Spot Safety Project Evaluation

Project Log # 200811216

Spot Safety Project # 07-00-204 & 07-99-221

Spot Safety Project Evaluation of the Traffic Signal and Left Turn Lane Installation
US 158 and SR 1001 (Church Street / Woolen Store Road)
Midway Crossroads, Rockingham County

Documents Prepared By:

Safety Evaluation Group
Traffic Safety Systems Management Section
Transportation Mobility and Safety Division
North Carolina Department of Transportation

Principal Investigator

_____ 5-28-2009

Jason B. Schronce Date

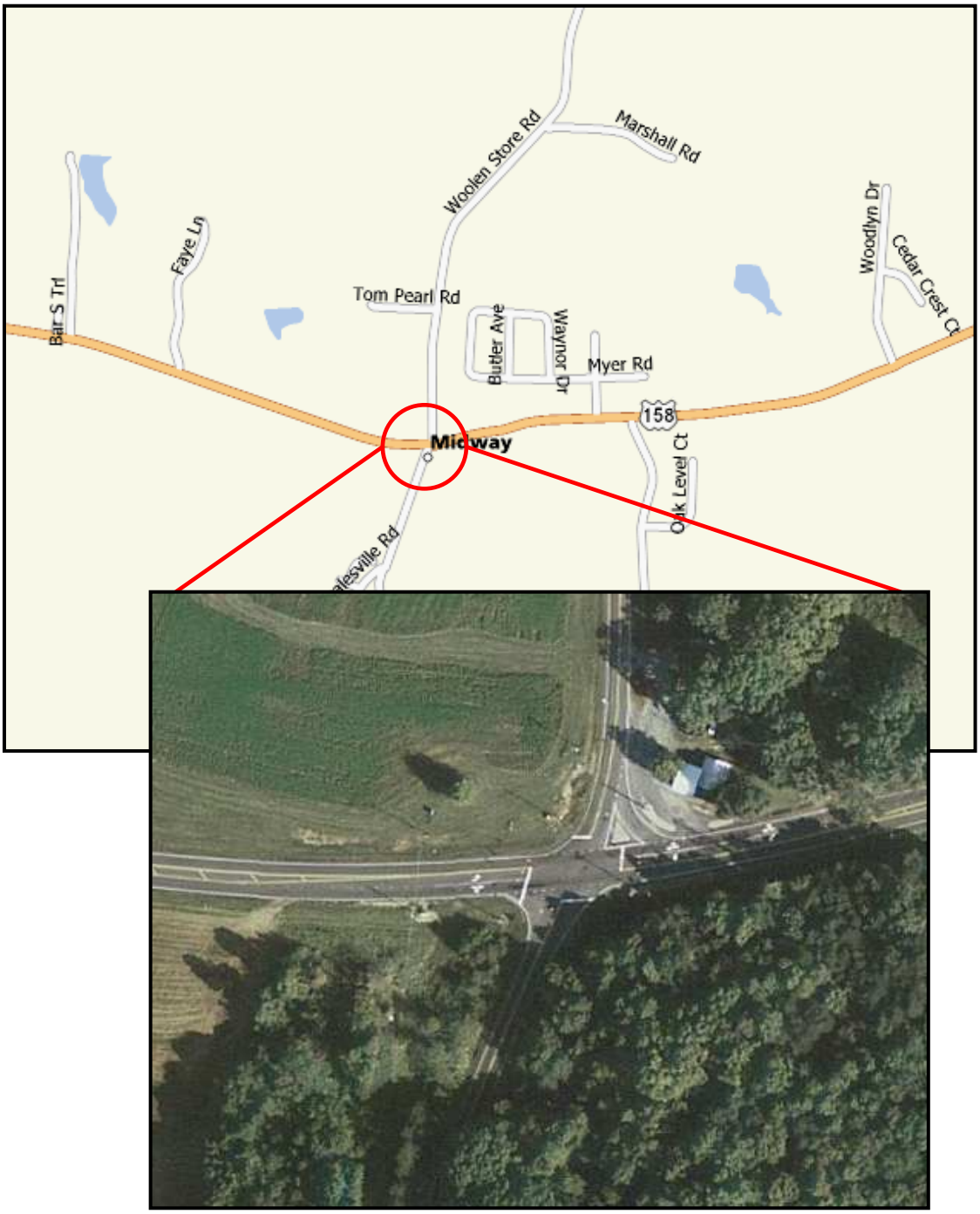
Traffic Safety Project Engineer

Spot Safety Project Evaluation Documentation

Subject Location

Evaluation of Spot Safety Project Number 07-00-204 and 07-99-221 located at the Intersection of US 158 and SR 1001 (Church Street / Woolen Store Road) in Rockingham County.

The Sig ID is 07-1998 for this newly installed traffic signal.



Project Information and Background from the Project File Folder

The spot safety project improvement countermeasures chosen for the subject location were the installation of US 158 left turn lanes (Spot Safety 07-99-221) and an intersection traffic signal (Spot Safety 07-00-204). In the before period, US 158 and SR 1001 were both two-lane facilities at the subject intersection with no turn lanes and speed limits of 55 mph and 50 mph respectfully. The subject location is a four-leg crossroads intersection, which was controlled by stop signs on the SR 1001 approaches.

The original statement of problem for the left turn lane installation (SS-07-99-211) was that vehicles on US 158 were experiencing delays when attempting to make left turns. This has lead to queuing on a high speed facility resulting in rear-end type collisions. The intended purpose was to reduce the delay and alleviate the potential for a rear-end crash pattern.

The justification and statement of problem for the signal installation (SS-07-00-204) was that vehicles on SR 1001 could not safely access the intersection or cross US 158 due to insufficient gaps in traffic. This has created an angle crash pattern especially for northbound SR 1001 vehicles. The intersection met signal warrants 9 and 11.

The after period intersection design integrated multiple warning devices including "Signal Ahead" US 158 pavement markings, US 158 advanced signal heads on both approaches, and Signal Ahead Warning Signs on all approaches. Also, a westbound US 158 right turn slip lane was installed.

The initial crash analysis for both projects was completed from August 1, 1996 to July 31, 1999 with eleven (11) reported crashes, six (6) of which were deemed combined correctable. The final completion date for the improvements at the subject intersection based off crash data was during June 2003 with a total combined cost of $180,000.00.

