Appendix C

Traffic Data

Intersection 1 12th St/L St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn	6	4	73.3%	6.5	7.2	Α
NB	Through	3	2	80.0%	4.0	8.3	Α
	Right Turn						
	Subtotal	9	7	75.6%	7.0	7.2	Α
	Left Turn						
SB	Through	9	10	111.1%	7.3	6.6	Α
36	Right Turn	405	415	102.4%	4.7	0.7	Α
	Subtotal	414	425	102.6%	4.7	0.6	Α
	Left Turn						
EB	Through						
LB	Right Turn						
	Subtotal						
	Left Turn	12	14	116.7%	7.9	4.7	Α
WB	Through	686	711	103.6%	10.2	1.3	В
	Right Turn	142	140	98.3%	7.2	2.1	Α
	Subtotal	840	864	102.9%	9.7	1.3	Α
	Total	1,263	1,296	102.6%	8.0	0.8	Α

Intersection 2 11th St/L St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	n)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
IND	Right Turn						
	Subtotal						
	Left Turn						
SB	Through						
36	Right Turn	34	37	108.2%	6.5	2.4	Α
	Subtotal	34	37	108.2%	6.5	2.4	Α
	Left Turn						_
EB	Through						
LD	Right Turn						
	Subtotal						
WB	Left Turn						
	Through	1,097	1,137	103.7%	9.1	0.7	Α
	Right Turn						
	Subtotal	1,097	1,137	103.7%	9.1	0.7	Α
	Total	1,131	1,174	103.8%	9.0	0.7	Α

Unruh Building Renovation
Existing Conditions
AM Peak Hour

Intersection 3 10th St/L St Signal

		Demand	Served Vo	lume (vph)	Total	Total Delay (sec/veh)		
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS	
NB	Left Turn	264	236	89.4%	19.0	3.3	В	
	Through	633	634	100.2%	25.8	3.9	С	
IND	Right Turn							
	Subtotal	897	870	97.0%	24.2	3.3	С	
	Left Turn							
SB	Through							
ЭБ	Right Turn							
	Subtotal							
	Left Turn							
EB	Through							
LD	Right Turn							
	Subtotal							
	Left Turn							
WB	Through	840	874	104.1%	10.8	1.4	В	
	Right Turn	291	299	102.7%	18.3	3.1	В	
	Subtotal	1,131	1,173	103.7%	12.7	1.5	В	
	Total	2,028	2,044	100.8%	17.6	1.8	В	

Intersection 4 9th/L St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	n)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
IND	Right Turn						
	Subtotal						
	Left Turn						
SB	Through	186	171	92.0%	9.0	1.1	Α
30	Right Turn	96	96	99.6%	6.4	2.8	Α
	Subtotal	282	267	94.6%	8.1	1.3	Α
	Left Turn						
EB	Through						
LB	Right Turn						
	Subtotal						
	Left Turn	265	270	102.0%	4.4	1.0	Α
WB	Through	739	746	100.9%	5.3	0.6	Α
	Right Turn						
	Subtotal	1,004	1,016	101.2%	5.1	0.5	Α
	Total	1,286	1,283	99.8%	5.7	0.5	Α

Unruh Building Renovation
Existing Conditions
AM Peak Hour

Intersection 5 8th St/L St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	n)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	169	159	94.0%	5.6	1.0	A
	Through	391	378	96.7%	10.9	1.3	В
	Right Turn						
	Subtotal	560	537	95.9%	9.3	1.0	Α
	Left Turn						
SB	Through						
36	Right Turn						
	Subtotal						
	Left Turn						
EB	Through						
LD	Right Turn						
	Subtotal						
WB	Left Turn						
	Through	584	579	99.2%	5.5	0.3	Α
	Right Turn	129	136	105.7%	6.5	1.2	Α
	Subtotal	713	716	100.4%	5.7	0.4	Α
	Total	1,273	1,252	98.4%	7.2	0.5	Α

Intersection 6 8th St/Capitol Mall Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	n)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn	72	66	91.7%	21.0	4.4	С
ND	Through	319	285	89.3%	22.2	2.1	С
NB	Right Turn	27	32	118.5%	7.9	2.2	Α
	Subtotal	418	383	91.6%	20.8	1.8	С
	Left Turn						
SB	Through						
36	Right Turn						
	Subtotal						
	Left Turn	206	194	94.4%	27.3	2.3	С
EB	Through	217	210	97.0%	24.4	1.6	С
LD	Right Turn						
	Subtotal	423	405	95.7%	25.8	1.5	С
	Left Turn						
WB	Through	74	76	103.2%	18.7	4.4	В
VVB	Right Turn	13	11	83.1%	3.5	1.6	Α
	Subtotal	87	87	100.2%	16.7	3.7	В
	Total	928	875	94.3%	22.7	1.1	С

Unruh Building Renovation
Existing Conditions
AM Peak Hour

Intersection 7

9th St/Capitol Mall

Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/ve	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
IND	Right Turn						
	Subtotal						
	Left Turn	33	28	83.6%	4.2	2.9	Α
SB	Through	348	346	99.4%	4.9	0.7	Α
30	Right Turn	52	52	99.2%	2.6	1.1	Α
	Subtotal	433	425	98.2%	4.6	0.7	Α
	Left Turn						
EB	Through	114	107	93.7%	11.0	2.4	В
ED	Right Turn	130	124	95.1%	6.1	0.8	Α
	Subtotal	244	230	94.4%	8.4	1.1	Α
	Left Turn	21	21	101.0%	10.2	6.9	В
WB	Through	35	30	85.7%	15.6	4.1	В
	Right Turn						
	Subtotal	56	51	91.4%	13.5	4.3	В
	Total	733	707	96.4%	6.5	0.7	Α

Intersection 8

10th St/Capitol Mall

Side-street Stop

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	ո)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn	43	38	89.3%	2.4	0.5	Α
NB	Through	786	773	98.3%	1.6	0.7	Α
IND	Right Turn						
	Subtotal	829	811	97.9%	1.7	0.7	Α
	Left Turn						
SB	Through						
36	Right Turn						
	Subtotal						
	Left Turn	127	120	94.8%	23.9	32.8	С
EB	Through						
LD	Right Turn						
	Subtotal	127	120	94.8%	23.9	32.8	С
	Left Turn						_
WB	Through						
	Right Turn						
	Subtotal						
	Total	956	932	97.4%	4.8	5.5	Α

Unruh Building Renovation
Existing Conditions
AM Peak Hour

Intersection 9 8th St/N St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB	Through	372	352	94.5%	13.1	1.9	В
IND	Right Turn	56	63	112.1%	5.6	1.9	Α
	Subtotal	428	414	96.8%	12.0	1.7	В
	Left Turn						
SB	Through						
36	Right Turn						
	Subtotal						
	Left Turn	46	51	111.3%	7.2	2.0	Α
EB	Through	361	376	104.2%	6.9	0.7	Α
LD	Right Turn						
	Subtotal	407	427	105.0%	6.9	0.7	Α
	Left Turn						_
WB	Through						
	Right Turn						
	Subtotal						
	Total	835	842	100.8%	9.4	0.9	Α

Intersection 10 9th St/N St Signal

		Demand	Served Vo	lume (vph)	Total	Total Delay (sec/veh)		
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS	
NB	Left Turn							
	Through							
IND	Right Turn							
	Subtotal							
	Left Turn	189	187	99.0%	7.8	1.6	Α	
SB	Through	310	304	97.9%	10.8	0.8	В	
36	Right Turn							
	Subtotal	499	491	98.4%	9.6	0.7	Α	
	Left Turn							
EB	Through	366	374	102.3%	6.9	0.8	Α	
LD	Right Turn	51	60	118.4%	5.3	1.1	Α	
	Subtotal	417	435	104.3%	6.6	0.7	Α	
	Left Turn							
WB	Through							
VVB	Right Turn							
	Subtotal							
	Total	916	926	101.0%	8.2	0.2	Α	

Intersection 11 10th St/N St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB	Through	772	752	97.5%	8.5	1.5	Α
IND	Right Turn	97	105	108.5%	5.7	1.6	Α
	Subtotal	869	858	98.7%	8.2	1.4	Α
	Left Turn						
CD	Through						
SB	Right Turn						
	Subtotal						
	Left Turn	57	59	103.9%	5.7	1.7	Α
EB	Through	498	504	101.3%	5.3	0.4	Α
ED	Right Turn						
	Subtotal	555	564	101.5%	5.3	0.3	Α
	Left Turn						
WB	Through						
	Right Turn						
	Subtotal						
	Total	1,424	1,421	99.8%	7.1	0.9	А

Intersection 12 9th St/P St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	n)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
IND	Right Turn						
	Subtotal						
	Left Turn						
SB	Through	299	308	103.1%	13.5	1.0	В
30	Right Turn	109	108	99.4%	10.5	2.1	В
	Subtotal	408	417	102.2%	12.7	1.2	В
	Left Turn						
EB	Through						
LB	Right Turn						
	Subtotal						
	Left Turn	96	92	96.3%	4.2	0.8	Α
WB	Through	604	602	99.7%	5.6	1.2	Α
	Right Turn						
	Subtotal	700	695	99.3%	5.4	1.1	Α
	Total	1,108	1,112	100.3%	8.1	0.7	Α

