



KENTUCKY TRANSPORTATION CENTER

ANNUAL UPDATE OF DATA FOR ESTIMATING ESALS

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Research Report KTC-06-34/PL9-06-1F

ANNUAL UPDATE OF DATA FOR ESTIMATING ESALS

by

Jerry G. Pigman
Clark Graves
Brad Rister
David Cain
and
Neil Tollner

Kentucky Transportation Center
College of Engineering
University of Kentucky
Lexington, Kentucky

in cooperation with

Kentucky Transportation Cabinet
Commonwealth of Kentucky

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The inclusion of manufacturer names and trade names is for identification purposes and is not to be considered an endorsement.

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TABLE OF CONTENTS

	Page
1.0 Background and Overview	2
2.0 Definitions and Reference Tables	4
3.0 Historical Data Trends by Aggregate Class	8
4.0 Aggregate Class Site Estimates and Averages.....	15
5.0 Aggregate Class Regression Estimates.....	52

1.0 BACKGROUND AND OVERVIEW

A revised procedure for estimating equivalent single axleloads (ESALs) was developed in 1985. This procedure used weight, classification, and traffic volume data collected by the Transportation Cabinet's Division of Planning. The procedure was developed and documented as Research Report UKTRP-85-30, and was titled "Estimation of Equivalent Axleloads". Since the revised procedure was adopted, there have been several changes; the most recent being documented as Report KTC-95-7 titled "Equivalent Single Axleload Computer Program Enhancements". Results documented in Report KTC-95-7 included improvements in the processing of ESAL data by aggregation of the functional classes to increase the accuracy of the estimates within a class, and conversion of computer programs used to process the data from mainframe to personal computer.

In addition, Report KTC-99-1 titled "Development of ESAL Forecasting Procedures for SuperPave Pavement Design" was prepared to document analysis methods used to prepare ESAL estimates for Superpave projects. The methodology included an interactive program that permitted users to access various databases in order to calculate ESAL Superpave estimates. Work accomplished during 2002 resulted in updating this interactive program for use with Superpave ESAL estimates. Significant effort has recently been directed to the evaluation and calibration of WIM data collection equipment. Report KTC-04-12 titled "Assessment of Data Collection for ESAL Determinations for the Kentucky Transportation Cabinet, Division of Planning" was completed in 2004 with recommendations for more intensive monitoring of WIM equipment.

Annual updates data used for estimating ESALs have been prepared for the Transportation Cabinet by the Kentucky Transportation Center for approximately 20 years. The update involves processing traffic characteristics data through a series of quality control and analytical programs to produce estimates of the following parameters:

- Average daily traffic,
- Percent trucks,
- Percent trucks classified as heavy/coal,
- Axes per truck,
- Axes per heavy/coal truck,
- ESALs per truck axle,
- ESALs per heavy/coal truck axle, and
- Total ESALs.

The most recent summary of ESAL estimating parameters was prepared in 2002, based on data collected during 2001 and combined with previous years. Preliminary analyses have been performed using data collected during each year since 2001; however, due to issues primarily associated with calibration of WIM equipment, data collected during the years 2002 and 2003 were omitted from the analysis and summary of information presented in this report. Therefore, the summary tables for each of the six

aggregate classes will reflect a three-year average using data for 2001, 2004, and 2005. Historical trends will show data for 1993 through 2001, and 2004 and 2005.

Tracking of the WIM calibration process has continued with an evaluation of the 2005 data and presentation of trends by the six aggregate classes. In addition, the historical trends of traffic characteristics data used to estimate ESALs have been updated through 2005.

To assist in understanding and interpreting the data presented in this report, reference tables are presented in Section 2.0. Included are the following:

- Functional classifications by number and the associated description, as well as cross-references from functional class to aggregate class,
- Descriptions and diagrams for each the 13 Federal Highway Administration vehicle classifications, and
- Kentucky counties and their respective numbers.

As an alternative means of presenting the trends in annual ESAL factors, summaries have been developed for each aggregate class from 1993 through 2005 and are included as Section 3.0. These summaries are included as Figures 1 through 6. Each figure contains tabular data for AADT, percent trucks, axles/truck, ESAL's/axle, and ESAL's/vehicle. Graphs are provided for percent trucks, axles/truck, and ESAL's/vehicle. Data for 2002 and 2003 were not included due to equipment calibration issues. In addition, there are instances of other years of data that appear to be somewhat out of line based on historical trends. For each graph the data point for 2006 corresponds to the parameter value recommended for use in traffic forecasting. This recommended value was determined based on discussions between representatives of the Transportation Cabinet's Division of Planning and the Transportation Center staff. It may be seen from these figures that the recommended values generally match the historical trends when selected outlier years are removed.

The primary objective of this analysis and evaluation of traffic characteristics data was to analyze and summarize parameters typically used to produce estimates of total ESALs. Section 4.0 includes vehicle classification and weight data collected in 2005 that were combined with previous years of data to produce average values for each of the six aggregate classes. These average values were previously referenced in Section 3.0 as historical data evaluated by Transportation Cabinet representatives and the Transportation Center staff, resulting in recommended data for forecasting in 2006.

In addition, regression analyses were performed to produce “smoothed values” for each of the parameters of interest to eliminate yearly variations that result from site-specific influences due to limited coverage of the functional and aggregate classes. This information is presented in Section 5.0 for each of the six aggregate classes.

2.0

Definitions and Reference Tables

FUNCTIONAL CLASSIFICATIONS

RURAL:

01	Principal Arterial - Interstate
02	Principal Arterial - Other
06	Minor Arterial
07	Major Collector
08	Minor Collector
09	Local

URBAN:

11	Principal Arterial - Interstate
12	Principal Arterial - Other Freeways and Expressways
14	Other Principal Arterial
16	Minor Arterial
17	Collectors
19	Local

or

AGGREGATE GROUPS

RURAL:

I	FC 1
II	FC 2, 6
III	FC 7, 8, 9

URBAN:

IV	FC 11
V	FC 12, 14
VI	FC 16, 17, 19

FHWA VEHICLE CLASSIFICATIONS

1	Motorcycles	2	Passenger Cars With 1- or 2-Axle Trailers	3	Two-Axle, 4 Tire Single Units Pickup or Van (With 1- or 2-Axle Trailers)	4	Busses (Includes Handicap-Equipped Bus and Mini School Bus)
5	Two-Axle, 6 Tire Single Units	6	Three Axle Single Units	7	Four or More Axle Singel Units	8	Four or Less Axle Single Trailers
9	Five Axle Single Trailers			10	Six or More Axle Single Trailer	11	Five or Less Axle Multi-Trailers
12	Six Axle Multi-Trailers			13	Seven or More Axle Multi-Trailers		

KENTUCKY COUNTIES AND THEIR NUMBERS

No.	County	No.	County	No.	County
1	Adair	41	Grant	81	Mason
2	Allen	42	Graves	82	Meade
3	Anderson	43	Grayson	83	Menifee
4	Ballard	44	Green	84	Mercer
5	Barren	45	Greenup	85	Metcalfe
6	Bath	46	Hancock	86	Monroe
7	Bell	47	Hardin	87	Montgomery
8	Boone	48	Harlan	88	Morgan
9	Bourbon	49	Harrison	89	Muhlenberg
10	Boyd	50	Hart	90	Nelson
11	Boyle	51	Henderson	91	Nicholas
12	Bracken	52	Henry	92	Ohio
13	Breathitt	53	Hickman	93	Oldham
14	Breckinridge	54	Hopkins	94	Owen
15	Bullitt	55	Jackson	95	Owsley
16	Butler	56	Jefferson	96	Pendleton
17	Caldwell	57	Jessamine	97	Perry
18	Calloway	58	Johnson	98	Pike
19	Campbell	59	Kenton	99	Powell
20	Carlisle	60	Knott	100	Pulaski
21	Carroll	61	Knox	101	Robertson
22	Carter	62	Larue	102	Rockcastle
23	Casey	63	Laurel	103	Rowan
24	Christian	64	Lawrence	104	Russell
25	Clark	65	Lee	105	Scott
26	Clay	66	Leslie	106	Shelby
27	Clinton	67	Letcher	107	Simpson
28	Crittenden	68	Lewis	108	Spencer
29	Cumberland	69	Lincoln	109	Taylor
30	Daviess	70	Livingston	110	Todd
31	Edmonson	71	Logan	111	Trigg
32	Elliott	72	Lyon	112	Trimble
33	Estill	73	McCracken	113	Union
34	Fayette	74	McCreary	114	Warren
35	Fleming	75	McLean	115	Washington
36	Floyd	76	Madison	116	Wayne
37	Franklin	77	Magoffin	117	Webster
38	Fulton	78	Marion	118	Whitley
39	Gallatin	79	Marshall	119	Wolfe
40	Garrard	80	Martin	120	Woodford

3.0

Historical Data Trends by Aggregate Class

Figure 1.

Aggregate ESAL Class I (FC 01)

	AADT	% Trucks	Axes/Truck	EAL's/Axle	EAL's/Veh
1993	23,935	24.46	4.50	0.201	0.905
1994	27,754	25.38	4.44	0.206	0.915
1995	25,427	29.99	4.49	0.215	0.964
1996	22,292	27.30	4.49	0.231	1.037
1997	34,777	28.93	4.50	0.208	0.936
1998	23,935	34.12	4.49	0.226	1.014
1999	26,600	35.56	4.65	0.220	1.023
2000	28,424	31.22	4.49	0.258	1.158
2001	31,586	31.64	4.46	0.239	1.065
2004	33,594	30.63	4.50	0.322	1.447
2005	35,488	31.31	4.49	0.302	1.357
2006	31,05	31.05	4.49	0.294	1.319
3-yr Avg	33,901	31.05	4.49	0.294	1.319

