

Road User Cost Analysis: U.S. 59 Eastex - Christie to Kelley

1994

Texas Transportation Institute

ROAD USER COST ANALYSIS

U.S. 59 Eastex - Christie to Kelley

Plans have been produced for improvements on a portion of the U.S. 59 Eastex Freeway from Christie Street to Kelley Street (CSJ 0177-11-105) and a small section of the I-610 interchange (CSJ 0271-14-180). This \$34.675 million project provides for reconstruction of 1.044 mile section of the U.S. 59 mainlanes, frontage roads, and direct connectors to the south of I-610 North Loop.

Although the public will benefit from the final improvements, motorists will experience additional delays throughout some phases of the construction. The Texas Department of Transportation (TxDOT) has requested that the Texas Transportation Institute (TTI) complete a road user cost analysis for each of the eight phases of the project. The road user cost analysis compares existing traffic conditions with those predicted during the construction activities. After the additional delay is determined, the current value of time is applied to the delay increase and a monetary cost to the public is calculated. This "cost" can then be used as guidelines for determining liquidated damage costs to be placed on the selected contractor for milestone completions as required.

Construction Sequencing

The first step in the analysis was to review the traffic control plans for each construction phase to determine the impacts on motorists. TxDOT provided the detailed traffic control plans for each step of Phases 1 through 8 of the construction. In most cases, the impacts are a result of narrow freeway and surface street lanes, ramp relocations, ramp closures, and reduced lateral clearances to concrete median barriers. These impacts result in reductions in roadway capacity causing additional delays to motorists that did not occur prior to the construction. A review of the traffic control plans for the construction project indicated that the majority of the delays will be incurred on the freeway mainlanes and on the direct connectors to/from the I-610 interchange. Delays will also be experienced when vehicles will be detoured due to closure of the I-610 westbound to U.S. 59 southbound direct connector (Conn. "E"). Any delays on the frontage roads and cross streets are considered minimal and are not examined in this analysis.

Traffic Demands

A major input to the road user cost determination is the traffic demands on the freeway facility being analyzed. This analysis requires freeway mainlane and ramp volume data within the project corridor. TTI completed the necessary traffic volume studies to facilitate the calculation of road user costs. The traffic volume counts for all entrance and exit ramps from Quitman to the direct connectors on the south side of the I-610 North Loop were completed in March 1994. Traffic volumes for the direct connectors on the north side of the I-610 North Loop were completed in November 1994. Freeway mainlane demands used were from a June 1990 survey.

In addition to using the traffic volume data for this analysis, it may also be used in order to determine allowable lane closure times for the freeway mainlanes and frontage roads. All of the data used to complete this analysis is included in the Appendix.

Delay Estimation

The major task of this effort includes estimations of the additional delays incurred as a result of the construction. In order to provide for a more consistent analysis, several assumptions were used throughout the analysis. They are as follows:

- No diversion to alternate routes;
- Minimal impact to cross street traffic;
- Traffic detoured around closed ramps are rerouted via the route shown in the TCP;
- Frontage road traffic signals operate as efficiently as possible;
- If the TCP did not include layouts of all roadway sections for a particular step, the same geometrics from the previous steps were used;
- A 35 mph average speed of traffic assigned to the frontage road due to ramp closure; and
- No impacts from other freeway construction projects.

Delays to detoured traffic whose access changed because of the closed direct connector was determined by initially estimating the additional distance these vehicles would be travelling on another direct connector, on the freeway, and along the frontage road. The additional time required was then computed by assuming a 55 mph average speed for freeway travel and 35 mph average frontage road speed over the predetermined detour

route compared with the normal freeway route at 55 mph average speed. This additional travel time was then multiplied by the 24-hour weekday volume for that direct connector to estimate vehicle-hours of delay because of the ramp closure.

In order to evaluate the impacts of the construction on the freeway traffic, a freeway simulation model was needed. The FREQ10PC was the model chosen to simulate freeway operations for the U.S. 59 Eastex Freeway construction project from Quitman to Kelley; including the I-610 North Loop interchange. This computer program simulates freeway traffic operations for a given set of geometric and demand input parameters. It is based upon a macroscopic deterministic approach which assumes that freeway operations can be simulated by disregarding the actual randomness of traffic demand and the behavior of individual vehicles. Inputs into the model includes geometric configuration, traffic demand, and traffic characteristic data. Model outputs include freeway travel time, ramp delay, total freeway travel time, total travel distance, average speed, gasoline consumed, vehicle emissions, and mainlane delay. The latest version of the model (REL T91) was used for this analysis.

The model was set up for typical weekday traffic conditions for the freeway section between Quitman and Kelley. The traffic volume data included in the Appendix was used to construct the model for a 24-hour period. It was calibrated based upon the existing (pre-construction) roadway geometrics. The determination of the capacity of the different freeway sections has a major impact upon the results of the FREQ10PC simulation during the construction. The capacity of the freeway mainlanes will be reduced because of narrow travel lanes, reduced and/or no shoulders, and minimal clearances to lateral obstructions. Adjustment factors relating to these items were obtained from Table 3-2 of the *Highway Capacity Manual* and the reduced capacity for each phase evaluated was determined. The reduced capacity was then applied to the impacted freeway sections in the FREQ10PC model to estimate the traffic flow conditions.

The total freeway mainlane delay and ramp delay (vehicle-hours) were the output variables of the model used for the analysis. Using the model's output for the calibrated existing conditions with no roadway construction, a base value of delay was determined for each direction of flow. Subtracting the base value from the model's output for each construction phase/step, the additional vehicles hours of freeway delay attributable to the

construction is estimated. Base values as determined for the approximate 3.2 mile section of the northbound freeway simulated were 42 and 0 vehicle-hours of mainlane and ramp delay, respectively, and for the southbound freeway were 56 and 0 vehicle-hours of mainlane and ramp delay, respectively.

Using the procedures discussed previously, the additional delays resulting from the construction were determined. These are presented in Table 1. The "mainlane delay" values presented were obtained from the freeway simulation analysis. For instances of detouring traffic because of the direct connector closure, these delays are noted as "detour delay". The "total delay" presents the delay for both directions. In cases of delays that were not considered significant, no value is reported in the table.

Table 1. Estimated Delays Due to Project Construction

Construction Activity	Total Daily Delay (vehicle-hours)					
	Northbound		Southbound			Total
	Mainlane	Ramp	Mainlane	Ramp	Detour	
Phase 1						
Step 1	482	911	0	0	0	1393
Step 2	449	571	0	0	0	1020
Step 3	436	571	0	0	0	1007
Phase 2						
Step 1	448	571	0	0	0	1019
Phase 3						
Step 1	0	0	0	0	0	0
Phase 4						
Step 1	0	0	0	0	0	0
Step 2	0	27	0	0	0	27
Phase 5						
Step 1	0	3300	0	0	0	3300
Step 2	0	3300	0	0	0	3300
Phase 6						
Step 1	0	0	2055	1574	470	4099
Step 2	0	0	0	0	470	470
Phase 7						
Step 1	0	0	0	0	470	470
Phase 8						
Step 1	0	0	0	0	470	470
Step 2	0	0	0	0	0	0
Step 3	0	0	0	0	0	0

Value of Time

Currently, the basis for determining the value of time is a TTI report "The Value of Travel Time: New Estimates Developed Using a Speed Choice Model," Research Report No. 396-2F. This study derived the value of time using a speed choice model assuming a rational driver chooses a speed so that the total driving costs are minimized. Total driving costs include value of time and vehicle operating costs, accident costs, and traffic violation costs. The study recommends the following values of time (in 1985 dollars):

Drivers - \$ 8.03 per person-hour

Passenger Car - \$ 10.04 per vehicle-hour(assumes 1.25 persons per vehicle)

The value of time may be adjusted using the current Consumer Price Index (CPI). Table 2 illustrates the CPI and value of time from 1985 to 1994. Current CPI values may be obtained from the *Wall Street Journal* or other economic publications.

Table 2. Value of Time, 1985 - 1993			
Year	CPI ¹	Value of Time	
		Drivers ²	Passenger Cars ^{2,3}
1985	322.2	\$ 8.03	\$10.04
1986	238.4	8.24	10.30
1987	240.4	8.48	10.60
1988	118.2 ⁴	8.82	11.03
1989	124.0 ⁴	9.26	11.58
1990	130.7 ⁴	9.76	12.20
1991	136.2 ⁴	10.17	12.71
1992	140.3 ⁴	10.47	13.09
1993	144.5 ⁴	10.78	13.48
June 1994	148.0	11.04	13.80

Notes: ¹CPI values are annual percentages.

²Costs represent only value of time.

³Passenger car cost based on drivers value of time times vehicle occupancy rate of 1.25.

⁴CPI base was changed in 1988. A multiplication factor of 2.995566 must be used with CPI published after 1988.

User Costs Determination

Using the differences between the delays for the existing conditions and the delays during construction, the additional delay to the motoring public during a typical weekday

can be estimated. Applying this additional delay to the current value of time (\$13.80/vehicle-hour), a monetary cost (road user cost) can be placed upon the motorists on the freeway mainlanes and those detoured during the construction of the U.S. 59 Eastex Freeway between Christie and Kelley. Table 3 presents the road user cost estimates for the construction phases evaluated in this report. These costs may be used as guidelines for determining liquidated damage costs to be placed on the selected contractor for milestone and/or project completion as required.

Table 3. Total Daily Road User Cost		
Construction Activity	Delay Cost (vehicle-hours)	User Time Cost (\$/day)
Phase 1		
Step 1	1393	19,223
Step 2	1020	14,076
Step 3	1007	13,897
Phase 2		
Step 1	1019	14,062
Phase 3		
Step 1	-	-
Phase 4		
Step 1	-	-
Step 2	27	373
Phase 5		
Step 1	3300	45,540
Step 2	3300	45,540
Phase 6		
Step 1	4099	56,566
Step 2	470	6,486
Phase 7		
Step 1	470	6,486
Phase 8		
Step 1	470	6,486
Step 2	-	-
Step 3	-	-

The user time costs presented in Table 3 may be prorated to reflect an average road user cost that can be applied to the entire construction project. The estimated durations for the different phases of construction were used to compute this prorated average of daily costs and the result was \$18,430 per weekday. The values presented in this analysis support the TxDOT policy limit of \$10,000 per day for liquidated damages.

