



**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

REGION 1 TRAFFIC OFFICE
P. O. BOX 58
7238 REGION LANE
KNOXVILLE, TENNESSEE 37901
(865) 594-2456

CLAY BRIGHT
COMMISSIONER

BILL LEE
GOVERNOR

March 13, 2020

Mr. Nathan Vatter, P.E.
Traffic Engineering Office
J.K. Polk Building, Suite 400
505 Deaderick Street
Nashville, TN 37243-0349

**RE: Speed Limit Request
State Route 331 and State Route 131 in Knox County
SR-331 Decrease 50 MPH to 40 MPH, (LM 7.67 to 8.31)
SR-131 Decrease 45 MPH to 40 MPH, (LM 25.12 to 26.26)**

Dear Mr. Vatter:

The Regional Traffic Office has recently conducted a traffic study on State Route 331 and State Route 131 in Knox County. The traffic study included a review of the roadway history and geometrics, a review of speeds along the roadway and a crash analysis. This study was conducted as a result of comments received from the general public as well as our partners in local municipalities.

This study considered the corridor of State Route 331 in Knox County from the Knoxville City Limits (LM 3.923) to its intersection with State Route 131 (LM 8.310) and State Route 131 at its intersection with State Route 331 (LM 25.120) to the Union County line (LM 29.495). The total length of roadway in this review is roughly 8.8 miles.

SR-331 Knox County – LM 3.923 to 4.990

- 2 – 12' lanes with 1' shoulders
- Rolling terrain
- AADT – 15,030 (2018)
- Existing speed limit is 45 MPH
- 85% speed is 49 MPH
- 50% speed is 46
- Overall observed speeds range from 31 MPH to 61 MPH
- Driveway Density – 39 access points per mile

SR-331 Knox County – LM 4.990 to 8.310

- 2 – 12' lanes with 1' shoulders
- Rolling terrain
- AADT – 15,030 (2018)
- Existing speed limit is 50 MPH
- 85% speed is 55 MPH
- 50% speed is 52 MPH
- Overall observed speeds range from 34 MPH to 64 MPH
- Driveway Density – 38 access points per mile

SR-131 Knox County – LM 25.120 to 26.390

- 2 – 12' lanes with 1' to 2' shoulders
- Rolling terrain
- AADT – 8,150 (2018)
- Existing speed limit is 45 MPH
- 85% speed is 46 MPH
- 50% speed is 40 MPH
- Overall observed speeds range from 31 MPH to 52 MPH
- Driveway Density – 33 access points per mile

SR-131 Knox County – LM 26.390 to 29.495

- 2 – 12' lanes with 1' to 2' shoulders
- Rolling terrain
- AADT – 7,345 (2018)
- Existing speed limit is 45 MPH
- 85% speed is 52 MPH
- 50% speed is 46 MPH
- Overall observed speeds range from 22 MPH to 58 MPH
- Driveway Density – 40 access points per mile

Spot speed studies were performed at four locations to determine drivers operating speeds. Speeds were recorded at LM 4.567 near Ridgeview Road, LM 7.148 near Henegar Road, LM 25.687 near the Gibbs Schools, and LM 28.7 near the Union County line. The spot speed data showed that most drivers were operating at or below the current posted speed limit, except for drivers in the 50 MPH section between LM 4.995 and LM 8.310.

An analysis of the crash data was also performed. Overall, the corridor is functioning above the state average for similar roadways.

State Route 331, Knox County			
Section- SR-331 LM 3.923 to SR-131 LM 29.495			
303 Crashes	- 2017-2019	Actual	- 2.792 Acc/MVM
State Average	- 1.647 Acc/MVM	Critical	- 1.938 Acc/MVM
A/S Ratio	= 1.70	A/C Ratio	= 1.44
1 Fatal Crash	18 Incap. Injury Crash	70 Other Injury Crash	

A total of three hundred and three (303) crashes occurred in a three (3) year period from 2017-2019. This section had one (1) fatal crash and eighteen (18) incapacitating injury crashes. The fatal crash was due to a lane departure and one (1) of the incapacitating injury crashes involved a pedestrian. Overall, rear end and angle crashes accounted for 56% of all crashes. This could be due to vehicles traveling at high speeds and the number of access points along the roadway.

Based on the spot speed studies, crashes analyses, terrain, and the frequency of access points, the Regional Traffic Office recommends reducing the posted speed on State Route 331 and State Route 131 in Knox County as follows:

- State Route 331 from 50 MPH to 40 MPH between LM 7.67 and 8.31
- State Route 131 from 45 MPH to 40 MPH between LM 25.12 and 26.26

If you concur with these recommendations, please send a letter authorizing the change in speed limit and our forces will make the necessary modifications.

We appreciate your assistance in this matter.

Sincerely,



Andrew Padgett, P.E.
Regional Traffic Engineer

AP/nb
Enclosure

USLIMITS2 Speed Zoning Report

Project Name: GibbsProposedSection

Analyst: NB

Date: 03-06-2020

Basic Project Information

Project Number: 1
Route Name: State Route 331 and State Route 131
State: Tennessee
County: Knox County
City: Rural
Route Type: Road Section in Developed Area
Route Status: Existing

Roadway Information

Section Length: 1.781 mile(s)
Statutory Speed Limit: 65 mph
Existing Speed Limit: mph
Adverse Alignment: No
One-Way Street: No
Divided/Undivided: Undivided
Number of Through Lanes: 2
Area Type: Commercial
Number of Driveways: 50
Number of Signals: 1

Crash Data Information

Crash Data Years: 3.00
Crash AADT: 10630 veh/day
Total Number of Crashes: 115
Total Number of Injury Crashes: 27
Section Crash Rate: 555 per 100 MVM
Section Injury Crash Rate: 130 per 100 MVM
Crash Rate Average for Similar Roads: 165
Injury Rate Average for Similar Roads: 52

Traffic Information

85th Percentile Speed: 46 mph
50th Percentile Speed: 40 mph
AADT: 10630 veh/day
On Street Parking and Usage: Not High
Pedestrian / Bicyclist Activity: Not High

Project Description: New 40 MPH section through Gibbs

Recommended Speed Limit:



Note: The section crash rate of 555 per 100 MVM is above the critical rate (213). The injury crash rate for the section of 130 per 100 MVM is above the critical rate (80). A comprehensive crash study should be undertaken to identify engineering and traffic control deficiencies and appropriate corrective actions. The speed limit should only be reduced as a last measure after all other treatments have either been tried or ruled out.

Disclaimer: The U.S. Government assumes no liability for the use of the information contained in this report. This report does not constitute a standard, specification, or regulation.

Equations Used in Crash Data Calculations

Exposure (M)

$$M = (\text{Section AADT} * 365 * \text{Section Length} * \text{Duration of Crash Data}) / (100000000)$$
$$M = (10630 * 365 * 1.781 * 3.00) / (100000000)$$
$$M = 0.2073$$

Crash Rate (Rc)

$$Rc = (\text{Section Crash Average} * 100000000) / (\text{Section AADT} * 365 * \text{Section Length})$$
$$Rc = (38.33 * 100000000) / (10630 * 365 * 1.781)$$
$$Rc = 554.74 \text{ crashes per 100 MVM}$$

Injury Rate (Ri)

$$Ri = (\text{Section Injury Crash Average} * 100000000) / (\text{Section AADT} * 365 * \text{Section Length})$$
$$Ri = (9.00 * 100000000) / (10630 * 365 * 1.781)$$

Ri = 130.24 injuries per 100 MVM

Critical Crash Rate (Cc)

Cc = Crash Average of Similar Sections + 1.645 * (Crash Average of Similar Sections / Exposure) ^ (1/2) + (1 / (2 * Exposure))

Cc = 164.70 + 1.645 * (164.70 / 0.2073) ^ (1/2) + (1 / (2 * 0.2073))

Cc = 213.48 crashes per 100 MVM

Critical Injury Rate (Ic)

Ic = Injury Crash Average of Similar Sections + 1.645 * (Injury Crash Average of Similar Sections / Exposure) ^ (1/2) + (1 / (2 * Exposure))

Ic = 51.90 + 1.645 * (51.90 / 0.2073) ^ (1/2) + (1 / (2 * 0.2073))

Ic = 80.34 injuries per 100 MVM

USLIMITS2 Speed Zoning Report

Project Name: SR331_USlimitsreport

Analyst: Nicholas Barnard

Date: 01-22-2020

Basic Project Information

Project Number: 1
Route Name: SR-331
From: LM 4.990
To: LM 8.310
State: Tennessee
County: Knox County
City: Rural
Route Type: Road Section in Developed Area
Route Status: Existing

Roadway Information

Section Length: 3.32 mile(s)
Statutory Speed Limit: 65 mph
Existing Speed Limit: 45 mph
Adverse Alignment: Yes
One-Way Street: No
Divided/Undivided: Undivided
Number of Through Lanes: 2
Area Type: Residential-Collector/Arterial
Number of Driveways: 104
Number of Signals: 1

Crash Data Information

Crash Data Years: 3.00
Crash AADT: 15030 veh/day
Total Number of Crashes: 136
Total Number of Injury Crashes: 41
Section Crash Rate: 249 per 100 MVM
Section Injury Crash Rate: 75 per 100 MVM
Crash Rate Average for Similar Roads: 167
Injury Rate Average for Similar Roads: 52

Traffic Information

85th Percentile Speed: 55 mph
50th Percentile Speed: 52 mph
AADT: 15030 veh/day
On Street Parking and Usage: Not High
Pedestrian / Bicyclist Activity: Not High

Project Description: 50 MPH Section from LM 4.990 to LM 8.310

Recommended Speed Limit:



Note: Sections with adverse alignments may need specific 'advisory speed warnings' which may be different from the general speed limit for the section. See [Procedures for Setting Advisory Speeds on Curves](#), Publication No. FHWA-SA-11-22, June 2011, for more guidance.

