

MOTORCYCLE



PASSENGER CARS



KANSAS

2005

PICKUPS



FIVE AXLES

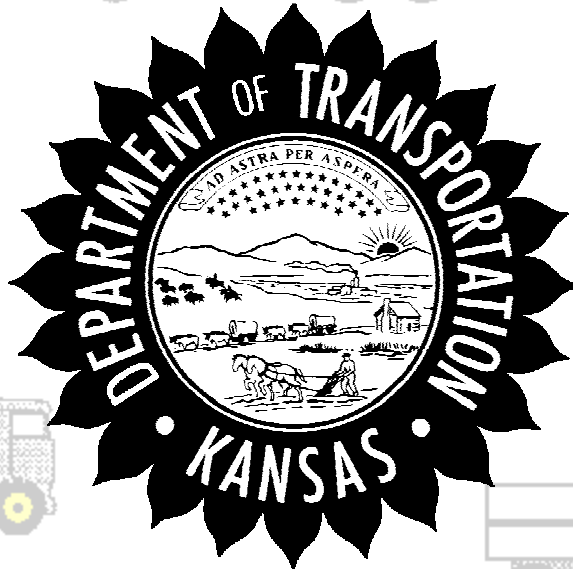
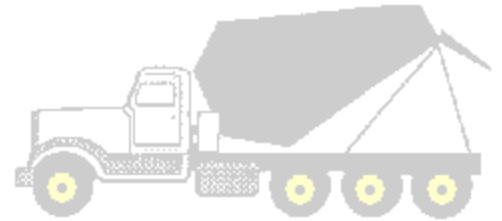


# VEHICLE CLASSIFICATION Overview

TWO AXLE



FOUR + AXLES



FOUR or LESS AXLES



FIVE AXLES



SIX + AXLES



Kansas Department of Transportation  
Bureau of Transportation Planning  
Traffic and Field Operations Unit

