

## **ROAD USER COST ANALYSIS**

### **I-45 North — Greens to Airtex**

Plans have been developed for the upgrading of a portion of I-45 North Freeway from north of Greens Bayou to north of Airtex (CSJs 0110-06-107, 0110-05-071, and 0010-05-070). The construction project provides for increased freeway/frontage street capacity, extension of the HOV lane, complete reconstruction of the I-45/Airtex interchange, and capacity improvements at the I-45/Rankin interchange. The HOV lane construction includes a direct connection into the METRO Kuykendahl Park-and-Ride lot. Project construction is expected to begin in late 1993.

Although the public will benefit from the final improvements, motorists will experience additional delays throughout the duration 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 seven 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. 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 this construction project indicated that the majority of the delays will be incurred on the freeway mainlanes. Although each of the planned phases does impact traffic, this analysis concentrated on those which severely impacted the mainlane traffic. These

additional delays will be incurred in Phase 2 — Step 1, Phase 2 — Step 2, Phase 3 — Step 1, and Phase 5. A road user cost for each of these has been estimated for typical weekdays, Saturdays, and Sundays.

The delays on the frontage road and surface street system are minimal when compared to those that will be experienced on the freeway mainlanes. The narrow lanes and alignment changes at the I-45/Rankin interchange will cause some additional delays to motorists, however, the number of available traffic lanes at the intersection will not change. Adjusting the signal timing will aid in reducing any excess queuing. The closure of the existing Airtex overpass will cause additional delays and inconvenience to motorists for selected movements. Road user cost estimates for each of these six movements are provided in this analysis.

### **Traffic Demands**

A major input to the road user cost determination is the availability of traffic demands within the area. This analysis requires freeway mainlane and ramp volume data, intersection approach volumes, and turning movement demands at major intersections within the project corridor. To facilitate the calculation of road user costs, TTI completed the necessary traffic volume studies. The studies were completed in July 1993 as described below:

- **Freeway Mainlane Volumes** — A 24-hour study was completed at FM 1960. These demands were used as the basis for the freeway volume flowcharts. Previous studies near Greens Road were used to adjust the weekday demands to Saturday and Sunday volumes.
- **Freeway Ramp/Frontage Road Demands** — All freeway entrance/exit ramps and the adjacent frontage roads from FM 1960 to Greens Road were counted for a six-day period.
- **Truck Percentages** — A manual freeway mainlane count at FM 1960 was completed during the peak periods for estimates of truck percentages.

to the access roads leading to the overpass and turning movement counts. These estimates were completed for weekday and weekend traffic patterns.

The delay calculations are based upon an estimate of travel time to complete the detoured movement and any additional delay at signalized intersections. For example, the delay for Movement 1 was determined as follows:

- Freeway mainlane travel to Richey exit at 55 mph;
- Crossing the Richey overpass at 35 mph; and
- SB frontage road travel to Airtex at 45 mph.

Similar estimation procedures were completed for the other five movements.

Table 1 presents the delay estimates for each of the six assumed diverted movements. Since this only included the additional travel required, these delays are the additional delay as a result of the closure of the Airtex overpass. These values are included in the user cost estimate in another section of this report.

**Table 1. Estimated Delays Due to Airtex Overpass Structure**

Detour Movement	Travel Time (min)	Total Daily Delay (vehicle-hours)		
		Weekday	Saturday	Sunday
1	3.49	104.0	82.8	59.2
2	3.50	117.2	81.9	58.6
3	3.77	40.8	32.5	23.2
4	2.97	46.5	37.0	26.4
5	3.39	153.3	107.1	76.7
6	3.62	139.5	97.4	69.7
Total	—	601.3	438.7	313.8

### **Delay Analysis — Freeway Mainlanes**

In order to evaluate the impacts of the construction on the traffic on the freeway mainlane traffic, the FREQ10PC simulation model was used. The FREQ10PC model was used to simulate freeway operations for four phases of the I-45 construction project. The computer program allows simulation of 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 to the model includes geometric and traffic demand 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 weekday, Saturday, and Sunday traffic conditions for the freeway section between Greens Road and FM 1960. 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 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 due to 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.

Table 2 presents the results of this analysis for the section of I-45 North Freeway between Greens Road and FM 1960. The table presents the freeway delay measures for existing (pre-construction) and selected construction phases for typical weekdays, Saturdays, and Sundays.

**Table 2. Estimated Delays Due to Reduced Freeway Capacity**

Construction Activity	Total Daily Delay (veh-hrs)		
	Weekday	Saturday	Sunday
<b>Existing (Pre-Construction)</b>			
Northbound	347.9	40.8	29.2
Southbound	545.5	49.9	29.5
Total	893.4	90.7	58.7
<b>Phase 2 — Step 1</b>			
Northbound	782.5	528.3	55.5
Southbound	2748.2	76.8	59.0
Total	3530.7	605.1	114.5
<b>Phase 2 — Step 2</b>			
Northbound	620.9	479.0	41.9
Southbound	3517.8	97.9	43.8
Total	4138.7	576.9	85.7
<b>Phase 3 — Step 1</b>			
Northbound	824.3	527.2	46.9
Southbound	2175.8	62.3	34.7
Total	3000.1	589.5	81.6
<b>Phase 5</b>			
Northbound	665.6	498.6	47.8
Southbound	2845.8	78.7	43.9
Total	3511.4	577.3	91.7

### **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. Table 3 illustrates the CPI and value of time from 1985 to 1993. Current CPI values may be obtained from the *Wall Street Journal* or other economic publications.

Year	CPI <sup>1</sup>	Value of Time	
		Drivers <sup>2</sup>	Passenger Cars <sup>2,3</sup>
1985	322.2	\$ 8.03	\$10.04
1986	238.4	8.24	10.30
1987	240.4	8.48	10.60
1988	118.2 <sup>4</sup>	8.82	11.03
1989	124.0 <sup>4</sup>	9.26	11.58
1990	130.7 <sup>4</sup>	9.76	12.20
1991	136.2 <sup>4</sup>	10.17	12.71
1992	140.3 <sup>4</sup>	10.47	13.09
1993 <sup>5</sup>	143.1 <sup>4</sup>	10.68	13.35

Notes: <sup>1</sup> CPI values are annual percentages.

<sup>2</sup> Costs represent only value of time.

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

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

<sup>5</sup> First quarter of 1993.

### User Costs Determination

Using the differences between the delays for the existing conditions and that during construction, the additional delay to the motoring public can be estimated. Applying this additional delay to the current value of time (\$13.35/vehicle-hour), a monetary cost (road user cost) can be placed upon the motorists on the freeway mainlanes and those detoured during the closure of the Airtex overpass. Table 4 presents the road user cost estimates for typical weekdays, Saturdays, and Sundays 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 4. Total Daily Road User Cost**

Scenario	Delay Cost (veh-hrs)	User Time Cost (\$/day)
<b>WEEKDAY</b>		
M/L — Phase 2 — Step 1	2637.4	\$35,208
M/L — Phase 2 — Step 2	3245.3	43,325
M/L — Phase 3 — Step 1	2106.7	28,124
M/L — Phase 5	2618.0	34,950
Airtex Bridge Closure	601.3	8,027
<b>SATURDAY</b>		
M/L — Phase 2 — Step 1	514.4	\$ 6,867
M/L — Phase 2 — Step 2	486.2	6,491
M/L — Phase 3 — Step 1	498.8	6,659
M/L — Phase 5	486.6	6,496
Airtex Bridge Closure	438.7	5,857
<b>SUNDAY</b>		
M/L — Phase 2 — Step 1	55.8	\$ 745
M/L — Phase 2 — Step 2	27.0	360
M/L — Phase 3 — Step 1	22.9	306
M/L — Phase 5	33.0	441
Airtex Bridge Closure	313.8	4,189

The user time costs presented above may be prorated to reflect an average road user cost that can be applied to the entire construction project. Using estimated duration times for the five scenarios above, user costs were determined as: Weekday — \$30,800/day, Saturday — \$6,550, and Sunday — \$620. TxDOT typically assumes a maximum cost of \$15,000/day for liquidated damages in most roadway construction projects. It is recommended that a liquidated damage cost of \$30,800/day be used for this construction project on I-45 North. However, if TxDOT policy limits the amount to \$15,000/day, this analysis serves to justify that amount.

## **APPENDIX**

## I-45 [NORTH] NORTHBOUND MAINLANES @ FM 1960

TIME	HEAVY TRUCKS	NON-HEAVY TRUCKS	TIME	HEAVY TRUCKS	NON-HEAVY TRUCKS	TIME	HEAVY TRUCKS	NON-HEAVY TRUCKS	TIME	HEAVY TRUCKS	NON-HEAVY TRUCKS
00:00	0	0	06:00	218	34	12:00	442	38	18:00	817	33
00:15	0	0	06:15	362	29	12:15	408	41	18:15	839	37
00:30	0	0	06:30	452	32	12:30	371	37	18:30	793	43
00:45	0	0	06:45	472	31	12:45	339	41	18:45	714	36
01:00	0	0	07:00	416	30	13:00	0	0	19:00	0	0
01:15	0	0	07:15	487	23	13:15	0	0	19:15	0	0
01:30	0	0	07:30	501	17	13:30	0	0	19:30	0	0
01:45	0	0	07:45	557	15	13:45	0	0	19:45	0	0
02:00	0	0	08:00	522	17	14:00	0	0	20:00	0	0
02:15	0	0	08:15	476	21	14:15	0	0	20:15	0	0
02:30	0	0	08:30	444	26	14:30	0	0	20:30	0	0
02:45	0	0	08:45	435	27	14:45	0	0	20:45	0	0
03:00	0	0	09:00	0	0	15:00	0	0	21:00	0	0
03:15	0	0	09:15	0	0	15:15	0	0	21:15	0	0
03:30	0	0	09:30	0	0	15:30	0	0	21:30	0	0
03:45	0	0	09:45	0	0	15:45	0	0	21:45	0	0
04:00	0	0	10:00	0	0	16:00	693	28	22:00	0	0
04:15	0	0	10:15	0	0	16:15	782	21	22:15	0	0
04:30	0	0	10:30	0	0	16:30	831	27	22:30	0	0
04:45	0	0	10:45	0	0	16:45	879	30	22:45	0	0
05:00	0	0	11:00	379	33	17:00	930	32	23:00	0	0
05:15	0	0	11:15	408	41	17:15	988	31	23:15	0	0
05:30	0	0	11:30	451	47	17:30	993	27	23:30	0	0
05:45	0	0	11:45	486	51	17:45	948	33	23:45	0	0
<b>SUMMARY TOTALS</b>											
<b>NON-TRK</b>											
<b>TRUCKS</b>											
<b>TOTAL</b>											
<b>% TRKS</b>											

NOTE : HEAVY TRUCKS DESIGNATE 18-WHEELERS ONLY  
NON-TRUCKS REPRESENT ALL OTHER VEHICLES

COUNT DATES: 6:00 - 9:00 --> 7/14/1993  
11:00 - 13:00 --> 7/14/1993  
16:00 - 19:00 --> 7/14/1993

AM PEAK HOUR = 7:15- 8:15 ==>  
PM PEAK HOUR = 17:00-18:00 ==>  
SOURCE : TEXAS TRANSPORTATION INSTITUTE MANUAL COUNTS

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06:00-09:00 ==>  
16:00-19:00 ==>  
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2067 72 2139 3.37  
5342 302 5644 5.35  
10207 378 10585 3.57  
3859 123 3982 3.09

## I-45 NORTH FREEWAY NORTHBOUND -- GREENS TO FM 1960 -- TYPICAL SATURDAY

SOURCE: TEXAS TRANSPORTATION INSTITUTE -- JULY 1993

TIME (Begin)	GREENS Entry M/L	RANKIN Exit M/L	RANKIN Entry M/L	AIRTEX Exit M/L	AIRTEX Entry M/L	RICHIEY Exit M/L	RICHIEY Entry M/L	FM 1960 Exit M/L	*M/L*
12:00 AM	1994	95	2089	400	1689	100	1789	110	1679
1:00 AM	1385	45	1430	237	1193	81	1274	53	1221
2:00 AM	1244	53	1297	222	1075	87	1162	50	1112
3:00 AM	714	32	746	119	627	22	649	35	614
4:00 AM	534	21	555	72	483	34	517	16	501
5:00 AM	668	33	701	95	606	50	656	19	637
6:00 AM	1459	59	1518	216	1302	77	1379	43	1336
7:00 AM	1997	134	2131	345	1786	131	1917	76	1841
8:00 AM	2206	143	2349	363	1986	147	2133	145	1988
9:00 AM	2718	225	2943	478	2465	163	2628	220	2408
10:00 AM	3275	334	3609	540	3069	193	3262	325	2937
11:00 AM	3462	488	3950	654	3296	388	3684	449	3235
12:00 PM	4038	510	4548	675	3873	521	4394	767	3627
1:00 PM	5045	605	5650	709	4941	335	5276	1334	3942
2:00 PM	4645	628	5273	771	4502	373	4875	919	3956
3:00 PM	4737	648	5385	765	4620	480	5100	788	4312
4:00 PM	4528	653	5181	837	4344	402	4746	801	3945
5:00 PM	3745	591	4336	758	3578	475	4053	522	3531
6:00 PM	3681	518	4199	723	3476	377	3853	456	3397
7:00 PM	3407	479	3886	632	3254	202	3656	346	3110
8:00 PM	2938	406	3344	611	2733	166	2899	220	2679
9:00 PM	3015	406	3421	640	2781	193	2974	190	2784
10:00 PM	2984	183	3167	711	2456	126	2582	145	2437
11:00 PM	2281	138	2419	528	1891	132	2023	125	1898
24 HOURS	66700	7427	74127	12101	62026	5255	67281	8154	59127

-45 NORTH FREEWAY NORTHBOUND -- GREENS TO FM 1960 -- TYPICAL WEEKDAY  
 SOURCE: TEXAS TRANSPORTATION INSTITUTE -- JULY 1993

TIME (Begin)	GREENS Entry	RANKIN Exit	M/L	M/L	M/L	M/L	M/L	M/L	M/L	RICHEY Entry	RICHEY Exit	M/L	M/L	*M/L*	
12:00 AM	924	154	1078	226	852	66	918	46	872	9	881	64	817	34	851
1:00 AM	654	99	753	125	628	48	676	23	653	5	658	39	619	11	630
2:00 AM	636	65	701	116	585	48	633	25	608	4	612	28	584	4	588
3:00 AM	427	49	476	66	410	18	428	12	416	2	418	35	383	6	389
4:00 AM	437	43	480	50	430	30	460	8	452	4	456	27	429	9	438
5:00 AM	936	45	981	168	813	60	873	37	836	11	847	68	779	29	808
6:00 AM	2639	124	2763	419	2344	141	2485	183	2302	19	2321	196	2125	46	2171
7:00 AM	3801	315	4116	717	3399	202	3601	378	3223	59	3282	401	2881	109	2990
8:00 AM	3483	275	3758	646	3112	199	3311	336	2975	49	3024	296	2728	108	2836
9:00 AM	3368	257	3625	653	2972	203	3175	295	2880	39	2919	337	2582	105	2687
10:00 AM	3420	340	3760	643	3117	203	3320	340	2980	46	3026	301	2725	157	2882
11:00 AM	3820	559	4379	717	3662	267	3929	477	3452	72	3524	439	3085	176	3261
12:00 PM	4006	665	4671	845	3826	248	4074	546	3528	88	3616	495	3121	212	3333
1:00 PM	4272	663	4935	821	4114	287	4401	677	3724	78	3802	497	3305	274	3579
2:00 PM	4519	751	5270	920	4350	409	4759	824	3935	84	4019	501	3518	282	3800
3:00 PM	5157	788	5945	997	4948	438	5386	679	4707	81	4788	602	4186	261	4447
4:00 PM	5950	1040	6990	1060	5930	491	6421	1203	5218	108	5326	849	4477	328	4805
5:00 PM	6006	1345	7351	994	6357	545	6902	1549	5353	134	5487	1068	4419	287	4706
6:00 PM	5644	849	6493	1047	5446	450	5896	921	4975	95	5070	809	4261	267	4528
7:00 PM	4348	516	4864	842	4022	228	4250	439	3811	93	3904	518	3386	314	3700
8:00 PM	3095	503	3598	686	2912	214	3126	278	2848	75	2923	286	2637	165	2802
9:00 PM	3162	440	3602	730	2872	201	3073	207	2866	66	2932	244	2688	155	2843
10:00 PM	2509	292	2801	639	2162	159	2321	161	2160	51	2211	196	2015	154	2169
11:00 PM	1825	199	2024	475	1549	117	1666	105	1561	32	1593	131	1462	74	1536
24 HOURS	75038	10376	85414	14602	70812	5272	76084	9749	66335	1304	67639	8427	59212	3567	62779

