



TRANSPORTATION NEEDS REPORT

William Preston Lane Jr. Memorial (Bay) Bridge



December 2004

Volume II of II



EXISTING TRAFFIC SUMMARIES

Classification Count

Location: William Preston Lane Bridge (Bay Bridge)

Direction: Eastbound

Date: Saturday, August 18, 2001

Beginning Hour	Heavy Vehicles								Total Heavy Vehicles	Total
	Motorcycles	Passenger Cars	Buses	Single Unit Trucks	WB40	WB50	WB60	Length > 66'		
0:00	0	766	6	34	9	27	8	1	79	851
01:00	0	405	12	14	6	32	5	1	58	475
02:00	0	340	7	20	7	23	3	1	54	401
03:00	0	277	20	26	11	26	7	2	72	369
04:00	2	303	22	35	14	38	7	1	95	422
05:00	1	626	30	63	13	29	11	2	118	775
06:00	3	1500	28	61	14	47	8	5	135	1666
07:00	3	2751	25	90	23	21	18	4	156	2935
08:00	6	3364	29	96	22	40	13	2	173	3572
09:00	5	3466	37	67	23	33	19	3	145	3653
10:00	8	3354	28	71	17	30	14	2	134	3524
11:00	11	3285	32	57	22	28	7	1	115	3443
12:00	6	3336	30	80	21	20	13	2	136	3508
13:00	5	2882	25	46	12	23	16	1	98	3010
14:00	6	2956	11	68	20	14	6	2	110	3083
15:00	9	3421	25	79	19	37	10	4	149	3604
16:00	14	3272	29	85	16	37	9	5	152	3467
17:00	6	1843	17	70	17	21	9	2	119	1985
18:00	3	2071	14	74	11	23	4	1	113	2201
19:00	2	1646	17	67	12	28	4	1	112	1777
20:00	1	1369	15	45	13	23	9	4	94	1479
21:00	0	1218	8	42	6	24	9	2	83	1309
22:00	1	981	3	23	5	15	3	1	47	1032
23:00	0	687	2	33	4	19	3	1	60	749
Total:	92	46119	472	1346	337	658	215	51	2607	49290
Percentage:	0.20%	93.57%	0.96%	2.73%	0.68%	1.33%	0.44%	0.10%	5.29%	

Total Motorcycles, Cars and Buses:	46683
Percentage Motorcycles, Cars and Buses:	94.71%

Total Heavy Vehicles:	2607
Percentage Heavy Vehicles:	5.29%

Classification Count

Location: William Preston Lane Bridge (Bay Bridge)

Direction: Westbound

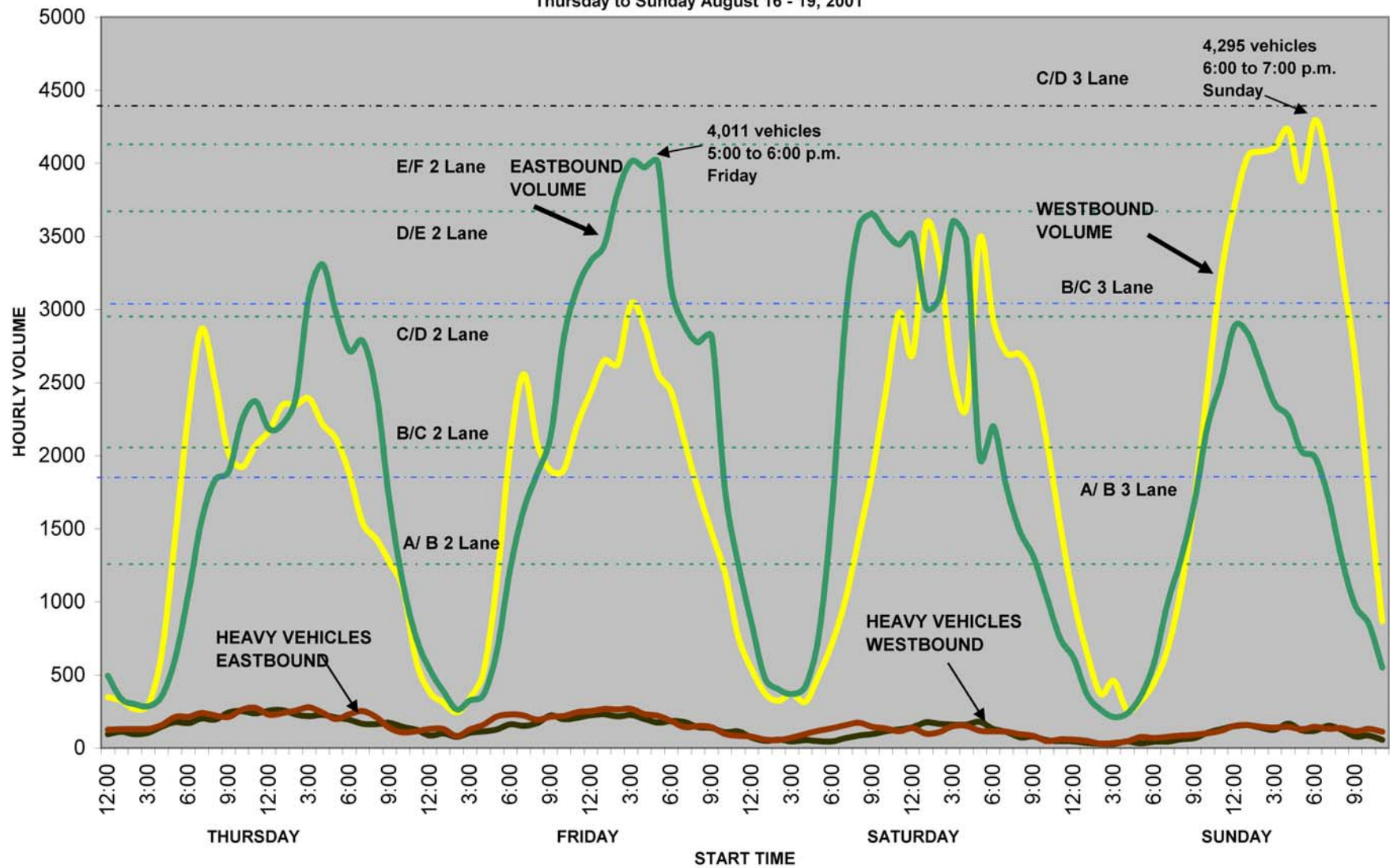
Date: Saturday, August 18, 2001

Beginning Hour	Heavy Vehicles								Total Heavy Vehicles	Total
	Motorcycles	Passenger Cars	Buses	Single Unit Trucks	WB40	WB50	WB60	Length > 66'		
0:00	0	462	6	18	11	31	11	0	71	539
01:00	0	319	4	10	9	20	10	0	49	372
02:00	1	256	10	10	11	27	8	1	57	324
03:00	0	319	7	10	6	19	10	1	46	372
04:00	1	260	2	6	10	31	5	2	54	317
05:00	0	450	4	17	5	18	5	2	47	501
06:00	1	669	6	20	8	13	3	2	46	722
07:00	1	942	9	15	14	19	17	2	67	1019
08:00	2	1340	17	28	13	32	9	4	86	1445
09:00	0	1765	26	30	16	28	18	4	96	1887
10:00	4	2297	24	41	24	31	15	3	114	2439
11:00	1	2803	47	59	35	24	7	2	127	2978
12:00	5	2511	37	114	17	8	2	1	142	2695
13:00	3	3355	51	138	26	5	6	1	176	3585
14:00	4	3124	40	94	36	20	11	4	165	3333
15:00	9	2352	44	127	21	7	4	1	160	2565
16:00	6	2124	37	123	20	6	7	4	160	2327
17:00	5	3238	65	117	32	19	11	1	180	3488
18:00	4	2743	54	61	16	31	18	4	130	2931
19:00	5	2546	42	50	13	31	15	1	110	2703
20:00	2	2597	22	37	13	14	8	1	73	2694
21:00	0	2446	17	41	10	23	3	1	78	2541
22:00	2	2031	10	27	11	11	3	2	54	2097
23:00	4	1462	9	20	6	15	5	1	47	1522
Total:	60	42411	590	1213	383	483	211	45	2335	45396
Percentage:	0.13%	93.42%	1.30%	2.67%	0.84%	1.06%	0.46%	0.10%	5.14%	

Total Motorcycles, Cars and Buses:	43061
Percentage Motorcycles, Cars and Buses:	94.86%

Total Heavy Vehicles:	2335
Percentage Heavy Vehicles:	5.14%

FIGURE E-1
HOURLY VOLUME COMPOSITE CHART - BAY BRIDGE
Thursday to Sunday August 16 - 19, 2001



Classification Count

Location: William Preston Lane Bridge (Bay Bridge)

Direction: Eastbound

Date: Wednesday, October 17, 2001

Beginning Hour	Motorcycles	Passenger Cars	Buses	Heavy Vehicles					Total Heavy Vehicles	Total
				Single Unit Trucks	WB40	WB50	WB60	Length > 66'		
0:00	0	240	4	17	17	66	30	0	130	374
01:00	0	96	2	15	7	46	27	0	95	193
02:00	2	67	4	11	11	47	31	0	100	173
03:00	2	69	2	18	15	56	28	2	119	192
04:00	0	107	4	18	18	82	27	2	147	258
05:00	1	248	12	39	21	83	28	2	173	434
06:00	2	651	21	62	30	58	23	3	176	850
07:00	0	1010	24	83	20	67	13	4	187	1221
08:00	2	1183	31	85	21	62	21	0	189	1405
09:00	0	1070	16	73	25	68	29	1	196	1282
10:00	0	1124	25	78	34	81	25	3	221	1370
11:00	0	1343	27	84	25	75	38	4	226	1596
12:00	1	1310	12	82	31	62	39	7	221	1544
13:00	3	1495	22	99	23	71	36	3	232	1752
14:00	2	1556	23	75	28	73	29	6	211	1792
15:00	3	1940	19	92	26	65	37	3	223	2185
16:00	3	2350	24	99	19	78	24	2	222	2599
17:00	0	2836	15	102	27	72	29	1	231	3082
18:00	3	2864	23	125	30	81	54	1	291	3181
19:00	2	1603	17	66	25	54	35	0	180	1802
20:00	2	1247	17	66	20	70	34	2	192	1458
21:00	1	938	9	38	8	53	29	2	130	1078
22:00	2	672	10	45	6	52	23	5	131	815
23:00	0	410	11	41	7	43	35	4	130	551
Total:	31	26429	374	1513	494	1565	724	57	4353	31187
Percentage:	0.10%	84.74%	1.20%	4.85%	1.58%	5.02%	2.32%	0.18%	13.96%	

Total Motorcycles, Cars and Buses:	26834
Percentage Motorcycles, Cars and Buses:	86.04%

Total Heavy Vehicles:	4353
Percentage Heavy Vehicles:	13.96%

Classification Count

Location: William Preston Lane Bridge (Bay Bridge)

Direction: Westbound

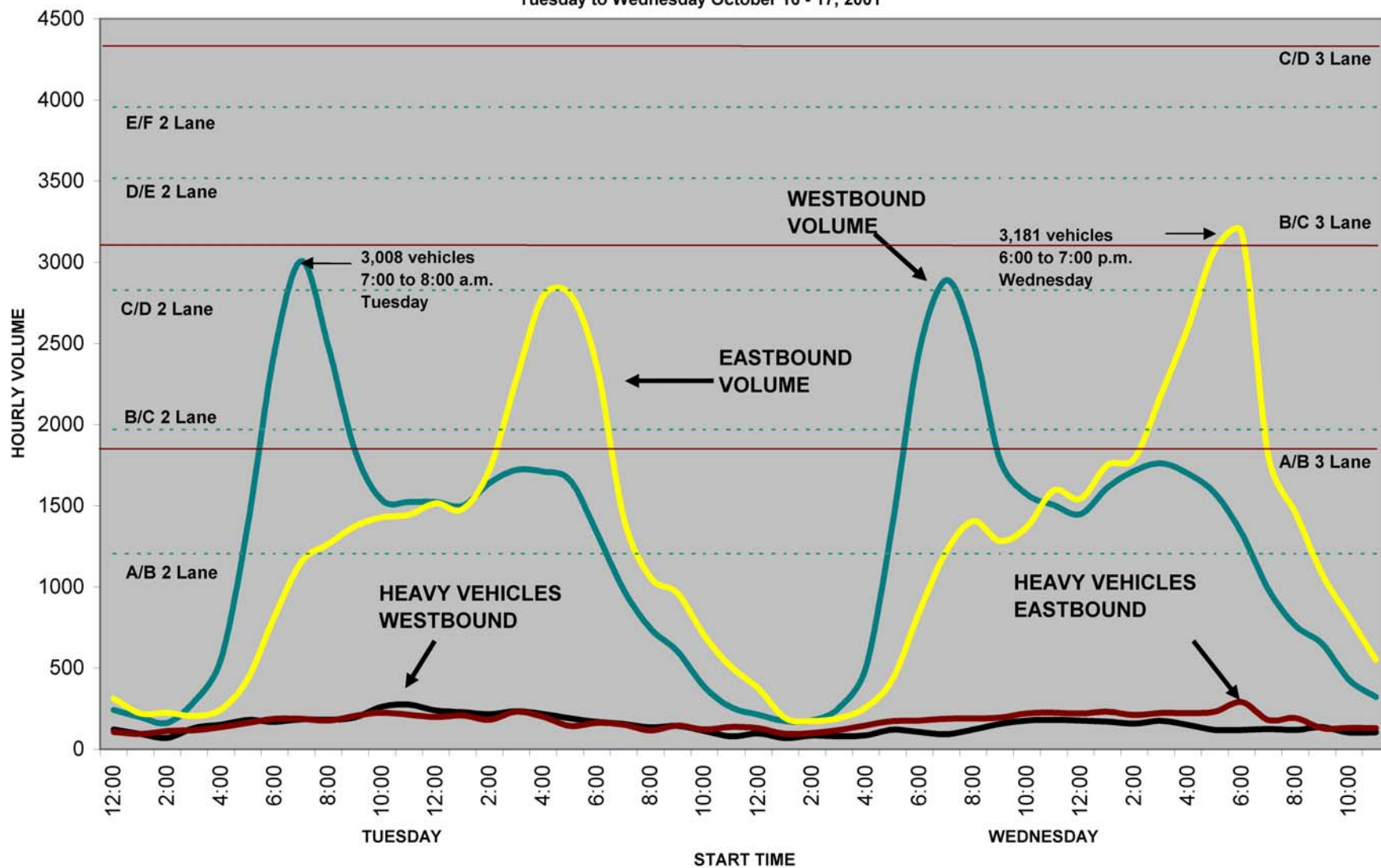
Date: Wednesday, October 17, 2001

Beginning Hour	Heavy Vehicles								Total Heavy Vehicles	Total
	Motorcycles	Passenger Cars	Buses	Single Unit Trucks	WB40	WB50	WB60	Length > 66'		
0:00	0	106	4	9	11	57	24	1	102	212
01:00	1	96	3	8	6	47	12	1	74	174
02:00	0	85	5	8	15	56	8	1	88	178
03:00	2	149	3	25	16	47	10	3	101	255
04:00	1	382	3	36	13	52	14	4	119	505
05:00	4	1207	22	59	17	58	16	7	157	1390
06:00	1	2267	14	86	26	45	15	6	178	2460
07:00	1	2727	9	70	24	41	14	5	154	2891
08:00	0	2290	18	93	30	59	12	3	197	2505
09:00	4	1535	9	86	29	87	29	2	233	1781
10:00	1	1332	19	61	33	90	35	0	219	1571
11:00	2	1249	17	72	29	107	28	1	237	1505
12:00	2	1211	6	60	34	102	32	2	230	1449
13:00	5	1365	18	73	21	95	31	5	225	1613
14:00	1	1484	23	73	28	80	23	4	208	1716
15:00	0	1517	23	69	30	90	29	3	221	1761
16:00	0	1485	19	63	26	74	29	2	194	1698
17:00	2	1395	19	60	18	55	20	7	160	1576
18:00	1	1146	11	63	14	74	19	1	171	1329
19:00	2	818	11	39	12	69	31	2	153	984
20:00	0	613	6	29	10	74	24	5	142	761
21:00	1	483	5	29	14	72	41	4	160	649
22:00	0	314	1	12	8	59	32	3	114	429
23:00	0	198	5	19	12	68	20	0	119	322
Total:	31	25454	273	1202	476	1658	548	72	3956	29714
Percentage:	0.10%	85.66%	0.92%	4.05%	1.60%	5.58%	1.84%	0.24%	13.31%	

Total Motorcycles, Cars and Buses:	25758
Percentage Motorcycles, Cars and Buses:	86.69%

Total Heavy Vehicles:	3956
Percentage Heavy Vehicles:	13.31%

FIGURE E-2
HOURLY VOLUME COMPOSITE CHART - BAY BRIDGE
Tuesday to Wednesday October 16 - 17, 2001





2001 CAPACITY ANALYSIS WORKSHEETS

Bay Bridge
2001 Summer Weekend Day
Westbound Analysis

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 7 AM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	1019	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	283	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	400	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	400	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	6.6	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 7 AM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	1445	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	401	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	567	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	567	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	9.4	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 9 AM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	1887	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	524	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	741	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	741	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	12.3	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 10 AM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2439	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	678	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	958	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	958	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	15.9	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 11 AM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2978	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	827	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	1169	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1169	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	19.4	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 12 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND - FRIDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2434	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	676	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	956	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	956	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	15.8	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 1 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND - FRIDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2652	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	737	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	1041	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1041	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	17.2	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 2 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND - FRIDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2627	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	730	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	1031	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1031	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	17.1	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 3 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2565	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	713	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	1007	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1007	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	16.7	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 4 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2327	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	646	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	914	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	914	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	15.1	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 5 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	3488	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	969	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	1369	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1369	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	22.7	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 6 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2931	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	814	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	1151	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	4.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.8	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	61.2	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1151	pc/h/ln
Free-flow speed, FFS	61.2	mi/h
Average passenger-car speed, S	61.2	mi/h
Number of lanes, N	3	
Density, D	18.8	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Bay Bridge
2001 Summer Weekend Day
Eastbound Analysis

