APÉNDICE A

FLUJO DE VEHÍCULOS

SUMMARY OF THE DATA FOR THE INTERSECTION:

Intersection: PR-116 (North) with PR-3116
Date: Sunday, August 01, 2004
Start Time: 12:00 A.M.

	NB-T FROM PR-3116		NB-T ON PR-116		SB-T		SB-R	
VOL. TOTAL (24 Horas)	4154		4798		3962		3536	
HORA PICO A.M.	11:45 AM		11:45 AM		11:45 AM		11:45 AM	
VOL. HORA PICO A.M.	340		280		311		254	
PRIMER INTERVALO		52		72		72		59
SEGUNDO INTERVALO		98		73		80		65
TERCER INTERVALO		104		64		76		62
CUARTO INTERVALO		86		71		83		68
FACTOR DE HORA PICO A.M.	0.8173		0.9589		0.9367		0.9338	
HORA PICO P.M.	7:15 PM		4:30 PM		2:30 PM		2:30 PM	
VOL. HORA PICO P.M.	395		459		341		315	
PRIMER INTERVALO		100		105		92		85
SEGUNDO INTERVALO		107		116		88		82
TERCER INTERVALO		92		128		76		70
CUARTO INTERVALO		96		110		85		78
FACTOR DE HORA PICO P.M.	0.9229		0.8965		0.9266		0.9265	

FIGURA 10

SUMMARY OF DATA NORTHBOUND - THRU
FROM PR-3116 TO PR-116
Intersection: PR-116 with PR-3116 (North)
Date: Sunday, August 01, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	21		
12:15 AM	23		
12:30 AM	25		
12:45 AM	32	101	
1:00 AM	18	98	
1:15 AM	8	83	
1:30 AM	8	66	
1:45 AM	6	40	
2:00 AM	14	36	
2:15 AM	11	39	
2:30 AM	6	37	
2:45 AM	10	41	
3:00 AM	4	31	
3:15 AM	8	28	
3:30 AM	13	35	
3:45 AM	4	29	
4:00 AM	4	29	
4:15 AM	8	29	
4:30 AM	5	21	
4:45 AM	11	28	
5:00 AM	7	31	
5:15 AM	8	31	
5:30 AM	5	31	
5:45 AM	5	25	
6:00 AM	10	28	
6:15 AM	5	25	
6:30 AM	7	27	
6:45 AM	13	35	
7:00 AM	17	42	
7:15 AM	20	57	
7:30 AM	13	63	
7:45 AM	17	67	
8:00 AM	20	70	
8:15 AM	22	72	
8:30 AM	31	90	
8:45 AM	23	96	
9:00 AM	46	122	
9:15 AM	28	128	
9:30 AM	41	138	
9:45 AM	56	171	
10:00 AM	45	170	
10:15 AM	49	191	
10:30 AM	61	211	
10:45 AM	42	197	
11:00 AM	52	204	
11:15 AM	98	253	
11:30 AM	104	296	
11:45 AM	86	340	340
12:00 PM	70	358	
12:15 PM	78	338	
12:30 PM	84	318	
12:45 PM	82	314	
1:00 PM	63	307	
1:15 PM	54	283	
1:30 PM	69	268	
1:45 PM	52	238	
2:00 PM	67	242	
2:15 PM	61	249	
2:30 PM	58	238	
2:45 PM	80	266	
3:00 PM	58	257	
3:15 PM	86	282	
3:30 PM	84	308	
3:45 PM	76	304	
4:00 PM	96	342	
4:15 PM	111	367	
4:30 PM	91	374	
4:45 PM	78	376	
5:00 PM	81	361	
5:15 PM	78	328	
5:30 PM	81	318	
5:45 PM	63	303	
6:00 PM	94	316	
6:15 PM	90	328	
6:30 PM	100	347	
6:45 PM	107	391	
7:00 PM	92	389	
7:15 PM	96	395	
7:30 PM	74	369	
7:45 PM	64	326	
8:00 PM	56	290	
8:15 PM	54	248	
8:30 PM	52	226	
8:45 PM	56	218	
9:00 PM	32	194	
9:15 PM	33	173	
9:30 PM	32	153	
9:45 PM	28	125	
10:00 PM	23	116	
10:15 PM	16	99	
10:30 PM	18	85	

10:45 PM	18	75	
11:00 PM	16	68	
11:15 PM	13	65	
11:30 PM	12	59	
11:45 PM	7	48	395
Total	4154		

SUMMARY OF DATA NORTHBOUND - THRU ON PR-116

Intersection: PR-116 (North) with PR-3116

Date: Sunday, August 01, 2004

Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	33		
12:15 AM	34		
12:30 AM	25		
12:45 AM	31	123	
1:00 AM	29	119	
1:15 AM	20	105	
1:30 AM	15	95	
1:45 AM	14	78	
2:00 AM	7	56	
2:15 AM	8	44	
2:30 AM	3	32	
2:45 AM	3	21	
3:00 AM	5	19	
3:15 AM	7	18	
3:30 AM	4	19	
3:45 AM	4	20	
4:00 AM	2	17	
4:15 AM	3	13	
4:30 AM	2	11	
4:45 AM	2	9	
5:00 AM	7	14	
5:15 AM	2	13	
5:30 AM	6	17	
5:45 AM	11	26	
6:00 AM	6	25	
6:15 AM	5	28	
6:30 AM	14	36	
6:45 AM	9	34	
7:00 AM	14	42	
7:15 AM	15	52	
7:30 AM	16	54	
7:45 AM	14	59	
8:00 AM	18	63	
8:15 AM	19	67	
8:30 AM	22	73	
8:45 AM	26	85	
9:00 AM	31	98	
9:15 AM	42	121	
9:30 AM	40	139	
9:45 AM	52	165	
10:00 AM	38	172	
10:15 AM	54	184	
10:30 AM	54	198	
10:45 AM	63	209	
11:00 AM	72	243	
11:15 AM	73	262	
11:30 AM	64	272	
11:45 AM	71	280	280
12:00 PM	64	272	
12:15 PM	84	283	
12:30 PM	71	290	
12:45 PM	81	300	
1:00 PM	84	320	
1:15 PM	94	330	
1:30 PM	98	357	
1:45 PM	100	376	
2:00 PM	98	390	
2:15 PM	92	388	
2:30 PM	127	417	
2:45 PM	81	398	
3:00 PM	91	391	
3:15 PM	96	395	
3:30 PM	97	365	
3:45 PM	105	389	
4:00 PM	116	414	
4:15 PM	128	446	
4:30 PM	110	459	
4:45 PM	103	457	
5:00 PM	76	417	
5:15 PM	127	416	
5:30 PM	106	412	
5:45 PM	105	414	
6:00 PM	104	442	
6:15 PM	92	407	
6:30 PM	98	399	
6:45 PM	87	381	
7:00 PM	94	371	
7:15 PM	88	367	
7:30 PM	87	356	
7:45 PM	89	358	
8:00 PM	83	347	
8:15 PM	78	337	
8:30 PM	47	297	

8:45 PM	41	249	
9:00 PM	63	229	
9:15 PM	47	198	
9:30 PM	37	188	
9:45 PM	42	189	
10:00 PM	30	156	
10:15 PM	24	133	
10:30 PM	29	125	
10:45 PM	22	105	
11:00 PM	33	108	
11:15 PM	14	98	
11:30 PM	14	83	
11:45 PM	12	73	459
Total	4798		

SUMMARY OF DATA SOUTHBOUND - THRU

Intersection: PR-116 (North) with PR-3116
Date: Sunday, August 01, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	20		
12:15 AM	25		
12:30 AM	15		
12:45 AM	15	75	
1:00 AM	15	70	
1:15 AM	11	56	
1:30 AM	23	64	
1:45 AM	12	61	
2:00 AM	15	61	
2:15 AM	7	57	
2:30 AM	6	40	
2:45 AM	7	35	
3:00 AM	8	28	
3:15 AM	8	29	
3:30 AM	7	30	
3:45 AM	10	33	
4:00 AM	4	29	
4:15 AM	7	28	
4:30 AM	2	23	
4:45 AM	2	15	
5:00 AM	6	17	
5:15 AM	4	14	
5:30 AM	7	19	
5:45 AM	6	23	
6:00 AM	8	25	
6:15 AM	10	31	
6:30 AM	12	36	
6:45 AM	18	48	
7:00 AM	13	53	
7:15 AM	15	58	
7:30 AM	22	68	
7:45 AM	33	83	
8:00 AM	24	94	
8:15 AM	24	103	
8:30 AM	34	115	
8:45 AM	39	121	
9:00 AM	36	133	
9:15 AM	41	150	
9:30 AM	46	162	
9:45 AM	53	176	
10:00 AM	47	187	
10:15 AM	47	193	
10:30 AM	49	196	
10:45 AM	55	198	
11:00 AM	72	223	
11:15 AM	80	256	
11:30 AM	76	283	
11:45 AM	83	311	311
12:00 PM	82	321	
12:15 PM	81	322	
12:30 PM	80	326	
12:45 PM	87	330	
1:00 PM	85	333	
1:15 PM	77	329	
1:30 PM	81	330	
1:45 PM	92	335	
2:00 PM	88	338	
2:15 PM	76	337	
2:30 PM	85	341	
2:45 PM	76	325	
3:00 PM	89	326	
3:15 PM	73	323	
3:30 PM	77	315	
3:45 PM	66	305	
4:00 PM	85	301	
4:15 PM	72	300	
4:30 PM	65	288	
4:45 PM	71	293	
5:00 PM	76	284	
5:15 PM	66	278	
5:30 PM	64	277	
5:45 PM	59	265	
6:00 PM	66	255	
6:15 PM	59	248	
6:30 PM	63	247	

6:45 PM	70	258	
7:00 PM	72	264	
7:15 PM	54	259	
7:30 PM	50	246	
7:45 PM	53	229	
8:00 PM	45	202	
8:15 PM	44	192	
8:30 PM	41	183	
8:45 PM	40	170	
9:00 PM	30	155	
9:15 PM	44	155	
9:30 PM	37	151	
9:45 PM	28	139	
10:00 PM	19	128	
10:15 PM	24	108	
10:30 PM	16	87	
10:45 PM	22	81	
11:00 PM	19	81	
11:15 PM	14	71	
11:30 PM	10	65	
11:45 PM	10	53	341
Total	3962		

SUMMARY OF DATA SOUTHBOUND - RIGHT

Intersection: PR-116 (North) with PR-3116
Date: Sunday, August 01, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	17		
12:15 AM	21		
12:30 AM	12		
12:45 AM	13	63	
1:00 AM	12	58	
1:15 AM	9	46	
1:30 AM	18	52	
1:45 AM	10	49	
2:00 AM	12	49	
2:15 AM	5	45	
2:30 AM	5	32	
2:45 AM	5	27	
3:00 AM	7	22	
3:15 AM	6	23	
3:30 AM	6	24	
3:45 AM	9	28	
4:00 AM	3	24	
4:15 AM	5	23	
4:30 AM	2	19	
4:45 AM	2	12	
5:00 AM	5	14	
5:15 AM	4	13	
5:30 AM	6	17	
5:45 AM	5	20	
6:00 AM	7	22	
6:15 AM	9	27	
6:30 AM	10	31	
6:45 AM	14	40	
7:00 AM	11	44	
7:15 AM	13	48	
7:30 AM	18	56	
7:45 AM	27	69	
8:00 AM	20	78	
8:15 AM	19	84	
8:30 AM	28	94	
8:45 AM	32	99	
9:00 AM	30	109	
9:15 AM	33	123	
9:30 AM	37	132	
9:45 AM	43	143	
10:00 AM	38	151	
10:15 AM	39	157	
10:30 AM	40	160	
10:45 AM	45	162	
11:00 AM	59	183	
11:15 AM	65	209	
11:30 AM	62	231	
11:45 AM	68	254	254
12:00 PM	75	270	
12:15 PM	75	280	
12:30 PM	74	292	
12:45 PM	80	304	
1:00 PM	78	307	
1:15 PM	71	303	
1:30 PM	74	303	
1:45 PM	85	308	
2:00 PM	82	312	
2:15 PM	70	311	
2:30 PM	78	315	
2:45 PM	71	301	
3:00 PM	82	301	
3:15 PM	67	298	
3:30 PM	72	292	
3:45 PM	61	282	
4:00 PM	78	278	
4:15 PM	67	278	
4:30 PM	60	266	

4:45 PM	66	271	
5:00 PM	71	264	
5:15 PM	60	257	
5:30 PM	59	256	
5:45 PM	54	244	
6:00 PM	61	234	
6:15 PM	55	229	
6:30 PM	59	229	
6:45 PM	64	239	
7:00 PM	67	245	
7:15 PM	49	239	
7:30 PM	47	227	
7:45 PM	49	212	
8:00 PM	41	186	
8:15 PM	41	178	
8:30 PM	37	168	
8:45 PM	36	155	
9:00 PM	27	141	
9:15 PM	41	141	
9:30 PM	35	139	
9:45 PM	26	129	
10:00 PM	18	120	
10:15 PM	22	101	
10:30 PM	15	81	
10:45 PM	20	75	
11:00 PM	18	75	
11:15 PM	13	66	
11:30 PM	10	61	
11:45 PM	9	50	315
Total	3536		

SUMMARY OF THE DATA FOR THE INTERSECTION:

Intersection: PR-116 (North) with PR-3116
Date: Tuesday, August 03, 2004
Start Time: 12:00 A.M.

	NB-T FROM PR-3116		NB-T ON PR-116		SB-T		SB-R	
VOL. TOTAL (24 Horas)	4442		3125		3770		3338	
HORA PICO A.M.	7:45 AM		7:15 AM		11:45 AM		11:45 AM	
VOL. HORA PICO A.M.	283		196		274		224	
PRIMER INTERVALO		57		55		60		49
SEGUNDO INTERVALO		70		52		57		47
TERCER INTERVALO		80		45		62		50
CUARTO INTERVALO		76		44		95		78
FACTOR DE HORA PICO A.M.	0.8844		0.8909		0.7211		0.7179	
HORA PICO P.M.	7:15 PM		4:45 PM		4:45 PM		3:30 PM	
VOL. HORA PICO P.M.	375		221		300		277	
PRIMER INTERVALO		95		55		74		76
SEGUNDO INTERVALO		102		62		73		67
TERCER INTERVALO		87		54		72		71
CUARTO INTERVALO		91		50		81		63
FACTOR DE HORA PICO P.M.	0.9191		0.8911		0.9259		0.9112	

FIGURA 11

SUMMARY OF DATA NORTHBOUND - THRU
FROM PR-3116 TO PR-116
Intersection: PR-116 (North) with PR-3116
Date: Tuesday, August 03, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	9		
12:15 AM	6		
12:30 AM	1		
12:45 AM	7	23	
1:00 AM	5	19	
1:15 AM	0	13	
1:30 AM	4	16	
1:45 AM	4	13	
2:00 AM	6	14	
2:15 AM	2	16	
2:30 AM	2	14	
2:45 AM	2	12	
3:00 AM	1	7	
3:15 AM	8	13	
3:30 AM	7	18	
3:45 AM	4	20	
4:00 AM	10	29	
4:15 AM	8	29	
4:30 AM	7	29	
4:45 AM	7	32	
5:00 AM	20	42	
5:15 AM	20	54	
5:30 AM	20	67	
5:45 AM	29	89	
6:00 AM	31	100	
6:15 AM	50	130	
6:30 AM	52	162	
6:45 AM	70	203	
7:00 AM	57	229	
7:15 AM	70	249	
7:30 AM	80	277	
7:45 AM	76	283	
8:00 AM	53	279	
8:15 AM	56	265	
8:30 AM	43	228	
8:45 AM	62	214	
9:00 AM	46	207	
9:15 AM	62	213	
9:30 AM	66	236	
9:45 AM	52	226	
10:00 AM	62	242	
10:15 AM	70	250	
10:30 AM	71	255	
10:45 AM	78	281	
11:00 AM	55	274	
11:15 AM	60	264	
11:30 AM	71	264	
11:45 AM	74	260	283
12:00 PM	73	278	
12:15 PM	62	280	
12:30 PM	70	279	
12:45 PM	89	294	
1:00 PM	73	294	
1:15 PM	65	297	
1:30 PM	59	286	
1:45 PM	63	260	
2:00 PM	52	239	
2:15 PM	69	243	
2:30 PM	76	260	
2:45 PM	74	271	
3:00 PM	94	313	
3:15 PM	70	314	
3:30 PM	76	314	
3:45 PM	86	326	
4:00 PM	71	303	
4:15 PM	78	311	
4:30 PM	66	301	
4:45 PM	70	285	
5:00 PM	64	278	
5:15 PM	58	258	
5:30 PM	47	239	
5:45 PM	60	229	
6:00 PM	89	254	
6:15 PM	86	282	
6:30 PM	95	330	
6:45 PM	102	372	
7:00 PM	87	370	
7:15 PM	91	375	
7:30 PM	70	350	
7:45 PM	61	309	
8:00 PM	53	275	
8:15 PM	51	235	
8:30 PM	49	214	
8:45 PM	53	206	
9:00 PM	30	183	
9:15 PM	31	163	
9:30 PM	30	144	
9:45 PM	27	118	
10:00 PM	22	110	
10:15 PM	15	94	
10:30 PM	17	81	

10:45 PM	17	71	
11:00 PM	15	64	
11:15 PM	12	61	
11:30 PM	11	55	
11:45 PM	7	45	375
Total	4442		

SUMMARY OF DATA NORTHBOUND - THRU ON PR-116
Intersection: PR-116 (North) with PR-3116
Date: Tuesday, August 03, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	31		
12:15 AM	9		
12:30 AM	8		
12:45 AM	5	53	
1:00 AM	3	25	
1:15 AM	6	22	
1:30 AM	7	21	
1:45 AM	2	18	
2:00 AM	1	16	
2:15 AM	2	12	
2:30 AM	1	6	
2:45 AM	2	6	
3:00 AM	2	7	
3:15 AM	2	7	
3:30 AM	4	10	
3:45 AM	3	11	
4:00 AM	3	12	
4:15 AM	6	16	
4:30 AM	9	21	
4:45 AM	12	30	
5:00 AM	15	42	
5:15 AM	26	62	
5:30 AM	29	82	
5:45 AM	30	100	
6:00 AM	42	127	
6:15 AM	40	141	
6:30 AM	55	167	
6:45 AM	52	189	
7:00 AM	45	192	
7:15 AM	44	196	
7:30 AM	54	195	
7:45 AM	39	182	
8:00 AM	44	181	
8:15 AM	38	175	
8:30 AM	48	169	
8:45 AM	38	168	
9:00 AM	41	165	
9:15 AM	41	168	
9:30 AM	43	163	
9:45 AM	43	168	
10:00 AM	36	163	
10:15 AM	50	172	
10:30 AM	38	167	
10:45 AM	42	166	
11:00 AM	40	170	
11:15 AM	46	166	
11:30 AM	52	180	
11:45 AM	39	177	196
12:00 PM	43	180	
12:15 PM	52	186	
12:30 PM	55	189	
12:45 PM	51	201	
1:00 PM	47	205	
1:15 PM	42	195	
1:30 PM	49	189	
1:45 PM	50	188	
2:00 PM	38	179	
2:15 PM	49	186	
2:30 PM	61	198	
2:45 PM	56	204	
3:00 PM	43	209	
3:15 PM	46	206	
3:30 PM	48	193	
3:45 PM	49	186	
4:00 PM	55	198	
4:15 PM	62	214	
4:30 PM	54	220	
4:45 PM	50	221	
5:00 PM	38	204	
5:15 PM	60	202	
5:30 PM	51	199	
5:45 PM	50	199	
6:00 PM	51	212	
6:15 PM	43	195	
6:30 PM	48	192	
6:45 PM	43	185	
7:00 PM	46	180	
7:15 PM	43	180	
7:30 PM	44	176	
7:45 PM	42	175	
8:00 PM	40	169	
8:15 PM	38	164	
8:30 PM	23	143	

8:45 PM	20	121	
9:00 PM	30	111	
9:15 PM	22	95	
9:30 PM	17	89	
9:45 PM	22	91	
10:00 PM	14	75	
10:15 PM	12	65	
10:30 PM	14	62	
10:45 PM	11	51	
11:00 PM	15	52	
11:15 PM	7	47	
11:30 PM	7	40	
11:45 PM	6	35	221
Total	3125		

SUMMARY OF DATA SOUTHBOUND - THRU

Intersection: PR-116 (North) with PR-3116
Date: Tuesday, August 03, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	10		
12:15 AM	8		
12:30 AM	8		
12:45 AM	2	28	
1:00 AM	8	26	
1:15 AM	5	23	
1:30 AM	3	18	
1:45 AM	2	18	
2:00 AM	4	14	
2:15 AM	3	12	
2:30 AM	3	12	
2:45 AM	3	13	
3:00 AM	2	11	
3:15 AM	3	11	
3:30 AM	3	11	
3:45 AM	5	13	
4:00 AM	3	14	
4:15 AM	3	14	
4:30 AM	10	21	
4:45 AM	12	28	
5:00 AM	18	43	
5:15 AM	20	60	
5:30 AM	26	76	
5:45 AM	36	100	
6:00 AM	44	126	
6:15 AM	47	153	
6:30 AM	43	170	
6:45 AM	43	177	
7:00 AM	40	173	
7:15 AM	41	167	
7:30 AM	36	160	
7:45 AM	37	154	
8:00 AM	34	148	
8:15 AM	40	147	
8:30 AM	40	151	
8:45 AM	43	157	
9:00 AM	41	164	
9:15 AM	46	170	
9:30 AM	59	189	
9:45 AM	52	198	
10:00 AM	53	210	
10:15 AM	55	219	
10:30 AM	52	212	
10:45 AM	58	218	
11:00 AM	60	225	
11:15 AM	57	227	
11:30 AM	62	237	
11:45 AM	95	274	274
12:00 PM	55	269	
12:15 PM	61	273	
12:30 PM	61	272	
12:45 PM	68	245	
1:00 PM	55	245	
1:15 PM	40	224	
1:30 PM	74	237	
1:45 PM	63	232	
2:00 PM	65	242	
2:15 PM	71	273	
2:30 PM	67	266	
2:45 PM	83	286	
3:00 PM	73	294	
3:15 PM	76	299	
3:30 PM	68	300	
3:45 PM	72	289	
4:00 PM	74	290	
4:15 PM	73	287	
4:30 PM	72	291	
4:45 PM	81	300	
5:00 PM	67	293	
5:15 PM	57	277	
5:30 PM	56	261	
5:45 PM	51	231	
6:00 PM	57	221	
6:15 PM	51	215	
6:30 PM	55	214	