A detailed analysis of the weekend freeway traffic conditions for typical Saturdays and Sundays are not completed. The total 24-hour traffic demands for a typical Saturday and Sunday are about 80% and 65%, respectively when compared to a typical weekday. The volumes are also more evenly distributed throughout the day and there are no definitive morning and evening peaks. Therefore, it is very unlikely for road user costs to be incurred due to typical weekend traffic demands.

APPENDIX

US 59 EASTEX NORTHBOUND --- WEEKDAY

TIME (Begin)	Quitman		Clignswth		Clignswth		Cavabade		I-610 EB		I-160 WB		I-610 WB		I-610 EB	
	M/L	Entry	M/L	Exit	M/L	Entry	M/L	Exit	M/L	Exit	*M/L*	Entry	M/L	Exit	Entry	M/L
12:00 AM	560	40	600	50	550	70	620	70	550	90	100	360	110	470	140	610
1:00 AM	350	30	380	30	350	50	400	40	360	70	70	220	100	320	100	420
2:00 AM	180	20	200	20	180	40	220	30	190	70	60	60	100	160	110	270
3:00 AM	140	20	160	20	140	30	170	30	140	50	40	50	100	150	70	220
4:00 AM	150	10	160	20	140	30	170	40	130	60	40	30	130	160	90	250
5:00 AM	510	40	550	40	510	90	600	70	530	100	160	270	300	570	190	760
6:00 AM	2090	90	2180	120	2060	200	2260	230	2030	330	420	1280	610	1890	450	2340
7:00 AM	2690	110	2800	170	2630	240	2870	300	2570	460	460	1650	760	2410	630	3040
8:00 AM	1920	110	2030	170	1860	240	2100	280	1820	410	400	1010	620	1630	540	2170
9:00 AM	1800	110	1910	180	1730	240	1970	260	1710	370	440	900	640	1540	580	2120
10:00 AM	1970	130	2100	200	1900	260	2160	270	1890	410	500	980	610	1590	570	2160
11:00 AM	2420	140	2560	240	2320	290	2610	280	2330	420	600	1310	710	2020	670	2690
12:00 PM	2860	150	3010	250	2760	300	3060	310	2750	440	650	1660	680	2340	630	2970
1:00 PM	3170	150	3320	250	3070	330	3400	330	3070	480	700	1890	740	2630	710	3340
2:00 PM	3730	180	3910	270	3640	330	3970	340	3630	520	830	2280	800	3080	840	3920
3:00 PM	4360	180	4540	300	4240	350	4590	390	4200	620	1120	2460	940	3400	960	4360
4:00 PM	5720	180	5900	270	5630	370	6000	370	5630	620	1300	3710	840	4550	900	5450
5:00 PM	5660	210	5870	250	5620	350	5970	330	5640	590	1310	3740	820	4560	920	5480
6:00 PM	4220	180	4400	220	4180	300	4480	290	4190	510	890	2790	710	3500	860	4360
7:00 PM	2910	160	3070	200	2870	260	3130	240	2890	390	530	1970	530	2500	660	3160
8:00 PM	2130	140	2270	140	2130	200	2330	190	2140	280	380	1480	380	1860	480	2340
9:00 PM	1990	130	2120	130	1980	200	2190	140	2050	280	360	1410	320	1730	440	2170
10:00 PM	1830	110	1940	110	1830	180	2010	140	1870	260	320	1290	270	1560	380	1940
11:00 PM	1170	70	1240	80	1160	110	1270	110	1160	200	220	740	210	950	290	1240
TOTAL	54530	2690	57220	3730	53490	5060	58550	5080	53470	8030	11900	33540	12030	45570	12210	57780

NOTES: Traffic volumes under I-610 North Loop were obtained from June 1990 survey. All entrance and exit ramp counts were updated in March 1994. All data collected by the Texas Transportation Institute.

T E X A S T R A N S P O R T A T I O N I N S T I T U T E

WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : US 59 NB QUITEMAN ENTRY

DATE : 3-12-1994

DIRECTION OF FLOW : US 59 NB

CHANNEL : THIS IS 1 OF 2

SITE NO : 30312597

DAY OF WEEK:	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
WEATHER	GOOD	GOOD	-	-	-	GOOD	GOOD		
	3 / 14	3 / 15	3 / 16	3 / 17	3 / 18	3 / 12	3 / 13	AVERAGE	AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	42	42	32	30	34	88	93	36	52
1- 2	32	27	17	24	36	77	75	27	41
2- 3	33	21	25	20	28	67	63	25	37
3- 4	19	9	12	13	26	35	39	16	22
4- 5	10	16	11	13	11	17	23	12	14
5- 6	34	41	41	50	45	43	30	42	41
6- 7	103	68	91	84	112	69	28	92	79
7- 8	118	112	99	129	108	81	47	113	99
8- 9	121	125	125	96	105	107	74	114	108
9-10	121	91	106	120	119	131	114	111	115
10-11	151	107	121	130	131	123	133	128	128
11-12	120	124	159	159	146	186	139	142	148
12-13	134	147	149	160	178	175	148	154	156
13-14	145	153	145	122	167	199	258	146	170
14-15	186	165	183	193	192	203	227	184	193
15-16	195	202	193	174	152	207	188	183	187
16-17	202	172	187	189	160	207	124	182	177
17-18	183	330	199	176	141	191	163	206	198
18-19	165	179	197	163	212	183	248	183	192
19-20	146	138	155	173	188	154	188	160	163
20-21	126	143	131	134	175	136	122	142	138
21-22	128	120	145	132	140	152	93	133	130
22-23	92	78	105	116	171	129	95	112	112
23-24	62	56	66	65	101	118	77	70	78
AM PEAK (6-9) VOLUME:	342	305	315	309	325	257	149	319	286
AM PEAK HIGHEST HOUR:	151	125	159	159	146	186	139	142	148
PM PEAK (3-6) VOLUME:	580	704	579	539	453	605	475	571	562
PM PEAK HIGHEST HOUR:	202	330	199	193	212	207	258	206	198
DAILY TOTAL:	2668	2666	2694	2665	2878	3078	2789	2714	2777

+ --- INDICATES SUM IS NOT FULL 24-HOUR TOTAL

- --- INDICATES DATA IS UNAVAILABLE

T E X A S T R A N S P O R T A T I O N I N S T I T U T E

WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : US 59 NB FR AFTER QUITEMAN ENTRY
 DATE : 3-12-1994 DIRECTION OF FLOW : US 59 NB FR
 CHANNEL : THIS IS 2 OF 2 SITE NO : 30312597

DAY OF WEEK:	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
WEATHER	GOOD	GOOD	-	-	-	GOOD	GOOD		
	3 / 14	3 / 15	3 / 16	3 / 17	3 / 18	3 / 12	3 / 13	AVERAGE	AVERAGE

TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	12	9	15	15	19	37	34	14	20
1- 2	12	13	11	8	16	21	26	12	15
2- 3	10	8	5	8	12	30	17	9	13
3- 4	7	4	3	5	8	9	17	5	8
4- 5	7	5	7	9	6	9	7	7	7
5- 6	14	13	15	15	19	15	9	15	14
6- 7	22	32	22	38	31	21	15	29	26
7- 8	42	50	54	43	53	37	33	48	45
8- 9	52	55	47	57	51	60	43	52	52
9-10	67	74	74	66	80	88	54	72	72
10-11	81	68	83	69	92	78	50	79	74
11-12	65	82	90	76	83	76	61	79	76
12-13	89	80	92	66	89	109	83	83	87
13-14	82	87	96	79	89	93	119	87	92
14-15	95	91	95	99	103	91	94	97	95
15-16	110	122	114	109	181	81	94	127	116
16-17	122	131	130	122	557	90	52	212	172
17-18	139	214	124	109	182	96	70	154	133
18-19	89	75	101	106	129	90	83	100	96
19-20	71	67	72	76	75	77	61	72	71
20-21	48	49	45	58	64	55	55	53	53
21-22	45	45	45	60	77	49	61	54	55
22-23	30	37	37	38	51	48	39	39	40
23-24	37	27	28	40	55	57	25	37	38
<hr/>									
AM PEAK (6-9) VOLUME:	116	137	123	138	135	118	91	130	123
AM PEAK HIGHEST HOUR:	81	82	90	76	92	88	61	79	76
PM PEAK (3-6) VOLUME:	371	467	368	340	920	267	216	493	421
PM PEAK HIGHEST HOUR:	139	214	130	122	557	109	119	212	172
DAILY TOTAL:	1348	1438	1405	1371	2122	1417	1202	1537	1472

+ --- INDICATES SUM IS NOT FULL 24-HOUR TOTAL

- --- INDICATES DATA IS UNAVAILABLE

TEXAS TRANSPORTATION INSTITUTE

WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : US 59 NB COLLINGSWORTH EXIT
 DATE : 3-12-1994 DIRECTION OF FLOW : US 59 NB
 CHANNEL : THIS IS 1 OF 2 SITE NO : 30310016

DAY OF WEEK: WEATHER	MONDAY GOOD 3 / 14	TUESDAY GOOD 3 / 15	WEDNESDAY - 3 / 16	THURSDAY - 3 / 17	FRIDAY - 3 / 18	SATURDAY GOOD 3 / 12	SUNDAY GOOD 3 / 13	5 - DAY AVERAGE	7 - DAY AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	48	50	37	53	48	92	69	47	57
1- 2	33	29	25	43	36	69	49	33	41
2- 3	28	22	29	20	28	49	53	25	33
3- 4	24	15	17	18	23	34	22	19	22
4- 5	31	27	20	20	27	25	17	25	24
5- 6	48	32	46	41	35	42	21	40	38
6- 7	130	104	113	130	103	60	29	116	96
7- 8	177	163	158	162	175	87	113	167	148
8- 9	181	151	144	176	203	133	102	171	156
9-10	214	157	179	179	198	140	133	185	171
10-11	206	192	209	209	210	197	149	205	196
11-12	228	193	244	240	287	187	172	238	222
12-13	260	236	224	251	297	215	129	254	230
13-14	242	227	233	271	296	183	171	254	232
14-15	247	256	263	296	290	200	191	270	249
15-16	317	315	283	285	302	189	175	300	267
16-17	309	291	266	290	195	178	182	270	244
17-18	286	167	227	264	286	163	178	246	224
18-19	222	201	217	231	212	176	174	217	205
19-20	164	183	180	192	254	153	136	195	180
20-21	118	122	136	139	194	135	98	142	135
21-22	120	102	133	117	160	136	113	126	126
22-23	78	93	96	110	154	109	88	106	104
23-24	57	72	76	69	120	134	73	79	86
AM PEAK (6-9) VOLUME:	488	418	415	468	481	280	244	454	399
AM PEAK HIGHEST HOUR:	228	193	244	240	287	197	172	238	222
PM PEAK (3-6) VOLUME:	912	773	776	839	783	530	535	817	735
PM PEAK HIGHEST HOUR:	317	315	283	296	302	215	191	300	267
DAILY TOTAL:	3768	3400	3555	3806	4133	3086	2637	3732	3484

