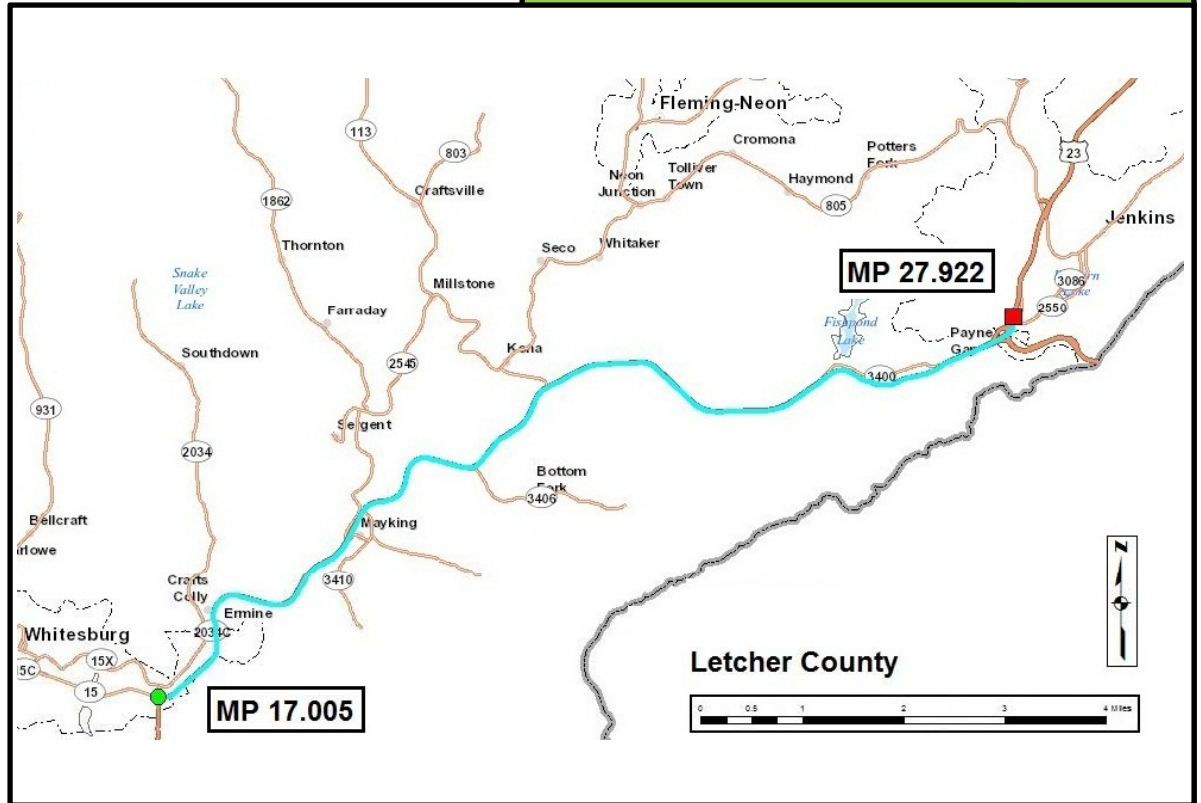


Data Needs Analysis



Scoping Study



US 119, Letcher County
From US 23 to Whitesburg
Item No. 12-199.00

Prepared by the KYTC
Division of Planning and
KYTC District 12

December 2014



I. PRELIMINARY PROJECT INFORMATION

County:	Letcher Co.	Item No.:	12-199.00
Route Number(s)*:	US 119	Road Name:	US 119 btw Whitesburg & US 23
Program No.:	9014301D	UPN:	FD04 067 0119 017-028
Federal Project No.:	n/a	Type of Work:	Reconstruction w/ Wider Lanes

2014 **Highway Plan Project Description:**

Perform Design Study to Determine Logical Approach to Improving US 119 between Whitesburg and US 23.