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 7 AM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	2935	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	815	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	1679	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1679	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	28.9	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 8 AM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	3572	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	992	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	2044	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2044	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	56.0	mi/h
Number of lanes, N	2	
Density, D	36.5	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 9 AM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	3653	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1015	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	2090	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2090	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	55.2	mi/h
Number of lanes, N	2	
Density, D	37.8	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 10 AM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	3524	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	979	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	2017	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2017	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	56.3	mi/h
Number of lanes, N	2	
Density, D	35.8	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 11 AM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	3443	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	956	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	1970	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1970	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	56.9	mi/h
Number of lanes, N	2	
Density, D	34.6	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 12 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	3508	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	974	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	2007	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2007	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	56.5	mi/h
Number of lanes, N	2	
Density, D	35.6	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 1 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	3010	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	836	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	1722	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1722	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	29.6	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 2 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	3083	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	856	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	1764	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1764	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.0	mi/h
Number of lanes, N	2	
Density, D	30.4	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 3 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	3604	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1001	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	2062	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2062	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	55.7	mi/h
Number of lanes, N	2	
Density, D	37.0	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 4 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	3467	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	963	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	1984	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1984	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	56.7	mi/h
Number of lanes, N	2	
Density, D	35.0-	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 5 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	1985	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	551	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	1136	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1136	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	19.6	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 6 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	2201	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	611	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	1259	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1259	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	21.7	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Bay Bridge
2001 Summer Weekend – Friday
Westbound Analysis

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 12 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND - FRIDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2434	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	676	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	956	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	956	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	15.8	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 1 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND - FRIDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2652	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	737	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	1041	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1041	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	17.2	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 2 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND - FRIDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2627	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	730	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	1031	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1031	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	17.1	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 3 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND - FRIDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	3042	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	845	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	1194	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1194	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	19.8	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 4 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND - FRIDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2878	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	799	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	1130	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1130	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	18.7	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 5 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND - FRIDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2563	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	712	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	1006	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	4.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.8	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	61.2	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1006	pc/h/ln
Free-flow speed, FFS	61.2	mi/h
Average passenger-car speed, S	61.2	mi/h
Number of lanes, N	3	
Density, D	16.4	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 6 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND - FRIDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2435	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	676	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	956	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	956	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	15.8	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Bay Bridge
2001 Summer Weekend – Friday
Eastbound Analysis

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 12 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND - FRIDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	3332	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	926	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	1907	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1907	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	57.4	mi/h
Number of lanes, N	2	
Density, D	33.2	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 1 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND - FRIDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	3440	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	956	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	1968	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1968	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	56.9	mi/h
Number of lanes, N	2	
Density, D	34.6	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 2 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND - FRIDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	3804	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1057	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	2177	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2177	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	53.5	mi/h
Number of lanes, N	2	
Density, D	40.7	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 3 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND - FRIDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	4013	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1115	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	2296	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2296	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S		mi/h
Number of lanes, N	2	
Density, D		pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 4 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND - FRIDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	3972	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1103	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	2273	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2273	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	50.9	mi/h
Number of lanes, N	2	
Density, D	44.6	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 5 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND - FRIDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	4011	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1114	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, vp	1.00	
Flow rate, vp	2284	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2284	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S		mi/h
Number of lanes, N	2	
Density, D		pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 6 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND - FRIDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	3146	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	874	v
Trucks and buses	5	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.976	
Driver population factor, vp	1.00	
Flow rate, vp	1791	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1791	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.0	mi/h
Number of lanes, N	2	
Density, D	30.9	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Bay Bridge
2001 Average Weekday
Westbound Analysis

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 7 AM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 WEEKDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2891	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	803	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	1135	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1135	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	18.8	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 8 AM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 WEEKDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2505	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	696	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	983	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	983	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	16.3	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 9 AM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 WEEKDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	1781	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	495	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	679	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	679	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	11.2	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 10 AM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 WEEKDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	1571	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	436	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	617	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	617	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	10.2	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 11 AM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 WEEKDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	1505	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	418	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	591	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	591	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	9.8	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 12 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 WEEKDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	1449	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	403	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	569	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	569	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	9.4	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 1 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 WEEKDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	1613	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	448	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	633	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	633	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	10.5	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 2 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 WEEKDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	1716	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	477	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	674	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	674	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	11.2	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 3 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 WEEKDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	1761	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	489	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	691	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	691	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	11.4	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 4 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 WEEKDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	1698	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	472	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	667	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	667	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	11.0+	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 5 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 WEEKDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	1576	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	438	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	619	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	619	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	10.2	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 6 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 WEEKDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	1329	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	369	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	522	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	522	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	8.6	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

Bay Bridge
2001 Average Weekday
Eastbound Analysis

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 7 AM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 WEEKDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	1221	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	339	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	699	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	699	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	12.0	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 8 AM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 WEEKDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	1405	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	390	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	804	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	804	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	13.8	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 9 AM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 WEEKDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	1282	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	356	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	734	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	734	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	12.6	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 10 AM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 WEEKDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	1370	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	381	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	784	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	784	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	13.5	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 11 AM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 WEEKDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	1596	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	443	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	913	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	913	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	15.7	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 12 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 WEEKDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	1544	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	429	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	884	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	884	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	15.2	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 1 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 WEEKDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	1752	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	487	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	1003	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1003	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	17.3	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 2 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 WEEKDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	1792	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	498	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	1025	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1025	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	17.6	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 3 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 WEEKDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	2185	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	607	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	1250	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1250	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	21.5	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 4 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 WEEKDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	2599	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	722	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	1487	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1487	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	25.6	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 5 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 WEEKDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	3082	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	856	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	1764	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1764	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.0	mi/h
Number of lanes, N	2	
Density, D	30.4	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 6 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 WEEKDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	3181	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	884	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	1820	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1820	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	57.9	mi/h
Number of lanes, N	2	
Density, D	31.4	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Bay Bridge
2001 Summer Weekend Day
Reversible Lane Operation
Westbound Analysis

 OPERATIONAL ANALYSIS

Analyst: BA
 Agency/Co:
 Date: 8/18/02
 Analysis Period: 7 AM
 Highway: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Project ID: REVERSIBLE LANE OPERATION

 FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	2.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	8.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Undivided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.9	mph	0.0	mph
Median type adjustment, FM	1.6	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	57.5	mph	60.0	mph

 VOLUME

Direction	1		2	
Volume, V	1019	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	283		0	
Trucks and buses	6	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Grade		Level	
Grade	3.50	%	0.00	%
Segment length	0.60	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.0		1.5	
Recreational vehicles PCE, ER	3.0		1.2	
Heavy vehicle adjustment, fHV	0.943		1.000	
Flow rate, vp	600	pcphpl	0	pcphpl

 RESULTS

Direction	1		2	
Flow rate, vp	600	pcphpl	0	pcphpl
Free-flow speed, FFS	57.5	mph	60.0	mph
Avg. passenger-car travel speed, S	57.5	mph	60.0	mph
Level of service, LOS	A		A	
Density, D	10.4	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

 OPERATIONAL ANALYSIS

Analyst: BA
 Agency/Co:
 Date: 8/18/02
 Analysis Period: 8 AM
 Highway: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Project ID: REVERSIBLE LANE OPERATION

 FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	2.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	8.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Undivided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.9	mph	0.0	mph
Median type adjustment, FM	1.6	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	57.5	mph	60.0	mph

 VOLUME

Direction	1		2	
Volume, V	1445	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	401		0	
Trucks and buses	5	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Grade		Level	
Grade	3.50	%	0.00	%
Segment length	0.60	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.0		1.5	
Recreational vehicles PCE, ER	3.0		1.2	
Heavy vehicle adjustment, fHV	0.952		1.000	
Flow rate, vp	842	pcphpl	0	pcphpl

 RESULTS

Direction	1		2	
Flow rate, vp	842	pcphpl	0	pcphpl
Free-flow speed, FFS	57.5	mph	60.0	mph
Avg. passenger-car travel speed, S	57.5	mph	60.0	mph
Level of service, LOS	B		A	
Density, D	14.6	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

 OPERATIONAL ANALYSIS

Analyst: BA
 Agency/Co:
 Date: 8/18/02
 Analysis Period: 9 AM
 Highway: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Project ID: REVERSIBLE LANE OPERATION

 FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	2.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	8.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Undivided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.9	mph	0.0	mph
Median type adjustment, FM	1.6	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	57.5	mph	60.0	mph

 VOLUME

Direction	1		2	
Volume, V	1887	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	524		0	
Trucks and buses	5	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Grade		Level	
Grade	3.50	%	0.00	%
Segment length	0.60	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.0		1.5	
Recreational vehicles PCE, ER	3.0		1.2	
Heavy vehicle adjustment, fHV	0.952		1.000	
Flow rate, vp	1100	pcphpl	0	pcphpl

 RESULTS

Direction	1		2	
Flow rate, vp	1100	pcphpl	0	pcphpl
Free-flow speed, FFS	57.5	mph	60.0	mph
Avg. passenger-car travel speed, S	57.5	mph	60.0	mph
Level of service, LOS	C		A	
Density, D	19.1	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

 OPERATIONAL ANALYSIS

Analyst: BA
 Agency/Co:
 Date: 8/18/02
 Analysis Period: 10 AM
 Highway: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Project ID: REVERSIBLE LANE OPERATION

 FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	2.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	8.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Undivided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.9	mph	0.0	mph
Median type adjustment, FM	1.6	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	57.5	mph	60.0	mph

 VOLUME

Direction	1		2	
Volume, V	2439	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	678		0	
Trucks and buses	5	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Grade		Level	
Grade	3.50	%	0.00	%
Segment length	0.60	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.0		1.5	
Recreational vehicles PCE, ER	3.0		1.2	
Heavy vehicle adjustment, fHV	0.952		1.000	
Flow rate, vp	1422	pcphpl	0	pcphpl

 RESULTS

Direction	1		2	
Flow rate, vp	1422	pcphpl	0	pcphpl
Free-flow speed, FFS	57.5	mph	60.0	mph
Avg. passenger-car travel speed, S	57.5	mph	60.0	mph
Level of service, LOS	C		A	
Density, D	24.7	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

 OPERATIONAL ANALYSIS

Analyst: BA
 Agency/Co:
 Date: 8/18/02
 Analysis Period: 11 AM
 Highway: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Project ID: REVERSIBLE LANE OPERATION

 FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	2.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	8.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Undivided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.9	mph	0.0	mph
Median type adjustment, FM	1.6	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	57.5	mph	60.0	mph

 VOLUME

Direction	1		2	
Volume, V	2978	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	827		0	
Trucks and buses	5	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Grade		Level	
Grade	3.50	%	0.00	%
Segment length	0.60	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.0		1.5	
Recreational vehicles PCE, ER	3.0		1.2	
Heavy vehicle adjustment, fHV	0.952		1.000	
Flow rate, vp	1737	pcphpl	0	pcphpl

 RESULTS

Direction	1		2	
Flow rate, vp	1737	pcphpl	0	pcphpl
Free-flow speed, FFS	57.5	mph	60.0	mph
Avg. passenger-car travel speed, S	56.1	mph	60.0	mph
Level of service, LOS	D		A	
Density, D	31.0	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

 OPERATIONAL ANALYSIS

Analyst: BA
 Agency/Co:
 Date: 8/18/02
 Analysis Period: 12 PM
 Highway: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Project ID: REVERSIBLE LANE OPERATION

 FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	2.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	8.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Undivided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.9	mph	0.0	mph
Median type adjustment, FM	1.6	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	57.5	mph	60.0	mph

 VOLUME

Direction	1		2	
Volume, V	2695	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	749		0	
Trucks and buses	5	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Grade		Level	
Grade	3.50	%	0.00	%
Segment length	0.60	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.0		1.5	
Recreational vehicles PCE, ER	3.0		1.2	
Heavy vehicle adjustment, fHV	0.952		1.000	
Flow rate, vp	1572	pcphpl	0	pcphpl

 RESULTS

Direction	1		2	
Flow rate, vp	1572	pcphpl	0	pcphpl
Free-flow speed, FFS	57.5	mph	60.0	mph
Avg. passenger-car travel speed, S	56.9	mph	60.0	mph
Level of service, LOS	D		A	
Density, D	27.6	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

 OPERATIONAL ANALYSIS

Analyst: BA
 Agency/Co:
 Date: 8/18/02
 Analysis Period: 1 PM
 Highway: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Project ID: REVERSIBLE LANE OPERATION

 FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	2.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	8.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Undivided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.9	mph	0.0	mph
Median type adjustment, FM	1.6	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	57.5	mph	60.0	mph

 VOLUME

Direction	1		2	
Volume, V	3585	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	996		0	
Trucks and buses	5	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Grade		Level	
Grade	3.50	%	0.00	%
Segment length	0.60	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.0		1.5	
Recreational vehicles PCE, ER	3.0		1.2	
Heavy vehicle adjustment, fHV	0.952		1.000	
Flow rate, vp	2091	pcphpl	0	pcphpl

 RESULTS

Direction	1		2	
Flow rate, vp	2091	pcphpl	0	pcphpl
Free-flow speed, FFS	57.5	mph	60.0	mph
Avg. passenger-car travel speed, S	54.0	mph	60.0	mph
Level of service, LOS	E		A	
Density, D	38.8	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

 OPERATIONAL ANALYSIS

Analyst: BA
 Agency/Co:
 Date: 8/18/02
 Analysis Period: 2 PM
 Highway: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Project ID: REVERSIBLE LANE OPERATION

 FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	2.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	8.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Undivided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.9	mph	0.0	mph
Median type adjustment, FM	1.6	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	57.5	mph	60.0	mph

 VOLUME

Direction	1		2	
Volume, V	3333	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	926		0	
Trucks and buses	5	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Grade		Level	
Grade	3.50	%	0.00	%
Segment length	0.60	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.0		1.5	
Recreational vehicles PCE, ER	3.0		1.2	
Heavy vehicle adjustment, fHV	0.952		1.000	
Flow rate, vp	1944	pcphpl	0	pcphpl

 RESULTS

Direction	1		2	
Flow rate, vp	1944	pcphpl	0	pcphpl
Free-flow speed, FFS	57.5	mph	60.0	mph
Avg. passenger-car travel speed, S	54.9	mph	60.0	mph
Level of service, LOS	E		A	
Density, D	35.4	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

 OPERATIONAL ANALYSIS

Analyst: BA
 Agency/Co:
 Date: 8/18/02
 Analysis Period: 3 PM
 Highway: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Project ID: REVERSIBLE LANE OPERATION

 FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	2.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	8.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Undivided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.9	mph	0.0	mph
Median type adjustment, FM	1.6	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	57.5	mph	60.0	mph

 VOLUME

Direction	1		2	
Volume, V	2565	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	713		0	
Trucks and buses	5	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Grade		Level	
Grade	3.50	%	0.00	%
Segment length	0.60	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.0		1.5	
Recreational vehicles PCE, ER	3.0		1.2	
Heavy vehicle adjustment, fHV	0.952		1.000	
Flow rate, vp	1496	pcphpl	0	pcphpl

 RESULTS

Direction	1		2	
Flow rate, vp	1496	pcphpl	0	pcphpl
Free-flow speed, FFS	57.5	mph	60.0	mph
Avg. passenger-car travel speed, S	57.2	mph	60.0	mph
Level of service, LOS	D		A	
Density, D	26.1	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

 OPERATIONAL ANALYSIS

Analyst: BA
 Agency/Co:
 Date: 8/18/02
 Analysis Period: 4 PM
 Highway: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Project ID: REVERSIBLE LANE OPERATION

 FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	2.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	8.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Undivided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.9	mph	0.0	mph
Median type adjustment, FM	1.6	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	57.5	mph	60.0	mph

 VOLUME

Direction	1		2	
Volume, V	2327	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	646		0	
Trucks and buses	5	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Grade		Level	
Grade	3.50	%	0.00	%
Segment length	0.60	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.0		1.5	
Recreational vehicles PCE, ER	3.0		1.2	
Heavy vehicle adjustment, fHV	0.952		1.000	
Flow rate, vp	1357	pcphpl	0	pcphpl

 RESULTS

Direction	1		2	
Flow rate, vp	1357	pcphpl	0	pcphpl
Free-flow speed, FFS	57.5	mph	60.0	mph
Avg. passenger-car travel speed, S	57.5	mph	60.0	mph
Level of service, LOS	C		A	
Density, D	23.6	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

 OPERATIONAL ANALYSIS

Analyst: BA
 Agency/Co:
 Date: 8/18/02
 Analysis Period: 5 PM
 Highway: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Project ID: REVERSIBLE LANE OPERATION

 FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	2.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	8.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Undivided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.9	mph	0.0	mph
Median type adjustment, FM	1.6	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	57.5	mph	60.0	mph

 VOLUME

Direction	1		2	
Volume, V	3488	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	969		0	
Trucks and buses	5	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Grade		Level	
Grade	3.50	%	0.00	%
Segment length	0.60	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.0		1.5	
Recreational vehicles PCE, ER	3.0		1.2	
Heavy vehicle adjustment, fHV	0.952		1.000	
Flow rate, vp	2034	pcphpl	0	pcphpl

 RESULTS

Direction	1		2	
Flow rate, vp	2034	pcphpl	0	pcphpl
Free-flow speed, FFS	57.5	mph	60.0	mph
Avg. passenger-car travel speed, S	54.3	mph	60.0	mph
Level of service, LOS	E		A	
Density, D	37.4	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

 OPERATIONAL ANALYSIS

Analyst: BA
 Agency/Co:
 Date: 8/18/02
 Analysis Period: 6 PM
 Highway: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Project ID: REVERSIBLE LANE OPERATION

 FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	2.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	8.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Undivided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.9	mph	0.0	mph
Median type adjustment, FM	1.6	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	57.5	mph	60.0	mph

