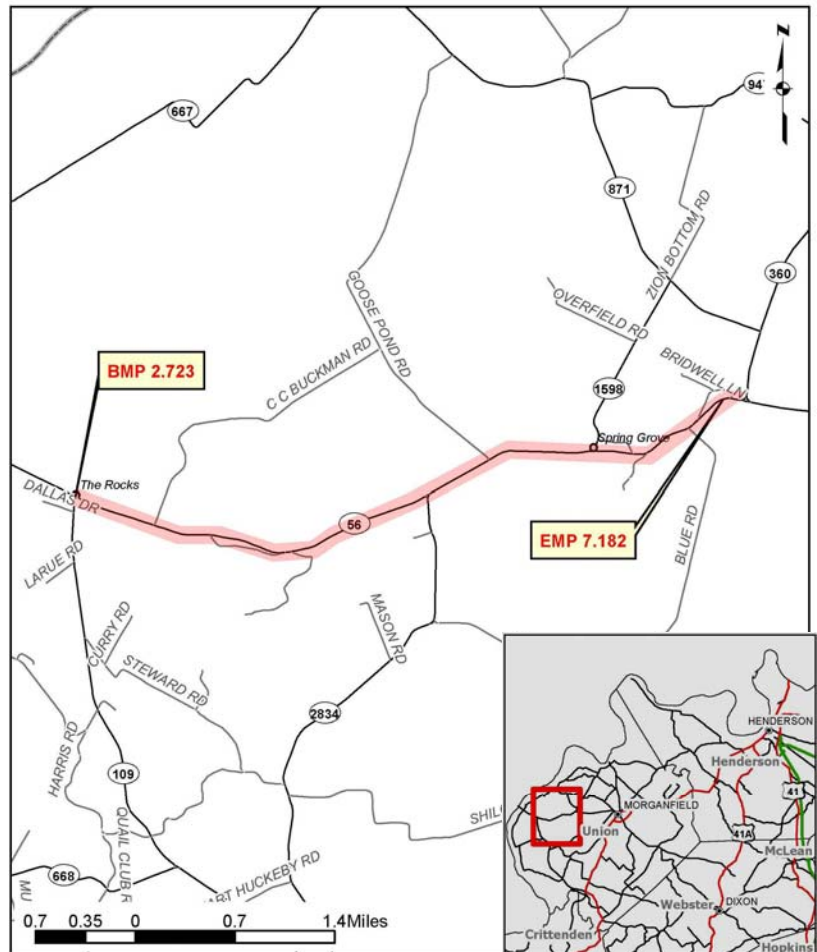


Data

Needs

Analysis



Scoping Study



Union County—KY56

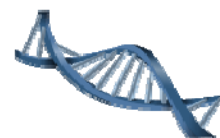
ADDRESS SAFETY, CONDITION AND SERVICE CONCERN FROM MP 2.723 to MP 7.182.