Aggregate ESAL Class I, Percent Trucks

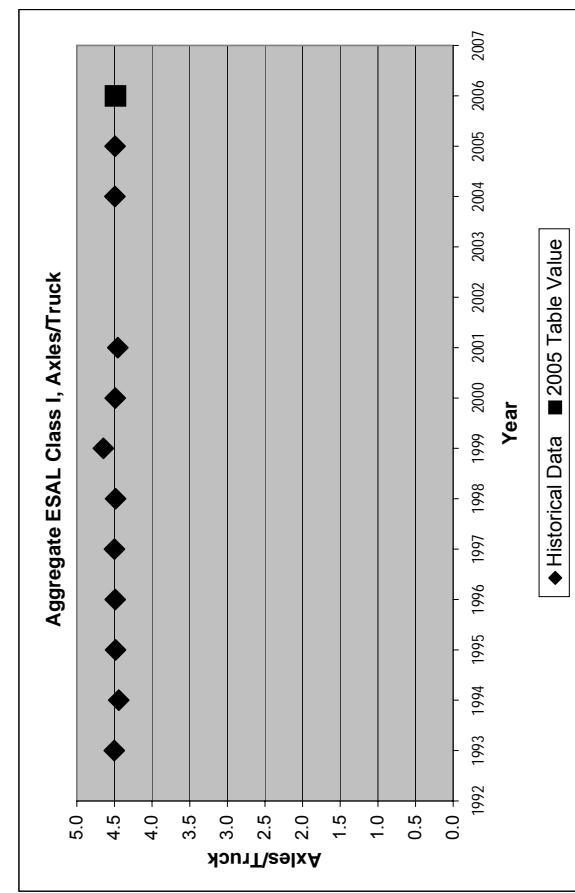
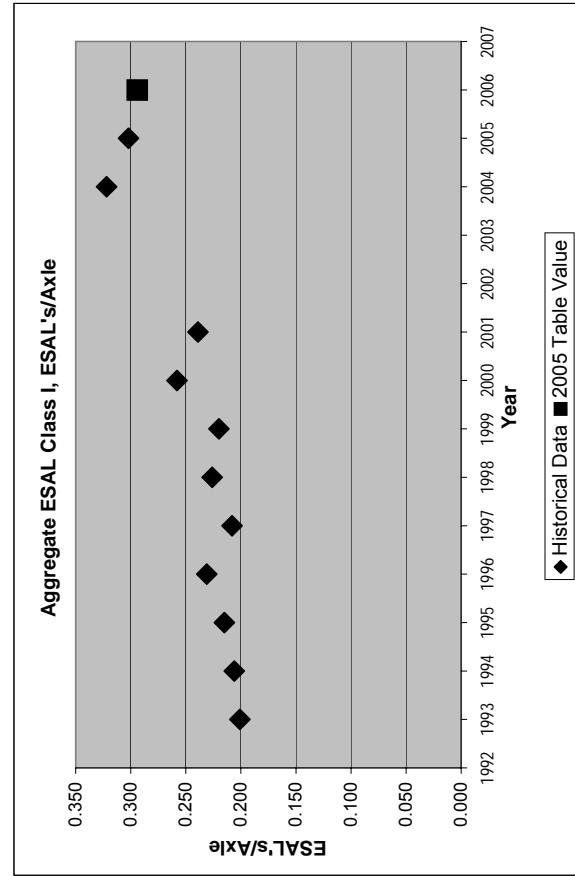
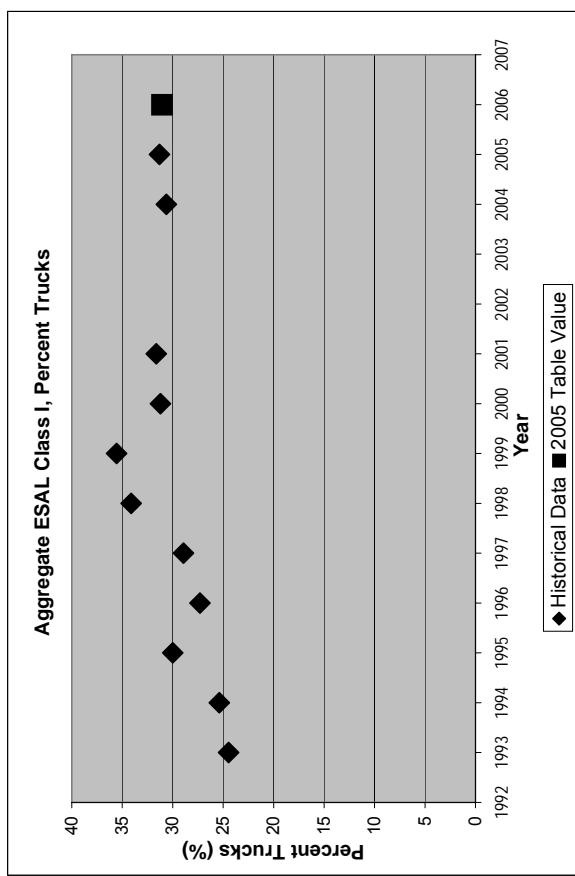


Figure 2.

Aggregate ESAL Class II (FC 02, 06)

	AADT	% Trucks	Axes/Truck	EAL's/Axle	EAL's/Veh
1993	5,566	9.48	3.43	0.205	
1994	5,730	9.51	3.40	0.214	0.727
1995	5,453	10.26	3.43	0.235	0.805
1996	6,439	13.72	3.52	0.248	0.873
1997	8,954	10.00	3.50	0.271	0.950
1998	7,603	11.84	3.53	0.275	0.971
1999	7,879	12.96	3.60	0.284	1.023
2000	6,242	18.69	3.64	0.286	1.040
2001	7,545	16.02	3.58	0.283	1.012
2004	7,081	13.75	3.59	0.236	0.847
2005	7,749	14.23	3.51	0.270	0.946
2006	14.40	3.55	0.260	0.924	
3-yr Avg	7,448	14.40	3.55	0.260	0.924

Aggregate ESAL Class II, Percent Trucks

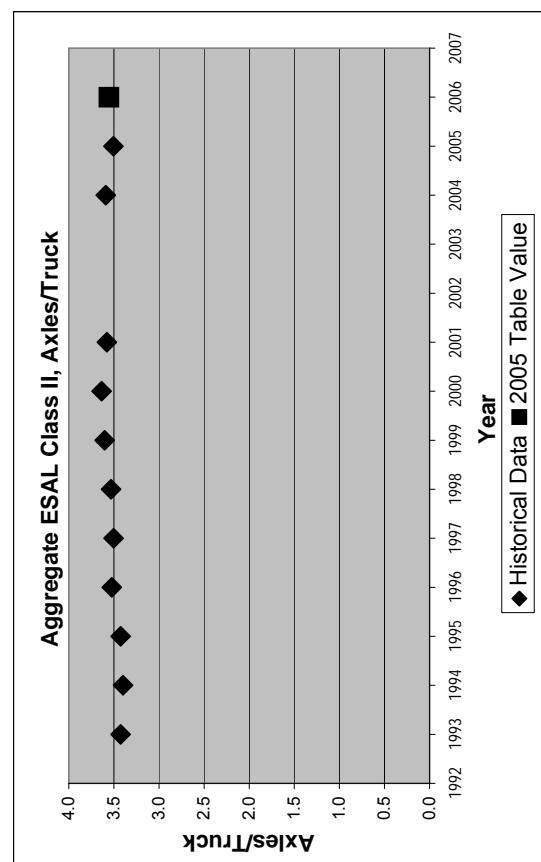
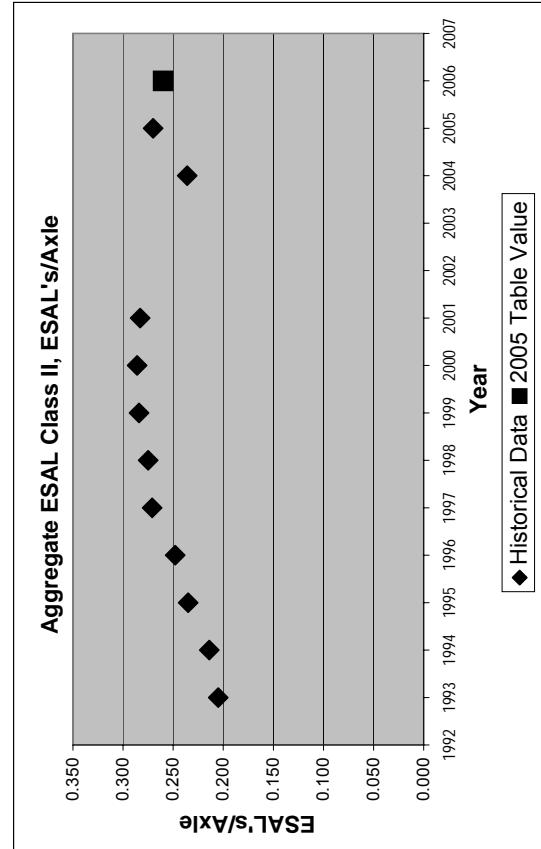
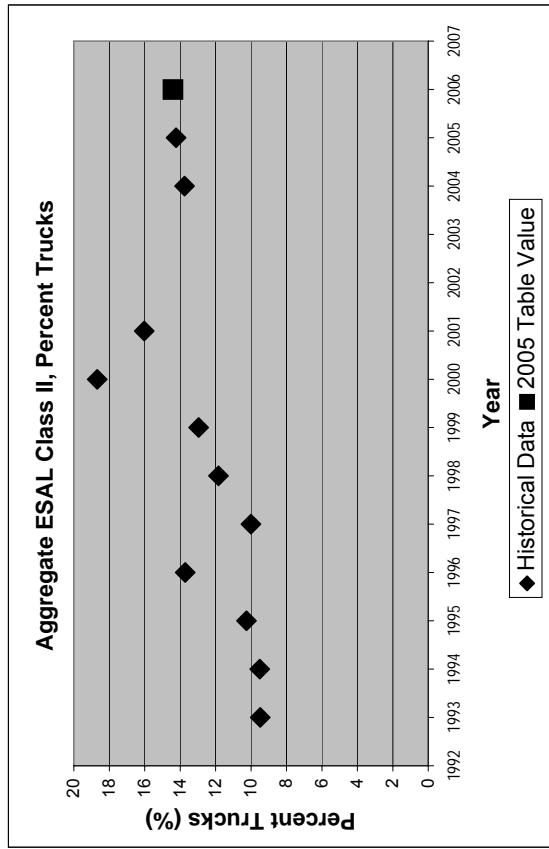


Figure 3.

Aggregate ESAL Class III (FC 07, 08, 09)

	AADT	% Trucks	Axes/Truck	EAL's/Axle	EAL's/Veh
1993	3,048	7.34	2.83	0.265	0.750
1994	3,037	7.42	2.87	0.249	0.715
1995	3,334	7.12	2.89	0.219	0.632
1996	3,078	7.48	2.88	0.214	0.616
1997	4,959	8.85	3.06	0.226	0.692
1998	4,285	9.69	3.04	0.222	0.674
1999	3,337	8.60	3.02	0.194	0.586
2000	2,040	9.75	2.95	0.233	0.688
2001	2,625	11.36	3.01	0.234	0.705
2004	2,506	10.21	3.10	0.505	1.563
2005	2,672	10.21	3.13	0.550	1.721
2006	10.43	3.09	0.234	0.723	
3-yr Avg	2,590	10.43	3.09	1.453	