-45 NORTH FREEWAY NORTHBOUND -- GREENS TO FM 1960 -- TYPICAL SUNDAY  
 SOURCE: TEXAS TRANSPORTATION INSTITUTE -- JULY 1993

TIME (Begin)	GREENS Entry M/L	RANKIN Exit M/L	AIRTEX Entry M/L	AIRTEX Exit M/L	RICHET Entry M/L	RICHET Exit M/L	FM 1960 Exit M/L	*M/L*
12:00 AM	1823	77	1900	399	1501	83	1584	73
1:00 AM	1222	149	1371	210	1161	70	1231	44
2:00 AM	1244	58	1302	239	1063	65	1128	55
3:00 AM	647	35	682	151	531	20	551	24
4:00 AM	484	17	501	74	427	22	449	16
5:00 AM	410	18	428	56	372	36	408	13
6:00 AM	762	40	802	121	681	41	722	29
7:00 AM	919	67	986	159	827	59	886	30
8:00 AM	994	84	1078	147	931	83	1014	47
9:00 AM	1491	132	1623	186	1437	87	1524	71
10:00 AM	2021	184	2205	299	1906	138	2044	133
11:00 AM	2486	220	2706	364	2342	154	2496	224
12:00 PM	3091	312	3403	477	2926	365	3291	344
1:00 PM	3532	390	3922	566	3356	552	3908	685
2:00 PM	3887	394	4281	572	3709	461	4170	842
3:00 PM	4127	339	4466	605	3861	580	4441	932
4:00 PM	3913	521	4434	671	3763	315	4078	656
5:00 PM	2816	594	3410	646	2764	271	3035	391
6:00 PM	2491	456	2947	605	2342	177	2519	282
7:00 PM	2413	300	2713	584	2129	173	2302	212
8:00 PM	2403	151	2554	539	2015	166	2181	183
9:00 PM	3355	166	3521	524	2997	168	3165	149
10:00 PM	2378	145	2523	431	2092	145	2237	103
11:00 PM	1638	67	1705	349	1356	75	1431	88
24 HOURS	50547	4916	55463	8974	46489	4306	50795	45169

## TEXAS TRANSPORTATION INSTITUTE

## WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : I-45 NB GREENS ENTRY  
 DATE : 7- 6-1993 DIRECTION OF FLOW : I-45 NB  
 CHANNEL : THIS IS 1 OF 2 SITE NO : 30314453

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 6	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
<hr/>									
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	48	-	324	189	54	95	77	154	131
1- 2	25	-	239	102	30	45	149	99	98
2- 3	16	-	156	64	23	53	58	65	62
3- 4	13	-	135	22	27	32	35	49	44
4- 5	21	-	101	31	19	21	17	43	35
5- 6	33	-	75	47	26	33	18	45	39
6- 7	112	-	175	115	96	59	40	124	99
7- 8	199	-	402	459	200	134	67	315	243
8- 9	270	-	324	296	211	143	84	275	221
9-10	259	-	290	233	248	225	132	257	231
10-11	-	-	331	311	378	334	184	340	308
11-12	-	-	572	534	572	488	220	559	477
12-13	-	-	755	570	671	510	312	665	564
13-14	-	-	676	628	684	605	390	663	597
14-15	-	819	840	690	657	628	394	751	671
15-16	-	921	722	706	805	648	339	788	690
16-17	-	1058	1133	988	983	653	521	1040	889
17-18	-	1564	1513	1217	1088	591	594	1345	1094
18-19	-	1022	854	786	735	518	456	849	728
19-20	-	459	539	512	554	479	300	516	474
20-21	-	638	500	443	431	406	151	503	428
21-22	-	495	435	398	432	406	166	440	389
22-23	-	370	417	162	221	183	145	292	250
23-24	-	288	250	98	161	138	67	199	167
<hr/>									
AM PEAK (6-9) VOLUME:	581	-	901	870	507	336	191	715	564
AM PEAK HIGHEST HOUR:	270	-	572	534	572	488	220	559	477
PM PEAK (3-6) VOLUME:	-	3543	3368	2911	2876	1892	1454	3174	2674
PM PEAK HIGHEST HOUR:	-	1564	1513	1217	1088	653	594	1345	1094
DAILY TOTAL:	996 +	7634 +	11758	9601	9306	7427	4916	10381	8930

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

## WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : I-45 NB FR AFTER GREENS ENTRY  
 DATE : 7- 6-1993 DIRECTION OF FLOW : I-45 NB FR  
 CHANNEL : THIS IS 2 OF 2 SITE NO : 30314453

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 6	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
<hr/>									
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	42	-	33	23	39	62	76	34	46
1- 2	10	-	23	21	27	29	81	20	32
2- 3	17	-	16	24	23	35	39	20	26
3- 4	6	-	6	17	12	24	28	10	15
4- 5	7	-	16	14	20	5	9	14	12
5- 6	27	-	28	35	23	14	10	28	23
6- 7	49	-	48	50	46	48	15	48	43
7- 8	113	-	172	179	117	84	25	145	115
8- 9	153	-	403	207	144	123	44	227	179
9-10	205	-	255	203	208	161	64	218	183
10-11	-	-	261	220	228	225	102	236	207
11-12	-	-	310	290	301	391	108	300	280
12-13	-	-	391	344	366	358	258	367	343
13-14	-	-	373	345	354	286	308	357	333
14-15	-	355	363	329	363	264	561	352	372
15-16	-	337	383	324	329	260	531	343	361
16-17	-	316	493	316	374	266	297	375	344
17-18	-	510	551	390	417	223	197	467	381
18-19	-	420	450	315	393	231	186	394	332
19-20	-	225	238	210	272	182	139	236	211
20-21	-	294	298	184	204	164	118	245	210
21-22	-	220	210	186	215	165	109	208	184
22-23	-	102	87	105	128	112	82	105	103
23-24	-	63	62	70	93	79	43	72	68
<hr/>									
AM PEAK (6-9) VOLUME:	315	-	623	436	307	255	84	420	337
AM PEAK HIGHEST HOUR:	205	-	403	290	301	391	108	300	280
PM PEAK (3-6) VOLUME:	-	1163	1427	1030	1120	749	1025	1185	1086
PM PEAK HIGHEST HOUR:	-	510	551	390	417	358	561	467	381
DAILY TOTAL:	629 +	2842 +	5470	4401	4696	3791	3430	4825	4404

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

## ===== WEEKLY VOLUME COUNT SUMMARY SHEET =====

LOCATION : I-45 NB RANKIN EXIT  
 DATE : 7- 6-1993 DIRECTION OF FLOW : I-45 NB  
 CHANNEL : THIS IS 1 OF 2 SITE NO : 30314465

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 6	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
<hr/>									
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	185	-	210	242	266	400	399	226	284
1- 2	118	-	117	124	142	237	210	125	158
2- 3	93	-	112	120	138	222	239	116	154
3- 4	80	-	50	57	79	119	151	66	89
4- 5	56	-	39	48	59	72	74	50	58
5- 6	151	-	159	181	183	95	56	168	138
6- 7	411	-	419	434	411	216	121	419	335
7- 8	677	-	801	748	642	345	159	717	562
8- 9	609	-	707	636	634	363	147	646	516
9-10	614	-	660	669	668	478	186	653	546
10-11	-	-	612	633	685	540	299	643	554
11-12	-	-	709	701	742	654	364	717	634
12-13	-	-	807	806	921	675	477	845	737
13-14	-	-	760	818	884	709	566	821	747
14-15	-	889	894	949	949	771	572	920	837
15-16	-	946	1010	988	1044	765	605	997	893
16-17	-	999	1086	1074	1081	837	671	1060	958
17-18	-	959	1122	938	956	758	646	994	896
18-19	-	970	1113	1058	1047	723	605	1047	919
19-20	-	792	852	890	835	632	584	842	764
20-21	-	654	697	695	700	611	539	686	649
21-22	-	674	713	807	728	640	524	730	681
22-23	-	541	639	680	695	711	431	639	616
23-24	-	390	467	449	595	528	349	475	463
<hr/>									
AM PEAK (6-9) VOLUME:	1697	-	1927	1818	1687	924	427	1782	1413
AM PEAK HIGHEST HOUR:	677	-	801	748	742	654	399	717	634
PM PEAK (3-6) VOLUME:	-	2904	3218	3000	3081	2360	1922	3051	2747
PM PEAK HIGHEST HOUR:	-	999	1122	1074	1081	837	671	1060	958
DAILY TOTAL:	2994 +	7814 +	14755	14745	15084	12101	8974	14604	13190

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

## ===== WEEKLY VOLUME COUNT SUMMARY SHEET =====

LOCATION : I-45 NB FR B4 RANKIN <sup>EXIT</sup> ENTRY  
 DATE : 7- 6-1993 DIRECTION OF FLOW : I-45 NB FR  
 CHANNEL : THIS IS 2 OF 2 SITE NO : 30314465

DAY OF WEEK:	MONDAY GOOD	TUESDAY GOOD	WEDNESDAY GOOD	THURSDAY GOOD	FRIDAY GOOD	SATURDAY GOOD	SUNDAY GOOD	5 - DAY AVERAGE	7 - DAY AVERAGE
WEATHER	7 / 12	7 / 6	7 / 7	7 / 8	7 / 9	7 / 10	7 / 11		

TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	32	-	28	28	30	53	69	29	40
1- 2	12	-	12	17	16	23	79	14	26
2- 3	16	-	13	15	20	30	28	16	20
3- 4	7	-	6	12	14	26	26	10	15
4- 5	3	-	13	9	15	8	7	10	9
5- 6	37	-	25	31	22	16	12	29	24
6- 7	81	-	82	84	88	50	20	84	67
7- 8	116	-	152	164	131	92	19	141	112
8- 9	142	-	176	177	152	131	53	162	138
9-10	199	-	220	206	220	156	66	211	178
10-11	-	-	233	240	244	240	103	239	212
11-12	-	-	319	315	341	407	112	325	299
12-13	-	-	368	365	452	424	414	395	405
13-14	-	-	335	377	452	354	528	388	409
14-15	-	322	303	375	399	395	1034	350	471
15-16	-	310	363	403	462	358	1065	384	493
16-17	-	327	519	514	559	317	498	480	456
17-18	-	562	778	535	542	277	217	604	485
18-19	-	411	502	310	446	252	188	417	351
19-20	-	207	231	218	229	178	133	221	199
20-21	-	158	185	175	260	164	114	194	176
21-22	-	148	178	166	235	155	103	182	164
22-23	-	83	72	96	115	106	71	91	90
23-24	-	60	51	62	79	64	35	63	58

AM PEAK (6-9) VOLUME:	339	-	410	425	371	273	92	386	318
AM PEAK HIGHEST HOUR:	199	-	319	315	341	407	112	325	299
PM PEAK (3-6) VOLUME:	-	1199	1660	1452	1563	952	1780	1468	1434
PM PEAK HIGHEST HOUR:	-	562	778	535	559	424	1065	604	493
DAILY TOTAL:	645 +	2588 +	5164	4894	5523	4276	4994	5040	4901

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

## ===== WEEKLY VOLUME COUNT SUMMARY SHEET =====

LOCATION : I-45 NB RANKIN ENTRY  
 DATE : 7- 6-1993 DIRECTION OF FLOW : I-45 NB  
 CHANNEL : THIS IS 1 OF 2 SITE NO : 30314157

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 6	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
<hr/>									
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	41	-	78	71	73	100	83	66	74
1- 2	25	-	50	61	56	81	70	48	57
2- 3	22	-	41	55	74	87	65	48	57
3- 4	16	-	17	13	26	22	20	18	19
4- 5	29	-	29	27	34	34	22	30	29
5- 6	50	-	57	60	74	50	36	60	54
6- 7	155	-	130	138	141	77	41	141	114
7- 8	222	-	176	207	205	131	59	202	167
8- 9	185	-	220	191	199	147	83	199	171
9-10	191	-	208	193	219	163	87	203	177
10-11	-	-	197	222	191	193	138	203	188
11-12	-	-	253	247	302	388	154	267	269
12-13	-	-	234	216	295	521	365	248	326
13-14	-	-	222	220	420	335	552	287	350
14-15	-	299	429	425	483	373	461	409	412
15-16	-	589	340	372	453	480	580	438	469
16-17	-	472	476	462	554	402	315	491	447
17-18	-	524	630	463	562	475	271	545	488
18-19	-	589	246	441	526	377	177	450	393
19-20	-	221	229	215	249	202	173	228	215
20-21	-	204	197	208	248	166	166	214	198
21-22	-	175	174	216	240	193	168	201	194
22-23	-	141	164	156	176	126	145	159	151
23-24	-	86	105	120	159	132	75	117	113
<hr/>									
AM PEAK (6-9) VOLUME:	562	-	526	536	545	355	183	542	451
AM PEAK HIGHEST HOUR:	222	-	253	247	302	388	154	267	269
PM PEAK (3-6) VOLUME:	-	1585	1446	1297	1569	1357	1166	1474	1403
PM PEAK HIGHEST HOUR:	-	589	630	463	562	521	580	545	488
DAILY TOTAL:	936 +	3300 +	4902	4999	5959	5255	4306	5276	5132

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

## ===== WEEKLY VOLUME COUNT SUMMARY SHEET =====

LOCATION : I-45 NB FR AFTER RANKIN ENTRY  
 DATE : 7- 6-1993 DIRECTION OF FLOW : I-45 NB FR  
 CHANNEL : THIS IS 2 OF 2 SITE NO : 30314157

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 6	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
<hr/>									
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	16	-	14	21	14	29	26	16	20
1- 2	11	-	6	12	12	18	26	10	14
2- 3	8	-	9	5	16	17	25	9	13
3- 4	5	-	3	6	5	9	8	5	6
4- 5	8	-	5	4	7	6	4	6	6
5- 6	20	-	18	14	12	4	6	16	12
6- 7	80	-	79	68	69	28	17	74	57
7- 8	108	-	102	122	107	73	24	110	89
8- 9	131	-	153	124	136	81	24	136	108
9-10	183	-	165	180	168	107	48	174	142
10-11	-	-	147	162	194	146	75	168	145
11-12	-	-	247	225	231	192	83	234	196
12-13	-	-	210	225	210	223	167	215	207
13-14	-	-	238	231	214	334	220	228	247
14-15	-	210	309	404	461	220	328	346	322
15-16	-	305	404	297	260	189	252	316	284
16-17	-	555	291	302	312	169	175	365	301
17-18	-	747	651	431	502	139	126	583	433
18-19	-	281	375	376	232	129	77	316	245
19-20	-	151	142	148	127	110	90	142	128
20-21	-	100	100	99	133	79	60	108	95
21-22	-	85	70	62	83	49	54	75	67
22-23	-	40	35	39	51	57	32	41	42
23-24	-	26	25	31	44	38	28	31	32
<hr/>									
AM PEAK (6-9) VOLUME:	319	-	334	314	312	182	65	320	254
AM PEAK HIGHEST HOUR:	183	-	247	225	231	192	83	234	196
PM PEAK (3-6) VOLUME:	-	1607	1346	1030	1074	497	553	1264	1018
PM PEAK HIGHEST HOUR:	-	747	651	431	502	334	328	583	433
DAILY TOTAL:	570 +	2500 +	3798	3588	3600	2446	1975	3725	3212

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

## WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : I-45 NB ARITEX EXIT  
 DATE : 7- 6-1993 DIRECTION OF FLOW : I-45 NB  
 CHANNEL : THIS IS 1 OF 2 SITE NO : 30314156