Naive Before and After Analysis

After reviewing the spot safety project file folder along with all the crashes at the subject location, the crash data omitted from this analysis to consider for an adequate construction period for both countermeasures was the months of March through June 2003. The before period consisted of reported crashes from June 1, 1997 through February 28, 2003 (5 years and 9 months); and the after period consisted of reported crashes from July 1, 2003 through March 31, 2009 (5 years and 9 months). The ending date for this analysis was determined by the date of available crash data at the time of analysis.

The treatment data consisted of all crashes within 150 feet of the subject intersection. *Please see attached location map, aerial map, and photos for further details.*

The following data table depicts the Naive Before and After Analysis for the treatment location. Please note that NC 158 Rear-End Crashes (labeled in green) were the target crashes for the left turn lane installation. Also, Frontal Impact Crashes were the target crashes for the new signal installation (labeled in red). The Frontal Impact Crash types considered are as follows: Left turn, same roadway; Left turn, different roadways; Right turn, same roadway; Right turn, different roadways; Head on; and Angle.

Treatment Information	Before	After	Percent Reduction (-) Percent Increase (+)
Total crashes	33	12	- 63.6 %
Total Severity Index	4.36	11.02	152.8 %
Left Turn Target Crashes	6	0	- 100.0 %
Left Turn Target Crash Severity Index	2.23	0.00	- 100.0 %
Signal Target Crashes	20	5	- 75.0 %
Signal Target Crash Severity Index	5.81	20.60	200+ %
Volume	8,100	7,300	- 9.9 %

Injury Crash Summary	Before	After	Percent Reduction (-) Percent Increase (+)
Fatal injury Crashes	0	1	100.0 %
Class A injury Crashes	0	0	N/A
Class B injury Crashes	7	2	- 71.4 %
Class C Injury Crashes	8	4	- 50.0 %
Total Injury Crashes	15	7	- 53.3 %

The naive before and after analysis at the treatment location resulted in a 64 percent decrease in Total Crashes, an 81 percent decrease in Combined Target Crashes, but over 100 percent increase in the Total Severity Index. The before period ADT year was 2000 and the after period ADT year was 2006.

Results and Discussion

The naive before and after analysis involving the comparison of treatment actual before data versus treatment actual after data resulted in a 64 percent decrease in Total Crashes and an 81 percent decrease in Combined Target Crashes. The summary results above demonstrate that both Total Crashes and Target Crashes appear to have decreased at the treatment location from the before to the after period.

Referencing the *Collision Diagrams*, the before period was experiencing a significant angle crash pattern from vehicles on SR 1001 improperly crossing US 158. Only two (2) of the before period frontal impact collisions resulted from vehicles on SR 1001 running the stop sign; one of which was at night and heavy fog. After the signal installation, frontal impact crashes reduced by 75 percent with all five (5) after period angle collisions resulting from vehicles running the red light. Of these red light violation crashes, four (4) occurred on US 158 and the DWI fatal on SR 1001. Overall, the signal has been successful in reducing the number of intersection angle collisions.

The addition of the US 158 left turn lanes did completely eliminate the mainline rear-end crash pattern. In the before period, four rear-end collisions occurred to vehicles waiting to turn left and two additional collisions took place in the queue.

The calculated benefit to cost ratio for this project is (**-1.64) considering total crashes**. The benefit to cost ratio **considering only combined target crashes is (-1.48)**. The benefits are calculated using the change in annual crash costs from the before to the after period. Operational and other benefits related to the project are not considered in this analysis. The costs of the project include the actual construction costs as well as the increase in annual maintenance and utility costs.

The negative benefit-cost ratio shown above stems from the existence of an after period fatal collision at this location. The Safety Evaluation Group reviewed the fatal investigation report and found that no roadway fault was discovered to attribute to this collision. The fatal angle crash occurred from a motorist running a red-light while driving impaired with an open container in the vehicle. The occupants were also not wearing seatbelts and driving a late model pick-up truck without airbags. All intersection safety measures and signal operation were found to be in working order and in good condition.

Please see the attached *Treatment Site Photos*. Photos are provided for all four approaches to the treatment intersection. As the Safety Evaluation Group completes additional spot safety reviews for this type of countermeasure, we will be able to provide objective and definite information regarding actual crash reduction factors for this type of intersection.

TREATMENT SITE PHOTOS TAKEN 1/26/2009

Traveling East on US 158

Traveling East on US 158 – notice advanced signal head

Traveling West on US 158 – Pavement Markings & Advanced Signal Head

Traveling West on US 158 – Right Turn Slip Lane under Yield Control

Traveling North on SR 1001 (Church Street) – notice vertical curvature

Traveling North on SR 1001

Traveling South on SR 1001 (Woolen Store Road)

Traveling South on SR 1001

BENEFIT-COST ANALYSIS WORKSHEET - Total Crashes

LOCATION: US 158 at SR 1001 | BY: JBS
COUNTY: Rockingham | DATE: 5/28/2009
FILE NO.: SS 07-00-204 | NOTES: Total Crashes

DETAILED COST: TYPE IMPROVEMENT - US 158 Left Turn Lanes & New Signal

ITEMS	TOTAL	SERVICE	CRF	ANNUAL COST
Construction	$180,000	10	0.149	$26,825
	$0	0	0.000	$0
Right-of-Way	$0	0	0.000	$0
TOTALS	$180,000	10	0.149	$26,825

ESTIMATED INCREASE IN ANNUAL MAINT. COST = $2,800
ESTIMATED INCREASE IN ANNUAL UTILITY COST = $900

TOTAL ANNUAL COST= $30,525
TOTAL COST OF PROJECT= $180,000

COMPREHENSIVE COST REDUCTION:

ESTIMATED NUMBER OF ANNUAL ACCIDENT DECREASES

TIME PERIOD	YEARS	K & A CRASHES	K & A CRASHES PER YR	B & C CRASHES	B & C CRASHES PER YR	PDO CRASHES	PDO CRASHES PER YR	ANNUAL COSTS
BEFORE	5.75	0	0.00	15	2.61	18	3.13	$59,165
AFTER	5.75	1	0.17	6	1.04	5	0.87	$109,130

Annual Benefits from Crash Cost Savings ($49,965)