Note: The section crash rate of 249 per 100 MVM is above the critical rate (197). The injury crash rate for the section of 75 per 100 MVM is above the critical rate (69). A comprehensive crash study should be undertaken to identify engineering and traffic control deficiencies and appropriate corrective actions. The speed limit should only be reduced as a last measure after all other treatments have either been tried or ruled out.

Disclaimer: The U.S. Government assumes no liability for the use of the information contained in this report. This report does not constitute a standard, specification, or regulation.

Equations Used in Crash Data Calculations

Exposure (M)

$$M = (\text{Section AADT} * 365 * \text{Section Length} * \text{Duration of Crash Data}) / (100000000)$$

$$M = (15030 * 365 * 3.32 * 3.00) / (100000000)$$

$$M = 0.5464$$

Crash Rate (Rc)

$$Rc = (\text{Section Crash Average} * 100000000) / (\text{Section AADT} * 365 * \text{Section Length})$$

$$Rc = (45.33 * 100000000) / (15030 * 365 * 3.32)$$

$$Rc = 248.90 \text{ crashes per 100 MVM}$$

Injury Rate (Ri)

$$Ri = (\text{Section Injury Crash Average} * 100000000) / (\text{Section AADT} * 365 * \text{Section Length})$$

$$Ri = (13.67 * 100000000) / (15030 * 365 * 3.32)$$

$$Ri = 75.04 \text{ injuries per 100 MVM}$$

Critical Crash Rate (Cc)

$$Cc = \text{Crash Average of Similar Sections} + 1.645 * (\text{Crash Average of Similar Sections} / \text{Exposure})^{(1/2)} + (1 / (2 * \text{Exposure}))$$

$$Cc = 167.40 + 1.645 * (167.40 / 0.5464)^{(1/2)} + (1 / (2 * 0.5464))$$

$$Cc = 197.11 \text{ crashes per 100 MVM}$$

Critical Injury Rate (Ic)

$$Ic = \text{Injury Crash Average of Similar Sections} + 1.645 * (\text{Injury Crash Average of Similar Sections} / \text{Exposure})^{(1/2)} + (1 / (2 * \text{Exposure}))$$

$$Ic = 51.90 + 1.645 * (51.90 / 0.5464)^{(1/2)} + (1 / (2 * 0.5464))$$

$$Ic = 68.85 \text{ injuries per 100 MVM}$$

USLIMITS2 Speed Zoning Report

Project Name: SR131_USlimitsreport

Analyst: Nicholas Barnard

Date: 01-23-2020

Basic Project Information

Project Number: 3
Route Name: SR-131
From: 25.120
To: 29.495
State: Tennessee
County: Knox County
City: Rural
Route Type: Road Section in Developed Area
Route Status: Existing

Roadway Information

Section Length: 4.375 mile(s)
Statutory Speed Limit: 65 mph
Existing Speed Limit: 45 mph
Adverse Alignment: Yes
One-Way Street: No
Divided/Undivided: Undivided
Number of Through Lanes: 2
Area Type: Residential-Collector/Arterial
Number of Driveways: 163
Number of Signals: 1

Crash Data Information

Crash Data Years: 3.00
Crash AADT: 7579 veh/day
Total Number of Crashes: 116
Total Number of Injury Crashes: 32
Section Crash Rate: 319 per 100 MVM
Section Injury Crash Rate: 88 per 100 MVM
Crash Rate Average for Similar Roads: 167
Injury Rate Average for Similar Roads: 52

Traffic Information

85th Percentile Speed: 49 mph
50th Percentile Speed: 43 mph
AADT: 7579 veh/day
On Street Parking and Usage: Not High
Pedestrian / Bicyclist Activity: Not High

Project Description: 45 MPH section of SR-131 from LM 25.120 to 29.495

Recommended Speed Limit:



Note: Sections with adverse alignments may need specific 'advisory speed warnings' which may be different from the general speed limit for the section. See [Procedures for Setting Advisory Speeds on Curves](#), Publication No. FHWA-SA-11-22, June 2011, for more guidance.

Note: The section crash rate of 319 per 100 MVM is above the critical rate (204). The injury crash rate for the section of 88 per 100 MVM is above the critical rate (73). A comprehensive crash study should be undertaken to identify engineering and traffic control deficiencies and appropriate corrective actions. The speed limit should only be reduced as a last measure after all other treatments have either been tried or ruled out.

Disclaimer: The U.S. Government assumes no liability for the use of the information contained in this report. This report does not constitute a standard, specification, or regulation.

Equations Used in Crash Data Calculations

Exposure (M)

$$M = (\text{Section AADT} * 365 * \text{Section Length} * \text{Duration of Crash Data}) / (100000000)$$

$$M = (7579 * 365 * 4.375 * 3.00) / (100000000)$$

$$M = 0.3631$$

Crash Rate (Rc)

$$Rc = (\text{Section Crash Average} * 100000000) / (\text{Section AADT} * 365 * \text{Section Length})$$

$$Rc = (38.67 * 100000000) / (7579 * 365 * 4.375)$$

$$Rc = 319.49 \text{ crashes per 100 MVM}$$

Injury Rate (Ri)

$$Ri = (\text{Section Injury Crash Average} * 100000000) / (\text{Section AADT} * 365 * \text{Section Length})$$

$$Ri = (10.67 * 100000000) / (7579 * 365 * 4.375)$$

$$Ri = 88.13 \text{ injuries per 100 MVM}$$

Critical Crash Rate (Cc)

$$Cc = \text{Crash Average of Similar Sections} + 1.645 * (\text{Crash Average of Similar Sections} / \text{Exposure})^{(1/2)} + (1 / (2 * \text{Exposure}))$$

$$Cc = 167.40 + 1.645 * (167.40 / 0.3631)^{(1/2)} + (1 / (2 * 0.3631))$$

$$Cc = 204.10 \text{ crashes per 100 MVM}$$

Critical Injury Rate (Ic)

$$Ic = \text{Injury Crash Average of Similar Sections} + 1.645 * (\text{Injury Crash Average of Similar Sections} / \text{Exposure})^{(1/2)} + (1 / (2 * \text{Exposure}))$$

$$Ic = 51.90 + 1.645 * (51.90 / 0.3631)^{(1/2)} + (1 / (2 * 0.3631))$$

$$Ic = 72.94 \text{ injuries per 100 MVM}$$

LOCATION: **State Route 331 @ Ridgeview Rd (LM 4.567)**

REGION: **1** COUNTY: **Knox** CITY: **Knoxville**

POSTED SPEED: **45 MPH** TIME: **11:49 AM** TO **12:07 PM** DATE: **1/17/2020**

DIRECTION OF FLOW: **Both** SURVEY MADE BY: **NB** CHECKED BY:

SPEED RANGE			MEDIAN	OBSERVATIONS	PCT	CUM PCT
0	-	2	1		0.00	0.00
3	-	5	4		0.00	0.00
6	-	8	7		0.00	0.00
9	-	11	10		0.00	0.00
12	-	14	13		0.00	0.00
15	-	17	16		0.00	0.00
18	-	20	19		0.00	0.00
21	-	23	22		0.00	0.00
24	-	26	25		0.00	0.00
27	-	29	28		0.00	0.00
30	-	32	31	1	1.00	1.00
33	-	35	34	2	2.00	3.00
36	-	38	37	6	6.00	9.00
39	-	41	40	16	16.00	25.00
42	-	44	43	22	22.00	47.00
45	-	47	46	18	18.00	65.00
48	-	50	49	25	25.00	90.00
51	-	53	52	7	7.00	97.00
54	-	56	55	2	2.00	99.00
57	-	59	58		0.00	99.00
60	-	62	61	1	1.00	100.00
63	-	65	64		0.00	100.00
66	-	68	67		0.00	100.00
69	-	71	70		0.00	100.00
72	-	74	73		0.00	100.00
75	-	77	76		0.00	100.00
78	-	80	79		0.00	100.00
81	-	83	82		0.00	100.00
84	-	86	85		0.00	100.00
87	-	89	88		0.00	100.00
TOTAL				100		

