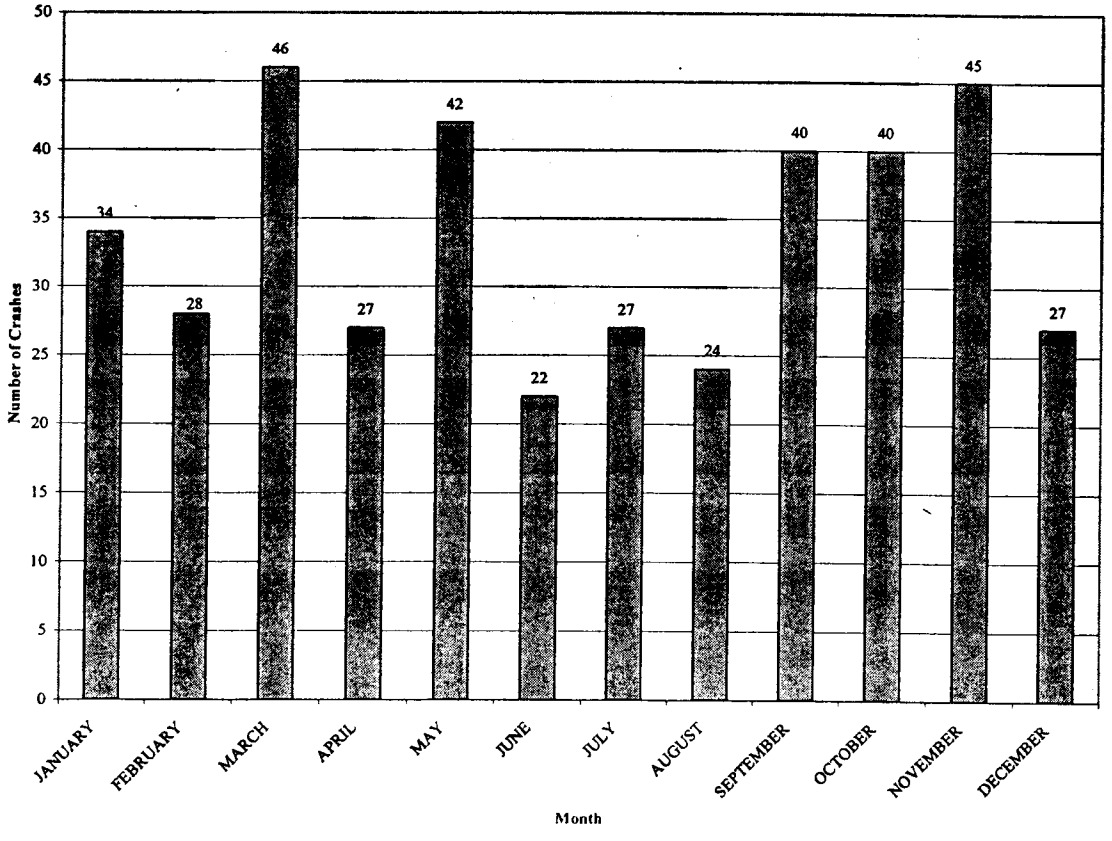
CRASH HISTORY

An analysis of all reportable crashes to the local police departments was conducted for the entire corridor study area for the years of 1997 to 2000. Each crash report was reviewed for location, type of crash, time of day, day of the week, month of the year, and weather conditions. There were 402 total crash reports reviewed. Crashes on the Garden State Parkway were not made part of this analysis since the primary focus of this study was the CR 520 corridor.

Monthly Crash Trends

All crashes that occurred between 1997 and 2000 were examined. Crashes for the months of February, April, June, July, August and December ranged between 22 and 28 crashes per month. All of the other six months had crashes of 35 and above with March and November at the upper limit. Table V details the number of crashes per month.