Aggregate ESAL Class III, Percent Trucks

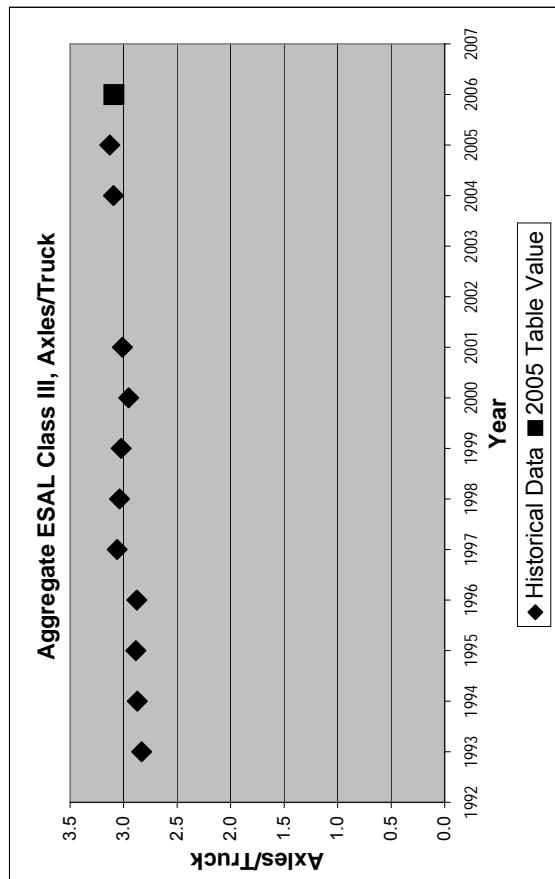
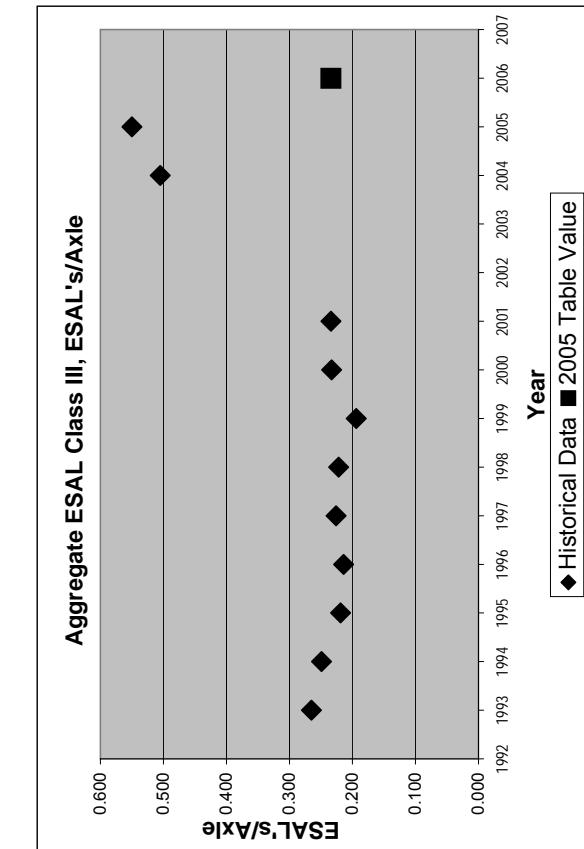
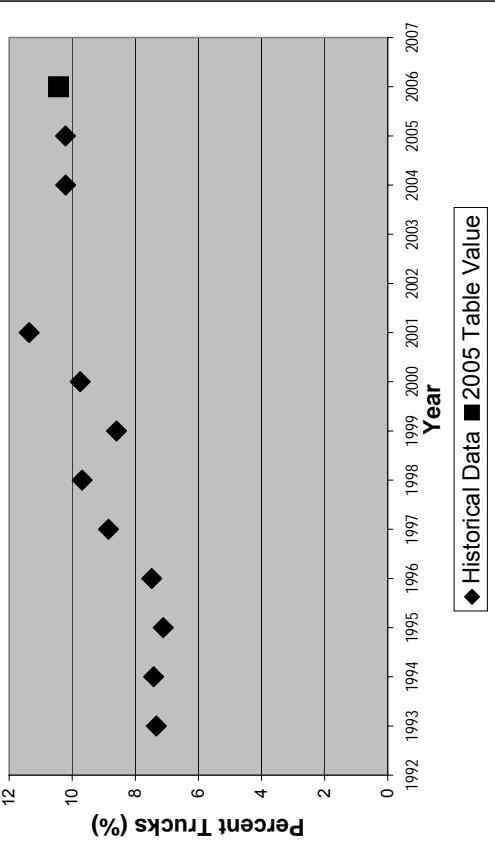
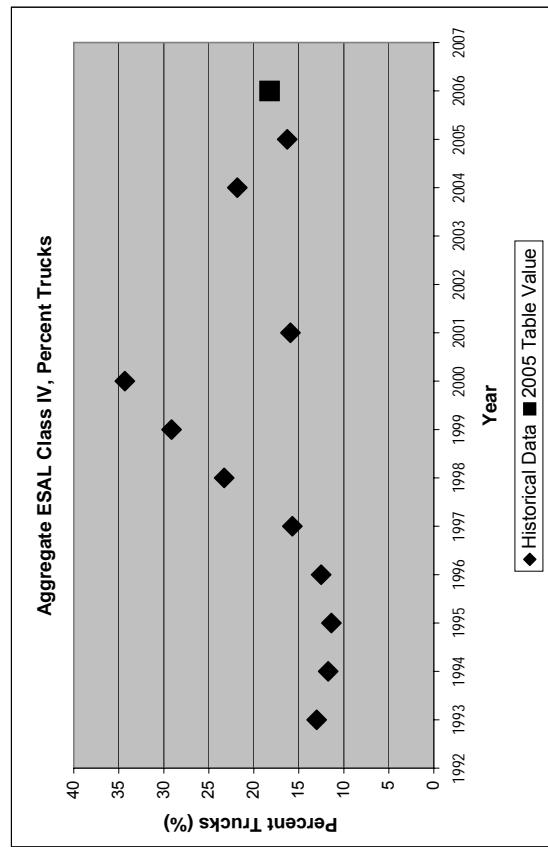


Figure 4.

Aggregate ESAL Class IV (FC 11)

	AADT	% Trucks	Axes/Truck	EAL's/Axle	EAL's/Veh
1993	49,584	13.02	3.72	0.181	0.672
1994	64,412	11.73	3.98	0.187	0.743
1995	99,690	11.39	3.98	0.179	0.713
1996	65,325	12.52	4.03	0.181	0.730
1997	66,585	15.71	4.19	0.187	0.783
1998	34,475	23.29	4.47	0.231	1.033
1999	28,000	29.14	4.56	0.241	1.100
2000	39,600	34.33	4.68	0.245	1.147
2001	45,087	15.93	4.01	0.339	1.360
2004	44,333	21.82	4.34	0.272	1.181
2005	44,802	16.29	4.27	0.268	1.144
2006	44,720	18.25	4.21	0.270	1.137
3-yr Avg	44,720	18.25	4.22	0.293	1.237

Aggregate ESAL Class IV, Percent Trucks



Aggregate ESAL Class IV, Axles/Truck

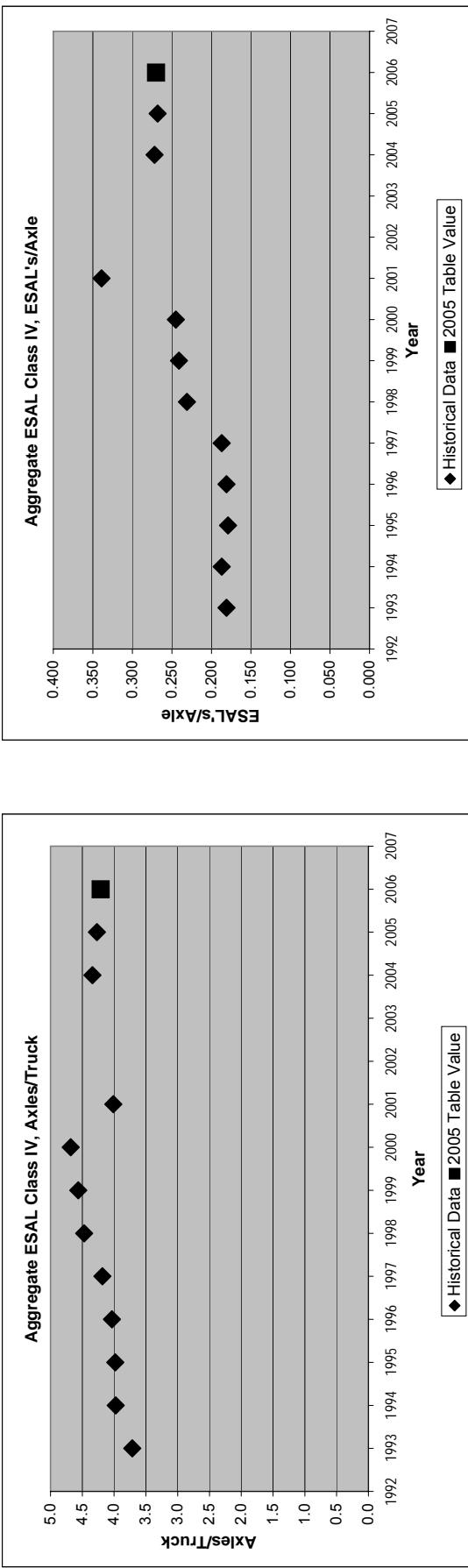
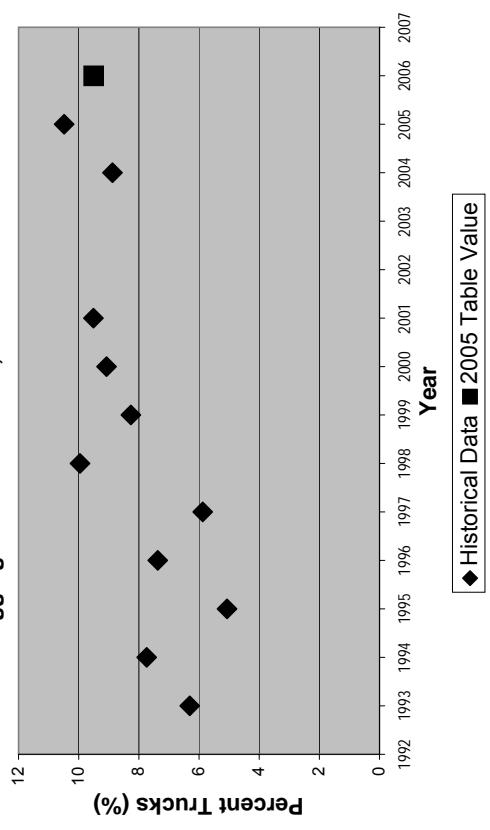


Figure 5.

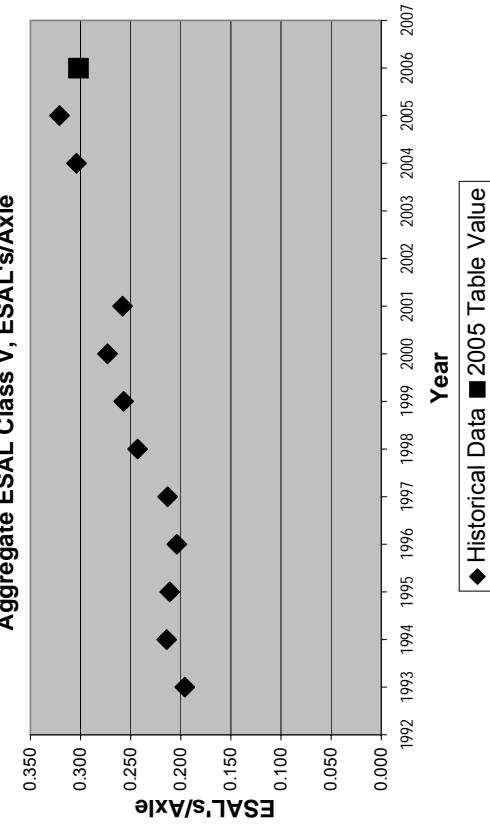
Aggregate ESAL Class V (FC 12, 14)

	AADT	% Trucks	Axes/Truck	EAL's/Axle	EAL's/Veh
1993	19,626	6.31	3.04	0.196	0.596
1994	16,519	7.74	2.97	0.214	0.636
1995	16,319	5.07	2.84	0.211	0.599
1996	21,135	7.37	3.14	0.204	0.641
1997	26,925	5.88	3.08	0.213	0.657
1998	20,421	9.96	3.39	0.243	0.823
1999	15,462	8.27	3.23	0.257	0.830
2000	25,643	9.08	3.19	0.273	0.870
2001	26,231	9.51	3.43	0.258	0.884
2004	19,655	8.88	3.52	0.304	1.070
2005	19,072	10.49	3.74	0.321	1.199
2006	9,50	3.57	0.302	1.079	
3-yr Avg	20,533	9.50	3.57	0.302	1.079