Item No. **2-310.20**

Prepared by

KYTC District 2 Planning

June 2014



I. PRELIMINARY PROJECT INFORMATION			
County:	Union	Item No.:	2-310.20
Route Number(s):	KY 56	Road Name:	KY 56
Program No.:	5844403D	UPN:	FD04 113 0056 002-008
Federal Project No.:		Type of Work:	Minor Widening
2014 Highway Plan Project Description:			
ADDRESS SAFETY, CONDITION AND SERVICE CONCERN FROM KY 109 TO WEST OF KY 360 TO ESTABLISH TRUCK NETWORK CONNECTION TO SHAWNEETOWN BRIDGE.(14CCR)			
Beginning MP:	2.723	Ending MP:	7.182
		Project Length:	4.459
Functional Class.:	<input type="checkbox"/> Urban <input checked="" type="checkbox"/> Rural Arterial	State Class.:	<input type="checkbox"/> Primary <input checked="" type="checkbox"/> Secondary
MPO Area:	Not Applicable	Route is on:	<input type="checkbox"/> NHS <input checked="" type="checkbox"/> NN <input type="checkbox"/> Ext Wt
In TIP:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Truck Class.:	AA
ADT (current):	1768 (2013)	% Trucks:	21.3
Access Control:	<input type="checkbox"/> None <input checked="" type="checkbox"/> Permit <input type="checkbox"/> Fully Controlled	Terrain:	Rolling
Median Type:	<input checked="" type="checkbox"/> Undivided <input type="checkbox"/> Divided (Type):	Spacing:	
Existing Bike Accommodations:	Shared Lane	Ped:	<input type="checkbox"/> Sidewalk
Posted Speed:	<input type="checkbox"/> 35 mph <input type="checkbox"/> 45 mph <input checked="" type="checkbox"/> 55 mph	Other (Specify):	
KYTC Guidelines Preliminarily Based on :	55 MPH Proposed Design Speed		
COMMON GEOMETRIC			
Roadway Data:	EXISTING	PRACTICES*	
No. of Lanes	2	2	Existing Rdwy. Plans available? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Year of Plans: <input checked="" type="checkbox"/> Traffic Forecast Requested Date Requested: 6/19/2014 <input type="checkbox"/> Mapping/Survey Requested Date Requested: Type:
Lane Width	10ft	12ft	
Shoulder Width	2-8ft	6ft	
Max. Superelevation**		8%	
Minimum Radius**		965	
Maximum Grade		8% Shldr/5% Pavmnt	
Minimum Sight Dist.		495	
Sidewalk Width(urban)		min 4ft	
Clear-zone***			
Project Notes/Design Exceptions?:			
<small>*Based on proposed Design Speed, **AASHTO's A Policy on Geometric Design of Highways and Streets, ***AASHTO's Roadside Design Guide</small>			
Bridge No.*:	(Bridge #1)	(Bridge #2)	
Sufficiency Rating			Existing Geotech data available? <input type="checkbox"/> Yes <input type="checkbox"/> No
Total Length			
Width, curb to curb			Detour Length(s):
Span Lengths			
Year Built			
Posted Weight Limit			
Structurally Deficient?			
Functionally Obsolete?			
Existing Bridge Type			

*If more than two bridges are located on the project, include additions sheets.

II. PROJECT PURPOSE AND NEED

A. Legislation

The funds shown are in the 2014 Highway Plan. An additional 1.5 million for R/W and 2 million for Utilities will be needed. Construction funding is higher than the PIF estimate and should be adequate for the project.

<i>Funding</i>	<i>Phase</i>	<i>Year</i>	<i>Amount</i>
SP	D	2014	\$1,500,000
SP	R	2016	\$2,000,000
SP	U	2016	\$2,000,000
SP	C	2017	\$14,500,000

B. Project Status

This was a UPL project, 02 113 D0056 87.00. The project was requested by GRADD in 2006. Initial Design funds, Right of Way funds, and Utility funds were authorized for the project on 6/11/2014.

C. System Linkage

KY 56 provides regional access to Illinois via the Shawneetown Bridge which is the only bridge crossing the Ohio River between Paducah and Henderson. This route is a Rural Minor Arterial with a Truck Wt. Classification of AA. The KYTC anticipates that improving this segment to current KYTC standards for construction will allow raising it to an AAA Truck Wt Classification and adding it to the National Truck Network.

D. Modal Interrelationships

This is an important freight route carrying 21 % trucks (ADT) or 377 trucks per day.

E. Social Demands & Economic Development

Improved truck access could benefit economic development opportunities for the area. If this route can be added to the NTN or classified as "AAA", it would allow for more efficient movement of goods in the area. Currently US 60 is the only route in Union County on the NTN.

II. PROJECT PURPOSE AND NEED (cont.)

F. Transportation Demand

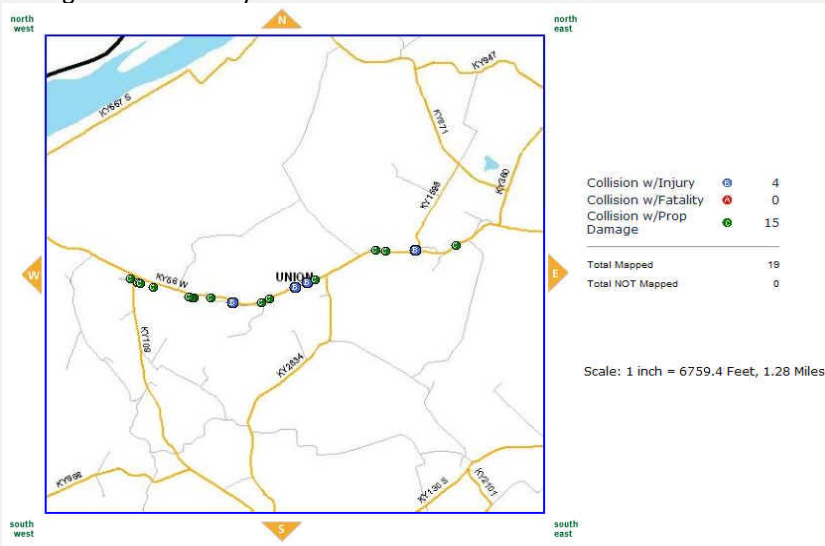
KY 56 provides regional access to Illinois via the Shawneetown Bridge. Current geometrics prevent this route from being classified and a "AAA" route and as a National Truck Network route.

