Safety Analyst

Network Screening Report

May 12, 2011

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1. Network Screening Report

Basic Network Screening

SafetyAnalyst: v4.0.10, packaged: Feb 9, 2011 10:41 AM on sa_dev.ittsystems.com

Data set title: NH State 2009 Data set comment: null

Data set created: Apr 2, 2010 9:54 AM Roadway Segments: Sliding Window Accident Severity Level: Total accidents Site Types: Segments, Intersections

Screening Attribute: Accident Type and Manner of Collision = Collision with parked motor vehicle; Collision with railroad train; Collision with bicyclist; Collision with pedestrian; Collision with animal; Collision with fixed object; Collision with other object; Other single-vehicle collision; Overturn; Fire or explosion; Other single-vehicle non-collision; Rear-end; Head-on; Rear-to-rear; Angle; Sideswipe, same direction; Sideswipe, opposite direction; Other multiple-vehicle collision; Unknown

Potential for Safety Improvement Using: Expected accident frequency

Analysis Period: From 2002 To 2009

Major Reconstruction: No major reconstruction occurred at any sites during the analysis period

Window Length: 0.3 mi Window Increment: 0.1 mi Area Weights (Rural): 2.0 Area Weights (Urban): 1.0

Limiting Value (Roadway Segments): 1.0 crashes/mi/yr

Limiting Value (Intersections): 1.0 crashes/yr

Number of sites in the site list: 22 Number of sites evaluated: 22 Number of segments evaluated: 12

Total length of segments evaluated: 3.827 Number of intersections evaluated: 10

Number of ramps evaluated: 0 Number of sites flagged: 21

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Network Screening Report

Network Screening Report

Table 1. Basic Network Screening (with Sliding Window on roadway segments)