Unruh Building Renovation
Existing Conditions
AM Peak Hour

Intersection 13 10th St/P St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	n)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	151	145	95.9%	21.9	3.7	С
	Through	1,092	1,090	99.8%	21.6	2.7	С
	Right Turn						
	Subtotal	1,243	1,235	99.3%	21.6	2.8	С
	Left Turn						
SB	Through						
ЭБ	Right Turn						
	Subtotal						
	Left Turn						
EB	Through						
LD	Right Turn						
	Subtotal						
	Left Turn						
WB	Through	549	550	100.1%	8.1	1.6	Α
	Right Turn	126	127	100.6%	6.9	1.8	Α
	Subtotal	675	676	100.2%	7.9	1.5	Α
	Total	1,918	1,911	99.6%	16.8	2.0	В

Intersection 14 10th St/Q St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB	Through	879	881	100.2%	25.4	2.1	С
IND	Right Turn	97	102	104.7%	23.0	1.7	С
	Subtotal	976	982	100.7%	25.2	2.0	С
	Left Turn						
SB	Through						
36	Right Turn						
	Subtotal						
	Left Turn	364	343	94.2%	28.2	3.2	С
EB	Through	1,040	1,008	97.0%	29.4	2.4	С
LD	Right Turn						
	Subtotal	1,404	1,351	96.2%	29.1	2.6	С
	Left Turn						_
WB	Through						
	Right Turn						
	Subtotal						
	Total	2,380	2,334	98.1%	27.5	1.6	С

Unruh Building Renovation
Existing Conditions
AM Peak Hour

Intersection 15 9th St/Q St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	ո)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB	Through						
	Right Turn						
	Subtotal						
	Left Turn	116	106	91.7%	6.3	0.8	Α
SB	Through	279	296	106.1%	6.1	0.6	Α
ЭБ	Right Turn						
	Subtotal	395	402	101.9%	6.1	0.4	Α
	Left Turn						
EB	Through	1,288	1,254	97.4%	21.0	3.5	С
LD	Right Turn	125	124	99.5%	21.0	3.3	С
	Subtotal	1,413	1,379	97.6%	21.0	3.4	С
	Left Turn						
WB	Through						
WB	Right Turn						
	Subtotal						
	Total	1,808	1,781	98.5%	17.6	2.7	В

Intersection 16 3rd St/Q St Signal

		Demand	Served Volume (vph)		Total Delay (sec/veh)		
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB	Through						
IND	Right Turn						
	Subtotal						
	Left Turn	160	161	100.8%	26.3	3.9	С
SB	Through	206	199	96.7%	29.8	3.6	С
36	Right Turn						
	Subtotal	366	360	98.5%	28.3	3.4	С
	Left Turn						
EB	Through	2,550	2,512	98.5%	8.8	0.7	Α
LB	Right Turn	329	326	99.2%	11.0	1.2	В
	Subtotal	2,879	2,838	98.6%	9.1	0.7	Α
	Left Turn						
WB	Through						
VVB	Right Turn						
	Subtotal						
	Total	3,245	3,199	98.6%	11.2	0.6	В

Unruh Building Renovation
Existing Conditions
AM Peak Hour

Intersection 17 11th St/W St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	า)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn	229	224	97.8%	31.6	5.8	С
NB	Through	154	154	100.3%	17.3	4.3	В
IND	Right Turn						
	Subtotal	383	378	98.8%	25.8	3.6	С
	Left Turn						
SB	Through	106	108	101.9%	18.0	4.0	В
ЭD	Right Turn	26	21	80.0%	7.5	4.4	Α
	Subtotal	132	129	97.6%	16.3	3.7	В
	Left Turn						
EB	Through						
ED	Right Turn						
	Subtotal						
	Left Turn	140	134	95.7%	10.0	1.6	В
WB	Through	1,405	1,409	100.3%	9.0	0.8	Α
	Right Turn	99	92	93.3%	4.9	1.4	Α
	Subtotal	1,644	1,636	99.5%	8.9	0.7	Α
	Total	2,159	2,143	99.2%	12.3	1.0	В

Intersection 18 3rd St/I-5-J St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/ve	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB	Through						
	Right Turn	75	69	92.3%	38.5	8.2	D
	Subtotal	75	69	92.3%	38.5	8.2	D
	Left Turn	73	69	94.8%	46.5	7.2	D
SB	Through	138	145	105.2%	47.1	6.7	D
ЗD	Right Turn						
	Subtotal	211	214	101.6%	46.7	5.5	D
	Left Turn	41	40	97.6%	29.6	6.7	С
EB	Through	994	1,016	102.2%	29.6	2.3	С
ED	Right Turn	149	150	100.7%	25.9	3.4	С
	Subtotal	1,184	1,206	101.8%	29.2	2.1	С
SE	Left Turn	1,307	1,311	100.3%	24.8	2.7	С
	Through						
	Right Turn	626	613	98.0%	33.7	6.2	С
	Subtotal	1,933	1,924	99.5%	27.6	2.9	С
	Total	3,403	3,413	100.3%	29.6	1.5	С

Unruh Building Renovation
Existing Conditions
AM Peak Hour

Intersection 19 9th St/J St Signal

	1	Demand	Served Vo	lume (vph)	Total Delay (sec/veh)		
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
EB	Through	1,236	1,219	98.6%	35.6	2.2	D
EB	Right Turn	126	122	97.1%	20.9	3.9	С
	Subtotal	1,362	1,341	98.5%	34.2	2.4	С
'	Left Turn	77	72	94.0%	8.4	3.9	Α
SB	Through	165	168	101.6%	9.2	2.4	Α
38	Right Turn						
	Subtotal	242	240	99.2%	9.1	2.3	Α
'	Left Turn						
SE	Through						
3E	Right Turn						
	Subtotal						
'	Left Turn						
WB	Through						
VVB	Right Turn						
	Subtotal						
	Total	1,604	1,581	98.6%	30.4	2.3	С

Intersection 20 10th St/J St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB	Through	233	236	101.3%	27.4	2.7	С
IND	Right Turn	128	121	94.4%	20.3	3.5	С
	Subtotal	361	357	98.8%	24.9	2.3	С
	Left Turn						
SB	Through						
36	Right Turn						
	Subtotal						
	Left Turn	188	177	94.3%	5.4	0.2	Α
EB	Through	1,125	1,113	99.0%	4.9	0.2	Α
LD	Right Turn						
	Subtotal	1,313	1,290	98.3%	4.9	0.2	Α
	Left Turn						_
WB	Through						
WB	Right Turn						
	Subtotal						
	Total	1,674	1,647	98.4%	9.3	0.6	Α

Unruh Building Renovation
Existing Conditions
PM Peak Hour

Intersection 1 12th St/L St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/ve	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
ND	Left Turn	17	16	91.8%	10.3	4.7	В
	Through	3	3	93.3%	1.3	2.1	Α
NB	Right Turn						
	Subtotal	20	18	92.0%	9.5	4.5	Α
	Left Turn						
SB	Through	5	4	72.0%	3.8	5.7	Α
ЭD	Right Turn	437	440	100.8%	5.0	0.4	Α
	Subtotal	442	444	100.5%	5.0	0.4	Α
	Left Turn						
EB	Through						
ED	Right Turn						
	Subtotal						
	Left Turn	2	2	120.0%	2.7	4.9	Α
WB	Through	743	764	102.8%	10.1	0.7	В
	Right Turn	77	76	99.2%	5.3	2.2	Α
	Subtotal	822	842	102.5%	9.7	0.8	Α
	Total	1,284	1,305	101.6%	8.1	0.6	А

Intersection 2 11th St/L St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/ve	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB	Through						
IND	Right Turn						
	Subtotal						
	Left Turn						
SB	Through						
30	Right Turn	313	308	98.5%	7.6	0.8	Α
	Subtotal	313	308	98.5%	7.6	0.8	Α
	Left Turn						
EB	Through						
LD	Right Turn						
	Subtotal						
	Left Turn						
WB	Through	1,197	1,214	101.4%	4.9	0.7	Α
	Right Turn						
	Subtotal	1,197	1,214	101.4%	4.9	0.7	Α
	Total	1,510	1,522	100.8%	5.5	0.6	Α

Unruh Building Renovation
Existing Conditions
PM Peak Hour

Intersection 3 10th St/L St Signal

		Demand	Served Vo	lume (vph)	Total	Total Delay (sec/veh)		
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS	
NB	Left Turn	187	177	94.5%	16.7	1.1	В	
	Through	392	370	94.3%	17.3	1.0	В	
IND	Right Turn							
	Subtotal	579	546	94.4%	17.1	0.8	В	
	Left Turn							
SB	Through							
36	Right Turn							
	Subtotal							
	Left Turn							
EB	Through							
LD	Right Turn							
	Subtotal							
	Left Turn							
WB	Through	1,285	1,291	100.5%	11.5	0.7	В	
	Right Turn	225	223	99.2%	8.8	1.8	Α	
	Subtotal	1,510	1,514	100.3%	11.1	0.8	В	
	Total	2,089	2,060	98.6%	12.7	0.8	В	

Intersection 4 9th/L St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/ve	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB	Through						
IND	Right Turn						
	Subtotal						
	Left Turn						
SB	Through	334	332	99.5%	20.7	12.1	С
36	Right Turn	92	98	107.0%	16.3	9.6	В
	Subtotal	426	431	101.1%	19.7	11.4	В
	Left Turn						_
EB	Through						
LD	Right Turn						
	Subtotal						
	Left Turn	542	530	97.8%	21.3	2.4	С
WB	Through	965	966	100.1%	20.8	4.3	С
VVB	Right Turn						
	Subtotal	1,507	1,496	99.2%	21.0	3.6	С
	Total	1,933	1,926	99.7%	20.7	5.2	С