G. Capacity

This section of KY 56 has 2 lanes 10ft wide and narrow shoulders. The average daily traffic in 2013 was 1768.

H. Safety

There have been 19 collisions reported in this project area during the 3 year period between 5/1/2011 and 5/1/2014. The collision locations are shown on the map below. The majority of the collisions were due to a single vehicle running off the roadway or an animal collision.



I. Roadway Deficiencies

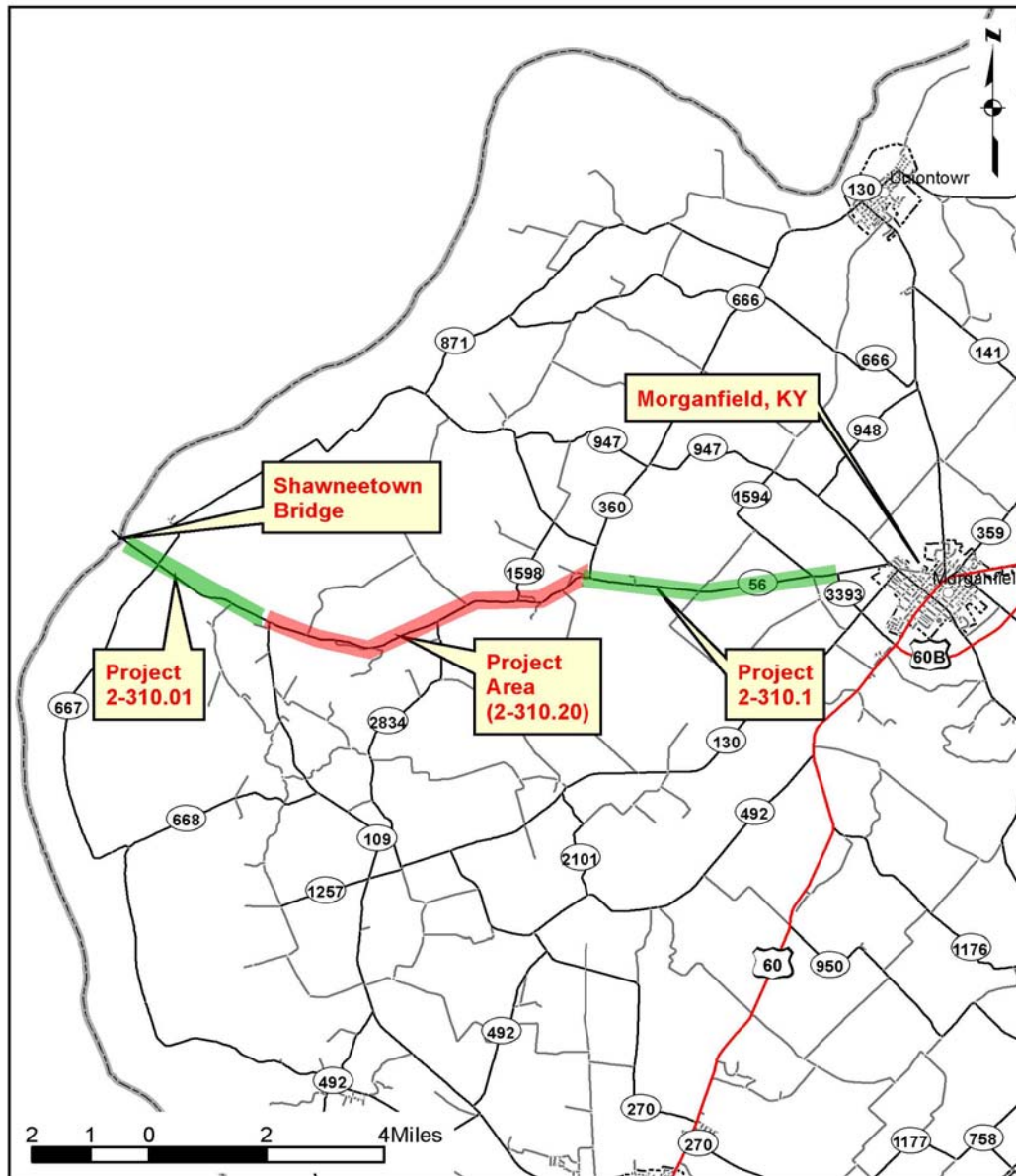
KY 56 is a narrow 2 lane route with 10ft driving lanes and shoulders as narrow as 2ft which does not meet current KYTC's common Geometric Practices.