 VOLUME

Direction	1		2	
Volume, V	2931	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	814		0	
Trucks and buses	5	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Grade		Level	
Grade	3.50	%	0.00	%
Segment length	0.60	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.0		1.5	
Recreational vehicles PCE, ER	3.0		1.2	
Heavy vehicle adjustment, fHV	0.952		1.000	
Flow rate, vp	1709	pcphpl	0	pcphpl

 RESULTS

Direction	1		2	
Flow rate, vp	1709	pcphpl	0	pcphpl
Free-flow speed, FFS	57.5	mph	60.0	mph
Avg. passenger-car travel speed, S	56.3	mph	60.0	mph
Level of service, LOS	D		A	
Density, D	30.4	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

Bay Bridge
2001 Summer Weekend Day
Reversible Lane Operation
Eastbound Analysis
(2 Lanes, 80 Percent Traffic)

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 7 AM
 Freeway/Direction: BAY BRIDGE EASTBOUND
 From/To:
 Jurisdiction: Anne Arundel County
 Analysis Year: 2001
 Description: REVERSIBLE OPERATION 2 LANES 80% EB TRAFFIC

Flow Inputs and Adjustments

Volume, V	2348	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	652	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	1344	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1344	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	23.1	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 7 AM
 Freeway/Direction: BAY BRIDGE EASTBOUND
 From/To:
 Jurisdiction: Anne Arundel County
 Analysis Year: 2001
 Description: REVERSIBLE OPERATION 2 LANES 80% EB TRAFFIC

Flow Inputs and Adjustments

Volume, V	2858	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	794	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	1635	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1635	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	28.1	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 9 AM
 Freeway/Direction: BAY BRIDGE EASTBOUND
 From/To:
 Jurisdiction: Anne Arundel County
 Analysis Year: 2001
 Description: REVERSIBLE OPERATION 2 LANES 80% EB TRAFFIC

Flow Inputs and Adjustments

Volume, V	2922	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	812	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	1672	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1672	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	28.8	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 10 AM
 Freeway/Direction: BAY BRIDGE EASTBOUND
 From/To:
 Jurisdiction: Anne Arundel County
 Analysis Year: 2001
 Description: REVERSIBLE OPERATION 2 LANES 80% EB TRAFFIC

Flow Inputs and Adjustments

Volume, V	2819	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	783	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	1613	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1613	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	27.8	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 11 AM
 Freeway/Direction: BAY BRIDGE EASTBOUND
 From/To:
 Jurisdiction: Anne Arundel County
 Analysis Year: 2001
 Description: REVERSIBLE OPERATION 2 LANES 80% EB TRAFFIC

Flow Inputs and Adjustments

Volume, V	2754	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	765	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	1576	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1576	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	27.1	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 12 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND
 From/To:
 Jurisdiction: Anne Arundel County
 Analysis Year: 2001
 Description: REVERSIBLE OPERATION 2 LANES 80% EB TRAFFIC

Flow Inputs and Adjustments

Volume, V	2806	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	779	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	1606	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1606	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	27.6	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 1 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND
 From/To:
 Jurisdiction: Anne Arundel County
 Analysis Year: 2001
 Description: REVERSIBLE OPERATION 2 LANES 80% EB TRAFFIC

Flow Inputs and Adjustments

Volume, V	2408	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	669	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	1378	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1378	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	23.7	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 2 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND
 From/To:
 Jurisdiction: Anne Arundel County
 Analysis Year: 2001
 Description: REVERSIBLE OPERATION 2 LANES 80% EB TRAFFIC

Flow Inputs and Adjustments

Volume, V	2466	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	685	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	1411	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1411	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	24.3	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 3 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND
 From/To:
 Jurisdiction: Anne Arundel County
 Analysis Year: 2001
 Description: REVERSIBLE OPERATION 2 LANES 80% EB TRAFFIC

Flow Inputs and Adjustments

Volume, V	2883	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	801	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	1650	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1650	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	28.4	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 4 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND
 From/To:
 Jurisdiction: Anne Arundel County
 Analysis Year: 2001
 Description: REVERSIBLE OPERATION 2 LANES 80% EB TRAFFIC

Flow Inputs and Adjustments

Volume, V	2774	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	771	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	1587	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1587	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	27.3	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 5 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND
 From/To:
 Jurisdiction: Anne Arundel County
 Analysis Year: 2001
 Description: REVERSIBLE OPERATION 2 LANES 80% EB TRAFFIC

Flow Inputs and Adjustments

Volume, V	1588	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	441	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	909	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	909	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	15.6	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 6 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND
 From/To:
 Jurisdiction: Anne Arundel County
 Analysis Year: 2001
 Description: REVERSIBLE OPERATION 2 LANES 80% EB TRAFFIC

Flow Inputs and Adjustments

Volume, V	1761	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	489	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	1008	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1008	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	17.3	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.



ACCIDENT SUMMARIES

Location: US50 Oceanic Drive to MDX Overpass

Length: 5.78

County: Cross County

Period: Jan. 1, 1999 to approx. Oct. 31, 2002

Note(s):

Type Controls: IR-1004

* Significantly Higher than Statewide

YEAR >	1999	2000	2001	2002	TOTAL	STUDYRATE	STMDRATH
FATAL		1	1	1	3	0.5	0.5
NO. KILLED		1	1	2	4		
INJURY	36	34	30	37	145	25.0 *	16.2
NO. INJURED	67	64	59	69	270		
PROP DAMAGE	58	57	66	73	254	43.6 *	22.7
TOTAL ACC	94	92	105	111	402	69.3 *	38.9
RATE	55.1	58.7	75.6	94.9			
A D T	79400	74100	65800	55500			
VMT (millions)	167.5	156.8	138.8	117.0	589.1		
OPPOSITE DIR.		1	1	1	3	0.5	0.5
REAR END	61	58	52	64	242	41.7 *	21.9
SIDESWipe	8	3	6	2	19	3.3	3.6
LEFT TURN						0.0	0.0
ANGLE			2		2	0.3	0.3
PEDESTRIAN						0.0	0.2
PARKED VEH	3	2		2	7	1.2 *	0.7
FIXED OBJECT	14	16	22	18	70	12.1	14.1
OTHER	8	12	15	24	59	10.2 *	5.2
U-TURN							
BACKING		1	1		2		
ANIMAL		4	2	3	7		
RAILROAD							
EXPL./FIRE							
OVERTURN		1		1	2		
OTHER/UNK	9	6	12	22	49		
TRUCK REL ACC	25	31	28	24	108	18.6 *	6.7
NIGHTTIME	11	19	13	16	59	14.8	22.8
WET SURFACE	7	9	11	12	39	9.8	28.8
ALCOHOL REL	5	6	3	5	19	4.8	8.8
INTERSEC REL	1	1			2		
TOTAL VEH	217	204	227	237	885		
TOTAL TRUCKS	35	31	28	24	108		
PERCENT TRUCK	11.5	15.2	12.3	10.1	12.2		
Comments:							

Note: Statewide Accident Rates shown in this table are for similar urban facilities. For the analysis of accidents on the Bay Bridge, accident rates in Anne Arundel County were compared to similar Urban Principal Arterials and accident rates in Queen Anne's County were compared to similar Rural Principal Arterials to be consistent with the classification of the roadway in each segment.

Maryland State Highway Administration
Office of Traffic and Safety - Traffic Safety Analysis Division
SHA 52.1 ADC Summary Output rev. 12/98-1

Name: THRAKTON
Date: 04/29/2003

Location: US50 Oceanic Drive to MD8 Overpass
County: Cross County Period: January 1, 1999 To December 31, 1999 Note(s):

Length: 5.78

SEVERITY	Fatal	Injury	F-Damage	Total	DAY OF THE WEEK																						
Accident#		36	58	94	SUN	MON	TUE	WED	THU	FRI	SAT	UNK															
Veh Occ		66	*****	*****	8	11	12	6	14	28	15																
Pedestrian		1	*****	*****																							
MONTH OF THE YEAR													CONDITION: DRIVER	PED													
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	Normal:	81													
3	3	7	8	18	14	8	16	3	2	10	2		ALCOHOL:	5													
													Other:	6													
TIME													VEHICLES INVOLVED PER ACCIDENT														
AM:	12	01	02	03	04	05	06	07	08	09	10	11	UNK	1	2	3	4	5	6-	UNK	TOTAL						
PM:	10	6	6	11	12	6	3	2	2	1	1	4		19	44	10	10	2	1		217						
VEHICLE TYPE				SURFACE				MOVEMENTS																			
M_Cycle/Moped				18 Trk_Trailer				7 WET				NORTH				SOUTH				EAST				WEST			
71 Passenger Veh				2 Passenger Bus				95 DRY				LF ST RT				LF ST RT				LF ST RT				LF ST RT			
45 Light Truck				1 School Bus				1 SMO/ICE												105				1 54			
7 Heavy Truck				2 Emergency Veh				MOD																			
71 Other Types				*****				OTHER																			
																								OTHER MOVEMENTS 57			
PROBABLE CAUSES								COLLISION TYPES				FAT				INJ				PROP				TOTAL			
Inf. of Drugs				Improper Parking				OPPOSITE DIR				RELATED:															
3 Inf. of Alcohol				Passenger Interfere/Obstr.				UNRELATED:																			
Inf. of Medication				Illegally in Roadway				REAR END				RELATED:															
Inf. of Combined Substance				Bicycle Violation				UNRELATED:								27				14				61			
Physical/Mental Difficulty				Clothing not Visible				SIDEWIDE				RELATED:															
fell Asleep/Fainted etc.				Smog, Smoke				UNRELATED:								2				6				8			
56 Fail to give full attent.				Slcet. Nail, Fns. Main				LEFT TURN				RELATED:															
Lic. Restr. Non-comply				Blowing Sand, Soil, Dirt				UNRELATED:																			
Fail to Yield Rightofway				Severe Crosswinds				ANGLE				RELATED:															
Fail to Obey Stop Sign				1 Rain, Snow				UNRELATED:																			
Fail to Obey Traffic Sig				Animal				PEDESTRIAN				RELATED:															
Fail to Obey Other Contr.				Vision Obstruction				UNRELATED:																			
Fail to Keep Right of Ctr				3 Vehicle Defect				PARKED VEH.				RELATED:															
Fail to Stop for Sch. Bus				1 Wet				UNRELATED:								2				1				3			
Wrong Way on One Way				1 Icy or Snow Covered				OTHER CT				RELATED:															
Exceeded Speed Limit				Debris or Obstruction				UNRELATED:								2				6				8			
6 Too Fast for Conditions				Ruts, Holes, Bumps				P BRIDGE				01															
9 Followed too Closely				Road Under Construction				I BUILDING				02								1				1			
Improper Turn				Traffic Cntrl Device Inop.				X CULVERT/DITCH				03															
4 Improper Lane Change				Shoulders Low, Soft, High				E CURB				04								1				1			
Improper Backing								D GUARDRAIL/BARRIER				05								2				2			
1 Improper Passing				9 Other or Unknown				E BRANWOMPT				06															
Improper Signal								O FENCE				07															
								B LIGHT POLE				08								1				1			
								J SIGN POST				09															
								E OTHER POLE				10								1				1			
								C TREE/SHRUBBERY				11															
								T CONSTR. BARRIER				12															
								S CRASH ATTENUATOR				13															
																								5			
																								6			
WEATHER				ILLUMINATION				TOTAL																			
90 CLEAR/CLDY				78 DAY																							
1 FOGGY				5 DAWN/DUSK				1999 94																			
2 RAINING				8 DARK - LIGHTS ON																							
1 SNOW/SLEET				3 DARK - NO LIGHTS				*****																			
OTHER				OTHER				*****																			

Maryland State Highway Administration
Office of Traffic and Safety - Traffic Safety Analysis Division
SHA 52.1 ADC Summary Output rev. 12/98-1

Name: TRENTON
Date: 04/29/2003

Location: US50 Oceanic Drive to MDN Overpass

Length: 5.78

County: Cross County

Period: January 1, 2000 To December 31, 2000

Note(s):

SEVERITY	Fatal	Injury	P-Damage	Total	DAY OF THE WEEK									
Accidents	1	34	57	92	SUN	MON	TUE	WED	THU	FRI	SAT	UNK		
Veh Occ	1	54			13	11	15	12	12	16	13			
Pedestrian														

MONTH OF THE YEAR													CONDITION: DRIVER	PED
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	Normal:	80
4	3	6	9	4	9	18	9	11	8	5	6		ALCOHOL:	6
													Other:	6

TIME	12	01	02	03	04	05	06	07	08	09	10	11	UNK	VEHICLES INVOLVED PER ACCIDENT									
AM:				2	1	4		4	4	3	9	15		1	2	3	4	5	6+	UNK	TOTAL		
PM:	6	6	4	1	4	5	3	4	5	2	4	2		22	38	23	8	1			304		

VEHICLE TYPE		SURFACE	MOVEMENTS															
1 M_Cycle/Moped	25 Trk_Trailer	5 WET	NORTH				SOUTH				EAST				WEST			
64 Passenger Veh	1 Passenger Bus	52 DRY	LF	ST	RT	LF	ST	RT	LF	ST	RT	LF	ST	RT	LF	ST	RT	
29 Light Truck	School Bus	1 SNO/ICH			1			1			113						38	
7 Heavy Truck	1 Emergency Veh	MUD																
76 Other Types		OTHER	OTHER MOVEMENTS 51															

PROBABLE CAUSES		COLLISION TYPES		FAT	INJ	PROP	TOTAL
Inf. of Drugs	Improper Parking	OPPOSITE DIR	RELATED:			1	1
6 Inf. of Alcohol	Passenger Interfere/Obstr.		UNRELATED:				
Inf. of Medication	Illegally in Roadway	REAR END	RELATED:				
Inf. of Combined Substance	Bicycle Violation		UNRELATED:	1	28	29	58
Physical/Mental Difficulty	Clothing not Visible	SIDESWIP	RELATED:				
Fell Asleep/Painted etc.	Smog, Smoke		UNRELATED:		2	1	3
52 Fail to give full attent.	Slack, Mail, Frs. Rain	LEPT TURN	RELATED:				
Lic. Restr. Non-comply	Blowing Sand, Soil, Dirt		UNRELATED:				
Fail to Yield Rightofway	Severe Crosswinds	ANGLE	RELATED:				
Fail to Obey Stop Sign	Rain, Snow		UNRELATED:				
Fail to Obey Traffic Sig	4 Animal	PED/STRIAN	RELATED:				
Fail to Obey Other Contr.	Vision Obstruction		UNRELATED:				
Fail to Keep Right of Ctr	1 Vehicle Defect	PARKED VEH.	RELATED:				
Fail to Stop for Sch. Bus	1 Wet		UNRELATED:			2	2
Wrong Way on One Way	1 Icy or Snow Covered	OTHER CT	RELATED:				
1 Exceeded Speed Limit	1 Debris or Obstruction		UNRELATED:		1	11	12
9 Too Fast for Conditions	Auto, Holes, Bumps	F BRIDGE	01				
6 Followed too Closely	Road Under Construction	I BUILDING	02			1	1
1 Improper Turn	1 Traffic Control Device Inop.	X CH/VERT/DITCH	03			1	1
Improper Lane Change	Shoulders Low, Soft, High	E CURB	04				
1 Improper Backing		D GUARDRAIL/BARRIER	05		2	2	5
Improper Passing	5 Other or Unknown	I SPAN/INFANT	06			1	1
Improper Signal		O PIECE	07				
		R LIGHT POLE	08			1	1
		J SIGN POST	09				
		E OTHER POLE	10				
		C TREE/SHRUBBERY	11				
		T CONSTR. BARRIER	12				
		S CRASH ATTENUATOR	13				
		OTHER FIXED OBJECT				7	7

WEATHER	ILLUMINATION	TOTAL	
84 CLEAR/CLDY	68 DAY		
1 FOGGY	5 DAWN/DUSK	2000	92
6 RAINING	11 DARK - LIGHTS ON		
1 SNOW/SLEET	8 DARK - NO LIGHTS		
OTHER	OTHER		

Maryland State Highway Administration
Office of Traffic and Safety - Traffic Safety Analysis Division
SHA 52.1 ADC Summary Output rev. 12/98-1

Name: THRAKTON
Date: 04/29/2003

Location: US50 Oceanic Drive to MD8 Overpass

Length: 6.78

County: Cross County

Period: January 1, 2001 To December 31, 2001

Note(s):

SEVERITY	Fatal	Injury	F-Damage	Total	DAY OF THE WEEK											
Accidents	1	38	66	105	SUN	MON	TUE	WED	THU	FRI	SAT	UNK				
Veh Occ	1	70			13	20	10	13	13	23	13					
Pedestrian																

MONTH OF THE YEAR													CONDITION: DRIVER			PED
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	Normal:	86	1	
3	5	7	6	9	15	12	11	7	12	14	4		ALCOHOL:	3		
													Other:	16		

TIME	12	01	02	03	04	05	06	07	08	09	10	11	UNK	VEHICLES INVOLVED PER ACCIDENT									
AM:	3	1			1		1	10	2	4	9	12		1	2	3	4	5	6	UNK	TOTAL		
PM:	6	6	15	5	10	6	3	7	1		4	1		24	53	16	11	1			227		

VEHICLE TYPE			SURFACE		MOVEMENTS													
1 M_Cycle/Moped	25 Tpk Trailer	11 WET	NORTH				SOUTH				EAST				WEST			
77 Passenger Veh	1 Passenger Bus	93 DRY	LF	ST	RT	LF	ST	RT	LF	ST	RT	LF	ST	RT	LF	ST	RT	
57 Light Truck	School Bus	1 SMO/ICE					2					122					49	
3 Heavy Truck	2 Emergency Veh	MUD																
51 Other types		OTHER	OTHER MOVEMENTS 54															