	Site Type	Site Subtype	County	Route	Site Start Location		Average	Location with Highest Potential for Safety Improvement									
ID						Site End Location	Observed Accidents for Entire Site*	Average Observed Accidents*	Predicted Accident Frequency*	Expected Accident Frequency*	Variance**	Start Location	End Location	No. of Expected Fatalities	No. of Expected Injuries	Rank	Additional Windows of Interest
14967	Segment	Seg/Urb; Multilane undivided	GRAFTON	SRS0000120	21.911	22.163	10.60	16.13	7.11	14.40	1.92	22.059	22.359	-		- 1	21.859 - 22.159 21.959 - 22.259 22.159 - 22.459
17408	Segment	Seg/Urb; Multilane undivided	GRAFTON	SRS0000120	22.163	22.3	17.05	16.13	7.11	14.40	1.92	22.059	22.359	-		- 1	21.959 - 22.259 22.159 - 22.459 22.259 - 22.559
22060	Segment	Seg/Urb; Multilane undivided	GRAFTON	SRS0000120	22.3	22.416	5.75	16.13	7.11	14.40	1.92	22.059	22.359	-		- 1	22.159 - 22.459 22.259 - 22.559 22.359 - 22.659
40939	Segment	Seg/Urb; Multilane undivided	GRAFTON	SRS0000120	22.416	22.53	20.49	12.79	11.69	12.63	1.76	22.259	22.559	-		4	22.159 - 22.459 22.359 - 22.659 22.459 - 22.759
2697	Segment	Seg/Urb; Multilane undivided	GRAFTON	SRS0000120	22.53	22.982	6.65	12.79	11.69	12.63	1.76	22.259	22.559	-		- 4	22.359 - 22.659 22.459 - 22.759 22.559 - 22.859 22.659 - 22.959 22.759 - 23.059 22.859 - 23.159 22.959 - 23.259
34488	Segment	Seg/Urb; 2-lane arterial	GRAFTON	SRS0000120	22.982	24.374	5.12	10.53	11.36	10.66	1.67	22.859	23.159	-		. 6	22.759 - 23.059 22.959 - 23.259 23.059 - 23.359 23.159 - 23.459 23.259 - 23.459 23.359 - 23.659 23.359 - 23.659 23.459 - 23.859 23.559 - 23.859 23.659 - 24.059 23.759 - 24.059 24.059 - 24.359 24.159 - 24.459 24.259 - 24.559 24.259 - 24.559 24.259 - 24.659
48399	Segment	Seg/Urb; 2-lane arterial	GRAFTON	SRS0000120	25.253	25.517	4.39	9.49	4.77	9.15	1.41	25.459	25.686	-		. 7	24.959 - 25.259 25.059 - 25.359 25.159 - 25.459 25.259 - 25.559 25.359 - 25.659
24594	Segment	Seg/Urb; 2-lane arterial	GRAFTON	SRS0000120	25.517	25.686	8.82	9.49	4.77	9.15	1.41	25.459	25.686	-		. 7	25.259 - 25.559 25.359 - 25.659
59123	Segment	Seg/Urb; 2-lane arterial	GRAFTON	SRS0000120	24.374	24.751	5.71	8.84	7.62	8.78	1.41	24.259	24.559	-		. 9	24.159 - 24.459 24.359 - 24.659 24.459 - 24.759 24.559 - 24.859 24.659 - 24.959
20896	Segment	Seg/Urb; Multilane undivided	GRAFTON	SRS0000120	21.859	21.911	0.00	8.34	6.43	8.40	1.24	21.859	22.159	-		10	
35429	Intersection	Int/Urb; 4-leg signalized	GRAFTON	SRS0000120	24.374		6.50	6.50	4.29	6.25	0.97	-	-	-		- 11	
1958	Intersection	Int/Urb; 4-leg signalized		SRS0000120	22.3		5.97	5.97	4.15	5.76	0.89	-	-	-		12	
46100	Intersection	Int/Urb; 4-leg signalized		SRS0000120	22.53		5.27	5.27	4.60	5.20			-	-		13	
3391	Intersection Segment	Int/Urb; 4-leg signalized Seg/Urb; 2-lane arterial		SRS0000120 SRS0000120	22.982 24.751	25.194	4.39 1.12		3.94 7.54	4.33 3.99	0.67 0.64	24.459	24.759	-		. 14	24.559 - 24.859 24.659 - 24.959 24.759 - 25.059 24.859 - 25.159 24.959 - 25.259 25.059 - 25.359 25.159 - 25.459
51424	Intersection	Int/Urb: 4-leg minor-rd STOP	GRAFTON	SRS0000120	22,163		2.81	2.81	1.51	2.66	0.39		_			16	23.137 - 23.439
5523	Segment	Seg/Urb; 2-lane arterial		SRS0000120	25.194	25.253	2.81	2.21	4.77	2.42		25.159	25.459	-		17	24.959 - 25.259 25.059 - 25.359
72807	Intersection	Int/Urb; 3-leg signalized		SRS0000120	25.253		2.50	2.50	1.56	2.19	0.26	-	-	-		18	\vdash
64926	Intersection	Int/Urb; 3-leg signalized			25.686		1.60	1.60	2.17	1.75		-	-	-		19	
12970	Intersection	Int/Urb; 3-leg minor-rd STOP	GRAFTON	SRS0000120	22.416		1.31	1.31	0.56	1.17		-	-	-		20	
51337	Intersection	Int/Urb; 3-leg minor-rd STOP	GRAFION	SRS0000120	21.911		1.31	1.31	0.45	1.11	0.14		-	-		21	

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Total Roadway Segments Ranked = 12 out of 12 total segments in sitelist.

Total Roadway Segment Length Ranked = 3.827 out of 3.827 total segment length in sitelist.

Percentage of Roadway Segment Length Ranked = 100.0

Number of Intersections Ranked = 9 out of 10 total intersections in sitelist.

Percentage of Intersections Ranked = 90.0

Number of Ramps Ranked = 0 out of 0 total ramps in sitelist.

Percentage of Ramps Ranked = ?

- * Units for Observed, Predicted and Excess Accident Frequency
 - Roadway Segments (crashes/mi/yr)
 - Intersections (crashes/yr)
 - Ramps (crashes/mi/yr)
- ** Units for Variance
 - Roadway Segments (crashes/mi**2/yr)
 - Intersections (crashes/yr)
 - Ramps (crashes/mi**2/yr)

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