SIX AXLES



SEVEN + AXLES



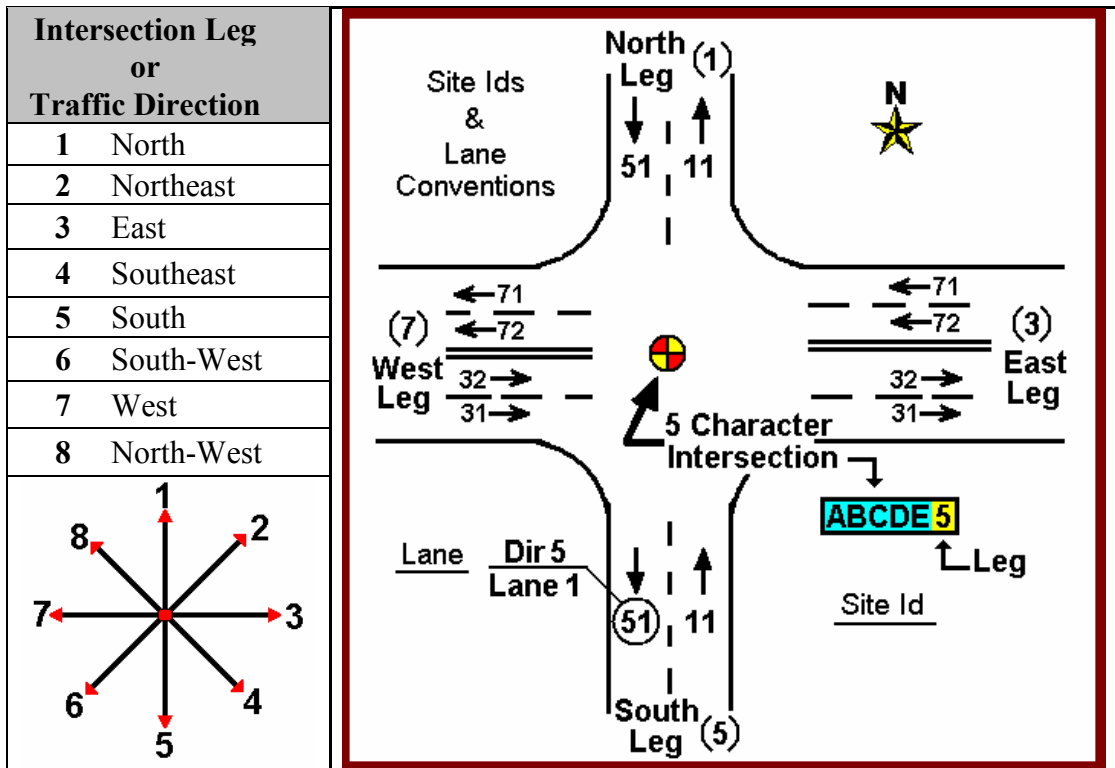
# OVERVIEW & CONVENTIONS

In 2005, (328) classification surveys were made by the Traffic & Field Operations unit.

<u>District</u>	<u>Counties</u>	<u>Locations</u>
I	17	66
II	15	47
III	17	48
IV	13	47
V	17	61
VI	<u>15</u>	<u>51</u>
<b>Total</b>	<b>94</b>	<b>320</b>

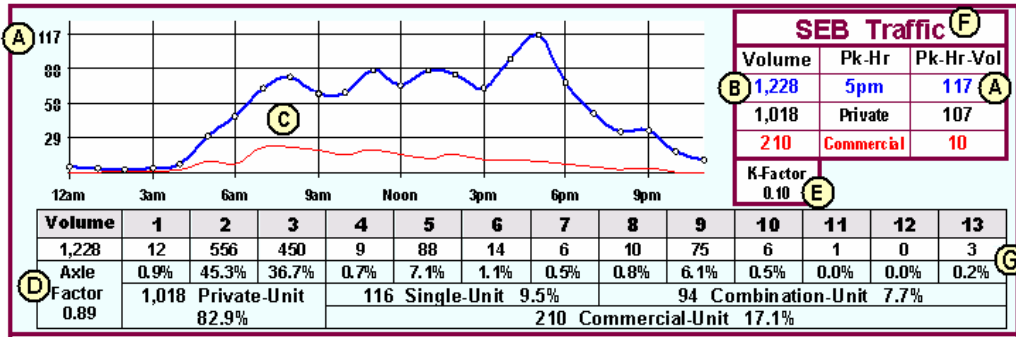
Each survey location is identified with a unique (6)-Character Site ID. The first (5) characters represent the **Route & Cross-Route** (intersection), and the last digit depicts the direction or leg from the intersection.

Traffic lanes are identified with a (2) digit number. The first indicates the *traffic direction*, and the last, the *traffic lane*. Traffic-lane numbering *always* start with 1 on the outside right-most lane.