III. PRELIMINARY ENVIRONMENTAL OVERVIEW	
A. Air Quality Project is in: <input type="checkbox"/> Attainment area <input type="checkbox"/> Nonattainment or Maintenance Area <input type="checkbox"/> PM 2.5 County STIP Pg. #: <input type="text"/> TIP Pg. #: <input type="text"/> Not included in STIP due to state-funding unless considered a project of regional significance. New draft STIP to be released July 2014.	
B. Archeology/Historic Resources <input type="checkbox"/> Known Archeological or Historic Resources are present None known at this time.	
C. Threatened and Endangered Species Indiana Bats and Northern long eared Bat mitigation to be paid if tree cutting restriction dates are not followed. Unsuitable habitat for mussel species and the Least Turn Bird. No effect on all species.	
D. Hazardous Materials <input type="checkbox"/> Potentially Contaminated Sites are present <input type="checkbox"/> Potential Bridge or Structure Demolition Not known	
E. Permitting Check all that may apply: <input type="checkbox"/> Waters of the US <input type="checkbox"/> MS4 area <input type="checkbox"/> Floodplain Impacts <input type="checkbox"/> Navigable Waters of the US Impacts Are 401/404 Permits likely to be required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Impacts to: <input type="checkbox"/> Wetlands <input type="checkbox"/> Stream/Lake/Pond <input type="checkbox"/> ACE LON <input type="checkbox"/> ACE NW <input type="checkbox"/> ACE IP <input type="checkbox"/> DOW IWQC <input type="checkbox"/> Special Use Waters Aerial photography, ARGIS, USFWS Wetlands mapper utilized for determination.	
F. Noise Are existing or planned noise sensitive receptors adjacent to the proposed project? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Is this considered a "Type I Project" according to the KYTC Noise Analysis and Abatement Policy? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Contingent on Design Plans and potentially removing trees serving as noise barriers.	
G. Socioeconomic Check all that may apply: <input type="checkbox"/> Low Income/Minority Populations affected <input type="checkbox"/> Relocations <input type="checkbox"/> Local Land Use Plan available None known	
H. Section 4(f) or 6(f) Resources The following are present on the project: <input type="checkbox"/> Section 4(f) Resources <input type="checkbox"/> Section 6(f) Resources None known	
Anticipated Environmental Document:	<input type="text" value="None (Completely State funded)"/>

IV. PROJECT SCOPING, NEEDS & PURPOSE

A. Scoping & Need:

This project is the continuation of 2-310.1 which is from west of KY 360 to the Morganfield Bypass. This project will complete upgrading this narrow two-lane route from Morganfield to the Shawneetown Bridge and connect to projects 2-310.01 and 2-310.10. A project scoping study by PDR Engineering Inc was completed in April 2001 for KY 56 from KY 109 at the Rocks, east to KY 130 WCL of Morganfield, including a bypass around Spring Grove.



B. Draft Project Purpose:

Address safety, roadway deficiencies, condition and service concerns of KY 56 from KY 109 to west of KY 360 just outside of Morganfield (MP 2.723 to 7.182).

V. PROJECT ESTIMATE & METHODOLOGY

Estimate Methodology:

UPL cost estimates shown here were based on similar projects. The amount for R/W and Utilities in the 2014 Highway Plan will not be adequate. The amounts shown here for R/W and Utilities are more accurate.