NET AVG. ANNUAL BENEFITS = AVG. ANNUAL BENEFITS - TOTAL ANNUAL COST = ($80,491)

BENEFIT-COST RATIO = AVG ANNUAL BENEFITS/TOTAL ANNUAL COST = -1.64

TOTAL COST OF PROJECT - $180,000 COMPREHENSIVE B/C RATIO - -1.64

BENEFIT-COST ANALYSIS WORKSHEET - Combined Target Crashes

LOCATION: US 158 at SR 1001 | BY: JBS
COUNTY: Rockingham | DATE: 5/28/2009
FILE NO.: SS 07-00-204 | NOTES: Target Crashes - Combined

DETAILED COST: TYPE IMPROVEMENT - US 158 Left Turn Lanes & New Signal

ITEMS	TOTAL	SERVICE	CRF	ANNUAL COST
Construction	$180,000	10	0.149	$26,825
	$0	0	0.000	$0
Right-of-Way	$0	0	0.000	$0
TOTALS	$180,000	10	0.149	$26,825

ESTIMATED INCREASE IN ANNUAL MAINT. COST = $2,800
ESTIMATED INCREASE IN ANNUAL UTILITY COST = $900

TOTAL ANNUAL COST= $30,525
TOTAL COST OF PROJECT= $180,000

COMPREHENSIVE COST REDUCTION:

ESTIMATED NUMBER OF ANNUAL ACCIDENT DECREASES

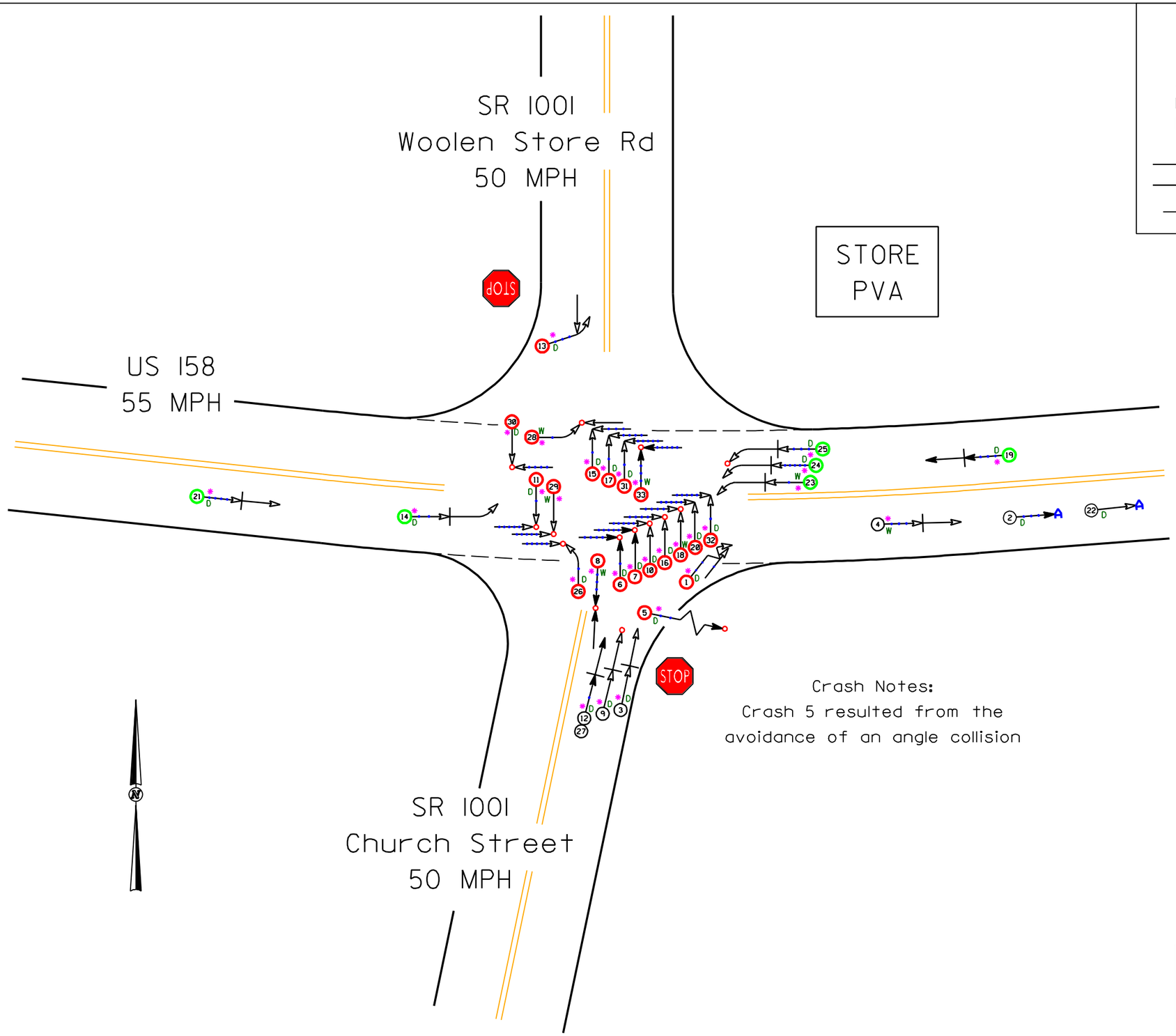
TIME PERIOD	YEARS	K & A CRASHES	K & A CRASHES PER YR	B & C CRASHES	B & C CRASHES PER YR	PDO CRASHES	PDO CRASHES PER YR	ANNUAL COSTS
BEFORE	5.75	0	0.00	14	2.43	12	2.09	$51,965
AFTER	5.75	1	0.17	3	0.52	1	0.17	$97,026

Annual Benefits from Crash Cost Savings ($45,061)

