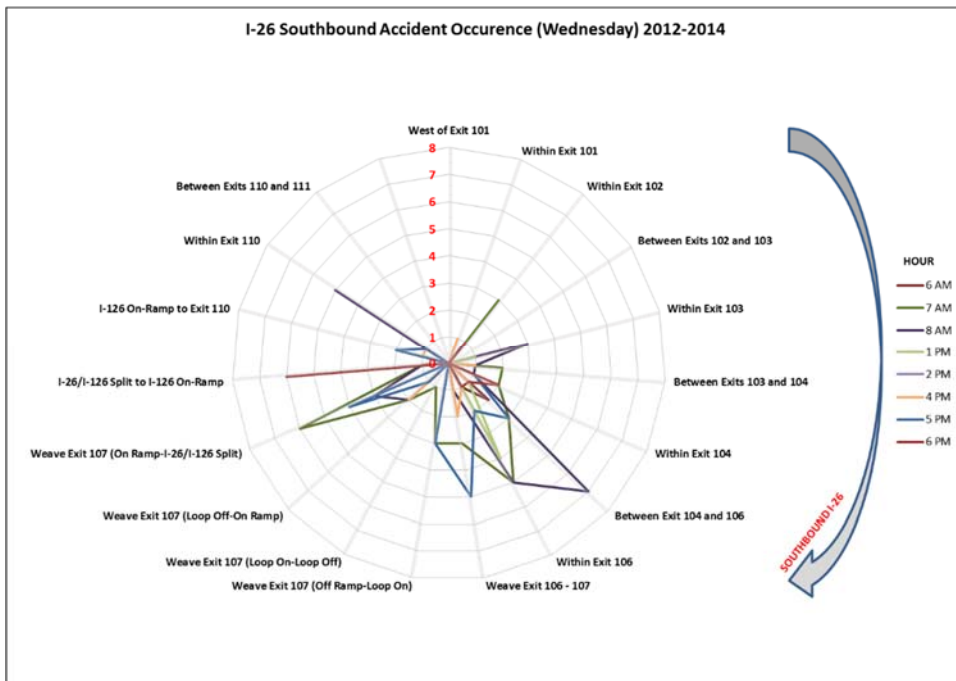
Crash Analysis



Most frequent Tuesday accidents occur:

- Within Exit 102
- Between Exits 104 and 106
- Within Exit 106
- In the weaving area between Exits 106 and 107
- In the weaving area between the loop ramps at Exit 107

Figure 2.3: Southbound I-26 Accident Occurrence (Tuesday)

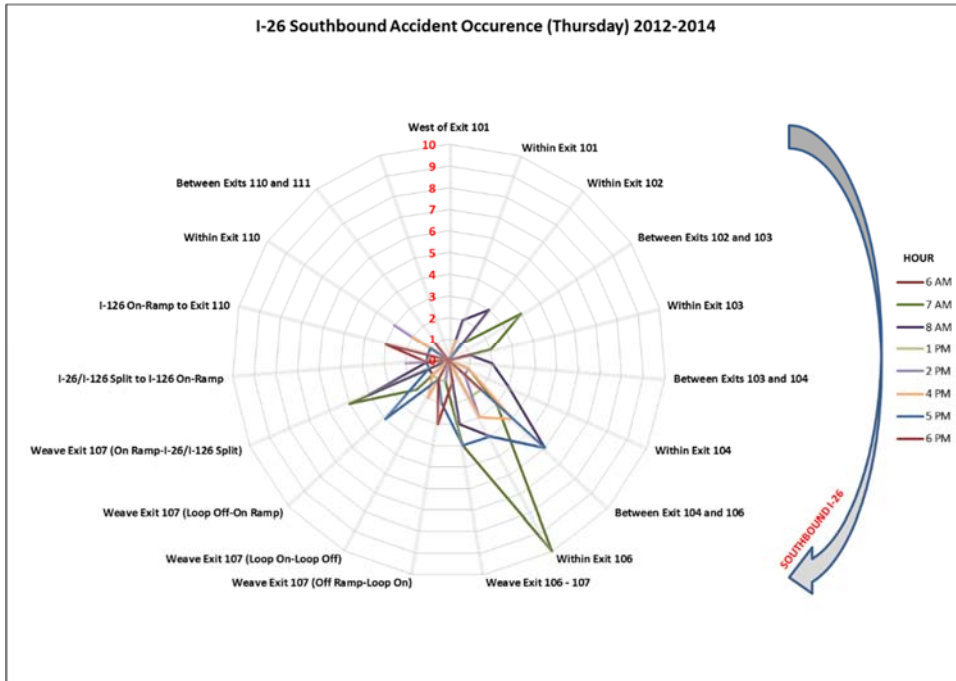


Most frequent Wednesday accidents occur:

- Between Exits 104 and 106
- Within Exit 106
- In the weaving area between Exits 106 and 107
- From the on-ramp at Exit 107 to the I-26/I126 split.

Figure 2.4: Southbound I-26 Accident Occurrence (Wednesday)

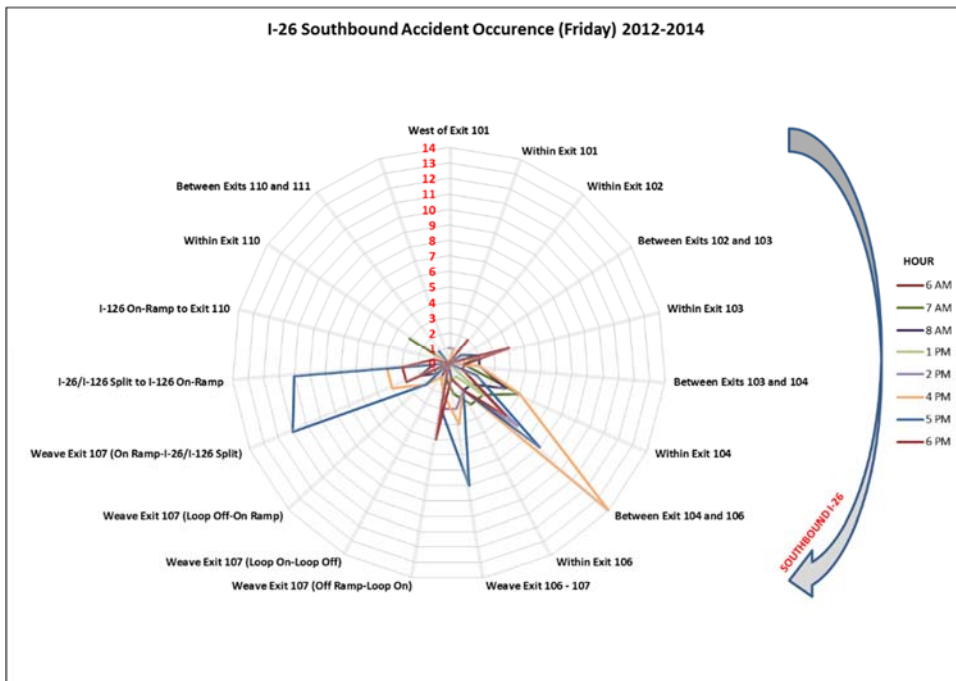
Crash Analysis



Most frequent Thursday accidents occur:

- Between Exits 104 and 106
- Within Exit 106
- In the weaving area between Exits 106 and 107

Figure 2.5: Southbound I-26 Accident Occurrence (Thursday)

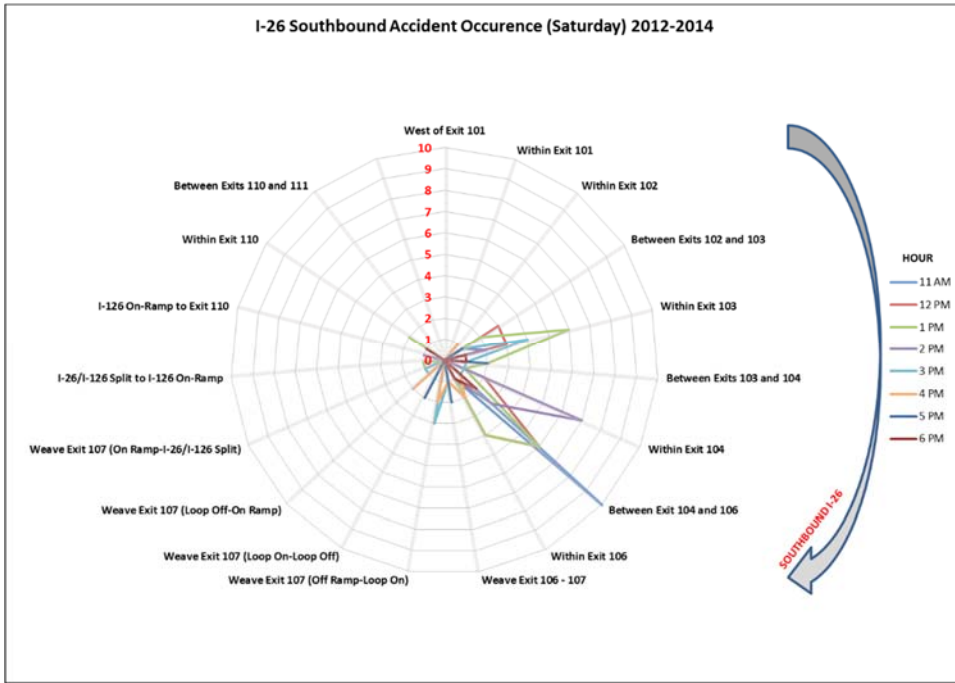


Most frequent Friday accidents occur:

- Between Exits 104 and 106
- Weaving section between Exits 106 and 107
- From the on-ramp at Exit 107 to the I-26/I-126 split.
- From the I-26/I-126 split to the I-126 on-ramp

Figure 2.6: Southbound I-26 Accident Occurrence (Friday)

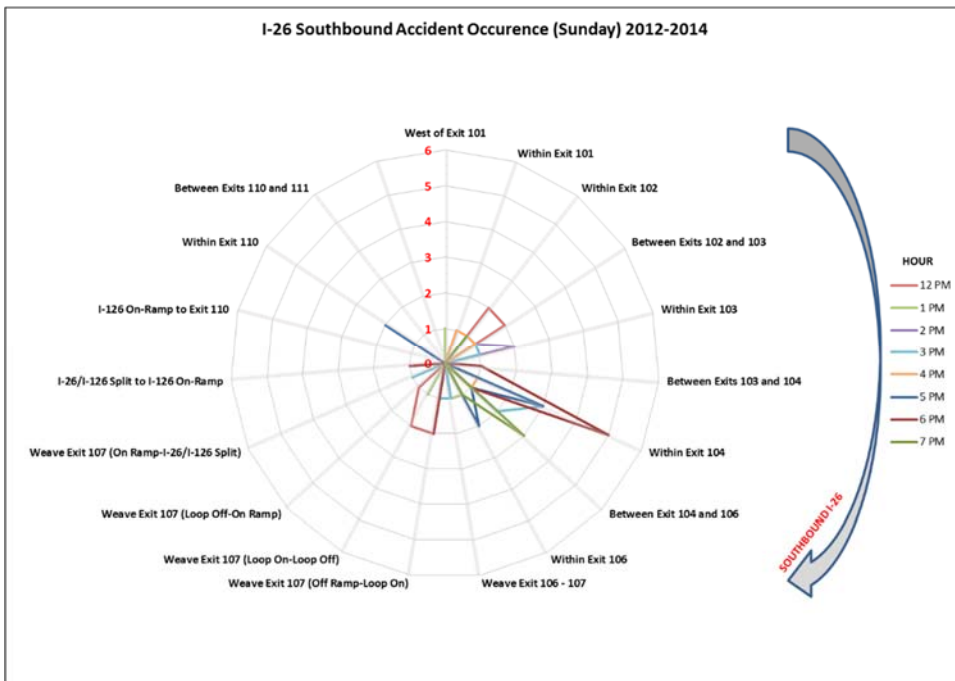
Crash Analysis



Most frequent Saturday accidents occur:

- Within Exit 103
- Within Exit 104
- Between Exits 104 and 106

Figure 2.7: Southbound I-26 Accident Occurrence (Saturday)

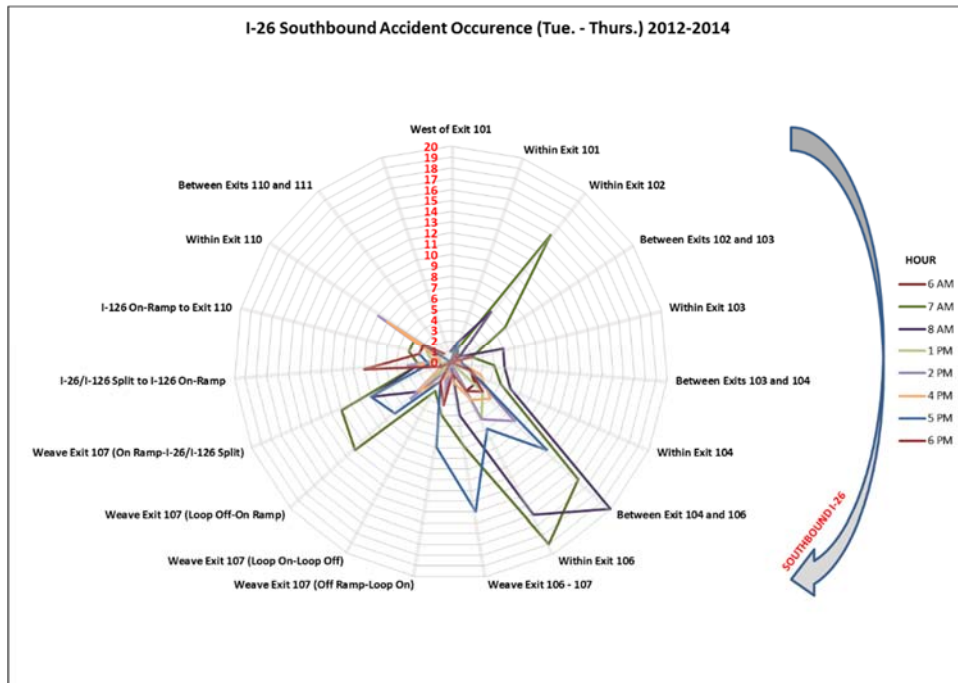


Most frequent Sunday accidents occur:

- Within Exit 104
- Between Exits 104 and 106

Figure 2.8: Southbound I-26 Accident Occurrence (Sunday)

Crash Analysis



Most frequent Weekday accidents occur at:

- Within Exit 102
- Between Exits 104 and 106
- Within Exit 106
- Between Exits 106 and 107
- Between the loop ramps at Exit 107
- From the on-ramp at Exit 107 to the I-26/I126 split.

Figure 2.9: Southbound I-26 Accident Occurrence (Typical Weekday)

The following sections contain a detailed review of crash data for each segment of southbound I-26. Collision diagrams for the freeway segments and interchange areas of southbound I-26 are shown in Appendix A.

2.1.1 NORTH OF EXIT 101 (MM 100.500-100.911)

Seven crashes were reported on the 0.411 mile long segment of southbound I-26 north of the southbound off-ramp to Broad River Road at Exit 101. **Table 2-10** summarizes crash data based on the collision type and injury severity. No fatal crashes were reported. Two crashes resulted in or possible injury, while five resulted in PDO.

Table 2-11 summarizes crash data by injury severity, lighting and pavement surface condition. Both the injury crashes reported in this segment resulted in non-incapacitating injuries. Most of the crashes occurred during daylight and on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix A (Figures A-1 and A-2).

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Table 2-10: I-26 Southbound (North of Exit 101) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	1	3	4	57.1%
Rear End	0	0	1	0	1	2	28.6%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	0	1	1	14.3%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	1	1	5	7	
Percentage	0.0%	0.0%	14.3%	14.3%	71.4%		

Table 2-11: I-26 Southbound (North of Exit 101) - Lighting and Pavement Condition

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	1	0	0	0	1	0	0	1	14.3%
Possible Injury	1	0	0	1	0	0	0	1	14.3%
Property Damage Only	4	0	1	5	0	0	0	5	71.4%
Total	6	0	1	6	1	0	0	7	
Percentage	85.7%	0.0%	14.3%	85.7%	14.3%	0.0%	0.0%		

2.1.2 WITHIN EXIT 101 (MM 100.911 - 101.639)

Twenty seven crashes were reported in this 0.728 mile long segment of southbound I-26. No fatal crashes were reported, while four crashes resulted in injury. The remaining twenty three crashes were PDO.

Table 2-12 summarizes crash data based on the collision type and injury severity.

As can be seen from **Table 2-12**, approximately 37 percent of the crashes in this segment resulted from *no collision with motor vehicle* and *rear end* crashes. The reminder of the crashes were caused by *angle* and *sideswipe in the same direction* collisions. Eleven of the crashes occurred on the ramps at Exit 101: two were possible injury and nine were PDO.

Crash Analysis

Table 2-12: I-26 Southbound (within Exit 101) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	2	8	10	37.0%
Rear End	0	0	0	1	9	10	37.0%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	1	1	2	7.4%
Sideswipe Same Direction	0	0	0	0	5	5	18.5%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	0	4	23	27	
Percentage	0.0%	0.0%	0.0%	14.8%	85.2%		

Table 2-13 summarizes crash data based on injury severity, lighting and pavement surface conditions. Four injury crashes were reported in this segment. All four injury crashes resulted in possible injuries. Most of the injury crashes took place during daylight and on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix A (Figures A-3 and A-4).

Table 2-13: I-26 Southbound (Within Exit 101) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non Inapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Possible Injury	3	0	1	3	1	0	0	4	14.8%
Property Damage Only	19	0	4	14	9	0	0	23	85.2%
Total	22	0	5	17	10	0	0	27	
Percentage	81.5%	0.0%	18.5%	63.0%	37.0%	0.0%	0.0%		

Crash Analysis

2.1.3 WITHIN EXIT 102 (MM 101.639 - 102.623)

Fifty six crashes were reported in this 0.984 mile long segment of southbound I-26 between the off-ramp and the on-ramp to/from Lake Murray Boulevard at Exit 102. One fatal crash, eleven injury crashes and 44 PDO crashes were reported. **Table 2-14** summarizes crash data based on the collision type and injury severity.

Table 2-14: I-26 Southbound (Within Exit 102) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	1	0	1	7	11	20	35.7%
Rear End	0	0	1	2	23	26	46.4%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	3	3	5.4%
Sideswipe Same Direction	0	0	0	0	7	7	12.5%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	1	0	2	9	44	56	
Percentage	1.8%	0.0%	3.6%	16.1%	78.6%		

The fatal crash occurred on the southbound on-ramp from Lake Murray Boulevard to southbound I-26 on Wednesday, June 11, 2014 at 3:45 PM. The fatal crash was the result of an overturn/rollover. There were nine crashes occurring on the ramps at this interchange. In addition to the fatal crash, there were two possible injury crashes and six PDO crashes.

A high percentage of crashes, approximately 36 percent, resulted from *no collision with motor vehicle* type accidents. Fourteen of the twenty *no collision with motor vehicle* crashes were caused by three causes: hitting the median barrier (nine crashes with four crashes resulting in injury), hitting the face of the guardrail (three crashes with one resulting in injury), and running into a ditch (two crashes, both resulting in injury). Eight of the twenty *no collision with motor vehicle* crashes resulted in injury; the three remaining injury crashes were caused by *rear end* crashes.

Table 2-15 summarizes crash data based on injury severity, lighting and pavement surface conditions. The fatal crash that occurred in this segment took place during daylight and on dry pavement. All eleven injury crashes resulted in non-incapacitating or possible injuries. Most of the injury crashes took place during daylight. However, approximately 45 percent of all injury crashes occurred on wet pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix A (Figures A-5 and A-6).

Crash Analysis

Table 2-15: I-26 Southbound (Within Exit 102) Lighting and Pavement Condition

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	1	0	0	1	0	0	0	1	1.8%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non Inapacitating Injury	2	0	0	1	1	0	0	2	3.6%
Possible Injury	8	0	1	5	4	0	0	9	16.1%
Property Damage Only	41	1	2	33	11	0	0	44	78.6%
Total	52	1	3	40	16	0	0	56	
Percentage	92.9%	1.8%	5.4%	71.4%	28.6%	0.0%	0.0%		

2.1.4 BETWEEN EXIT 102 AND EXIT 103 (MM 102.623 - 103.031)

Forty three crashes were reported in this 0.408 mile long segment of southbound I-26 between the on-ramp from Lake Murray Boulevard at Exit 102 and the off-ramp to Harbison Boulevard at Exit 103. **Table 2-16** summarizes crash data based on the collision type and injury severity. No fatal crashes were reported along this segment. Three crashes resulted in injury and forty crashes resulted in PDO. Two of the injury crashes were caused by *no collision with motor vehicle* type accidents, while one was caused by a *sideswipe in the same direction* accident.

Table 2-16: I-26 Southbound (between Exits 102 and 103) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	2	10	12	27.9%
Rear End	0	0	0	0	25	25	58.1%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	1	5	6	14.0%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	0	3	40	43	
Percentage	0.0%	0.0%	0.0%	7.0%	93.0%		

Crash Analysis

Most of the collisions were caused by *rear end* collisions. Approximately 28 percent of all collisions resulted from *no collision with motor vehicle* type accidents. Four of these crashes resulted in crashes with other moveable objects. *Sideswipe in the same direction* collisions accounted for the remaining 14 percent of the crashes.

Table 2-17 summarizes crash data based on injury severity, lighting and pavement surface conditions. Three possible injury crashes were reported. All of these crashes occurred during daylight and on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix A (Figures A-7 and A-8).

Table 2-17: I-26 Southbound (between Exits 102 and 103) Lighting and Pavement Condition

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non Inapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Possible Injury	3	0	0	3	0	0	0	3	7.0%
Property Damage Only	32	1	7	35	5	0	0	40	93.0%
Total	35	1	7	38	5	0	0	43	
Percentage	81.4%	2.3%	16.3%	88.4%	11.6%	0.0%	0.0%		

2.1.5 WITHIN EXIT 103 (MM 103.031 - 103.618)

Fifty five crashes occurred in this 0.587 mile long segment of southbound I-26 between the off-ramp and the on-ramp to/from Harbison Boulevard at Exit 103. **Table 2-18** summarizes crash data by collision type and injury severity. No fatal crashes were reported. Eleven crashes resulted in injury and the remaining forty four crashes resulted in property damage. Nine injury crashes were caused by *rear end* collisions, while *sideswipe in the same direction* and *no collision with motor vehicle* type accidents also caused one injury collision each.

Seven crashes occurred on ramps at Exit 103. Two resulted in possible injuries and five were PDO. All seven were *rear end* crashes.

Crash Analysis

Table 2-18: I-26 Southbound (within Exit 103) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	1	4	5	9.1%
Rear End	0	0	1	8	35	44	80.0%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	1	4	5	9.1%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	1	1	1.8%
Other	0	0	0	0	0	0	0.0%
Total	0	0	1	10	44	55	
Percentage	0.0%	0.0%	1.8%	18.2%	80.0%		

Most of the crashes (approximately 80 percent) on this segment are caused by *rear end* collisions. *No collision with motor vehicles* and *sideswipe in the same direction* accidents accounted for nine percent of the crashes each.

Table 2-19 summarizes crash data based on injury severity, lighting and pavement surface conditions. Approximately twenty percent of all crashes resulted in injury. All injury crashes occurred on dry pavement, while most of the crashes (approximately 63 percent) occurred during daylight. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix A (Figures A-9 and A-10).

Table 2-19: I-26 Southbound (within Exit 103) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non Inapacitating Injury	0	0	1	1	0	0	0	1	1.8%
Possible Injury	7	0	3	10	0	0	0	10	18.2%
Property Damage Only	36	0	8	38	6	0	0	44	80.0%
Total	43	0	12	49	6	0	0	55	
Percentage	78.2%	0.0%	21.8%	89.1%	10.9%	0.0%	0.0%		

Crash Analysis

2.1.6 BETWEEN EXIT 103 AND EXIT 104 (BETWEEN MM 103.618 - 103.874)

Thirty two crashes were reported in this 0.256 mile long segment of southbound I-26 between the on-ramp from Harbison Boulevard at Exit 103 and the off-ramp to Piney Grove Road at Exit 104. **Table 2-20** summarizes crash data based on the collision type and injury severity. No fatal crashes were reported in this segment. Four crashes resulted in injury or possible injury and twenty eight crashes resulted in PDO. One non-incapacitating injury crash was caused by a *rear end* collision. The three possible injury crashes were caused by a *no collision with motor vehicle*, an *angle* collision and an *angle* crash.

Table 2-20: I-26 Southbound (between Exits 103 and 104) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	1	5	6	18.8%
Rear End	0	0	1	1	13	15	46.9%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	1	1	2	6.3%
Sideswipe Same Direction	0	0	0	0	9	9	28.1%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	1	3	28	32	
Percentage	0.0%	0.0%	3.1%	9.4%	87.5%		

Most of the crashes in this segment were caused by *rear end*, *sideswipe in the same direction* and *no collision with motor vehicle* type collisions.

Table 2-21 summarizes crash data based on injury severity, lighting and pavement surface conditions. Four injury or possible injury crashes occurred during the daytime, while three of the four crashes occurred on wet pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix A (Figures A-11 and A-12).

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Table 2-21: I-26 Southbound (between Exits 103 and 104) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non Incapacitating Injury	1	0	0	0	1	0	0	1	3.1%
Possible Injury	3	0	0	1	2	0	0	3	9.4%
Property Damage Only	24	0	4	19	9	0	0	28	87.5%
Total	28	0	4	20	12	0	0	32	
Percentage	87.5%	0.0%	12.5%	62.5%	37.5%	0.0%	0.0%		

2.1.7 WITHIN EXIT 104 (MM 103.874 - 104.662)

Seventy five collisions were reported within this 0.788 mile long segment of southbound I-26 between the off-ramp and on-ramp to/from Piney Grove Road at Exit 104. **Table 2-22** summarizes crash data based on the collision type and injury severity. No fatal crashes were reported along this segment. Nine crashes resulted in non-incapacitating injury or possible injury, while 66 crashes were PDO.

Table 2-22: I-26 Southbound (within Exit 104) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	1	6	7	9.3%
Rear End	0	0	1	6	50	57	76.0%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	2	2	2.7%
Sideswipe Same Direction	0	0	0	1	7	8	10.7%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	1	1	1.3%
Other	0	0	0	0	0	0	0.0%
Total	0	0	1	8	66	75	
Percentage	0.0%	0.0%	1.3%	10.7%	88.0%		

Rear end collisions are the most frequent type of collision in this segment, followed by *sideswipe in the same direction* and *no collision with motor vehicle* type collisions. The one non-incapacitating injury crash was the result of a *rear end* crash. Of the eight possible injury crashes, six were caused by *rear end* collisions, one by

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sideswipe in the same direction and one by *no collision with motor vehicle*. Approximately 88 percent of all crashes in this segment were PDO crashes. Most of them were caused by *rear end collisions, sideswipe in the same direction* and *no collision with motor vehicle* type accidents.

Twelve crashes were located on the ramps at Exit 104. Of these 12 crashes, one was a possible injury crash and the remaining eleven were PDO. Eight of the twelve ramp crashes were the result of *rear end* crashes; three were the result of *no collision with motor vehicle* crashes and one was a *sideswipe same direction* crash.

Table 2-23 summarizes crash data based on injury severity, lighting and pavement surface conditions. Most of the crashes occurred during daylight. The one non-incapacitating injury crash occurred in daylight on dry pavement. Five of the possible injury crashes occurred on dry pavement, while the remaining three occurred on wet pavement. Most of the PDO crashes occurred on dry pavement and during daylight. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix A (Figures A-13 and A-14).

Table 2-23: I-26 Southbound (within Exit 104) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non Inapacitating Injury	1	0	0	0	1	0	0	1	1.3%
Possible Injury	7	0	1	5	3	0	0	8	10.7%
Property Damage Only	58	1	7	52	14	0	0	66	88.0%
Total	66	1	8	57	18	0	0	75	
Percentage	88.0%	1.3%	10.7%	76.0%	24.0%	0.0%	0.0%		

2.1.8 BETWEEN EXIT 104 AND EXIT 106 (MM 104.662 AND MM 105.986)

One hundred and eighty two crashes were reported in this 1.324 mile long segment of southbound I-26 between the on-ramp from Piney Grove Road at Exit 104 and the off-ramp to Saint Andrews Road at Exit 106. **Table 2-24** summarizes the crash data by collision type and injury severity.

Most of the collisions in this segment were caused by *rear end* collisions, followed by *sideswipe in the same direction* and *no collision with motor vehicle* accidents. No fatal crashes were reported in this segment. One crash was a non-incapacitating injury crash, 32 were possible injury crashes, and 149 crashes were PDO.

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Table 2-24: I-26 Southbound (between Exits 104 and 106) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	1	6	13	20	11.0%
Rear End	0	0	0	22	109	131	72.0%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	2	2	1.1%
Sideswipe Same Direction	0	0	0	4	24	28	15.4%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	1	1	0.5%
Total	0	0	1	32	149	182	
Percentage	0.0%	0.0%	0.5%	17.6%	81.9%		

Approximately 72 percent of all reported injury or possible injury crashes (twenty two of thirty three reported crashes) were caused by *rear end* collisions. Seven injury or possible injury crashes were caused by *no collision with motor vehicle* collisions, while the remaining four injury crashes were caused by *sideswipe in the same direction* crashes.

Table 2-25 summarizes crash data based on injury severity, lighting and pavement surface conditions. Nearly 90 percent of the crashes occurred in daylight, while 76 percent occurred on dry pavement. About 24 percent of the crashes occurred on wet pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix A (Figures A-15 and A-16 for the west portion and A-17 and A-18 for the east portion of the freeway segment between Exits 104 and 106).

Table 2-25: I-26 Southbound (between Exits 104 and 106) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non Inapacitating Injury	1	0	0	1	0	0	0	1	0.5%
Possible Injury	27	1	4	23	9	0	0	32	17.6%
Property Damage Only	134	2	13	114	34	1	0	149	81.9%
Total	162	3	17	138	43	1	0	182	
Percentage	89.0%	1.6%	9.3%	75.8%	23.6%	0.5%	0.0%		

Crash Analysis

2.1.9 WITHIN EXIT 106 (MM 105.986 AND 106.578)

One hundred and forty four crashes were reported in this 0.592 mile segment of I-26 southbound between the off-ramp to and the on-ramp from Saint Andrews Road at Exit 106. This segment also includes the loop on-ramp between the other two ramps. **Table 2-26** summarizes the crash data by collision type and injury severity. No fatal crashes were reported in this segment; thirty one crashes resulted in injury (six non-incapacitating injury crashes and 25 possible injury crashes) and the 113 crashes were PDO.

Rear end collisions are the most frequent type of collision in this segment, followed by *no collision with motor vehicles*. Thirty five percent of all *no collision with motor vehicle* collisions resulted in injury. Four of the six non-incapacitating injury crashes and eight of the 25 possible injury crashes were the result of *no collision with motor vehicle* crashes.

Table 2-26: I-26 Southbound (within Exit 106) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	4	8	22	34	23.6%
Rear End	0	0	0	15	70	85	59.0%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	1	1	3	5	3.5%
Sideswipe Same Direction	0	0	1	1	16	18	12.5%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	2	2	1.4%
Other	0	0	0	0	0	0	0.0%
Total	0	0	6	25	113	144	
Percentage	0.0%	0.0%	4.2%	17.4%	78.5%		

Thirteen of the 34 *no collision with motor vehicle* crashes involved cars entering a ditch. Six were two-wheeled vehicle spills, and five were collisions with the median barrier.

Twenty seven crashes occurred on the ramps within Exit 106. Nineteen of these crashes were *no collision with motor vehicle* crashes, six were *rear end* crashes, and two were *angle* crashes.

Table 2-25 summarizes the crash data based on injury severity, lighting and pavement surface conditions. Most of the injury crashes occurred during the daytime. Approximately 35 percent of all non-incapacitating injury and possible injury crashes occurred in wet pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix A (Figures A-19 and A-20 for the off-ramp portion and Figures A-21 and A-22 for the on-ramp portion of the segments within the interchange limits).

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Table 2-27: I-26 Southbound (within Exit 106) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non Incapacitating Injury	6	0	0	5	1	0	0	6	4.2%
Possible Injury	20	1	4	16	9	0	0	25	17.4%
Property Damage Only	92	4	17	73	40	0	0	113	78.5%
Total	118	5	21	94	50	0	0	144	
Percentage	81.9%	3.5%	14.6%	65.3%	34.7%	0.0%	0.0%		

2.1.10 WEAVE BETWEEN EXIT 106 AND EXIT 107 (BETWEEN MM 106.578 AND 106.7)

Seventy two crashes were reported in this 0.155 mile segment of southbound I-26 between the on-ramp from Saint Andrews Road at Exit 106 and the off-ramp to westbound I-20 at Exit 107. **Table 2-28** summarizes the crash data by collision type and injury severity.

No fatal crashes were reported in this segment. Thirteen crashes resulted in possible injury and 59 crashes resulted in PDO.

Table 2-28: I-26 Southbound (Weave between Exits 106 and 107) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	1	4	5	6.9%
Rear End	0	0	0	9	38	47	65.3%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	1	1	1.4%
Sideswipe Same Direction	0	0	0	3	16	19	26.4%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	0	13	59	72	
Percentage	0.0%	0.0%	0.0%	18.1%	81.9%		

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Rear end collisions are the most frequent type of collision in this segment, followed by *sideswipe in the same direction* crashes. Approximately 69 percent of all possible injury crashes (nine of thirteen) were caused by *rear end* collisions. One crash occurred on a ramp at this interchange. The crash was a *no collision with motor vehicle* crash that resulted in possible injury.

Table 2-29 summarizes crash data based on injury severity, lighting and pavement surface conditions. Most of the crashes and most of the possible injury crashes took place during daylight and on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix A (Figures A-23 and A-24).

Table 2-29: I-26 Southbound (Weave between Exits 106 and 107) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non Inapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Possible Injury	10	1	2	11	2	0	0	13	18.1%
Property Damage Only	52	2	5	53	6	0	0	59	81.9%
Total	62	3	7	64	8	0	0	72	
Percentage	86.1%	4.2%	9.7%	88.9%	11.1%	0.0%	0.0%		

2.1.11 EXIT 107 BETWEEN OFF-RAMP TO I-20 WESTBOUND AND LOOP ON-RAMP FROM I-20 WESTBOUND (MM 106.7 AND 106.992)

Ninety five crashes were reported in this 0.292 mile long segment of southbound I-26 between the off-ramp to I-20 westbound and the loop on-ramp from I-20 westbound. **Table 2-30** summarizes crash data by collision type and injury severity. One fatal crash, which was the result of a *rear end* collision was reported on this segment. The crash occurred on Saturday, January 12, 2012 at 3:50 AM in the dark on wet pavement. There were also one non-incapacitating injury crash, 17 possible injury crashes and 72 PDO crashes reported along this segment.

There were three crashes occurring on the ramps at this interchange. One crash was due to a *no collision with motor vehicle* crash, and two resulted from *rear end* crashes. All three crashes were PDO.

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Table 2-30: I-26 Southbound (Exit 107 between Off-Ramp and Loop On-Ramp) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	0	5	5	5.3%
Rear End	1	0	1	15	50	67	70.5%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	1	1	1.1%
Sideswipe Same Direction	0	0	0	2	20	22	23.2%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	1	0	1	17	76	95	
Percentage	1.1%	0.0%	1.1%	17.9%	80.0%		

Seventy percent of all crashes in this segment were caused by *rear end* collisions, followed by *sideswipe in the same direction* collisions. Approximately 24 percent of all *rear end* collisions resulted in one non-incapacitating injury crash and fifteen possible injury crashes. Two possible injury crashes were caused by *sideswipe in the same direction* type collisions.

Table 2-31 summarizes crash data based on injury severity, lighting and pavement surface condition. The fatal accident took place during dark, unlit conditions and on wet pavement. The incapacitating injury crash and most of the possible injury crashes occurred during daylight and on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix A (Figures A-25 and A-26).

Table 2-31: I-26 Southbound (Exit 107 between Off-Ramp and Loop On-Ramp) - Lighting and Pavement Condition

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	1	0	1	0	0	1	1.1%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non Incapacitating Injury	1	0	0	1	0	0	0	1	1.1%
Possible Injury	14	1	2	15	2	0	0	17	17.9%
Property Damage Only	63	0	13	64	12	0	0	76	80.0%
Total	78	1	16	80	15	0	0	95	
Percentage	82.1%	1.1%	16.8%	84.2%	15.8%	0.0%	0.0%		

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2.1.12 EXIT 107 LOOP ON RAMP/LOOP OFF RAMP WEAVING SEGMENT (MM 106.992 AND 107.09)

Twelve crashes were reported on this 0.098 mile long segment of southbound I-26 between the loop on-ramp from westbound I-20 and the loop off-ramp to eastbound I-20. The crash data are summarized by collision type in **Table 2-32**. Most of the crashes were caused by *rear end* collisions followed by *sideswipe in the same direction* collisions. No fatal crashes were reported in this segment. Three possible injury crashes were reported: two resulting from *no collision with motor vehicle* collisions and one resulting from a *sideswipe in the same direction* collision.

Table 2-32: I-26 Southbound (Weave at Exit 107) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	2	0	2	16.7%
Rear End	0	0	0	0	7	7	58.3%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	1	2	3	25.0%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	0	3	9	12	
Percentage	0.0%	0.0%	0.0%	25.0%	75.0%		

Table 2-33 summarizes crash data based on injury severity, lighting and pavement surface conditions. Most of the possible injury crashes occurred during daylight and on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix A (Figures A-27 and A-28).

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Table 2-33: I-26 Southbound (Weave at Exit 107) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Possible Injury	2	0	1	3	0	0	0	3	25.0%
Property Damage Only	7	0	2	6	3	0	0	9	75.0%
Total	9	0	3	9	3	0	0	12	
Percentage	75.0%	0.0%	25.0%	75.0%	25.0%	0.0%	0.0%		

2.1.13 WEAVE AT EXIT 107 BETWEEN LOOP RAMPS AND I-20 EASTBOUND ON-RAMP (MM 107.09 AND 107.278)

Eighty six crashes were reported in this 0.188 mile segment of southbound I-26 between the location of the weaving section between the loop on-ramp from westbound I-20/loop off-ramp to eastbound I-20 and the on-ramp from eastbound I-20. **Table 2-34** summarizes the crash data by collision type and injury severity.

Table 2-34: I-26 Southbound (Weave between Loop Ramps and I-20 Eastbound On-Ramp) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	1	2	13	16	18.6%
Rear End	0	1	0	3	35	39	45.3%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	1	1	2	2.3%
Sideswipe Same Direction	0	0	2	4	23	29	33.7%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	1	3	10	72	86	
Percentage	0.0%	1.2%	3.5%	11.6%	83.7%		

Most of the reported crashes resulted in PDO. *Rear end* collisions were the most frequent type collision in this segment followed by *sideswipe in the same direction* collisions. No fatal crashes were reported in this segment

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and 14 injury or possible injury crashes were reported. There was one incapacitating injury crash resulting from a *rear end* crash. Three non-incapacitating injury crashes were the result of *sideswipe same direction* (two crashes) and *no collision with a motor vehicle* (one crash) crashes. There were ten possible injury crashes.

Eleven crashes occurred on ramps within this interchange. Of these eleven crashes, eight were *no collision with motor vehicle* crashes (one non-incapacitating injury crash, one possible injury crash and six PDO), two were *rear end* crashes (both PDO), and one was a *sideswipe same direction* crash (PDO).

Table 2-35 summarizes crash data by accident severity, lighting and pavement surface conditions. The incapacitating injury crash and the three non-incapacitating injury crashes occurred during daylight and on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can also be found in Appendix A (Figures A-27 and A-28).

Table 2-35: I-26 Southbound (Weave between Loop Ramps and I-20 Eastbound On-Ramp) – Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	1	0	0	1	0	0	0	1	1.2%
Non Inapacitating Injury	3	0	0	3	0	0	0	3	3.5%
Possible Injury	9	0	1	8	2	0	0	10	11.6%
Property Damage Only	61	1	10	56	16	0	0	72	83.7%
Total	74	1	11	68	18	0	0	86	
Percentage	86.0%	1.2%	12.8%	79.1%	20.9%	0.0%	0.0%		

2.1.14 WEAVE BETWEEN ON-RAMP FROM EASTBOUND I-20 AT EXIT 107 AND THE I-26/I-126 SPLIT AT EXIT 108 (MM 107.728 AND 107.613)

Eighty six crashes were reported in this 0.335 mile segment of southbound I-26 between the on-ramp from eastbound I-20 at Exit 107 and the I-26/I-126 split at Exit 108. **Table 2-36** summarizes the crash data by collision type and injury severity.

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Table 2-36: I-26 Southbound (Weave from I-20 Eastbound On-Ramp to I-26/I-126 Split) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	1	7	8	9.3%
Rear End	1	0	1	9	47	58	67.4%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	0	19	19	22.1%
Sideswipe Opposite Direction	0	0	0	1	0	1	1.2%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	1	0	1	11	73	86	
Percentage	1.2%	0.0%	1.2%	12.8%	84.9%		

One fatal crash was reported in this segment. The crash occurred on Monday, September 16, 2013 at 6:46 AM and resulted from a *rear end* crash with a stopped motor vehicle in daylight and on dry pavement.

Nine crashes occurred on ramps within the section. There were four each of *no collision with motor vehicle* and *rear end* crashes. The other ramp crash was a *sideswipe opposite direction* crash.

One non-incapacitating injury crash and eleven possible injury crashes were reported in this segment. The non-incapacitating injury crash and nine of the ten possible injury crashes were the result of *rear end* collisions. One possible injury crash was a *no collision with motor vehicle* crash and one was a *sideswipe in opposite direction* collision.

Table 2-37 summarizes crash data by accident severity, lighting and pavement surface conditions. The non-incapacitating injury crash occurred on dry pavement in dark, unlighted conditions. Approximately half of the possible injury crashes occurred in daylight and on dry pavement. About 33 percent of the possible injury crashes occurred on wet pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix A (Figures A-29, A-30, A-31, and A-32).

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Table 2-37: I-26 Southbound (Weave from I-20 Eastbound On-Ramp to I-26/I-126 Split) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition			Total	Percentage
	Daylight	Dark	Not Lighted	Dry	Wet	Snow		
Fatality	1	0	0	0	1	0	1	1.2%
Incapacitating Injury	0	0	0	0	0	0	0	0.0%
Non Inapacitating Injury	6	2	4	8	4	0	12	14.0%
Property Damage Only	67	1	5	62	11	0	73	84.9%
Total	74	3	9	70	16	0	86	
Percentage	86.0%	3.5%	10.5%	81.4%	18.6%	0.0%		

2.1.15 EXIT 108 - I-26/I-126 SPLIT AND I-126 NORTHBOUND RAMP MERGE (MM 107.613 AND MM 108.528)

Eighty seven crashes were reported along this 0.915 mile long segment of southbound I-26 between the I-26/I-126 split at Exit 108 and the location where the on-ramp from northbound I-126 merges with southbound I-26. Crash data are summarized by collision type and injury severity in **Table 2-38**. No fatal crashes were reported on this segment.

Table 2-38: I-26 Southbound (I-26/126 Split and I-126 Ramp Merge) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	1	3	4	17	25	28.7%
Rear End	0	0	1	5	22	28	32.2%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	1	3	4	4.6%
Sideswipe Same Direction	0	0	0	5	25	30	34.5%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	1	4	15	67	87	
Percentage	0.0%	1.1%	4.6%	17.2%	77.0%		

Sideswipe in the same direction, rear end, and no collision with motor vehicle were the most frequent types of collisions in this segment. Approximately 29 percent of all crashes resulted from *no collision with motor*

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vehicles. Of the 25 crashes of this type, six each resulted from collisions with other movable objects or with the face of guardrail. Five resulted from collisions with the median barrier, and two from collisions with the guardrail end. The one incapacitating injury crash and three of the four non-incapacitating injury crashes were due to *no collision with motor vehicle* crashes.

Table 2-39 summarizes crash data by accident severity, lighting and pavement surface conditions. The incapacitating injury crash occurred during daylight and on dry pavement. Three of the four non-incapacitating injury crashes occurred during daylight; two on dry pavement and two on wet pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix A (Figures A-31, A-32, A-33 and A-34).

Table 2-39: I-26 Southbound (I-26/126 Split and I-126 Ramp Merge) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	1	0	0	1	0	0	0	1	1.1%
Non Incapacitating Injury	3	0	1	2	2	0	0	4	4.6%
Possible Injury	12	0	3	12	2	1	0	15	17.2%
Property Damage Only	47	4	16	51	16	0	0	67	77.0%
Total	63	4	20	66	20	1	0	87	
Percentage	72.4%	4.6%	23.0%	75.9%	23.0%	1.1%	0.0%		

2.1.16 ON-RAMP FROM NORTHBOUND I-126 TO EXIT 110 OFF-RAMP (MM 108.528 AND MM 109.177)

Twenty eight crashes were reported in this 0.649 mile segment of southbound I-26 between the location where the on-ramp from northbound I-126 merges with southbound I-26 and the off-ramp to Bush River Road at Exit 110. **Table 2-40** summarizes the crash data by collision type and injury severity.

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Table 2-40: I-26 Southbound (On-ramp from I-126 to Exit 110) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	0	3	3	10.7%
Rear End	0	0	0	3	7	10	35.7%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	0	15	15	53.6%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	0	3	25	28	
Percentage	0.0%	0.0%	0.0%	10.7%	89.3%		

Sideswipe in the same direction (Approximately 54 percent) is the most frequent type of collision in this segment, followed by *rear end* collisions (approximately 36 percent). Most of the reported crashes resulted in PDO. No fatal crashes were reported in this segment. Three possible injury crashes caused by *rear end* collisions were reported in this segment.

Table 2-41 summarizes crash data by accident severity, lighting and pavement surface conditions. Two of the three possible injury crashes occurred during daylight, while one possible injury crash occurred in dark, unlit conditions. All three possible injury crashes occurred on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix A (Figures A-33, A-34, A-35 and A-36).

Table 2-41: I-26 Southbound (On-ramp from I-126 to Exit 110) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Possible Injury	2	0	1	3	0	0	0	3	10.7%
Property Damage Only	16	2	7	21	4	0	0	25	89.3%
Total	18	2	8	24	4	0	0	28	
Percentage	64.3%	7.1%	28.6%	85.7%	14.3%	0.0%	0.0%		

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2.1.17 WITHIN EXIT 110 (MM 109.177 AND MM 110.176)

Seventy seven crashes were reported in this 0.999 mile long segment of southbound I-26 between the off-ramp and on-ramp to US 378 at Exit 110. Approximately 79 percent of the collisions were PDO, while approximately 17 percent resulted in possible injuries. **Table 2-42** summarizes the crash data by collision type and injury severity.

Table 2-42: I-26 Southbound (Within Exit 110) – Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	1	1	5	7	9.1%
Rear End	0	0	1	10	46	57	74.0%
Head On	0	0	0	0	1	1	1.3%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	1	0	0	0	0	1	1.3%
Sideswipe Same Direction	0	0	0	2	9	11	14.3%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	1	0	2	13	61	77	
Percentage	1.3%	0.0%	2.6%	16.9%	79.2%		

There was one fatal crash that occurred in this segment. The fatal crash occurred on Monday, December 24, 2012 at 1:25 PM. The fatal crash was an *angle* crash in daylight on wet pavement. There were two non-incapacitating injury crashes – once each of *no collision with motor vehicle* and *rear end* crashes.

Approximately 74 percent of all crashes along this segment were caused by *rear end* collisions. *Sideswipe in the same direction* and *no collision with motor vehicle* type accidents are the two other frequent collision types in this segment. Thirteen possible injury crashes were reported in this segment. Ten of these accidents were caused by *rear end* collisions.

Forty of the 77 crashes took place on the ramps at the Exit 110 interchange. Of these 40 crashes, one was a non-incapacitating injury crash, five were possible injury crashes, and 34 were PDO. Thirty seven of the crashes on the ramps were *rear end* crashes, with two *no collision with motor vehicle* crashes and one *sideswipe same direction* crash.

Table 2-43 summarizes the accidents based on injury severity, lighting and pavement surface condition. Most of the crashes occurred in daylight and on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix A (Figures A-37 and A-38).

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Table 2-43: I-26 Southbound (Within Exit 110) – Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	1	0	0	0	1	0	0	1	1.3%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non Inapacitating Injury	1	1	0	1	1	0	0	2	2.6%
Possible Injury	11	1	1	12	1	0	0	13	16.9%
Property Damage Only	54	5	2	49	12	0	0	61	79.2%
Total	67	7	3	62	15	0	0	77	
Percentage	87.0%	9.1%	3.9%	80.5%	19.5%	0.0%	0.0%		

2.1.18 SOUTH OF EXIT 110 (MM 110.176 AND MM 110.33)

Seven crashes were reported along this 0.154 mile long segment of southbound I-26 south of the on-ramp from US 378 at Exit 110. **Table 2-44** summarizes the crash data by collision type and injury severity. Three of the seven crashes resulted in possible injury. Two of the three possible injury crashes resulted from *rear end* collisions while the remaining possible injury crash was caused by a *no collision with motor vehicle* type accident. No fatal crashes were reported in this segment.

Table 2-45 summarizes crash data by accident severity, lighting and pavement surface conditions. Most of the possible injury crashes occurred in dark, unlit conditions and on wet pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix A (Figures A-39 and A-40).

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Table 2-44: I-26 Southbound (South of Exit 110) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	1	2	3	42.9%
Rear End	0	0	0	2	1	3	42.9%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	0	1	1	14.3%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	0	3	4	7	
Percentage	0.0%	0.0%	0.0%	42.9%	57.1%		

Table 2-45: I-26 Southbound (South of Exit 110) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non Inapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Possible Injury	1	2	0	1	2	0	0	3	42.9%
Property Damage Only	3	0	1	3	1	0	0	4	57.1%
Total	4	2	1	4	3	0	0	7	
Percentage	57.1%	28.6%	14.3%	57.1%	42.9%	0.0%	0.0%		

2.2 Northbound I-26

Within the study area, 1,199 crashes were reported along northbound I-26. There were three fatal crashes. All the fatal crashes resulted from *no collision with motor vehicle* type accident. Seven injury crashes resulted in incapacitating injuries. Three of the seven incapacitating injury crashes were caused by *no collision with motor vehicle* type accidents, three by *rear end* accidents and one by an *angle* collision. There were 25 crashes resulting in non-incapacitating injuries. Of these, thirteen were *rear end* crashes and eleven were *no collision with motor vehicle* crashes. There were 169 possible injury crashes. Of these, 118 were the result of *rear end* crashes, 30 were the result of *no collision with motor vehicle* crashes, and seventeen were the result of *sideswipe same direction* crashes. Approximately 83 percent (995) crashes resulted in PDO.

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Overall, *rear end* collisions are the most frequent type of accident in this segment, followed by *no collision with motor vehicle* type and *sideswipe in the same direction* accidents.

Table 2-46 summarizes crash data by collision type and injury severity along westbound I-26 within the study area.

Table 2-46: I-26 Northbound Crash Data Summary by Collision Type and Injury Severity

Collision Type	Injury Severity					Total	Percentage
	Fatality	Injury			Property Damage		
		Incapacitating	Non-incapacitating	Possible			
No Collision with Motor Vehicle	3	3	11	30	160	207	17.3%
Rear End	0	3	13	118	622	756	63.1%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	1	0	4	27	32	2.7%
Sideswipe Same Direction	0	0	1	17	177	195	16.3%
Sideswipe Opposite Direction	0	0	0	0	2	2	0.2%
Backed Into	0	0	0	0	5	5	0.4%
Other	0	0	0	0	2	2	0.2%
	3	7	25	169	995	1199	100.0%

Table 2-47 summarizes crash data by injury severity, lighting and pavement surface conditions

Table 2-47: I-26 Northbound Crash Data Summary by Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark		Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
		Lighted	Not Lighted						
Fatality	2	0	1	3	0	0	0	3	0.3%
Incapacitating Injury	5	0	2	5	2	0	0	7	0.6%
Non-incapacitating Injury	17	0	8	23	2	0	0	25	2.1%
Possible Injury	140	7	22	123	45	1	0	169	14.1%
Property Damage Only	846	30	119	761	234	0	0	995	83.0%
Total	1010	37	152	915	283	1	0	1199	
Percentage	84.2%	3.1%	12.7%	76.3%	23.6%	0.1%	0.0%		

Crash Analysis

As can be seen from **Table 2-47**, Most of the crashes along northbound I-26 occurred during daylight (about 84 percent) and on dry pavement (about 76 percent). About 24 percent of the crashes occurred on wet pavement.

Crash data along northbound I-26 were also summarized based on day of the week and time of day. A graph depicting the time and day of the week is shown in **Figure 2.10**.

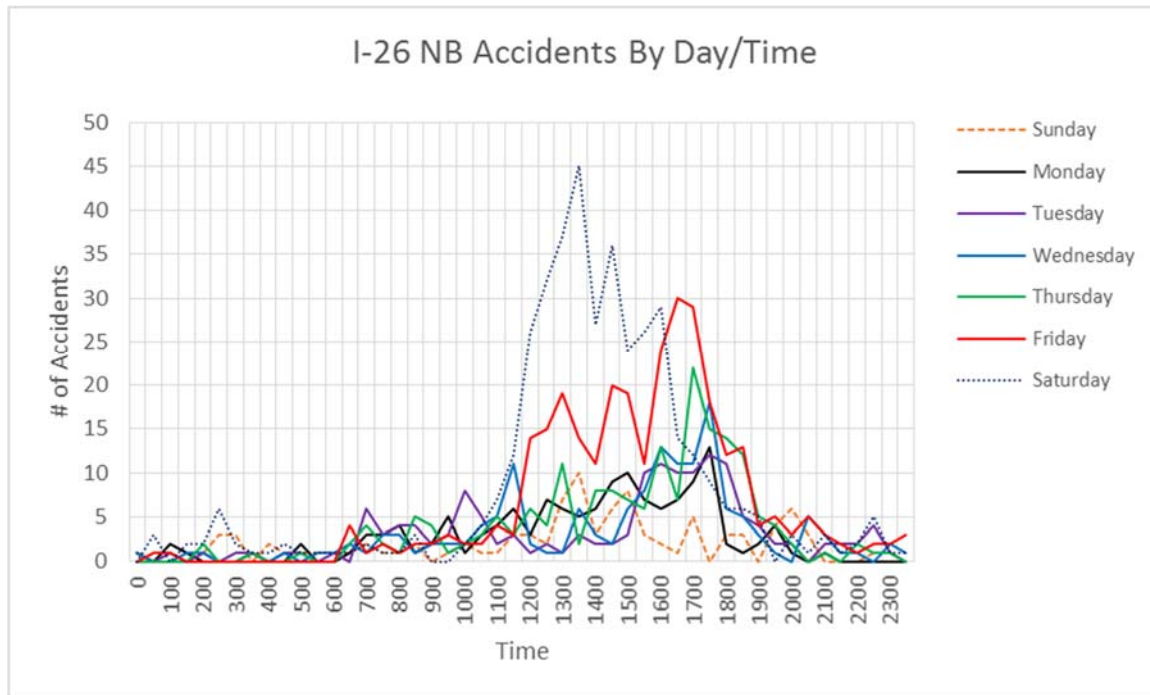


Figure 2.10: I-26 Northbound Summary by Day of Week and Time of Day

As can be seen from Figure 10, the highest number of accidents on westbound I-26 occur on Saturday during the midday. Friday also has a high number of accidents occurring throughout the midday and into the afternoon peak period. Most of the other periods with a high number of accidents occur during the other weekdays (Monday through Thursday) during the afternoon peak period.

