



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
REGION ONE TRAFFIC OFFICE  
P.O. Box 58, Knoxville, TN 37901  
(865) 594-2456

**MEMORANDUM**

TO: Mr. Brian Hurst, TDOT Safety Planning Office

FROM: Nathan Vatter, Region 1 Traffic Office NV

DATE: December 15, 2010

RE: **NHTSA Project**  
**State Route 71 (US 441) from Evans Rd, LM 0.75 (Knox Co) to**  
**Burnett Ln, LM 0.152 (Sevier Co).**  
**Knox and Sevier County**

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Enclosed is a NHTSA Funding request for the subject location.

The Department has received requests from Representative Richard Montgomery and Knox County Commissioners requesting improvements at the intersection of State Route 71, Chapman Hwy US 441 in Knox County. Following these requests, the Regional Traffic Office has conducted a traffic study and found the following: intersection needs to be widened in order to implement several geometric improvements. As part of the study, a traffic signal warrant analysis was performed that concluded the intersection did not meet for signalization. The crash analysis further demonstrated the intersection's crash ratio is 5.49 actual/state and 2.12 actual/critical.

After discussing the improvements to the intersection with the Region 1 Director, Mr. Steve Borden, and Assistant Director, Ms. Amanda Snowden, they have suggested the improvements be implemented on a longer section of the State Route. The section's crash ratio is 0.48 actual/state and 0.40 actual/critical. Even though the crash ratio is low, the section of State Route 71 has experienced 2 fatal crashes and 11 incapacitating crashes.

Due to these findings, the Regional Traffic Office is submitting this location for NHTSA Funding for geometric improvements on the 4,500 ft section of Chapman Hwy. These improvements are to be let to contract for construction.

If I can be of further assistance, please let me know.

NV/ap

Enclosure: NHTSA Application  
Location Map  
Accident Information  
Proposed Improvements

## APPLICATION FOR NHTSA IMPROVEMENT PROJECT

**County/City:** Knox/Blount/Sevier **Route/Road:** State Route 71 (US 441), Chapman Hwy from Evans Rd, LM 0.75 (Knox Co) to Burnett Ln, LM 0.152 (Sevier Co).

**Project Termini/Description:** Project includes geometric improvements at the intersection of State Route 71 with Simpson Rd. The geometric improvements include:

- Left-turn lane on SR 71.
- Widening of Chapman Hwy to accommodate

In addition to those improvements to the intersection, the Regional Traffic Office is recommending that the section from Evans Rd, LM 0.75 (Knox Co) to Burnett Ln, LM 0.152 (Sevier Co) be widened to a 5-lane section .

**Problem:** This section experiences safety concerns, because the motorists on Chapman Hwy attempting left-turns onto the side street or into business and churches. Due to the current conditions, Chapman Highway experiences a crash rate 5.49 times the state rate and 2.12 times the critical rate.

**Proposed Solution:** Constructing geometric improvements at including widening the 4-lane section to a 5-lane section.

**Note: Attach maps, sketches, pictures, etc. as supporting documentation**

**Traffic:** 2010 ADT: 27,600

**Crash Data:** Crash Rate = 0.713 Acc/ MV  
State Ave = 0.130 Acc/ MV      Critical = 0.337 Acc/MV  
Crash Rate is 2.12 times the Critical Rate and 5.49 times the State Rate.

**Estimated Cost:** \$2,000,000.00 for the section from Evans Rd, LM 0.75 (Knox Co) to Burnett Ln, LM 0.152 (Sevier Co), which includes the intersection with Simpson Rd.

**Work Performed By: (Please Check One)**

☐ **Local Agency**    ☐ **State Maintenance Forces**    ☒ **State Let to Contract**