RADAR STUDY RESULTS	
50TH PERCENTILE SPEED	46
85TH PERCENTILE SPEED	49
10 MPH PACE SPEED	40 TO 49
PERCENT IN PACE SPEED	
PERCENT OVER PACE SPEED	10.0
PERCENT UNDER PACE SPEED	9.0
RANGE OF SPEEDS	31 TO 61
VEHICLES OBSERVED	100
AVERAGE SPEED	45.0

LOCATION: **State Route 331 @ Henegar Rd (LM 7.148)**

REGION: **1** COUNTY: **Knox** CITY: **Corryton**

POSTED SPEED: **50 MPH** TIME: **11:28 AM** TO **11:44 AM** DATE: **1/17/2020**

DIRECTION OF FLOW: **Both** SURVEY MADE BY: **NB** CHECKED BY:

SPEED RANGE			MEDIAN	OBSERVATIONS	PCT	CUM PCT
0	-	2	1		0.00	0.00
3	-	5	4		0.00	0.00
6	-	8	7		0.00	0.00
9	-	11	10		0.00	0.00
12	-	14	13		0.00	0.00
15	-	17	16		0.00	0.00
18	-	20	19		0.00	0.00
21	-	23	22		0.00	0.00
24	-	26	25		0.00	0.00
27	-	29	28		0.00	0.00
30	-	32	31		0.00	0.00
33	-	35	34	1	1.00	1.00
36	-	38	37	1	1.00	2.00
39	-	41	40		0.00	2.00
42	-	44	43	7	7.00	9.00
45	-	47	46	6	6.00	15.00
48	-	50	49	26	26.00	41.00
51	-	53	52	31	31.00	72.00
54	-	56	55	15	15.00	87.00
57	-	59	58	7	7.00	94.00
60	-	62	61	4	4.00	98.00
63	-	65	64	2	2.00	100.00
66	-	68	67		0.00	100.00
69	-	71	70		0.00	100.00
72	-	74	73		0.00	100.00
75	-	77	76		0.00	100.00
78	-	80	79		0.00	100.00
81	-	83	82		0.00	100.00
84	-	86	85		0.00	100.00
87	-	89	88		0.00	100.00
TOTAL				100		

RADAR STUDY RESULTS			
50TH PERCENTILE SPEED	52		
85TH PERCENTILE SPEED	55		
10 MPH PACE SPEED	49	TO	58
PERCENT IN PACE SPEED	79.0		
PERCENT OVER PACE SPEED	6.0		
PERCENT UNDER PACE SPEED	15.0		
RANGE OF SPEEDS	34	TO	64
VEHICLES OBSERVED	100		
AVERAGE SPEED	51.4		

LOCATION: **State Route 131 @ Gibbs Schools (LM 25.687)**

REGION: **1** COUNTY: **Knox** CITY: **Corryton**

POSTED SPEED: **45 MPH** TIME: **10:41 AM** TO **11:23 AM** DATE: **1/17/2020**

DIRECTION OF FLOW: **NB** SURVEY MADE BY: **NB** CHECKED BY:

SPEED RANGE			MEDIAN	OBSERVATIONS	PCT	CUM PCT
0	-	2	1		0.00	0.00
3	-	5	4		0.00	0.00
6	-	8	7		0.00	0.00
9	-	11	10		0.00	0.00
12	-	14	13		0.00	0.00
15	-	17	16		0.00	0.00
18	-	20	19		0.00	0.00
21	-	23	22		0.00	0.00
24	-	26	25		0.00	0.00
27	-	29	28		0.00	0.00
30	-	32	31	1	1.00	1.00
33	-	35	34	3	3.00	4.00
36	-	38	37	15	15.00	19.00
39	-	41	40	35	35.00	54.00
42	-	44	43	28	28.00	82.00
45	-	47	46	12	12.00	94.00
48	-	50	49	5	5.00	99.00
51	-	53	52	1	1.00	100.00
54	-	56	55		0.00	100.00
57	-	59	58		0.00	100.00
60	-	62	61		0.00	100.00
63	-	65	64		0.00	100.00
66	-	68	67		0.00	100.00
69	-	71	70		0.00	100.00
72	-	74	73		0.00	100.00
75	-	77	76		0.00	100.00
78	-	80	79		0.00	100.00
81	-	83	82		0.00	100.00
84	-	86	85		0.00	100.00
87	-	89	88		0.00	100.00
TOTAL				100		

RADAR STUDY RESULTS	
50TH PERCENTILE SPEED	40
85TH PERCENTILE SPEED	46
10 MPH PACE SPEED	37 TO 46
PERCENT IN PACE SPEED	80.0
PERCENT OVER PACE SPEED	6.0
PERCENT UNDER PACE SPEED	4.0
RANGE OF SPEEDS	31 TO 52
VEHICLES OBSERVED	100
AVERAGE SPEED	41.4

LOCATION: **State Route 131 @ Gibbs Schools (LM 25.687)**

REGION: **1** COUNTY: **Knox** CITY: **Corryton**

POSTED SPEED: **45 MPH** TIME: **10:41 AM** TO **11:23 AM** DATE: **1/17/2020**

DIRECTION OF FLOW: **SB** SURVEY MADE BY: **NB** CHECKED BY:

SPEED RANGE			MEDIAN	OBSERVATIONS	PCT	CUM PCT
0	-	2	1		0.00	0.00
3	-	5	4		0.00	0.00
6	-	8	7		0.00	0.00
9	-	11	10		0.00	0.00
12	-	14	13		0.00	0.00
15	-	17	16		0.00	0.00
18	-	20	19		0.00	0.00
21	-	23	22		0.00	0.00
24	-	26	25		0.00	0.00
27	-	29	28	1	1.00	1.00
30	-	32	31	4	4.00	5.00
33	-	35	34	13	13.00	18.00
36	-	38	37	14	14.00	32.00
39	-	41	40	28	28.00	60.00
42	-	44	43	19	19.00	79.00
45	-	47	46	12	12.00	91.00
48	-	50	49	6	6.00	97.00
51	-	53	52	3	3.00	100.00
54	-	56	55		0.00	100.00
57	-	59	58		0.00	100.00
60	-	62	61		0.00	100.00
63	-	65	64		0.00	100.00
66	-	68	67		0.00	100.00
69	-	71	70		0.00	100.00
72	-	74	73		0.00	100.00
75	-	77	76		0.00	100.00
78	-	80	79		0.00	100.00
81	-	83	82		0.00	100.00
84	-	86	85		0.00	100.00
87	-	89	88		0.00	100.00
TOTAL				100		

RADAR STUDY RESULTS			
50TH PERCENTILE SPEED	40		
85TH PERCENTILE SPEED	46		
10 MPH PACE SPEED	34	TO	43
PERCENT IN PACE SPEED	74.0		
PERCENT OVER PACE SPEED	21.0		
PERCENT UNDER PACE SPEED	5.0		
RANGE OF SPEEDS	28	TO	52
VEHICLES OBSERVED	100		
AVERAGE SPEED	40.5		

LOCATION: **State Route 131 @ Log Mile 28.7**

REGION: **1** COUNTY: **Knox** CITY: **Corryton**

POSTED SPEED: **45 MPH** TIME: **12:19 PM** TO **12:41 PM** DATE: **1/17/2020**

DIRECTION OF FLOW: **Both** SURVEY MADE BY: **NB** CHECKED BY:

SPEED RANGE			MEDIAN	OBSERVATIONS	PCT	CUM PCT
0	-	2	1		0.00	0.00
3	-	5	4		0.00	0.00
6	-	8	7		0.00	0.00
9	-	11	10		0.00	0.00
12	-	14	13		0.00	0.00
15	-	17	16		0.00	0.00
18	-	20	19		0.00	0.00
21	-	23	22		0.00	0.00
24	-	26	25		0.00	0.00
27	-	29	28	1	1.00	1.00
30	-	32	31	1	1.00	2.00
33	-	35	34		0.00	2.00
36	-	38	37		0.00	2.00
39	-	41	40	3	3.00	5.00
42	-	44	43	22	22.00	27.00
45	-	47	46	30	30.00	57.00
48	-	50	49	14	14.00	71.00
51	-	53	52	17	17.00	88.00
54	-	56	55	7	7.00	95.00
57	-	59	58	2	2.00	97.00
60	-	62	61	3	3.00	100.00
63	-	65	64		0.00	100.00
66	-	68	67		0.00	100.00
69	-	71	70		0.00	100.00
72	-	74	73		0.00	100.00
75	-	77	76		0.00	100.00
78	-	80	79		0.00	100.00
81	-	83	82		0.00	100.00
84	-	86	85		0.00	100.00
87	-	89	88		0.00	100.00
TOTAL				100		