6:45 PM	61	224	
7:00 PM	63	230	
7:15 PM	47	226	
7:30 PM	44	215	
7:45 PM	46	200	
8:00 PM	39	176	
8:15 PM	38	167	
8:30 PM	35	158	
8:45 PM	34	146	
9:00 PM	26	133	
9:15 PM	38	133	
9:30 PM	33	131	
9:45 PM	24	121	
10:00 PM	17	112	
10:15 PM	21	95	
10:30 PM	14	76	
10:45 PM	19	71	
11:00 PM	17	71	
11:15 PM	12	62	
11:30 PM	9	57	
11:45 PM	9	47	300
Total	3770		

SUMMARY OF DATA SOUTHBOUND - RIGHT

Intersection: PR-116 (North) with PR-3116
Date: Tuesday, August 03, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	9		
12:15 AM	6		
12:30 AM	6		
12:45 AM	2	23	
1:00 AM	6	20	
1:15 AM	4	18	
1:30 AM	3	15	
1:45 AM	2	15	
2:00 AM	4	13	
2:15 AM	2	11	
2:30 AM	2	10	
2:45 AM	3	11	
3:00 AM	2	9	
3:15 AM	3	10	
3:30 AM	2	10	
3:45 AM	4	11	
4:00 AM	2	11	
4:15 AM	2	10	
4:30 AM	8	16	
4:45 AM	10	22	
5:00 AM	15	35	
5:15 AM	17	50	
5:30 AM	22	64	
5:45 AM	30	84	
6:00 AM	36	105	
6:15 AM	39	127	
6:30 AM	35	140	
6:45 AM	36	146	
7:00 AM	32	142	
7:15 AM	34	137	
7:30 AM	29	131	
7:45 AM	31	126	
8:00 AM	27	121	
8:15 AM	33	120	
8:30 AM	33	124	
8:45 AM	35	128	
9:00 AM	34	135	
9:15 AM	38	140	
9:30 AM	49	156	
9:45 AM	42	163	
10:00 AM	43	172	
10:15 AM	45	179	
10:30 AM	42	172	
10:45 AM	48	178	
11:00 AM	49	184	
11:15 AM	47	186	
11:30 AM	50	194	
11:45 AM	78	224	224
12:00 PM	51	226	
12:15 PM	56	235	
12:30 PM	56	241	
12:45 PM	63	226	
1:00 PM	50	225	
1:15 PM	36	205	
1:30 PM	68	217	
1:45 PM	59	213	
2:00 PM	60	223	
2:15 PM	66	253	
2:30 PM	62	247	
2:45 PM	76	264	
3:00 PM	67	271	
3:15 PM	71	276	
3:30 PM	63	277	
3:45 PM	66	267	
4:00 PM	68	268	
4:15 PM	67	264	
4:30 PM	66	267	

4:45 PM	75	276	
5:00 PM	61	269	
5:15 PM	53	255	
5:30 PM	51	240	
5:45 PM	47	212	
6:00 PM	53	204	
6:15 PM	48	199	
6:30 PM	51	199	
6:45 PM	56	208	
7:00 PM	58	213	
7:15 PM	43	208	
7:30 PM	40	197	
7:45 PM	43	184	
8:00 PM	36	162	
8:15 PM	36	155	
8:30 PM	33	148	
8:45 PM	32	137	
9:00 PM	24	125	
9:15 PM	36	125	
9:30 PM	30	122	
9:45 PM	23	113	
10:00 PM	15	104	
10:15 PM	19	87	
10:30 PM	13	70	
10:45 PM	18	65	
11:00 PM	15	65	
11:15 PM	11	57	
11:30 PM	8	52	
11:45 PM	8	42	277
Total	3338		

SUMMARY OF THE DATA FOR THE INTERSECTION:

Intersection: PR-116 (South) with PR-3116
Date: Sunday, August 01, 2004
Start Time: 12:00 A.M.

	NB-T	NB-R	SB-L	SB-T	WB-L	WB-R
VOL. TOTAL (24 Horas)	4481	909	158	3420	1069	317
HORA PICO A.M.	11:45 AM	11:45 AM	11:45 AM	11:45 AM	11:45 AM	11:45 AM
VOL. HORA PICO A.M.	250	63	13	207	66	30
PRIMER INTERVALO	66	17	3	44	12	6
SEGUNDO INTERVALO	63	16	4	58	21	10
TERCER INTERVALO	59	15	3	50	12	5
CUARTO INTERVALO	62	15	3	55	21	9
FACTOR DE HORA PICO A.M.	0.9470	0.9265	0.8125	0.8922	0.7857	0.7500
HORA PICO P.M.	4:30 PM	4:30 PM	1:00 PM	3:45 PM	7:30 PM	12:00 PM
VOL. HORA PICO P.M.	441	85	13	306	108	29
PRIMER INTERVALO	101	19	3	76	28	10
SEGUNDO INTERVALO	113	22	4	83	34	5
TERCER INTERVALO	123	24	3	73	19	9
CUARTO INTERVALO	104	20	3	74	27	5
FACTOR DE HORA PICO P.M.	0.8963	0.8854	0.8125	0.9217	0.7941	0.7250

FIGURA 13

SUMMARY OF DATA NORTHBOUND - THRU

Intersection: PR-116 (South) with PR-3116
Date: Sunday, August 01, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	31		
12:15 AM	31		
12:30 AM	22		
12:45 AM	29	113	
1:00 AM	25	107	
1:15 AM	19	95	
1:30 AM	14	87	
1:45 AM	14	72	
2:00 AM	6	53	
2:15 AM	8	42	
2:30 AM	3	31	
2:45 AM	3	20	
3:00 AM	5	19	
3:15 AM	6	17	
3:30 AM	4	18	
3:45 AM	3	18	
4:00 AM	2	15	
4:15 AM	3	12	
4:30 AM	2	10	
4:45 AM	2	9	
5:00 AM	7	14	
5:15 AM	2	13	
5:30 AM	6	17	
5:45 AM	11	26	
6:00 AM	5	24	
6:15 AM	4	26	
6:30 AM	12	32	
6:45 AM	7	28	
7:00 AM	12	35	
7:15 AM	12	43	
7:30 AM	13	44	
7:45 AM	10	47	
8:00 AM	15	50	
8:15 AM	14	52	
8:30 AM	18	57	
8:45 AM	19	66	
9:00 AM	25	76	
9:15 AM	38	100	
9:30 AM	35	117	
9:45 AM	45	143	
10:00 AM	34	152	
10:15 AM	47	161	
10:30 AM	47	173	
10:45 AM	58	186	
11:00 AM	66	218	
11:15 AM	63	234	
11:30 AM	59	246	
11:45 AM	62	250	250
12:00 PM	59	243	
12:15 PM	80	260	
12:30 PM	65	266	
12:45 PM	76	280	
1:00 PM	80	301	
1:15 PM	90	311	
1:30 PM	94	340	
1:45 PM	96	360	
2:00 PM	94	374	
2:15 PM	87	371	
2:30 PM	122	399	
2:45 PM	75	378	
3:00 PM	87	371	
3:15 PM	92	376	
3:30 PM	91	345	
3:45 PM	101	371	
4:00 PM	113	397	
4:15 PM	123	428	
4:30 PM	104	441	
4:45 PM	98	438	
5:00 PM	71	396	
5:15 PM	123	396	
5:30 PM	102	394	
5:45 PM	99	395	
6:00 PM	98	422	
6:15 PM	87	386	
6:30 PM	94	378	
6:45 PM	80	359	
7:00 PM	86	347	
7:15 PM	84	344	
7:30 PM	81	331	
7:45 PM	86	337	
8:00 PM	81	332	
8:15 PM	74	322	
8:30 PM	44	285	
8:45 PM	39	238	
9:00 PM	60	217	
9:15 PM	45	188	
9:30 PM	34	178	
9:45 PM	38	177	
10:00 PM	29	146	
10:15 PM	22	123	
10:30 PM	28	117	

10:45 PM	21	100	
11:00 PM	32	103	
11:15 PM	13	94	
11:30 PM	14	80	
11:45 PM	11	70	441
Total	4481		

SUMMARY OF DATA NORTHBOUND - RIGHT

Intersection: PR-116 (South) with PR-3116
Date: Sunday, August 01, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	8		
12:15 AM	8		
12:30 AM	5		
12:45 AM	7	28	
1:00 AM	6	26	
1:15 AM	5	23	
1:30 AM	4	22	
1:45 AM	3	18	
2:00 AM	2	14	
2:15 AM	2	11	
2:30 AM	1	8	
2:45 AM	1	6	
3:00 AM	1	5	
3:15 AM	1	4	
3:30 AM	1	4	
3:45 AM	1	4	
4:00 AM	1	4	
4:15 AM	1	4	
4:30 AM	0	3	
4:45 AM	0	2	
5:00 AM	2	3	
5:15 AM	0	2	
5:30 AM	1	3	
5:45 AM	3	6	
6:00 AM	1	5	
6:15 AM	1	6	
6:30 AM	3	8	
6:45 AM	2	7	
7:00 AM	3	9	
7:15 AM	3	11	
7:30 AM	3	11	
7:45 AM	2	11	
8:00 AM	4	12	
8:15 AM	3	12	
8:30 AM	5	14	
8:45 AM	5	17	
9:00 AM	6	19	
9:15 AM	9	25	
9:30 AM	9	29	
9:45 AM	11	35	
10:00 AM	8	37	
10:15 AM	12	40	
10:30 AM	12	43	
10:45 AM	14	46	
11:00 AM	17	55	
11:15 AM	16	59	
11:30 AM	15	62	
11:45 AM	15	63	63
12:00 PM	11	57	
12:15 PM	15	56	
12:30 PM	12	53	
12:45 PM	15	53	
1:00 PM	15	57	
1:15 PM	17	59	
1:30 PM	18	65	
1:45 PM	18	68	
2:00 PM	18	71	
2:15 PM	16	70	
2:30 PM	23	75	
2:45 PM	14	71	
3:00 PM	16	69	
3:15 PM	18	71	
3:30 PM	17	65	
3:45 PM	19	70	
4:00 PM	22	76	
4:15 PM	24	82	
4:30 PM	20	85	
4:45 PM	19	85	
5:00 PM	13	76	
5:15 PM	24	76	
5:30 PM	19	75	
5:45 PM	19	75	
6:00 PM	19	81	
6:15 PM	16	73	
6:30 PM	18	72	
6:45 PM	15	68	
7:00 PM	16	65	
7:15 PM	16	65	
7:30 PM	16	63	
7:45 PM	16	64	
8:00 PM	16	64	
8:15 PM	14	62	
8:30 PM	8	54	

8:45 PM	8	46	
9:00 PM	12	42	
9:15 PM	8	36	
9:30 PM	6	34	
9:45 PM	7	33	
10:00 PM	6	27	
10:15 PM	4	23	
10:30 PM	5	22	
10:45 PM	4	19	
11:00 PM	6	19	
11:15 PM	3	18	
11:30 PM	3	16	
11:45 PM	2	14	85
Total	909		

SUMMARY OF DATA SOUTHBOUND - LEFT

Intersection: PR-116 (South) with PR-3116
Date: Sunday, August 01, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	1		
12:15 AM	1		
12:30 AM	1		
12:45 AM	1	4	
1:00 AM	0	3	
1:15 AM	1	3	
1:30 AM	1	3	
1:45 AM	1	3	
2:00 AM	0	3	
2:15 AM	0	2	
2:30 AM	0	1	
2:45 AM	0	0	
3:00 AM	0	0	
3:15 AM	0	0	
3:30 AM	0	0	
3:45 AM	0	0	
4:00 AM	0	0	
4:15 AM	0	0	
4:30 AM	0	0	
4:45 AM	0	0	
5:00 AM	0	0	
5:15 AM	0	0	
5:30 AM	0	0	
5:45 AM	0	0	
6:00 AM	0	0	
6:15 AM	1	1	
6:30 AM	0	1	
6:45 AM	1	2	
7:00 AM	1	3	
7:15 AM	1	3	
7:30 AM	1	4	
7:45 AM	1	4	
8:00 AM	1	4	
8:15 AM	1	4	
8:30 AM	2	5	
8:45 AM	1	5	
9:00 AM	2	6	
9:15 AM	1	6	
9:30 AM	2	6	
9:45 AM	2	7	
10:00 AM	3	8	
10:15 AM	2	9	
10:30 AM	2	9	
10:45 AM	2	9	
11:00 AM	3	9	
11:15 AM	4	11	
11:30 AM	3	12	
11:45 AM	3	13	13
12:00 PM	2	12	
12:15 PM	3	11	
12:30 PM	4	12	
12:45 PM	3	12	
1:00 PM	3	13	
1:15 PM	3	13	
1:30 PM	2	11	
1:45 PM	3	11	
2:00 PM	3	11	
2:15 PM	3	11	
2:30 PM	3	12	
2:45 PM	4	13	
3:00 PM	3	13	
3:15 PM	3	13	
3:30 PM	3	13	
3:45 PM	3	12	
4:00 PM	3	12	
4:15 PM	4	13	
4:30 PM	3	13	
4:45 PM	3	13	
5:00 PM	3	13	
5:15 PM	3	12	
5:30 PM	2	11	
5:45 PM	3	11	
6:00 PM	3	11	
6:15 PM	3	11	
6:30 PM	3	12	

6:45 PM	3	12	
7:00 PM	3	12	
7:15 PM	2	11	
7:30 PM	2	10	
7:45 PM	2	9	
8:00 PM	3	9	
8:15 PM	2	9	
8:30 PM	1	8	
8:45 PM	1	7	
9:00 PM	1	5	
9:15 PM	1	4	
9:30 PM	1	4	
9:45 PM	2	5	
10:00 PM	1	5	
10:15 PM	1	5	
10:30 PM	0	4	
10:45 PM	1	3	
11:00 PM	1	3	
11:15 PM	1	3	
11:30 PM	1	4	
11:45 PM	0	3	13
Total	158		

SUMMARY OF DATA SOUTHBOUND - THRU

Intersection: PR-116 (South) with PR-3116
Date: Sunday, August 01, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	20		
12:15 AM	18		
12:30 AM	17		
12:45 AM	14	69	
1:00 AM	9	58	
1:15 AM	11	51	
1:30 AM	9	43	
1:45 AM	12	41	
2:00 AM	5	37	
2:15 AM	5	31	
2:30 AM	3	25	
2:45 AM	9	22	
3:00 AM	5	22	
3:15 AM	6	23	
3:30 AM	5	25	
3:45 AM	9	25	
4:00 AM	6	26	
4:15 AM	1	21	
4:30 AM	6	22	
4:45 AM	1	14	
5:00 AM	0	8	
5:15 AM	5	12	
5:30 AM	4	10	
5:45 AM	6	15	
6:00 AM	4	19	
6:15 AM	8	22	
6:30 AM	10	28	
6:45 AM	9	31	
7:00 AM	11	38	
7:15 AM	14	44	
7:30 AM	12	46	
7:45 AM	17	54	
8:00 AM	24	67	
8:15 AM	22	75	
8:30 AM	30	93	
8:45 AM	25	101	
9:00 AM	34	111	
9:15 AM	22	111	
9:30 AM	29	110	
9:45 AM	30	115	
10:00 AM	46	127	
10:15 AM	28	133	
10:30 AM	33	137	
10:45 AM	37	144	
11:00 AM	44	142	
11:15 AM	58	172	
11:30 AM	50	189	
11:45 AM	55	207	207
12:00 PM	48	211	
12:15 PM	76	229	
12:30 PM	87	266	
12:45 PM	61	272	
1:00 PM	68	292	
1:15 PM	70	286	
1:30 PM	68	267	
1:45 PM	74	280	
2:00 PM	79	291	
2:15 PM	68	289	
2:30 PM	67	288	
2:45 PM	71	285	
3:00 PM	76	282	
3:15 PM	83	297	
3:30 PM	73	303	
3:45 PM	74	306	
4:00 PM	61	291	
4:15 PM	86	294	
4:30 PM	77	298	

4:45 PM	62	286	
5:00 PM	72	297	
5:15 PM	67	278	
5:30 PM	66	267	
5:45 PM	67	272	
6:00 PM	62	262	
6:15 PM	67	262	
6:30 PM	59	255	
6:45 PM	68	256	
7:00 PM	66	260	
7:15 PM	60	253	
7:30 PM	43	237	
7:45 PM	46	215	
8:00 PM	54	203	
8:15 PM	42	185	
8:30 PM	34	176	
8:45 PM	30	160	
9:00 PM	32	138	
9:15 PM	25	121	
9:30 PM	36	123	
9:45 PM	35	128	
10:00 PM	30	126	
10:15 PM	21	122	
10:30 PM	5	91	
10:45 PM	15	71	
11:00 PM	18	59	
11:15 PM	13	51	
11:30 PM	11	57	
11:45 PM	9	51	306
Total	3420		

SUMMARY OF DATA WESTBOUND - LEFT

Intersection: PR-116 (South) with PR-3116
Date: Sunday, August 01, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	3		
12:15 AM	8		
12:30 AM	7		
12:45 AM	3	21	
1:00 AM	8	26	
1:15 AM	3	21	
1:30 AM	2	16	
1:45 AM	1	14	
2:00 AM	1	7	
2:15 AM	0	4	
2:30 AM	1	3	
2:45 AM	0	2	
3:00 AM	0	1	
3:15 AM	1	2	
3:30 AM	1	2	
3:45 AM	1	3	
4:00 AM	1	4	
4:15 AM	1	4	
4:30 AM	1	4	
4:45 AM	0	3	
5:00 AM	1	3	
5:15 AM	0	2	
5:30 AM	1	2	
5:45 AM	1	3	
6:00 AM	2	4	
6:15 AM	3	7	
6:30 AM	6	12	
6:45 AM	3	14	
7:00 AM	5	17	
7:15 AM	7	21	
7:30 AM	6	21	
7:45 AM	10	28	
8:00 AM	6	29	
8:15 AM	10	32	
8:30 AM	10	36	
8:45 AM	17	43	
9:00 AM	12	49	
9:15 AM	8	47	
9:30 AM	10	47	
9:45 AM	17	47	
10:00 AM	9	44	
10:15 AM	15	51	
10:30 AM	15	56	
10:45 AM	10	49	
11:00 AM	12	52	
11:15 AM	21	58	
11:30 AM	12	55	
11:45 AM	21	66	66
12:00 PM	20	74	
12:15 PM	16	69	
12:30 PM	24	81	
12:45 PM	19	79	
1:00 PM	17	76	
1:15 PM	15	75	
1:30 PM	15	66	
1:45 PM	18	65	
2:00 PM	18	66	
2:15 PM	20	71	
2:30 PM	22	78	

2:45 PM	23	83	
3:00 PM	18	83	
3:15 PM	15	78	
3:30 PM	25	81	
3:45 PM	15	73	
4:00 PM	12	67	
4:15 PM	20	72	
4:30 PM	27	74	
4:45 PM	23	82	
5:00 PM	22	92	
5:15 PM	15	87	
5:30 PM	18	78	
5:45 PM	23	78	
6:00 PM	25	81	
6:15 PM	19	85	
6:30 PM	19	86	
6:45 PM	28	91	
7:00 PM	34	100	
7:15 PM	19	100	
7:30 PM	27	108	
7:45 PM	15	95	
8:00 PM	11	72	
8:15 PM	16	69	
8:30 PM	13	55	
8:45 PM	11	51	
9:00 PM	11	51	
9:15 PM	9	44	
9:30 PM	11	42	
9:45 PM	16	47	
10:00 PM	6	42	
10:15 PM	7	40	
10:30 PM	6	35	
10:45 PM	4	23	
11:00 PM	4	21	
11:15 PM	2	16	
11:30 PM	0	10	
11:45 PM	3	9	108
Total	1069		

SUMMARY OF DATA WESTBOUND - RIGHT

Intersection: PR-116 (South) with PR-3116
Date: Sunday, August 01, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	2		
12:15 AM	3		
12:30 AM	3		
12:45 AM	2	10	
1:00 AM	4	12	
1:15 AM	1	10	
1:30 AM	1	8	
1:45 AM	0	6	
2:00 AM	1	3	
2:15 AM	0	2	
2:30 AM	0	1	
2:45 AM	0	1	
3:00 AM	0	0	
3:15 AM	1	1	
3:30 AM	0	1	
3:45 AM	1	2	
4:00 AM	0	2	
4:15 AM	0	1	
4:30 AM	0	1	
4:45 AM	0	0	
5:00 AM	0	0	
5:15 AM	0	0	
5:30 AM	0	0	
5:45 AM	0	0	
6:00 AM	1	1	
6:15 AM	1	2	
6:30 AM	2	4	
6:45 AM	2	6	
7:00 AM	2	7	
7:15 AM	3	9	
7:30 AM	3	10	
7:45 AM	4	12	
8:00 AM	3	13	
8:15 AM	5	15	
8:30 AM	4	16	
8:45 AM	7	19	
9:00 AM	6	22	
9:15 AM	4	21	
9:30 AM	5	22	
9:45 AM	7	22	
10:00 AM	4	20	

10:15 AM	7	23	
10:30 AM	7	25	
10:45 AM	5	23	
11:00 AM	6	25	
11:15 AM	10	28	
11:30 AM	5	26	
11:45 AM	9	30	30
12:00 PM	5	29	
12:15 PM	4	23	
12:30 PM	6	24	
12:45 PM	5	20	
1:00 PM	4	19	
1:15 PM	4	19	
1:30 PM	4	17	
1:45 PM	4	16	
2:00 PM	4	16	
2:15 PM	5	17	
2:30 PM	5	18	
2:45 PM	6	20	
3:00 PM	4	20	
3:15 PM	4	19	
3:30 PM	6	20	
3:45 PM	4	18	
4:00 PM	3	17	
4:15 PM	5	18	
4:30 PM	6	18	
4:45 PM	5	19	
5:00 PM	5	21	
5:15 PM	4	20	
5:30 PM	4	18	
5:45 PM	6	19	
6:00 PM	6	20	
6:15 PM	5	21	
6:30 PM	4	21	
6:45 PM	7	22	
7:00 PM	8	24	
7:15 PM	4	23	
7:30 PM	6	25	
7:45 PM	3	21	
8:00 PM	2	15	
8:15 PM	4	15	
8:30 PM	3	12	
8:45 PM	2	11	
9:00 PM	3	12	
9:15 PM	2	10	
9:30 PM	3	10	
9:45 PM	4	12	
10:00 PM	1	10	
10:15 PM	2	10	
10:30 PM	1	8	
10:45 PM	1	5	
11:00 PM	1	5	
11:15 PM	1	4	
11:30 PM	0	3	
11:45 PM	1	3	29
Total	317		

SUMMARY OF THE DATA FOR THE INTERSECTION:

Intersection: PR-116 (South) with PR-3116
Date: Tuesday, August 03, 2004
Start Time: 12:00 A.M.