Aggregate ESAL Class V, Percent Trucks



Aggregate ESAL Class V, ESAL's/Axle



Aggregate ESAL Class V, Axles/Truck

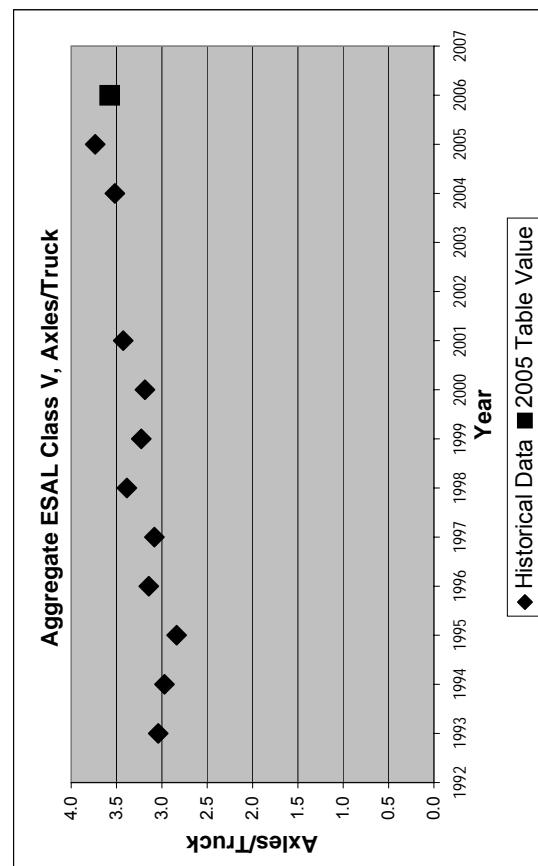
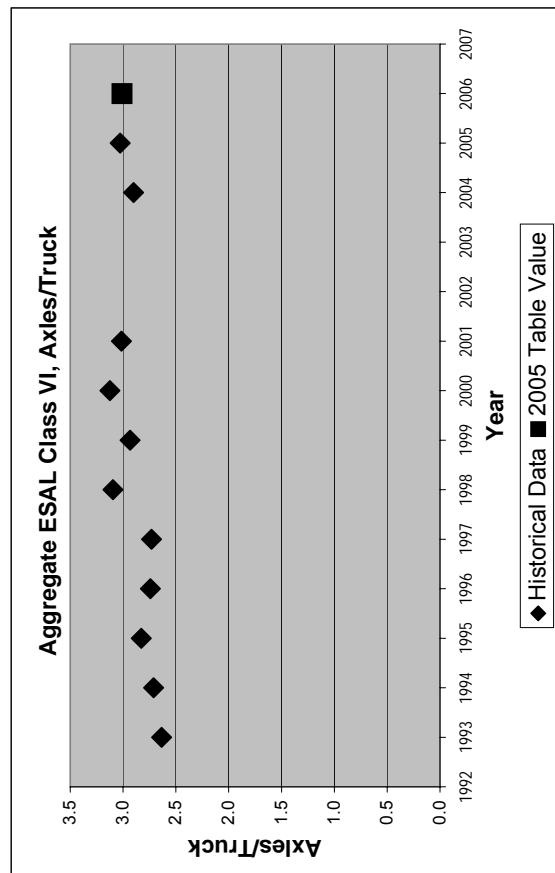
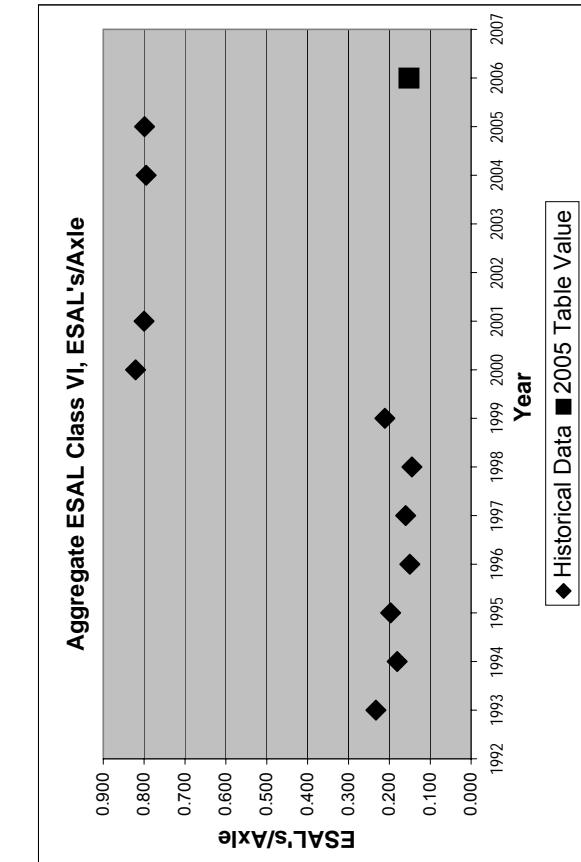
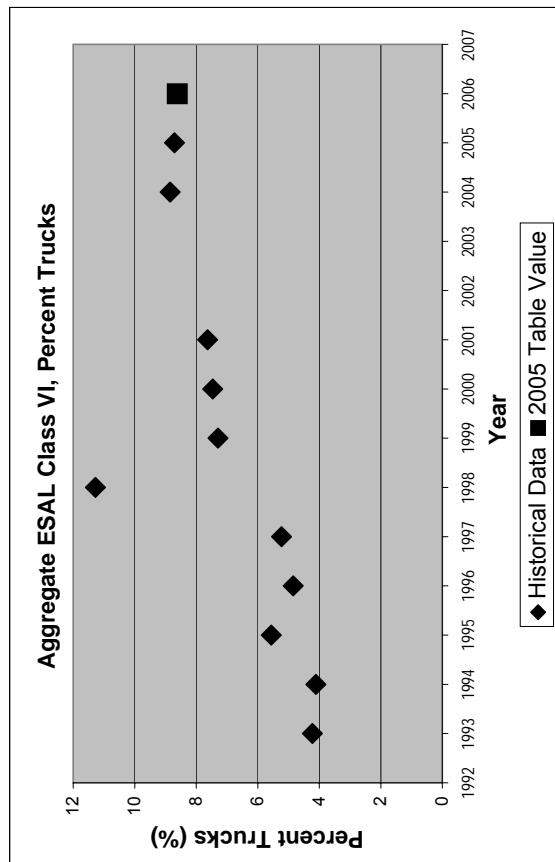


Figure 6.

Aggregate ESAL Class VI (FC 16, 17, 19)

	AADT	% Trucks	Axes/Truck	ESAL's/Veh
1993	11,811	4.22	2.64	0.233
1994	12,275	4.11	2.71	0.181
1995	10,381	5.56	2.83	0.197
1996	11,221	4.85	2.74	0.150
1997	13,803	5.23	2.73	0.160
1998	10,994	11.28	3.10	0.145
1999	8,809	7.29	2.93	0.211
2000	11,235	7.46	3.13	0.821
2001	10,619	7.63	3.02	0.800
2004	6,908	8.85	2.90	0.795
2005	6,745	8.71	3.03	0.799
2006	8,611	8.61	3.01	0.152
3-yr Avg	7,332	8.61	3.01	0.798
				2.402

Aggregate ESAL Class VI, Percent Trucks



4.0

Aggregate Class Site Estimates and Averages

EAL TRAFFIC PARAMETERS FOR INDIVIDUAL CLASSIFICATION STATIONS
2005

AGGREGATE CLASS I -- RURAL INTERSTATE

COU	STA	ROUTE	MILE POINT	AADT	FRACT AXLES/TRUCK OF TRK			EAL'S/AXLE			2-DIRECTION EAL'S IN 1000'S			
					TRUCK FRACT	WITH COAL	HEAVY COAL	NORMAL COAL	HEAVY COAL	NORMAL COAL	4-TIRE VEHICLES	NON-COAL TRUCKS	COAL TRUCKS	TOTAL
106	520	I 64	30.6	50341	.191	.000	3.955	.000	.275	.000	74.	3814.	0.	3888.
107	P91	I 65	4.7	48274	.297	.000	4.399	.000	.290	.000	62.	6682.	0.	6744.
111	043	I 24	68.3	16783	.390	.000	4.765	.000	.299	.000	19.	3407.	0.	3426.
114	059	I 65	42.0	41963	.324	.000	4.771	.000	.301	.000	52.	7119.	0.	7170.
114	061	I 65	35.6	45803	.444	.000	4.984	.000	.393	.000	43.	14541.	0.	14584.
114	065	I 65	30.7	47219	.262	.000	4.822	.000	.302	.000	64.	6591.	0.	6654.
118	257	I 75	8.5	25447	.359	.000	3.923	.000	.288	.000	27.	3758.	0.	3785.

SUMMARY OF AVERAGE VALUES FOR
AGGREGATE CLASS I -- RURAL INTERSTATE

YEAR	3 YR AVG	05	04	01	00	99	98	97	96	95	94	93
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UNCLASSIFIED ROADS
(ALL AVC LOCATIONS AND MANUAL LOCATIONS WITH LESS
THAN 3% OF TRUCKS CLASSIFIED AS HEAVY/COAL)

NO OF CLASSIFICATION STA.	102	42	36	24	10	9	17	20	15	11	11	10
AADT	33901	35488	33594	31586	28424	26600	23935	34777	22292	25427	27754	23935
PERCENT TRUCKS	31.053	31.312	30.361	31.636	31.224	35.555	34.124	28.932	27.300	29.990	25.383	27.461
AXLES PER TRUCK	4.485	4.492	4.495	4.456	4.489	4.648	4.486	4.501	4.489	4.485	4.442	4.502
EAL'S PER TRUCK AXLE	.294	.302	.322	.239	.258	.220	.226	.208	.231	.215	.206	.201

CLASSIFIED ROADS
(MANUAL LOCATION WITH 3% OR MORE OF
TRUCKS CLASSIFIED AS HEAVY/COAL)

NO OF CLASSIFICATION STA.	1	0	0	1	0	0	0	0	1	0	0	0
AADT	21300	0	0	21300	0	0	0	0	3687	0	0	0
PERCENT TRUCKS	23.543	.000	.000	23.543	.000	.000	.000	.000	17.738	.000	.000	.000
PERCENT OF TRUCKS CLASSIFIED AS HEAVY/COAL	3.878	.000	.000	3.878	.000	.000	.000	.000	4.128	.000	.000	.000
AXLES PER TRUCK NORMAL	4.252	.000	.000	4.252	.000	.000	.000	.000	5.165	.000	.000	.000
AXLES PER TRUCK HEAVY/COAL	4.637	.000	.000	4.637	.000	.000	.000	.000	4.778	.000	.000	.000
EAL'S PER TRUCK AXLE NORMAL	.244	.000	.000	.244	.000	.000	.000	.000	.292	.000	.000	.000
EAL'S PER TRUCK AXLE HEAVY/COAL	1.870	.000	.000	1.870	.000	.000	.000	.000	.880	.000	.000	.000

EAL TRAFFIC PARAMETERS FOR INDIVIDUAL CLASSIFICATION STATIONS
 2005
 AGGREGATE CLASS II -- RURAL PRINCIPAL ARTERIAL/
 RURAL MINOR ARTERIAL

COU STA 120 271	ROUTE US 421	MILE POINT 4 .9	AADT 4994	FRACT OF TRK .099	FRACT AXLES/TRUCK EAL'S/AXLE			2-DIRECTION EAL'S IN 1000'S					
					TRUCK FRACT .000	WITH COAL COAL .000	NORMAL HEAVY COAL .383	4-TIRE COAL .330	NON-COAL VEHICLES .000	COAL TRUCKS 8.	TRUCKS 202.	TOTAL 0.	TOTAL 210.