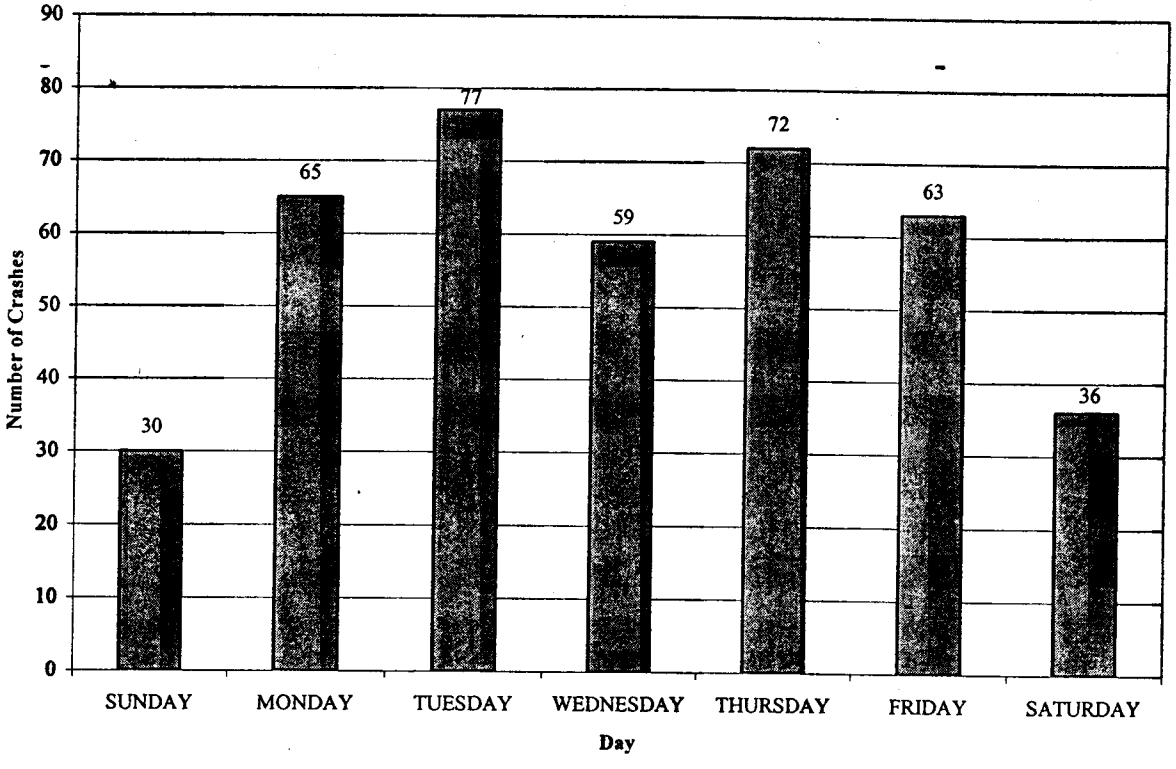
Table V – Crashes By Month



Daily Crash Trends

A further analysis on the number of crashes by day of the week revealed that most crashes occurred on Tuesday with 77 reported. Sunday had the least number of crashes with 30. Table VI summarizes the crashes by day of the week.