Beginning MP:	17.005	Ending MP:	27.922	Project Length:	10.917
In TIP:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Reconcile Project Information in Clearview			
State Class.:	<input checked="" type="checkbox"/> Primary <input type="checkbox"/> Secondary	Route is on:	<input checked="" type="checkbox"/> NHS <input checked="" type="checkbox"/> NN <input checked="" type="checkbox"/> Ext Wt		
Functional Class.:	<input type="checkbox"/> Urban <input checked="" type="checkbox"/> Rural Arterial	Truck Class.:	AAA	% Trucks:	11.88%
MPO Area:	Not Applicable	Terrain:	Mountainous		
ADT (current):	6008 2013				
Access Control:	<input type="checkbox"/> None <input checked="" type="checkbox"/> Permit <input type="checkbox"/> Fully Controlled <input type="checkbox"/> Partial	Spacing: <input type="text"/>			
Median Type:	<input checked="" type="checkbox"/> Undivided <input type="checkbox"/> Divided (Type):				
Existing Bike Accommodations:	None	Ped:	<input type="checkbox"/> Sidewalk		
Posted Speed:	<input type="checkbox"/> 35 mph <input type="checkbox"/> 45 mph <input checked="" type="checkbox"/> 55 mph <input type="checkbox"/> Other (Specify):				
KYTC Guidelines Preliminarily Based on :	55 MPH Proposed Design Speed				

COMMON GEOMETRIC

Roadway Data:	EXISTING	PRACTICES**	
No. of Lanes	2, 3 and 4	2	Existing Rdwy. Plans available?
Lane Width	12-foot	12 feet	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Shoulder Width	varies	8 feet	Year of Plans: 1957, 61, 71
Max. Superelevation***	8%	8%	<input type="checkbox"/> Traffic Forecast Requested
Minimum Radius***	954.93'	951'	Date Requested: <input type="text"/>
Maximum Grade	7%	6%	<input type="checkbox"/> Mapping/Survey Requested
Minimum Sight Dist.	480'	495'	Date Requested: <input type="text"/>
Sidewalk Width(urban)	n/a	n/a	Type: <input type="text"/>
Clear-zone [†]			
Project Notes/Design Exceptions?			

Bridge No.:#	067B00081N	067B00082N	=> add'l see attached
Sufficiency Rating	80	79	
Total Length	358.9	203.1	Existing Geotech Data Available?
Width, curb to curb	14.6	13.4	<input type="checkbox"/> Yes <input type="checkbox"/> No
Span Lengths			
Year Built	1974	1974	
Posted Weight Limit			Detour Length(s): n/a
Structurally Deficient?	No	No	
Functionally Obsolete?	No	No	
Existing Bridge Type			

*If more than one road is included in the project, include additional sheets.
 **Based on proposed Design Speed
 ***AASHTO's A Policy on Geometric Design of Highways and Streets
 †AASHTO's Roadside Design Guide
 ‡If more than two bridges are located on the project, include additional sheets.

II. PROJECT PURPOSE AND NEED

A. Legislation

Project championed by 94th District State Representative Leslie Combs. The following funding was listed in the 2014 General Assembly's Encacted Highway Plan.

<i>Funding</i>	<i>Phase</i>	<i>Year</i>	<i>Amount</i>
SPP	D	2015	\$1,000,000
	R		
	U		
	C		

B. Project Status

This segment of US 119 is covered under inactive PIF 12 067 B0118 34.00. An adjacent project (PIF 12 067 B0119 27.00) should be evaluated in the further development of this project. PIF 12 067 B0119 27.00 involves construction of a new access to the Gateway Industrial Park and lies along the projects eastern termini. Design funds for this project were authorized in December 2014.

C. System Linkage

This project is located along Corridor "F" of Appalachian Development Highway System (ADHS). Corridor F extends from I-75 near Caryville, TN and extends easterly to tie into Corridor B (US 23) at Payne Gap near Jenkins, Kentucky. This project involves upgrades to the eastern most 10.917 miles of Corridor "F".

D. Modal Interrelationships

This section of US 119 is part of the National Highway System, National Truck Network and on Extended Weight Network. It is a vital freight and commercial artery that links I-75 to US 23 along the southeastern portion of Kentucky. This section of US 119 has a 11.882 percent truck rate.

E. Social Demands & Economic Development

This 10.700 mile segment of US 119 is a heavy traveled major connector for local and interstate traffic. Coal trucks and passenger vehicles do not share this roadway well. Widening this stretch to 4 lanes could reduce the number of rear end and head-on collisions as well as carrying the volume of interstate and local traffic at a better rate and safer speed.

II. PROJECT PURPOSE AND NEED (cont.)

F. Transportation Demand

ADT through the corridor has remained relatively unchanged of the last 15 years. Traffic is not expected to increase.

G. Capacity

This section of US 119 exhibits no capacity issues at the present time and is not expected to do so in the foreseeable future.