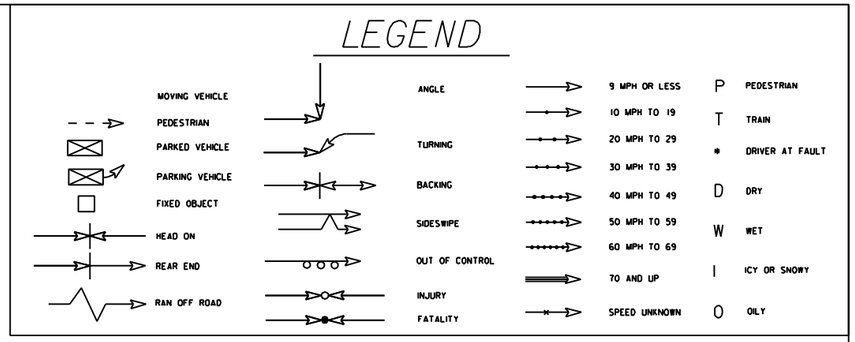
NET AVG. ANNUAL BENEFITS = AVG. ANNUAL BENEFITS - TOTAL ANNUAL COST = ($75,586)

BENEFIT-COST RATIO = AVG ANNUAL BENEFITS/TOTAL ANNUAL COST = -1.48

TOTAL COST OF PROJECT - $180,000 COMPREHENSIVE B/C RATIO - -1.48



Crash Notes:
Crash 5 resulted from the avoidance of an angle collision



SS# 07-00-204
SS# 07-99-221
Rockingham County
BEFORE Period
6/1/97 - 2/28/03

Left Turn Lane Target Crashes

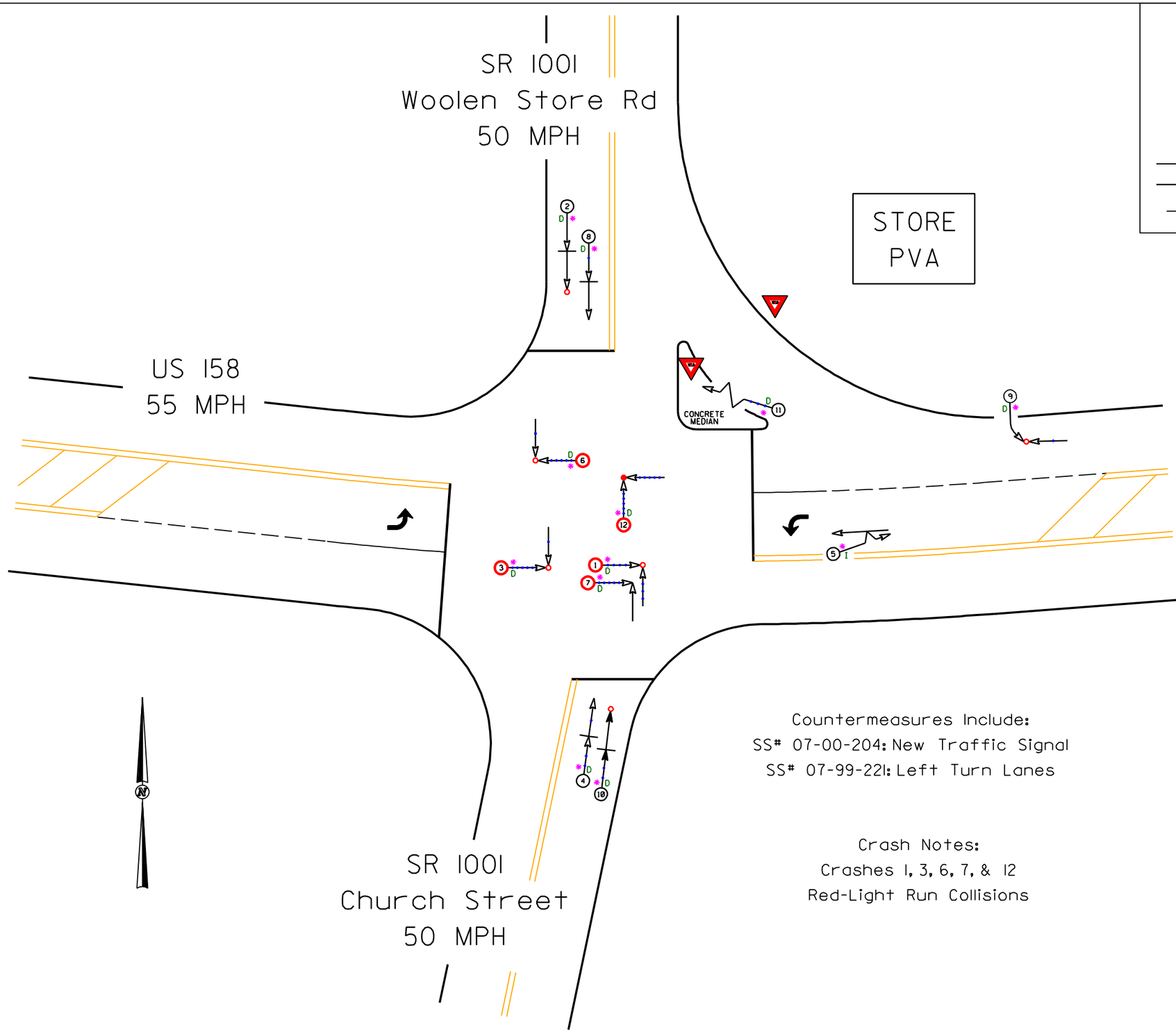
Traffic Signal Target Crashes

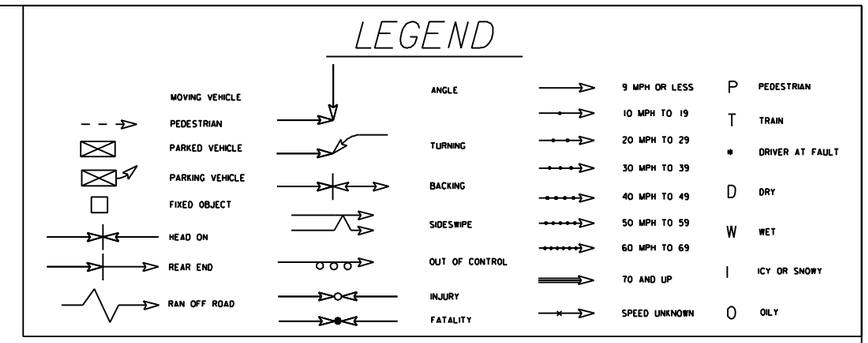
TRAFFIC SAFETY SYSTEMS MANAGEMENT UNIT

COLLISION DIAGRAM

DIVISION: 7	AREA:
STUDY PERIOD: 6/1/1997 - 2/28/03	
DISTANCE: Y-LINE : 150FT	
ANALYSIS PREPARED BY: JBS	
ANALYSIS CHECKED BY: N/A	
DIAGRAM PREPARED BY: JBS	
DIAGRAM REVIEWED BY: ST	
SCALE: NOT TO SCALE	
DATE: 5-27-2009	
LOG NUMBER: SS# 07-00-204 BEFORE	