# OVERVIEW & CONVENTIONS

## Understanding Classification Report Charts

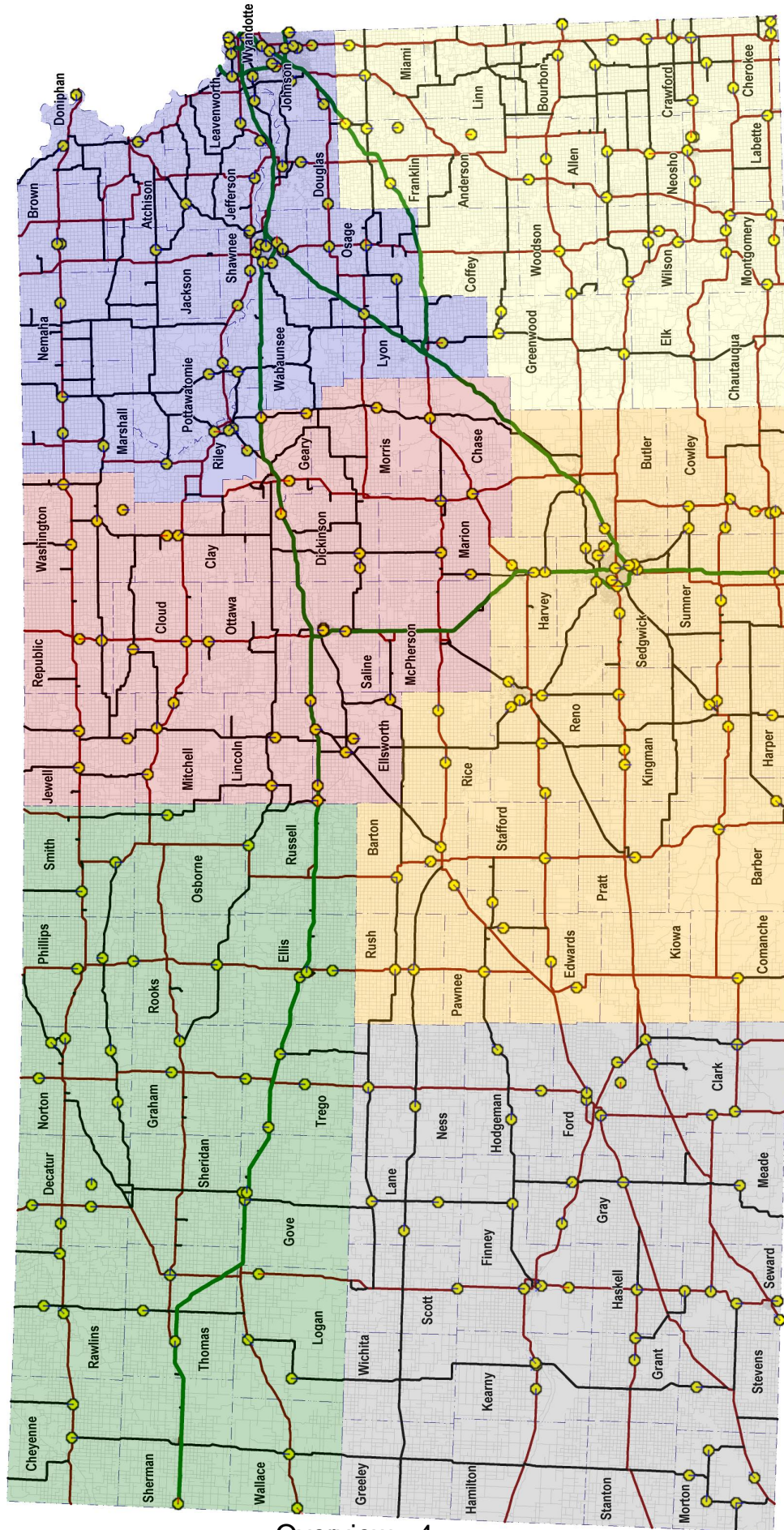


- A) Averaged Peak-Hour Traffic Volume: All Traffic (117) ; Class 1-3 (107) ; Class 4-13 (10)
- B) Averaged (24) Hour Volumes.
- C) Averaged Hourly Volumes : Total Traffic (Blue) & Commercial Traffic (Red)
- D) The Axle Correction Factor is used to adjust traffic volumes obtained from axle counts
- E) The K-Factor is the Highest Direction Peak-Hour-Volume divided by the 24 Hour Site Volume.
- F) Site or Indicated Traffic Direction
- G) Averaged 24 Hour (Total or Category) Volume

## Roadway Functional Classification Codes

<u>Rural</u>		<u>Urban</u>	
01	Interstate	11	Interstate
02	Other Principal Arterials	12	Freeway & Expressways
06	Minor Arterials	14	Other Principal Arterials
07	Major Collectors	16	Minor Arterials
08	Minor Collectors	17	Collectors
09	Locals	19	Locals