H. Safety

During the last three year period (January 2011 through December 2013) there have been a total of 118 crashes within the project limits. 210 vehicles were involved in the incidents with 110 injuries and one fatality. The roadway and lane conditions vary from two, three and four lane sections within the project limits. Of the 10.345 miles (excluding ramp to US 23), 5.827-miles (56.3%) is 2-lane, 2.228-miles (22.5%) is 3-Lane and 2.290-miles (22.1%) is 4-lane. Collision among the three sections are 88 for 2-lane, 19 for 3-lane and 11 for the 4-lane sections, respectively. A disproportionate number of collisions are occurring on the 2-lane section resulting in a collision rate of 15.102 collision/mile compare to 8.525 for the three lane section and only 4.803 for the four lane section. As can be expected, the dominate number of collisions (33) were Rear End along the 2-lane section.

I. Roadway Deficiencies

For the most part, this section of US 119 consists of approximately 79% of either 2 or 3 lane undivided roadway with varying shoulders. There is a 2.290-mile section 4-lane divided roadway within the project limits between MP 18.969 and MP 19.925. There are five-(5) structures located within the project limits with two being either functionally obsolete or structurally deficient. 067B00083N at MP 20.156 is classified as structurally deficient and 067B00129N at MP 27.728 is functionally obsolete.

III. PRELIMINARY ENVIRONMENTAL OVERVIEW

A. Air Quality

Project is in: Attainment area Nonattainment or Maintenance Area PM 2.5 County

STIP Pg.#:

TIP Pg.#:

B. Archeology/Historic Resources

Known Archeological or Historic Resources are present

No Section 106 notifications have been generated from the District at this point. If the historical survey indicates that there may be an impact to historical sites, then the 106 process will be started.

C. Threatened and Endangered Species

The Indiana Bat, Gray Bat, Blackside Dace, Cumberland Darter, Kentucky Arrow Darter, and Cumberland Arrow Darter are listed as threatened or endangered species in the project area. A BA may be required to satisfy section 7 requirements for all species. An IBCMOA or tree-cutting restrictions may be utilized to compensate for any potential habitat loss for the Indiana Bat.

D. Hazardous Materials

Potentially Contaminated Sites are present Potential Bridge or Structure Demolition

At the time of the Environmental Overview, no UST/HAZMAT issues were noted in the project area. However, project does potentially have structure demolition.

E. Permitting

Check all that may apply: Waters of the US MS4 area Floodplain Impacts Navigable Waters of the US Impacts
Are 401/404 Permits likely to be required? Yes No Impacts to: Wetlands Stream/Lake/Pond
 ACE LON ACE NW ACE IP DOW IWQC Special Use Waters

ACE LOP may be required if waste area is needed.

F. Noise

Are existing or planned noise sensitive receptors adjacent to the proposed project? Yes No
Is this considered a "Type I Project" according to the [KYTC Noise Analysis and Abatement Policy?](#) Yes No

State funded project, No Noise work required.

G. Socioeconomic

Check all that may apply: Low Income/Minority Populations Relocations Local Land Use Plan available

Possible relocations associated with project. Relocation surveys would need to be completed to see if any low income or minority populations are affected.

H. Section 4(f) or 6(f) Resources

The following are present on the project: Section 4(f) Resources Section 6(f) Resources

State funded project; 4(f) or 6(f) doesn't apply.

Anticipated Environmental Document: None (Completely State funded) ▼

IV. PROJECT SCOPING, NEEDS & PURPOSE

A. Scoping & Need:

This 10.700 mile segment of US 119 is a heavy traveled major connector for local and interstate traffic. Coal trucks and passenger vehicles do not share this roadway well. With a 11.9% truck rate, limited opportunities for passing and unrestricted entrances, this section of US 119 can be very challenging for travelers. Most of the collisions (approximately 75%) are occurring on the 2-lane segments of the road with 2/3 of these collisions being either rear end or single vehicle accidents. The numbers suggest that driver inattention is a viable candidate for most of these accidents. The Critical Rate Factor (CRF) does not exceed 1.0 for any segment within the study limits with the highest rate observed being 0.909 between MP 16.82 and MP 17.82 at the western most project termini. Previous in-house studies have been limited to the eastern most portions of the study limits. They include developing a new four-lane section to the north of existing US 119 beginning at approximately MP 25.1 and extending easterly to US 23 at Payne Gap (see attached). In addition, District design staff have also studied improving the intersection with US 23 and US 119 at Payne Gap. This would involve a grade separated access for US 23 northbound traffic coming from Virginia to access US 119 westbound.