SUMMARY OF AVERAGE VALUES FOR
 AGGREGATE CLASS II -- RURAL PRINCIPAL ARTERIAL /
 RURAL MINOR ARTERIAL

YEAR	3 YR AVG	05	04	01	00	99	98	97	96	95	94	93
UNCLASSIFIED ROADS (ALL AVC LOCATIONS AND MANUAL LOCATIONS WITH LESS THAN 3% OF TRUCKS CLASSIFIED AS HEAVY/COAL)												
NO OF CLASSIFICATION STA.												
AADT	619	246	238	135	30	46	70	57	79	52	71	61
PERCENT TRUCKS	7448	7749	7081	7545	6242	7879	7603	8954	6439	5453	5730	5566
AXLES PER TRUCK	14.436	14.228	13.752	16.023	18.686	12.956	11.839	10.003	13.718	10.261	9.507	9.479
EAL'S PER TRUCK AXLE	3.554	3.505	3.591	3.577	3.637	3.603	3.532	3.504	3.522	3.426	3.399	3.426
CLASSIFIED ROADS (MANUAL LOCATION WITH 3% OR MORE OF TRUCKS CLASSIFIED AS HEAVY/COAL)												
NO OF CLASSIFICATION STA.												
AADT	6	0	1	5	10	13	25	25	25	40	24	33
PERCENT TRUCKS	10952	0	13513	10440	8404	13147	10268	11012	8449	8809	6493	7533
PERCENT OF TRUCKS CLASSIFIED AS HEAVY/COAL	11.749	.000	5.715	12.956	15.789	17.028	17.769	16.283	13.686	14.606	15.188	14.255
AXLES PER TRUCK NORMAL	32.463	.000	18.139	35.328	28.408	37.977	37.125	30.049	29.687	31.257	21.233	38.951
AXLES PER TRUCK HEAVY/COAL	3.550	.000	3.229	3.614	3.514	3.451	3.384	3.615	3.229	3.254	3.308	3.104
EAL'S PER TRUCK AXLE NORMAL	5.123	.000	5.179	5.112	4.978	5.010	5.188	5.174	4.764	4.941	4.794	4.821
EAL'S PER TRUCK AXLE HEAVY/COAL	.298	.000	.218	.314	.316	.305	.290	.259	.250	.227	.230	.223

EAL TRAFFIC PARAMETERS FOR INDIVIDUAL CLASSIFICATION STATIONS
 2005
 AGGREGATE CLASS III -- RURAL MAJOR COLLECTOR/
 RURAL MINOR COLLECTOR

COU STA	ROUTE	MILE POINT	FRACT AXLES/TRUCK OF TRK			EAL'S/AXLE			2-DIRECTION EAL'S IN 1000'S		
			FRACT	TRUCK WITH COAL	NORMAL COAL	HEAVY COAL	4-TIRE VEHICLES	NON-COAL TRUCKS	COAL TRUCKS	TOTAL	
111 758	KY 274	.9	3827	.106	.000	2.210	.000	.243	.000	6.	86.
117 A14	KY 120	6.9	834	.102	.000	2.938	.000	.581	.000	1.	55.
119 500	KY 746	.1	1316	.037	.000	3.074	.000	.341	.000	2.	21.
6 276	KY 211	6.1	2334	.099	.000	3.181	.000	.665	.000	4.	182.
14 C11	US 60X	1.5	1904	.313	.000	3.374	.000	.579	.000	2.	427.
22 X01	KY1959	1.2	800	.026	.000	2.185	.000	.264	.000	1.	6.
30 Z02	KY 334	.1	623	.035	.000	2.668	.000	.240	.000	1.	6.
30 Z06	KY 762	.1	245	.091	.000	3.008	.000	.505	.000	0.	13.
48 765	KY 413	.1	1226	.023	.000	2.884	.000	.612	.000	2.	21.
58 A18	KY 321X	.1	5149	.086	.000	2.677	.000	.364	.000	9.	166.
65 A21	KY1144	.0	3622	.116	.000	3.014	.000	.367	.000	6.	177.
67 263	KY2034	1.0	1602	.034	.000	2.596	.000	.363	.000	3.	22.
78 519	KY 412	11.6	121	.370	.000	3.403	.000	.586	.000	0.	33.
82 313	KY1500	1.1	1727	.046	.000	2.720	.000	.537	.000	3.	45.
97 Z01	KY2448	.1	1063	.057	.000	2.454	.000	.324	.000	2.	20.

SUMMARY OF AVERAGE VALUES FOR
AGGREGATE CLASS III -- RURAL MAJOR COLLECTOR /
RURAL MINOR COLLECTOR

YEAR	3 YR AVG	05	04	01	00	99	98	97	96	95	94	93
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UNCLASSIFIED ROADS (ALL AVC LOCATIONS AND MANUAL LOCATIONS WITH LESS THAN 3% OF TRUCKS CLASSIFIED AS HEAVY/COAL)												
NO OF CLASSIFICATION STA.	984	365	430	189	37	69	98	54	64	61	68	53
AADT	2590	2672	2506	2625	2040	3337	4285	4959	3078	3334	3037	3048
PERCENT TRUCKS	10.432	10.213	10.209	11.364	9.750	8.596	9.685	8.848	7.483	7.117	7.420	7.336
AXLES PER TRUCK	3.091	3.129	3.095	3.011	2.953	3.023	3.038	3.061	2.877	2.886	2.872	2.832
EAL'S PER TRUCK AXLE	.470	.550	.505	.234	.233	.194	.222	.226	.214	.219	.249	.265

CLASSIFIED ROADS (MANUAL LOCATION WITH 3% OR MORE OF TRUCKS CLASSIFIED AS HEAVY/COAL)												
NO OF CLASSIFICATION STA.	5	0	0	5	5	11	14	17	23	13	18	15
AADT	3466	0	0	3466	2785	5037	3512	6475	4453	2347	2310	3485
PERCENT TRUCKS	7.382	.000	.000	7.382	6.125	11.662	17.000	7.541	9.820	12.200	12.500	10.521
PERCENT OF TRUCKS CLASSIFIED AS HEAVY/COAL	29.182	.000	.000	29.182	38.523	33.964	43.723	31.279	32.668	32.287	22.841	42.873
AXLES PER TRUCK NORMAL	3.427	.000	.000	3.427	3.352	2.934	3.548	2.984	2.888	2.701	2.895	2.971
AXLES PER TRUCK HEAVY/COAL	4.286	.000	.000	4.286	4.181	4.729	4.369	4.789	4.545	4.429	4.697	4.562
EAL'S PER TRUCK AXLE NORMAL	.148	.000	.000	.148	.208	.179	.293	.210	.194	.192	.205	.195
EAL'S PER TRUCK AXLE HEAVY/COAL	2.671	.000	.000	2.671	3.155	2.678	3.143	1.194	1.153	1.434	1.515	1.922

SUMMARY OF AVERAGE VALUES FOR
AGGREGATE CLASS IV -- URBAN INTERSTATE

YEAR	3 YR AVG	05	04	01	00	99	98	97	96	95	94	93
UNCLASSIFIED ROADS (ALL AVC LOCATIONS AND MANUAL LOCATIONS WITH LESS THAN 3% OF TRUCKS CLASSIFIED AS HEAVY/COAL)												
NO OF CLASSIFICATION STA.												
AADT	112	33	42	37	1	2	4	17	19	11	16	17
PERCENT TRUCKS	44720	44802	44333	45087	39600	28000	34475	66585	65325	99690	64412	49584
AXLES PER TRUCK	18.245	16.289	21.823	15.927	34.331	29.140	23.285	15.710	12.515	11.386	11.726	13.020
EAL'S PER TRUCK AXLE	4.211	4.270	4.341	4.012	4.683	4.563	4.470	4.185	4.033	3.981	3.975	3.715
CLASSIFIED ROADS (MANUAL LOCATION WITH 3% OR MORE OF TRUCKS CLASSIFIED AS HEAVY/COAL)												
NO OF CLASSIFICATION STA.												
AADT	0	0	0	0	0	0	0	0	0	0	0	0
PERCENT TRUCKS	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
PERCENT OF TRUCKS CLASSIFIED AS HEAVY/COAL	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
AXLES PER TRUCK NORMAL	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
AXLES PER TRUCK HEAVY/COAL	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
EAL'S PER TRUCK AXLE NORMAL	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
EAL'S PER TRUCK AXLE HEAVY/COAL	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

EAL TRAFFIC PARAMETERS FOR INDIVIDUAL CLASSIFICATION STATIONS
 2005
 AGGREGATE CLASS V -- URBAN OTHER FREEWAY AND EXPRESSWAYS /
 URBAN OTHER PRINCIPAL ARTERIAL

COU STA	ROUTE	MILE POINT	FRACT AXLES/TRUCK OF TRK			EAL'S/AXLE			2-DIRECTION EAL'S IN 1000'S		
			TRUCK FRACT COAL		WITH COAL	NORMAL HEAVY COAL		NORMAL HEAVY COAL	4-TIRE VEHICLES		NON-COAL TRUCKS
			AADT			.092	.000	3.924	.000	.239	.000
30 P17	US 60B	6.1	31067	.092	.000	3.924	.000	3.924	.000	51.	981.
34 D88	KY 4	16.8	63127	.016	.000	4.139	.000	.269	.000	113.	420.
34 P75	KY 4	3.5	56522	.059	.000	3.106	.000	.362	.000	96.	1366.
42 A07	KY9003	23.4	13787	.277	.000	4.043	.000	.308	.000	18.	1736.
42 A10	KY9003	23.9	11710	.281	.000	4.029	.000	.323	.000	13.	1563.
47 B18	KY9001	136.6	14891	.490	.000	2.340	.000	.276	.000	14.	1722.
51 B75	KY9004	77.4	17858	.260	.000	4.403	.000	.257	.000	24.	1920.
54 A61	KY9004	43.2	30093	.182	.000	4.586	.000	.244	.000	45.	2230.
54 A91	KY9004	45.1	21642	.186	.000	4.037	.000	.269	.000	32.	1594.
54 063	KY9004	45.6	14549	.209	.000	4.514	.000	.249	.000	21.	1244.
56 A09	KY 841	36.0	17711	.062	.000	3.637	.000	.440	.000	30.	642.
56 G79	KY 841	4.3	45842	.075	.000	4.077	.000	.265	.000	77.	1364.
56 G80	KY 841	.8	30730	.081	.000	4.013	.000	.268	.000	52.	984.
5 B06	KY 90	10.1	10800	.080	.000	3.345	.000	.440	.000	18.	464.
7 A06	US 25E	2.2	22876	.087	.000	4.397	.000	.248	.000	38.	798.
9 A80	US 27	8.4	16873	.144	.000	3.324	.000	.340	.000	26.	1001.
10 A82	US 60	9.6	20641	.056	.000	2.872	.000	.254	.000	35.	306.
10 B16	US 23X	1.1	10617	.034	.000	2.249	.000	.264	.000	18.	78.
10 B34	US 60	11.9	12160	.110	.000	3.700	.000	.370	.000	20.	667.
10 B71	US 23	19.1	35948	.054	.000	3.417	.000	.268	.000	62.	655.
10 C41	US 60	5.4	26358	.054	.000	3.901	.000	.275	.000	46.	558.
10 C49	KY 180	2.0	13090	.104	.000	3.115	.000	.296	.000	21.	457.
10 D27	US 23	11.8	17701	.121	.000	3.529	.000	.239	.000	28.	660.
11 A01	US 150	12.9	11094	.086	.000	3.176	.000	.397	.000	18.	438.
11 B06	US 150B	1.0	15953	.145	.000	3.423	.000	.357	.000	25.	1028.
11 B12	US 127N	5.3	9482	.068	.000	3.068	.000	.312	.000	16.	225.
11 P66	US 127B	1.5	23251	.069	.000	4.197	.000	.270	.000	40.	666.
19 A77	US 27	18.0	7362	.067	.000	3.514	.000	.435	.000	12.	276.
19 E23	KY1120	.3	6253	.150	.025	4.175	4.417	.309	3.866	9.	432.
24 B19	US 41	11.9	11903	.090	.000	3.593	.000	.422	.000	20.	594.
24 F01	US 41A	2.3	23911	.055	.000	4.675	.000	.234	.000	41.	521.
24 286	US 41A	5.3	17406	.247	.008	4.117	4.375	.284	3.946	23.	1825.
30 A26	KY 54	2.3	17598	.138	.000	3.506	.000	.378	.000	27.	1175.
30 A36	KY2155	2.7	4975	.109	.000	3.789	.000	.385	.000	8.	290.
30 B76	US 60	14.6	22283	.083	.000	4.200	.000	.264	.000	37.	753.