# 2005 Vehicle Classification Locations



# 2005 Classification Surveys

Number of Locations by Route & District

K Routes	District					
	1	2	3	4	5	6
K-2					2	
K-4	3	2			2	1
K-5	2					
K-7	2					
K-8			1			
K-9		3	3			
K-14		4			1	
K-15		6			2	
K-16	1					
K-17					1	
K-18	2					
K-19					2	
K-23			2			6
K-25			3			2
K-27			2			3
K-28		1				
K-31	1					
K-32	2					
K-34						1
K-39				2		
K-47				1		
K-51						2
K-58				1		
K-61					1	
K-68				1		
K-94						1
K-96					4	2
K-99	4			1		
K-102				1		
K-116	1					
K-117			1			
K-126				1		
K-128		2				
K-144						1
K-147			1			
K-148		4				
K-150		1				
K-156		1			1	3
K-161			1			
K-170	1					
K-177		2				
K-179					1	
K-181		1	1			
K-190						2
K-196					1	
K-198			1			
K-232		1				
K-254					2	
K-268	1					
K-360					1	
K-383			1			

Interstate Routes	District					
	1	2	3	4	5	6
I-35	1			2	1	
I-70	2	5	4			
I-135		1			2	
I-235					2	
I-335	1					
I-435	1					
I-635	1					

US Routes	District					
	1	2	3	4	5	6
US-24	6	1	2			
US-36	4		3			
US-40			3			
US-50		1			3	5
US-54				4	3	2
US-56	3	1			3	2
US-59	2			2		
US-69	2			5		
US-73	1					
US-75	2			4		
US-77	2	3			3	
US-81		3				
US-83 B						1
US-83			5			7
US-160				3	5	3
US-166				4	1	
US-169	1			4		
US-183			4		3	1
US-183 Byp			1			
US-281			2		5	
US-283			4			4
US-400				6		1

City Routes	District					
	1	2	3	4	5	6
C-106					1	
C-1000	1					
C-1714			1			
C-1820					1	
C-2701	1					
C-2712	1					
C-2901	1					
C-3151	1					
C-3216	1					
C-3814	1					
C-4212	1					
C-4261	1					
C-4516				1		
C-4816		1				
C-4817		1				
C-5251	1					
C-5350	1					
C-5390	1					
C-5630	2					
C-6050					1	
C-6150					1	
C-6275					1	
C-6451					1	
C-6625					1	

Minor Collectors	District					
	1	2	3	4	5	6
MCS-7409			1			

Rural Secondary	District					
	1	2	3	4	5	6
RS-13				1		
RS-18				1		
RS-61	1					
RS-125		1				
RS-238		1				
RS-251						1
RS-266				2		
RS-296					1	
RS-303					1	
RS-538	1					
RS-902			1			
RS-1253	1					



