

Appendix A

Preliminary Site Plan



DP-01

**BIGLIERI
GROUP**

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Appendix B

Traffic Data and Volume Projections

CR10 / Larmer Line			Eastbound			Northbound			Westbound			Southbound			Volume Type
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
June	2023	AM	12	3	14	5	237	7	10	3	13	5	204	5	Registered Volumes
June	2023	PM	11	6	9	7	225	7	6	5	3	11	289	14	
June	2023	SAT	6	5	6	15	217	4	11	7	2	2	242	11	
Annual Growth Rate 2.00%															
	2023	AM	12	3	14	5	237	7	10	3	13	5	204	5	Existing Volumes (Projected)
	2023	PM	11	6	9	7	225	7	6	5	3	11	289	14	
	2023	SAT	6	5	6	15	217	4	11	7	2	2	242	11	Background Volumes (Projected)
	2026	AM	13	3	15	5	252	7	11	3	14	5	216	5	
	2026	PM	12	6	10	7	239	7	6	5	3	12	307	15	
	2026	SAT	6	5	6	16	230	4	12	7	2	2	257	12	Development "A" 50% Complete
	2026	AM	0	0	8	12	97	10	7	0	0	0	34	0	
	2026	PM	0	0	10	6	61	4	6	0	0	0	102	0	
	2026	SAT	0	0	9	8	89	6	6	0	0	0	95	0	Development "B" 100% Complete
	2026	AM	0	0	3	0	30	0	3	0	0	0	55	0	
	2026	PM	0	0	1	1	38	1	1	0	0	0	31	0	
	2026	SAT	0	0	1	3	41	1	2	0	0	0	48	0	Development "C" 50% Complete
	2026	AM	0	0	1	1	69	2	1	0	0	0	21	0	
	2026	PM	0	0	3	1	39	1	1	0	0	0	77	0	
	2026	SAT	0	0	1	3	52	1	3	0	0	0	69	0	Development "D" 0% Complete
	2026	AM	0	0	0	0	0	0	0	0	0	0	0	0	
	2026	PM	0	0	0	0	0	0	0	0	0	0	0	0	
	2026	SAT	0	0	0	0	0	0	0	0	0	0	0	0	Total Background Volumes 2026
	2026	AM	13	3	27	18	448	19	22	3	14	5	326	5	
	2026	PM	12	6	24	15	377	13	14	5	3	12	517	15	
	2026	SAT	6	5	17	30	412	12	23	7	2	2	469	12	Site Generated Trips Phase I
	2026	AM	0	0	4	5	99	5	2	0	0	0	40	0	
	2026	PM	0	0	3	4	101	4	2	0	0	0	74	0	
	2026	SAT	0	0	3	7	115	3	3	0	0	0	74	0	Total Trips 2026
	2026	AM	13	3	31	23	547	24	24	3	14	5	366	5	
	2026	PM	12	6	27	19	478	17	16	5	3	12	591	15	
	2026	SAT	6	5	20	37	527	15	26	7	2	2	543	12	
Annual Growth Rate 2.00%															
	2031	AM	14	4	16	6	278	8	12	4	15	6	239	6	Background Volumes (Projected)
	2031	PM	13	7	11	8	264	8	7	6	4	13	339	16	
	2031	SAT	7	6	7	18	254	5	13	8	2	2	284	13	
	2031	AM	0	0	17	25	194	20	14	0	0	0	68	0	Development "A" 100% Complete
	2031	PM	0	0	20	13	122	8	13	0	0	0	204	0	
	2031	SAT	0	0	19	17	178	12	12	0	0	0	191	0	
