

Appendix A

48-Hour Mechanical  
Traffic Counts

## APPENDIX A FHWA VEHICLE TYPES

The vehicle types of interest to FHWA are described below. The classification scheme is separated into categories depending on whether the vehicle carries passengers or commodities. Nonpassenger vehicles are further subdivided by number of axles and number of units including both power and trailer units.

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### FHWA Vehicle Classes with Definitions

#### *Type Name and Description*

1. **Motorcycles** (Optional) – All two- or three-wheeled motorized vehicles. Typical vehicles in this category have saddle type seats and are steered by handle bars rather than wheels. This category includes motorcycles, motor scooters, mopeds, motor-powered bicycles, and three-wheel motorcycles. This vehicle type may be reported at the option of the State.
  2. **Passenger Cars** – All sedans, coupes, and station wagons manufactured primarily for the purpose of carrying passengers and including those passenger cars pulling recreational or other light trailers.
  3. **Other Two-Axle, Four-Tire Single Unit Vehicles** – All two-axle, four-tire vehicles, other than passenger cars. Included in this classification are pickups, panel vans, and other vehicles such as campers, motor homes, ambulances, hearses, and carryalls. Other two-axle, four-tire single unit vehicles pulling recreational or other light trailers are included in this classification.
  4. **Buses** – All vehicles manufactured as traditional passenger-carrying buses with two axles and six tires or three or more axles. This category includes only traditional buses (including school buses) functioning as passenger-carrying vehicles. Modified buses should be considered as trucks and be appropriately classified.
- NOTE:** In reporting information on trucks the following criteria should be used:
- a. Truck tractor units traveling without a trailer will be considered single unit trucks.
  - b. A truck tractor unit pulling other such units in a "saddle mount" configuration will be considered as one single unit truck and will be defined only by the axles on the pulling unit.
  - c. Vehicles shall be defined by the number of axles in contact with the roadway. Therefore, "floating" axles are counted only when in the down position.
  - d. The term "trailer" includes both semi- and full trailers.
5. **Two-Axle, Six-Tire, Single Unit Trucks** – All vehicles on a single frame, including trucks, camping and recreational vehicles, motor homes, etc., having two axles and dual rear wheels.
  6. **Three-Axle Single Unit Trucks** – All vehicles on a single frame, including trucks, camping and recreational vehicles, motor homes, etc., having three axles.
  7. **Four- or More Axle Single Unit Trucks** – All trucks on a single frame with four or more axles.
  8. **Four- or Less Axle Single Trailer Trucks** – All vehicles with four or less axles consisting of two units, one of which is a tractor or straight truck power unit.

9. ***Five-Axle Single Trailer Trucks*** – All five-axle vehicles consisting of two units, one of which is a tractor or straight truck power unit.
10. ***Six- or More Axle Single Trailer Trucks*** – All vehicles with six or more axles consisting of two units, one of which is a tractor or straight truck power unit.
11. ***Five- or Less Axle Multitrailer Trucks*** – All vehicles with five or less axles consisting of three or more units, one of which is a tractor or straight truck power unit.

12. ***Six-Axle Multitrailer Trucks*** – All six-axle vehicles consisting of three or more units, one of which is a tractor or straight truck power unit.
13. ***Seven- or More Axle Multitrailer Trucks*** – All vehicles with seven or more axles consisting of three or more units, one of which is a tractor or straight truck power unit.

APPENDIX A  
SUMMARY OF 48-HOUR MECHANICAL TRAFFIC COUNTS  
North-South Expressway Corridor Study  
Shreveport to Arkansas State Line