+ --- INDICATES SUM IS NOT FULL 24-HOUR TOTAL
 - --- INDICATES DATA IS UNAVAILABLE

TEXAS TRANSPORTATION INSTITUTE

WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : US 59 NB FR 84 COLLINGSWORTH EXI
 DATE : 3-12-1994 DIRECTION OF FLOW : US 59 NB FR
 CHANNEL : THIS IS 2 OF 2 SITE NO : 30310016

DAY OF WEEK: WEATHER	MONDAY GOOD 3 / 14	TUESDAY GOOD 3 / 15	WEDNESDAY - 3 / 16	THURSDAY - 3 / 17	FRIDAY - 3 / 18	SATURDAY GOOD 3 / 12	SUNDAY GOOD 3 / 13	5 - DAY AVERAGE	7 - DAY AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	14	10	17	18	24	48	44	17	25
1- 2	15	13	13	8	20	36	29	14	19
2- 3	13	9	7	8	16	34	21	11	15
3- 4	9	8	3	8	8	11	21	7	10
4- 5	5	6	3	8	9	12	7	6	7
5- 6	20	17	17	21	22	18	15	19	19
6- 7	42	52	44	52	46	32	19	47	41
7- 8	52	59	62	47	66	43	40	57	53
8- 9	64	74	62	65	56	77	48	64	64
9-10	78	78	79	85	83	84	76	81	80
10-11	88	82	92	74	99	105	68	87	87
11-12	89	97	91	97	99	106	85	95	95
12-13	104	88	111	76	102	114	96	96	99
13-14	116	98	102	96	116	118	148	106	113
14-15	120	96	117	101	115	109	120	110	111
15-16	124	133	131	130	198	116	108	143	134
16-17	139	144	128	130	577	114	75	224	187
17-18	161	216	142	125	216	133	101	172	156
18-19	105	95	114	107	139	114	96	112	110
19-20	83	77	92	96	94	81	78	88	86
20-21	59	53	67	73	74	71	72	65	67
21-22	67	49	47	69	94	71	71	65	67
22-23	37	43	39	43	64	60	48	45	48
23-24	49	36	37	44	61	68	34	45	47
AM PEAK (6-9) VOLUME:	158	185	168	164	168	152	107	169	157
AM PEAK HIGHEST HOUR:	89	97	92	97	99	106	85	95	95
PM PEAK (3-6) VOLUME:	424	493	401	385	991	363	284	539	477
PM PEAK HIGHEST HOUR:	161	216	142	130	577	133	148	224	187
DAILY TOTAL:	1653	1633	1617	1581	2398	1775	1520	1776	1740

+ --- INDICATES SUM IS NOT FULL 24-HOUR TOTAL
 - --- INDICATES DATA IS UNAVAILABLE

T E X A S T R A N S P O R T A T I O N I N S T I T U T E

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WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : US 59 NB COLLINGSWORTH ENTRY
 DATE : 3-12-1994 DIRECTION OF FLOW : US 59 NB
 CHANNEL : THIS IS 1 OF 2 SITE NO : 30314139

DAY OF WEEK: WEATHER	MONDAY GOOD 3 / 14	TUESDAY GOOD 3 / 15	WEDNESDAY - 3 / 16	THURSDAY - 3 / 17	FRIDAY - 3 / 18	SATURDAY GOOD 3 / 12	SUNDAY GOOD 3 / 13	5 - DAY AVERAGE	7 - DAY AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	69	61	59	70	71	131	132	66	85
1- 2	52	57	44	60	50	119	102	53	69
2- 3	55	39	38	35	54	114	112	44	64
3- 4	42	24	25	33	35	52	33	32	35
4- 5	35	33	18	29	40	42	37	31	33
5- 6	79	81	105	82	106	60	33	91	78
6- 7	187	195	186	217	189	119	47	195	163
7- 8	248	219	232	243	262	139	74	241	202
8- 9	250	200	253	241	232	190	76	235	206
9-10	247	194	234	269	258	218	156	240	225
10-11	264	213	266	247	296	281	246	257	259
11-12	283	257	298	316	301	307	226	291	284
12-13	304	273	319	293	321	327	238	302	296
13-14	348	290	334	324	358	303	349	331	329
14-15	307	311	331	339	372	319	352	332	333
15-16	360	354	325	389	337	298	239	353	329
16-17	326	331	332	335	540	309	215	373	341
17-18	339	349	348	371	341	303	259	350	330
18-19	262	279	301	306	327	259	238	295	282
19-20	229	231	232	283	319	240	209	259	249
20-21	172	150	212	215	227	214	198	195	198
21-22	180	196	207	170	240	185	164	199	192
22-23	137	156	178	183	234	164	140	178	170
23-24	94	98	100	101	172	123	101	113	113
AM PEAK (6-9) VOLUME:	685	614	671	701	683	448	197	671	571
AM PEAK HIGHEST HOUR:	283	257	298	316	301	307	246	291	284
PM PEAK (3-6) VOLUME:	1025	1034	1005	1095	1218	910	713	1075	1000
PM PEAK HIGHEST HOUR:	360	354	348	389	540	327	352	373	341
DAILY TOTAL:	4869	4591	4977	5151	5682	4816	3976	5054	4866

+ --- INDICATES SUM IS NOT FULL 24-HOUR TOTAL

- --- INDICATES DATA IS UNAVAILABLE

TEXAS TRANSPORTATION INSTITUTE

WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : US 59 NB FR AFTER COLLINGSWORTH
 DATE : 3-12-1994 DIRECTION OF FLOW : US 59 NB FR
 CHANNEL : THIS IS 2 OF 2 SITE NO : 30314139

DAY OF WEEK: WEATHER	MONDAY GOOD 3 / 14	TUESDAY GOOD 3 / 15	WEDNESDAY - 3 / 16	THURSDAY - 3 / 17	FRIDAY - 3 / 18	SATURDAY GOOD 3 / 12	SUNDAY GOOD 3 / 13	5 - DAY AVERAGE	7 - DAY AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	46	22	31	40	63	84	55	40	49
1- 2	42	10	16	25	34	47	47	25	32
2- 3	22	23	14	21	23	34	45	21	26
3- 4	8	9	7	17	14	18	9	11	12
4- 5	5	7	8	9	13	19	22	8	12
5- 6	32	23	22	31	20	34	17	26	26
6- 7	39	46	64	56	69	44	28	55	49
7- 8	91	75	88	96	104	89	48	91	84
8- 9	104	118	111	116	111	87	70	112	102
9-10	140	113	123	132	126	129	124	127	127
10-11	154	130	144	139	165	159	145	146	148
11-12	154	126	152	157	164	175	161	151	156
12-13	202	165	156	159	189	159	111	174	163
13-14	188	166	196	177	205	172	149	186	179
14-15	188	186	181	191	204	180	160	190	184
15-16	189	169	195	208	242	185	145	201	190
16-17	227	222	232	201	437	193	128	264	234
17-18	262	233	207	225	282	141	137	242	212
18-19	149	155	181	198	209	144	121	178	165
19-20	123	131	136	133	156	129	116	136	132
20-21	87	87	106	104	136	128	95	104	106
21-22	97	64	107	100	128	103	96	99	99
22-23	54	53	76	88	103	94	87	75	79
23-24	51	59	49	105	92	110	66	71	76
AM PEAK (6-9) VOLUME:	234	239	263	268	284	220	146	258	236
AM PEAK HIGHEST HOUR:	154	130	152	157	165	175	161	151	156
PM PEAK (3-6) VOLUME:	678	624	634	634	961	519	410	706	637
PM PEAK HIGHEST HOUR:	262	233	232	225	437	193	160	264	234
DAILY TOTAL:	2654	2392	2602	2728	3289	2657	2182	2733	2643

+ --- INDICATES SUM IS NOT FULL 24-HOUR TOTAL
 - --- INDICATES DATA IS UNAVAILABLE

T E X A S T R A N S P O R T A T I O N I N S T I T U T E
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WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : US 59 NB CAVALCADE EXIT
DATE : 3-12-1994 DIRECTION OF FLOW : US 59 NB
CHANNEL : THIS IS 1 OF 2 SITE NO : 30310017

DAY OF WEEK: WEATHER	MONDAY GOOD 3 / 14	TUESDAY GOOD 3 / 15	WEDNESDAY - 3 / 16	THURSDAY - 3 / 17	FRIDAY - 3 / 18	SATURDAY GOOD 3 / 12	SUNDAY GOOD 3 / 13	5 - DAY AVERAGE	7 - DAY AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	72	62	59	70	76	112	120	68	82
1- 2	41	46	47	40	49	76	79	45	54
2- 3	38	34	32	23	43	67	77	34	45
3- 4	35	30	26	31	33	37	27	31	31
4- 5	32	38	45	45	47	25	25	41	37
5- 6	60	72	77	68	74	40	25	70	59
6- 7	236	229	224	235	243	74	39	233	183
7- 8	318	269	312	347	281	163	87	305	254
8- 9	295	260	288	253	287	191	105	277	240
9-10	264	229	245	272	281	247	168	258	244
10-11	294	223	281	260	299	292	206	271	265
11-12	304	255	274	267	297	229	212	279	263
12-13	322	274	331	280	342	218	150	310	274
13-14	346	308	344	321	347	249	194	333	301
14-15	331	343	335	350	346	256	221	341	312
15-16	340	335	369	436	483	245	215	393	346
16-17	392	367	352	388	335	227	231	367	327
17-18	385	228	338	347	361	245	205	332	301
18-19	278	297	298	251	306	182	211	286	260
19-20	202	228	242	246	281	190	183	240	225
20-21	151	182	182	207	226	141	134	190	175
21-22	117	117	153	151	189	131	124	145	140
22-23	119	122	140	137	183	158	139	140	143
23-24	101	99	94	129	138	139	113	112	116

AM PEAK (6-9) VOLUME:	849	758	824	835	811	428	231	815	677
AM PEAK HIGHEST HOUR:	318	269	312	347	299	292	212	305	265
PM PEAK (3-6) VOLUME:	1117	930	1059	1171	1179	717	651	1091	975
PM PEAK HIGHEST HOUR:	392	367	369	436	483	256	231	393	346
DAILY TOTAL:	5073	4647	5088	5154	5547	3934	3290	5102	4676