**Remarks:** ADDITIONAL RIGHT-OF-WAY IS NEEDED

**Submitted By:** NATHAN VATTER      **Date:** 12/16/2010

**Title:** REGIONAL TRAFFIC ENGINEER

**Recommended By:**

**Environment & Planning Bureau:** \_\_\_\_\_

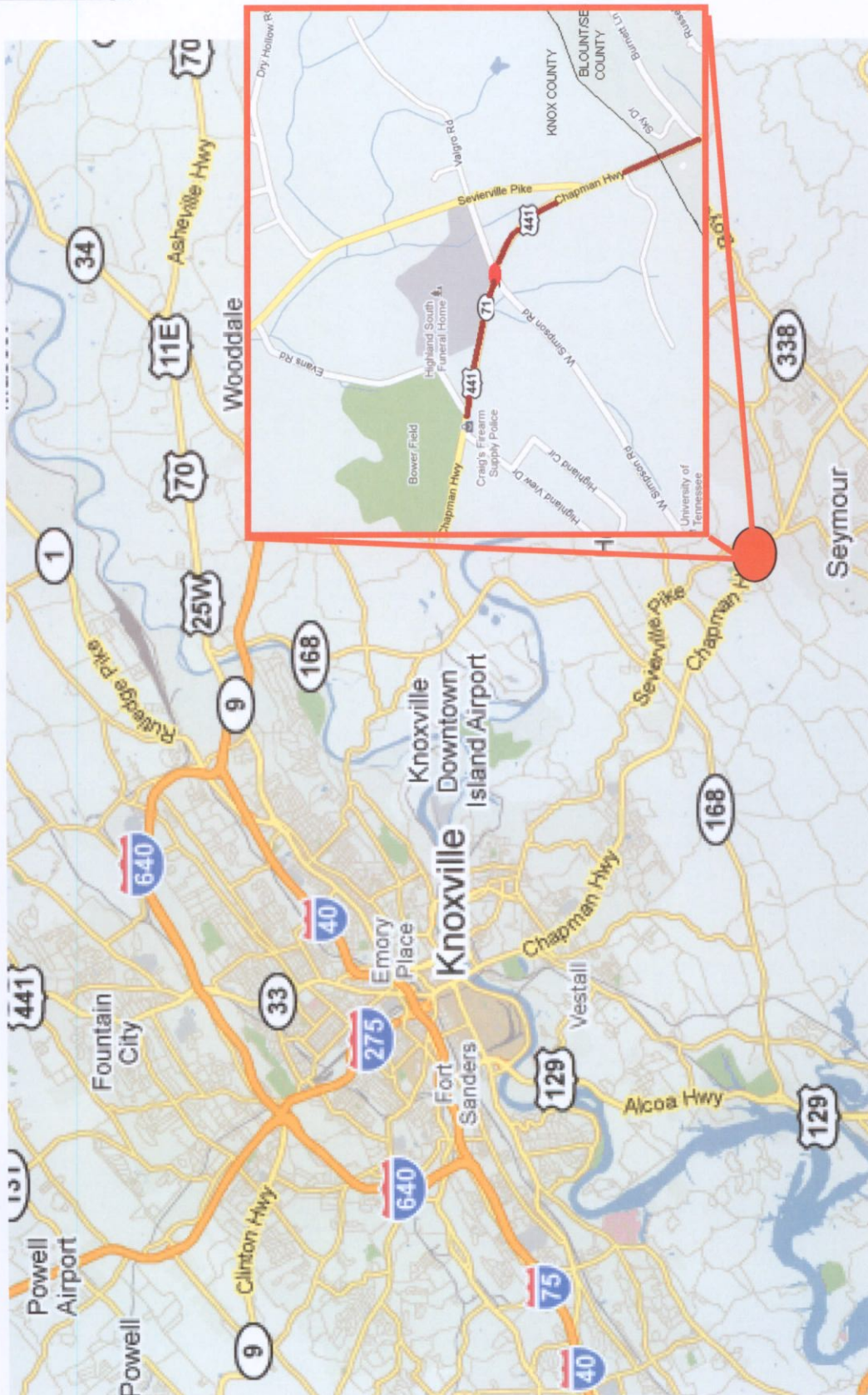
**Design/Operations Bureau:** \_\_\_\_\_