LOCATION	DIRECTION	TRAFFIC VOLUME COUNT BY VEHICLE CLASSIFICATION													TOTAL 48-HOUR TRAFFIC VOLUME
		F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	
1. LA 1 (S of Ark/TX State Line)	Northbound	5	1338	594	4	86	49	0	32	200	31	4	0	7	2350
	Southbound	17	1800	425	35	91	63	7	28	240	10	3	0	7	2726
	TOTAL	22	3138	1019	39	177	112	7	60	440	41	7	0	14	5076
2. US 71 (S of Ark State Line)	Northbound	4	2463	187	3	32	64	4	31	461	20	13	0	31	3313
	Southbound	1	1745	350	4	102	54	3	35	323	6	5	0	18	2646
	TOTAL	5	4208	537	7	134	118	7	66	784	26	18	0	49	5959
3. LA 3 (1.5 miles N of LA 537)	Northbound	2	992	499	10	111	32	1	31	801	35	35	4	2	2555
	Southbound	10	1016	350	11	83	18	2	43	779	25	16	5	5	2363
	TOTAL	12	2008	849	21	194	50	3	74	1580	60	51	9	7	4918
4. LA 2 (3.0 miles E of LA 170)	Eastbound	2	1123	372	3	57	7	2	15	93	2	0	1	0	1677
	Westbound	3	1203	360	6	41	52	2	17	49	7	4	0	1	1745
	TOTAL	5	2326	732	9	98	59	4	32	142	9	4	1	1	3422
5. LA 2 (4.0 miles E of US 71)	Eastbound	8	846	306	3	81	26	4	26	252	34	7	1	1	1595
	Westbound	5	688	282	7	77	47	0	34	313	20	5	0	0	1478
	TOTAL	13	1534	588	10	158	73	4	60	565	54	12	1	1	3073
6. LA 530 (4.0 miles E of LA 538)	Eastbound	2	374	155	2	41	6	0	6	8	1	1	0	1	597
	Westbound	0	482	240	1	44	21	0	4	4	1	2	0	0	799
	TOTAL	2	856	395	3	85	27	0	10	12	2	3	0	1	1396
7. LA 538 (2.3 miles S of LA 169)	Northbound	0	426	112	1	13	12	13	9	35	1	3	0	1	626
	Southbound	3	611	97	0	8	40	2	5	14	1	3	0	2	786
	TOTAL	3	1037	209	1	21	52	15	14	49	2	6	0	3	1412
8. LA 1 (1.3 miles N of LA 173)	Northbound	0	5172	1674	0	222	31	0	64	127	4	2	0	8	7304
	Southbound	19	5387	1347	14	169	80	12	74	222	16	2	0	7	7349
	TOTAL	19	10559	3021	14	391	111	12	138	349	20	4	0	15	14653
9. LA 173 (1.5 miles N of LA 1)	Northbound	1	241	96	0	28	4	0	4	10	4	1	0	0	389
	Southbound	1	223	72	0	20	2	0	2	4	0	1	0	0	325
	TOTAL	2	464	168	0	48	6	0	6	14	4	2	0	0	714
10. US 71 (1.5 miles S of LA 173)	Northbound	13	2927	849	20	176	83	11	68	448	61	27	1	14	4698
	Southbound	6	2571	667	15	135	35	1	84	452	28	15	2	5	4016
	TOTAL	19	5498	1516	35	311	118	12	152	900	89	42	3	19	8714

APPENDIX A (Continued)  
 SUMMARY OF 48-HOUR MECHANICAL TRAFFIC COUNTS  
 North-South Expressway Corridor Study  
 Shreveport to Arkansas State Line