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 6	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	42	-	47	46	49	110	73	46	61
1- 2	20	-	22	18	33	53	44	23	32
2- 3	17	-	27	26	31	50	55	25	34
3- 4	8	-	14	16	10	35	24	12	18
4- 5	6	-	9	6	11	16	16	8	11
5- 6	38	-	32	35	42	19	13	37	30
6- 7	192	-	181	180	181	43	29	183	134
7- 8	401	-	399	356	356	76	30	378	270
8- 9	340	-	361	287	357	145	47	336	256
9-10	295	-	356	265	266	220	71	295	245
10-11	-	-	374	332	313	325	133	340	295
11-12	-	-	474	418	538	449	224	477	421
12-13	-	-	491	508	640	767	344	546	550
13-14	-	-	475	524	1032	1334	685	677	810
14-15	-	-	477	603	1392	919	842	824	847
15-16	-	487	539	728	963	788	932	679	739
16-17	-	815	1178	1425	1393	801	656	1203	1045
17-18	-	1502	1354	1851	1488	522	391	1549	1185
18-19	-	776	1001	987	919	456	282	921	737
19-20	-	411	420	506	421	346	212	439	386
20-21	-	254	242	317	299	220	183	278	252
21-22	-	192	233	206	198	190	149	207	195
22-23	-	147	144	186	168	145	103	161	149
23-24	-	86	91	95	148	125	88	105	105
AM PEAK (6-9) VOLUME:	933	-	941	823	894	264	106	898	660
AM PEAK HIGHEST HOUR:	401	-	474	418	538	449	224	477	421
PM PEAK (3-6) VOLUME:	-	2804	3071	4004	3844	2111	1979	3431	2969
PM PEAK HIGHEST HOUR:	-	1502	1354	1851	1488	1334	932	1549	1185
DAILY TOTAL:	1359 +	4670 +	8941	9921	11248	8154	5626	9751	8807

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

=====  
WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : I-45 NB FR B4 AIRTEX EXIT  
 DATE : 7- 6-1993 DIRECTION OF FLOW : I-45 NB FR  
 CHANNEL : THIS IS 2 OF 2 SITE NO : 30314156

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 6	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
<hr/>									
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	18	-	12	24	15	32	30	17	22
1- 2	12	-	8	12	12	18	24	11	14
2- 3	7	-	9	5	15	18	24	9	13
3- 4	7	-	4	5	4	9	10	5	7
4- 5	8	-	4	6	7	7	6	6	6
5- 6	16	-	17	11	12	3	6	14	11
6- 7	73	-	66	62	61	27	14	65	50
7- 8	96	-	108	118	108	64	25	107	86
8- 9	145	-	152	168	146	96	21	153	121
9-10	181	-	198	181	187	97	46	187	148
10-11	-	-	171	197	223	154	65	197	162
11-12	-	-	255	287	275	176	87	272	216
12-13	-	-	227	250	211	235	146	229	214
13-14	-	-	260	252	240	212	189	251	231
14-15	-	-	278	284	284	206	243	282	259
15-16	-	236	238	311	270	196	255	264	251
16-17	-	289	300	349	318	148	163	314	261
17-18	-	400	512	451	505	143	129	467	357
18-19	-	299	483	240	242	123	82	316	245
19-20	-	155	158	161	137	123	89	153	137
20-21	-	112	115	91	127	81	62	111	98
21-22	-	87	74	82	96	48	57	85	74
22-23	-	42	37	37	53	65	34	42	45
23-24	-	32	21	34	46	36	28	33	33
<hr/>									
AM PEAK (6-9) VOLUME:	314	-	326	348	315	187	60	326	258
AM PEAK HIGHEST HOUR:	181	-	255	287	275	176	87	272	216
PM PEAK (3-6) VOLUME:	-	925	1050	1111	1093	487	547	1045	869
PM PEAK HIGHEST HOUR:	-	400	512	451	505	235	255	467	357
DAILY TOTAL:	563 +	1652 +	3707	3618	3594	2317	1835	3591	3061

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

## ===== WEEKLY VOLUME COUNT SUMMARY SHEET =====

LOCATION : \*\* I-45 NB AIRTEX ENTRY

DATE : 7- 6-1993

DIRECTION OF FLOW : I-45 NB

CHANNEL: THIS IS 1 OF 2

SITE NO : 6190017

DAY OF WEEK: WEATHER	MONDAY GOOD 7 / 12	TUESDAY GOOD 7 / 6	WEDNESDAY GOOD 7 / 7	THURSDAY GOOD 7 / 8	FRIDAY GOOD 7 / 9	SATURDAY GOOD 7 / 10	SUNDAY GOOD 7 / 11	5 - DAY AVERAGE	7 - DAY AVERAGE
	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	9	-	-	-	-	11	21	9	14
1- 2	5	-	-	-	-	16	13	5	11
2- 3	4	-	-	-	-	10	8	4	7
3- 4	2	-	-	-	-	8	3	2	4
4- 5	4	-	-	-	-	4	2	4	3
5- 6	11	-	-	-	-	6	4	11	7
6- 7	19	-	-	-	-	7	5	19	10
7- 8	59	-	-	-	-	31	20	59	37
8- 9	49	-	-	-	-	38	17	49	35
9-10	39	-	-	-	-	34	29	39	34
10-11	-	-	-	-	46	59	30	46	45
11-12	-	-	-	-	72	64	37	72	58
12-13	-	-	-	-	88	69	68	88	75
13-14	-	-	-	-	78	99	89	78	89
14-15	-	-	-	-	84	84	95	84	88
15-16	-	-	-	-	81	100	114	81	98
16-17	-	-	-	-	108	116	129	108	118
17-18	-	-	-	-	134	88	108	134	110
18-19	-	-	-	-	95	63	88	95	82
19-20	-	-	-	-	93	124	87	93	101
20-21	-	-	-	-	75	65	47	75	62
21-22	-	-	-	-	66	75	48	66	63
22-23	-	-	-	-	51	51	27	51	43
23-24	-	-	-	-	32	35	19	32	29
AM PEAK (6-9) VOLUME:	127	-	-	-	-	76	42	127	82
AM PEAK HIGHEST HOUR:	59	-	-	-	72	64	37	72	58
PM PEAK (3-6) VOLUME:	-	-	-	-	323	304	351	323	326
PM PEAK HIGHEST HOUR:	-	-	-	-	134	124	129	134	118
DAILY TOTAL:	201 +	-	-	-	1103 +	1257	1108	1304	1223

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

=====  
WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : I-45 NB FR AFTER AIRTEX ENTRY  
 DATE : 7- 6-1993 DIRECTION OF FLOW : I-45 NB FR  
 CHANNEL : THIS IS 2 OF 2 SITE NO : 6190017

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 6	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
<hr/>									
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	29	-	21	30	25	60	53	26	36
1- 2	18	-	13	11	20	25	23	15	18
2- 3	12	-	20	14	28	23	30	18	21
3- 4	10	-	8	14	7	13	13	10	11
4- 5	8	-	5	4	13	15	11	8	9
5- 6	21	-	24	25	22	10	10	23	19
6- 7	192	-	199	198	191	40	25	195	141
7- 8	330	-	302	291	301	94	31	306	225
8- 9	272	-	285	230	295	139	40	270	210
9-10	248	-	310	235	236	168	71	257	211
10-11	-	-	299	257	279	224	103	278	232
11-12	-	-	368	362	376	266	180	369	310
12-13	-	-	391	413	440	374	258	415	375
13-14	-	-	420	436	457	347	310	438	394
14-15	-	-	423	354	469	355	369	415	394
15-16	-	370	381	424	412	357	388	397	389
16-17	-	460	529	531	593	360	289	528	460
17-18	-	724	838	759	958	388	301	820	661
18-19	-	585	786	516	602	342	217	622	508
19-20	-	342	297	399	366	338	215	351	326
20-21	-	231	212	239	290	209	151	243	222
21-22	-	153	193	183	209	186	113	184	173
22-23	-	94	97	101	131	120	105	106	108
23-24	-	72	55	60	99	84	53	71	70
<hr/>									
AM PEAK (6-9) VOLUME:	794	-	786	719	787	273	96	771	576
AM PEAK HIGHEST HOUR:	330	-	368	362	376	266	180	369	310
PM PEAK (3-6) VOLUME:	-	1554	1748	1714	1963	1105	978	1745	1510
PM PEAK HIGHEST HOUR:	-	724	838	759	958	388	388	820	661
DAILY TOTAL:	1140 +	3031 +	6476	6086	6819	4537	3359	6367	5526

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

## WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : I-45 NB RICHEY EXIT  
 DATE : 7-6-1993 DIRECTION OF FLOW : I-45 NB  
 CHANNEL : THIS IS 1 OF 2 SITE NO : 3310776

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 6	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	48	-	72	62	74	133	99	64	81
1- 2	39	-	35	40	42	67	86	39	51
2- 3	20	-	29	30	35	60	73	28	41
3- 4	28	-	35	27	50	33	35	35	35
4- 5	30	-	31	23	23	28	17	27	25
5- 6	65	-	69	69	68	37	23	68	55
6- 7	206	-	221	201	156	75	33	196	149
7- 8	358	-	461	470	317	158	60	401	304
8- 9	276	-	316	308	286	156	63	296	234
9-10	345	-	375	367	262	210	91	337	275
10-11	-	-	298	318	287	263	147	301	263
11-12	-	-	471	448	399	374	192	439	377
12-13	-	-	447	522	516	399	319	495	441
13-14	-	-	471	483	537	481	402	497	475
14-15	-	-	490	489	524	449	357	501	462
15-16	-	561	646	568	632	529	376	602	552
16-17	-	824	869	856	848	614	458	849	745
17-18	-	1164	1065	1043	1002	477	379	1068	855
18-19	-	915	740	841	742	397	290	809	654
19-20	-	611	477	464	521	399	281	518	459
20-21	-	270	316	299	261	201	173	286	253
21-22	-	223	251	256	247	225	178	244	230
22-23	-	181	196	192	215	203	184	196	195
23-24	-	104	124	118	177	109	107	131	123
AM PEAK (6-9) VOLUME:	840	-	998	979	759	389	156	894	687
AM PEAK HIGHEST HOUR:	358	-	471	470	399	374	192	439	377
PM PEAK (3-6) VOLUME:	-	2549	2580	2467	2482	1620	1213	2519	2152
PM PEAK HIGHEST HOUR:	-	1164	1065	1043	1002	614	458	1068	855
DAILY TOTAL:	1415 +	4853 +	8505	8494	8221	6077	4423	8430	7334

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

## ===== WEEKLY VOLUME COUNT SUMMARY SHEET =====

LOCATION : I-45 NB FR B4 RICHEY EXIT  
 DATE : 7- 6-1993 DIRECTION OF FLOW : I-45 NB FR  
 CHANNEL : THIS IS 2 OF 2 SITE NO : 3310776

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 6	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
<hr/>									
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	37	-	27	33	26	58	52	31	39
1- 2	21	-	17	11	20	35	37	17	23
2- 3	13	-	15	21	25	27	28	18	21
3- 4	12	-	7	6	11	14	11	9	10
4- 5	7	-	3	4	12	12	14	7	9
5- 6	15	-	20	17	14	10	9	16	14
6- 7	58	-	56	58	57	29	15	57	45
7- 8	103	-	115	110	120	66	27	112	90
8- 9	143	-	174	149	151	87	37	154	123
9-10	207	-	215	173	195	141	58	197	165
10-11	-	-	257	207	248	185	112	237	202
11-12	-	-	356	299	333	230	158	329	275
12-13	-	-	389	418	435	325	237	414	361
13-14	-	-	425	445	437	356	283	436	389
14-15	-	-	364	309	405	383	358	359	364
15-16	-	364	378	396	421	349	367	390	379
16-17	-	448	528	546	570	360	292	523	457
17-18	-	700	824	758	920	341	253	800	633
18-19	-	542	668	442	521	327	185	543	447
19-20	-	332	323	349	344	314	195	337	309
20-21	-	236	254	266	272	234	167	257	238
21-22	-	230	249	275	252	191	150	251	224
22-23	-	133	143	147	181	160	128	151	149
23-24	-	107	83	63	143	107	48	99	92
<hr/>									
AM PEAK (6-9) VOLUME:	304	-	345	317	328	182	79	323	259
AM PEAK HIGHEST HOUR:	207	-	356	299	333	230	158	329	275
PM PEAK (3-6) VOLUME:	-	1512	1730	1700	1911	1050	912	1713	1469
PM PEAK HIGHEST HOUR:	-	700	824	758	920	383	367	800	633
DAILY TOTAL:	616 +	3092 +	5890	5502	6113	4341	3221	5747	5061

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

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## WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : \*\* I-45 NB RICHEY ENTRY  
 DATE : 7- 6-1993 DIRECTION OF FLOW : I-45 NB  
 CHANNEL: THIS IS 1 OF 2 SITE NO : 30312634

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	AVERAGE	AVERAGE
<hr/>									
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	34	-	-	-	-	89	67	34	63
1- 2	11	-	-	-	-	52	30	11	31
2- 3	4	-	-	-	-	21	18	4	14
3- 4	6	-	-	-	-	16	11	6	11
4- 5	9	-	-	-	-	18	6	9	11
5- 6	29	-	-	-	-	13	7	29	16
6- 7	46	-	-	-	-	29	15	46	30
7- 8	109	-	-	-	-	44	22	109	58
8- 9	108	-	-	-	-	73	46	108	76
9-10	105	-	-	-	-	114	54	105	91
10-11	-	-	-	-	157	162	73	157	131
11-12	-	-	-	-	176	172	99	176	149
12-13	-	-	-	-	212	280	136	212	209
13-14	-	-	-	-	274	281	217	274	257
14-15	-	-	-	-	282	287	193	282	254
15-16	-	-	-	-	261	307	254	261	274
16-17	-	-	-	-	328	357	264	328	316
17-18	-	-	-	-	287	242	201	287	243
18-19	-	-	-	-	267	243	180	267	230
19-20	-	-	-	-	314	284	169	314	256
20-21	-	-	-	-	165	131	84	165	127
21-22	-	-	-	-	155	153	96	155	135
22-23	-	-	-	-	154	160	78	154	131
23-24	-	-	-	-	74	63	15	74	51
<hr/>									
AM PEAK (6-9) VOLUME:	263	-	-	-	-	146	83	263	164
AM PEAK HIGHEST HOUR:	109	-	-	-	176	172	99	176	149
PM PEAK (3-6) VOLUME:	-	-	-	-	876	906	719	876	834
PM PEAK HIGHEST HOUR:	-	-	-	-	328	357	264	328	316
DAILY TOTAL:	461 +	-	-	-	3106 +	3591	2335	3567	3164

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

## ===== WEEKLY VOLUME COUNT SUMMARY SHEET =====

LOCATION : \*\* I-45 NB FR AFTER RICHEY ENTRY  
 DATE : 7- 6-1993 DIRECTION OF FLOW : I-45 NB  
 CHANNEL: THIS IS 2 OF 2 SITE NO : 30312634

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 6	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
<hr/>									
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	72	-	-	-	-	138	119	72	110
1- 2	44	-	-	-	-	81	86	44	70
2- 3	20	-	-	-	-	55	72	20	49
3- 4	19	-	-	-	-	24	35	19	26
4- 5	18	-	-	-	-	26	27	18	24
5- 6	37	-	-	-	-	23	19	37	26
6- 7	99	-	-	-	-	52	33	99	61
7- 8	165	-	-	-	-	127	58	165	117
8- 9	178	-	-	-	-	165	84	178	142
9-10	191	-	-	-	-	223	124	191	179
10-11	-	-	-	-	295	301	170	295	255
11-12	-	-	-	-	417	321	205	417	314
12-13	-	-	-	-	512	459	308	512	426
13-14	-	-	-	-	482	484	354	482	440
14-15	-	-	-	-	488	455	430	488	458
15-16	-	-	-	-	554	505	470	554	510
16-17	-	-	-	-	837	522	383	837	581
17-18	-	-	-	-	1281	470	361	1281	704
18-19	-	-	-	-	799	471	325	799	532
19-20	-	-	-	-	500	389	300	500	396
20-21	-	-	-	-	353	302	225	353	293
21-22	-	-	-	-	314	259	197	314	257
22-23	-	-	-	-	235	202	195	235	211
23-24	-	-	-	-	193	132	100	193	142
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AM PEAK (6-9) VOLUME:	442	-	-	-	-	344	175	442	320
AM PEAK HIGHEST HOUR:	191	-	-	-	417	321	205	417	314
PM PEAK (3-6) VOLUME:	-	-	-	-	2672	1497	1214	2672	1794
PM PEAK HIGHEST HOUR:	-	-	-	-	1281	522	470	1281	704
DAILY TOTAL:	843 +	-	-	-	7260 +	6186	4680	8103	6323