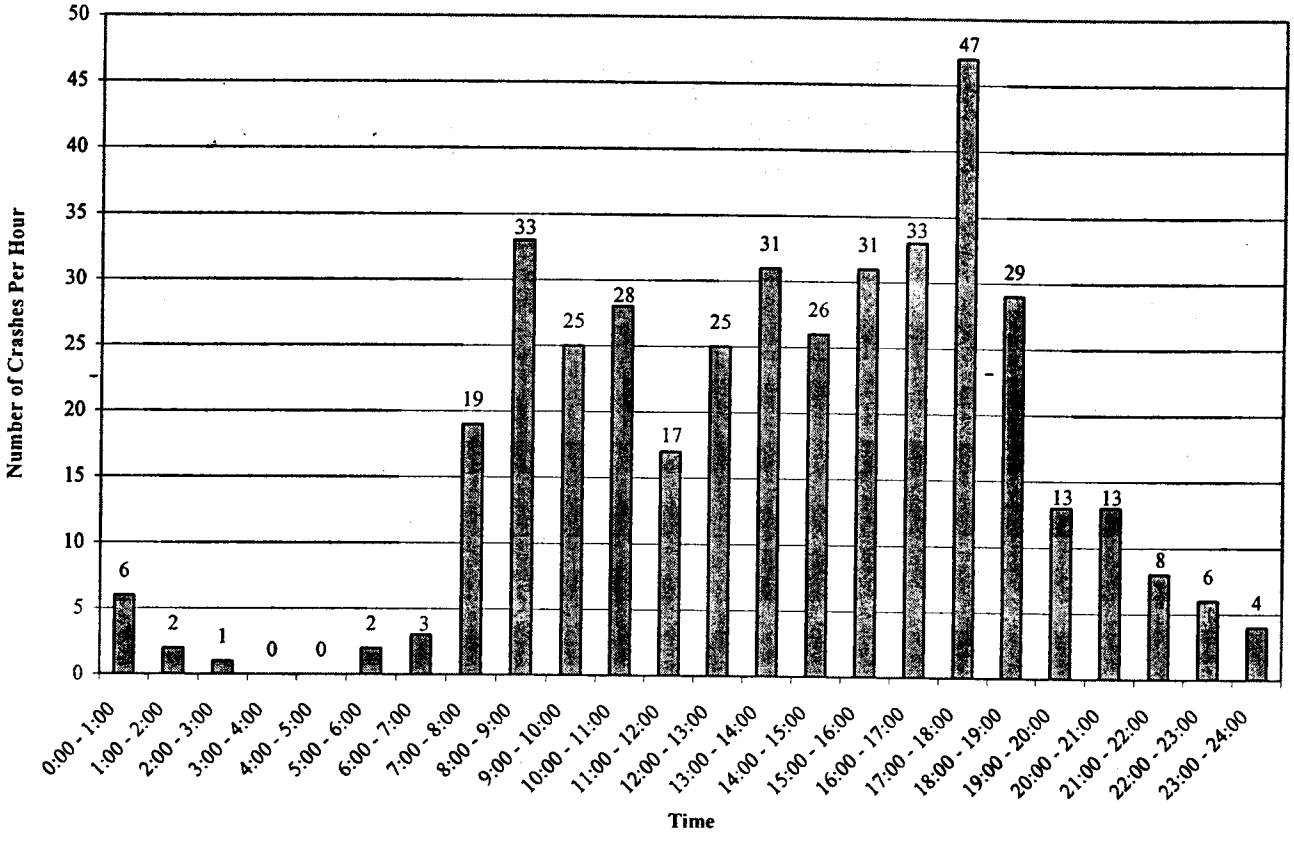
Table VI – Crashes Per Day of the Week



Time of Day Crash Trends

Most reported crashes occurred between the hours of 7:00 AM and 7:00 PM. During this 12-hour time period there were 344 crashes, accounting for approximately 86 percent of the total crashes reported for the entire study area. Table VII indicates the number of crashes at different hours of a typical day. The hours between 5:00 PM to 6:00 PM had the highest number of crashes with 47 crashes, or 12% of the total crashes.

Table VII – Crashes Per Hour of the Day

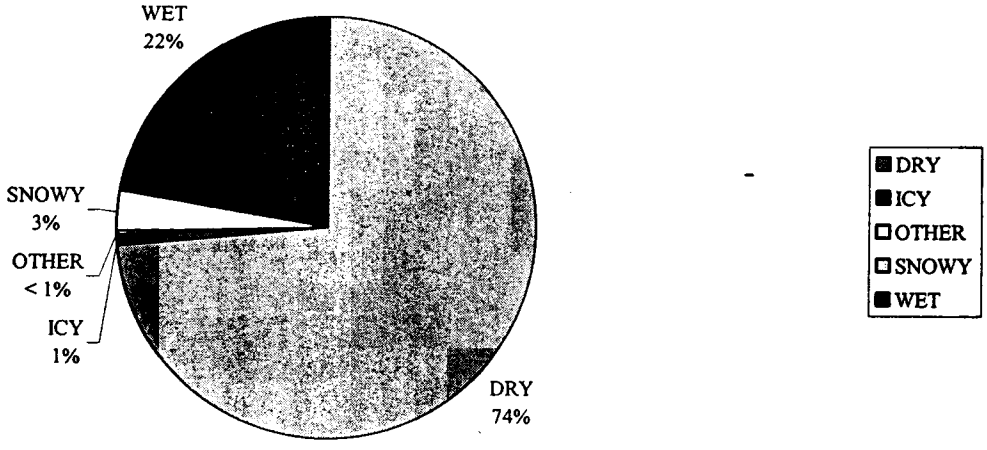


Weather Related Crash Trends

As shown in the Table VIII, 74 percent (297) of the reportable crashes occurred on dry pavement, 22 percent (88) on wet surfaces, and 4 percent (17) under icy or snowy conditions. There was no concentration of wet weather crashes for the entire corridor study area.