Current Estimate

Phase	Estimate
Planning	0
Design	1,500,000
R/W	3,500,000
Utilities	4,000,000
Const	12,250,000
Total	21,250,000

VI. UTILITIES POTENTIALLY AFFECTED - CONTACT INFORMATION

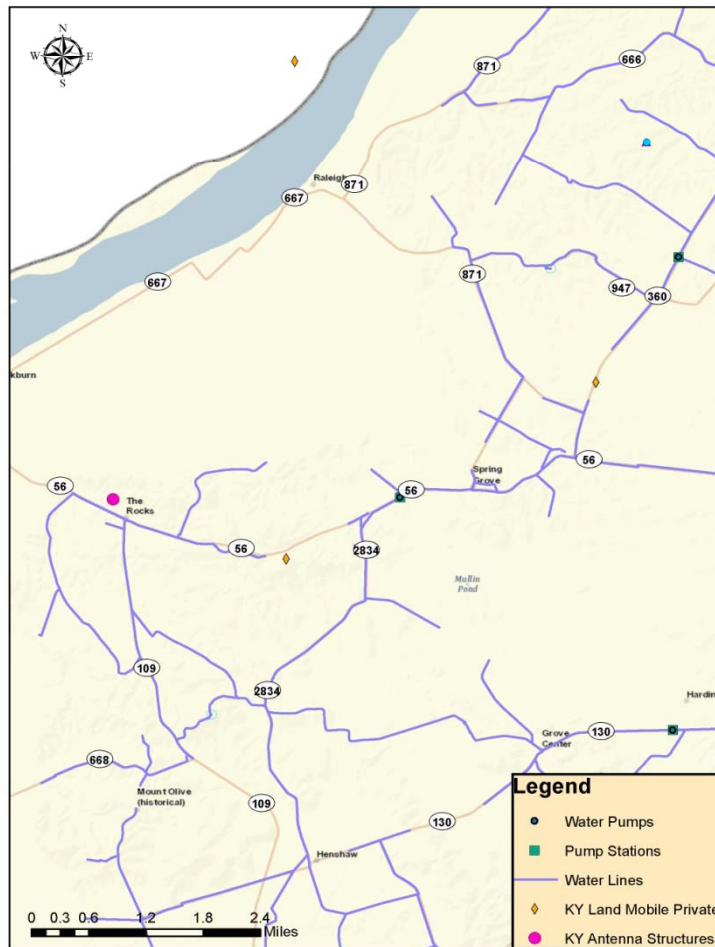
Kenergy
6402 Old Corydon Road
Henderson, KY 42420
John Newland 270-826-3991

ATT
3021 Old Hartford Road
Owensboro, KY 42303
David Ryan 270-685-7615

Time Warner Cable
100 Industrial Drive
Owensboro, KY 42301
Brent Rafferty

City Of Morgan Field Gas
220 North Main Street
Morganfield, KY 42437
David Presser 270-389-2525

Union County Water
409 North Court Street
Morganfield, KY 42437
Gary Sheffer 270 389-3868



VII. PRECONSTRUCTION STATUS REPORT

08-Jul-2014

Preconstruction Status Report

Page 56 of 163

Project No.	Parent No.	Auth. #	Auth. Date
2 - 310.21	2 - 310.01	58444	29-Aug-1995

ADDRESS SAFETY, CONDITION AND SERVICE CONCERN FROM
KY 109 TO WEST OF KY 360 TO ESTABLISH TRUCK NETWORK
CONNECTION TO SHAWNEETOWN BRIDGE.(14CCR) (SAME AS
ITEM NO. 2-310.20 IN 2014 SYP)

Project No.
2 - 310.21

Type of Work	MINOR WIDENING(O)
Roadway Engineer	MUNICIPAL ENGINEERING
Bridge Engineer	
Project Manager	

Countyname	UNION
Route	KY-56-
BMP / EMP	2.72 / 7.18

No. Lanes	0
Length	4.46
Meas. Type	M

Final Plans	Sep 13, 2015
Contractor Notice	Oct 11, 2015

R/W Clearance Date	
Utility Clearance Date	

Syp Pro Brno	
Suffrate	

Letting Status / Date	LETTING DATE	Nov 15, 2015
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ENVIRONMENTAL	Name	Date	Type	Sched. Comp.	Actual Comp.	Expire Date
Assigned:	District	Feb 28, 2011		Jul 8, 2011	Jun 27, 2011	Jun 27, 2013
Requested:	District Office	Feb 25, 2011	CE LVL 2			