	NB-T	NB-R	SB-L	SB-T	WB-L	WB-R
VOL. TOTAL (24 Horas)	2802	600	154	2584	1071	323
HORA PICO A.M.	7:15 AM	7:15 AM	6:30 AM	6:30 AM	11:30 AM	11:30 AM
VOL. HORA PICO A.M.	176	42	11	146	64	28
PRIMER INTERVALO	50	12	2	29	13	6
SEGUNDO INTERVALO	46	11	2	33	14	6
TERCER INTERVALO	42	10	4	47	18	8
CUARTO INTERVALO	38	9	3	37	19	8
FACTOR DE HORA PICO A.M.	0.8800	0.8750	0.6875	0.7766	0.8421	0.8750
HORA PICO P.M.	4:30 PM	4:30 PM	3:30 PM	3:30 PM	7:30 PM	12:00 PM
VOL. HORA PICO P.M.	203	39	12	220	102	25
PRIMER INTERVALO	46	9	3	55	27	8
SEGUNDO INTERVALO	52	10	3	54	32	8
TERCER INTERVALO	57	11	3	59	18	5
CUARTO INTERVALO	48	9	3	52	25	4
FACTOR DE HORA PICO P.M.	0.8904	0.8864	1.0000	0.9322	0.7969	0.7813

FIGURA 14

SUMMARY OF DATA NORTHBOUND - THRU

Intersection: PR-116 (South) with PR-3116
Date: Tuesday, August 03, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	30		
12:15 AM	9		
12:30 AM	8		
12:45 AM	4	51	
1:00 AM	2	23	
1:15 AM	5	19	
1:30 AM	6	17	
1:45 AM	2	15	
2:00 AM	1	14	
2:15 AM	2	11	
2:30 AM	1	6	
2:45 AM	2	6	
3:00 AM	1	6	
3:15 AM	2	6	
3:30 AM	4	9	
3:45 AM	3	10	
4:00 AM	3	12	
4:15 AM	6	16	
4:30 AM	8	20	
4:45 AM	10	27	
5:00 AM	14	38	
5:15 AM	22	54	
5:30 AM	26	72	
5:45 AM	28	90	
6:00 AM	38	114	
6:15 AM	34	126	
6:30 AM	50	150	
6:45 AM	46	168	
7:00 AM	42	172	
7:15 AM	38	176	
7:30 AM	48	174	
7:45 AM	34	162	
8:00 AM	39	159	
8:15 AM	31	152	
8:30 AM	42	146	
8:45 AM	35	147	
9:00 AM	36	144	
9:15 AM	36	149	
9:30 AM	38	145	
9:45 AM	37	147	
10:00 AM	30	141	
10:15 AM	45	150	
10:30 AM	31	143	
10:45 AM	36	142	
11:00 AM	34	146	
11:15 AM	38	139	
11:30 AM	44	152	
11:45 AM	34	150	176
12:00 PM	39	155	
12:15 PM	47	164	
12:30 PM	52	172	
12:45 PM	47	185	
1:00 PM	42	188	
1:15 PM	39	180	
1:30 PM	45	173	
1:45 PM	46	172	
2:00 PM	35	165	
2:15 PM	45	171	
2:30 PM	55	181	
2:45 PM	52	187	
3:00 PM	39	191	
3:15 PM	43	189	
3:30 PM	42	176	
3:45 PM	46	170	
4:00 PM	52	183	
4:15 PM	57	197	
4:30 PM	48	203	
4:45 PM	45	202	
5:00 PM	33	183	
5:15 PM	57	183	
5:30 PM	47	182	
5:45 PM	45	182	
6:00 PM	45	194	
6:15 PM	39	176	
6:30 PM	44	173	
6:45 PM	37	165	
7:00 PM	39	159	
7:15 PM	39	159	
7:30 PM	38	153	
7:45 PM	39	155	
8:00 PM	38	154	
8:15 PM	34	149	
8:30 PM	20	131	
8:45 PM	18	110	
9:00 PM	28	100	
9:15 PM	20	86	
9:30 PM	15	81	
9:45 PM	18	81	
10:00 PM	13	66	
10:15 PM	10	56	
10:30 PM	13	54	

10:45 PM	10	46	
11:00 PM	14	47	
11:15 PM	6	43	
11:30 PM	7	37	
11:45 PM	5	32	203
Total	2802		

SUMMARY OF DATA NORTHBOUND - RIGHT

Intersection: PR-116 (South) with PR-3116
Date: Tuesday, August 03, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	8		
12:15 AM	2		
12:30 AM	2		
12:45 AM	1	13	
1:00 AM	0	5	
1:15 AM	1	4	
1:30 AM	2	4	
1:45 AM	1	4	
2:00 AM	0	4	
2:15 AM	0	3	
2:30 AM	0	1	
2:45 AM	1	1	
3:00 AM	0	1	
3:15 AM	1	2	
3:30 AM	1	3	
3:45 AM	1	3	
4:00 AM	1	4	
4:15 AM	2	5	
4:30 AM	2	6	
4:45 AM	2	7	
5:00 AM	4	10	
5:15 AM	6	14	
5:30 AM	6	18	
5:45 AM	7	23	
6:00 AM	10	29	
6:15 AM	8	31	
6:30 AM	12	37	
6:45 AM	11	41	
7:00 AM	10	41	
7:15 AM	9	42	
7:30 AM	12	42	
7:45 AM	8	39	
8:00 AM	10	39	
8:15 AM	8	38	
8:30 AM	10	36	
8:45 AM	9	37	
9:00 AM	9	36	
9:15 AM	9	37	
9:30 AM	9	36	
9:45 AM	9	36	
10:00 AM	7	34	
10:15 AM	11	36	
10:30 AM	8	35	
10:45 AM	9	35	
11:00 AM	8	36	
11:15 AM	9	34	
11:30 AM	11	37	
11:45 AM	8	36	42
12:00 PM	7	35	
12:15 PM	9	35	
12:30 PM	10	34	
12:45 PM	9	35	
1:00 PM	8	36	
1:15 PM	7	34	
1:30 PM	9	33	
1:45 PM	9	33	
2:00 PM	7	32	
2:15 PM	9	34	
2:30 PM	11	36	
2:45 PM	10	37	
3:00 PM	8	38	
3:15 PM	8	37	
3:30 PM	8	34	
3:45 PM	9	33	
4:00 PM	10	35	
4:15 PM	11	38	
4:30 PM	9	39	
4:45 PM	9	39	
5:00 PM	6	35	
5:15 PM	11	35	
5:30 PM	9	35	
5:45 PM	9	35	
6:00 PM	9	38	
6:15 PM	8	35	
6:30 PM	8	34	
6:45 PM	7	32	
7:00 PM	8	31	
7:15 PM	7	30	
7:30 PM	7	29	
7:45 PM	8	30	
8:00 PM	7	29	
8:15 PM	6	28	
8:30 PM	4	25	

8:45 PM	4	21	
9:00 PM	5	19	
9:15 PM	4	17	
9:30 PM	3	16	
9:45 PM	3	15	
10:00 PM	3	13	
10:15 PM	2	11	
10:30 PM	2	10	
10:45 PM	2	9	
11:00 PM	3	9	
11:15 PM	1	8	
11:30 PM	1	7	
11:45 PM	1	6	39
Total	600		

SUMMARY OF DATA SOUTHBOUND - LEFT

Intersection: PR-116 (South) with PR-3116
Date: Tuesday, August 03, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	1		
12:15 AM	0		
12:30 AM	0		
12:45 AM	0	1	
1:00 AM	0	0	
1:15 AM	0	0	
1:30 AM	0	0	
1:45 AM	0	0	
2:00 AM	0	0	
2:15 AM	0	0	
2:30 AM	0	0	
2:45 AM	0	0	
3:00 AM	0	0	
3:15 AM	0	0	
3:30 AM	0	0	
3:45 AM	0	0	
4:00 AM	0	0	
4:15 AM	0	0	
4:30 AM	0	0	
4:45 AM	1	1	
5:00 AM	1	2	
5:15 AM	1	3	
5:30 AM	1	4	
5:45 AM	2	5	
6:00 AM	2	6	
6:15 AM	4	9	
6:30 AM	3	11	
6:45 AM	2	11	
7:00 AM	2	11	
7:15 AM	2	9	
7:30 AM	2	8	
7:45 AM	1	7	
8:00 AM	2	7	
8:15 AM	2	7	
8:30 AM	2	7	
8:45 AM	1	7	
9:00 AM	3	8	
9:15 AM	2	8	
9:30 AM	3	9	
9:45 AM	2	10	
10:00 AM	2	9	
10:15 AM	3	10	
10:30 AM	2	9	
10:45 AM	2	9	
11:00 AM	3	10	
11:15 AM	3	10	
11:30 AM	2	10	
11:45 AM	3	11	11
12:00 PM	3	11	
12:15 PM	2	10	
12:30 PM	2	10	
12:45 PM	2	9	
1:00 PM	2	8	
1:15 PM	2	8	
1:30 PM	2	8	
1:45 PM	2	8	
2:00 PM	2	8	
2:15 PM	2	8	
2:30 PM	2	8	
2:45 PM	3	9	
3:00 PM	3	10	
3:15 PM	3	11	
3:30 PM	3	12	
3:45 PM	3	12	
4:00 PM	2	11	
4:15 PM	3	11	
4:30 PM	3	11	
4:45 PM	2	10	
5:00 PM	3	11	
5:15 PM	3	11	
5:30 PM	2	10	
5:45 PM	3	11	
6:00 PM	2	10	
6:15 PM	3	10	
6:30 PM	2	10	

6:45 PM	3	10	
7:00 PM	2	10	
7:15 PM	2	9	
7:30 PM	2	9	
7:45 PM	2	8	
8:00 PM	2	8	
8:15 PM	2	8	
8:30 PM	1	7	
8:45 PM	1	6	
9:00 PM	1	5	
9:15 PM	1	4	
9:30 PM	1	4	
9:45 PM	1	4	
10:00 PM	1	4	
10:15 PM	1	4	
10:30 PM	0	3	
10:45 PM	1	3	
11:00 PM	1	3	
11:15 PM	1	3	
11:30 PM	0	3	
11:45 PM	0	2	12
Total	154		

SUMMARY OF DATA SOUTHBOUND - THRU

Intersection: PR-116 (South) with PR-3116
Date: Tuesday, August 03, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	8		
12:15 AM	4		
12:30 AM	4		
12:45 AM	4	20	
1:00 AM	1	13	
1:15 AM	4	13	
1:30 AM	1	10	
1:45 AM	2	8	
2:00 AM	1	8	
2:15 AM	2	6	
2:30 AM	0	5	
2:45 AM	2	5	
3:00 AM	1	5	
3:15 AM	1	4	
3:30 AM	2	6	
3:45 AM	1	5	
4:00 AM	4	8	
4:15 AM	0	7	
4:30 AM	4	9	
4:45 AM	12	20	
5:00 AM	20	36	
5:15 AM	19	55	
5:30 AM	17	68	
5:45 AM	29	85	
6:00 AM	33	98	
6:15 AM	47	126	
6:30 AM	37	146	
6:45 AM	25	142	
7:00 AM	26	135	
7:15 AM	24	112	
7:30 AM	28	103	
7:45 AM	14	92	
8:00 AM	21	87	
8:15 AM	30	93	
8:30 AM	21	86	
8:45 AM	18	90	
9:00 AM	33	102	
9:15 AM	27	99	
9:30 AM	33	111	
9:45 AM	33	126	
10:00 AM	27	120	
10:15 AM	38	131	
10:30 AM	22	120	
10:45 AM	28	115	
11:00 AM	33	121	
11:15 AM	33	116	
11:30 AM	33	127	
11:45 AM	40	139	146
12:00 PM	48	154	
12:15 PM	38	159	
12:30 PM	31	157	
12:45 PM	37	154	
1:00 PM	45	151	
1:15 PM	41	154	
1:30 PM	38	161	
1:45 PM	37	161	
2:00 PM	43	159	
2:15 PM	43	161	
2:30 PM	40	163	
2:45 PM	55	181	
3:00 PM	54	192	
3:15 PM	59	208	
3:30 PM	52	220	
3:45 PM	52	217	
4:00 PM	43	206	
4:15 PM	61	208	
4:30 PM	55	211	

4:45 PM	44	203	
5:00 PM	51	211	
5:15 PM	48	198	
5:30 PM	47	190	
5:45 PM	48	194	
6:00 PM	44	187	
6:15 PM	48	187	
6:30 PM	42	182	
6:45 PM	48	182	
7:00 PM	47	185	
7:15 PM	43	180	
7:30 PM	30	168	
7:45 PM	32	152	
8:00 PM	38	143	
8:15 PM	29	129	
8:30 PM	25	124	
8:45 PM	22	114	
9:00 PM	23	99	
9:15 PM	17	87	
9:30 PM	26	88	
9:45 PM	25	91	
10:00 PM	22	90	
10:15 PM	15	88	
10:30 PM	4	66	
10:45 PM	10	51	
11:00 PM	12	41	
11:15 PM	10	36	
11:30 PM	9	41	
11:45 PM	6	37	220
Total	2584		

SUMMARY OF DATA WESTBOUND - LEFT

Intersection: PR-116 (South) with PR-3116
Date: Tuesday, August 03, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	2		
12:15 AM	1		
12:30 AM	1		
12:45 AM	1	5	
1:00 AM	1	4	
1:15 AM	2	5	
1:30 AM	2	6	
1:45 AM	0	5	
2:00 AM	0	4	
2:15 AM	0	2	
2:30 AM	0	0	
2:45 AM	0	0	
3:00 AM	1	1	
3:15 AM	0	1	
3:30 AM	0	1	
3:45 AM	1	2	
4:00 AM	0	1	
4:15 AM	0	1	
4:30 AM	3	4	
4:45 AM	4	7	
5:00 AM	3	10	
5:15 AM	8	18	
5:30 AM	8	23	
5:45 AM	6	25	
6:00 AM	8	30	
6:15 AM	13	35	
6:30 AM	12	39	
6:45 AM	14	47	
7:00 AM	7	46	
7:15 AM	13	46	
7:30 AM	14	48	
7:45 AM	11	45	
8:00 AM	12	50	
8:15 AM	14	51	
8:30 AM	12	49	
8:45 AM	7	45	
9:00 AM	11	44	
9:15 AM	10	40	
9:30 AM	11	39	
9:45 AM	13	45	
10:00 AM	12	46	
10:15 AM	10	46	
10:30 AM	14	49	
10:45 AM	13	49	
11:00 AM	14	51	
11:15 AM	18	59	
11:30 AM	19	64	
11:45 AM	12	63	64
12:00 PM	19	68	
12:15 PM	20	70	
12:30 PM	14	65	
12:45 PM	18	71	
1:00 PM	20	72	
1:15 PM	14	66	
1:30 PM	16	68	
1:45 PM	19	69	
2:00 PM	11	60	
2:15 PM	16	62	
2:30 PM	28	74	

2:45 PM	19	74	
3:00 PM	17	80	
3:15 PM	15	79	
3:30 PM	23	74	
3:45 PM	15	70	
4:00 PM	11	64	
4:15 PM	19	68	
4:30 PM	25	70	
4:45 PM	21	76	
5:00 PM	20	85	
5:15 PM	15	81	
5:30 PM	17	73	
5:45 PM	22	74	
6:00 PM	23	77	
6:15 PM	19	81	
6:30 PM	18	82	
6:45 PM	27	87	
7:00 PM	32	96	
7:15 PM	18	95	
7:30 PM	25	102	
7:45 PM	14	89	
8:00 PM	10	67	
8:15 PM	15	64	
8:30 PM	12	51	
8:45 PM	10	47	
9:00 PM	11	48	
9:15 PM	8	41	
9:30 PM	11	40	
9:45 PM	15	45	
10:00 PM	6	40	
10:15 PM	6	38	
10:30 PM	6	33	
10:45 PM	4	22	
11:00 PM	4	20	
11:15 PM	2	16	
11:30 PM	0	10	
11:45 PM	3	9	102
Total	1071		

SUMMARY OF DATA WESTBOUND - RIGHT

Intersection: PR-116 (South) with PR-3116
Date: Tuesday, August 03, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	1		
12:15 AM	0		
12:30 AM	0		
12:45 AM	1	2	
1:00 AM	1	2	
1:15 AM	1	3	
1:30 AM	1	4	
1:45 AM	0	3	
2:00 AM	0	2	
2:15 AM	0	1	
2:30 AM	0	0	
2:45 AM	0	0	
3:00 AM	1	1	
3:15 AM	0	1	
3:30 AM	0	1	
3:45 AM	0	1	
4:00 AM	0	0	
4:15 AM	0	0	
4:30 AM	1	1	
4:45 AM	2	3	
5:00 AM	1	4	
5:15 AM	4	8	
5:30 AM	3	10	
5:45 AM	2	10	
6:00 AM	4	13	
6:15 AM	6	15	
6:30 AM	5	17	
6:45 AM	6	21	
7:00 AM	3	20	
7:15 AM	6	20	
7:30 AM	6	21	
7:45 AM	5	20	
8:00 AM	5	22	
8:15 AM	7	23	
8:30 AM	6	23	
8:45 AM	3	21	
9:00 AM	5	21	
9:15 AM	5	19	
9:30 AM	5	18	
9:45 AM	6	21	
10:00 AM	6	22	

10:15 AM	5	22	
10:30 AM	7	24	
10:45 AM	6	24	
11:00 AM	6	24	
11:15 AM	8	27	
11:30 AM	8	28	
11:45 AM	5	27	28
12:00 PM	4	25	
12:15 PM	5	22	
12:30 PM	3	17	
12:45 PM	4	16	
1:00 PM	5	17	
1:15 PM	3	15	
1:30 PM	4	16	
1:45 PM	4	16	
2:00 PM	3	14	
2:15 PM	4	15	
2:30 PM	6	17	
2:45 PM	4	17	
3:00 PM	4	18	
3:15 PM	3	17	
3:30 PM	6	17	
3:45 PM	3	16	
4:00 PM	3	15	
4:15 PM	5	17	
4:30 PM	6	17	
4:45 PM	5	19	
5:00 PM	5	21	
5:15 PM	3	19	
5:30 PM	4	17	
5:45 PM	5	17	
6:00 PM	6	18	
6:15 PM	4	19	
6:30 PM	4	19	
6:45 PM	6	20	
7:00 PM	7	21	
7:15 PM	4	21	
7:30 PM	6	23	
7:45 PM	3	20	
8:00 PM	2	15	
8:15 PM	4	15	
8:30 PM	3	12	
8:45 PM	2	11	
9:00 PM	2	11	
9:15 PM	2	9	
9:30 PM	2	8	
9:45 PM	4	10	
10:00 PM	1	9	
10:15 PM	2	9	
10:30 PM	1	8	
10:45 PM	1	5	
11:00 PM	1	5	
11:15 PM	1	4	
11:30 PM	0	3	
11:45 PM	1	3	25
Total	323		

SUMMARY OF THE DATA FOR THE INTERSECTION:

Intersection: PR-3116 with PR-325
Date: Sunday, August 01, 2004
Start Time: 12:00 A.M.