Table VIII – Crashes By Surface Condition

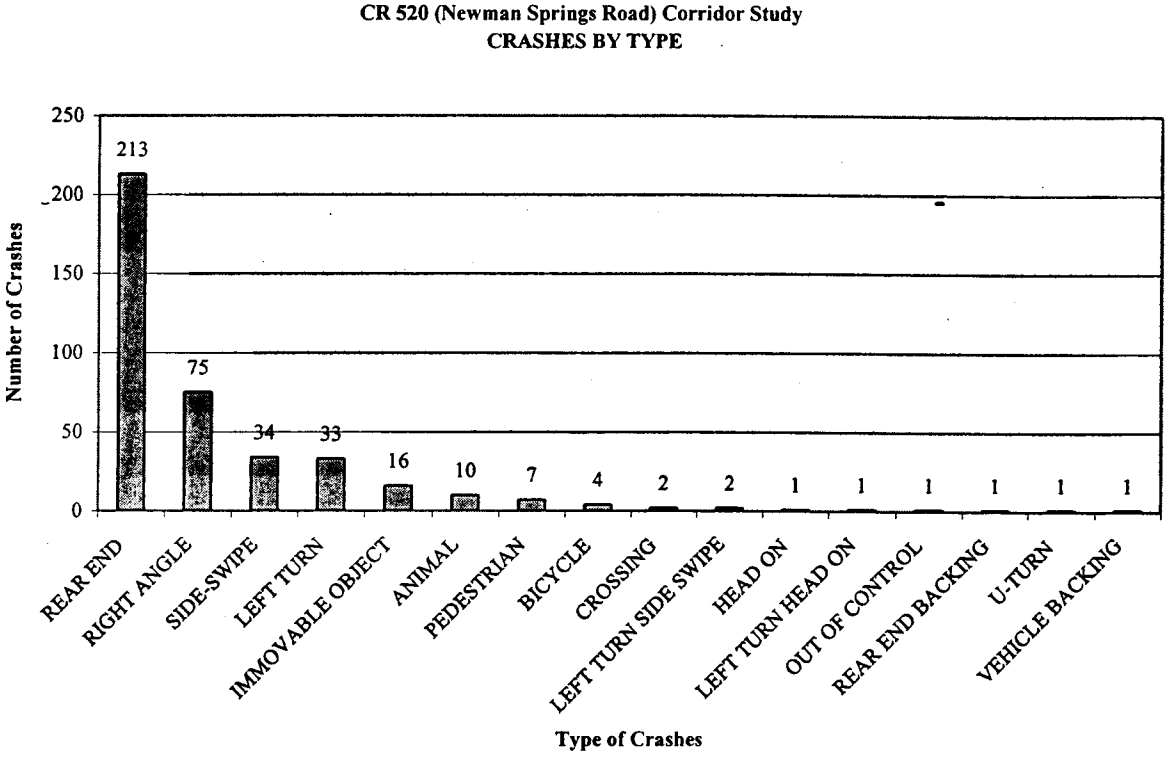
CR 520 (Newman Springs Road) Corridor Study
CRASHES PER SURFACE CONDITION



Types of Crashes

Table IX summarizes the types of crashes occurring along the corridor.