Unruh Building Renovation
Existing Conditions
PM Peak Hour

Intersection 5 8th St/L St Signal

		Demand	Served Vo	lume (vph)	Total	otal Delay (sec/veh)		
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS	
	Left Turn	147	121	82.4%	19.8	8.7	В	
ND	Through	355	358	100.7%	8.6	2.0	Α	
NB	Right Turn							
	Subtotal	502	479	95.4%	11.3	2.1	В	
	Left Turn							
SB	Through							
ЭБ	Right Turn							
	Subtotal							
	Left Turn							
EB	Through							
ED	Right Turn							
	Subtotal							
	Left Turn							
WB	Through	1,099	1,084	98.6%	29.0	10.4	С	
VVB	Right Turn	122	110	90.5%	26.2	11.4	С	
	Subtotal	1,221	1,194	97.8%	28.7	10.3	С	
	Total	1,723	1,673	97.1%	23.8	7.9	С	

Intersection 6 8th St/Capitol Mall Signal

		Demand	Served Vo	lume (vph)	Total	Total Delay (sec/veh)		
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS	
	Left Turn	50	46	92.8%	22.9	4.2	С	
NB	Through	228	200	87.5%	21.8	2.5	С	
INB	Right Turn	17	20	115.3%	8.0	6.3	Α	
	Subtotal	295	266	90.0%	21.0	1.6	С	
	Left Turn							
SB	Through							
30	Right Turn							
	Subtotal							
	Left Turn	147	153	103.9%	27.0	3.1	С	
EB	Through	227	219	96.4%	21.9	3.0	С	
LD	Right Turn							
	Subtotal	374	372	99.4%	24.0	2.6	С	
	Left Turn							
WB	Through	233	221	94.9%	21.9	3.1	С	
	Right Turn	25	24	97.6%	3.3	1.0	Α	
	Subtotal	258	246	95.2%	20.1	3.3	С	
	Total	927	883	95.2%	22.1	1.6	С	

Unruh Building Renovation
Existing Conditions
PM Peak Hour

Intersection 7

9th St/Capitol Mall

Signal

		Demand	Served Vo	lume (vph)	Total	h)	
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
'	Left Turn						
NB	Through						
ND	Right Turn						
	Subtotal						
	Left Turn	18	18	97.8%	9.8	4.0	А
SB	Through	717	710	99.1%	9.5	0.9	Α
36	Right Turn	141	138	97.9%	6.5	1.2	Α
	Subtotal	876	866	98.9%	9.0	0.8	Α
	Left Turn						
EB	Through	75	63	83.7%	12.3	2.3	В
LD	Right Turn	169	163	96.3%	9.7	2.3	Α
	Subtotal	244	226	92.5%	10.5	1.6	В
	Left Turn	33	35	105.5%	12.9	5.7	В
WB	Through	117	99	84.8%	14.9	3.9	В
VVD	Right Turn						
	Subtotal	150	134	89.3%	14.6	4.0	В
	Total	1,270	1,226	96.5%	10.0	0.9	А

Intersection 8

10th St/Capitol Mall

Side-street Stop

		Demand	Served Vo	lume (vph)	Total Delay (sec/veh)		
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn	128	116	90.9%	1.1	0.3	Α
NB	Through	504	486	96.5%	1.0	0.1	Α
IND	Right Turn						
	Subtotal	632	603	95.4%	1.1	0.1	Α
	Left Turn						_
SB	Through						
36	Right Turn						
	Subtotal						
	Left Turn	75	62	82.1%	5.4	2.7	Α
EB	Through						
LB	Right Turn						
	Subtotal	75	62	82.1%	5.4	2.7	Α
	Left Turn						
WB	Through						
	Right Turn						
	Subtotal						
	Total	707	664	94.0%	1.4	0.3	Α

Unruh Building Renovation
Existing Conditions
PM Peak Hour

Intersection 9 8th St/N St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/ve	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	234	211	90.3%	7.2	1.7	Α
	Right Turn	62	67	107.7%	3.9	0.8	Α
	Subtotal	296	278	93.9%	6.4	1.2	Α
	Left Turn						
SB	Through						
36	Right Turn						
	Subtotal						
	Left Turn	61	62	102.3%	12.3	2.7	В
EB	Through	458	446	97.5%	14.9	0.5	В
LB	Right Turn						
	Subtotal	519	509	98.0%	14.6	0.5	В
	Left Turn						
WB	Through						
	Right Turn						
	Subtotal						
	Total	815	787	96.5%	11.7	0.4	В

Intersection 10 9th St/N St Signal

	1	Demand	Served Vo	lume (vph)	Total	Delay (sec/ve	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB	Through						
IND	Right Turn						
	Subtotal						
	Left Turn	231	226	97.7%	11.9	1.0	В
SB	Through	703	694	98.7%	14.3	1.0	В
36	Right Turn						
	Subtotal	934	920	98.5%	13.7	0.8	В
	Left Turn						
EB	Through	441	436	99.0%	4.1	0.7	Α
LD	Right Turn	79	74	94.2%	3.0	0.6	Α
	Subtotal	520	511	98.2%	3.9	0.5	Α
	Left Turn						
WB	Through						
	Right Turn						
	Subtotal						
	Total	1,454	1,430	98.4%	10.2	0.6	В

Unruh Building Renovation
Existing Conditions
PM Peak Hour

Intersection 11 10th St/N St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB	Through	573	555	96.8%	5.3	0.7	Α
	Right Turn	136	135	99.1%	3.9	0.5	Α
	Subtotal	709	690	97.3%	5.0	0.6	Α
	Left Turn						
SB	Through						
36	Right Turn						
	Subtotal						
	Left Turn	59	50	84.7%	7.2	2.2	Α
EB	Through	613	614	100.2%	7.2	0.9	Α
ED	Right Turn						
	Subtotal	672	664	98.9%	7.2	0.9	Α
	Left Turn						
WB	Through						
VVD	Right Turn						
	Subtotal						
	Total	1,381	1,354	98.0%	6.1	0.5	А

Intersection 12 9th St/P St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/ve	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB	Through						
IND	Right Turn						
	Subtotal						
	Left Turn						
SB	Through	858	834	97.2%	19.1	2.1	В
36	Right Turn	185	184	99.7%	20.5	4.3	С
	Subtotal	1,043	1,018	97.6%	19.4	2.5	В
	Left Turn						
EB	Through						
LD	Right Turn						
	Subtotal						
	Left Turn	214	221	103.2%	17.1	6.4	В
WB	Through	999	944	94.5%	19.3	6.3	В
	Right Turn						
	Subtotal	1,213	1,164	96.0%	18.8	6.3	В
	Total	2,256	2,182	96.7%	19.1	4.3	В

Unruh Building Renovation
Existing Conditions
PM Peak Hour

Intersection 13 10th St/P St Signal

		Demand	Served Vo	lume (vph)	Total Delay (sec/veh)		
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn	137	130	95.2%	20.3	1.3	С
NB	Through	470	454	96.6%	19.5	1.2	В
IND	Right Turn						
	Subtotal	607	584	96.3%	19.7	1.1	В
	Left Turn						
SB	Through						
36	Right Turn						
	Subtotal						
	Left Turn						
EB	Through						
ED	Right Turn						
	Subtotal						
	Left Turn						
WB	Through	1,076	1,031	95.8%	17.7	7.5	В
	Right Turn	107	110	102.4%	14.4	8.0	В
	Subtotal	1,183	1,141	96.4%	17.4	7.6	В
	Total	1,790	1,725	96.4%	18.2	5.2	В

Intersection 14 10th St/Q St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/ve	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						•
	Through	485	473	97.5%	13.9	0.6	В
	Right Turn	54	54	100.0%	9.0	1.8	Α
	Subtotal	539	527	97.7%	13.4	0.6	В
	Left Turn						
SB	Through						
36	Right Turn						
	Subtotal						
	Left Turn	122	118	96.7%	14.6	1.5	В
EB	Through	816	828	101.5%	19.4	0.6	В
LB	Right Turn						
	Subtotal	938	946	100.9%	18.8	0.6	В
	Left Turn						
WB	Through						
WB	Right Turn						
	Subtotal						
	Total	1,477	1,473	99.7%	16.9	0.5	В

Unruh Building Renovation
Existing Conditions
PM Peak Hour

Intersection 15 9th St/Q St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/ve	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
IND	Right Turn						
	Subtotal						
	Left Turn	114	112	97.9%	9.3	1.8	Α
SB	Through	958	941	98.2%	10.4	1.5	В
36	Right Turn						
	Subtotal	1,072	1,053	98.2%	10.3	1.5	В
	Left Turn						
EB	Through	824	830	100.7%	5.9	1.0	Α
LD	Right Turn	212	208	98.1%	7.9	2.3	Α
	Subtotal	1,036	1,038	100.2%	6.3	1.1	Α
	Left Turn						
WB	Through						
	Right Turn						
	Subtotal						
	Total	2,108	2,091	99.2%	8.3	0.9	Α