LOCATION	DIRECTION	TRAFFIC VOLUME COUNT BY VEHICLE CLASSIFICATION													TOTAL 48-HOUR TRAFFIC VOLUME
		F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	
11. LA 3 (3.2 miles S of LA 162)	Northbound	17	7603	1697	16	364	127	21	67	839	20	54	7	7	10839
	Southbound	21	7800	1687	16	319	171	9	77	774	51	58	8	14	11005
	TOTAL	38	15403	3384	32	683	298	30	144	1613	71	112	15	21	21844
12. LA 173 (N of IH 220 Interchange)	Northbound	18	13226	2706	15	348	146	25	121	308	5	8	0	9	16935
	Southbound	33	12157	2979	29	326	115	25	169	399	39	33	2	28	16334
	TOTAL	51	25383	5685	44	674	261	50	290	707	44	41	2	37	33269
13. US 71/LA 1 (N of IH 220 Interchange)	Northbound	-	-	-	-	-	-	-	-	-	-	-	-	-	29799
	Southbound	-	-	-	-	-	-	-	-	-	-	-	-	-	37860
	TOTAL	-	-	-	-	-	-	-	-	-	-	-	-	-	67659
14. LA 538 (N of IH 220 & S of MLK)	Northbound	11	3747	1008	5	118	51	0	43	12	2	1	0	1	4999
	Southbound	8	3671	1067	12	119	51	1	16	9	1	1	0	0	4956
	TOTAL	19	7418	2075	17	237	102	1	59	21	3	2	0	1	9955
15. LA 3049 (N of IH 220 Interchange)	Northbound	1	435	143	0	35	20	0	4	1	0	0	0	0	639
	Southbound	3	627	167	1	28	17	1	12	6	2	2	0	0	866
	TOTAL	4	1062	310	1	63	37	1	16	7	2	2	0	0	1505
16. LA 3 (N of IH 220 Interchange)	Northbound	11	7236	1380	18	239	107	12	102	903	55	28	10	32	10133
	Southbound	7	8194	3022	13	422	17	0	93	460	18	15	3	3	12267
	TOTAL	18	15430	4402	31	661	124	12	195	1363	73	43	13	35	22400
17. IH 220 (S of LA 173 Interchange)	Northbound	51	18185	5749	64	973	390	11	380	2591	122	201	34	25	28776
	Southbound	64	19027	4991	52	906	212	33	338	2181	292	196	43	72	28407
	TOTAL	115	37212	10740	116	1879	602	44	718	4772	414	397	77	97	57183
18. LA 173 (S of IH 220 Interchange)	Northbound	0	8542	1261	5	121	69	6	69	82	14	3	3	7	10182
	Southbound	7	9774	1087	10	90	66	7	34	68	16	16	1	4	11180
	TOTAL	7	18316	2348	15	211	135	13	103	150	30	19	4	11	21362
19. US 71/LA 1 (S of IH 220 Interchange)	Northbound	-	-	-	-	-	-	-	-	-	-	-	-	-	31664
	Southbound	-	-	-	-	-	-	-	-	-	-	-	-	-	31025
	TOTAL	-	-	-	-	-	-	-	-	-	-	-	-	-	62689
20. LA 3 (S of IH 220 Interchange)	Northbound	-	-	-	-	-	-	-	-	-	-	-	-	-	26411
	Southbound	-	-	-	-	-	-	-	-	-	-	-	-	-	22627
	TOTAL	-	-	-	-	-	-	-	-	-	-	-	-	-	49038

SOURCE: Traffic counts conducted for this study on a typical weekday during June and July 1994.

Appendix B

Survey Form and Vehicle Classification Counts  
at Travel Survey Locations

Serial Number: \_\_\_\_\_

Highway Location: \_\_\_\_\_

Interviewer: \_\_\_\_\_

Date: \_\_\_\_\_

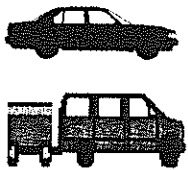
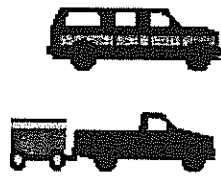

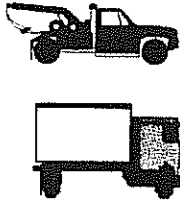
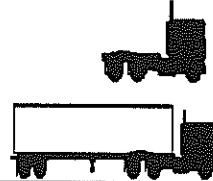