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

## WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : I-45 NB FM 1960 EXIT  
 DATE : 7-7-1993 DIRECTION OF FLOW : I-45 NB  
 CHANNEL : THIS IS 1 OF 2 SITE NO : 30312591

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 13	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	238	-	-	242	242	465	442	241	326
1- 2	154	-	-	163	156	302	307	158	216
2- 3	115	-	-	151	185	304	304	150	212
3- 4	64	-	-	80	101	168	163	82	115
4- 5	62	-	-	76	79	96	98	72	82
5- 6	132	-	-	121	146	115	94	133	122
6- 7	496	-	-	448	452	313	172	465	376
7- 8	681	-	-	731	731	493	244	714	576
8- 9	788	-	-	801	794	495	204	794	616
9-10	744	-	-	776	757	645	325	759	649
10-11	-	-	-	797	861	731	391	829	695
11-12	-	-	-	967	1030	805	514	998	829
12-13	-	-	-	941	1089	913	691	1015	908
13-14	-	-	-	1055	1098	994	787	1076	983
14-15	-	-	-	1066	1059	963	728	1063	954
15-16	-	-	1087	1172	1168	1009	753	1142	1038
16-17	-	-	1153	1224	1144	1008	801	1174	1066
17-18	-	-	1089	1014	1105	885	859	1069	990
18-19	-	-	1002	1091	1135	980	899	1076	1021
19-20	-	-	1077	976	984	865	716	1012	924
20-21	-	-	770	760	848	733	656	793	753
21-22	-	-	797	835	869	796	643	834	788
22-23	-	-	636	686	727	677	503	683	646
23-24	-	-	438	472	661	574	402	524	509
AM PEAK (6-9) VOLUME:	1965	-	-	1980	1977	1301	620	1974	1569
AM PEAK HIGHEST HOUR:	788	-	-	967	1030	805	514	998	829
PM PEAK (3-6) VOLUME:	-	-	3329	3410	3417	2902	2413	3385	3094
PM PEAK HIGHEST HOUR:	-	-	1153	1224	1168	1009	899	1174	1066
DAILY TOTAL:	3474 +	-	8049 +	16645	17421	15329	11696	16857	15397

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

## ===== WEEKLY VOLUME COUNT SUMMARY SHEET =====

LOCATION : I-45 NB FR B4 FM 1960 EXIT  
 DATE : 7-7-1993 DIRECTION OF FLOW : I-45 NB FR  
 CHANNEL : THIS IS 2 OF 2 SITE NO : 30312591

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	AVERAGE	AVERAGE
<hr/>									
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	63	-	-	63	62	112	117	63	83
1- 2	32	-	-	35	34	82	79	34	52
2- 3	29	-	-	32	51	52	62	37	45
3- 4	14	-	-	18	17	25	26	16	20
4- 5	18	-	-	24	28	26	24	23	24
5- 6	55	-	-	56	56	29	27	56	45
6- 7	148	-	-	162	147	68	45	152	114
7- 8	294	-	-	251	279	142	66	275	206
8- 9	217	-	-	250	280	197	110	249	211
9-10	249	-	-	289	285	281	180	274	257
10-11	-	-	-	291	336	401	253	313	320
11-12	-	-	-	434	471	439	308	452	413
12-13	-	-	-	510	621	532	370	565	508
13-14	-	-	-	539	578	612	446	558	544
14-15	-	-	-	448	583	557	532	515	530
15-16	-	-	580	567	620	591	580	589	588
16-17	-	-	830	852	931	632	499	871	749
17-18	-	-	1350	1301	1444	549	475	1365	1024
18-19	-	-	1028	1020	898	493	389	982	766
19-20	-	-	570	521	555	470	347	549	493
20-21	-	-	350	401	402	374	235	384	352
21-22	-	-	318	368	338	286	239	341	310
22-23	-	-	194	191	258	243	191	214	215
23-24	-	-	123	101	182	163	99	135	134
<hr/>									
AM PEAK (6-9) VOLUME:	659	-	-	663	706	407	221	676	531
AM PEAK HIGHEST HOUR:	294	-	-	434	471	439	308	452	413
PM PEAK (3-6) VOLUME:	-	-	2760	2720	2995	1772	1554	2825	2360
PM PEAK HIGHEST HOUR:	-	-	1350	1301	1444	632	580	1365	1024
DAILY TOTAL:	1119 +	-	5343 +	8724	9456	7356	5699	9016	8002

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

- --- INDICATES DATA IS UNAVAILABLE

## I-45 [NORTH] SOUTHBOUND MAINLANES @ FM 1960

TIME	NON-HEAVY TRUCKS	HEAVY TRUCKS	TIME	NON-HEAVY TRUCKS	HEAVY TRUCKS	TIME	NON-HEAVY TRUCKS	HEAVY TRUCKS	TIME	NON-HEAVY TRUCKS	HEAVY TRUCKS
00:00	0	0	06:00	905	33	12:00	515	38	18:00	576	33
00:15	0	0	06:15	974	27	12:15	483	41	18:15	561	41
00:30	0	0	06:30	1038	38	12:30	476	45	18:30	526	37
00:45	0	0	06:45	1053	35	12:45	463	49	18:45	505	46
01:00	0	0	07:00	983	34	13:00	0	0	19:00	0	0
01:15	0	0	07:15	974	30	13:15	0	0	19:15	0	0
01:30	0	0	07:30	946	28	13:30	0	0	19:30	0	0
01:45	0	0	07:45	922	27	13:45	0	0	19:45	0	0
02:00	0	0	08:00	937	25	14:00	0	0	20:00	0	0
02:15	0	0	08:15	896	31	14:15	0	0	20:15	0	0
02:30	0	0	08:30	815	40	14:30	0	0	20:30	0	0
02:45	0	0	08:45	701	51	14:45	0	0	20:45	0	0
03:00	0	0	09:00	0	0	15:00	0	0	21:00	0	0
03:15	0	0	09:15	0	0	15:15	0	0	21:15	0	0
03:30	0	0	09:30	0	0	15:30	0	0	21:30	0	0
03:45	0	0	09:45	0	0	15:45	0	0	21:45	0	0
04:00	0	0	10:00	0	0	16:00	535	47	22:00	0	0
04:15	0	0	10:15	0	0	16:15	526	36	22:15	0	0
04:30	0	0	10:30	0	0	16:30	542	40	22:30	0	0
04:45	0	0	10:45	0	0	16:45	551	42	22:45	0	0
05:00	0	0	11:00	483	45	17:00	564	38	23:00	0	0
05:15	0	0	11:15	462	37	17:15	589	43	23:15	0	0
05:30	0	0	11:30	478	42	17:30	605	37	23:30	0	0
05:45	0	0	11:45	496	40	20:08	17:45	617	25	2518	0
<b>SUMMARY TOTALS</b>											
COUNT DATES:	6:00 - 9:00 -->	7/14/1993	06:00-09:00 ==>	11144	399	11543	3.46				
	11:00 - 13:00 -->	7/14/1993	16:00-19:00 ==>	6697	465	7162	6.49				
	16:00 - 19:00 -->	7/14/1993									

NOTE: HEAVY TRUCKS DESIGNATE 18-WHEELERS ONLY  
NON-TRUCKS REPRESENT ALL OTHER VEHICLES

COUNT DATES: 6:00 - 9:00 --> 7/14/1993  
11:00 - 13:00 --> 7/14/1993  
16:00 - 19:00 --> 7/14/1993

06:00-09:00 ==> 11144  
16:00-19:00 ==> 6697

AM PEAK HOUR = 6:30- 7:30 ==>  
PM PEAK HOUR = 17:15-18:15 ==>  
SOURCE: TEXAS TRANSPORTATION INSTITUTE MANUAL COUNTS

4048 137 4185 3.27  
2387 138 2525 5.47

1-45 NORTH FREEWAY SOUTHBOUND -- FM 1960 TO GREENS -- TYPICAL WEEKDAY  
 SOURCE: TEXAS TRANSPORTATION INSTITUTE -- JULY 1993

TIME (Begin)	FM 1960 Entry		RICHEY Exit		RICHEY Entry		AIRTEX Exit		AIRTEX Entry		RANKIN Exit		RANKIN Entry		GREENS Exit		
	*M/L*	M/L	M/L	M/L	M/L	M/L	M/L	M/L	M/L	M/L	M/L	M/L	M/L	M/L	M/L	M/L	
12:00 AM	484	214	698	37	661	54	715	16	699	41	740	45	695	155	850	60	790
1:00 AM	390	133	523	30	493	35	528	8	520	24	544	30	514	114	628	45	583
2:00 AM	362	135	497	26	471	32	503	10	493	12	505	27	478	123	601	42	559
3:00 AM	425	114	539	24	515	30	545	4	541	13	554	21	533	83	616	24	592
4:00 AM	656	185	841	19	822	51	873	5	868	24	892	37	855	114	969	40	929
5:00 AM	2098	565	2663	54	2609	163	2772	23	2749	111	2860	94	2766	510	3276	118	3158
6:00 AM	4056	1280	5336	226	5110	389	5499	153	5346	420	5766	191	5575	1279	6854	385	6469
7:00 AM	4049	1223	5272	768	4504	413	4917	250	4667	997	5664	166	5498	1616	7114	701	6413
8:00 AM	3312	1138	4450	222	4228	452	4680	137	4543	439	4982	226	4756	1144	5900	636	5264
9:00 AM	2779	1261	4040	174	3866	474	4340	115	4225	294	4519	198	4321	978	5299	635	4664
10:00 AM	2520	1323	3843	146	3697	425	4122	158	3964	293	4257	185	4072	855	4927	703	4224
11:00 AM	2373	1545	3918	158	3760	533	4293	167	4126	377	4503	214	4289	838	5127	873	4254
12:00 PM	2426	1754	4180	186	3994	574	4568	158	4410	446	4856	255	4601	861	5462	1004	4458
1:00 PM	2483	1642	4125	192	3933	556	4489	135	4354	546	4900	258	4642	914	5556	906	4650
2:00 PM	2465	1577	4042	163	3879	572	4451	129	4322	491	4813	240	4573	859	5432	817	4615
3:00 PM	2522	1557	4079	153	3926	478	4404	108	4296	465	4761	247	4514	889	5403	748	4655
4:00 PM	2505	1405	3910	193	3717	488	4205	138	4067	503	4570	250	4320	888	5208	705	4503
5:00 PM	2765	1407	4172	222	3950	465	4415	169	4246	542	4788	240	4548	928	5476	663	4813
6:00 PM	2262	1205	3467	163	3304	403	3707	189	3518	355	3873	208	3665	846	4511	595	3916
7:00 PM	1835	945	2780	178	2602	345	2947	160	2787	286	3073	217	2856	634	3490	556	2934
8:00 PM	1345	792	2137	98	2039	287	2326	91	2235	181	2416	167	2249	488	2737	393	2344
9:00 PM	1223	730	1953	95	1858	235	2093	71	2022	225	2247	170	2077	479	2556	273	2283
10:00 PM	1008	550	1558	74	1484	184	1668	42	1626	105	1731	128	1603	423	2026	192	1834
11:00 PM	682	405	1087	74	1013	107	1120	52	1068	64	1132	105	1027	282	1309	140	1169
24 HOURS	47025	23085	70110	3675	66435	7745	74180	2488	71692	7254	78946	3919	75027	16300	91327	11254	80073

## I-45 NORTH FREEWAY SOUTHBOUND -- FM 1960 TO GREENS -- TYPICAL SATURDAY

SOURCE: TEXAS TRANSPORTATION INSTITUTE -- JULY 1993

TIME (Begin)	FM 1960 Entry *H/L*	RICHEY Exit		RICHEY Entry		AIRTEX Exit		AIRTEX Entry		RANKIN Exit		RANKIN Entry		GREENS Exit			
		H/L	M/L	H/L	M/L	H/L	M/L	H/L	M/L	H/L	M/L	H/L	M/L	H/L	M/L		
112:00 AM	718	429	1147	46	1101	77	1178	41	1137	72	1209	91	1118	277	1395	122	1273
1:00 AM	569	303	872	48	824	57	881	14	867	37	904	47	857	212	1069	96	973
2:00 AM	495	237	732	29	703	48	751	17	734	22	756	51	705	219	924	61	863
3:00 AM	338	187	525	20	505	16	521	8	513	21	534	24	510	107	617	24	593
4:00 AM	343	139	482	18	464	16	480	5	475	15	490	20	470	116	586	43	543
5:00 AM	625	241	866	18	848	46	894	5	889	36	925	75	850	217	1067	56	1011
6:00 AM	938	475	1413	37	1376	118	1494	13	1481	98	1579	117	1462	413	1875	95	1780
7:00 AM	1430	676	2106	84	2022	144	2166	36	2130	160	2290	84	2206	526	2732	203	2529
8:00 AM	1747	861	2608	115	2493	225	2718	71	2647	222	2869	107	2762	734	3496	376	3120
9:00 AM	2329	1026	3355	131	3224	291	3515	121	3394	254	3648	118	3530	777	4307	667	3640
10:00 AM	2559	1274	3833	151	3682	321	4003	141	3862	299	4161	159	4002	844	4846	883	3963
11:00 AM	2493	1487	3980	181	3799	402	4201	155	4046	344	4390	185	4205	925	5130	1094	4036
12:00 PM	2478	1624	4102	199	3903	499	4402	121	4281	372	4653	208	4445	881	5326	1107	4219
1:00 PM	2590	1663	4253	194	4059	458	4517	147	4370	377	4747	201	4546	812	5358	1097	4261
2:00 PM	2442	1690	4132	201	3931	509	4440	155	4285	427	4712	175	4537	811	5348	1019	4329
3:00 PM	2473	1577	4050	195	3855	505	4360	161	4199	446	4645	191	4454	822	5276	964	4312
4:00 PM	2374	1453	3827	266	3561	420	3981	130	3851	415	4266	216	4050	715	4765	864	3901
5:00 PM	2402	1285	3687	189	3498	388	3886	161	3725	341	4066	192	3874	731	4605	792	3813
6:00 PM	2331	1178	3509	193	3316	337	3653	212	3441	313	3754	198	3556	706	4262	698	3564
7:00 PM	2108	1016	3124	224	2900	415	3315	186	3129	342	3471	178	3293	634	3927	698	3229
8:00 PM	1430	863	2293	91	2202	259	2461	97	2364	185	2549	163	2386	540	2926	412	2514
9:00 PM	1151	797	1948	99	1849	195	2044	68	1976	159	2135	165	1970	571	2541	319	2222
10:00 PM	1102	813	1915	97	1818	151	1969	73	1896	110	2006	170	1836	508	2344	223	2121
11:00 PM	826	589	1415	54	1361	99	1460	32	1428	67	1495	123	1372	396	1768	154	1614
24 HOURS	38291	21833	60174	2880	57294	5996	63290	2170	61120	5134	66254	3258	62996	13494	76490	12067	64423

-45 NORTH FREEWAY SOUTHBOUND -- FM 1960 TO GREENS -- TYPICAL SUNDAY  
 SOURCE: TEXAS TRANSPORTATION INSTITUTE -- JULY 1993