**2005 VEHICLE CLASSIFICATION by FUNCTIONAL CLASS  
SUMMARY BY FUNCTIONAL CLASSIFICATION**

Fun Class	No Loc	FHWA VEHICLE TYPE CATEGORY													HEAVY COMMERCIAL			Vehicle Total	Axle Factor
		1	2	3	4	5	6	7	8	9	10	11	12	13	*SU	**Comb	Total		
1	14	746 0.47%	82,835 52.09%	27,393 17.23%	1,164 0.73%	4,117 2.59%	931 0.59%	341 0.21%	3,833 2.41%	32,436 20.40%	463 0.29%	2,792 1.76%	1,163 0.73%	798 0.50%	6,553 4.12%	41,484 26.09%	48,037 30.21%	159,012	0.72
2	101	2,595 0.55%	256,668 54.26%	122,755 25.95%	2,621 0.55%	17,463 3.69%	4,645 0.98%	1,694 0.36%	8,315 1.76%	50,687 10.72%	2,240 0.47%	1,925 0.41%	430 0.09%	1,004 0.21%	26,424 5.59%	64,601 13.66%	91,025 19.24%	473,043	0.83
6	107	931 0.52%	94,348 52.90%	51,638 28.96%	879 0.49%	7,684 4.31%	2,413 1.35%	742 0.42%	2,744 1.54%	15,034 8.43%	1,060 0.59%	311 0.17%	69 0.04%	483 0.27%	11,718 6.57%	19,701 11.05%	31,419 17.62%	178,335	0.85
7	46	139 0.55%	12,441 48.77%	8,254 32.36%	107 0.42%	1,163 4.56%	542 2.13%	132 0.52%	317 1.24%	2,083 8.17%	163 0.64%	76 0.30%	11 0.04%	81 0.32%	1,944 7.62%	2,731 10.71%	4,675 18.33%	25,510	0.85
8	1	0 0.00%	11 34.92%	15 47.62%	0 0.00%	2 4.76%	2 6.35%	1 3.17%	1 3.17%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	5 14.29%	1 3.17%	6 17.46%	32	0.91
11	7	1,102 0.35%	215,215 68.40%	66,352 21.09%	1,581 0.50%	7,296 2.32%	2,608 0.83%	562 0.18%	3,208 1.02%	14,439 4.59%	324 0.10%	936 0.30%	442 0.14%	594 0.19%	12,046 3.83%	19,941 6.34%	31,987 10.17%	314,655	0.91
12	5	534 0.49%	66,730 61.09%	28,943 26.50%	507 0.46%	3,914 3.58%	1,551 1.42%	411 0.38%	1,339 1.23%	4,653 4.26%	181 0.17%	147 0.13%	47 0.04%	279 0.26%	6,382 5.84%	6,645 6.08%	13,027 11.93%	109,234	0.91
14	20	1,300 0.44%	211,857 72.18%	62,721 21.37%	902 0.31%	6,534 2.23%	2,094 0.71%	571 0.19%	2,042 0.70%	4,874 1.66%	227 0.08%	157 0.05%	64 0.02%	151 0.05%	10,102 3.44%	7,515 2.56%	17,616 6.00%	293,494	0.96
16	15	721 0.49%	115,583 77.78%	27,343 18.40%	383 0.26%	2,227 1.50%	354 0.24%	164 0.11%	811 0.55%	825 0.56%	57 0.04%	57 0.04%	31 0.02%	42 0.03%	3,128 2.10%	1,823 1.23%	4,950 3.33%	148,598	0.98
17	2	17 0.20%	5,781 70.93%	1,929 23.66%	38 0.46%	212 2.60%	58 0.71%	29 0.35%	32 0.39%	35 0.43%	4 0.05%	11 0.13%	2 0.02%	6 0.07%	336 4.12%	89 1.09%	424 5.20%	8,150	0.98
Total %	318	8,085 0.47%	1,061,469 62.07%	397,341 23.24%	8,180 0.48%	50,611 2.96%	15,198 0.89%	4,647 0.27%	22,641 1.32%	125,065 7.31%	4,718 0.28%	6,411 0.37%	2,258 0.13%	3,437 0.20%	78,636 4.60%	164,530 9.62%	243,166 14.22%	1,710,060	0.87

\* SU = SINGLE UNIT VEHICLES, CLASS 4 THRU 7



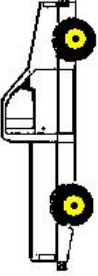

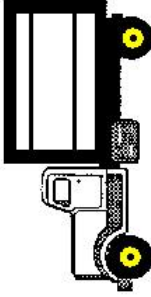

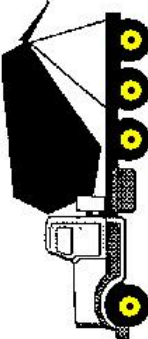
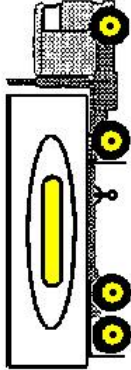
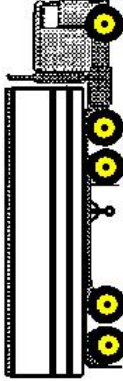
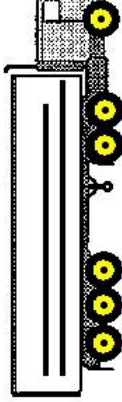