Intersection 16 3rd St/Q St Signal

		Demand	Served Vo	lume (vph)	Total	Total Delay (sec/veh)		
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS	
	Left Turn							
NB	Through							
IND	Right Turn							
	Subtotal							
	Left Turn	198	204	103.2%	18.7	1.6	В	
SB	Through	467	467	100.0%	21.4	1.1	С	
36	Right Turn							
	Subtotal	665	672	101.0%	20.5	1.0	С	
	Left Turn							
EB	Through	736	755	102.6%	6.4	0.6	Α	
LB	Right Turn	87	93	107.1%	4.6	1.0	Α	
	Subtotal	823	848	103.1%	6.2	0.6	Α	
	Left Turn							
WB	Through							
VVB	Right Turn							
	Subtotal							
Total		1,488	1,520	102.2%	12.6	0.7	В	

Unruh Building Renovation
Existing Conditions
PM Peak Hour

Intersection 17 11th St/W St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/ve	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn	140	130	92.6%	25.8	7.3	С
NB	Through	136	137	100.6%	10.0	2.2	В
IND	Right Turn						
	Subtotal	276	266	96.5%	17.8	5.0	В
	Left Turn						
SB	Through	340	334	98.1%	16.8	4.2	В
36	Right Turn	109	106	97.6%	13.2	5.2	В
	Subtotal	449	440	98.0%	15.9	4.0	В
	Left Turn						_
EB	Through						
LB	Right Turn						
	Subtotal						
	Left Turn	256	262	102.2%	17.0	1.0	В
WB	Through	1,313	1,313	100.0%	15.3	1.1	В
VVD	Right Turn	55	56	102.5%	8.5	3.3	Α
	Subtotal	1,624	1,631	100.4%	15.3	1.0	В
	Total	2,349	2,338	99.5%	15.8	1.4	В

Intersection 18 3rd St/I-5-J St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB	Through						
IND	Right Turn	154	150	97.7%	14.7	2.5	В
	Subtotal	154	150	97.7%	14.7	2.5	В
	Left Turn	170	177	104.0%	19.1	2.0	В
SB	Through	344	368	106.9%	20.2	1.8	С
ЭБ	Right Turn						
	Subtotal	514	544	105.9%	19.8	1.5	В
	Left Turn	25	25	99.2%	21.7	6.6	С
EB	Through	161	172	107.1%	20.9	3.4	С
LD	Right Turn	29	28	96.6%	16.3	8.2	В
	Subtotal	215	225	104.7%	20.7	3.2	С
	Left Turn	667	672	100.7%	17.1	1.8	В
SE	Through						
JE	Right Turn	321	318	99.1%	18.5	2.6	В
	Subtotal	988	990	100.2%	17.5	1.8	В
	Total	1,871	1,910	102.1%	18.3	1.2	В

Unruh Building Renovation
Existing Conditions
PM Peak Hour

Intersection 19 9th St/J St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
EB	Through	873	874	100.2%	20.7	0.6	С
ED	Right Turn	151	149	98.5%	10.9	1.5	В
	Subtotal	1,024	1,023	99.9%	19.3	0.7	В
	Left Turn	74	75	101.1%	8.3	2.8	Α
SB	Through	295	307	104.0%	9.6	1.3	Α
36	Right Turn						
	Subtotal	369	382	103.4%	9.3	1.4	Α
	Left Turn						
SE	Through						
3E	Right Turn						
	Subtotal						
	Left Turn						
WB	Through						
VVD	Right Turn						
	Subtotal						
	Total	1,393	1,405	100.8%	16.6	0.7	В

Intersection 20 10th St/J St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/ve	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB	Through	364	369	101.3%	17.8	0.6	В
IND	Right Turn	124	116	93.5%	14.3	1.4	В
	Subtotal	488	485	99.3%	17.0	0.8	В
	Left Turn						
SB	Through						
36	Right Turn						
	Subtotal						
	Left Turn	128	133	103.8%	20.1	1.5	С
EB	Through	819	828	101.1%	21.3	0.6	С
LD	Right Turn						
	Subtotal	947	961	101.5%	21.1	0.7	С
	Left Turn						
WB	Through						
VVD	Right Turn						
	Subtotal						
	Total	1,435	1,446	100.7%	19.7	0.5	В

Unruh Building Renovation Existing Conditions AM Peak Hour Signal

Intersection 16 3rd St/Q St

		Storage	Average (Queue (ft)	95th Qւ	ueue (ft)	Maximum	Queue (ft)		k Time
Direction	Lane Group	(ft)	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
	Through	325	225	22	325	67	325	68	0%	1%
	Through/Right	325	225	26	325	34	325	42	0%	1%
ЕВ										
	Left/Through	375	125	6	175	25	175	32	0%	0%
	Through	375	75	13	125	27	125	28	0%	0%
SB										
0										
0										

Unruh Building Renovation Existing Conditions AM Peak Hour

Signal

Intersection 18 3rd St/I-5-J St

		Storage	Average	Queue (ft)	95th Qu	ueue (ft)	Maximum	Queue (ft)	Bloc	k Time
Direction	Lane Group	(ft)	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
	Left/Through	1,375	275	21	350	28	325	29	0%	0%
	Through	1,375	225	25	325	29	300	32	0%	0%
EB	Through/Right	325	175	25	250	44	250	53	0%	0%
LD										
	Right Turn	775	50	14	100	23	100	24	0%	0%
	Rigiit Tuffi	773	30	14	100	23	100	24	070	076
NB										
	Left Turn	1,350	50	15	125	35	125	36	0%	0%
	Left/Through	350	125	19	200	28	200	22	39%	0%
SB	Through	75	75	16	125	13	100	1	2%	0%
	Left Turns	725	225	16	325	31	300	30	0%	0%
	Left Turn	725	225	31	300	51	275	53	0%	0%
	Shared	725	325	40	475	87	475	126	0%	0%
SE									.,,	-,-

SimTraffic Post-Processor Average Results from 10 Runs Queue Length Unruh Building Renovation Existing Conditions AM Peak Hour

Intersection 240 I-5 NB Off-Ramp/I-5 SB Off-Ramp & Q St

		Storage Average Queue (ft)			ueue (ft)		Queue (ft)		k Time	
Direction	Lane Group	(ft)	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
	Right Turn	1,800	25	7	25	26	25	29	0%	0%
NB										
	Left Turn									
SB										
0										
0										

Notes:

Intersection 240 is the upstream node to Intersection 16. Therefore, any queue at Intersection 240 was added to the queue at Intersection 16.

Unruh Building Renovation Existing Conditions AM Peak Hour

Intersection 253

US 50 WB Off-Ramp & W St

		Storage	Average (Queue (ft)	95th Qu	ueue (ft)	Maximum	Queue (ft)	Block Time	
Direction	Lane Group	(ft)	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
	Through									
NW										
0										
0										
0										

Unruh Building Renovation Existing Conditions PM Peak Hour Signal

Intersection 16 3rd St/Q St

		Storage	Average	Queue (ft)	95th Qı	ueue (ft)	Maximum	Queue (ft)	Bloc	k Time
Direction	Lane Group	(ft)	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
	Through	325	75	10	100	17	100	21	0%	0%
	Through/Right	325	75	7	100	17	100	22	0%	0%
EB										
	Left/Through	375	125	11	175	15	175	17	0%	0%
	Through	375	125	15	150	14	150	14	0%	0%
SB										
0.5										
0										
0										

Signal

Intersection 18 3rd St/I-5-J St

Left Turn

Shared

SE

Storage Average Queue (ft) 95th Queue (ft) Maximum Queue (ft) Block Time Direction Lane Group (ft) Average Std. Dev. Average Std. Dev. Average Std. Dev. Pocket Upstream Left/Through 1,200 75 11 125 17 100 19 0% 0% 25 Through 1,200 8 50 21 75 26 0% 0% Through/Right 325 25 12 75 24 75 23 0% 0% ЕВ 75 13 17 17 Right Turn 825 100 100 0% 0% NB Left Turn 1,325 75 13 125 31 125 45 0% 0% Left/Through 325 150 18 225 225 28% 27 36 0% 0 Through 75 75 13 125 13 100 2% 0% SB 725 125 15 0% 0% Left Turns 7 175 175 16

175

200

24

38

150

200

20

40

0%

0%

0%

0%

12

21

100

125

725

725

Unruh Building Renovation Existing Conditions PM Peak Hour

Intersection 240 I-5 NB Off-Ramp/I-5 SB Off-Ramp & Q St

		Storage Average Queue (ft)		95th Qu	ueue (ft)	Maximum	Queue (ft)	Block Time		
Direction	Lane Group	(ft)	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
	Right Turn									
NB										
	Left Turn									
	Left ruiii									
SB										
35										
0										
0										

Notes:

Intersection 240 is the upstream node to Intersection 16. Therefore, any queue at Intersection 240 was added to the queue at Intersection 16.