TIME (Begin)	FM 1960 Entry *M/L*	RICHEY Exit		RICHEY Entry		AIRTEX Exit		AIRTEX Entry		RANKIN Exit		RANKIN Entry		GREENS Exit			
		M/L	M/L	M/L	M/L	M/L	M/L	M/L	M/L	M/L	M/L	M/L	M/L	M/L	M/L		
2:00 AM	690	389	1079	38	1041	83	1124	22	1102	97	1199	91	1108	274	1382	123	1259
11:00 AM	568	296	864	29	835	44	879	12	867	57	924	50	874	198	1072	74	998
2:00 AM	438	308	746	28	718	45	763	22	741	32	773	43	750	205	935	68	867
3:00 AM	300	158	458	13	445	18	463	4	459	13	472	19	453	104	557	24	533
4:00 AM	215	119	334	15	319	18	337	3	334	14	348	28	320	84	404	43	361
5:00 AM	379	186	565	6	559	24	583	11	572	13	585	45	540	130	670	23	647
6:00 AM	450	197	647	19	628	61	689	4	685	42	727	79	648	209	857	54	803
7:00 AM	554	265	819	22	797	87	884	7	877	70	947	63	884	256	1140	87	1053
8:00 AM	866	410	1276	23	1253	112	1365	15	1350	91	1441	61	1380	328	1708	108	1600
9:00 AM	1488	671	2159	45	2114	168	2282	82	2200	126	2326	76	2250	546	2796	217	2579
10:00 AM	1728	914	2642	94	2548	190	2738	136	2602	187	2789	93	2696	582	3278	346	2932
11:00 AM	1785	1028	2813	128	2685	216	2901	109	2792	219	3011	119	2892	617	3509	579	2930
12:00 PM	1962	1170	3132	189	2943	277	3220	96	3124	240	3364	148	3216	628	3844	734	3110
1:00 PM	2222	1314	3536	190	3346	363	3709	153	3556	261	3817	177	3640	631	4271	824	3447
2:00 PM	2188	1294	3482	207	3275	417	3692	118	3574	347	3921	183	3738	640	4378	856	3522
3:00 PM	2351	1331	3682	165	3517	397	3914	151	3763	365	4128	185	3943	632	4575	800	3775
4:00 PM	2173	1123	3296	248	3048	394	3442	94	3348	445	3793	161	3632	669	4301	737	3564
5:00 PM	1671	1034	2705	149	2556	378	2934	151	2783	270	3053	207	2846	624	3470	525	2945
6:00 PM	1219	873	2092	109	1983	284	2267	183	2084	235	2319	194	2125	500	2625	294	2331
7:00 PM	1131	691	1822	138	1684	247	1931	107	1824	240	2064	194	1870	505	2375	321	2054
8:00 PM	1095	695	1790	96	1694	138	1832	69	1763	112	1875	169	1706	429	2135	219	1916
9:00 PM	1848	716	2564	77	2487	151	2638	61	2577	116	2693	156	2537	434	2971	247	2724
10:00 PM	1062	553	1615	97	1518	130	1648	57	1591	87	1678	120	1558	368	1926	178	1748
11:00 PM	668	394	1062	88	974	75	1049	30	1019	46	1065	85	980	234	1214	136	1078
24 HOURS	29051	16129	45180	2213	42967	4317	47284	1697	45587	3725	49312	2746	46566	9827	56393	7617	48776

## TEXAS TRANSPORTATION INSTITUTE

## WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : I-45 SB FM 1960 ENTRY  
 DATE : 7- 6-1993 DIRECTION OF FLOW : I-45 NB  
 CHANNEL : THIS IS 1 OF 2 SITE NO : 30314597

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 6	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
<hr/>									
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	236	-	214	239	169	429	389	214	279
1- 2	144	-	116	169	105	303	296	133	189
2- 3	169	-	93	157	122	237	308	135	181
3- 4	129	-	75	129	124	187	158	114	134
4- 5	176	-	186	187	192	139	119	185	166
5- 6	583	-	569	604	506	241	186	565	448
6- 7	1337	-	1251	1305	1229	475	197	1280	966
7- 8	1277	-	1210	1294	1111	676	265	1223	972
8- 9	1107	-	1069	1187	1190	861	410	1138	971
9-10	1340	-	1160	1273	1273	1026	671	1261	1124
10-11	-	-	1175	1370	1424	1274	914	1323	1231
11-12	-	-	1484	1478	1674	1487	1028	1545	1430
12-13	-	-	1704	1681	1876	1624	1170	1754	1611
13-14	-	-	1419	1751	1755	1663	1314	1642	1580
14-15	-	-	1355	1569	1806	1690	1294	1577	1543
15-16	-	-	1462	1506	1704	1577	1331	1557	1516
16-17	-	1166	1446	1488	1519	1453	1123	1405	1366
17-18	-	1256	1375	1554	1445	1285	1034	1407	1325
18-19	-	1186	1128	1251	1257	1178	873	1205	1145
19-20	-	756	916	1016	1092	1016	691	945	914
20-21	-	694	729	761	983	863	695	792	787
21-22	-	573	659	773	916	797	716	730	739
22-23	-	432	514	573	682	813	553	550	594
23-24	-	368	400	348	506	589	394	405	434
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AM PEAK (6-9) VOLUME:	3721	-	3530	3786	3530	2012	872	3642	2908
AM PEAK HIGHEST HOUR:	1340	-	1484	1478	1674	1487	1028	1545	1430
PM PEAK (3-6) VOLUME:	-	2422	4283	4548	4668	4315	3488	4370	4207
PM PEAK HIGHEST HOUR:	-	1256	1704	1751	1876	1690	1331	1754	1611
DAILY TOTAL:	6498 +	6431 +	21709	23663	24660	21883	16129	23090	21647

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

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WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : \*\* I-45 SB RICHEY EXIT  
 DATE : 7-6-1993 DIRECTION OF FLOW : I-45 SB  
 CHANNEL: THIS IS 1 OF 2 SITE NO : 30310779

DAY OF WEEK: WEATHER	MONDAY GOOD	TUESDAY GOOD	WEDNESDAY GOOD	THURSDAY GOOD	FRIDAY GOOD	SATURDAY GOOD	SUNDAY GOOD	5 - DAY AVERAGE	7 - DAY AVERAGE
	7 / 12	7 / 6	7 / 7	7 / 8	7 / 9	7 / 10	7 / 11		
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TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	31	-	32	49	-	46	38	37	39
1- 2	35	-	22	32	-	48	29	30	33
2- 3	29	-	18	32	-	29	28	26	27
3- 4	27	-	16	30	-	20	13	24	21
4- 5	22	-	15	19	-	18	15	19	18
5- 6	61	-	56	44	-	18	6	54	37
6- 7	266	-	202	211	-	37	19	226	147
7- 8	809	-	772	724	-	84	22	768	482
8- 9	201	-	228	237	-	115	23	222	161
9-10	175	-	162	184	-	131	45	174	139
10-11	-	-	149	141	147	151	94	146	136
11-12	-	-	148	166	160	181	128	158	157
12-13	-	-	209	169	181	199	189	186	189
13-14	-	-	181	183	211	194	190	192	192
14-15	-	-	161	169	159	201	207	163	179
15-16	-	-	162	-	143	195	165	153	166
16-17	-	194	176	-	209	266	248	193	219
17-18	-	226	242	-	197	189	149	222	201
18-19	-	164	166	-	160	193	109	163	158
19-20	-	171	152	-	211	224	138	178	179
20-21	-	83	88	-	122	91	96	98	96
21-22	-	85	78	-	121	99	77	95	92
22-23	-	69	61	-	93	97	97	74	83
23-24	-	76	81	-	65	54	88	74	73
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AM PEAK (6-9) VOLUME:	1276	-	1202	1172	-	236	64	1217	790
AM PEAK HIGHEST HOUR:	809	-	772	724	160	181	128	768	482
PM PEAK (3-6) VOLUME:	-	-	580	-	549	650	562	567	585
PM PEAK HIGHEST HOUR:	-	226	242	183	211	266	248	222	219
DAILY TOTAL:	1656 +	1068 +	3577	2390 +	2179 +	2880	2213	3674	3226

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

## ===== WEEKLY VOLUME COUNT SUMMARY SHEET =====

LOCATION : I-45 SB RICHEY ENTRY  
 DATE : 7- 6-1993 DIRECTION OF FLOW : I-45 SB  
 CHANNEL : THIS IS 1 OF 2 SITE NO : 3314588

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 6	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
<hr/>									
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	51	-	65	52	50	77	83	54	63
1- 2	30	-	32	38	42	57	44	35	40
2- 3	46	-	29	25	28	48	45	32	37
3- 4	39	-	19	35	28	16	18	30	26
4- 5	73	-	41	36	55	16	18	51	40
5- 6	172	-	163	134	182	46	24	163	120
6- 7	424	-	380	383	370	118	61	389	289
7- 8	323	-	436	430	462	144	87	413	314
8- 9	437	-	464	456	452	225	112	452	358
9-10	448	-	449	577	424	291	168	474	393
10-11	412	-	447	443	397	321	190	425	368
11-12	-	-	596	482	522	402	216	533	444
12-13	-	-	588	553	582	499	277	574	500
13-14	-	-	604	515	549	458	363	556	498
14-15	-	-	564	589	564	509	417	572	529
15-16	-	-	456	502	477	505	397	478	467
16-17	-	482	513	484	475	420	394	488	461
17-18	-	426	502	476	458	388	378	465	438
18-19	-	373	355	416	468	337	284	403	372
19-20	-	290	348	346	398	415	247	345	341
20-21	-	325	259	290	273	259	138	287	257
21-22	-	246	221	230	242	195	151	235	214
22-23	-	177	168	206	187	151	130	184	170
23-24	-	107	107	82	132	99	75	107	100
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AM PEAK (6-9) VOLUME:	1184	-	1280	1269	1284	487	260	1254	961
AM PEAK HIGHEST HOUR:	448	-	596	577	522	402	216	533	444
PM PEAK (3-6) VOLUME:	-	908	1471	1462	1410	1313	1169	1432	1367
PM PEAK HIGHEST HOUR:	-	482	604	589	582	509	417	574	529
DAILY TOTAL:	2455 +	2426 +	7806	7780	7817	5996	4317	7750	6839

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

=====  
WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : I-45 SB FR AFTER RICHEY ENTRY  
 DATE : 7-6-1993 DIRECTION OF FLOW : I-45 SB FR  
 CHANNEL : THIS IS 2 OF 2 SITE NO : 3314588

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 6	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	23	-	23	31	25	57	51	25	35
1- 2	14	-	16	21	21	27	25	18	21
2- 3	14	-	12	27	16	25	51	17	24
3- 4	15	-	9	11	10	18	11	11	12
4- 5	12	-	6	5	11	8	3	8	8
5- 6	42	-	40	47	42	10	10	43	32
6- 7	336	-	331	322	284	24	16	318	219
7- 8	1449	-	1301	1260	1052	65	20	1265	858
8- 9	338	-	327	330	318	101	25	328	240
9-10	153	-	174	168	191	123	54	171	144
10-11	178	-	183	155	169	152	91	171	155
11-12	-	-	212	201	236	240	113	216	200
12-13	-	-	303	279	291	247	186	291	261
13-14	-	-	294	288	297	275	187	293	268
14-15	-	-	235	243	244	268	244	241	247
15-16	-	-	203	231	279	254	218	238	237
16-17	-	228	220	216	263	252	216	232	232
17-18	-	236	231	243	304	250	193	253	243
18-19	-	181	193	216	213	224	170	201	199
19-20	-	151	164	202	245	241	169	190	195
20-21	-	132	130	152	170	143	114	146	140
21-22	-	117	105	124	162	128	118	127	126
22-23	-	93	76	78	104	119	92	88	94
23-24	-	61	61	54	90	58	45	66	61
AM PEAK (6-9) VOLUME:	2123	-	1959	1912	1654	190	61	1912	1316
AM PEAK HIGHEST HOUR:	1449	-	1301	1260	1052	240	113	1265	858
PM PEAK (3-6) VOLUME:	-	464	654	690	846	756	627	723	712
PM PEAK HIGHEST HOUR:	-	236	303	288	304	275	244	293	268
DAILY TOTAL:	2574 +	1199 +	4849	4904	5037	3309	2422	4960	4251

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

=====  
WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : I-45 SB AIRTEX EXIT  
 DATE : 7- 6-1993 DIRECTION OF FLOW : I-45 SB  
 CHANNEL : THIS IS 1 OF 2 SITE NO : 30314582

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 6	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
<hr/>									
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	17	-	21	16	11	41	22	16	21
1- 2	4	-	5	16	7	14	12	8	10
2- 3	6	-	6	19	10	17	22	10	13
3- 4	5	-	1	7	3	8	4	4	5
4- 5	6	-	5	3	7	5	3	5	5
5- 6	22	-	24	20	28	5	11	23	18
6- 7	178	-	147	153	133	13	4	153	105
7- 8	358	-	260	186	198	36	7	250	174
8- 9	128	-	156	127	138	71	15	137	106
9-10	106	-	141	105	110	121	82	115	111
10-11	175	-	136	156	165	141	136	158	151
11-12	-	-	169	179	153	155	109	167	153
12-13	-	-	152	177	146	121	96	158	138
13-14	-	-	145	113	146	147	153	135	141
14-15	-	-	131	136	120	155	118	129	132
15-16	-	-	102	96	125	161	151	108	127
16-17	-	179	120	118	136	130	94	138	129
17-18	-	143	243	135	154	161	151	169	164
18-19	-	169	165	195	227	212	183	189	192
19-20	-	131	146	172	192	186	107	160	156
20-21	-	100	77	81	108	97	69	91	89
21-22	-	65	54	76	90	68	61	71	69
22-23	-	37	34	49	47	73	57	42	49
23-24	-	55	51	41	62	32	30	52	45
<hr/>									
AM PEAK (6-9) VOLUME:	664	-	563	466	469	120	26	540	385
AM PEAK HIGHEST HOUR:	358	-	260	186	198	155	136	250	174
PM PEAK (3-6) VOLUME:	-	322	465	349	415	452	396	415	421
PM PEAK HIGHEST HOUR:	-	179	243	195	227	212	183	189	192
DAILY TOTAL:	1005 +	879 +	2491	2376	2516	2170	1697	2491	2304

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

## ===== WEEKLY VOLUME COUNT SUMMARY SHEET =====

LOCATION : I-45 SB FR B4 AIRTEX EXIT  
 DATE : 7- 6-1993 DIRECTION OF FLOW : I-45 SB FR  
 CHANNEL : THIS IS 2 OF 2 SITE NO : 30314582

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 6	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	59	-	30	32	36	88	95	39	57
1- 2	27	-	20	24	35	43	53	26	34
2- 3	15	-	17	16	13	21	32	15	19
3- 4	21	-	11	16	21	21	17	17	18
4- 5	26	-	19	20	22	18	9	22	19
5- 6	104	-	110	109	110	30	13	108	79
6- 7	535	-	546	538	500	67	37	530	370
7- 8	1630	-	1438	1413	1220	140	49	1425	982
8- 9	419	-	415	432	407	170	59	418	317
9-10	236	-	252	230	243	194	102	240	209
10-11	242	-	231	209	249	237	206	233	229
11-12	-	-	316	316	299	305	173	310	282
12-13	-	-	368	346	346	281	217	353	312
13-14	-	-	332	330	315	285	208	326	294
14-15	-	-	284	280	273	289	280	279	281
15-16	-	-	247	295	324	300	255	289	284
16-17	-	320	300	280	339	283	257	310	296
17-18	-	317	291	284	357	279	212	312	290
18-19	-	272	282	283	295	254	192	283	263
19-20	-	219	233	273	297	305	217	255	257
20-21	-	159	143	178	192	173	128	168	162
21-22	-	144	119	146	206	180	144	154	156
22-23	-	119	117	110	136	133	108	120	120
23-24	-	64	72	63	98	69	54	74	70
AM PEAK (6-9) VOLUME:	2584	-	2399	2383	2127	377	145	2373	1669
AM PEAK HIGHEST HOUR:	1630	-	1438	1413	1220	305	206	1425	982
PM PEAK (3-6) VOLUME:	-	637	838	859	1020	862	724	911	871
PM PEAK HIGHEST HOUR:	-	320	368	346	357	305	280	353	312
DAILY TOTAL:	3314 +	1614 +	6193	6223	6333	4165	3117	6308	5402

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

## ===== WEEKLY VOLUME COUNT SUMMARY SHEET =====

LOCATION : I-45 SB AIRTEX ENTRY  
 DATE : 7-6-1993 DIRECTION OF FLOW : I-45 SB  
 CHANNEL : THIS IS 1 OF 2 SITE NO : 6190778