N.C. DEPARTMENT of TRANSPORTATION
DIVISION of HIGHWAYS
TRANSPORTATION MOBILITY and SAFETY DIVISION





SS# 07-00-204
SS# 07-99-221
Rockingham County
AFTER Period
7/1/03 - 3/31/09

R New Signalized
Y Intersection
G Sig ID 07-1998

Countermeasures Include:
SS# 07-00-204: New Traffic Signal
SS# 07-99-221: Left Turn Lanes

Crash Notes:
Crashes 1, 3, 6, 7, & 12
Red-Light Run Collisions

Left Turn Lane Target Crashes

Traffic Signal Target Crashes

TRAFFIC SAFETY SYSTEMS MANAGEMENT UNIT

COLLISION DIAGRAM	
DIVISION: 7	AREA:
STUDY PERIOD: 7/1/2003 - 3/31/2009	
DISTANCE: Y-LINE = 150FT	
ANALYSIS PREPARED BY: JBS	
ANALYSIS CHECKED BY: N/A	
DIAGRAM PREPARED BY: JBS	
DIAGRAM REVIEWED BY: ST	
SCALE: NOT TO SCALE	
DATE: 5-27-2009	
LOC NUMBER: SS# 07-00-204 AFTER	

N.C. DEPARTMENT of TRANSPORTATION
DIVISION of HIGHWAYS
TRANSPORTATION MOBILITY and SAFETY DIVISION

North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Intersection Analysis Report

Study Criteria Summary

County: ROCKINGHAM **City:** All and Rural
Date: 6/1/1997 **to** 2/28/2003 **Study:** 0700204BEFORE
Location: US-158 at SR 1001

Report Details

Acc No	Crash ID	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
1	**97126873**	07/05/1997 14:50	RIGHT TURN, SAME ROADWAY	$ 6328	0	0	0	0	1	1	1	5	0	1	1
Unit	**1 :** 32	**Alchl/Drgs:** 0	**Speed:** 80 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 80 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 7			**Obj Strk:**							
2	**97194431**	10/13/1997 22:30	ANIMAL	$ 2500	0	0	0	0	1	5	1	1	0	0	2
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 55 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:** 17							
3	**97246263**	12/16/1997 13:05	REAR END, SLOW OR STOP	$ 1000	0	0	0	0	1	1	1	2	0	1	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 1			**Obj Strk:**							
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
4	**98005148**	01/08/1998 16:00	REAR END, SLOW OR STOP	$ 2000	0	0	0	0	2	1	2	1	0	0	2
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 1			**Obj Strk:**							
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 50 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 11			**Obj Strk:**							
5	**98021435**	02/01/1998 19:00	RAN OFF ROAD - RIGHT	$ 4500	0	0	1	0	1	5	1	1	0	1	1
Unit	**1 :** 3	**Alchl/Drgs:** 0	**Speed:** 50 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:** 58							
6	**98211438**	11/02/1998 18:00	ANGLE	$ 4500	0	0	2	0	1	5	2	1	0	1	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 50 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
Unit	**2 :** 1	**Alchl/Drgs:** 7	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 7			**Obj Strk:**							
7	**98224874**	11/18/1998 19:00	ANGLE	$ 18000	0	0	0	1	1	5	1	5	0	1	1
Unit	**1 :** 2	**Alchl/Drgs:** 0	**Speed:** 55 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
Unit	**2 :** 3	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
8	**99005731**	01/09/1999 06:40	HEAD ON	$ 9500	0	0	2	0	2	5	5	5	0	1	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 1			**Obj Strk:**							
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							

Acc No	Crash ID	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
9	**99044439**	03/08/1999 16:15	REAR END, SLOW OR STOP	$ 1000	0	0	0	1	1	1	1	3	0	1	1
Unit	**1 : 1**	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 1				**Obj Strk:**						
Unit	**2 : 1**	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
10	**99093205**	05/17/1999 07:58	ANGLE	$ 8000	0	0	1	1	1	1	1	1	0	1	1
Unit	**1 : 5**	**Alchl/Drgs:** 0	**Speed:** 50 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
Unit	**2 : 1**	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
11	**99124498**	06/30/1999 14:00	ANGLE	$ 13000	0	0	2	0	1	1	1	7	0	1	1
Unit	**1 : 1**	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:** 33						
Unit	**2 : 1**	**Alchl/Drgs:** 0	**Speed:** 55 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
Unit	**3 : 1**	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 1				**Obj Strk:**						
12	**99181047**	09/17/1999 19:40	REAR END, SLOW OR STOP	$ 4000	0	0	0	0	1	5	1	3	0	1	1
Unit	**1 : 2**	**Alchl/Drgs:** 0	**Speed:** 2 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 1				**Obj Strk:**						
Unit	**2 : 1**	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
13	**99192172**	10/01/1999 15:20	LEFT TURN, DIFFERENT ROADWAYS	$ 7500	0	0	0	0	1	1	1	1	0	1	1
Unit	**1 : 2**	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 8				**Obj Strk:**						
Unit	**2 : 1**	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 12				**Obj Strk:**						
14	**99244161**	12/04/1999 14:15	REAR END, SLOW OR STOP	$ 4000	0	0	0	0	1	1	1	5	0	1	1
Unit	**1 : 2**	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 1				**Obj Strk:**						
Unit	**2 : 1**	**Alchl/Drgs:** 0	**Speed:** 55 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
15	**100047542**	03/08/2000 11:48	ANGLE	$ 2000	0	0	0	0	1	1	1	5	0	1	1
Unit	**1 : 1**	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
Unit	**2 : 1**	**Alchl/Drgs:** 0	**Speed:** 55 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
16	**100068229**	04/07/2000 10:26	ANGLE	$ 19000	0	0	1	0	1	1	1	5	0	1	1
Unit	**1 : 4**	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
Unit	**2 : 1**	**Alchl/Drgs:** 0	**Speed:** 55 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
17	**100114223**	06/09/2000 15:00	ANGLE	$ 8400	0	0	0	0	1	1	1	1	0	1	1
Unit	**1 : 1**	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
Unit	**2 : 1**	**Alchl/Drgs:** 0	**Speed:** 55 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						