B. Draft Project Purpose:

The purpose of this project is to improve safety, mobility and connectivity for travelers along the 10.7-mile corridor from Whitesburg to US 23 in Letcher County. US 119 in this area is classified as a rural arterial and is a vital connection for both local travelers between Whitesburg and Jenkins and those that use this route as a major east-west connector.

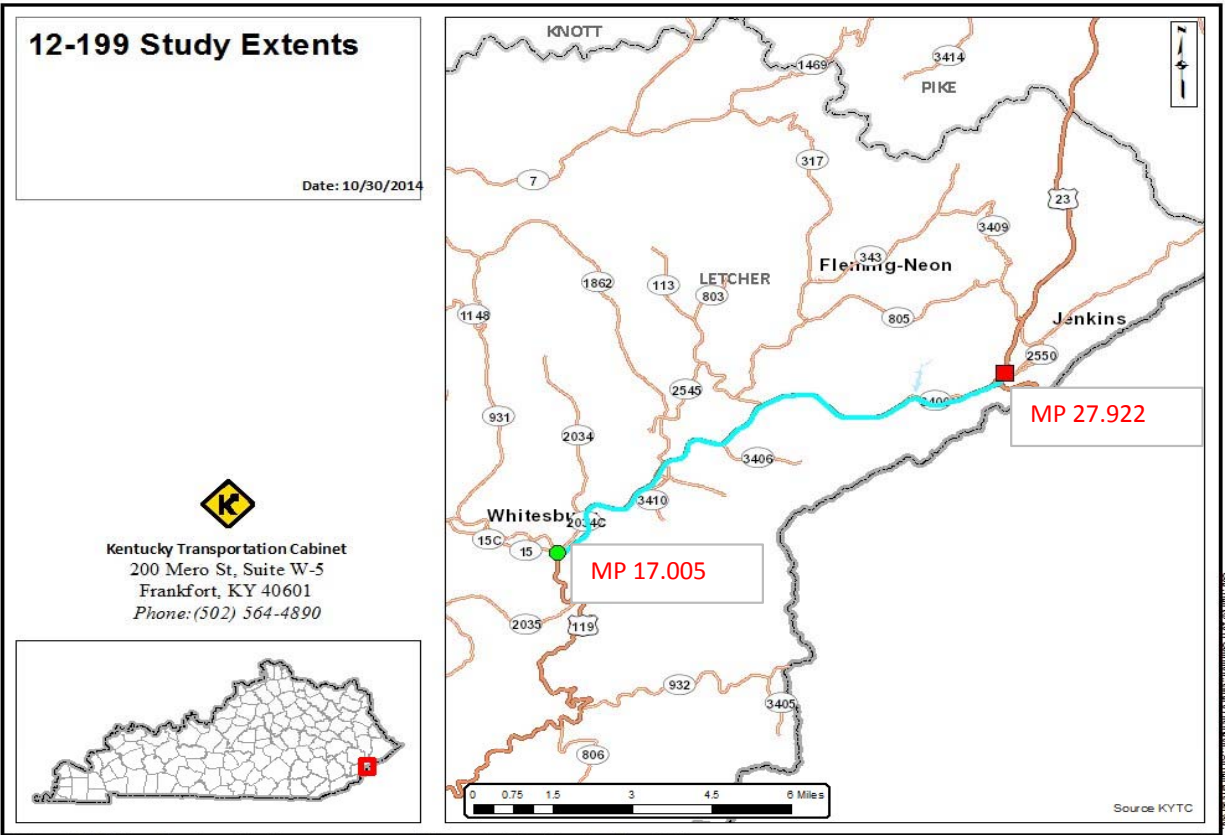
V. PROJECT ESTIMATE & METHODOLOGY

Estimate Methodology:	Current Estimate	
Design study to be completed. Cost estimates for project alternatives will be developed.	<u>Phase</u>	<u>Estimate</u>
	Planning	\$1,000,000.00 combined
	Design	
	R/W	
	Utilities	
	Const	
	Total	