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 6	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
<hr/>									
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	51	-	35	39	40	72	97	41	56
1- 2	22	-	18	27	30	37	57	24	32
2- 3	8	-	16	11	13	22	32	12	17
3- 4	17	-	9	11	14	21	13	13	14
4- 5	24	-	24	26	23	15	14	24	21
5- 6	113	-	115	111	106	36	13	111	82
6- 7	449	-	410	427	395	98	42	420	303
7- 8	1255	-	989	910	834	160	70	997	703
8- 9	422	-	424	446	466	222	91	439	345
9-10	264	-	322	294	296	254	126	294	259
10-11	313	-	301	244	313	299	187	293	276
11-12	-	-	353	358	421	344	219	377	339
12-13	-	-	443	443	453	372	240	446	390
13-14	-	-	526	550	562	377	261	546	455
14-15	-	-	510	494	469	427	347	491	449
15-16	-	-	443	489	463	446	365	465	441
16-17	-	376	573	535	530	415	445	503	479
17-18	-	442	541	541	645	341	270	542	463
18-19	-	277	339	389	417	313	235	355	328
19-20	-	239	285	297	323	342	240	286	288
20-21	-	133	144	216	230	185	112	181	170
21-22	-	218	206	236	241	159	116	225	196
22-23	-	100	96	109	117	110	87	105	103
23-24	-	49	75	63	69	67	46	64	61
<hr/>									
AM PEAK (6-9) VOLUME:	2126	-	1823	1783	1695	480	203	1857	1352
AM PEAK HIGHEST HOUR:	1255	-	989	910	834	344	219	997	703
PM PEAK (3-6) VOLUME:	-	818	1557	1565	1638	1202	1080	1511	1384
PM PEAK HIGHEST HOUR:	-	442	573	550	645	446	445	546	479
DAILY TOTAL:	2938 +	1834 +	7197	7266	7470	5134	3725	7258	6273

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

=====  
WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : I-45 SB FR AFTER AIRTEX ENTRY  
 DATE : 7- 6-1993 DIRECTION OF FLOW : I-45 SB FR  
 CHANNEL : THIS IS 2 OF 2 SITE NO : 6190778

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 6	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
<hr/>									
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	31	-	24	20	26	54	56	25	35
1- 2	13	-	14	21	22	23	29	18	20
2- 3	11	-	13	11	11	17	24	11	14
3- 4	12	-	4	8	15	13	15	10	11
4- 5	13	-	6	5	12	10	5	9	8
5- 6	50	-	52	49	56	16	6	52	38
6- 7	370	-	341	360	315	28	18	346	239
7- 8	1194	-	1060	918	925	67	14	1024	696
8- 9	389	-	372	380	343	115	23	371	270
9-10	208	-	216	190	208	150	61	205	172
10-11	247	-	260	234	257	201	75	249	212
11-12	-	-	280	268	348	305	101	299	260
12-13	-	-	400	392	384	302	170	392	330
13-14	-	-	392	364	424	282	189	393	330
14-15	-	-	331	373	402	335	218	369	332
15-16	-	-	301	348	386	298	201	345	307
16-17	-	285	345	353	382	247	220	341	305
17-18	-	334	309	377	349	223	148	342	290
18-19	-	202	262	239	222	175	166	231	211
19-20	-	153	195	176	224	191	141	187	180
20-21	-	133	119	117	123	129	78	123	116
21-22	-	107	99	121	138	106	89	116	110
22-23	-	67	57	74	87	97	68	71	75
23-24	-	50	61	48	67	54	44	56	54
<hr/>									
AM PEAK (6-9) VOLUME:	1953	-	1773	1658	1583	210	55	1742	1205
AM PEAK HIGHEST HOUR:	1194	-	1060	918	925	305	101	1024	696
PM PEAK (3-6) VOLUME:	-	619	955	1078	1117	768	569	1028	902
PM PEAK HIGHEST HOUR:	-	334	400	392	424	335	220	393	332
DAILY TOTAL:	2538 +	1331 +	5513	5446	5726	3438	2159	5588	4618

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

## ===== WEEKLY VOLUME COUNT SUMMARY SHEET =====

LOCATION : I-45 SB RANKIN EXIT  
 DATE : 7-6-1993 DIRECTION OF FLOW : I-45 SB  
 CHANNEL : THIS IS 1 OF 2 SITE NO : 30310777

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	AVERAGE	AVERAGE
<hr/>									
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	40	-	46	61	35	91	91	45	61
1- 2	30	-	18	39	33	47	50	30	36
2- 3	26	-	23	32	27	51	43	27	34
3- 4	29	-	14	19	23	24	19	21	21
4- 5	30	-	33	42	42	20	28	37	33
5- 6	86	-	92	98	101	75	45	94	83
6- 7	224	-	181	184	176	117	79	191	160
7- 8	114	-	168	185	197	84	63	166	135
8- 9	226	-	201	232	244	107	61	226	178
9-10	230	-	180	187	195	118	76	198	164
10-11	204	-	175	196	167	159	93	185	166
11-12	-	-	230	207	206	185	119	214	189
12-13	-	-	219	254	292	208	148	255	224
13-14	-	-	227	285	263	201	177	258	231
14-15	-	-	236	224	259	175	183	240	215
15-16	-	-	230	265	247	191	185	247	224
16-17	-	-	236	273	242	216	161	250	226
17-18	-	222	231	254	252	192	207	240	226
18-19	-	190	222	205	214	198	194	208	204
19-20	-	219	220	198	231	178	194	217	207
20-21	-	166	154	165	182	163	169	167	166
21-22	-	155	162	176	186	165	156	170	167
22-23	-	120	114	111	169	170	120	128	134
23-24	-	101	108	93	119	123	85	105	105
<hr/>									
AM PEAK (6-9) VOLUME:	564	-	550	601	617	308	203	583	474
AM PEAK HIGHEST HOUR:	230	-	230	232	244	185	119	226	189
PM PEAK (3-6) VOLUME:	-	222	697	792	741	599	553	737	676
PM PEAK HIGHEST HOUR:	-	222	236	285	292	216	207	258	231
DAILY TOTAL:	1239 +	1173 +	3720	3985	4102	3258	2746	3921	3589

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

## ===== WEEKLY VOLUME COUNT SUMMARY SHEET =====

LOCATION : I-45 SB FR B4 RANKIN EXIT  
 DATE : 7- 6-1993 DIRECTION OF FLOW : I-45 SB FR  
 CHANNEL : THIS IS 2 OF 2 SITE NO : 30310777

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 6	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
<hr/>									
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	31	-	34	19	27	56	56	28	37
1- 2	14	-	10	20	21	28	31	16	21
2- 3	10	-	16	14	19	16	30	15	18
3- 4	11	-	5	8	16	15	14	10	11
4- 5	13	-	7	9	14	14	9	11	11
5- 6	49	-	46	50	49	17	6	48	36
6- 7	352	-	330	357	310	36	19	337	234
7- 8	1142	-	988	859	858	74	15	962	656
8- 9	352	-	365	372	337	107	27	356	260
9-10	237	-	248	187	265	172	77	234	198
10-11	262	-	241	235	276	203	78	253	216
11-12	-	-	304	279	325	261	104	303	255
12-13	-	-	357	356	363	277	149	359	300
13-14	-	-	352	331	358	244	142	347	285
14-15	-	-	316	319	337	292	176	324	288
15-16	-	-	271	305	366	256	165	314	273
16-17	-	-	329	290	367	226	157	329	274
17-18	-	351	329	350	393	224	136	356	297
18-19	-	259	294	273	285	168	155	278	239
19-20	-	177	215	187	232	163	143	203	186
20-21	-	150	142	146	143	143	70	145	132
21-22	-	126	121	142	151	128	94	135	127
22-23	-	70	63	68	88	101	66	72	76
23-24	-	50	61	46	75	49	45	58	54
<hr/>									
AM PEAK (6-9) VOLUME:	1846	-	1683	1588	1505	217	61	1655	1150
AM PEAK HIGHEST HOUR:	1142	-	988	859	858	261	104	962	656
PM PEAK (3-6) VOLUME:	-	351	929	945	1126	706	458	998	844
PM PEAK HIGHEST HOUR:	-	351	357	356	393	292	176	359	300
DAILY TOTAL:	2473 +	1183 +	5444	5222	5675	3270	1964	5493	4484

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

## ===== WEEKLY VOLUME COUNT SUMMARY SHEET =====

LOCATION : I-45 SB RANKIN ENTRY  
 DATE : 7- 6-1993 DIRECTION OF FLOW : I-45 SB  
 CHANNEL : THIS IS 1 OF 2 SITE NO : 30314607

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 6	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	126	-	151	140	204	277	274	155	195
1- 2	101	-	101	111	142	212	198	114	144
2- 3	91	-	86	120	194	219	205	123	152
3- 4	65	-	84	88	97	107	104	83	91
4- 5	115	-	99	106	135	116	84	114	109
5- 6	522	-	516	511	491	217	130	510	398
6- 7	1397	-	1220	1270	1231	413	209	1279	957
7- 8	1768	-	1623	1624	1448	526	256	1616	1207
8- 9	1146	-	1127	1116	1188	734	328	1144	940
9-10	933	-	977	988	1016	777	546	978	873
10-11	810	-	825	918	868	844	582	855	808
11-12	-	-	840	778	896	925	617	838	811
12-13	-	-	868	830	886	881	628	861	819
13-14	-	-	919	858	964	812	631	914	837
14-15	-	-	786	866	925	811	640	859	806
15-16	-	-	839	866	963	822	632	889	824
16-17	-	-	890	876	899	715	669	888	810
17-18	-	926	919	931	936	731	624	928	844
18-19	-	763	811	854	957	706	500	846	765
19-20	-	588	623	641	683	634	505	634	612
20-21	-	428	477	473	573	540	429	488	487
21-22	-	434	437	458	586	571	434	479	487
22-23	-	378	370	443	501	508	368	423	428
23-24	-	239	276	243	369	396	234	282	293
AM PEAK (6-9) VOLUME:	4311	-	3970	4010	3867	1673	793	4039	3104
AM PEAK HIGHEST HOUR:	1768	-	1623	1624	1448	925	617	1616	1207
PM PEAK (3-6) VOLUME:	-	926	2648	2673	2798	2268	1925	2706	2479
PM PEAK HIGHEST HOUR:	-	926	919	931	964	881	669	928	844
DAILY TOTAL:	7074 +	3756 +	15864	16109	17152	13494	9827	16301	14697

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

## ===== WEEKLY VOLUME COUNT SUMMARY SHEET =====

LOCATION : I-45 SB FR AFTER RANKIN ENTRY  
 DATE : 7- 6-1993 DIRECTION OF FLOW : I-45 SB FR  
 CHANNEL : THIS IS 2 OF 2 SITE NO : 30314607

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 6	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
0- 1	30	-	25	28	32	39	48	29	34
1- 2	6	-	10	15	14	23	37	11	18
2- 3	11	-	6	15	13	23	36	11	17
3- 4	2	-	10	7	11	10	19	8	10
4- 5	11	-	16	12	14	6	12	13	12
5- 6	15	-	31	38	24	14	7	27	21
6- 7	207	-	171	190	166	24	14	183	129
7- 8	628	-	496	537	532	72	28	548	382
8- 9	274	-	301	302	269	117	38	286	217
9-10	242	-	247	257	273	223	76	255	220
10-11	274	-	302	255	319	275	79	288	251
11-12	-	-	348	447	476	371	185	424	365
12-13	-	-	425	458	539	385	253	474	412
13-14	-	-	368	409	455	288	231	411	350
14-15	-	-	332	365	412	287	250	370	329
15-16	-	-	283	365	355	312	236	334	310
16-17	-	-	294	306	306	226	178	302	262
17-18	-	229	220	258	226	274	133	233	223
18-19	-	166	199	192	245	185	146	200	189
19-20	-	132	186	165	177	166	116	165	157
20-21	-	113	117	118	114	141	72	115	113
21-22	-	92	108	106	115	76	78	105	96
22-23	-	58	82	60	88	86	76	72	75
23-24	-	41	54	45	94	66	44	58	57
AM PEAK (6-9) VOLUME:	1109	-	968	1029	967	213	80	1018	728
AM PEAK HIGHEST HOUR:	628	-	496	537	532	371	185	548	382
PM PEAK (3-6) VOLUME:	-	229	797	929	887	812	547	870	796
PM PEAK HIGHEST HOUR:	-	229	425	458	539	385	253	474	412
DAILY TOTAL:	1700 +	831 +	4631	4950	5269	3689	2392	4924	4248

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

## WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : I-45 SB GREENS EXIT  
 DATE : 7-7-1993 DIRECTION OF FLOW : I-45 SB  
 CHANNEL : THIS IS 1 OF 2 SITE NO : 30312583

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 13	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	70	-	-	47	63	122	123	60	85
1- 2	45	-	-	61	30	96	74	45	61
2- 3	43	-	-	43	40	61	68	42	51
3- 4	22	-	-	28	21	24	24	24	24
4- 5	42	-	-	33	46	43	43	40	41
5- 6	125	-	-	106	123	56	23	118	87
6- 7	376	-	-	383	397	95	54	385	261
7- 8	630	-	-	736	737	203	87	701	479
8- 9	603	-	-	660	645	376	108	636	478
9-10	643	-	-	575	687	667	217	635	558
10-11	726	-	613	645	829	883	346	703	674
11-12	-	-	779	854	987	1094	579	873	859
12-13	-	-	899	978	1135	1107	734	1004	971
13-14	-	-	795	855	1067	1097	824	906	928
14-15	-	-	708	859	885	1019	856	817	865
15-16	-	-	614	781	850	964	800	748	802
16-17	-	-	623	683	809	864	737	705	743
17-18	-	-	610	643	736	792	525	663	661
18-19	-	-	494	616	676	698	294	595	556
19-20	-	-	486	541	641	698	321	556	537
20-21	-	-	339	435	404	412	219	393	362
21-22	-	-	248	238	333	319	247	273	277
22-23	-	-	144	225	206	223	178	192	195
23-24	-	-	125	103	191	154	136	140	142
AM PEAK (6-9) VOLUME:	1609	-	-	1779	1779	674	249	1722	1218
AM PEAK HIGHEST HOUR:	726	-	779	854	987	1094	579	873	859
PM PEAK (3-6) VOLUME:	-	-	1847	2107	2395	2620	2062	2116	2206
PM PEAK HIGHEST HOUR:	-	-	899	978	1135	1107	856	1004	971
DAILY TOTAL:	3325 +	-	7477 +	11128	12538	12067	7617	11255	10696

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

## ===== WEEKLY VOLUME COUNT SUMMARY SHEET =====

LOCATION : I-45 SB FR B4 GREENS EXIT  
 DATE : 7- 7-1993 DIRECTION OF FLOW : I-45 SB FR  
 CHANNEL : THIS IS 2 OF 2 SITE NO : 30312583

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 13	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
<hr/>									
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	28	-	-	36	40	44	52	35	40
1- 2	9	-	-	19	22	33	42	17	25
2- 3	13	-	-	18	14	29	41	15	23
3- 4	13	-	-	10	14	15	25	12	15
4- 5	12	-	-	19	23	19	17	18	18
5- 6	51	-	-	55	39	17	16	48	36
6- 7	400	-	-	311	296	42	25	336	215
7- 8	1030	-	-	938	913	105	40	960	605
8- 9	392	-	-	377	371	145	52	380	267
9-10	281	-	-	310	357	247	99	316	259
10-11	302	-	358	305	380	278	101	336	287
11-12	-	-	493	503	565	325	183	520	414
12-13	-	-	500	489	553	339	244	514	425
13-14	-	-	428	409	473	266	214	437	358
14-15	-	-	374	387	419	277	233	393	338
15-16	-	-	324	358	377	277	217	353	311
16-17	-	-	424	426	440	245	189	430	345
17-18	-	-	462	429	398	285	158	430	346
18-19	-	-	291	266	296	195	166	284	243
19-20	-	-	231	226	204	172	124	220	191
20-21	-	-	189	153	144	165	89	162	148
21-22	-	-	122	140	143	94	93	135	118
22-23	-	-	91	72	115	97	80	93	91
23-24	-	-	68	61	108	77	57	79	74
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AM PEAK (6-9) VOLUME:	1822	-	-	1626	1580	292	117	1676	1087
AM PEAK HIGHEST HOUR:	1030	-	493	938	913	325	183	960	605
PM PEAK (3-6) VOLUME:	-	-	1210	1213	1215	807	564	1213	1002
PM PEAK HIGHEST HOUR:	-	-	500	489	553	339	244	514	425
DAILY TOTAL:	2531 +	-	4355 +	6317	6704	3788	2557	6524	5193