SimTraffic Post-Processor Average Results from 10 Runs Queue Length

Intersection 253

US 50 WB Off-Ramp & W St

Unruh Building Renovation Existing Conditions

PM Peak Hour

95th Queue (ft) verage Std. Dev. Average Queue (ft) Average Std. Dev. Maximum Queue (ft) Average Std. Dev. Storage Block Time Direction Lane Group (ft) Average Pocket Upstream Through NW 0 0 0

Intersection 1 12th St/L St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn	6	5	80.0%	3.8	4.8	Α
NB	Through	3	2	80.0%	1.7	4.2	Α
IND	Right Turn						
	Subtotal	9	7	80.0%	4.3	4.8	Α
	Left Turn						
SB	Through	9	12	133.3%	10.0	6.7	В
36	Right Turn	412	412	100.1%	4.4	0.4	Α
	Subtotal	421	424	100.8%	4.5	0.5	Α
	Left Turn						
EB	Through						
LB	Right Turn						
	Subtotal						
	Left Turn	12	12	100.0%	13.7	6.3	В
WB	Through	687	692	100.8%	9.8	0.6	Α
VVD	Right Turn	142	146	102.5%	7.5	2.0	Α
	Subtotal	841	850	101.1%	9.4	0.7	Α
	Total	1,271	1,282	100.8%	7.8	0.5	А

Intersection 2 11th St/L St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	า)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB	Through						
IND	Right Turn						
	Subtotal						
	Left Turn						
SB	Through						
ЭБ	Right Turn	35	30	84.6%	5.5	1.8	Α
	Subtotal	35	30	84.6%	5.5	1.8	Α
	Left Turn						
EB	Through						
LD	Right Turn						
	Subtotal						
	Left Turn						
WB	Through	1,105	1,112	100.6%	8.7	0.6	Α
VVD	Right Turn						
	Subtotal	1,105	1,112	100.6%	8.7	0.6	Α
	Total	1,140	1,142	100.1%	8.6	0.6	Α

Intersection 3 10th St/L St Signal

		Demand	Served Vo	Served Volume (vph) Total Delay (sec/veh)			n)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn	264	276	104.4%	20.0	4.7	В
NB	Through	638	612	95.9%	25.4	4.8	С
IND	Right Turn						
	Subtotal	902	887	98.4%	23.7	4.6	С
	Left Turn						
SB	Through						
ЭБ	Right Turn						
	Subtotal						
	Left Turn						
EB	Through						
LB	Right Turn						
	Subtotal						
	Left Turn						_
WB	Through	841	859	102.1%	11.2	1.2	В
VVB	Right Turn	299	283	94.7%	19.7	5.1	В
	Subtotal	1,140	1,142	100.2%	13.3	2.0	В
	Total	2,042	2,029	99.4%	17.9	3.0	В

Intersection 4 9th/L St Signal

		Demand	Served Vo	Served Volume (vph) Total Delay (sec/		Delay (sec/ve	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB	Through						
IND	Right Turn						
	Subtotal						
	Left Turn						
SB	Through	186	184	99.1%	10.2	2.3	В
36	Right Turn	96	97	101.3%	6.9	1.4	Α
	Subtotal	282	282	99.9%	9.1	1.8	Α
	Left Turn						
EB	Through						
LD	Right Turn						
	Subtotal						
	Left Turn	266	278	104.5%	4.2	0.6	Α
WB	Through	739	748	101.3%	5.4	0.5	Α
VVD	Right Turn						
	Subtotal	1,005	1,026	102.1%	5.0	0.4	Α
	Total	1,287	1,308	101.6%	5.9	0.6	Α

Unruh Building Renovation
Existing Plus Project Conditions
AM Peak Hour

Intersection 5 8th St/L St Signal

		Demand	Served Vo	Served Volume (vph) Total Delay (sec/ve			n)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn	169	198	117.2%	6.5	1.2	Α
NB	Through	391	401	102.5%	10.5	0.9	В
IND	Right Turn						
	Subtotal	560	599	106.9%	9.2	0.5	Α
	Left Turn						
SB	Through						
30	Right Turn						
	Subtotal						
	Left Turn						
EB	Through						
LD	Right Turn						
	Subtotal						
	Left Turn						_
WB	Through	584	606	103.7%	5.8	0.6	Α
VVB	Right Turn	129	135	104.8%	6.9	1.0	Α
	Subtotal	713	741	103.9%	6.0	0.6	Α
	Total	1,273	1,340	105.2%	7.4	0.5	Α

Intersection 6 8th St/Capitol Mall Signal

		Demand	Served Vo	lume (vph)	Total Delay (sec/veh)		
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn	72	60	82.8%	24.8	3.9	С
NB	Through	319	316	99.2%	23.6	3.5	С
IND	Right Turn	27	23	85.9%	8.5	8.0	Α
	Subtotal	418	399	95.5%	22.9	3.0	С
	Left Turn						
SB	Through						
30	Right Turn						
	Subtotal						
	Left Turn	206	220	107.0%	28.8	2.9	С
EB	Through	218	214	98.0%	25.3	2.8	С
LD	Right Turn						
	Subtotal	424	434	102.4%	27.2	1.8	С
	Left Turn						
WB	Through	74	82	110.3%	18.7	3.7	В
VVD	Right Turn	13	15	116.9%	3.8	2.2	Α
	Subtotal	87	97	111.3%	16.5	3.0	В
	Total	929	930	100.1%	24.3	1.5	С

Unruh Building Renovation
Existing Plus Project Conditions
AM Peak Hour

Intersection 7

9th St/Capitol Mall

Signal

		Demand	Served Volume (vph)		Total	Total Delay (sec/veh)		
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS	
	Left Turn							
NB	Through							
IND	Right Turn							
	Subtotal							
	Left Turn	33	34	103.0%	4.6	3.3	Α	
SB	Through	349	356	102.0%	5.0	0.8	Α	
30	Right Turn	52	52	99.2%	1.9	1.3	Α	
	Subtotal	434	442	101.8%	4.6	0.6	Α	
	Left Turn							
EB	Through	115	113	98.4%	12.4	2.1	В	
ED	Right Turn	130	116	88.9%	6.3	1.3	Α	
	Subtotal	245	229	93.4%	9.3	1.3	Α	
	Left Turn	21	18	85.7%	14.8	9.0	В	
WB	Through	35	44	124.6%	16.1	2.8	В	
WB	Right Turn							
	Subtotal	56	62	110.0%	15.7	2.7	В	
	Total	735	732	99.6%	7.0	0.8	Α	

Intersection 8

10th St/Capitol Mall

Side-street Stop

		Demand	Served Vo	lume (vph)	Total	Total Delay (sec/veh)		
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS	
	Left Turn	43	47	108.8%	2.3	0.4	А	
NB	Through	790	788	99.7%	2.0	1.0	Α	
IND	Right Turn							
	Subtotal	833	834	100.2%	2.0	0.9	Α	
	Left Turn							
SB	Through							
36	Right Turn							
	Subtotal							
	Left Turn	128	121	94.4%	16.3	15.5	С	
EB	Through							
LD	Right Turn							
	Subtotal	128	121	94.4%	16.3	15.5	С	
	Left Turn						_	
WB	Through							
VVD	Right Turn							
	Subtotal							
	Total	961	955	99.4%	3.6	2.0	Α	

Unruh Building Renovation
Existing Plus Project Conditions
AM Peak Hour

Intersection 9 8th St/N St Signal

		Demand	Served Volume (vph)		Total	Total Delay (sec/veh)		
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS	
	Left Turn							
NB	Through	372	382	102.6%	13.4	1.3	В	
IND	Right Turn	56	50	88.6%	4.3	1.3	Α	
	Subtotal	428	431	100.7%	12.3	1.2	В	
	Left Turn							
SB	Through							
36	Right Turn							
	Subtotal							
	Left Turn	46	48	104.3%	6.0	1.7	Α	
EB	Through	361	374	103.5%	7.1	1.3	Α	
LD	Right Turn							
	Subtotal	407	422	103.6%	7.0	1.3	Α	
	Left Turn							
WB	Through							
VVD	Right Turn							
	Subtotal							
	Total	835	853	102.1%	9.7	0.8	Α	

Intersection 10 9th St/N St Signal

	1	Demand	Served Volume (vph)		Total	Total Delay (sec/veh)		
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS	
	Left Turn							
NB	Through							
IND	Right Turn							
	Subtotal							
	Left Turn	189	188	99.3%	8.9	1.7	Α	
SB	Through	311	304	97.7%	11.5	1.0	В	
30	Right Turn							
	Subtotal	500	492	98.3%	10.5	0.9	В	
	Left Turn							
EB	Through	366	372	101.6%	6.4	1.1	Α	
LD	Right Turn	51	50	97.3%	5.3	1.6	Α	
	Subtotal	417	422	101.1%	6.3	1.0	Α	
	Left Turn							
WB	Through							
VVD	Right Turn							
	Subtotal							
	Total	917	913	99.6%	8.5	0.7	Α	

Unruh Building Renovation
Existing Plus Project Conditions
AM Peak Hour

Intersection 11 10th St/N St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	n)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB SB EB	Through	776	770	99.3%	8.7	1.6	Α
	Right Turn	97	90	92.4%	5.9	1.4	Α
	Subtotal	873	860	98.5%	8.4	1.5	Α
	Left Turn						
SB	Through						
36	Right Turn						
	Subtotal						
	Left Turn	57	61	106.7%	4.9	1.7	Α
ED	Through	498	498	100.1%	5.1	0.9	Α
LD	Right Turn						
	Subtotal	555	559	100.8%	5.1	0.9	Α
	Left Turn						
WB	Through						
	Right Turn						
	Subtotal						
	Total	1,428	1,419	99.4%	7.1	1.0	Α

Intersection 12 9th St/P St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/ve	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
	Left Turn						
SB	Through	300	300	99.9%	13.2	1.1	В
36	Right Turn	109	107	98.0%	11.0	2.1	В
	Subtotal	409	406	99.4%	12.6	1.1	В
	Left Turn						_
EB	Through						
LD	Right Turn						
	Subtotal						
	Left Turn	96	91	95.0%	4.1	1.0	Α
WB	Through	604	619	102.5%	5.6	0.7	Α
	Right Turn						
	Subtotal	700	710	101.4%	5.4	0.7	Α
	Total	1,109	1,116	100.7%	8.1	0.6	Α