PROBABLE CAUSES			COLLISION TYPES				FAT				INJ				PROP				TOTAL			
Inf. of Drugs		Improper Parking	OPPOSITE DIR	RELATED:																		
3 Inf. of Alcohol		Passenger Interfere/Obstr.	UNRELATED:																			
Inf. of Medication		Illegally in Roadway	REAR ENO	RELATED:																		
Inf. of Combined Substance		Bicycle Violation	UNRELATED:																			
1 Physical/Mental Difficulty		Clothing not Visible	SIDESWIP	RELATED:																		
2 Fell Asleep/Fainted etc.		Fog, Smoke	UNRELATED:																			
63 Fail to give full attent.		1 Sleet, Hail, Frz. Rain	LEFT TURN	RELATED:																		
Lic. Restr. Non-comply		Blowing Sand, Soil, Dirt	UNRELATED:																			
Fail to Yield Rightofway		Severe Crosswinds	ANGLE	RELATED:																		
Fail to Obey Stop Sign		Rain, Snow	UNRELATED:																			
Fail to Obey Traffic Sig		1 Animal	PEDESTRIAN	RELATED:																		
Fail to Obey Other Contr.		Vision Obstruction	UNRELATED:																			
Fail to Keep Right of Ctr		2 Vehicle Defect	PARKED VEH.	RELATED:																		
Fail to Stop for Sch. Bus		Wet	UNRELATED:																			
Wrong Way on One Way		Icy or Snow Covered	OTHER CT	RELATED:																		
Exceeded Speed Limit		Debris or Obstruction	UNRELATED:																			
14 Too Fast for Conditions		Ruts, Holes, Bumps	F BRIDGE	01																		
5 Followed too Closely		Road Under Construction	I BUILDING	02																		
Improper Turn		Traffic Cntrl Device Inop.	X CULVERT/DITCH	03																		
2 Improper Lane Change		Shoulders Low, Soft, High	E CURB	04																		
Improper Backing			D QUADRAIL/BARRIER	05																		
Improper Passing		11 Other or Unknown	I MEDIANMENT	06																		
Improper Signal			O FENCE	07																		
			P LIGHT POLE	08																		
			J SIGN POST	09																		
			R OTHER POLE	10																		
			C TREE/SHRUBBERY	11																		
			T CONSTR. BARRIER	12																		
			S CRASH ATTENUATOR	13																		
			OTHER FIXED OBJECT																			

WEATHER	ILLUMINATION	TOTAL
96 CLEAR/CLOY	92 DAY	
FOGGY	DAWN/DUSK	2001 105
6 RAINING	10 DARK - LIGHTS ON	
2 SNOW/SLEET	3 DARK - NO LIGHTS	
1 OTHER	OTHER	

Maryland State Highway Administration
Office of Traffic and Safety - Traffic Safety Analysis Division
SHA 52.1 ADC Summary Output rev. 12/98-1

Name: TBRAXTON
Date: 04/29/2003

Location: US50 Oceanic Drive to MD8 Overpass
County: Cross County Period: Jan. 1, 2002 to approx. Oct. 31, 2002 Note(s):

Length: 5.78

SEVERITY					DAY OF THE WEEK											
Fatal	Injury	P-Damage	Total		SUN	MON	TUE	WED	THU	FRI	SAT	UNK				
Accidents	1	37	73	111												
Veh Occ	2	69			11	9	8	14	19	24	26					
Pedestrian																

MONTH OF THE YEAR													CONDITION: DRIVER PRU	
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	Normal:	06
3	10	14	7	7	16	10	18	12	4	8			ALCOHOL:	5
													Other:	20

TIME	12	01	02	03	04	05	06	07	08	09	10	11	UNK	VEHICLES INVOLVED PER ACCIDENT											
AM:	4			1	1	2	4	5	5	7	3	8		1	3	3	4	5	6	UNK	TOTAL				
PM:	8	11	12	11	8	2	5	3	2	1	5	2		22	58	24	4	1			237				

VEHICLE TYPE			SURFACE		MOVEMENTS											
1 M_Cycle/Moped	18 Trk_Trailer		12 WET		NORTH		SOUTH		EAST		WEST					
90 Passenger Veh	Passenger Bus		96 DRY		LP	ST	RT	LP	ST	RT	LP	ST	RT	LP	ST	RT
59 Light Truck	School Bus		1 SHO/ICE									112				64
4 Heavy Truck	Emergency Veh		MUD													
63 Other Types			OTHER		OTHER MOVEMENTS 61											

PROBABLE CAUSES			COLLISION TYPES				FAT	INJ	PROP	TOTAL
1 Inf. of Drugs	Improper Parking		OPPOSITE DIR	RELATED:						
3 Inf. of Alcohol	Passenger Interfere/Obstr.			UNRELATED:		1				1
Inf. of Medication	Illegally in Roadway		REAR END	RELATED:						
Inf. of Combined Substance	Bicycle Violation			UNRELATED:		26	38			64
1 Physical/Mental Difficulty	Clothing not Visible		SIDESWIP	RELATED:						
1 Fell Asleep/Fainted etc.	Smog, Smoke			UNRELATED:				2		2
41 Fail to give full attent.	Slent, Hall, Frz. Rain		LEFT TURN	RELATED:						
Lic. Restr. Non-comply	Blowing Sand, Soil, Dirt			UNRELATED:						
2 Fail to Yield Rightofway	Severe Crosswinds		ANGLE	RELATED:						
Fail to Obey Stop Sign	1 Rain, Snow			UNRELATED:						
Fail to Obey Traffic Sig	1 Animal		PEDESTRIAN	RELATED:						
Fail to Obey Other Contr.	Vision Obstruction			UNRELATED:						
Fail to Keep Right of Ctr	5 Vehicle Defect		PARKED VEH.	RELATED:						
Fail to Stop for Sch. Bus	Wet			UNRELATED:		1		1		2
Wrong Way on One Way	Icy or Snow Covered		OTHER CT	RELATED:						
2 Exceeded Speed Limit	Debris or Obstruction			UNRELATED:		4	28			24
10 Too Fast for Conditions	Nuts, Holes, Bumps		F BRIDGE	01						
16 Followed too Closely	Road Under Construction		I BUILDING	02						
Improper Turn	Traffic Cntrl Device Inop.		X CH/VERT/DITCH	03						
2 Improper Lane Change	Shoulders Low, Soft, High		S CURB	04						
Improper Backing			D GUARDRAIL/BARRIER	05		5	3			8
1 Improper Passing	15 Other or Unknown		I EMBANKMENT	06						
Improper Signal			O FENCE	07						
			B LIGHT POLE	08				1		1
			J SIGN POST	09						
			C OTHER POLE	10						
			T TREE/SHRUBBERY	11			1			1
			CONSTR. BARRIER	12				2		2
			CHASH ATTENUATOR	13				1		1
			OTHER FIXED OBJECT					5		5

WEATHER	ILLUMINATION	TOTAL
108 CLEAR/CLDY	92 DAY	
1 FOGGY	3 DAWN/DUSK	2002 111
1 RAINING	8 DARK - LIGHTS ON	
1 SNOW/SLEET	8 DARK - NO LIGHTS	
OTHER	OTHER	

Maryland State Highway Administration
Office of Traffic and Safety - Traffic Safety Analysis Division
MSA 52.1 ADC Combined Summary Output rev. 12/98-1

Name: TERNATON
Date: 04/29/2003

Location: US50 Oceanic Drive to MD8 Overpass

Length: 5.78

County: Cross County Period: Jan. 1, 1998 to approx. Oct. 31, 2002 Note(s):

SEVERITY					DAY OF THE WEEK							
Fatal	Injury	P-Damage	Total		SUN	MON	TUE	WED	THU	FRI	SAT	UNK
Accidents	3	145	254	402								
Veh Occ	4	269			46	51	45	45	58	91	67	
Pedestrian	1											

MONTH OF THE YEAR													CONDITION: DRIVER	PED
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	Normal:	333
13	21	14	30	38	54	48	34	33	28	37	12		ALCOHOL:	19
													Other:	50

TIME	12	01	02	03	04	05	06	07	08	09	10	11	UNK	VEHICLES INVOLVED PER ACCIDENT							
AM:	8	1		3	3	8	6	21	18	22	25	43		1	2	3	4	5	6+	UNK	TOTAL
PM:	29	28	37	30	34	19	14	16	10	4	14	9		87	193	83	33	5	1		885

VEHICLE TYPE		SURFACE		MOVEMENTS											
3 M_Cycle/Moped	86 Trk_Trailer	39 WET		NORTH			SOUTH			EAST			WEST		
302 Passenger Veh	4 Passenger Bus	359 DRY		LF	ST	RT	LF	ST	RT	LF	ST	RT	LF	ST	RT
190 Light Truck	1 School Bus	4 SMO/ICE				1			3			452		1	205
23 Heavy Truck	5 Emergency Veh	MUD													
271 Other Types		OTHER													

PROBABLE CAUSES				COLLISION TYPES				FAT	INJ	PROP	TOTAL
1 Inf. of Drugs	Improper Parking			OPPOSITE DIR	RELATED:					1	1
15 Inf. of Alcohol	Passenger Interfere/Cbstr.				UNRELATED:			1		1	2
Inf. of Medication	Illegally in Roadway			REAR END	RELATED:						
Inf. of Combined Substance	Bicycle Violation				UNRELATED:			1	111	138	242
2 Physical/Mental Difficulty	Clothing not Visible			SIDESWIPE	RELATED:						
3 Fell Asleep/Fatigued etc.	Smog, Smoke				UNRELATED:			1	4	14	19
213 Fail to give full attent.	1 Sleet, Hail, Frz. Rain			LEFT TURN	RELATED:						
Lic. Restr. Non-comply	Blowing Sand, Soil, Dirt				UNRELATED:						
2 Fail to Yield Rightofway	Severe Crosswinds			ANGLE	RELATED:						
Fail to Obey Stop Sign	2 Rain, Snow				UNRELATED:					2	2
Fail to Obey Traffic Sig	6 Animal			PEDESTRIAN	RELATED:						
Fail to Obey Other Contr.	Vision Obstruction				UNRELATED:						
Fail to Keep Right of Ctr	11 Vehicle Defect			PARKED VEH.	RELATED:						
Fail to Stop for Sch. Bus	2 Wet				UNRELATED:			1	2	4	7
Wrong Way on One Way	2 Icy or Snow Covered			OTHER CT	RELATED:						
3 Exceeded Speed Limit	1 Debris or Obstruction				UNRELATED:				12	47	59
45 Too Fast for Conditions	Ruts, Holes, Bumps			F BRIDGE	01						
38 Followed too Closely	Road Under Construction			I BUILDING	02					4	4
1 Improper Turn	1 Traffic Cntrl Device Inop.			C CULVERT/DITCH	03					1	1
6 Improper Lane Change	Shoulders Low, Soft, High			K CURB	04			1			1
1 Improper Backing				D GUARDRAIL/BARRIER	05			12	10		22
2 Improper Passing	41 Other or Unknown			E EMMENTMENT	06					1	1
Improper Signal				O FENCE	07						
				B LIGHT POLE	08					4	4
				J HIGH POST	09						
				E OTHER POLE	10					1	1
				C TREE/SHRUBBERY	11				1		1
				T CONST. BARRIER	12					2	2
				G CRASH ATTENUATOR	13				1	1	2
				I OTHER FIXED OBJECT						31	31

WEATHER	ILLUMINATION	TOTALS	
378 CLEAR/CLDY	330 DRY		
3 FOGGY	13 DARK/DUSK	1999	94
16 RAINING	37 DARK - LIGHTS ON	2000	92
5 SNOW/SLEET	22 DARK - NO LIGHTS	2001	105
1 OTHER	OTHER	2002	111

Maryland State Highway Administration
Office of Traffic and Safety - Traffic Safety Analysis Division
SHA 52.1 ADC Combined Logfile History Output rev. 12/98-1

Name: TERRITON
Date: 04/30/2003

Location: US50 Oceanic Drive to MD6 Overpass
County: Cross County Period: Jan. 1, 1999 to approx. Oct. 31, 2002 Note(s):

Length: 5.78

LOGMILE	IN	DATE	SEVERITY	TIME	LIGHT	SUR	FX	CLEM	MOVE	PROBABLE CAUSE
						FACE	ALC	ON	TYPE	V1 V2
US0050										
Anne Arundel										
17.01		050299	1 Inj.	5P	DAY	DRY			RREND	ES ES
17.05		110299	2 Inj.	9A	DAY	DAY		03	FXOBJ	NS NA
17.05		832999	1 Inj.	12P	DAY	DRY			RREND	ES ES
17.05		070100	PROPERTY	11A	DAY	DRY			RREND	ES ES
17.05		040800	1 Inj.	5A	NIGHT	DRY			RREND	NS NS
17.05		090700	1 Inj.	9A	DAY	DRY			SDSWP	NS NS
17.05		101101	PROPERTY	4P	DAY	DRY			OTHER	ES ES
17.05		112501	1 Inj.	8P	NIGHT	WET			RREND	ES ES
17.05		812402	PROPERTY	5P	NIGHT	WET			PARKD	UU UP
17.05		110602	PROPERTY	4P	DAY	DRY			RREND	ES ES
17.05		072101	PROPERTY	3P	DAY	DRY		05	FXOBJ	NS NA
17.07		081999	PROPERTY	11A	DAY	DRY			RREND	ES ES
17.07		041201	PROPERTY	11P	NIGHT	DRY			SDSWP	NS NS
17.07		041402	1 Inj.	2P	DAY	DRY		05	FXOBJ	NS NA
17.09		052899	PROPERTY	11P	NIGHT	DRY			RREND	ES ES
17.11		062500	PROPERTY	5P	DAY	DRY			OTHER	UU ES
17.14		052800	PROPERTY	12P	DAY	WET			OTHER	ES NS
17.14		081500	1 Inj.	11A	DAY	DRY			RREND	ES ES
17.14		092802	1 Inj.	12P	DAY	DRY			OTHER	ES NA
17.14		072902	PROPERTY	12P	DAY	DRY			OTHER	UU ES
17.14		062903	PROPERTY	8A	DAY	DRY			RREND	ES ES
17.15		111199	1 Inj.	5A	DAY	DRY			RREND	NS NS
17.15		070299	1 Inj.	12P	DAY	DRY			RREND	NS NS
17.15		061302	2K 01	5A	DAY	DRY			PARKD	NS UP
17.15		031602	2 Inj.	11A	DAY	WET			RREND	ES ES
17.21		050799	3 Inj.	4P	DAY	DRY			OTHER	NS NS
17.21		032599	PROPERTY	4P	DAY	DRY			RREND	ES ES
17.21		070201	PROPERTY	5P	DAY	DRY			RREND	ES ES
17.24		080700	PROPERTY	11A	DAY	DRY		08	FXOBJ	ES NA
17.24		021701	PROPERTY	11A	DAY	DRY			RREND	ES ES
17.24		062102	PROPERTY	11A	DAY	DRY		08	FXOBJ	ES NA
17.25		110299	PROPERTY	4P	DAY	WET		05	FXOBJ	NS NA
17.25		083001	1 Inj.	10A	DAY	WET			OTHER	NS UU
17.25		051502	1 Inj.	12P	DAY	DRY			RREND	ES ES
17.31		051701	PROPERTY	10P	NIGHT	DRY			OTHER	UU UU
17.31		081702	PROPERTY	10P	NIGHT	DRY			SDSWP	ES ES
17.32		081999	PROPERTY	11A	DAY	DRY			RREND	UU ES
17.32		041900	PROPERTY	1P	DAY	DRY			RREND	ES ES
17.33		090602	PROPERTY	4P	DAY	DRY			OTHER	UU ES
17.33		062102	PROPERTY	10P	NIGHT	WET			OTHER	UU ES
17.34		012299	PROPERTY	9A	DAY	WET		08	FXOBJ	ES NA
FXOB(01)-Bridge (02)-Building (03)-Culver/Ditch (04)-Curb (05)-Guardrail/Barrier (06)-Embankment (07)-Fence (08)-Light Pole (09)-Sign Post (10)-Other Pole (11)-Tree/Shrubbery (12)-Construct. Barrier (13)-Crash Attenuator										

Continues...

ADC Combined Legalle History Output Continued...