Acc No	Crash ID	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
18	**100182309**	09/14/2000 08:10	ANGLE	$ 6000	0	0	0	2	2	1	2	1	0	1	1
Unit	**1 :** 2	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
19	**100210322**	10/20/2000 21:45	REAR END, SLOW OR STOP	$ 2700	0	0	0	0	1	5	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 1	**Speed:** 55 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:** 1	**Speed:** 55 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 1				**Obj Strk:**						
20	**100235257**	11/20/2000 14:50	ANGLE	$ 9200	0	0	0	0	1	1	1	1	0	1	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 55 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
21	**100320013**	03/22/2001 16:35	REAR END, SLOW OR STOP	$ 4500	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 5	**Alchl/Drgs:** 0	**Speed:** 55 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 1				**Obj Strk:**						
22	**100353511**	05/10/2001 07:05	ANIMAL	$ 3000	0	0	0	0	1	1	1		0		
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:** 17						
23	**100406870**	07/28/2001 12:30	REAR END, SLOW OR STOP	$ 1000	0	0	0	0	2	1	3	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 55 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 1				**Obj Strk:**						
24	**100408504**	07/31/2001 10:20	REAR END, SLOW OR STOP	$ 500	0	0	0	0	1	1	2	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 1				**Obj Strk:**						
Unit	**2 :** 32	**Alchl/Drgs:** 7	**Speed:** 55 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
25	**100457352**	10/06/2001 13:20	REAR END, TURN	$ 5200	0	0	0	1	1	1	2	1	0	1	1
Unit	**1 :** 2	**Alchl/Drgs:** 0	**Speed:** 55 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 8				**Obj Strk:**						
26	**100474633**	10/29/2001 15:20	LEFT TURN, DIFFERENT ROADWAYS	$ 15300	0	0	2	0	1	1	1	1	0	1	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 8				**Obj Strk:**						
Unit	**2 :** 4	**Alchl/Drgs:** 0	**Speed:** 55 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
Unit	**3 :** 2	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 1				**Obj Strk:**						

Acc No	Crash ID	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
27	**100505867**	12/05/2001 18:30	REAR END, SLOW OR STOP	$ 3800	0	0	0	0	1	5	1	1	0	1	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:**				11		**Obj Strk:**				
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:**				4		**Obj Strk:**				
28	**100535639**	01/11/2002 07:20	LEFT TURN, SAME ROADWAY	$ 2000	0	0	0	2	2	3	3	7	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:**				8		**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:**				4		**Obj Strk:**				
29	**100554082**	02/07/2002 12:10	ANGLE	$ 15500	0	0	0	1	2	1	3	1	0	1	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:**				4		**Obj Strk:**				
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 55 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:**				4		**Obj Strk:**		34		
30	**100636924**	06/05/2002 11:40	ANGLE	$ 12000	0	0	0	2	1	1	1	1	0	1	1
Unit	**1 :** 10	**Alchl/Drgs:** 0	**Speed:** 55 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:**				4		**Obj Strk:**				
Unit	**2 :** 5	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:**				4		**Obj Strk:**				
31	**100689678**	08/19/2002 14:26	ANGLE	$ 1000	0	0	0	0	1	1	1	1	0	1	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 55 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:**				4		**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 55 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:**				4		**Obj Strk:**				
32	**100707870**	09/12/2002 08:20	ANGLE	$ 4000	0	0	0	0	1	1	1	1	0	1	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:**				4		**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 55 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:**				4		**Obj Strk:**				
33	**100709627**	09/14/2002 21:17	ANGLE	$ 10500	0	0	0	1	2	5	3	1	0	1	1
Unit	**1 :** 5	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:**				4		**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 50 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:**				4		**Obj Strk:**				

Legend for Report Details:

Acc No - Accident Number
Injuries: F - Fatal, A - Class A, B - Class B, C - Class C
Condition: R - Road Surface, L - Ambient Light, W - Weather
Rd Ch - Road Character
Rd Ci - Roadway Contributing Circumstances
Trfc Ctl - Traffic Control: Dv - Device, Op - Operating
Alchl/Drgs - Alcohol Drugs Suspected
Veh Mnvr/Ped Actn - Vehicle Maneuver/Pedestrian Action
Obj Strk - Object Struck

Summary Statistics

High Level Crash Summary

Crash Type	Number of Crashes	Percent of Total
Total Crashes	33	100.00
Fatal Crashes	0	0.00
Non-Fatal Injury Crashes	15	45.45
Total Injury Crashes	15	45.45
Property Damage Only Crashes	18	54.55
Night Crashes	9	27.27
Wet Crashes	7	21.21
Alcohol/Drugs Involvement Crashes	1	3.03

Crash Severity Summary

Crash Type	Number of Crashes	Percent of Total
Total Crashes	33	100.00
Fatal Crashes	0	0.00
Class A Crashes	0	0.00
Class B Crashes	7	21.21
Class C Crashes	8	24.24
Property Damage Only Crashes	18	54.55

Vehicle Exposure Statistics

Annual ADT = 8100

Total Vehicle Exposure = 17 (MEV)

Crash Rate	Crashes Per 100 Million Vehicles Entered
Total Crash Rate	194.10
Fatal Crash Rate	0.00
Non Fatal Crash Rate	88.23
Night Crash Rate	52.94
Wet Crash Rate	41.17
EPDO Rate	846.96

Miscellaneous Statistics

Severity Index =	4.36
EPDO Crash Index =	144.00
Estimated Property Damage Total = $	211428.00

Accident Type Summary

Accident Type	Number of Crashes	Percent of Total
ANGLE	14	42.42
ANIMAL	2	6.06
HEAD ON	1	3.03
LEFT TURN, DIFFERENT ROADWAYS	2	6.06
LEFT TURN, SAME ROADWAY	1	3.03
RAN OFF ROAD - RIGHT	1	3.03
REAR END, SLOW OR STOP	10	30.30
REAR END, TURN	1	3.03
RIGHT TURN, SAME ROADWAY	1	3.03