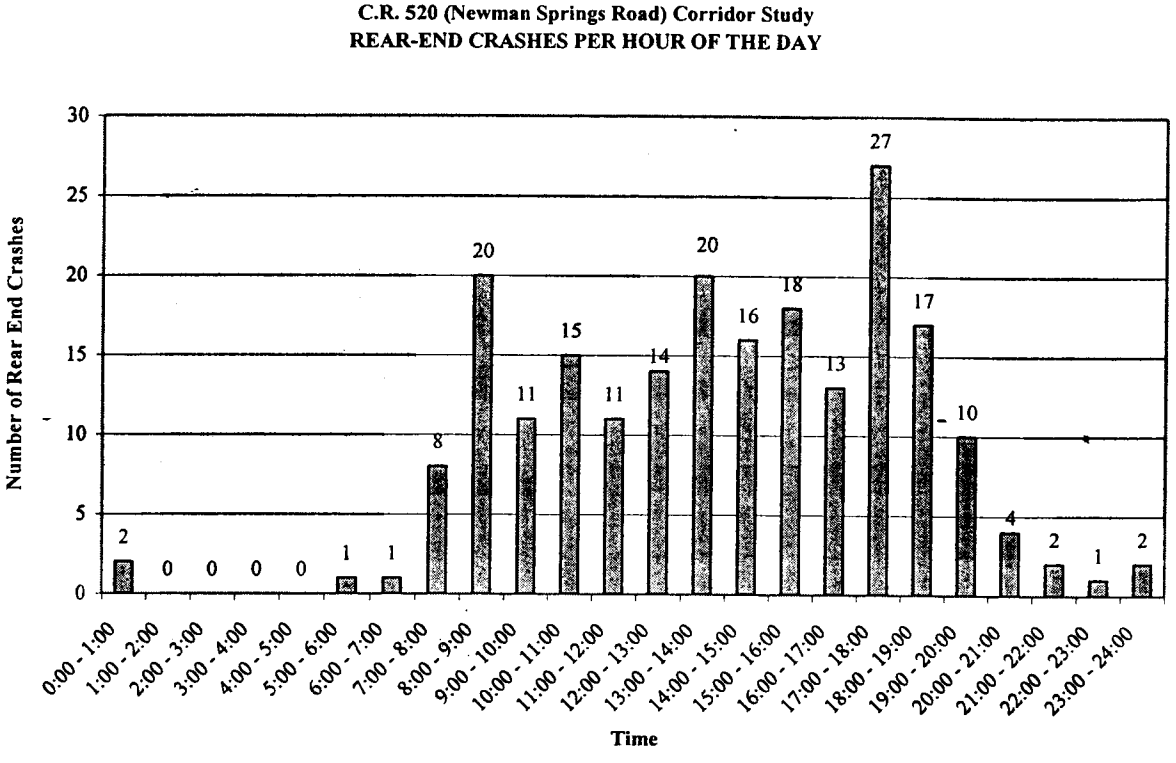
Table IX – Crashes By Type



As can be seen on the above chart (Table IX), 213 (53%) of the reportable crashes along the entire study corridor have been rear-end crashes, 75 (19%) have been right-angle crashes, and approximately 8 percent each have been side-swipes or vehicles making a left turn. It is worthy to note that most rear-ended crashes occurred during or close to the morning (8:00 AM to 9:00 AM), midday (1:00 PM to 2:00 PM), and evening peak hours (5:00 PM to 6:00 PM) (See Table X).

In addition, out of the 402 reportable crashes, there was one crash that involved a fatality. This was at the intersection of Leighton Avenue and CR 520.

Table X – Rear-End Crashes Per Hour of the Day



Crash Trends by Location

Locations of different crashes that occurred within the study corridor were also analyzed. The analysis showed that 36 percent of the total number of crashes (1997-2000) occurred within the immediate vicinity of intersections, while 64 percent of the crashes occurred in between two intersections. A detailed description of the number of crashes by mid-block and intersections can be found in the appendix.

Table XI and XII illustrate the number of crashes that occurred for key intersections and at key mid-block (between intersections). For the data that was collected during the three-year period (1997-2000), the intersection of Shrewsbury Avenue (CR 13) and CR 520 had the highest total number of crashes with 19, while for the mid-block, the roadway (CR 520) section between Swimming River Road and Rose Street had the highest number of crashes with 35.

Table XI

Crashes By Intersection

Location	# of Crashes
Half-Mile Road	31
Hance Avenue	21
Shrewsbury Avenue	16
Phalanx Road	15
Middletown-Lincroft Road / Swimming River Road	13
Springdale	13
Leighton	13
Hurleys Lane	11
Knight Street	11
Brookdale Community College	10

Table XII

Crashes by Mid-block

Location	# of Crashes
Middletown-Lincroft Road to Rose Street	35
Clinton Place to Shrewsbury Avenue	19

Specific Crash Patterns

Identifying the locations of high frequency crashes is valuable in determining where to spend efforts and resources for crash prevention measures. Identifying specific crash patterns and possible contributing causes will maximize potential for success.

Of the total of 402 reportable crashes, the following is a list of site-specific high crash locations and comments noted as a result of field visits:

Table XIII

Specific Crash Patterns

Crash Type	Location	# of Crashes/ % of total	Comments
Rear Ends	Between Clinton Place & Springdale Avenue	36 (9.0 %)	4-lane pattern requires left turning vehicles to wait in the through lane for an adequate gap in opposing traffic. 14 of the crashes involved injuries.
Right Angle	Driveways east of Swimming River Road	13 (3.2%)	Crossing maneuvers are difficult because of high volumes and multiple lanes. There are multiple driveways in close proximity to the stop line.
Rear Ends	EB at Shrewsbury Avenue	10 (2.5%)	Congested intersection – long queue lengths – no shoulder.
Rear Ends	WB at Half-Mile Road	10 (2.5%)	Congested area – no shoulder.
Rear Ends	At Knight Street	9 (2.2%)	4-lane pattern requires left turning vehicles to wait in through lane for adequate gap in opposing traffic.
Rear Ends	WB at Schultz Drive	7 (1.7%)	Stopping Sight Distance adequate but partially restricted by vegetation on the north side of Newman Springs Road approaching the intersection.
Left Turns	WB at Hance Avenue	6 (1.5%)	There is adequate Stopping Sight Distance available.
Rear Ends	EB at Hance Avenue	6 (1.5%)	There is adequate Stopping Sight Distance available.