LOGMILE	IR	DATE	SEVERITY	TIME	LIGHT	SUR	FACE	ALC	CB	FX	CLSN	MOVE	VI	V2	PROBABLE CAUSE
17.34		021699	PROPERTY	4P	DAY	DRY					OTHER	ES ES			UNKNOWN OR OTHER CAUSE
17.34		050899	PROPERTY	11A	DAY	DRY				08	FXOBJ	ES na			FAIL TO GIVE FULL TIME/ATTENT
17.34		060899	PROPERTY	10P	NIGHT	DRY				08	FXOBJ	ES na			FAIL TO GIVE FULL TIME/ATTENT
17.34		061799	PROPERTY	3P	DAY	WET				08	FXOBJ	ES na			FAIL TO GIVE FULL TIME/ATTENT
17.34		080999	PROPERTY	7A	DAY	DRY				02	FXOBJ	ES na			FAIL TO GIVE FULL TIME/ATTENT
17.34		052499	PROPERTY	12P	DAY	DRY				08	FXOBJ	ES na			FAIL TO GIVE FULL TIME/ATTENT
17.34		082699	PROPERTY	9A	DAY	DRY					RREND	ES ES			FOLLOWED TOO CLOSELY
17.34		112400	PROPERTY	10P	NIGHT	DRY				08	FXOBJ	ES na			FAIL TO GIVE FULL TIME/ATTENT
17.34		062000	1 Inj.	8P	DAY	DRY					RREND	ES ES			FAIL TO GIVE FULL TIME/ATTENT
17.34		032000	1 Inj.	10P	NIGHT	WET					RREND	ES ES			FAIL TO GIVE FULL TIME/ATTENT
17.34		010100	1 Inj.	8A	DAY	WET				05	FXOBJ	ES na			TOO FAST FOR CONDITIONS
17.34		109300	PROPERTY	7P	NIGHT	DRY				08	FXOBJ	ES na			FAIL TO GIVE FULL TIME/ATTENT
17.34		061400	PROPERTY	7P	DAY	DRY				08	FXOBJ	ES na			FAIL TO GIVE FULL TIME/ATTENT
17.34		081600	PROPERTY	10A	DAY	DRY				08	FXOBJ	ES na			FAIL TO GIVE FULL TIME/ATTENT
17.34		120900	PROPERTY	3P	DAY	DRY				08	FXOBJ	ES na			FAIL TO GIVE FULL TIME/ATTENT
17.34		102200	PROPERTY	10P	NIGHT	DRY				08	FXOBJ	ES na			VEHICLE DEFECT
17.34		070600	PROPERTY	10P	NIGHT	DRY					OTHER	UU ES			FAIL TO GIVE FULL TIME/ATTENT
17.34		112101	PROPERTY	7A	DAY	DRY					OTHER	UU ES			FAIL TO GIVE FULL TIME/ATTENT
17.34		082501	PROPERTY	7A	DAY	DRY				08	FXOBJ	ES na			FAIL TO GIVE FULL TIME/ATTENT
17.34		100801	PROPERTY	12A	NIGHT	DRY				08	FXOBJ	ES na			FAIL TO GIVE FULL TIME/ATTENT
17.34		111201	PROPERTY	10A	DAY	DRY					OTHER	UU ES			UNKNOWN OR OTHER CAUSE
17.34		102801	PROPERTY	10P	NIGHT	DRY					RREND	ES ES			UNDER INFLUENCE OF ALCOHOL
17.34		041701	PROPERTY	11A	DAY	DRY				08	FXOBJ	ES na			FAIL TO GIVE FULL TIME/ATTENT
17.34		081401	PROPERTY	1P	DAY	DRY				08	FXOBJ	ES na			FAIL TO GIVE FULL TIME/ATTENT
17.34		111801	PROPERTY	1A	NIGHT	WET				02	FXOBJ	ES na			FAIL TO GIVE FULL TIME/ATTENT
17.34		112201	PROPERTY	7P	NIGHT	DRY					OTHER	UU ES			FAIL TO GIVE FULL TIME/ATTENT
17.34		041601	PROPERTY	12A	NIGHT	WET				08	FXOBJ	ES na			FAIL TO GIVE FULL TIME/ATTENT
17.34		071301	6 Inj.	10A	DAY	DRY					RREND	ES ES			FAIL TO GIVE FULL TIME/ATTENT
17.34		062601	PROPERTY	7P	DAY	DRY				08	FXOBJ	ES na			FAIL TO GIVE FULL TIME/ATTENT
17.34		120301	PROPERTY	4P	DAY	WET				03	FXOBJ	ES na			FAIL TO GIVE FULL TIME/ATTENT
17.34		121101	PROPERTY	10A	DAY	WET				06	FXOBJ	ES na			FAIL TO GIVE FULL TIME/ATTENT
17.34		121301	PROPERTY	7P	NIGHT	DRY				08	FXOBJ	ES na			FAIL TO GIVE FULL TIME/ATTENT
17.34		121101	PROPERTY	11A	DAY	DRY				08	FXOBJ	ES na			FAIL TO GIVE FULL TIME/ATTENT
17.34		042901	PROPERTY	4P	DAY	DRY				08	FXOBJ	ES na			UNKNOWN OR OTHER CAUSE
17.34		010501	PROPERTY	8A	DAY	DRY				08	FXOBJ	ES na			FAIL TO GIVE FULL TIME/ATTENT
17.34		072701	PROPERTY	10A	DAY	DRY				08	FXOBJ	ES na			FAIL TO GIVE FULL TIME/ATTENT
17.34		111501	PROPERTY	5P	DAY	DRY				08	FXOBJ	ES na			FAIL TO GIVE FULL TIME/ATTENT
17.34		062501	PROPERTY	11A	DAY	DRY				08	FXOBJ	ES na			VEHICLE DEFECT
17.34		101002	PROPERTY	4A	NIGHT	DRY				08	FXOBJ	IRV na			FAIL TO GIVE FULL TIME/ATTENT
17.34		092702	PROPERTY	6A	DAY	DRY					OTHER	ES na			VEHICLE DEFECT
17.34		090702	PROPERTY	6A	DAY	DRY				08	FXOBJ	ES na			UNKNOWN OR OTHER CAUSE
17.34		081602	PROPERTY	10P	NIGHT	WET					OTHER	UU ES			IMPROPER LANE CHANGE
17.34		061702	PROPERTY	7P	DAY	WET					OTHER	UU ES			IMPROPER LANE CHANGE
17.34		051802	PROPERTY	8A	DAY	DRY				08	FXOBJ	ES na			FAIL TO GIVE FULL TIME/ATTENT
17.34		042702	PROPERTY	11A	DAY	DRY					OTHER	UU UU			FAIL TO GIVE FULL TIME/ATTENT
17.34		031502	PROPERTY	6P	DAY	DRY					RREND	ES ES			FAIL TO GIVE FULL TIME/ATTENT
17.34		110902	PROPERTY	8A	DAY	DRY				08	FXOBJ	ES na			FAIL TO GIVE FULL TIME/ATTENT
17.35		111700	PROPERTY	12P	DAY	DRY				02	FXOBJ	ES na			FAIL TO GIVE FULL TIME/ATTENT
17.36		082201	PROPERTY	4P	DAY	DRY					OTHER	UU ES			UNKNOWN OR OTHER CAUSE

FXOB(01)-Bridge (02)-Building (03)-Culver/Ditch (04)-Curb (05)-Guardrail/Barrier (06)-Embankment (07)-Fence
(08)-Light Pole (09)-Sign Post (10)-Other Pole (11)-Tree/Shrubbery (12)-Construct. Barrier (13)-Crash Attenuator

ADC Combined Logelle History Output Continued...

LOGMILE	LA	DATE	SEVERITY	TIME	LIGHT	SUR FACE	ALC	OR	FX	CLSN TYPE	MOVE V1 V2	PROBABLE CAUSE
17.36		050701	1 Inj.	11A	DAY	DRY			13	PROBJ	WS NA	PELL ASLEEP, FAINTED, ETC.
17.36		081401	PROPERTY	2P	DAY	DRY				SDSWP	ES ES	IMPROPER LANE CHANGE
17.37		072800	PROPERTY	11A	DAY	DRY				RREND	ES ES	FOLLOWED TOO CLOSELY
17.37		110402	1 Inj.	3P	DAY	DRY			05	PROBJ	WS NA	PHYSICAL/MENTAL DIFFICULTY
17.38		032001	PROPERTY	10A	DAY	DRY				SDSWP	ES ES	UNKNOWN OR OTHER CAUSE
17.38		052902	3 Inj.	8A	DAY	DRY				OTHER	ES UU	TOO FAST FOR CONDITIONS
17.41		080701	PROPERTY	12P	DAY	DRY				RREND	ES ES	FOLLOWED TOO CLOSELY
17.41		081802	PROPERTY	4P	DAY	DRY				RREND	ES ES	TOO FAST FOR CONDITIONS
17.44		112399	1 Inj.	8A	DAY	DRY			04	PROBJ	WS NA	TOO FAST FOR CONDITIONS
17.44		062300	PROPERTY	3A	NIGHT	DRY			08	PROBJ	ES NA	FAIL TO GIVE FULL TIME/ATTENT
17.44		030101	2 Inj.	3P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.44		081001	PROPERTY	4P	DAY	DRY				OTHER	UU ES	UNKNOWN OR OTHER CAUSE
17.44		072302	PROPERTY	6P	DAY	DRY			08	PROBJ	ES NA	UNKNOWN OR OTHER CAUSE
17.45		041499	1 Inj.	1P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.47		050401	PROPERTY	3P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.47		092802	PROPERTY	1P	DAY	DRY				RREND	ES ES	UNKNOWN OR OTHER CAUSE
17.47		092802	PROPERTY	1P	DAY	DRY				RREND	ES ES	UNKNOWN OR OTHER CAUSE
17.49		080299	PROPERTY	8A	DAY	DRY			08	PROBJ	UU NA	FAIL TO GIVE FULL TIME/ATTENT
17.49		080999	PROPERTY	5P	NIGHT	DRY			08	PROBJ	UU NA	FAIL TO GIVE FULL TIME/ATTENT
17.51		031402	PROPERTY	1P	DAY	DRY				SDSWP	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.56		072002	PROPERTY	5A	DAY	DRY				RREND	ES ES	TOO FAST FOR CONDITIONS
17.57		121500	PROPERTY	8P	NIGHT	DRY				SDSWP	WS WS	UNDER INFLUENCE OF ALCOHOL
17.57		022801	PROPERTY	4P	DAY	DRY				SDSWP	ES ES	UNKNOWN OR OTHER CAUSE
17.57		082102	PROPERTY	4P	DAY	DRY				OTHER	UU ES	TOO FAST FOR CONDITIONS
17.59		112300	PROPERTY	6P	NIGHT	DRY				OTHER	UU ES	IMPROPER BACKING
17.61		041299	PROPERTY	12P	DAY	DRY				RREND	ES ES	FOLLOWED TOO CLOSELY
17.61		030802	2 Inj.	5P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.61		030402	PROPERTY	7A	DAY	DRY				RREND	WS WS	FOLLOWED TOO CLOSELY
17.62		040299	2 Inj.	4P	DAY	DRY				RREND	ES ES	TOO FAST FOR CONDITIONS
17.62		031101	PROPERTY	3P	DAY	WET				SDSWP	ES ES	UNKNOWN OR OTHER CAUSE
17.67		070900	1 Inj.	4P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.67		092201	PROPERTY	11A	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.67		041701	PROPERTY	5P	DAY	DRY				ANGLE	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.67		010101	PROPERTY	10P	NIGHT	DRY				OTHER	WS NA	UNKNOWN OR OTHER CAUSE
17.67		092201	PROPERTY	11A	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.71		052099	1 Inj.	3P	DAY	DRY				RREND	ES ES	TOO FAST FOR CONDITIONS
17.71		050799	1 Inj.	3P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.71		051599	PROPERTY	2P	DAY	DRY				RREND	ES ES	FOLLOWED TOO CLOSELY
17.71		051899	PROPERTY	6A	DAY	WET				OTHER	UU WS	ICY OR SNOW COVERED
17.71		051599	PROPERTY	10A	DAY	DRY			05	PROBJ	WS NA	FAIL TO GIVE FULL TIME/ATTENT
17.71		091499	PROPERTY	8A	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.71		101499	PROPERTY	4P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.71		061999	PROPERTY	5A	DAY	DRY				OTHER	WS NA	VEHICLE DEFECT
17.71		052099	1 Inj.	8P	NIGHT	DRY				RREND	ES ES	FOLLOWED TOO CLOSELY
17.71		102901	1 Inj.	10A	DAY	DRY				RREND	ES ES	TOO FAST FOR CONDITIONS
17.71		062401	1 Inj.	1P	DAY	DRY				RREND	ES ES	FOLLOWED TOO CLOSELY
17.71		061001	1 Inj.	11A	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.71		060302	PROPERTY	11A	DAY	DRY				RREND	ES ES	TOO FAST FOR CONDITIONS
17.71		090602	PROPERTY	10A	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT

FX08(01)-Bridge (02)-Building (03)-Culver/Ditch (04)-Curb (05)-Guardrail/Barrier (06)-Embankment (07)-Fence
(08)-Light Pole (09)-Sign Post (10)-Other Pole (11)-Tree/Shrubbery (12)-Construct. Barrier (13)-Crash Attenuator

ADC Combined Logfile History Output Continued...

LOGMILE	LA	DATE	SEVERITY	TIME	LIGHT	SUR FACE	ALC	OR	FX TYPE	CLSN V1 V2	MOVE V1 V2	PROBABLE CAUSE
17.73		061299	PROPERTY	12P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.77		090399	PROPERTY	1P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.77		060199	PROPERTY	8A	DAY	DRY				OTHER	WS WS	VEHICLE DEFECT
17.77		000500	PROPERTY	3P	DAY	DRY				RREND	ES ES	TOO FAST FOR CONDITIONS
17.77		180600	PROPERTY	5P	DAY	WET				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.77		051101	2 Inj.	2P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.77		051101	3 Inj.	2P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.77		051101	1 Inj.	2P	DAY	DRY				OTHER	UV ES	FAIL TO GIVE FULL TIME/ATTENT
17.78		033199	2 Inj.	4P	DAY	DRY		05	FXOBJ	WS WS	FAIL TO GIVE FULL TIME/ATTENT	
17.79		110100	PROPERTY	7P	NIGHT	DRY				OTHER	WS WS	ANIMAL
17.81		061299	2 Inj.	6P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.81		061401	PROPERTY	7P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.87		012399	1 Inj.	11A	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.87		080799	PROPERTY	1P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.87		080799	PROPERTY	5P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.87		081999	4 Inj.	2P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.87		082199	4 Inj.	3P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.87		091200	2 Inj.	9A	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.87		092301	PROPERTY	8A	DAY	DRY				RREND	ES ES	UNKNOWN OR OTHER CAUSE
17.87		071101	0 Inj.	4P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.87		080501	2 Inj.	12P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.87		031401	2 Inj.	1P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.87		071101	2 Inj.	4P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.87		061001	1 Inj.	11A	DAY	DRY				RREND	ES ES	FOLLOWED TOO CLOSELY
17.87		060802	PROPERTY	4P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.89		101901	PROPERTY	2P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.90		041899	PROPERTY	4P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.91		082799	PROPERTY	1P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.91		070200	PROPERTY	11A	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.91		081200	2 Inj.	10A	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.91		121800	1 Inj.	11A	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.91		060300	1 Inj.	12P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.91		062500	3 Inj.	2P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.91		070800	PROPERTY	7A	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.91		111901	PROPERTY	9A	DAY	DRY				RREND	ES ES	TOO FAST FOR CONDITIONS
17.91		111901	PROPERTY	8A	DAY	DRY				RREND	ES ES	TOO FAST FOR CONDITIONS
17.91		092101	PROPERTY	1P	DAY	DRY				RREND	ES ES	TOO FAST FOR CONDITIONS
17.91		101901	2 Inj.	2P	DAY	DRY				RREND	ES ES	TOO FAST FOR CONDITIONS
17.91		101901	2 Inj.	2P	DAY	DRY				RREND	ES ES	TOO FAST FOR CONDITIONS
17.91		052302	1 Inj.	3P	DAY	WET				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.91		062302	1 Inj.	3P	DAY	WET				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.96		092301	1 Inj.	12P	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.97		032699	PROPERTY	4P	DAY	DRY				RREND	ES ES	TOO FAST FOR CONDITIONS
17.97		110199	5 Inj.	9A	DAY	DRY				RREND	ES ES	FOLLOWED TOO CLOSELY
17.97		020900	2 Inj.	11A	DAY	DRY				RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
17.97		091200	PROPERTY	10A	DAY	DRY				OTHER	UN WS	UNKNOWN OR OTHER CAUSE
17.97		091200	2 Inj.	10A	DAY	DRY				RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
17.97		091200	PROPERTY	10A	DAY	DRY				RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
17.97		031300	PROPERTY	10A	DAY	DRY				OTHER	WS WS	DEBRIS OR OBSTRUCTION

FX08(01)-Bridge	(02)-Building	(03)-Culver/Ditch	(04)-Curb	(05)-Guardrail/Barrier	(06)-Embankment	(07)-Fence
(08)-Light Pole	(09)-Sign Post	(10)-Other Pole	(11)-Tree/Shrubbery	(12)-Concrete Barrier	(13)-Crash Attenuator	

FXOB(01)=Bridge (02)=Building (03)=Culver/Ditch (04)=Curb (05)=Guardrail/Barrier (06)=Rebankment (07)=Fence
(08)=Light Pole (09)=Sign Post (10)=Other Pole (11)=Tree/Shrubbery (12)=Construct. Barrier (13)=Crash Attenuator

ADC Combined Logmile History Output Continued...

LOGMILE	IS	DATE	SEVERITY	TIME	LIGHT	SUR FACE	ALC	PK 08	CLEM TYPE	NOVE V1 V2	PROBABLE CAUSE
17.97		092801	PROPERTY	2P	DAY	DRY			ARCLE	SS SS	FAIL TO GIVE FULL TIME/ATTENT
17.97		081702	PROPERTY	1P	DAY	DRY			RREND	ES ES	FOLLOWED TOO CLOSELY
17.97		042002	PROPERTY	2P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
18.01		050299	PROPERTY	7P	DAY	DRY			RREND	SS SS	FAIL TO GIVE FULL TIME/ATTENT
18.01		061299	PROPERTY	11A	DAY	DRY			RREND	US ES	FAIL TO GIVE FULL TIME/ATTENT
18.01		070601	2 Inj.	11A	DAY	DRY			RREND	ES ES	TOO FAST FOR CONDITIONS
18.06		061502	1 Inj.	12A	NIGHT	DRY	/	05	FXDNG	UU SS	FAIL TO GIVE FULL TIME/ATTENT
18.07		062799	2 Inj.	3P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
18.07		072999	PROPERTY	3P	DAY	DRY			RREND	ES ES	VEHICLE DEFECT
18.07		112499	PROPERTY	1P	DAY	DRY			RREND	US ES	FAIL TO GIVE FULL TIME/ATTENT
18.07		031700	PROPERTY	6P	NIGHT	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
18.07		062000	PROPERTY	11A	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
18.07		082200	PROPERTY	11A	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
18.07		070200	PROPERTY	11A	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
18.07		102700	PROPERTY	4P	DAY	DRY			RREND	ES ES	TOO FAST FOR CONDITIONS
18.07		091200	5 Inj.	9A	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
18.07		101901	PROPERTY	2P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
18.07		041301	PROPERTY	2P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
18.07		061701	2 Inj.	11A	DAY	DRY			RREND	ES ES	TOO FAST FOR CONDITIONS
18.07		091402	PROPERTY	9A	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
18.10		071699	1 Inj.	12P	DAY	DRY			RREND	US ES	FAIL TO GIVE FULL TIME/ATTENT
18.11		081399	1 Inj.	13P	DAY	DRY			RREND	ES ES	FOLLOWED TOO CLOSELY
18.16		011302	PROPERTY	8P	NIGHT	DRY			OTHER	UU WS	UNKNOWN OR OTHER CAUSE
18.16		061402	PROPERTY	2P	DAY	WET			RREND	ES ES	TOO FAST FOR CONDITIONS
18.16		062602	PROPERTY	3P	DAY	WET			OTHER	UU ES	TOO FAST FOR CONDITIONS
18.18		071802	PROPERTY	10P	NIGHT	DRY			RREND	ES ES	FOLLOWED TOO CLOSELY
18.17		080799	PROPERTY	7A	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
18.17		110199	4 Inj.	11A	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
18.17		111099	PROPERTY	10A	DAY	DRY			RREND	ES ES	TOO FAST FOR CONDITIONS
18.17		030900	PROPERTY	1P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
18.17		041600	PROPERTY	1P	DAY	DRY		05	FXDNG	ES SS	FAIL TO GIVE FULL TIME/ATTENT
18.17		062100	PROPERTY	7A	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
18.19		082701	5 Inj.	11A	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
18.21		072100	PROPERTY	8A	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
18.21		081102	PROPERTY	12P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
18.27		031800	PROPERTY	3P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
18.27		103000	5 Inj.	10A	DAY	DRY			RREND	ES ES	EXCEEDED SPEED LIMIT
18.27		080501	PROPERTY	12P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
18.31		040699	2 Inj.	11P	NIGHT	WET	/		PARKD	ES UP	FAIL TO GIVE FULL TIME/ATTENT
18.31		072100	PROPERTY	8A	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
18.34		070300	2 Inj.	4P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
18.36		072702	PROPERTY	2P	DAY	DRY			RREND	ES ES	FOLLOWED TOO CLOSELY
18.37		070900	13 Inj.	1P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
18.41		071700	PROPERTY	2P	DAY	DRY			RREND	ES ES	UNKNOWN OR OTHER CAUSE
18.46		122600	1 Inj.	11A	DAY	DRY			RREND	ES ES	FOLLOWED TOO CLOSELY
18.46		050101	PROPERTY	2P	DAY	DRY			OTHER	UU US	IMPROPER LANE CHANGE
18.46		060802	PROPERTY	4P	DAY	DRY			RREND	ES ES	TOO FAST FOR CONDITIONS
18.46		032702	PROPERTY	7A	DAY	DRY			RREND	ES ES	UNKNOWN OR OTHER CAUSE
18.47		052899	1 Inj.	8P	NIGHT	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT

FX08 (01)=Bridge (02)=Building (03)=Culver/Ditch (04)=Curb (05)=Guardrail/Barrier (06)=Embankment (07)=Fence
(08)=Light Pole (09)=Sign Post (10)=Other Pole (11)=Tree/shrubbery (12)=Construc. Barrier (13)=Crash Attenuator

ADC Combined Legale History Output Continued...