EAL TRAFFIC PARAMETERS FOR INDIVIDUAL CLASSIFICATION STATIONS
 2005
 AGGREGATE CLASS V -- URBAN OTHER FREEWAY AND EXPRESSWAYS /
 URBAN OTHER PRINCIPAL ARTERIAL

		FRACT AXLES/TRUCK EAL'S/AXE						2-DIRECTION EAL'S IN 1000'S				
		OF TRK			TRUCK FRACT			4-VEHICLES		NON-COAL		COAL
COU STA	ROUTE	MILE POINT	AADT	COAL	WITH COAL	NORMAL COAL	HEAVY COAL	45	.000	17.	613.	TOTAL
63 A78	KY9006	1.9	1.0492	.115	.000	4.037	.000	345	.000	17.	613.	630.
63 C03	US 25E	.5	23888	.109	.000	3.896	.000	256	.000	39.	950.	988.
71 B52	US 431	14.6	5047	.222	.000	4.251	.000	276	.000	7.	480.	487.
73 A45	US 60	11.7	21498	.030	.000	4.287	.000	253	.000	38.	255.	293.
73 A52	US 60X	.5	13709	.040	.000	4.350	.000	249	.000	24.	218.	242.
73 C13	US 62	14.7	12504	.055	.000	4.161	.000	263	.000	22.	278.	0.
73 C20	US 45	6.2	22354	.152	.000	4.715	.000	236	.000	35.	1382.	1417.
73 D35	US 60X	4.7	14496	.022	.000	4.005	.000	264	.000	26.	124.	150.
73 298	US 68	.5	8168	.105	.000	3.714	.000	313	.000	13.	364.	0.
76 A46	US 25	15.3	22308	.091	.003	3.702	4.200	333	4.299	37.	908.	33.
76 A57	US 25	15.5	31157	.052	.000	3.251	.000	365	.000	54.	698.	752.
76 C33	KY 21	9.8	9076	.061	.000	3.175	.000	450	.000	15.	290.	305.
76 Z15	US 25	12.5	19680	.096	.000	3.128	.000	377	.000	32.	815.	847.
76 Z16	US 25	14.5	19346	.067	.000	3.219	.000	355	.000	33.	542.	574.
78 A02	KY 55	.2	11098	.200	.001	4.060	4.333	357	4.027	16.	1171.	1206.
84 A36	US 68	7.3	10484	.195	.000	3.072	.000	421	.000	15.	963.	979.
90 A12	US 31E	14.6	12704	.143	.000	3.588	.000	424	.000	20.	1008.	1028.
90 A48	US 62	14.4	13224	.207	.000	3.754	.000	433	.000	19.	1622.	1642.
90 B07	US 31E	12.3	9148	.108	.000	3.150	.000	390	.000	15.	444.	458.
98 A73	US 23	24.1	27652	.045	.000	4.288	.000	261	.000	48.	504.	553.
100 A05	US 27	15.6	36252	.033	.000	4.404	.000	253	.000	64.	486.	550.
100 B04	US 27	17.6	17068	.068	.000	3.354	.000	299	.000	29.	426.	455.
100 B61	KY 80B	1.4	17565	.128	.000	4.189	.000	297	.000	28.	1020.	1048.
103 A54	KY 32	6.3	25677	.023	.000	4.065	.000	267	.000	46.	230.	276.
105 B11	US 62	8.0	14259	.079	.000	3.513	.000	395	.000	24.	574.	598.
105 080	KY 620	1.2	9900	.218	.000	4.062	.000	270	.000	14.	863.	877.
106 530	KY 53	5.3	5256	.100	.000	2.686	.000	354	.000	9.	184.	192.
109 809	KY 210	15.6	6551	.141	.000	4.108	.000	288	.000	10.	400.	411.
114 A14	US 68	9.2	26382	.056	.000	4.393	.000	253	.000	45.	603.	648.
114 A49	KY 446	.5	18676	.192	.000	3.756	.000	372	.000	27.	1823.	1850.

SUMMARY OF AVERAGE VALUES FOR
AGGREGATE CLASS V -- URBAN OTHER FREEWAY AND EXPRESSWAYS /
URBAN OTHER PRINCIPAL ARTERIAL

YEAR	3 YR AVG	05	04	01	00	99	98	97	96	95	94	93
UNCLASSIFIED ROADS (ALL AVC LOCATIONS AND MANUAL LOCATIONS WITH LESS THAN 3% OF TRUCKS CLASSIFIED AS HEAVY/COAL)												
NO OF CLASSIFICATION STA.												
AADT	308	100	158	50	22	27	41	44	54	36	50	52
PERCENT TRUCKS	20533	19072	19655	26231	25643	15462	20421	26925	21135	16319	16519	19626
AXLES PER TRUCK	9.504	10.485	8.880	9.511	9.077	8.265	9.957	5.879	7.370	5.069	4.739	6.309
EAL'S PER TRUCK AXLE	3.574	3.735	3.519	3.427	3.186	3.228	3.386	3.083	3.144	2.838	2.972	3.041
CLASSIFIED ROADS (MANUAL LOCATION WITH 3% OR MORE OF TRUCKS CLASSIFIED AS HEAVY/COAL)												
NO OF CLASSIFICATION STA.												
AADT	3	0	2	1	4	6	7	10	9	6	4	6
PERCENT TRUCKS	20067	0	16301	27600	29000	23966	22371	23716	26200	15833	14435	14575
PERCENT OF TRUCKS CLASSIFIED AS HEAVY/COAL	10.007	.000	13.117	3.787	11.487	12.142	7.806	9.999	9.095	8.183	11.206	10.346
AXLES PER TRUCK NORMAL	9.188	.000	5.409	16.745	12.844	11.826	8.567	11.037	29.425	28.880	13.591	25.585
AXLES PER TRUCK HEAVY/COAL	3.897	.000	4.284	3.123	3.875	3.836	3.724	3.685	3.393	3.121	3.531	3.420
EAL'S PER TRUCK AXLE NORMAL	4.342	.000	4.484	4.057	4.106	3.860	3.950	4.696	4.573	4.457	4.814	4.699
EAL'S PER TRUCK AXLE HEAVY/COAL	.276	.000	.304	.221	.219	.234	.199	.203	.220	.198	.190	.207

EAL TRAFFIC PARAMETERS FOR INDIVIDUAL CLASSIFICATION STATIONS
 1995
 AGGREGATE CLASS VI -- URBAN MINOR ARTERIAL /
 URBAN COLLECTOR

COU STA	ROUTE	MILE POINT	FRACT AXLES/TRUCK OF TRK			EAL'S/AXLE			2-DIRECTION EAL'S IN 1000'S		
			AADT	TRUCK FRACT	WITH COAL	NORMAL COAL	HEAVY COAL	4-VEHICLES	NON-COAL	TRUCKS	COAL
76 C64	KY1983	.2	3488	.152	.000	4.020	.000	1.134	.000	5.	882.
76 Z01	US 25	12.0	5380	.045	.000	2.514	.000	.765	.000	9.	171.
76 Z06	US 25	11.9	5548	.051	.000	3.219	.000	.956	.000	10.	316.
78 A50	KY 49	17.6	1919	.095	.000	2.505	.000	.749	.000	3.	125.
81 A43	KY 10	4.4	9418	.075	.000	3.020	.000	.845	.000	16.	655.
81 A44	US 62X	3.1	8370	.130	.002	3.559	5.000	.756	2.275	13.	1068.
81 A53	KY 8	11.7	3486	.097	.000	2.818	.000	.740	.000	6.	256.
87 A05	US 60	4.4	5116	.076	.000	2.802	.000	.579	.000	9.	230.
89 D44	US 62	16.7	10500	.141	.000	3.857	.000	.918	.000	16.	1918.
90 B01	US 150	1.9	13544	.125	.000	3.758	.000	.991	.000	21.	2298.
93 A41	KY 53	7.6	7499	.066	.000	2.913	.000	.729	.000	13.	386.
98 A01	KY1426	7.2	8395	.051	.000	2.793	.000	.573	.000	14.	252.
98 A54	KY1460	6.7	5982	.055	.000	2.712	.000	.864	.000	10.	282.
98 A56	KY1384	7.3	4032	.033	.000	2.209	.000	.724	.000	7.	76.
100 A24	KY1247	8.3	7771	.066	.000	3.217	.000	.799	.000	13.	498.
100 B15	KY 80	18.5	8617	.062	.000	3.028	.000	.733	.000	15.	430.
100 B50	KY 80	20.5	9220	.055	.000	2.629	.000	.754	.000	16.	368.
100 B53	KY 769	9.4	4676	.065	.000	3.240	.000	.827	.000	8.	296.
100 B75	KY1642	5.2	4263	.062	.000	2.492	.000	.736	.000	7.	179.
100 B81	KY2302	2.0	3469	.041	.000	2.525	.000	.705	.000	6.	94.
105 A12	US 25	3.9	13021	.366	.000	4.021	.000	.728	.000	15.	5084.
105 A60	US 460	10.2	12210	.136	.001	3.607	5.000	.850	2.275	19.	1854.
105 009	US 25	8.9	5266	.120	.000	3.122	.000	.838	.000	8.	602.
105 058	KY 32	23.9	1593	.059	.000	2.611	.000	.632	.000	3.	57.
107 A04	KY 73	9.3	4060	.128	.000	2.822	.000	.577	.000	6.	311.
107 A18	KY1008	.3	1966	.113	.000	3.737	.000	1.134	.000	3.	345.
107 A44	KY1008	3.8	7374	.111	.000	3.655	.000	1.018	.000	12.	1112.
109 B60	KY3350	.2	6427	.082	.000	3.228	.000	.745	.000	11.	465.
114 A33	US 31W	14.3	21388	.048	.000	4.353	.000	1.438	.000	37.	2321.
114 D01	KY 880	2.6	14151	.144	.000	3.421	.000	.869	.000	22.	2206.
116 A22	KY 92	8.1	5874	.092	.000	3.163	.000	.642	.000	10.	401.
118 A36	KY 312	1.8	4925	.040	.000	2.767	.000	.725	.000	9.	146.
118 A66	KY 727	2.6	2858	.046	.000	2.607	.000	.721	.000	5.	89.
118 D26	US 25W	11.4	12556	.167	.000	3.510	.000	.753	.000	19.	2021.
7 A77	KY1599	.8	2405	.047	.000	2.496	.000	.577	.000	4.	59.