	NB-T	NB-R	SB-L	SB-T	WB-L	WB-R
VOL. TOTAL (24 Horas)	1773	645	1987	1889	633	2671
HORA PICO A.M.	11:30 AM	10:45 AM	11:45 AM	11:45 AM	11:30 AM	11:30 AM
VOL. HORA PICO A.M.	158	41	136	155	59	212
PRIMER INTERVALO	52	11	33	37	11	41
SEGUNDO INTERVALO	36	8	31	36	14	50
TERCER INTERVALO	36	8	36	41	16	58
CUARTO INTERVALO	34	14	36	41	18	63
FACTOR DE HORA PICO A.M.	0.7596	0.7321	0.9444	0.9451	0.8194	0.8413
HORA PICO P.M.	12:00 PM	2:30 PM	2:30 PM	2:30 PM	4:30 PM	4:30 PM
VOL. HORA PICO P.M.	145	56	220	195	63	289
PRIMER INTERVALO	36	16	64	56	17	79
SEGUNDO INTERVALO	34	12	59	53	13	58
TERCER INTERVALO	43	15	49	44	19	87
CUARTO INTERVALO	32	13	48	42	14	65
FACTOR DE HORA PICO P.M.	0.8430	0.8750	0.8594	0.8705	0.8289	0.8305

FIGURA 17

SUMMARY OF DATA NORTHBOUND - THRU

Intersection: PR-3116 with PR-325
Date: Sunday, August 01, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	10		
12:15 AM	12		
12:30 AM	6		
12:45 AM	5	33	
1:00 AM	2	25	
1:15 AM	2	15	
1:30 AM	7	16	
1:45 AM	5	16	
2:00 AM	1	15	
2:15 AM	2	15	
2:30 AM	2	10	
2:45 AM	2	7	
3:00 AM	1	7	
3:15 AM	2	7	
3:30 AM	2	7	
3:45 AM	3	8	
4:00 AM	2	9	
4:15 AM	5	12	
4:30 AM	2	12	
4:45 AM	5	14	
5:00 AM	4	16	
5:15 AM	2	13	
5:30 AM	6	17	
5:45 AM	3	15	
6:00 AM	6	17	
6:15 AM	8	23	
6:30 AM	10	27	
6:45 AM	17	41	
7:00 AM	17	52	
7:15 AM	15	59	
7:30 AM	17	66	
7:45 AM	19	68	
8:00 AM	21	72	
8:15 AM	17	74	
8:30 AM	21	78	
8:45 AM	25	84	
9:00 AM	18	81	
9:15 AM	37	101	
9:30 AM	37	117	
9:45 AM	31	123	
10:00 AM	42	147	
10:15 AM	31	141	
10:30 AM	28	132	
10:45 AM	52	153	
11:00 AM	36	147	
11:15 AM	36	152	
11:30 AM	34	158	
11:45 AM	43	149	158
12:00 PM	32	145	
12:15 PM	27	136	
12:30 PM	29	131	
12:45 PM	27	115	
1:00 PM	31	114	
1:15 PM	32	119	
1:30 PM	24	114	
1:45 PM	36	123	
2:00 PM	27	119	
2:15 PM	34	121	
2:30 PM	31	128	
2:45 PM	28	120	
3:00 PM	32	125	
3:15 PM	21	112	
3:30 PM	28	109	
3:45 PM	32	113	
4:00 PM	28	109	
4:15 PM	26	114	
4:30 PM	32	118	
4:45 PM	28	114	
5:00 PM	20	106	
5:15 PM	22	102	
5:30 PM	36	106	
5:45 PM	31	109	
6:00 PM	24	113	
6:15 PM	24	115	
6:30 PM	27	106	
6:45 PM	22	97	
7:00 PM	25	98	
7:15 PM	23	97	
7:30 PM	23	93	
7:45 PM	24	95	
8:00 PM	27	97	
8:15 PM	25	99	
8:30 PM	15	91	
8:45 PM	18	85	
9:00 PM	16	74	
9:15 PM	15	64	
9:30 PM	16	65	
9:45 PM	8	55	
10:00 PM	7	46	
10:15 PM	8	39	
10:30 PM	6	29	

10:45 PM	6	27	
11:00 PM	3	23	
11:15 PM	1	16	
11:30 PM	4	14	
11:45 PM	1	9	145
Total	1773		

SUMMARY OF DATA NORTHBOUND - RIGHT

Intersection: PR-3116 with PR-325
Date: Sunday, August 01, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	3		
12:15 AM	3		
12:30 AM	1		
12:45 AM	1	8	
1:00 AM	1	6	
1:15 AM	1	4	
1:30 AM	2	5	
1:45 AM	1	5	
2:00 AM	0	4	
2:15 AM	0	3	
2:30 AM	0	1	
2:45 AM	0	0	
3:00 AM	0	0	
3:15 AM	1	1	
3:30 AM	0	1	
3:45 AM	1	2	
4:00 AM	0	2	
4:15 AM	1	2	
4:30 AM	1	3	
4:45 AM	1	3	
5:00 AM	1	4	
5:15 AM	1	4	
5:30 AM	2	5	
5:45 AM	1	5	
6:00 AM	1	5	
6:15 AM	2	6	
6:30 AM	3	7	
6:45 AM	5	11	
7:00 AM	5	15	
7:15 AM	4	17	
7:30 AM	4	18	
7:45 AM	5	18	
8:00 AM	6	19	
8:15 AM	4	19	
8:30 AM	5	20	
8:45 AM	7	22	
9:00 AM	5	21	
9:15 AM	10	27	
9:30 AM	10	32	
9:45 AM	8	33	
10:00 AM	11	39	
10:15 AM	8	37	
10:30 AM	8	35	
10:45 AM	14	41	
11:00 AM	9	39	
11:15 AM	9	40	
11:30 AM	9	41	
11:45 AM	12	39	41
12:00 PM	14	44	
12:15 PM	12	47	
12:30 PM	12	50	
12:45 PM	12	50	
1:00 PM	13	49	
1:15 PM	14	51	
1:30 PM	10	49	
1:45 PM	16	53	
2:00 PM	12	52	
2:15 PM	15	53	
2:30 PM	13	56	
2:45 PM	12	52	
3:00 PM	14	54	
3:15 PM	9	48	
3:30 PM	12	47	
3:45 PM	14	49	
4:00 PM	12	47	
4:15 PM	11	49	
4:30 PM	14	51	
4:45 PM	12	49	
5:00 PM	9	46	
5:15 PM	9	44	
5:30 PM	15	45	
5:45 PM	13	46	
6:00 PM	10	47	
6:15 PM	10	48	
6:30 PM	12	45	
6:45 PM	10	42	
7:00 PM	11	43	
7:15 PM	10	43	
7:30 PM	10	41	
7:45 PM	10	41	
8:00 PM	11	41	
8:15 PM	11	42	
8:30 PM	7	39	

8:45 PM	8	37	
9:00 PM	7	33	
9:15 PM	6	28	
9:30 PM	7	28	
9:45 PM	3	23	
10:00 PM	3	19	
10:15 PM	4	17	
10:30 PM	2	12	
10:45 PM	3	12	
11:00 PM	1	10	
11:15 PM	0	6	
11:30 PM	2	6	
11:45 PM	1	4	56
Total	645		

SUMMARY OF DATA SOUTHBOUND - LEFT

Intersection: PR-3116 with PR-325
Date: Sunday, August 01, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	12		
12:15 AM	9		
12:30 AM	11		
12:45 AM	8	40	
1:00 AM	8	36	
1:15 AM	7	34	
1:30 AM	4	27	
1:45 AM	9	28	
2:00 AM	8	28	
2:15 AM	8	29	
2:30 AM	5	30	
2:45 AM	3	24	
3:00 AM	1	17	
3:15 AM	2	11	
3:30 AM	4	10	
3:45 AM	3	10	
4:00 AM	4	13	
4:15 AM	1	12	
4:30 AM	3	11	
4:45 AM	2	10	
5:00 AM	2	8	
5:15 AM	3	10	
5:30 AM	2	9	
5:45 AM	3	10	
6:00 AM	3	11	
6:15 AM	3	11	
6:30 AM	6	15	
6:45 AM	3	15	
7:00 AM	10	22	
7:15 AM	6	25	
7:30 AM	9	28	
7:45 AM	9	34	
8:00 AM	17	41	
8:15 AM	8	43	
8:30 AM	6	40	
8:45 AM	15	46	
9:00 AM	15	44	
9:15 AM	19	55	
9:30 AM	20	69	
9:45 AM	23	77	
10:00 AM	31	93	
10:15 AM	24	98	
10:30 AM	26	104	
10:45 AM	25	106	
11:00 AM	33	108	
11:15 AM	31	115	
11:30 AM	36	125	
11:45 AM	36	136	136
12:00 PM	44	147	
12:15 PM	47	163	
12:30 PM	37	164	
12:45 PM	38	166	
1:00 PM	45	167	
1:15 PM	36	156	
1:30 PM	39	158	
1:45 PM	64	184	
2:00 PM	59	198	
2:15 PM	49	211	
2:30 PM	48	220	
2:45 PM	55	211	
3:00 PM	37	189	
3:15 PM	69	209	
3:30 PM	41	202	
3:45 PM	34	181	
4:00 PM	37	181	
4:15 PM	40	152	
4:30 PM	36	147	
4:45 PM	26	139	
5:00 PM	33	135	
5:15 PM	24	119	
5:30 PM	35	118	
5:45 PM	31	123	
6:00 PM	21	111	
6:15 PM	25	112	
6:30 PM	29	106	

6:45 PM	28	103	
7:00 PM	27	109	
7:15 PM	27	111	
7:30 PM	28	110	
7:45 PM	29	111	
8:00 PM	22	106	
8:15 PM	22	101	
8:30 PM	22	95	
8:45 PM	19	85	
9:00 PM	19	82	
9:15 PM	15	75	
9:30 PM	22	75	
9:45 PM	18	74	
10:00 PM	10	65	
10:15 PM	8	58	
10:30 PM	13	49	
10:45 PM	8	39	
11:00 PM	13	42	
11:15 PM	11	45	
11:30 PM	6	38	
11:45 PM	5	35	220
Total	1987		

SUMMARY OF DATA SOUTHBOUND - THRU

Intersection: PR-3116 with PR-325
Date: Sunday, August 01, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	13		
12:15 AM	10		
12:30 AM	12		
12:45 AM	8	43	
1:00 AM	8	38	
1:15 AM	7	35	
1:30 AM	5	28	
1:45 AM	10	30	
2:00 AM	8	30	
2:15 AM	9	32	
2:30 AM	6	33	
2:45 AM	3	26	
3:00 AM	2	20	
3:15 AM	2	13	
3:30 AM	4	11	
3:45 AM	3	11	
4:00 AM	5	14	
4:15 AM	2	14	
4:30 AM	3	13	
4:45 AM	3	13	
5:00 AM	2	10	
5:15 AM	3	11	
5:30 AM	2	10	
5:45 AM	3	10	
6:00 AM	4	12	
6:15 AM	4	13	
6:30 AM	7	18	
6:45 AM	4	19	
7:00 AM	11	26	
7:15 AM	6	28	
7:30 AM	10	31	
7:45 AM	10	37	
8:00 AM	20	46	
8:15 AM	8	48	
8:30 AM	6	44	
8:45 AM	16	50	
9:00 AM	16	46	
9:15 AM	22	60	
9:30 AM	23	77	
9:45 AM	26	87	
10:00 AM	34	105	
10:15 AM	27	110	
10:30 AM	29	116	
10:45 AM	29	119	
11:00 AM	37	122	
11:15 AM	36	131	
11:30 AM	41	143	
11:45 AM	41	155	155
12:00 PM	39	157	
12:15 PM	42	163	
12:30 PM	33	155	
12:45 PM	34	148	
1:00 PM	39	148	
1:15 PM	32	138	
1:30 PM	35	140	
1:45 PM	56	162	
2:00 PM	53	176	
2:15 PM	44	188	
2:30 PM	42	195	
2:45 PM	49	188	
3:00 PM	33	168	
3:15 PM	62	186	
3:30 PM	36	180	
3:45 PM	31	162	
4:00 PM	33	162	
4:15 PM	35	135	
4:30 PM	32	131	

4:45 PM	23	123	
5:00 PM	30	120	
5:15 PM	21	106	
5:30 PM	31	105	
5:45 PM	28	110	
6:00 PM	19	99	
6:15 PM	22	100	
6:30 PM	25	94	
6:45 PM	25	91	
7:00 PM	24	96	
7:15 PM	24	98	
7:30 PM	24	97	
7:45 PM	25	97	
8:00 PM	19	92	
8:15 PM	19	87	
8:30 PM	20	83	
8:45 PM	16	74	
9:00 PM	16	71	
9:15 PM	13	65	
9:30 PM	20	65	
9:45 PM	16	65	
10:00 PM	9	58	
10:15 PM	8	53	
10:30 PM	12	45	
10:45 PM	8	37	
11:00 PM	12	40	
11:15 PM	9	41	
11:30 PM	6	35	
11:45 PM	5	32	195
Total	1889		

SUMMARY OF DATA WESTBOUND - LEFT

Intersection: PR-3116 with PR-325
Date: Sunday, August 01, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	5		
12:15 AM	3		
12:30 AM	5		
12:45 AM	2	15	
1:00 AM	2	12	
1:15 AM	1	10	
1:30 AM	2	7	
1:45 AM	2	7	
2:00 AM	2	7	
2:15 AM	2	8	
2:30 AM	1	7	
2:45 AM	1	6	
3:00 AM	2	6	
3:15 AM	1	5	
3:30 AM	1	5	
3:45 AM	1	5	
4:00 AM	1	4	
4:15 AM	0	3	
4:30 AM	2	4	
4:45 AM	1	4	
5:00 AM	0	3	
5:15 AM	0	3	
5:30 AM	1	2	
5:45 AM	1	2	
6:00 AM	1	3	
6:15 AM	1	4	
6:30 AM	2	5	
6:45 AM	2	6	
7:00 AM	3	8	
7:15 AM	3	10	
7:30 AM	2	10	
7:45 AM	6	14	
8:00 AM	3	14	
8:15 AM	6	17	
8:30 AM	6	21	
8:45 AM	8	23	
9:00 AM	6	26	
9:15 AM	11	31	
9:30 AM	8	33	
9:45 AM	7	32	
10:00 AM	10	36	
10:15 AM	6	31	
10:30 AM	8	31	
10:45 AM	11	35	
11:00 AM	14	39	
11:15 AM	16	49	
11:30 AM	18	59	
11:45 AM	11	59	59
12:00 PM	10	55	
12:15 PM	14	53	
12:30 PM	10	45	
12:45 PM	9	43	
1:00 PM	8	41	
1:15 PM	10	37	
1:30 PM	7	34	
1:45 PM	11	36	
2:00 PM	9	37	
2:15 PM	11	38	
2:30 PM	11	42	

2:45 PM	12	43	
3:00 PM	11	45	
3:15 PM	12	46	
3:30 PM	13	48	
3:45 PM	17	53	
4:00 PM	13	55	
4:15 PM	19	62	
4:30 PM	14	63	
4:45 PM	10	56	
5:00 PM	12	55	
5:15 PM	12	48	
5:30 PM	12	46	
5:45 PM	14	50	
6:00 PM	14	52	
6:15 PM	16	56	
6:30 PM	14	58	
6:45 PM	13	57	
7:00 PM	12	55	
7:15 PM	9	48	
7:30 PM	10	44	
7:45 PM	6	37	
8:00 PM	8	33	
8:15 PM	7	31	
8:30 PM	6	27	
8:45 PM	4	25	
9:00 PM	4	21	
9:15 PM	3	17	
9:30 PM	3	14	
9:45 PM	2	12	
10:00 PM	3	11	
10:15 PM	1	9	
10:30 PM	2	8	
10:45 PM	2	8	
11:00 PM	2	7	
11:15 PM	1	7	
11:30 PM	1	6	
11:45 PM	1	5	63
Total	633		

SUMMARY OF DATA WESTBOUND - RIGHT			
Intersection: PR-3116 with PR-325			
Date: Sunday, August 01, 2004			
Start Time: 12:00 A.M.			
TIME	VOLUME	Hour Vol	
12:00 AM	16		
12:15 AM	12		
12:30 AM	17		
12:45 AM	5	50	
1:00 AM	5	39	
1:15 AM	5	32	
1:30 AM	7	22	
1:45 AM	5	22	
2:00 AM	5	22	
2:15 AM	5	22	
2:30 AM	5	20	
2:45 AM	5	20	
3:00 AM	7	22	
3:15 AM	4	21	
3:30 AM	3	19	
3:45 AM	5	19	
4:00 AM	5	17	
4:15 AM	2	15	
4:30 AM	7	19	
4:45 AM	4	18	
5:00 AM	2	15	
5:15 AM	1	14	
5:30 AM	4	11	
5:45 AM	3	10	
6:00 AM	4	12	
6:15 AM	4	15	
6:30 AM	8	19	
6:45 AM	7	23	
7:00 AM	9	28	
7:15 AM	11	35	
7:30 AM	5	32	
7:45 AM	20	45	
8:00 AM	9	45	
8:15 AM	21	55	
8:30 AM	22	72	
8:45 AM	27	79	
9:00 AM	20	90	
9:15 AM	37	106	
9:30 AM	30	114	
9:45 AM	27	114	
10:00 AM	34	128	

10:15 AM	20	111	
10:30 AM	27	108	
10:45 AM	41	122	
11:00 AM	50	138	
11:15 AM	58	176	
11:30 AM	63	212	
11:45 AM	39	210	212
12:00 PM	44	204	
12:15 PM	62	208	
12:30 PM	44	189	
12:45 PM	39	189	
1:00 PM	36	181	
1:15 PM	44	163	
1:30 PM	34	153	
1:45 PM	51	165	
2:00 PM	39	168	
2:15 PM	50	174	
2:30 PM	49	189	
2:45 PM	52	190	
3:00 PM	52	203	
3:15 PM	57	210	
3:30 PM	60	221	
3:45 PM	79	248	
4:00 PM	58	254	
4:15 PM	87	284	
4:30 PM	65	289	
4:45 PM	47	257	
5:00 PM	55	254	
5:15 PM	53	220	
5:30 PM	56	211	
5:45 PM	66	230	
6:00 PM	66	241	
6:15 PM	74	262	
6:30 PM	62	268	
6:45 PM	58	260	
7:00 PM	56	250	
7:15 PM	41	217	
7:30 PM	45	200	
7:45 PM	29	171	
8:00 PM	36	151	
8:15 PM	30	140	
8:30 PM	26	121	
8:45 PM	17	109	
9:00 PM	19	92	
9:15 PM	15	77	
9:30 PM	13	64	
9:45 PM	11	58	
10:00 PM	15	54	
10:15 PM	6	45	

10:30 PM	10	42	
10:45 PM	8	39	
11:00 PM	7	31	
11:15 PM	7	32	
11:30 PM	5	27	
11:45 PM	4	23	289
Total	2671		

SUMMARY OF THE DATA FOR THE INTERSECTION:

Intersection: PR-3116 with PR-325
Date: Tuesday, August 03, 2004
Start Time: 12:00 A.M.