LOGMILE	IN	DATE	SEVERITY	TIME	LIGHT	SUR FACE	ALC	FX 08	CLSN TYPE	MOVE V1 V2	PROBABLE CAUSE
18.50		061003	PROPERTY	4P	DAY	DRY		05	FX0BJ	WS NA	VEHICLE DEFECT
18.56		071502	2 Inj.	12P	DAY	DRY			RREND	ES ES	FOLLOWED TOO CLOSELY
18.57		082001	PROPERTY	12P	DAY	DRY			OTHER	UU ES	UNKNOWN OR OTHER CAUSE
18.62		040459	1 Inj.	11P	DAY	DRY			SDSWP	WE WE	IMPROPER LANE CHANGE
18.62		031401	PROPERTY	3P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
18.71		080800	2 Inj.	4A	NIGHT	DRY	/		RREND	ES ES	UNDER INFLUENCE OF ALCOHOL
18.71		022803	PROPERTY	10A	DAY	DRY		13	FX0BJ	WS NA	FAIL TO GIVE FULL TIME/ATTENT
18.76		122600	1 Inj.	11A	DAY	DRY			RREND	ES ES	FOLLOWED TOO CLOSELY
18.76		122600	1 Inj.	11A	DAY	DRY			RREND	ES ES	FOLLOWED TOO CLOSELY
18.76		060901	PROPERTY	2P	DAY	DRY			OPDIR	WS ES	FELL ASLEEP, FAINTED, ETC.
18.76		101702	2 Inj.	9A	DAY	DRY			OTHER	WS WS	EXCEEDED SPEED LIMIT
18.86		091202	PROPERTY	4P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
18.87		062559	PROPERTY	6P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
18.91		101300	PROPERTY	5P	DAY	DRY			RREND	ES ES	TOO FAST FOR CONDITIONS
18.97		062100	PROPERTY	11P	NIGHT	WET		05	FX0BJ	WS NA	TOO FAST FOR CONDITIONS
18.97		030202	PROPERTY	2P	DAY	DRY		12	FX0BJ	WS NA	VEHICLE DEFECT
19.06		102702	PROPERTY	3P	DAY	DRY			RREND	ES ES	FOLLOWED TOO CLOSELY
19.07		042759	PROPERTY	2P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
19.17		032202	PROPERTY	3P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
19.17		102302	PROPERTY	9A	DAY	DRY			RREND	ES ES	FOLLOWED TOO CLOSELY
19.17		032202	PROPERTY	3P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
19.17		032202	1 Inj.	3P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
19.18		070200	1 Inj.	11A	DAY	DRY			RREND	ES ES	FOLLOWED TOO CLOSELY
19.18		030200	PROPERTY	12P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
19.18		083102	1 Inj.	2P	DAY	DRY			RREND	ES ES	TOO FAST FOR CONDITIONS
19.18		083102	PROPERTY	2P	DAY	DRY			RREND	ES ES	TOO FAST FOR CONDITIONS
19.18		021902	PROPERTY	3A	NIGHT	DRY		12	FX0BJ	WS NA	FAIL TO GIVE FULL TIME/ATTENT
19.27		052759	PROPERTY	7P	DAY	DRY	/		RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
19.38		052000	2 Inj.	5A	NIGHT	WET		05	FX0BJ	WS NA	WET
19.38		091900	1 Inj.	7A	DAY	WET		05	FX0BJ	WS NA	TOO FAST FOR CONDITIONS
19.38		012000	PROPERTY	9A	DAY	SNOW			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
19.37		032202	1 Inj.	3P	DAY	DRY			RREND	ES ES	UNDER INFLUENCE OF DRUGS
19.47		061601	PROPERTY	6P	DAY	WET	/		RREND	ES ES	UNDER INFLUENCE OF ALCOHOL
19.47		090702	PROPERTY	12A	NIGHT	DRY	/		OTHER	WE WE	UNDER INFLUENCE OF ALCOHOL
19.47		081102	PROPERTY	1P	DAY	DRY			RREND	ES ES	FOLLOWED TOO CLOSELY
19.47		042502	2 Inj.	2P	DAY	DRY			RREND	WS WS	UNKNOWN OR OTHER CAUSE
19.48		050201	1 Inj.	10A	DAY	DRY			OTHER	ES WS	PHYSICAL/MENTAL DIFFICULTY
19.48		060801	1 Inj.	2P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
19.50		113059	PROPERTY	5P	DAY	DRY			OTHER	WS NA	UNKNOWN OR OTHER CAUSE
19.52		022300	1 Inj.	3A	NIGHT	DRY			OTHER	UU WS	UNKNOWN OR OTHER CAUSE
19.57		071902	2 Inj.	1P	DAY	DRY			OPDIR	ES WS	VEHICLE DEFECT
19.58		041900	1 Inj.	8A	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
19.58		082302	PROPERTY	2P	DAY	DRY			OTHER	UU ES	UNKNOWN OR OTHER CAUSE
19.60		022802	1 Inj.	9A	DAY	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
19.60		022802	1 Inj.	9A	DAY	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
19.60		022802	2 Inj.	9A	DAY	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
19.60		022802	2 Inj.	9A	DAY	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
19.68		080202	PROPERTY	11A	DAY	DRY			RREND	ES ES	TOO FAST FOR CONDITIONS
19.68		082302	PROPERTY	2P	DAY	DRY			OTHER	ES UU	TOO FAST FOR CONDITIONS

FX01=Bridge (02)=Building (03)=Culver/Ditch (04)=Curb (05)=Guardrail/Barrier (06)=Embankment (07)=Fence
(08)=Light Pole (09)=Sign Post (10)=Other Pole (11)=Tree/Shrubbery (12)=Construct. Barrier (13)=Crash Attenuator

ADC Combined Logfile History Output Continued...

LOGMILE	IR	DATE	SEVERITY	TIME	LIGHT	SUR FACE	ALC	PZ OB	CLEN TYPE	MOVE V1 V2	PROBABLE CAUSE
19.82		011499	PROPERTY	11A	DAY	ICE			SDSWP	WS WS	UNKNOWN OR OTHER CAUSE
19.88		090299	1 Inj.	4P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
19.88		031401	1 Inj.	12P	DAY	DRY			RREND	ES ES	FOLLOWED TOO CLOSELY
19.88		070201	1 Inj.	6P	DAY	DRY			RREND	ES ES	TOO FAST FOR CONDITIONS
19.88		111601	1 Inj.	7A	DAY	DRY			RREND	NS NS	FAIL TO GIVE FULL TIME/ATTENT
Queen Anne's											
0.00		052699	2 Inj.	12A	NIGHT	DRY			PARKD	WS UP	UNDER INFLUENCE OF ALCOHOL
0.00		102401	PROPERTY	7A	DAY	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
0.00		102401	PROPERTY	7A	DAY	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
0.00		102401	PROPERTY	7A	DAY	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
0.00		052202	2 Inj.	6A	DAY	DRY			RREND	WS WS	FOLLOWED TOO CLOSELY
0.00		011902	PROPERTY	2P	DAY	SNOW		05	FXOBJ	WS na	RAIN, SNOW
0.10		041599	PROPERTY	3P	DAY	DRY			PARKD	WS WS	FAIL TO GIVE FULL TIME/ATTENT
0.10		031302	1 Inj.	10A	DAY	WET			OTHER	WS WS	FAIL TO GIVE FULL TIME/ATTENT
0.10		041202	1 Inj.	3P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
0.20		112601	2 Inj.	1P	DAY	DRY			RREND	WS WS	TOO FAST FOR CONDITIONS
0.20		030602	PROPERTY	7A	DAY	DRY			RREND	WS WS	TOO FAST FOR CONDITIONS
0.30		101900	1 Inj.	11P	NIGHT	DRY			RREND	WS WS	UNDER INFLUENCE OF ALCOHOL
0.30		030102	PROPERTY	7A	DAY	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
0.40		080301	PROPERTY	7P	DAY	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
0.40		022602	PROPERTY	11A	DAY	DRY			OTHER	UN WS	FAIL TO GIVE FULL TIME/ATTENT
0.40		061602	1 Inj.	12P	DAY	DRY			RREND	ES ES	FOLLOWED TOO CLOSELY
0.50		032699	2 Inj.	4P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
0.50		072700	PROPERTY	12P	DAY	DRY			PARKD	UN UP	UNKNOWN OR OTHER CAUSE
0.50		072700	PROPERTY	12P	DAY	DRY			PARKD	UN UP	UNKNOWN OR OTHER CAUSE
0.50		041900	1 Inj.	5P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
0.50		010701	2 Inj.	4A	NIGHT	DRY		05	FXOBJ	ES na	FAIL TO GIVE FULL TIME/ATTENT
0.50		101002	2 Inj.	3P	DAY	WET			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
0.55		080699	PROPERTY	2P	DAY	DRY			SDSWP	WS WS	IMPROPER PASSING
0.60		080999	PROPERTY	2P	DAY	DRY			RREND	ES ES	UNDER INFLUENCE OF ALCOHOL
0.60		092300	1 Inj.	8P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
0.60		041202	2 Inj.	6P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
0.70		100199	PROPERTY	8A	DAY	DRY			RREND	WS WS	FOLLOWED TOO CLOSELY
0.70		090402	PROPERTY	7P	DAY	DRY			OTHER	UN WS	FAIL TO GIVE FULL TIME/ATTENT
0.80		073099	PROPERTY	2P	DAY	DRY			RREND	ES WS	FAIL TO GIVE FULL TIME/ATTENT
0.80		051999	PROPERTY	8A	DAY	DRY			SDSWP	WS WS	IMPROPER LANE CHANGE
1.00		041400	PROPERTY	7P	DAY	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
1.09		110302	5 Inj.	1P	DAY	DRY			RREND	WS WS	FOLLOWED TOO CLOSELY
1.09		110302	1 Inj.	1P	DAY	DRY			RREND	WS WS	FOLLOWED TOO CLOSELY
1.10		022199	1 Inj.	11P	NIGHT	DRY			OTHER	WS na	FAIL TO GIVE FULL TIME/ATTENT
1.10		060901	1 Inj.	9A	DAY	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
1.19		022601	PROPERTY	7A	DAY	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
1.19		022601	PROPERTY	7A	DAY	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
1.20		090401	PROPERTY	7P	DAY	DRY		05	FXOBJ	WS na	FAIL TO GIVE FULL TIME/ATTENT
1.20		060901	1 Inj.	6A	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
1.20		061001	PROPERTY	10P	NIGHT	DRY			RREND	ES ES	FOLLOWED TOO CLOSELY
1.29		041900	PROPERTY	6P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
1.30		072100	1 Inj.	8P	DAY	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
FXOB(01)=Bridge (02)=Building (03)=Culver/Ditch (04)=Curb (05)=Guardrail/Barrier (06)=Embankment (07)=Fence (08)=Light Pole (09)=Sign Post (10)=Other Pole (11)=Tree/Shrubbery (12)=Construct. Barrier (13)=Crash Attenuator											

ADC Combined Logmile History Output Continued...

LOOMILE	IN	DATE	SEVERITY	TIME	LIGHT	SUR FACE	ALC	FX OS	CLSN TYPE	MOVE V1 V2	PROBABLE CAUSE
1.48		040402	1 Inj.	11P	NIGHT	DRY	/		RREND	WS WS	TOO FAST FOR CONDITIONS
1.49		022100	PROPERTY	5P	DAY	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
1.49		113000	1K 01	1P	DAY	DRY			RREND	WS WS	TOO FAST FOR CONDITIONS
1.59		081359	1 Inj.	1P	DAY	DRY			RREND	ES ES	FOLLOWED TOO CLOSELY
1.59		021400	1 Inj.	10A	DAY	DRY			RREND	ES ES	TOO FAST FOR CONDITIONS
1.59		021402	2 Inj.	7A	DAY	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
1.60		102402	PROPERTY	11P	NIGHT	DRY			RREND	ES ES	EXCEEDED SPEED LIMIT
1.69		080102	PROPERTY	1P	DAY	DAY			OTHER	UU WS	FAIL TO YIELD RIGHT OF WAY
1.79		090200	PROPERTY	2P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
1.79		061502	PROPERTY	11A	DAY	DRY			RREND	ES ES	FOLLOWED TOO CLOSELY
1.80		111501	1 Inj.	10A	DAY	DRY			RREND	WS WS	TOO FAST FOR CONDITIONS
1.86		110302	1 Inj.	3P	DAY	DRY			RREND	WS WS	FOLLOWED TOO CLOSELY
1.89		021499	PROPERTY	3P	DAY	DRY			RREND	WS WS	UNKNOWN OR OTHER CAUSE
1.89		071901	PROPERTY	5P	DAY	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
1.89		071401	1 Inj.	6P	DAY	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
1.89		080102	PROPERTY	8A	DAY	DRY			RREND	ES ES	UNKNOWN OR OTHER CAUSE
1.91		052109	2 Inj.	8A	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
1.95		072309	PROPERTY	11A	DAY	DRY			SDSWP	UD WS	UNKNOWN OR OTHER CAUSE
2.05		042100	PROPERTY	10A	DAY	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
2.09		110502	PROPERTY	12P	DAY	DRY		05	PROBJ	WS na	TOO FAST FOR CONDITIONS
2.12		100501	PROPERTY	5P	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
2.19		070501	PROPERTY	4P	DAY	WET			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
2.22		041902	PROPERTY	10P	NIGHT	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
2.23		112101	1 Inj.	7A	DAY	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
2.23		112101	PROPERTY	7A	DAY	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
2.29		122309	PROPERTY	9A	DAY	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
2.29		030502	2 Inj.	8A	DAY	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
2.32		061601	1 Inj.	2P	DAY	WET			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
2.32		061001	PROPERTY	2P	DAY	DRY			RREND	WS WS	FOLLOWED TOO CLOSELY
2.32		110901	PROPERTY	4P	DAY	DRY		05	PROBJ	WS na	FAIL TO GIVE FULL TIME/ATTENT
2.32		062402	PROPERTY	6A	DAY	DRY			OTHER	WS na	FAIL TO GIVE FULL TIME/ATTENT
2.33		062609	1 Inj.	11P	NIGHT	DRY	/		RREND	WS WS	UNDER INFLUENCE OF ALCOHOL
2.33		081602	2 Inj.	1P	DAY	DRY			RREND	WS WS	FOLLOWED TOO CLOSELY
2.39		061709	PROPERTY	1P	DAY	DRY			SDSWP	ES ES	IMPROPER LANE CHANGE
2.42		110902	PROPERTY	12A	NIGHT	DRY			OTHER	ES na	ANIMAL
2.42		080202	PROPERTY	1P	DAY	DRY			OTHER	UU WS	UNKNOWN OR OTHER CAUSE
2.42		070502	6 Inj.	12A	NIGHT	DRY		05	PROBJ	WS na	VEHICLE DEFECT
2.42		080502	PROPERTY	11A	DAY	DRY			RREND	WS WS	TOO FAST FOR CONDITIONS
2.43		022201	1 Inj.	4P	DAY	SNOW		05	PROBJ	WS na	FLEET, HAIL, FREEZING RAIN
2.44		090801	1K 11	7P	DAY	DRY			SDSWP	WS WS	FAIL TO GIVE FULL TIME/ATTENT
2.49		061809	PROPERTY	6P	DAY	DRY			RREND	ES ES	TOO FAST FOR CONDITIONS
2.53		070300	PROPERTY	3P	DAY	DRY			OTHER	WS na	FAIL TO GIVE FULL TIME/ATTENT
2.56		030601	1 Inj.	9A	DAY	WET			OTHER	WS UU	TOO FAST FOR CONDITIONS
2.61		110909	1 Inj.	5P	NIGHT	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
2.63		071109	2 Inj.	12P	DAY	DRY			RREND	WS WL	FOLLOWED TOO CLOSELY
2.62		010700	1 Inj.	9A	DAY	DRY			SDSWP	ES ES	UNKNOWN OR OTHER CAUSE
2.67	/	060809	PROPERTY	5P	DAY	WET		10	PROBJ	ES na	RAIN, SNOW
2.70		071301	1 Inj.	12A	NIGHT	DRY	/		OTHER	WS na	UNDER INFLUENCE OF ALCOHOL
2.71		000709	PROPERTY	4P	DAY	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT

FXOS(01)-Bridge (02)-Building (03)-Culver/Ditch (04)-Curb (05)-Guardrail/Barrier (06)-Embankment (07)-Fence
 (08)-Light Pole (09)-Sign Post (10)-Other Pole (11)-Tree/Shrubbery (12)-Construct. Barrier (13)-Crash Attenuator

ADC Combined Logfile History Output Continued...