Unruh Building Renovation
Existing Plus Project Conditions
AM Peak Hour

Intersection 13 10th St/P St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	ո)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn	151	147	97.5%	20.5	2.7	С
NB	Through	1,096	1,079	98.4%	21.7	2.3	С
	Right Turn						
	Subtotal	1,247	1,226	98.3%	21.6	2.3	С
	Left Turn						
SB	Through						
36	Right Turn						
	Subtotal						
	Left Turn						
EB	Through						
LD	Right Turn						
	Subtotal						
WB	Left Turn						
	Through	549	562	102.4%	7.7	0.7	Α
	Right Turn	126	128	101.6%	8.0	1.4	Α
	Subtotal	675	690	102.3%	7.8	0.7	Α
	Total	1,922	1,916	99.7%	16.6	1.6	В

Intersection 14 10th St/Q St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB	Through	883	880	99.7%	24.5	1.4	С
IND	Right Turn	97	102	105.2%	22.8	2.6	С
	Subtotal	980	982	100.2%	24.3	1.5	С
	Left Turn						
CD	Through						
36	Right Turn						
	Subtotal						
SB EB	Left Turn	364	350	96.3%	26.7	2.6	С
	Through	1,040	1,003	96.4%	28.2	2.5	С
	Right Turn						
	Subtotal	1,404	1,353	96.4%	27.8	2.5	С
	Left Turn						_
WB	Through						
VVB	Right Turn						
	Subtotal						
	Total	2,384	2,335	98.0%	26.4	1.7	С

Unruh Building Renovation
Existing Plus Project Conditions
AM Peak Hour

Intersection 15 9th St/Q St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/ve	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB	Through						
IND	Right Turn						
	Subtotal						
	Left Turn	116	110	95.2%	6.6	0.9	Α
SB	Through	280	279	99.7%	6.2	0.8	Α
ЭD	Right Turn						
	Subtotal	396	390	98.4%	6.3	0.8	Α
	Left Turn						
EB	Through	1,288	1,243	96.5%	20.1	3.2	С
LD	Right Turn	125	128	102.7%	21.6	4.6	С
	Subtotal	1,413	1,372	97.1%	20.2	3.3	С
	Left Turn						
WB	Through						
	Right Turn						
	Subtotal						
	Total	1,809	1,761	97.4%	17.2	2.7	В

Intersection 16 3rd St/Q St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/ve	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB	Through						
	Right Turn						
	Subtotal						
	Left Turn	160	154	96.5%	30.5	7.8	С
SB	Through	206	207	100.6%	30.0	3.8	С
36	Right Turn						
	Subtotal	366	362	98.8%	30.2	5.1	С
	Left Turn						_
EB	Through	2,550	2,561	100.4%	8.7	0.6	Α
LD	Right Turn	329	316	96.2%	9.9	1.2	Α
	Subtotal	2,879	2,878	100.0%	8.9	0.6	Α
	Left Turn						_
WB	Through						
WB	Right Turn						
	Subtotal						
	Total	3,245	3,239	99.8%	11.3	1.2	В

Unruh Building Renovation
Existing Plus Project Conditions
AM Peak Hour

Intersection 17 11th St/W St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	ո)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn	229	244	106.7%	30.0	4.6	С
NB	Through	154	140	90.9%	16.8	2.1	В
IND	Right Turn						
	Subtotal	383	384	100.4%	25.2	3.4	С
SB	Left Turn						
	Through	106	98	92.8%	17.7	2.6	В
ЭБ	Right Turn	26	22	86.2%	11.2	3.4	В
	Subtotal	132	121	91.5%	16.6	2.9	В
	Left Turn						
EB	Through						
LD	Right Turn						
	Subtotal						
	Left Turn	140	151	107.7%	9.8	1.6	Α
WB	Through	1,409	1,402	99.5%	9.1	0.4	Α
	Right Turn	99	104	105.1%	4.4	1.4	Α
	Subtotal	1,648	1,657	100.6%	8.8	0.4	Α
	Total	2,163	2,162	100.0%	12.2	0.8	В

Intersection 18 3rd St/I-5-J St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/ve	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn	75	69	91.7%	38.4	8.3	D
	Subtotal	75	69	91.7%	38.4	8.3	D
	Left Turn	73	70	95.9%	46.9	7.5	D
SB	Through	138	144	104.3%	46.2	6.3	D
ЭD	Right Turn						
	Subtotal	211	214	101.4%	46.1	5.1	D
	Left Turn	41	40	97.6%	28.9	6.6	С
EB	Through	994	1,009	101.5%	29.9	2.0	С
EB	Right Turn	149	153	102.6%	25.8	3.4	С
	Subtotal	1,184	1,202	101.5%	29.4	1.9	С
SE	Left Turn	1,311	1,284	97.9%	24.5	2.5	С
	Through						
	Right Turn	626	611	97.6%	33.0	6.6	С
	Subtotal	1,937	1,894	97.8%	27.2	3.0	С
	Total	3,407	3,379	99.2%	29.4	1.6	С

Unruh Building Renovation
Existing Plus Project Conditions
AM Peak Hour

Intersection 19 9th St/J St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/ve	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
ED	Through	1,240	1,267	102.2%	36.8	2.2	D
EB Left Turn Through 1,240 Right Turn 126 Subtotal 1,366 Left Turn 77 Through 165 Right Turn 242 Left Turn Through Right Turn Subtotal Left Turn Subtotal Left Turn Left Turn	126	131	103.8%	27.5	5.4	С	
	Right Turn	1,398	102.3%	35.9	2.4	D	
	Left Turn	77	75	97.7%	9.6	2.4	Α
CD	Through	165	170	102.8%	10.0	2.5	Α
38	Right Turn						
	Subtotal	242	245	101.2%	9.8	1.8	Α
	Left Turn						
CE	Through						
3L	Right Turn				27.5 5.4 35.9 2.4 9.6 2.4 10.0 2.5		
	Subtotal						
	Left Turn						
WB	Through						
VVD	Right Turn						
	Subtotal						
_	Total	1,608	1,642	102.1%	32.0	2.4	С

Intersection 20 10th St/J St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/ve	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB	Through	233	232	99.4%	28.5	3.8	С
IND	Right Turn	128	105	82.2%	21.9	2.8	С
	Subtotal	361	337	93.3%	26.5	3.4	С
	Left Turn						
SB	Through						
SD	Right Turn						
	Subtotal						
EB	Left Turn	188	192	101.9%	5.5	0.3	Α
	Through	1,129	1,149	101.8%	4.8	0.5	Α
LD	Right Turn						
	Subtotal	1,317	1,340	101.8%	4.9	0.5	Α
	Left Turn						
WB	Through						
VVB	Right Turn						
	Subtotal						
	Total	1,678	1,677	100.0%	9.3	0.9	А

Unruh Building Renovation
Existing Plus Project Conditions
PM Peak Hour

Intersection 1 12th St/L St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn	17	16	96.5%	6.1	3.7	А
NB	Through	3	4	133.3%	9.0	9.7	Α
IND	Right Turn						
	Subtotal	20	20	102.0%	7.4	3.9	Α
	Left Turn						
SB	Through	5	2	40.0%	3.5	5.9	Α
36	Right Turn	438	447	102.1%	4.8	0.7	Α
	Subtotal	443	449	101.4%	4.8	0.7	Α
	Left Turn						
EB	Through						
LD	Right Turn						
	Subtotal						
	Left Turn	2	1	40.0%	0.5	1.4	Α
WB	Through	743	744	100.1%	9.9	1.1	Α
WB	Right Turn	77	74	96.6%	5.1	1.5	Α
	Subtotal	822	819	99.6%	9.5	1.0	Α
	Total	1,285	1,288	100.3%	7.8	0.8	Α

Intersection 2 11th St/L St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	n)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
	Left Turn						
SB	Through						
30	Right Turn	327	328	100.3%	8.7	1.4	Α
	Subtotal	327	328	100.3%	8.7	1.4	Α
	Left Turn						
EB	Through						
LB	Right Turn						
	Subtotal						
WB	Left Turn						
	Through	1,198	1,212	101.1%	5.6	1.1	Α
	Right Turn						
	Subtotal	1,198	1,212	101.1%	5.6	1.1	Α
	Total	1,525	1,540	101.0%	6.2	1.1	Α

Unruh Building Renovation
Existing Plus Project Conditions
PM Peak Hour

Intersection 3 10th St/L St Signal

		Demand	Served Vo	lume (vph)	Total Delay (sec/veh)		
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn	187	177	94.5%	17.1	3.5	В
NB	Through	393	389	98.9%	17.6	1.7	В
IND	Right Turn						
	Subtotal	580	566	97.5%	17.5	2.0	В
	Left Turn						
SB	Through						
ЭD	Right Turn						
	Subtotal						
	Left Turn						
EB	Through						
LD	Right Turn						
	Subtotal						
	Left Turn						
WB	Through	1,295	1,296	100.0%	13.0	2.4	В
	Right Turn	230	233	101.2%	10.5	1.4	В
	Subtotal	1,525	1,528	100.2%	12.6	2.1	В
	Total	2,105	2,094	99.5%	13.9	1.9	В