	NB-T	NB-R	SB-L	SB-T	WB-L	WB-R
VOL. TOTAL (24 Horas)	2137	758	2087	2005	457	1893
HORA PICO A.M.	11:30 AM	11:30 AM	11:45 AM	11:45 AM	7:15 AM	7:15 AM
VOL. HORA PICO A.M.	172	46	118	133	37	132
PRIMER INTERVALO	39	10	31	36	8	29
SEGUNDO INTERVALO	43	12	28	32	9	32
TERCER INTERVALO	44	12	29	32	9	34
CUARTO INTERVALO	46	12	30	33	11	37
FACTOR DE HORA PICO A.M.	0.9348	0.9583	0.9516	0.9236	0.8409	0.8919
HORA PICO P.M.	12:00 PM	3:00 PM	4:45 PM	4:45 PM	4:15 PM	4:15 PM
VOL. HORA PICO P.M.	160	64	169	150	36	167
PRIMER INTERVALO	44	14	44	39	11	49
SEGUNDO INTERVALO	46	20	38	34	8	38
TERCER INTERVALO	35	13	41	37	7	32
CUARTO INTERVALO	35	17	46	40	10	48
FACTOR DE HORA PICO P.M.	0.8696	0.8000	0.9185	0.9375	0.8182	0.8520

FIGURA 18

SUMMARY OF DATA NORTHBOUND - THRU

Intersection: PR-3116 with PR-325
Date: Tuesday, August 03, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	3		
12:15 AM	4		
12:30 AM	0		
12:45 AM	1	8	
1:00 AM	4	9	
1:15 AM	0	5	
1:30 AM	2	7	
1:45 AM	1	7	
2:00 AM	2	5	
2:15 AM	1	6	
2:30 AM	2	6	
2:45 AM	2	7	
3:00 AM	6	11	
3:15 AM	2	12	
3:30 AM	4	14	
3:45 AM	6	18	
4:00 AM	2	14	
4:15 AM	2	14	
4:30 AM	7	17	
4:45 AM	13	24	
5:00 AM	18	40	
5:15 AM	13	51	
5:30 AM	17	61	
5:45 AM	32	80	
6:00 AM	32	94	
6:15 AM	30	111	
6:30 AM	29	123	
6:45 AM	29	120	
7:00 AM	43	131	
7:15 AM	33	134	
7:30 AM	24	129	
7:45 AM	28	128	
8:00 AM	32	117	
8:15 AM	32	116	
8:30 AM	31	123	
8:45 AM	37	132	
9:00 AM	40	140	
9:15 AM	33	141	
9:30 AM	40	150	
9:45 AM	22	135	
10:00 AM	45	140	
10:15 AM	35	142	
10:30 AM	36	138	
10:45 AM	39	155	
11:00 AM	43	153	
11:15 AM	44	162	
11:30 AM	46	172	
11:45 AM	35	168	172
12:00 PM	35	160	
12:15 PM	43	159	
12:30 PM	45	158	
12:45 PM	27	150	
1:00 PM	27	142	
1:15 PM	36	135	
1:30 PM	30	120	
1:45 PM	22	115	
2:00 PM	34	122	
2:15 PM	32	118	
2:30 PM	46	134	
2:45 PM	30	142	
3:00 PM	39	147	
3:15 PM	31	146	
3:30 PM	35	135	
3:45 PM	32	137	
4:00 PM	29	127	
4:15 PM	27	123	
4:30 PM	32	120	
4:45 PM	29	117	
5:00 PM	21	109	
5:15 PM	22	104	
5:30 PM	37	109	
5:45 PM	32	112	
6:00 PM	25	116	
6:15 PM	25	119	
6:30 PM	28	110	
6:45 PM	23	101	
7:00 PM	26	102	
7:15 PM	24	101	
7:30 PM	24	97	
7:45 PM	25	99	
8:00 PM	27	100	
8:15 PM	26	102	
8:30 PM	16	94	
8:45 PM	18	87	
9:00 PM	17	77	
9:15 PM	15	66	
9:30 PM	17	67	
9:45 PM	9	58	
10:00 PM	8	49	
10:15 PM	9	43	
10:30 PM	7	33	

10:45 PM	4	28	
11:00 PM	2	22	
11:15 PM	2	15	
11:30 PM	3	11	
11:45 PM	2	9	160
Total	2137		

SUMMARY OF DATA NORTHBOUND - RIGHT

Intersection: PR-3116 with PR-325
Date: Tuesday, August 03, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	1		
12:15 AM	1		
12:30 AM	0		
12:45 AM	0	2	
1:00 AM	1	2	
1:15 AM	0	1	
1:30 AM	0	1	
1:45 AM	0	1	
2:00 AM	0	0	
2:15 AM	0	0	
2:30 AM	0	0	
2:45 AM	1	1	
3:00 AM	1	2	
3:15 AM	1	3	
3:30 AM	1	4	
3:45 AM	1	4	
4:00 AM	1	4	
4:15 AM	0	3	
4:30 AM	2	4	
4:45 AM	4	7	
5:00 AM	5	11	
5:15 AM	3	14	
5:30 AM	4	16	
5:45 AM	8	20	
6:00 AM	9	24	
6:15 AM	8	29	
6:30 AM	8	33	
6:45 AM	8	33	
7:00 AM	12	36	
7:15 AM	9	37	
7:30 AM	7	36	
7:45 AM	8	36	
8:00 AM	9	33	
8:15 AM	8	32	
8:30 AM	8	33	
8:45 AM	10	35	
9:00 AM	11	37	
9:15 AM	9	38	
9:30 AM	11	41	
9:45 AM	6	37	
10:00 AM	12	38	
10:15 AM	9	38	
10:30 AM	9	36	
10:45 AM	10	40	
11:00 AM	12	40	
11:15 AM	12	43	
11:30 AM	12	46	
11:45 AM	9	45	46
12:00 PM	15	48	
12:15 PM	18	54	
12:30 PM	19	61	
12:45 PM	11	63	
1:00 PM	12	60	
1:15 PM	16	58	
1:30 PM	13	52	
1:45 PM	9	50	
2:00 PM	15	53	
2:15 PM	14	51	
2:30 PM	20	58	
2:45 PM	13	62	
3:00 PM	17	64	
3:15 PM	13	63	
3:30 PM	15	58	
3:45 PM	14	59	
4:00 PM	12	54	
4:15 PM	11	52	
4:30 PM	14	51	
4:45 PM	12	49	
5:00 PM	9	46	
5:15 PM	10	45	
5:30 PM	16	47	
5:45 PM	14	49	
6:00 PM	11	51	
6:15 PM	11	52	
6:30 PM	12	48	
6:45 PM	10	44	
7:00 PM	11	44	
7:15 PM	10	43	
7:30 PM	10	41	
7:45 PM	11	42	
8:00 PM	12	43	
8:15 PM	11	44	
8:30 PM	7	41	

8:45 PM	8	38	
9:00 PM	7	33	
9:15 PM	7	29	
9:30 PM	7	29	
9:45 PM	4	25	
10:00 PM	3	21	
10:15 PM	4	18	
10:30 PM	3	14	
10:45 PM	2	12	
11:00 PM	1	10	
11:15 PM	1	7	
11:30 PM	1	5	
11:45 PM	1	4	64
Total	758		

SUMMARY OF DATA SOUTHBOUND - LEFT

Intersection: PR-3116 with PR-325
Date: Tuesday, August 03, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	5		
12:15 AM	6		
12:30 AM	4		
12:45 AM	5	20	
1:00 AM	2	17	
1:15 AM	4	15	
1:30 AM	3	14	
1:45 AM	1	10	
2:00 AM	2	10	
2:15 AM	2	8	
2:30 AM	1	6	
2:45 AM	2	7	
3:00 AM	1	6	
3:15 AM	1	5	
3:30 AM	0	4	
3:45 AM	0	2	
4:00 AM	1	2	
4:15 AM	5	6	
4:30 AM	1	7	
4:45 AM	2	9	
5:00 AM	2	10	
5:15 AM	7	12	
5:30 AM	8	19	
5:45 AM	10	27	
6:00 AM	18	43	
6:15 AM	14	50	
6:30 AM	22	64	
6:45 AM	17	71	
7:00 AM	20	73	
7:15 AM	19	78	
7:30 AM	17	73	
7:45 AM	18	74	
8:00 AM	20	74	
8:15 AM	15	70	
8:30 AM	22	75	
8:45 AM	20	77	
9:00 AM	21	78	
9:15 AM	20	83	
9:30 AM	20	81	
9:45 AM	28	89	
10:00 AM	27	95	
10:15 AM	29	104	
10:30 AM	31	115	
10:45 AM	24	111	
11:00 AM	31	115	
11:15 AM	28	114	
11:30 AM	29	112	
11:45 AM	30	118	118
12:00 PM	58	145	
12:15 PM	33	150	
12:30 PM	39	160	
12:45 PM	35	165	
1:00 PM	41	148	
1:15 PM	37	152	
1:30 PM	25	138	
1:45 PM	45	148	
2:00 PM	38	145	
2:15 PM	37	145	
2:30 PM	38	158	
2:45 PM	40	153	
3:00 PM	42	157	
3:15 PM	41	161	
3:30 PM	44	167	
3:45 PM	37	164	
4:00 PM	44	166	
4:15 PM	38	163	
4:30 PM	41	160	
4:45 PM	46	169	
5:00 PM	43	168	
5:15 PM	30	160	
5:30 PM	33	152	
5:45 PM	27	133	
6:00 PM	31	121	
6:15 PM	30	121	
6:30 PM	34	122	

6:45 PM	34	129	
7:00 PM	32	130	
7:15 PM	32	132	
7:30 PM	33	131	
7:45 PM	34	131	
8:00 PM	26	125	
8:15 PM	26	119	
8:30 PM	27	113	
8:45 PM	22	101	
9:00 PM	22	97	
9:15 PM	18	89	
9:30 PM	27	89	
9:45 PM	22	89	
10:00 PM	12	79	
10:15 PM	10	71	
10:30 PM	16	60	
10:45 PM	10	48	
11:00 PM	16	52	
11:15 PM	13	55	
11:30 PM	7	46	
11:45 PM	6	42	169
Total	2087		

SUMMARY OF DATA SOUTHBOUND - THRU

Intersection: PR-3116 with PR-325
Date: Tuesday, August 03, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	5		
12:15 AM	6		
12:30 AM	4		
12:45 AM	5	20	
1:00 AM	2	17	
1:15 AM	4	15	
1:30 AM	4	15	
1:45 AM	1	11	
2:00 AM	2	11	
2:15 AM	2	9	
2:30 AM	2	7	
2:45 AM	2	8	
3:00 AM	2	8	
3:15 AM	2	8	
3:30 AM	0	6	
3:45 AM	1	5	
4:00 AM	2	5	
4:15 AM	5	8	
4:30 AM	2	10	
4:45 AM	3	12	
5:00 AM	2	12	
5:15 AM	7	14	
5:30 AM	10	22	
5:45 AM	11	30	
6:00 AM	20	48	
6:15 AM	16	57	
6:30 AM	24	71	
6:45 AM	20	80	
7:00 AM	22	82	
7:15 AM	22	88	
7:30 AM	19	83	
7:45 AM	21	84	
8:00 AM	23	85	
8:15 AM	17	80	
8:30 AM	24	85	
8:45 AM	22	86	
9:00 AM	24	87	
9:15 AM	23	93	
9:30 AM	23	92	
9:45 AM	32	102	
10:00 AM	31	109	
10:15 AM	32	118	
10:30 AM	35	130	
10:45 AM	28	126	
11:00 AM	36	131	
11:15 AM	32	131	
11:30 AM	32	128	
11:45 AM	33	133	133
12:00 PM	52	149	
12:15 PM	29	146	
12:30 PM	34	148	
12:45 PM	31	146	
1:00 PM	37	131	
1:15 PM	33	135	
1:30 PM	22	123	
1:45 PM	39	131	
2:00 PM	34	128	
2:15 PM	33	128	
2:30 PM	33	139	
2:45 PM	36	136	
3:00 PM	37	139	
3:15 PM	36	142	
3:30 PM	39	148	
3:45 PM	32	144	
4:00 PM	39	146	
4:15 PM	34	144	
4:30 PM	37	142	

4:45 PM	40	150	
5:00 PM	39	150	
5:15 PM	27	143	
5:30 PM	30	136	
5:45 PM	24	120	
6:00 PM	28	109	
6:15 PM	26	108	
6:30 PM	31	109	
6:45 PM	30	115	
7:00 PM	28	115	
7:15 PM	28	117	
7:30 PM	29	115	
7:45 PM	31	116	
8:00 PM	23	111	
8:15 PM	23	106	
8:30 PM	24	101	
8:45 PM	20	90	
9:00 PM	20	87	
9:15 PM	16	80	
9:30 PM	24	80	
9:45 PM	19	79	
10:00 PM	11	70	
10:15 PM	9	63	
10:30 PM	14	53	
10:45 PM	9	43	
11:00 PM	14	46	
11:15 PM	11	48	
11:30 PM	7	41	
11:45 PM	6	38	150
Total	2005		

SUMMARY OF DATA WESTBOUND - LEFT

Intersection: PR-3116 with PR-325
Date: Tuesday, August 03, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	0		
12:15 AM	0		
12:30 AM	1		
12:45 AM	0	1	
1:00 AM	1	2	
1:15 AM	0	2	
1:30 AM	1	2	
1:45 AM	1	3	
2:00 AM	0	2	
2:15 AM	1	3	
2:30 AM	0	2	
2:45 AM	0	1	
3:00 AM	0	1	
3:15 AM	0	0	
3:30 AM	0	0	
3:45 AM	0	0	
4:00 AM	1	1	
4:15 AM	1	2	
4:30 AM	1	3	
4:45 AM	1	4	
5:00 AM	1	4	
5:15 AM	2	5	
5:30 AM	2	6	
5:45 AM	5	10	
6:00 AM	6	15	
6:15 AM	7	20	
6:30 AM	8	26	
6:45 AM	9	30	
7:00 AM	9	33	
7:15 AM	11	37	
7:30 AM	7	36	
7:45 AM	6	33	
8:00 AM	4	28	
8:15 AM	7	24	
8:30 AM	8	25	
8:45 AM	6	25	
9:00 AM	7	28	
9:15 AM	6	27	
9:30 AM	7	26	
9:45 AM	9	29	
10:00 AM	9	31	
10:15 AM	8	33	
10:30 AM	8	34	
10:45 AM	6	31	
11:00 AM	7	29	
11:15 AM	9	30	
11:30 AM	9	31	
11:45 AM	9	34	37
12:00 PM	6	33	
12:15 PM	7	31	
12:30 PM	7	29	
12:45 PM	6	26	
1:00 PM	8	28	
1:15 PM	5	26	
1:30 PM	7	26	
1:45 PM	6	26	
2:00 PM	8	26	
2:15 PM	7	28	
2:30 PM	9	30	

2:45 PM	7	31	
3:00 PM	7	30	
3:15 PM	8	31	
3:30 PM	11	33	
3:45 PM	8	34	
4:00 PM	7	34	
4:15 PM	10	36	
4:30 PM	8	33	
4:45 PM	6	31	
5:00 PM	7	31	
5:15 PM	6	27	
5:30 PM	7	26	
5:45 PM	8	28	
6:00 PM	8	29	
6:15 PM	9	32	
6:30 PM	7	32	
6:45 PM	7	31	
7:00 PM	7	30	
7:15 PM	5	26	
7:30 PM	5	24	
7:45 PM	3	20	
8:00 PM	4	17	
8:15 PM	4	16	
8:30 PM	3	14	
8:45 PM	2	13	
9:00 PM	2	11	
9:15 PM	2	9	
9:30 PM	2	8	
9:45 PM	1	7	
10:00 PM	2	7	
10:15 PM	1	6	
10:30 PM	1	5	
10:45 PM	1	5	
11:00 PM	1	4	
11:15 PM	1	4	
11:30 PM	1	4	
11:45 PM	1	4	36
Total	457		

SUMMARY OF DATA WESTBOUND - RIGHT

Intersection: PR-3116 with PR-325
Date: Tuesday, August 03, 2004
Start Time: 12:00 A.M.

TIME	VOLUME	Hour Vol	
12:00 AM	2		
12:15 AM	1		
12:30 AM	5		
12:45 AM	2	10	
1:00 AM	2	10	
1:15 AM	1	10	
1:30 AM	3	8	
1:45 AM	4	10	
2:00 AM	0	8	
2:15 AM	2	9	
2:30 AM	1	7	
2:45 AM	0	3	
3:00 AM	2	5	
3:15 AM	0	3	
3:30 AM	2	4	
3:45 AM	2	6	
4:00 AM	5	9	
4:15 AM	3	12	
4:30 AM	4	14	
4:45 AM	5	17	
5:00 AM	4	16	
5:15 AM	8	21	
5:30 AM	6	23	
5:45 AM	19	37	
6:00 AM	20	53	
6:15 AM	23	68	
6:30 AM	29	91	
6:45 AM	32	104	
7:00 AM	34	118	
7:15 AM	37	132	
7:30 AM	26	129	
7:45 AM	23	120	
8:00 AM	15	101	
8:15 AM	23	87	
8:30 AM	29	90	
8:45 AM	20	87	
9:00 AM	24	96	
9:15 AM	20	93	
9:30 AM	26	90	
9:45 AM	30	100	
10:00 AM	34	110	

10:15 AM	30	120	
10:30 AM	30	124	
10:45 AM	23	117	
11:00 AM	25	108	
11:15 AM	31	109	
11:30 AM	31	110	
11:45 AM	30	117	132
12:00 PM	25	117	
12:15 PM	31	117	
12:30 PM	34	120	
12:45 PM	30	120	
1:00 PM	36	131	
1:15 PM	24	124	
1:30 PM	34	124	
1:45 PM	30	124	
2:00 PM	37	125	
2:15 PM	32	133	
2:30 PM	39	138	
2:45 PM	30	138	
3:00 PM	33	134	
3:15 PM	34	136	
3:30 PM	49	146	
3:45 PM	38	154	
4:00 PM	32	153	
4:15 PM	48	167	
4:30 PM	35	153	
4:45 PM	25	140	
5:00 PM	30	138	
5:15 PM	30	120	
5:30 PM	30	115	
5:45 PM	36	126	
6:00 PM	36	132	
6:15 PM	41	143	
6:30 PM	34	147	
6:45 PM	32	143	
7:00 PM	30	137	
7:15 PM	23	119	
7:30 PM	25	110	
7:45 PM	16	94	
8:00 PM	20	84	
8:15 PM	16	77	
8:30 PM	15	67	
8:45 PM	10	61	
9:00 PM	11	52	
9:15 PM	8	44	
9:30 PM	7	36	
9:45 PM	6	32	
10:00 PM	8	29	
10:15 PM	3	24	
10:30 PM	6	23	
10:45 PM	5	22	
11:00 PM	4	18	
11:15 PM	3	18	
11:30 PM	2	14	
11:45 PM	2	11	167
Total	1893		

APÉNDICE B

DETERMINACIÓN NECESIDAD SISTEMA DE SEMÁFOROS

PR-116 (South) with PR-3116

Study Name : **PR-116 (South) with PR-3116**
Study Date : **03/01/05**
Page No. : **1**

Signal Warrants - Summary

Major Street Approaches

Northbound: **PR-116**
Number of Lanes: **1**
Approach Speed: **50**
Total Approach Volume: **4,481**

Southbound: **PR-116**
Number of Lanes: **2**
Approach Speed: **50**
Total Approach Volume: **3,578**

Minor Street Approaches

Westbound: **PR-3116**
Number of Lanes: **1**

Total Approach Volume: **1,386**

Warrant Summary **(Rural values apply.)**

Warrant 1 - Eight Hour Vehicular Volumes ..... **Not Satisfied**

Warrant 1A - Minimum Vehicular Volume ..... **Not Satisfied**
Required volumes reached for 2 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic ..... **Not Satisfied**
Required volumes reached for 5 hours, 8 are needed

Warrant 1 A&B - Combination of Warrants ..... **Not Satisfied**
Required volumes reached for 7 hours, 8 are needed

Warrant 2 - Four Hour Volumes ..... **Not Satisfied**
Number of hours (1) volumes exceed minimum < minimum required (4).

Warrant 3 - Peak Hour ..... **Satisfied**

Warrant 3A - Peak Hour Delay ..... **Satisfied**
Number of hours (14) volumes exceed minimum >= required (1). Delay data not evaluated.

Warrant 3B - Peak Hour Volumes ..... **Not Satisfied**
Volumes do not exceed minimums for any hour.

Warrant 4 - Pedestrian Volumes ..... Not Evaluated

Warrant 5 - School Crossing ..... Not Evaluated

Warrant 6 - Coordinated Signal System ..... **Not Satisfied**
No adjacent coordinated signals are present

Warrant 7 - Crash Experience ..... Not Evaluated

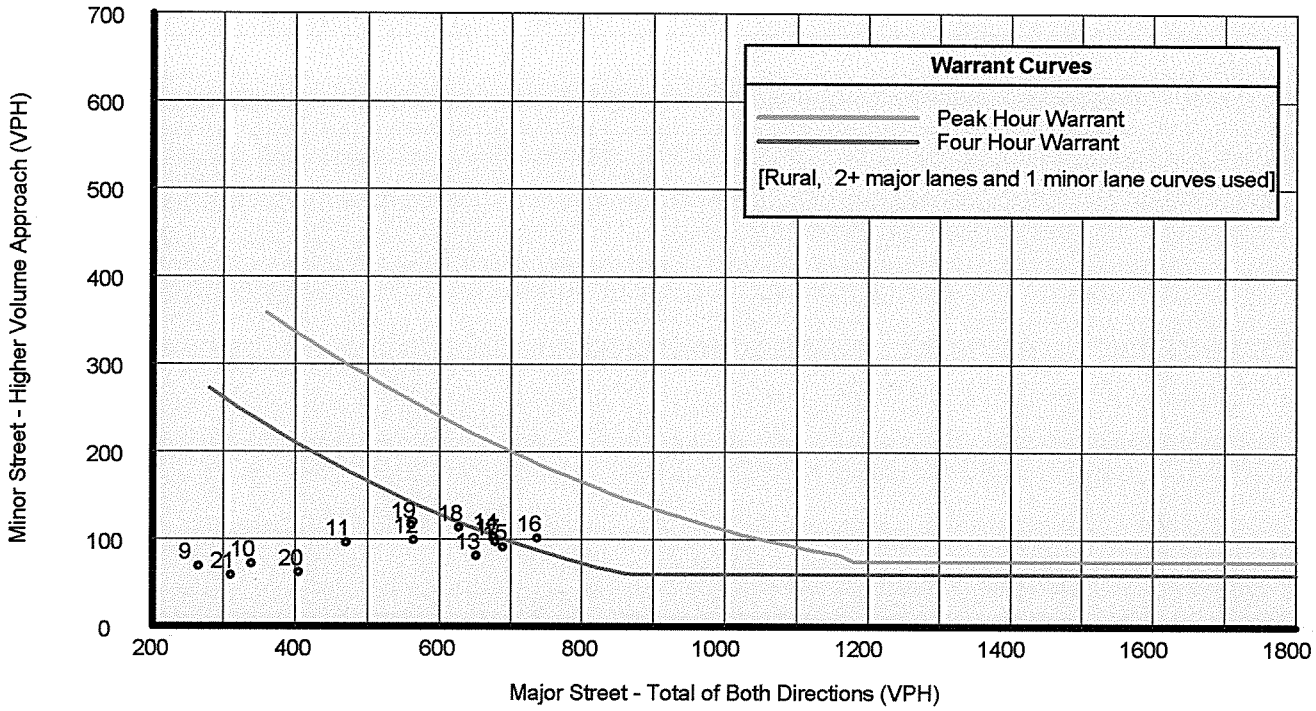
Warrant 8 - Roadway Network ..... **Not Satisfied**
Major Route conditions not met. No volume requirement met.