Westbound I-26 accident data was separated into the following segments:

- East of the northbound off-ramp to Exit 110 (MM 109.953 - 110.33)
- Within Exit 110 between the northbound off-ramp and on-ramp (MM 109.953 – 109.29)
- Between the northbound on-ramp from Exit 110 and the off-ramp to the I-126/Bush River Road Split (MM 109.29 - 108.25)
- Within Exit 108 from the I-26/I-126 Split to the northbound I-126 slip ramp merge (MM 108.25 - 107.402)
- Weaving segment between the I-126 northbound ramp merge and the Exit 107 off-ramp to I-20 eastbound (MM 107.402 – 107.327)
- Weaving segment at Exit 107 between the off-ramp to eastbound I-20 and the loop on-ramp from eastbound I-20 (MM 107.327 – 107.2)

Crash Analysis

- Weaving segment at Exit 107 between the loop on-ramp from eastbound I-20 and the loop off-ramp to westbound I-20 (MM 107.2 – 107.09)
- Weaving segment at Exit 107 between the loop off-ramp to westbound I-20 and the on-ramp from westbound I-20 (MM 107.09 - 106.618)
- Weaving segment between the on-ramp from westbound I-20 at Exit 107 to the off-ramp at Exit 106 (MM 106.618 - 106.571)
- Within Exit 106 between the northbound off-ramp and on-ramp (MM 106.571 - 105.961)
- Between the northbound on-ramp at Exit 106 and the off-ramp at Exit 104 (MM 105.961 - 104.51)
- Within Exit 104 between the northbound off-ramp and on-ramp (MM 103.717 - 104.51)
- Between the northbound on-ramp at Exit 104 and loop off-ramp at Exit 103 (MM 103.717 - 103.422)
- Within Exit 103 between the northbound loop off-ramp and the on-ramp (between MM 103.422 - 102.88)
- Between the northbound on-ramp from Exit 103 and the off-ramp to Exit 102 (between MM 102.88 - 102.473)
- Within Exit 102 between the northbound off-ramp and on-ramp (MM 102.473 - 101.766)
- Within Exit 101 between the northbound off-ramp and on-ramp to/from Broad River Road (MM 101.766 - 100.921)
- West of the northbound on-ramp from Broad River Road at Exit 101 (MM 100.921 – 100.500)

Table 2-48 summarizes the accident data for each segment by collision type, lighting and pavement surface condition. Crash data for each segment were also summarized by collision type and accident severity and is presented in **Table 2-49**.

Crash Analysis

Table 2-48: Northbound I-26 Segment Summary

Segment	Mile Posts	Injury Severity					Lighting Condition			Surface Condition				Total	Percentage
		Fatality	Injury			Property Damage	Day Light	Dark		Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
			Incapacitating	Non-Incapacitating	Possible			Lighted	Not Lighted						
East of the northbound off-ramp to Exit 110	(MM 110.330 - 109.953)	0	0	1	2	16	14	2	3	15	4	0	0	19	1.6%
Within Exit 110 between the northbound off-ramp and on-ramp	(MM 109.953 – 109.290)	1	1	0	11	39	42	5	5	47	5	0	0	52	4.3%
Between the northbound on-ramp from Exit 110 and the off-ramp to the I-126/Bush River Road Split	(MM 109.290 - 108.250)	0	0	7	18	95	103	2	15	95	24	1	0	120	10.0%
Within Exit 108 from the I-26/I-126 Split to the northbound I-126 slip ramp merge	(MM 108.250 - 107.402)	1	2	2	15	86	79	8	19	71	35	0	0	106	8.8%
Weaving segment between the I-126 northbound ramp merge and the Exit 107 off-ramp to I-20 eastbound	(MM 107.402 – 107.327)	0	0	1	3	9	10	1	2	8	5	0	0	13	1.1%
Weaving segment at Exit 107 between the off-ramp to eastbound I-20 and the loop on-ramp from eastbound I-20	(MM 107.327 – 107.200)	0	0	0	4	23	18	1	8	19	8	0	0	27	2.3%
Weaving segment at Exit 107 between the loop on-ramp from eastbound I-20 and the loop off-ramp to westbound I-20	(MM 107.200 – 107.090)	0	1	0	4	39	36	2	6	38	6	0	0	44	3.7%
Weaving segment at Exit 107 between the loop off-ramp to westbound I-20 and the on-ramp from westbound I-20	(MM 107.090 - 106.618)	0	1	1	10	100	96	3	13	90	22	0	0	112	9.3%
Weaving segment between the on-ramp from westbound I-20 at Exit 107 to the off-ramp at Exit 106	(MM 106.618 - 106.571)	0	0	0	1	14	12	0	3	13	2	0	0	15	1.3%
Within Exit 106 between the northbound off-ramp and on-ramp	(MM 106.571 - 105.961)	0	0	5	24	133	134	3	25	130	32	0	0	162	13.5%
Between the northbound on-ramp at Exit 106 and the off-ramp at Exit 104	(MM 105.961 - 104.510)	0	1	3	22	99	110	2	13	89	36	0	0	125	10.4%
Within Exit 104 between the northbound off-ramp and on-ramp	(MM 103.717 - 104.510)	1	0	2	22	80	97	4	4	78	27	0	0	105	8.8%
Between the northbound on-ramp at Exit 104 and loop off-ramp at Exit 103	(MM 103.717 - 103.422)	0	0	1	17	131	141	0	8	114	35	0	0	149	12.4%
Within Exit 103 between the northbound loop off-ramp and the on-ramp	(MM 103.422 - 102.880)	0	1	0	4	29	30	0	4	26	8	0	0	34	2.8%
Between the northbound on-ramp from Exit 103 and the off-ramp to Exit 102	(MM 102.880 - 102.473)	0	0	0	2	21	17	3	3	20	3	0	0	23	1.9%
Within Exit 102 between the northbound off-ramp and on-ramp	(MM 102.473 - 101.766)	0	0	1	2	18	15	1	5	14	7	0	0	21	1.8%
Within Exit 101 between the northbound off-ramp and on-ramp to/from Broad River Road	(MM 101.766 - 100.921)	0	0	1	5	52	45	0	13	37	21	0	0	58	4.8%
West of the northbound on-ramp from Broad River Road at Exit 101	(MM 100.921 – 100.500)	0	0	0	3	11	11	0	3	11	3	0	0	14	1.2%
Total		3	7	25	169	995	1010	37	152	915	283	1	0	1199	
Percentage		0.3%	0.6%	2.1%	14.1%	83.0%	84.2%	3.1%	12.7%	76.3%	23.6%	0.1%	0.0%		

Crash Analysis

Table 2-49: Northbound I-26 Segment Summary by Collision Type and Injury Severity

Segment	Mile Posts	Accident Types									Total	Percentage
		No Collision with Motor Vehicle	Rear End	Head On	Rear-to-Rear	Angle	Sideswipe Same Direction	Sideswipe Opposite Direction	Backed Into	Other		
East of the westbound off-ramp to Exit 110	(MM 110.330 - 109.953)	3	11	0	0	1	4	0	0	0	19	1.6%
Within Exit 110 between the westbound off-ramp and on-ramp	(MM 109.953 – 109.29)	6	38	0	0	3	5	0	0	0	52	4.3%
Between the westbound on-ramp from Exit 110 and the off-ramp to the I-126/Bush River Road Split	(MM 109.29 - 108.25)	23	67	0	0	2	24	2	1	1	120	10.0%
Within Exit 108 from the I-26/I-126 Split to the westbound I-126 slip ramp merge	(MM 108.25 - 107.402)	38	48	0	0	1	17	0	2	0	106	8.8%
Weaving segment between the I-126 westbound ramp merge and the Exit 107 off-ramp to I-20 eastbound	(MM 107.402 – 107.327)	1	7	0	0	0	5	0	0	0	13	1.1%
Weaving segment at Exit 107 between the off-ramp to eastbound I-20 and the loop on-ramp from eastbound I-20	(MM 107.327 – 107.2)	5	19	0	0	0	3	0	0	0	27	2.3%
Weaving segment at Exit 107 between the loop on-ramp from eastbound I-20 and the loop off-ramp to westbound I-20	(MM 107.2 – 107.09)	12	19	0	0	0	13	0	0	0	44	3.7%
Weaving segment at Exit 107 between the loop off-ramp to westbound I-20 and the on-ramp from westbound I-20	(MM 107.09 - 106.618)	16	65	0	0	3	28	0	0	0	112	9.3%
Weaving segment between the on-ramp from westbound I-20 at Exit 107 to the off-ramp at Exit 106	(MM 106.618 - 106.571)	1	11	0	0	1	2	0	0	0	15	1.3%
Within Exit 106 between the westbound off-ramp and on-ramp	(MM 106.571 - 105.961)	29	107	0	0	4	21	0	1	0	162	13.5%
Between the westbound on-ramp at Exit 106 and the off-ramp at Exit 104	(MM 105.961 - 104.51)	19	85	0	0	4	16	0	0	1	125	10.4%
Within Exit 104 between the westbound off-ramp and on-ramp	(MM 103.717 - 104.51)	10	81	0	0	1	12	0	1	0	105	8.8%
Between the westbound on-ramp at Exit 104 and loop off-ramp at Exit 103	(MM 103.717 - 103.422)	9	122	0	0	2	16	0	0	0	149	12.4%
Within Exit 103 between the westbound loop off-ramp and the on-ramp	(MM 103.422 - 102.88)	3	25	0	0	2	4	0	0	0	34	2.8%
Between the westbound on-ramp from Exit 103 and the off-ramp to Exit 102	(MM 102.88 - 102.473)	5	6	0	0	2	10	0	0	0	23	1.9%
Within Exit 102 between the westbound off-ramp and on-ramp	(MM 102.473 - 101.766)	10	6	0	0	2	3	0	0	0	21	1.8%
Within Exit 101 between the westbound off-ramp and on-ramp to/from Broad River Road	(MM 101.766 - 100.921)	12	34	0	0	4	8	0	0	0	58	4.8%
West of the westbound on-ramp from Broad River Road at Exit 101	(MM 100.921 – 100.500)	5	5	0	0	0	4	0	0	0	14	1.2%
Total		207	756	0	0	32	195	2	5	2	1199	
Percentage		17.3%	63.1%	0.0%	0.0%	2.7%	16.3%	0.2%	0.4%	0.2%		

Crash Analysis

The Actual Crash Rate (ACR) for each of the segments along northbound I-26 was calculated to compare the segments against the statewide average ACR. For freeway segments, the statewide average ACR for all crashes is 92.2 per one hundred million vehicle miles (HMVM). The statewide average injury and fatality ACR for freeway segments is 27.5 HMVM and 0.77 HMVM respectively.

The ACR for all crashes for each segment, including the ramp crashes associated with those segments, are shown in **Table 2-50**. The ACR for all injury crashes are shown in **Table 2-51**.

As can be seen from **Table 2-50**, all but one of the segments of northbound I-26 exceed the statewide average ACR for freeway segments. The only segment that does not exceed the statewide average ACR is the segment between the northbound off-ramp and the on-ramp at Exit 102.

As can be seen from **Table 2-51**, twelve of the eighteen segments of northbound I-26 exceed the statewide average for the overall Injury ACR. These segments include the consecutive segments between the northbound off-ramp to Exit 110 and the loop off-ramp to Exit 103.

The three fatal crashes that occurred along northbound I-26 took place on three separate segments. Each of these segments exceed the statewide average ACR for fatal crashes:

- Within the Exit 110 interchange area (ACR of 3.4)
- Within the segment of Exit 108 between the I-26/I-126 split to the merge location of the northbound I-126 slip ramp (ACR of 1.9)
- Within the Exit 104 interchange area (ACR of 2.2)

As can be seen from **Table 2-50**, the ACR is highest on the segment between Exit 104 and Exit 103. The crash rate for this segment (8.8 per 100 HMVM) is significantly higher than the other segments.

The accidents occurring during the morning and afternoon peak periods for each day of the week and on typical weekdays (Tuesday through Thursday) were plotted on graphs. The resulting graphs are shown in **Figures 2.11 through 2.18**.

The following sections contain a detailed review of crash data for each segment of northbound I-26. Collision diagrams for the freeway segments and interchange areas of northbound I-26 are shown in Appendix B.

Crash Analysis

Table 2-50: I-26 Northbound Segments - Actual Crash Rate (Total Crashes)

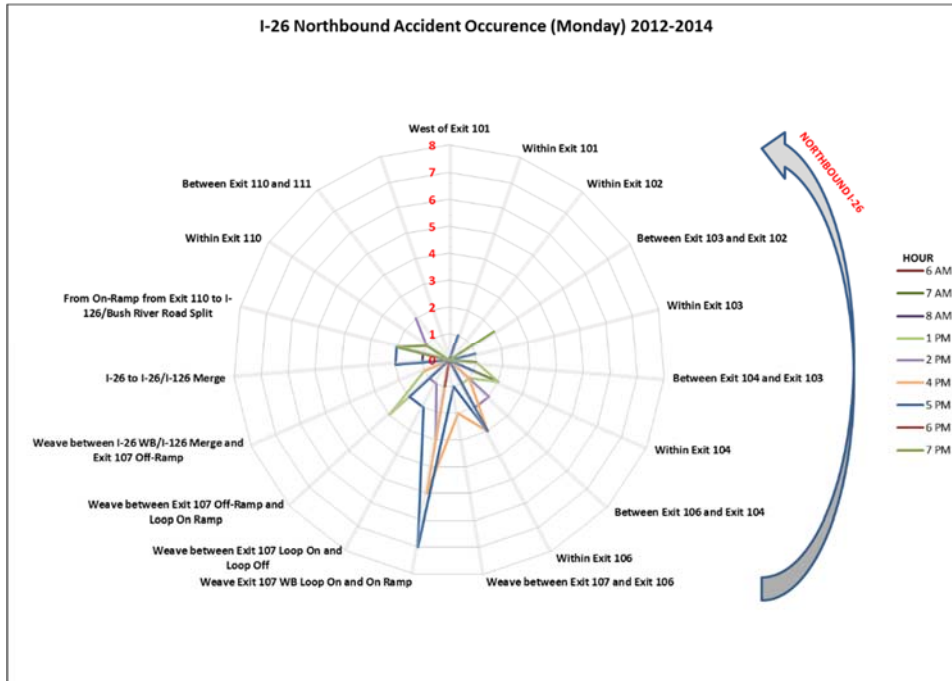
Segment	Mile Posts	Total Crashes	Segment Length	Segment AADT	Actual Crash Rate (per 100 MVM)
East of the northbound off-ramp to Exit 110	(MM 110.330 - 109.953)	19	0.377	77,600	118.6
Within Exit 110 between the northbound off-ramp and on-ramp	(MM 109.953 – 109.290)	52	0.663	81,000	176.9
Between the northbound on-ramp from Exit 110 and the off-ramp to the I-126/Bush River Road Split	(MM 109.290 - 108.250)	120	1.040	81,000	260.2
Within Exit 108 from the I-26/I-126 Split to the northbound I-126 slip ramp merge	(MM 108.250 - 107.402)	106	0.848	112,500	202.9
Weaving segment between the I-126 northbound ramp merge and the Exit 107 off-ramp to I-20 eastbound	(MM 107.402 – 107.327)	13	0.075	112,500	281.4
Weaving segment at Exit 107 between the off-ramp to eastbound I-20 and the loop on-ramp from eastbound I-20	(MM 107.327 – 107.200)	27	0.127	133,600	290.6
Weaving segment at Exit 107 between the loop on-ramp from eastbound I-20 and the loop off-ramp to westbound I-20	(MM 107.200 – 107.090)	44	0.110	133,600	546.9
Weaving segment at Exit 107 between the loop off-ramp to westbound I-20 and the on-ramp from westbound I-20	(MM 107.090 - 106.618)	112	0.472	133,600	324.4
Weaving segment between the on-ramp from westbound I-20 at Exit 107 to the off-ramp at Exit 106	(MM 106.618 - 106.571)	15	0.047	133,600	436.3
Within Exit 106 between the northbound off-ramp and on-ramp	(MM 106.571 - 105.961)	162	0.610	115,500	420.0
Between the northbound on-ramp at Exit 106 and the off-ramp at Exit 104	(MM 105.961 - 104.510)	125	1.451	115,500	136.2
Within Exit 104 between the northbound off-ramp and on-ramp	(MM 103.717 - 104.510)	105	0.793	104,700	231.0
Between the northbound on-ramp at Exit 104 and loop off-ramp at Exit 103	(MM 103.717 - 103.422)	149	0.295	104,700	881.1
Within Exit 103 between the northbound loop off-ramp and the on-ramp	(MM 103.422 - 102.880)	34	0.542	93,200	122.9
Between the northbound on-ramp from Exit 103 and the off-ramp to Exit 102	(MM 102.880 - 102.473)	23	0.407	93,200	110.7
Within Exit 102 between the northbound off-ramp and on-ramp	(MM 102.473 - 101.766)	21	0.707	71,500	75.9
Within Exit 101 between the northbound off-ramp and on-ramp to/from Broad River Road	(MM 101.766 - 100.921)	58	0.845	51,400	243.9
West of the northbound on-ramp from Broad River Road at Exit 101	(MM 100.921 – 100.500)	14	0.421	51,400	118.2

Crash Analysis

Table 2-51: I-26 Northbound Segments - Actual Crash Rates (Injury Crashes)

Segment	Mile Posts	Total Injury Crashes	Segment Length	Segment AADT	Actual Crash Rate (per 100 MVM)
East of the northbound off-ramp to Exit 110	(MM 110.330 - 109.953)	3	0.377	77,600	18.7
Within Exit 110 between the northbound off-ramp and on-ramp	(MM 109.953 - 109.290)	12	0.663	81,000	40.8
Between the northbound on-ramp from Exit 110 and the off-ramp to the I-126/Bush River Road Split	(MM 109.290 - 108.250)	25	1.040	81,000	54.2
Within Exit 108 from the I-26/I-126 Split to the northbound I-126 slip ramp merge	(MM 108.250 - 107.402)	19	0.848	112,500	36.4
Weaving segment between the I-126 northbound ramp merge and the Exit 107 off-ramp to I-20 eastbound	(MM 107.402 - 107.327)	4	0.075	112,500	86.6
Weaving segment at Exit 107 between the off-ramp to eastbound I-20 and the loop on-ramp from eastbound I-20	(MM 107.327 - 107.200)	4	0.127	133,600	43.1
Weaving segment at Exit 107 between the loop on-ramp from eastbound I-20 and the loop off-ramp to westbound I-20	(MM 107.200 - 107.090)	5	0.110	133,600	62.1
Weaving segment at Exit 107 between the loop off-ramp to westbound I-20 and the on-ramp from westbound I-20	(MM 107.090 - 106.618)	12	0.472	133,600	34.8
Weaving segment between the on-ramp from westbound I-20 at Exit 107 to the off-ramp at Exit 106	(MM 106.618 - 106.571)	1	0.047	133,600	29.1
Within Exit 106 between the northbound off-ramp and on-ramp	(MM 106.571 - 105.961)	29	0.610	115,500	75.2
Between the northbound on-ramp at Exit 106 and the off-ramp at Exit 104	(MM 105.961 - 104.510)	26	1.451	115,500	28.3
Within Exit 104 between the northbound off-ramp and on-ramp	(MM 103.717 - 104.510)	24	0.793	104,700	52.8
Between the northbound on-ramp at Exit 104 and loop off-ramp at Exit 103	(MM 103.717 - 103.422)	18	0.295	104,700	106.4
Within Exit 103 between the northbound loop off-ramp and the on-ramp	(MM 103.422 - 102.880)	5	0.542	93,200	18.1
Between the northbound on-ramp from Exit 103 and the off-ramp to Exit 102	(MM 102.880 - 102.473)	2	0.407	93,200	9.6
Within Exit 102 between the northbound off-ramp and on-ramp	(MM 102.473 - 101.766)	3	0.707	71,500	10.8
Within Exit 101 between the northbound off-ramp and on-ramp to/from Broad River Road	(MM 101.766 - 100.921)	6	0.845	51,400	25.2
West of the northbound on-ramp from Broad River Road at Exit 101	(MM 100.921 - 100.500)	3	0.421	51,400	25.3

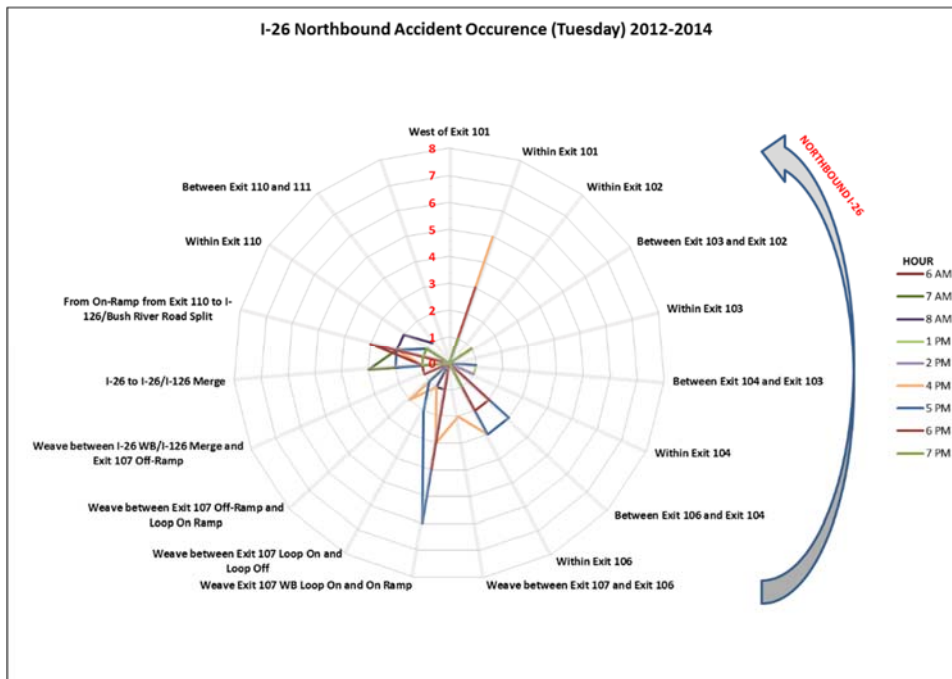
Crash Analysis



Most frequent Monday accidents occur:

- Between the loop ramps at Exit 107

Figure 2.11: I-26 Northbound Accident Occurrence (Monday)

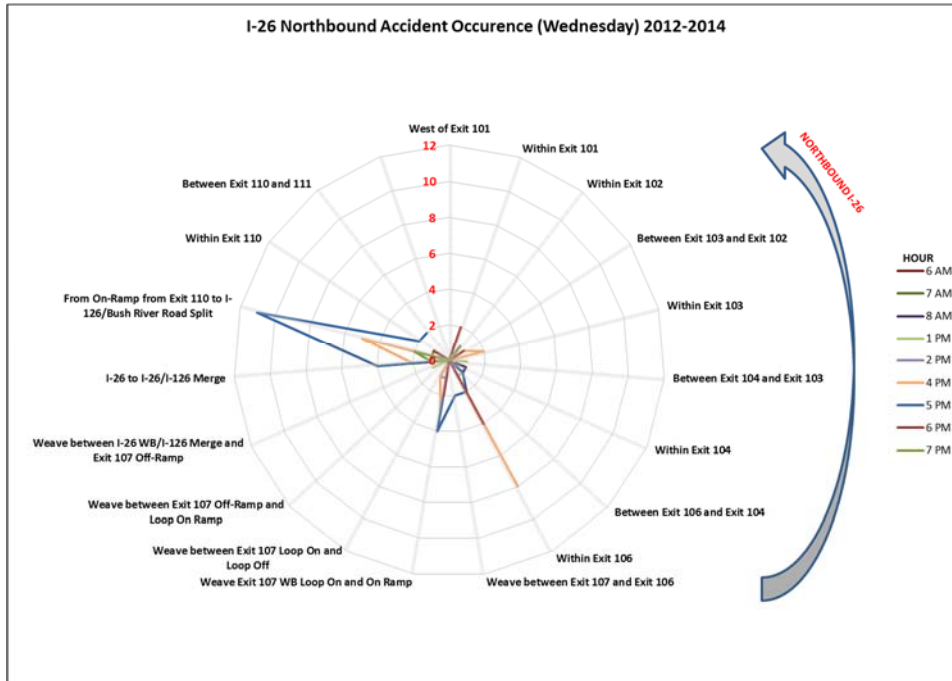


Most frequent Tuesday accidents occur:

- Between the loop ramps at Exit 107

Figure 2.12: I-26 Northbound Accident Occurrence (Tuesday)

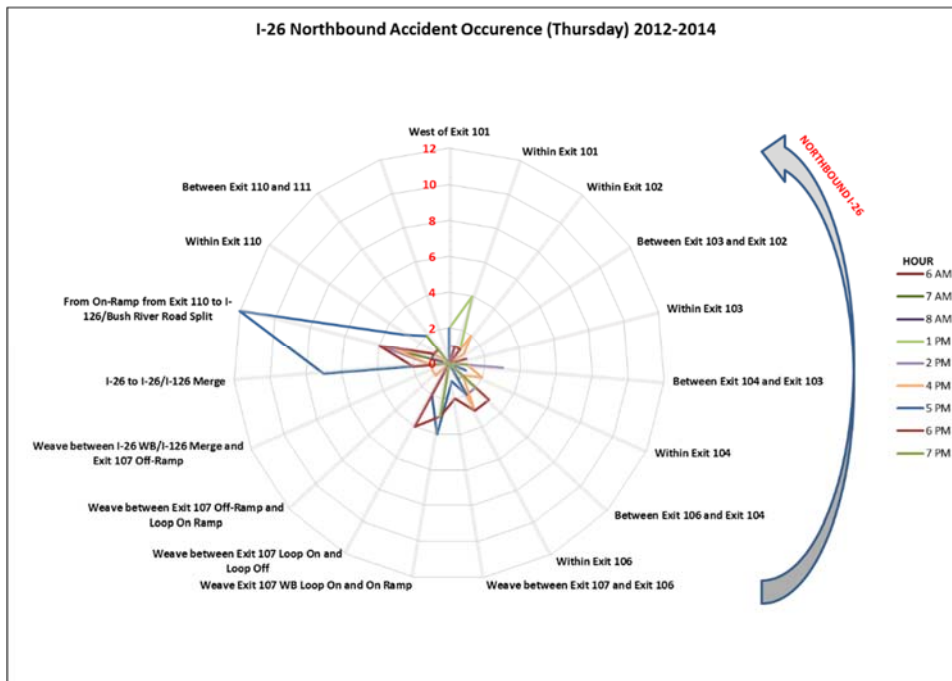
Crash Analysis



Most frequent Wednesday accidents occur:

- Between Exit 110 and the I-126/Bush River Road Split
- Between the I-126 Split and the I-126 Merge
- Within Exit 106

Figure 2.13: I-26 Northbound Accident Occurrence (Wednesday)

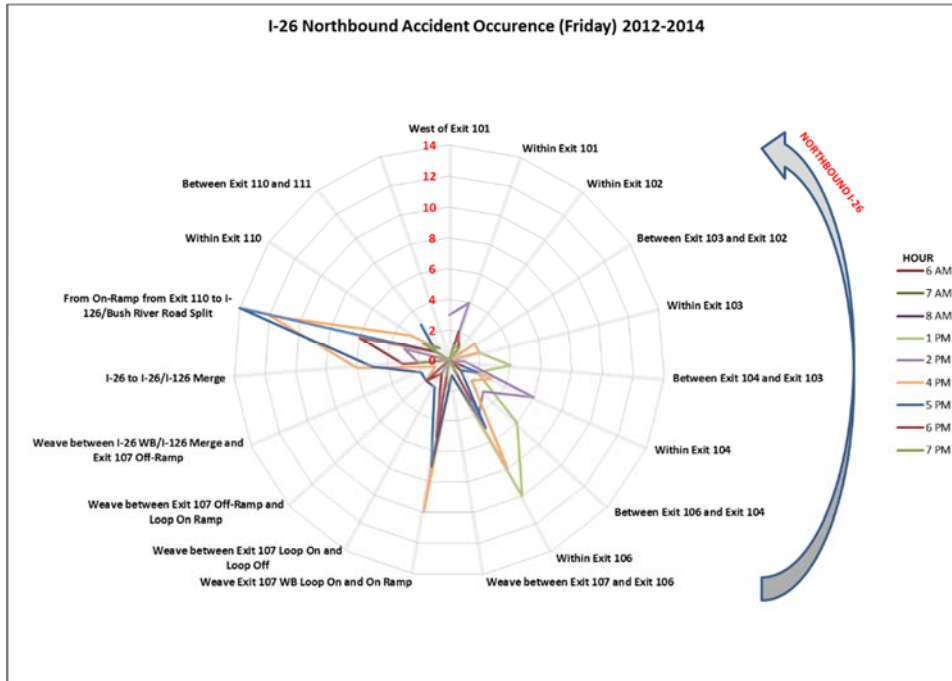


Most frequent Thursday accidents occur:

- Between Exit 110 and the I-126/Bush River Road Split
- Between the I-126 Split and the I-126 Merge

Figure 2.14: I-26 Northbound Accident Occurrence (Thursday)

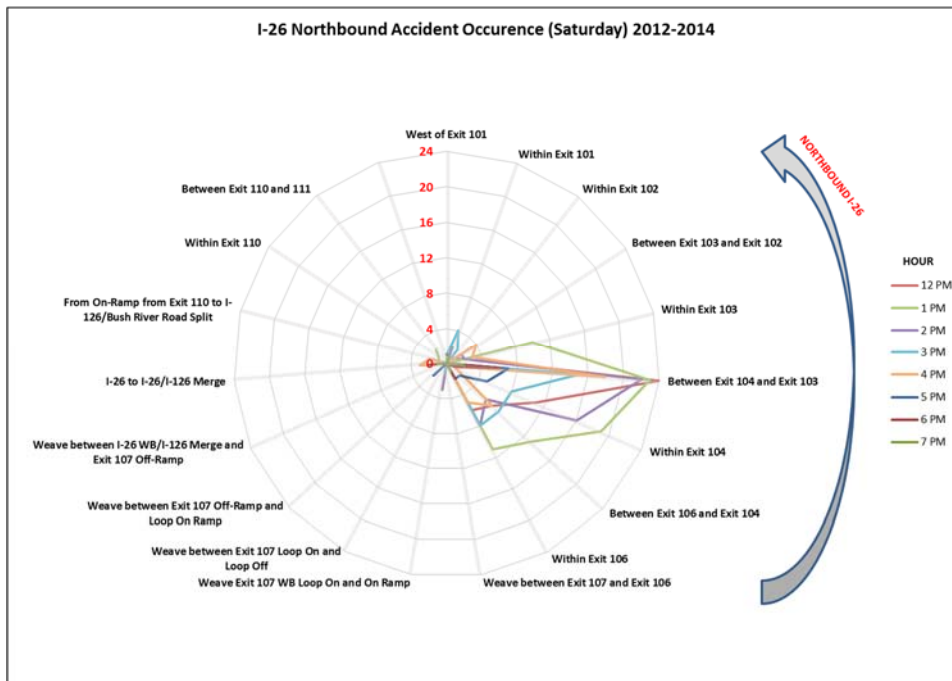
Crash Analysis



Most frequent Friday accidents occur:

- Between Exit 110 and the I-126/Bush River Road Split
- Between the I-126 Split and the I-126 Merge
- Between the loop ramps at Exit 107
- Within Exit 106

Figure 2.15: I-26 Northbound Accident Occurrence (Friday)

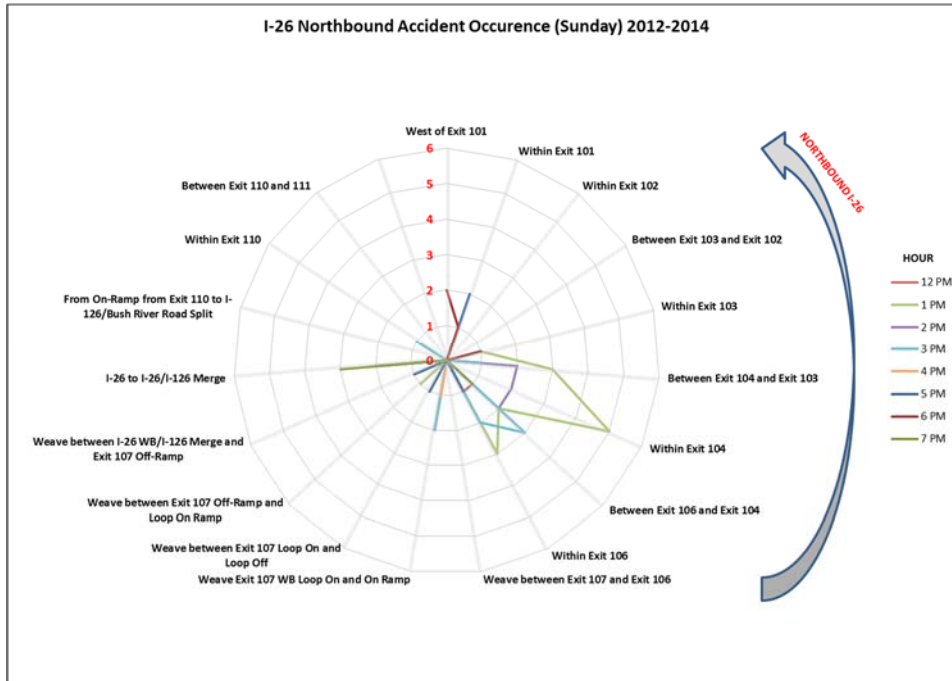


Most frequent Saturday accidents occur:

- Within Exit 106
- Between Exits 106 and 104
- Within Exit 104
- Between Exits 104 and 103
- Within Exit 103

Figure 2.16: I-26 Northbound Accident Occurrence (Saturday)

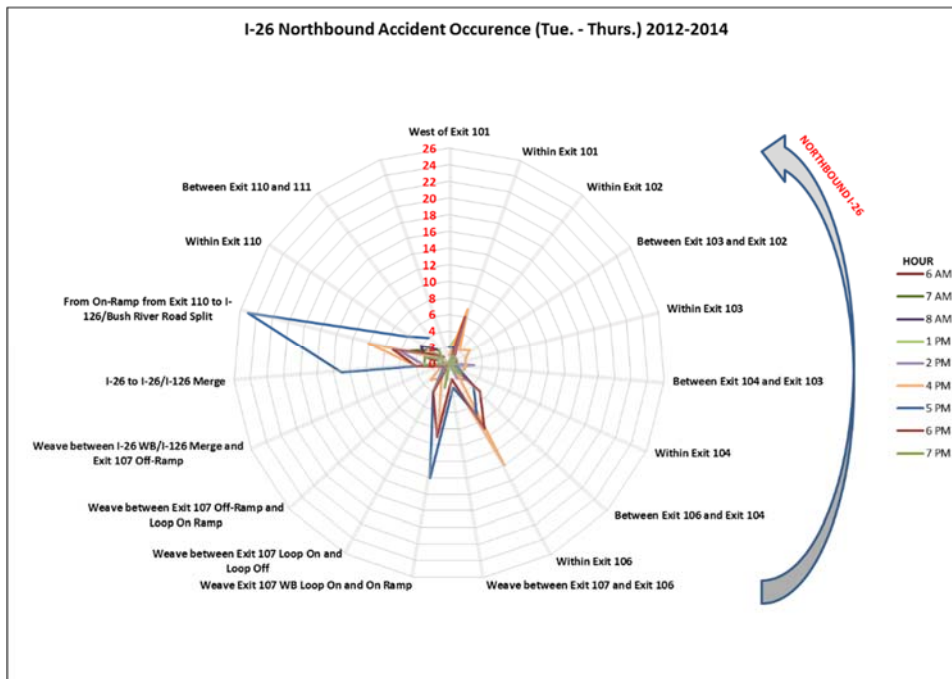
Crash Analysis



Most frequent Sunday accidents occur:

- Within Exit 106
- Between Exits 106 and 104
- Within Exit 104
- Between Exits 104 and 103

Figure 2.17: I-26 Northbound Accident Occurrence (Sunday)



Most frequent Weekday accidents occur:

- Between Exit 110 and the I-126/Bush River Road Split
- Between the I-126 Split and the I-126 Merge
- Between the loop ramps at Exit 107
- Within Exit 106

Figure 2.18: I-26 Northbound Accident Occurrence (Typical Weekday)

Crash Analysis

The following sections contain a detailed review of crash data for each segment of northbound I-26.

2.2.1 EAST OF EXIT 110 (MM 109.953 – 110.330)

Nineteen crashes were reported in this 0.623 mile segment of northbound I-26 east of the off-ramp to US 378 at Exit 110. **Table 2-52** summarizes crash data based on the collision type and injury severity. No fatal crashes were reported along this segment. One crash resulted in a non-incapacitating injury, two resulted in possible injury, and sixteen crashes caused PDO. *Rear end* collisions are the most frequent type of collision in this segment followed by *sideswipe in the same direction* accidents.

Table 2-52: I-26 Northbound (South of Exit 110) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	1	0	2	3	15.8%
Rear End	0	0	0	1	10	11	57.9%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	1	1	5.3%
Sideswipe Same Direction	0	0	0	1	3	4	21.1%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	1	2	16	19	
Percentage	0.0%	0.0%	5.3%	10.5%	84.2%		

Table 2-53 summarizes crash data based on injury severity, pavement and lighting condition. The data in **Table 2-53** shows that most of the crashes on this segment occurred on dry pavement and during daylight. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix B (Figures B-1 and B-2).

Crash Analysis

Table 2-53: I-26 Northbound (South of Exit 110) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	0	0	1	1	0	0	0	1	5.3%
Possible Injury	2	0	0	2	0	0	0	2	10.5%
Property Damage Only	12	2	2	12	4	0	0	16	84.2%
Total	14	2	3	15	4	0	0	19	
Percentage	73.7%	10.5%	15.8%	78.9%	21.1%	0.0%	0.0%		

2.2.2 WITHIN EXIT 110 (MM 109.953 - 109.290)

Fifty two crashes were reported in this 0.663 mile segment of northbound I-26 between the off-ramp and on-ramp to/from US 378 at Exit 110. **Table 2-54** summarizes crash data based on the collision type and injury severity. *Rear end* collisions are the most frequent collision type in this segment, followed by *no collision with motor vehicle* and *sideswipe in the same direction* collisions. There was one fatal crash on this segment, which resulted from a *no collision with motor vehicle* accident. The fatal crash took place on June 11, 2013, at noon during daylight on dry pavement and involved an overturn/rollover crash and a driver under the influence (DUI). There was one incapacitating injury crash resulting from a *rear end* crash, and eleven crashes that resulted in possible injury (ten resulting from *rear end* collisions).

Crash Analysis

Table 2-54: I-26 Northbound (within Exit 110) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	1	0	0	0	5	6	11.5%
Rear End	0	1	0	10	27	38	73.1%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	1	2	3	5.8%
Sideswipe Same Direction	0	0	0	0	5	5	9.6%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	1	1	0	11	39	52	
Percentage	1.9%	1.9%	0.0%	21.2%	75.0%		

There were 24 crashes that occurred on the ramps within Exit 110. Of these, four were possible injury crashes and 20 were PDO. Four of the crashes on the ramps were *no collision with motor vehicle* crashes and eighteen were *rear end* crashes.

Table 2-55 summarizes crash data based on injury severity, pavement and lighting condition. Most of the crashes in this segment occurred on dry pavement and daylight driving condition. Both the fatal crash and the incapacitating injury crash occurred during daylight and on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix B (Figures B-3 and B-4).

Table 2-55: I-26 Northbound (Within Exit 110) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	1	0	0	1	0	0	0	1	1.9%
Incapacitating Injury	1	0	0	1	0	0	0	1	1.9%
Non-incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Possible Injury	11	0	0	10	1	0	0	11	21.2%
Property Damage Only	29	5	5	35	4	0	0	39	75.0%
Total	42	5	5	47	5	0	0	52	
Percentage	80.8%	9.6%	9.6%	90.4%	9.6%	0.0%	0.0%		

Crash Analysis

2.2.3 FROM EXIT 110 TO THE I-126/BUSH RIVER ROAD SPLIT (BETWEEN MM 109.290 - 108.250)

One hundred and twenty crashes were reported in this 1.04 mile segment of northbound I-26 between the on-ramp from US 378 at Exit 110 and the off-ramp split to Bush River Road and eastbound I-126.

Table 2-56 summarizes the crash data based on the collision type and injury severity.

Rear end collisions are the most frequent collision type, followed by *sideswipe in the same direction* and *no collision with motor vehicle* collisions. *No collision with motor vehicles* accounted for 19 percent of all collisions. No fatal crashes were reported in this segment. There were seven non-incapacitating injury crashes, six of which were the result of *rear end* crashes. Approximately 79 percent of the crashes were PDO.

Of the 23 *no collision with motor vehicle* crashes, fourteen were collisions with the median barrier and three were collisions with other features (wall, building, tunnel, etc.).

Table 2-56: I-26 Northbound (Exit 110 to I-126/Bush River Road Split) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	6	17	23	19.2%
Rear End	0	0	15	52	67	55.8%
Head On	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0.0%
Angle	0	0	0	2	2	1.7%
Sideswipe Same Direction	0	0	4	20	24	20.0%
Sideswipe Opposite Direction	0	0	0	2	2	1.7%
Backed Into	0	0	0	1	1	0.8%
Other	0	0	0	1	1	0.8%
Total	0	0	25	95	120	
Percentage	0.0%	0.0%	20.8%	79.2%		

Table 2-57 summarizes collision data based on injury severity, daylight and pavement surface conditions. Injury crashes most frequently occurred during daylight and on dry pavement. All seven of the non-incapacitating injury crashes occurred during daylight and on dry pavement. Most of the PDO crashes occurred on dry pavement and during daylight. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix B (Figures B-5, B-6, B-7, B-8, B-9 and B-10).

Crash Analysis

Table 2-57: I-26 Northbound (Exit 110 to I-126/Bush River Road Split) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	7	0	0	7	0	0	0	7	5.8%
Possible Injury	14	1	3	12	5	1	0	18	15.0%
Property Damage Only	82	1	12	76	19	0	0	95	79.2%
Total	103	2	15	95	24	1	0	120	
Percentage	85.8%	1.7%	12.5%	79.2%	20.0%	0.8%	0.0%		

2.2.4 EXIT 108 BETWEEN THE I-126/BUSH RIVER ROAD SPLIT TO THE I-26/I-126 MERGE (MM 108.250 - 107.402)

One hundred and six accidents were reported in this 0.848 mile segment of northbound I-26 at Exit 108 between the ramp split to I-126 southbound/Bush River Road and the merge of I-26/I-126 northbound merge. **Table 2-58** summarizes the accident data by collision type and injury severity.

Rear-end collisions, No Collision with Motor Vehicle, and Sideswipe in the Same Direction were the most frequently occurring crashes. One fatal crash, resulting from a *no collision with motor vehicle* crash, was reported. This crash occurred on Thursday, August 29, 2013 at 11:24 AM, in daylight and on dry pavement, and was the result of a collision with the guardrail end. There were two incapacitating injury crashes and two non-incapacitating injury crashes, each caused by one *no collision with a motor vehicle crash* and one *rear end* crash. Fifteen crashes resulted in possible injury and 86 crashes resulted in PDO.

Crash Analysis

Table 2-58: I-26 Northbound (I-126/Bush River Road Split to I-26/I-126 Merge) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	1	1	1	5	30	38	35.8%
Rear End	0	1	1	9	37	48	45.3%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	1	1	0.9%
Sideswipe Same Direction	0	0	0	1	16	17	16.0%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	2	2	1.9%
Other	0	0	0	0	0	0	0.0%
Total	1	2	2	15	86	106	
Percentage	0.9%	1.9%	1.9%	14.2%	81.1%		

Table 2-59 summarizes the accident data based on injury severity, lighting and pavement surface condition. Both incapacitating injury crashes occurred during daylight. One of the incapacitating injury crashes occurred on dry pavement, while the other occurred on wet pavement. Both non-incapacitating injury crashes occurred on dry pavement, one during daylight and one in dark, not lighted conditions. Most of the PDO crashes occurred during daylight and on wet pavement. However, 33 percent of the PDO crashes occurred on wet pavement and approximately 27 percent of the PDO crashes occurred under dark (lighted or not lighted) conditions. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix B (Figures B-9, B-10, B-11, and B-12).

Table 2-59: I-26 Northbound (I-126/Bush River Road split to I-126/26 Merge) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	1	0	0	1	0	0	0	1	0.9%
Incapacitating Injury	2	0	0	1	1	0	0	2	1.9%
Non-incapacitating Injury	1	0	1	2	0	0	0	2	1.9%
Possible Injury	11	2	2	9	6	0	0	15	14.2%
Property Damage Only	64	6	16	58	28	0	0	86	81.1%
Total	79	8	19	71	35	0	0	106	
Percentage	74.5%	7.5%	17.9%	67.0%	33.0%	0.0%	0.0%		

Crash Analysis

2.2.5 WEAVE BETWEEN EXIT 108 I-26/I-126 MERGE AND EXIT 107 OFF-RAMP (MM 107.402 -107.327)

Thirteen crashes were reported in this 0.075 mile long segment of northbound I-26 between the merge of northbound I-26 and northbound I-126 at Exit 108 and the off-ramp to eastbound I-20 at Exit 107.

Table 2-60 summarizes the accident data by collision type and injury severity. One non-incapacitating injury crash and three possible injury crashes were reported. Nine crashes resulted in PDO. No fatal crashes were reported. Seven of the thirteen crashes were caused by *rear end* collisions. Five crashes were caused by *sideswipe in the same direction* collisions, while one crash was caused by a *no collision with motor vehicle* crash.

Table 2-61 summarizes the crash data based on injury severity, lighting and pavement surface condition. The non-incapacitating injury crash occurred in dark, not lighted conditions on wet pavement. Most of the PDO crashes occurred during daylight and on dry pavement. Five of the thirteen PDO crashes occurred on wet pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix B (Figures B-11 and B-12).

Table 2-60: I-26 Northbound (Weave between I-26/126 Merge and Exit 107 Off-Ramp) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	1	0	1	7.7%
Rear End	0	0	1	2	4	7	53.8%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	0	5	5	38.5%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	1	3	9	13	
Percentage	0.0%	0.0%	7.7%	23.1%	69.2%		

Crash Analysis

Table 2-61: I-26 Northbound (Weave between I-26/126 Merge and Exit 107 Off-Ramp) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	0	0	1	0	1	0	0	1	7.7%
Possible Injury	2	0	1	1	2	0	0	3	23.1%
Property Damage Only	8	1	0	7	2	0	0	9	69.2%
Total	10	1	2	8	5	0	0	13	
Percentage	76.9%	7.7%	15.4%	61.5%	38.5%	0.0%	0.0%		

2.2.6 WEAVE AT EXIT 107 OFF-RAMP TO EASTBOUND I-20 AND LOOP ON RAMP FROM EASTBOUND I-20 (MM 107.327 – 107.200)

Twenty seven crashes were reported in this 0.127 mile segment on northbound I-26 between the westbound off-ramp to eastbound I-20 and the loop on-ramp from eastbound I-20 at Exit 107. **Table 2-62** summarizes crash data based on the collision type and injury severity. *Rear end* collisions are the most frequent collision type in this segment (approximately 70 percent), followed by *no collision with motor vehicle* and *sideswipe in the same direction* collisions. No fatal crashes were reported. Four crashes resulted in possible injury, while twenty three crashes resulted in PDO. Three of the possible injury crashes resulted from *rear end* collisions and one from a *sideswipe in the same direction* collision.

Crash Analysis

Table 2-62: I-26 Northbound (Weave at Exit 107 Off-Ramp and Loop On-Ramp) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	0	5	5	18.5%
Rear End	0	0	0	3	16	19	70.4%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	1	2	3	11.1%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	0	4	23	27	
Percentage	0.0%	0.0%	0.0%	14.8%	85.2%		

Table 2-63 summarizes crash data based on injury severity, lighting and pavement surface condition. Two of the possible injury crashes occurred in daylight and two in dark, unlit conditions. Three of the four injury crashes occurred on dry pavement. Approximately 85 percent of all crashes resulted in property damages. Approximately 34 percent of POD crashes took place under dark conditions and about 30 percent took place on wet pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix B (Figures B-13 and B-14).

Table 2-63: I-26 Northbound (Weave at Exit 107 Off-Ramp and Loop On-Ramp) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Possible Injury	2	0	2	3	1	0	0	4	14.8%
Property Damage Only	16	1	6	16	7	0	0	23	85.2%
Total	18	1	8	19	8	0	0	27	
Percentage	66.7%	3.7%	29.6%	70.4%	29.6%	0.0%	0.0%		

Crash Analysis

2.2.7 WEAVING SEGMENT BETWEEN EXIT 107 LOOP ON AND LOOP OFF RAMPS (MM 107.2 – 107.09)

Forty four crashes were reported in this 0.11 mile segment of northbound I-26 between the loop on-ramp from eastbound I-20 and the loop off-ramp to westbound I-20 at Exit 107. Twelve of the crashes occurred on the ramps.

Table 2-64 summarizes the accident data based on the collision type and injury severity. Approximately 43 percent of all crashes were caused by *rear end* collisions, while thirty percent were caused by *sideswipe in the same direction* crashes. *No collision with motor vehicle* accidents were the third highest collision type with 12 crashes. No fatal crashes were reported along this segment. One crash resulting in an incapacitating injury was caused by a *rear end* crash, and four crashes resulted in possible injuries. Thirty nine crashes were PDO.

Table 2-64: I-26 Northbound (Weave at Exit 107 Loop Ramps) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	1	11	12	27.3%
Rear End	0	1	0	3	15	19	43.2%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	0	13	13	29.5%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	1	0	4	39	44	
Percentage	0.0%	2.3%	0.0%	9.1%	88.6%		

Eleven of the twelve ramp crashes were *no collision with motor vehicle* crashes (the other was a *rear end* crash). Of the twelve total *no collision with motor vehicle* crashes, three each were collisions with highway traffic sign posts and with guard rail ends, and two each were collisions with the guardrail face and were overturn/rollover collisions.

Table 2-65 summarizes crash data by injury severity, lighting and pavement condition. The incapacitating injury crash occurred on dry pavement in dark, unlighted conditions. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix B (Figures B-15 and B-16).

Crash Analysis

Table 2-65: I-26 Northbound (Weave at Exit 107 Loop Ramps) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	1	1	0	0	0	1	2.3%
Non-incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Possible Injury	2	1	1	4	0	0	0	4	9.1%
Property Damage Only	34	1	4	33	6	0	0	39	88.6%
Total	36	2	6	38	6	0	0	44	
Percentage	81.8%	4.5%	13.6%	86.4%	13.6%	0.0%	0.0%		

2.2.8 WEAVING SEGMENT EXIT 107 WB LOOP ON AND ON RAMP (BETWEEN MM 107.090 - 106.618)

One hundred and twelve crashes were reported in this 0.472 mile segment of northbound I-26 between the loop off-ramp to westbound I-20 and the on-ramp from westbound I-20 at Exit 107. **Table 2-66** summarizes crash data by injury severity and collision type.

Most of the crashes in the segment resulted from *rear end* (58 percent), *sideswipe in the same direction* (25 percent) and *no collision with motor vehicle* (14 percent) collisions. No fatal crash was reported. There was one incapacitating injury crash and one non-incapacitating injury crashes, both caused by *no collision with motor vehicle* crashes. One hundred of the crashes (89 percent) were PDO.

Of the sixteen collisions that did not involve other motor vehicles, six involved collisions with the median barrier and two with the face of the guardrail. The non-incapacitating injury crash involved a pedestrian, while the incapacitating injury crash resulted from a median barrier collision.

Crash Analysis

Table 2-66: I-26 Northbound (Exit 107 Loop On to On-Ramp) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	1	1	1	13	16	14.3%
Rear End	0	0	0	6	59	65	58.0%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	1	2	3	2.7%
Sideswipe Same Direction	0	0	0	2	26	28	25.0%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	1	1	10	100	112	
Percentage	0.0%	0.9%	0.9%	8.9%	89.3%		

Table 2-67 summarizes crash data by injury severity, daylight and pavement surface condition. Most of the crashes took place during the daytime and on dry pavement, but 22 of the crashes occurred on wet pavement. Both the incapacitating injury crash and the non-incapacitating injury crash occurred in unlighted conditions. The incapacitating injury crash occurred on wet pavement and the non-incapacitating injury crash occurred on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix B (Figures B-15 and B-16).

Table 2-67: I-26 Northbound (Exit 107 On to On-Ramp) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	1	0	1	0	0	1	0.9%
Non-incapacitating Injury	0	0	1	1	0	0	0	1	0.9%
Possible Injury	9	0	1	8	2	0	0	10	8.9%
Property Damage Only	87	3	10	81	19	0	0	100	89.3%
Total	96	3	13	90	22	0	0	112	
Percentage	85.7%	2.7%	11.6%	80.4%	19.6%	0.0%	0.0%		

Crash Analysis

2.2.9 WEAVE BETWEEN EXIT 107 AND EXIT 106 (BETWEEN MM 106.618 – 106.571)

Fifteen crashes took place in this 0.047 mile segment of northbound I-26 between the on-ramp from westbound I-20 at Exit 107 and the off-ramp to eastbound Saint Andrews Road at Exit 106. **Table 2-68** summarizes crash data by collision type and injury severity.

Rear end collisions are the most frequent type of accident in this segment; 11 of the 15 collisions along this segment are *rear-end* collisions. No fatal crashes were reported. One possible injury crash, resulting from a *rear end* collision, was reported. Approximately 93 percent of all crashes were PDO.