VI. UTILITIES POTENTIALLY AFFECTED - CONTACT INFORMATION

Company Name -	AT&T KY
Contact -	Mr. Jack Salyer
Address -	29 Willis Branch Rd., Prestonsburg KY 41653
Phone No. -	(606) 874-2715
Company Name -	KY Power Company
Contact -	Mr. Bill Johnson
Address -	3249 North Mayo Trail, Pikeville KY 41501
Phone No. -	(606) 437-3823
Company Name -	TV Service, Inc.
Contact -	Mr. Kenny Sammons
Address -	P.O. Box 1410, Hindman KY 41822
Phone No. -	(606) 785-3450
Company Name -	Inter Mountain Cable
Contact -	Mr. Roy Harlow
Address -	P.O. Box 159, Harold, KY 41635
Phone No. -	(606) 479-6222
Company Name -	Chesapeake Appalachia Gas
Contact -	Mr. Michael Flannery
Address -	P.O. Box 150, Prestonsburg KY 41653
Phone No. -	(606) 298-3400
Company Name -	Letcher County Water District
Contact -	Mr. Mark Lewis
Address -	6 Broadway Steet-Suite B, Whitesburg, KY 41858
Phone No. -	(606) 633-8550

VII. TABLES AND EXHIBITS



Disclaimer: KYTC Division of Planning provides this map as a reference only. Users are to validate information independently.

Through Lanes:

Begin	End	L. Width	Lanes	Length		
17.005	18.969	12	2	1.964		
18.969	19.925	12	4	0.956		
19.925	23.788	12	2	3.863		
23.788	25.122	12	4	1.334	2-Lane	6.399 58.6%
25.122	27.35	12	3	2.228	3-Lane	2.228 20.4%
27.35	27.922	12	2	0.572	4-Lane	2.29 21.0%
	10.917					10.917 miles

VII. TABLES AND EXHIBITS (cont.)

Bridge No.: [‡]	<u>067B00083N</u>	<u>067B00120N</u>	<u>067B00129N</u>
Sufficiency Rating	<u>96</u>	<u>65.4</u>	<u>92.3</u>
Total Length	<u>342.8</u>	<u>24.9</u>	<u>35.1</u>
Width, curb to curb	<u>19.1</u>		<u>31.5</u>
Span Lengths			
Year Built	<u>1974</u>	<u>1970</u>	<u>2000</u>
Posted Weight Limit			
Structurally Deficient?	<u>Yes</u>	<u>No</u>	<u>No</u>
Functionally Obsolete?	<u>No</u>	<u>No</u>	<u>Yes</u>
Existing Bridge Type			

	Collisions										Grand Total	Units Involved	Injuries	Fatalities
	MP	Angle	Backing	Head On	Opposing Left Turn	Rear End	Side Swipe		Single Vechicle					
							Opposing Direction	Same Direction						
2-Lane Section / 1.964-Miles	17.008					1					1	2	2	0
	17.026					1					1	2	0	0
	17.034					1					1	2	0	0
	17.083					1					1	2	1	0
	17.099	1									1	2	1	1
	17.254					1					1	2	1	0
	17.308					1					1	2	0	0
	17.339		1								1	2	0	0
	17.422					1					1	3	6	0
	17.443					1					1	2	0	0
	17.623					1					1	4	3	0
	17.723					1					1	2	0	0
	17.788								1		1	1	1	0
	17.841					1					1	2	0	0
	17.905					1					1	2	0	0
	17.959							1			1	2	0	0
	17.96	1				1					2	5	2	0
	17.962	1									1	2	1	0
	17.963					2					2	5	3	0
	17.965					1					1	2	2	0
	17.967					1	1				2	6	3	0
	17.968					1					1	2	0	0
	17.969					1					1	2	0	0
	18.024					1					1	2	2	0
	18.026	1									1	2	1	0
	18.073					1					1	2	4	0
	18.133							1			1	5	5	0
	18.136							1			1	2	2	0
	18.218								1		1	1	0	0
	18.286								1		1	2	0	0
	18.304							1			1	2	1	0
	18.421								1		1	1	0	0
	18.427								1		1	1	0	0
	18.636							1			1	2	0	0
18.658								1		1	1	0	0	
18.698	1									1	2	3	0	
18.702					1					1	2	1	0	
18.709					1					1	3	0	0	
18.711					1					1	2	2	0	
18.734				1	1					2	4	6	0	
18.758	1									1	2	0	0	
18.773								1		1	2	0	0	
18.781	1									1	2	4	0	
18.783					1					1	2	1	0	
18.792					1					1	2	1	0	
18.796	1									1	2	1	0	
18.951								1		1	2	0	0	
		8	1	0	1	27	6	3	5	51	108	60	1	
4-Lane Section 0.956-Miles	19.065	1								1	2	0	0	
	19.161					1				1	2	1	0	
	19.204					1			1	2	3	2	0	
	19.208	1								1	3	0	0	
	19.843	1								1	2	4	0	
19.922								1		1	1	0	0	
		3	0	0	0	2	0	0	2	7	13	7	0	
on / 3.863-Mile	20.103					1				1	2	0	0	
	20.149	1								1	2	2	0	
	20.155					1				1	2	0	0	
	20.27					1				1	2	0	0	
	20.294	1								1	2	0	0	
	20.312				1					1	2	0	0	
	20.365								1		1	1	0	
	20.422		1							1	2	0	0	
	20.504								1		1	1	0	
	20.546	1								1	2	3	0	
	20.552								1		1	1	0	0
	20.624							1			1	2	0	0
	20.721								1		1	1	0	0
	20.771							1			1	2	0	0
	20.99								1		1	1	0	0
	21.001								1		1	1	1	0
21.092					1					1	2	0	0	
21.167	1									1	2	0	0	
21.296								1		1	1	0	0	