FIGURA 15

PR-116 (South) with PR-3116

Study Name : **PR-116 (South) with PR-3116**
Study Date : **03/01/05**
Page No. : **2**

Signal Warrants - Summary



Analysis of 8-Hour Volume Warrants:

Hour	Major	Higher Minor		War-1A			War-1B			War-1A&B		
Begin	Total	Vol	Dir	Major Crit	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?
00:00	186	31	WB	420-No	105-No	---	630-No	52-No	---	504-No	84-No	---
01:00	116	20	WB	420-No	105-No	---	630-No	52-No	---	504-No	84-No	---
02:00	42	3	WB	420-No	105-No	---	630-No	52-No	---	504-No	84-No	---
03:00	43	5	WB	420-No	105-No	---	630-No	52-No	---	504-No	84-No	---
04:00	23	3	WB	420-No	105-No	---	630-No	52-No	---	504-No	84-No	---
05:00	41	3	WB	420-No	105-No	---	630-No	52-No	---	504-No	84-No	---
06:00	61	20	WB	420-No	105-No	---	630-No	52-No	---	504-No	84-No	---
07:00	105	40	WB	420-No	105-No	---	630-No	52-No	---	504-No	84-No	---
08:00	172	62	WB	420-No	105-No	---	630-No	52-Yes	Minor	504-No	84-No	---
09:00	265	69	WB	420-No	105-No	---	630-No	52-Yes	Minor	504-No	84-No	---
10:00	339	72	WB	420-No	105-No	---	630-No	52-Yes	Minor	504-No	84-No	---
11:00	470	96	WB	420-Yes	105-No	Major	630-No	52-Yes	Minor	504-No	84-Yes	Minor
12:00	564	99	WB	420-Yes	105-No	Major	630-No	52-Yes	Minor	504-Yes	84-Yes	Both
13:00	651	81	WB	420-Yes	105-No	Major	630-Yes	52-Yes	Both	504-Yes	84-No	Major
14:00	676	103	WB	420-Yes	105-No	Major	630-Yes	52-Yes	Both	504-Yes	84-Yes	Both
15:00	689	91	WB	420-Yes	105-No	Major	630-Yes	52-Yes	Both	504-Yes	84-Yes	Both
16:00	737	101	WB	420-Yes	105-No	Major	630-Yes	52-Yes	Both	504-Yes	84-Yes	Both
17:00	678	97	WB	420-Yes	105-No	Major	630-Yes	52-Yes	Both	504-Yes	84-Yes	Both
18:00	627	113	WB	420-Yes	105-Yes	Both	630-No	52-Yes	Minor	504-Yes	84-Yes	Both
19:00	561	116	WB	420-Yes	105-Yes	Both	630-No	52-Yes	Minor	504-Yes	84-Yes	Both
20:00	405	62	WB	420-No	105-No	---	630-No	52-Yes	Minor	504-No	84-No	---
21:00	310	59	WB	420-No	105-No	---	630-No	52-Yes	Minor	504-No	84-No	---
22:00	174	28	WB	420-No	105-No	---	630-No	52-No	---	504-No	84-No	---
23:00	124	12	WB	420-No	105-No	---	630-No	52-No	---	504-No	84-No	---

PR-3116 with PR-325

Study Name : **PR-3116 with PR-325**
Study Date : **08/22/04**
Page No. : **1**

Signal Warrants - Summary

Major Street Approaches

Northbound: **PR-3116**
Number of Lanes: **1**
Approach Speed: **35**
Total Approach Volume: **2,418**

Southbound: **PR-3116**
Number of Lanes: **1**
Approach Speed: **35**
Total Approach Volume: **3,876**

Minor Street Approaches

Westbound: **PR-325**
Number of Lanes: **1**

Total Approach Volume: **3,437**

Warrant Summary **(Urban values apply.)**

Warrant 1 - Eight Hour Vehicular Volumes ..... **Not Satisfied**

Warrant 1A - Minimum Vehicular Volume ..... **Not Satisfied**
Required volumes reached for 3 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic ..... **Not Satisfied**
Required volumes reached for 0 hours, 8 are needed

Warrant 1 A&B - Combination of Warrants ..... **Not Satisfied**
Required volumes reached for 0 hours, 8 are needed

Warrant 2 - Four Hour Volumes ..... Satisfied
Number of hours (4) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour ..... Satisfied

Warrant 3A - Peak Hour Delay ..... Satisfied
Number of hours (29) volumes exceed minimum >= required (1). Delay data not evaluated.

Warrant 3B - Peak Hour Volumes ..... **Not Satisfied**
Volumes do not exceed minimums for any hour.

Warrant 4 - Pedestrian Volumes ..... Not Evaluated

Warrant 5 - School Crossing ..... Not Evaluated

Warrant 6 - Coordinated Signal System ..... **Not Satisfied**
No adjacent coordinated signals are present

Warrant 7 - Crash Experience ..... Not Evaluated

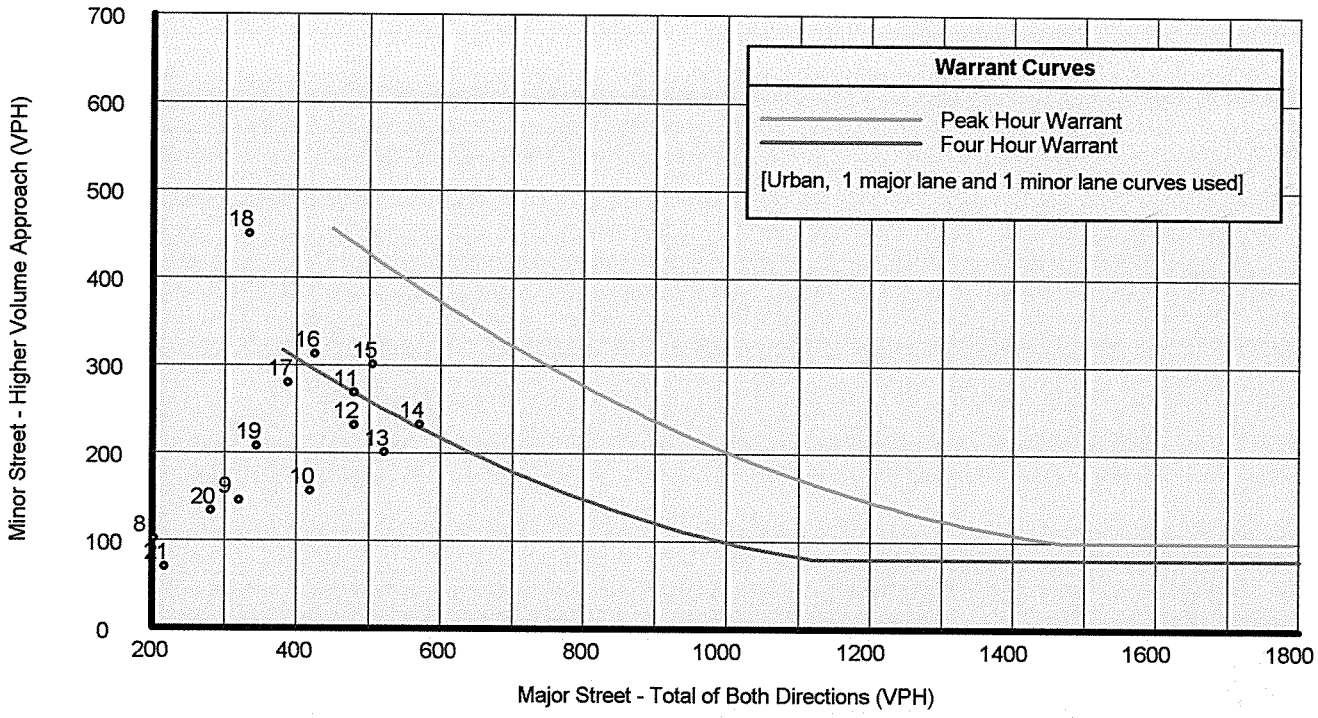
Warrant 8 - Roadway Network ..... **Not Satisfied**
Major Route conditions not met. No volume requirement met.

FIGURA 19

PR-3116 with PR-325

Signal Warrants - Summary

Study Name : **PR-3116 with PR-325**
Study Date : **08/22/04**
Page No. : **2**



Analysis of 8-Hour Volume Warrants:

Hour	Major	Higher Minor		War-1A			War-1B			War-1A&B		
Begin	Total	Vol	Dir	Major Crit	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?
00:00	124	65	WB	500-No	150-No	---	750-No	75-No	---	600-No	120-No	---
01:00	79	29	WB	500-No	150-No	---	750-No	75-No	---	600-No	120-No	---
02:00	57	26	WB	500-No	150-No	---	750-No	75-No	---	600-No	120-No	---
03:00	31	24	WB	500-No	150-No	---	750-No	75-No	---	600-No	120-No	---
04:00	40	22	WB	500-No	150-No	---	750-No	75-No	---	600-No	120-No	---
05:00	40	12	WB	500-No	150-No	---	750-No	75-No	---	600-No	120-No	---
06:00	86	29	WB	500-No	150-No	---	750-No	75-No	---	600-No	120-No	---
07:00	157	59	WB	500-No	150-No	---	750-No	75-No	---	600-No	120-No	---
08:00	202	102	WB	500-No	150-No	---	750-No	75-Yes	Minor	600-No	120-No	---
09:00	320	146	WB	500-No	150-No	---	750-No	75-Yes	Minor	600-No	120-Yes	Minor
10:00	419	157	WB	500-No	150-Yes	Minor	750-No	75-Yes	Minor	600-No	120-Yes	Minor
11:00	479	269	WB	500-No	150-Yes	Minor	750-No	75-Yes	Minor	600-No	120-Yes	Minor
12:00	479	232	WB	500-No	150-Yes	Minor	750-No	75-Yes	Minor	600-No	120-Yes	Minor
13:00	522	201	WB	500-Yes	150-Yes	Both	750-No	75-Yes	Minor	600-No	120-Yes	Minor
14:00	571	233	WB	500-Yes	150-Yes	Both	750-No	75-Yes	Minor	600-No	120-Yes	Minor
15:00	505	301	WB	500-Yes	150-Yes	Both	750-No	75-Yes	Minor	600-No	120-Yes	Minor
16:00	425	313	WB	500-No	150-Yes	Minor	750-No	75-Yes	Minor	600-No	120-Yes	Minor
17:00	388	280	WB	500-No	150-Yes	Minor	750-No	75-Yes	Minor	600-No	120-Yes	Minor
18:00	333	450	WB	500-No	150-Yes	Minor	750-No	75-Yes	Minor	600-No	120-Yes	Minor
19:00	344	208	WB	500-No	150-Yes	Minor	750-No	75-Yes	Minor	600-No	120-Yes	Minor
20:00	281	134	WB	500-No	150-No	---	750-No	75-Yes	Minor	600-No	120-Yes	Minor
21:00	217	70	WB	500-No	150-No	---	750-No	75-No	---	600-No	120-No	---
22:00	115	47	WB	500-No	150-No	---	750-No	75-No	---	600-No	120-No	---
23:00	80	28	WB	500-No	150-No	---	750-No	75-No	---	600-No	120-No	---

APÉNDICE C

ANÁLISIS DE CAPACIDAD

HCS2000: Unsignalized Intersections Release 4.1d

TWO-WAY STOP CONTROL SUMMARY

Analyst: JOSE J. PAREJO COHEN
Agency/Co.: PLC CONSULTING ENGINEERS
Date Performed: 3/5/2005
Analysis Time Period: P.M. PEAK HOUR
Intersection: PR-116 SOUTH & PR-3116
Jurisdiction: GUANICA
Units: U. S. Customary
Analysis Year: EXISTING CONDITIONS
Project ID: DESARROLLO ANTIGUA CENTRAL GUANICA Y MONTES LAS PARDAS
East/West Street: PR-3116
North/South Street: PR-116 SOUTH
Intersection Orientation: NS Study period (hrs): 1.00

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		441		13	306	
Peak-Hour Factor, PHF		0.90		0.90	0.90	
Hourly Flow Rate, HFR		490		14	340	
Percent Heavy Vehicles		--	--	0	--	--
Median Type/Storage	Undivided			/		
RT Channelized?						
Lanes		2		0	1	
Configuration		T			LT	
Upstream Signal?		No			No	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	108	1	29			
Peak Hour Factor, PHF	0.90	0.90	0.90			
Hourly Flow Rate, HFR	120	1	32			
Percent Heavy Vehicles	0	0	0			
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage			No	/		/
Lanes	0	1	0			
Configuration		LTR				

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config		LT		LTR				
v (vph)		14		153				
C(m) (vph)		1084		339				
v/c		0.01		0.45				
95% queue length		0.04		2.41				
Control Delay		8.4		24.3				
LOS		A		C				
Approach Delay				24.3				
Approach LOS				C				

FIGURA 23

HCS2000: Unsignalized Intersections Release 4.1d

JOSE J. PAREJO COHEN
PLC CONSULTING ENGINEERS & PLANNERS
PO BOX 1764
CAGUAS PR. 00726

Phone: 7877443589 Fax: 7877035141
E-Mail: ingeplan@caribe.net

TWO-WAY STOP CONTROL(TWSC) ANALYSIS

Analyst: JOSE J. PAREJO COHEN
Agency/Co.: PLC CONSULTING ENGINEERS
Date Performed: 3/5/2005
Analysis Time Period: P.M. PEAK HOUR
Intersection: PR-116 SOUTH & PR-3116
Jurisdiction: GUANICA
Units: U. S. Customary
Analysis Year: EXISTING CONDITIONS
Project ID: DESARROLLO ANTIGUA CENTRAL GUANICA Y MONTES LAS PARDAS
East/West Street: PR-3116
North/South Street: PR-116 SOUTH
Intersection Orientation: NS Study period (hrs): 1.00

Vehicle Volumes and Adjustments

Major Street Movements	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		441		13	306	
Peak-Hour Factor, PHF		0.90		0.90	0.90	
Peak-15 Minute Volume		122		4	85	
Hourly Flow Rate, HFR		490		14	340	
Percent Heavy Vehicles		--	--	0	--	--
Median Type/Storage	Undivided			/		
RT Channelized?						
Lanes		2		0	1	
Configuration		T			LT	
Upstream Signal?		No			No	

Minor Street Movements	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	108	1	29			
Peak Hour Factor, PHF	0.90	0.90	0.90			
Peak-15 Minute Volume	30	0	8			
Hourly Flow Rate, HFR	120	1	32			
Percent Heavy Vehicles	0	0	0			
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage			No	/		/
RT Channelized?						
Lanes	0	1	0			
Configuration		LTR				

Pedestrian Volumes and Adjustments

Movements	13	14	15	16
Flow (ped/hr)	0	0	0	0

Lane Width (ft)	12.0	12.0	12.0	12.0
Walking Speed (ft/sec)	4.0	4.0	4.0	4.0
Percent Blockage	0	0	0	0

Upstream Signal Data

		Prog. Flow vph	Sat Flow vph	Arrival Type	Green Time sec	Cycle Length sec	Prog. Speed mph	Distance to Signal feet
S2	Left-Turn							
	Through							
S5	Left-Turn							
	Through							

Worksheet 3-Data for Computing Effect of Delay to Major Street Vehicles

	Movement 2	Movement 5
Shared ln volume, major th vehicles:		340
Shared ln volume, major rt vehicles:		0
Sat flow rate, major th vehicles:		1700
Sat flow rate, major rt vehicles:		1700
Number of major street through lanes:		1

Worksheet 4-Critical Gap and Follow-up Time Calculation

Critical Gap Calculation

Movement		1 L	4 L	7 L	8 T	9 R	10 L	11 T	12 R
t(c,base)			4.1	7.5	6.5	6.9			
t(c,hv)		2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
P(hv)			0	0	0	0			
t(c,g)				0.20	0.20	0.10	0.20	0.20	0.10
Grade/100				0.00	0.00	0.00	0.00	0.00	0.00
t(3,lt)			0.00	0.70	0.00	0.00			
t(c,T):	1-stage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2-stage	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
t(c)	1-stage		4.1	6.8	6.5	6.9			
	2-stage								

Follow-Up Time Calculations

Movement	1 L	4 L	7 L	8 T	9 R	10 L	11 T	12 R
t(f,base)		2.20	3.50	4.00	3.30			
t(f,HV)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
P(HV)		0	0	0	0			
t(f)		2.2	3.5	4.0	3.3			

Worksheet 5-Effect of Upstream Signals

Computation 1-Queue Clearance Time at Upstream Signal

	Movement 2		Movement 5	
	V(t)	V(l,prot)	V(t)	V(l,prot)
V prog				

Total Saturation Flow Rate, s (vph)
Arrival Type
Effective Green, g (sec)
Cycle Length, C (sec)
Rp (from Exhibit 16-11)
Proportion vehicles arriving on green P
g(q1)
g(q2)
g(q)

Computation 2-Proportion of TWSC Intersection Time blocked	Movement 2		Movement 5	
	V(t)	V(l,prot)	V(t)	V(l,prot)
alpha				
beta				
Travel time, t(a) (sec)				
Smoothing Factor, F				
Proportion of conflicting flow, f				
Max platooned flow, V(c,max)				
Min platooned flow, V(c,min)				
Duration of blocked period, t(p)				
Proportion time blocked, p	0.000		0.000	

Computation 3-Platoon Event Periods	Result
p(2)	0.000
p(5)	0.000
p(dom)	
p(subo)	
Constrained or unconstrained?	

Proportion unblocked for minor movements, p(x)	(1) Single-stage Process	(2) Two-Stage Process Stage I	(3) Two-Stage Process Stage II
p(1)			
p(4)			
p(7)			
p(8)			
p(9)			
p(10)			
p(11)			
p(12)			

Computation 4 and 5
Single-Stage Process

Movement	1 L	4 L	7 L	8 T	9 R	10 L	11 T	12 R
V c,x		490	858	858	245			
s								
Px								
V c,u,x								
C r,x								
C plat,x								

Two-Stage Process

7	8	10	11

	Stage1	Stage2	Stage1	Stage2	Stage1	Stage2	Stage1	Stage2
V(c,x)								
s		1500		1500				
P(x)								
V(c,u,x)								
C(r,x)								
C(plat,x)								

Worksheet 6-Impedance and Capacity Equations

Step 1: RT from Minor St.	9	12
Conflicting Flows	245	
Potential Capacity	762	
Pedestrian Impedance Factor	1.00	1.00
Movement Capacity	762	
Probability of Queue free St.	0.96	1.00
Step 2: LT from Major St.	**4**	**1**
Conflicting Flows	490	
Potential Capacity	1084	
Pedestrian Impedance Factor	1.00	1.00
Movement Capacity	1084	
Probability of Queue free St.	0.99	1.00
Maj L-Shared Prob Q free St.	0.98	
Step 3: TH from Minor St.	**8**	**11**
Conflicting Flows	858	
Potential Capacity	297	
Pedestrian Impedance Factor	1.00	1.00
Cap. Adj. factor due to Impeding mvmnt	0.98	0.98
Movement Capacity	292	
Probability of Queue free St.	1.00	1.00
Step 4: LT from Minor St.	**7**	**10**
Conflicting Flows	858	
Potential Capacity	300	
Pedestrian Impedance Factor	1.00	1.00
Maj. L, Min T Impedance factor		0.98
Maj. L, Min T Adj. Imp Factor.		0.99
Cap. Adj. factor due to Impeding mvmnt	0.99	0.94
Movement Capacity	296	

Worksheet 7-Computation of the Effect of Two-stage Gap Acceptance

Step 3: TH from Minor St.	8	11
Part 1 - First Stage		
Conflicting Flows		
Potential Capacity		
Pedestrian Impedance Factor		
Cap. Adj. factor due to Impeding mvmnt		
Movement Capacity		
Probability of Queue free St.		