Station I.D. Number: \_\_\_\_\_

# Louisiana North-South Expressway

Louisiana Department of Transportation and Development

Time of Interview	Vehicle Class	Trailer Type	Total Axles	Vehicle Occup.	ORIGIN	DESTINATION	Trip Purpose	Use IH 220?	State Regist.
	1. Pass. Car 2. Pass. Truck 3. Pass. Bus 4. Sm. Heavy Truck 5. Lg. Heavy Truck 6. Motorcycle 7. Ped./Bicycle	0. None 1. One 2. Two	2 Axle 3 Axle 4 Axle 5 Axle 6 Axle 7 Axle	Number of people in vehicle (including driver)	Where did this trip begin? (Obtain address if within study area)	Where will this trip end? (Obtain address if within study area)	1. To/From Work 2. Business 3. Vacation/Recreation 4. Shopping 5. Other (Specify)	Did you use Loop 220 in Shreveport on this trip?	State where vehicle is registered
	1 2 3 4 5 6 7	0 1 2	2 3 4 5 6 7		Address - City - State -	Address - City - State -	1 2 3 4 5	1 - yes 2 - no	
	1 2 3 4 5 6 7	0 1 2	2 3 4 5 6 7		Address - City - State -	Address - City - State -	1 2 3 4 5	1 - yes 2 - no	
	1 2 3 4 5 6 7	0 1 2	2 3 4 5 6 7		Address - City - State -	Address - City - State -	1 2 3 4 5	1 - yes 2 - no	
	1 2 3 4 5 6 7	0 1 2	2 3 4 5 6 7		Address - City - State -	Address - City - State -	1 2 3 4 5	1 - yes 2 - no	

**VEHICLE CLASSIFICATION TABLE**  
**Louisiana North-South Expressway Study**  
Louisiana Department of Transportation and Development

<b>VEHICLE CLASSIFICATION</b>	<b>VEHICLE DESCRIPTION</b>
<b>PASSENGER CARS</b>	<p>Those vehicles primarily intended for carrying passengers; also passenger cars with trailers.</p> <p>e.g. Sedans, coupes, mini-vans, station wagons, and small sport utility vehicles.</p> 
<b>PASSENGER TRUCKS</b>	<p>Most larger 2-axle, 4-tire passenger trucks and vans; also similar vehicles with recreational or other light-duty trailers.</p> <p>e.g. Pickups, panel trucks, vans, suburbans, hearses, step vans, delivery trucks, and small motorhomes.</p> 
<b>PASSENGER BUSES</b>	<p>Those vehicles manufactured as passenger-carrying buses.</p> <p>e.g. Transit buses, school buses, commercial buses, private bus.</p> 
<b>SMALL HEAVY TRUCKS</b>	<p>All vehicles having 2-axes and dual rear wheels (6 tires), and similar vehicles with recreational or light-duty trailers.</p> <p>e.g. Various trucks, campers, motorhomes, ambulances and tow trucks.</p> 
<b>LARGE HEAVY TRUCKS</b>	<p>All large, heavy vehicles having 3 or more axes; also various types of farm equipment.</p> <p>e.g. Large trucks, truck-trailer combinations, large motorhomes, and farm tractors.</p> 
<b>MOTORCYCLES</b>	<p>Small 2 or 3-wheeled motorized vehicles steered by handle bars.</p> <p>e.g. Motorcycles, scooters, and mopeds.</p> 
<b>BICYCLES / NONMOTORIZED VEHICLES</b>	<p>All types of 2, 3, or 4 wheeled non-motorized vehicles.</p> <p>e.g. Bicycles.</p> 



**Louisiana North-South Expressway**  
Louisiana Department of Transportation and Development

Station Location: **LA 3, North of Plain Dealing** Direction: **NB** Date of Survey: **June 7, 1994**

TIME PERIOD	MANUAL CLASSIFICATION COUNTS										TOTALS
	Passenger Cars	Passenger Trucks	Passenger Buses	Small Heavy Truck (2-Axle/6-Tire)	Large Heavy Trucks			Motorcycles	Bicycles & Nonmotorized Vehicles		
					No Trailer	One Trailer	Multi-Trailer				
7:00-8:00	8	6	0	1	0	7	1	0	0	23	
8:00-9:00	26	24	1	3	0	19	0	1	0	74	
9:00-10:00	29	23	0	4	0	26	0	6	0	88	
10:00-11:00	19	20	0	10	0	26	1	0	0	76	
11:00-12:00	31	22	0	3	0	21	0	1	0	78	
12:00-13:00	32	22	0	3	0	18	0	1	0	76	
13:00-14:00	14	15	0	4	0	8	0	0	0	41	
14:00-15:00	14	17	0	14	0	23	0	0	0	68	
15:00-16:00	35	30	0	2	0	28	0	0	0	95	
20:23-07:00	20	23	0	0	0	24	0	0	0	67	
17:00-18:00	44	16	0	9	0	31	0	0	0	100	
18:00-19:00	38	21	0	3	0	16	0	0	0	78	
TOTALS	310	239	1	56	0	247	2	10	0	865	