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

- --- INDICATES DATA IS UNAVAILABLE

TEXAS TRANSPORTATION INSTITUTE  
TURNING MOVEMENT COUNTS

NORTH-SOUTH STREET ===> I-45N (E) Acc Rd

EAST-WEST STREET =====> Airtex

AM PEAK PERIOD ---> 7/02/1993

OFF PEAK PERIOD --> 7/02/1993

PM PEAK PERIOD ---> 7/06/1993

TIME	I-45N (E) Acc Rd			I-45N (E) Acc Rd			Airtex			Airtex			TOTAL
	NB_LT	NB_TH	NB_RT	SB_LT	SB_TH	SB_RT	EB_LT	EB_TH	EB_RT	WB_LT	WB_TH	WB_RT	
700	.	.	.	9	.	18	16	17	.	.	28	1	89
715	.	.	.	23	.	20	25	27	.	.	20	4	119
730	.	.	.	20	.	31	41	32	.	.	38	3	165
745	.	.	.	19	.	57	33	47	.	.	36	3	195
800	.	.	.	5	.	27	23	23	.	.	39	3	120
815	.	.	.	16	.	25	24	28	.	.	24	2	119
830	.	.	.	16	.	32	19	24	.	.	30	2	123
845	.	.	.	10	.	21	15	12	.	.	16	1	75
1100	.	.	.	16	.	23	22	19	.	.	52	10	142
1115	.	.	.	23	.	27	25	25	.	.	46	11	157
1130	.	.	.	22	.	31	27	15	.	.	44	8	147
1145	.	.	.	26	.	39	25	21	.	.	43	13	167
1200	.	.	.	38	.	37	43	35	.	.	79	21	253
1215	.	.	.	26	.	39	32	27	.	.	65	13	202
1230	.	.	.	33	.	34	30	27	.	.	47	13	184
1245	.	.	.	30	.	31	32	23	.	.	42	14	172
1600	.	.	.	50	.	18	17	19	.	.	44	9	157
1615	.	.	.	55	.	22	14	23	.	.	37	18	169
1630	.	.	.	69	.	21	25	19	.	.	78	13	225
1645	.	.	.	61	.	25	23	11	.	.	63	8	191
1700	.	.	.	72	.	31	48	30	.	.	79	15	275
1715	.	.	.	75	.	30	53	37	.	.	79	11	285
1730	.	.	.	67	.	20	57	31	.	.	73	12	260
1745	.	.	.	68	.	28	50	32	.	.	64	9	251
AM PEAK HOUR													
730	0	0	0	127	0	275	243	259	0	0	270	24	1198
OFF PEAK HOUR													
1200	0	0	0	127	0	141	137	112	0	0	233	61	811
PM PEAK HOUR													
1700	0	0	0	282	0	109	208	130	0	0	295	47	1071

TEXAS TRANSPORTATION INSTITUTE  
TURNING MOVEMENT COUNTS

NORTH-SOUTH STREET ===> I-45N (W) Acc Rd  
EAST-WEST STREET =====> Airtex

AM PEAK PERIOD ---> 7/02/1993  
OFF PEAK PERIOD --> 7/02/1993  
PM PEAK PERIOD ---> 7/06/1993

TIME	I-45N (W) Acc Rd			I-45N (W) Acc Rd			Airtex			Airtex			TOTAL
	NB_LT	NB_TH	NB_RT	SB_LT	SB_TH	SB_RT	EB_LT	EB_TH	EB_RT	WB_LT	WB_TH	WB_RT	
700	.	.	.	6	.	3	.	22	45	.	20	16	112
715	.	.	.	11	.	8	.	35	45	.	33	17	149
730	.	.	.	17	.	1	.	42	47	.	20	32	159
745	.	.	.	24	.	12	.	66	44	.	48	33	227
800	.	.	.	26	.	6	.	37	37	.	51	37	194
815	.	.	.	14	.	5	.	27	30	.	29	21	126
830	.	.	.	18	.	5	.	27	25	.	30	24	129
845	.	.	.	23	.	7	.	22	32	.	26	36	146
1100	.	.	.	31	.	8	.	14	14	.	37	36	140
1115	.	.	.	26	.	10	.	26	21	.	42	28	153
1130	.	.	.	22	.	9	.	17	21	.	43	38	150
1145	.	.	.	36	.	14	.	25	16	.	46	47	184
1200	.	.	.	40	.	13	.	29	14	.	50	67	213
1215	.	.	.	45	.	14	.	17	24	.	52	60	212
1230	.	.	.	33	.	4	.	32	20	.	44	43	176
1245	.	.	.	33	.	17	.	40	23	.	44	38	195
1600	.	.	.	18	.	7	.	25	15	.	45	52	162
1615	.	.	.	16	.	7	.	24	13	.	47	41	148
1630	.	.	.	23	.	15	.	21	17	.	85	66	227
1645	.	.	.	27	.	7	.	35	21	.	96	61	247
1700	.	.	.	23	.	12	.	49	23	.	125	81	313
1715	.	.	.	20	.	9	.	51	26	.	162	49	317
1730	.	.	.	24	.	16	.	45	15	.	127	59	286
1745	.	.	.	36	.	7	.	62	22	.	128	45	300
<b>AM PEAK HOUR</b>													
715	0	0	0	78	0	27	0	180	173	0	152	119	729
<b>OFF PEAK HOUR</b>													
1200	0	0	0	151	0	48	0	118	81	0	190	208	796
<b>PM PEAK HOUR</b>													
1700	0	0	0	103	0	44	0	207	86	0	542	234	1216

TEXAS TRANSPORTATION INSTITUTE  
TURNING MOVEMENT COUNTS

NORTH-SOUTH STREET ==> Kuykendahl

EAST-WEST STREET =====> Rankin

AM PEAK PERIOD ---> 7/01/1993

OFF PEAK PERIOD --> 7/01/1993

PM PEAK PERIOD ---> 6/30/1993

TIME	Kuykendahl			Kuykendahl			Rankin			Rankin			TOTAL
	NB_LT	NB_TH	NB_RT	SB_LT	SB_TH	SB_RT	EB_LT	EB_TH	EB_RT	WB_LT	WB_TH	WB_RT	
700	0	7	4	165	122	10	19	155	11	8	59	77	637
715	0	18	6	247	164	17	37	197	8	14	66	97	871
730	0	7	4	249	188	15	28	221	25	17	87	108	949
745	0	15	14	222	156	7	20	218	20	15	105	112	904
800	1	8	13	186	117	14	18	165	22	7	81	81	713
815	0	5	6	145	55	11	20	157	16	7	64	97	583
830	1	15	6	143	62	6	13	124	5	4	75	87	541
845	1	4	3	143	35	10	14	106	6	6	56	93	477
1100	0	9	3	104	20	9	13	79	4	0	68	80	389
1115	0	11	11	115	20	5	11	93	3	0	80	115	464
1130	0	26	12	117	28	18	15	133	4	3	101	136	593
1145	0	12	12	94	30	4	17	109	0	7	89	130	504
1200	0	18	14	123	26	11	24	127	4	6	115	127	595
1215	0	29	8	119	23	10	19	95	7	8	88	138	544
1230	1	18	13	123	29	12	17	103	7	4	102	133	562
1245	1	14	14	126	35	11	13	109	1	5	75	124	528
1600	1	29	9	116	35	14	17	81	4	4	131	198	639
1615	1	21	20	121	25	17	20	84	4	6	163	258	740
1630	1	30	30	114	13	10	26	94	2	5	160	192	677
1645	2	45	18	96	24	15	29	92	3	5	174	195	698
1700	1	52	45	98	19	30	32	125	4	6	163	202	777
1715	2	71	25	107	31	23	49	151	1	7	153	212	832
1730	1	66	26	129	34	95	41	120	2	7	194	225	940
1745	2	39	17	105	31	63	50	86	1	5	158	210	767
<b>AM PEAK HOUR</b>													
715	1	48	37	904	625	53	103	801	75	53	339	398	3437
<b>OFF PEAK HOUR</b>													
1130	0	85	46	453	107	43	75	464	15	24	393	531	2236
<b>PM PEAK HOUR</b>													
1700	6	228	113	439	115	211	172	482	8	25	668	849	3316

TEXAS TRANSPORTATION INSTITUTE  
DIAMOND INTERCHANGE COUNTS

FREWAY [IN-S] =====> I 45 NORTH

CROSS STREET [E-W] ==> RANKIN

AM PEAK PERIOD ---> 7/15/1993

PM PEAK PERIOD ---> 7/15/1993

START TIME	I 45 SB FR-----				I 45 NB FR-----				I 45 NB FR-----				TOTAL		
	RT	TH+TH	TH+LT	RT	TH	LT+TH	UT	RT	TH+TH	TH+LT	RT	TH	LT+TH	UT	
700	130	183	43	30	93	121	0	27	36	17	27	8	86	10	811
715	141	219	49	35	105	134	0	34	42	20	36	11	109	13	948
730	147	215	50	37	114	133	1	32	65	28	41	11	116	11	1001
745	156	214	53	45	105	140	3	36	70	36	50	9	124	7	1048
800	164	172	47	36	90	124	2	31	63	29	43	8	132	6	947
815	172	138	34	25	64	90	1	31	45	31	36	10	135	8	820
830	184	86	26	16	43	70	3	26	37	34	32	9	120	11	697
845	191	72	21	18	40	63	1	20	39	29	29	7	94	12	636
1600	76	71	36	21	15	43	6	51	186	45	28	11	253	6	848
1615	83	69	42	30	17	51	3	63	193	52	36	16	282	7	944
1630	92	71	61	26	24	43	8	83	214	43	27	43	251	10	996
1645	110	59	66	33	31	32	14	97	190	48	25	58	240	9	1012
1700	75	63	67	27	26	29	17	101	183	51	31	63	221	11	965
1715	84	56	72	24	29	36	11	94	214	46	26	52	199	8	951
1730	70	43	59	28	35	41	8	80	183	42	27	61	179	10	866
1745	68	36	48	21	42	36	9	43	176	40	24	56	135	7	741
AM PEAK HOUR															
715	608	820	199	153	414	531	6	133	240	113	170	39	481	37	3944
PM PEAK HOUR															
1630	361	249	266	110	110	140	50	375	801	188	109	216	911	38	3924

## TEXAS TRANSPORTATION INSTITUTE

=====  
WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : EB RANKIN E OF KUYKENDAHL  
 DATE : 7- 7-1993 DIRECTION OF FLOW : EB  
 CHANNEL : THIS IS 2 OF 2 SITE NO : 30314585

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 13	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
<hr/>									
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	162	-	-	183	243	375	327	196	258
1- 2	104	-	-	130	182	275	239	139	186
2- 3	95	-	-	123	201	240	268	140	185
3- 4	71	-	-	87	98	120	131	85	101
4- 5	138	-	-	123	154	143	95	138	131
5- 6	605	-	-	599	594	274	170	599	448
6- 7	1711	-	-	1796	1599	510	265	1702	1176
7- 8	2248	-	-	2413	2218	683	308	2293	1574
8- 9	1477	-	-	1520	1548	870	400	1515	1163
9-10	1148	-	-	1280	1208	937	592	1212	1033
10-11	874	-	1117	1059	1048	1024	693	1024	969
11-12	-	-	1149	900	1148	1169	770	1066	1027
12-13	-	-	1380	1075	1378	1057	835	1278	1145
13-14	-	-	1352	1133	1278	1017	854	1254	1127
14-15	-	-	1154	1031	1222	987	833	1136	1045
15-16	-	-	1187	1053	1156	1027	837	1132	1052
16-17	-	-	1271	1182	1238	981	860	1230	1106
17-18	-	-	1669	1550	1516	997	786	1578	1304
18-19	-	-	1118	1104	1307	893	647	1176	1014
19-20	-	-	772	847	929	852	666	849	813
20-21	-	-	604	630	746	696	565	660	648
21-22	-	-	580	607	738	695	557	642	635
22-23	-	-	485	554	687	624	453	575	561
23-24	-	-	326	325	506	520	306	386	397
AM PEAK (6-9) VOLUME:	5436	-	-	5729	5365	2063	973	5510	3913
AM PEAK HIGHEST HOUR:	2248	-	1149	2413	2218	1169	770	2293	1574
PM PEAK (3-6) VOLUME:	-	-	4127	3785	3910	3005	2483	3941	3462
PM PEAK HIGHEST HOUR:	-	-	1669	1550	1516	1057	860	1578	1304
DAILY TOTAL:	8633 +	-	14164 +	21304	22942	16966	12457	22006	19099

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

## WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : EB RANKIN W OF KUYKENDAHL  
 DATE : 7- 7-1993 DIRECTION OF FLOW : EB  
 CHANNEL : THIS IS 1 OF 2 SITE NO : 30312582

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	AVERAGE	AVERAGE
<hr/>									
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	88	-	-	90	99	182	137	92	119
1- 2	53	-	-	59	87	107	102	66	82
2- 3	44	-	-	69	86	128	143	66	94
3- 4	39	-	-	50	43	63	63	44	52
4- 5	59	-	-	50	56	66	45	55	55
5- 6	218	-	-	259	235	130	72	237	183
6- 7	675	-	-	725	668	253	151	689	494
7- 8	1084	-	-	1040	966	352	164	1030	721
8- 9	721	-	-	742	726	437	192	730	564
9-10	558	-	-	572	516	474	298	549	484
10-11	441	-	455	456	477	500	364	457	449
11-12	-	-	494	489	507	553	437	497	496
12-13	-	-	522	512	602	535	428	545	520
13-14	-	-	518	544	561	517	447	541	517
14-15	-	-	478	528	548	496	475	518	505
15-16	-	-	469	489	491	524	442	483	483
16-17	-	-	547	571	589	484	432	569	525
17-18	-	-	760	738	716	520	419	738	631
18-19	-	-	642	631	708	480	354	660	563
19-20	-	-	505	496	574	422	344	525	468
20-21	-	-	354	373	454	399	336	394	383
21-22	-	-	330	329	448	376	258	369	348
22-23	-	-	264	294	353	298	251	304	292
23-24	-	-	182	163	245	246	152	197	198
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AM PEAK (6-9) VOLUME:	2480	-	-	2507	2360	1042	507	2449	1779
AM PEAK HIGHEST HOUR:	1084	-	494	1040	966	553	437	1030	721
PM PEAK (3-6) VOLUME:	-	-	1776	1798	1796	1528	1293	1790	1638
PM PEAK HIGHEST HOUR:	-	-	760	738	716	535	475	738	631
DAILY TOTAL:	3980 +	-	6520 +	10269	10755	8542	6506	10356	9225

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

## WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : EB RANKIN W OF KUYKENDAHL  
 DATE : 7- 7-1993 DIRECTION OF FLOW : EB  
 CHANNEL : THIS IS 2 OF 2 SITE NO : 30312582

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 13	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
<hr/>									
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	88	-	-	90	101	182	139	93	120
1- 2	53	-	-	59	88	111	103	67	83
2- 3	45	-	-	70	86	129	144	67	95
3- 4	39	-	-	50	44	64	63	44	52
4- 5	59	-	-	50	57	67	45	55	56
5- 6	219	-	-	261	237	131	73	239	184
6- 7	689	-	-	754	699	256	151	714	510
7- 8	1176	-	-	1164	1039	354	164	1126	779
8- 9	738	-	-	756	747	440	194	747	575
9-10	559	-	-	580	521	478	296	553	487
10-11	443	-	460	459	481	505	368	461	453
11-12	-	-	496	492	510	555	438	499	498
12-13	-	-	524	514	607	536	430	548	522
13-14	-	-	522	545	563	517	448	543	519
14-15	-	-	479	532	552	498	478	521	508
15-16	-	-	471	491	494	529	444	485	486
16-17	-	-	550	573	594	487	432	572	527
17-18	-	-	767	749	724	524	422	747	637
18-19	-	-	644	638	718	482	356	667	568
19-20	-	-	510	499	577	425	346	529	471
20-21	-	-	360	375	458	401	338	398	386
21-22	-	-	334	335	454	381	263	374	353
22-23	-	-	267	299	361	301	255	309	297
23-24	-	-	189	167	247	249	152	201	201
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AM PEAK (6-9) VOLUME:	2603	-	-	2674	2485	1050	509	2587	1864
AM PEAK HIGHEST HOUR:	1176	-	496	1164	1039	555	438	1126	779
PM PEAK (3-6) VOLUME:	-	-	1788	1813	1812	1540	1298	1804	1650
PM PEAK HIGHEST HOUR:	-	-	767	749	724	536	478	747	637
DAILY TOTAL:	4108 +	-	6573 +	10502	10959	8602	6542	10560	9367