EAL TRAFFIC PARAMETERS FOR INDIVIDUAL CLASSIFICATION STATIONS
 2005
 AGGREGATE CLASS VI -- URBAN MINOR ARTERIAL /
 URBAN COLLECTOR

COU STA	ROUTE	MILE POINT	FRACT AXLES/TRUCK OF TRK						2-DIRECTION EAL'S IN 1000'S					
			TRUCK FRACT			WITH NORMAL COAL			4-TIRE VEHICLES			NON-COAL TRUCKS		
			AADT	FRACT	COAL	WITH	NORMAL	HEAVY COAL	VEHICLES	NORMAL	HEAVY COAL	VEHICLES	NON-COAL TRUCKS	COAL TRUCKS
7 A79	KY2396	.2	2954	.042	.000	2.315	.000	.647	.000	5.	.68.	.000	0.	73.
8 K03	KY3076	.0	5581	.072	.000	3.394	.000	.813	.000	9.	.405.	.000	0.	415.
8 040	KY 338	26.6	4051	.111	.000	2.910	.000	.694	.000	7.	.331.	.000	0.	337.
9 A50	KY1940	1.0	802	.159	.000	2.362	.000	.850	.000	1.	.94.	.000	0.	95.
11 B21	KY 34	13.1	6722	.092	.000	3.219	.000	.836	.000	11.	.604.	.000	0.	615.
11 019	KY1805	2.3	1249	.052	.000	2.577	.000	.649	.000	2.	.39.	.000	0.	41.
17 A39	KY2080	.5	1975	.058	.000	2.737	.000	.653	.000	3.	.76.	.000	0.	79.
18 A43	KY2594	.1	4166	.110	.000	3.004	.000	.785	.000	7.	.392.	.000	0.	399.
18 A92	KY 774	.3	6222	.053	.000	2.340	.000	.676	.000	11.	.190.	.000	0.	201.
18 B30	KY1550	5.2	3625	.066	.000	2.231	.000	.622	.000	6.	.121.	.000	0.	127.
19 A53	KY 8	5.0	1729	.064	.000	2.476	.000	.629	.000	3.	.63.	.000	0.	66.
19 A82	KY2238	.8	5955	.027	.000	2.927	.000	.762	.000	11.	.129.	.000	0.	139.
19 B20	KY 445	.1	3462	.065	.000	3.682	.000	.848	.000	6.	.255.	.000	0.	261.
19 776	KY 10	.7	1680	.069	.000	2.472	.000	.625	.000	3.	.65.	.000	0.	68.
24 F02	KY 911	1.0	7837	.132	.000	3.238	.000	.559	.000	12.	.684.	.000	0.	696.
25 A62	KY 974	.8	2036	.081	.000	2.536	.000	.702	.000	3.	.109.	.000	0.	112.
30 C91	KY 331	1.1	837	.229	.000	3.911	.000	1.137	.000	1.	.310.	.000	0.	311.
30 821	KY6080	.2	445	.057	.000	2.721	.000	.587	.000	15.	.15.	.000	0.	15.
34 G07	KY1978	1.0	940	.112	.000	2.792	.000	.667	.000	1.	.73.	.000	0.	74.
34 G13	KY1977	2.0	1255	.096	.000	2.714	.000	.775	.000	2.	.93.	.000	0.	95.
34 040	KY 353	4.0	4107	.090	.000	2.473	.000	.793	.000	7.	.266.	.000	0.	272.
34 276	KY 57	8.3	4071	.050	.000	2.711	.000	.715	.000	7.	.144.	.000	0.	151.
45 E59	KY3105	.3	1186	.176	.000	2.765	.000	.971	.000	2.	.204.	.000	0.	206.
45 E73	KY 750	0	3915	.126	.000	2.976	.000	.671	.000	6.	.359.	.000	0.	366.
45 E85	KY 693	.2	1748	.060	.000	2.135	.000	.688	.000	3.	.56.	.000	0.	59.
49 A66	KY 982	5.2	3141	.099	.000	2.663	.000	.736	.000	5.	.224.	.000	0.	229.
51 B21	KY 285	2.6	3927	.054	.000	3.046	.000	.671	.000	7.	.157.	.000	0.	164.
54 A52	KY 336	3.8	3021	.077	.000	2.500	.000	.672	.000	5.	.142.	.000	0.	147.
56 G72	KY1230	7.8	1349	.204	.000	2.816	.000	1.077	.000	2.	.306.	.000	0.	308.
56 323	KY1819	4.8	3712	.054	.000	2.710	.000	.670	.000	6.	.133.	.000	0.	139.
59 D56	KY 371	.7	8105	.041	.000	2.989	.000	.806	.000	14.	.293.	.000	0.	307.
59 L40	KY1829	4.5	4644	.088	.000	2.992	.000	.610	.000	8.	.272.	.000	0.	280.
63 A01	KY 638	.1	2606	.038	.000	2.739	.000	.708	.000	5.	.71.	.000	0.	75.
78 A69	KY 429	.3	2117	.079	.000	2.387	.000	.710	.000	4.	.103.	.000	0.	107.
78 A74	KY 208	11.0	7335	.142	.000	3.289	.000	.727	.000	11.	.908.	.000	0.	919.

EAL TRAFFIC PARAMETERS FOR INDIVIDUAL CLASSIFICATION STATIONS
 2005
 AGGREGATE CLASS VI -- URBAN MINOR ARTERIAL/
 URBAN COLLECTOR

COU STA	ROUTE	FRACT AXLES/TRUCK OF TRK										2-DIRECTION EAL'S IN 1000'S					
		MILE POINT	AADT	TRUCK FRACT		WITH COAL		NORMAL COAL		HEAVY COAL		4-TIRE VEHICLES		NON-COAL TRUCKS		COAL TRUCKS	
				FRACT	COAL	COAL	COAL	NORMAL	HEAVY	COAL	COAL	VEHICLES	TRUCKS	TRUCKS	COAL	TRUCKS	TOTAL
93 B11	KY 329	8.5	4562	.067	.000	2.791	.000	.599	.000	.000	.000	8.	186.	0.	194.	0.	226.
93 275	KY 393	3.7	4448	.067	.000	2.556	.000	.784	.000	.000	.000	8.	219.	0.	87.	0.	87.
98 805	KY3417	.5	2215	.053	.000	2.649	.000	.739	.000	.000	.000	4.	83.	0.	62.	0.	62.
100 A03	KY1580	.4	1020	.084	.000	2.531	.000	.770	.000	.000	.000	2.	60.	0.	536.	0.	536.
105 292	KY 32	1.0	6019	.060	.000	4.113	.000	.970	.000	.000	.000	10.	526.	0.	425.	0.	425.
106 A74	KY2862	.1	3593	.119	.000	3.251	.000	.829	.000	.000	.000	6.	419.	0.	985.	0.	985.
109 A53	KY 658	.1	5936	.172	.000	3.347	.000	.784	.000	.000	.000	9.	976.	0.	449.	0.	449.
109 B03	KY 289	1.6	7662	.056	.000	3.171	.000	.872	.000	.000	.000	13.	436.	0.	425.	0.	425.
114 A69	KY 884	9.0	7389	.084	.000	2.679	.000	.680	.000	.000	.000	12.	413.	0.	517.	0.	517.
114 B17	KY3225	.6	11198	.060	.000	2.845	.000	.713	.000	.000	.000	19.	498.	0.	157.	0.	157.
116 A70	KY3106	.3	3642	.059	.000	2.933	.000	.651	.000	.000	.000	6.	151.	0.	30.	0.	30.
118 A65	KY1259	.3	2282	.021	.000	2.551	.000	.596	.000	.000	.000	4.	26.	0.	6.	0.	6.
118 D04	KY 856	1.3	239	.030	.000	2.571	.000	.812	.000	.000	.000	0.	5.	0.	292.	0.	292.
120 A27	KY1964	9.4	4019	.097	.000	3.124	.000	.642	.000	.000	.000	7.	286.	0.	87.	0.	87.
10 D21	KY3294	7.8	3851	.040	.000	2.461	.000	.589	.000	.000	.000	7.	80.	0.	85.	0.	85.
24 C05	KY1979	.1	2513	.038	.000	3.050	.000	.759	.000	.000	.000	4.	81.	0.	362.	0.	362.
25 A42	KY3370	4.3	8331	.055	.000	2.753	.000	.755	.000	.000	.000	14.	347.	0.	1524.	12.	1524.
34 AAA	KY1723	.3	12484	.135	.002	3.221	.000	.753	.000	.000	.000	20.	1492.	0.	168.	0.	168.
73 A47	KY 731	1.2	4297	.045	.000	2.885	.000	.829	.000	.000	.000	7.	168.	0.	176.	0.	176.

SUMMARY OF AVERAGE VALUES FOR
 AGGREGATE CLASS VI -- URBAN MINOR ARTERIAL /
 URBAN COLLECTOR

YEAR	3 YR AVG	05	04	01	00	99	98	97	96	95	94	93
UNCLASSIFIED ROADS (ALL AVC LOCATIONS AND MANUAL LOCATIONS WITH LESS THAN 3% OF TRUCKS CLASSIFIED AS HEAVY/COAL)												
NO OF CLASSIFICATION STA.												
AADT	219	159	28	32	17	17	32	36	39	48	42	65
PERCENT TRUCKS	7332	6745	6908	10619	11235	8809	10994	13803	11221	10381	12275	11811
AXLES PER TRUCK	8.613	8.838	8.459	7.631	7.463	7.294	11.278	5.230	4.847	5.561	4.108	4.222
EAL'S PER TRUCK AXLE	3.010	3.028	2.901	3.016	3.125	2.933	3.095	2.731	2.741	2.828	2.711	2.635
CLASSIFIED ROADS (MANUAL LOCATION WITH 3% OR MORE OF TRUCKS CLASSIFIED AS HEAVY/COAL)												
NO OF CLASSIFICATION STA.												
AADT	0	0	0	0	0	0	0	2	1	2	0	2
PERCENT TRUCKS	0	0	0	0	0	0	0	22100	16100	8575	0	16100
PERCENT OF TRUCKS CLASSIFIED AS HEAVY/COAL	.000	.000	.000	.000	.000	.000	.000	13.201	3.053	3.124	.000	5.916
AXLES PER TRUCK NORMAL	.000	.000	.000	.000	.000	.000	.000	15.310	13.688	53.480	.000	15.504
AXLES PER TRUCK HEAVY/COAL	.000	.000	.000	.000	.000	.000	.000	3.857	2.875	2.980	.000	3.029
EAL'S PER TRUCK AXLE NORMAL	.000	.000	.000	.000	.000	.000	.000	5.041	4.955	3.647	.000	4.873
EAL'S PER TRUCK AXLE HEAVY/COAL	.000	.000	.000	.000	.000	.000	.000	.120	.134	.163	.000	.193

5.0

Aggregate Class Regression Estimates

YEAR	ANNUAL CHANGE (%)	05	04	01	00	99	98	97	96	95	94
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AGGREGATE CLASS I -- RURAL INTERSTATE
AVERAGE VALUES (SMOOTHED)