**Approved By Chairman:**

**Chief Engineer:** \_\_\_\_\_ **Date:** \_\_\_\_\_

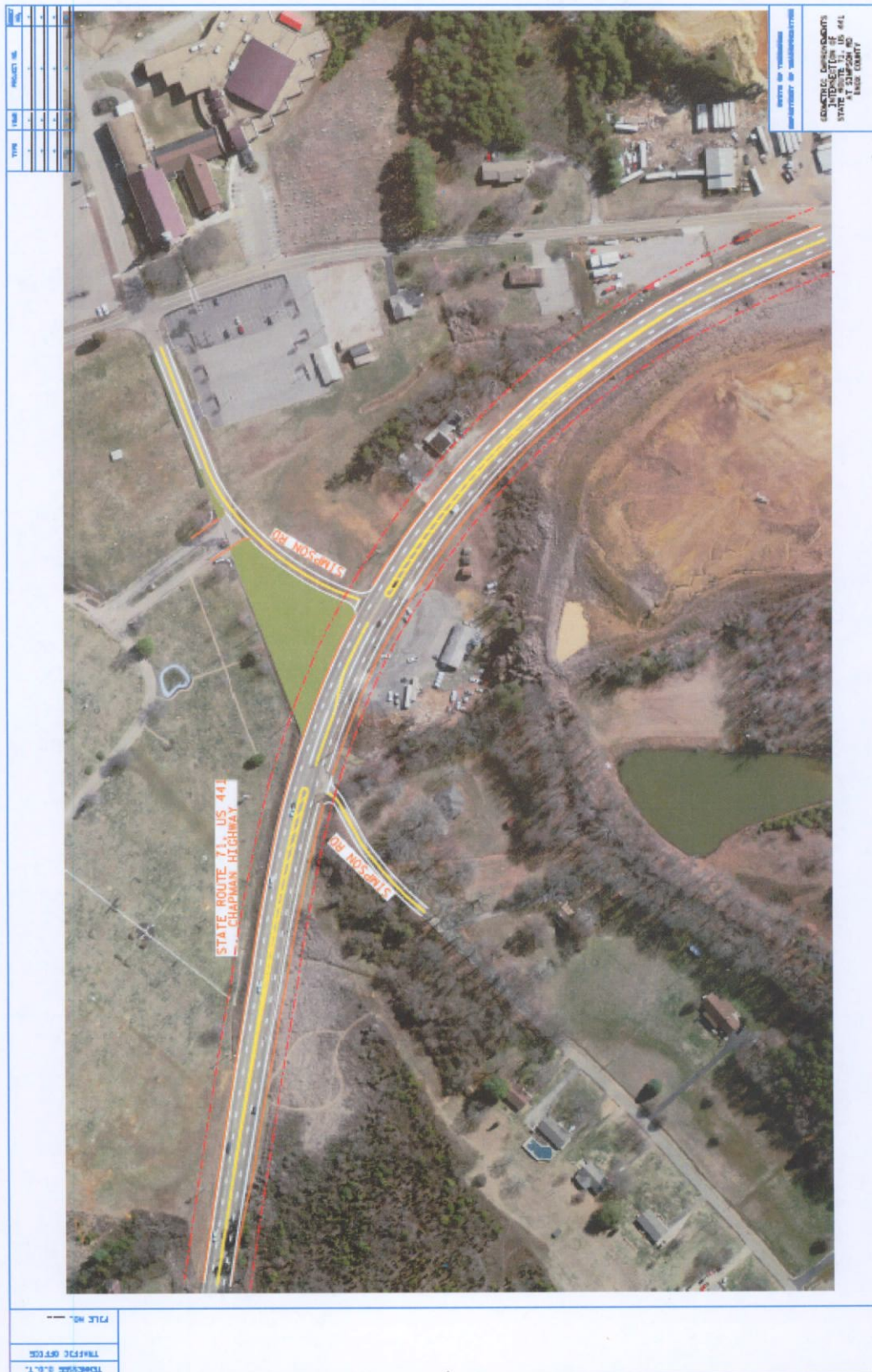


**Location Map:**



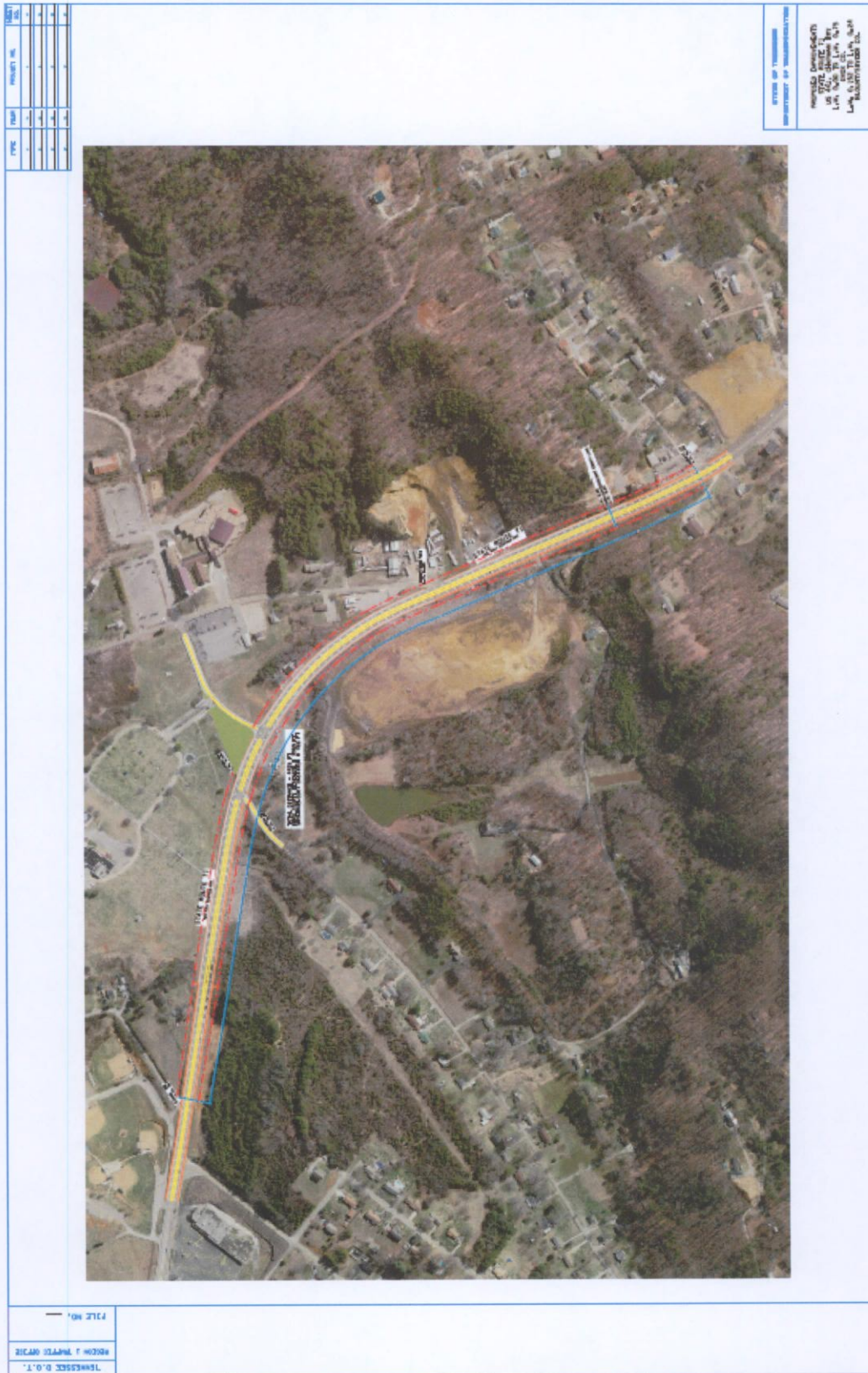


**Aerial Map Sketch: Intersection of SR 71, Chapman Hwy and Simpson Rd**





**Aerial Map Sketch: Section of SR 71, Chapman Hwy, from Evans Rd, LM 0.75  
(Knox Co) to Burnett Ln, LM 0.152 (Sevier Co).**



## Nathan Vatter - State Route 71 at Simpson Rd

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**From:** Nathan Vatter  
**To:** Amanda Snowden  
**Date:** 1/11/2010 4:51 PM  
**Subject:** State Route 71 at Simpson Rd  
**CC:** Andrew Padgett  
**Attachments:** SR71 at Simpson Rd.pdf  
*Knox County*

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Amanda,

The Regional Traffic Office has reviewed referenced location and found that the intersection has a crash rate higher than the State average for similar intersections, but does not qualify for **Hazard Elimination Safety Program (HESP)** funds. To qualify for **HESP** funds the crash ratio (actual crash rate divided by the critical crash rate) would have to be 3.0 (the minimum threshold) or larger.

The Department also has a Spot Safety Program to improve locations that frequently experience crashes. However, the costs associated with constructing a turn lane at this location would be much higher than the \$100,000 cap for this program.

In reviewing the feasibility of installing a turn lane at this location, we found that the State's Right-of-Way near this intersection is 120 to 175 ft in width, which is sufficient for road widening to accommodate a center turn lane. However, the widening would require a large fill, extension of a drainage structure and the relocation of utilities which would increase the cost for this project. The estimated costs for turn lanes at this intersection is \$250,000.

I have also provided some supporting documentation regarding this location. Please let me know if I may be of further assistance with regard to this request.