Intersection 4 9th/L St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	ո)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
ND	Through						
NB	Right Turn						
	Subtotal						
	Left Turn						
SB	Through	334	320	95.9%	24.0	18.8	С
36	Right Turn	92	92	99.6%	21.8	19.8	С
	Subtotal	426	412	96.7%	23.5	19.0	С
	Left Turn						_
EB	Through						
LD	Right Turn						
	Subtotal						
	Left Turn	552	548	99.3%	24.2	5.6	С
WB	Through	965	962	99.7%	24.4	7.8	С
	Right Turn						
	Subtotal	1,517	1,510	99.6%	24.3	6.9	С
	Total	1,943	1,922	98.9%	24.1	9.2	С

Unruh Building Renovation
Existing Plus Project Conditions
PM Peak Hour

Intersection 5 8th St/L St Signal

		Demand	Served Vo	erved Volume (vph) Total Delay (sec/vel			n)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn	147	148	101.0%	19.7	12.4	В
NB	Through	355	368	103.7%	8.1	1.4	Α
IND	Right Turn						
	Subtotal	502	516	102.9%	11.4	3.5	В
	Left Turn						
SB	Through						
ЭБ	Right Turn						
	Subtotal						
	Left Turn						
EB	Through						
LD	Right Turn						
	Subtotal						
	Left Turn						
WB	Through	1,099	1,082	98.5%	32.0	15.0	С
	Right Turn	122	125	102.6%	28.6	14.3	С
	Subtotal	1,221	1,207	98.9%	31.6	15.0	С
	Total	1,723	1,724	100.0%	25.5	10.9	С

Intersection 6 8th St/Capitol Mall Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	n)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn	50	48	96.8%	22.1	4.4	С
NB	Through	228	227	99.6%	22.6	2.6	С
IND	Right Turn	17	14	82.4%	7.2	5.9	Α
	Subtotal	295	290	98.2%	21.8	2.4	С
	Left Turn						
SB	Through						
30	Right Turn						
	Subtotal						
	Left Turn	147	147	100.1%	25.1	2.6	С
EB	Through	227	232	102.4%	23.7	3.3	С
LD	Right Turn						
	Subtotal	374	380	101.5%	24.4	1.7	С
	Left Turn						
WB	Through	237	248	104.6%	24.3	3.1	С
	Right Turn	25	28	112.0%	3.8	0.9	Α
	Subtotal	262	276	105.3%	22.2	2.8	С
	Total	931	945	101.5%	23.0	1.2	С

Unruh Building Renovation
Existing Plus Project Conditions
PM Peak Hour

Intersection 7

9th St/Capitol Mall

Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/ve	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB	Through						
IND	Right Turn						
	Subtotal						
	Left Turn	18	14	77.8%	8.2	5.7	Α
SB	Through	723	716	99.1%	9.1	1.1	Α
30	Right Turn	145	137	94.6%	7.6	1.7	Α
	Subtotal	886	868	97.9%	8.8	1.1	Α
	Left Turn						
EB	Through	75	65	86.4%	10.5	3.8	В
ED	Right Turn	169	171	101.1%	9.4	0.8	Α
	Subtotal	244	236	96.6%	9.8	1.1	Α
	Left Turn	33	31	93.3%	14.2	8.7	В
WB	Through	117	127	108.7%	19.0	2.7	В
	Right Turn						
	Subtotal	150	158	105.3%	18.2	3.6	В
	Total	1,280	1,261	98.5%	10.2	1.0	В

Intersection 8

10th St/Capitol Mall

Side-street Stop

		Demand	mand Served Volume (vph) T			Гotal Delay (sec/veh)		
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS	
NB	Left Turn	128	131	102.2%	1.3	0.3	А	
	Through	505	506	100.2%	1.1	0.1	Α	
IND	Right Turn							
	Subtotal	633	637	100.6%	1.2	0.2	Α	
\ <u>-</u>	Left Turn							
SB	Through							
36	Right Turn							
	Subtotal							
	Left Turn	75	63	83.7%	6.7	2.3	Α	
EB	Through							
LB	Right Turn							
	Subtotal	75	63	83.7%	6.7	2.3	Α	
	Left Turn							
WB	Through							
	Right Turn							
	Subtotal							
	Total	708	700	98.8%	1.7	0.2	Α	

Unruh Building Renovation
Existing Plus Project Conditions
PM Peak Hour

Intersection 9 8th St/N St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	ո)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	234	234	99.8%	6.9	1.4	Α
	Right Turn	62	64	103.9%	3.8	1.3	Α
	Subtotal	296	298	100.7%	6.2	1.2	Α
	Left Turn						
SB	Through						
36	Right Turn						
	Subtotal						
	Left Turn	61	66	107.5%	13.8	2.4	В
EB	Through	458	464	101.3%	15.3	0.6	В
LD	Right Turn						
	Subtotal	519	530	102.0%	15.1	0.6	В
	Left Turn						_
WB	Through						
	Right Turn						
	Subtotal						
	Total	815	828	101.5%	11.9	0.8	В

Intersection 10 9th St/N St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/ve	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB	Through						
IND	Right Turn						
	Subtotal						
	Left Turn	233	237	101.8%	13.4	2.1	В
SB	Through	707	702	99.3%	14.8	1.5	В
36	Right Turn						
	Subtotal	940	940	100.0%	14.4	1.5	В
	Left Turn						_
EB	Through	441	452	102.6%	3.8	1.0	Α
LD	Right Turn	79	76	95.7%	3.6	1.2	Α
	Subtotal	520	528	101.5%	3.8	1.0	Α
	Left Turn						_
WB	Through						
	Right Turn						
	Subtotal						
	Total	1,460	1,468	100.5%	10.6	1.2	В

Unruh Building Renovation
Existing Plus Project Conditions
PM Peak Hour

Intersection 11 10th St/N St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	574	574	100.1%	5.6	0.6	Α
	Right Turn	136	141	103.8%	3.8	0.8	Α
	Subtotal	710	716	100.8%	5.2	0.5	Α
\ <u>-</u>	Left Turn						
SB	Through						
36	Right Turn						
	Subtotal						
\ <u>-</u>	Left Turn	59	61	103.1%	7.9	3.3	Α
EB	Through	615	634	103.1%	8.1	0.9	Α
LB	Right Turn						
	Subtotal	674	695	103.1%	8.1	1.1	Α
	Left Turn						
WB	Through						
	Right Turn						
	Subtotal						
	Total	1,384	1,410	101.9%	6.6	0.7	Α

Intersection 12 9th St/P St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	n)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB	Through						
IND	Right Turn						
	Subtotal						
	Left Turn						
SB	Through	861	849	98.6%	19.6	2.4	В
36	Right Turn	186	203	109.0%	22.1	3.6	С
	Subtotal	1,047	1,052	100.4%	20.1	2.5	С
	Left Turn						_
EB	Through						
LD	Right Turn						
	Subtotal						
	Left Turn	214	201	94.0%	22.7	8.9	С
WB	Through	999	994	99.5%	25.8	8.0	С
	Right Turn						
	Subtotal	1,213	1,195	98.5%	25.3	8.1	С
	Total	2,260	2,247	99.4%	22.9	4.7	С

Unruh Building Renovation
Existing Plus Project Conditions
PM Peak Hour

Intersection 13 10th St/P St Signal

		Demand	Served Vo	Served Volume (vph) Total Delay (so			n)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	137	126	92.0%	20.8	1.3	С
	Through	471	478	101.6%	19.7	1.3	В
IND	Right Turn						
	Subtotal	608	604	99.4%	19.9	1.3	В
	Left Turn						
SB	Through						
36	Right Turn						
	Subtotal						
	Left Turn						
EB	Through						
LD	Right Turn						
	Subtotal						
	Left Turn						_
WB	Through	1,076	1,072	99.7%	27.8	18.5	С
	Right Turn	107	103	96.4%	22.2	16.5	С
	Subtotal	1,183	1,176	99.4%	27.3	18.3	С
	Total	1,791	1,780	99.4%	24.8	11.9	С

Intersection 14 10th St/Q St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	486	498	102.6%	14.2	0.7	В
	Right Turn	54	52	96.3%	8.0	1.5	Α
	Subtotal	540	550	101.9%	13.6	0.7	В
	Left Turn						
SB	Through						
36	Right Turn						
	Subtotal						
	Left Turn	122	115	94.4%	16.1	1.6	В
EB	Through	816	813	99.7%	19.1	1.0	В
LD	Right Turn						
	Subtotal	938	928	99.0%	18.8	1.0	В
	Left Turn						_
WB	Through						
	Right Turn						
	Subtotal						
	Total	1,478	1,479	100.1%	16.8	0.8	В

Unruh Building Renovation
Existing Plus Project Conditions
PM Peak Hour

Intersection 15 9th St/Q St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	า)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB	Through						
IND	Right Turn						
	Subtotal						
	Left Turn	114	115	100.7%	8.3	1.4	Α
SB	Through	961	931	96.9%	9.6	1.3	Α
36	Right Turn						
	Subtotal	1,075	1,046	97.3%	9.4	1.3	Α
	Left Turn						
EB	Through	824	822	99.7%	5.7	1.5	Α
LD	Right Turn	212	209	98.7%	8.1	2.1	Α
	Subtotal	1,036	1,031	99.5%	6.2	1.5	Α
	Left Turn						
WB	Through						
VVD	Right Turn						
	Subtotal						
	Total	2,111	2,076	98.4%	7.8	1.0	Α