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

=====  
WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : NB KUYKENDAHL S OF RANKIN  
 DATE : 7- 7-1993 DIRECTION OF FLOW : NB  
 CHANNEL : THIS IS 1 OF 2 SITE NO : 64080378

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 13	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
<hr/>									
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	11	-	-	15	14	18	14	13	14
1- 2	3	-	-	10	8	7	9	7	7
2- 3	4	-	-	7	10	8	10	7	8
3- 4	3	-	-	4	8	7	5	5	5
4- 5	6	-	-	6	7	10	3	6	6
5- 6	14	-	-	20	15	4	6	16	12
6- 7	55	-	-	47	47	11	7	50	33
7- 8	95	-	-	103	114	41	13	104	73
8- 9	65	-	-	64	68	46	18	66	52
9-10	55	-	-	64	65	69	29	61	56
10-11	58	-	62	55	72	82	33	62	60
11-12	-	-	99	115	136	82	42	117	95
12-13	-	-	105	117	135	86	37	119	96
13-14	-	-	126	82	115	64	43	108	86
14-15	-	-	104	83	122	67	57	103	87
15-16	-	-	118	112	154	75	57	128	103
16-17	-	-	247	247	255	46	52	250	169
17-18	-	-	350	367	373	57	50	363	239
18-19	-	-	149	151	153	48	58	151	112
19-20	-	-	90	71	64	60	47	75	66
20-21	-	-	56	54	54	34	36	55	47
21-22	-	-	47	49	47	50	37	48	46
22-23	-	-	28	36	55	32	31	40	36
23-24	-	-	25	29	27	31	10	27	24
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AM PEAK (6-9) VOLUME:	215	-	-	214	229	98	38	219	159
AM PEAK HIGHEST HOUR:	95	-	99	115	136	82	42	117	95
PM PEAK (3-6) VOLUME:	-	-	715	726	782	178	159	741	512
PM PEAK HIGHEST HOUR:	-	-	350	367	373	86	58	363	239
DAILY TOTAL:	369 +	-	1606 +	1908	2118	1035	704	1980	1536

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

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WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : SB KUYKENDAHL N OF RANKIN  
 DATE : 7- 7-1993 DIRECTION OF FLOW : SB  
 CHANNEL : THIS IS 1 OF 2 SITE NO : 30314146

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 13	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
<hr/>									
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	126	-	-	162	254	308	321	181	234
1- 2	92	-	-	142	210	280	214	148	188
2- 3	92	-	-	114	204	236	233	137	176
3- 4	42	-	-	71	87	97	115	67	82
4- 5	84	-	-	91	120	113	72	98	96
5- 6	463	-	-	485	417	184	124	455	335
6- 7	1560	-	-	1633	1497	343	151	1563	1037
7- 8	2557	-	-	2878	2471	499	200	2635	1721
8- 9	1600	-	-	1602	1608	694	282	1603	1157
9-10	1099	-	-	1138	1137	889	518	1125	956
10-11	953	-	963	1014	1011	951	600	985	915
11-12	-	-	963	913	1053	1089	685	976	941
12-13	-	-	1244	1092	1248	1043	918	1195	1109
13-14	-	-	1256	1175	1215	1105	855	1215	1121
14-15	-	-	1025	981	1200	1026	885	1069	1023
15-16	-	-	979	992	1154	1052	850	1042	1005
16-17	-	-	1050	1093	1130	1036	863	1091	1034
17-18	-	-	1407	1315	1429	956	782	1384	1178
18-19	-	-	1171	1154	1274	807	643	1200	1010
19-20	-	-	813	837	919	754	571	856	779
20-21	-	-	634	635	696	625	474	655	613
21-22	-	-	593	568	692	593	505	618	590
22-23	-	-	426	501	614	573	394	514	502
23-24	-	-	303	310	515	474	248	376	370
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AM PEAK (6-9) VOLUME:	5717	-	-	6113	5576	1536	633	5802	3915
AM PEAK HIGHEST HOUR:	2557	-	963	2878	2471	1089	685	2635	1721
PM PEAK (3-6) VOLUME:	-	-	3436	3400	3713	3044	2495	3516	3218
PM PEAK HIGHEST HOUR:	-	-	1407	1315	1429	1105	918	1384	1178
DAILY TOTAL:	8668 +	-	12827 +	20896	22155	15727	11503	21187	18172

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

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WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : EB & WB AIRTEX @ I-45  
 DATE : 7-7-1993 DIRECTION OF FLOW : EB & WB  
 CHANNEL : THIS IS 2 OF 2 SITE NO : 64080377

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 13	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
0- 1	58	-	-	68	77	133	122	68	92
1- 2	24	-	-	34	52	85	87	37	56
2- 3	19	-	-	47	51	77	68	39	52
3- 4	14	-	-	18	14	34	29	15	22
4- 5	10	-	-	14	18	15	22	14	16
5- 6	55	-	-	50	59	24	12	55	40
6- 7	215	-	-	227	230	57	32	224	152
7- 8	609	-	-	544	523	137	55	559	374
8- 9	450	-	-	438	480	230	86	456	337
9-10	352	-	-	373	374	285	126	366	302
10-11	434	-	-	414	419	358	174	422	360
11-12	-	-	539	593	604	426	247	579	482
12-13	-	-	692	680	652	504	379	675	581
13-14	-	-	749	728	728	548	378	735	626
14-15	-	-	642	620	637	572	428	633	580
15-16	-	-	614	642	655	540	499	637	590
16-17	-	-	865	828	905	537	457	866	718
17-18	-	-	1188	1075	1142	570	405	1135	876
18-19	-	-	884	782	857	492	388	841	681
19-20	-	-	482	568	516	474	358	522	480
20-21	-	-	334	426	449	335	223	403	353
21-22	-	-	425	430	380	243	193	412	334
22-23	-	-	178	228	209	198	137	205	190
23-24	-	-	150	130	181	147	121	154	146
AM PEAK (6-9) VOLUME:	1274	-	-	1209	1233	424	173	1239	863
AM PEAK HIGHEST HOUR:	609	-	539	593	604	426	247	579	482
PM PEAK (3-6) VOLUME:	-	-	2667	2545	2702	1647	1361	2638	2184
PM PEAK HIGHEST HOUR:	-	-	1188	1075	1142	572	499	1135	876
DAILY TOTAL:	2240 +	-	7742 +	9957	10212	7021	5026	10050	8440

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

## WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : EB & WB AIRTEX ACCESS RD W OF I-  
 DATE : 7-7-1993 DIRECTION OF FLOW : EB & WB  
 CHANNEL : THIS IS 2 OF 2 SITE NO : 64080375

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	AVERAGE	AVERAGE
	7 / 12	7 / 13	7 / 7	7 / 8	7 / 9	7 / 10	7 / 11		
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	33	-	-	39	26	90	59	33	49
1- 2	9	-	-	24	16	30	34	16	23
2- 3	6	-	-	26	13	30	26	15	20
3- 4	9	-	-	9	6	17	11	8	10
4- 5	7	-	-	8	8	8	9	8	8
5- 6	25	-	-	33	28	11	13	29	22
6- 7	105	-	-	106	106	26	7	106	70
7- 8	288	-	-	268	246	61	18	267	176
8- 9	236	-	-	247	289	137	33	257	188
9-10	236	-	-	247	272	190	60	252	201
10-11	315	-	-	279	283	238	118	292	247
11-12	381	-	354	391	383	302	186	377	333
12-13	-	-	467	460	432	341	227	453	385
13-14	-	-	479	504	491	364	269	491	421
14-15	-	-	434	412	359	386	286	402	375
15-16	-	-	340	406	373	400	352	373	374
16-17	-	-	441	390	422	346	289	418	378
17-18	-	-	482	387	443	367	269	437	390
18-19	-	-	380	329	352	330	252	354	329
19-20	-	-	273	312	299	364	265	295	303
20-21	-	-	168	235	288	218	124	230	207
21-22	-	-	236	264	232	155	100	244	197
22-23	-	-	74	89	104	130	92	89	98
23-24	-	-	91	61	78	69	50	77	70
AM PEAK (6-9) VOLUME:	629	-	-	621	641	224	58	630	435
AM PEAK HIGHEST HOUR:	381	-	354	391	383	302	186	377	333
PM PEAK (3-6) VOLUME:	-	-	1263	1183	1238	1113	910	1228	1141
PM PEAK HIGHEST HOUR:	-	-	482	504	491	400	352	491	421
DAILY TOTAL:	1650 +	-	4219 +	5526	5549	4610	3149	5522	4874

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

## WEEKLY VOLUME COUNT SUMMARY SHEET

LOCATION : EB & WB ARITEX ACC.RD E OF I-45  
 DATE : 7- 7-1993 DIRECTION OF FLOW : EB & WB  
 CHANNEL : THIS IS 2 OF 2 SITE NO : 64080376

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 13	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
0- 1	41	-	-	46	51	94	78	46	62
1- 2	18	-	-	23	35	70	64	25	42
2- 3	19	-	-	33	45	60	58	32	43
3- 4	10	-	-	18	9	34	25	12	19
4- 5	8	-	-	8	15	12	21	10	13
5- 6	48	-	-	33	53	19	11	45	33
6- 7	126	-	-	108	117	42	27	117	84
7- 8	375	-	-	335	328	96	34	346	234
8- 9	310	-	-	303	302	182	55	305	230
9-10	282	-	-	289	263	199	89	278	224
10-11	325	-	304	310	340	285	136	320	283
11-12	-	-	438	448	428	350	228	438	378
12-13	-	-	442	502	450	423	288	465	421
13-14	-	-	503	467	450	488	354	473	452
14-15	-	-	464	474	483	472	400	474	459
15-16	-	-	439	479	509	483	397	476	461
16-17	-	-	638	631	688	440	393	652	558
17-18	-	-	885	789	814	494	340	829	664
18-19	-	-	671	601	648	391	313	640	525
19-20	-	-	403	449	409	409	275	420	389
20-21	-	-	275	307	335	247	177	306	268
21-22	-	-	253	235	228	207	146	239	214
22-23	-	-	134	172	179	146	106	162	147
23-24	-	-	103	89	144	110	94	112	108
AM PEAK (6-9) VOLUME:	811	-	-	746	747	320	116	768	548
AM PEAK HIGHEST HOUR:	375	-	438	448	428	350	228	438	378
PM PEAK (3-6) VOLUME:	-	-	1962	1899	2011	1417	1130	1957	1684
PM PEAK HIGHEST HOUR:	-	-	885	789	814	494	400	829	664
DAILY TOTAL:	1562 +	-	5952 +	7149	7323	5753	4109	7222	6313

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

## ===== WEEKLY VOLUME COUNT SUMMARY SHEET =====

LOCATION : WB RANKIN E OF I-45  
 DATE : 7-7-1993 DIRECTION OF FLOW : WB  
 CHANNEL : THIS IS 1 OF 2 SITE NO : 30312597

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 13	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	93	-	-	161	163	196	142	139	151
1- 2	45	-	-	96	94	114	98	78	89
2- 3	54	-	-	91	130	171	114	92	112
3- 4	23	-	-	40	72	45	41	45	44
4- 5	32	-	-	49	50	37	31	44	40
5- 6	80	-	-	88	97	58	36	88	72
6- 7	276	-	-	204	226	119	59	235	177
7- 8	457	-	-	460	425	195	108	447	329
8- 9	450	-	-	430	437	249	130	439	339
9-10	407	-	396	422	450	276	174	419	354
10-11	378	-	362	446	438	292	172	406	348
11-12	-	-	581	568	649	342	226	599	473
12-13	-	-	622	600	624	409	262	615	503
13-14	-	-	549	500	562	419	294	537	465
14-15	-	-	589	625	625	432	319	613	518
15-16	-	-	719	792	811	446	394	774	632
16-17	-	-	979	945	995	304	285	973	702
17-18	-	-	1173	1160	1139	407	322	1157	840
18-19	-	-	743	776	765	320	299	761	581
19-20	-	-	428	458	440	315	277	442	384
20-21	-	-	409	419	418	307	327	415	376
21-22	-	-	377	413	442	284	288	411	361
22-23	-	-	280	317	264	244	293	287	280
23-24	-	-	185	206	234	193	156	208	195
AM PEAK (6-9) VOLUME:	1183	-	-	1094	1088	563	297	1122	845
AM PEAK HIGHEST HOUR:	457	-	581	568	649	342	226	599	473
PM PEAK (3-6) VOLUME:	-	-	2871	2897	2945	1157	1001	2904	2174
PM PEAK HIGHEST HOUR:	-	-	1173	1160	1139	446	394	1157	840
DAILY TOTAL:	2295 +	-	8392 +	10266	10550	6174	4847	10226	8364

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

- --- INDICATES DATA IS UNAVAILABLE

## TEXAS TRANSPORTATION INSTITUTE

## ===== WEEKLY VOLUME COUNT SUMMARY SHEET =====

LOCATION : \*\* WB RANKIN W OF I-45  
 DATE : 7- 7-1993 DIRECTION OF FLOW : WB  
 CHANNEL: THIS IS 1 OF 2 SITE NO : 30314585

DAY OF WEEK: WEATHER	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	5 - DAY	7 - DAY
	GOOD 7 / 12	GOOD 7 / 13	GOOD 7 / 7	GOOD 7 / 8	GOOD 7 / 9	GOOD 7 / 10	GOOD 7 / 11	AVERAGE	AVERAGE
<hr/>									
TIME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME	HOURLY VOLUME
0- 1	-	-	-	318	335	535	544	327	433
1- 2	-	-	-	171	190	305	297	181	241
2- 3	-	-	-	167	174	302	304	171	237
3- 4	-	-	-	59	111	142	179	85	123
4- 5	-	-	-	63	70	77	86	67	74
5- 6	-	-	-	160	160	90	71	160	120
6- 7	-	-	-	487	477	277	156	482	349
7- 8	-	-	-	818	812	446	208	815	571
8- 9	-	-	-	763	747	479	232	755	555
9-10	-	-	-	738	756	611	327	747	608
10-11	-	-	769	748	815	738	440	777	702
11-12	-	-	1070	924	975	856	510	990	867
12-13	-	-	1198	1095	1211	976	752	1168	1046
13-14	-	-	1084	1003	1123	1000	875	1070	1017
14-15	-	-	1228	1123	1209	1089	1419	1187	1214
15-16	-	-	1502	1382	1453	1137	-	1446	1369
16-17	-	-	1781	1623	1762	1220	-	1722	1597
17-18	-	-	2070	1971	2006	1136	-	2016	1796
18-19	-	-	1747	1625	1651	1074	-	1674	1524
19-20	-	-	1330	1254	1261	1001	-	1282	1212
20-21	-	-	1122	1068	1115	917	-	1102	1056
21-22	-	-	1157	1163	1139	985	-	1153	1111
22-23	-	-	848	941	984	953	-	924	932
23-24	-	-	636	608	788	701	-	677	683
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AM PEAK (6-9) VOLUME:	-	-	-	2068	2036	1202	596	2052	1476
AM PEAK HIGHEST HOUR:	-	-	1070	924	975	856	544	990	867
PM PEAK (3-6) VOLUME:	-	-	5353	4976	5221	3493	-	5183	4761
PM PEAK HIGHEST HOUR:	-	-	2070	1971	2006	1220	1419	2016	1796
DAILY TOTAL:	-	-	17542 +	20272	21324	17047	6400 +	20975	19435

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

- --- INDICATES DATA IS UNAVAILABLE