Injury Summary

Injury Type	Number of Injuries	Percent of Total
Fatal Injuries	0	0.00
Class A Injuries	0	0.00
Class B Injuries	11	47.83
Class C Injuries	12	52.17
Total Non-Fatal Injuries	23	100.00
Total Injuries	23	100.00

Monthly Summary

Month	Number of Crashes	Percent of Total
Jan	3	9.09
Feb	2	6.06
Mar	3	9.09
Apr	1	3.03
May	2	6.06
Jun	3	9.09
Jul	3	9.09
Aug	1	3.03
Sep	4	12.12
Oct	5	15.15
Nov	3	9.09
Dec	3	9.09

Daily Summary

Day	Number of Crashes	Percent of Total
Mon	7	21.21
Tue	2	6.06
Wed	5	15.15
Thu	6	18.18
Fri	6	18.18
Sat	6	18.18
Sun	1	3.03

Hourly Summary

Hour	Number of Crashes	Percent of Total
0000-0059	0	0.00
0100-0159	0	0.00
0200-0259	0	0.00
0300-0359	0	0.00
0400-0459	0	0.00
0500-0559	0	0.00
0600-0659	1	3.03
0700-0759	3	9.09
0800-0859	2	6.06
0900-0959	0	0.00
1000-1059	2	6.06
1100-1159	2	6.06
1200-1259	2	6.06
1300-1359	2	6.06
1400-1459	5	15.15
1500-1559	3	9.09
1600-1659	3	9.09
1700-1759	0	0.00
1800-1859	2	6.06
1900-1959	3	9.09
2000-2059	0	0.00
2100-2159	2	6.06
2200-2259	1	3.03
2300-2359	0	0.00

Light and Road Conditions Summary

Condition	Dry	Wet	Other	Total
Day	19	4	0	23
Dark	7	2	0	9
Other	0	1	0	1
Total	26	7	0	33

Object Struck Summary

Object Type	Times Struck	Percent of Total
ANIMAL	2	40.00
DITCH	1	20.00
TREE	1	20.00
UTILITY POLE	1	20.00

Vehicle Type Summary

Vehicle Type	Number Involved	Percent of Total
LIGHT TRUCK (MINI-VAN, PANEL)	2	3.08
PASSENGER CAR	43	66.15
PICKUP	11	16.92
SINGLE UNIT TRUCK (2-AXLE, 6-TIRE)	1	1.54
SPORT UTILITY	2	3.08
UNKNOWN	2	3.08
VAN	4	6.15

Yearly Totals Summary

Accident Totals

Year	Total Accidents	Fatal Accidents	Injury Accidents	Property Damage Only Accidents
1997	3	0	0	3
1998	4	0	3	1
1999	7	0	4	3
2000	6	0	2	4
2001	7	0	2	5
2002	6	0	4	2
2003	0	0	0	0
Total	33	0	15	18

Injury Totals

Year	Fatal Injuries	Class A, B, or C Injuries
1997	0	0
1998	0	4
1999	0	7
2000	0	3
2001	0	3
2002	0	6
2003	0	0
Total	0	23

Miscellaneous Totals

Year	Property Damage	EPDO Index
1997	$ 9828	3.00
1998	$ 29000	26.20
1999	$ 47000	36.60
2000	$ 47300	20.80
2001	$ 33300	21.80
2002	$ 45000	35.60
2003	$ 0	0.00
Total	$ 211428	144.00

Type of Accident Totals

Year	Left Turn	Right Turn	Rear End	Run Off Road & Fixed Object	Angle	Side Swipe	Other
1997	0	1	1	0	0	0	1
1998	0	0	1	1	2	0	0
1999	1	0	3	0	2	0	1
2000	0	0	1	0	5	0	0
2001	1	0	5	0	0	0	1
2002	1	0	0	0	5	0	0
2003	0	0	0	0	0	0	0
Total	3	1	11	1	14	0	3

North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Intersection Analysis Report

Study Criteria Summary

County: ROCKINGHAM **City:** All and Rural
Date: 7/1/2003 **to** 3/31/2009 **Study:** 0700204AFTER
Location: US-158 at SR 1001

Report Details

Acc No	Crash ID	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
1	**100954243**	07/28/2003 16:20	ANGLE	$ 22500	0	0	2	0	1	1	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 55 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:** 34						
2	**100977985**	08/27/2003 16:15	REAR END, SLOW OR STOP	$ 1100	0	0	0	1	1	1	1	1	0	13	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
3	**100987403**	09/08/2003 12:33	ANGLE	$ 6000	0	0	0	2	1	1	1	1	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:** 0	**Speed:** 55 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
4	**101040515**	11/11/2003 13:30	LEFT TURN, SAME ROADWAY	$ 2000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** NW	**Veh Mnvr / Ped Actn:** 8				**Obj Strk:**						
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
5	**101061645**	12/04/2003 07:15	RIGHT TURN, DIFFERENT ROADWAYS	$ 2000	0	0	0	0	5	1	4	3	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 1				**Obj Strk:**						
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 7				**Obj Strk:**						
6	**101164402**	04/15/2004 17:15	ANGLE	$ 11000	0	0	0	4	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 55 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
Unit	**2 :** 4	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
7	**101187744**	05/14/2004 10:15	ANGLE	$ 1000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 14	**Alchl/Drgs:** 0	**Speed:** 55 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
8	**101301299**	10/05/2004 15:45	REAR END, TURN	$ 3500	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 7				**Obj Strk:**						
Unit	**2 :** 4	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 1				**Obj Strk:**						

Acc No	Crash ID	Date	Accident Type	Total Damage	Injuries F	Injuries A	Injuries B	Injuries C	Condition R	Condition L	Condition W	Road Ch	Road Ci	Trfc Ctl Dv	Trfc Ctl Op
9	**101408735**	02/12/2005 14:50	LEFT TURN, DIFFERENT ROADWAYS	$ 4500	0	0	1	1	1	1	1	1	0	13	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 20 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** SE	**Veh Mnvr / Ped Actn:** 8				**Obj Strk:**						
10	**101628563**	12/08/2005 17:40	REAR END, SLOW OR STOP	$ 1700	0	0	0	1	1	5	1	3	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 1				**Obj Strk:**						
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 11				**Obj Strk:**						
11	**101968147**	03/19/2007 10:41	FIXED OBJECT	$ 5100	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 11	**Alchl/Drgs:** 0	**Speed:** 55 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:** 38						
12	**102017851**	04/21/2007 17:15	ANGLE	$ 6000	1	1	2	0	1	1	1	1	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:** 0	**Speed:** 55 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:** 64						
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 55 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 4				**Obj Strk:**						