Thanks,

Nathan

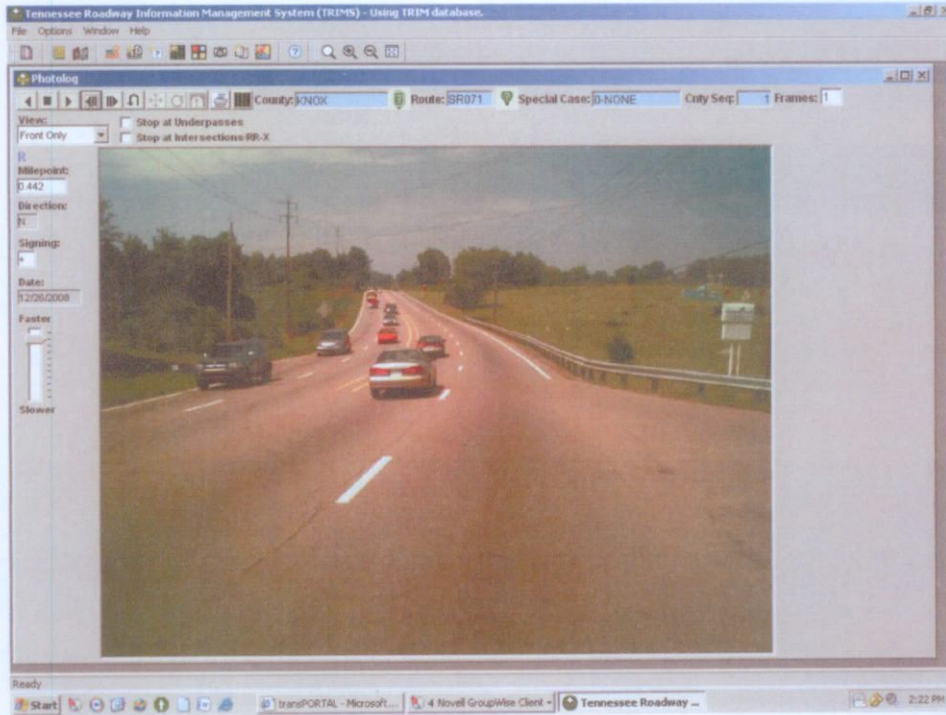
Nathan Vatter, P.E.  
TDOT, Region 1, Traffic Office  
7345 Region Lane, P.O. Box 58  
Knoxville, TN 37901  
(865) 594-2456  
(865) 594-3948 FAX  
[Nathan.Vatter@tn.gov](mailto:Nathan.Vatter@tn.gov)



## State Route 71 & Simpson Road

### Knox County

1/5/10



Crash Information								
Total Crashes	Rear-Ends	Sideswipe	Angle	Head-On	Other	Crash Rate	Actual/ State Average	Actual/ Critical
15	9	1	1	1	3	0.713 Acc/MV	5.49	2.12

2008 AADT -28,800

R.O.W = 120 to 175 ft near intersection

TENNESSEE DEPARTMENT OF TRANSPORTATION

COUNTY	=	Knox	Date:	1/5/2010			
Route	=	SR71 and Simpson Rd					
Location	=						
Highway Type	=	4 Lane Rural Other Intersection					
FUNTIONAL CLASS	=						
DATA YEARS	=	2005 to 2008 TRIMS Crash Data					
ADT YEARS USED	=	2008 TRIMS					
COMMENTS	=	Has 1 incapacting injury					
ANALYZED BY	=	NV					
SECTION = MORE THAN 0.10 MILE / SPOT = LESS THAN 0.10 MILE							
	BLM	ELM	Length	Average AADT	VTM		
	0.00	0.00	0.00	0	0		
	0.00	0.00	0.00	0	0		
	0.00	0.00	0.00	0	0		
	0.00	0.00	0.00	0	0		
	0.00	0.00	0.00	0	0		
	0.00	0.00	0.00	0	0		
	0.00	0.00	0.00	0	0		
			0.00	0	0		
INTERSECTION							
Log Mile	=	0.41	Leg	Traffic AADT			
			North	=	14,400		
			East	=			
			South	=	14,400		
			West	=	0		
			Entering AADT	=	14,400		
			2008 Trims				
			4 Lane Rural Other Intersection				
			2005 To 2008 Trims Crash Data				
			Total	Fatal	Incap. Injury	*Severe Crashes	Other Injury
No. of Crashes	=	15	0	2	2		
No. of Years	=	4					
SW avg. rate	=	0.130	0.003	0.005	0.008	0.040	
03-05 S/W Rates							
Exposure (E)	=	21.0240					
Crash Rate (A)	=	0.713	0.000	0.095	0.095	0.428	
Critical Rate (C)	=	0.337					
Severity Index (SI)	=	0.8667					
Actual Rate/SW Average	=	5.49	0.00	19.03	11.89	10.70	
Ratio of A/C	=	2.12					
* Severe Crashes are the sum of fatal and incapacitating injury crashes							
Revised 4/3/2007							
T.D.O.T. PROJECT PLANNING DIVISION ( SAFETY PLANNING SECTION )							





STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
REGION ONE TRAFFIC OFFICE