Table 2-68: I-26 Northbound (Weave between Exits 107 and 106) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	0	1	1	6.7%
Rear End	0	0	0	1	10	11	73.3%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	1	1	6.7%
Sideswipe Same Direction	0	0	0	0	2	2	13.3%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	0	1	14	15	
Percentage	0.0%	0.0%	0.0%	6.7%	93.3%		

Table 2-69 summarizes the crash data by injury severity, lighting and pavement surface condition. The single possible injury crash took place during dark, unlit conditions on wet pavement. Most of the PDO crashes occurred during daylight and on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix B (Figures B-17 and B-18).

Crash Analysis

Table 2-69: I-26 Northbound (Weave between Exits 107 and 106) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Possible Injury	1	0	0	1	0	0	0	1	6.7%
Property Damage Only	11	0	3	12	2	0	0	14	93.3%
Total	12	0	3	13	2	0	0	15	
Percentage	80.0%	0.0%	20.0%	86.7%	13.3%	0.0%	0.0%		

2.2.10 WITHIN EXIT 106 (MM 106.571 - 105.961)

One hundred and sixty two crashes were reported in this 0.61 mile segment of northbound I-26 between the off-ramp and on-ramp to Saint Andrews Road at Exit 106. This segment includes the loop off-ramp to westbound Saint Andrews Road. Twenty nine crashes occurred on the ramps at the interchange, with fourteen *no collision with motor vehicle* crashes and fourteen *rear end* collisions. One of the ramp collisions was a *backed into* crash.

Table 2-70 summarizes crash data based on the collision type and injury severity. *Rear end* collisions are the most frequent collision type in this segment, followed by *no collision with motor vehicle* and *sideswipe in the same direction*. Approximately 18 percent of all crashes resulted from *no collision with motor vehicle* crashes. No fatal crashes were reported. There were five non-incapacitating injury crashes (three from *no collision with motor vehicle* and two *rear end* collisions) and 24 possible injury crashes, while 133 crashes resulted in PDO.

Of the 29 *no collision with motor vehicle* collisions, four were crashes with guardrail face. There were three each crashes with the median barrier and trees. There were two crashes each with guardrail ends, fence, embankment, and other (wall, building, tunnel, etc.). Two crashes were the result of overturn/rollover and two were jackknifed trucks.

Table 2-71 summarizes crash data by injury severity, lighting and pavement surface condition. Most of these collisions took place in daylight on dry pavement. Of the five non-incapacitating injury crashes, four took place in daylight and five on dry pavement. Most of the PDO crashes also took place in daylight and on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix B (Figures B-19, B-20, B-21 and B-22).

Crash Analysis

Table 2-70: I-26 Northbound (within Exit 106) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	8	21	29	17.9%
Rear End	0	0	19	88	107	66.0%
Head On	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0.0%
Angle	0	0	1	3	4	2.5%
Sideswipe Same Direction	0	0	1	20	21	13.0%
Sideswipe Opposite Direction	0	0	0	0	0	0.0%
Backed Into	0	0	0	1	1	0.6%
Other	0	0	0	0	0	0.0%
Total	0	0	29	133	162	
Percentage	0.0%	0.0%	17.9%	82.1%		

Table 2-71: I-26 Northbound (within Exit 106) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	4	0	1	5	0	0	0	5	3.1%
Possible Injury	20	0	4	19	5	0	0	24	14.8%
Property Damage Only	110	3	20	106	27	0	0	133	82.1%
Total	134	3	25	130	32	0	0	162	
Percentage	82.7%	1.9%	15.4%	80.2%	19.8%	0.0%	0.0%		

2.2.11 BETWEEN EXIT 106 AND EXIT 104 (MM 105.961 - 104.51)

One hundred and twenty five crashes were reported in this 1.451 mile segment of northbound I-26 between the on-ramp from Saint Andrews Road at Exit 106 and the off-ramp to Piney Grove Road at Exit 104. **Table 2-72** summarizes crash data based on the collision type and injury severity.

Rear end collisions are the most frequent type of collision within this segment, followed by *no collision with motor vehicles* and *sideswipe in the same direction*. No fatal crash was reported. There was one incapacitating injury crash (resulting from an angle crash) and three non-incapacitating injury crashes

Crash Analysis

(one *no collision with motor vehicle* and two *rear end* crashes). There were 99 PDO crashes (approximately 79 percent of all the crashes).

Of the nineteen *no collision with motor vehicle* crashes, seven involved collisions with the median barrier, four with other movable objects, and two crashes with trees.

Table 2-72: I-26 Northbound (between Exits 106 and 104) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	1	5	13	19	15.2%
Rear End	0	0	2	16	67	85	68.0%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	1	0	0	3	4	3.2%
Sideswipe Same Direction	0	0	0	1	15	16	12.8%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	1	1	0.8%
Total	0	1	3	22	99	125	
Percentage	0.0%	0.8%	2.4%	17.6%	79.2%		

Table 2-73 summarizes crash data by injury severity, lighting and pavement surface condition. The incapacitating injury crash occurred during daylight and on dry pavement. Of the three non-incapacitating injury crashes, two occurred in daylight and two occurred on dry pavement. Nearly 30 percent of the crashes occurring on this segment occurred on wet pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix B (Figures B-23, B-24, B-25 and B-26).

Crash Analysis

Table 2-73: I-26 Northbound (between Exits 106 and 104) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	1	0	0	1	0	0	0	1	0.8%
Non-incapacitating Injury	2	0	1	2	1	0	0	3	2.4%
Possible Injury	21	0	1	16	6	0	0	22	17.6%
Property Damage Only	86	2	11	70	29	0	0	99	79.2%
Total	110	2	13	89	36	0	0	125	
Percentage	88.0%	1.6%	10.4%	71.2%	28.8%	0.0%	0.0%		

2.2.12 WITHIN EXIT 104 (MM 104.51 - 103.717)

One hundred and five crashes were reported in this 0.793 mile segment of I-26 northbound between the off-ramp and on-ramp to/from Piney Grove Road at Exit 104. **Table 2-74** summarizes crash data based on the collision type and injury severity. Within the segment, the most frequent crashes were *rear-end* collisions, followed by *sideswipe in the same direction*, and *no collisions with motor vehicle* collisions.

One fatal crash, classified as a *no collision with motor vehicle* crash, was reported. The fatal crash occurred March 6, 2012 at 3:41 AM and involved a collision with the roadway embankment and DUI. There were two non-incapacitating injury crashes, both the result of *no collision with motor vehicle* collisions.

Crash Analysis

Table 2-74: I-26 Northbound (Within Exit 104) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	1	0	2	1	6	10	9.5%
Rear End	0	0	0	18	63	81	77.1%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	1	0	1	1.0%
Sideswipe Same Direction	0	0	0	2	10	12	11.4%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	1	1	1.0%
Other	0	0	0	0	0	0	0.0%
Total	1	0	2	22	80	105	
Percentage	1.0%	0.0%	1.9%	21.0%	76.2%		

Nineteen crashes occurred on the interchange ramps at Exit 104. Sixteen of these crashes were *rear end* crashes and the remainder *no collision with motor vehicle*, *angle*, and *sideswipe same direction* (one crash each).

Table 2-75 summarizes crash data by injury severity, lighting and pavement surface condition. The two non-incapacitating injury crashes occurred during daylight and dry pavement. The majority of crashes occurred during daylight and on dry pavement; approximately 26 percent of all injury crashes occurred on wet pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix B (Figures B-27 and B-28).

Table 2-75: I-26 Northbound (Within Exit 104) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	1	1	0	0	0	1	1.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	2	0	0	2	0	0	0	2	1.9%
Possible Injury	20	2	0	11	11	0	0	22	21.0%
Property Damage Only	75	2	3	64	16	0	0	80	76.2%
Total	97	4	4	78	27	0	0	105	
Percentage	92.4%	3.8%	3.8%	74.3%	25.7%	0.0%	0.0%		

Crash Analysis

2.2.13 BETWEEN EXIT 104 AND EXIT 103 (MM 103.717 – 103.422)

One hundred and forty nine crashes took place in this 0.295 mile segment of northbound I-26 between the on-ramp from Piney Grove Road at Exit 104 and the loop off-ramp to Harbison Boulevard at Exit 103.

The crash data is summarized by collision type and injury severity in **Table 2-76**. *Rear end* collisions are the most frequent type of collision (approximately 82 percent), followed by *sideswipe in the same direction*. No fatal crashes were reported. One crash resulted in a non-incapacitating injury and seventeen resulted in possible injury. Of the 131 PDO crashes, 105 were due to *rear end* collisions and 15 were due to *sideswipe in same direction*.

Table 2-76: I-26 Northbound (Between Exits 104 and 103) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	0	9	9	6.0%
Rear End	0	0	1	16	105	122	81.9%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	2	2	1.3%
Sideswipe Same Direction	0	0	0	1	15	16	10.7%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	1	17	131	149	
Percentage	0.0%	0.0%	0.7%	11.4%	87.9%		

Table 2-77 summarizes the accident data by injury severity, lighting and pavement surface condition. Most of the crashes occurred during daylight. Approximately 23 percent of the total crashes occurred on wet pavement. The one non-incapacitating injury crash occurred in daylight on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix B (Figures B-29 and B-30).

Crash Analysis

Table 2-77: I-26 Northbound (Between Exits 104 and 103) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	1	0	0	1	0	0	0	1	0.7%
Possible Injury	15	0	2	13	4	0	0	17	11.4%
Property Damage Only	125	0	6	100	31	0	0	131	87.9%
Total	141	0	8	114	35	0	0	149	
Percentage	94.6%	0.0%	5.4%	76.5%	23.5%	0.0%	0.0%		

2.2.14 WITHIN EXIT 103 (MM 103.422 - 102.88)

Thirty four crashes were reported in this 0.542 mile segment of northbound I-26 between the loop off-ramp and the on-ramp to/from Harbison Road at Exit 103. **Table 2-78** summarizes the accident data by collision type and injury severity. *Rear end* collisions are the most frequent type of collision (approximately 74 percent) in this segment, followed by *sideswipe in the same direction* (approximately 12 percent) and *no collision with motor vehicle* type collisions (approximately 9 percent). No fatal crashes were reported. One incapacitating injury crash was the result of a *no collision with motor vehicle* crash.

Table 2-78: I-26 Northbound (Within Exit 103) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	1	0	1	1	3	8.8%
Rear End	0	0	0	3	22	25	73.5%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	2	2	5.9%
Sideswipe Same Direction	0	0	0	0	4	4	11.8%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	1	0	4	29	34	
Percentage	0.0%	2.9%	0.0%	11.8%	85.3%		

Crash Analysis

Table 2-79 summarizes crash data based on injury severity, lighting and pavement surface condition. Most of the crashes occurred during daylight and on dry pavement. The incapacitating injury crash occurred during daylight and on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix B (Figures B-31 and B-32).

Table 2-79: I-26 Northbound (Within Exit 103) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	1	0	0	1	0	0	0	1	2.9%
Non-incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Possible Injury	3	0	1	3	1	0	0	4	11.8%
Property Damage Only	26	0	3	22	7	0	0	29	85.3%
Total	30	0	4	26	8	0	0	34	
Percentage	88.2%	0.0%	11.8%	76.5%	23.5%	0.0%	0.0%		

2.2.15 BETWEEN EXIT 103 AND EXIT 102(MM 102.880 - 102.473)

Twenty three crashes were reported in this 0.407 mile segment of northbound I-26 between the on-ramp from Harbison Boulevard at Exit 103 and the off-ramp to Lake Murray Boulevard at Exit 102. **Table 2-80** summarizes the accident data by collision type and injury severity.

Sideswipe in the same direction is the most frequent collision type in this segment followed by *rear end* collisions and *no collision with motor vehicle* type accidents. Most of the crashes in this segment were PDO crashes. No fatal crashes were reported, while two crashes resulted in possible injury.

Crash Analysis

Table 2-80: I-26 Northbound (Between Exits 103 and 102) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	1	4	5	21.7%
Rear End	0	0	0	0	6	6	26.1%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	2	2	8.7%
Sideswipe Same Direction	0	0	0	1	9	10	43.5%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	0	2	21	23	
Percentage	0.0%	0.0%	0.0%	8.7%	91.3%		

Crash data summary by injury severity, pavement and lighting condition is presented in **Table 2-81**.

Both of the injury crashes resulted in non-incapacitating injuries. The possible injury crashes occurred on dry pavement. One of the possible injury crashes occurred during daylight, while the other occurred under dark-lighted conditions. Most of the PDO crashes in this segment occurred during daylight and on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix B (Figures B-33 and B-34).

Table 2-81: I-26 Northbound (Between Exits 103 and 102) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Possible Injury	1	1	0	2	0	0	0	2	8.7%
Property Damage Only	16	2	3	18	3	0	0	21	91.3%
Total	17	3	3	20	3	0	0	23	
Percentage	73.9%	13.0%	13.0%	87.0%	13.0%	0.0%	0.0%		

Crash Analysis

2.2.16 WITHIN EXIT 102 (MM 102.473 - 101.766)

Twenty one crashes were reported in this 0.707 mile segment of northbound I-26 between the off-ramp and on-ramp to/from Lake Murray Boulevard at Exit 102. **Table 2-82** summarizes the crash data by collision type and injury severity. *No collision with motor vehicle* crashes are the most frequent type of collision type in this segment, accounting for approximately 48 percent of all crashes. The remaining crashes were caused by *rear end, angle, and sideswipe in the same direction* collisions. One crash resulted in non-incapacitating injury and eighteen resulted in PDO. No fatal crashes were reported.

Table 2-82: I-26 Northbound (Within Exit 102) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	1	2	7	10	47.6%
Rear End	0	0	0	0	6	6	28.6%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	2	2	9.5%
Sideswipe Same Direction	0	0	0	0	3	3	14.3%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	1	2	18	21	
Percentage	0.0%	0.0%	4.8%	9.5%	85.7%		

Of the ten *no collision with motor vehicle* crashes, three were collisions with highway traffic sign posts and two were collisions with trees. There was one crash each with the median barrier, guardrail face, ditch, a deer and other fixed object.

Six of the collisions occurred on the ramps at the Exit 102 interchange. Five of these involved *no collision with motor vehicle*, and one involved a *sideswipe same direction* crash.

Table 2-83 summarizes crash data based on injury severity, lighting condition and pavement surface condition. Most of the crashes occurred in daylight. Approximately 33 percent of all crashes occurred on wet pavement. The non-incapacitating injury crash occurred on dry pavement under dark, not lighted conditions. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix B (Figures B-35 and B-36).

Crash Analysis

Table 2-83: I-26 Northbound (Within Exit 102) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	0	0	1	1	0	0	0	1	4.8%
Possible Injury	0	0	2	2	0	0	0	2	9.5%
Property Damage Only	15	1	2	11	7	0	0	18	85.7%
Total	15	1	5	14	7	0	0	21	
Percentage	71.4%	4.8%	23.8%	66.7%	33.3%	0.0%	0.0%		

2.2.17 WITHIN EXIT 101 (MM 101.766 - 100.921)

Fifty eight crashes were reported in this 0.845 mile segment of northbound I-26 between the off-ramp and on-ramp to/from Broad River Road at Exit 101. **Table 2-84** summarizes crash data by collision type and injury severity. No fatal crashes were reported on this segment. There was one non-incapacitating injury crash, five possible injury crashes, and fifty two crashes that resulted in PDO. *Rear end* collisions were the most frequent type of accident within this segment, followed by *no collision with motor vehicle* and *sideswipe in the same direction* accidents. The non-incapacitating injury crash was caused by a *sideswipe in the same direction* collision.

Table 2-84: I-26 Northbound (Within Exit 101) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	1	11	12	20.7%
Rear End	0	0	0	3	31	34	58.6%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	4	4	6.9%
Sideswipe Same Direction	0	0	1	1	6	8	13.8%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	1	5	52	58	
Percentage	0.0%	0.0%	1.7%	8.6%	89.7%		

Crash Analysis

Of the twelve *no collision with motor vehicle* crashes, five involved collisions with the median barrier.

Table 2-85 summarizes the accident data based on injury severity, lighting and pavement surface condition. The non-incapacitating injury crash took place on dry pavement and in dark, not lighted conditions. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix B (Figures B-37 and B-38).

Table 2-85: I-26 Northbound (Within Exit 101) - Lighting and Pavement Condition

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	0	0	1	1	0	0	0	1	1.7%
Possible Injury	3	0	2	5	0	0	0	5	8.6%
Property Damage Only	42	0	10	31	21	0	0	52	89.7%
Total	45	0	13	37	21	0	0	58	
Percentage	77.6%	0.0%	22.4%	63.8%	36.2%	0.0%	0.0%		

2.2.18 NORTH OF EXIT 101 (MM 100.921 AND 100.503)

Fourteen crashes were reported in this 0.418 mile segment of northbound I-26 to the north of the on-ramp from Broad River Road at Exit 101. **Table 2-86** summarizes crash data based on the collision type and injury severity. No fatal crashes were reported. Three crashes resulted in possible injury and eleven crashes resulted in property damage.

Crash Analysis

Table 2-86: I-26 Northbound (North of Exit 101) - Collision Type and Injury Type

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	1	4	5	35.7%
Rear End	0	0	0	1	4	5	35.7%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	1	3	4	28.6%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	0	3	11	14	
Percentage	0.0%	0.0%	0.0%	21.4%	78.6%		

Of the fourteen crashes, five were caused by *no collision with motor vehicle*, five by *rear end* and four by *sideswipe in the same direction* collisions.

Table 2-87 summarizes crash data based on injury severity, lighting and surface condition. Most of the crashes took place during daylight and on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix B (Figures B-39 and B-40).

Table 2-87: I-26 Northbound (North of Exit 101) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Possible Injury	3	0	0	2	1	0	0	3	21.4%
Property Damage Only	8	0	3	9	2	0	0	11	78.6%
Total	11	0	3	11	3	0	0	14	
Percentage	78.6%	0.0%	21.4%	78.6%	21.4%	0.0%	0.0%		

Crash Analysis

2.3 Eastbound I-20

Two hundred and twenty five crashes occurred along eastbound I-20 during the reporting period. **Table 2-88** summarizes the crashes along eastbound I- 20 by injury severity and collision type

Table 2-88: Eastbound I-20 Crash Summary - Collision Type and Injury Severity

Collision Type	Injury Severity					Total	Percentage
	Fatality	Injury			Property Damage		
		Incapacitating	Non-incapacitating	Possible			
No Collision with Motor Vehicle	1	0	4	11	35	51	22.7%
Rear End	0	0	1	16	82	99	44.0%
Head On	0	0	1	0	1	2	0.9%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	1	11	12	5.3%
Sideswipe Same Direction	0	0	1	7	51	59	26.2%
Sideswipe Opposite Direction	0	0	0	0	1	1	0.4%
Backed Into	0	0	0	0	1	1	0.4%
Other	0	0	0	0	0	0	0.0%
	1	0	7	35	182	225	100.0%

One fatal crash resulting from a *No collision with motor vehicle* type collision was reported.

Forty two injury type crashes (approximately 19 percent resulting in non-incapacitating or possible injury, were reported. The seven non-incapacitating injury crashes were caused by *no collision with motor vehicle* (four crashes), and one crash each for *rear end*, *head on*, and *sideswipe same direction*. The 35 possible injury crashes resulted from the following

- Rear End (16 crashes)
- No Collision with Motor Vehicle (11 crashes)
- Sideswipe-same direction type collision (seven crashes)
- Angle collision (one crash)

Table 2-89 summarizes the crash reports along eastbound I- 20 based on crash severity, lighting and road surface conditions

The fatal crash along eastbound I-20 occurred during daylight and on dry pavement.

All of the non-incapacitating injury crashes occurred during daylight and six occurred on dry pavement (one occurred on wet pavement).

Crash Analysis

Table 2-89: Eastbound I-20 Crash Summary - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark		Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
		Lighted	Not Lighted						
Fatality	1	0	0	1	0	0	0	1	0.4%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	7	0	0	6	1	0	0	7	3.1%
Possible Injury	22	0	13	26	9	0	0	35	15.6%
Property Damage Only	157	0	25	150	30	2	0	182	80.9%
Total	187	0	38	183	40	2	0	225	
Percentage	83.1%	0.0%	16.9%	81.3%	17.8%	0.9%	0.0%		

Crash data along eastbound I-20 were also summarized based on day of the week and time of day. A graph depicting the time and day of the week is shown in **Figure 2.19**.

As can be seen from **Figure 2.19**, the morning peak period (between 6:00 AM and 9:00 AM) has the highest occurrence of crashes on typical weekdays (Tuesday, Wednesday and Thursday) than on weekends. Saturday crashes are most frequent at 10:00 AM, while Sunday crashes occur with similar frequency at 11:00 AM, 12:00 Noon and 4:00 PM.

Crash Analysis

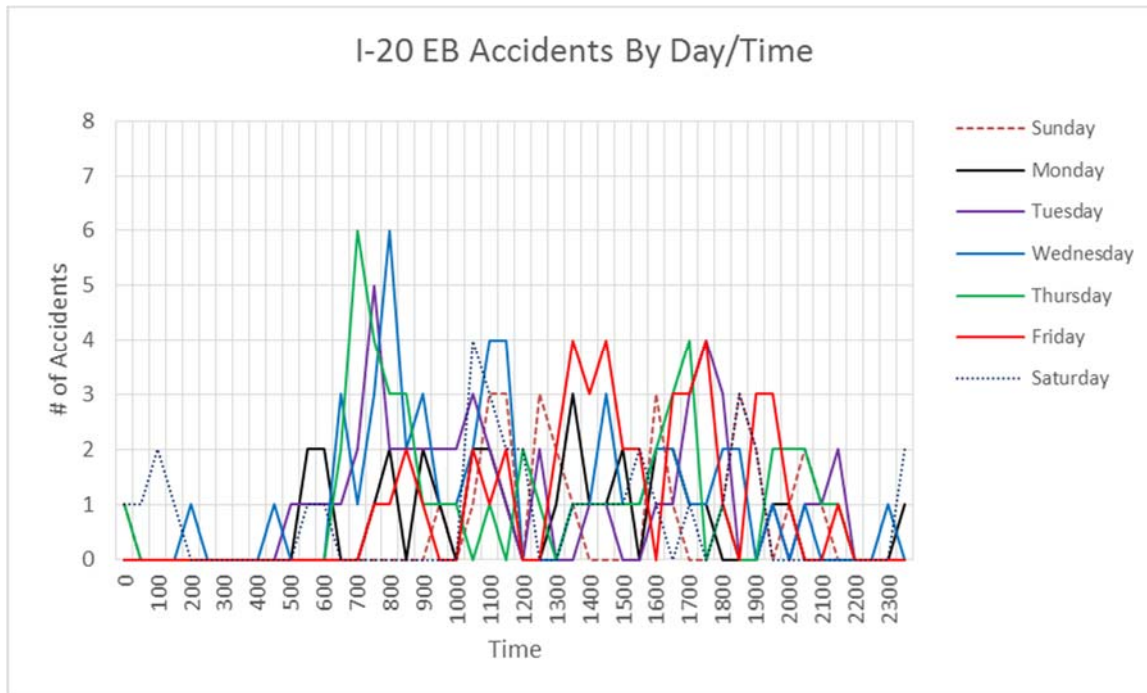


Figure 2.19: I-20 Eastbound Crash Summary - Day of the Week and Time of Day

The accident data along eastbound I-20 was separated into nine segments. The segments are based on the mileposts associated with interchange ramp mileposts coded in the South Carolina Statewide Highway GIS network file. The eastbound segments are:

- West of eastbound off-ramp to Exit 63 (MM 62.600 and MM 62.990)
- Within Exit 63 between the eastbound off-ramp and the loop on-ramp (MM 62.990 and MM 63.408)
- Within Exit 63 between the eastbound loop on-ramp and the eastbound on-ramp (MM 63.408 and MM 63.622)
- Between the eastbound on-ramp at Exit 63 and the off-ramp to southbound I-26 at Exit 64 (MM 63.662 and MM 63.679)
- At Exit 64 between the off-ramp to southbound I-26 and the weaving section between the loop on-ramp from southbound I-26 and the loop off-ramp to northbound I-26 (MM 63.679 and 64.120)
- At Exit 64 the weaving section created between the loop on-ramp from southbound I-26 and the loop off-ramp to northbound I-26 and the on-ramp from northbound I-26 (MM 64.120 and MM 64.450)
- Between the on-ramp from northbound I-26 at Exit 64 to the eastbound off-ramp at Exit 65 (MM 64.450 and 64.750)
- Within Exit 65 between the eastbound off-ramp and on-ramp (MM 64.750 and MM 65.436)
- East of the eastbound on-ramp at Exit 65 (MM 65.436 and MM 65.820)

Crash Analysis

Table 2-90 summarizes the accident data for each segment based on injury severity, lighting and pavement surface conditions. **Table 2-91** summarizes the accident data for each segment based on collision type.

Crash Analysis

Table 2-90: Eastbound I-20 Segment Summary

Segment	Mile Posts	Injury Severity				Property Damage	Lighting Condition			Surface Condition				Total	Percentage
		Fatality	Injury				Day Light	Dark		Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
			Incapacitating	Non-Incapacitating	Possible			Lighted	Not Lighted						
West of eastbound off-ramp to Exit 63	(MM 62.600 - 62.990)	0	0	1	5	15	17	0	4	16	5	0	0	21	9.3%
Within Exit 63 between the eastbound off-ramp and the loop on-ramp	(MM 62.990 - 63.408)	0	0	1	3	31	32	0	3	25	10	0	0	35	15.6%
Within Exit 63 between the eastbound loop on-ramp and the eastbound on-ramp	(MM 63.408 - 63.622)	0	0	0	0	6	5	0	1	5	1	0	0	6	2.7%
Between the eastbound on-ramp at Exit 63 and the off-ramp to southbound I-26 at Exit	(MM 63.622 - 63.679)	0	0	0	1	7	5	0	3	7	1	0	0	8	3.6%
Segment at Exit 64 between the off-ramp to southbound I-26 and the weaving section between the loop on-ramp from southbound I-26 and the loop off-ramp to northbound I-26	(MM 63.679 - 64.120)	0	0	1	2	27	29	0	1	24	6	0	0	30	13.3%
Segment between the weaving segment between the loop on-ramp from southbound I-26 and the loop off-ramp to northbound I-26 and the on-ramp from northbound I-26	(MM 64.120 - 64.450)	0	0	1	4	33	34	0	4	32	6	0	0	38	16.9%
Between the on-ramp from northbound I-26 at Exit 64 to the eastbound off-ramp at Exit 65	(MM 64.450 - 64.750)	0	0	2	5	14	15	0	6	17	3	1	0	21	9.3%
Within Exit 65 between the eastbound off-ramp and on-ramp	(MM 64.750 - 65.436)	0	0	1	6	26	24	0	9	32	1	0	0	33	14.7%
East of the eastbound on-ramp at Exit 65	(MM 65.436 - 65.820)	1	0	0	9	23	26	0	7	25	7	1	0	33	14.7%
Total		1	0	7	35	182	187	0	38	183	40	2	0	225	
Percentage		0.4%	0.0%	3.1%	15.6%	80.9%	83.1%	0.0%	16.9%	81.3%	17.8%	0.9%	0.0%		

Crash Analysis

Table 2-91: Eastbound I-20 Segment Summary by Collision Type and Injury Severity

Segment	Mile Posts	Accident Types									Total	Percentage
		No Collision with Motor Vehicle	Rear End	Head On	Rear-to-Rear	Angle	Sideswipe Same Direction	Sideswipe Opposite Direction	Backed Into	Other		
West of eastbound off-ramp to Exit 63	(MM 62.600 - 62.990)	9	9	0	0	1	2	0	0	0	21	9.3%
Within Exit 63 between the eastbound off-ramp and the loop on-ramp	(MM 62.990 - 63.408)	3	24	1	0	1	5	0	1	0	35	15.6%
Within Exit 63 between the eastbound loop on-ramp and the eastbound on-ramp	(MM 63.408 - 63.622)	1	3	0	0	0	2	0	0	0	6	2.7%
Between the eastbound on-ramp at Exit 63 and the off-ramp to southbound I-26 at Exit 64	(MM 63.622 - 63.679)	0	3	1	0	0	4	0	0	0	8	3.6%
Segment at Exit 64 between the off-ramp to southbound I-26 and the weaving section between the loop on-ramp from southbound I-26 and the loop off-ramp to northbound I-26	(MM 63.679 - 64.120)	6	11	0	0	0	13	0	0	0	30	13.3%
Segment between the weaving segment between the loop on-ramp from southbound I-26 and the loop off-ramp to northbound I-26 and the on-ramp from northbound I-26	(MM 64.120 - 64.450)	10	10	0	0	5	12	1	0	0	38	16.9%
Between the on-ramp from northbound I-26 at Exit 64 to the eastbound off-ramp at Exit 65	(MM 64.450 - 64.750)	6	4	0	0	1	10	0	0	0	21	9.3%
Within Exit 65 between the eastbound off-ramp and on-ramp	(MM 64.750 - 65.436)	4	25	0	0	1	3	0	0	0	33	14.7%
East of the eastbound on-ramp at Exit 65	(MM 65.436 - 65.820)	12	10	0	0	3	8	0	0	0	33	14.7%
Total		51	99	2	0	12	59	1	1	0	225	
Percentage		22.7%	44.0%	0.9%	0.0%	5.3%	26.2%	0.4%	0.4%	0.0%		

Crash Analysis

The crash data summaries for the individual interstate segments also include collisions occurring on the ramps. Of the 225 crashes along eastbound I-20, 58 crashes were identified in the crash data as occurring on ramps.

The ACR for each of the segments along eastbound I-20 was calculated to compare the segments against the statewide average ACR. For freeway segments, the statewide average ACR for all crashes is 92.2 per HMVM. The statewide average injury and fatality ACR for freeway segments is 27.5 per HMVM and 0.77 per HMVM respectively.

The ACR for all crashes for each segment of eastbound I-20, including the ramp crashes associated with those segments, are shown in **Table 2-92**. The ACR for all the injury crashes are shown in **Table 2-93**.

Table 2-92: I-20 Eastbound Segments - Actual Crash Rate (Total Crashes)

Segment	Mile Posts	Total Crashes	Segment Length	Segment AADT	Actual Crash Rate (per 100 MVM)
West of eastbound off-ramp to Exit 63	(MM 62.600 - 62.990)	21	0.390	76,900	127.9
Within Exit 63 between the eastbound off-ramp and the loop on-ramp	(MM 62.990 - 63.408)	35	0.418	74,500	205.3
Within Exit 63 between the eastbound loop on-ramp and the eastbound on-ramp	(MM 63.408 - 63.622)	6	0.214	74,500	68.7
Between the eastbound on-ramp at Exit 63 and the off-ramp to southbound I-26 at Exit 64	(MM 63.622 - 63.679)	8	0.057	74,500	344.1
Segment at Exit 64 between the off-ramp to eastbound I-26 and the weaving section between the loop on-ramp from eastbound I-26 and the loop off-ramp to westbound I-26	(MM 63.679 - 64.120)	30	0.441	74,500	166.8
Segment between the weaving segment between the loop on-ramp from southbound I-26 and the loop off-ramp to northbound I-26 and the on-ramp from northbound I-26	(MM 64.120 - 64.450)	38	0.330	74,500	282.3
Between the on-ramp from westbound I-26 at Exit 64 to the eastbound off-ramp at Exit 65	(MM 64.450 - 64.750)	21	0.300	90,900	140.7
Within Exit 65 between the eastbound off-ramp and on-ramp	(MM 64.750 - 65.436)	33	0.676	90,900	98.1
East of the eastbound on-ramp at Exit 65	(MM 65.436 - 65.820)	33	0.384	103,700	151.4

As can be seen from **Table 2-92**, all but one of the segments of eastbound I-20 exceeds the statewide average ACR for freeway segments. The only segment that does not exceed the statewide average ACR is the segment within the Exit 63 interchange between the loop on-ramp and the eastbound on-ramp from Bush River Road.

As can be seen from **Table 2-93**, the injury ACR for five of the nine segments of eastbound I-20 exceeds the statewide average injury ACR for freeway segments. These segments include

- The segment of I-20 west of the eastbound off-ramp to Exit 63
- The segment between the eastbound on-ramp at Exit 53 and the off-ramp to southbound I-26 at Exit 64

Crash Analysis

- The two consecutive segments including the weaving segment between the loop ramps at Exit 64 and the off-ramp to Exit 65
- The segment of eastbound I-20 east of the on-ramp from Exit 65.

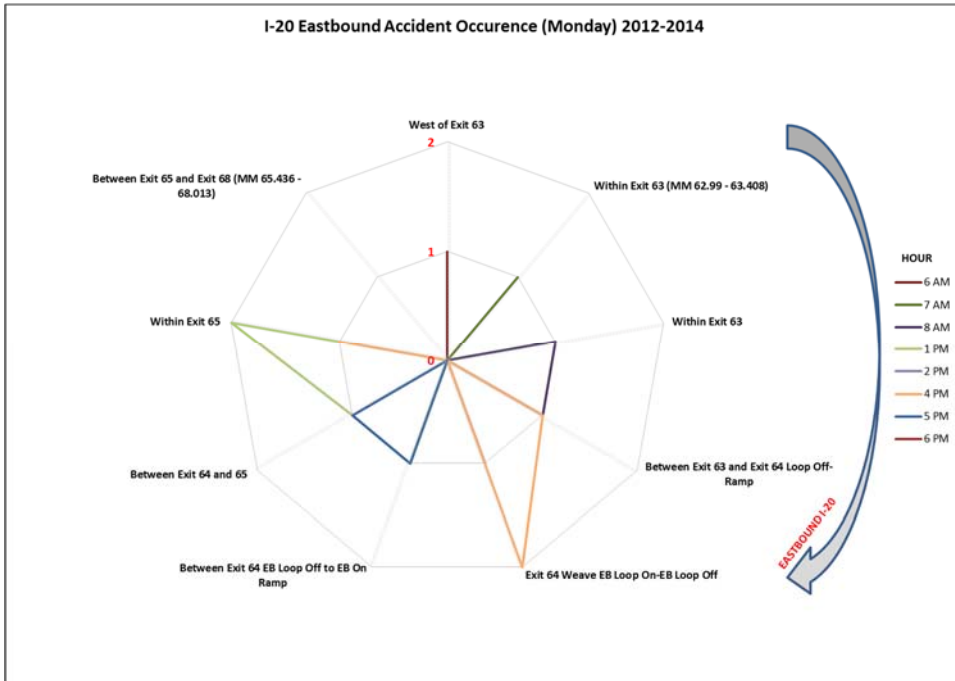
Table 2-93: I-20 Eastbound Segments - Actual Crash Rates (Injury Crashes)

Segment	Mile Posts	Total Injury Crashes	Segment Length	Segment AADT	Actual Crash Rate (per 100 MVM)
West of eastbound off-ramp to Exit 63	(MM 62.600 - 62.990)	6	0.390	76,900	36.5
Within Exit 63 between the eastbound off-ramp and the loop on-ramp	(MM 62.990 - 63.408)	4	0.418	74,500	23.5
Within Exit 63 between the eastbound loop on-ramp and the eastbound on-ramp	(MM 63.408 - 63.622)	0	0.214	74,500	0.0
Between the eastbound on-ramp at Exit 63 and the off-ramp to southbound I-26 at Exit 64	(MM 63.622 - 63.679)	1	0.057	74,500	43.0
Segment at Exit 64 between the off-ramp to southbound I-26 and the weaving section between the loop on-ramp from southbound I-26 and the loop off-ramp to northbound I-26	(MM 63.679 - 64.120)	3	0.441	74,500	16.7
Segment between the weaving segment between the loop on-ramp from southbound I-26 and the loop off-ramp to northbound I-26 and the on-ramp from northbound I-26	(MM 64.120 - 64.450)	5	0.330	74,500	37.1
Between the on-ramp from northbound I-26 at Exit 64 to the eastbound off-ramp at Exit 65	(MM 64.450 - 64.750)	7	0.300	90,900	46.9
Within Exit 65 between the eastbound off-ramp and on-ramp	(MM 64.750 - 65.436)	7	0.676	90,900	20.8
East of the eastbound on-ramp at Exit 65	(MM 65.436 - 65.820)	9	0.384	103,700	41.3

The accidents occurring during the morning and afternoon peak periods for each day of the week and on typical weekdays (Tuesday through Thursday) were plotted on graphs. The resulting graphs are shown in **Figures 2.20** through **2.27**.

The sections following **Figures 2.20** through **2.27** contain a detailed review of crash data for each segment of eastbound I-20. Collision diagrams for the freeway segments and interchange areas of eastbound I-20 are shown in Appendix C.

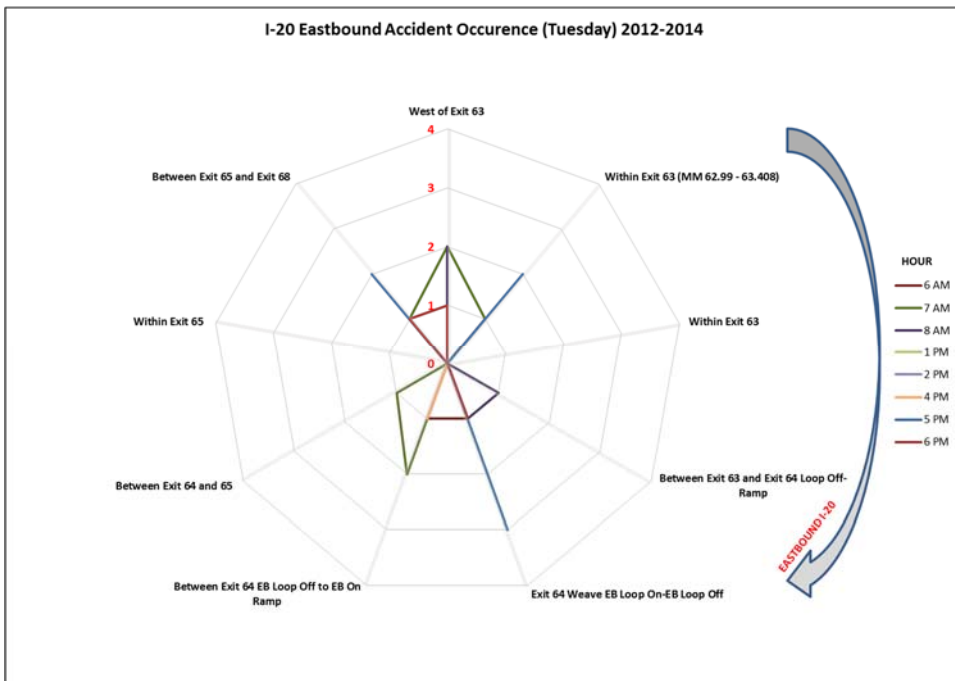
Crash Analysis



Most frequent Monday accidents occur:

- At the weaving movement between the Exit 64 loop ramps
- Within Exit 65

Figure 2.20: Eastbound I-20 Accident Occurrence (Monday)

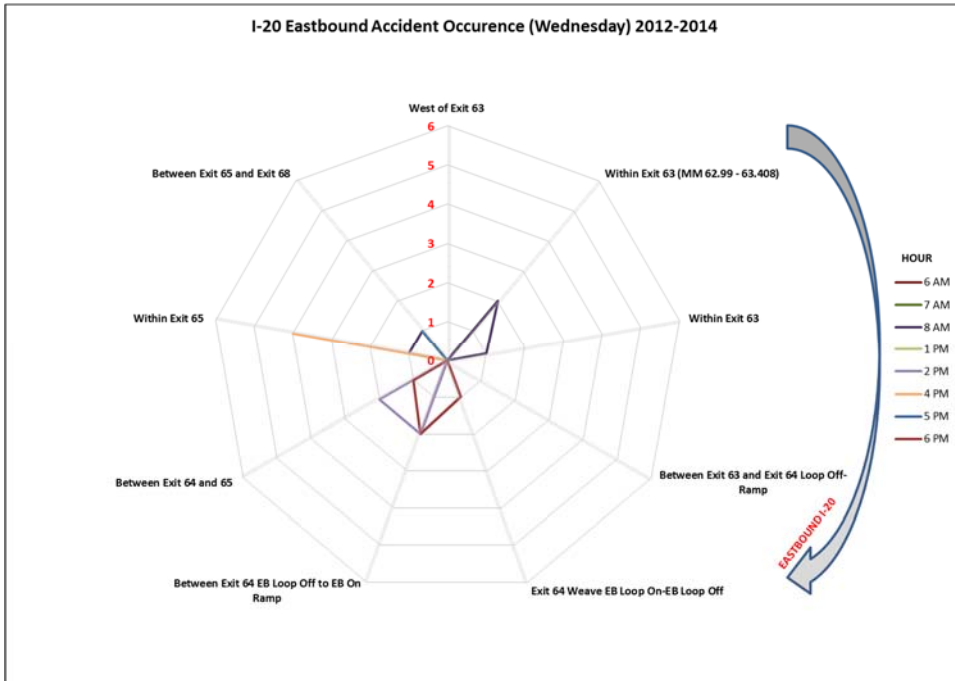


Most frequent Tuesday accidents occur:

- At the weaving movement between the Exit 64 loop ramps
- Between the loop off-ramp and the on-ramp at Exit 64

Figure 2.21: Eastbound I-20 Accident Occurrence (Tuesday)

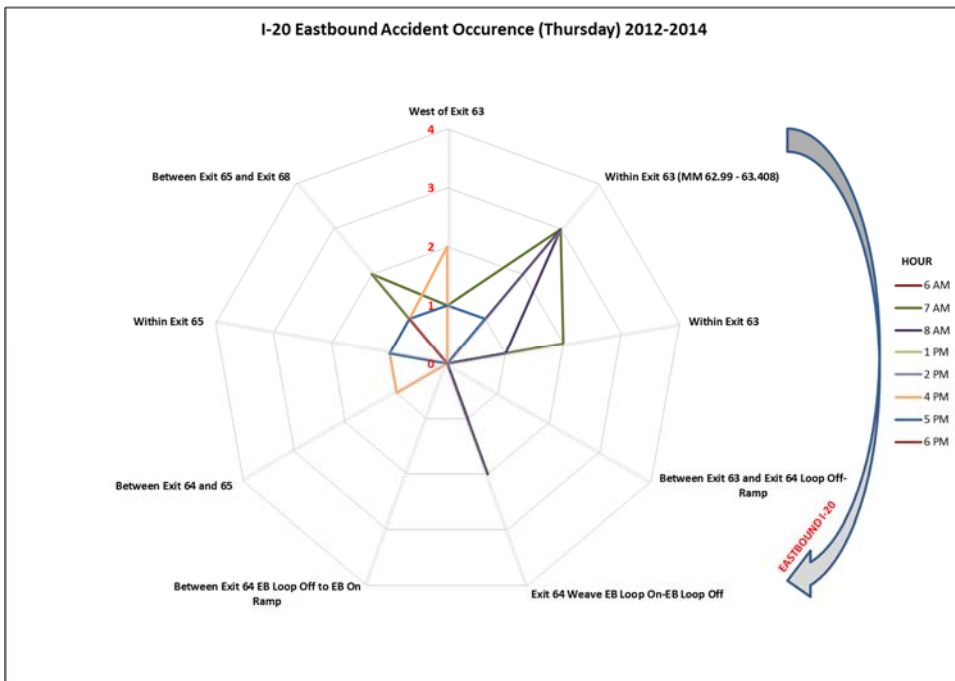
Crash Analysis



Most frequent Wednesday accidents occur:

- Within Exit 65

Figure 2.22: Eastbound I-20 Accident Occurrence (Wednesday)

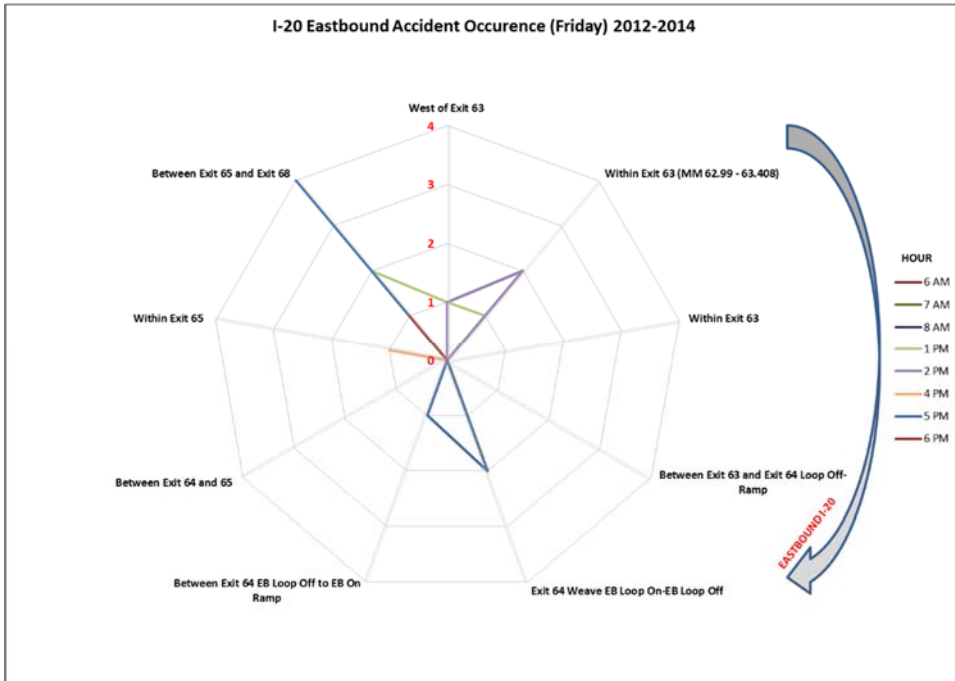


Most frequent Thursday accidents occur:

- Within Exit 63
- At the weaving movement between the Exit 64 loop ramps

Figure 2.23: Eastbound I-20 Accident Occurrence (Thursday)

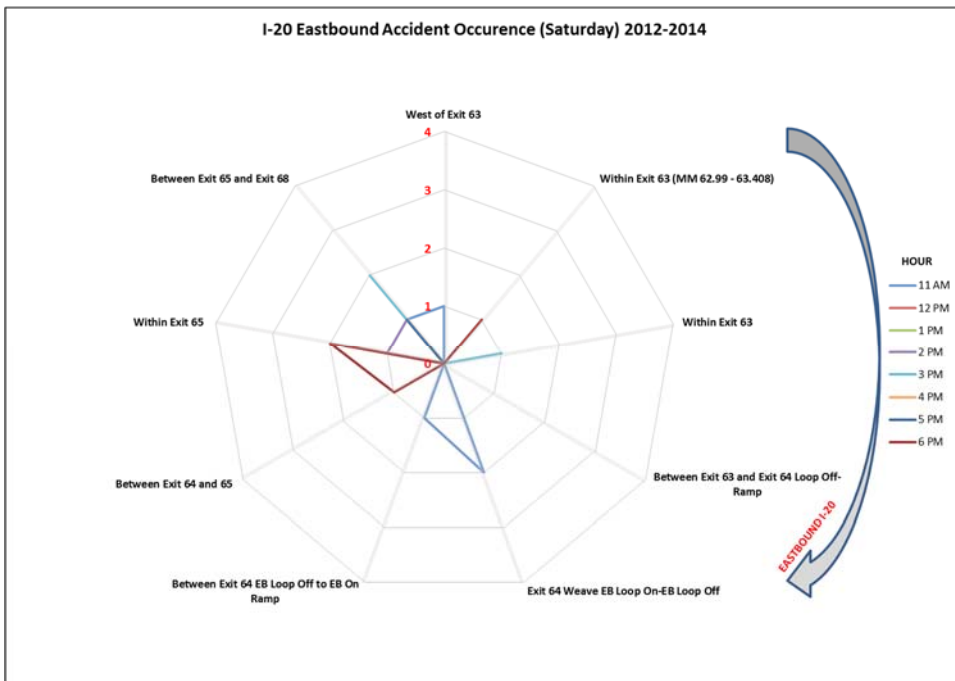
Crash Analysis



Most frequent Friday accidents occur:

- East of Exit 65
- At the weaving movement between the Exit 64 loop ramps

Figure 2.24: Eastbound I-20 Accident Occurrence (Friday)

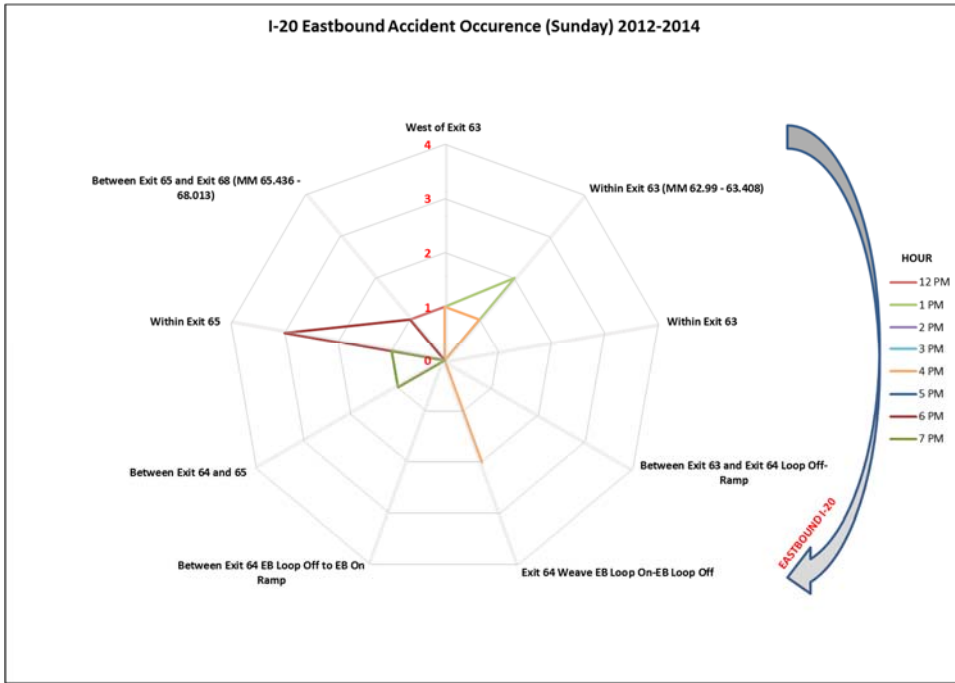


Most frequent Saturday accidents occur:

- At the weaving movement between the Exit 64 loop ramps
- Within Exit 65

Figure 2.25: Eastbound I-20 Accident Occurrence (Saturday)

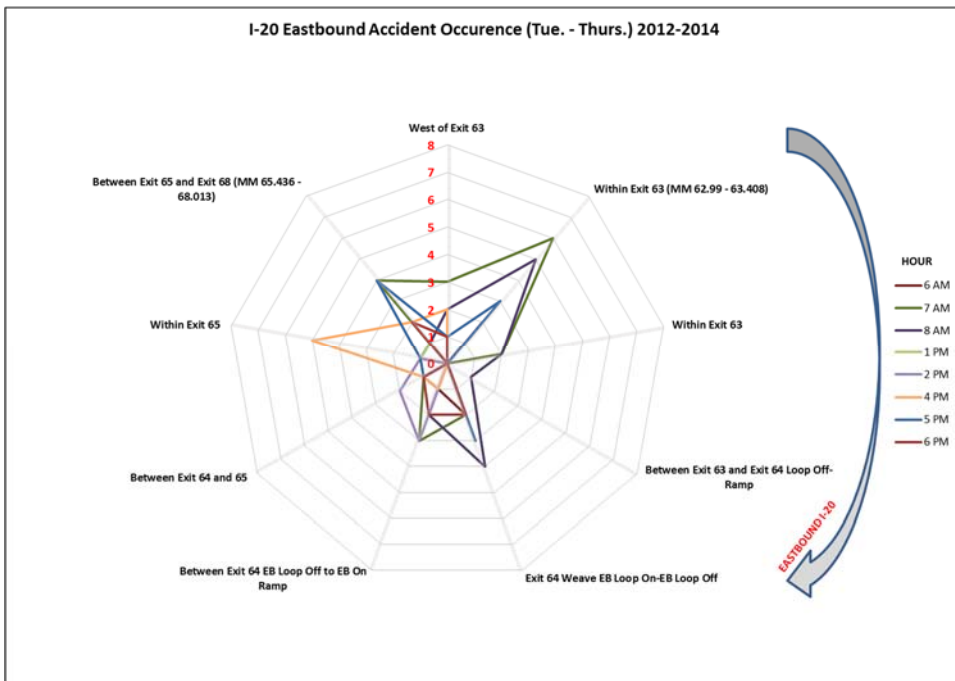
Crash Analysis



Most frequent Sunday accidents occur:

- Within Exit 63
- At the weaving movement between the Exit 64 loop ramps
- Within Exit 65

Figure 2.26: Eastbound I-20 Accident Occurrence (Sunday)



Most frequent Weekday accidents occur:

- Within Exit 63
- At the weaving movement between the Exit 64 loop ramps
- Within Exit 65
- East of Exit 65

Figure 2.27: Eastbound I-20 Accident Occurrence (Typical Weekday)

Crash Analysis

2.3.1 WEST OF EXIT 63 (MM 62.600 AND MM 62.990)

Twenty one accidents took place in this 1.43 mile segment of I-20 west of the eastbound off-ramp to Bush River Road at Exit 63. **Table 2-94** summarizes crash data based on the collision type and injury severity. No fatal crashes were reported. There was one non-incapacitating injury crash and five possible injury crashes. Fifteen crashes were PDO crashes.

Table 2-94: I-20 Eastbound (west of Exit 63) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	1	3	5	9	42.9%
Rear End	0	0	0	1	8	9	42.9%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	1	1	4.8%
Sideswipe Same Direction	0	0	0	1	1	2	9.5%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	1	5	15	21	
Percentage	0.0%	0.0%	4.8%	23.8%	71.4%		

No collision with motor vehicle and *rear end* type collisions were the two most frequent type of collisions in this segment, followed by *sideswipe in the same direction* collisions. *No collision with motor vehicle* and *rear end* type collision account for approximately 85 percent of all the collisions within this segment.

A high percentage (approximately 43 percent) of *no collision with motor vehicle* type collisions was reported on this segment. About 67 percent of all injury crashes in this segment were caused by this collision type. The types of crashes involved collisions with the median barrier (four crashes), guardrail face (two crashes), other moveable object (two crashes), and a deer (one crash).

The crash data within this segment is summarized in **Table 2-95** based on injury severity, lighting and pavement surface condition. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix C (Figures C-1 and C-2).