RADAR STUDY RESULTS			
50TH PERCENTILE SPEED	46		
85TH PERCENTILE SPEED	52		
10 MPH PACE SPEED	43	TO	52
PERCENT IN PACE SPEED	83.0		
PERCENT OVER PACE SPEED	12.0		
PERCENT UNDER PACE SPEED	5.0		
RANGE OF SPEEDS	28	TO	61
VEHICLES OBSERVED	100		
AVERAGE SPEED	47.6		

TENNESSEE DEPARTMENT OF TRANSPORTATION

COUNTY = **Knox** Date: **3/6/2020**
 Route = **State Route 331 and State Route 131**
 Location = **Section- Proposed 40 MPH Zone**
 Log Mile =
 Highway Type = **2 Lane Undivided**
 FUNCTIONAL CLASS **Urban Minor Arterial**
 DATA YEARS = **2017 to 2019 TRIMS Crash Data**
 ADT YEARS USED = **2018 TRIMS**
 COMMENTS =
 ANALYZED BY = **NB**

SECTION = MORE THAN 0.10 MILE / SPOT = LESS THAN 0.10 MILE

BLM	ELM	Length	Average AADT	VMT
7.67	8.31	0.64	15,030	9,649
25.12	26.26	1.14	8,150	9,283
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

1.78 10,630 18,932

INTERSECTION

Log Mile =

Leg Traffic AADT

North =

East =

South =

West =

Entering AADT = 0

2018 Trims

2 Lane Undivided
2017 to 2019 Trims Crash Data

		Total	Fatal	Incap. Injury	*Severe Crashes	Other Injury
No. of Crashes	=	115	0	5	5	22
No. of Years	=	3				
SW avg. rate	=	1.647	0.024	0.116	0.140	0.403
2012 - 2014 HSIP						
Exposure (E)	=	20.7307				
Crash Rate (A)	=	5.547	0.000	0.241	0.241	1.061
Critical Rate (C)	=	2.327				
Severity Index (SI)	=	0.2783				
Actual Rate/SW Average	=	3.37	0.00	2.08	1.72	2.63
Ratio of A/C	=	2.38				

* Severe Crashes are the sum of fatal and incapacitating injury crashes

Revised 4/3/2007

TENNESSEE DEPARTMENT OF TRANSPORTATION

COUNTY = Knox **Date:** 2/19/2020
Route = State Route 331
Location = Section- Knoxville City Limits to LM 4.990
Log Mile = 3.923 to 4.99
Highway Type = 2 Lane Undivided
FUNTIONAL CLASS Urban Minor Arterial
DATA YEARS = 2017 to 2019 TRIMS Crash Data
ADT YEARS USED = 2018 TRIMS
COMMENTS =
ANALYZED BY = NB

SECTION = MORE THAN 0.10 MILE / SPOT = LESS THAN 0.10 MILE

BLM	ELM	Length	Average AADT	VMT
3.92	4.99	1.07	15,030	16,082
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

1.07 15,030 16,082

INTERSECTION **Leg** **Traffic AADT**
Log Mile =

North =
East =
South =
West =

Entering AADT = 0
 2018 Trims

2 Lane Undivided
 2017 to 2019 Trims Crash Data

		Total	Fatal	Incap. Injury	*Severe Crashes	Other Injury
No. of Crashes	=	51	0	3	3	13
No. of Years	=	3				
SW avg. rate	=	1.647	0.024	0.116	0.140	0.403
2012 - 2014 HSIP						
Exposure (E)	=	17.6099				
Crash Rate (A)	=	2.896	0.000	0.170	0.170	0.738
Critical Rate (C)	=	2.387				
Severity Index (SI)	=	0.3725				
Actual Rate/SW Average	=	1.76	0.00	1.47	1.22	1.83
Ratio of A/C	=	1.21				

* Severe Crashes are the sum of fatal and incapacitating injury crashes

Revised 4/3/2007

TENNESSEE DEPARTMENT OF TRANSPORTATION

COUNTY = Knox **Date:** 2/19/2020
Route = State Route 331
Location = Section - Begin 50 MPH to State Route 131
Log Mile = 4.990 to 8.31
Highway Type = 2 Lane Undivided
FUNTIONAL CLASS Urban Minor Arterial
DATA YEARS = 2017 to 2019 TRIMS Crash Data
ADT YEARS USED = 2018 TRIMS
COMMENTS =
ANALYZED BY = NB

SECTION = MORE THAN 0.10 MILE / SPOT = LESS THAN 0.10 MILE

BLM	ELM	Length	Average AADT	VMT
4.99	8.31	3.32	15,030	49,900
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

3.32 15,030 49,900

INTERSECTION

Log Mile =

Leg **Traffic AADT**
 North =
 East =
 South =
 West =

Entering AADT = 0
 2018 Trims

2 Lane Undivided
 2017 to 2019 Trims Crash Data

		Total	Fatal	Incap. Injury	*Severe Crashes	Other Injury
No. of Crashes	=	136	1	8	9	32
No. of Years	=	3				
SW avg. rate	=	1.647	0.024	0.116	0.140	0.403
2012 - 2014 HSIP						
Exposure (E)	=	54.6401				
Crash Rate (A)	=	2.489	0.018	0.146	0.165	0.586
Critical Rate (C)	=	2.060				
Severity Index (SI)	=	0.3824				
Actual Rate/SW Average	=	1.51	0.76	1.26	1.18	1.45
Ratio of A/C	=	1.21				

* Severe Crashes are the sum of fatal and incapacitating injury crashes

Revised 4/3/2007

TENNESSEE DEPARTMENT OF TRANSPORTATION

COUNTY = Knox **Date:** 2/19/2020
Route = State Route 131
Location = Section- State Route 331 to Log Mile 26.390
Log Mile = 25.120 to 26.39
Highway Type = 2 Lane Undivided
FUNTIONAL CLASS Urban Minor Arterial
DATA YEARS = 2017 to 2019 TRIMS Crash Data
ADT YEARS USED = 2018 TRIMS
COMMENTS =
ANALYZED BY = NB

SECTION = MORE THAN 0.10 MILE / SPOT = LESS THAN 0.10 MILE

BLM	ELM	Length	Average AADT	VMT
25.12	26.39	1.27	8,150	10,351
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

1.27 8,150 10,351

INTERSECTION **Leg** **Traffic AADT**
Log Mile =

North =
East =
South =
West =

Entering AADT = 0
 2018 Trims

2 Lane Undivided
 2017 to 2019 Trims Crash Data

		Total	Fatal	Incap. Injury	*Severe Crashes	Other Injury
No. of Crashes	=	61	0	4	4	13
No. of Years	=	3				
SW avg. rate	=	1.647	0.024	0.116	0.140	0.403
2012 - 2014 HSIP						
Exposure (E)	=	11.3338				
Crash Rate (A)	=	5.382	0.000	0.353	0.353	1.147
Critical Rate (C)	=	2.578				
Severity Index (SI)	=	0.3443				
Actual Rate/SW Average	=	3.27	0.00	3.04	2.52	2.85
Ratio of A/C	=	2.09				

* Severe Crashes are the sum of fatal and incapacitating injury crashes

Revised 4/3/2007

TENNESSEE DEPARTMENT OF TRANSPORTATION

COUNTY = Knox **Date:** 2/19/2020
Route = State Route 131
Location = Section - Log Mile 26.390 to Union County Line
Log Mile = 26.390 to 29.495
Highway Type = 2 Lane Undivided
FUNTIONAL CLASS Rural Major Collector
DATA YEARS = 2017 to 2019 TRIMS Crash Data
ADT YEARS USED = 2018 TRIMS
COMMENTS =
ANALYZED BY = NB

SECTION = MORE THAN 0.10 MILE / SPOT = LESS THAN 0.10 MILE

BLM	ELM	Length	Average AADT	VMT
26.39	28.67	2.28	8,150	18,541
28.67	29.50	0.83	5,140	4,266
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

3.11 7,345 22,807

INTERSECTION

Log Mile =

Leg Traffic AADT
 North =
 East =
 South =
 West =

Entering AADT = 0
 2018 Trims

2 Lane Undivided
 2017 to 2019 Trims Crash Data

		Total	Fatal	Incap. Injury	*Severe Crashes	Other Injury
No. of Crashes	=	55	0	3	3	12
No. of Years	=	3				
SW avg. rate	=	1.647	0.024	0.116	0.140	0.403
2012 - 2014 HSIP						
Exposure (E)	=	24.9742				
Crash Rate (A)	=	2.202	0.000	0.120	0.120	0.480
Critical Rate (C)	=	2.265				
Severity Index (SI)	=	0.3273				
Actual Rate/SW Average	=	1.34	0.00	1.04	0.86	1.19
Ratio of A/C	=	0.97				