Intersection 16 3rd St/Q St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	n)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB	Through						
IND	Right Turn						
	Subtotal						
	Left Turn	198	199	100.6%	17.7	3.5	В
SB	Through	467	467	100.0%	21.3	1.0	С
36	Right Turn						
	Subtotal	665	666	100.2%	20.2	1.4	С
	Left Turn						
EB	Through	736	740	100.6%	6.6	0.4	Α
LD	Right Turn	87	87	99.8%	4.3	1.3	Α
	Subtotal	823	827	100.5%	6.3	0.4	Α
	Left Turn						
WB	Through						
VVD	Right Turn						
	Subtotal						
	Total	1,488	1,494	100.4%	12.5	0.9	В

Unruh Building Renovation
Existing Plus Project Conditions
PM Peak Hour

Intersection 17 11th St/W St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	n)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn	140	154	110.3%	28.6	7.7	С
NB	Through	136	139	102.1%	10.3	2.8	В
IND	Right Turn						
	Subtotal	276	293	106.2%	19.9	5.5	В
	Left Turn						
CD	Through	340	333	97.9%	16.3	4.3	В
SB	Right Turn	109	114	104.2%	14.0	3.2	В
	Subtotal	449	446	99.4%	15.7	3.9	В
	Left Turn						
EB	Through						
EB	Right Turn						
	Subtotal						
	Left Turn	256	269	105.0%	17.4	1.9	В
MD	Through	1,314	1,329	101.1%	14.5	1.1	В
WB	Right Turn	55	49	89.5%	8.3	2.9	Α
	Subtotal	1,625	1,647	101.3%	14.8	1.1	В
	Total	2,350	2,386	101.5%	15.6	1.3	В

Intersection 18 3rd St/I-5-J St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB	Through						
IND	Right Turn	154	141	91.4%	15.3	1.9	В
	Subtotal	154	141	91.4%	15.3	1.9	В
	Left Turn	170	164	96.7%	19.7	2.5	В
SB	Through	344	355	103.3%	20.2	1.9	С
36	Right Turn						
	Subtotal	514	520	101.1%	20.0	1.7	С
	Left Turn	25	28	113.6%	21.7	6.7	С
EB	Through	161	174	107.8%	21.4	3.2	С
LD	Right Turn	29	32	109.0%	18.4	5.2	В
	Subtotal	215	234	108.7%	21.1	3.0	С
	Left Turn	668	666	99.7%	17.0	1.5	В
SE	Through						
3L	Right Turn	321	328	102.3%	18.5	1.7	В
	Subtotal	989	994	100.5%	17.5	1.3	В
	Total		1,888	100.9%	18.5	1.1	В

Unruh Building Renovation
Existing Plus Project Conditions
PM Peak Hour

Intersection 19 9th St/J St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/ve	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
EB	Through	874	861	98.5%	20.8	0.8	С
ED	Right Turn	151	149	98.8%	10.3	1.6	В
	Subtotal	1,025	1,010	98.6%	19.3	0.8	В
'	Left Turn	74	74	100.0%	7.3	1.6	Α
SB	Through	295	294	99.7%	9.1	1.1	Α
38	Right Turn						
	Subtotal	369	368	99.7%	8.8	0.9	Α
'	Left Turn						
SE	Through						
3E	Right Turn						
	Subtotal						
'	Left Turn						
WB	Through						
VVB	Right Turn						
	Subtotal						
	Total	1,394	1,378	98.9%	16.5	0.7	В

Intersection 20 10th St/J St Signal

		Demand	Served Vo	lume (vph)	Total	Delay (sec/vel	h)
Direction	Movement	Volume (vph)	Average	Percent	Average	Std. Dev.	LOS
	Left Turn						
NB	Through	364	376	103.4%	18.1	0.8	В
IND	Right Turn	128	118	92.5%	13.7	1.9	В
	Subtotal	492	495	100.6%	17.0	0.6	В
	Left Turn						
SB	Through						
36	Right Turn						
	Subtotal						
	Left Turn	128	131	102.5%	20.9	1.1	С
EB	Through	820	810	98.7%	21.5	0.6	С
LD	Right Turn						
	Subtotal	948	941	99.2%	21.4	0.5	С
	Left Turn						_
WB	Through						
VVD	Right Turn						
	Subtotal						
	Total		1,436	99.7%	19.9	0.4	В

Unruh Building Renovation Existing Plus Project Conditions AM Peak Hour Signal

itersection	16	3rd	St/	Q	St

		Storage	Average	Queue (ft)	95th Qu	ueue (ft)	Maximum	Queue (ft)	Block	k Time
Direction	Lane Group	(ft)	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
	Through	325	225	19	300	45	300	43	0%	0%
	Through/Right	325	225	20	300	35	325	41	0%	1%
EB										
	Left/Through	375	125	25	175	38	175	45	0%	0%
	Through	375	75	22	125	44	125	44	0%	0%
SB										
0										
0										

Unruh Building Renovation Existing Plus Project Conditions AM Peak Hour

Intersection 18 3rd St/I-5-J St Signal

	·	Storage	Average	Queue (ft)	95th Qu	ueue (ft)	Maximum	Queue (ft)	Bloc	k Time
Direction	Lane Group	(ft)	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
	Left/Through	1,375	275	18	350	32	350	38	0%	0%
	Through	1,375	225	19	325	35	325	40	0%	0%
EB	Through/Right	325	175	15	250	37	250	46	0%	0%
EB										
	Right Turn	775	50	12	100	22	100	28	0%	0%
NB										
	Left Turn	1,350	50	13	100	31	100	38	0%	0%
	Left/Through	350	125	17	175	37	175	33	35%	0%
SB	Through	75	50	12	125	13	100	2	1%	0%
	Left Turns	725	225	14	300	26	300	30	0%	0%
	Left Turn	725	200	15	300	33	275	41	0%	0%
SE	Shared	725	325	51	450	86	425	88	0%	0%

SimTraffic Post-Processor Average Results from 10 Runs Queue Length Unruh Building Renovation Existing Plus Project Conditions AM Peak Hour

Intersection 240 I-5 NB Off-Ramp/I-5 SB Off-Ramp & Q St

		Storage	Average	Queue (ft)		ueue (ft)		Queue (ft)		k Time
Direction	Lane Group	(ft)	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
	Right Turn	1,800	25	3	25	12	25	22	0%	0%
NB										
	Left Turn									
	2010 1 01111									
SB										
0										
0										

Notes:

Intersection 240 is the upstream node to Intersection 16. Therefore, any queue at Intersection 240 was added to the queue at Intersection 16.

SimTraffic Post-Processor Average Results from 10 Runs Queue Length Unruh Building Renovation Existing Plus Project Conditions AM Peak Hour

Intersection 253

US 50 WB Off-Ramp & W St

0

		Storage	Average (Queue (ft)	95th Qı	ueue (ft)	Maximum	Queue (ft)	Bloc	k Time
Direction	Lane Group	(ft)	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
	Through									
NW										
0										
0										
0										

Unruh Building Renovation Existing Plus Project Conditions PM Peak Hour Signal

tersection 16	3rd St/Q St

		Storage	Storage Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
Direction	Lane Group	(ft)	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
	Through	325	75	7	100	19	125	29	0%	0%
	Through/Right	325	75	13	125	22	125	21	0%	0%
EB										
	Left/Through	375	125	8	175	13	175	13	0%	0%
	Through	375	125	16	150	20	150	15	0%	0%
SB										
0										
0										

Signal

Intersection 18 3rd St/I-5-J St

		Storage	ge Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
Direction	Lane Group	(ft)	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left/Through	1,200	75	13	125	18	125	20	0%	0%
	Through	1,200	25	8	50	19	75	27	0%	0%
	Through/Right	325	50	12	75	18	75	17	0%	0%
	Diaht Tour	025	75		100	1.4	100	16	00/	00/
	Right Turn	825	75	8	100	14	100	16	0%	0%
NB										
	Left Turn	1,325	75	9	125	30	125	45	0%	0%
	Left/Through	325	150	16	200	32	200	37	29%	0%
SB	Through	75	75	11	125	11	100	0	2%	0%
SE	Left Turns	725	125	7	175	13	175	17	0%	0%
	Left Turn	725	100	10	175	27	150	25	0%	0%
	Shared	725	125	21	200	38	200	44	0%	0%
JL										

SimTraffic Post-Processor Average Results from 10 Runs Queue Length Unruh Building Renovation Existing Plus Project Conditions PM Peak Hour

Intersection 240 I-5 NB Off-Ramp/I-5 SB Off-Ramp & Q St

		Storage	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
Direction	Lane Group	(ft)	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
	Through								#N/A	#N/A
0										
	Right Turn	1,800	25	0	25	0	25	0	0%	0%
		_,								
NB										
IND										
	Left Turn	375	25	0	25	0	25	0	0%	0%
	Leit Tulli	3/3	23	U	23	U	23	U	076	0/0
CD.										
SB										
0										

Notes:

Intersection 240 is the upstream node to Intersection 16. Therefore, any queue at Intersection 240 was added to the queue at Intersection 16.

SimTraffic Post-Processor Average Results from 10 Runs Queue Length Unruh Building Renovation Existing Plus Project Conditions PM Peak Hour

Intersection 253

US 50 WB Off-Ramp & W St

		Storage	Average Queue (ft)		95th Qu	ueue (ft)	Maximum Queue (ft)		Block Time	
Direction	Lane Group	(ft)	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
	Through									
NW										
0										
0										
0										