UNCLASSIFIED ROADS (ALL AVC LOCATIONS AND MANUAL LOCATIONS WITH LESS THAN 3% OF TRUCKS CLASSIFIED AS HEAVY/COAL)											
NO. OF CLASSIFICATION STA.		42	36	24	10	9	17	20	15	11	11
AADT	2.858	33265	32315	31364	30413	29463	28512	27562	26611	25660	24710
PERCENT TRUCKS	1.582	32.926	32.405	31.884	31.363	30.842	30.321	29.800	29.280	28.759	28.238
AXLES PER TRUCK	.065	4.511	4.509	4.506	4.503	4.500	4.497	4.494	4.491	4.488	4.485
EAL'S PER TRUCK AXLE	3.733	.292	.281	.270	.259	.248	.237	.226	.215	.205	.194

53

CLASSIFIED ROADS (MANUAL LOCATION WITH 3% OR MORE OF TRUCKS CLASSIFIED AS HEAVY/COAL)											
NO. OF CLASSIFICATION STA.		0	0	1	0	0	0	0	1	0	0
AADT	? 12.428 ?	28345	24822	21300	17777	14254	10732	7209	3686	164	0
PERCENT TRUCKS	4.489	25.865	24.704	23.543	22.382	21.221	20.060	18.899	17.738	16.577	15.416
PERCENT OF TRUCKS CLASSIFIED AS HEAVY/COAL	? -1.323 ?	3.778	3.828	3.878	3.928	3.978	4.028	4.078	4.128	4.178	4.228
AXLES PER TRUCK NORMAL	? -4.698 ?	3.887	4.069	4.252	4.435	4.617	4.800	4.982	5.165	5.348	5.530
AXLES PER TRUCK HEAVY/COAL	? -.616 ?	4.581	4.609	4.637	4.665	4.693	4.722	4.750	4.778	4.806	4.834
EAL'S PER TRUCK AXLE NORMAL	? -4.270 ?	.225	.234	.244	.254	.263	.273	.282	.292	.302	.311
EAL'S PER TRUCK AXLE HEAVY/COAL	? 8.738 ?	2.266	2.068	1.870	1.672	1.474	1.276	1.078	.880	.682	.484

AGGREGATE CLASS III -- RURAL PRINCIPAL ARTERIAL/
RURAL MINOR ARTERIAL

YEAR	ANNUAL CHANGE (%)			AVERAGE VALUES (SMOOTHED)		
	05	04	01	00	99	98
				97	98	97
				96	95	95
				94		

UNCLASSIFIED ROADS (ALL AVC LOCATIONS AND MANUAL LOCATIONS WITH LESS THAN 3% OF TRUCKS CLASSIFIED AS HEAVY/COAL)						
NO. OF CLASSIFICATION STA.	246	238	135	30	46	70
AADT	2,113	7810	7645	7480	7315	7150
PERCENT TRUCKS	4,006	15.978	15.338	14.698	14.057	13.417
AXLES PER TRUCK	.479	3.607	3.590	3.573	3.556	3.538
EAL'S PER TRUCK AXLE	1.600	.280	.276	.271	.267	.262
					.258	.253
					.249	.245
						.240

54

CLASSIFIED ROADS (MANUAL LOCATION WITH 3% OR MORE OF TRUCKS CLASSIFIED AS HEAVY/COAL)						
NO. OF CLASSIFICATION STA.	0	1	5	10	13	25
AADT	4,497	12977	12394	11810	11226	10643
PERCENT TRUCKS	? -5.650	?	11.178	11.809	12.441	13.073
PERCENT OF TRUCKS CLASSIFIED AS HEAVY/COAL	.286	30.345	30.259	30.172	30.085	29.998
AXLES PER TRUCK NORMAL	.558	3.497	3.478	3.458	3.439	3.419
AXLES PER TRUCK HEAVY/COAL	.741	5.209	5.170	5.131	5.093	5.054
EAL'S PER TRUCK AXLE NORMAL	2.170	.300	.294	.287	.281	.274
EAL'S PER TRUCK AXLE HEAVY/COAL	3.964	3.691	3.545	3.398	3.252	3.106
						.268
						.261
						.255
						.248
						.242

YEAR	ANNUAL CHANGE (%)	AVERAGE VALUES (SMOOTHED)	RURAL MAJOR COLLECTOR / RURAL MINOR COLLECTOR
	94	95	94

NO. OF CLASSIFICATION STA.		UNCLASSIFIED ROADS (ALL AVC LOCATIONS AND MANUAL LOCATIONS WITH LESS THAN 3% OF TRUCKS CLASSIFIED AS HEAVY/COAL)					
AADT	? -4.883 ?	365	430	189	37	69	98
PERCENT TRUCKS	3.764	2613	2741	2868	2996	3123	3251
AXLES PER TRUCK	.801	10.918	10.507	10.096	9.685	9.274	8.863
EAL'S PER TRUCK AXLE	? 7.005 ?	.416	.387	.357	.328	.299	.270

NO. OF CLASSIFICATION STA.		CLASSIFIED ROADS (MANUAL LOCATION WITH 3% OR MORE OF TRUCKS CLASSIFIED AS HEAVY/COAL)					
AADT	2.457	0	0	5	5	11	14
PERCENT TRUCKS	? -8.497 ?	7.175	7.785	8.395	9.004	9.614	10.224
PERCENT OF TRUCKS CLASSIFIED AS HEAVY/COAL	2.800	39.076	37.982	36.887	35.793	34.699	33.605
AXLES PER TRUCK NORMAL	2.544	3.594	3.503	3.411	3.320	3.228	3.137
AXLES PER TRUCK HEAVY/COAL	? -1.118 ?	4.242	4.290	4.337	4.385	4.432	4.479
EAL'S PER TRUCK AXLE NORMAL	? -1.806 ?	.185	.189	.192	.195	.199	.202
EAL'S PER TRUCK AXLE HEAVY/COAL	? 7.598 ?	3.638	3.362	3.085	2.809	2.533	2.256

YEAR	ANNUAL CHANGE (%)	AGGREGATE CLASS IV -- URBAN INTERSTATE AVERAGE VALUES (SMOOTHED)
	05	04
		00
		99
		98
		97
		96
		95
		94

NO. OF CLASSIFICATION STA.		UNCLASSIFIED ROADS (ALL AVC LOCATIONS AND MANUAL LOCATIONS WITH LESS THAN 3% OF TRUCKS CLASSIFIED AS HEAVY/COAL)
AADT	?-13.947 ?	33 42 37 1 2 4 17 19 11 16
PERCENT TRUCKS	4.777	32705 37266 41828 46389 50950 55511 60073 64634 69195 73757
AXLES PER TRUCK	.910	24.474 23.305 22.136 20.967 19.798 18.629 17.460 16.290 15.121 13.952
EAL'S PER TRUCK AXLE	4.800	4.433 4.393 4.352 4.312 4.271 4.231 4.191 4.150 4.110 4.070
	.297	.283 .269 .254 .240 .226 .212 .197 .183 .169

NO. OF CLASSIFICATION STA.		CLASSIFIED ROADS (MANUAL LOCATION WITH 3% OR MORE OF TRUCKS CLASSIFIED AS HEAVY/COAL)
AADT	.000	*****
PERCENT TRUCKS	.000	*****
PERCENT OF TRUCKS CLASSIFIED AS HEAVY/COAL	.000	*****
AXLES PER TRUCK NORMAL	.000	*****
EAL'S PER TRUCK AXLE HEAVY/COAL	.000	*****
EAL'S PER TRUCK AXLE NORMAL	.000	*****
EAL'S PER TRUCK AXLE HEAVY/COAL	.000	*****

YEAR	ANNUAL CHANGE (%)	AGGREGATE CLASS V -- URBAN OTHER FREEWAY AND EXPRESSWAYS / URBAN OTHER PRINCIPAL ARTERIAL		AVERAGE VALUES (SMOOTHED)		95		
		05	04	01	00			
UNCLASSIFIED ROADS (ALL AVC LOCATIONS AND MANUAL LOCATIONS WITH LESS THAN 3% OF TRUCKS CLASSIFIED AS HEAVY/COAL)								
NO. OF CLASSIFICATION STA.								
AADT	1.700	22457	22075	21693	21311	20929		
PERCENT TRUCKS	? 5.562 ?	10.569	9.981	9.393	8.805	8.217		
AXLES PER TRUCK	2.215	3.612	3.532	3.452	3.372	3.292		
EAL'S PER TRUCK AXLE	4.109	.306	.294	.281	.269	.256		
CLASSIFIED ROADS (MANUAL LOCATION WITH 3% OR MORE OF TRUCKS CLASSIFIED AS HEAVY/COAL)								
NO. OF CLASSIFICATION STA.								
AADT	3.092	26209	25399	24589	23778	22968		
PERCENT TRUCKS	.236	9.762	9.739	9.716	9.693	9.670		
PERCENT OF TRUCKS CLASSIFIED AS HEAVY/COAL	?-24.481 ?	6.910	8.602	10.294	11.986	13.678		
AXLES PER TRUCK NORMAL	1.738	3.964	3.895	3.826	3.757	3.688		
AXLES PER TRUCK HEAVY/COAL	? -1.799 ?	3.975	4.047	4.118	4.190	4.261		
EAL'S PER TRUCK AXLE NORMAL	3.457	.267	.258	.249	.239	.230		
EAL'S PER TRUCK AXLE HEAVY/COAL	? 10.013 ?	4.626	4.163	3.700	3.236	2.773		

YEAR	ANNUAL CHANGE (%)	AVERAGE VALUES	URBAN COLLECTOR (SMOOTHED)	MINOR ARTERIAL / URBAN
	05	04	01	00
			99	98
			99	97
			98	96
			99	95
			98	94

UNCLASSIFIED ROADS
(ALL AVC LOCATIONS AND MANUAL LOCATIONS WITH LESS
THAN 3% OF TRUCKS CLASSIFIED AS HEAVY/COAL)

NO. OF CLASSIFICATION STA.	AADT	PERCENT TRUCKS	AXLES PER TRUCK	EAL'S PER TRUCK AXLE
?	-6.041 ?	8161	8654	9147
?	5.300 ?	9.323	8.829	8.335
1.268		3.098	3.059	3.019
?	10.874 ?		.829	.739
				.649
				.559
				.469
				.378
				.288
				.198
				.108
				.018

CLASSIFIED ROADS
(MANUAL LOCATION WITH 3% OR MORE OF
TRUCKS CLASSIFIED AS HEAVY/COAL)

NO. OF CLASSIFICATION STA.	AADT	PERCENT TRUCKS	PERCENT OF TRUCKS CLASSIFIED AS HEAVY/COAL	AXLES PER TRUCK NORMAL	EAL'S PER TRUCK HEAVY/COAL	EAL'S PER TRUCK AXLE NORMAL	EAL'S PER TRUCK AXLE HEAVY/COAL
?	6.730 ?	*****	19.697	20.977	22.256	23.536	24.815
?	11.565 ?	*****	21.025	19.610	18.195	16.780	15.365
?	11.166	9.875	8.583	7.292	6.001	4.709	3.418
?	-6.496 ?	*****	19.697	20.977	22.256	23.536	24.815
4.088		*****	3.762	3.608	3.454	3.301	3.147
1.540		*****	4.913	4.837	4.761	4.686	4.610
?	-22.927 ?	*****	0.082	.101	.120	.138	.157
?	6.888 ?	*****	1.427	1.329	1.231	1.132	1.034
							.936
							.838

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ktc@engr.uky.edu

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