* Severe Crashes are the sum of fatal and incapacitating injury crashes

Revised 4/3/2007

County: KNOX

Route: SR331

Spcl Cse: 0-NONE

Cnty Seq: 1

Log Miles: 3.923 to 4.990 - Crash Dates: 1/1/2017 to 12/31/2019

Vehicle Filter: None - Other Factors Filter: None

Statistics	Crashes Involving	First Harmful Event
Fatal Crashes: 0	Pedestrians: 0	Pedestrian: 0
Total Killed: 0	Hazardous Cargo: 0	Pedalcycle: 0
Incap Injury Crashes: 3	Work / Constr Zones: 0	Railway Train: 0
Total Incap Injuries: 7	Fixed Objects: 4	Deer (Animal): 1
Other Injury Crashes: 13	Single Unit Trucks: 2	Other Animal: 0
Total Other Injuries: 27	Tractor - Trailer Trucks: 1	Motor Vehicle in Transport: 44
Prop Damage Crashes: 35	Bicycles: 0	Motor Vehicle in Transport in Other Roadway: 1
Total Crashes: 51	Motorcycles: 0	Parked Motor Vehicle: 0
	Lane Departures: 8	Other Type Non-Motorist: 0
	Distracted Drivers: 4	Fixed Object: 4
		Other Object (Not Fixed): 0
		Non Collision: 0
		Overturn: 1
		Jackknife: 0
		Cross Median: 0
		Ran Off Road: 0
Crash Location	Road Conditions	Weather Conditions
Along Roadway: 22	Ice: 0	No Adverse Conditions: 44
At Intersection: 29	Snow or Slush: 0	Rain: 7
Railroad Crossing: 0	Sand, Mud, Dirt or Oil: 0	Sleet and Hail: 0
Bridge: 0	Wet: 11	Snow: 0
Underpass: 0	Dry: 40	Foggy: 0
Ramp: 0		Smog, Smoke: 0
Private Property: 0		Crosswind: 0
Other: 0		
Manner of Collision	Light Conditions	Weather Conditions
Rear End: 19	Dawn: 2	No Adverse Conditions: 44
Head On: 3	Daylight: 35	Rain: 7
Rear-to-Side / Rear: 0	Dusk: 2	Sleet and Hail: 0
Angle: 18	Dark / Lighted: 1	Snow: 0
Sideswipe Same Dir: 2	Dark / Not Lighted: 10	Foggy: 0
Sideswipe Opp Dir: 1	Not Indicated: 1	Smog, Smoke: 0
Unknown: 2		Crosswind: 0
Fixed Objects		
Boulder: 0	Other Barrier: 0	Ditch: 0
Building: 0	Highway Traffic Sign Post: 0	Embankment: 0
Impact Attenuator: 0	Overhead Sign Support: 0	Fence: 0
Overhead Structure: 0	Luminaire/Light Support: 0	Wall: 0
Bridge Pier/Abutment/End: 0	Traffic Signal Support: 0	Mail Box: 0
Bridge Rail: 0	Utility Pole: 0	Shrubbery: 0
Guardrail: 0	Other Post, Pole Supports: 1	Tree: 3
Cable Barrier: 0	Culvert: 0	Fire Hydrant: 0
	Curb: 0	Other Fixed Object: 0

This report was generated by E-TRIMS

County: KNOX

Route: SR331

Spcl Cse: 0-NONE

Cnty Seq: 1

Log Miles: 4.990 to 8.310 - Crash Dates: 1/1/2017 to 12/31/2019

Vehicle Filter: None - Other Factors Filter: None

Statistics	Crashes Involving	First Harmful Event
Fatal Crashes: 1	Pedestrians: 0	Pedestrian: 0
Total Killed: 1	Hazardous Cargo: 0	Pedalcycle: 0
Incap Injury Crashes: 8	Work / Constr Zones: 0	Railway Train: 0
Total Incap Injuries: 9	Fixed Objects: 31	Deer (Animal): 0
Other Injury Crashes: 32	Single Unit Trucks: 0	Other Animal: 1
Total Other Injuries: 53	Tractor - Trailer Trucks: 0	Motor Vehicle in Transport: 95
Prop Damage Crashes: 95	Bicycles: 0	Motor Vehicle in Transport in Other Roadway: 3
Total Crashes: 136	Motorcycles: 3	Parked Motor Vehicle: 0
	Lane Departures: 37	Other Type Non-Motorist: 0
	Distracted Drivers: 12	Fixed Object: 31
		Other Object (Not Fixed): 1
		Non Collision: 2
		Overturn: 2
		Jackknife: 0
		Cross Median: 0
		Ran Off Road: 0
Crash Location	Road Conditions	Weather Conditions
Along Roadway: 95	Ice: 1	No Adverse Conditions: 121
At Intersection: 41	Snow or Slush: 0	Rain: 13
Railroad Crossing: 0	Sand, Mud, Dirt or Oil: 0	Sleet and Hail: 0
Bridge: 0	Wet: 20	Snow: 0
Underpass: 0	Dry: 114	Foggy: 1
Ramp: 0		Smog, Smoke: 0
Private Property: 0		Crosswind: 0
Other: 0		
Manner of Collision	Light Conditions	Weather Conditions
Rear End: 47	Dawn: 1	No Adverse Conditions: 121
Head On: 6	Daylight: 100	Rain: 13
Rear-to-Side / Rear: 1	Dusk: 1	Sleet and Hail: 0
Angle: 33	Dark / Lighted: 9	Snow: 0
Sideswipe Same Dir: 4	Dark / Not Lighted: 23	Foggy: 1
Sideswipe Opp Dir: 3	Not Indicated: 1	Smog, Smoke: 0
Unknown: 4		Crosswind: 0
Fixed Objects		
Boulder: 0	Other Barrier: 0	Ditch: 9
Building: 0	Highway Traffic Sign Post: 0	Embankment: 4
Impact Attenuator: 0	Overhead Sign Support: 0	Fence: 2
Overhead Structure: 0	Luminaire/Light Support: 0	Wall: 0
Bridge Pier/Abutment/End: 0	Traffic Signal Support: 0	Mail Box: 2
Bridge Rail: 0	Utility Pole: 9	Shrubbery: 0
Guardrail: 1	Other Post, Pole Supports: 1	Tree: 2
Cable Barrier: 0	Culvert: 1	Fire Hydrant: 0
	Curb: 0	Other Fixed Object: 0