+ --- INDICATES SUM IS NOT FULL 24-HOUR TOTAL
- --- INDICATES DATA IS UNAVAILABLE

T E X A S T R A N S P O R T A T I O N I N S T I T U T E
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WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : US 59 NB FR B4 CAVALCADE EXIT
DATE : 3-12-1994 DIRECTION OF FLOW : US 59 NB FR
CHANNEL : THIS IS 2 OF 2 SITE NO : 30310017

DAY OF WEEK: WEATHER	MONDAY GOOD 3 / 14	TUESDAY GOOD 3 / 15	WEDNESDAY - 3 / 16	THURSDAY - 3 / 17	FRIDAY - 3 / 18	SATURDAY GOOD 3 / 12	SUNDAY GOOD 3 / 13	5 - DAY AVERAGE	7 - DAY AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	41	24	20	27	56	67	39	34	39
1- 2	32	13	11	15	24	40	39	19	25
2- 3	17	12	11	14	19	32	34	15	20
3- 4	4	9	4	17	10	13	10	9	10
4- 5	5	3	3	6	14	12	14	6	8
5- 6	23	17	19	20	17	18	15	19	18
6- 7	37	45	56	49	57	32	22	49	43
7- 8	64	66	77	81	93	64	33	76	68
8- 9	87	90	99	90	89	75	46	91	82
9-10	124	96	94	110	102	110	82	105	103
10-11	140	104	120	112	131	121	87	121	116
11-12	140	95	132	136	143	137	105	129	127
12-13	176	140	130	129	157	117	92	146	134
13-14	171	138	167	160	193	132	150	166	159
14-15	160	155	139	160	169	144	129	157	151
15-16	163	131	147	192	212	135	118	169	157
16-17	168	168	176	155	401	133	95	214	185
17-18	218	189	154	181	245	101	98	197	169
18-19	109	106	125	143	159	108	93	128	120
19-20	87	103	100	94	118	90	88	100	97
20-21	59	68	70	77	105	88	70	76	77
21-22	75	54	77	72	91	68	72	74	73
22-23	44	42	55	72	74	67	64	57	60
23-24	42	44	32	87	71	74	51	55	57
AM PEAK (6-9) VOLUME:	188	201	232	220	239	171	101	216	193
AM PEAK HIGHEST HOUR:	140	104	132	136	143	137	105	129	127
PM PEAK (3-6) VOLUME:	549	488	477	528	858	369	311	580	511
PM PEAK HIGHEST HOUR:	218	189	176	192	401	144	150	214	185
DAILY TOTAL:	2186	1912	2018	2199	2750	1978	1646	2213	2098

+ --- INDICATES SUM IS NOT FULL 24-HOUR TOTAL
- --- INDICATES DATA IS UNAVAILABLE

TEXAS TRANSPORTATION INSTITUTE

WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : US 59 NB TO I-610 EB N.LOOP
 DATE : 3-12-1994 DIRECTION OF FLOW : US 59 NB TO I-610 EB N.LOOP
 CHANNEL : THIS IS 1 OF 2 SITE NO : 301

DAY OF WEEK: WEATHER	MONDAY GOOD 3 / 14	TUESDAY GOOD 3 / 15	WEDNESDAY - 3 / 16	THURSDAY - 3 / 17	FRIDAY - 3 / 18	SATURDAY GOOD 3 / 12	SUNDAY GOOD 3 / 13	5 - DAY AVERAGE	7 - DAY AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	100	90	101	78	85	180	152	91	112
1- 2	79	71	46	70	77	112	112	69	81
2- 3	65	55	74	59	79	126	109	66	81
3- 4	43	41	45	58	46	81	69	47	55
4- 5	53	53	57	82	41	46	31	57	52
5- 6	91	91	104	88	121	52	34	99	83
6- 7	351	325	320	339	327	189	108	332	280
7- 8	483	441	498	443	431	218	136	459	379
8- 9	416	423	404	421	406	226	196	414	356
9-10	329	492	332	328	360	279	266	368	341
10-11	417	420	381	395	430	335	304	409	383
11-12	405	369	425	461	466	324	320	425	396
12-13	421	434	444	439	467	370	236	441	402
13-14	464	417	459	525	516	350	282	476	430
14-15	512	508	498	526	548	-	352	518	491
15-16	637	519	553	537	833	-	329	616	568
16-17	657	582	568	603	683	350	235	619	525
17-18	640	494	599	631	590	286	296	591	505
18-19	481	490	543	505	534	321	405	511	468
19-20	365	362	441	375	422	264	306	393	362
20-21	268	229	284	277	347	240	241	281	269
21-22	254	260	309	291	304	205	203	284	261
22-23	212	260	251	307	286	237	216	263	253
23-24	182	173	172	202	293	225	164	204	202
AM PEAK (6-9) VOLUME:	1250	1189	1222	1203	1164	633	440	1206	1014
AM PEAK HIGHEST HOUR:	483	492	498	461	466	335	320	459	396
PM PEAK (3-6) VOLUME:	1934	1595	1720	1771	2106	636	860	1825	1599
PM PEAK HIGHEST HOUR:	657	582	599	631	833	370	405	619	568
DAILY TOTAL:	7925	7599	7908	8040	8692	5016 +	5102	8033	7334

+ --- INDICATES SUM IS NOT FULL 24-HOUR TOTAL

- --- INDICATES DATA IS UNAVAILABLE

T E X A S T R A N S P O R T A T I O N I N S T I T U T E

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WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : US 59 NB TO I-610 WB N.LOOP
 DATE : 3-12-1994 DIRECTION OF FLOW : US 59 NB TO I-610 WB N.LOOP
 CHANNEL : THIS IS 1 OF 2 SITE NO : 64080377

DAY OF WEEK: WEATHER	MONDAY GOOD 3 / 14	TUESDAY GOOD 3 / 15	WEDNESDAY - 3 / 16	THURSDAY - 3 / 17	FRIDAY - 3 / 18	SATURDAY GOOD 3 / 12	SUNDAY GOOD 3 / 13	5 - DAY AVERAGE	7 - DAY AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	101	86	90	109	94	226	244	96	136
1- 2	75	55	53	79	68	174	177	66	97
2- 3	71	51	53	45	69	151	139	58	83
3- 4	43	31	24	42	34	75	66	35	45
4- 5	47	42	35	40	46	54	47	42	44
5- 6	152	156	173	164	173	112	58	164	141
6- 7	403	435	405	427	419	245	87	418	346
7- 8	459	470	423	446	481	329	119	456	390
8- 9	393	383	440	405	397	516	150	404	383
9-10	423	432	446	425	463	629	278	438	442
10-11	527	423	565	431	543	795	379	498	523
11-12	507	508	841	582	571	930	338	602	611
12-13	533	513	983	574	663	677	460	653	629
13-14	617	545	952	627	753	683	636	699	688
14-15	682	686	1149	731	884	684	586	826	772
15-16	947	868	1441	1028	1338	687	545	1124	979
16-17	1205	1153	1541	1235	1372	667	554	1301	1104
17-18	1362	1090	1507	1397	1205	658	559	1312	1111
18-19	746	838	908	1120	832	528	564	889	791
19-20	514	458	519	586	594	462	462	534	514
20-21	339	295	431	370	442	355	359	375	370
21-22	302	346	359	349	455	362	298	362	353
22-23	233	276	274	293	524	415	252	320	324
23-24	151	175	196	207	380	277	198	222	226
AM PEAK (6-9) VOLUME:	1255	1288	1268	1278	1297	1090	356	1277	1119
AM PEAK HIGHEST HOUR:	527	508	841	582	571	930	379	602	611
PM PEAK (3-6) VOLUME:	3514	3111	4489	3660	3915	2012	1658	3738	3194
PM PEAK HIGHEST HOUR:	1362	1153	1541	1397	1372	687	636	1312	1111
DAILY TOTAL:	10832	10315	13808	11712	12800	10691	7555	11893	11102

+ --- INDICATES SUM IS NOT FULL 24-HOUR TOTAL

- --- INDICATES DATA IS UNAVAILABLE

T E X A S T R A N S P O R T A T I O N I N S T I T U T E

WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : I-610 WB TO US 59 NB EASTEX
 DATE : 11-29-1994 DIRECTION OF FLOW : I-610 WB TO US 59 NB EASTEX
 CHANNEL : THIS IS 1 OF 2 SITE NO : 30312634

DAY OF WEEK: WEATHER	MONDAY GOOD 12 / 5	TUESDAY GOOD 11 / 29	WEDNESDAY GOOD 11 / 30	THURSDAY GOOD 12 / 1	FRIDAY GOOD 12 / 2	SATURDAY GOOD 12 / 3	SUNDAY GOOD 12 / 4	5 - DAY AVERAGE	7 - DAY AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	86	-	110	131	108	167	192	109	132
1- 2	67	-	96	105	117	84	138	96	101
2- 3	86	-	89	117	118	113	114	102	106
3- 4	86	-	106	94	97	92	84	96	93
4- 5	102	-	149	130	136	112	46	129	113
5- 6	271	-	318	278	321	161	96	297	241
6- 7	563	-	613	665	614	258	150	614	477
7- 8	790	-	756	750	723	331	191	755	590
8- 9	-	-	655	618	573	398	204	615	490
9-10	-	-	642	613	652	534	282	636	545
10-11	-	-	556	603	682	587	376	614	561
11-12	-	-	706	635	777	591	398	706	621
12-13	-	690	660	670	682	615	487	675	634
13-14	-	732	701	719	787	594	511	735	674
14-15	-	787	759	792	867	632	499	801	723
15-16	-	971	957	927	922	614	518	944	818
16-17	-	811	869	883	806	583	462	842	736
17-18	-	830	930	878	656	517	469	823	713
18-19	-	704	745	751	637	524	443	709	634
19-20	-	504	522	544	546	405	382	529	484
20-21	-	372	387	420	326	303	270	376	346
21-22	-	332	329	338	298	313	327	324	323
22-23	-	274	280	252	268	251	195	268	253
23-24	-	208	213	207	220	259	176	212	214
AM PEAK (6-9) VOLUME:	1353	-	2024	2033	1910	987	545	1984	1557
AM PEAK HIGHEST HOUR:	790	-	756	750	777	591	398	755	621
PM PEAK (3-6) VOLUME:	-	2612	2756	2688	2384	1714	1449	2610	2267
PM PEAK HIGHEST HOUR:	-	971	957	927	922	632	518	944	818
DAILY TOTAL:	2051 +	7215 +	12148	12120	11933	9038	7010	12009	10622