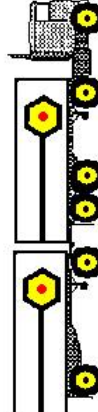
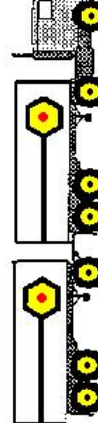
\*\*COMB = COMBINATION UNITS, CLASS 8 THRU 13

**2003 - 2005 VEHICLE CLASSIFICATION by FUNCTIONAL CLASS  
SUMMARY BY FUNCTIONAL CLASSIFICATION**

Fun Class	No Loc	FHWA VEHICLE TYPE CATEGORY													HEAVY COMMERCIAL			Vehicle Total	Axle Factor
		1	2	3	4	5	6	7	8	9	10	11	12	13	*SU	**Comb	Total		
1	36	1,848	252,207	82,169	3,380	11,995	2,685	899	10,911	91,598	1,232	7,075	3,006	2,298	18,960	116,120	135,080	471,304	0.73
		0.39%	53.51%	17.43%	0.72%	2.55%	0.57%	0.19%	2.32%	19.44%	0.26%	1.50%	0.64%	0.49%	4.02%	24.64%	28.66%		
2	243	6,163	863,075	338,086	6,952	42,452	12,163	3,899	22,001	119,770	5,035	4,464	1,184	2,582	65,466	155,036	220,502	1,427,825	0.86
		0.43%	60.45%	23.68%	0.49%	2.97%	0.85%	0.27%	1.54%	8.39%	0.35%	0.31%	0.08%	0.18%	4.59%	10.86%	15.44%		
6	308	2,487	285,169	154,619	2,337	20,650	6,168	1,901	7,539	39,613	2,530	1,100	174	1,269	31,055	52,225	83,279	525,555	0.86
		0.47%	54.26%	29.42%	0.44%	3.93%	1.17%	0.36%	1.43%	7.54%	0.48%	0.21%	0.03%	0.24%	5.91%	9.94%	15.85%		
7	200	708	116,711	60,855	889	7,419	2,212	654	1,884	5,925	484	322	50	307	11,175	8,972	20,147	198,421	0.93
		0.36%	58.82%	30.67%	0.45%	3.74%	1.11%	0.33%	0.95%	2.99%	0.24%	0.16%	0.03%	0.15%	5.63%	4.52%	10.15%		
8	6	18	2,586	900	14	79	83	14	23	66	1	2	0	5	188	96	284	3,788	0.95
		0.48%	68.28%	23.76%	0.36%	2.07%	2.18%	0.36%	0.59%	1.74%	0.01%	0.04%	0.00%	0.13%	4.96%	2.52%	7.49%		
9	3	45	8,148	2,185	44	172	55	16	46	37	8	0	0	4	287	95	382	10,760	0.98
		0.42%	75.73%	20.31%	0.41%	1.60%	0.51%	0.15%	0.42%	0.34%	0.08%	0.00%	0.00%	0.04%	2.67%	0.88%	3.55%		
11	28	3,874	835,421	260,958	4,508	31,149	11,816	2,369	12,968	74,626	1,470	4,338	1,878	2,390	49,842	97,671	147,512	1,247,765	0.89
		0.31%	66.95%	20.91%	0.36%	2.50%	0.95%	0.19%	1.04%	5.98%	0.12%	0.35%	0.15%	0.19%	3.99%	7.83%	11.82%		
12	20	2,188	436,562	130,775	2,318	15,491	6,015	1,546	6,153	14,420	841	524	706	1,072	25,369	23,714	49,083	618,608	0.94
		0.35%	70.57%	21.14%	0.37%	2.50%	0.97%	0.25%	0.99%	2.33%	0.14%	0.08%	0.11%	0.17%	4.10%	3.83%	7.93%		
14	48	3,238	572,869	163,334	2,128	15,387	4,615	1,340	4,868	11,480	529	293	178	362	23,470	17,711	41,181	780,621	0.96
		0.41%	73.39%	20.92%	0.27%	1.97%	0.59%	0.17%	0.62%	1.47%	0.07%	0.04%	0.02%	0.05%	3.01%	2.27%	5.28%		
16	34	1,843	277,235	71,354	774	5,895	1,048	391	1,634	1,666	109	87	40	72	8,107	3,608	11,715	362,147	0.98
		0.51%	76.55%	19.70%	0.21%	1.63%	0.29%	0.11%	0.45%	0.46%	0.03%	0.02%	0.01%	0.02%	2.24%	1.00%	3.23%		
17	11	239	36,522	11,057	242	1,178	642	102	554	1,135	23	273	16	63	2,164	2,064	4,228	52,046	0.94
		0.46%	70.17%	21.25%	0.47%	2.26%	1.23%	0.20%	1.06%	2.18%	0.04%	0.53%	0.03%	0.12%	4.16%	3.97%	8.12%		
19	4	35	2,416	1,355	5	107	37	7	63	45	5	23	3	24	156	162	318	4,123	0.94
		0.84%	58.59%	32.87%	0.11%	2.60%	0.91%	0.16%	1.52%	1.08%	0.11%	0.55%	0.07%	0.58%	3.78%	3.92%	7.70%		
Total %	941	22,685	3,688,921	1,277,647	23,591	151,973	47,538	13,136	68,642	360,380	12,266	18,500	7,236	10,447	236,239	477,471	713,710	5,702,963	0.88
		0.40%	64.68%	22.40%	0.41%	2.66%	0.83%	0.23%	1.20%	6.32%	0.22%	0.32%	0.13%	0.18%	4.14%	8.37%	12.51%		