**Louisiana North-South Expressway**  
Louisiana Department of Transportation and Development

Station Location: **LA 3, Northof Plain Dealing** Direction: **SB**

Date of Survey: **June 7, 1994**

TIME PERIOD	MANUAL CLASSIFICATION COUNTS										TOTALS
	Passenger Cars	Passenger Trucks	Passenger Buses	Small Heavy Truck (2-Axle/6-Tire)	Large Heavy Trucks			Motorcycles	Bicycles & Nonmotorized Vehicles		
					No Trailer	One Trailer	Multi-Trailer				
7:30-8:00	15	7	0	3	0	13	0	0	0	0	38
8:00-9:00	22	11	0	2	0	15	0	0	0	0	50
9:00-10:00	35	11	0	5	0	18	0	0	0	0	69
10:00-11:00	28	22	0	1	0	22	0	0	1	0	74
11:00-12:00	36	17	0	7	0	22	0	0	1	0	83
12:00-13:00	25	21	0	5	0	16	0	0	0	0	67
13:00-14:00	24	14	0	3	0	11	0	0	0	0	52
14:00-15:00	33	26	0	5	0	19	0	0	0	0	83
15:00-16:00	29	34	0	2	0	17	0	0	0	0	82
16:00-17:00	25	22	0	5	0	16	0	0	0	0	68
17:00-18:00	35	15	0	12	0	23	0	0	0	0	85
18:00-19:00	21	13	0	8	0	14	0	0	0	0	56
<b>TOTALS</b>	<b>328</b>	<b>213</b>	<b>0</b>	<b>68</b>	<b>0</b>	<b>206</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>807</b>

**Louisiana North-South Expressway**  
**Louisiana Department of Transportation and Development**

Station Location: **US 71, North of Shreveport**      Direction: **NB**      Date of Survey: **June 8, 1994**

**MANUAL CLASSIFICATION COUNTS**

TIME PERIOD	Passenger Cars	Passenger Trucks	Passenger Buses	Small Heavy Truck (2-Axle/6-Tire)	Large Heavy Trucks			Motorcycles	Bicycles & Nonmotorized Vehicles	TOTALS
					No Trailer	One Trailer	Multi-Trailer			
7:00-8:00	47	51	0	1	0	0	11	0	0	110
8:00-9:00	54	46	1	11	0	14	1	0	0	127
9:00-10:00	68	35	0	10	0	14	0	0	0	127
10:00-11:00	52	50	0	12	0	29	0	1	0	144
11:00-12:00	61	49	0	13	2	28	0	0	0	153
12:00-13:00	39	37	0	4	0	13	0	0	0	93
13:00-14:00	70	68	0	6	0	22	0	1	0	167
14:00-15:00	60	19	0	5	0	9	0	0	0	93
15:00-16:00	47	56	0	24	0	25	0	0	0	152
16:00-17:00	89	61	0	6	0	17	0	0	0	173
17:00-18:00	80	78	0	21	0	24	0	1	0	204
18:00-19:00	74	64	0	7	0	17	0	0	0	162
<b>TOTALS</b>	<b>741</b>	<b>614</b>	<b>1</b>	<b>120</b>	<b>2</b>	<b>212</b>	<b>12</b>	<b>3</b>	<b>0</b>	<b>1673</b>

**Louisiana North-South Expressway**  
Louisiana Department of Transportation and Development

Station Location: **US 71, North of Shreveport**      Direction: **SB**      Date of Survey: **June 8, 1994**