+ --- INDICATES SUM IS NOT FULL 24-HOUR TOTAL
 - --- INDICATES DATA IS UNAVAILABLE

T E X A S T R A N S P O R T A T I O N I N S T I T U T E

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WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : ** I-610 EB TO US 59 NB EASTEX
 DATE : 11-29-1994 DIRECTION OF FLOW : I-610 EB TO US 59 NB EASTEX
 CHANNEL: THIS IS 1 OF 2 SITE NO : 30314139

DAY OF WEEK: WEATHER	MONDAY GOOD 12 / 5	TUESDAY GOOD 11 / 29	WEDNESDAY GOOD 11 / 30	THURSDAY GOOD 12 / 1	FRIDAY GOOD 12 / 2	SATURDAY GOOD 12 / 3	SUNDAY GOOD 12 / 4	5 - DAY AVERAGE	7 - DAY AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	88	-	134	195	-	329	337	139	217
1- 2	90	-	87	123	-	202	221	100	145
2- 3	103	-	84	129	-	189	183	105	138
3- 4	72	-	71	69	-	123	115	71	90
4- 5	93	-	86	89	-	78	53	89	80
5- 6	190	-	169	211	-	129	85	190	157
6- 7	460	-	436	444	-	191	127	447	332
7- 8	623	-	647	620	-	383	198	630	494
8- 9	-	-	523	558	-	460	258	541	450
9-10	-	-	570	574	598	521	328	581	518
10-11	-	-	575	532	598	564	451	568	544
11-12	-	-	612	-	718	618	487	665	609
12-13	-	595	587	-	707	703	619	630	642
13-14	-	633	682	-	807	766	609	707	699
14-15	-	762	794	-	977	801	596	844	786
15-16	-	952	938	-	989	770	643	960	858
16-17	-	948	898	-	841	715	588	896	798
17-18	-	957	988	-	824	695	635	923	820
18-19	-	841	861	-	892	661	543	865	760
19-20	-	641	629	-	694	448	508	655	584
20-21	-	481	487	-	470	414	362	479	443
21-22	-	435	453	-	434	451	334	441	421
22-23	-	358	352	-	440	442	279	383	374
23-24	-	253	242	-	368	368	178	288	282
AM PEAK (6-9) VOLUME	1083	-	1606	1622	-	1034	583	1617	1276
AM PEAK HIGHEST HOUR	623	-	647	620	718	618	487	665	609
PM PEAK (3-6) VOLUME	-	2857	2824	-	2654	2180	1866	2778	2476
PM PEAK HIGHEST HOUR	-	957	988	-	989	801	643	960	858
DAILY TOTAL:	1719 +	7856 +	11905	3544 +	10357 +	11021	8737	12196	11240

+ --- INDICATES SUM IS NOT FULL 24-HOUR TOTAL

- --- INDICATES DATA IS UNAVAILABLE

US 59 EASTEX SOUTHBOUND --- WEEKDAY

TIME (Begin)	I-610 EB		I-610 WB		Cavalcade		Clignawth		Clignawth		Quitman		Quitman	
	M/L	Exit	M/L	Exit	*M/L*	Entry	M/L	Exit	M/L	Entry	M/L	Exit	M/L	Entry
12:00 AM	520	110	410	100	310	130	550	80	630	90	540	40	580	20
1:00 AM	370	100	270	80	190	80	360	50	410	100	310	40	350	10
2:00 AM	410	90	320	80	240	70	370	60	430	70	360	20	380	10
3:00 AM	410	110	300	110	190	60	320	20	340	50	290	20	310	10
4:00 AM	920	260	660	210	450	60	610	50	660	50	610	40	650	10
5:00 AM	3130	730	2400	560	1840	240	2300	140	2440	100	2340	80	2420	30
6:00 AM	5810	920	4890	910	3980	940	5550	360	5910	210	5700	220	5920	70
7:00 AM	5540	800	4740	1060	3680	1050	5510	450	5960	280	5680	310	5990	90
8:00 AM	4810	670	4140	930	3210	850	4660	370	5030	300	4730	270	5000	100
9:00 AM	3690	550	3140	710	2430	650	3630	360	3960	310	3680	240	3920	110
10:00 AM	3290	550	2740	620	2120	610	3260	370	3630	330	3300	260	3560	100
11:00 AM	3180	580	2600	640	1960	600	3110	360	3470	390	3080	270	3350	100
12:00 PM	3400	590	2810	600	2210	610	3390	380	3770	380	3390	290	3680	120
1:00 PM	3380	600	2780	620	2160	610	3350	410	3760	380	3380	290	3670	120
2:00 PM	3540	680	2860	670	2190	620	3410	390	3800	380	3420	290	3710	120
3:00 PM	3370	670	2700	630	2070	620	3330	430	3760	410	3350	300	3650	130
4:00 PM	3280	700	2580	600	1980	670	3260	400	3660	480	3180	280	3460	120
5:00 PM	3550	780	2770	620	2150	660	3350	400	3750	360	3390	230	3620	120
6:00 PM	3090	570	2520	580	1940	580	3010	350	3360	330	3030	220	3250	120
7:00 PM	2390	400	1990	410	1580	490	2520	310	2830	300	2530	180	2710	110
8:00 PM	1920	320	1600	310	1290	330	1930	250	2180	230	1950	140	2090	80
9:00 PM	1920	260	1660	280	1380	260	1920	210	2130	210	1920	140	2060	70
10:00 PM	1590	220	1370	260	1110	270	1680	200	1880	180	1700	120	1820	50
11:00 PM	1150	170	980	160	820	250	1310	140	1450	150	1300	80	1380	30
TOTAL	64660	11430	53230	11750	41480	11310	62690	6540	69230	6070	63160	4370	67530	1850
														10910
														76700

NOTES: Traffic volumes under I-610 North Loop were obtained from June 1990 survey. All entrance and exit ramp counts were updated in March 1994. All data collected by the Texas Transportation Institute.

TEXAS TRANSPORTATION INSTITUTE

WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : ** US 59 SB TO I-610 EB N.LOOP
 DATE : 11-29-1994 DIRECTION OF FLOW : US 59 SB TO I-610 EB N.LOOP
 CHANNEL: THIS IS 1 OF 2 SITE NO : 3014583

DAY OF WEEK: WEATHER	MONDAY GOOD 12 / 5	TUESDAY GOOD 11 / 29	WEDNESDAY GOOD 11 / 30	THURSDAY GOOD 12 / 1	FRIDAY GOOD 12 / 2	SATURDAY GOOD 12 / 3	SUNDAY GOOD 12 / 4	5 - DAY AVERAGE	7 - DAY AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	115	-	107	105	-	126	126	109	116
1- 2	110	-	91	86	-	95	111	96	99
2- 3	80	-	109	85	-	79	81	91	87
3- 4	104	-	134	104	-	69	63	114	95
4- 5	233	-	301	237	-	116	77	257	193
5- 6	684	-	754	758	-	218	127	732	508
6- 7	930	-	904	911	-	358	191	915	659
7- 8	797	-	761	838	-	308	172	799	575
8- 9	704	-	685	623	-	331	216	671	512
9-10	-	-	532	539	580	462	353	550	493
10-11	-	-	531	547	582	452	315	553	485
11-12	-	-	584	-	568	488	356	576	499
12-13	-	633	501	-	632	486	358	589	522
13-14	-	567	618	-	623	499	430	603	547
14-15	-	710	623	-	709	536	463	681	608
15-16	-	651	658	-	701	507	453	670	594
16-17	-	698	706	-	686	486	443	697	604
17-18	-	788	807	-	737	465	503	777	660
18-19	-	575	541	-	580	481	529	565	541
19-20	-	380	407	-	424	348	368	404	385
20-21	-	315	326	-	311	272	306	317	306
21-22	-	253	255	-	261	262	277	256	262
22-23	-	212	227	-	221	265	258	220	237
23-24	-	180	154	-	178	198	177	171	177
AM PEAK (6-9) VOLUME	2431	-	2350	2372	-	997	579	2384	1746
AM PEAK HIGHEST HOUR	930	-	904	911	582	488	356	915	659
PM PEAK (3-6) VOLUME	-	2137	2171	-	2124	1458	1399	2144	1858
PM PEAK HIGHEST HOUR	-	788	807	-	737	536	529	777	660
DAILY TOTAL:	3757 +	5962 +	11316	4833 +	7793 +	7907	6753	11412	9764

+ --- INDICATES SUM IS NOT FULL 24-HOUR TOTAL
 - --- INDICATES DATA IS UNAVAILABLE

T E X A S T R A N S P O R T A T I O N I N S T I T U T E

WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : ** US 59 SB TO I-610 WB N.LOOP
 DATE : 11-29-1994 DIRECTION OF FLOW : US 59 SB TO I-610 WB N.LOOP
 CHANNEL: THIS IS 1 OF 2 SITE NO : 30310016

DAY OF WEEK:	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
WEATHER	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD		
	12 / 5	11 / 29	11 / 30	12 / 1	12 / 2	12 / 3	12 / 4	AVERAGE	AVERAGE

TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	118	-	76	102	-	128	147	99	114
1- 2	98	-	73	81	-	69	111	84	86
2- 3	97	-	66	78	-	93	115	80	90
3- 4	113	-	99	110	-	68	49	107	88
4- 5	230	-	196	196	-	107	62	207	158
5- 6	577	-	572	542	-	217	102	564	402
6- 7	908	-	911	-	-	334	142	910	574
7- 8	1077	-	1043	-	-	442	189	1060	688
8- 9	922	-	945	-	-	555	275	934	674
9-10	-	-	667	-	755	592	390	711	601
10-11	-	-	606	-	639	619	468	623	583
11-12	-	-	634	-	641	697	447	638	605
12-13	-	637	555	-	602	700	541	598	607
13-14	-	603	628	-	640	715	625	624	642
14-15	-	666	650	-	696	652	552	671	643
15-16	-	615	622	-	663	595	524	633	604
16-17	-	631	627	-	555	612	581	604	601
17-18	-	606	649	-	612	589	639	622	619
18-19	-	579	590	-	575	670	594	581	602
19-20	-	359	422	-	447	529	472	409	446
20-21	-	277	299	-	350	406	346	309	336
21-22	-	265	270	-	290	332	295	275	290
22-23	-	264	247	-	259	315	266	257	270
23-24	-	149	155	-	181	235	163	162	177