Concerns

Phase Code	D	R	U	C
Stage	AUTHORIZED	AUTHORIZED	AUTHORIZED	ESTIMATED
SYP Fund Code	SP	SP	SP	SP
PreCon FY				2017
Enacted Plan Cost				
Current Estimated Cost				
Date of Estimate				
PreCon Escalated Cost	0	0	0	14,500,000
Project Auth. Date				
Auth. Amount	1,500,000	2,000,000	3,000,000	
Auth. Date	11-Jun-2014	11-Jun-2014	11-Jun-2014	
Initial Funding Type	FD04	FD04	FD04	
EMARS Remaining Balance	1,500,000	2,000,000	3,000,000	

Prog Cd	Unobligated	Encumbered Remaining
5844402R	2,000,000	0
5844402U	3,000,000	0
5844403D	1,500,000	0

R/W Parcel Info.	Completion Date
Total Parcels	0
Appraisals	0 of 0
Relocated	of
Deeds Signed	
Suits Filed	0
Right of Entry	0
Parcels Cleared	0

Utility Information	Completion Date
Negotiated Starts	of
Agreements	of
Relocated	of

Milestone	Sch. Comp. Date	Status	Date	Remarks

VIII. TABLES AND EXHIBITS



VIII. TABLES AND EXHIBITS (cont.)



Historical Traffic Volume Summary

Station Details:

Sta ID:	113799	Begin MP:	6.6080
Map:	MapIt	Begin Desc:	KY 1598 (SPRING GROVE ROAD)
District:	2	End MP:	7.8120
County:	Union	End Desc:	KY 360
Route:	113-KY-0056 -000	Impact Year:	
Route Desc:		Year Added:	2003

Newest Count:

AADT:	1768
Year:	2013
% Single:	12.6420
% Combo:	8.7050
K Factor:	8.40
D Factor:	55

Definitions:

Sta. ID - Three digit county number + station number

MP - milepoint

Impact Year - year of significant change to traffic pattern within station segment

AADT - Annual Average Daily Traffic - the annualized average 24-hour volume of vehicles on a segment of roadway

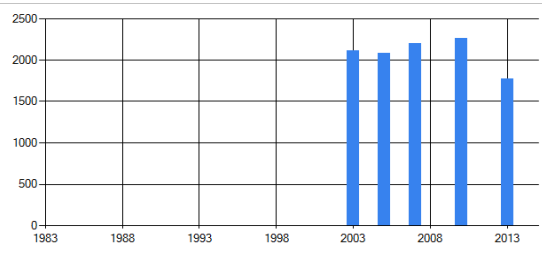
% Single - single unit truck volume as a percentage of the AADT

% Combo - combination truck volume as a percentage of the AADT

K Factor - peak hour volume as a percentage of the AADT

D Factor - percentage of peak hour volume flowing in the peak direction

Year AADT	Year AADT	Year AADT
2014	2004	1994
2013 1768	2003 2110	1993
2012	2002	1992
2011	2001	1991
2010 2270	2000	1990
2009	1999	1989
2008	1998	1988
2007 2210	1997	1987
2006	1996	1986
2005 2080	1995	1985



Historical Traffic Volume Summary

Station Details:

Sta ID:	113750	Begin MP:	2.7430
Map:	MapIt	Begin Desc:	KY 109 AT THE ROCKS
District:	2	End MP:	6.6080
County:	Union	End Desc:	KY 1598 (SPRING GROVE ROAD)
Route:	113-KY-0056 -000	Impact Year:	
Route Desc:		Year Added:	

Newest Count:

AADT:	1616
Year:	2013
% Single:	12.6420
% Combo:	8.7050
K Factor:	7.90
D Factor:	55

Definitions:

Sta. ID - Three digit county number + station number

MP - milepoint

Impact Year - year of significant change to traffic pattern within station segment

AADT - Annual Average Daily Traffic - the annualized average 24-hour volume of vehicles on a segment of roadway

% Single - single unit truck volume as a percentage of the AADT

% Combo - combination truck volume as a percentage of the AADT

K Factor - peak hour volume as a percentage of the AADT

D Factor - percentage of peak hour volume flowing in the peak direction

Year AADT	Year AADT	Year AADT
2014	2004 1790	1994
2013 1616	2003	1993
2012	2002	1992
2011	2001 1780	1991
2010 2030	2000	1990 1330
2009	1999	1989
2008	1998	1988
2007 1940	1997	1987
2006	1996	1986
2005	1995 1520	1985