Crash Analysis

Table 2-95: I-20 Eastbound (West of Exit 63) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	1	0	0	1	0	0	0	1	4.8%
Possible Injury	3	0	2	2	3	0	0	5	23.8%
Property Damage Only	13	0	2	13	2	0	0	15	71.4%
Total	17	0	4	16	5	0	0	21	
Percentage	81.0%	0.0%	19.0%	76.2%	23.8%	0.0%	0.0%		

Most of the crashes occurred on daylight and on dry pavement. Five of the 21 crashes occurred on wet pavement. The non-incapacitating injury crash occurred during daylight and on dry pavement.

2.3.2 EXIT 63 OFF-RAMP TO LOOP ON-RAMP (MM 62.99 AND MM 63.408)

Thirty five crashes took place in this segment of eastbound I-20 within the Exit 63 interchange between the eastbound off-ramp and the loop on-ramp to/from Bush River Road. **Table 2-96** summarizes crash data for this segment by collision type.

Table 2-96: I-20 Eastbound (Exit 63 Off-Ramp to Loop On-Ramp) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	1	2	3	8.6%
Rear End	0	0	0	1	23	24	68.6%
Head On	0	0	1	0	0	1	2.9%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	1	0	1	2.9%
Sideswipe Same Direction	0	0	0	0	5	5	14.3%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	1	1	2.9%
Other	0	0	0	0	0	0	0.0%
Total	0	0	1	3	31	35	
Percentage	0.0%	0.0%	2.9%	8.6%	88.6%		

Crash Analysis

As can be seen from **Table 2-96**, no fatal accidents were reported and four crashes resulted in non-incapacitating injury or possible injury. *Rear end* collisions are the most frequent collision type in this segment followed by *sideswipe in the same direction* crashes. These two collision types account for approximately 86 percent of all reported crashes within this segment.

The single non-incapacitating injury crash was the result of a *head on* collision.

The crash data indicates that twenty of the 35 crashes were located on the ramps at Exit 63. Of the 20 collisions that took place on the ramps, 18 were *rear end* collisions and two were *no collision with motor vehicle* crashes.

Crash data within this segment is summarized in **Table 2-97** based on injury severity, lighting and pavement surface condition. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix C (Figures C-2 and C-3).

Table 2-97: I-20 Eastbound (Exit 63 Off-Ramp to Loop On-Ramp) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	1	0	0	0	1	0	0	1	2.9%
Possible Injury	3	0	0	2	1	0	0	3	8.6%
Property Damage Only	28	0	3	23	8	0	0	31	88.6%
Total	32	0	3	25	10	0	0	35	
Percentage	91.4%	0.0%	8.6%	71.4%	28.6%	0.0%	0.0%		

As shown in **Table 2-97**, the majority of the crashes took place in daylight. Approximately 71 percent of all crashes occurred on dry pavement, while the remaining 29 percent occurred on wet pavement.

The non-incapacitating injury crash occurred in daylight on wet pavement. The three possible injury crashes occurred during daylight; two of these crashes occurred on dry pavement, while the other occurred on wet pavement.

2.3.3 EXIT 63 LOOP ON-RAMP TO ON-RAMP (MM 63.408 AND MM 63.622)

Six crashes were reported in this 0.214 mile segment of eastbound I-20 within the Exit 63 interchange between the eastbound loop on-ramp and the eastbound on-ramp from Bush River Road. **Table 2-98** summarizes the crash data by collision type and **Table 2-99** summarizes the crash data by severity, lighting and pavement condition.

As shown in **Table 2-98**, all six accidents were PDO; no fatality or injury crashes were reported on this segment. Three of the six crashes were *rear end* type collisions, two were *sideswipe in the same direction* and one was a

Crash Analysis

no collision with motor vehicle crash. As shown in **Table 2-99**, a majority of the accidents occurred in daylight and on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix C (Figures C-3 and C-4).

Table 2-98: I-20 Eastbound (Loop On-Ramp to On-Ramp) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	0	1	1	16.7%
Rear End	0	0	0	0	3	3	50.0%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	0	2	2	33.3%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	0	0	6	6	
Percentage	0.0%	0.0%	0.0%	0.0%	100.0%		

Table 2-99: I-20 Eastbound (Loop On-Ramp to On-Ramp) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Possible Injury	0	0	0	0	0	0	0	0	0.0%
Property Damage Only	5	0	1	5	1	0	0	6	100.0%
Total	5	0	1	5	1	0	0	6	
Percentage	83.3%	0.0%	16.7%	83.3%	16.7%	0.0%	0.0%		

Crash Analysis

2.3.4 EXIT 63 ON-RAMP TO EXIT 64 OFF-RAMP TO I-26 EASTBOUND (MM 63.622 AND MM 63.679)

A total of 8 crashes were reported in this 0.057 mile segment of eastbound I-20 between the eastbound on-ramp at Exit 63 and the off-ramp to southbound I-26 at Exit 64. **Table 2-100** summarizes crash data on this segment based on collision type.

Seven of the crashes were PDO collisions. No fatal crashes and only one crash resulting in possible injury occurred within this segment. *Sideswipe in the same direction* is the most frequently occurring type of crash in this segment followed by *rear end* type collision. There was one *head on* crash within this segment.

Table 2-100: I-20 Eastbound (between Exits 63 and 64) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	0	0	0	0.0%
Rear End	0	0	0	1	2	3	37.5%
Head On	0	0	0	0	1	1	12.5%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	0	4	4	50.0%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	0	1	7	8	
Percentage	0.0%	0.0%	0.0%	12.5%	87.5%		

Table 2-101 summarizes crash data in this segment by injury severity, lighting and pavement surface condition. The possible injury crash occurred in daylight and on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix C (Figures C-5 and C-6).

Crash Analysis

Table 2-101: I-20 Eastbound (between Exits 63 and 64) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unknow		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Possible Injury	1	0	0	1	0	0	0	1	12.5%
Property Damage Only	4	0	3	6	1	0	0	7	87.5%
Total	5	0	3	7	1	0	0	8	
Percentage	62.5%	0.0%	37.5%	87.5%	12.5%	0.0%	0.0%		

2.3.5 EXIT 64 OFF-RAMP TO I-26 SOUTHBOUND TO WEAVING AREA (MM 63.679 AND MM 64.12)

Thirty crashes occurred along the segment of I-20 eastbound between the off-ramp to southbound I-26 and the start of the weaving segment within Exit 64 between the loop on-ramp from eastbound I-26 and the loop off-ramp to northbound I-26. **Table 2-102** summarizes crash data on this segment based on collision type and injury severity. No fatal crashes were reported on this segment. There was one non-incapacitating injury crash (resulting from a *sideswipe same direction* crash) and two possible injury crashes (resulting from *rear end* crashes). Twenty seven of the crashes were PDO.

Table 2-102: I-20 Eastbound (Exit 64 Off-Ramp to Weaving Area) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	6	6	20.0%
Rear End	0	0	2	9	11	36.7%
Head On	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	1	12	13	43.3%
Sideswipe Opposite Direction	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0.0%
Total	0	0	3	27	30	
Percentage	0.0%	0.0%	10.0%	90.0%		

Crash Analysis

As can be seen from **Table 2-102**, *sideswipe in the same direction* and *rear end* are the two most frequent types of collision in this segment. Together, these two collision types account for approximately 80 percent of all reported accidents in this segment. Twenty percent of the crashes were caused by *no collision with motor vehicle* crashes. All six of these crashes resulted in PDO.

Crash data within this segment is summarized in **Table 2-103** based on injury severity, lighting and pavement surface condition. Nearly all the crashes occurred during daylight and most (about 80 percent) occurred on dry pavement. Twenty percent of the crashes occurred on wet pavement. The non-incapacitating injury crash and the two possible injury crashes occurred in daylight on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix C (Figures C-5, C-6, C-7 and C-8).

Table 2-103: I-20 Eastbound (Exit 64 Off-Ramp to Weaving Area) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	1	0	0	1	0	0	0	1	3.3%
Possible Injury	2	0	0	2	0	0	0	2	6.7%
Property Damage Only	26	0	1	21	6	0	0	27	90.0%
Total	29	0	1	24	6	0	0	30	
Percentage	96.7%	0.0%	3.3%	80.0%	20.0%	0.0%	0.0%		

2.3.6 EXIT 64 WEAVING AREA TO ON-RAMP FROM I-26 NORTHBOUND (BETWEEN MM 64.12 AND MM 64.45)

Thirty eight crashes occurred along the segment of I-20 eastbound along the weaving segment between the Exit 64 loop on-ramp from southbound I-26 and the loop off-ramp to northbound I-26 and the on-ramp from northbound I-26. **Table 2-104** summarizes crash data on this segment based on collision type and injury severity.

Crash Analysis

Table 2-104: I-20 Eastbound (Weaving Area to Eastbound On-Ramp) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	1	3	6	10	26.3%
Rear End	0	0	0	1	9	10	26.3%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	5	5	13.2%
Sideswipe Same Direction	0	0	0	0	12	12	31.6%
Sideswipe Opposite Direction	0	0	0	0	1	1	2.6%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	1	4	33	38	
Percentage	0.0%	0.0%	2.6%	10.5%	86.8%		

There were no fatal crashes reported on this segment. There was one non-incapacitating injury crash and four possible injury crashes. Thirty-three crashes were PDO. Twelve of the reported crashes were *sideswipe in the same direction*, ten were *no collision with motor vehicle* type accident, ten were *rear end* collisions, five were angle collisions and one was sideswipe in the opposing direction. Of the ten *no collision with motor vehicle* crashes, four involved crashes with the guardrail face.

The one non-incapacitating injury crash and three of the possible injury crashes were *no collision with motor vehicle* type crashes. The other possible injury crash was caused by a *rear end* crash.

Crash data within this segment is summarized in **Table 2-105** based on injury severity, lighting and pavement surface condition. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix C (Figures C-7, C-8, C-9 and C-10).

Crash Analysis

Table 2-105: I-20 Eastbound (Weaving Area to Eastbound On-Ramp) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	1	0	0	1	0	0	0	1	2.6%
Possible Injury	3	0	1	2	2	0	0	4	10.5%
Property Damage Only	30	0	3	29	4	0	0	33	86.8%
Total	34	0	4	32	6	0	0	38	
Percentage	89.5%	0.0%	10.5%	84.2%	15.8%	0.0%	0.0%		

The majority of the crashes occurred during daylight and on dry pavement. The non-incapacitating injury crash and three of the four possible injury crashes occurred during daylight. The non-incapacitating injury crash and two possible injury crashes occurred on dry pavement, and two possible injury crashes occurred on wet pavement.

2.3.7 BETWEEN EXIT 64 AND EXIT 65 (BETWEEN MM 64.450 AND MM 64.750)

Twenty one crashes were reported in this 0.3 mile segment of eastbound I-20 between the on-ramp from northbound I-26 at Exit 64 and the off-ramp to Broad River Road at Exit 65. **Table 2-106** summarizes crash data on this segment based on the collision type and injury severity.

No fatal crashes were reported. Approximately 33 percent of the crashes resulted in non-incapacitating injury or possible injury, while 67 percent were PDO.

Ten reported crashes were *sideswipe-same direction* crashes, six were *no collision with motor vehicle* type crashes, four were *rear end* collisions and one was an *angle* crash.

There were two non-incapacitating injury crashes and five possible injury crashes. The non-incapacitating injury crashes were due to *no collision with motor vehicle* and *rear end* crashes. Three of the possible injury crashes resulted from *sideswipe in the same direction* collisions, and one each from *rear end* and from *no collision with motor vehicle* crashes.

Crash Analysis

Table 2-106: I-20 Eastbound (Between Exits 64 and 65) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	1	1	4	6	28.6%
Rear End	0	0	1	1	2	4	19.0%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	1	1	4.8%
Sideswipe Same Direction	0	0	0	3	7	10	47.6%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	2	5	14	21	
Percentage	0.0%	0.0%	9.5%	23.8%	66.7%		

Crash data within this segment is summarized in **Table 2-107** based on injury severity, lighting and pavement surface condition. A majority of the crashes occurred on dry pavement. Fifteen crashes occurred during daylight, while the remaining six collisions occurred in dark, unlit conditions. The two non-incapacitating injury crashes occurred in daylight and on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix C (Figures C-9, C-10, C-11 and C-12).

Table 2-107: I-20 Eastbound (Between Exits 64 and 65) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	2	0	0	2	0	0	0	2	9.5%
Possible Injury	2	0	3	4	1	0	0	5	23.8%
Property Damage Only	11	0	3	11	2	1	0	14	66.7%
Total	15	0	6	17	3	1	0	21	
Percentage	71.4%	0.0%	28.6%	81.0%	14.3%	4.8%	0.0%		

Crash Analysis

2.3.8 WITHIN EXIT 65 (BETWEEN MM 64.75 AND MM 65.436)

Thirty three crashes were reported in this 0.676 mile segment of eastbound I-20 within the Exit 65 interchange area between the off-ramp and on-ramp to/from Broad River Road. **Table 2-108** summarizes crash data on this segment based on the collision type and injury severity.

Table 2-108: I-20 Eastbound (Within Exit 65) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	1	0	3	4	12.1%
Rear End	0	0	0	6	19	25	75.8%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	1	1	3.0%
Sideswipe Same Direction	0	0	0	0	3	3	9.1%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	1	6	26	33	
Percentage	0.0%	0.0%	3.0%	18.2%	78.8%		

No fatal crashes were reported. One of the reported crashes was classified as a non-incapacitating injury crash resulting from a *no collision with motor vehicle* crash. The six possible injury crashes were the result of *rear end* crashes. There were 26 crashes classified as PDO.

Rear end collisions are the most frequent type of collision in this segment. Twenty five accidents were *rear end* collisions, four were *no collision with motor vehicles* crashes, three were *sideswipe in the same direction*, and one was an angle collision. Approximately 25 percent of all *rear end* collision in this segment resulted in possible injury crashes.

Twenty four of the 33 crashes in this segment were identified as occurring on the ramps of the Exit 65 interchange. Of these 24 crashes, 21 were *rear end* crashes, two were *no collision with motor vehicle* crashes, and one was a *sideswipe same direction* crash.

Crash data within this segment is summarized in **Table 2-109** based on injury severity, lighting and pavement surface condition. Most of the crashes in this segment occurred in daylight and on dry pavement. The non-incapacitating injury crash occurred in daylight on dry pavement. All six of the possible injury crashes occurred on dry pavement, but five of the six occurred in dark, not lighted conditions. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix C (Figures C-13 and C-14).

Crash Analysis

Table 2-109: I-20 Eastbound (Within Exit 65) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	1	0	0	1	0	0	0	1	3.0%
Possible Injury	1	0	5	6	0	0	0	6	18.2%
Property Damage Only	22	0	4	25	1	0	0	26	78.8%
Total	24	0	9	32	1	0	0	33	
Percentage	72.7%	0.0%	27.3%	97.0%	3.0%	0.0%	0.0%		

2.3.9 EAST OF EXIT 65 (BETWEEN MM 65.436 AND MM 65.820)

Thirty three crashes were reported in this 0.384 mile segment of eastbound I-20 east of the on-ramp from Broad River Road at Exit 65. One fatal crash, nine injury crashes and twenty three PDO crashes were reported. **Table 2-110** summarizes the crash data on this segment based on the collision type and injury severity.

Table 2-110: I-20 Eastbound (East of Exit 65) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	1	0	0	3	8	12	36.4%
Rear End	0	0	0	3	7	10	30.3%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	3	3	9.1%
Sideswipe Same Direction	0	0	0	3	5	8	24.2%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	1	0	0	9	23	33	
Percentage	3.0%	0.0%	0.0%	27.3%	69.7%		

The fatal crash was caused a by *no collision with motor vehicle* crash that occurred on Saturday, November 16, 2013 at 3:45 PM. The crash occurred when the guardrail face was hit but a driver operating under the influence.

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There were nine possible injury crashes in this segment; three each of *rear end*, *sideswipe the same direction* and *no collision with motor vehicles* crashes.

Crash data within this segment is summarized in **Table 2-111** based on injury severity, lighting and pavement surface condition. The majority of the crashes occurred during daylight and on dry pavement. The fatal crash occurred during daylight and on dry pavement. Seven of the possible injury crashes occurred during daylight, while the remaining two occurred during dark, unlit conditions. Seven of the nine possible injury crashes occurred on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix C (Figures C-15 and C-16).

Table 2-111: I-20 Eastbound (East of Exit 65) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	1	0	0	1	0	0	0	1	3.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Possible Injury	7	0	2	7	2	0	0	9	27.3%
Property Damage Only	18	0	5	17	5	1	0	23	69.7%
Total	26	0	7	25	7	1	0	33	
Percentage	78.8%	0.0%	21.2%	75.8%	21.2%	3.0%	0.0%		

2.4 Westbound I-20

Five hundred and seventy one crashes were reported along westbound I-20 within the study area. **Table 2-112** summarizes crashes along westbound I-20 by injury severity and collision types.

Crash Analysis

Table 2-112: Westbound I-20 Crash Summary - Collision Type and Injury Severity

Collision Type	Injury Severity					Total	Percentage
	Fatality	Injury			Property Damage		
		Incapacitating	Non-incapacitating	Possible			
No Collision with Motor Vehicle	1	3	6	9	45	64	11.2%
Rear End	1	2	7	63	350	423	74.1%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	1	1	0.2%
Angle	0	0	0	4	11	15	2.6%
Sideswipe Same Direction	0	0	2	3	61	66	11.6%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	2	2	0.4%
Other	0	0	0	0	0	0	0.0%
	2	5	15	79	470	571	100.0%

There were two fatal crashes on westbound I-20 during the reporting period. One fatal crash resulted from a *No collision with motor vehicle* crash and one was due to a *rear end* crash.

There were five incapacitating injury crashes: three resulted from *no collision with motor vehicle* crashes and two from *rear end* crashes. There were fifteen non-incapacitating injury crashes. Of these, seven were *rear end* crashes, six were *no collision with motor vehicle* crashes, and two were *sideswipe same direction* crashes.

Seventy nine crashes resulted in possible injury. Sixty three of these (about 80 percent) were due to *rear end* crashes. There were nine possibly injury crashes resulting from *no collision with motor vehicle* crashes, four from *angle* crashes, and three from *sideswipe same direction* crashes.

Rear end collisions are the most frequently occurring collision (approximately 74 percent), followed by *sideswipe in the same direction* (about 12 percent) and *no collision with motor vehicle* type accident (about 11 percent). A total of 470 crashes were PDO. The majority of these crashes were caused by *rear end* crashes (approximately 75 percent), followed by *sideswipe in the same direction* (approximately 13 percent) and *no collision with motor vehicles* (approximately 9.6 percent).

Table 2-113 summarizes the crash reports along eastbound I- 20 based on crash severity, lighting and road surface conditions.

Of the two fatal crashes, one occurred during the daytime, while the other fatal crash occurred in dark, unlit conditions. Both fatal crashes occurred on dry pavement. Four of the five incapacitating injury crashes occurred during daylight and on dry pavement. One incapacitating injury crash occurred at night and one occurred on wet pavement.

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Table 2-113: Westbound I-20 Crash Summary - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark		Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
		Lighted	Not Lighted						
Fatality	1	0	1	2	0	0	0	2	0.4%
Incapacitating Injury	4	0	1	4	1	0	0	5	0.9%
Non-incapacitating Injury	9	1	5	10	5	0	0	15	2.6%
Possible Injury	66	3	10	71	8	0	0	79	13.8%
Property Damage Only	399	12	59	392	78	0	0	470	82.3%
Total	479	16	76	479	92	0	0	571	
Percentage	83.9%	2.8%	13.3%	83.9%	16.1%	0.0%	0.0%		

The crash data along westbound I-20 is depicted graphically by the time-of-day and day of the week in **Figure 2.28**.

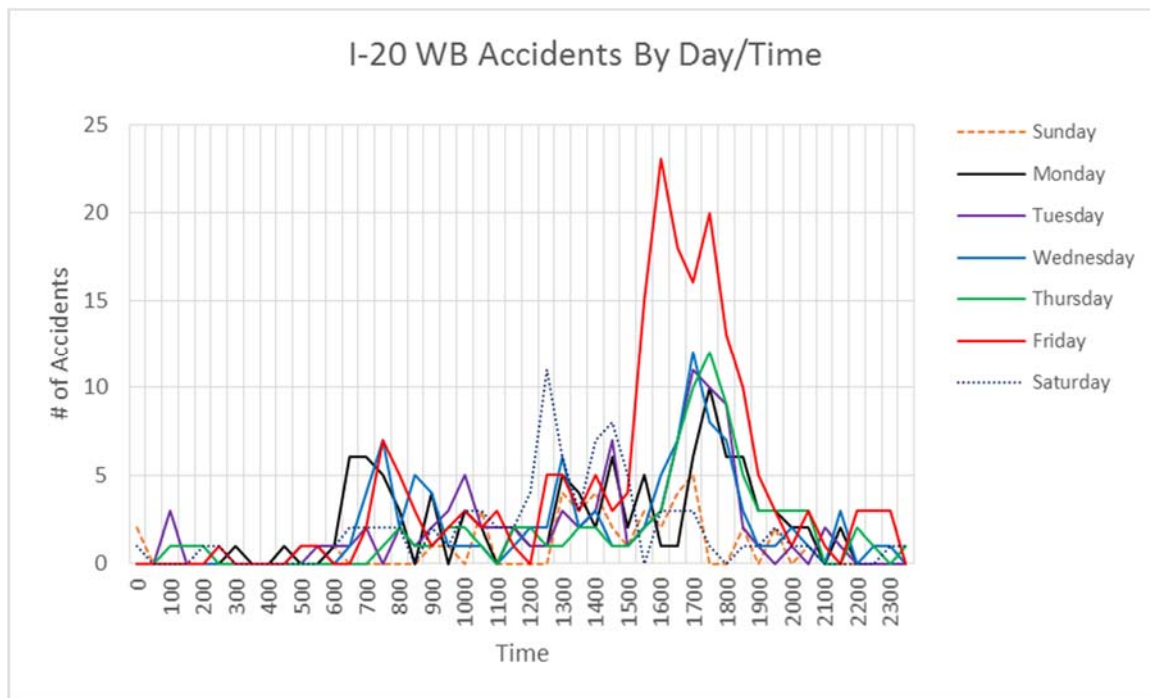


Figure 2.28: I-20 Westbound Crash Summary - Day of the Week and Time of Day

As can be seen from **Figure 2.28**, a significant number of the accidents along westbound I-20 occurs between 7:00 AM and 7:00 PM. A high number of accidents between 6:30 and 8:30 AM occurred on Monday, Wednesday and Friday. There were similarly frequent accidents between noon and 3:00 PM. Westbound

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accidents during the weekdays was highest between 5:00 and 6:30 PM, with a substantially higher number of accidents occurring on Friday between 3:30 and 7:00 PM.

The accident data along westbound I-20 was separated into eight segments based on the mileposts associated with interchange ramp mileposts coded in the South Carolina Statewide Highway GIS network file. The westbound segments are:

- East of the westbound off-ramp to Exit 65 (MM 65.820 and MM 65.499)
- Within Exit 65 between the westbound off-ramp and on-ramp to/from Broad River Road (MM 65.449 and MM 64.608)
- Between the westbound on-ramp at Exit 65 and the off-ramp to northbound I-26 at Exit 64 (MM 64.608 and MM 64.350)
- Within Exit 64 from the westbound off-ramp to northbound I-26 to the weaving section between the loop on-ramp from northbound I-26 and the loop off-ramp to southbound I-26 (MM 64.350 and MM 64.120)
- Within Exit 64 between the weaving section between the loop on-ramp from northbound I-26/loop off-ramp to southbound I-26 to the on-ramp from southbound I-26 (MM 64.120 and MM 63.689)
- The weaving section between the on-ramp from southbound I-26 at Exit 64 and the off-ramp to Bush River Road at Exit 63 (MM 63.689 and 63.633)
- Within Exit 63 between the off-ramp and the on-ramp to/from Bush River Road (MM 63.633 and 62.982)
- West of the on-ramp from Bush River Road at Exit 63 (MM 62.982 and MM 62.600)

Table 2-114 summarizes the accident data for each segment based on injury severity, lighting and pavement surface conditions.

Table 2-115 summarizes the accident data for each segment based on collision type.

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Table 2-114: Westbound I-20 Segment Summary

Segment	Mile Posts	Injury Severity				Property Damage	Lighting Condition			Surface Condition				Total	Percentage
		Fatality	Injury				Day Light	Dark		Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
			Incapacitating	Non-Incapacitating	Possible			Lighted	Not Lighted						
East of the westbound off-ramp to Exit 65	(MM 65.820 - 65.499)	1	0	1	4	28	26	1	7	30	4	0	0	34	6.0%
Within Exit 65 between the westbound off-ramp and on-ramp to/from Broad River Road	(MM 65.499 - 64.608)	0	2	4	37	222	222	10	33	234	31	0	0	265	46.4%
Between the westbound on-ramp at Exit 65 and the off-ramp to northbound I-26 at Exit 64	(MM 64.608 - 64.350)	0	0	3	10	67	69	1	10	60	20	0	0	80	14.0%
Within Exit 64 from the westbound off-ramp to northbound I-26 to the weaving section between the loop on-ramp from northbound I-26 and the loop off-ramp to southbound I-26	(MM 64.350 - 64.120)	0	0	3	7	39	40	1	8	33	16	0	0	49	8.6%
Within Exit 64 between the weaving section between the loop on-ramp from northbound I-26/loop off-ramp to southbound I-26 to the on-ramp from southbound I-26	(MM 64.120-63.689)	0	2	1	2	19	16	1	7	18	6	0	0	24	4.2%
The weaving section between the on-ramp from southbound I-26 at Exit 64 and the off-ramp to Bush River Road at Exit 63	(MM 63.689-63.633)	0	0	1	1	6	7	0	1	7	1	0	0	8	1.4%
Within Exit 63 between the off-ramp and the on-ramp to/from Bush River Road	(MM 63.633-62.982)	0	0	1	9	65	68	1	6	67	8	0	0	75	13.1%
West of the on-ramp from Bush River Road at Exit 63	(MM 62.982-62.600)	1	1	1	9	24	31	1	4	30	6	0	0	36	6.3%
Total		2	5	15	79	470	479	16	76	479	92	0	0	571	
Percentage		0.4%	0.9%	2.6%	13.8%	82.3%	83.9%	2.8%	13.3%	83.9%	16.1%	0.0%	0.0%		

Crash Analysis

Table 2-115: Westbound I-20 Segment Summary by Collision Type

Segment	Mile Posts	Accident Types									Total	Percentage
		No Collision with Motor Vehicle	Rear End	Head On	Rear-to-Rear	Angle	Sideswipe Same Direction	Sideswipe Opposite Direction	Backed Into	Other		
East of the westbound off-ramp to Exit 65	(MM 65.820 - 65.499)	6	18	0	0	3	7	0	0	0	34	6.0%
Within Exit 65 between the westbound off-ramp and on-ramp to/from Broad River Road	(MM 65.499 - 64.608)	9	232	0	1	6	16	0	1	0	265	46.4%
Between the westbound on-ramp at Exit 65 and the off-ramp to northbound I-26 at Exit 64	(MM 64.608 - 64.350)	8	53	0	0	4	15	0	0	0	80	14.0%
Within Exit 64 from the westbound off-ramp to northbound I-26 to the weaving section between the loop on-ramp from northbound I-26 and the loop off-ramp to southbound I-26	(MM 64.350 - 64.120)	19	20	0	0	1	9	0	0	0	49	8.6%
Within Exit 64 between the weaving section between the loop on-ramp from northbound I-26/loop off-ramp to southbound I-26 to the on-ramp from southbound I-26	(MM 64.120-63.689)	6	10	0	0	0	8	0	0	0	24	4.2%
The weaving section between the on-ramp from southbound I-26 at Exit 64 and the off-ramp to Bush River Road at Exit 63	(MM 63.689-63.633)	4	1	0	0	0	2	0	1	0	8	1.4%
Within Exit 63 between the off-ramp and the on-ramp to/from Bush River Road	(MM 63.633-62.982)	6	65	0	0	0	4	0	0	0	75	13.1%
West of the on-ramp from Bush River Road at Exit 63	(MM 62.982-62.600)	6	24	0	0	1	5	0	0	0	36	6.3%
Total		64	423	0	1	15	66	0	2	0	571	
Percentage		11.2%	74.1%	0.0%	0.2%	2.6%	11.6%	0.0%	0.4%	0.0%		

Crash Analysis

The crash data summaries for the individual interstate segments also include collisions occurring on the ramps. Of the 571 crashes along westbound I-20, 372 crashes were identified in the crash data as occurring on ramps.

The ACR for each of the segments along eastbound I-20 was calculated to compare the segments against the statewide average ACR. For freeway segments, the statewide average ACR for all crashes is 92.2 per HMVM. The statewide average injury and fatality ACR for freeway segments is 27.5 per HMVM and 0.77 per HMVM respectively.

In order to compare crashes between the segments, the ACR for each segment of westbound I-20 was calculated. The ACR for the westbound segments of I-20 are shown in **Table 2-116**.

Table 2-116: I-20 Westbound Segments - Actual Crash Rate (Total Crashes)

Segment	Mile Posts	Total Crashes	Segment Length	Segment AADT	Actual Crash Rate (per 100 MVM)
East of the westbound off-ramp to Exit 65	(MM 65.820 - 65.499)	34	0.321	103,700	186.6
Within Exit 65 between the westbound off-ramp and on-ramp to/from Broad River Road	(MM 65.499 - 64.608)	265	0.676	90,900	787.7
Between the westbound on-ramp at Exit 65 and the off-ramp to northbound I-26 at Exit 64	(MM 64.608 - 64.350)	80	0.300	90,900	535.8
Within Exit 64 from the westbound off-ramp to northbound I-26 to the weaving section between the loop on-ramp from northbound I-26 and the loop off-ramp to southbound I-26	(MM 64.350 - 64.120)	49	0.330	74,500	364.0
Within Exit 64 between the weaving section between the loop on-ramp from northbound I-26/loop off-ramp to southbound I-26 to the on-ramp from southbound I-26	(MM 64.120-63.689)	24	0.441	74,500	133.4
The weaving section between the on-ramp from southbound I-26 at Exit 64 and the off-ramp to Bush River Road at Exit 63	(MM 63.689-63.633)	8	0.057	74,500	344.1
Within Exit 63 between the off-ramp and the on-ramp to/from Bush River Road	(MM 63.633-62.982)	75	0.214	74,500	859.2
West of the on-ramp from Bush River Road at Exit 63	(MM 62.982-62.600)	36	0.382	74,500	231.0

As can be seen from **Table 2-116**, all the segments had ACR exceeding the statewide average rate for freeway segments. The segments with the three highest ACR are:

1. Within Exit 63 between the off-ramp and the on-ramp to/from Bush River Road (ACR of 859.2)
2. Within Exit 65 between the off-ramp and on-ramp to/from Broad River Road (ACR of 787.7)
3. Between the on-ramp from Exit 65 and the off-ramp to northbound I-26 at Exit 64 (ACR of 535.8)

The ACR calculated for injury crashes are shown in **Table 2-117**.

Crash Analysis

Table 2-117: I-20 Westbound Segments - Actual Crash Rates (Injury Crashes)

Segment	Mile Posts	Total Injury Crashes	Segment Length	Segment AADT	Actual Crash Rate (per 100 MVM)
East of the westbound off-ramp to Exit 65	(MM 65.820 - 65.499)	5	0.321	103,700	27.4
Within Exit 65 between the westbound off-ramp and on-ramp to/from Broad River Road	(MM 65.499 - 64.608)	43	0.676	90,900	127.8
Between the westbound on-ramp at Exit 65 and the off-ramp to northbound I-26 at Exit 64	(MM 64.608 - 64.350)	13	0.300	90,900	87.1
Within Exit 64 from the westbound off-ramp to northbound I-26 to the weaving section between the loop on-ramp from northbound I-26 and the loop off-ramp to southbound I-26	(MM 64.350 - 64.120)	10	0.330	74,500	74.3
Within Exit 64 between the weaving section between the loop on-ramp from northbound I-26/loop off-ramp to southbound I-26 to the on-ramp from southbound I-26	(MM 64.120-63.689)	5	0.441	74,500	27.8
The weaving section between the on-ramp from southbound I-26 at Exit 64 and the off-ramp to Bush River Road at Exit 63	(MM 63.689-63.633)	2	0.057	74,500	86.0
Within Exit 63 between the off-ramp and the on-ramp to/from Bush River Road	(MM 63.633-62.982)	10	0.214	74,500	114.6
West of the on-ramp from Bush River Road at Exit 63	(MM 62.982-62.600)	11	0.382	74,500	70.6

The ACR for the injury crashes also exceed the statewide average ACR for freeway segments for all the westbound I-20 segments between the westbound off-ramp to Broad River Road at Exit 65 and west of the on-ramp from Bush River Road at Exit 63. The only segment of westbound I-20 that does not exceed the statewide average ACR is the segment east of the westbound off-ramp to Broad River Road at Exit 65.

Injury ACR are the highest within Exit 65 (ACR of 127.8) and within Exit 63 (ACR of 114.6).

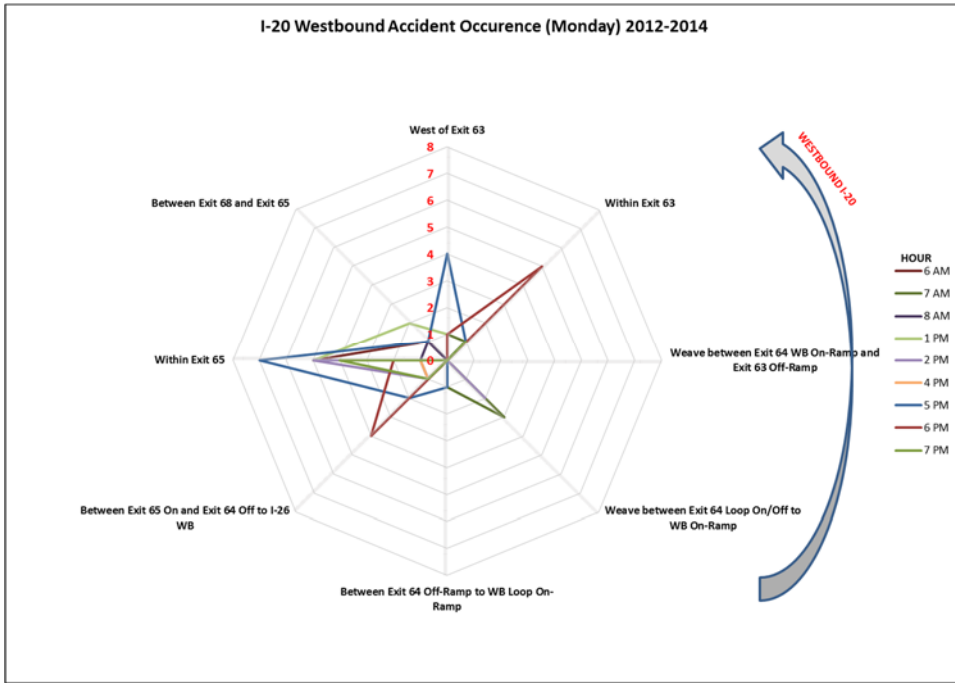
The two fatal crashes that occurred along westbound I-20 took place on separate segments. Each of these segments exceed the statewide average ACR for fatal crashes:

- East of the westbound off-ramp to Exit 65 (ACR of 5.5)
- West of the westbound on-ramp from Bush River Road at Exit 63 (ACR of 6.4)

The accidents occurring along the corridor during the morning and afternoon peak periods for each day of the week and on typical weekdays (Tuesday through Thursday) were plotted on graphs. The resulting graphs are shown in **Figures 2.29** through **2.36**.

The following sections contain a detailed review of crash data for each segment of westbound I-20. Collision diagrams for the freeway segments and interchange areas of westbound I-20 are shown in Appendix D.

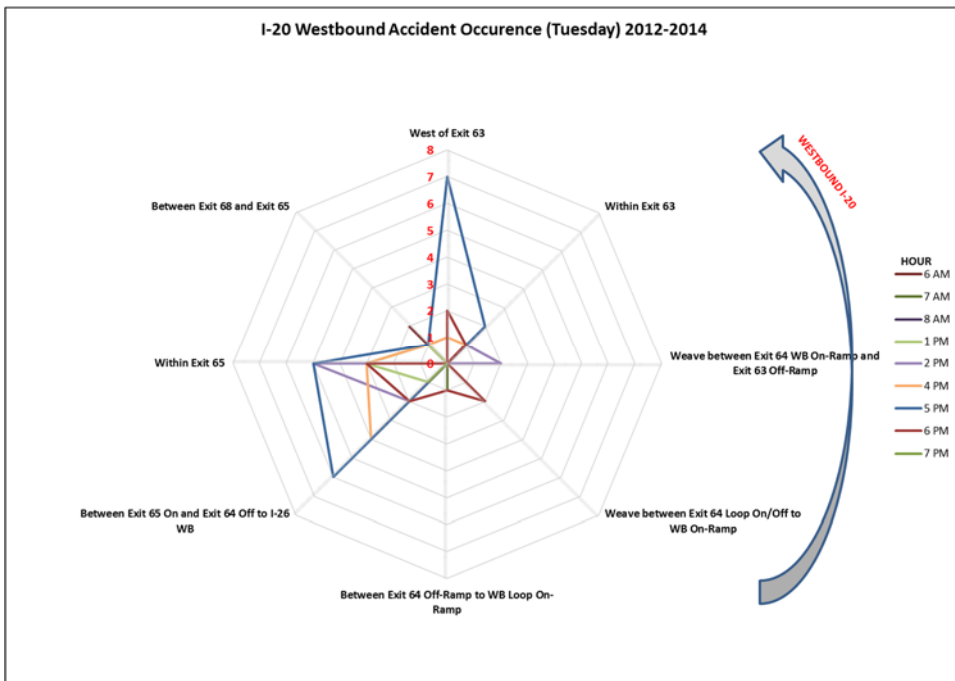
Crash Analysis



Most frequent Monday accidents occur:

- Within Exit 65
- Within Exit 63
- West of Exit 63

Figure 2.29: Westbound I-20 Accident Occurrence (Monday)

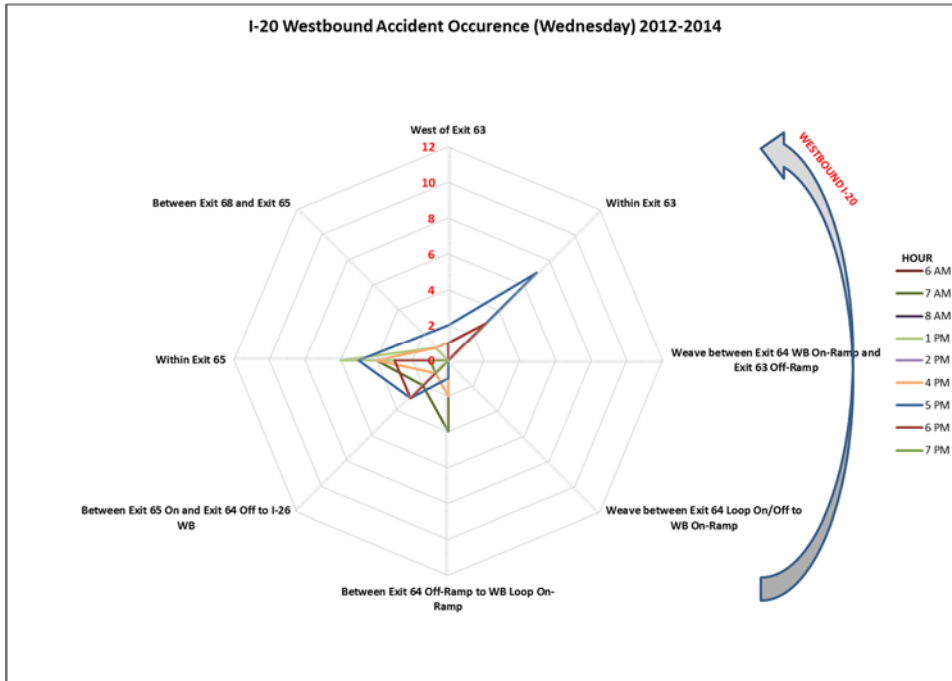


Most frequent Tuesday accidents occur:

- Within Exit 65
- Between Exit 65 and Exit 64 off-ramp to I-26 northbound
- West of Exit 63

Figure 2.30: Westbound I-20 Accident Occurrence (Tuesday)

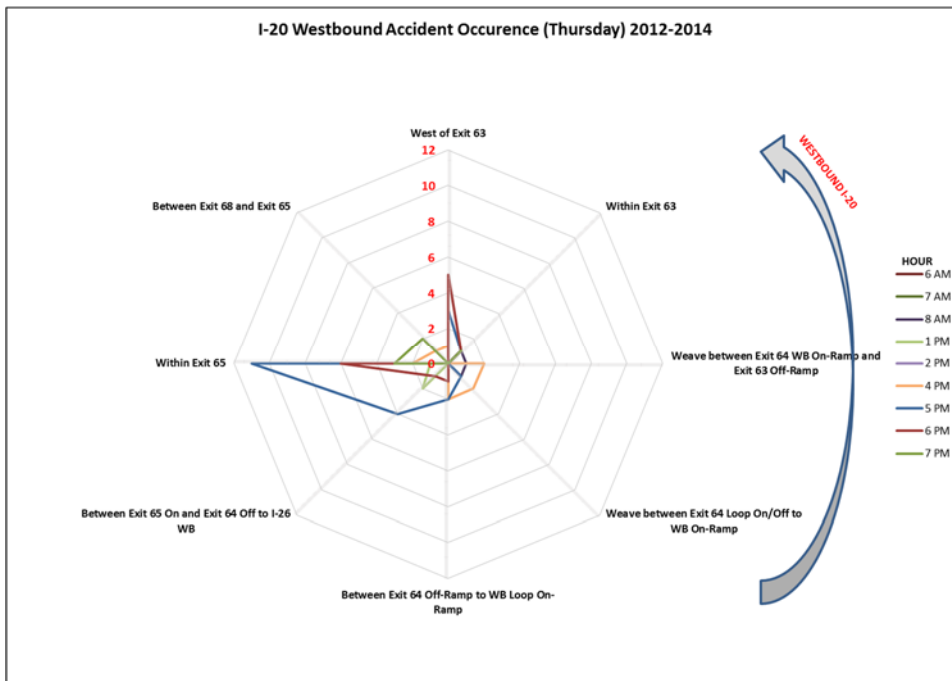
Crash Analysis



Most frequent Wednesday accidents occur:

- Within Exit 65
- Within Exit 63

Figure 2.31: Westbound I-20 Accident Occurrence (Wednesday)

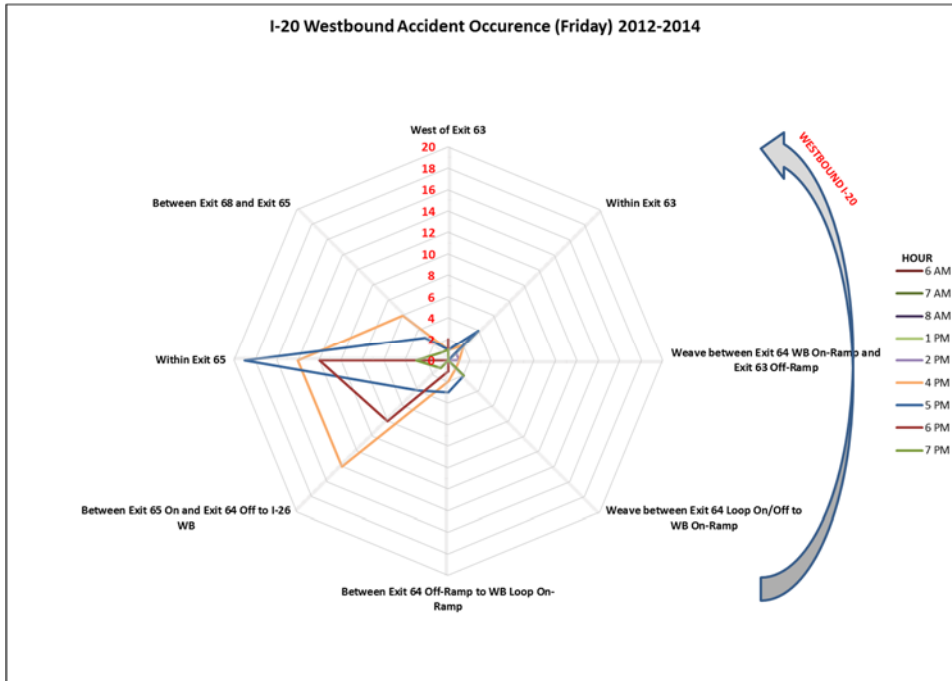


Most frequent Thursday accidents occur:

- Within Exit 65
- Between Exit 65 and Exit 64 off-ramp to I-26 northbound
- West of Exit 63

Figure 2.32: Westbound I-20 Accident Occurrence (Thursday)

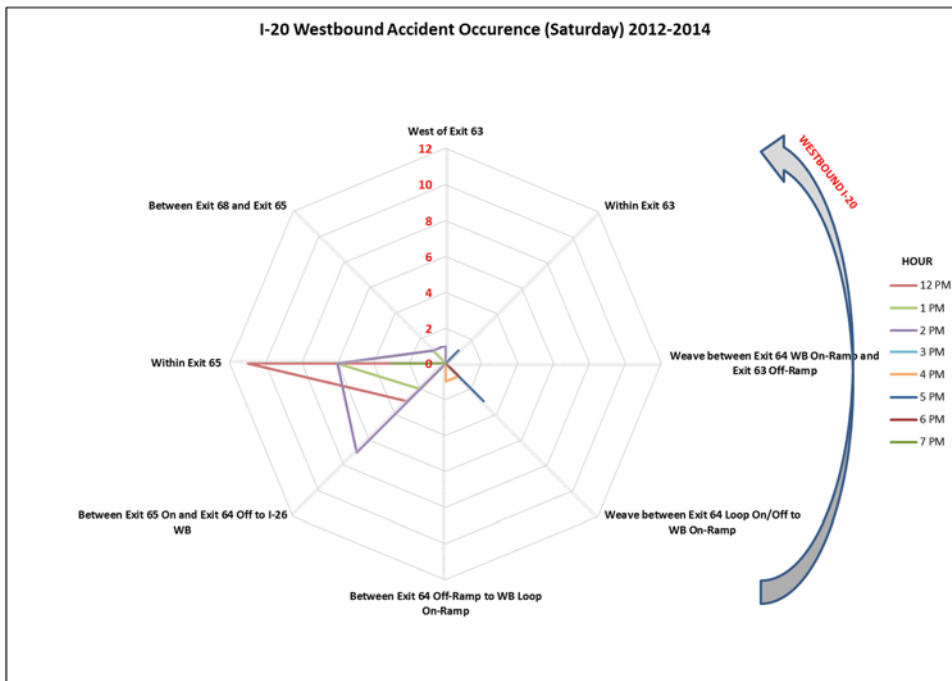
Crash Analysis



Most frequent Friday accidents occur:

- Within Exit 65
- Between Exit 65 and Exit 64 off-ramp to I-26 northbound

Figure 2.33: Westbound I-20 Accident Occurrence (Friday)

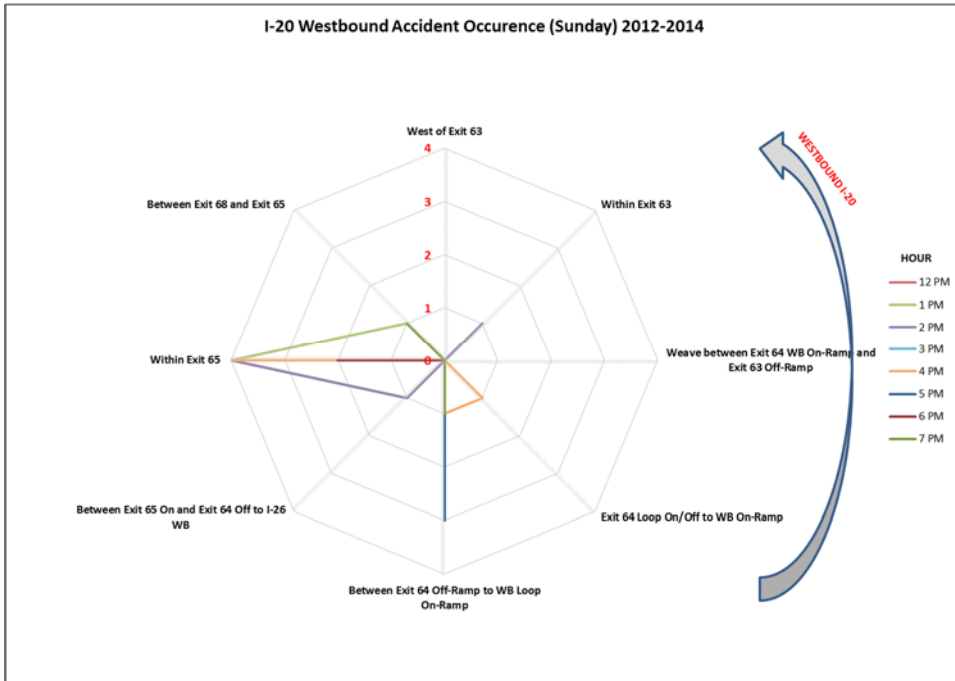


Most frequent Saturday accidents occur:

- Within Exit 65
- Between Exit 65 and Exit 64 off-ramp to I-26 northbound
- West of Exit 63

Figure 2.34: Westbound I-20 Accident Occurrence (Saturday)

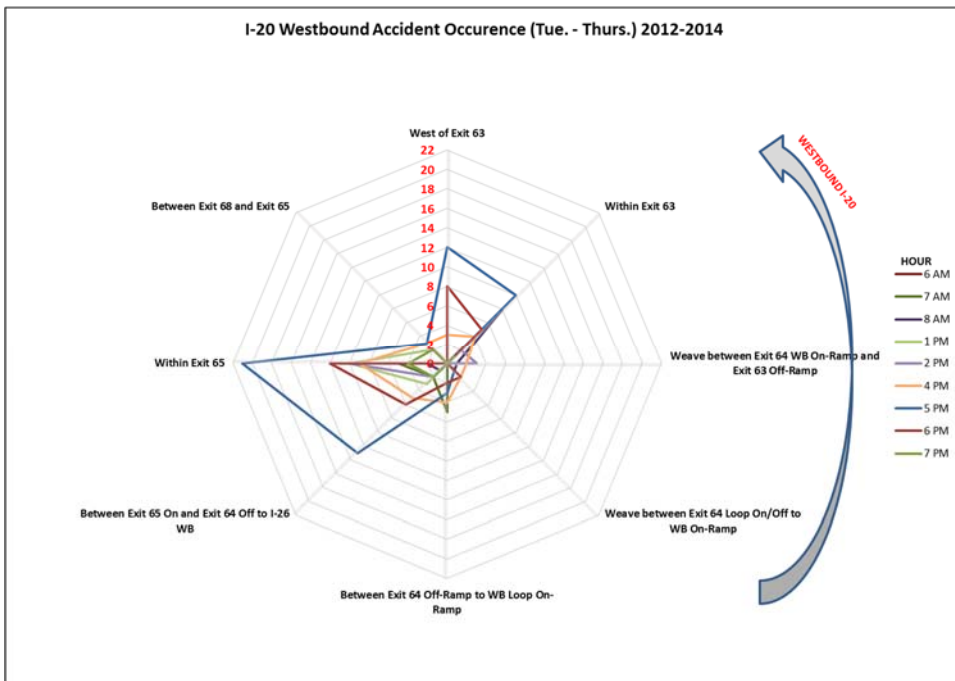
Crash Analysis



Most frequent Sunday accidents occur:

- Within Exit 65
- Between the Exit 64 off-ramp and the loop on-ramp

Figure 2.35: Westbound I-20 Accident Occurrence (Sunday)



Most frequent Weekday accidents occur:

- Within Exit 65
- Between Exit 65 and Exit 64 off-ramp to I-26 northbound
- Within Exit 63
- West of Exit 63

Figure 2.36: Westbound I-20 Accident Occurrence (Typical Weekday)

Crash Analysis

2.4.1 EAST OF EXIT 65 (MM 65.820 AND 65.499)

Thirty four crashes occurred in this 0.321 mile segment of westbound I-20 east of the westbound off-ramp to Broad River Road at Exit 65. **Table 2-118** summarizes crash data on this segment based on the collision type and injury severity.

Table 2-118: I-20 Westbound (East of Exit 65) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	1	5	6	17.6%
Rear End	1	0	0	1	16	18	52.9%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	1	2	3	8.8%
Sideswipe Same Direction	0	0	1	1	5	7	20.6%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	1	0	1	4	28	34	
Percentage	2.9%	0.0%	2.9%	11.8%	82.4%		

Rear end crashes are the most frequent type of crash in this segment followed by *sideswipe in the same direction* and *no collision with motor vehicle* crashes.

One fatal crash, resulting from a *rear end* collision, was reported. This crash occurred on Monday, May 22, 2012 at approximately 1:08 AM and involved a motor vehicle in transport and a driver operating under the influence. One non-incapacitating injury and four possible injury crashes were also reported. The non-incapacitating injury crash was caused by a *sideswipe same direction* crash. Twenty eight reported crashes were PDO.

Crash data within this segment is summarized in **Table 2-119** based on injury severity, lighting and pavement surface condition. Most of the crashes occurred on dry pavement and during the daytime. The fatal accident occurred in dark, unlit conditions and on dry pavement. The non-incapacitating injury crash occurred during in dark, unlighted conditions on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix D (Figures D-1 and D-2).

Crash Analysis

Table 2-119: I-20 Westbound (East of Exit 65) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unknwn		
Fatality	0	0	1	1	0	0	0	1	2.9%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	0	0	1	1	0	0	0	1	2.9%
Possible Injury	3	0	1	4	0	0	0	4	11.8%
Property Damage Only	23	1	4	24	4	0	0	28	82.4%
Total	26	1	7	30	4	0	0	34	
Percentage	76.5%	2.9%	20.6%	88.2%	11.8%	0.0%	0.0%		

2.4.2 WITHIN EXIT 65 (BETWEEN MM 65.449 AND MM 65.608)

Two hundred and sixty five crashes occurred in this 0.159 mile segment of westbound I-20 between the westbound off-ramp to Broad River Road and the on-ramp from Broad River Road at Exit 65. **Table 2-120** summarizes crash data on this segment based on the collision type and injury severity.