	2031	AM	0	0	3	0	30	0	3	0	0	0	55	0	Development "B" 100% Complete
	2031	PM	0	0	1	1	38	1	1	0	0	0	31	0	
	2031	SAT	0	0	1	3	41	1	2	0	0	0	48	0	
	2031	AM	0	0	3	3	139	4	2	0	0	0	43	0	Development "C" 100% Complete
	2031	PM	0	0	6	2	79	2	3	0	0	0	154	0	
	2031	SAT	0	0	3	7	104	2	6	0	0	0	139	0	
	2031	AM	19	1	0	0	19	1	5	5	0	0	106	106	Development "D" 50% Complete
	2031	PM	85	4	0	0	85	4	1	1	0	0	30	30	
	2031	SAT	4	0	0	0	3	0	0	0	0	0	4	4	
	2031	AM	33	5	39	34	660	33	36	9	15	6	511	112	Total Background Volumes 2031
	2031	PM	98	11	38	24	588	23	25	7	4	13	758	46	
	2031	SAT	11	6	30	45	580	20	33	8	2	2	666	17	
	2031	AM	0	0	5	62	194	11	5	0	0	0	79	0	Site Generated Trips Phase II
	2031	PM	0	0	23	23	262	10	3	0	0	0	108	0	
	2031	SAT	0	0	1	3	316	10	7	0	0	0	127	0	
	2031	AM	33	5	44	96	854	44	41	9	15	6	590	112	Total Trips 2031
	2031	PM	98	11	61	47	850	33	28	7	4	13	866	46	
	2031	SAT	11	6	31	48	896	30	40	8	2	2	793	17	
Annual Growth Rate 2.00%															
	2036	AM	16	4	18	6	307	9	13	4	17	6	264	6	Background Volumes (Projected)
	2036	PM	14	8	12	9	291	9	8	6	4	14	374	18	
	2036	SAT	8	6	8	19	281	5	14	9	3	3	313	14	
	2036	AM	0	0	17	25	194	20	14	0	0	0	68	0	Development "A" 100% Complete
	2036	PM	0	0	20	13	122	8	13	0	0	0	204	0	
	2036	SAT	0	0	19	17	178	12	12	0	0	0	191	0	
	2036	AM	0	0	3	0	30	0	3	0	0	0	55	0	Development "B" 100% Complete
	2036	PM	0	0	1	1	38	1	1	0	0	0	31	0	
	2036	SAT	0	0	1	3	41	1	2	0	0	0	48	0	
	2036	AM	0	0	3	3	139	4	2	0	0	0	43	0	Development "C" 100% Complete
	2036	PM	0	0	6	2	79	2	3	0	0	0	154	0	
	2036	SAT	0	0	3	7	104	2	6	0	0	0	139	0	
	2036	AM	38	2	0	0	38	2	11	11	0	0	213	213	Development "D" 100% Complete
	2036	PM	170	9	0	0	170	9	3	3	0	0	60	60	
	2036	SAT	8	0	0	0	7	1	0	0	0	0	8	8	
	2036	AM	54	6	41	34	708	35	43	15	17	6	643	219	Total Background Volumes 2036
	2036	PM	184	17	39	25	700	29	28	9	4	14	823	78	
	2036	SAT	16	6	31	46	611	21	34	9	3	3	699	22	
	2036	AM	0	0	5	62	194	11	5	0	0	0	79	0	Site Generated Trips Phase II
	2036	PM	0	0	23	23	262	10	3	0	0	0	108	0	
	2036	SAT	0	0	1	3	316	10	7	0	0	0	127	0	
	2036	AM	54	6	46	96	902	46	48	15	17	6	722	219	Total Trips 2036
	2036	PM	184	17	62	48	962	39	31	9	4	14	931	78	
	2036	SAT	16	6	32	49	927	31	41	9	3	3	826	22	