This report was generated by E-TRIMS

County: KNOX

Route: SR331

Spcl Cse: 0-NONE

Cnty Seq: 1

Log Miles: 7.668 to 8.310 - Crash Dates: 1/1/2017 to 12/31/2019

Vehicle Filter: None - Other Factors Filter: None

<p>Statistics</p> <p>Fatal Crashes: 0</p> <p>Total Killed: 0</p> <p>Incap Injury Crashes: 2</p> <p>Total Incap Injuries: 2</p> <p>Other Injury Crashes: 9</p> <p>Total Other Injuries: 11</p> <p>Prop Damage Crashes: 45</p> <p>Total Crashes: 56</p>	<p>Crashes Involving</p> <p>Pedestrians: 0</p> <p>Hazardous Cargo: 0</p> <p>Work / Constr Zones: 0</p> <p>Fixed Objects: 3</p> <p>Single Unit Trucks: 0</p> <p>Tractor - Trailer Trucks: 0</p> <p>Bicycles: 0</p> <p>Motorcycles: 0</p> <p>Lane Departures: 3</p> <p>Distracted Drivers: 6</p>	<p>First Harmful Event</p> <p>Pedestrian: 0</p> <p>Pedalcycle: 0</p> <p>Railway Train: 0</p> <p>Deer (Animal): 0</p> <p>Other Animal: 0</p> <p>Motor Vehicle in Transport: 50</p> <p>Motor Vehicle in Transport in Other Roadway: 2</p> <p>Parked Motor Vehicle: 0</p> <p>Other Type Non-Motorist: 0</p> <p>Fixed Object: 3</p> <p>Other Object (Not Fixed): 0</p> <p>Non Collision: 0</p> <p>Overturn: 0</p> <p>Jackknife: 0</p> <p>Cross Median: 0</p> <p>Ran Off Road: 0</p>																											
<p>Crash Location</p> <p>Along Roadway: 37</p> <p>At Intersection: 19</p> <p>Railroad Crossing: 0</p> <p>Bridge: 0</p> <p>Underpass: 0</p> <p>Ramp: 0</p> <p>Private Property: 0</p> <p>Other: 0</p>	<p>Road Conditions</p> <p>Ice: 0</p> <p>Snow or Slush: 0</p> <p>Sand, Mud, Dirt or Oil: 0</p> <p>Wet: 7</p> <p>Dry: 48</p>																												
<p>Manner of Collision</p> <p>Rear End: 21</p> <p>Head On: 2</p> <p>Rear-to-Side / Rear: 1</p> <p>Angle: 22</p> <p>Sideswipe Same Dir: 2</p> <p>Sideswipe Opp Dir: 1</p> <p>Unknown: 3</p>	<p>Light Conditions</p> <p>Dawn: 0</p> <p>Daylight: 43</p> <p>Dusk: 0</p> <p>Dark / Lighted: 4</p> <p>Dark / Not Lighted: 7</p> <p>Not Indicated: 1</p>	<p>Weather Conditions</p> <p>No Adverse Conditions: 51</p> <p>Rain: 4</p> <p>Sleet and Hail: 0</p> <p>Snow: 0</p> <p>Foggy: 0</p> <p>Smog, Smoke: 0</p> <p>Crosswind: 0</p>																											
<p>Fixed Objects</p> <table border="0"> <tr> <td>Boulder: 0</td> <td>Other Barrier: 0</td> <td>Ditch: 0</td> </tr> <tr> <td>Building: 0</td> <td>Highway Traffic Sign Post: 0</td> <td>Embankment: 0</td> </tr> <tr> <td>Impact Attenuator: 0</td> <td>Overhead Sign Support: 0</td> <td>Fence: 0</td> </tr> <tr> <td>Overhead Structure: 0</td> <td>Luminaire/Light Support: 0</td> <td>Wall: 0</td> </tr> <tr> <td>Bridge Pier/Abutment/End: 0</td> <td>Traffic Signal Support: 0</td> <td>Mail Box: 0</td> </tr> <tr> <td>Bridge Rail: 0</td> <td>Utility Pole: 2</td> <td>Shrubbery: 0</td> </tr> <tr> <td>Guardrail: 0</td> <td>Other Post, Pole Supports: 0</td> <td>Tree: 0</td> </tr> <tr> <td>Cable Barrier: 0</td> <td>Culvert: 1</td> <td>Fire Hydrant: 0</td> </tr> <tr> <td></td> <td>Curb: 0</td> <td>Other Fixed Object: 0</td> </tr> </table> <p><i>This report was generated by E-TRIMS</i></p>			Boulder: 0	Other Barrier: 0	Ditch: 0	Building: 0	Highway Traffic Sign Post: 0	Embankment: 0	Impact Attenuator: 0	Overhead Sign Support: 0	Fence: 0	Overhead Structure: 0	Luminaire/Light Support: 0	Wall: 0	Bridge Pier/Abutment/End: 0	Traffic Signal Support: 0	Mail Box: 0	Bridge Rail: 0	Utility Pole: 2	Shrubbery: 0	Guardrail: 0	Other Post, Pole Supports: 0	Tree: 0	Cable Barrier: 0	Culvert: 1	Fire Hydrant: 0		Curb: 0	Other Fixed Object: 0
Boulder: 0	Other Barrier: 0	Ditch: 0																											
Building: 0	Highway Traffic Sign Post: 0	Embankment: 0																											
Impact Attenuator: 0	Overhead Sign Support: 0	Fence: 0																											
Overhead Structure: 0	Luminaire/Light Support: 0	Wall: 0																											
Bridge Pier/Abutment/End: 0	Traffic Signal Support: 0	Mail Box: 0																											
Bridge Rail: 0	Utility Pole: 2	Shrubbery: 0																											
Guardrail: 0	Other Post, Pole Supports: 0	Tree: 0																											
Cable Barrier: 0	Culvert: 1	Fire Hydrant: 0																											
	Curb: 0	Other Fixed Object: 0																											

County: KNOX

Route: SR131

Spcl Cse: 0-NONE

Cnty Seq: 1

Log Miles: 25.120 to 26.259 - Crash Dates: 1/1/2017 to 12/31/2019

Vehicle Filter: None - Other Factors Filter: None

<p>Statistics</p> <p>Fatal Crashes: 0</p> <p>Total Killed: 0</p> <p>Incap Injury Crashes: 3</p> <p>Total Incap Injuries: 4</p> <p>Other Injury Crashes: 13</p> <p>Total Other Injuries: 23</p> <p>Prop Damage Crashes: 43</p> <p>Total Crashes: 59</p>	<p>Crashes Involving</p> <p>Pedestrians: 1</p> <p>Hazardous Cargo: 0</p> <p>Work / Constr Zones: 0</p> <p>Fixed Objects: 3</p> <p>Single Unit Trucks: 1</p> <p>Tractor - Trailer Trucks: 0</p> <p>Bicycles: 0</p> <p>Motorcycles: 0</p> <p>Lane Departures: 4</p> <p>Distracted Drivers: 2</p>	<p>First Harmful Event</p> <p>Pedestrian: 1</p> <p>Pedalcycle: 0</p> <p>Railway Train: 0</p> <p>Deer (Animal): 0</p> <p>Other Animal: 0</p> <p>Motor Vehicle in Transport: 55</p> <p>Motor Vehicle in Transport in Other Roadway: 0</p> <p>Parked Motor Vehicle: 0</p> <p>Other Type Non-Motorist: 0</p> <p>Fixed Object: 3</p> <p>Other Object (Not Fixed): 0</p> <p>Non Collision: 0</p> <p>Overturn: 0</p> <p>Jackknife: 0</p> <p>Cross Median: 0</p> <p>Ran Off Road: 0</p>																											
<p>Crash Location</p> <p>Along Roadway: 27</p> <p>At Intersection: 32</p> <p>Railroad Crossing: 0</p> <p>Bridge: 0</p> <p>Underpass: 0</p> <p>Ramp: 0</p> <p>Private Property: 0</p> <p>Other: 0</p>	<p>Road Conditions</p> <p>Ice: 0</p> <p>Snow or Slush: 0</p> <p>Sand, Mud, Dirt or Oil: 0</p> <p>Wet: 6</p> <p>Dry: 53</p>																												
<p>Manner of Collision</p> <p>Rear End: 21</p> <p>Head On: 7</p> <p>Rear-to-Side / Rear: 0</p> <p>Angle: 24</p> <p>Sideswipe Same Dir: 0</p> <p>Sideswipe Opp Dir: 3</p> <p>Unknown: 0</p>	<p>Light Conditions</p> <p>Dawn: 5</p> <p>Daylight: 34</p> <p>Dusk: 2</p> <p>Dark / Lighted: 10</p> <p>Dark / Not Lighted: 7</p> <p>Not Indicated: 1</p>	<p>Weather Conditions</p> <p>No Adverse Conditions: 54</p> <p>Rain: 4</p> <p>Sleet and Hail: 0</p> <p>Snow: 0</p> <p>Foggy: 1</p> <p>Smog, Smoke: 0</p> <p>Crosswind: 0</p>																											
<p>Fixed Objects</p> <table border="0"> <tr> <td>Boulder: 0</td> <td>Other Barrier: 0</td> <td>Ditch: 2</td> </tr> <tr> <td>Building: 0</td> <td>Highway Traffic Sign Post: 0</td> <td>Embankment: 0</td> </tr> <tr> <td>Impact Attenuator: 0</td> <td>Overhead Sign Support: 0</td> <td>Fence: 0</td> </tr> <tr> <td>Overhead Structure: 0</td> <td>Luminaire/Light Support: 0</td> <td>Wall: 0</td> </tr> <tr> <td>Bridge Pier/Abutment/End: 0</td> <td>Traffic Signal Support: 1</td> <td>Mail Box: 0</td> </tr> <tr> <td>Bridge Rail: 0</td> <td>Utility Pole: 0</td> <td>Shrubbery: 0</td> </tr> <tr> <td>Guardrail: 0</td> <td>Other Post, Pole Supports: 0</td> <td>Tree: 0</td> </tr> <tr> <td>Cable Barrier: 0</td> <td>Culvert: 0</td> <td>Fire Hydrant: 0</td> </tr> <tr> <td></td> <td>Curb: 0</td> <td>Other Fixed Object: 0</td> </tr> </table> <p><i>This report was generated by E-TRIMS</i></p>			Boulder: 0	Other Barrier: 0	Ditch: 2	Building: 0	Highway Traffic Sign Post: 0	Embankment: 0	Impact Attenuator: 0	Overhead Sign Support: 0	Fence: 0	Overhead Structure: 0	Luminaire/Light Support: 0	Wall: 0	Bridge Pier/Abutment/End: 0	Traffic Signal Support: 1	Mail Box: 0	Bridge Rail: 0	Utility Pole: 0	Shrubbery: 0	Guardrail: 0	Other Post, Pole Supports: 0	Tree: 0	Cable Barrier: 0	Culvert: 0	Fire Hydrant: 0		Curb: 0	Other Fixed Object: 0
Boulder: 0	Other Barrier: 0	Ditch: 2																											
Building: 0	Highway Traffic Sign Post: 0	Embankment: 0																											
Impact Attenuator: 0	Overhead Sign Support: 0	Fence: 0																											
Overhead Structure: 0	Luminaire/Light Support: 0	Wall: 0																											
Bridge Pier/Abutment/End: 0	Traffic Signal Support: 1	Mail Box: 0																											
Bridge Rail: 0	Utility Pole: 0	Shrubbery: 0																											
Guardrail: 0	Other Post, Pole Supports: 0	Tree: 0																											
Cable Barrier: 0	Culvert: 0	Fire Hydrant: 0																											
	Curb: 0	Other Fixed Object: 0																											