Part 2 - Second Stage		
Conflicting Flows		
Potential Capacity		
Pedestrian Impedance Factor		
Cap. Adj. factor due to Impeding mvmnt		
Movement Capacity		
Part 3 - Single Stage		
Conflicting Flows	858	
Potential Capacity	297	
Pedestrian Impedance Factor	1.00	1.00
Cap. Adj. factor due to Impeding mvmnt	0.98	0.98
Movement Capacity	292	
Result for 2 stage process:		
a		
y		
C t	292	
Probability of Queue free St.	1.00	1.00
Step 4: LT from Minor St.	7	10
Part 1 - First Stage		
Conflicting Flows		
Potential Capacity		
Pedestrian Impedance Factor		
Cap. Adj. factor due to Impeding mvmnt		
Movement Capacity		
Part 2 - Second Stage		
Conflicting Flows		
Potential Capacity		
Pedestrian Impedance Factor		
Cap. Adj. factor due to Impeding mvmnt		
Movement Capacity		
Part 3 - Single Stage		
Conflicting Flows	858	
Potential Capacity	300	
Pedestrian Impedance Factor	1.00	1.00
Maj. L, Min T Impedance factor		0.98
Maj. L, Min T Adj. Imp Factor.		0.99
Cap. Adj. factor due to Impeding mvmnt	0.99	0.94
Movement Capacity	296	
Results for Two-stage process:		
a		
y		
C t	296	

Worksheet 8-Shared Lane Calculations

Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (vph)	120	1	32			
Movement Capacity (vph)	296	292	762			
Shared Lane Capacity (vph)		339				

Worksheet 9-Computation of Effect of Flared Minor Street Approaches

Movement	7	8	9	10	11	12
	L	T	R	L	T	R
C sep	296	292	762			
Volume	120	1	32			
Delay						
Q sep						
Q sep +1						
round (Qsep +1)						
n max						
C sh		339				
SUM C sep						
n						
C act						

Worksheet 10-Delay, Queue Length, and Level of Service

Movement	1	4	7	8	9	10	11	12
Lane Config		LT		LTR				
v (vph)		14		153				
C(m) (vph)		1084		339				
v/c		0.01		0.45				
95% queue length		0.04		2.41				
Control Delay		8.4		24.3				
LOS		A		C				
Approach Delay				24.3				
Approach LOS				C				

Worksheet 11-Shared Major LT Impedance and Delay

	Movement 2	Movement 5
p(oj)	1.00	0.99
v(il), Volume for stream 2 or 5		340
v(i2), Volume for stream 3 or 6		0
s(il), Saturation flow rate for stream 2 or 5		1700
s(i2), Saturation flow rate for stream 3 or 6		1700
P*(oj)		0.98
d(M,LT), Delay for stream 1 or 4		8.4
N, Number of major street through lanes		1
d(rank,1) Delay for stream 2 or 5		0.1

HCS2000: Unsignalized Intersections Release 4.1d

TWO-WAY STOP CONTROL SUMMARY

Analyst: JOSE J. PAREJO COHEN
Agency/Co.: PLC CONSULTING ENGINEERS
Date Performed: 3/5/2005
Analysis Time Period: P.M. PEAK HOUR
Intersection: PR-116 SOUTH & PR-3116
Jurisdiction: GUANICA
Units: U. S. Customary
Analysis Year: EXISTING CONDITIONS
Project ID: DESARROLLO ANTIGUA CENTRAL GUANICA Y MONTES LAS PARDAS
East/West Street: PR-325
North/South Street: PR-3116
Intersection Orientation: NS Study period (hrs): 1.00

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		145	56	220	195	
Peak-Hour Factor, PHF		0.90	0.90	0.90	0.90	
Hourly Flow Rate, HFR		161	62	244	216	
Percent Heavy Vehicles		--	--	0	--	--
Median Type/Storage	Undivided			/		
RT Channelized?						
Lanes		1	0	0	1	
Configuration			TR		LT	
Upstream Signal?		No			No	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	63	1	289			
Peak Hour Factor, PHF	0.90	0.90	0.90			
Hourly Flow Rate, HFR	70	1	321			
Percent Heavy Vehicles	0	0	0			
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage			No /			/
Lanes	0	1	0			
Configuration		LTR				

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config		LT		LTR				
v (vph)		244		392				
C(m) (vph)		1358		601				
v/c		0.18		0.65				
95% queue length		0.66		5.35				
Control Delay		8.2		22.0				
LOS		A		C				
Approach Delay				22.0				
Approach LOS				C				

FIGURA 24

HCS2000: Unsignalized Intersections Release 4.1d

JOSE J. PAREJO COHEN
PLC CONSULTING ENGINEERS & PLANNERS
PO BOX 1764
CAGUAS PR. 00726

Phone: 7877443589 Fax: 7877035141
E-Mail: ingeplan@caribe.net

TWO-WAY STOP CONTROL(TWSC) ANALYSIS

Analyst: JOSE J. PAREJO COHEN
Agency/Co.: PLC CONSULTING ENGINEERS
Date Performed: 3/5/2005
Analysis Time Period: P.M. PEAK HOUR
Intersection: PR-116 SOUTH & PR-3116
Jurisdiction: GUANICA
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Analysis Year: EXISTING CONDITIONS
Project ID: DESARROLLO ANTIGUA CENTRAL GUANICA Y MONTES LAS PARDAS
East/West Street: PR-325
North/South Street: PR-3116
Intersection Orientation: NS Study period (hrs): 1.00

Vehicle Volumes and Adjustments

Major Street Movements	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		145	56	220	195	
Peak-Hour Factor, PHF		0.90	0.90	0.90	0.90	
Peak-15 Minute Volume		40	16	61	54	
Hourly Flow Rate, HFR		161	62	244	216	
Percent Heavy Vehicles		--	--	0	--	--
Median Type/Storage	Undivided			/		
RT Channelized?						
Lanes		1	0	0	1	
Configuration			TR		LT	
Upstream Signal?		No			No	

Minor Street Movements	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	63	1	289			
Peak Hour Factor, PHF	0.90	0.90	0.90			
Peak-15 Minute Volume	18	0	80			
Hourly Flow Rate, HFR	70	1	321			
Percent Heavy Vehicles	0	0	0			
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage			No	/		/
RT Channelized?						
Lanes	0	1	0			
Configuration		LTR				

Pedestrian Volumes and Adjustments

Movements	13	14	15	16
Flow (ped/hr)	0	0	0	0

Lane Width (ft)	12.0	12.0	12.0	12.0
Walking Speed (ft/sec)	4.0	4.0	4.0	4.0
Percent Blockage	0	0	0	0

Upstream Signal Data

	Prog. Flow vph	Sat Flow vph	Arrival Type	Green Time sec	Cycle Length sec	Prog. Speed mph	Distance to Signal feet
S2 Left-Turn							
Through							
S5 Left-Turn							
Through							

Worksheet 3-Data for Computing Effect of Delay to Major Street Vehicles

	Movement 2	Movement 5
Shared ln volume, major th vehicles:		216
Shared ln volume, major rt vehicles:		0
Sat flow rate, major th vehicles:		1700
Sat flow rate, major rt vehicles:		1700
Number of major street through lanes:		1

Worksheet 4-Critical Gap and Follow-up Time Calculation

Critical Gap Calculation

Movement		1 L	4 L	7 L	8 T	9 R	10 L	11 T	12 R
t(c,base)			4.1	7.1	6.5	6.2			
t(c,hv)		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
P(hv)			0	0	0	0			
t(c,g)				0.20	0.20	0.10	0.20	0.20	0.10
Grade/100				0.00	0.00	0.00	0.00	0.00	0.00
t(3,lt)			0.00	0.70	0.00	0.00			
t(c,T):	1-stage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2-stage	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
t(c)	1-stage		4.1	6.4	6.5	6.2			
	2-stage								

Follow-Up Time Calculations

Movement	1 L	4 L	7 L	8 T	9 R	10 L	11 T	12 R
t(f,base)		2.20	3.50	4.00	3.30			
t(f,HV)	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
P(HV)		0	0	0	0			
t(f)		2.2	3.5	4.0	3.3			

Worksheet 5-Effect of Upstream Signals

Computation 1-Queue Clearance Time at Upstream Signal

	Movement 2		Movement 5	
	V(t)	V(l,prot)	V(t)	V(l,prot)
V prog				

Total Saturation Flow Rate, s (vph)	
Arrival Type	
Effective Green, g (sec)	
Cycle Length, C (sec)	
Rp (from Exhibit 16-11)	
Proportion vehicles arriving on green P	
g(q1)	
g(q2)	
g(q)	

Computation 2-Proportion of TWSC Intersection Time blocked	Movement 2		Movement 5	
	V(t)	V(l,prot)	V(t)	V(l,prot)
alpha				
beta				
Travel time, t(a) (sec)				
Smoothing Factor, F				
Proportion of conflicting flow, f				
Max platooned flow, V(c,max)				
Min platooned flow, V(c,min)				
Duration of blocked period, t(p)				
Proportion time blocked, p	0.000		0.000	

Computation 3-Platoon Event Periods	Result
p(2)	0.000
p(5)	0.000
p(dom)	
p(subo)	
Constrained or unconstrained?	

Proportion unblocked for minor movements, p(x)	(1) Single-stage Process	(2) Two-Stage Process Stage I	(3) Two-Stage Process Stage II
p(1)			
p(4)			
p(7)			
p(8)			
p(9)			
p(10)			
p(11)			
p(12)			

Computation 4 and 5
Single-Stage Process

Movement	1 L	4 L	7 L	8 T	9 R	10 L	11 T	12 R
V c,x		223	896	896	192			
s								
Px								
V c,u,x								
C r,x								
C plat,x								

Two-Stage Process

7	8	10	11

	Stage1	Stage2	Stage1	Stage2	Stage1	Stage2	Stage1	Stage2
V(c,x)								
s		1500		1500				
P(x)								
V(c,u,x)								
C(r,x)								
C(plat,x)								

Worksheet 6-Impedance and Capacity Equations

Step 1: RT from Minor St.	9	12
Conflicting Flows	192	
Potential Capacity	855	
Pedestrian Impedance Factor	1.00	1.00
Movement Capacity	855	
Probability of Queue free St.	0.62	1.00
Step 2: LT from Major St.	**4**	**1**
Conflicting Flows	223	
Potential Capacity	1358	
Pedestrian Impedance Factor	1.00	1.00
Movement Capacity	1358	
Probability of Queue free St.	0.82	1.00
Maj L-Shared Prob Q free St.	0.79	
Step 3: TH from Minor St.	**8**	**11**
Conflicting Flows	896	
Potential Capacity	282	
Pedestrian Impedance Factor	1.00	1.00
Cap. Adj. factor due to Impeding mvmnt	0.79	0.79
Movement Capacity	224	
Probability of Queue free St.	1.00	1.00
Step 4: LT from Minor St.	**7**	**10**
Conflicting Flows	896	
Potential Capacity	313	
Pedestrian Impedance Factor	1.00	1.00
Maj. L, Min T Impedance factor		0.79
Maj. L, Min T Adj. Imp Factor.		0.84
Cap. Adj. factor due to Impeding mvmnt	0.82	0.52
Movement Capacity	257	

Worksheet 7-Computation of the Effect of Two-stage Gap Acceptance

Step 3: TH from Minor St.	8	11
Part 1 - First Stage		
Conflicting Flows		
Potential Capacity		
Pedestrian Impedance Factor		
Cap. Adj. factor due to Impeding mvmnt		
Movement Capacity		
Probability of Queue free St.		

Part 2 - Second Stage		
Conflicting Flows		
Potential Capacity		
Pedestrian Impedance Factor		
Cap. Adj. factor due to Impeding mvmnt		
Movement Capacity		
Part 3 - Single Stage		
Conflicting Flows	896	
Potential Capacity	282	
Pedestrian Impedance Factor	1.00	1.00
Cap. Adj. factor due to Impeding mvmnt	0.79	0.79
Movement Capacity	224	
Result for 2 stage process:		
a		
y		
C t	224	
Probability of Queue free St.	1.00	1.00
Step 4: LT from Minor St.	7	10
Part 1 - First Stage		
Conflicting Flows		
Potential Capacity		
Pedestrian Impedance Factor		
Cap. Adj. factor due to Impeding mvmnt		
Movement Capacity		
Part 2 - Second Stage		
Conflicting Flows		
Potential Capacity		
Pedestrian Impedance Factor		
Cap. Adj. factor due to Impeding mvmnt		
Movement Capacity		
Part 3 - Single Stage		
Conflicting Flows	896	
Potential Capacity	313	
Pedestrian Impedance Factor	1.00	1.00
Maj. L, Min T Impedance factor		0.79
Maj. L, Min T Adj. Imp Factor.		0.84
Cap. Adj. factor due to Impeding mvmnt	0.82	0.52
Movement Capacity	257	
Results for Two-stage process:		
a		
y		
C t	257	

Worksheet 8-Shared Lane Calculations

Movement	7 L	8 T	9 R	10 L	11 T	12 R
Volume (vph)	70	1	321			
Movement Capacity (vph)	257	224	855			
Shared Lane Capacity (vph)		601				

Worksheet 9-Computation of Effect of Flared Minor Street Approaches

Movement	7 L	8 T	9 R	10 L	11 T	12 R
C sep	257	224	855			
Volume	70	1	321			
Delay						
Q sep						
Q sep +1						
round (Qsep +1)						
n max						
C sh		601				
SUM C sep						
n						
C act						

Worksheet 10-Delay, Queue Length, and Level of Service

Movement	1	4	7	8	9	10	11	12
Lane Config		LT		LTR				
v (vph)		244		392				
C(m) (vph)		1358		601				
v/c		0.18		0.65				
95% queue length		0.66		5.35				
Control Delay		8.2		22.0				
LOS		A		C				
Approach Delay				22.0				
Approach LOS				C				

Worksheet 11-Shared Major LT Impedance and Delay

	Movement 2	Movement 5
p(oj)	1.00	0.82
v(il), Volume for stream 2 or 5		216
v(i2), Volume for stream 3 or 6		0
s(il), Saturation flow rate for stream 2 or 5		1700
s(i2), Saturation flow rate for stream 3 or 6		1700
P*(oj)		0.79
d(M,LT), Delay for stream 1 or 4		8.2
N, Number of major street through lanes		1
d(rank,1) Delay for stream 2 or 5		1.7

HCS2000: Ramps and Ramp Junctions Release 4.1d

JOSE J. PAREJO COHEN
PLC CONSULTING ENGINEERS & PLANNE
PO BOX 1764
CAGUAS PR. 00726

Phone: 7877443589 Fax: 7877035141
E-mail: ingeplan@caribe.net

Merge Analysis

Analyst:	JOSE J. PAREJO COHEN
Agency/Co.:	PLC CONSULTING ENGINEERS
Date performed:	3/5/2005
Analysis time period:	P.M. PEAK HOUR
Freeway/Dir of Travel:	NORTHBOUND
Junction:	PR-116 NORTH & PR-3116
Jurisdiction:	GUANICA
Analysis Year:	EXISTING CONDITIONS
Description:	DESARROLLO ANTIGUA CENTRAL GUANIC

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	55.0	mph
Volume on freeway	459	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	35.0	mph
Volume on ramp	395	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	459	395		vph
Peak-hour factor, PHF	0.90	0.90		
Peak 15-min volume, v15	128	110		v
Trucks and buses	0	0		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%		%
Length	mi	mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

FIGURA 25

Heavy vehicle adjustment, fHV	1.000	1.000	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	510	439	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 510 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	949	4500	No
v_{R12}	949	4600	No

Level of Service Determination (if not F)

Density, $D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 9.5 pc/mi/ln

Level of service for ramp-freeway junction areas of influence A

Speed Estimation

Intermediate speed variable,	M_S = 0.296	
Space mean speed in ramp influence area,	S_R = 51.2	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 51.2	mph

HCS2000: Ramps and Ramp Junctions Release 4.1d

JOSE J. PAREJO COHEN
PLC CONSULTING ENGINEERS & PLANNE
PO BOX 1764
CAGUAS PR. 00726

Phone: 7877443589 Fax: 7877035141
E-mail: ingeplan@caribe.net

Diverge Analysis

Analyst:	JOSE J. PAREJO COHEN
Agency/Co.:	PLC CONSULTING ENGINEERS
Date performed:	3/5/2005
Analysis time period:	P.M. PEAK HOUR
Freeway/Dir of Travel:	SOUTHBOUND
Junction:	PR-116 NORTH & PR-3116
Jurisdiction:	GUANICA
Analysis Year:	EXISTING CONDITIONS
Description:	DESARROLLO ANTIGUA CENTRAL GUANIC

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	55.0	mph
Volume on freeway	341	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	35.0	mph
Volume on ramp	315	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp	
Volume, V (vph)	341		315			vph
Peak-hour factor, PHF	0.90		0.90			
Peak 15-min volume, v15	95		88			v
Trucks and buses	0		0			%
Recreational vehicles	0		0			%
Terrain type:	Level		Level			
Grade	0.00	%	0.00	%		%
Length	0.00	mi	0.00	mi		mi
Trucks and buses PCE, ET	1.5		1.5			
Recreational vehicle PCE, ER	1.2		1.2			

FIGURA 26

Heavy vehicle adjustment, fHV	1.000	1.000	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	379	350	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 379 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	379	4500	No
v_{12}	379	4400	No
$v_{FO} = v_F - v_R$	29	4500	No
v_R	350	2000	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 3.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence A

Speed Estimation

Intermediate speed variable,	D_S = 0.460	
Space mean speed in ramp influence area,	S_R = 49.0	mph
Space mean speed in outer lanes,	S_0 = N/A	mph
Space mean speed for all vehicles,	S = 49.0	mph

HCS2000: Unsignalized Intersections Release 4.1d

TWO-WAY STOP CONTROL SUMMARY

Analyst: JOSE J. PAREJO COHEN
Agency/Co.: PLC CONSULTING ENGINEERS
Date Performed: 3/5/2005
Analysis Time Period: P.M. PEAK HOUR
Intersection: PR-116 SOUTH & PR-3116
Jurisdiction: GUANICA
Units: U. S. Customary
Analysis Year: TRAFFIC GENERATED
Project ID: DESARROLLO ANTIGUA CENTRAL GUANICA Y MONTES LAS PARDAS
East/West Street: PR-3116
North/South Street: PR-116 SOUTH
Intersection Orientation: NS Study period (hrs): 1.00

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		441		13	306	
Peak-Hour Factor, PHF		0.90		0.90	0.90	
Hourly Flow Rate, HFR		490		14	340	
Percent Heavy Vehicles		--	--	0	--	--
Median Type/Storage	Undivided			/		
RT Channelized?						
Lanes		2		0	1	
Configuration		T			LT	
Upstream Signal?		No			No	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	178	1	47			
Peak Hour Factor, PHF	0.90	0.90	0.90			
Hourly Flow Rate, HFR	197	1	52			
Percent Heavy Vehicles	0	0	0			
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage			No	/		/
Lanes	0	1	0			
Configuration		LTR				

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config		LT		LTR				
v (vph)		14		250				
C(m) (vph)		1084		339				
v/c		0.01		0.74				
95% queue length		0.04		7.25				
Control Delay		8.4		43.8				
LOS		A		E				
Approach Delay				43.8				
Approach LOS				E				

FIGURA 27

HCS2000: Unsignalized Intersections Release 4.1d

JOSE J. PAREJO COHEN
PLC CONSULTING ENGINEERS & PLANNERS
PO BOX 1764
CAGUAS PR. 00726

Phone: 7877443589 Fax: 7877035141
E-Mail: ingeplan@caribe.net

TWO-WAY STOP CONTROL(TWSC) ANALYSIS

Analyst: JOSE J. PAREJO COHEN
Agency/Co.: PLC CONSULTING ENGINEERS
Date Performed: 3/5/2005
Analysis Time Period: P.M. PEAK HOUR
Intersection: PR-116 SOUTH & PR-3116
Jurisdiction: GUANICA
Units: U. S. Customary
Analysis Year: TRAFFIC GENERATED
Project ID: DESARROLLO ANTIGUA CENTRAL GUANICA Y MONTES LAS PARDAS
East/West Street: PR-3116
North/South Street: PR-116 SOUTH
Intersection Orientation: NS Study period (hrs): 1.00

Vehicle Volumes and Adjustments

Major Street Movements	1 L	2 T	3 R	4 L	5 T	6 R
Volume		441		13	306	
Peak-Hour Factor, PHF		0.90		0.90	0.90	
Peak-15 Minute Volume		122		4	85	
Hourly Flow Rate, HFR		490		14	340	
Percent Heavy Vehicles		--	--	0	--	--
Median Type/Storage	Undivided			/		
RT Channelized?						
Lanes		2		0	1	
Configuration		T		LT		
Upstream Signal?		No			No	

Minor Street Movements	7 L	8 T	9 R	10 L	11 T	12 R
Volume	178	1	47			
Peak Hour Factor, PHF	0.90	0.90	0.90			
Peak-15 Minute Volume	49	0	13			
Hourly Flow Rate, HFR	197	1	52			
Percent Heavy Vehicles	0	0	0			
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage			No	/		/
RT Channelized?						
Lanes	0	1	0			
Configuration		LTR				

Pedestrian Volumes and Adjustments

Movements	13	14	15	16
Flow (ped/hr)	0	0	0	0

Lane Width (ft)	12.0	12.0	12.0	12.0
Walking Speed (ft/sec)	4.0	4.0	4.0	4.0
Percent Blockage	0	0	0	0

Upstream Signal Data

		Prog. Flow vph	Sat Flow vph	Arrival Type	Green Time sec	Cycle Length sec	Prog. Speed mph	Distance to Signal feet
S2	Left-Turn							
	Through							
S5	Left-Turn							
	Through							

Worksheet 3-Data for Computing Effect of Delay to Major Street Vehicles

	Movement 2	Movement 5
Shared ln volume, major th vehicles:		340
Shared ln volume, major rt vehicles:		0
Sat flow rate, major th vehicles:		1700
Sat flow rate, major rt vehicles:		1700
Number of major street through lanes:		1

Worksheet 4-Critical Gap and Follow-up Time Calculation

Critical Gap Calculation

Movement		1 L	4 L	7 L	8 T	9 R	10 L	11 T	12 R
t(c,base)			4.1	7.5	6.5	6.9			
t(c,hv)		2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
P(hv)			0	0	0	0			
t(c,g)				0.20	0.20	0.10	0.20	0.20	0.10
Grade/100				0.00	0.00	0.00	0.00	0.00	0.00
t(3,lt)			0.00	0.70	0.00	0.00			
t(c,T):	1-stage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2-stage	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
t(c)	1-stage		4.1	6.8	6.5	6.9			
	2-stage								

Follow-Up Time Calculations

Movement	1 L	4 L	7 L	8 T	9 R	10 L	11 T	12 R
t(f,base)		2.20	3.50	4.00	3.30			
t(f,HV)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
P(HV)		0	0	0	0			
t(f)		2.2	3.5	4.0	3.3			

Worksheet 5-Effect of Upstream Signals

Computation 1-Queue Clearance Time at Upstream Signal

	Movement 2		Movement 5	
	V(t)	V(l,prot)	V(t)	V(l,prot)
V prog				

Total Saturation Flow Rate, s (vph)
Arrival Type
Effective Green, g (sec)
Cycle Length, C (sec)
Rp (from Exhibit 16-11)
Proportion vehicles arriving on green P
g(q1)
g(q2)
g(q)

Computation 2-Proportion of TWSC Intersection Time blocked	Movement 2		Movement 5	
	V(t)	V(l,prot)	V(t)	V(l,prot)
alpha				
beta				
Travel time, t(a) (sec)				
Smoothing Factor, F				
Proportion of conflicting flow, f				
Max platooned flow, V(c,max)				
Min platooned flow, V(c,min)				
Duration of blocked period, t(p)				
Proportion time blocked, p	0.000		0.000	

Computation 3-Platoon Event Periods	Result
p(2)	0.000
p(5)	0.000
p(dom)	
p(subo)	
Constrained or unconstrained?	