Intersection: SR 71 AT SIMPSON

City or County : KNOX Date: 9/1/09

Prepared By: RH Speed Limit: 50

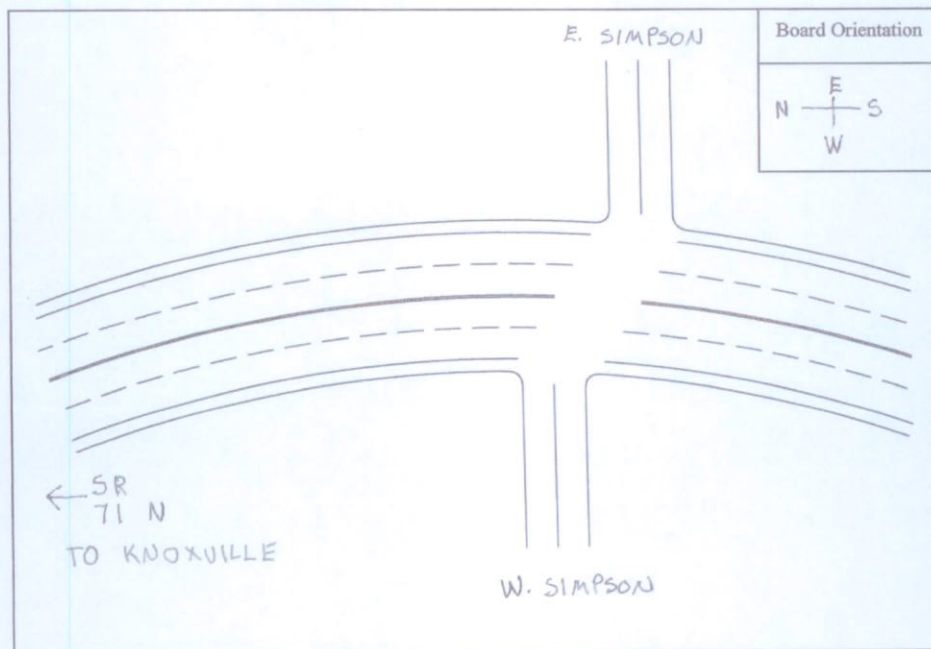
Notes : \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Intersection Drawing with lane Configurations



Pictures Taken:

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_
- 4) \_\_\_\_\_



Tennessee Department of Transportation  
Region 1 Traffic Office

Counted By: RH  
Weather:  
Major: 4L  
Minor: 2L

File Name : SR71@Simpson Rd  
Site Code : 00000047  
Start Date : 9/1/2009  
Page No : 1

Groups Printed- Unshifted

Start Time	SR 71 Southbound					SIMPSON Westbound					SR 71 Northbound					SIMPSON Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	3	128	0	0	131	1	0	3	0	4	0	386	0	0	386	0	0	1	0	1	522
07:15 AM	12	136	0	0	148	1	0	3	0	4	1	520	0	0	521	0	0	0	0	0	673
07:30 AM	5	188	3	0	196	0	0	7	0	7	0	449	0	0	449	1	1	1	0	3	655
07:45 AM	7	181	0	0	188	0	2	8	0	10	1	398	0	0	399	0	0	2	0	2	599
Total	27	633	3	0	663	2	2	21	0	25	2	1753	0	0	1755	1	1	4	0	6	2449
08:00 AM	10	152	0	0	162	2	0	6	0	8	0	378	0	0	378	0	0	1	0	1	549
08:15 AM	3	145	0	0	148	0	0	7	0	7	0	303	9	0	312	0	0	0	0	0	467
08:30 AM	7	151	0	0	158	2	0	10	0	12	1	258	3	0	262	0	0	3	0	3	435
08:45 AM	3	141	0	0	144	2	0	12	0	14	0	240	1	0	241	0	0	1	0	1	400
Total	23	589	0	0	612	6	0	35	0	41	1	1179	13	0	1193	0	0	5	0	5	1851
11:00 AM	4	182	0	0	186	0	0	4	0	4	1	218	0	0	219	0	0	0	0	0	409
11:15 AM	3	213	0	0	216	1	0	4	0	5	0	196	2	0	198	0	0	4	0	4	423
11:30 AM	4	199	0	0	203	1	0	7	0	8	2	213	1	0	216	0	0	2	0	2	429
11:45 AM	6	203	0	0	209	2	0	5	0	7	1	215	0	0	216	1	0	1	0	2	434
Total	17	797	0	0	814	4	0	20	0	24	4	842	3	0	849	1	0	7	0	8	1695
12:00 PM	5	213	2	0	220	2	0	8	0	10	0	242	2	0	244	0	0	3	0	3	477
12:15 PM	8	218	0	0	226	0	0	5	0	5	1	213	0	0	214	0	0	0	0	0	445
12:30 PM	2	209	0	0	211	1	2	8	0	11	1	255	2	0	258	0	0	4	0	4	484
12:45 PM	5	241	1	0	247	2	1	6	0	9	0	194	1	0	195	0	1	1	0	2	453
Total	20	881	3	0	904	5	3	27	0	35	2	904	5	0	911	0	1	8	0	9	1859
02:00 PM	10	219	1	0	230	2	0	7	0	9	2	234	0	0	236	1	0	2	0	3	478
02:15 PM	5	302	1	0	308	5	0	7	0	12	1	191	0	0	192	0	0	1	0	1	513
02:30 PM	3	238	0	0	241	4	0	7	0	11	0	198	0	0	198	0	0	1	0	1	451
02:45 PM	3	249	0	0	252	3	1	5	0	9	1	186	0	0	187	0	1	3	0	4	452
Total	21	1008	2	0	1031	14	1	26	0	41	4	809	0	0	813	1	1	7	0	9	1894
03:00 PM	4	257	1	0	262	1	0	8	0	9	1	203	1	0	205	0	0	2	0	2	478
03:15 PM	4	308	0	0	312	1	1	8	0	10	0	246	0	0	246	0	0	1	0	1	569
03:30 PM	5	328	0	0	333	1	0	13	0	14	0	214	0	0	214	0	0	1	0	1	562
03:45 PM	5	309	1	0	315	2	0	8	0	10	0	234	0	0	234	0	0	4	0	4	563
Total	18	1202	2	0	1222	5	1	37	0	43	1	897	1	0	899	0	0	8	0	8	2172
04:00 PM	2	503	1	0	506	0	0	6	0	6	2	260	0	0	262	0	0	1	0	1	775
04:15 PM	6	323	0	0	329	0	0	8	0	8	1	210	0	0	211	0	0	0	0	0	548
04:30 PM	11	319	1	0	331	0	0	9	0	9	0	180	1	0	181	0	0	0	0	0	521
04:45 PM	3	376	0	0	379	0	0	11	0	11	0	203	1	0	204	0	0	8	0	8	602
Total	22	1521	2	0	1545	0	0	34	0	34	3	853	2	0	858	0	0	9	0	9	2446
05:00 PM	5	331	0	0	336	4	0	10	0	14	1	217	0	0	218	0	0	6	0	6	574
05:15 PM	6	567	0	0	573	0	0	9	0	9	3	219	0	0	222	0	0	6	0	6	810
05:30 PM	2	520	0	0	522	3	0	4	0	7	5	244	0	0	249	0	0	4	0	4	782
05:45 PM	7	447	0	0	454	1	0	5	0	6	1	277	0	0	278	0	0	8	0	8	746
Total	20	1865	0	0	1885	8	0	28	0	36	10	957	0	0	967	0	0	24	0	24	2912
Grand Total	8496 12 0 8676					44 7 228 0 279					27 8194 24 0 8245					3 3 72 0 78					17278
Apprch %	1.9 97.9 0.1 0					15.8 2.5 81.7 0					0.3 99.4 0.3 0					3.8 3.8 92.3 0					
Total %	1 49.2 0.1 0 50.2					0.3 0 1.3 0 1.6					0.2 47.4 0.1 0 47.7					0 0 0.4 0 0.5					