Table 2-120: I-20 Westbound (Within Exit 65) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	1	8	9	3.4%
Rear End	0	2	4	34	192	232	87.5%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	1	1	0.4%
Angle	0	0	0	2	4	6	2.3%
Sideswipe Same Direction	0	0	0	0	16	16	6.0%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	1	1	0.4%
Other	0	0	0	0	0	0	0.0%
Total	0	2	4	37	222	265	
Percentage	0.0%	0.8%	1.5%	14.0%	83.8%		

The majority of the crashes at this location were *rear end* crashes (nearly 90 percent of all crashes), followed by *sideswipe same direction* and *no collision with motor vehicle* crashes. While there were no fatal crashes, two crashes resulted in incapacitating injury, four crashes resulted in non-incapacitating injury, and 37 crashes resulted in possible injury. There were 222 PDO crashes.

Crash Analysis

The crash data shows that 185 crashes reported on this segment of westbound I-20 occurred on the westbound off-ramp to Broad River Road. The crashes on the off-ramp included 168 *rear end* crashes, seven *sideswipe same direction* crashes, five *angle* crashes, three *no collision with motor vehicle* crashes, and one each classified as *rear-to-rear* and *backed into* crashes.

There were 80 crashes designated as occurring on the freeway segment. Of these, 64 were *rear end* crashes, nine were *sideswipe same direction* crashes, and six were *no collision with motor vehicle* crashes.

Crash data within this segment is summarized in **Table 2-121** based on injury severity, lighting and pavement surface condition. Approximately 84 percent of the crashes occurred in daylight, and about 88 percent of the crashes occurred on dry pavement. The two incapacitating injury crashes occurred in daylight on dry pavement. The four non-incapacitating injury crashes occurred in daylight; three of the four non-incapacitating injury crashes occurred on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix D (Figures D-3, D-4, D-5 and D-6).

Table 2-121: I-20 Westbound (Within Exit 65) – Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	2	0	0	2	0	0	0	2	0.8%
Non-incapacitating Injury	4	0	0	3	1	0	0	4	1.5%
Possible Injury	30	2	5	33	4	0	0	37	14.0%
Property Damage Only	186	8	28	196	26	0	0	222	83.8%
Total	222	10	33	234	31	0	0	265	
Percentage	83.8%	3.8%	12.5%	88.3%	11.7%	0.0%	0.0%		

2.4.3 BETWEEN EXIT 65 ON-RAMP AND EXIT 64 OFF-RAMP TO I-26 NORTHBOUND (MM 64.608 AND MM 64.350)

Eighty crashes were reported within this 0.258 mile segment of westbound I-20 between the westbound on-ramp at Exit 65 and the off-ramp to northbound I-26 at Exit 64. No fatal crashes were reported. Three crashes resulted in non-incapacitating injury, ten crashes resulted in possible injury, and 67 crashes resulted in PDO.

Table 2-122 summarizes crash data on this segment based on the collision type and injury severity.

Rear end collisions are the most frequent type of collision (approximately 66 percent), followed by *sideswipe-same direction* (approximately 19 percent) and *no collision with motor vehicle* (approximately 10 percent) type accidents.

Crash Analysis

Two of the non-incapacitating injury crashes resulted from *rear end* crashes; the third was the result of a *sideswipe same direction* crash. Six of the ten possible injury crashes were classified as *rear end* crashes, two as *no collision with motor vehicle* crashes, and one each as *angle* and *sideswipe same direction* crashes.

Table 2-122: I-20 Westbound (between Exits 65 and 64 off-ramp) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	2	6	8	10.0%
Rear End	0	0	2	6	45	53	66.3%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	1	3	4	5.0%
Sideswipe Same Direction	0	0	1	1	13	15	18.8%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	3	10	67	80	
Percentage	0.0%	0.0%	3.8%	12.5%	83.8%		

Crash data within this segment is summarized in **Table 2-123** based on injury severity, lighting and pavement surface condition. Most of the crashes occurred on dry pavement and during daylight. The three non-incapacitating injury crashes occurred during daylight; two occurred on dry pavement and one on wet pavement. Eight of the ten possible injury crashes occurred in daylight; nine occurred on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix D (Figures D-7 and D-8).

Crash Analysis

Table 2-123: I-20 Westbound (between Exits 65 and 64 off-ramp) - Lighting and Pavement Condition

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non Inapacitating Injury	3	0	0	2	1	0	0	3	3.8%
Possible Injury	8	0	2	9	1	0	0	10	12.5%
Property Damage Only	58	1	8	49	18	0	0	67	83.8%
Total	69	1	10	60	20	0	0	80	
Percentage	86.3%	1.3%	12.5%	75.0%	25.0%	0.0%	0.0%		

2.4.4 WITHIN EXIT 64 FROM THE OFF-RAMP TO I-26 NORTHBOUND TO THE LOOP RAMPS (MM 64.350 AND MM 64.120)

Forty nine crashes occurred in this 0.230 mile long segment of westbound I-20 between the off-ramp to northbound I-26 and the weaving section between the loop on-ramp from northbound I-26 and the loop off-ramp to southbound I-26. No fatal crashes were reported. There were three non-incapacitating injury and seven possible injury crashes. The remaining 39 crashes were PDO. **Table 2-124** summarizes crash data on this segment based on the collision type and injury severity.

Table 2-124: I-20 Westbound (Exit 64 Off-Ramp to Loop Ramps) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	3	2	14	19	38.8%
Rear End	0	0	0	5	15	20	40.8%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	1	1	2.0%
Sideswipe Same Direction	0	0	0	0	9	9	18.4%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	3	7	39	49	
Percentage	0.0%	0.0%	6.1%	14.3%	79.6%		

Crash Analysis

Twenty crashes were *rear end* collisions, nineteen were *no collision with motor vehicle* crashes, nine were *sideswipe in the same direction* crashes and one was an *angle* crash. Of the nineteen *no collision with motor vehicle* crashes, eight involved collisions with the face of guardrail, three were overturn/rollover, and two were crashes with trees.

All three non-incapacitating injury crashes were classified *no collision with motor vehicle* crashes. Two of these involved collisions with trees and one was an overturn/rollover. Five of the seven possible injury crashes were *rear end* crashes and two were *no collision with motor vehicle* crashes.

Crash data within this segment is summarized in **Table 2-125** based on injury severity, lighting and pavement surface condition. Most of the crashes occurred during daylight (approximately 82 percent). Approximately 67 percent of the crashes occurred on dry pavement and the remaining 33 percent occurred on wet pavement. One of the non-incapacitating injury crashes occurred in daylight and two in dark, unlighted conditions. One occurred on dry pavement and two on wet pavement. All seven of the possible injury crashes occurred during daylight and on dry pavement. Most of the PDO crashes occurred during daylight. Approximately 64 percent occurred on dry pavement, while the remaining 36 percent occurred on wet pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix D (Figures D-9 and D-10).

Table 2-125: I-20 Westbound (Exit 64 Off-Ramp to Loop Ramps) - Lighting and Pavement Condition

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non Inapacitating Injury	1	0	2	1	2	0	0	3	6.1%
Possible Injury	7	0	0	7	0	0	0	7	14.3%
Property Damage Only	32	1	6	25	14	0	0	39	79.6%
Total	40	1	8	33	16	0	0	49	
Percentage	81.6%	2.0%	16.3%	67.3%	32.7%	0.0%	0.0%		

2.4.5 EXIT 64 LOOP ON/OFF TO ON-RAMP FROM SOUTHBOUND I-26 (BETWEEN MM 64.120 AND MM 63.689)

Twenty four crashes occurred in this 0.431 mile long segment of westbound I-20 from the weaving section between the loop on-ramp from northbound I-26 and the loop off-ramp to southbound I-26 to the on-ramp from southbound I-26. No fatal crashes were reported. Two crashes resulted in incapacitating injury, one in non-incapacitating injury, and two in possible injury. Nineteen crashes were classified as PDO. **Table 2-126** summarizes crash data on this segment based on the collision type and injury severity.

Crash Analysis

Rear end is the most frequent type of accident (ten crashes) in this segment followed by *sideswipe in the same direction* (eight crashes) and *no collision with motor vehicle* (six crashes). Nine of the 24 crashes were identified as occurring on the ramps at this location. Five of these crashes were classified as *no collision with motor vehicle* and four were classified as *rear end*.

Of the six *no collision with motor vehicle* crashes, three involved crashes with a highway traffic sign post, and one crash each with a tree, the median barrier, and a fence. Only the crash with the median barrier did not occur on the ramps at this location.

The two incapacitating injury crashes were by *no collision with motor vehicle* crashes. These two crashes occurred on the ramps and involved crashes with trees and a fence. The one non-incapacitating injury crash was also a *no collision with motor vehicle* crash. It occurred on a ramp and involved a crash with a highway traffic sign post.

Table 2-126: I-20 Westbound (Exit 64 from Loop Ramps to On-Ramp) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	2	1	0	3	6	25.0%
Rear End	0	0	0	1	9	10	41.7%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	1	7	8	33.3%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	2	1	2	19	24	
Percentage	0.0%	8.3%	4.2%	8.3%	79.2%		

Crash data within this segment is summarized in **Table 2-127** based on injury severity, lighting and pavement surface condition. Most of the crashes occurred during daylight (approximately 67 percent) and on dry pavement (approximately 75 percent). Of the two incapacitating injury crashes, one occurred during daylight and one occurred in dark, unlit conditions. One incapacitating injury crash occurred on dry pavement, while the other occurred on wet pavement. The non-incapacitating injury crash occurred on dry pavement in dark, unlit conditions. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix D (Figures D-11, D-12, D-13, and D-14).

Crash Analysis

Table 2-127: I-20 Westbound (Exit 64 from Loop Ramps to On-Ramp) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	1	0	1	1	1	0	0	2	8.3%
Non Inapacitating Injury	0	0	1	1	0	0	0	1	4.2%
Possible Injury	1	1	0	1	1	0	0	2	8.3%
Property Damage Only	14	0	5	15	4	0	0	19	79.2%
Total	16	1	7	18	6	0	0	24	
Percentage	66.7%	4.2%	29.2%	75.0%	25.0%	0.0%	0.0%		

2.4.6 WEAVING SEGMENT BETWEEN EXIT 64 ON-RAMP FROM SOUTHBOUND I-26 AND EXIT 63 OFF-RAMP (MM 63.689 AND MM 63.633)

Eight crashes occurred in this 0.056 mile long segment of westbound I-20 between the on-ramp from southbound I-26 and the off-ramp to Bush River Road at Exit 63. No fatal crashes were reported. One crash resulted in a non-incapacitating injury and one crash resulted in possible injury. The remaining six crashes were PDO. **Table 2-128** summarizes crash data on this segment based on the collision type and injury severity. *No collision with motor vehicle* is the most frequent type of accident in this segment followed by *rear end* collision.

Table 2-128: I-20 Westbound (Weave between Exits 64 and 63) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	1	1	2	4	50.0%
Rear End	0	0	0	0	1	1	12.5%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	0	2	2	25.0%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	1	1	12.5%
Other	0	0	0	0	0	0	0.0%
Total	0	0	1	1	6	8	
Percentage	0.0%	0.0%	12.5%	12.5%	75.0%		

Crash Analysis

The non-incapacitating injury and the possible injury crashes were *no collision with motor vehicle* crashes. The non-incapacitating injury crash was caused by a collision with the median barrier, and the possible injury crash involved the face of guardrail.

Crash data within this segment is summarized in **Table 2-129** based on injury severity, lighting and pavement surface condition. Most of the crashes occurred during daylight and on dry pavement. The non-incapacitating injury crash occurred during daylight and on dry pavement. The possible injury crash occurred in daylight on wet pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix D (Figures D-15 and D-16).

Table 2-129: I-20 Westbound (Weave between Exits 64 and 63) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non Inapacitating Injury	1	0	0	1	0	0	0	1	12.5%
Possible Injury	1	0	0	0	1	0	0	1	12.5%
Property Damage Only	5	0	1	6	0	0	0	6	75.0%
Total	7	0	1	7	1	0	0	8	
Percentage	87.5%	0.0%	12.5%	87.5%	12.5%	0.0%	0.0%		

2.4.7 WITHIN EXIT 63 (MM 63.633 AND MM 62.982)

Seventy five crashes occurred in this 0.651 mile long segment of westbound I-20 between the off-ramp and on-ramp to/from Bush River Road at Exit 63. No fatal crashes were reported, while ten accidents resulted in injury or possible injury. There was one non-incapacitating injury and nine possible injury crashes. The remaining 65 crashes were PDO. **Table 2-130** summarizes crash data on this segment based on the collision type and injury severity.

Crash Analysis

Table 2-130: I-20 Westbound (Within Exit 63) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	1	1	4	6	8.0%
Rear End	0	0	0	8	57	65	86.7%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	0	4	4	5.3%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	1	9	65	75	
Percentage	0.0%	0.0%	1.3%	12.0%	86.7%		

Rear end is the most frequent type of crash in this segment followed by *no collision with motor vehicle*. The non-incapacitating injury crash and one of the possible injury crashes resulted from *no collision with motor vehicle* crashes. Eight other possible injury crashes were caused by *rear end* crashes

Fifty eight of the crashes were identified as occurring on the ramps within this section. Fifty three of the crashes occurred on the westbound off-ramp to Bush River Road. Of these crashes, all but one of the crashes was due to a *rear end* crash (the other crash caused by a *sideswipe same direction* crash).

Of the seventeen crashes occurring on the freeway lanes, nine were due to *rear end* crashes, six to *no collision with motor vehicle* crashes, and two to *sideswipe same direction* crashes.

Crash data within this segment is summarized in **Table 2-131** based on injury severity, lighting and pavement surface condition. Most of the crashes occurred during daylight and on dry pavement. The non-incapacitating injury crash occurred in dark, unlighted conditions on wet pavement. All nine of the possible injury crashes occurred in daylight on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix D (Figures D-15, D-16, D-17 and D-18).

Crash Analysis

Table 2-131: I-20 Westbound (Within Exit 63) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non Inapacitating Injury	0	0	1	0	1	0	0	1	1.3%
Possible Injury	9	0	0	9	0	0	0	9	12.0%
Property Damage Only	59	1	5	58	7	0	0	65	86.7%
Total	68	1	6	67	8	0	0	75	
Percentage	90.7%	1.3%	8.0%	89.3%	10.7%	0.0%	0.0%		

2.4.8 WEST OF EXIT 63 (MM 62.982 AND MM 62.600)

Thirty six crashes occurred in this 0.382 mile long segment of westbound I-20 west of the on-ramp from Bush River Road at Exit 63. One fatal crash occurred along this section on Monday, December 3, 2012 at approximately 1:30 PM. The crash was a *no collision with motor vehicle* crash with a type of object classified as “other” (such as a wall). The fatal crash also involved a driver operating under the influence. There was one incapacitating injury crash, one non-incapacitating injury crash and nine possible injury crashes. **Table 2-132** summarizes crash data on this segment based on the collision type and injury severity.

Table 2-132: I-20 Westbound (West of Exit 63) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	1	1	0	1	3	6	16.7%
Rear End	0	0	1	8	15	24	66.7%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	1	1	2.8%
Sideswipe Same Direction	0	0	0	0	5	5	13.9%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	1	1	1	9	24	36	
Percentage	2.8%	2.8%	2.8%	25.0%	66.7%		

Crash Analysis

Approximately one-third of all collisions in this segment resulted in fatality, injury or possible injury. Two-thirds of all accidents in this segment were *rear end* crashes. Approximately 38 percent of the *rear end* collisions resulted in injury or possible injury.

The incapacitating injury crash was classified as a *no collision with motor vehicle* crash. The non-incapacitating injury crash was the result of a *rear-end* crash. Eight of the nine possible injury crashes resulted from *rear end* crashes (one was a *no collision with motor vehicle* crash).

Crash data within this segment is summarized in **Table 2-133** based on injury severity, lighting and pavement surface condition. The fatal crash occurred during daylight and on dry pavement. The incapacitating injury crash occurred during daylight and on dry pavement, and the non-incapacitating injury crash occurred at night under lighted conditions on dry pavement. Seven of the eight possible injury crashes in this segment occurred during daylight and eight occurred on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix D (Figures D-19 and D-20).

Table 2-133: I-20 Westbound (West of Exit 63) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	1	0	0	1	0	0	0	1	2.8%
Incapacitating Injury	1	0	0	1	0	0	0	1	2.8%
Non Inapacitating Injury	0	1	0	1	0	0	0	1	2.8%
Possible Injury	7	0	2	8	1	0	0	9	25.0%
Property Damage Only	22	0	2	19	5	0	0	24	66.7%
Total	31	1	4	30	6	0	0	36	
Percentage	86.1%	2.8%	11.1%	83.3%	16.7%	0.0%	0.0%		

2.5 Southbound I-126

Eighty five crashes were reported along southbound I-126 within the study area. **Table 2-134** summarizes crashes along southbound I-126 by injury severity and collision types.

One fatal crash resulting from a *rear-end* collision was reported. Twenty eight crashes resulting in injury or possible injury were reported. This was approximately 33 percent of the reported crashes. There were six non-incapacitating injury crashes and 22 possible injury crashes. There were 56 PDO crashes.

The most frequent collision type were *rear end* crashes. There were 31 *rear end* crashes (approximately 36 percent of all crashes), three resulting in non-incapacitating injury and six resulting in possible injury. There were 26 *no collision with motor vehicle* crashes, two resulting in non-incapacitating injury and three resulting in possible injury. This crash type made up about 31 percent of the crashes along southbound I-126. There were also nineteen *sideswipe same direction* crashes. Making up about 22 percent of the crashes, nine of the

Crash Analysis

nineteen crashes resulted in possible injury. There were also five angle accidents and one head on collision along southbound I-126.

The six non-incapacitating injury crashes were caused by the following type of collisions:

- *Rear end* type collision (three crashes)
- *No collision with motor vehicle* type collision (two crashes)
- *Sideswipe opposite direction* collision (one crash)
- Head on collision (one crash)
- Angle collision (one crash)

Table 2-134: Southbound I-126 Crash Summary - Collision Type and Injury Severity

Collision Type	Injury Severity					Total	Percentage
	Fatality	Injury			Property Damage		
		Incapacitating	Non-incapacitating	Possible			
No Collision with Motor Vehicle	0	0	2	3	21	26	30.6%
Rear End	1	0	3	6	21	31	36.5%
Head On	0	0	0	1	0	1	1.2%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	1	4	5	5.9%
Sideswipe Same Direction	0	0	0	9	10	19	22.4%
Sideswipe Opposite Direction	0	0	1	2	0	3	3.5%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
	1	0	6	22	56	85	100.0%

Table 2-135 summarizes the crash reports along southbound I-126 based on crash severity, lighting and road surface conditions.

The fatal crash along southbound I-126 occurred on dry pavement under dark, not lighted conditions. Four of the six non-incapacitating injury crashes occurred during daylight; all six occurred on dry pavement. Fifteen of the 22 possible injury crashes occurred in daylight; six occurred under dark, not lighted conditions. Seventeen of the possible injury crashes occurred on dry pavement and five occurred on wet pavement.

Crash Analysis

Table 2-135: Southbound I-126 Crash Summary - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark		Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
		Lighted	Not Lighted						
Fatality	0	0	1	1	0	0	0	1	1.2%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	4	0	2	6	0	0	0	6	7.1%
Possible Injury	15	1	6	17	5	0	0	22	25.9%
Property Damage Only	46	3	7	47	8	1	0	56	65.9%
Total	65	4	16	71	13	1	0	85	
Percentage	76.5%	4.7%	18.8%	83.5%	15.3%	1.2%	0.0%		

Crash data along southbound I-126 were also summarized based on day of the week and time of day. A graph depicting the time and day of the week is shown in **Figure 2.37**.

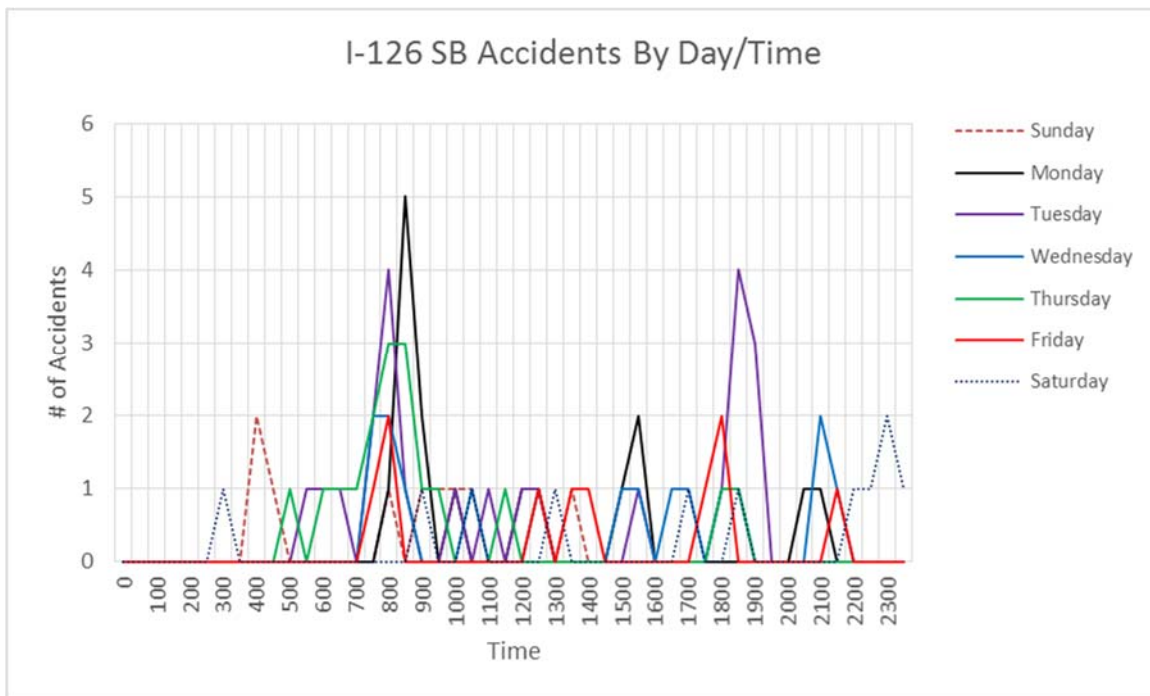


Figure 2.37: I-126 Southbound Crash Summary - Day of the Week and Time of Day

As can be seen from **Figure 2.37**, the morning peak period (between 7:00 AM and 9:00 AM) along southbound I-126 has the highest occurrence of crashes. Most of the crashes during the morning peak period occur on Monday, Tuesday and Thursday. There is also a noticeable peak in accidents between 6:00 and 7:00 PM on Tuesday. Saturday crashes are most frequent at 10:00 and 11:30 PM, while Sunday crashes are most frequent at 4:00 AM.

Crash Analysis

The accident data along southbound I-126 was separated into five segments. The segments are based on the mileposts associated with interchange ramp mileposts coded in the South Carolina Statewide Highway GIS network file. The southbound segments are:

- I-26 split to northbound I-26 on-ramp merge (MM 0.000 and MM 0.375)
- I-26 on-ramp merge to Colonial Life Boulevard on-ramp (MM 0.375 and MM 1.268)
- Colonial Life Boulevard On-Ramp to Greystone Boulevard Loop Off-Ramp (MM 1.268 and MM 2.113)
- Within Greystone Boulevard interchange (MM 2.113 and MM 2.307)
- Greystone Boulevard on-ramp to Huger Street/Elmwood Avenue (MM 2.307 and 3.680)

Table 2-136 summarizes the accident data for each segment based on injury severity, lighting and pavement surface conditions. **Table 2-137** summarizes the accident data for each segment based on collision type.

Crash Analysis

Table 2-136: Southbound I-126 Segment Summary

Segment	Mile Posts	Injury Severity				Property Damage	Lighting Condition			Surface Condition				Total	Percentage
		Fatality	Injury				Day Light	Dark		Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
			Incapacitating	Non-Incapacitating	Possible			Lighted	Not Lighted						
I-26 Split to I-26 NB On-Ramp Merge	(MM 0.000 - 0.375)	0	0	0	1	5	4	0	2	4	2	0	0	6	7.1%
On-Ramp from I-26 NB to Colonial Life Boulevard On-Ramp	(MM 0.375 - 1.268)	0	0	2	3	11	11	1	4	15	1	0	0	16	18.8%
Colonial Life Boulevard On-Ramp to Greystone Boulevard Loop Off-Ramp	(MM 1.268 - 2.113)	1	0	2	9	10	14	0	8	19	2	1	0	22	25.9%
Within Greystone Boulevard Interchange	(MM 2.113 - 2.307)	0	0	1	0	3	4	0	0	1	3	0	0	4	4.7%
Greystone Boulevard On-Ramp to Huger Street/Elmwood Avenue	(MM 2.307 - 3.680)	0	0	1	9	27	32	3	2	32	5	0	0	37	43.5%
Total		1	0	6	22	56	65	4	16	71	13	1	0	85	
Percentage		1.2%	0.0%	7.1%	25.9%	65.9%	76.5%	4.7%	18.8%	83.5%	15.3%	1.2%	0.0%		

Table 2-137: Southbound I-26 Segment Summary by Collision Type and Injury Severity

Segment	Mile Posts	Accident Types									Total	Percentage
		No Collision with Motor Vehicle	Rear End	Head On	Rear-to-Rear	Angle	Sideswipe Same Direction	Sideswipe Opposite Direction	Backed Into	Other		
I-26 Split to I-26 NB On-Ramp Merge	(MM 0.000 - 0.375)	1	4	0	0	0	1	0	0	0	6	7.1%
On-Ramp from I-26 NB to Colonial Life Boulevard On-Ramp	(MM 0.375 - 1.268)	6	6	0	0	1	3	0	0	0	16	18.8%
Colonial Life Boulevard On-Ramp to Greystone Boulevard Loop Off-Ramp	(MM 1.268 - 2.113)	8	4	0	0	0	8	2	0	0	22	25.9%
Within Greystone Boulevard Interchange	(MM 2.113 - 2.307)	4	0	0	0	0	0	0	0	0	4	4.7%
Greystone Boulevard On-Ramp to Huger Street/Elmwood Avenue	(MM 2.307 - 3.473)	7	17	1	0	4	7	1	0	0	37	43.5%
Total		26	31	1	0	5	19	3	0	0	85	
Percentage		30.6%	36.5%	1.2%	0.0%	5.9%	22.4%	3.5%	0.0%	0.0%		

Crash Analysis

The crash data summaries for the individual interstate segments also include collisions occurring on the ramps. Of the 85 crashes along southbound I-126, fourteen crashes were identified in the crash data as occurring on ramps.

The ACR for each of the segments along southbound I-126 was calculated to compare the segments against the statewide average ACR. For freeway segments, the statewide average ACR for all crashes is 92.2 per HMVM. The statewide average injury and fatality ACR for freeway segments is 27.5 per HMVM and 0.77 per HMVM respectively.

In order to compare crashes between the segments, the ACR for each segment was calculated. The ACR for the southbound segments of I-126 are shown in **Table 2-138**.

Table 2-138: I-126 Southbound Segments - Actual Crash Rate (Total Crashes)

Segment	Mile Posts	Total Crashes	Segment Length	Segment AADT	Actual Crash Rate (per 100 MVM)
I-26 Split to I-26 NB On-Ramp Merge	(MM 0.000 - 0.375)	6	0.561	62,200	94.2
On-Ramp from I-26 NB to Colonial Life Boulevard On-Ramp	(MM 0.375 - 1.268)	16	0.347	62,200	406.2
Colonial Life Boulevard On-Ramp to Greystone Boulevard Loop Off-Ramp	(MM 1.268 - 2.113)	22	0.369	71,100	459.5
Within Greystone Boulevard Interchange	(MM 2.113 - 2.307)	4	0.751	71,100	41.0
Greystone Boulevard On-Ramp to Huger Street/Elmwood Avenue	(MM 2.307 - 3.473)	37	1.119	70,800	255.9

As can be seen from **Table 2-138**, four of the southbound segments of I-126 exceed the statewide ACR for all crashes on the interstate. The only segment that does not exceed the average ACR is the segment between the loop off-ramp to Greystone Boulevard and the on-ramp from Greystone Boulevard. The segments with the highest ACR are the two segments between the on-ramp from northbound I-26 to the Greystone Boulevard loop off-ramp.

The ACR calculated for injury crashes are shown in **Table 2-139**.

Crash Analysis

Table 2-139: I-126 Southbound Segments - Actual Crash Rates (Injury Crashes)

Segment	Mile Posts	Total Injury Crashes	Segment Length	Segment AADT	Actual Crash Rate (per 100 MVM)
I-26 EB Split to On-Ramp from I-126 WB	(MM 0.000 - 0.375)	1	0.561	62,200	15.7
On-Ramp from I-26 WB to Colonial Life On-Ramp	(MM 0.375 - 1.268)	5	0.347	62,200	126.9
Colonial Life On-Ramp to Greystone Loop Off-Ramp	(MM 1.268 - 2.113)	11	0.369	71,100	229.7
Within Greystone Interchange	(MM 2.113 - 2.307)	1	0.751	71,100	10.3
Greystone On-Ramp to Huger/Elmwood	(MM 2.307 - 3.473)	10	1.119	70,800	69.2

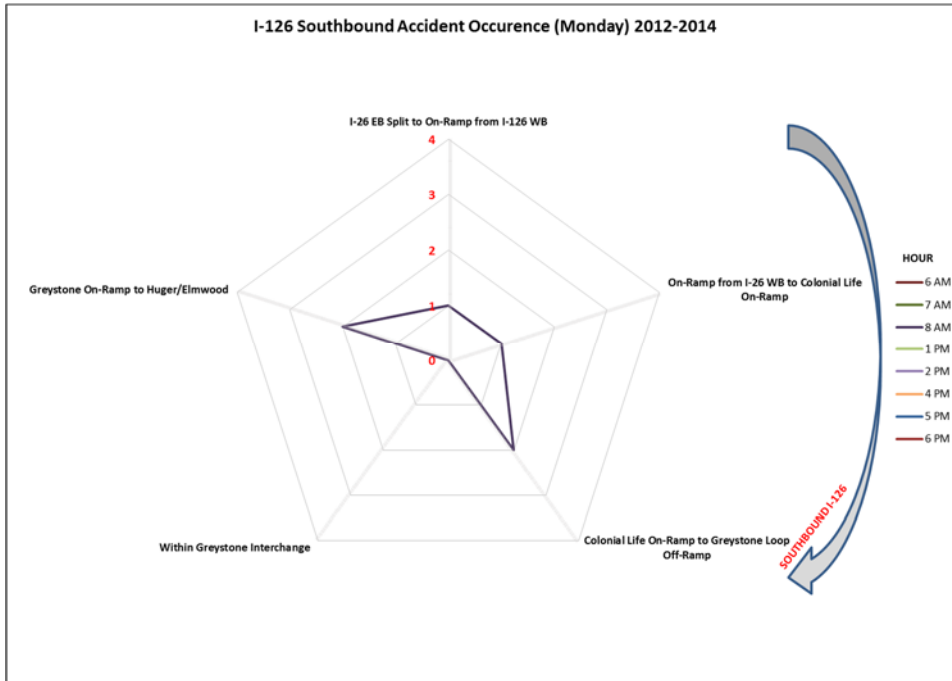
The ACR for the injury crashes also exceed the statewide average ACR for the southbound segments of I-126 between the on-ramp from northbound I-26 to the loop off-ramp to Greystone Boulevard. The segment between the Greystone Boulevard on-ramp and the end of southbound I-126 at the ramps to Elmwood Avenue and Huger Street also exceed the statewide average injury ACR.

The single fatal crash occurring on southbound I-126 took place on the segment of southbound I-126 between the Colonial Life Boulevard on-ramp and the Greystone Boulevard loop off-ramp. This segment has a fatal crash ACR of 20.9, which exceeds the statewide average rate.

The accidents occurring along the corridor during the morning and afternoon peak periods for each day of the week and on typical weekdays (Tuesday through Thursday) were plotted on graphs. The resulting graphs are shown in **Figures 2.38** through **2.45**.

The following sections contain a detailed review of crash data for each segment of southbound I-126. Collision diagrams for the freeway segments and interchange areas of southbound I-126 are shown in Appendix E.

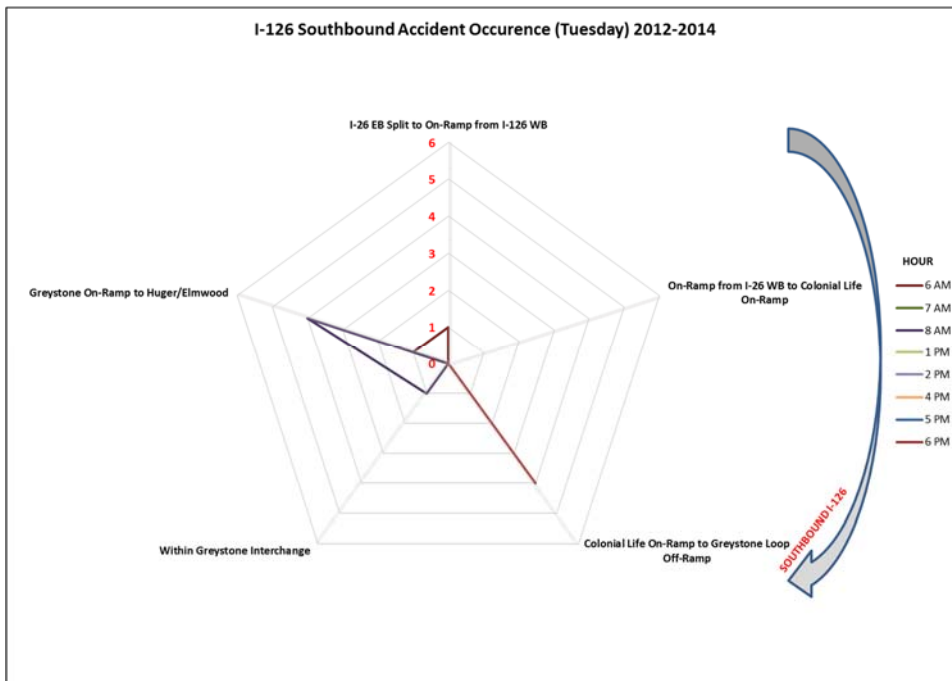
Crash Analysis



Most frequent Monday accidents occur:

- Between the Greystone Blvd. on-ramp to Huger St. /Elmwood Ave.
- Between the Colonial Life On-Ramp to the Greystone Blvd. Loop off-ramp

Figure 2.38: Southbound I-126 Accident Occurrence (Monday)

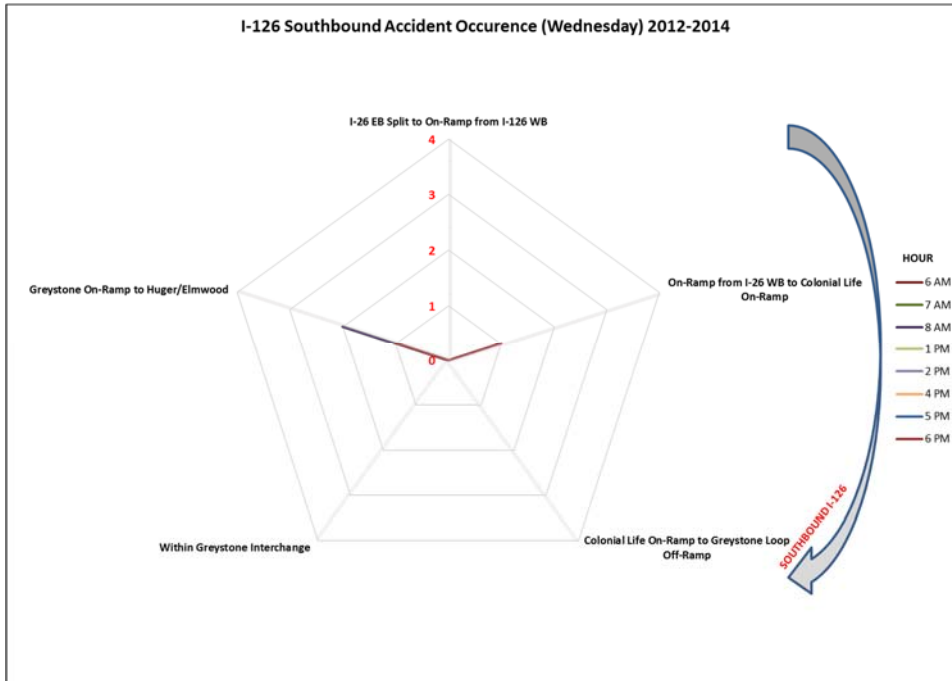


Most frequent Tuesday accidents occur:

- Between the Greystone Blvd. on-ramp to Huger St. /Elmwood Ave.
- Between the Colonial Life On-Ramp to the Greystone Blvd. Loop off-ramp

Figure 2.39: Southbound I-126 Accident Occurrence (Tuesday)

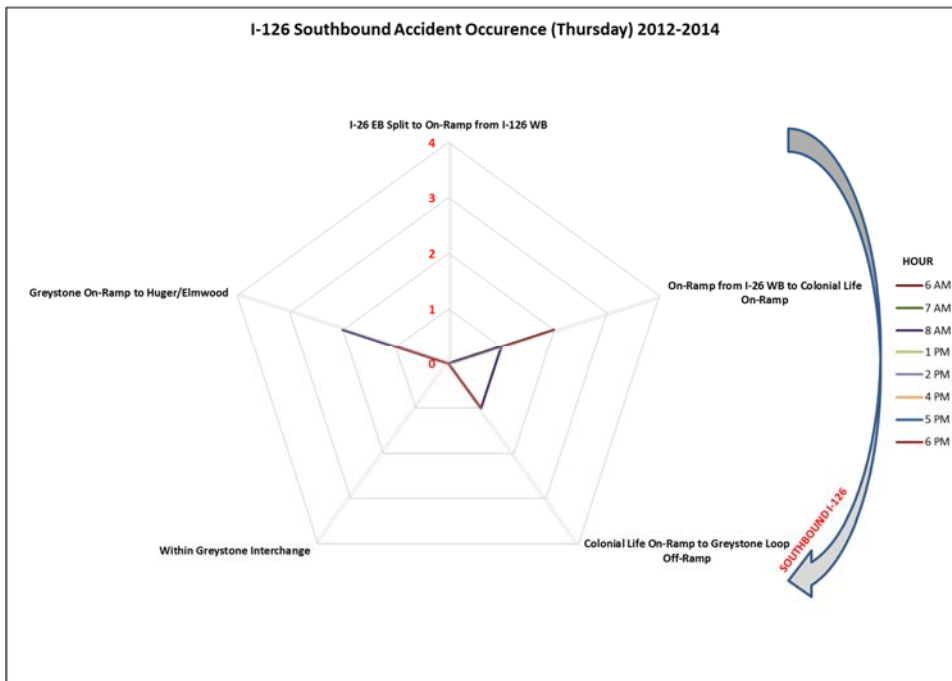
Crash Analysis



Most frequent Wednesday accidents occur:

- Between the Greystone Blvd. on-ramp to Huger St. /Elmwood Ave.

Figure 2.40: Southbound I-126 Accident Occurrence (Wednesday)

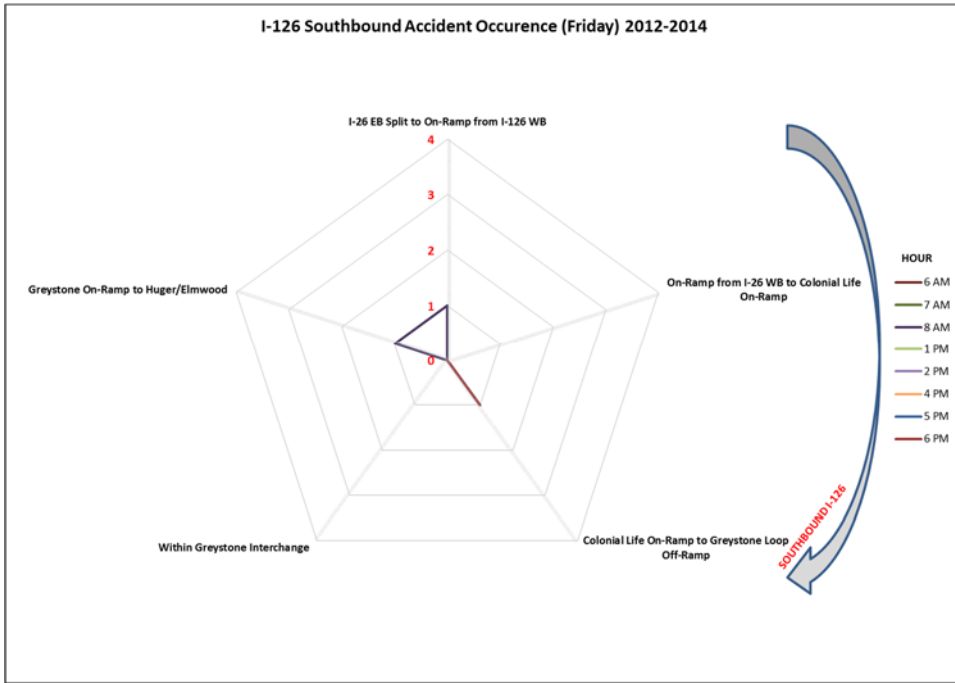


Most frequent Thursday accidents occur:

- Between the on-ramp from I-26 WB to Colonial Life Blvd. on-ramp
- Between the Greystone Blvd. on-ramp to Huger St. /Elmwood Ave.

Figure 2.41: Southbound I-126 Accident Occurrence (Thursday)

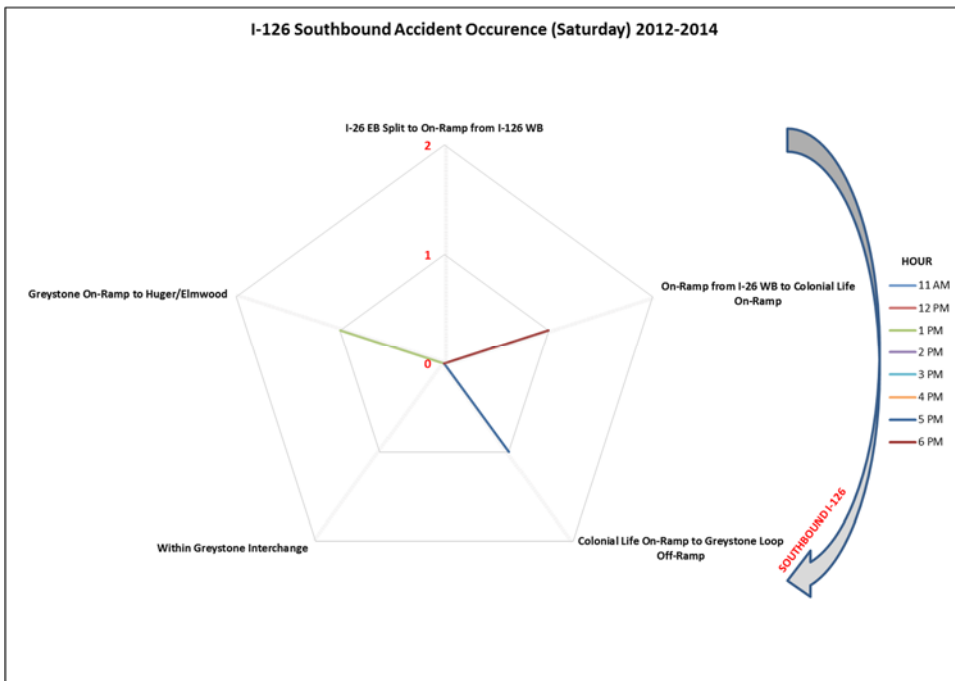
Crash Analysis



Most frequent Friday accidents occur:

- Between the Colonial Life On-Ramp to the Greystone Blvd. Loop off-ramp

Figure 2.42: Southbound I-126 Accident Occurrence (Friday)

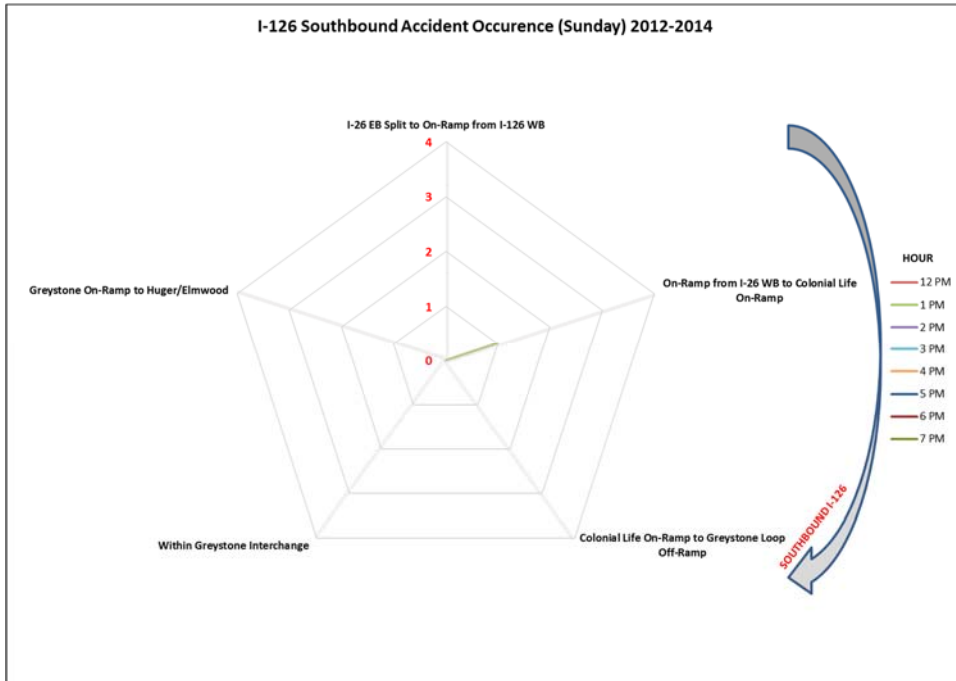


Most frequent Saturday accidents occur:

- No major segment occurrence

Figure 2.43: Southbound I-126 Accident Occurrence (Saturday)

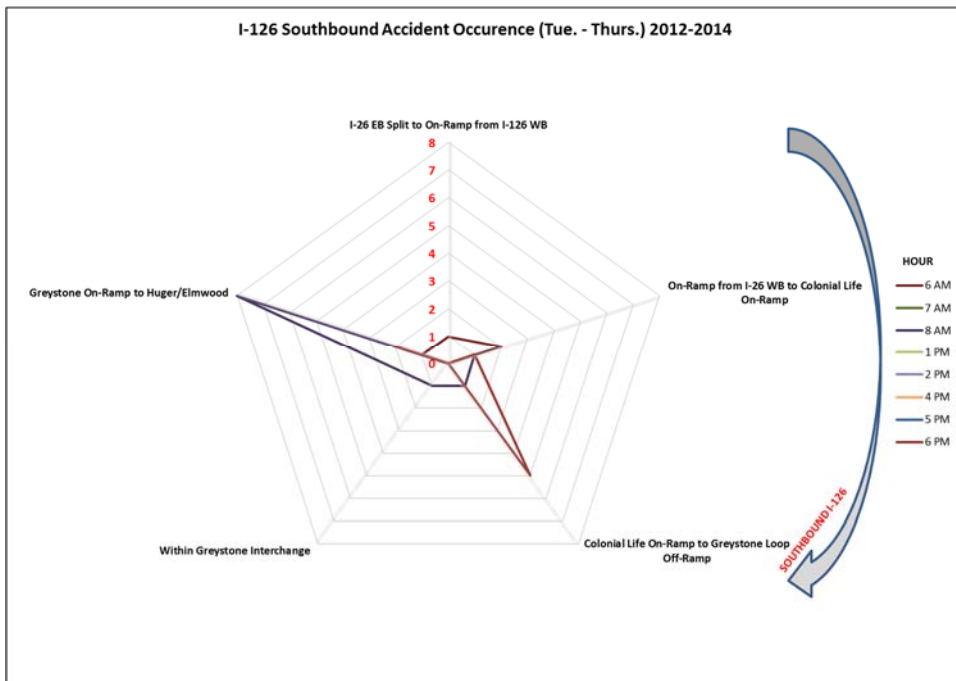
Crash Analysis



Most frequent Sunday accidents occur:

- No major segment occurrence

Figure 2.44: Southbound I-126 Accident Occurrence (Sunday)



Most frequent Weekday accidents occur:

- Between the Greystone Blvd. on-ramp to Huger St. /Elmwood Ave.
- Between the Colonial Life On-Ramp to the Greystone Blvd. Loop off-ramp

Figure 2.45: Southbound I-126 Accident Occurrence (Typical Weekday)

Crash Analysis

2.5.1 I-26 SPLIT TO I-26 NORTHBOUND ON-RAMP MERGE (MM 0.000 AND 0.375)

Six crashes occurred in this segment of southbound I-126 between the I-26 split and the merge location of the on-ramp from northbound I-26. **Table 2-140** summarizes crash data on this segment based on the collision type and injury severity.

Rear end crashes are the most frequent type of collision in this segment followed by *sideswipe in the same direction* and *no collision with motor vehicle* crashes.

One possible injury crash was caused by a *rear end* crash. The remaining five crashes were PDO.

Table 2-140: I-126 Southbound (I-26 Split to On-Ramp Merge) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	0	1	1	16.7%
Rear End	0	0	0	1	3	4	66.7%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	0	1	1	16.7%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	0	1	5	6	
Percentage	0.0%	0.0%	0.0%	16.7%	83.3%		

Crash data within this segment is summarized in **Table 2-141** based on injury severity, lighting and pavement surface condition. Four of the six crashes occurred on dry pavement and during the daytime. Two crashes occurred in dark, unlit conditions and on wet pavement. The single possible injury crash occurred on wet pavement in daylight. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix E (Figures E-1 and E-2).

Crash Analysis

Table 2-141: I-126 Southbound (I-26 to On-Ramp Merge) - Lighting and Injury Severity

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Possible Injury	1	0	0	0	1	0	0	1	16.7%
Property Damage Only	3	0	2	4	1	0	0	5	83.3%
Total	4	0	2	4	2	0	0	6	
Percentage	66.7%	0.0%	33.3%	66.7%	33.3%	0.0%	0.0%		

2.5.2 I-26 NORTHBOUND ON-RAMP MERGE TO COLONIAL LIFE ON-RAMP (MM 0.375 AND 1.268)

Sixteen crashes occurred in this 0.893 mile long segment of southbound I-126 between the merge location of the on-ramp from northbound I-26 to the Colonial Life Boulevard on-ramp. **Table 2-142** summarizes crash data on this segment based on the collision type and injury severity.

Rear end and *no collision with motor vehicle* crashes are the most frequent type of collisions in this segment followed by *sideswipe in the same direction* and *angle* crashes. The six *no collision with motor vehicle* crashes included two crashes with the median barrier, and one crash each with a deer and with the face of guardrail. There was also one overturn/rollover crash and a two-wheeled vehicle spill.

Two non-incapacitating injury crashes and three possible injury crashes occurred on this segment. The two non-incapacitating injury crashes were due to *rear end* crashes. Two of the possible injury crashes were *sideswipe same direction* crashes and one from a *no collision with motor vehicle* crash (from an overturn/rollover crash). The remaining eleven crashes were PDO, with five occurring from *no collision with motor vehicle* and four occurring from *rear end* crashes.

Crash Analysis

Table 2-142: I-126 Southbound (On-Ramp to Colonial Life On-Ramp) - Type of Collision and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	1	5	6	37.5%
Rear End	0	0	2	0	4	6	37.5%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	1	1	6.3%
Sideswipe Same Direction	0	0	0	2	1	3	18.8%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	2	3	11	16	
Percentage	0.0%	0.0%	12.5%	18.8%	68.8%		

Crash data within this segment is summarized in **Table 2-143** based on injury severity, lighting and pavement surface condition. Eleven of the crashes occurred during daylight and four occurred during dark, not lighted conditions. Fifteen of the sixteen crashes occurred on dry pavement. . Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix E (Figures E-3 and E-4).

Table 2-143: I-126 Southbound (On-Ramp to Colonial Life On-Ramp) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non Inapacitating Injury	1	0	1	2	0	0	0	2	12.5%
Possible Injury	3	0	0	2	1	0	0	3	18.8%
Property Damage Only	7	1	3	11	0	0	0	11	68.8%
Total	11	1	4	15	1	0	0	16	
Percentage	68.8%	6.3%	25.0%	93.8%	6.3%	0.0%	0.0%		

The two non-incapacitating injury crashes occurred on dry pavement, one in daylight and one in dark, not lighted conditions. Three possible injury crashes occurred in daylight, two on dry pavement and one on wet pavement.

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2.5.3 COLONIAL LIFE ON-RAMP TO GREYSTONE LOOP OFF-RAMP (MM 1.268 AND 2.113)

Twenty-two crashes occurred in this 0.845 mile long segment of southbound I-126 between the Colonial Life Boulevard on-ramp and the Greystone Boulevard loop off-ramp. **Table 2-144** summarizes crash data on this segment based on the collision type and injury severity.

Sideswipe same direction and *no collision with motor vehicle* are the most frequent type of crashes in this segment followed by *rear end* and *sideswipe opposite direction* collisions.

One fatal crash resulting from a *rear end* crash occurred on this segment. The fatal crash occurred on Wednesday, June 11, 2014 at approximately 9:00 PM and involved a motor vehicle in transport and high speed. There were two non-incapacitating injury crashes resulted from a *rear end* crash and from a *sideswipe opposite direction* crash. There were nine possible injury crashes, five of which were *sideswipe same direction* crashes. Two possible injury crashes resulted from *rear end* crashes and one each from *no collision with motor vehicle* and *sideswipe opposite direction*. There were ten PDO crashes; seven resulted from *no collision with a motor vehicle* and three occurring from *sideswipe same direction* crashes.

Table 2-144: I-126 Southbound (Colonial Life On-Ramp to Greystone Loop Off-Ramp) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	1	7	8	36.4%
Rear End	1	0	1	2	0	4	18.2%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	5	3	8	36.4%
Sideswipe Opposite Direction	0	0	1	1	0	2	9.1%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	1	0	2	9	10	22	
Percentage	4.5%	0.0%	9.1%	40.9%	45.5%		

Crash data within this segment is summarized in **Table 2-145** based on injury severity, lighting and pavement surface condition. The fatal accident occurred on dry pavement under dark, unlighted conditions. The two non-incapacitating injury crashes occurred on dry pavement; one in daylight and one in dark, not lighted conditions. Eight of the nine possible injury crashes occurred on dry pavement; five occurred in daylight and four occurred in dark, unlighted conditions. Eight of the ten PDO collision occurred in daylight and eight occurred on dry

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pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix E (Figures E-5 and E-6).