TIME PERIOD	MANUAL CLASSIFICATION COUNTS										TOTALS
	Passenger Cars	Passenger Trucks	Passenger Buses	Small Heavy Truck (2-Axle/6-Tire)	Large Heavy Trucks			Motorcycles	Bicycles & Nonmotorized Vehicles	TOTALS	
					No Trailer	One Trailer	Multi-Trailer				
7:00-8:00	75	68	0	11	0	14	0	0	0	168	
8:00-9:00	43	28	1	7	0	15	0	0	0	94	
9:00-10:00	54	21	0	7	0	10	0	0	0	92	
10:00-11:00	52	48	0	5	1	10	0	0	0	116	
11:00-12:00	46	47	0	14	1	10	0	0	0	118	
12:00-13:00	65	52	0	15	0	20	0	0	0	152	
13:00-14:00	57	34	0	14	0	30	0	0	0	135	
14:00-15:00	63	47	0	17	0	38	0	0	0	165	
15:00-16:00	47	36	1	15	0	29	0	0	0	126	
16:00-17:00	35	22	2	4	0	18	0	0	0	81	
17:00-18:00	44	32	0	5	1	11	0	0	1	94	
18:00-19:00	38	27	0	4	0	13	0	0	1	83	
<b>TOTALS</b>	<b>619</b>	<b>462</b>	<b>4</b>	<b>118</b>	<b>3</b>	<b>218</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1426</b>	

**Louisiana North-South Expressway**  
Louisiana Department of Transportation and Development

Station Location: **LA 1, North Shreveport**      Direction: **NB**      Date of Survey: **June 9, 1994**

TIME PERIOD	MANUAL CLASSIFICATION COUNTS										TOTALS
	Passenger Cars	Passenger Trucks	Passenger Buses	Small Heavy Truck (2-Axle/6-Tire)	Large Heavy Trucks			Motorcycles	Bicycles & Nonmotorized Vehicles		
					No Trailer	One Trailer	Multi-Trailer				
7:00-8:00	74	65	0	8	0	3	0	1	0	151	
8:00-9:00	57	72	2	3	0	15	0	0	0	149	
9:00-10:00	57	66	1	14	0	8	0	1	0	147	
10:00-11:00	66	83	0	7	0	7	0	0	0	163	
11:00-12:00	91	92	0	6	0	12	0	0	0	201	
12:00-13:00	79	62	1	1	0	18	0	1	0	162	
13:00-14:00	60	55	0	14	0	10	0	0	0	139	
14:00-15:00	108	94	0	0	0	12	0	0	0	214	
15:00-16:00	111	119	0	4	0	7	0	0	0	241	
16:00-17:00	156	118	0	1	0	9	0	1	0	285	
17:00-18:00	239	201	0	12	0	12	0	1	0	465	
18:00-19:00	149	184	0	6	0	3	0	0	0	342	
<b>TOTALS</b>	<b>1247</b>	<b>1211</b>	<b>4</b>	<b>76</b>	<b>0</b>	<b>116</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>2659</b>	

**Louisiana North-South Expressway**  
Louisiana Department of Transportation and Development

Station Location: **LA 1, North of Shreveport**      Direction: **SB**      Date of Survey: **June 9, 1994**

**MANUAL CLASSIFICATION COUNTS**

TIME PERIOD	Passenger Cars	Passenger Trucks	Passenger Buses	Small Heavy Truck (2-Axle/6-Tire)	Large Heavy Trucks			Motorcycles	Bicycles & Nonmotorized Vehicles	TOTALS
					No Trailer	One Trailer	Multi-Trailer			
7:00-8:00	180	164	1	5	0	5	0	0	0	355
8:00-9:00	118	93	0	5	0	4	0	0	0	220
9:00-10:00	75	59	0	14	0	14	0	0	0	163
10:00-11:00	113	73	0	6	0	9	0	0	0	201
11:00-12:00	86	65	0	5	0	0	0	1	0	157
12:00-13:00	96	93	0	9	0	5	0	0	0	203
13:00-14:00	87	66	0	12	0	12	0	0	0	177
14:00-15:00	79	87	0	10	0	6	0	0	0	182
15:00-16:00	82	83	0	7	0	6	0	0	0	178
16:00-17:00	75	85	0	6	0	5	0	0	0	171
17:00-18:00	102	99	0	10	0	6	0	0	0	217
18:00-19:00	83	79	0	9	1	12	1	0	0	185
<b>TOTALS</b>	<b>1176</b>	<b>1046</b>	<b>1</b>	<b>98</b>	<b>1</b>	<b>84</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>2408</b>