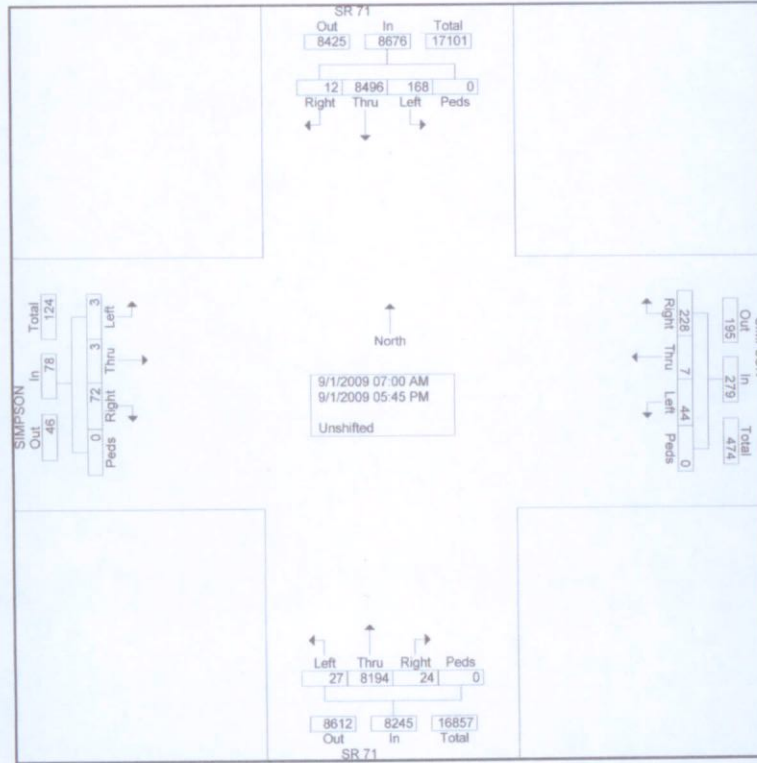




**Tennessee Department of Transportation**  
**Region 1 Traffic Office**

Counted By: RH  
Weather:  
Major: 4L  
Minor: 2L

File Name : SR71@Simpson Rd  
Site Code : 00000047  
Start Date : 9/1/2009  
Page No : 2



# Tennessee Department of Transportation

Region 1  
Traffic Office

Study Name : SR71@Simpon Rd (2009)  
Study Date : 09/11/09  
Page No. : 1

## Signal Warrants - Summary

### Major Street Approaches

**Northbound: SR 71**  
Number of Lanes: 2  
Approach Speed: 50  
Total Approach Volume: 8,245

**Southbound: SR 71**  
Number of Lanes: 2  
Approach Speed: 50  
Total Approach Volume: 8,676

### Minor Street Approaches

**Eastbound: SIMPSON**  
Number of Lanes: 1  
Total Approach Volume: 78

**Westbound: SIMPSON**  
Number of Lanes: 1  
Total Approach Volume: 279

### Warrant Summary (Rural values apply.)

<b>Warrant 1 - Eight Hour Vehicular Volumes</b>	<b>Not Satisfied</b>
<b>Warrant 1A - Minimum Vehicular Volume</b> <b>Not Satisfied</b> Required volumes reached for 0 hours, 8 are needed	
<b>Warrant 1B - Interruption of Continuous Traffic</b> <b>Not Satisfied</b> Required volumes reached for 0 hours, 8 are needed	
<b>Warrant 1 A&amp;B - Combination of Warrants</b> <b>Not Satisfied</b> Required volumes reached for 0 hours, 8 are needed	
<b>Warrant 2 - Four Hour Volumes</b>	<b>Not Satisfied</b>
Number of hours (0) volumes exceed minimum < minimum required (4).	
<b>Warrant 3 - Peak Hour</b>	<b>Not Satisfied</b>
<b>Warrant 3A - Peak Hour Delay</b> <b>Not Satisfied</b> Total approach volumes and delays on minor street do not exceed minimums for any hour.	
<b>Warrant 3B - Peak Hour Volumes</b> <b>Not Satisfied</b> Volumes do not exceed minimums for any hour.	
<b>Warrant 4 - Pedestrian Volumes</b>	<b>Not Satisfied</b>
Required 4 Hr pedestrian volume reached for 0 hour(s) and the single hour volume for 0 hour(s)	
<b>Warrant 5 - School Crossing</b>	<b>Not Satisfied</b>
Number of gaps > .0 seconds (0) exceeds the number of minutes in the crossing period (0).	
<b>Warrant 6 - Coordinated Signal System</b>	<b>Not Satisfied</b>
No adjacent coordinated signals are present	
<b>Warrant 7 - Crash Experience</b>	<b>Not Satisfied</b>
Number of accidents (-1) is less than minimum (5). Volume minimums are not met.	
<b>Warrant 8 - Roadway Network</b>	<b>Not Satisfied</b>
Major Route conditions not met. One or more volume requirement met.	