Table 2-145: I-126 Southbound (Colonial Life On-Ramp to Greystone Loop Off-Ramp) - Lighting and Pavement Markings

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice /Slush	Other / Unkown		
Fatality	0	0	1	1	0	0	0	1	4.5%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non Inapacitating Injury	1	0	1	2	0	0	0	2	9.1%
Possible Injury	5	0	4	8	1	0	0	9	40.9%
Property Damage Only	8	0	2	8	1	1	0	10	45.5%
Total	14	0	8	19	2	1	0	22	
Percentage	63.6%	0.0%	36.4%	86.4%	9.1%	4.5%	0.0%		

Segment 4 - Within Greystone Interchange

2.5.4 WITHIN GREYSTONE INTERCHANGE (MM 2.113 AND 2.307)

Four crashes occurred in this 0.194 mile long segment of southbound I-126 between the loop off-ramp and the on-ramp at the Greystone Boulevard interchange. **Table 2-146** summarizes crash data on this segment based on the collision type and injury severity.

Table 2-146: I-126 Southbound (within Greystone Exit) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	1	0	3	4	100.0%
Rear End	0	0	0	0	0	0	0.0%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	0	0	0	0.0%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	1	0	3	4	
Percentage	0.0%	0.0%	25.0%	0.0%	75.0%		

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All four collisions were the result of *no collision with motor vehicle* crashes. One of these crashes resulted in non-incapacitating injury. The remaining three crashes were PDO. The four *no collision with motor vehicle* crashes were further categorized in the data as separate collisions with the median barrier, fence, a tree, and other non-collision.

Crash data within this segment is summarized in **Table 2-147** based on injury severity, lighting and pavement surface condition. All four crashes on this segment occurred in daylight. The non-incapacitating injury crash took place on dry pavement, while the three PDO crashes took place on wet pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix E (Figures E-7 and E-8).

Table 2-147: I-126 Southbound (within Greystone Exit) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non Inapacitating Injury	1	0	0	1	0	0	0	1	25.0%
Possible Injury	0	0	0	0	0	0	0	0	0.0%
Property Damage Only	3	0	0	0	3	0	0	3	75.0%
Total	4	0	0	1	3	0	0	4	
Percentage	100.0%	0.0%	0.0%	25.0%	75.0%	0.0%	0.0%		

2.5.5 GREYSTONE ON-RAMP TO HUGER/ELMWOOD (MM 2.307 AND 3.473)

Thirty seven crashes occurred in this 1.166 mile long segment of southbound I-126 between the Greystone Boulevard on-ramp and the terminus of I-126 at the Huger Street/Elmwood Avenue Split. **Table 2-148** summarizes crash data on this segment based on the collision type and injury severity.

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Table 2-148: I-126 Southbound (Greystone to Huger/Elmwood) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	1	1	5	7	18.9%
Rear End	0	0	0	3	14	17	45.9%
Head On	0	0	0	1	0	1	2.7%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	1	3	4	10.8%
Sideswipe Same Direction	0	0	0	2	5	7	18.9%
Sideswipe Opposite Direction	0	0	0	1	0	1	2.7%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	1	9	27	37	
Percentage	0.0%	0.0%	2.7%	24.3%	73.0%		

Rear end crashes were the most frequent type of collision in this segment, with the seventeen rear end crashes making up about 46 percent of the total crashes. There were seven crashes each of no collision with motor vehicle and sideswipe same direction making up about 19 percent of the total crashes each. There were four angle crashes, and one each head on and sideswipe opposite direction crashes.

One no collision with motor vehicle crash resulted in a non-incapacitating injury. There were nine possible injury crashes, three of which were rear end crashes. The remaining 27 crashes were PDO.

Eight of the crashes along this segment were identified as being located on Elmwood Avenue and one on Huger Street. Four of these crashes were rear end crashes, three were sideswipe same direction and one each were angle and head on. The head on crash resulted in possible injury; the remaining crashes were PDO.

Crash data within this segment is summarized in Table 2-149 based on injury severity, lighting and pavement surface condition. Thirty two of the crashes occurred during daylight, with three in dark lighted and two in dark unlighted conditions. Thirty two of the crashes occurred on dry pavement with five on wet pavement. The non-incapacitating injury crash occurred in daylight and on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix E (Figures E-9 and E-10).

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Table 2-149: I-126 Southbound (Greystone to Huger/Elmwood) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non Inapacitating Injury	1	0	0	1	0	0	0	1	2.7%
Possible Injury	6	1	2	7	2	0	0	9	24.3%
Property Damage Only	25	2	0	24	3	0	0	27	73.0%
Total	32	3	2	32	5	0	0	37	
Percentage	86.5%	8.1%	5.4%	86.5%	13.5%	0.0%	0.0%		

2.6 Northbound I-126

One hundred crashes were reported along northbound I-126 within the study area. **Table 2-150** summarizes crashes along northbound I-126 by injury severity and collision types.

One fatal crash resulting from a *no collision with motor vehicle* was reported. There were six incapacitating injury crashes, twelve non-incapacitating injury crashes, and twelve possible injury crashes. Sixty nine of the crashes were PDO.

The most frequent collision type were *rear end* crashes. There were 41 *rear end* crashes, two resulting in incapacitating injury, four in non-incapacitating injury and six in possible injury. The *no collision with motor vehicle* crashes had the most injury and possible injury crashes. Of the 32 *no collision with motor vehicle* crashes, three resulted in incapacitating injury, five non-incapacitating injury and five possible injury crashes.

The other incapacitating injury crash came from a *sideswipe same direction* crash. There was one each non-incapacitating injury crashes from *rear-to-rear*, *sideswipe same direction*, and *sideswipe opposite direction* crashes. One possible injury crash was the result of a *rear-to-rear* crash.

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Table 2-150: Northbound I-126 Crash Summary - Collision Type and Injury Severity

Collision Type	Injury Severity					Total	Percentage
	Fatality	Injury			Property Damage		
		Incapacitating	Non-incapacitating	Possible			
No Collision with Motor Vehicle	1	3	5	5	18	32	32.0%
Rear End	0	2	4	6	35	47	47.0%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	1	1	1	3	3.0%
Angle	0	0	0	0	5	5	5.0%
Sideswipe Same Direction	0	1	1	0	10	12	12.0%
Sideswipe Opposite Direction	0	0	1	0	0	1	1.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
	1	6	12	12	69	100	100.0%

Table 2-151 summarizes the crash reports along northbound I-126 based on crash severity, lighting and road surface conditions

Table 2-151: Northbound I-126 Crash Summary - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark		Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
		Lighted	Not Lighted						
Fatality	0	1	0	1	0	0	0	1	1.0%
Incapacitating Injury	4	1	1	4	2	0	0	6	6.0%
Non-incapacitating Injury	11	0	1	10	2	0	0	12	12.0%
Possible Injury	6	4	2	8	3	1	0	12	12.0%
Property Damage Only	52	5	12	45	24	0	0	69	69.0%
Total	73	11	16	68	31	1	0	100	
Percentage	73.0%	11.0%	16.0%	68.0%	31.0%	1.0%	0.0%		

The fatal crash along this segment of northbound I-126 occurred during on dry pavement under dark, lighted conditions. Four of the six incapacitating injury crashes occurred during daylight, and four occurred on dry pavement. Eleven of the twelve possible injury crashes occurred in daylight with ten occurring on dry pavement. Six of the possible injury crashes occurred in daylight and six occurred in the dark (four in lighted and two in not lighted conditions). Eight of the possible injury crashes occurred on dry pavement, three on wet pavement, and one on snow covered pavement. Of the PDO crashes, 52 of the 69 crashes occurred in daylight,

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12 in dark, unlighted conditions and five in dark, lighted conditions. Forty five crashes occurred on dry pavement and 24 occurred on wet pavement.

Crash data along northbound I-126 were also summarized based on day of the week and time of day. A graph depicting the time and day of the week is shown in **Figure 2.46**

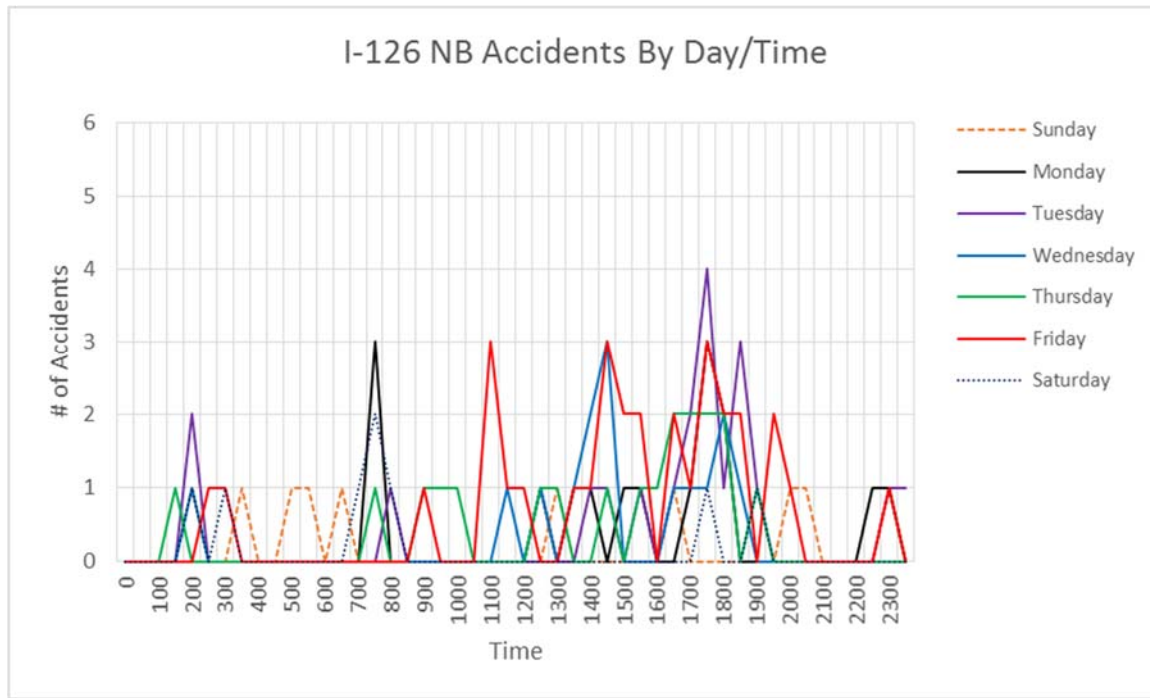


Figure 2.46: I-126 Northbound Crash Summary - Day of the Week and Time of Day

As can be seen from **Figure 2.46**, there are multiple accident peaks throughout the day, including 7:30 and 11:00 AM on Monday and Friday respectively, and at 2:30 PM (Wednesday and Friday), 5:30 PM (Monday, Tuesday and Friday), and at 6:30 PM (Tuesday). There is also a noticeable peak in accidents between 1:30 and 3:30 AM occurring on multiple days.

The accident data along northbound I-126 was separated into six segments. The segments are based on the mileposts associated with interchange ramp mileposts coded in the South Carolina Statewide Highway GIS network file. The northbound segments are:

- Elmwood Avenue/Huger Street to Greystone Boulevard off-ramp (MM 2.435 and MM 3.680)
- Within the Greystone Boulevard interchange (MM 2.028 and MM 2.435)
- Between the Greystone Boulevard on-ramp and the Colonial Life Boulevard off-ramp (MM 1.277 and MM 2.028)
- Colonial Life Boulevard off-ramp to the off-ramp to southbound I-26 (MM 0.908 and MM 1.277)
- Off-ramp to southbound I-26 to the northbound outside slip ramp to I-20 (MM 0.561 and 0.908)
- Northbound outside slip ramp to I-20 to the I-26 northbound ramp merge (MM 0.000 – 0.561)

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Table 2-152 summarizes the accident data for each segment based on injury severity, lighting and pavement surface conditions. **Table 2-13** summarizes the accident data for each segment based on collision type.

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Table 2-152: Northbound I-126 Segment Summary

Segment	Mile Posts	Injury Severity				Property Damage	Lighting Condition			Surface Condition				Total	Percentage
		Fatality	Injury				Day Light	Dark		Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
			Incapacitating	Non-Incapacitating	Possible			Lighted	Not Lighted						
Elmwood/Huger to Greystone Off-Ramp	(MM 3.554 - 2.435)	1	2	5	5	15	18	6	4	19	8	1	0	28	28.0%
Within Greystone Interchange	(MM 2.435 - 2.028)	0	1	2	2	6	6	0	5	7	4	0	0	11	11.0%
Between Greystone and Colonial Life Off-Ramp	(MM 2.028 - 1.277)	0	0	2	0	16	14	0	4	12	6	0	0	18	18.0%
Colonial Life Off-Ramp to Off-Ramp to I-26 Southbound Off-Ramp	(MM 1.277 - 0.908)	0	0	1	3	2	4	1	1	5	1	0	0	6	6.0%
Off-Ramp to I-26 southbound - northbound outside slip ramp to I-20	(MM 0.908 - 0.561)	0	2	1	1	13	14	2	1	11	6	0	0	17	17.0%
Northbound outside slip ramp to I-20 to I-26 northbound ramp merge	(MM 0.561 - 0.000)	0	1	1	1	17	17	2	1	14	6	0	0	20	20.0%
Total		1	6	12	12	69	73	11	16	68	31	1	0	100	
Percentage		1.0%	6.0%	12.0%	12.0%	69.0%	73.0%	11.0%	16.0%	68.0%	31.0%	1.0%	0.0%		

Table 2-153: Northbound I-126 Segment Summary by Collision Type and Injury Severity

Segment	Mile Posts	Accident Types									Total	Percentage
		No Collision with Motor Vehicle	Rear End	Head On	Rear-to-Rear	Angle	Sideswipe Same Direction	Sideswipe Opposite Direction	Backed Into	Other		
Elmwood/Huger to Greystone Off-Ramp	(MM 3.554 - 2.435)	15	10	0	0	0	2	1	0	0	28	28.0%
Within Greystone Interchange	(MM 2.435 - 2.028)	6	1	0	2	1	1	0	0	0	11	11.0%
Between Greystone and Colonial Life Off-Ramp	(MM 2.028 - 1.277)	5	9	0	0	3	1	0	0	0	18	18.0%
Colonial Life Off-Ramp to Off-Ramp to I-26 Southbound Off-Ramp	(MM 1.277 - 0.908)	3	3	0	0	0	0	0	0	0	6	6.0%
Off-Ramp to I-26 southbound - northbound outside slip ramp to I-20	(MM 0.908 - 0.561)	2	10	0	0	1	4	0	0	0	17	17.0%
Northbound outside slip ramp to I-20 to I-26 northbound ramp merge	(MM 0.561 - 0.000)	1	14	0	1	0	4	0	0	0	20	20.0%
Total		32	47	0	3	5	12	1	0	0	100	
Percentage		32.0%	47.0%	0.0%	3.0%	5.0%	12.0%	1.0%	0.0%	0.0%		

Crash Analysis

The crash data summaries for the individual interstate segments also include collisions occurring on the ramps. Of the 100 crashes along northbound I-126, eight crashes were identified in the crash data as occurring on ramps.

The ACR for each of the segments along northbound I-126 was calculated to compare the segments against the statewide average ACR. For freeway segments, the statewide average ACR for all crashes is 92.2 per HMVM. The statewide average injury and fatality ACR for freeway segments is 27.5 per HMVM and 0.77 per HMVM respectively.

In order to compare crashes between the segments, the ACR for each segment was calculated. The ACR for the northbound segments of I-126 are shown in **Table 2-154**.

Table 2-154: I-126 Northbound Segments - Actual Crash Rate (Total Crashes)

Segment	Mile Posts	Total Crashes	Segment Length	Segment AADT	Actual Crash Rate (per 100 MVM)
Elmwood/Huger to Greystone Off-Ramp	(MM 3.554 - 2.435)	28	1.119	70,800	193.7
Within Greystone Interchange	(MM 2.435 - 2.028)	11	0.407	70,800	209.2
Between Greystone and Colonial Life Off-Ramp	(MM 2.028 - 1.277)	18	0.751	71,100	184.7
Colonial Life Off-Ramp to Off-Ramp to I-26 Southbound Off-Ramp	(MM 1.277 - 0.908)	6	0.369	62,200	143.2
Off-Ramp to I-26 southbound - northbound outside slip ramp to I-20	(MM 0.908 - 0.561)	17	0.347	62,200	431.6
Northbound outside slip ramp to I-20 to I-26 northbound ramp merge	(MM 0.561 - 0.000)	20	0.561	62,200	314.1

As can be seen from **Table 2-154**, all the northbound I-126 segments exceed the statewide average ACR for freeway segments. The northern most segments between the off-ramp to I-26 southbound and the end of northbound I-126 where I-26 northbound merges in to I-126 has the highest ACR of the segments.

The ACR calculated for injury crashes are shown in **Table 2-155**.

The ACR for the injury crashes also exceed the statewide average ACR for all of the northbound segments of I-126 except for the segment between the northbound on-ramp from Greystone Boulevard to the Colonial Life Boulevard off ramp.

Crash Analysis

Table 2-155: I-126 Northbound Segments - Actual Crash Rates (Injury Crashes)

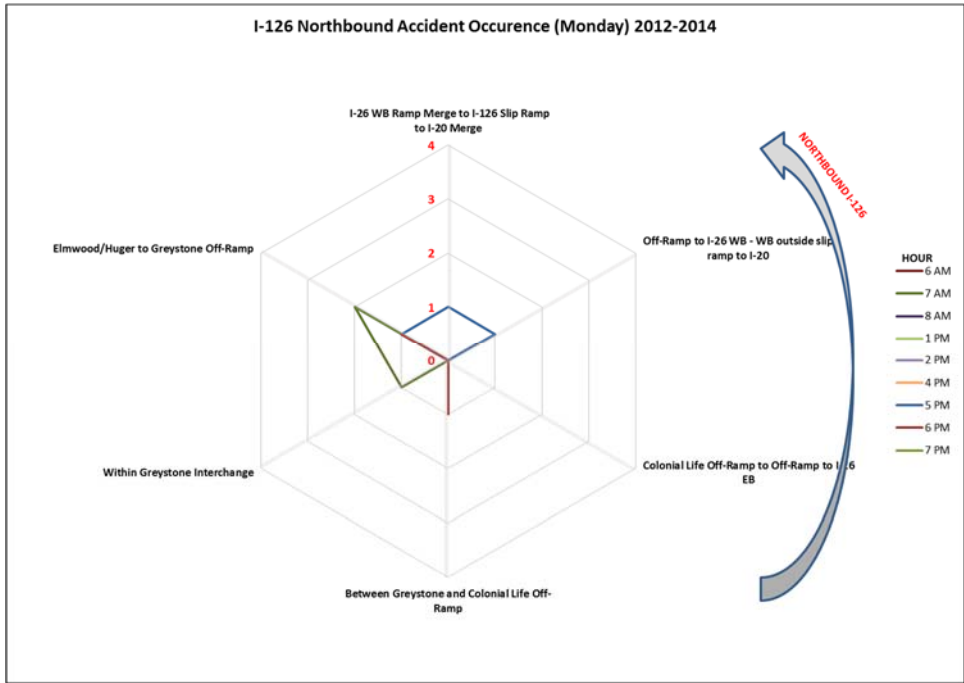
Segment	Mile Posts	Total Injury Crashes	Segment Length	Segment AADT	Actual Crash Rate (per 100 MVM)
Elmwood/Huger to Greystone Off-Ramp	(MM 3.554 - 2.435)	12	1.119	70,800	83.0
Within Greystone Interchange	(MM 2.435 - 2.028)	5	0.407	70,800	95.1
Between Greystone and Colonial Life Off-Ramp	(MM 2.028 - 1.277)	2	0.751	71,100	20.5
Colonial Life Off-Ramp to Off-Ramp to I-26 Southbound Off-Ramp	(MM 1.277 - 0.908)	4	0.369	62,200	95.5
Off-Ramp to I-26 southbound - northbound outside slip ramp to I-20	(MM 0.908 - 0.561)	4	0.347	62,200	101.5
Northbound outside slip ramp to I-20 to I-26 northbound ramp merge	(MM 0.561 - 0.000)	3	0.516	62,200	51.2

The single fatal crash occurring on northbound I-126 took place on the southernmost segment between the Elmwood Avenue/Huger Street merge to the off-ramp to Greystone Boulevard. This segment has a fatal crash ACR of 6.9, which exceeds the statewide average rate.

The accidents occurring along the corridor during the morning and afternoon peak periods for each day of the week and on typical weekdays (Tuesday through Thursday) were plotted on graphs. The resulting graphs are shown in **Figures 2.47** through **2.54**.

The following sections contain a detailed review of crash data for each segment of southbound I-126. Collision diagrams for the freeway segments and interchange areas of southbound I-126 are shown in Appendix F.

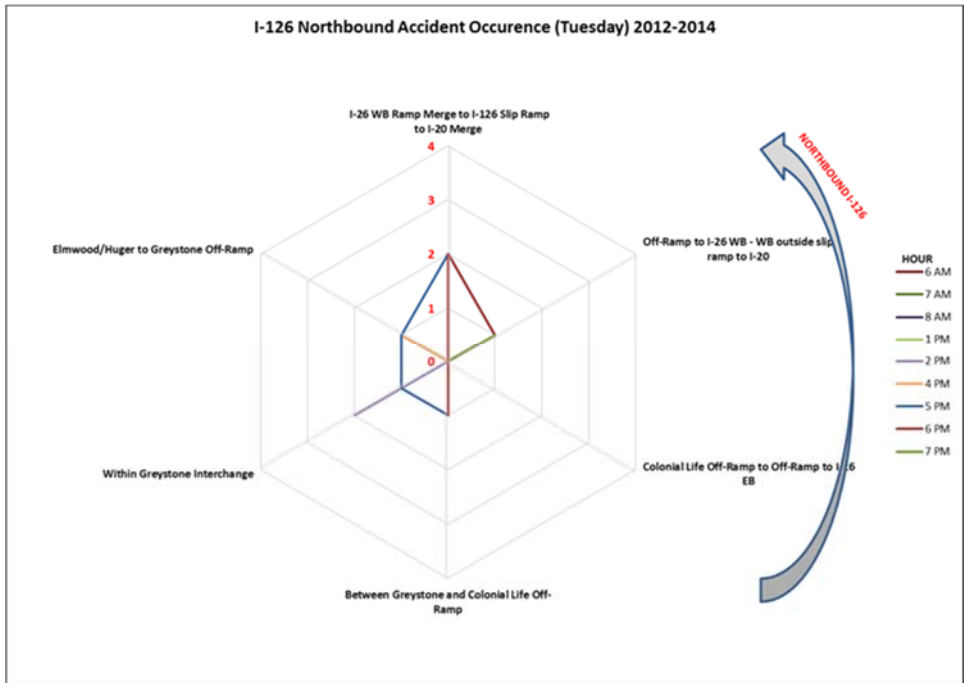
Crash Analysis



Most frequent Monday accidents occur:

- Between Elmwood Ave – Huger Street and the Greystone Blvd. off-ramp

Figure 2.47: Northbound I-126 Accident Occurrence (Monday)

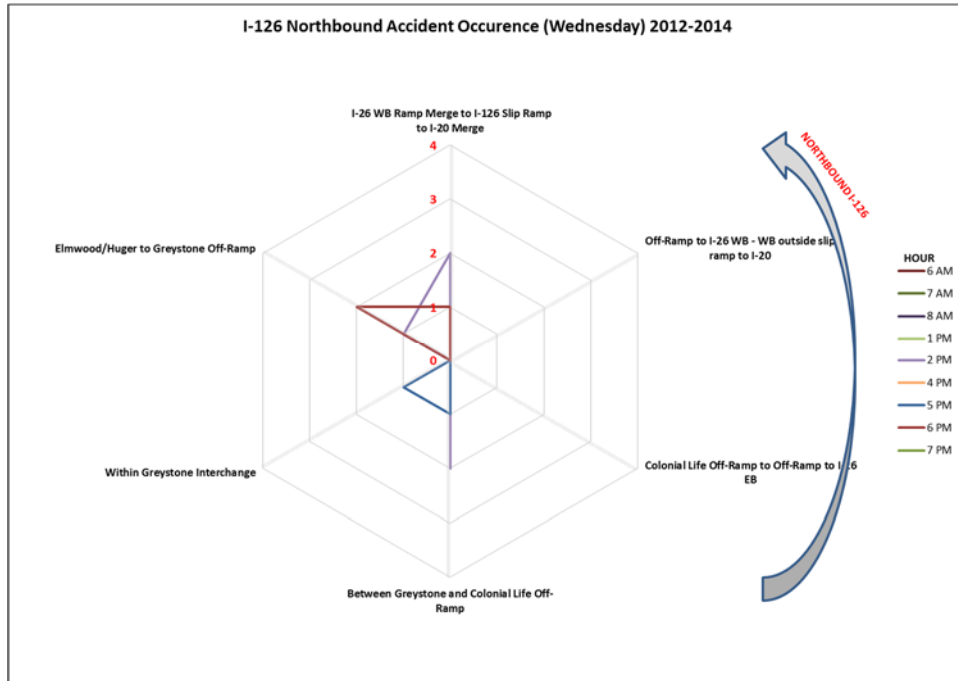


Most frequent Tuesday accidents occur:

- Within the Greystone Blvd interchange
- I-26 merge to I-126 slip ramp to I-20 merge

Figure 2.48: Northbound I-126 Accident Occurrence (Tuesday)

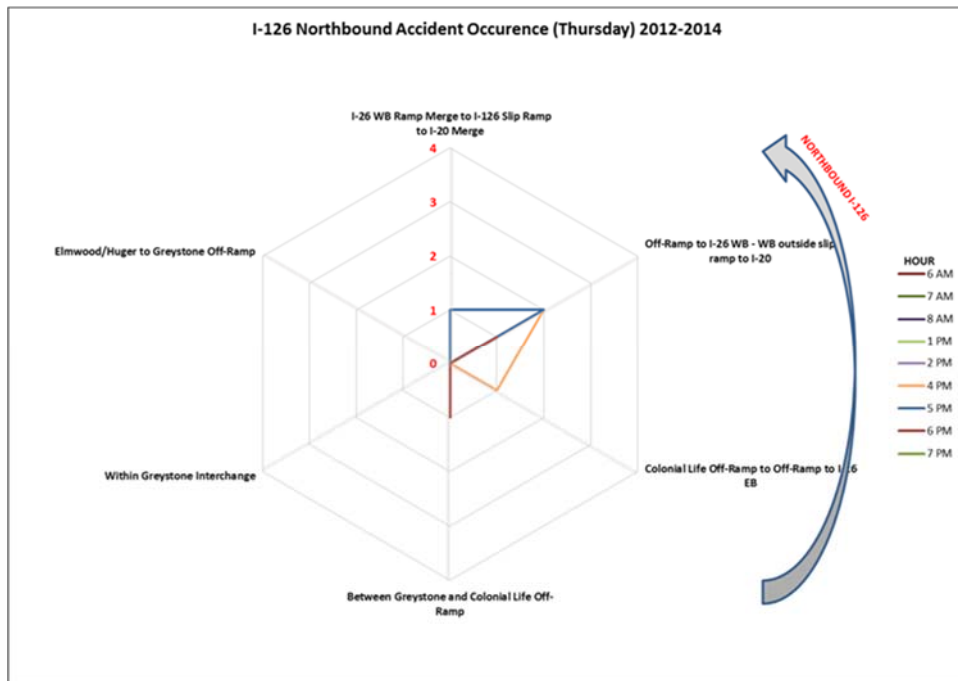
Crash Analysis



Most frequent Wednesday accidents occur:

- Between Elmwood Ave – Huger Street and the Greystone Blvd. off-ramp
- Between Greystone Blvd and Colonial Life Blvd.
- I-26 merge to I-126 slip ramp to I-20 merge

Figure 2.49: Northbound I-126 Accident Occurrence (Wednesday)

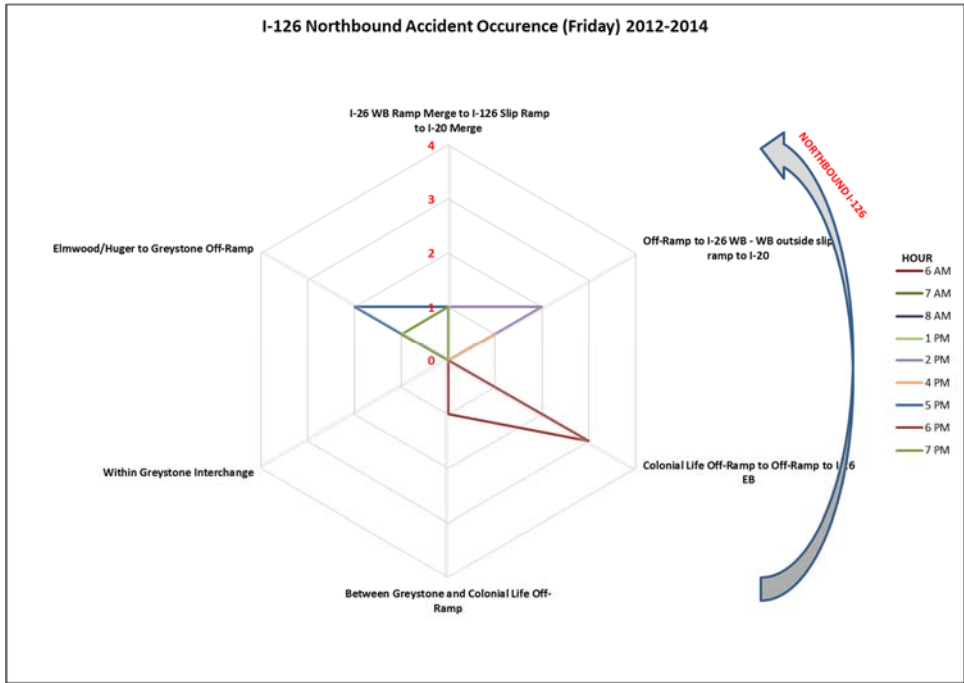


Most frequent Thursday accidents occur:

- Between the off-ramp to I-26 southbound to the diverge area for the outside slip ramp to I-20

Figure 2.50: Northbound I-126 Accident Occurrence (Thursday)

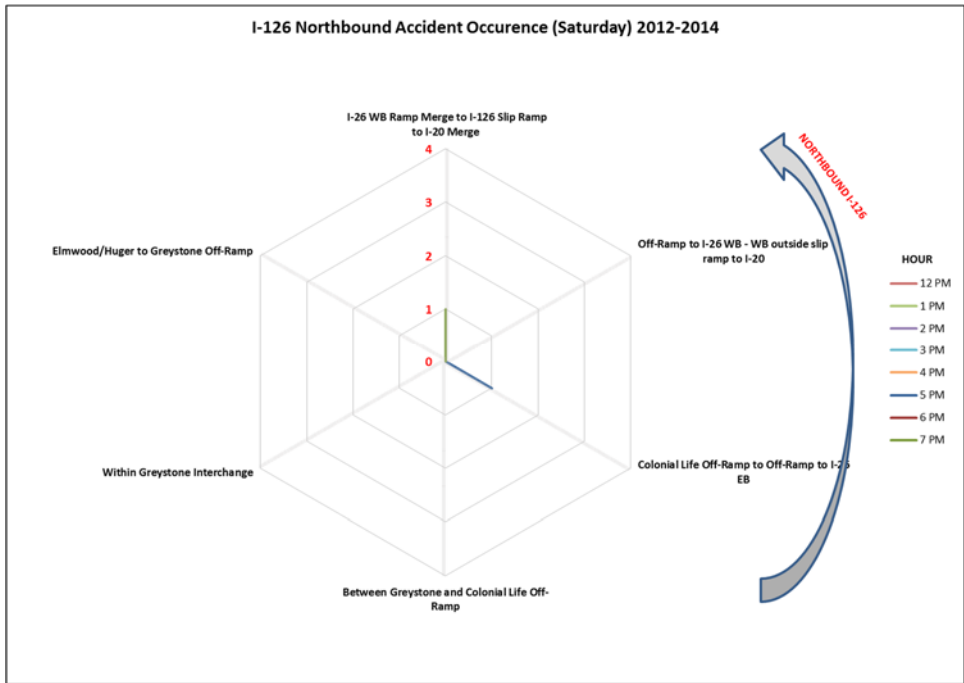
Crash Analysis



Most frequent Friday accidents occur:

- Between Elmwood Ave – Huger Street and the Greystone Blvd. off-ramp
- Between the Colonial Life Blvd. off-ramp to the I-26 off-ramp

Figure 2.51: Northbound I-126 Accident Occurrence (Friday)

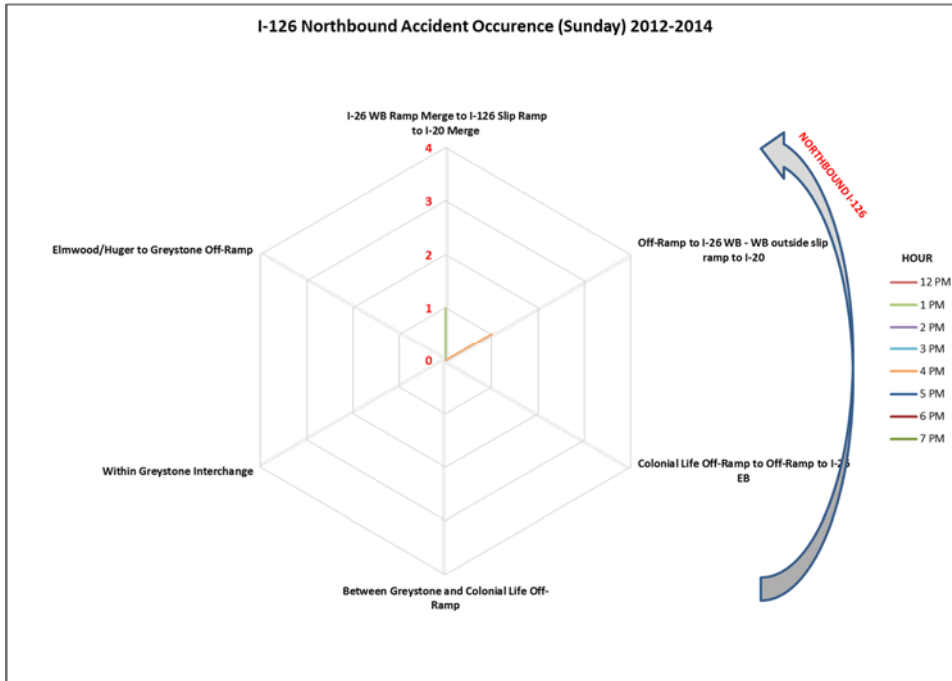


Most frequent Saturday accidents occur:

- No major segment occurrence

Figure 2.52: Northbound I-126 Accident Occurrence (Saturday)

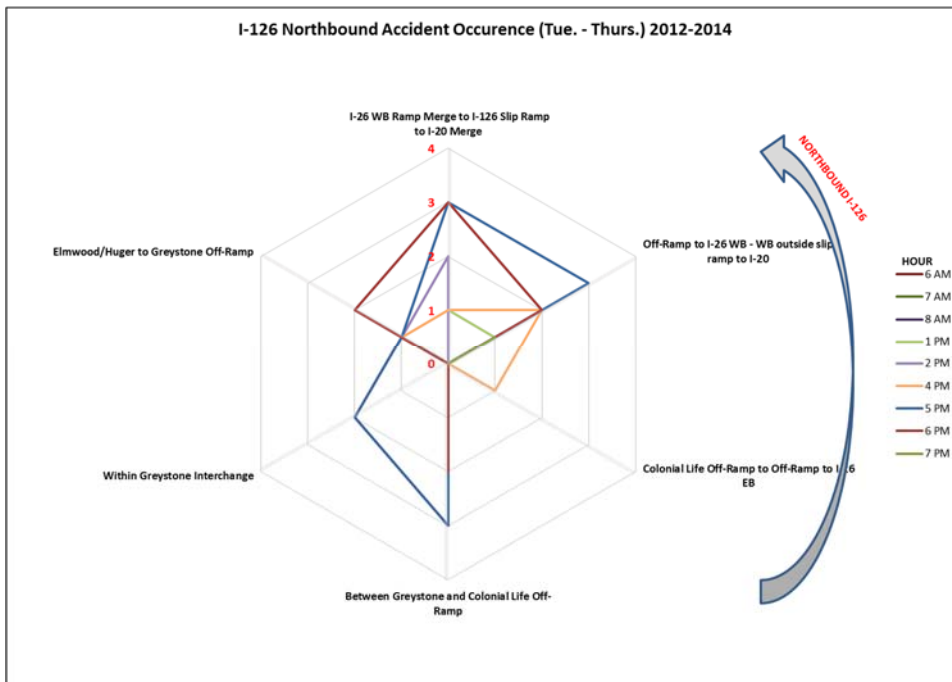
Crash Analysis



Most frequent Sunday accidents occur:

- No major segment occurrence

Figure 2.53: Northbound I-126 Accident Occurrence (Sunday)



Most frequent Weekday accidents occur:

- Between Greystone and Colonial Life
- Between the I-26 off-ramp and the I-20 slip ramp
- Within Greystone
- I-26 merge to I-20 slip ramp merge
- Elmwood/Huger to Greystone

Figure 2.54: Northbound I-126 Accident Occurrence (Typical Weekday)

Crash Analysis

2.6.1 ELMWOOD/HUGER TO GREYSTONE OFF-RAMP (MM 3.680 AND 2.435)

Twenty eight crashes occurred in this 1.245 mile long segment of northbound I-126 between the merge location of Elmwood Avenue and Huger Street that creates northbound I-126 and the off-ramp to Greystone Boulevard.

Table 2-156 summarizes crash data on this segment based on the collision type and injury severity.

There was one fatal crash resulting from a *no collision with a motor vehicle* crash. This crash took place on Tuesday, November 6, 2012 at approximately 2:25 AM. The crash was with a face of the guardrail and was caused by the operator driving too fast for conditions.

No collision with a motor vehicle and rear end collisions are the most frequent type of collisions in this segment with 15 and nine crashes respectively. These two crash types resulted in 25 of the 28 crashes observed on the segment. There were two incapacitating injury crashes that were both *no collision with a motor vehicle* crashes. There were five non-incapacitating injury crashes and five possible injury crashes. Two of the non-incapacitating injury crashes and three of the possible injury crashes resulted from *no collision with motor vehicle* crashes. Four *rear end* crashes resulted in two each non-incapacitating injury and possible injury crashes. One other non-incapacitating injury crash was the result of a *sideswipe opposite direction* crash. There were fifteen PDO crashes – seven were the result of *no collision with motor vehicle* crashes, six were due to *rear end* crashes, and two were the result of *sideswipe same direction* crashes.

The most frequent *no collision with motor vehicle* crashes were crashes with the face of guardrail (five crashes), median barrier (three crashes), and deer (two crashes). There was one crash each of overturn/rollover, two-wheeled vehicle spill, other moveable object, other (wall, etc.), and collision with the bridge rail. As mentioned previously, the fatal crash involved a collision with the guardrail face. The two incapacitating injury crashes were due to crashes with the median barrier and guardrail face, as were the two non-incapacitating injury crashes.

Crash data within this segment is summarized in **Table 2-157** based on injury severity, lighting and pavement surface condition. The fatal accident occurred on dry pavement in dark, lighted conditions. The two incapacitating injury crashes occurred on dry pavement, one in daylight and the other in dark, lighted conditions. Five of the non-incapacitating injury crashes occurred on dry pavement, with four occurring in daylight and one in dark, unlighted conditions. Three of the five possible injury crashes occurred in daylight and occurred on dry pavement.

Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix F (Figures F-1, F-2, F-3, and F-4).

Crash Analysis

Table 2-156: I-26 Northbound (Elmwood/Huger to Greystone) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	1	2	2	3	7	15	53.6%
Rear End	0	0	2	2	6	10	35.7%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	0	2	2	7.1%
Sideswipe Opposite Direction	0	0	1	0	0	1	3.6%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	1	2	5	5	15	28	
Percentage	3.6%	7.1%	17.9%	17.9%	53.6%		

Table 2-157: I-26 Northbound (Elmwood/Huger to Greystone) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	1	0	1	0	0	0	1	3.6%
Incapacitating Injury	1	1	0	2	0	0	0	2	7.1%
Non-incapacitating Injury	4	0	1	5	0	0	0	5	17.9%
Possible Injury	3	2	0	3	1	1	0	5	17.9%
Property Damage Only	10	2	3	8	7	0	0	15	53.6%
Total	18	6	4	19	8	1	0	28	
Percentage	64.3%	21.4%	14.3%	67.9%	28.6%	3.6%	0.0%		

2.6.2 WITHIN GREYSTONE INTERCHANGE (MM 2.435 AND 2.028)

Eleven crashes occurred in this 0.407 mile long segment of northbound I-126 between the Greystone Boulevard interchange off-ramp and on-ramp. **Table 2-158** summarizes crash data on this segment based on the collision type and injury severity.

No collision with motor vehicle is the most frequent type of collision in this segment, with six crashes. *Rear-to-rear* crashes occurred twice, and *rear end*, *angle*, and *sideswipe same direction* crashes each had one occurrence.

Crash Analysis

There was one incapacitating injury crash arising from a *rear end* collision. Two non-incapacitating injury crashes occurred, with one crash each classified as *no collision with motor vehicle* and *rear-to-rear* crashes, as were the two possible injury crashes. The remaining six crashes were PDO, with four occurring from *no collision with motor vehicle* collisions, and one each occurring from *angle* and *sideswipe same direction* collisions.

Table 2-158: I-126 Northbound (within Greystone Exit) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	1	1	4	6	54.5%
Rear End	0	1	0	0	0	1	9.1%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	1	1	0	2	18.2%
Angle	0	0	0	0	1	1	9.1%
Sideswipe Same Direction	0	0	0	0	1	1	9.1%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	1	2	2	6	11	
Percentage	0.0%	9.1%	18.2%	18.2%	54.5%		

The six *no collision with motor vehicle* crashes were the result of other non-collision (two crashes), and crashes with deer, guardrail face, unknown fixed object, and crossing the median/center (one crash each).

Crash data within this segment is summarized in **Table 2-159** based on injury severity, lighting and pavement surface condition. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix F (Figures F-5 and F-6).

Table 2-159: I-126 Northbound (within Greystone Exit) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	1	0	1	0	0	1	9.1%
Non Inapacitating Injury	2	0	0	1	1	0	0	2	18.2%
Possible Injury	1	0	1	2	0	0	0	2	18.2%
Property Damage Only	3	0	3	4	2	0	0	6	54.5%
Total	6	0	5	7	4	0	0	11	
Percentage	54.5%	0.0%	45.5%	63.6%	36.4%	0.0%	0.0%		

Crash Analysis

Six of the eleven of the crashes occurred during daylight and five occurred during dark, not lighted conditions. Seven of the eleven crashes occurred on dry pavement and four occurred on wet pavement. The incapacitating injury crash occurred on wet pavement under dark, not lighted conditions. The two non-incapacitating injury crashes occurred in daylight; one on dry and one on wet pavement. The two possible injury crashes occurred on dry pavement; one in daylight and one in dark, not lighted conditions. Half of the six PDO crashes occurred in daylight and half in dark, unlighted conditions. Four PDO crashes occurred on dry pavement and two on wet pavement.

2.6.3 GREYSTONE ON-RAMP TO COLONIAL LIFE OFF-RAMP (MM 2.028 AND 1.277)

Eighteen crashes occurred in this 0.751 mile long segment of northbound I-126 between the Greystone Boulevard interchange on-ramp and the Colonial Life Boulevard off-ramp. **Table 2-160** summarizes crash data on this segment based on the collision type and injury severity.

Rear end and *no collision with motor vehicles* are the most frequent type of collisions in this segment followed by *angle* collisions. There were nine *rear end* crashes, five *no collision with motor vehicle* crashes, and three *angle* crashes. There was also one *sideswipe same direction* crash.

There were no fatal crashes or crashes resulting in incapacitating injury. There were two non-incapacitating injury crashes, one each resulting from *rear end* and *sideswipe same direction* crashes. There were 16 PDO crashes: eight resulted from *rear end* crashes, five from *no collision with motor vehicle*, and three from *angle* crashes.

Table 2-160: I-126 Northbound (Greystone to Colonial Life) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	0	5	5	27.8%
Rear End	0	0	1	0	8	9	50.0%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	3	3	16.7%
Sideswipe Same Direction	0	0	1	0	0	1	5.6%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	2	0	16	18	
Percentage	0.0%	0.0%	11.1%	0.0%	88.9%		

Crash data within this segment is summarized in **Table 2-161** based on injury severity, lighting and pavement surface condition. The two non-incapacitating injury crashes occurred on dry pavement, with one each

Crash Analysis

occurring on dry pavement and wet pavement. Twelve of the 16 PDO collisions occurred in daylight and four in dark, not lighted conditions. Eleven of the PDO crashes occurred on dry pavement and five on wet pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix F (Figures F-7 and F-8).

Table 2-161: I-126 Northbound (Greystone to Colonial Life) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non Inapacitating Injury	2	0	0	1	1	0	0	2	11.1%
Possible Injury	0	0	0	0	0	0	0	0	0.0%
Property Damage Only	12	0	4	11	5	0	0	16	88.9%
Total	14	0	4	12	6	0	0	18	
Percentage	77.8%	0.0%	22.2%	66.7%	33.3%	0.0%	0.0%		

2.6.4 COLONIAL LIFE OFF-RAMP TO I-26 OFF-RAMP (MM 1.277 AND 0.908)

Six crashes occurred in this 0.369 mile long segment of northbound I-126 between the Colonial Life Boulevard off-ramp and the off-ramp to the flyover to southbound I-26. **Table 2-162** summarizes crash data on this segment based on the collision type and injury severity.

Table 2-162: I-126 Northbound (Colonial Life to I-26 SB Off-Ramp) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	1	1	1	3	50.0%
Rear End	0	0	0	2	1	3	50.0%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	0	0	0	0.0%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	1	3	2	6	
Percentage	0.0%	0.0%	16.7%	50.0%	33.3%		

Crash Analysis

Three of the collisions were the result of *no collision with motor vehicle* crashes and three from *rear end* crashes. There was one non-incapacitating injury crash (from a *no collision with motor vehicle* crash) and three possible injury crashes (one resulting from *no collision with motor vehicle* and two *rear end* crashes). The two remaining crashes were PDO, one each resulting from *no collision with motor vehicle* and *rear end* crashes.

Crash data within this segment is summarized in **Table 2-163** based on injury severity, lighting and pavement surface condition. The non-incapacitating injury crash took place in daylight on dry pavement. The three possible injury crashes occurred on dry pavement; one each occurring during daylight, and in the dark under lighted and non-lighted conditions. Both of the PDO crashes took place in daylight, one on dry pavement and one on wet pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix F (Figures F-9 and F-10).

Table 2-163: I-126 Northbound (Colonial Life to I-26 SB Off-Ramp) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non Incapacitating Injury	1	0	0	1	0	0	0	1	16.7%
Possible Injury	1	1	1	3	0	0	0	3	50.0%
Property Damage Only	2	0	0	1	1	0	0	2	33.3%
Total	4	1	1	5	1	0	0	6	
Percentage	66.7%	16.7%	16.7%	83.3%	16.7%	0.0%	0.0%		

2.6.5 I-26 OFF-RAMP TO I-20 SLIP RAMP (MM 0.908 AND 0.561)

Seventeen crashes occurred in this 0.347 mile long segment of northbound I-126 between the off-ramp to the I-26 southbound flyover ramp to the location where the slip ramp to the I-20 ramps at I-26 Exit 107 separates from northbound I-126. **Table 2-164** summarizes crash data on this segment based on the collision type and injury severity.

Rear end crashes made up ten of the 17 collisions on this segment. The next most frequent crash types were *sideswipe same direction* (four crashes), *no collision with motor vehicle* (two crashes) and *angle* (one crash).

There were two incapacitating injury crashes (one *no collision with a motor vehicle* and one *sideswipe same direction* crashes). There was one non-incapacitating injury crash (from a *no collision with motor vehicle* crash) and one possible injury crash (from a *rear end* crash). Nine of the 13 PDO crashes resulted from *rear end* collisions, three from *sideswipe same direction*, and one from *angle* crashes.

Crash Analysis

Table 2-164: I-126 Northbound (I-26 Off-Ramp to I-20 Slip Ramp) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	1	1	0	0	2	11.8%
Rear End	0	0	0	1	9	10	58.8%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	1	1	5.9%
Sideswipe Same Direction	0	1	0	0	3	4	23.5%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	2	1	1	13	17	
Percentage	0.0%	11.8%	5.9%	5.9%	76.5%		

Crash data within this segment is summarized in **Table 2-165** based on injury severity, lighting and pavement surface condition. The two incapacitating injury crashes occurred during daylight on dry pavement. The non-incapacitating injury crash occurred in daylight on dry pavement. The possible injury crash occurred in daylight on wet pavement. Of the 13 PDO collisions, ten occurred during daylight and three in the dark (two lighted and one not lighted). Eight of the 13 PDO collisions occurred on dry pavement and five on wet pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix F (Figures F-11 and F-12).

Table 2-165: I-126 Northbound (I-26 Off-Ramp to I-20 Slip Ramp) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	2	0	0	2	0	0	0	2	11.8%
Non Inapacitating Injury	1	0	0	1	0	0	0	1	5.9%
Possible Injury	1	0	0	0	1	0	0	1	5.9%
Property Damage Only	10	2	1	8	5	0	0	13	76.5%
Total	14	2	1	11	6	0	0	17	
Percentage	82.4%	11.8%	5.9%	64.7%	35.3%	0.0%	0.0%		

Crash Analysis

2.6.6 I-20 SLIP RAMP TO I-26 NORTHBOUND MERGE (MM 0.561 AND 0.000)

Twenty crashes occurred in this 0.561 mile long segment of northbound I-126 between the location where the slip-ramp to I-20 separates from northbound I-126 and where the two lanes from the flyover ramp from northbound I-26 join the northbound I-126 lanes. **Table 2-166** summarizes crash data on this segment based on the collision type and injury severity.

Rear end and *sideswipe same direction* crashes are the most frequent collision type with 14 and four crashes respectively. There was one each of the *no collision with motor vehicle* and *rear-to-rear* crashes. The one incapacitating injury crash, one non-incapacitating injury crash and the one possible injury crash all resulted from *rear end* crashes.

Table 2-166: I-126 Northbound (I-20 Slip Ramp to I-26 Merge) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	0	1	1	5.0%
Rear End	0	1	1	1	11	14	70.0%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	1	1	5.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	0	4	4	20.0%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	1	1	1	17	20	
Percentage	0.0%	5.0%	5.0%	5.0%	85.0%		

Seventeen of the 20 crashes were PDO. Of these, 11 were the result of *rear end* crashes, four resulted from *sideswipe same direction* crashes, and one each were the result of *no collision with motor vehicle* and *rear-to-rear* crashes.

Crash data within this segment is summarized in **Table 2-167** based on injury severity, lighting and pavement surface condition. Seventeen of the 20 crashes occurred during daylight, with two in dark lighted and one in dark, unlighted conditions. Fourteen of the crashes occurred on dry pavement with six on wet pavement. The single incapacitating injury crash occurred in daylight on wet pavement. The non-incapacitating injury crash occurred in daylight on dry pavement. The possible injury crash occurred in dark, lighted conditions on wet pavement. Fifteen of the 17 PDO crashes occurred in daylight, with two occurring in the dark (one lighted and one not lighted). Thirteen PDO crashes occurred on dry pavement and four occurred on wet pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix F (Figures F-13 and F-14).

Crash Analysis

Table 2-167: I-126 Northbound (I-20 Slip Ramp to I-26 Merge) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	1	0	0	0	1	0	0	1	5.0%
Non Inapacitating Injury	1	0	0	1	0	0	0	1	5.0%
Possible Injury	0	1	0	0	1	0	0	1	5.0%
Property Damage Only	15	1	1	13	4	0	0	17	85.0%
Total	17	2	1	14	6	0	0	20	
Percentage	85.0%	10.0%	5.0%	70.0%	30.0%	0.0%	0.0%		

3 Arterial Roadways

Crash analyses were performed for the arterial roadway segments at each of the I-26, I-20 and I-126 interchanges and the frontage roads within the studyarea.

There were four fatal crashes along the interchange arterial roadways and on the frontage roads interstate routes within the study area. Two took place along interchange arterial roadways and two took place along frontage roads. **Table 3-1** summarizes the details of the four fatal accidents along arterial roadways within the study area.

Table 3-1: Summary of Fatal Crashes

Route	Day	Date	Time	Crash Type	FHE	Cause	Surface	Lighting
Harbison Boulevard (Exit 103)	Monday	8/8/2014	08:30 PM	No Collision with Motor Vehicle	Other (Wall, Building, Tunnel, Etc.)	DUI	Dry	Daylight
Broad River Road (Exit 65)	Tuesday	2/21/2012	07:13 PM	Rear End	Motor Vehicle In Transport	DUI	Dry	Dark (no lights)
Burning Tree Drive (Frontage)	Wednesday	1/2/2014	10:10 AM	Rear End	Motor Vehicle In Transport	SPEED	Dry	Dark (lighting Unspecified)
Gracern Road (Frontage)	Tuesday	10/4/2014	07:38 PM	No Collision with Motor Vehicle	Guardrail Face	DTFFC	Dry	Dark (street lamp lit)

There was one fatal accident that occurred in 2012 and three in 2014. Two crashes occurred on Tuesday, and one each on Monday and Wednesday. None of the crashes occurred during a weekday peak period. Two of the fatal crashes were due to *no collision with a motor vehicle* crashes and two were due to *rear end* crashes. Two crashes were attributed to *driving under the influence* (DUI) and one each were attributed to *driving too fast for conditions* (DTFFC) and speed. All four crashes occurred on dry pavement. One crash occurred during daylight and three occurred in dark conditions.

Crash Analysis

3.1 I-26 Arterial Roadways

Within the study area, there are eight arterial roadways at the interchange of I-26 for which crash data was summarized. These arterials are:

- Broad River Road (US 76/US 176) from Columbiana Drive to Western Lane (Exit 101)
- Lake Murray Boulevard (SC 60) from Columbiana Drive to Kinley Road (Exit 102)
- Harbison Boulevard (S-32-0757, S-40-0757) from Saturn Parkway to Parkridge Drive (Exit 103)
- Piney Grove Road (S-32-671/S-40-1280) from eastbound ramp to westbound ramp (Exit 104)
- St. Andrews Road (S-32-0036/S-40-0042, St. Andrews Road from Woodland Hills Road to Fernandina Road (Exit 106)
- Burning Tree Drive (S-40-2893) from St. Andrews Road to eastbound Slip Ramp (Exit 106)
- Bush River Road (S-40-0031) from Zimalcrest Road to Latonea Drive (Exit 108)
- US 378 (Sunset Boulevard) from Harbor Drive to McSwain Drive (Exit 110)

The following sections contain a detailed review of crash data for each of the arterial roadways at the I-26 interchanges. Collision diagrams for the I-26 arterials are shown in Appendix G.