\* SU = SINGLE UNIT VEHICLES, CLASS 4 THRU 7  
\*\*COMB = COMBINATION UNITS, CLASS 8 THRU 13

# FHWA CLASSIFICATIONS

	1 MOTORCYCLE	2 PASSENGER CARS	3 PICKUPS	4 BUS
PRIVATE			 OTHER 2-AXLE 4 TIRE SINGLE UNIT	 2-3 AXLE PASSENGER BUS
<b>COMMERCIAL VEHICLES</b>				
SINGLE UNIT	5 TWO AXLE 	6 THREE AXLE 	7 FOUR + AXLES 	
SINGLE TRAILER	8 FOUR or LESS AXLES 	9 FIVE AXLES 	10 SIX + AXLES 	
MULTI TRAILER	11 FIVE AXLES 	12 SIX AXLES 	13 SEVEN + AXLES 	

- 01 - Motorcycles
- 02 - Passenger Cars
- 03 - Other Two-Axle, Four-Tire Single-Unit Vehicles
- 04 - Busses
- 05 - Two-axle, Six-Tire Single-Unit Trucks
- 06 - Three-Axle Single-Unit Trucks
- 07 - Four or More Axle Single-Unit Trucks
- 08 - Four or Less Axle Single-Trailer Trucks
- 09 - Five-axle Single-Trailer Trucks
- 10 - Six or More Axle Single-Trailer Trucks
- 11 - Five or Less Axle Multi-Trailer Trucks
- 12 - Six Axle Multi-Trailer Trucks
- 13 - Seven or More Axle Multi-Trailer Trucks