County: KNOX

Route: SR131

Spcl Cse: 0-NONE

Cnty Seq: 1

Log Miles: 26.390 to 29.495 - Crash Dates: 1/1/2017 to 12/31/2019

Vehicle Filter: None - Other Factors Filter: None

Statistics	Crashes Involving	First Harmful Event
Fatal Crashes: 0	Pedestrians: 0	Pedestrian: 0
Total Killed: 0	Hazardous Cargo: 0	Pedalcycle: 0
Incap Injury Crashes: 3	Work / Constr Zones: 0	Railway Train: 0
Total Incap Injuries: 3	Fixed Objects: 29	Deer (Animal): 5
Other Injury Crashes: 12	Single Unit Trucks: 2	Other Animal: 2
Total Other Injuries: 14	Tractor - Trailer Trucks: 0	Motor Vehicle in Transport: 15
Prop Damage Crashes: 40	Bicycles: 0	Motor Vehicle in Transport in Other Roadway: 0
Total Crashes: 55	Motorcycles: 0	Parked Motor Vehicle: 0
	Lane Departures: 29	Other Type Non-Motorist: 0
	Distracted Drivers: 4	Fixed Object: 29
		Other Object (Not Fixed): 0
		Non Collision: 0
		Overturn: 2
		Jackknife: 0
		Cross Median: 0
		Ran Off Road: 0
Crash Location	Road Conditions	Weather Conditions
Along Roadway: 49	Ice: 0	No Adverse Conditions: 48
At Intersection: 6	Snow or Slush: 0	Rain: 3
Railroad Crossing: 0	Sand, Mud, Dirt or Oil: 0	Sleet and Hail: 0
Bridge: 0	Wet: 6	Snow: 0
Underpass: 0	Dry: 47	Foggy: 0
Ramp: 0		Smog, Smoke: 0
Private Property: 0		Crosswind: 0
Other: 0		
Manner of Collision	Light Conditions	Weather Conditions
Rear End: 4	Dawn: 1	No Adverse Conditions: 48
Head On: 0	Daylight: 27	Rain: 3
Rear-to-Side / Rear: 0	Dusk: 4	Sleet and Hail: 0
Angle: 3	Dark / Lighted: 0	Snow: 0
Sideswipe Same Dir: 1	Dark / Not Lighted: 20	Foggy: 0
Sideswipe Opp Dir: 6	Not Indicated: 1	Smog, Smoke: 0
Unknown: 1		Crosswind: 0
Fixed Objects		
Boulder: 0	Other Barrier: 0	Ditch: 14
Building: 0	Highway Traffic Sign Post: 0	Embankment: 1
Impact Attenuator: 0	Overhead Sign Support: 0	Fence: 1
Overhead Structure: 0	Luminaire/Light Support: 0	Wall: 2
Bridge Pier/Abutment/End: 0	Traffic Signal Support: 0	Mail Box: 3
Bridge Rail: 0	Utility Pole: 6	Shrubbery: 0
Guardrail: 0	Other Post, Pole Supports: 0	Tree: 2
Cable Barrier: 0	Culvert: 0	Fire Hydrant: 0
	Curb: 0	Other Fixed Object: 0

This report was generated by E-TRIMS

County: KNOX

Route: SR131

Spcl Cse: 0-NONE

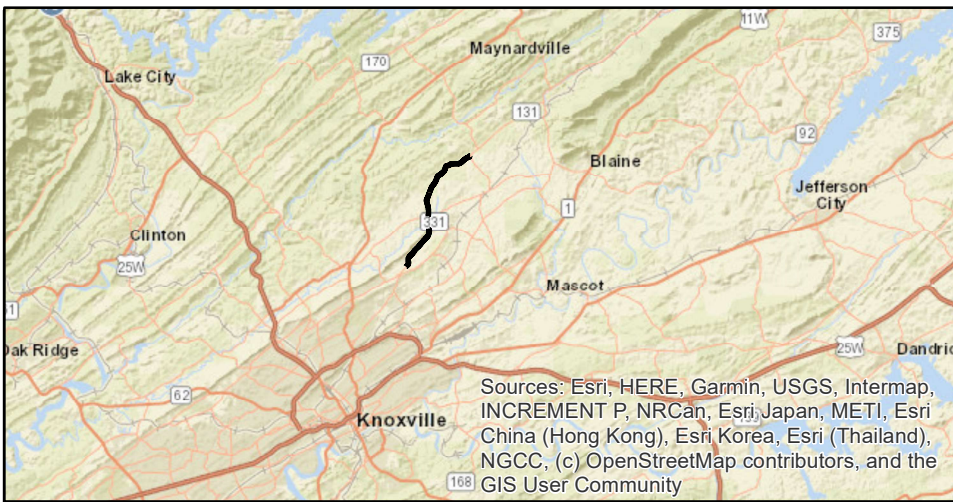
Cnty Seq: 1

Log Miles: 25.120 to 26.390 - Crash Dates: 1/1/2017 to 12/31/2019

Vehicle Filter: None - Other Factors Filter: None

Statistics	Crashes Involving	First Harmful Event
Fatal Crashes: 0	Pedestrians: 1	Pedestrian: 1
Total Killed: 0	Hazardous Cargo: 0	Pedalcycle: 0
Incap Injury Crashes: 4	Work / Constr Zones: 0	Railway Train: 0
Total Incap Injuries: 5	Fixed Objects: 5	Deer (Animal): 0
Other Injury Crashes: 13	Single Unit Trucks: 1	Other Animal: 0
Total Other Injuries: 24	Tractor - Trailer Trucks: 0	Motor Vehicle in Transport: 55
Prop Damage Crashes: 44	Bicycles: 0	Motor Vehicle in Transport in Other Roadway: 0
Total Crashes: 61	Motorcycles: 0	Parked Motor Vehicle: 0
	Lane Departures: 6	Other Type Non-Motorist: 0
	Distracted Drivers: 3	Fixed Object: 5
		Other Object (Not Fixed): 0
		Non Collision: 0
		Overturn: 0
		Jackknife: 0
		Cross Median: 0
		Ran Off Road: 0
Crash Location	Road Conditions	Weather Conditions
Along Roadway: 29	Ice: 0	No Adverse Conditions: 56
At Intersection: 32	Snow or Slush: 0	Rain: 4
Railroad Crossing: 0	Sand, Mud, Dirt or Oil: 0	Sleet and Hail: 0
Bridge: 0	Wet: 6	Snow: 0
Underpass: 0	Dry: 55	Foggy: 1
Ramp: 0		Smog, Smoke: 0
Private Property: 0		Crosswind: 0
Other: 0		
Manner of Collision	Light Conditions	Weather Conditions
Rear End: 21	Dawn: 5	No Adverse Conditions: 56
Head On: 7	Daylight: 35	Rain: 4
Rear-to-Side / Rear: 0	Dusk: 2	Sleet and Hail: 0
Angle: 24	Dark / Lighted: 10	Snow: 0
Sideswipe Same Dir: 0	Dark / Not Lighted: 8	Foggy: 1
Sideswipe Opp Dir: 3	Not Indicated: 1	Smog, Smoke: 0
Unknown: 0		Crosswind: 0
Fixed Objects		
Boulder: 0	Other Barrier: 0	Ditch: 2
Building: 0	Highway Traffic Sign Post: 0	Embankment: 0
Impact Attenuator: 0	Overhead Sign Support: 0	Fence: 0
Overhead Structure: 0	Luminaire/Light Support: 0	Wall: 0
Bridge Pier/Abutment/End: 0	Traffic Signal Support: 1	Mail Box: 0
Bridge Rail: 0	Utility Pole: 0	Shrubbery: 0
Guardrail: 0	Other Post, Pole Supports: 0	Tree: 2
Cable Barrier: 0	Culvert: 0	Fire Hydrant: 0
	Curb: 0	Other Fixed Object: 0

This report was generated by E-TRIMS



Speed Study 5 - Clapps Chapel Rd
 Posted Speed: 45 MPH
 85% Speed: 52
 50% Speed: 46
 Range of Speeds: 28-61 MPH

State Route 131 Knox County		LM 26.390 to 29.495	
Section - Log Mile 26.390 to Union County Line			
55 Crashes - 2017 to 2019	Actual - 2.202	Acc/MVM	
State Average - 1.647	Acc/MVM	Critical - 2.265	Acc/MVM
A/S Ratio = 1.34		A/C Ratio = 0.97	
0 Fatal Crash	3 Incap. Injury Crash	12 Other Injury Crash	

Speed Study 3 - Gibbs Schools NB
 Posted Speed: 45 MPH
 85% Speed: 46 MPH
 50% Speed: 40 MPH
 Range of Speeds: 37-46 MPH

Speed Study 4 - Gibbs Schools NB
 Posted Speed: 45 MPH
 85% Speed: 46 MPH
 50% Speed: 40 MPH
 Range of Speeds: 28-52 MPH