# Tennessee Department of Transportation

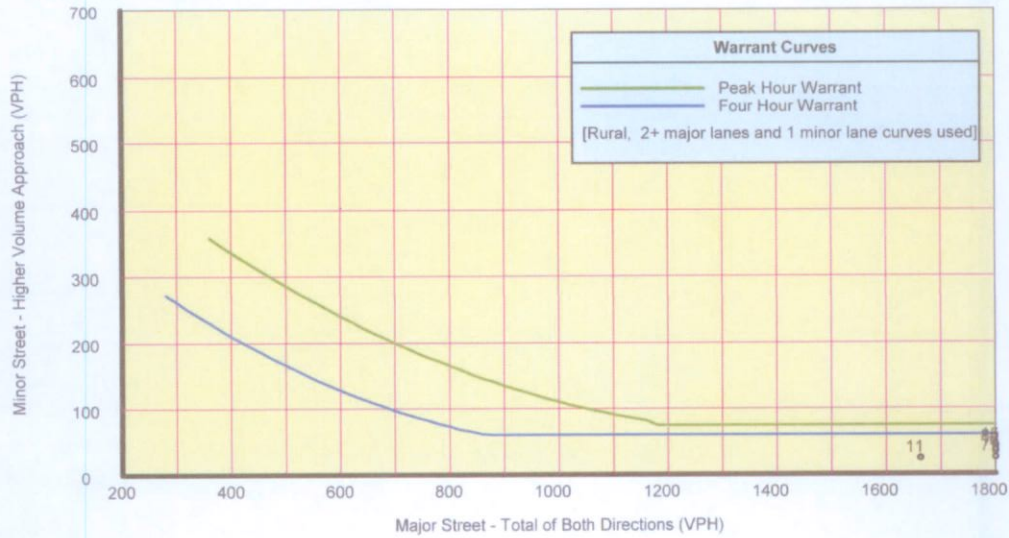
Region 1  
Traffic Office

Study Name : SR71@Simpon Rd (2009)

Study Date : 09/11/09

Page No. : 2

## Signal Warrants - Summary



Analysis of 8-Hour Volume Warrants:

Hour Begin	Major Total	Higher Minor Vol	Dir	War-1A			War-1B			War-1A&B		
				Major Crit	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?
00:00	0	0	EB	420-No	105-No	---	630-No	53-No	---	504-No	84-No	---
01:00	0	0	EB	420-No	105-No	---	630-No	53-No	---	504-No	84-No	---
02:00	0	0	EB	420-No	105-No	---	630-No	53-No	---	504-No	84-No	---
03:00	0	0	EB	420-No	105-No	---	630-No	53-No	---	504-No	84-No	---
04:00	0	0	EB	420-No	105-No	---	630-No	53-No	---	504-No	84-No	---
05:00	0	0	EB	420-No	105-No	---	630-No	53-No	---	504-No	84-No	---
06:00	0	0	EB	420-No	105-No	---	630-No	53-No	---	504-No	84-No	---
07:00	2,418	25	WB	420-Yes	105-No	Major	630-Yes	53-No	Major	504-Yes	84-No	Major
08:00	1,805	41	WB	420-Yes	105-No	Major	630-Yes	53-No	Major	504-Yes	84-No	Major
09:00	0	0	EB	420-No	105-No	---	630-No	53-No	---	504-No	84-No	---
10:00	0	0	EB	420-No	105-No	---	630-No	53-No	---	504-No	84-No	---
11:00	1,663	24	WB	420-Yes	105-No	Major	630-Yes	53-No	Major	504-Yes	84-No	Major
12:00	1,815	35	WB	420-Yes	105-No	Major	630-Yes	53-No	Major	504-Yes	84-No	Major
13:00	0	0	EB	420-No	105-No	---	630-No	53-No	---	504-No	84-No	---
14:00	1,844	41	WB	420-Yes	105-No	Major	630-Yes	53-No	Major	504-Yes	84-No	Major
15:00	2,121	43	WB	420-Yes	105-No	Major	630-Yes	53-No	Major	504-Yes	84-No	Major
16:00	2,403	34	WB	420-Yes	105-No	Major	630-Yes	53-No	Major	504-Yes	84-No	Major
17:00	2,852	36	WB	420-Yes	105-No	Major	630-Yes	53-No	Major	504-Yes	84-No	Major
18:00	0	0	EB	420-No	105-No	---	630-No	53-No	---	504-No	84-No	---
19:00	0	0	EB	420-No	105-No	---	630-No	53-No	---	504-No	84-No	---
20:00	0	0	EB	420-No	105-No	---	630-No	53-No	---	504-No	84-No	---
21:00	0	0	EB	420-No	105-No	---	630-No	53-No	---	504-No	84-No	---
22:00	0	0	EB	420-No	105-No	---	630-No	53-No	---	504-No	84-No	---
23:00	0	0	EB	420-No	105-No	---	630-No	53-No	---	504-No	84-No	---