	Collisions												
	MP	Angle	Backing	Head On	Opposing Left Turn	Rear End	Side Swipe		Single Vehicle	Grand Total	Units Involved	Injuries	Fatalities
							Opposing Direction	Same Direction					
2-Lane Section	21.306								1	1	1	1	0
	21.467	1								1	2	1	0
	21.572	1								1	2	0	0
	21.623								1	1	1	1	0
	22.016					1				1	2	0	0
	22.061								1	1	1	1	0
	22.193			1						1	2	3	0
	22.325			1						1	2	3	0
	22.591			1						1	2	0	0
	22.721								1	1	1	0	0
	22.758					1				1	2	0	0
	22.77								1	1	1	3	0
	22.835								1	1	1	0	0
	22.88								1	1	1	0	0
	23.007								1	1	1	0	0
	23.199								1	1	1	0	0
	23.63								1	1	1	0	0
23.64								1	1	1	1	0	
		6	1	3	1	6	2	0	18	37	56	22	0
4-Lane Section / 1.334-Miles	23.822								1	1	1	2	0
	23.88					1				1	3	1	0
	24.41								1	1	1	0	0
	24.734		1							1	2	0	0
		0	1	0	0	1	0	0	2	4	7	3	0
3-Lane Section / 2.228-Miles	25.542								1	1	1	1	0
	25.648								1	1	1	0	0
	25.763								1	1	1	0	0
	25.891								1	1	1	0	0
	25.896								1	1	1	1	0
	26.087								1	1	1	1	0
	26.091							1		1	2	3	0
	26.315	1								1	2	5	0
	26.402								1	1	1	0	0
	26.42	1								1	3	4	0
	26.455								1	1	1	0	0
	26.499	1								1	2	2	0
	26.595								1	1	1	1	0
	26.7					1				1	2	0	0
	26.743								1	1	1	0	0
	27.127								1	1	1	0	0
	27.204	1								1	2	0	0
27.268								1	1	1	0	0	
27.336								1	1	1	0	0	
		4	0	0	0	1	0	1	13	19	26	18	0
		21	3	3	2	37	8	4	40	118	210	110	1

		Collisions										
		Milepoints	Injuries	Fatalities	Angle	Backing	Headon	Opposing Left Turn	Rear End	Side Swipe		Single Vehicle
										Opposing Direction	Same Direction	
2-L	17.005 to 18.969	60	1	8	1	0	1	27	6	3	5	
4-L	18.969 to 19.925	7	0	3	0	0	0	2	0	0	2	
2-L	19.925 to 23.788	22	0	6	1	3	1	6	2	0	18	
4-L	23.788 to 25.122	3	0	0	1	0	0	1	0	0	2	
3-L	25.122 to 27.350	18	0	4	0	0	0	1	0	1	13	
2-L	27.350 to 27.922	0	0	0	0	0	0	0	0	0	0	

Collisions Rate (#/Mile):

	#	Miles	Rate	
2-Lane	88	5.827	15.102	56.3%
3-Lane	19	2.228	8.528	21.5%
4-Lane	11	2.29	4.803	22.1%