LOGMILE	JR	DATE	SEVERITY	TIME	LIGHT	SUR FACE	ALC	FX DO	CLER TYPE	MOVE V1 V2	PROBABLE CAUSE
2.71		050800	PROPERTY	9P	NIGHT	DRY			OTHER	ES ES	ANIMAL
2.71		063600	PROPERTY	5A	DAY	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
2.71	/	082000	PROPERTY	4P	DAY	DRY			OPDIR	NS GS	TRAFFIC CONTROL DEVICE INOP.
2.74		051400	PROPERTY	5A	DAY	DRY			OTHER	ES ES	ANIMAL
2.76		121099	1 Inj.	5P	NIGHT	WET			SDSWP	WS WS	WET
2.85		040299	PROPERTY	10A	DAY	DRY			SDSWP	WS WS	IMPROPER LANE CHANGE
2.85		072499	PROPERTY	12P	DAY	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
2.89		012999	PROPERTY	10A	DAY	DRY			OTHER	WS ES	UNKNOWN OR OTHER CAUSE
2.94		021402	PROPERTY	6P	NIGHT	DRY			RREND	ES ES	FAIL TO GIVE FULL TIME/ATTENT
2.95		032599	PROPERTY	3P	DAY	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
2.95		071799	5 Inj.	12P	DAY	DRY			RREND	WS WS	FAIL TO GIVE FULL TIME/ATTENT
2.95		012700	PROPERTY	7A	DAY	DRY		06	FXOBJ	ES ES	FAIL TO GIVE FULL TIME/ATTENT
2.95		020500	PROPERTY	8P	NIGHT	WET		03	FXOBJ	ES ES	ICY OR SNOW COVERED
2.95		101800	PROPERTY	11A	DAY	DRY	/		RREND	WS WS	UNDER INFLUENCE OF ALCOHOL
2.95		072300	2 Inj.	1P	DAY	DRY			RREND	WS WS	FOLLOWED TOO CLOSELY
2.95		042600	PROPERTY	9P	NIGHT	WET			OTHER	WS ES	ANIMAL
2.95		071802	1 Inj.	5P	DAY	DRY		05	FXOBJ	ES ES	FELL ASLEEP, FAINTED, ETC.
2.95		070902	2 Inj.	7P	DAY	DRY	/	11	FXOBJ	UU ES	UNDER INFLUENCE OF ALCOHOL
2.95		062202	PROPERTY	6P	DAY	DRY			OTHER	WS UU	UNKNOWN OR OTHER CAUSE
2.95		052602	PROPERTY	9P	DAY	WET			RREND	WS ES	FAIL TO GIVE FULL TIME/ATTENT

FX08(01)=Bridge (02)=Building (03)=Culver/Ditch (04)=Curb (05)=Guardrail/Barrier (06)=Embankment (07)=Fence
(08)=Light Pole (09)=Sign Post (10)=Other Pole (11)=Tree/Shrubbery (12)=Construc. Barrier (13)=Crash Attenuator



2025 CAPACITY ANALYSIS WORKSHEETS

Bay Bridge
2025 Summer Weekend Day
Westbound Analysis

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 10 AM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2717	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	755	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	1067	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1067	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	17.7	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 11 AM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	3160	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	878	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	1241	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	4.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.8	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	61.2	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1241	pc/h/ln
Free-flow speed, FFS	61.2	mi/h
Average passenger-car speed, S	61.2	mi/h
Number of lanes, N	3	
Density, D	20.3	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 12 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	3474	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	965	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	1364	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1364	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	22.6	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 1 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	3785	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1051	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	1486	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1486	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	24.6	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 2 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	3749	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1041	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	1472	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1472	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	24.4	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS2000: Basic Freeway Segments Release 4.1a

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 3 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	4341	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1206	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	1704	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1704	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.3	mi/h
Number of lanes, N	3	
Density, D	28.2	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 4PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	4107	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1141	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	1612	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1612	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	26.7	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 5 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	3658	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1016	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	1436	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1436	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	23.8	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 6 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	3475	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	965	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	1364	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1364	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	22.6	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 7 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2988	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	830	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	1173	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1173	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	19.4	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 8 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2520	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	700	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	989	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	4.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	0.8	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	61.2	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	989	pc/h/ln
Free-flow speed, FFS	61.2	mi/h
Average passenger-car speed, S	61.2	mi/h
Number of lanes, N	3	
Density, D	16.2	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 9 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2104	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	584	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.943	
Driver population factor, vp	1.00	
Flow rate, vp	826	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	826	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	13.7	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Bay Bridge
2025 Summer Weekend Day
Eastbound Analysis

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 10 AM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	4029	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1119	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	2305	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2305	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S		mi/h
Number of lanes, N	2	
Density, D		pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 11 AM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	4521	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1256	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	2587	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2587	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S		mi/h
Number of lanes, N	2	
Density, D		pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS2000: Basic Freeway Segments Release 4.1a

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 12 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	4784	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1329	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	2738	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2738	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S		mi/h
Number of lanes, N	2	
Density, D		pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 1 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	4939	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1372	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	2826	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2826	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S		mi/h
Number of lanes, N	2	
Density, D		pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 2 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	5462	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1517	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	3125	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	3125	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S		mi/h
Number of lanes, N	2	
Density, D		pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS2000: Basic Freeway Segments Release 4.1a

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 3 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	5762	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1601	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	3297	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	3297	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S		mi/h
Number of lanes, N	2	
Density, D		pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 4 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	5703	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1584	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	3263	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	3263	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S		mi/h
Number of lanes, N	2	
Density, D		pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 5 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	5759	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1600	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	3295	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	3295	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S		mi/h
Number of lanes, N	2	
Density, D		pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 6 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	4517	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1255	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	2585	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2585	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S		mi/h
Number of lanes, N	2	
Density, D		pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

HCS2000: Basic Freeway Segments Release 4.1a

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 7 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	4147	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1152	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	2373	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2373	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S		mi/h
Number of lanes, N	2	
Density, D		pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 8 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	3983	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1106	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	2279	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2279	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	50.8	mi/h
Number of lanes, N	2	
Density, D	44.9	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 9 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	4048	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1124	v
Trucks and buses	6	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.971	
Driver population factor, vp	1.00	
Flow rate, vp	2316	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2316	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S		mi/h
Number of lanes, N	2	
Density, D		pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Bay Bridge
2025 Average Weekday
Westbound Analysis

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 10 AM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 WEEKDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2216	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	616	v
Trucks and buses	14	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.877	
Driver population factor, vp	1.00	
Flow rate, vp	936	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	936	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	15.5	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 11 AM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 WEEKDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2200	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	611	v
Trucks and buses	14	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.877	
Driver population factor, vp	1.00	
Flow rate, vp	929	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	929	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	15.4	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 12 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 WEEKDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2201	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	611	v
Trucks and buses	14	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.877	
Driver population factor, vp	1.00	
Flow rate, vp	929	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	929	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	15.4	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 1 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 WEEKDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2166	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	602	v
Trucks and buses	14	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.877	
Driver population factor, vp	1.00	
Flow rate, vp	915	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	915	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	15.1	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 2 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 WEEKDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2370	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	658	v
Trucks and buses	14	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.877	
Driver population factor, vp	1.00	
Flow rate, vp	1001	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1001	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	16.6	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 3 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 WEEKDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2484	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	690	v
Trucks and buses	14	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.877	
Driver population factor, vp	1.00	
Flow rate, vp	1049	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1049	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	17.4	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 4PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 WEEKDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2471	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	686	v
Trucks and buses	14	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.877	
Driver population factor, vp	1.00	
Flow rate, vp	1043	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1043	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	17.3	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 5 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 WEEKDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	2393	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	665	v
Trucks and buses	14	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.877	
Driver population factor, vp	1.00	
Flow rate, vp	1010	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1010	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	16.7	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 6 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 WEEKDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	1925	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	535	v
Trucks and buses	14	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.877	
Driver population factor, vp	1.00	
Flow rate, vp	813	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	813	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	13.5	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 7 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 WEEKDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	1418	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	394	v
Trucks and buses	14	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.877	
Driver population factor, vp	1.00	
Flow rate, vp	599	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	599	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	9.9	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 8 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 WEEKDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	1073	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	298	v
Trucks and buses	14	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.877	
Driver population factor, vp	1.00	
Flow rate, vp	453	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	453	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	7.5	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 9 PM
 Freeway/Direction: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 WEEKDAY
 Description: 3 WB LANES

Flow Inputs and Adjustments

Volume, V	872	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	242	v
Trucks and buses	14	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.50	%
Segment length	0.60	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.877	
Driver population factor, vp	1.00	
Flow rate, vp	368	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	3	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	1.6	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	3.0	mi/h
Free-flow speed, FFS	60.4	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	368	pc/h/ln
Free-flow speed, FFS	60.4	mi/h
Average passenger-car speed, S	60.4	mi/h
Number of lanes, N	3	
Density, D	6.1	pc/mi/ln
Level of service, LOS	A	

Overall results are not computed when free-flow speed is less than 55 mph.

Bay Bridge
2025 Average Weekday
Eastbound Analysis

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 10 AM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 WEEKDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	2136	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	593	v
Trucks and buses	15	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.930	
Driver population factor, vp	1.00	
Flow rate, vp	1276	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1276	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	22.0	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 11 AM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 WEEKDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	2159	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	600	v
Trucks and buses	15	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.930	
Driver population factor, vp	1.00	
Flow rate, vp	1289	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1289	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	22.2	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 12 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 WEEKDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	2263	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	629	v
Trucks and buses	15	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.930	
Driver population factor, vp	1.00	
Flow rate, vp	1352	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1352	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	23.3	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 1 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 WEEKDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	2210	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	614	v
Trucks and buses	15	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.930	
Driver population factor, vp	1.00	
Flow rate, vp	1320	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1320	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	22.7	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 2 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 WEEKDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	2580	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	717	v
Trucks and buses	15	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.930	
Driver population factor, vp	1.00	
Flow rate, vp	1541	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1541	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	26.5	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 3 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 WEEKDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	3402	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	945	v
Trucks and buses	15	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.930	
Driver population factor, vp	1.00	
Flow rate, vp	2032	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2032	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	56.1	mi/h
Number of lanes, N	2	
Density, D	36.2	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 4 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 WEEKDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	4170	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1158	v
Trucks and buses	15	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.930	
Driver population factor, vp	1.00	
Flow rate, vp	2490	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2490	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S		mi/h
Number of lanes, N	2	
Density, D		pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 5 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 WEEKDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	4189	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1164	v
Trucks and buses	15	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.930	
Driver population factor, vp	1.00	
Flow rate, vp	2502	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2502	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S		mi/h
Number of lanes, N	2	
Density, D		pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 6 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 WEEKDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	3520	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	978	v
Trucks and buses	15	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.930	
Driver population factor, vp	1.00	
Flow rate, vp	2102	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2102	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	2	
Density, D	38.2	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 7 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 WEEKDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	2130	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	592	v
Trucks and buses	15	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.930	
Driver population factor, vp	1.00	
Flow rate, vp	1272	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1272	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	21.9	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 8 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 WEEKDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	1579	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	439	v
Trucks and buses	15	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.930	
Driver population factor, vp	1.00	
Flow rate, vp	943	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	943	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	16.2	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: BKA
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 9 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 WEEKDAY
 Description: 2 EB LANES

Flow Inputs and Adjustments

Volume, V	1437	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	399	v
Trucks and buses	15	%
Recreational vehicles	0	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	0.70	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	3.0	
Heavy vehicle adjustment, fHV	0.930	
Driver population factor, vp	1.00	
Flow rate, vp	858	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	858	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	2	
Density, D	14.8	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

Bay Bridge
2025 Summer Weekend Day
Reversible Lane Operation
Westbound Analysis

 OPERATIONAL ANALYSIS

Analyst: BA
 Agency/Co: Parsons
 Date: 8/18/02
 Analysis Period: 10 AM
 Highway: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Project ID: REVERSIBLE LANE OPERATION - 2 WB Lanes

 FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	2.0	ft	2.0	ft
Left edge	6.0	ft	2.0	ft
Total lateral clearance	8.0	ft	4.0	ft
Access points per mile	0		0	
Median type	Undivided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.9	mph	1.8	mph
Median type adjustment, FM	1.6	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	57.5	mph	60.0	mph

 VOLUME

Direction	1		2	
Volume, V	2717	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	755		0	
Trucks and buses	6	%	6	%
Recreational vehicles	0	%	0	%
Terrain type	Grade		Grade	
Grade	3.50	%	3.00	%
Segment length	0.60	mi	0.70	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.0		1.5	
Recreational vehicles PCE, ER	3.0		3.0	
Heavy vehicle adjustment, fHV	0.943		0.971	
Flow rate, vp	1600	pcphpl	0	pcphpl

 RESULTS

Direction	1		2	
Flow rate, vp	1600	pcphpl	0	pcphpl
Free-flow speed, FFS	57.5	mph	60.0	mph
Avg. passenger-car travel speed, S	56.8	mph	60.0	mph
Level of service, LOS	D		A	
Density, D	28.2	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

 OPERATIONAL ANALYSIS

Analyst: BA
 Agency/Co: Parsons
 Date: 8/18/02
 Analysis Period: 11 AM
 Highway: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Project ID: REVERSIBLE LANE OPERATION - 2 WB Lanes

 FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	2.0	ft	2.0	ft
Left edge	6.0	ft	2.0	ft
Total lateral clearance	8.0	ft	4.0	ft
Access points per mile	0		0	
Median type	Undivided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.9	mph	1.8	mph
Median type adjustment, FM	1.6	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	57.5	mph	60.0	mph

 VOLUME

Direction	1		2	
Volume, V	3160	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	878		0	
Trucks and buses	6	%	6	%
Recreational vehicles	0	%	0	%
Terrain type	Grade		Grade	
Grade	3.50	%	3.00	%
Segment length	0.60	mi	0.70	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.0		1.5	
Recreational vehicles PCE, ER	3.0		3.0	
Heavy vehicle adjustment, fHV	0.943		0.971	
Flow rate, vp	1860	pcphpl	0	pcphpl

 RESULTS

Direction	1		2	
Flow rate, vp	1860	pcphpl	0	pcphpl
Free-flow speed, FFS	57.5	mph	60.0	mph
Avg. passenger-car travel speed, S	55.4	mph	60.0	mph
Level of service, LOS	D		A	
Density, D	33.6	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

 OPERATIONAL ANALYSIS

Analyst: BA
 Agency/Co: Parsons
 Date: 8/18/02
 Analysis Period: 12 PM
 Highway: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Project ID: REVERSIBLE LANE OPERATION - 2 WB Lanes

 FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	2.0	ft	2.0	ft
Left edge	6.0	ft	2.0	ft
Total lateral clearance	8.0	ft	4.0	ft
Access points per mile	0		0	
Median type	Undivided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.9	mph	1.8	mph
Median type adjustment, FM	1.6	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	57.5	mph	60.0	mph

 VOLUME

Direction	1		2	
Volume, V	3474	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	965		0	
Trucks and buses	6	%	6	%
Recreational vehicles	0	%	0	%
Terrain type	Grade		Grade	
Grade	3.50	%	3.00	%
Segment length	0.60	mi	0.70	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.0		1.5	
Recreational vehicles PCE, ER	3.0		3.0	
Heavy vehicle adjustment, fHV	0.943		0.971	
Flow rate, vp	2045	pcphpl	0	pcphpl

 RESULTS

Direction	1		2	
Flow rate, vp	2045	pcphpl	0	pcphpl
Free-flow speed, FFS	57.5	mph	60.0	mph
Avg. passenger-car travel speed, S	54.3	mph	60.0	mph
Level of service, LOS	E		A	
Density, D	37.7	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

 OPERATIONAL ANALYSIS

Analyst: BA
 Agency/Co: Parsons
 Date: 8/18/02
 Analysis Period: 1 PM
 Highway: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Project ID: REVERSIBLE LANE OPERATION - 2 WB Lanes

 FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	2.0	ft	2.0	ft
Left edge	6.0	ft	2.0	ft
Total lateral clearance	8.0	ft	4.0	ft
Access points per mile	0		0	
Median type	Undivided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.9	mph	1.8	mph
Median type adjustment, FM	1.6	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	57.5	mph	60.0	mph

 VOLUME

Direction	1		2	
Volume, V	3785	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	1051		0	
Trucks and buses	6	%	6	%
Recreational vehicles	0	%	0	%
Terrain type	Grade		Grade	
Grade	3.50	%	3.00	%
Segment length	0.60	mi	0.70	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.0		1.5	
Recreational vehicles PCE, ER	3.0		3.0	
Heavy vehicle adjustment, fHV	0.943		0.971	
Flow rate, vp	2228	pcphpl	0	pcphpl

 RESULTS

Direction	1		2	
Flow rate, vp	2228	pcphpl	0	pcphpl
Free-flow speed, FFS	57.5	mph	60.0	mph
Avg. passenger-car travel speed, S		mph	60.0	mph
Level of service, LOS	F		A	
Density, D		pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

 OPERATIONAL ANALYSIS

Analyst: BA
 Agency/Co: Parsons
 Date: 8/18/02
 Analysis Period: 2 PM
 Highway: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Project ID: REVERSIBLE LANE OPERATION - 2 WB Lanes

 FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	2.0	ft	2.0	ft
Left edge	6.0	ft	2.0	ft
Total lateral clearance	8.0	ft	4.0	ft
Access points per mile	0		0	
Median type	Undivided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.9	mph	1.8	mph
Median type adjustment, FM	1.6	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	57.5	mph	60.0	mph

 VOLUME

Direction	1		2	
Volume, V	3749	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	1041		0	
Trucks and buses	6	%	6	%
Recreational vehicles	0	%	0	%
Terrain type	Grade		Grade	
Grade	3.50	%	3.00	%
Segment length	0.60	mi	0.70	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.0		1.5	
Recreational vehicles PCE, ER	3.0		3.0	
Heavy vehicle adjustment, fHV	0.943		0.971	
Flow rate, vp	2207	pcphpl	0	pcphpl

 RESULTS

Direction	1		2	
Flow rate, vp	2207	pcphpl	0	pcphpl
Free-flow speed, FFS	57.5	mph	60.0	mph
Avg. passenger-car travel speed, S		mph	60.0	mph
Level of service, LOS	F		A	
Density, D		pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

 OPERATIONAL ANALYSIS

Analyst: BA
 Agency/Co: Parsons
 Date: 8/18/02
 Analysis Period: 3 PM
 Highway: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Project ID: REVERSIBLE LANE OPERATION - 2 WB Lanes

 FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	2.0	ft	2.0	ft
Left edge	6.0	ft	2.0	ft
Total lateral clearance	8.0	ft	4.0	ft
Access points per mile	0		0	
Median type	Undivided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.9	mph	1.8	mph
Median type adjustment, FM	1.6	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	57.5	mph	60.0	mph

 VOLUME

Direction	1		2	
Volume, V	4341	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	1206		0	
Trucks and buses	6	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Grade		Level	
Grade	3.50	%	3.00	%
Segment length	0.60	mi	0.70	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.0		1.5	
Recreational vehicles PCE, ER	3.0		1.2	
Heavy vehicle adjustment, fHV	0.943		1.000	
Flow rate, vp	2556	pcphpl	0	pcphpl

 RESULTS

Direction	1		2	
Flow rate, vp	2556	pcphpl	0	pcphpl
Free-flow speed, FFS	57.5	mph	60.0	mph
Avg. passenger-car travel speed, S		mph	60.0	mph
Level of service, LOS	F		A	
Density, D		pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

 OPERATIONAL ANALYSIS

Analyst: BA
 Agency/Co: Parsons
 Date: 8/18/02
 Analysis Period: 4 PM
 Highway: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Project ID: REVERSIBLE LANE OPERATION - 2 WB Lanes

 FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	2.0	ft	2.0	ft
Left edge	6.0	ft	2.0	ft
Total lateral clearance	8.0	ft	4.0	ft
Access points per mile	0		0	
Median type	Undivided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.9	mph	1.8	mph
Median type adjustment, FM	1.6	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	57.5	mph	60.0	mph

 VOLUME

Direction	1		2	
Volume, V	4107	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	1141		0	
Trucks and buses	6	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Grade		Level	
Grade	3.50	%	3.00	%
Segment length	0.60	mi	0.70	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.0		1.5	
Recreational vehicles PCE, ER	3.0		1.2	
Heavy vehicle adjustment, fHV	0.943		1.000	
Flow rate, vp	2418	pcphpl	0	pcphpl

 RESULTS

Direction	1		2	
Flow rate, vp	2418	pcphpl	0	pcphpl
Free-flow speed, FFS	57.5	mph	60.0	mph
Avg. passenger-car travel speed, S		mph	60.0	mph
Level of service, LOS	F		A	
Density, D		pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

 OPERATIONAL ANALYSIS

Analyst: BA
 Agency/Co: Parsons
 Date: 8/18/02
 Analysis Period: 5 PM
 Highway: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Project ID: REVERSIBLE LANE OPERATION - 2 WB Lanes

 FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	2.0	ft	2.0	ft
Left edge	6.0	ft	2.0	ft
Total lateral clearance	8.0	ft	4.0	ft
Access points per mile	0		0	
Median type	Undivided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.9	mph	1.8	mph
Median type adjustment, FM	1.6	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	57.5	mph	60.0	mph

 VOLUME

Direction	1		2	
Volume, V	3658	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	1016		0	
Trucks and buses	6	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Grade		Level	
Grade	3.50	%	3.00	%
Segment length	0.60	mi	0.70	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.0		1.5	
Recreational vehicles PCE, ER	3.0		1.2	
Heavy vehicle adjustment, fHV	0.943		1.000	
Flow rate, vp	2154	pcphpl	0	pcphpl

 RESULTS

Direction	1		2	
Flow rate, vp	2154	pcphpl	0	pcphpl
Free-flow speed, FFS	57.5	mph	60.0	mph
Avg. passenger-car travel speed, S		mph	60.0	mph
Level of service, LOS	F		A	
Density, D		pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

 OPERATIONAL ANALYSIS

Analyst: BA
 Agency/Co: Parsons
 Date: 8/18/02
 Analysis Period: 6 PM
 Highway: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Project ID: REVERSIBLE LANE OPERATION - 2 WB Lanes

 FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	2.0	ft	2.0	ft
Left edge	6.0	ft	2.0	ft
Total lateral clearance	8.0	ft	4.0	ft
Access points per mile	0		0	
Median type	Undivided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.9	mph	1.8	mph
Median type adjustment, FM	1.6	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	57.5	mph	60.0	mph

 VOLUME

Direction	1		2	
Volume, V	3475	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	965		0	
Trucks and buses	6	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Grade		Level	
Grade	3.50	%	3.00	%
Segment length	0.60	mi	0.70	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.0		1.5	
Recreational vehicles PCE, ER	3.0		1.2	
Heavy vehicle adjustment, fHV	0.943		1.000	
Flow rate, vp	2046	pcphpl	0	pcphpl

 RESULTS

Direction	1		2	
Flow rate, vp	2046	pcphpl	0	pcphpl
Free-flow speed, FFS	57.5	mph	60.0	mph
Avg. passenger-car travel speed, S	54.3	mph	60.0	mph
Level of service, LOS	E		A	
Density, D	37.7	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

 OPERATIONAL ANALYSIS

Analyst: BA
 Agency/Co:
 Date: 8/18/02
 Analysis Period: 7 AM
 Highway: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2001 SUMMER WEEKEND
 Project ID: REVERSIBLE LANE OPERATION

 FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	4.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	10.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Undivided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.4	mph	0.0	mph
Median type adjustment, FM	1.6	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	58.0	mph	60.0	mph

 VOLUME

Direction	1		2	
Volume, V	1019	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	283		0	
Trucks and buses	6	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Grade		Level	
Grade	3.00	%	0.00	%
Segment length	0.70	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	3.0		1.2	
Heavy vehicle adjustment, fHV	0.971		1.000	
Flow rate, vp	583	pcphpl	0	pcphpl

 RESULTS

Direction	1		2	
Flow rate, vp	583	pcphpl	0	pcphpl
Free-flow speed, FFS	58.0	mph	60.0	mph
Avg. passenger-car travel speed, S	58.0	mph	60.0	mph
Level of service, LOS	A		A	
Density, D	10.1	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

 OPERATIONAL ANALYSIS

Analyst: BA
 Agency/Co: Parsons
 Date: 8/18/02
 Analysis Period: 8 PM
 Highway: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Project ID: REVERSIBLE LANE OPERATION - 2 WB Lanes

 FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	2.0	ft	2.0	ft
Left edge	6.0	ft	2.0	ft
Total lateral clearance	8.0	ft	4.0	ft
Access points per mile	0		0	
Median type	Undivided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.9	mph	1.8	mph
Median type adjustment, FM	1.6	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	57.5	mph	60.0	mph

 VOLUME

Direction	1		2	
Volume, V	2520	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	700		0	
Trucks and buses	6	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Grade		Level	
Grade	3.50	%	3.00	%
Segment length	0.60	mi	0.70	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.0		1.5	
Recreational vehicles PCE, ER	3.0		1.2	
Heavy vehicle adjustment, fHV	0.943		1.000	
Flow rate, vp	1484	pcphpl	0	pcphpl

 RESULTS

Direction	1		2	
Flow rate, vp	1484	pcphpl	0	pcphpl
Free-flow speed, FFS	57.5	mph	60.0	mph
Avg. passenger-car travel speed, S	57.3	mph	60.0	mph
Level of service, LOS	C		A	
Density, D	25.9	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

 OPERATIONAL ANALYSIS

Analyst: BA
 Agency/Co: Parsons
 Date: 8/18/02
 Analysis Period: 9 PM
 Highway: BAY BRIDGE WESTBOUND SPAN
 From/To:
 Jurisdiction:
 Analysis Year: 2025 SUMMER WEEKEND
 Project ID: REVERSIBLE LANE OPERATION - 2 WB Lanes

 FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	2.0	ft	2.0	ft
Left edge	6.0	ft	2.0	ft
Total lateral clearance	8.0	ft	4.0	ft
Access points per mile	0		0	
Median type	Undivided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.9	mph	1.8	mph
Median type adjustment, FM	1.6	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	57.5	mph	60.0	mph

 VOLUME

Direction	1		2	
Volume, V	2104	vph	0	vph
Peak-hour factor, PHF	0.90		0.90	
Peak 15-minute volume, v15	584		0	
Trucks and buses	6	%	0	%
Recreational vehicles	0	%	0	%
Terrain type	Grade		Level	
Grade	3.50	%	3.00	%
Segment length	0.60	mi	0.70	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	2.0		1.5	
Recreational vehicles PCE, ER	3.0		1.2	
Heavy vehicle adjustment, fHV	0.943		1.000	
Flow rate, vp	1239	pcphpl	0	pcphpl

 RESULTS

Direction	1		2	
Flow rate, vp	1239	pcphpl	0	pcphpl
Free-flow speed, FFS	57.5	mph	60.0	mph
Avg. passenger-car travel speed, S	57.5	mph	60.0	mph
Level of service, LOS	C		A	
Density, D	21.5	pc/mi/ln	0.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

Bay Bridge
2025 Summer Weekend Day
Reversible Lane Operation
Eastbound Analysis
(2 Lanes, 80 Percent Traffic)

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 10 AM
 Freeway/Direction: BAY BRIDGE EASTBOUND
 From/To:
 Jurisdiction: Anne Arundel County
 Analysis Year: 2025
 Description: REVERSIBLE OPERATION 2 LANES 80% EB TRAFFIC

Flow Inputs and Adjustments

Volume, V	3223	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	895	v
Trucks and buses	10	%
Recreational vehicles	4	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	4.00	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	1.5	
Heavy vehicle adjustment, fHV	0.893	
Driver population factor, vp	1.00	
Flow rate, vp	2005	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2005	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	56.5	mi/h
Number of lanes, N	2	
Density, D	35.5	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 11 AM
 Freeway/Direction: BAY BRIDGE EASTBOUND
 From/To:
 Jurisdiction: Anne Arundel County
 Analysis Year: 2025
 Description: REVERSIBLE OPERATION 2 LANES 80% EB TRAFFIC

Flow Inputs and Adjustments

Volume, V	3617	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1005	v
Trucks and buses	10	%
Recreational vehicles	4	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	4.00	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	1.5	
Heavy vehicle adjustment, fHV	0.893	
Driver population factor, vp	1.00	
Flow rate, vp	2251	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2251	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	51.6	mi/h
Number of lanes, N	2	
Density, D	43.6	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

 Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 12 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND
 From/To:
 Jurisdiction: Anne Arundel County
 Analysis Year: 2025
 Description: REVERSIBLE OPERATION 2 LANES 80% EB TRAFFIC

 Flow Inputs and Adjustments

Volume, V	3827	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1063	v
Trucks and buses	10	%
Recreational vehicles	4	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	4.00	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	1.5	
Heavy vehicle adjustment, fHV	0.893	
Driver population factor, vp	1.00	
Flow rate, vp	2381	pc/h/ln

 Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

 LOS and Performance Measures

Flow rate, vp	2381	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S		mi/h
Number of lanes, N	2	
Density, D		pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 1 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND
 From/To:
 Jurisdiction: Anne Arundel County
 Analysis Year: 2025
 Description: REVERSIBLE OPERATION 2 LANES 80% EB TRAFFIC

Flow Inputs and Adjustments

Volume, V	3951	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1098	v
Trucks and buses	10	%
Recreational vehicles	4	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	4.00	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	1.5	
Heavy vehicle adjustment, fHV	0.893	
Driver population factor, vp	1.00	
Flow rate, vp	2458	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2458	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S		mi/h
Number of lanes, N	2	
Density, D		pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 2 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND
 From/To:
 Jurisdiction: Anne Arundel County
 Analysis Year: 2025
 Description: REVERSIBLE OPERATION 2 LANES 80% EB TRAFFIC

Flow Inputs and Adjustments

Volume, V	4370	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1214	v
Trucks and buses	10	%
Recreational vehicles	4	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	4.00	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	1.5	
Heavy vehicle adjustment, fHV	0.893	
Driver population factor, vp	1.00	
Flow rate, vp	2719	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2719	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S		mi/h
Number of lanes, N	2	
Density, D		pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 3 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND
 From/To:
 Jurisdiction: Anne Arundel County
 Analysis Year: 2025
 Description: REVERSIBLE OPERATION 2 LANES 80% EB TRAFFIC

Flow Inputs and Adjustments

Volume, V	4610	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1281	v
Trucks and buses	10	%
Recreational vehicles	4	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	4.00	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	1.5	
Heavy vehicle adjustment, fHV	0.893	
Driver population factor, vp	1.00	
Flow rate, vp	2868	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2868	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S		mi/h
Number of lanes, N	2	
Density, D		pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 4 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND
 From/To:
 Jurisdiction: Anne Arundel County
 Analysis Year: 2025
 Description: REVERSIBLE OPERATION 2 LANES 80% EB TRAFFIC

Flow Inputs and Adjustments

Volume, V	4562	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1267	v
Trucks and buses	10	%
Recreational vehicles	4	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	4.00	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	1.5	
Heavy vehicle adjustment, fHV	0.893	
Driver population factor, vp	1.00	
Flow rate, vp	2839	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2839	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S		mi/h
Number of lanes, N	2	
Density, D		pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 5 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND
 From/To:
 Jurisdiction: Anne Arundel County
 Analysis Year: 2025
 Description: REVERSIBLE OPERATION 2 LANES 80% EB TRAFFIC

Flow Inputs and Adjustments

Volume, V	4607	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1280	v
Trucks and buses	10	%
Recreational vehicles	4	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	4.00	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	1.5	
Heavy vehicle adjustment, fHV	0.893	
Driver population factor, vp	1.00	
Flow rate, vp	2867	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2867	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S		mi/h
Number of lanes, N	2	
Density, D		pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 6 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND
 From/To:
 Jurisdiction: Anne Arundel County
 Analysis Year: 2025
 Description: REVERSIBLE OPERATION 2 LANES 80% EB TRAFFIC

Flow Inputs and Adjustments

Volume, V	3614	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1004	v
Trucks and buses	10	%
Recreational vehicles	4	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	4.00	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	1.5	
Heavy vehicle adjustment, fHV	0.893	
Driver population factor, vp	1.00	
Flow rate, vp	2249	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2249	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	51.6	mi/h
Number of lanes, N	2	
Density, D	43.6	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 7 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND
 From/To:
 Jurisdiction: Anne Arundel County
 Analysis Year: 2025
 Description: REVERSIBLE OPERATION 2 LANES 80% EB TRAFFIC

Flow Inputs and Adjustments

Volume, V	3317	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	921	v
Trucks and buses	10	%
Recreational vehicles	4	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	4.00	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	1.5	
Heavy vehicle adjustment, fHV	0.893	
Driver population factor, vp	1.00	
Flow rate, vp	2064	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2064	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	55.7	mi/h
Number of lanes, N	2	
Density, D	37.1	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 8 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND
 From/To:
 Jurisdiction: Anne Arundel County
 Analysis Year: 2025
 Description: REVERSIBLE OPERATION 2 LANES 80% EB TRAFFIC

Flow Inputs and Adjustments

Volume, V	3186	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	885	v
Trucks and buses	10	%
Recreational vehicles	4	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	4.00	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	1.5	
Heavy vehicle adjustment, fHV	0.893	
Driver population factor, vp	1.00	
Flow rate, vp	1982	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	1982	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	56.7	mi/h
Number of lanes, N	2	
Density, D	34.9	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

Operational Analysis

Analyst: Bala Akundi
 Agency or Company: Parsons
 Date Performed: 8/13/02
 Analysis Time Period: 9 PM
 Freeway/Direction: BAY BRIDGE EASTBOUND
 From/To:
 Jurisdiction: Anne Arundel County
 Analysis Year: 2025
 Description: REVERSIBLE OPERATION 2 LANES 80% EB TRAFFIC

Flow Inputs and Adjustments

Volume, V	3238	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	899	v
Trucks and buses	10	%
Recreational vehicles	4	%
Terrain type:	Grade	
Grade	3.00	%
Segment length	4.00	mi
Trucks and buses PCE, ET	2.0	
Recreational vehicle PCE, ER	1.5	
Heavy vehicle adjustment, fHV	0.893	
Driver population factor, vp	1.00	
Flow rate, vp	2015	pc/h/ln

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-shoulder lateral clearance	2.0	ft
Interchange density	0.50	interchange/mi
Number of lanes, N	2	
Free-flow speed:	Ideal	
FFS or BFFS	65.0	mi/h
Lane width adjustment, fLW	0.0	mi/h
Lateral clearance adjustment, fLC	2.4	mi/h
Interchange density adjustment, fID	0.0	mi/h
Number of lanes adjustment, fN	4.5	mi/h
Free-flow speed, FFS	58.1	mi/h
	Urban Freeway	

LOS and Performance Measures

Flow rate, vp	2015	pc/h/ln
Free-flow speed, FFS	58.1	mi/h
Average passenger-car speed, S	56.4	mi/h
Number of lanes, N	2	
Density, D	35.8	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