Legend for Report Details:

Acc No - Accident Number
Injuries: F - Fatal, A - Class A, B - Class B, C - Class C
Condition: R - Road Surface, L - Ambient Light, W - Weather
Rd Ch - Road Character
Rd Ci - Roadway Contributing Circumstances
Trfc Ctl - Traffic Control: Dv - Device, Op - Operating
Alchl/Drgs - Alcohol Drugs Suspected
Veh Mnvr/Ped Actn - Vehicle Maneuver/Pedestrian Action
Obj Strk - Object Struck

Summary Statistics

High Level Crash Summary

Crash Type	Number of Crashes	Percent of Total
Total Crashes	12	100.00
Fatal Crashes	1	8.33
Non-Fatal Injury Crashes	6	50.00
Total Injury Crashes	7	58.33
Property Damage Only Crashes	5	41.67
Night Crashes	1	8.33
Wet Crashes	0	0.00
Alcohol/Drugs Involvement Crashes	0	0.00

Crash Severity Summary

Crash Type	Number of Crashes	Percent of Total
Total Crashes	12	100.00
Fatal Crashes	1	8.33
Class A Crashes	0	0.00
Class B Crashes	2	16.67
Class C Crashes	4	33.33
Property Damage Only Crashes	5	41.67

Vehicle Exposure Statistics

Annual ADT = 7300

Total Vehicle Exposure = 15.34 (MEV)

Crash Rate	Crashes Per 100 Million Vehicles Entered
Total Crash Rate	78.24
Fatal Crash Rate	6.52
Non Fatal Crash Rate	39.12
Night Crash Rate	6.52
Wet Crash Rate	0.00
EPDO Rate	861.95

Miscellaneous Statistics

Severity Index =	11.02
EPDO Crash Index =	132.20
Estimated Property Damage Total = $	66400.00

Accident Type Summary

Accident Type	Number of Crashes	Percent of Total
ANGLE	5	41.67
FIXED OBJECT	1	8.33
LEFT TURN, DIFFERENT ROADWAYS	1	8.33
LEFT TURN, SAME ROADWAY	1	8.33
REAR END, SLOW OR STOP	2	16.67
REAR END, TURN	1	8.33
RIGHT TURN, DIFFERENT ROADWAYS	1	8.33

Injury Summary

Injury Type	Number of Injuries	Percent of Total
Fatal Injuries	1	6.25
Class A Injuries	1	6.25
Class B Injuries	5	31.25
Class C Injuries	9	56.25
Total Non-Fatal Injuries	15	93.75
Total Injuries	16	100.00

Monthly Summary

Month	Number of Crashes	Percent of Total
Jan	0	0.00
Feb	1	8.33
Mar	1	8.33
Apr	2	16.67
May	1	8.33
Jun	0	0.00
Jul	1	8.33
Aug	1	8.33
Sep	1	8.33
Oct	1	8.33
Nov	1	8.33
Dec	2	16.67

Daily Summary

Day	Number of Crashes	Percent of Total
Mon	3	25.00
Tue	2	16.67
Wed	1	8.33
Thu	3	25.00
Fri	1	8.33
Sat	2	16.67
Sun	0	0.00

Hourly Summary

Hour	Number of Crashes	Percent of Total
0000-0059	0	0.00
0100-0159	0	0.00
0200-0259	0	0.00
0300-0359	0	0.00
0400-0459	0	0.00
0500-0559	0	0.00
0600-0659	0	0.00
0700-0759	1	8.33
0800-0859	0	0.00
0900-0959	0	0.00
1000-1059	2	16.67
1100-1159	0	0.00
1200-1259	1	8.33
1300-1359	1	8.33
1400-1459	1	8.33
1500-1559	1	8.33
1600-1659	2	16.67
1700-1759	3	25.00
1800-1859	0	0.00
1900-1959	0	0.00
2000-2059	0	0.00
2100-2159	0	0.00
2200-2259	0	0.00
2300-2359	0	0.00

Light and Road Conditions Summary

Condition	Dry	Wet	Other	Total
Day	10	0	1	11
Dark	1	0	0	1
Other	0	0	0	0
Total	11	0	1	12

Object Struck Summary

Object Type	Times Struck	Percent of Total
OFFICIAL HIGHWAY SIGN BREAKAWAY	1	33.33
OTHER FIXED OBJECT	1	33.33
UTILITY POLE	1	33.33

Vehicle Type Summary

Vehicle Type	Number Involved	Percent of Total
PASSENGER CAR	7	30.43
PICKUP	10	43.48
SINGLE UNIT TRUCK (3 OR MORE AXLES)	1	4.35
SPORT UTILITY	4	17.39
TRACTOR/SEMI-TRAILER	1	4.35

Yearly Totals Summary

Accident Totals

Year	Total Accidents	Fatal Accidents	Injury Accidents	Property Damage Only Accidents
2003	5	0	3	2
2004	3	0	1	2
2005	2	0	2	0
2006	0	0	0	0
2007	2	1	0	1
2008	0	0	0	0
2009	0	0	0	0
Total	12	1	6	5

Injury Totals

Year	Fatal Injuries	Class A, B, or C Injuries
2003	0	5
2004	0	4
2005	0	3
2006	0	0
2007	1	3
2008	0	0
2009	0	0
Total	1	15

Miscellaneous Totals

Year	Property Damage	EPDO Index
2003	$ 33600	27.20
2004	$ 15500	10.40
2005	$ 6200	16.80
2006	$ 0	0.00
2007	$ 11100	77.80
2008	$ 0	0.00
2009	$ 0	0.00
Total	$ 66400	132.20

Type of Accident Totals

Year	Left Turn	Right Turn	Rear End	Run Off Road & Fixed Object	Angle	Side Swipe	Other
2003	1	1	1	0	2	0	0
2004	0	0	1	0	2	0	0
2005	1	0	1	0	0	0	0
2006	0	0	0	0	0	0	0
2007	0	0	0	1	1	0	0
2008	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0
Total	2	1	3	1	5	0	0