AM PEAK (6-9) VOLUME	2907	-	2899	-	-	1331	606	2903	1936
AM PEAK HIGHEST HOUR	1077	-	1043	542	755	697	468	1060	688
PM PEAK (3-6) VOLUME	-	1852	1898	-	1830	1796	1744	1860	1824
PM PEAK HIGHEST HOUR	-	666	650	-	696	715	639	671	643
DAILY TOTAL:	4140 +	5651 +	11602	1109 +	7905 +	10271	8095	11760	10500

+ --- INDICATES SUM IS NOT FULL 24-HOUR TOTAL
 - --- INDICATES DATA IS UNAVAILABLE

T E X A S T R A N S P O R T A T I O N I N S T I T U T E

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WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : I-610 EB TO US 59 SB EASTEX
 DATE : 3-12-1994 DIRECTION OF FLOW : I-610 EB TO US 59 SB EASTEX
 CHANNEL : THIS IS 1 OF 2 SITE NO : 309

DAY OF WEEK: WEATHER	MONDAY GOOD 3 / 14	TUESDAY GOOD 3 / 15	WEDNESDAY - 3 / 16	THURSDAY - 3 / 17	FRIDAY - 3 / 18	SATURDAY GOOD 3 / 12	SUNDAY GOOD 3 / 13	5 - DAY AVERAGE	7 - DAY AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	323	75	76	88	85	499	453	129	228
1- 2	190	49	51	36	52	306	299	76	140
2- 3	186	32	41	44	54	276	310	71	135
3- 4	141	38	46	40	40	166	148	61	88
4- 5	69	55	58	60	57	238	157	60	99
5- 6	246	257	238	243	218	525	299	240	289
6- 7	915	945	958	925	935	1006	555	936	891
7- 8	990	1019	1081	1087	1053	1211	734	1046	1025
8- 9	793	962	826	836	817	1201	1052	847	927
9-10	657	659	668	632	651	1363	1145	653	825
10-11	592	592	552	582	711	1442	1292	606	823
11-12	589	564	610	570	635	1500	1373	594	834
12-13	591	574	614	593	693	1685	1364	613	873
13-14	619	573	626	653	592	1658	1429	613	879
14-15	650	634	590	599	653	1659	1541	625	904
15-16	616	561	617	593	700	1540	1455	617	869
16-17	649	670	658	698	690	1468	1323	673	879
17-18	667	656	647	692	656	1501	1292	664	873
18-19	520	532	628	597	659	1503	1334	587	825
19-20	401	456	455	503	616	1452	1259	486	735
20-21	295	259	330	324	458	1036	983	333	526
21-22	233	221	241	275	350	979	870	264	453
22-23	181	182	217	218	574	888	774	274	433
23-24	141	135	120	162	692	638	486	250	339
AM PEAK (6-9) VOLUME:	2698	2926	2865	2848	2805	3418	2341	2828	2843
AM PEAK HIGHEST HOUR:	990	1019	1081	1087	1053	1500	1373	1046	1025
PM PEAK (3-6) VOLUME:	1932	1887	1922	1983	2046	4509	4070	1954	2621
PM PEAK HIGHEST HOUR:	667	670	658	698	700	1685	1541	673	904
DAILY TOTAL:	11254	10700	10948	11050	12641	25740	21927	11319	14894

+ --- INDICATES SUM IS NOT FULL 24-HOUR TOTAL

- --- INDICATES DATA IS UNAVAILABLE

T E X A S T R A N S P O R T A T I O N I N S T I T U T E

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WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : I-610 WB TO US 59 SB EASTEX
 DATE : 3-12-1994 DIRECTION OF FLOW : I-610 WB TO US 59 SB EASTEX
 CHANNEL : THIS IS 1 OF 2 SITE NO : 302

DAY OF WEEK:	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
WEATHER	GOOD	GOOD	-	-	-	GOOD	GOOD		
	3 / 14	3 / 15	3 / 16	3 / 17	3 / 18	3 / 12	3 / 13	AVERAGE	AVERAGE

TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	100	111	114	122	116	210	174	113	135
1- 2	75	88	86	87	96	137	91	86	94
2- 3	52	60	64	53	76	120	86	61	73
3- 4	60	78	79	70	70	84	50	71	70
4- 5	74	111	80	100	109	65	45	95	83
5- 6	215	217	227	204	254	150	68	223	191
6- 7	608	620	648	642	650	282	160	634	516
7- 8	769	708	816	811	803	354	265	781	647
8- 9	609	527	620	592	649	355	207	599	508
9-10	544	494	549	601	574	368	270	552	486
10-11	550	458	521	520	591	429	323	528	485
11-12	567	472	588	567	567	399	357	552	502
12-13	550	508	576	571	657	436	416	572	531
13-14	543	555	580	594	630	476	457	580	548
14-15	576	589	579	613	627	439	527	597	564
15-16	646	651	606	653	631	448	497	637	590
16-17	687	552	616	610	595	408	365	612	548
17-18	602	522	520	517	539	359	334	540	485
18-19	479	458	490	485	532	400	438	489	469
19-20	424	405	431	469	529	390	406	452	436
20-21	265	252	297	356	381	332	336	310	317
21-22	255	262	281	291	329	303	322	284	292
22-23	251	276	363	256	340	297	297	297	297
23-24	218	236	223	222	314	248	209	243	239

AM PEAK (6-9) VOLUME:	1986	1855	2084	2045	2102	991	632	2014	1671
AM PEAK HIGHEST HOUR:	769	708	816	811	803	429	357	781	647
PM PEAK (3-6) VOLUME:	1935	1725	1742	1780	1765	1215	1196	1789	1623
PM PEAK HIGHEST HOUR:	687	651	616	653	657	476	527	637	590
DAILY TOTAL:	9719	9210	9954	10006	10659	7489	6700	9910	9105

+ --- INDICATES SUM IS NOT FULL 24-HOUR TOTAL

- --- INDICATES DATA IS UNAVAILABLE

T E X A S T R A N S P O R T A T I O N I N S T I T U T E

WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : US 59 SB CAVALCADE ENTRY
 DATE : 3-12-1994 DIRECTION OF FLOW : SU 59 SB
 CHANNEL : THIS IS 1 OF 2 SITE NO : 30314140

DAY OF WEEK: WEATHER	MONDAY GOOD 3 / 14	TUESDAY GOOD 3 / 15	WEDNESDAY - 3 / 16	THURSDAY - 3 / 17	FRIDAY - 3 / 18	SATURDAY GOOD 3 / 12	SUNDAY GOOD 3 / 13	5 - DAY AVERAGE	7 - DAY AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	52	76	74	85	103	119	74	78	83
1- 2	39	53	55	67	57	94	64	54	61
2- 3	34	65	43	53	78	80	67	55	60
3- 4	22	17	22	32	28	49	28	24	28
4- 5	38	56	47	53	48	43	23	48	44
5- 6	85	182	161	128	138	86	26	139	115
6- 7	245	433	392	399	358	142	55	365	289
7- 8	300	420	517	521	486	232	70	449	364
8- 9	308	354	403	389	392	240	97	369	312
9-10	272	381	401	369	381	282	149	361	319
10-11	268	387	410	367	401	317	184	367	333
11-12	304	332	381	378	396	253	135	358	311
12-13	258	388	413	414	423	276	151	379	332
13-14	324	416	403	419	475	232	249	407	360
14-15	293	437	387	425	424	269	251	393	355
15-16	307	475	428	460	459	242	210	426	369
16-17	407	442	416	460	299	230	192	405	349
17-18	446	390	405	366	384	220	203	398	345
18-19	378	353	318	330	363	190	227	348	308
19-20	313	270	297	325	357	191	211	312	281
20-21	237	204	244	245	315	175	147	249	224
21-22	195	178	206	188	273	132	141	208	188
22-23	183	199	193	191	232	136	139	200	182
23-24	119	110	103	149	198	143	79	136	129
AM PEAK (6-9) VOLUME:	853	1207	1312	1309	1236	614	222	1183	965
AM PEAK HIGHEST HOUR:	308	433	517	521	486	317	184	449	364
PM PEAK (3-6) VOLUME:	1160	1307	1249	1286	1142	692	605	1229	1063
PM PEAK HIGHEST HOUR:	446	475	428	460	475	276	251	426	369
DAILY TOTAL:	5427	6618	6719	6813	7068	4373	3172	6529	5741

+ --- INDICATES SUM IS NOT FULL 24-HOUR TOTAL

- --- INDICATES DATA IS UNAVAILABLE

T E X A S T R A N S P O R T A T I O N I N S T I T U T E

WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : US 59 SB FR AFTER CAVALCADE ENTR
 DATE : 3-12-1994 DIRECTION OF FLOW : US 59 SB FR
 CHANNEL : THIS IS 2 OF 2 SITE NO : 30314140

DAY OF WEEK: WEATHER	MONDAY GOOD 3 / 14	TUESDAY GOOD 3 / 15	WEDNESDAY - 3 / 16	THURSDAY - 3 / 17	FRIDAY - 3 / 18	SATURDAY GOOD 3 / 12	SUNDAY GOOD 3 / 13	5 - DAY AVERAGE	7 - DAY AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	23	16	18	17	26	25	29	20	22
1- 2	17	19	18	20	17	34	18	18	20
2- 3	11	11	5	12	30	29	25	14	18
3- 4	15	22	14	20	11	16	7	16	15
4- 5	14	15	13	22	19	24	6	17	16
5- 6	22	18	27	19	35	16	7	24	21
6- 7	72	78	63	56	63	29	13	66	53
7- 8	337	287	273	173	234	81	36	261	203
8- 9	172	166	147	117	141	85	41	149	124
9-10	142	75	53	117	156	121	51	109	102
10-11	162	65	62	132	173	149	59	119	115
11-12	181	55	128	133	158	127	58	131	120
12-13	192	56	121	147	191	98	52	141	122
13-14	195	106	89	192	217	105	76	160	140
14-15	174	127	116	179	202	115	74	160	141
15-16	149	99	137	168	171	99	72	145	128
16-17	156	111	154	149	360	88	72	186	156
17-18	115	113	123	128	192	95	78	134	121
18-19	99	79	110	88	90	72	66	93	86
19-20	75	73	86	81	85	65	54	80	74
20-21	61	41	77	54	78	56	44	62	59
21-22	55	39	47	33	68	34	41	48	45
22-23	48	26	41	49	65	41	23	46	42
23-24	17	32	22	32	37	27	30	28	28
AM PEAK (6-9) VOLUME:	581	531	483	346	438	195	90	476	381
AM PEAK HIGHEST HOUR:	337	287	273	173	234	149	59	261	203
PM PEAK (3-6) VOLUME:	420	323	414	445	723	282	222	465	404
PM PEAK HIGHEST HOUR:	195	127	154	192	360	115	78	186	156
DAILY TOTAL:	2504	1729	1944	2138	2819	1631	1032	2227	1971