Proportion unblocked for minor movements, p(x)	(1) Single-stage Process	(2) Two-Stage Process Stage I	(3) Two-Stage Process Stage II
p(1)			
p(4)			
p(7)			
p(8)			
p(9)			
p(10)			
p(11)			
p(12)			

Computation 4 and 5
Single-Stage Process

Movement	1 L	4 L	7 L	8 T	9 R	10 L	11 T	12 R
V c,x		490	858	858	245			
s								
Px								
V c,u,x								
C r,x								
C plat,x								

Two-Stage Process

7	8	10	11

	Stage1	Stage2	Stage1	Stage2	Stage1	Stage2	Stage1	Stage2
V(c,x)								
s		1500		1500				
P(x)								
V(c,u,x)								
C(r,x)								
C(plat,x)								

Worksheet 6-Impedance and Capacity Equations

Step 1: RT from Minor St.	9	12
Conflicting Flows	245	
Potential Capacity	762	
Pedestrian Impedance Factor	1.00	1.00
Movement Capacity	762	
Probability of Queue free St.	0.93	1.00
Step 2: LT from Major St.	**4**	**1**
Conflicting Flows	490	
Potential Capacity	1084	
Pedestrian Impedance Factor	1.00	1.00
Movement Capacity	1084	
Probability of Queue free St.	0.99	1.00
Maj L-Shared Prob Q free St.	0.98	
Step 3: TH from Minor St.	**8**	**11**
Conflicting Flows	858	
Potential Capacity	297	
Pedestrian Impedance Factor	1.00	1.00
Cap. Adj. factor due to Impeding mvmnt	0.98	0.98
Movement Capacity	292	
Probability of Queue free St.	1.00	1.00
Step 4: LT from Minor St.	**7**	**10**
Conflicting Flows	858	
Potential Capacity	300	
Pedestrian Impedance Factor	1.00	1.00
Maj. L, Min T Impedance factor		0.98
Maj. L, Min T Adj. Imp Factor.		0.99
Cap. Adj. factor due to Impeding mvmnt	0.99	0.92
Movement Capacity	296	

Worksheet 7-Computation of the Effect of Two-stage Gap Acceptance

Step 3: TH from Minor St.	8	11
Part 1 - First Stage		
Conflicting Flows		
Potential Capacity		
Pedestrian Impedance Factor		
Cap. Adj. factor due to Impeding mvmnt		
Movement Capacity		
Probability of Queue free St.		

Part 2 - Second Stage		
Conflicting Flows		
Potential Capacity		
Pedestrian Impedance Factor		
Cap. Adj. factor due to Impeding mvmnt		
Movement Capacity		
Part 3 - Single Stage		
Conflicting Flows	858	
Potential Capacity	297	
Pedestrian Impedance Factor	1.00	1.00
Cap. Adj. factor due to Impeding mvmnt	0.98	0.98
Movement Capacity	292	
Result for 2 stage process:		
a		
y		
C t	292	
Probability of Queue free St.	1.00	1.00
Step 4: LT from Minor St.	7	10
Part 1 - First Stage		
Conflicting Flows		
Potential Capacity		
Pedestrian Impedance Factor		
Cap. Adj. factor due to Impeding mvmnt		
Movement Capacity		
Part 2 - Second Stage		
Conflicting Flows		
Potential Capacity		
Pedestrian Impedance Factor		
Cap. Adj. factor due to Impeding mvmnt		
Movement Capacity		
Part 3 - Single Stage		
Conflicting Flows	858	
Potential Capacity	300	
Pedestrian Impedance Factor	1.00	1.00
Maj. L, Min T Impedance factor		0.98
Maj. L, Min T Adj. Imp Factor.		0.99
Cap. Adj. factor due to Impeding mvmnt	0.99	0.92
Movement Capacity	296	
Results for Two-stage process:		
a		
y		
C t	296	

Worksheet 8-Shared Lane Calculations

Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (vph)	197	1	52			
Movement Capacity (vph)	296	292	762			
Shared Lane Capacity (vph)		339				

Worksheet 9-Computation of Effect of Flared Minor Street Approaches

Movement	7 L	8 T	9 R	10 L	11 T	12 R
C sep	296	292	762			
Volume	197	1	52			
Delay						
Q sep						
Q sep +1						
round (Qsep +1)						
n max						
C sh		339				
SUM C sep						
n						
C act						

Worksheet 10-Delay, Queue Length, and Level of Service

Movement	1	4	7	8	9	10	11	12
Lane Config		LT		LTR				
v (vph)		14		250				
C(m) (vph)		1084		339				
v/c		0.01		0.74				
95% queue length		0.04		7.25				
Control Delay		8.4		43.8				
LOS		A		E				
Approach Delay				43.8				
Approach LOS				E				

Worksheet 11-Shared Major LT Impedance and Delay

	Movement 2	Movement 5
p(oj)	1.00	0.99
v(il), Volume for stream 2 or 5		340
v(i2), Volume for stream 3 or 6		0
s(il), Saturation flow rate for stream 2 or 5		1700
s(i2), Saturation flow rate for stream 3 or 6		1700
P*(oj)		0.98
d(M,LT), Delay for stream 1 or 4		8.4
N, Number of major street through lanes		1
d(rank,1) Delay for stream 2 or 5		0.1

HCS2000: Unsignalized Intersections Release 4.1d

TWO-WAY STOP CONTROL SUMMARY

Analyst: JOSE J. PAREJO COHEN
Agency/Co.: PLC CONSULTING ENGINEERS
Date Performed: 3/5/2005
Analysis Time Period: P.M. PEAK HOUR
Intersection: PR-116 SOUTH & PR-3116
Jurisdiction: GUANICA
Units: U. S. Customary
Analysis Year: INCLUDE TRAFFIC GENERATED
Project ID: DESARROLLO ANTIGUA CENTRAL GUANICA Y MONTES LAS PARDAS
East/West Street: PR-325
North/South Street: PR-3116
Intersection Orientation: NS Study period (hrs): 1.00

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		145	155	616	195	
Peak-Hour Factor, PHF		0.90	0.90	0.90	0.90	
Hourly Flow Rate, HFR		161	172	684	216	
Percent Heavy Vehicles		--	--	0	--	--
Median Type/Storage	Undivided			/		
RT Channelized?						
Lanes		1	0	0	1	
Configuration			TR		LT	
Upstream Signal?		No			No	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	151	1	643			
Peak Hour Factor, PHF	0.90	0.90	0.90			
Hourly Flow Rate, HFR	167	1	714			
Percent Heavy Vehicles	0	0	0			
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage			No	/		/
Lanes	0	1	0			
Configuration		LTR				

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config		LT		LTR				
v (vph)		684		882				
C(m) (vph)		1238		166				
v/c		0.55		5.31				
95% queue length		3.66		361.66				
Control Delay		11.5		7817				
LOS		B		F				
Approach Delay				7817				
Approach LOS				F				

FIGURA 28

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JOSE J. PAREJO COHEN
PLC CONSULTING ENGINEERS & PLANNERS
PO BOX 1764
CAGUAS PR. 00726

Phone: 7877443589 Fax: 7877035141
E-Mail: ingeplan@caribe.net

TWO-WAY STOP CONTROL(TWSC) ANALYSIS

Analyst: JOSE J. PAREJO COHEN
Agency/Co.: PLC CONSULTING ENGINEERS
Date Performed: 3/5/2005
Analysis Time Period: P.M. PEAK HOUR
Intersection: PR-116 SOUTH & PR-3116
Jurisdiction: GUANICA
Units: U. S. Customary
Analysis Year: INCLUDE TRAFFIC GENERATED
Project ID: DESARROLLO ANTIGUA CENTRAL GUANICA Y MONTES LAS PARDAS
East/West Street: PR-325
North/South Street: PR-3116
Intersection Orientation: NS Study period (hrs): 1.00

Vehicle Volumes and Adjustments

Major Street Movements	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		145	155	616	195	
Peak-Hour Factor, PHF		0.90	0.90	0.90	0.90	
Peak-15 Minute Volume		40	43	171	54	
Hourly Flow Rate, HFR		161	172	684	216	
Percent Heavy Vehicles		--	--	0	--	--
Median Type/Storage	Undivided			/		
RT Channelized?						
Lanes		1	0	0	1	
Configuration			TR	LT		
Upstream Signal?		No			No	

Minor Street Movements	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	151	1	643			
Peak Hour Factor, PHF	0.90	0.90	0.90			
Peak-15 Minute Volume	42	0	179			
Hourly Flow Rate, HFR	167	1	714			
Percent Heavy Vehicles	0	0	0			
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage			No	/		/
RT Channelized?						
Lanes	0	1	0			
Configuration		LTR				

Pedestrian Volumes and Adjustments

Movements	13	14	15	16
Flow (ped/hr)	0	0	0	0

Lane Width (ft)	12.0	12.0	12.0	12.0
Walking Speed (ft/sec)	4.0	4.0	4.0	4.0
Percent Blockage	0	0	0	0

Upstream Signal Data

		Prog. Flow vph	Sat Flow vph	Arrival Type	Green Time sec	Cycle Length sec	Prog. Speed mph	Distance to Signal feet
S2	Left-Turn							
	Through							
S5	Left-Turn							
	Through							

Worksheet 3-Data for Computing Effect of Delay to Major Street Vehicles

	Movement 2	Movement 5
Shared ln volume, major th vehicles:		216
Shared ln volume, major rt vehicles:		0
Sat flow rate, major th vehicles:		1700
Sat flow rate, major rt vehicles:		1700
Number of major street through lanes:		1

Worksheet 4-Critical Gap and Follow-up Time Calculation

Critical Gap Calculation

Movement		1 L	4 L	7 L	8 T	9 R	10 L	11 T	12 R
t(c,base)			4.1	7.1	6.5	6.2			
t(c,hv)		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
P(hv)			0	0	0	0			
t(c,g)				0.20	0.20	0.10	0.20	0.20	0.10
Grade/100				0.00	0.00	0.00	0.00	0.00	0.00
t(3,lt)			0.00	0.70	0.00	0.00			
t(c,T):	1-stage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2-stage	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
t(c)	1-stage		4.1	6.4	6.5	6.2			
	2-stage								

Follow-Up Time Calculations

Movement	1 L	4 L	7 L	8 T	9 R	10 L	11 T	12 R
t(f,base)		2.20	3.50	4.00	3.30			
t(f,HV)	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
P(HV)		0	0	0	0			
t(f)		2.2	3.5	4.0	3.3			

Worksheet 5-Effect of Upstream Signals

Computation 1-Queue Clearance Time at Upstream Signal

	Movement 2		Movement 5	
	V(t)	V(l,prot)	V(t)	V(l,prot)
V prog				

Total Saturation Flow Rate, s (vph)	
Arrival Type	
Effective Green, g (sec)	
Cycle Length, C (sec)	
Rp (from Exhibit 16-11)	
Proportion vehicles arriving on green P	
g(q1)	
g(q2)	
g(q)	

Computation 2-Proportion of TWSC Intersection Time blocked	Movement 2		Movement 5	
	V(t)	V(l,prot)	V(t)	V(l,prot)
alpha				
beta				
Travel time, t(a) (sec)				
Smoothing Factor, F				
Proportion of conflicting flow, f				
Max platooned flow, V(c,max)				
Min platooned flow, V(c,min)				
Duration of blocked period, t(p)				
Proportion time blocked, p	0.000		0.000	

Computation 3-Platoon Event Periods	Result
p(2)	0.000
p(5)	0.000
p(dom)	
p(subo)	
Constrained or unconstrained?	

Proportion unblocked for minor movements, p(x)	(1) Single-stage Process	(2) Two-Stage Process Stage I	(3) Two-Stage Process Stage II
p(1)			
p(4)			
p(7)			
p(8)			
p(9)			
p(10)			
p(11)			
p(12)			

Computation 4 and 5
Single-Stage Process

Movement	1 L	4 L	7 L	8 T	9 R	10 L	11 T	12 R
V c,x		333	1831	1831	247			
s								
Px								
V c,u,x								
C r,x								
C plat,x								

Two-Stage Process

7	8	10	11

	Stage1	Stage2	Stage1	Stage2	Stage1	Stage2	Stage1	Stage2
V(c,x)								
s		1500		1500				
P(x)								
V(c,u,x)								
C(r,x)								
C(plat,x)								

Worksheet 6-Impedance and Capacity Equations

Step 1: RT from Minor St.	9	12
Conflicting Flows	247	
Potential Capacity	797	
Pedestrian Impedance Factor	1.00	1.00
Movement Capacity	797	
Probability of Queue free St.	0.10	1.00
Step 2: LT from Major St.	**4**	**1**
Conflicting Flows	333	
Potential Capacity	1238	
Pedestrian Impedance Factor	1.00	1.00
Movement Capacity	1238	
Probability of Queue free St.	0.45	1.00
Maj L-Shared Prob Q free St.	0.37	
Step 3: TH from Minor St.	**8**	**11**
Conflicting Flows	1831	
Potential Capacity	77	
Pedestrian Impedance Factor	1.00	1.00
Cap. Adj. factor due to Impeding mvmnt	0.37	0.37
Movement Capacity	28	
Probability of Queue free St.	0.96	1.00
Step 4: LT from Minor St.	**7**	**10**
Conflicting Flows	1831	
Potential Capacity	85	
Pedestrian Impedance Factor	1.00	1.00
Maj. L, Min T Impedance factor		0.35
Maj. L, Min T Adj. Imp Factor.		0.48
Cap. Adj. factor due to Impeding mvmnt	0.45	0.05
Movement Capacity	38	

Worksheet 7-Computation of the Effect of Two-stage Gap Acceptance

Step 3: TH from Minor St.	8	11
Part 1 - First Stage		
Conflicting Flows		
Potential Capacity		
Pedestrian Impedance Factor		
Cap. Adj. factor due to Impeding mvmnt		
Movement Capacity		
Probability of Queue free St.		

Part 2 - Second Stage		
Conflicting Flows		
Potential Capacity		
Pedestrian Impedance Factor		
Cap. Adj. factor due to Impeding mvmnt		
Movement Capacity		
Part 3 - Single Stage		
Conflicting Flows	1831	
Potential Capacity	77	
Pedestrian Impedance Factor	1.00	1.00
Cap. Adj. factor due to Impeding mvmnt	0.37	0.37
Movement Capacity	28	
Result for 2 stage process:		
a		
y		
C t	28	
Probability of Queue free St.	0.96	1.00
Step 4: LT from Minor St.	7	10
Part 1 - First Stage		
Conflicting Flows		
Potential Capacity		
Pedestrian Impedance Factor		
Cap. Adj. factor due to Impeding mvmnt		
Movement Capacity		
Part 2 - Second Stage		
Conflicting Flows		
Potential Capacity		
Pedestrian Impedance Factor		
Cap. Adj. factor due to Impeding mvmnt		
Movement Capacity		
Part 3 - Single Stage		
Conflicting Flows	1831	
Potential Capacity	85	
Pedestrian Impedance Factor	1.00	1.00
Maj. L, Min T Impedance factor		0.35
Maj. L, Min T Adj. Imp Factor.		0.48
Cap. Adj. factor due to Impeding mvmnt	0.45	0.05
Movement Capacity	38	
Results for Two-stage process:		
a		
y		
C t	38	

Worksheet 8-Shared Lane Calculations

Movement	7 L	8 T	9 R	10 L	11 T	12 R
Volume (vph)	167	1	714			
Movement Capacity (vph)	38	28	797			
Shared Lane Capacity (vph)		166				

Worksheet 9-Computation of Effect of Flared Minor Street Approaches

Movement	7 L	8 T	9 R	10 L	11 T	12 R
C sep	38	28	797			
Volume	167	1	714			
Delay						
Q sep						
Q sep +1						
round (Qsep +1)						
n max						
C sh		166				
SUM C sep						
n						
C act						

Worksheet 10-Delay, Queue Length, and Level of Service

Movement	1	4	7	8	9	10	11	12
Lane Config		LT		LTR				
v (vph)		684		882				
C(m) (vph)		1238		166				
v/c		0.55		5.31				
95% queue length		3.66		361.66				
Control Delay		11.5		7817				
LOS		B		F				
Approach Delay				7817				
Approach LOS				F				

Worksheet 11-Shared Major LT Impedance and Delay

	Movement 2	Movement 5
p(oj)	1.00	0.45
v(il), Volume for stream 2 or 5		216
v(i2), Volume for stream 3 or 6		0
s(il), Saturation flow rate for stream 2 or 5		1700
s(i2), Saturation flow rate for stream 3 or 6		1700
P*(oj)		0.37
d(M,LT), Delay for stream 1 or 4		11.5
N, Number of major street through lanes		1
d(rank,1) Delay for stream 2 or 5		7.3

HCS2000: Ramps and Ramp Junctions Release 4.1d

JOSE J. PAREJO COHEN
PLC CONSULTING ENGINEERS & PLANNE
PO BOX 1764
CAGUAS PR. 00726

Phone: 7877443589 Fax: 7877035141
E-mail: ingeplan@caribe.net

Merge Analysis

Analyst:	JOSE J. PAREJO COHEN
Agency/Co.:	PLC CONSULTING ENGINEERS
Date performed:	3/5/2005
Analysis time period:	P.M. PEAK HOUR
Freeway/Dir of Travel:	NORTHBOUND
Junction:	PR-116 NORTH & PR-3116
Jurisdiction:	GUANICA
Analysis Year:	INCLUDE TRAFFIC GENERATED
Description:	DESARROLLO ANTIGUA CENTRAL GUANIC

Freeway Data

Type of analysis	Merge	
Number of lanes in freeway	2	
Free-flow speed on freeway	55.0	mph
Volume on freeway	459	vph

On Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-flow speed on ramp	35.0	mph
Volume on ramp	749	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent Ramp		vph
Position of adjacent Ramp		
Type of adjacent Ramp		
Distance to adjacent Ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway	Ramp	Adjacent Ramp	
Volume, V (vph)	459	749		vph
Peak-hour factor, PHF	0.90	0.90		
Peak 15-min volume, v15	128	208		v
Trucks and buses	0	0		%
Recreational vehicles	0	0		%
Terrain type:	Level	Level		
Grade	%	%		%
Length	mi	mi		mi
Trucks and buses PCE, ET	1.5	1.5		
Recreational vehicle PCE, ER	1.2	1.2		

FIGURA 29

Heavy vehicle adjustment, fHV	1.000	1.000	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	510	832	pcph

Estimation of V12 Merge Areas

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 Using Equation 0

$v_{12} = v_F (P_{FM})$ = 510 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
v_{FO}	1342	4500	No
v_{R12}	1342	4600	No

Level of Service Determination (if not F)

Density, $D_R = 5.475 + 0.00734\, v_R + 0.0078\, v_{12} - 0.00627\, L_A$ = 12.4 pc/mi/ln

Level of service for ramp-freeway junction areas of influence B

Speed Estimation

Intermediate speed variable,	M_S = 0.301	
Space mean speed in ramp influence area,	S_R = 51.1	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 51.1	mph

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JOSE J. PAREJO COHEN
PLC CONSULTING ENGINEERS & PLANNE
PO BOX 1764
CAGUAS PR. 00726

Phone: 7877443589 Fax: 7877035141
E-mail: ingeplan@caribe.net

Diverge Analysis

Analyst:	JOSE J. PAREJO COHEN
Agency/Co.:	PLC CONSULTING ENGINEERS
Date performed:	3/5/2005
Analysis time period:	P.M. PEAK HOUR
Freeway/Dir of Travel:	SOUTHBOUND
Junction:	PR-116 NORTH & PR-3116
Jurisdiction:	GUANICA
Analysis Year:	INCLUDE TRAFFIC GENERATED
Description:	DESARROLLO ANTIGUA CENTRAL GUANIC

Freeway Data

Type of analysis	Diverge	
Number of lanes in freeway	2	
Free-flow speed on freeway	55.0	mph
Volume on freeway	341	vph

Off Ramp Data

Side of freeway	Right	
Number of lanes in ramp	1	
Free-Flow speed on ramp	35.0	mph
Volume on ramp	711	vph
Length of first accel/decel lane	500	ft
Length of second accel/decel lane		ft

Adjacent Ramp Data (if one exists)

Does adjacent ramp exist?	No	
Volume on adjacent ramp		vph
Position of adjacent ramp		
Type of adjacent ramp		
Distance to adjacent ramp		ft

Conversion to pc/h Under Base Conditions

Junction Components	Freeway		Ramp		Adjacent Ramp	
Volume, V (vph)	341		711			vph
Peak-hour factor, PHF	0.90		0.90			
Peak 15-min volume, v15	95		198			v
Trucks and buses	0		0			%
Recreational vehicles	0		0			%
Terrain type:	Level		Level			
Grade	0.00	%	0.00	%		%
Length	0.00	mi	0.00	mi		mi
Trucks and buses PCE, ET	1.5		1.5			
Recreational vehicle PCE, ER	1.2		1.2			

FIGURA 30

Heavy vehicle adjustment, fHV	1.000	1.000	
Driver population factor, fP	1.00	1.00	
Flow rate, vp	379	790	pcph

Estimation of V12 Diverge Areas

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 Using Equation 0

$v_{12} = v_R + (v_F - v_R) P_{FD}$ = 379 pc/h

Capacity Checks

	Actual	Maximum	LOS F?
$v_{Fi} = v_F$	379	4500	No
v_{12}	379	4400	No
$v_{FO} = v_F - v_R$	-411	4500	No
v_R	790	2000	No

Level of Service Determination (if not F)

Density, $D_R = 4.252 + 0.0086\, v_{12} - 0.009\, L_D$ = 3.0 pc/mi/ln

Level of service for ramp-freeway junction areas of influence A

Speed Estimation

Intermediate speed variable,	D_S = 0.499	
Space mean speed in ramp influence area,	S_R = 48.5	mph
Space mean speed in outer lanes,	S_O = N/A	mph
Space mean speed for all vehicles,	S = 48.5	mph