3.1.1 BROAD RIVER ROAD (EXIT 101)

Twenty-four crashes were reported along Broad River Road from Columbiana Extension to Western Lane. **Table 3-2** summarizes this section's crash data based on collision type and injury severity.

Table 3-2: Broad River Road (Exit 101) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	0	2	2	8.3%
Rear End	0	0	1	0	5	6	25.0%
Head On	0	0	0	1	1	2	8.3%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	1	2	0	8	11	45.8%
Sideswipe Same Direction	0	0	0	0	2	2	8.3%
Sideswipe Opposite Direction	0	0	0	0	1	1	4.2%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	1	3	1	19	24	
Percentage	0.0%	4.2%	12.5%	4.2%	79.2%		

Crash Analysis

No fatal crashes were reported along Broad River Road. However, five crashes resulted in injury or possible injury while 19 resulted in PDO. The most common collision type was *angle* collisions, which accounted for approximately 46 percent of collisions, followed by *rear end* collisions, which made up 25 percent of the total collisions.

There was one incapacitating injury crash resulting from an *angle* crash. There were three non-incapacitating injury crashes: two were the result of *angle* crashes, and one was the result of a *rear-end* crash. The one possible injury crash was the result of a *head on* crash.

Table 3-3 summarizes crash data on this segment based on injury severity, lighting and pavement surface condition. Eighteen of the crashes took place in *daylight* and seventeen crashes occurred on *dry* pavement. The incapacitating injury crash occurred in dark, not lighted conditions on wet pavement. The three non-incapacitating injury crashes took place in daylight and on dry pavement. The possible injury crash took place in dark, lighted conditions and on dry pavement. The PDO crashes occurred predominantly during daylight (15 of 19). Thirteen of the PDO crashes occurred on dry pavement and six occurred on wet pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix G (Figures G-1 and G-2).

Table 3-3: Broad River Road (Exit 101) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	1	0	1	0	0	1	4.2%
Non-incapacitating Injury	3	0	0	3	0	0	0	3	12.5%
Possible Injury	0	1	0	1	0	0	0	1	4.2%
Property Damage Only	15	2	2	13	6	0	0	19	79.2%
Total	18	3	3	17	7	0	0	24	
Percentage	75.0%	12.5%	12.5%	70.8%	29.2%	0.0%	0.0%		

3.1.2 LAKE MURRAY BOULEVARD (EXIT 102)

A total of 41 crashes were reported on Lake Murray Boulevard from Columbiana Extension to Kinley Road, as shown in **Table 3-4**. No fatal crashes were reported. There were nine injury or possible injury crashes (approximately 22 percent) reported. Three crashes were non-incapacitating injury crashes and six were possible injury crashes. The remaining 78% of the total collisions (32 crashes) resulted in PDO. The most common collision type was *rear end* crashes which made up approximately 46 percent of the total crashes, followed by *angle* collisions accounting for approximately 32 percent of the total.

Crash Analysis

The three non-incapacitating injury crashes were all the result of *angle* crashes. Four of the six possible injury crashes were due to *rear end* crashes, while there was one crash each classified as *angle* and *sideswipe same direction*.

Table 3-5 summarizes the crash data on this roadway section based on injury severity, lighting and pavement surface condition. Of the 41 total crashes, the majority occurred in the *daylight* and on *dry* pavement (approximately 81 percent and 78 percent, respectively). The three non-incapacitating injury crashes occurred in daylight; two crashes occurred on dry pavement and one on wet pavement. All six of the possible injury crashes occurred on dry pavement. Four occurred during daylight, and one each occurred during dark lighted and dark unlighted conditions. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix G (Figures G-3 and G-4).

Table 3-4: Lake Murray Boulevard (Exit 102) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	0	2	2	4.9%
Rear End	0	0	0	4	15	19	46.3%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	3	1	9	13	31.7%
Sideswipe Same Direction	0	0	0	1	5	6	14.6%
Sideswipe Opposite Direction	0	0	0	0	1	1	2.4%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	3	6	32	41	
Percentage	0.0%	0.0%	7.3%	14.6%	78.0%		

Crash Analysis

Table 3-5: Lake Murray Boulevard (Exit 102) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	3	0	0	2	1	0	0	3	7.3%
Possible Injury	4	1	1	6	0	0	0	6	14.6%
Property Damage Only	26	3	3	24	8	0	0	32	78.0%
Total	33	4	4	32	9	0	0	41	
Percentage	80.5%	9.8%	9.8%	78.0%	22.0%	0.0%	0.0%		

3.1.3 HARBISON BOULEVARD (EXIT 103)

As shown in **Table 3-6**, a total of 105 collisions were reported on Harbison Boulevard from Saturn Parkway to Parkridge Drive. The vast majority of these crashes were either *rear end* (50 crashes) or *angle* (48 crashes) collisions. These two crash types accounted for approximately 93 percent of all crashes along this arterial segment. One *angle* collision on this section resulted in a fatality. The fatal crash occurred on August 8, 2014 at 10:30 PM and was the result of an *angle* crash due to failure to yield right of way. That was one incapacitating injury crash that was also due to an *angle* crash. Of the nine incapacitating injury crashes, four were the result of *angle* crashes, four were *rear end* crashes and one was a *no collision with motor vehicle* crash.

Table 3-6: Harbison Boulevard (Exit 103) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	1	1	0	2	1.9%
Rear End	0	0	4	9	37	50	47.6%
Head On	0	0	0	0	1	1	1.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	1	1	4	19	23	48	45.7%
Sideswipe Same Direction	0	0	0	0	4	4	3.8%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	1	1	9	29	65	105	
Percentage	1.0%	1.0%	8.6%	27.6%	61.9%		

Crash Analysis

There were 29 possible injury crashes. Nineteen of these crashes resulted from *angle* crashes, nine resulted from *rear end* crashes and one resulted from a *no collision with motor vehicle* crash. A total of 65 crashes resulted in PDO, with 60 of these crashes being either *rear end* (37 crashes) or *angle* (23 crashes) collision types. Four PDO crashes were *sideswipe same direction* crashes, and one was a *head on* crash.

As shown in **Table 3-7**, the majority of crashes on this section occurred in the daylight and on dry pavement (approximately 62 percent and 86 percent, respectively). The fatal crash occurred in dark, lighted conditions on wet pavement. The incapacitating injury crash occurred in daylight on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix G (Figures G-5 and G-6).

Table 3-7: Harbison Boulevard (Exit 103) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	1	0	0	1	0	0	1	1.0%
Incapacitating Injury	1	0	0	1	0	0	0	1	1.0%
Non-incapacitating Injury	6	3	0	8	1	0	0	9	8.6%
Possible Injury	12	12	5	24	3	0	2	29	27.6%
Property Damage Only	46	13	6	57	8	0	0	65	61.9%
Total	65	29	11	90	13	0	2	105	
Percentage	61.9%	27.6%	10.5%	85.7%	12.4%	0.0%	1.9%		

Six of the nine non-incapacitating injury crashes occurred in daylight; eight occurred on dry pavement. Most of the possible injury crashes occurred in dark conditions (12 lighted and five not lighted). Twelve of the possible injury crashes occurred in daylight. Twenty four of the possible injury crashes occurred on dry pavement and three on wet pavement. One of the possible injury crashes occurred on a contaminated surface. The pavement condition on another possible injury crash noted as “unknown”.

3.1.4 PINEY GROVE ROAD (EXIT 104)

A total of 190 collisions were reported along Piney Grove Road from the eastbound ramp intersection to the westbound ramp intersection, as shown in **Table 3-8**. While no fatalities or incapacitating injuries were reported, there were three non-incapacitating injury crashes and 37 possible injury crashes (approximately 21 percent of the total crashes). There were 150 PDO crashes (approximately 79 percent of the total crashes).

Crash Analysis

Table 3-8: Piney Grove Road (Exit 104) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	0	3	3	1.6%
Rear End	0	0	0	10	54	64	33.7%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	3	26	78	107	56.3%
Sideswipe Same Direction	0	0	0	1	14	15	7.9%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	1	1	0.5%
Other	0	0	0	0	0	0	0.0%
Total	0	0	3	37	150	190	
Percentage	0.0%	0.0%	1.6%	19.5%	78.9%		

The most common collision type in this section was *angle* collisions (107 crashes) which made up approximately 56 percent of the total collisions, followed by *rear end* collisions (64 crashes) which made up 34 percent. There were 15 *sideswipe same direction* crashes, three *no collision with motor vehicle* crashes, and one *backed into* crash.

All three of the non-incapacitating injury crashes were *angle* crashes. Of the 37 possible injury crashes, 26 were *angle* crashes, ten were *rear end* crashes, and one was a *sideswipe same direction* crash. Of the 15 PDO crashes, 78 were *angle* crashes, 54 were *rear end* crashes, and 14 were *sideswipe same direction* crashes. There were three *no collision with motor vehicle* crashes and one *backed into* crash.

As shown in **Table 3-9**, the majority of crashes on this section occurred in daylight (84 percent) and on dry pavement (89 percent). All three of the non-incapacitating injury crashes occurred on dry pavement, with two occurring in daylight and one occurring in dark, lighted conditions. Of the 37 possible injury crashes, 31 occurred on dry pavement and six occurred on wet pavement. Twenty eight occurred in daylight and 20 occurred in the dark (nine lighted and eleven not lighted). Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix G (Figures G-7 and G-8).

Crash Analysis

Table 3-9: Piney Grove Road (Exit 104) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	2	1	0	3	0	0	0	3	1.6%
Possible Injury	28	5	4	31	6	0	0	37	19.5%
Property Damage Only	130	9	11	135	15	0	0	150	78.9%
Total	160	15	15	169	21	0	0	190	
Percentage	84.2%	7.9%	7.9%	88.9%	11.1%	0.0%	0.0%		

3.1.5 ST. ANDREWS ROAD (EXIT 106)

As shown in **Table 3-10**, 132 crashes were reported on St. Andrews Road from Woodland Hills Road to Fernandina Road. No fatalities were reported. However, 28 collisions (approximately 21 percent) resulted an injury or possible injury. *Rear end* and *angle* collisions made up approximately 36 percent and 43 percent of the total collisions, with 47 and 57 collisions, respectively. There were 22 *sideswipe same direction* collisions, accounting for about 17 percent of the collisions. The remaining collisions were *no collision with motor vehicles* (3 crashes), *head on* (2 crashes) and *sideswipe opposite direction* (1 crash).

The single incapacitating injury crash was the result of a *rear end* crash. All four non-incapacitating injury crashes were the result of *angle* crashes. There were 23 possible injury crashes. Eleven of these were *angle* crashes, ten were *rear end* crashes, and two were *sideswipe same direction* crashes. Of the 104 PDO crashes, 42 were *angle*, 36 were *rear end*, and 20 were *sideswipe same direction* crashes. There were also three *no collision with motor vehicle* crashes, two *head on* crashes, and one *sideswipe opposite direction* crash.

Crash Analysis

Table 3-10: St. Andrews Road (Exit 106) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	0	3	3	2.3%
Rear End	0	1	0	10	36	47	35.6%
Head On	0	0	0	0	2	2	1.5%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	4	11	42	57	43.2%
Sideswipe Same Direction	0	0	0	2	20	22	16.7%
Sideswipe Opposite Direction	0	0	0	0	1	1	0.8%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	1	4	23	104	132	
Percentage	0.0%	0.8%	3.0%	17.4%	78.8%		

As shown in **Table 3-11**, the majority of 132 crashes on this section occurred in daylight (93 crashes or 71 percent) and on dry pavement (107 crashes or 81 percent). The incapacitating injury crash occurred during daylight on dry pavement. Two of the four non-incapacitating injury crashes occurred in daylight, with two occurring in the dark (one in lighted and one in unlighted conditions). Three occurred on dry pavement and one on wet pavement. Of the 23 possible injury crashes, 17 occurred in daylight and six in the dark (two lighted and four not lighted). Similarly, 16 occurred on dry pavement and seven on wet pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix G (Figures G-9 and G-10).

Table 3-11: St. Andrews Road (Exit 106) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	1	0	0	0	1	0	0	1	0.8%
Non-incapacitating Injury	2	1	1	3	1	0	0	4	3.0%
Possible Injury	17	2	4	16	7	0	0	23	17.4%
Property Damage Only	73	20	11	88	16	0	0	104	78.8%
Total	93	23	16	107	25	0	0	132	
Percentage	70.5%	17.4%	12.1%	81.1%	18.9%	0.0%	0.0%		

Crash Analysis

3.1.6 BURNING TREE DRIVE (EXIT 106)

The section of Burning Tree Drive from St. Andrews Road to the northbound off-ramp intersection was included in this arterial analysis as it functions as part of the Exit 106 interchange. Thirteen collisions were reported along this section of Burning Tree Drive, as shown in **Table 3-12**. Most of the crashes were *angle* crashes (seven), followed by *no collision with motor vehicle* (three), *rear end* (two), and *sideswipe same direction* (one).

No fatalities were reported along this section, and three injury crashes (one incapacitating injury crash, one non-incapacitating injury crash and one possible injury crash) were reported. The remaining 10 crashes were PDO.

The incapacitating crash was the result of a *no collision with motor vehicle* crash arising from collision with a post or pole. The non-incapacitating crash was the result a *sideswipe same direction* crash, while the possible injury crash was due to an *angle* crash. Six of the 10 PDO crashes were *angle* collisions, with two crashes each classified as *no collision with motor vehicle* and *rear end* collisions. One of the two *no collision with motor vehicle* crashes involved a pedestrian. The other involved a tree.

Table 3-12: Burning Tree Drive (Exit 106) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	1	0	0	2	3	23.1%
Rear End	0	0	0	0	2	2	15.4%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	1	6	7	53.8%
Sideswipe Same Direction	0	0	1	0	0	1	7.7%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	1	1	1	10	13	
Percentage	0.0%	7.7%	7.7%	7.7%	76.9%		

Table 3-13 summarizes the crash data for this section by injury severity, lighting condition and pavement surface. As shown in the table, nearly all (approximately 92 percent) of the collisions occurred on *dry* pavement. About 62 percent of the collisions occurred in *daylight*. Three collisions occurred in *dark lighted* conditions and two collisions occurred in *dark not lighted conditions*.

The incapacitating injury crash occurred in daylight on dry pavement. The non-incapacitating injury crash and the possible injury crash occurred in dark, lighted conditions on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix G (Figures G-9 and G-10).

Crash Analysis

Table 3-13: Burning Tree Drive (Exit 106) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	1	0	0	0	1	0	0	1	7.7%
Non-incapacitating Injury	0	1	0	1	0	0	0	1	7.7%
Possible Injury	0	1	0	1	0	0	0	1	7.7%
Property Damage Only	7	1	2	10	0	0	0	10	76.9%
Total	8	3	2	12	1	0	0	13	
Percentage	61.5%	23.1%	15.4%	92.3%	7.7%	0.0%	0.0%		

3.1.7 BUSH RIVER ROAD (EXIT 108)

A total of 96 collisions were reported on Bush River Road from Zimalcrest Road to Latonea Drive, as shown in **Table 3-14**. No fatalities were reported. There were 24 crashes resulting injury or possible injury, and 72 PDO crashes. Two of the three incapacitating injury crashes were the result of *angle* collisions, while one was the result of a *no collision with motor vehicle* crash. Of the nine non-incapacitating injury crashes, four were the result of *angle* crashes, three were due to *no collision with motor vehicle* crashes, and two were due to *rear end* crashes. The possible injury crashes consisted of seven *rear end* crashes, four *angle* crashes, and one *sideswipe same direction* crash..

Table 3-14: Bush River Road (Exit 108) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	1	3	0	2	6	6.3%
Rear End	0	0	2	7	31	40	41.7%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	2	4	4	26	36	37.5%
Sideswipe Same Direction	0	0	0	1	13	14	14.6%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	3	9	12	72	96	
Percentage	0.0%	3.1%	9.4%	12.5%	75.0%		

Crash Analysis

There were 72 PDO crashes (approximately 75 percent of the crashes). Of these, 31 were the result of *rear end* collisions, 26 were due to *angle* collisions, 13 were due to *sideswipe same direction* crashes and two were attributable to *no collision with motor vehicle* crashes.

Table 3-15 summarizes the crash data for this section by injury severity, lighting condition and pavement surface. Approximately 76 percent of all the collisions occurred during daylight, and about 78 percent occurred on *dry* pavement. Twenty three collisions occurred in dark conditions, with 15 occurring in lighted and eight occurring in not lighted conditions. Twenty one collisions occurred on wet pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix G (Figures G-11 and G-12).

Table 3-15: Bush River Road (Exit 108) - Lighting and Pavement Condition

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	1	2	0	3	0	0	0	3	3.1%
Non-incapacitating Injury	4	3	2	7	2	0	0	9	9.4%
Possible Injury	11	1	0	10	2	0	0	12	12.5%
Property Damage Only	57	9	6	55	17	0	0	72	75.0%
Total	73	15	8	75	21	0	0	96	
Percentage	76.0%	15.6%	8.3%	78.1%	21.9%	0.0%	0.0%		

Two of the incapacitating injury crashes occurred in dark lighted conditions, and one in daylight. All three incapacitating injury collisions occurred on dry pavement. Of the nine non-incapacitating injury crashes, four occurred in daylight and five in the dark (three lighted and two not lighted). Seven crashes occurred on dry pavement and two on wet pavement. Eleven of the twelve possible injury crashes occurred in daylight and one in dark, lighted conditions. Ten occurred on dry pavement and two on wet pavement.

3.1.8 SUNSET BOULEVARD (EXIT 110)

A total of 149 crashes were reported on Sunset Boulevard from Harbor Drive to McSwain Drive. No *fatality* or *Incapacitating injury* collisions were reported along this section, as shown in **Table 3-16**. There was one *non-incapacitating injury* crash, 27 possible injury crashes and 121 PDO crashes. The most common collision types were *rear end* (80 crashes) and *angle* (37 crashes) crashes. These accounted for approximately 54 and 25 percent of the total collisions, respectively. There were also 20 *sideswipe same direction* crashes, five *head on* crashes, three *no collision with motor vehicle* crashes, two *backed into* crashes, and one crash each for *sideswipe same direction* and *other*.

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Table 3-16: Sunset Boulevard (Exit 110) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	1	2	3	2.0%
Rear End	0	0	0	14	66	80	53.7%
Head On	0	0	0	0	5	5	3.4%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	1	10	26	37	24.8%
Sideswipe Same Direction	0	0	0	1	19	20	13.4%
Sideswipe Opposite Direction	0	0	0	0	1	1	0.7%
Backed Into	0	0	0	0	2	2	1.3%
Other	0	0	0	1	0	1	0.7%
Total	0	0	1	27	121	149	
Percentage	0.0%	0.0%	0.7%	18.1%	81.2%		

The non-incapacitating injury crash was an *angle* crash. Of the possible injury crashes, the collision types were *rear end* (14 crashes) and *angle* (10 crashes). There was also one crash each for *no collision with motor vehicle*, *sideswipe same direction*, and *other*. Of the 121 PDO crashes, 66 were the result of *rear end* collisions, 26 were the result of *angle* collisions and 19 were the result of *sideswipe same direction* collisions. The remaining PDO crashes were the result of *head on* crashes (5 collisions), *no collision with motor vehicle* (2 collisions), *backed into* (2 collisions) and *sideswipe opposite direction* (1 collision).

Table 3-17 summarizes the crash data for this section by injury severity, lighting condition and pavement surface. Approximately 76 percent of all the collisions occurred during daylight, and about 83 percent occurred on dry pavement. Thirty five collisions occurred in dark conditions, with 25 occurring in lighted and ten occurring in not lighted conditions. Twenty five collisions occurred on wet pavement.

The non-incapacitating injury crash took place in daylight on dry pavement. Of the 27 possible injury crashes, 19 occurred in daylight, and eight occurred in dark conditions (four each for lighted and not lighted conditions). Twenty three of the possible injury crashes occurred on dry pavement and four occurred on wet pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix G (Figures G-13, G-14, G-15 and G-16).

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Table 3-17: Sunset Boulevard (Exit 110) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	1	0	0	1	0	0	0	1	0.7%
Possible Injury	19	4	4	23	4	0	0	27	18.1%
Property Damage Only	94	21	6	100	21	0	0	121	81.2%
Total	114	25	10	124	25	0	0	149	
Percentage	76.5%	16.8%	6.7%	83.2%	16.8%	0.0%	0.0%		

3.2 I-20 Arterial Roadways

There are two arterial roadways at the interchanges of I-20 for which crash data was summarized. These arterials are:

- Bush River Road (S-32-273) from Outlet Point Boulevard to Rockland Road (Exit 63)
- Broad River Road (US 176) from Briargate Drive to Long Creek Drive (Exit 65).

The following sections contain a detailed review of crash data for each of the arterial roadways at the I-20 interchanges. Collision diagrams for the I-20 arterials are shown in Appendix H.

3.2.1 BUSH RIVER ROAD (EXIT 63)

Seventy-four crashes were reported along Bush River Road from Outlet Point Boulevard to Rockland Road.

Table 3-18 summarizes the crash data from this segment based on collision type and injury severity. No fatal crashes or incapacitating crashes were reported along this segment. The majority of crashes (about 84 percent) resulted in PDO. The most common collision types were *rear end* and *angle* collisions with 31 and 25 crashes (approximately 42 percent and 34 percent), respectively. There were 14 *sideswipe same direction* collisions, as well as three *no collision with motor vehicle* crashes and one *head on* crash.

The two non-incapacitating injury crashes resulted from *no collision with motor vehicle* crashes. These were caused by a two-wheeled vehicle spill and a collision with the curb. The ten possible injury crashes consisted of five *rear end* collisions, three *angle* collisions, and two *sideswipe same direction* collisions. Of the PDO collisions, there were 26 *rear end collisions*, 22 *angle collisions*, and 12 *sideswipe same direction collisions*. There was one crash each for *no collision with motor vehicle* and *head on collision* types.

Crash data on this segment summarized by injury severity, lighting and pavement surface condition is presented in **Table 3-19**. The majority of crashes took place in daylight (approximately 80 percent) and dry surface

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conditions (approximately 86 percent). Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix H (Figures H-1 and H-2).

Table 3-18: Bush River Road (Exit 63) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	2	0	1	3	4.1%
Rear End	0	0	0	5	26	31	41.9%
Head On	0	0	0	0	1	1	1.4%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	3	22	25	33.8%
Sideswipe Same Direction	0	0	0	2	12	14	18.9%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	2	10	62	74	
Percentage	0.0%	0.0%	2.7%	13.5%	83.8%		

Table 3-19: Bush River Road (Exit 63) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	1	1	0	2	0	0	0	2	2.7%
Possible Injury	8	1	1	10	0	0	0	10	13.5%
Property Damage Only	50	4	8	52	10	0	0	62	83.8%
Total	59	6	9	64	10	0	0	74	
Percentage	79.7%	8.1%	12.2%	86.5%	13.5%	0.0%	0.0%		

The two non-incapacitating injury crashes took place on dry pavement, with one occurring in daylight and one occurring in dark, lighted conditions. The ten possible injury crashes all took place on dry pavement; eight took place in daylight and two in the dark (one lighted and one not lighted).

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3.2.2 BROAD RIVER ROAD (EXIT 65)

A total of 310 crashes were reported along Broad River Road from Briargate Drive to Garner Lane. **Table 3-20** summarizes this section's crash data based on collision type and injury severity.

Table 3-20: Broad River Road (Exit 65) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	1	0	1	2	4	8	2.6%
Rear End	0	0	3	23	117	143	46.1%
Head On	0	0	2	4	2	8	2.6%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	6	33	79	118	38.1%
Sideswipe Same Direction	0	1	0	2	23	26	8.4%
Sideswipe Opposite Direction	0	0	0	0	3	3	1.0%
Backed Into	0	0	0	0	3	3	1.0%
Other	0	0	0	0	1	1	0.3%
Total	1	1	12	64	232	310	
Percentage	0.3%	0.3%	3.9%	20.6%	74.8%		

There was one fatality along this arterial that resulted from a *no collision with motor vehicle* crash. The fatality occurred on Tuesday, February 21, 2012 at about 7:10 PM. The crash was a *no collision with motor vehicle* involving a pedestrian laying in the roadway.

Seventy-seven crashes resulted in injury or possible injury while 232 resulted in PDO. There was one crash resulted in a *non-incapacitating injury*, attributed to a *sideswipe same direction* collision. There were twelve non-incapacitating injury crashes, six off which resulted from *angle* accidents. The other six non-incapacitating injury crashes consist of three *rear end* crashes, two *head on* crashes, and one *no collision with motor vehicle* crash. There were 64 crashes resulting in possible injury. Of these, 33 were the result of *angle* crashes, 23 were the result of *rear end* crashes, four were *head on* crashes, and two each were classified as *no collision with motor vehicle* and *sideswipe same direction* crashes. The major PDO collision types were *rear end* (117 crashes), *angle* (79 crashes), and *sideswipe same direction* (23 crashes).

Table 3-21 summarizes crash data on this segment based on injury severity, lighting condition, and surface condition. As shown in the table, most of the crashes took place during daylight (72 percent) and on dry pavement (84 percent). The pavement surface was wet during approximately 16 percent of collisions.

The fatal crash took place in dark, lighted conditions on dry pavement. The single incapacitating injury crash took place in daylight on dry pavement. All 12 of the non-incapacitating injury crashes took place on dry pavement, with seven taking place in daylight with the remaining five taking place in the dark (one lighted and

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four not lighted). Forty of the possible injury crashes took place in daylight and 24 took place in the dark (14 lighted and ten not lighted). The pavement was dry for 55 of the 64 crashes, and wet for nine crashes. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix H (Figures H-3 and H-4).

Table 3-21: Broad River Road (Exit 65) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	1	0	1	0	0	0	1	0.3%
Incapacitating Injury	1	0	0	1	0	0	0	1	0.3%
Non-incapacitating Injury	7	1	4	12	0	0	0	12	3.9%
Possible Injury	40	14	10	55	9	0	0	64	20.6%
Property Damage Only	174	28	30	192	40	0	0	232	74.8%
Total	222	44	44	261	49	0	0	310	
Percentage	71.6%	14.2%	14.2%	84.2%	15.8%	0.0%	0.0%		

3.3 I-126 Arterial Roadways

There are four arterial roadways at the interchanges with I-126 for which crash data was summarized. These arterials are:

- Colonial Life Boulevard (S-40-2963) from I-126 to Colonial Life Boulevard
- Greystone Boulevard (S-40-3020) from Candi Lane to Stoneridge Drive
- Huger Street (US 21) from I-126 to Laurel Street & Elmwood Avenue (US 321) from I-126 to Gadsden Street

The following sections contain a detailed review of crash data for each of the arterial roadways at the I-126 interchanges. Collision diagrams for the I-126 arterials are shown in Appendix I.

3.3.1 COLONIAL LIFE BOULEVARD

Only two crashes occurred on the Colonial Life Boulevard ramps to and from I-126. The crashes are summarized in **Table 3-22**. Both crashes were *sideswipe in the same direction* collisions. One crash resulted in a possible injury. Both of the crashes occurred in daylight and on dry pavement, as shown in **Table 3-23**. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix I (Figures I-1 and I-2).

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Table 3-22: Colonial Life Boulevard Arterial – Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	0	0	0	0.0%
Rear End	0	0	0	0	0	0	0.0%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	1	1	2	100.0%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	0	1	1	2	
Percentage	0.0%	0.0%	0.0%	50.0%	50.0%		

Table 3-23: Colonial Life Boulevard Arterial - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Possible Injury	1	0	0	1	0	0	0	1	50.0%
Property Damage Only	1	0	0	1	0	0	0	1	50.0%
Total	2	0	0	2	0	0	0	2	
Percentage	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%		

3.3.2 GREYSTONE BOULEVARD ARTERIAL

Twenty crashes were reported along Greystone Boulevard from Candi Lane to Stoneridge Drive. Three of the 20 reported crashes resulted in non-incapacitating injury while three resulted in possible injury. The remaining 14 crashes resulted in PDO, as shown in **Table 3-24**. Thirteen of the collisions were *angle* crashes, while six were *rear end* crashes. There was one *sideswipe same direction* crash.

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Table 3-24: Greystone Boulevard Arterial - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	0	0	0	0.0%
Rear End	0	0	1	0	5	6	30.0%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	2	3	8	13	65.0%
Sideswipe Same Direction	0	0	0	0	1	1	5.0%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	3	3	14	20	
Percentage	0.0%	0.0%	15.0%	15.0%	70.0%		

Of the three non-incapacitating injury crashes, two were the result of *angle* crashes. The other non-incapacitating injury crash was the result of a *rear end* collision. All three possible injury crashes were *angle* crashes. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix I (Figures I-3 and I-4).

All 20 of the reported collisions occurred on dry pavement as shown in **Table 3-25**. Thirteen (65 percent) of the total collisions occurred in daylight. Five collisions occurred in the dark without street lighting while the remaining 2 collisions occurred in the dark with street lighting. Four of the non-incapacitating injury crashes occurred in daylight, and two in the dark (one each lighted and not lighted conditions). All six occurred on dry pavement.

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Table 3-25: Greystone Boulevard Arterial - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	2	0	1	3	0	0	0	3	15.0%
Possible Injury	2	1	0	3	0	0	0	3	15.0%
Property Damage Only	9	1	4	14	0	0	0	14	70.0%
Total	13	2	5	20	0	0	0	20	
Percentage	65.0%	10.0%	25.0%	100.0%	0.0%	0.0%	0.0%		

3.3.3 HUGER STREET AND ELMWOOD AVENUE

The crash data for Huger Street from I-126 to Laurel Street and for Elmwood Avenue from I-126 to Gadsden Street was combined into a single data set. The crash data was combined because both streets are arterials of the same interchange at the terminus of I-126.

Thirty-nine collisions were reported on these roadway sections. Two of the reported collisions resulted in non-incapacitating injuries, six resulted in possible injury, and resulted in PDO, as shown in **Table 3-26**. The most common collision types were *rear end* (20 collisions), *sideswipe same direction* (10 crashes) and *angle* (seven collisions). There was one crash each for the collision types *sideswipe opposite direction* and *backed into*. There were no fatalities or incapacitating injury crashes.

The two non-incapacitating injury crashes consisted of one *rear end* crash and one *angle* crash. The six possible injury crashes included four *rear end* crashes, one *angle* crash, and one *sideswipe opposite direction* crash.

As shown in **Table 3-27**, the majority of collisions on these sections were reported as occurring during daylight and on dry pavement. Nine of the 39 collisions occurred while the pavement was wet. The two non-incapacitating injury crashes occurred in daylight and on dry pavement. All six possible injury crashes occurred in daylight, with four occurring on dry pavement and two on wet pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix I (Figures I-5 and I-6).

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Table 3-26: Huger Street/Elmwood Avenue - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	0	0	0	0.0%
Rear End	0	0	1	4	15	20	51.3%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	1	1	5	7	17.9%
Sideswipe Same Direction	0	0	0	0	10	10	25.6%
Sideswipe Opposite Direction	0	0	0	1	0	1	2.6%
Backed Into	0	0	0	0	1	1	2.6%
Other	0	0	0	0	0	0	0.0%
Total	0	0	2	6	31	39	
Percentage	0.0%	0.0%	5.1%	15.4%	79.5%		

Table 3-27: Huger Street/Elmwood Avenue - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	2	0	0	2	0	0	0	2	5.1%
Possible Injury	6	0	0	4	2	0	0	6	15.4%
Property Damage Only	27	2	2	24	7	0	0	31	79.5%
Total	35	2	2	30	9	0	0	39	
Percentage	89.7%	5.1%	5.1%	76.9%	23.1%	0.0%	0.0%		

3.4 Frontage Roads

There are 14 frontage roads that are part of the SCDOT secondary road system that are adjacent to I-26 or I-20 within the study area. Twelve frontage roads had crash data and were summarized. These frontage roads are:

- Columbiana Extension (S-40-3048) from Broad River Road to Lake Murray Boulevard
- Saturn Parkway (S-32-1792) from Harbison Boulevard to Bower Parkway
- Giles Court (S-32-1924) from Saturn Parkway to Dead End
- Fernandina Road (S-40-3021/S-32-1925/S-40-3045) from Woodcross Drive to Piney Grove Road
- Fernandina Road (S-32-1842) from Piney Grove Road to St. Andrews Road

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- Jamil Road (S-32-1791) from Piney Grove Road to St. Andrews Road
- Berryhill Road (S-32-1551) from Woodland Hills Road to Bush River Road
- Burning Tree Drive/Browning Road (S-40-2893/S-32-1841/S-40-2892) from St. Andrews Road to Fairhaven Drive
- Rockland Road (S-32-1241) from Bush River Road to Bush River Road
- Frontage (Road S-40-2891) from Bush River Road to Lawand Drive
- Gracern Road (S-40-2890) from Arrowwood Road to its dead end
- McSwain Drive (S-32-1814) from Sunset Boulevard to its dead end

Two Frontage Roads had no reported crashes. These are

- Rivermont Drive from Greystone Boulevard to Dead End
- Candi Lane from Dead End to Greystone Boulevard.

The following sections contain a detailed review of crash data for each of the frontage roadways. Collision diagrams for the frontage roadways are shown in Appendix J.

3.4.1 COLUMBIANA EXTENSION

As shown in **Table 3-28**, nine crashes occurred on the section of Columbiana Extension from Broad River Road to Lake Murray Boulevard. This frontage road runs to the west of I-26 between Exits 101 and 102. Of the nine crashes, one resulted in non-incapacitating injury, four resulted in possible injury and four crashes were PDO. The non-incapacitating injury crash was a *no collision with motor vehicle* crash. Of the four possible injury crashes, two were *rear end* crashes, one was a *no collision with a motor vehicle* crash, and one was a *head on* crash.

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Table 3-28: Columbiana Extension - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	1	1	0	2	22.2%
Rear End	0	0	0	2	3	5	55.6%
Head On	0	0	0	1	0	1	11.1%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	0	0	0	0.0%
Sideswipe Opposite Direction	0	0	0	0	1	1	11.1%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	1	4	4	9	
Percentage	0.0%	0.0%	11.1%	44.4%	44.4%		

As shown in **Table 3-29**, seven of the nine total crashes occurred on wet pavement. The remaining two crashes occurred on dry pavement. Five of the collisions happened in daylight and four in dark conditions (one lighted and three not lighted). The non-incapacitating injury crash occurred in dark, not lighted conditions on wet pavement. Two of the four possible injury crashes occurred in daylight and two in dark, unlighted conditions. Three occurred on wet pavement and one on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix J (Figures J-1 and J-2).

Table 3-29: Columbiana Extension - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	0	0	1	0	1	0	0	1	11.1%
Possible Injury	2	0	2	1	3	0	0	4	44.4%
Property Damage Only	3	1	0	1	3	0	0	4	44.4%
Total	5	1	3	2	7	0	0	9	
Percentage	55.6%	11.1%	33.3%	22.2%	77.8%	0.0%	0.0%		

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3.4.2 SATURN PARKWAY

Five collisions were reported on Saturn Parkway from Harbison Boulevard to Bower Parkway, which is located west of I-26 in the Exit 103 area. All five collisions resulted in PDO as shown in **Table 3-30**. Three of the five collisions were *angle* crashes. There was one crash each classified as *rear end* and *head on*.

Table 3-30: Saturn Parkway - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	0	0	0	0.0%
Rear End	0	0	0	0	1	1	20.0%
Head On	0	0	0	0	1	1	20.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	3	3	60.0%
Sideswipe Same Direction	0	0	0	0	0	0	0.0%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	0	0	5	5	
Percentage	0.0%	0.0%	0.0%	0.0%	100.0%		

As shown in **Table 3-31**, four of the five crashes occurred during daylight and on dry pavement. There was one crash that occurred in dark lighted conditions and one on wet pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix J (Figures J-3 and J-4).

Table 3-31: Saturn Parkway - Lighting and Pavement Condition

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Possible Injury	0	0	0	0	0	0	0	0	0.0%
Property Damage Only	4	1	0	4	1	0	0	5	100.0%
Total	4	1	0	4	1	0	0	5	
Percentage	80.0%	20.0%	0.0%	80.0%	20.0%	0.0%	0.0%		

Crash Analysis

3.4.3 GILES COURT

As shown in **Table 3-32**, only one crash occurred on Giles Court between Saturn Parkway and its dead end in the Exit 103 area. The crash on this section resulted in a possible injury and was a *rear end* collision. As shown in **Table 3-33**, this crash occurred in daylight and on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix J (Figures J-5 and J-6).

Table 3-32: Giles Court - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	0	0	0	0.0%
Rear End	0	0	0	1	0	1	100.0%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	0	0	0	0.0%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	0	1	0	1	
Percentage	0.0%	0.0%	0.0%	100.0%	0.0%		

Table 3-33: Giles Court - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Possible Injury	1	0	0	1	0	0	0	1	100.0%
Property Damage Only	0	0	0	0	0	0	0	0	0.0%
Total	1	0	0	1	0	0	0	1	
Percentage	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%		

3.4.4 FERNANDINA ROAD (WOODCROSS DRIVE TO PINEY GROVE ROAD)

The section of Fernandina Road from Woodcross Drive to Piney Grove is located on the east side of I-26 between Exits 103 and 104. As shown in **Table 3-34**, 10 crashes occurred on this frontage road segment.

Crash Analysis

Nine of the ten crashes resulted in PDO, with the remaining crash classified as a possible injury collision. There were six *rear end*, two *no collision with motor vehicle* and two *backed into* collisions reported. The possible injury crash was the result of a *no collision with motor vehicle* crash.

Table 3-34: Fernandina Road (Woodcross to Piney Grove) - Collision Type and injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	1	1	2	20.0%
Rear End	0	0	0	0	6	6	60.0%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	0	0	0	0.0%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	2	2	20.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	0	1	9	10	
Percentage	0.0%	0.0%	0.0%	10.0%	90.0%		

Table 3-35 summarizes the collisions by injury severity, lighting and pavement conditions. Of the 10 crashes, eight occurred in daylight and two in dark, not lighted conditions. Nine occurred on dry pavement and one occurred on wet pavement. The possible injury crash occurred in daylight and on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix J (Figures J-7 and J-8).

Table 3-35: Fernandina Road (Woodcross to Piney Grove) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Possible Injury	1	0	0	1	0	0	0	1	10.0%
Property Damage Only	7	0	2	8	1	0	0	9	90.0%
Total	8	0	2	9	1	0	0	10	
Percentage	80.0%	0.0%	20.0%	90.0%	10.0%	0.0%	0.0%		

Crash Analysis

3.4.5 FERNANDINA ROAD (PINEY GROVE ROAD TO ST. ANDREWS ROAD)

The section of Fernandina Road from Piney Grove to St. Andrews Road is located on the east side of I-26 between Exits 104 and 106. As shown in **Table 3-36**, 61 collisions occurred on this section of Fernandina Road. No fatalities were reported, but 18 of the reported collisions resulted in injury or possible injury. One of the injury collisions resulted in an incapacitating injury, five in non-incapacitating injury, and 12 in possible injury. The most common collision types were *angle* (24 crashes), *no collision with motor vehicle* (16 crashes), and *rear end* (15 crashes) collisions.

Table 3-36: Fernandina Road (Piney Grove to St. Andrews) - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	1	3	12	16	26.2%
Rear End	0	0	6	9	15	24.6%
Head On	0	0	0	2	2	3.3%
Rear-to-Rear	0	0	0	0	0	0.0%
Angle	0	0	6	18	24	39.3%
Sideswipe Same Direction	0	0	2	0	2	3.3%
Sideswipe Opposite Direction	0	0	0	1	1	1.6%
Backed Into	0	0	0	1	1	1.6%
Other	0	0	0	0	0	0.0%
Total	0	1	17	43	61	
Percentage	0.0%	0.8%	14.0%	70.5%		

The incapacitating injury collision was the result of a *no collision with motor vehicle* crash. Of the five non-incapacitating injury collisions, two were attributed to *angle* crashes, and one each for *no collision with motor vehicle*, *rear end*, and *sideswipe same direction*. Of the twelve possible injury crashes, five were attributed to *rear end* and four to *angle* crashes. There were also two *no collision with motor vehicle* crashes and one *sideswipe same direction* crash.

The 16 *no collision with motor vehicle* crashes made up about 26 percent of the total crashes and had eleven different first harmful effects. The most prevalent were collisions with guardrail face (three crashes), and two each of overturn/rollover, ditch, and fence.

Table 3-37 summarizes the collisions by injury severity, lighting and pavement conditions. A relatively high proportion of collisions on this section occurred on wet pavement. There were 24 crashes on wet pavement (approximately 39 percent) compared to 37 crashes on dry pavement. Forty six of the crashes occurred in daylight, with 15 crashes occurring in dark conditions (two lighted and 13 not lighted). Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix J (Figures J-7 and J-8).

Crash Analysis

The incapacitating injury crash took place on dry pavement in dark, not lighted conditions. Of the five non-incapacitating injury crashes, two took place in daylight and three in dark, not lighted conditions. Three took place on dry pavement and two on wet pavement. Of the twelve possible injury crashes, ten took place during daylight and two in dark, not lighted conditions. Seven took place on dry pavement and five on wet pavement.

Table 3-37: Fernandina Road (Piney Grove to St. Andrews) - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	1	1	0	0	0	1	1.6%
Non-incapacitating Injury	2	0	3	3	2	0	0	5	8.2%
Possible Injury	10	0	2	7	5	0	0	12	19.7%
Property Damage Only	34	2	7	26	17	0	0	43	70.5%
Total	46	2	13	37	24	0	0	61	
Percentage	75.4%	3.3%	21.3%	60.7%	39.3%	0.0%	0.0%		

3.4.6 JAMIL ROAD

The section of Jamil Road from Piney Grove to St. Andrews Road is located on the west side of I-26 between Exits 104 and 106. A total of 43 crashes were reported on Jamil Road. No fatality or incapacitating injury collisions were reported, as shown in **Table 3-38**. However, 11 (approximately 26 percent) of the total collisions were possible injury collisions. The remaining 32 collisions resulted in PDO. The three most common collision types were *angle* (16 crashes), *rear end* (12 crashes) and *no collision with motor vehicle* (9 crashes) collisions. These collision types account for approximately 37, 28 and 21 percent of all collisions on this section, respectively.

Crash Analysis

Table 3-38: Jamil Road - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	2	7	9	20.9%
Rear End	0	0	0	3	9	12	27.9%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	6	10	16	37.2%
Sideswipe Same Direction	0	0	0	0	1	1	2.3%
Sideswipe Opposite Direction	0	0	0	0	2	2	4.7%
Backed Into	0	0	0	0	3	3	7.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	0	11	32	43	
Percentage	0.0%	0.0%	0.0%	25.6%	74.4%		

Of the 11 possible injury crashes, six were attributed to *angle* crashes, three to *rear end* crashes, and two to *no collision with motor vehicle* crashes.

Table 3-39 summarizes the collisions by injury severity, lighting and pavement conditions. Most of the 43 collisions on this section occurred in the daylight (33 crashes) and on dry pavement (36 crashes). Seven of the reported collisions occurred on wet pavement. Of the eleven possible injury crashes, eight occurred during daylight and ten occurred on dry pavement (only one crash occurred on wet pavement). Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix J (Figures J-9 and J-10).

Table 3-39: Jamil Road - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Possible Injury	8	1	2	10	1	0	0	11	25.6%
Property Damage Only	25	4	3	26	6	0	0	32	74.4%
Total	33	5	5	36	7	0	0	43	
Percentage	76.7%	11.6%	11.6%	83.7%	16.3%	0.0%	0.0%		

Crash Analysis

3.4.7 BERRYHILL ROAD

The section of Berryhill Road runs from Woodland Hills Road (near St. Andrews Road at I-26 Exit 106) and wraps around the northwest quadrant of the I-20/I-26 system interchange to its intersection with Bush River Road (near I-20 Exit 63). A total of 35 collisions were reported along Berryhill Road from Woodland Hills Road to Bush River Road. **Table 3-40** summarizes the crash data on this section by collision type and injury severity.

As presented in the table, no *fatality* or *incapacitating injury* collisions were reported. Three non-incapacitating injury crashes and seven possible injury crashes were reported along with 25 PDO collisions. The majority of collisions on this roadway section were *angle* collisions (15 crashes), accounting for 43 percent of all collisions. There were also six each of *no collision with motor vehicle* and *rear end* type collisions. There were four *backed into* collisions and one crash each for *head on*, *sideswipe same direction*, *sideswipe opposite direction*, and *other*.

The three non-incapacitating injury crashes consisted of one each *no collision with motor vehicle*, *head on*, and *angle* crashes. The seven possible injury crashes consisted of three *no collision with motor vehicle* crashes, three *angle* crashes, and one *rear end* crash.

Table 3-40: Berryhill Road - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	1	3	2	6	17.1%
Rear End	0	0	0	1	5	6	17.1%
Head On	0	0	1	0	0	1	2.9%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	1	3	11	15	42.9%
Sideswipe Same Direction	0	0	0	0	1	1	2.9%
Sideswipe Opposite Direction	0	0	0	0	1	1	2.9%
Backed Into	0	0	0	0	4	4	11.4%
Other	0	0	0	0	1	1	2.9%
Total	0	0	3	7	25	35	
Percentage	0.0%	0.0%	8.6%	20.0%	71.4%		

Table 3-41 summarizes the collisions by injury severity, lighting and pavement conditions. The majority of collisions on this section occurred in the daylight (21 crashes), accounting for 60 percent of the reported collisions. Ten collisions (approximately 29 percent) occurred in the dark without street lighting while four (approximately 11 percent) occurred in the dark with street lighting. Thirty of the collisions took place on dry pavement (86 percent), while five of the collisions (14 percent) occurred on wet pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix J (Figures J-11 and J-12).

Crash Analysis

Of the three non-incapacitating injury collisions, two occurred in daylight and one in dark, not lighted conditions. All three occurred on wet pavement. Of the seven possible injury crashes, three occurred in daylight and four in dark conditions (two in lighted and two in not lighted). Five of the possible injury crashes took place on dry pavement and two took place on wet pavement.

Table 3-41: Berryhill Road - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	2	0	1	3	0	0	0	3	8.6%
Possible Injury	3	2	2	5	2	0	0	7	20.0%
Property Damage Only	16	2	7	22	3	0	0	25	71.4%
Total	21	4	10	30	5	0	0	35	
Percentage	60.0%	11.4%	28.6%	85.7%	14.3%	0.0%	0.0%		

3.4.8 BURNING TREE DRIVE

The section of Burning Tree Drive/Browning Road runs along the east side of I-26 from St. Andrews Road (Exit 106) to Fairhaven Drive in the northeast quadrant of Exit 108. At its intersection with Center Point Road, Burning Tree Drive is renamed Browning Road. A total of 73 crashes occurred on the section of Burning Tree/Browning Road from St. Andrews Road to Fairhaven Drive. As shown in **Table 3-42**, there was one fatality, ten non-incapacitating injury, ten possible injury, and 52 PDO crashes. *Angle* (34 crashes), *rear end* (20 crashes), and *no collision with motor vehicle* (11 crashes) make up nearly 90 percent of the crashes reported.

Crash Analysis

Table 3-42: Burning Tree Drive - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	1	0	3	0	7	11	15.1%
Rear End	0	0	1	1	18	20	27.4%
Head On	0	0	2	2	1	5	6.8%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	3	7	24	34	46.6%
Sideswipe Same Direction	0	0	1	0	1	2	2.7%
Sideswipe Opposite Direction	0	0	0	0	1	1	1.4%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	1	0	10	10	52	73	
Percentage	1.4%	0.0%	13.7%	13.7%	71.2%		

The fatality crash was the result of a *no collision with motor vehicle* crash that took place on Monday, January 2, 2014 at around 10:10 AM. The crash involved a tree and was caused by the driving too fast for conditions.

Of the ten non-incapacitating injury crashes, three were attributed to *no collision with motor vehicle* crashes and three to *angle* crashes; two were attributed to *head on* crashes and one each to *rear end* and *sideswipe same direction* crashes. The ten possible injury crashes consisted of seven *angle* crashes, two *head on* crashes, and one *rear end* crash.

Table 3-43 summarizes the collisions by injury severity, lighting and pavement conditions. Of the 73 crashes, 62 crashes (approximately 85 percent) occurred on dry pavement. The remaining eleven crashes occurred on wet pavement. Approximately 70 percent of collisions (51 crashes) happened in daylight, 25 percent (18 crashes) in the *dark without street lighting*, and 6 percent (four crashes) in the *dark with street lighting*. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix J (Figures J-13 and J-14).

Crash Analysis

Table 3-43: Burning Tree Drive - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	1	0	0	0	1	0	0	1	1.4%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	6	1	3	9	1	0	0	10	13.7%
Possible Injury	6	1	3	8	2	0	0	10	13.7%
Property Damage Only	38	2	12	45	7	0	0	52	71.2%
Total	51	4	18	62	11	0	0	73	
Percentage	69.9%	5.5%	24.7%	84.9%	15.1%	0.0%	0.0%		

The fatality occurred in daylight on wet pavement. Of the ten non-incapacitating injury crashes, six occurred in daylight and four in dark conditions (one lighted and three not lighted). Of the ten possible injury crashes, six occurred in daylight, one in dark, lighted conditions and three in dark, unlighted conditions. Eight occurred on dry pavement and two occurred on wet pavement.

3.4.9 ROCKLAND ROAD

Rockland Road runs as a loop connecting Bush River Road in the southwest quadrant of the I-20/I-26 system interchange. Rockland Road connects to the portion of Bush River Road that is located east of I-20 Exit 63. Five collisions were reported along Rockland Road as shown in **Table 3-44**. No *fatality* or *injury* collisions were reported; all five crashes resulted in PDO. All of the reported collisions were *no collision with motor vehicle* collisions.

As shown in **Table 3-45**, four of the five collisions reported on this section occurred in the dark without street lighting. The remaining collision occurred in daylight. Three collisions occurred on wet pavement and two occurred on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix J (Figures J-15 and J-16).

Crash Analysis

Table 3-44: Rockland Road - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	0	5	5	100.0%
Rear End	0	0	0	0	0	0	0.0%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	0	0	0	0.0%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	0	0	5	5	
Percentage	0.0%	0.0%	0.0%	0.0%	100.0%		

Table 3-45: Rockland Road - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Possible Injury	0	0	0	0	0	0	0	0	0.0%
Property Damage Only	1	0	4	2	3	0	0	5	100.0%
Total	1	0	4	2	3	0	0	5	
Percentage	20.0%	0.0%	80.0%	40.0%	60.0%	0.0%	0.0%		

3.4.10 FRONTAGE ROAD

Frontage Road runs from Bush River Road along the east side of I-26 near Exit 108 to Lawand Drive. As shown in **Table 3-46**, five crashes occurred on the Frontage Road. All crashes resulted in PDO. *Rear end and no collision with motor vehicle* collisions had two occurrences; there was one *sideswipe opposite direction* crash.

As shown in **Table 3-47**, all collisions on this section occurred during daylight. Four of the five collisions occurred on dry pavement and one occurred on wet pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix J (Figures J-17 and J-18).

Crash Analysis

Table 3-46: Frontage Road - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	0	2	2	40.0%
Rear End	0	0	0	0	2	2	40.0%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	0	0	0	0.0%
Sideswipe Opposite Direction	0	0	0	0	1	1	20.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	0	0	0	5	5	
Percentage	0.0%	0.0%	0.0%	0.0%	100.0%		

Table 3-47: Frontage Road - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Possible Injury	0	0	0	0	0	0	0	0	0.0%
Property Damage Only	5	0	0	4	1	0	0	5	100.0%
Total	5	0	0	4	1	0	0	5	
Percentage	100.0%	0.0%	0.0%	80.0%	20.0%	0.0%	0.0%		

3.4.11 GRACERN ROAD

Gracern Road runs from Arrowwood Road near the Colonial Life Boulevard ramps along the east side of I-126 to its dead end in the northwest quadrant of the Greystone Boulevard interchange. As shown in **Table 3-48**, one crash occurred on Gracern Road. The crash was a *head on* collision and a fatal crash. It occurred on Saturday, October 4, 2014 at about 7:30 PM. The crash involved a parked motor and was caused by speeding.

As shown in **Table 3-49**, this crash occurred in dark lighted conditions on dry pavement.

Crash Analysis

Table 3-48: Gracern Road - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	0	0	0	0	0	0.0%
Rear End	0	0	0	0	0	0	0.0%
Head On	1	0	0	0	0	1	100.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	0	0	0	0.0%
Sideswipe Same Direction	0	0	0	0	0	0	0.0%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	1	0	0	0	0	1	
Percentage	100.0%	0.0%	0.0%	0.0%	0.0%		

Table 3-49: Gracern Road - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	1	0	1	0	0	0	1	100.0%
Incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Non-incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Possible Injury	0	0	0	0	0	0	0	0	0.0%
Property Damage Only	0	0	0	0	0	0	0	0	0.0%
Total	0	1	0	1	0	0	0	1	
Percentage	0.0%	100.0%	0.0%	100.0%	0.0%	0.0%	0.0%		

3.4.12 MCSWAIN DRIVE

McSwain Drive runs Sunset Boulevard (Exit 110) along the east side of I-26 to its dead end in the southeast quadrant of I-26 Exit 108. A total of five collisions were reported along McSwain Drive. **Table 3-50** summarizes the crash data on this section based on collision type and injury severity. Four of the five crashes in this section were *no collision with motor vehicle* collisions. There was also one *angle* crash. One crash resulted in incapacitating injury and one crash resulted in possible injury. There were three PDO crashes.

The incapacitating injury crash was a *no collision with motor vehicle* crash. The possible injury crash was attributed to an *angle* collision. The three PDO crashes were all *no collision with motor vehicle* crashes.

Crash Analysis

Table 3-50: McSwain Drive - Collision Type and Injury Severity

Collision Type	Fatality	Incapacitating Injury	Non-incapacitating Injury	Possible Injury	Property Damage	Total	Percentage
No Collision with Motor Vehicle	0	1	0	0	3	4	80.0%
Rear End	0	0	0	0	0	0	0.0%
Head On	0	0	0	0	0	0	0.0%
Rear-to-Rear	0	0	0	0	0	0	0.0%
Angle	0	0	0	1	0	1	20.0%
Sideswipe Same Direction	0	0	0	0	0	0	0.0%
Sideswipe Opposite Direction	0	0	0	0	0	0	0.0%
Backed Into	0	0	0	0	0	0	0.0%
Other	0	0	0	0	0	0	0.0%
Total	0	1	0	1	3	5	
Percentage	0.0%	20.0%	0.0%	20.0%	60.0%		

As shown in **Table 3-51**, only one of the five crashes on this section occurred in daylight. Four of the five crashes occurred on dry pavement. One crash occurred on wet pavement. Both of the injury crashes occurred in the *dark without street lighting* and on dry pavement. Collision diagrams summarizing the manner of collision and the injury type can be found in Appendix J (Figures J-19 and J-20).