+ --- INDICATES SUM IS NOT FULL 24-HOUR TOTAL
 - --- INDICATES DATA IS UNAVAILABLE

TEXAS TRANSPORTATION INSTITUTE

WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : US 59 SB COLLINGSWORTH EXIT
 DATE : 3-12-1994 DIRECTION OF FLOW : US 59 SB
 CHANNEL : THIS IS 1 OF 2 SITE NO : 30314153

DAY OF WEEK: WEATHER	MONDAY GOOD 3 / 14	TUESDAY GOOD 3 / 15	WEDNESDAY - 3 / 16	THURSDAY - 3 / 17	FRIDAY - 3 / 18	SATURDAY GOOD 3 / 12	SUNDAY GOOD 3 / 13	5 - DAY AVERAGE	7 - DAY AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	61	123	67	74	129	140	119	91	102
1- 2	42	127	120	40	158	85	81	97	93
2- 3	49	102	50	37	106	84	104	69	76
3- 4	61	73	34	40	60	88	40	54	57
4- 5	54	40	50	45	53	43	34	48	46
5- 6	102	96	100	97	102	57	39	99	85
6- 7	197	208	208	210	240	106	81	213	179
7- 8	335	286	278	249	272	274	194	284	270
8- 9	310	292	304	273	346	235	162	305	275
9-10	334	261	324	345	307	291	285	314	307
10-11	346	264	422	281	339	328	357	330	334
11-12	367	338	505	359	365	324	350	387	373
12-13	363	384	389	343	420	345	263	380	358
13-14	380	358	401	367	375	301	251	376	348
14-15	373	408	377	355	372	365	307	377	365
15-16	407	350	368	389	541	421	330	411	401
16-17	435	334	416	392	838	368	285	483	438
17-18	366	339	353	381	367	426	264	361	357
18-19	304	270	343	358	381	361	306	331	332
19-20	269	265	262	334	368	345	255	300	300
20-21	162	229	263	220	288	232	216	232	230
21-22	184	180	274	193	224	233	241	211	218
22-23	141	244	171	137	198	212	227	178	190
23-24	100	201	100	188	169	161	140	152	151
AM PEAK (6-9) VOLUME:	842	786	790	732	858	615	437	802	723
AM PEAK HIGHEST HOUR:	367	338	505	359	365	328	357	387	373
PM PEAK (3-6) VOLUME:	1208	1023	1137	1162	1746	1215	879	1255	1196
PM PEAK HIGHEST HOUR:	435	408	416	392	838	426	330	483	438
DAILY TOTAL:	5742	5772	6179	5707	7018	5825	4931	6084	5882

+ --- INDICATES SUM IS NOT FULL 24-HOUR TOTAL
 - --- INDICATES DATA IS UNAVAILABLE

T E X A S T R A N S P O R T A T I O N I N S T I T U T E

WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : US 59 SB FR B4 COLLINGSWORTH EXI
 DATE : 3-12-1994 DIRECTION OF FLOW : US 59 SB FR
 CHANNEL : THIS IS 2 OF 2 SITE NO : 30314153

DAY OF WEEK: WEATHER	MONDAY GOOD 3 / 14	TUESDAY GOOD 3 / 15	WEDNESDAY - 3 / 16	THURSDAY - 3 / 17	FRIDAY - 3 / 18	SATURDAY GOOD 3 / 12	SUNDAY GOOD 3 / 13	5 - DAY AVERAGE	7 - DAY AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	59	18	21	20	27	32	33	29	30
1- 2	19	20	20	20	18	34	21	19	22
2- 3	10	8	10	12	32	30	32	14	19
3- 4	12	15	50	16	14	16	7	21	19
4- 5	17	23	35	20	45	29	10	28	26
5- 6	43	38	46	40	100	21	7	53	42
6- 7	60	190	62	69	62	29	18	89	70
7- 8	323	456	275	176	232	84	39	292	226
8- 9	166	463	230	161	158	101	51	236	190
9-10	185	252	185	187	200	155	69	202	176
10-11	205	188	191	197	267	178	66	210	185
11-12	222	201	228	199	227	181	68	215	189
12-13	246	235	258	195	292	137	60	245	203
13-14	271	263	221	218	300	135	91	255	214
14-15	268	268	258	273	311	132	99	276	230
15-16	220	228	254	273	295	115	82	254	210
16-17	230	271	247	262	436	123	90	289	237
17-18	193	251	225	214	308	119	101	238	202
18-19	146	121	147	121	163	91	75	140	123
19-20	88	94	96	92	101	73	61	94	86
20-21	62	52	91	68	90	71	58	73	70
21-22	58	52	54	42	81	141	47	57	68
22-23	50	27	59	60	76	52	30	54	51
23-24	26	40	40	38	46	26	74	38	41
AM PEAK (6-9) VOLUME:	549	1109	567	406	452	214	108	617	486
AM PEAK HIGHEST HOUR:	323	463	275	199	267	181	69	292	226
PM PEAK (3-6) VOLUME:	643	750	726	749	1039	357	273	781	648
PM PEAK HIGHEST HOUR:	271	271	258	273	436	141	101	289	237
DAILY TOTAL:	3179	3774	3303	2973	3881	2105	1289	3422	2929

+ --- INDICATES SUM IS NOT FULL 24-HOUR TOTAL
 - --- INDICATES DATA IS UNAVAILABLE

T E X A S T R A N S P O R T A T I O N I N S T I T U T E

WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : US 59 SB COLLINGSWORTH ENTRY
 DATE : 3-12-1994 DIRECTION OF FLOW : US 59 SB
 CHANNEL : THIS IS 1 OF 2 SITE NO : 30314583

DAY OF WEEK:	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
WEATHER	GOOD	GOOD	-	-	-	GOOD	GOOD		
	3 / 14	3 / 15	3 / 16	3 / 17	3 / 18	3 / 12	3 / 13	AVERAGE	AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	50	41	24	40	40	83	79	39	51
1- 2	29	21	33	79	39	69	65	40	48
2- 3	28	26	18	29	22	67	70	25	37
3- 4	25	24	27	21	23	35	42	24	28
4- 5	31	47	33	44	44	31	18	40	35
5- 6	88	74	97	73	74	35	34	81	68
6- 7	206	218	239	209	207	88	65	216	176
7- 8	258	336	304	323	324	148	69	309	252
8- 9	278	276	254	259	280	151	107	269	229
9-10	226	207	249	250	274	184	103	241	213
10-11	303	208	245	264	260	203	180	256	238
11-12	260	254	272	242	309	231	169	267	248
12-13	280	278	307	283	286	220	152	287	258
13-14	319	270	271	277	331	254	230	294	279
14-15	317	264	263	299	314	228	272	291	280
15-16	284	312	275	293	329	244	210	299	278
16-17	290	294	257	290	289	182	169	284	253
17-18	228	235	196	258	246	207	178	233	221
18-19	202	197	243	188	265	178	197	219	210
19-20	181	163	175	196	208	172	143	185	177
20-21	135	106	124	129	180	140	152	135	138
21-22	118	125	148	136	178	117	131	141	136
22-23	96	74	104	130	173	134	90	115	114
23-24	58	62	58	77	163	104	74	84	85
AM PEAK (6-9) VOLUME:	742	830	797	791	811	387	241	794	657
AM PEAK HIGHEST HOUR:	303	336	304	323	324	231	180	309	252
PM PEAK (3-6) VOLUME:	802	841	728	841	864	633	557	815	752
PM PEAK HIGHEST HOUR:	319	312	307	299	331	254	272	299	280
DAILY TOTAL:	4290	4112	4216	4389	4858	3505	2999	4373	4053

+ --- INDICATES SUM IS NOT FULL 24-HOUR TOTAL
 - --- INDICATES DATA IS UNAVAILABLE

TEXAS TRANSPORTATION INSTITUTE

WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : US 59 SB FR AFTER COLLINGSWORTH
 DATE : 3-12-1994 DIRECTION OF FLOW : US 59 SB FR
 CHANNEL : THIS IS 2 OF 2 SITE NO : 30314583

DAY OF WEEK: WEATHER	MONDAY GOOD 3 / 14	TUESDAY GOOD 3 / 15	WEDNESDAY - 3 / 16	THURSDAY - 3 / 17	FRIDAY - 3 / 18	SATURDAY GOOD 3 / 12	SUNDAY GOOD 3 / 13	5 - DAY AVERAGE	7 - DAY AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	13	14	11	15	23	41	35	15	22
1- 2	14	15	8	69	17	32	26	25	26
2- 3	11	13	7	10	14	23	31	11	16
3- 4	7	4	7	4	8	16	14	6	9
4- 5	12	6	10	9	18	14	10	11	11
5- 6	29	22	30	16	25	16	10	24	21
6- 7	47	97	59	43	48	26	18	59	48
7- 8	358	370	260	115	159	39	25	252	189
8- 9	107	214	81	81	87	63	43	114	97
9-10	82	92	74	69	102	79	56	84	79
10-11	94	84	89	71	93	94	71	86	85
11-12	82	89	76	64	83	71	91	79	79
12-13	101	94	106	101	97	100	61	100	94
13-14	92	109	94	84	105	82	75	97	92
14-15	88	91	107	98	112	76	75	99	92
15-16	78	106	94	105	308	69	79	138	120
16-17	95	91	103	96	792	93	64	235	191
17-18	107	100	89	100	102	88	79	100	95
18-19	79	90	75	107	80	84	71	86	84
19-20	62	57	70	74	82	72	37	69	65
20-21	49	35	37	56	77	51	57	51	52
21-22	48	27	43	61	62	48	48	48	48
22-23	32	25	26	48	75	36	33	41	39
23-24	20	30	24	21	62	41	28	31	32
AM PEAK (6-9) VOLUME:	512	681	400	239	294	128	86	425	334
AM PEAK HIGHEST HOUR:	358	370	260	115	159	94	91	252	189
PM PEAK (3-6) VOLUME:	280	297	286	301	1202	250	222	473	405
PM PEAK HIGHEST HOUR:	107	109	107	107	792	100	79	235	191
DAILY TOTAL:	1707	1875	1580	1517	2631	1354	1137	1862	1686