State Route 131 Knox County		LM 25.120 to 26.390	
Section- State Route 331 to Log Mile 26.390			
61 Crashes - 2017 to 2019	Actual - 5.382	Acc/MVM	
State Average - 1.647	Acc/MVM	Critical - 2.578	Acc/MVM
A/S Ratio = 3.27		A/C Ratio = 2.09	
0 Fatal Crash	4 Incap. Injury Crash	13 Other Injury Crash	

State Route 331 Knox County		LM 4.990 to 8.310	
Section - Begin 50 MPH to State Route 131			
136 Crashes - 2017 to 2019	Actual - 2.489	Acc/MVM	
State Average - 1.647	Acc/MVM	Critical - 2.060	Acc/MVM
A/S Ratio = 1.51		A/C Ratio = 1.21	
1 Fatal Crash	8 Incap. Injury Crash	32 Other Injury Crash	

State Route 331 Knox County		LM 3.923 to 4.990	
Section- Knoxville City Limits to LM 4.990			
51 Crashes - 2017 to 2019	Actual - 2.896	Acc/MVM	
State Average - 1.647	Acc/MVM	Critical - 2.387	Acc/MVM
A/S Ratio = 1.76		A/C Ratio = 1.21	
0 Fatal Crash	3 Incap. Injury Crash	13 Other Injury Crash	

Speed Study 2 - Henegar Rd
 Posted Speed: 50 MPH
 85% Speed: 55 MPH
 50% Speed: 52 MPH
 Range of Speeds: 34-64 MPH

Speed Study 1 - Ridgeview Rd
 Posted Speed: 45 MPH
 85% Speed: 49 MPH
 50% Speed: 46 MPH
 Range of Speeds: 31-61 MPH

Legend

Crash Severity

- Fatal (1)
- Suspected Serious Injury (18)
- Suspected Minor Injury (70)
- Property Damage (214)

State Route 131

— 45 MPH

State Route 331

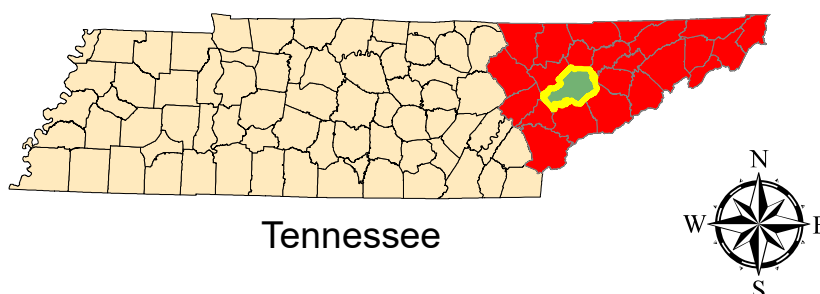
— 45 MPH

— 50 MPH

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), OpenStreetMap contributors, and the GIS User Community



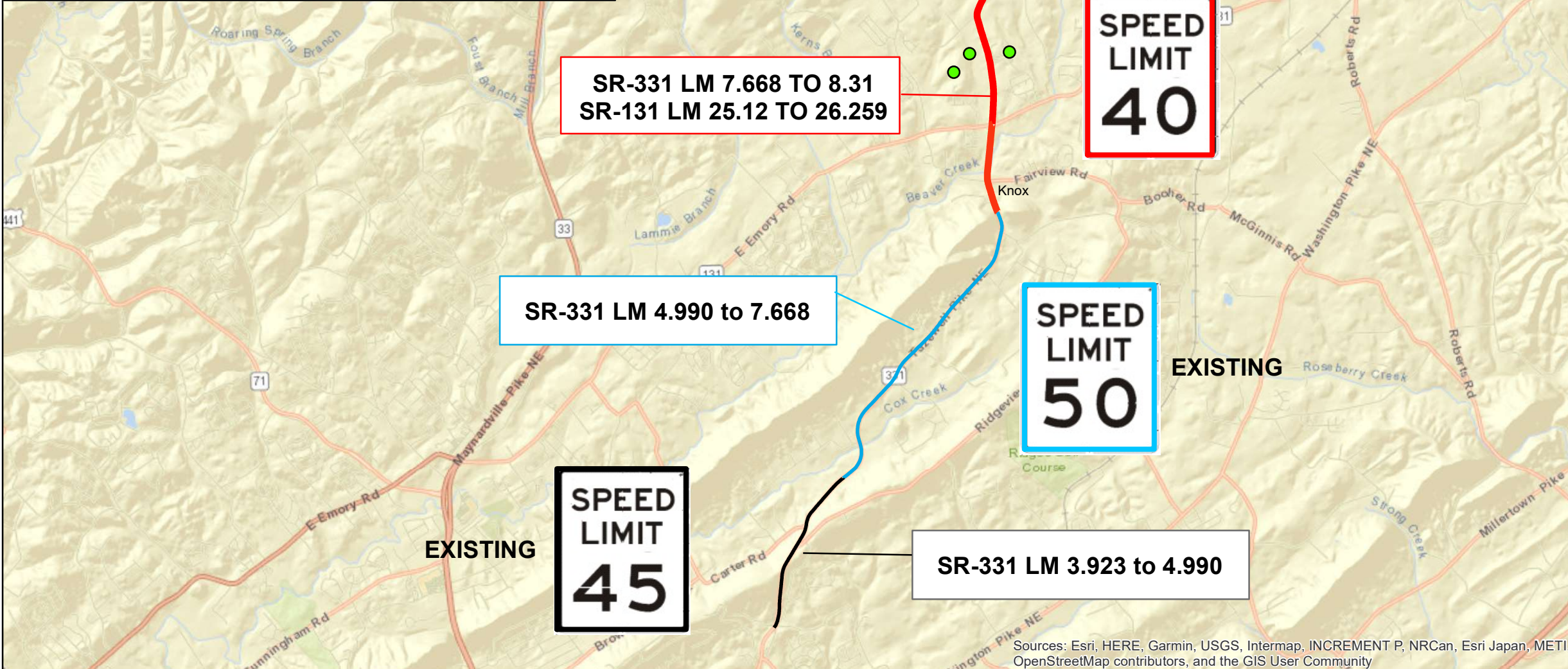
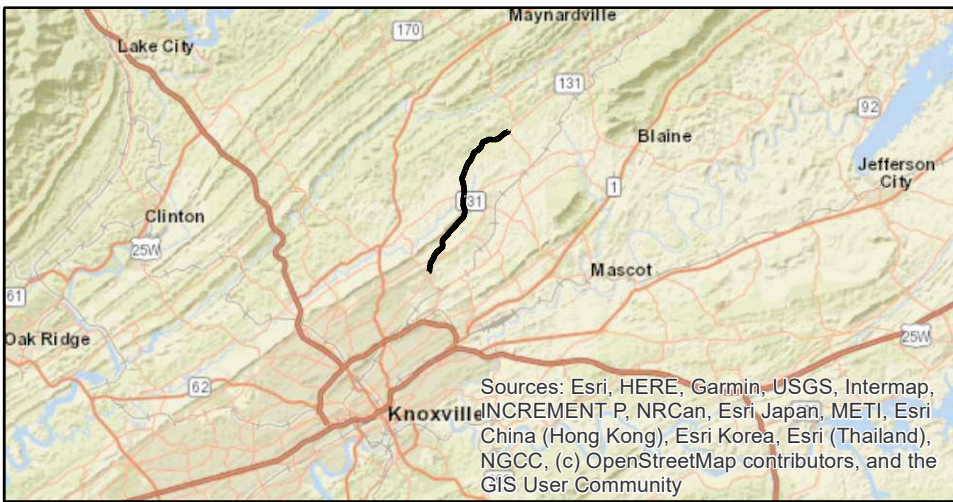
PREPARED BY:
 TDOT TRAFFIC OFFICE
 REGION 1



Crash Location Map

State Route 331
 From LM 3.923 to 8.310
 And
 State Route 131
 From LM 25.120 to 29.495

Knox County
 Source: TDOT GIS

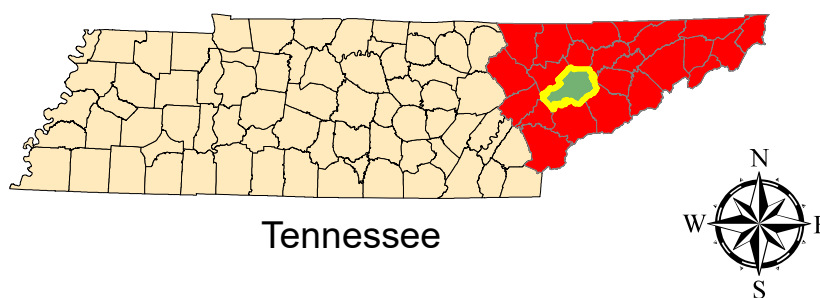


Legend

- 40 MPH Segment
- 50 MPH Segment
- 45 MPH Segments
- Gibbs Schools



PREPARED BY:
TDOT TRAFFIC OFFICE
REGION 1



Proposed Speed Limit

State Route 331
From LM 3.923 to 8.310
And
State Route 131
From LM 25.120 to 29.495

Knox County
Source: TDOT GIS