Table 3-51: McSwain Drive - Lighting and Pavement Conditions

Crash Severity	Lighting Condition			Surface Condition				Total	Percentage
	Daylight	Dark Lighted	Not Lighted	Dry	Wet / Standing Water	Snow / Ice / Slush	Other / Unkown		
Fatality	0	0	0	0	0	0	0	0	0.0%
Incapacitating Injury	0	0	1	1	0	0	0	1	20.0%
Non-incapacitating Injury	0	0	0	0	0	0	0	0	0.0%
Possible Injury	0	0	1	1	0	0	0	1	20.0%
Property Damage Only	1	1	1	2	1	0	0	3	60.0%
Total	1	1	3	4	1	0	0	5	
Percentage	20.0%	20.0%	60.0%	80.0%	20.0%	0.0%	0.0%		

Crash Analysis

4 Economic Loss Analysis

An economic loss analysis was performed for all three interstate sections within the study area as well as the local roads where accident data was provided.

4.1 Methodology

The approximate cost of crashes in the corridor were estimated using the following Cost of Motor Vehicle Injuries data, obtained from National Safety Council (2013 costs):

- Fatality: \$1,500,000
- Incapacitating Injury: \$74,900
- Non-incapacitating evident injury (Class B): \$24,000
- Possible Injury: \$13,600
- PDO: \$9,300

A conservative annual inflation rate of 1.6 percent, as per current Bloomberg values, was used to adjust the Fatality, Injury and Property Damage costs to 2015 dollars for the estimate of economic loss.

4.2 I-26 Freeway Segment Economic Loss

Table 4-1 summarizes the combined economic loss for the northbound and southbound I-26 segments within the study area.

Table 4-1: I-26 Freeway Segment Economic Loss

Location	Fatality		Injury						Property Damage		Total Economic Loss	Percentage
	Num.	Cost (2015 \$\$)	Incapacitating		Non-incapacitating		Possible		Num.	Cost (2015 \$\$)		
			Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)				
I-26 Southbound	4	\$6,193,500	2	\$154,600	24	\$594,600	183	\$2,569,100	958	\$9,196,800	\$18,708,600	51.3%
I-26 Northbound	3	\$4,645,200	7	\$541,200	25	\$619,400	169	\$2,372,500	995	\$9,552,000	\$17,730,300	48.7%
Total Economic Loss		\$10,838,700		\$695,800		\$1,214,000		\$4,941,600		\$18,748,800	\$36,438,900	
Percentage		29.7%		1.9%		3.3%		13.6%		51.5%		

The projected economic loss from the crashes occurring on I-26 is estimated to be approximately \$36.4 million. The projected economic loss for southbound I-26 is approximately \$1.0 million higher than the economic loss for northbound I-26.

To understand the economic impact of the different collision types, economic loss analyses were performed for each collision type for both southbound and northbound I-26. The results of this analysis are summarized in **Table 4-2** for the southbound segments and **Table 4-3** for the northbound segments.

Crash Analysis

Table 4-2: I-26 Southbound Economic Loss by Collision Type

Collision Type	Fatality		Injury						Property Damage		Total Economic Loss	Percentage
	Num.	Cost (2015 \$\$)	Incapacitating		Non-incapacitating		Possible		Num.	Cost (2015 \$\$)		
			Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)				
No Collision with Motor Vehicle	1	\$1,548,400	1	\$77,300	11	\$272,500	41	\$575,600	138	\$1,324,800	\$3,798,600	20.3%
Rear End	2	\$3,096,800	1	\$77,300	9	\$223,000	111	\$1,558,300	588	\$5,644,800	\$10,600,200	56.7%
Head On	0	\$0	0	\$0	0	\$0	0	\$0	1	\$9,600	\$9,600	0.1%
Rear-to-Rear	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	\$0	0.0%
Angle	1	\$1,548,400	0	\$0	1	\$24,800	5	\$70,200	18	\$172,800	\$1,816,200	9.7%
Sideswipe Same Direction	0	\$0	0	\$0	3	\$74,300	25	\$351,000	208	\$1,996,800	\$2,422,100	12.9%
Sideswipe Opposite Direction	0	\$0	0	\$0	0	\$0	1	\$14,000	0	\$0	\$14,000	0.1%
Backed Into	0	\$0	0	\$0	0	\$0	0	\$0	4	\$38,400	\$38,400	0.2%
Other	0	\$0	0	\$0	0	\$0	0	\$0	1	\$9,600	\$9,600	0.1%
Total Economic Loss	\$6,193,600		\$154,600		\$594,600		\$2,569,100		\$9,196,800		\$18,708,700	
Percentage	33.1%		0.8%		3.2%		13.7%		49.2%			

Table 4-3: I-26 Northbound Economic Loss by Collision Type

Collision Type	Fatality		Injury						Property Damage		Total Economic Loss	Percentage
	Num.	Cost (2015 \$\$)	Incapacitating		Non-incapacitating		Possible		Num.	Cost (2015 \$\$)		
			Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)				
No Collision with Motor Vehicle	3	\$4,645,200	3	\$231,900	11	\$272,500	30	\$421,200	160	\$1,536,000	\$7,106,800	40.1%
Rear End	0	\$0	3	\$231,900	13	\$322,100	118	\$1,656,600	622	\$5,971,200	\$8,181,800	46.1%
Head On	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	\$0	0.0%
Rear-to-Rear	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	\$0	0.0%
Angle	0	\$0	1	\$77,300	0	\$0	4	\$56,200	27	\$259,200	\$392,700	2.2%
Sideswipe Same Direction	0	\$0	0	\$0	1	\$24,800	17	\$238,700	177	\$1,699,200	\$1,962,700	11.1%
Sideswipe Opposite Direction	0	\$0	0	\$0	0	\$0	0	\$0	2	\$19,200	\$19,200	0.1%
Backed Into	0	\$0	0	\$0	0	\$0	0	\$0	5	\$48,000	\$48,000	0.3%
Other	0	\$0	0	\$0	0	\$0	0	\$0	2	\$19,200	\$19,200	0.1%
Total Economic Loss	\$4,645,200		\$541,100		\$619,400		\$2,372,700		\$9,552,000		\$ 17,730,400	
Percentage	26.2%		3.1%		3.5%		13.4%		53.9%			

Most of the economic loss was caused by *rear end* collisions along both southbound and northbound I-26. The economic loss along northbound I-26 is significantly higher for the *no collision with motor vehicle* type collisions by about \$3.3 million. This is largely due to the higher number of fatal and incapacitating injury crashes resulting from this collision type in the northbound direction compared to the southbound direction.

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4.3 I-20 Freeway Segment Economic Loss

Table 4-4 summarizes the combined economic loss for the eastbound and westbound I-20 segments within the study area.

Table 4-4: I-20 Freeway Segment Economic Loss

Location	Fatality		Injury						Property Damage		Total Economic Loss	Percentage
			Incapacitating		Non-incapacitating		Possible					
	Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)		
I-20 Eastbound	1	\$1,548,400	0	\$0	7	\$173,400	35	\$491,400	182	\$1,747,200	\$3,960,400	29.5%
I-20 Westbound	2	\$3,096,800	5	\$386,600	15	\$371,600	79	\$1,109,100	470	\$4,512,000	\$9,476,100	70.5%
Total Economic Loss	\$4,645,200		\$386,600		\$545,000		\$1,600,500		\$6,259,200		\$13,436,500	
Percentage	34.6%		2.9%		4.1%		11.9%		46.6%			

The projected economic loss from the crashes occurring on I-20 is estimated to be approximately \$13.4 million. The projected economic loss for westbound I-20 is approximately \$5.5 million higher than the economic loss for eastbound I-20.

To understand the economic impact of the different collision types, economic loss analyses were performed for each collision type for both eastbound and westbound I-20. The results of this analysis are summarized in **Table 4-5** for the southbound segments and **Table 4-6** for the northbound segments.

Table 4-5: I-20 Eastbound Economic Loss by Collision Type

Collision Type	Fatality		Injury						Property Damage		Total Economic Loss	Percentage
			Incapacitating		Non-incapacitating		Possible					
	Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)		
No Collision with Motor Vehicle	1	\$1,548,400	0	\$0	4	\$99,100	11	\$154,400	35	\$336,000	\$2,137,900	54.0%
Rear End	0	\$0	0	\$0	1	\$24,800	16	\$224,600	82	\$787,200	\$1,036,600	26.2%
Head On	0	\$0	0	\$0	1	\$24,800	0	\$0	1	\$9,600	\$34,400	0.9%
Rear-to-Rear	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	\$0	0.0%
Angle	0	\$0	0	\$0	0	\$0	1	\$14,000	11	\$105,600	\$119,600	3.0%
Sideswipe Same Direction	0	\$0	0	\$0	1	\$24,800	7	\$98,300	51	\$489,600	\$612,700	15.5%
Sideswipe Opposite Direction	0	\$0	0	\$0	0	\$0	0	\$0	1	\$9,600	\$9,600	0.2%
Backed Into	0	\$0	0	\$0	0	\$0	0	\$0	1	\$9,600	\$9,600	0.2%
Other	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	\$0	0.0%
Total Economic Loss	\$1,548,400		\$ -		\$173,500		\$491,300		\$1,747,200		\$ 3,960,400	
Percentage	39.1%		0.0%		4.4%		12.4%		44.1%			

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Table 4-6: I-20 Westbound Economic Loss by Collision Type

Collision Type	Fatality		Injury						Property Damage		Total Economic Loss	Percentage
	Num.	Cost (2015 \$\$)	Incapacitating		Non-incapacitating		Possible		Num.	Cost (2015 \$\$)		
			Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)				
No Collision with Motor Vehicle	1	\$1,548,400	3	\$231,900	6	\$148,600	9	\$126,300	45	\$432,000	\$2,487,200	26.2%
Rear End	1	\$1,548,400	2	\$154,600	7	\$173,400	63	\$884,400	350	\$3,360,000	\$6,120,800	64.6%
Head On	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	\$0	0.0%
Rear-to-Rear	0	\$0	0	\$0	0	\$0	0	\$0	1	\$9,600	\$9,600	0.1%
Angle	0	\$0	0	\$0	0	\$0	4	\$56,200	11	\$105,600	\$161,800	1.7%
Sideswipe Same Direction	0	\$0	0	\$0	2	\$49,500	3	\$42,100	61	\$585,600	\$677,200	7.1%
Sideswipe Opposite Direction	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	\$0	0.0%
Backed Into	0	\$0	0	\$0	0	\$0	0	\$0	2	\$19,200	\$19,200	0.2%
Other	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	\$0	0.0%
Total Economic Loss	\$3,096,800		\$386,500		\$371,500		\$1,109,000		\$4,512,000		\$9,475,800	
Percentage	32.7%		4.1%		3.9%		11.7%		47.6%			

Most of the economic loss was caused by *rear end* collisions along both eastbound and westbound I-20. The economic loss along westbound I-26 is significantly higher for the *rear end* type collisions by about \$5.1 million. This is largely due to the higher number of *rear end* crashes resulting occurring in the westbound direction compared to the eastbound direction.

4.4 I-126 Freeway Segment Economic Loss

Table 4-7 summarizes the combined economic loss for the southbound and northbound I-126 segments within the study area.

Table 4-7: I-126 Freeway Segment Economic Loss

Location	Fatality		Injury						Property Damage		Total Economic Loss	Percentage
	Num.	Cost (2015 \$\$)	Incapacitating		Non-incapacitating		Possible		Num.	Cost (2015 \$\$)		
			Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)				
I-126 Southbound	1	\$1,548,400	0	\$0	6	\$148,600	22	\$308,900	56	\$537,600	\$2,543,500	44.7%
I-126 Northbound	1	\$1,548,400	6	\$463,900	12	\$297,300	12	\$168,500	69	\$662,400	\$3,140,500	55.3%
Total Economic Loss	\$3,096,800		\$463,900		\$445,900		\$477,400		\$1,200,000		\$5,684,000	
Percentage	54.5%		8.2%		7.8%		8.4%		21.1%			

The projected economic loss from the crashes occurring on I-126 is estimated to be approximately \$5.7 million. The projected economic loss for northbound I-126 is approximately \$600,000 higher than the economic loss for southbound I-126.

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To understand the economic impact of the different collision types, economic loss analyses were performed for each collision type for both southbound and northbound I-26. The results of this analysis are summarized in **Table 4-8** for the southbound segments and **Table 4-9** for the northbound segments.

Table 4-8: I-126 Southbound Economic Loss by Collision Type

Collision Type	Fatality		Injury						Property Damage		Total Economic Loss	Percentage
	Num.	Cost (2015 \$\$)	Incapacitating		Non-incapacitating		Possible		Num.	Cost (2015 \$\$)		
			Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)				
No Collision with Motor Vehicle	0	\$0	0	\$0	2	\$49,500	3	\$42,100	21	\$201,600	\$293,200	11.5%
Rear End	1	\$1,548,400	0	\$0	3	\$74,300	6	\$84,200	21	\$201,600	\$1,908,500	75.0%
Head On	0	\$0	0	\$0	0	\$0	1	\$14,000	0	\$0	\$14,000	0.6%
Rear-to-Rear	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	\$0	0.0%
Angle	0	\$0	0	\$0	0	\$0	1	\$14,000	4	\$38,400	\$52,400	2.1%
Sideswipe Same Direction	0	\$0	0	\$0	0	\$0	9	\$126,300	10	\$96,000	\$222,300	8.7%
Sideswipe Opposite Direction	0	\$0	0	\$0	1	\$24,800	2	\$28,100	0	\$0	\$52,900	2.1%
Backed Into	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	\$0	0.0%
Other	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	\$0	0.0%
Total Economic Loss		\$1,548,400		\$ -		\$148,600		\$308,700		\$537,600	\$ 2,543,300	
Percentage		60.9%		0.0%		5.8%		12.1%		21.1%		

Table 4-9: I-126 Northbound Economic Loss by Collision Type

Collision Type	Fatality		Injury						Property Damage		Total Economic Loss	Percentage
	Num.	Cost (2015 \$\$)	Incapacitating		Non-incapacitating		Possible		Num.	Cost (2015 \$\$)		
			Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)				
No Collision with Motor Vehicle	1	\$1,548,400	3	\$231,900	5	\$123,900	5	\$70,200	18	\$172,800	\$2,147,200	68.4%
Rear End	0	\$0	2	\$154,600	4	\$99,100	6	\$84,200	35	\$336,000	\$673,900	21.5%
Head On	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	\$0	0.0%
Rear-to-Rear	0	\$0	0	\$0	1	\$24,800	1	\$14,000	1	\$9,600	\$48,400	1.5%
Angle	0	\$0	0	\$0	0	\$0	0	\$0	5	\$48,000	\$48,000	1.5%
Sideswipe Same Direction	0	\$0	1	\$77,300	1	\$24,800	0	\$0	10	\$96,000	\$198,100	6.3%
Sideswipe Opposite Direction	0	\$0	0	\$0	1	\$24,800	0	\$0	0	\$0	\$24,800	0.8%
Backed Into	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	\$0	0.0%
Other	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	\$0	0.0%
Total Economic Loss		\$1,548,400		\$463,800		\$297,400		\$168,400		\$662,400	\$ 3,140,400	
Percentage		49.3%		14.8%		9.5%		5.4%		21.1%		

Most of the economic loss was caused by *rear end* collisions along southbound I-126 because of the fatal crash of that collision type. Similarly, *no collision with motor vehicle* crashes caused higher economic loss for northbound I-126 because of the fatal accident of that collision type. Northbound I-126 has a higher economic

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loss than southbound I-126 due to the higher number of incapacitating injury crashes and slightly higher non-incapacitating injury crashes and property damage crashes.

4.5 I-26 Arterial Roadway Economic Loss

Table 4-10 summarizes the combined economic loss by collision type for the arterial roadway segments at the I-26 interchanges within the study area. The total economic loss of crashes along the I-26 interchange arterials is approximately \$10.3 million. *Angle* crashes and *rear end* crashes account for about 86 percent of the total economic loss.

Table 4-10: I-26 Interchange Arterial Economic Loss by Collision Type

Collision Type	Fatality		Injury						Property Damage		Total Economic Loss	Percentage
	Num.	Cost (2015 \$\$)	Incapacitating		Non-incapacitating		Possible Injury		Num.	Cost (2015 \$\$)		
			Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)				
No Collision with Motor Vehicle	0	\$0	2	\$154,600	4	\$99,100	2	\$28,100	16	\$153,600	\$435,400	4.2%
Rear End	0	\$0	1	\$77,300	7	\$173,400	54	\$758,100	246	\$2,361,600	\$3,370,400	32.7%
Head On	0	\$0	0	\$0	0	\$0	1	\$14,000	9	\$86,400	\$100,400	1.0%
Rear-to-Rear	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	\$0	0.0%
Angle	1	\$1,548,400	4	\$309,300	21	\$520,300	72	\$1,010,800	218	\$2,092,800	\$5,481,600	53.1%
Sideswipe Same Direction	0	\$0	0	\$0	1	\$24,800	6	\$84,200	77	\$739,200	\$848,200	8.2%
Sideswipe Opposite Direction	0	\$0	0	\$0	0	\$0	0	\$0	4	\$38,400	\$38,400	0.4%
Backed Into	0	\$0	0	\$0	0	\$0	0	\$0	3	\$28,800	\$28,800	0.3%
Other	0	\$0	0	\$0	0	\$0	1	\$14,000	0	\$0	\$14,000	0.1%
Total Economic Loss		\$1,548,400		\$541,200		\$817,600		\$1,909,200		\$5,500,800	\$ 10,317,200	
Percentage		15.0%		5.2%		7.9%		18.5%		53.3%		

The economic loss for each interchange arterial roadway is summarized in **Table 4-11**.

Table 4-11: Economic Loss by I-26 Interchange Arterial

Arterial Location	Fatality		Injury						Property Damage		Total Economic Loss	Percentage
	Num.	Cost (2015 \$\$)	Incapacitating		Non-incapacitating		Possible Injury		Num.	Cost (2015 \$\$)		
			Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)				
Exit 101 (Broad River Road)	0	\$0	1	\$77,300	3	\$74,300	1	\$14,000	19	\$182,400	\$348,000	3.4%
Exit 102 (Lake Murray Boulevard)	0	\$0	0	\$0	3	\$74,300	6	\$84,200	32	\$307,200	\$465,700	4.5%
Exit 103 (Harbison Boulevard)	1	\$1,548,400	1	\$77,300	9	\$223,000	29	\$407,100	65	\$624,000	\$2,879,800	27.9%
Exit 104 (Piney Grove Road)	0	\$0	0	\$0	3	\$74,300	37	\$519,400	150	\$1,440,000	\$2,033,700	19.7%
Exit 106 (St. Andrews Road)	0	\$0	1	\$77,300	4	\$99,100	23	\$322,900	104	\$998,400	\$1,497,700	14.5%
Exit 106 (Burning Tree Drive)	0	\$0	1	\$77,300	1	\$24,800	1	\$14,000	10	\$96,000	\$212,100	2.1%
Exit 108 (Bush River Road)	0	\$0	3	\$231,900	9	\$223,000	12	\$168,500	72	\$691,200	\$1,314,600	12.7%
Exit 110 (Sunset Boulevard)	0	\$0	0	\$0	1	\$24,800	27	\$379,000	121	\$1,161,600	\$1,565,400	15.2%
Total Economic Loss		\$1,548,400		\$541,100		\$817,600		\$1,909,100		\$5,500,800	\$ 10,317,000	
Percentage		15.0%		5.2%		7.9%		18.5%		53.3%		

Crash Analysis

The interchange arterial roadways with the highest economic loss are at Harbison Boulevard (Exit 103) and Piney Grove Road (Exit 104) with approximately \$2.88 million and \$2.03 million respectively. These two locations make up nearly half of the economic loss at the I-26 interchange arterial roadways. Without the fatal crash, Harbison Boulevard would have the fourth highest economic loss. Piney Grove Road would have the highest economic loss, approximately \$470,000 higher than the losses at Sunset Boulevard.

4.6 I-20 Arterial Roadway Economic Loss

Table 4-12 summarizes the combined economic loss by collision type for the arterial roadway segments at the I-20 interchanges within the study area. The total economic loss of crashes along the I-20 interchange arterials is approximately \$5.9 million. *Rear end* crashes, *angle* crashes and *no collision with motor vehicle* crashes account for about 88 percent of the total economic loss.

Table 4-12: I-20 Interchange Arterial Economic Loss by Collision Type

Collision Type	Fatality		Injury						Property Damage		Total Economic Loss	Percentage
	Num.	Cost (2015 \$\$)	Incapacitating		Non-incapacitating		Possible Injury		Num.	Cost (2015 \$\$)		
			Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)				
No Collision with Motor Vehicle	1	\$1,548,400	0	\$0	3	\$74,300	2	\$28,100	5	\$48,000	\$1,698,800	29.1%
Rear End	0	\$0	0	\$0	3	\$74,300	28	\$393,100	143	\$1,372,800	\$1,840,200	31.5%
Head On	0	\$0	0	\$0	2	\$49,500	4	\$56,200	3	\$28,800	\$134,500	2.3%
Rear-to-Rear	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	\$0	0.0%
Angle	0	\$0	0	\$0	6	\$148,600	36	\$505,400	101	\$969,600	\$1,623,600	27.8%
Sideswipe Same Direction	0	\$0	1	\$77,300	0	\$0	4	\$56,200	35	\$336,000	\$469,500	8.0%
Sideswipe Opposite Direction	0	\$0	0	\$0	0	\$0	0	\$0	3	\$28,800	\$28,800	0.5%
Backed Into	0	\$0	0	\$0	0	\$0	0	\$0	3	\$28,800	\$28,800	0.5%
Other	0	\$0	0	\$0	0	\$0	0	\$0	1	\$9,600	\$9,600	0.2%
Total Economic Loss		\$1,548,400		\$77,300		\$346,700		\$1,039,000		\$2,822,400	\$ 5,833,800	
Percentage		26.5%		1.3%		5.9%		17.8%		48.4%		

The economic loss for each interchange arterial roadway is summarized in **Table 4-13**.

Table 4-13: Economic Loss by I-20 Interchange Arterial

Arterial Location	Fatality		Injury						Property Damage		Total Economic Loss	Percentage
	Num.	Cost (2015 \$\$)	Incapacitating		Non-incapacitating		Possible Injury		Num.	Cost (2015 \$\$)		
			Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)				
Exit 63 (Bush River Road)	0	\$0	0	\$0	2	\$49,500	10	\$140,400	62	\$595,200	\$785,100	13.5%
Exit 65 (Broad River Road)	1	\$1,548,400	1	\$77,300	12	\$297,300	64	\$898,500	232	\$2,227,200	\$5,048,700	86.5%
Total Economic Loss		\$1,548,400		\$77,300		\$346,800		\$1,038,900		\$2,822,400	\$ 5,833,800	
Percentage		26.5%		1.3%		5.9%		17.8%		48.4%		

Crash Analysis

The Broad River Road arterial crashes at Exit 65 of I-20 had an economic loss of approximately \$5.1 million (about 86 percent of the total economic loss between it and Bush River Road). Without the fatal crash, which contributes about 30 percent of the total economic loss along Broad River Road, Broad River Road would still have about 4.5 times the economic loss of the Bush River Road arterial crashes.

4.7 I-126 Arterial Roadway Economic Loss

Table 4-14 summarizes the combined economic loss by collision type for the arterial roadway segments at the I-126 interchanges within the study area. The total economic loss of crashes along the I-126 interchange arterials is approximately \$706,000. *Rear end* crashes and *angle* crashes account for about 78 percent of the total economic loss. With *sideswipe same direction* crashes, the three crash types account for nearly 97 percent of the economic loss.

Table 4-14: I-126 Interchange Arterial Economic Loss by Collision Type

Collision Type	Fatality		Injury						Property Damage		Total Economic Loss	Percentage
	Num.	Cost (2015 \$\$)	Incapacitating		Non-incapacitating		Possible Injury		Num.	Cost (2015 \$\$)		
			Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)				
No Collision with Motor Vehicle	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	\$0	0.0%
Rear End	0	\$0	0	\$0	2	\$49,500	4	\$56,200	20	\$192,000	\$297,700	42.2%
Head On	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	\$0	0.0%
Rear-to-Rear	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	\$0	0.0%
Angle	0	\$0	0	\$0	3	\$74,300	4	\$56,200	13	\$124,800	\$255,300	36.2%
Sideswipe Same Direction	0	\$0	0	\$0	0	\$0	1	\$14,000	12	\$115,200	\$129,200	18.3%
Sideswipe Opposite Direction	0	\$0	0	\$0	0	\$0	1	\$14,000	0	\$0	\$14,000	2.0%
Backed Into	0	\$0	0	\$0	0	\$0	0	\$0	1	\$9,600	\$9,600	1.4%
Other	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	\$0	0.0%
Total Economic Loss	\$ -		\$ -		\$123,800		\$140,400		\$441,600		\$ 705,800	
Percentage	0.0%		0.0%		17.5%		19.9%		62.6%			

The economic loss for each interchange arterial roadway is summarized in **Table 4-15**.

Table 4-15: Economic Loss by I-126 Interchange Arterial

Arterial Location	Fatality		Injury						Property Damage		Total Economic Loss	Percentage
	Num.	Cost (2015 \$\$)	Incapacitating		Non-incapacitating		Possible Injury		Num.	Cost (2015 \$\$)		
			Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)				
Colonial Life Boulevard	0	\$0	0	\$0	0	\$0	1	\$14,000	1	\$9,600	\$23,600	3.3%
Greystone Boulevard	0	\$0	0	\$0	3	\$74,300	3	\$42,100	14	\$134,400	\$250,800	35.5%
Huger Street/Elmwood Avenue	0	\$0	0	\$0	2	\$49,500	6	\$84,200	31	\$297,600	\$431,300	61.1%
Total Economic Loss	\$ -		\$ -		\$123,800		\$140,300		\$441,600		\$ 705,700	
Percentage	0.0%		0.0%		17.5%		19.9%		62.6%			

Crash Analysis

The interchange arterial roadways with the highest economic loss are at Elmwood Avenue and Huger Street with approximately \$432,000 (61 percent of the total). The total economic loss resulting from crashes at Elmwood Avenue/Huger Street and Greystone Boulevard combine for nearly 97 percent of the economic losses of the I-126 interchange arterial roadways (\$682,100)

4.8 Frontage Roadway Economic Loss

Table 4-16 summarizes the combined economic loss by collision type for the frontage roadways within the study area. The total economic loss of crashes along the frontage roadways is approximately \$4.8 million. *No Collision with Motor Vehicle* crashes made up half of the total economic loss. *Angle* crashes and *rear end* crashes account for another 39.5 percent of the total economic loss. The three crash types account for 90 percent of the economic loss along the frontage roads.

Table 4-16: Frontage Roadway Economic Loss by Collision Type

Collision Type	Fatality		Injury						Property Damage		Total Economic Loss	Percentage
	Num.	Cost (2015 \$\$)	Incapacitating		Non-incapacitating		Possible Injury		Num.	Cost (2015 \$\$)		
			Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)				
No Collision with Motor Vehicle	1	\$1,548,400	2	\$154,600	6	\$148,600	14	\$196,500	39	\$374,400	\$2,422,500	50.5%
Rear End	0	\$0	0	\$0	2	\$49,500	15	\$210,600	51	\$489,600	\$749,700	15.6%
Head On	0	\$0	0	\$0	3	\$74,300	6	\$84,200	4	\$38,400	\$196,900	4.1%
Rear-to-Rear	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	\$0	0.0%
Angle	0	\$0	0	\$0	6	\$148,600	26	\$365,000	66	\$633,600	\$1,147,200	23.9%
Sideswipe Same Direction	0	\$0	0	\$0	2	\$49,500	3	\$42,100	3	\$28,800	\$120,400	2.5%
Sideswipe Opposite Direction	0	\$0	0	\$0	0	\$0	0	\$0	6	\$57,600	\$57,600	1.2%
Backed Into	0	\$0	0	\$0	0	\$0	0	\$0	10	\$96,000	\$96,000	2.0%
Other	0	\$0	0	\$0	0	\$0	0	\$0	1	\$9,600	\$9,600	0.2%
Total Economic Loss		\$1,548,400		\$154,600		\$470,500		\$898,400		\$1,728,000	\$ 4,799,900	
Percentage		32.3%		3.2%		9.8%		18.7%		36.0%		

The economic loss for each interchange arterial roadway is summarized in **Table 4-17**.

Crash Analysis

Table 4-17: Economic Loss by Frontage Roadway

Arterial Location	Fatality		Injury						Property Damage		Total Economic Loss	Percentage
	Num.	Cost (2015 \$\$)	Incapacitating		Non-incapacitating		Possible Injury		Num.	Cost (2015 \$\$)		
			Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)	Num.	Cost (2015 \$\$)				
Columbiana Extension	0	\$0	0	\$0	1	\$24,800	4	\$56,200	4	\$38,400	\$119,400	1.9%
Saturn Parkway	0	\$0	0	\$0	0	\$0	0	\$0	5	\$48,000	\$48,000	0.8%
Giles Xourt	0	\$0	0	\$0	0	\$0	1	\$14,000	0	\$0	\$14,000	0.2%
Fernandina Road (north)	0	\$0	0	\$0	0	\$0	1	\$14,000	9	\$86,400	\$100,400	1.6%
Fernandina Road (south)	0	\$0	1	\$77,300	5	\$123,900	17	\$238,700	43	\$412,800	\$852,700	13.3%
Jamil Road	0	\$0	0	\$0	0	\$0	11	\$154,400	32	\$307,200	\$461,600	7.2%
Berryhill Road	0	\$0	0	\$0	3	\$74,300	10	\$140,400	25	\$240,000	\$454,700	7.1%
Burning Tree Drive/Browning Road	1	\$1,548,400	0	\$0	10	\$247,700	20	\$280,800	52	\$499,200	\$2,576,100	40.3%
Rockland Road	0	\$0	0	\$0	0	\$0	0	\$0	5	\$48,000	\$48,000	0.8%
Frontage Road	0	\$0	0	\$0	0	\$0	0	\$0	5	\$48,000	\$48,000	0.8%
Gracern Road	1	\$1,548,400	0	\$0	0	\$0	0	\$0	0	\$0	\$1,548,400	24.2%
McSwain Drive	0	\$0	1	\$77,300	0	\$0	1	\$14,000	3	\$28,800	\$120,100	1.9%
Total Economic Loss		\$3,096,800		\$154,600		\$470,700		\$912,500		\$1,756,800	\$ 6,391,400	
Percentage		48.5%		2.4%		7.4%		14.3%		27.5%		

The frontage roadways with the highest economic loss are the Burning Tree Drive/Browning Road and Gracern Road frontage roads. These two frontage roadways contribute to nearly 65 percent of the total economic loss along the frontage roads. This high proportion of the total economic loss results from a fatal crash occurring on each frontage road. The fatal crash on Gracern Road was the only crash along that roadway; there would be no economic loss on Gracern Road without that crash. Without the fatal crash on Burning Tree Drive/Browning Road, the economic loss on that road would be reduced, but would still exceed \$1 million.

Removing the fatal crashes, the total economic loss along the frontage roads would be reduced to \$3,294,600. The economic loss along Burning Tree Drive/Browning Road would make up about 31 percent of the total economic loss. The next highest frontage road economic loss occurs on the southern section of Fernandina Road and is approximately \$853,000 (about 26 percent of the total economic loss). The economic loss along Jamil Road and Berryhill Road are both about \$460,000, each contributing about 14 percent of the total economic loss.

5 Hot Spots

The crash data for the freeway segments, interchange arterial roadways, and frontage roads we evaluated to identify the “hot spots” in the various roadway segments.

5.1 Freeway Segment Hot Spots

The following sections highlight the freeway segments with the highest total number of crashes, the highest overall ACR, the highest total number of injury crashes, and the highest overall injury ACR. There are a total of 64 freeway segments along I-26, I-20, and I-126 that were evaluated to identify freeway hot spots.

Crash Analysis

5.1.1 TOTAL FREEWAY CRASHES HOT SPOTS

The freeway segments within the study area were sorted based on the number of total crashes that occurred. The segments with the ten highest number of total crashes are shown in **Table 5-1**. The corresponding segment ACR, Total Injury Crashes and Injury ACR were also included in **Table 5-1**.

Table 5-1: Segments with Most Crashes

Route	Segment	Total Crashes	Actual Crash Rate (per 100 MVM)	Total Injury Crashes	Actual Injury Crash Rate (per 100 MVM)
I-20 WB	Within Exit 65 between the westbound off-ramp and on-ramp to/from Broad River Road	265	787.7	43	127.8
I-26 SB	Between the southbound on-ramp at Exit 104 and the off-ramp to Exit 106	182	217.4	33	39.4
I-26 NB	Within Exit 106 between the northbound off-ramp and on-ramp	162	420.0	29	75.2
I-26 NB	Between the northbound on-ramp at Exit 104 and loop off-ramp at Exit 103	149	881.1	18	106.4
I-26 SB	Within Exit 106 between the southbound off-ramp and the southbound on-ramp	144	332.5	31	71.6
I-26 NB	Between the northbound on-ramp at Exit 106 and the off-ramp at Exit 104	125	136.2	26	28.3
I-26 NB	Between the northbound on-ramp from Exit 110 and the off-ramp to the I-126/Bush River Road Split	120	260.2	25	54.2
I-26 NB	Weaving segment at Exit 107 between the loop off-ramp to westbound I-20 and the on-ramp from westbound I-20	112	324.4	12	34.8
I-26 NB	Within Exit 108 from the I-26/I-126 Split to the northbound I-126 slip ramp merge	106	202.9	19	36.4
I-26 NB	Within Exit 104 between the northbound off-ramp and on-ramp	105	231.0	24	52.8

Based on the total number of crashes occurring the the I-26, I-20 and I-126 freeway segments, seven of the ten segments with the most frequent crashes are located on northbound I-26. The segments on northbound I-26, starting from the south, include the segments from the northbound on-ramp from Exit 110 to the I-126/Bush River Road exit split; from I-26 merges into I-126 to the location where the I-126 slip ramp to I-20 merges; on most of consecutive segments starting at Exit 107 at the loop off-ramp to westbound I-20 and ending at the loop off-ramp to Exit 103 (the 7th, 9th, 8th, 3rd, 6th, 10th and 4th entries in **Table 5-1**). Two consecutive segments on southbound I-26 are also listed in **Table 5-1**: beginning at the southbound on-ramp at Exit 104 (2nd entry) and ending at the southbound on-ramp at Exit 106 (5th entry). The lone entry from I-20 has the highest number of

Crash Analysis

crashes on the freeway segments in the study area. This is the segment located between the off-ramp and on-ramp to Broad River Road along westbound I-20 at Exit 65. It should be noted that many of the crashes located along this segment are located on the westbound off-ramp and involve traffic movements turning from the off-ramp onto Broad River Road.

5.1.2 FREEWAY ACR HOT SPOTS

The freeway segments within the study area were sorted based on the total ACR. The segments with the ten highest ACR are shown in Table 5-2. The corresponding segment Total Crashes, Total Injury Crashes and Injury ACR were also included in Table 5-2. Sixty of the 64 segments evaluated for hot spots had an ACR that exceeded the statewide average freeway ACR (92.2); another 50 segments could be considered hot spots as well.

Table 5-2: Segments with Highest ACR

Route	Segment	Total Crashes	Actual Crash Rate (per 100 MVM)	Total Injury Crashes	Actual Injury Crash Rate (per 100 MVM)
I-26 NB	Between the northbound on-ramp at Exit 104 and loop off-ramp at Exit 103	149	881.1	18	106.4
I-20 WB	Within Exit 63 between the off-ramp and the on-ramp to/from Bush River Road	75	859.2	10	114.6
I-26 SB	Weaving segment between the southbound on-ramp at Exit 106 and the off-ramp to westbound I-20 at Exit 107	72	806.8	13	145.7
I-20 WB	Within Exit 65 between the westbound off-ramp and on-ramp to/from Broad River Road	265	787.7	43	127.8
I-26 SB	Weaving segment at Exit 107 between the southbound loop off-ramp to eastbound I-20 and the on-ramp from eastbound I-20	86	742.7	14	120.9
I-26 SB	Weaving segment between the on-ramp from eastbound I-20 at Exit 107 and the I-26/I-126 split at Exit 108	86	578.9	12	80.8
I-26 NB	Weaving segment at Exit 107 between the loop on-ramp from eastbound I-20 and the loop off-ramp to westbound I-20	44	546.9	5	62.1
I-20 WB	Between the westbound on-ramp at Exit 65 and the off-ramp to northbound I-26 at Exit 64	80	535.8	13	87.1
I-26 SB	Weaving segment at Exit 107 between the off-ramp to westbound I-20 and the loop on-ramp from westbound I-20	95	528.2	18	100.1
I-126 SB	Colonial Life Boulevard On-Ramp to Greystone Boulevard Loop Off-Ramp	22	459.5	11	229.7

Crash Analysis

Based on the ACR, four segments of southbound I-26, three segments of westbound I-20, two segments of northbound I-26, and one segment of southbound I-126 make up the ten segments with the highest ACR.

The four segments located on southbound I-26 are generally consecutive segments in the area with complex weaving movements approaching the I-26/I-20 system interchange. The group of segments begins at the on-ramp from Exit 106 and ends at the I-26/I-126 split (3rd, 9th, 5th, and 6th entries in **Table 5-2**). The only segment in this group of segments that is not shown in **Table 5-2** is the weaving section between the loop on-ramp from westbound I-20 and the loop off-ramp to eastbound I-20 at Exit 107. This segment has the 18th highest ACR.

The three segments of westbound I-20 shown in **Table 5-2** include the two consecutive segments beginning with the westbound off-ramp at Exit 65 and ending at the off-ramp to northbound I-26 at Exit 64 (4th and 8th entries in **Table 5-2**). The third westbound I-20 segment is located at Exit 63 between the off-ramp and on-ramp to Bush River Road (2nd entry in **Table 5-2**). This segment, similar to the segment between the off-ramp and on-ramp to/from Broad River Road at Exit 65, includes a number of crashes on the westbound off-ramp and involving off-ramp movements onto Bush River Road.

The two segments of northbound I-26 shown in **Table 5-2** include weaving segment at Exit 107 between the loop on-ramp from eastbound I-20 and the loop off-ramp to westbound I-20 (7th entry). The highest segment ACR is located on the I-20 northbound segment between the on-ramp from Exit 104 to the loop off-ramp at Exit 103.

The tenth highest ACR occurs on the segment of southbound I-126 between the Colonial Life Boulevard on-ramp and the off-ramp to Greystone Boulevard.

5.1.3 TOTAL FREEWAY INJURY CRASHES HOT SPOTS

The freeway segments within the study area were sorted based on the total number of injury crashes. The segments with the ten highest number of injury crashes are shown in **Table 5-3**. The corresponding segment Total Crashes, ACR, and Injury ACR were also included in **Table 5-3**.

Based on the total number of injury crashes, five segments of northbound I-26, four segments of southbound I-26, and one segment of westbound I-20 make up the ten segments with the highest ACR.

Two of the five segments along northbound I-26 occur between the on-ramp from Exit 110 and the area where I-26 merges with I-126 and the I-126 slip ramp to I-20 (6th and 9th entries in **Table 5-3**). The other three segments of northbound I-26 with a high number of injury crashes occurs on consecutive segments between the off-ramp to Exit 106 and the on-ramp from Exit 104 (4th, 5th and 7th entries in **Table 5-3**).

The three of the four segments of southbound I-26 shown in **Table 5-3** are generally consecutive segments beginning at the on-ramp from Exit 104 and ending at the loop on-ramp from westbound I-20 at Exit 107 (2nd, 3rd, and 10th entries). The segment missing from **Table 5-3** falling within this group is the segment between the southbound on-ramp from Exit 106 and the off-ramp to westbound I-20 at Exit 107. This segment has the 14th highest number of injury crashes. The other southbound I-26 segment shown in **Table 5-3** is located between the I-26/I-126 split and the merge area from the on-ramp from northbound I-126 (8th entry).

Crash Analysis

Table 5-3: Segments with Highest Injury Crashes

Route	Segment	Total Crashes	Actual Crash Rate (per 100 MVM)	Total Injury Crashes	Actual Injury Crash Rate (per 100 MVM)
I-20 WB	Within Exit 65 between the westbound off-ramp and on-ramp to/from Broad River Road	265	787.7	43	127.8
I-26 SB	Between the southbound on-ramp at Exit 104 and the off-ramp to Exit 106	182	217.4	33	39.4
I-26 SB	Within Exit 106 between the southbound off-ramp and the southbound on-ramp	144	332.5	31	71.6
I-26 NB	Within Exit 106 between the northbound off-ramp and on-ramp	162	420.0	29	75.2
I-26 NB	Between the northbound on-ramp at Exit 106 and the off-ramp at Exit 104	125	136.2	26	28.3
I-26 NB	Between the northbound on-ramp from Exit 110 and the off-ramp to the I-126/Bush River Road Split	120	260.2	25	54.2
I-26 NB	Within Exit 104 between the northbound off-ramp and on-ramp	105	231.0	24	52.8
I-26 SB	Between the I-26/I-126 split and the on-ramp from westbound I-126	87	214.4	20	49.3
I-26 NB	Within Exit 108 from the I-26/I-126 Split to the northbound I-126 slip ramp merge	106	202.9	19	36.4
I-26 SB	Weaving segment at Exit 107 between the off-ramp to westbound I-20 and the loop on-ramp from westbound I-20	95	528.2	18	100.1

The one segment in **Table 5-3** located along westbound I-20 is again located at Exit 65 between the off-ramp and on-ramp to/from Broad River Road. This segment, which has the highest number of injury crashes in **Table 5-3**, includes crashes occurring on the off-ramp and involving traffic turning from the off-ramp onto Broad River Road.

5.1.4 FREEWAY INJURY ACR HOT SPOTS

The freeway segments within the study area were sorted based on the injury ACR. The segments with the ten highest injury ACR are shown in **Table 5-4**. The corresponding segment Total Crashes, ACR, and Total Injury Crashes were also included in **Table 5-4**. Forty three of the 64 segments evaluated for hot spots had an injury ACR that exceeded the statewide average freeway injury ACR (27.5); another 33 segments could be considered hot spots as well.

Crash Analysis

Based on the highest injury ACR, three of the ten highest segments are located along southbound I-26, two along southbound I-126, two along northbound I-126 and two along westbound I-20, and one along northbound I-26.

Table 5-4: Segments with Highest Injury ACR

Route	Segment	Total Crashes	Actual Crash Rate (per 100 MVM)	Total Injury Crashes	Actual Injury Crash Rate (per 100 MVM)
I-126 SB	Colonial Life Boulevard On-Ramp to Greystone Boulevard Loop Off-Ramp	22	459.5	11	229.7
I-26 SB	Weaving segment between the southbound on-ramp at Exit 106 and the off-ramp to westbound I-20 at Exit 107	72	806.8	13	145.7
I-20 WB	Within Exit 65 between the westbound off-ramp and on-ramp to/from Broad River Road	265	787.7	43	127.8
I-126 SB	On-Ramp from I-26 NB to Colonial Life Boulevard On-Ramp	16	406.2	5	126.9
I-26 SB	Weaving segment at Exit 107 between the southbound loop off-ramp to eastbound I-20 and the on-ramp from eastbound I-20	86	742.7	14	120.9
I-20 WB	Within Exit 63 between the off-ramp and the on-ramp to/from Bush River Road	75	859.2	10	114.6
I-26 NB	Between the northbound on-ramp at Exit 104 and loop off-ramp at Exit 103	149	881.1	18	106.4
I-126 NB	Off-Ramp to I-26 southbound - northbound outside slip ramp to I-20	17	431.6	4	101.5
I-26 SB	Weaving segment at Exit 107 between the off-ramp to westbound I-20 and the loop on-ramp from westbound I-20	95	528.2	18	100.1
I-126 NB	Colonial Life Off-Ramp to Off-Ramp to I-26 Southbound Off-Ramp	6	143.2	4	95.5

The three segments located along southbound I-26 include generally consecutive segments within the heavy weaving area located at Exits 106 and 107. The three segments listed in **Table 5-4** begin at the southbound on-ramp at Exit 106 and ends at the on-ramp from eastbound I-20 at Exit 107 (2nd, 9th, and 5th entries). The missing segment, the weaving section at Exit 107 between the loop on-ramp from westbound I-20 and the loop off-ramp to eastbound I-20, has the 26th highest injury ACR of the 64 freeway segments along all interstates.

The two segments along southbound I-126 include consecutive segments beginning at the merge area from the on-ramp from northbound I-26 to the Greystone Boulevard loop off-ramp (4th and 1st entries). The two segments along northbound I-126 include consecutive segments beginning at the off-ramp to Colonial Life

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Boulevard and ending at the diverge area of the outside slip ramp to I-20 (10th and 8th entries). The two westbound I-20 segments occur between the off-ramps and on-ramps at Exit 65 (3rd entry) and Exit 63 (6th entry). The only northbound I-26 segment (7th entry) is the segment between the on-ramp from Exit 104 to the loop off-ramp to Exit 103.

5.1.5 FREEWAY HOT SPOTS: CONCLUSIONS

The following conclusions were developed from the freeway hot spots analysis and freeway segment analysis to improve traffic flow and enhance safety by reducing the frequency and/or severity of crashes:

- The reduction or elimination of multiple weaving movements on southbound I-26 between the off-ramp to St. Andrews Road at Exit 106 and the I-26/I-126
- The reduction or elimination of multiple weaving movements on northbound I-26 between the I-126/I-26 ramp merge and the northbound on-ramp from St. Andrews Road at Exit 106
- Improving traffic flow and/or separating off-ramp traffic to Harbison Boulevard on northbound I-26; consideration of safety enhancements should be incorporated into improvement alternatives developed at Exit 103.
- Improving the I-20/I-26 system interchange area at Exit 64 and the movements between Exit 64 and the adjacent interchanges at Exits 63 and 65, such as through the reduction or elimination of weaving movements at or adjacent to Exit 64,
- Improving Exit 64 to facilitate the westbound flow of traffic to downstream movements, especially the movement to northbound I-26; distinct separation of westbound I-20 traffic heading to northbound I-26 should be considered in the interchange improvement alternatives;
- Improving ramp termini intersections for the westbound off-ramps at I-20 Exits 63 and 65 should be considered to reduce the high number of crashes occurring on the off-ramps and for traffic movements turning onto Bush River Road (Exit 63) and Broad River Road (Exit 65)
- Increasing the merging distance for traffic entering southbound I-126 from northbound I-20 should be considered as part of improvement alternatives developed for the I-26/I-126 system interchange.
- Improvements to signal timing/coordination and other improvements should be considered along Elmwood Avenue and Huger Street to facilitate the flow of traffic exiting southbound I-126
- Improvements are needed along northbound I-126 in the area of the the diverge for the I-20 slip ramp and the merging of northbound I-26 to facilitate traffic flow through this area and in upstream areas on I-126 extending back to Greystone Boulevard.

5.2 Interchange Arterial Roadway Hot Spots

The interchange arterial roadway segments were sorted by the highest total number of crashes in **Table 5-5**. The interchange arterial roadway crashes may include a portion of crashes taking place on ramp approaches as well as crashes along the arterial between the ramp intersections, at the ramp intersections, and along the arterial between the ramp intersections and nearby, adjacent intersections.

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Table 5-5: Arterials with Highest Crashes

Route	Exit	Arterial	Total Crashes
I-20	65	Broad River Road	310
I-26	104	Piney Grove Road	190
I-26	110	Sunset Boulevard	149
I-26	106	Total (St. Andrews & Burning Tree)	145
I-26	106	St. Andrews Road	132
I-26	103	Harbison Boulevard	105
I-26	108	Bush River Road	96
I-20	63	Bush River Road	74
I-26	102	Lake Murray Bouelvard	41
I-126	-	Huger Street/Elmwood Avenue	39
I-26	101	Broad River Road	24
I-126	-	Greystone Boulevard	20
I-26	106	Burning Tree Road	13
I-126	-	Colonial Life Boulevard	2

The five arterial roadways with the most crashes are Broad River Road (Exit 65), Piney Grove Road (Exit 104), Sunset Boulevard (Exit 110), St. Andrews Road (combined with the portion of Burning Tree Road that interacts with the northbound off-ramp at Exit 106), and Harbison Boulevard (Exit 103).

5.2.1 ARTERIAL HOT SPOTS: CONCLUSIONS

The following conclusions were developed from the interchange arterial hot spots analysis and the arterial segment analysis to improve traffic flow and enhance safety by reducing the frequency and/or severity of crashes:

- Improving the flow of traffic at the ramps at Broad River Road (I-20 Exit 65), especially the westbound off-ramp traffic, should be considered due to the high number of crashes along this ramp and along Broad River Road in both the freeway segment and interchange arterial crashes. Crashes along Broad River Road at this interchange also need to be addressed to the adjacent intersections that may be affected by interchange improvement alternatives. This includes intersections between Briargate Circle to the north of the interchange to Longcreek Drive south of the interchange as well as address access to the businesses along Broad River Road between these intersections.
- Safety enhancements should be considered in the development of interchange improvement alternatives at Piney Grove Road (Exit 104). Interchange improvement alternatives should incorporate potential safety improvements along Piney Grove Road between Bower Parkway/Jamil Road and Fernandina Road, including at the ramp intersections and driveways to businesses east of the interchange.
- At the Sunset Boulevard interchange (Exit 110), the adjacent signal at the intersection of E Hospital Drive/Harbor Drive has a large cluster of crashes. While addressing this intersection may fall outside the scope of the Carolina Crossroads project, a further evaluation of crashes along this corridor and at this

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intersection may need to be undertaken by SCDOT to address the number of angle crashes occurring along this segment.

- At the St. Andrews Road interchange (Exit 106), safety enhancements should be considered in the development of interchange improvement alternatives. The interchange improvement alternatives should incorporate potential safety improvements along St. Andrews Road between Jamil Road and Fernandina Road, including at the ramp intersections. Attention should also be given to resolving the northbound off-ramp configuration, including the connection to Burning Tree Road and the ramp termini. One purpose of the connection from the northbound off-ramp to the Burning Tree Road connection is to provide off-ramp traffic a safer way to access Fernandina Road; however, most traffic traveling to Fernandina Road travels to the end of the ramp and attempts to cross several lanes in a short distance to enter the left turn lane to Fernandina Road.
- Safety enhancements should be considered in the development of interchange improvement alternatives at Harbison Boulevard (Exit 103). At Harbison Boulevard, interchange improvement alternatives should focus on improving the safe operation of the ramp termini intersections along as crashes that occur on the Harbison Boulevard approaches to the ramp signals.
- At the Bush River Road interchange at I-20 Exit 108, safety enhancements should be considered in the development of interchange improvements to address the number of crashes occurring at the ramp intersections and the adjacent intersection of Bush River Road at Rockland Road.
- At the Bush River Road interchange at I-20 Exit 63, safety enhancements should be considered in the development of interchange improvements to address the number of crashes occurring at the westbound off-ramp intersection and the adjacent Bush River Road intersections at Berryhill Drive and Outlet Pointe Boulevard.

5.3 Frontage Road Hot Spots

The frontage road segments were sorted by the highest total number of crashes in **Table 5-6**.

Table 5-6: Frontage Roads with Highest Crashes

Frontage Road	Total Crashes
Burning Tree Drive	73
Total Fernandina Road	71
Fernandina Road (Piney Grove to St Andrews)	61
Jamil Road	43
Berryhill Road	35
Fernandina Road (Woodcross to Piney Grove)	10
Columbiana Extension	9
Saturn Parkway	5
Rockland Road	5
Frontage Road	5
McSwain Drive	5
Giles Court	1
Gracern Road	1

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The four arterial roadways with the most crashes are Burning Tree Drive/Browning Road, Fernandina Road, Jamil Road, and Berryhill Road.

While the Carolina Crossroads project may affect none, part or all of these frontage roads, they were reviewed in case safety improvement may be incorporated into the portions of those frontage roads that may be included in the project.

5.3.1 FRONTAGE ROAD HOT SPOTS: CONCLUSIONS

The following conclusions were developed from the frontage road hot spots analysis and the segment analysis to improve traffic flow and enhance safety by reducing the frequency and/or severity of crashes:

- The crashes along Burning Tree Drive/Browning Road take place in two major clusters: those at the ramp intersections and at the intersection with St. Andrews Road at Exit 106 and those at the Browning Road intersection with Zimalcrest Drive. As previously mentioned, the crashes along Burning Tree Road in the vicinity of Exit 106 should be addressed in improvement alternatives developed for the St. Andrews Road interchange. The intersection of Browning Road and Zimalcrest Drive currently has not turn lanes to facilitate left and right turn movements from Browning Road to Zimalcrest Drive and to separate the turning traffic from through traffic on Browning Road. The construction of left and right turn lanes on Browning Road at Zimalcrest Drive may be useful in reducing the frequency of crashes at that intersection.
- The Fernandina Road crashes are scattered along the length of the frontage road, with a cluster on the sharp curve of Fernandina Road in the northeast quadrant of Exit 106 and at the Fernandina Road intersections with Piney Grove Road and St. Andrews Road. Interchange improvement alternatives at Exits 104 and 106 should incorporate improvements to enhance safety at the adjacent Fernandina Road intersections to those interchanges. Additionally, consideration should be given to providing separate left turn lanes at key intersections/driveways or constructing a center left turn lane to separate turning traffic from through traffic on Fernandina Road.
- The crashes along Jamil Road occur in three clusters: one near its intersection with Piney Grove Road, one near its intersection with Tram Road, and one near its intersection with St. Andrews Road. Interchange improvement alternatives at Exits 104 and 106 should consider safety enhancements at the Jamil Road intersections near these interchanges. Providing turn lanes at the intersection of Jamil Road with Tram Road, left turn lanes at key driveways/intersections (or a center turn lane) along Jamil Road may help reduce the occurrence of crashes.
- The Berryhill Drive crashes occur scattered along that frontage road with a cluster at its intersection with Bush River Road near Exit 63. Providing left turn lanes or a center left turn lane along Berryhill Drive may help to address the scattered crashes. If improvement alternatives to the Exit 63 interchange affect the Bush River Road intersection with Berryhill Road, consideration should be given to address the crashes occurring at that location.