County	Route	Log Mile	Case Number	Location	Type of Crash	Date of Crash	Time of Crash	Total Killed	Total Incap	Manner of First Collision	Total Inj	First Harmful Event	Total Veh	Light Conditions	Weather Cond	Urban or Rural
KNOX	SR071	0.410	9935169	At an Intersection	Non-Incap Injury	07/26/2008	1543	0	0	Rear-End	2	Vehicle in Transport	2	Daylight	No Adverse Cond.	Rural
KNOX	SR071	0.441	9798958	At an Intersection	Non-Incap Injury	06/21/2007	1802	0	0	Rear-End	3	Vehicle in Transport	3	Daylight	No Adverse Cond.	Rural
KNOX	SR071	0.441	9464981	At an Intersection	Prop Damage (over)	11/24/2005	9999	0	0	No Collision w/ Vehicle	0	Deer (Animal)	1	Daylight	No Adverse Cond.	Rural
KNOX	SR071	0.441	7325066	At an Intersection	Prop Damage (over)	05/07/2006	2110	0	0	Sideswipe, Same Dir	0	Vehicle in Transport	2	Dark-Not Lighted	No Adverse Cond.	Rural
KNOX	SR071	0.441	50093562	At an Intersection	Prop Damage (over)	09/12/2007	1618	0	0	Rear-End	0	Vehicle in Transport	2	Daylight	No Adverse Cond.	Rural
KNOX	SR071	0.441	50082025	At an Intersection	Prop Damage (over)	10/28/2007	300	0	0	Head-On	0	Vehicle in Transport	2	Dark-Not Lighted	No Adverse Cond.	Rural
KNOX	SR071	0.441	7980998	At an Intersection	Non-Incap Injury	04/16/2005	348	0	0	No Collision w/ Vehicle	1	Ditch	2	Dark-Not Lighted	No Adverse Cond.	Rural
KNOX	SR071	0.441	50245400	At an Intersection	Non-Incap Injury	01/11/2008	1515	0	0	Rear-End	1	Vehicle in Transport	2	Daylight	No Adverse Cond.	Rural
KNOX	SR071	0.441	50163374	At an Intersection	Non-Incap Injury	01/11/2008	730	0	0	Rear-End	1	Vehicle in Transport	2	Daylight	No Adverse Cond.	Rural
KNOX	SR071	0.441	50208169	At an Intersection	Non-Incap Injury	04/05/2008	654	0	0	Rear-End	1	Vehicle in Transport	2	Daylight	Rain	Rural
KNOX	SR071	0.441	7975649	At an Intersection	Non-Incap Injury	08/09/2005	9999	0	0	Rear-End	2	Vehicle in Transport	2	Daylight	No Adverse Cond.	Rural
KNOX	SR071	0.441	8491617	At an Intersection	Prop Damage (over)	03/22/2005	1450	0	0	Rear-End	0	Vehicle in Transport	2	Daylight	Rain	Rural
KNOX	SR071	0.441	8706538	At an Intersection	Prop Damage (over)	06/03/2005	1030	0	0	Rear-End	0	Vehicle in Transport	3	Daylight	No Adverse Cond.	Rural
KNOX	SR071	0.441	9464992	At an Intersection	Non-Incap Injury	12/14/2005	739	0	0	Angle	3	Vehicle in Transport	2	Daylight	No Adverse Cond.	Rural
KNOX	SR071	0.470	50088117	Along Roadway	Incap Injury	10/09/2007	12	0	1	No Collision w/ Vehicle	1	Embankment	1	Dark-Not Lighted	No Adverse Cond.	Rural



# TENNESSEE DEPARTMENT OF TRANSPORTATION

COUNTY	= Knox		Date:	12/21/2010													
Route	= SR 71 US 441																
Location	= KNOX LM 0.00 to LM 0.75 and BLOUNT LM 0.152 TO LM 0.24																
Highway Type	= Urban 4 Lane Undivided section																
FUNTIONAL CLASS=																	
DATA YEARS	= 2004 - 2008 TRIMS Crash Data																
ADT YEARS USED=	2009 TRIMS																
COMMENTS	=																
ANALYZED BY	= AP																
SECTION = MORE THAN 0.10 MILE / SPOT = LESS THAN 0.10 MILE																	
	BLM	ELM	Length	Average AADT	VMT												
	0.00	0.75	0.75	27,570	20,678												
	0.15	0.24	0.09	25,000	2,200												
	0.00	0.00	0.00	0	0												
	0.00	0.00	0.00	0	0												
	0.00	0.00	0.00	0	0												
	0.00	0.00	0.00	0	0												
	0.00	0.00	0.00	0	0												
	0.00	0.00	0.00	0	0												
			0.84	27,300	22,878												
INTERSECTION																	
Log Mile	=	0	<table border="0" style="width: 100%;"> <tr> <td style="text-align: right;">Leg</td> <td style="text-align: right;">Traffic AADT</td> </tr> <tr> <td>North</td> <td>= 0</td> </tr> <tr> <td>East</td> <td>= 0</td> </tr> <tr> <td>South</td> <td>= 0</td> </tr> <tr> <td>West</td> <td>= 0</td> </tr> <tr> <td colspan="2" style="border-top: 1px solid black;">Entering AADT = 0</td> </tr> </table>			Leg	Traffic AADT	North	= 0	East	= 0	South	= 0	West	= 0	Entering AADT = 0	
Leg	Traffic AADT																
North	= 0																
East	= 0																
South	= 0																
West	= 0																
Entering AADT = 0																	
2009 Trims Urban 4 Lane Undivided Section 2004 - 2008 Trims Crash Data																	
		Total	Fatal	Incap. Injury	*Severe Crashes	Other Injury											
No. of Crashes	=	75	2	11	13	20											
No. of Years	=	5															
SW avg. rate	=	3.733	0.016	0.071	0.086	0.920											
3/27/2007 Revised S/W Rates																	
Exposure (E)	=	41.7514															
Crash Rate (A)	=	1.796	0.048	0.263	0.311	0.479											
Critical Rate (C)	=	4.441															
Severity Index (SI)	=	0.6667															
Actual Rate/SW Average	=	0.48	3.09	3.72	3.60	0.52											
Ratio of A/C	=	0.40															
* Severe Crashes are the sum of fatal and incapacitating injury crashes <u>There has been 2 fatal and 11 incap injury during the 5 years span from 2004-2008.</u>																	
Revised 4/3/2007																	
T.D.O.T. REGION 1 ( TRAFFIC OFFICE )						Ap											