+ --- INDICATES SUM IS NOT FULL 24-HOUR TOTAL
 - --- INDICATES DATA IS UNAVAILABLE

T E X A S T R A N S P O R T A T I O N I N S T I T U T E

WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : US 59 SB QUITEMAN EXIT
 DATE : 3-12-1994 DIRECTION OF FLOW : US 59 SB
 CHANNEL : THIS IS 1 OF 2 SITE NO : 30314146

DAY OF WEEK:	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
WEATHER	GOOD	GOOD	-	-	-	GOOD	GOOD		
	3 / 14	3 / 15	3 / 16	3 / 17	3 / 18	3 / 12	3 / 13	AVERAGE	AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	28	19	18	16	17	30	47	20	25
1- 2	19	16	13	12	7	32	50	13	21
2- 3	25	15	13	8	7	20	40	14	18
3- 4	9	2	4	9	8	7	15	6	8
4- 5	7	7	7	6	14	23	10	8	11
5- 6	20	23	12	14	78	41	17	29	29
6- 7	61	50	49	75	102	71	29	67	62
7- 8	154	47	80	87	87	71	31	91	80
8- 9	107	87	90	99	101	98	57	97	91
9-10	98	142	88	95	116	113	108	108	109
10-11	106	99	92	101	97	130	174	99	114
11-12	89	85	89	110	122	106	151	99	107
12-13	125	105	114	127	145	125	76	123	117
13-14	116	123	119	108	121	152	125	117	123
14-15	140	110	107	125	122	139	169	121	130
15-16	147	117	105	129	154	147	160	130	137
16-17	134	120	119	119	129	130	110	124	123
17-18	135	119	97	108	137	122	128	119	121
18-19	114	103	109	121	134	108	119	116	115
19-20	108	102	145	78	115	121	120	110	113
20-21	74	65	89	52	108	90	72	78	79
21-22	60	60	58	64	97	108	91	68	77
22-23	46	53	45	45	68	86	51	51	56
23-24	33	31	31	27	50	80	46	34	43
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AM PEAK (6-9) VOLUME:	322	184	219	261	290	240	117	255	233
AM PEAK HIGHEST HOUR:	154	142	92	110	122	130	174	108	114
PM PEAK (3-6) VOLUME:	416	356	321	356	420	399	398	374	381
PM PEAK HIGHEST HOUR:	147	123	145	129	154	152	169	130	137
DAILY TOTAL:	1955	1700	1693	1735	2136	2150	1996	1844	1909

+ --- INDICATES SUM IS NOT FULL 24-HOUR TOTAL
 - --- INDICATES DATA IS UNAVAILABLE

T E X A S T R A N S P O R T A T I O N I N S T I T U T E

WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : ** US 59 SB FR B4 QUITMAN EXIT
 DATE : 3-12-1994 DIRECTION OF FLOW : US 59 SB FR
 CHANNEL: THIS IS 2 OF 2 SITE NO : 30314146

DAY OF WEEK: WEATHER	MONDAY GOOD 3 / 14	TUESDAY GOOD 3 / 15	WEDNESDAY GOOD 3 / 16	THURSDAY GOOD 3 / 17	FRIDAY GOOD 3 / 18	SATURDAY GOOD 3 / 12	SUNDAY GOOD 3 / 13	5 - DAY AVERAGE	7 - DAY AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	13	14	18	14	17	-	38	15	19
1- 2	15	14	12	13	20	-	22	15	16
2- 3	16	12	8	10	9	-	24	11	13
3- 4	7	14	16	12	19	-	19	14	15
4- 5	17	11	13	12	32	-	17	17	17
5- 6	34	22	27	24	40	-	14	29	27
6- 7	59	84	45	44	151	-	14	77	66
7- 8	341	358	190	72	82	-	27	209	178
8- 9	104	222	128	71	102	-	40	125	111
9-10	72	92	69	70	80	-	64	77	75
10-11	83	86	68	75	85	-	55	79	75
11-12	87	81	98	100	104	64	58	94	85
12-13	115	84	99	78	102	96	51	96	89
13-14	109	98	100	102	-	75	76	102	93
14-15	88	101	120	105	-	75	70	104	93
15-16	85	94	98	104	-	72	79	95	89
16-17	100	108	114	103	-	88	70	106	97
17-18	99	95	96	96	-	82	58	97	88
18-19	68	74	80	60	-	75	65	71	70
19-20	47	62	52	55	-	67	46	54	55
20-21	45	40	42	62	-	49	61	47	50
21-22	45	39	58	45	-	45	57	47	48
22-23	32	29	33	24	-	34	47	30	33
23-24	27	38	28	19	-	53	35	28	33
AM PEAK (6-9) VOLUME	504	664	363	187	335	-	81	411	356
AM PEAK HIGHEST HOUR	341	358	190	100	151	-	64	209	178
PM PEAK (3-6) VOLUME	284	297	308	303	-	242	207	298	274
PM PEAK HIGHEST HOUR	115	108	120	105	-	96	79	106	97
DAILY TOTAL:	1708	1872	1612	1370	843 +	875 +	1107	1637	1536

+ --- INDICATES SUM IS NOT FULL 24-HOUR TOTAL

- --- INDICATES DATA IS UNAVAILABLE

T E X A S T R A N S P O R T A T I O N I N S T I T U T E

WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : US 59 SB QUITEMAN ENTRY
 DATE : 3-12-1994 DIRECTION OF FLOW : US 59 SB
 CHANNEL : THIS IS 1 OF 2 SITE NO : 30314607

DAY OF WEEK: WEATHER	MONDAY GOOD 3 / 14	TUESDAY GOOD 3 / 15	WEDNESDAY - 3 / 16	THURSDAY - 3 / 17	FRIDAY - 3 / 18	SATURDAY GOOD 3 / 12	SUNDAY GOOD 3 / 13	5 - DAY AVERAGE	7 - DAY AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	56	37	81	123	113	271	109	82	113
1- 2	45	23	89	97	101	170	73	71	85
2- 3	32	21	73	98	101	229	79	65	90
3- 4	22	24	52	50	61	79	49	42	48
4- 5	38	37	128	92	124	98	31	84	78
5- 6	76	74	256	244	258	195	33	182	162
6- 7	206	210	655	771	704	293	44	509	412
7- 8	548	854	1117	896	1005	483	93	884	714
8- 9	270	823	660	641	716	457	164	622	533
9-10	228	493	675	620	731	588	195	549	504
10-11	242	437	704	722	771	487	221	575	512
11-12	266	490	754	703	690	588	197	581	527
12-13	301	747	775	728	741	243	192	658	532
13-14	332	791	722	703	735	232	297	657	545
14-15	357	738	788	726	725	269	293	667	557
15-16	299	848	782	802	1473	335	232	841	682
16-17	265	695	758	868	1797	252	242	877	697
17-18	283	727	834	659	662	236	253	633	522
18-19	217	649	629	582	679	246	263	551	466
19-20	177	472	563	553	649	211	254	483	411
20-21	156	427	478	476	541	210	172	416	351
21-22	137	446	426	433	492	154	165	387	322
22-23	98	250	271	333	437	144	122	278	236
23-24	66	233	173	215	394	122	109	216	187
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AM PEAK (6-9) VOLUME:	1024	1887	2432	2308	2425	1233	301	2015	1659
AM PEAK HIGHEST HOUR:	548	854	1117	896	1005	588	221	884	714
PM PEAK (3-6) VOLUME:	847	2270	2374	2329	3932	823	727	2350	1900
PM PEAK HIGHEST HOUR:	357	848	834	868	1797	335	297	877	697
DAILY TOTAL:	4717	10546	12443	12135	14700	6592	3882	10908	9288

+ --- INDICATES SUM IS NOT FULL 24-HOUR TOTAL
 - --- INDICATES DATA IS UNAVAILABLE

TEXAS TRANSPORTATION INSTITUTE

WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : ** US 59 SB FR AFTER QUITMAN ENTRY
 DATE : 3-12-1994 DIRECTION OF FLOW : US 59 SB FR
 CHANNEL: THIS IS 2 OF 2 SITE NO : 30314607

DAY OF WEEK:	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
WEATHER	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD		
	3 / 14	3 / 15	3 / 16	3 / 17	3 / 18	3 / 12	3 / 13	AVERAGE	AVERAGE
<hr/>									
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	-	-	19	30	41	104	-	30	49
1- 2	-	-	20	21	37	68	-	26	37
2- 3	-	-	15	18	36	91	-	23	40
3- 4	-	-	16	9	20	37	-	15	21
4- 5	-	-	27	13	34	36	-	25	28
5- 6	-	-	47	40	75	74	-	54	59
6- 7	-	-	146	150	237	111	-	178	161
7- 8	-	-	340	261	406	189	-	336	299
8- 9	-	181	205	213	290	198	-	222	217
9-10	-	101	204	290	291	266	-	222	230
10-11	-	76	221	326	281	247	-	226	230
11-12	-	105	251	329	259	257	-	236	240
12-13	-	209	275	370	374	-	-	307	307
13-14	-	296	302	363	393	-	-	339	339
14-15	-	307	369	372	437	-	-	371	371
15-16	-	336	358	418	742	-	-	464	464
16-17	-	317	352	406	891	-	-	492	492
17-18	-	256	374	298	315	-	-	311	311
18-19	-	206	241	223	301	-	-	243	243
19-20	-	130	186	177	273	-	-	192	192
20-21	-	84	137	126	219	-	-	142	142
21-22	-	75	92	127	177	-	-	118	118
22-23	-	52	63	116	152	-	-	96	96
23-24	-	42	39	62	154	-	-	74	74
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AM PEAK (6-9) VOLUME	-	-	691	624	933	498	-	736	677
AM PEAK HIGHEST HOUR	-	181	340	329	406	266	-	336	299
PM PEAK (3-6) VOLUME	-	909	1084	1122	1948	-	-	1266	1266
PM PEAK HIGHEST HOUR	-	336	374	418	891	-	-	492	492
DAILY TOTAL:	-	+ 2773 +	4299	4758	6435	1678 +	-	+ 4738	4756

+ --- INDICATES SUM IS NOT FULL 24-HOUR TOTAL
 - --- INDICATES DATA IS UNAVAILABLE