CR10 / Fallis Line			Eastbound			Northbound			Westbound			Southbound			Volume Type
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
June	2023	AM	41	0	78	74	209	0	0	0	0	0	190	16	Registered Volumes
June	2023	PM	32	0	55	61	207	0	0	0	0	0	272	49	
June	2023	SAT	24	0	38	35	198	0	0	0	0	0	155	45	
Annual Growth Rate 2.00%															
	2023	AM	41	0	78	74	209	0	0	0	0	0	190	16	Existing Volumes (Projected)
	2023	PM	32	0	55	61	207	0	0	0	0	0	272	49	
	2023	SAT	24	0	38	35	198	0	0	0	0	0	155	45	
	2026	AM	44	0	83	79	222	0	0	0	0	0	202	17	Background Volumes (Projected)
	2026	PM	34	0	58	65	220	0	0	0	0	0	289	52	
	2026	SAT	25	0	40	37	210	0	0	0	0	0	164	48	
	2026	AM	35	0	64	47	4	0	0	0	0	0	13	22	Development "A" 50% Complete
	2026	PM	17	0	30	43	14	0	0	0	0	0	8	28	
	2026	SAT	23	0	39	41	13	0	0	0	0	0	12	25	
	2026	AM	30	0	29	27	0	0	0	0	0	0	0	61	Development "B" 100% Complete
	2026	PM	40	0	17	21	0	0	0	0	0	0	0	33	
	2026	SAT	45	0	48	34	0	0	0	0	0	0	0	51	
	2026	AM	73	0	49	20	0	0	0	0	0	0	0	24	Development "C" 50% Complete
	2026	PM	41	0	43	55	0	0	0	0	0	0	0	81	
	2026	SAT	56	0	63	56	0	0	0	0	0	0	0	74	
	2026	AM	0	0	0	0	0	0	0	0	0	0	0	0	Development "D" 0% Complete
	2026	PM	0	0	0	0	0	0	0	0	0	0	0	0	
	2026	SAT	0	0	0	0	0	0	0	0	0	0	0	0	
	2026	AM	182	0	225	173	226	0	0	0	0	0	215	124	Total Background Volumes 2026
	2026	PM	132	0	148	184	234	0	0	0	0	0	297	194	
	2026	SAT	149	0	190	168	223	0	0	0	0	0	176	198	
	2026	AM	4	38	-33	0	29	35	44	39	67	47	0	0	Site Generated Trips Phase I
	2026	PM	10	41	-26	0	34	50	52	44	62	80	0	0	
	2026	SAT	6	52	-43	0	37	55	70	52	76	82	0	0	
	2026	AM	-10	25	-15	-10	-15	25	35	22	25	32	-20	-12	Pass-by Trips Phase I
	2026	PM	-11	22	-11	-11	-15	26	35	27	26	40	-24	-16	
	2026	SAT	-11	28	-17	-14	-18	32	39	39	29	47	-22	-25	
	2026	AM	176	63	177	163	240	60	79	61	92	79	195	112	Total Trips 2026
	2026	PM	131	63	111	173	253	76	87	71	88	120	273	178	
	2026	SAT	144	80	130	154	242	87	109	91	105	129	154	173	
Annual Growth Rate 2.00%															
	2031	AM	48	0	91	87	245	0	0	0	0	0	223	19	Background Volumes (Projected)
	2031	PM	37	0	64	71	243	0	0	0	0	0	319	57	
	2031	SAT	28	0	45	41	232	0	0	0	0	0	182	53	
	2031	AM	70	0	128	95	9	0	0	0	0	0	26	44	Development "A" 100% Complete
	2031	PM	35	0	60	86	28	0	0	0	0	0	16	56	
	2031	SAT	47	0	78	82	26	0	0	0	0	0	25	50	
	2031	AM	30	0	29	27	0	0	0	0	0	0	0	61	Development "B" 100% Complete
	2031	PM	40	0	17	21	0	0	0	0	0	0	0	33	
	2031	SAT	45	0	48	34	0	0	0	0	0	0	0	51	
	2031	AM	146	0	98	40	0	0	0	0	0	0	0	48	Development "C" 100% Complete
	2031	PM	83	0	87	111	0	0	0	0	0	0	0	163	
	2031	SAT	113	0	126	113	0	0	0	0	0	0	0	148	
	2031	AM	35	0	0	0	51	0	0	0	0	0	9	6	Development "D" 50% Complete
	2031	PM	10	0	0	0	14	0	0	0	0	0	41	27	
	2031	SAT	1	0	0	0	2	0	0	0	0	0	1	1	
	2031	AM	329	0	346	249	305	0	0	0	0	0	258	178	Total Background Volumes 2031
	2031	PM	205	0	228	289	285	0	0	0	0	0	376	336	
	2031	SAT	234	0	297	270	260	0	0	0	0	0	208	303	
	2031	AM	10	67	-61	0	106	63	64	56	122	92	0	0	Site Generated Trips Phase II
	2031	PM	24	62	-43	0	92	71	80	74	117	136	0	0	
	2031	SAT	20	94	-80	0	138	94	123	107	134	139	0	0	
	2031	AM	-16	32	-16	-12	-19	31	45	28	35	45	-29	-16	Pass-by Trips Phase II
	2031	PM	-9	21	-12	-12	-14	26	39	35	23	50	-27	-23	
	2031	SAT	-17	40	-23	-17	-20	37	46	48	37	54	-23	-31	
	2031	AM	323	99	269	237	392	94	109	84	157	137	229	162	Total Trips 2031
	2031	PM	220	83	173	277	363	97	119	109	140	186	349	313	
	2031	SAT	237	134	194	253	378	131	169	155	171	193	185	272	
Annual Growth Rate 2.00%															
	2036	AM	53	0	101	96	270	0	0	0	0	0	246	21	Background Volumes (Projected)
	2036	PM	41	0	71	79	268	0	0	0	0	0	352	63	
	2036	SAT	31	0	49	45	256	0	0	0	0	0	201	58	
	2036	AM	70	0	128	95	9	0	0	0	0	0	26	44	Development "A" 100% Complete
	2036	PM	35	0	60	86	28	0	0	0	0	0	16	56	
	2036	SAT	47	0	78	82	26	0	0	0	0	0	25	50	
	2036	AM	30	0	29	27	0	0	0	0	0	0	0	61	Development "B" 100% Complete
	2036	PM	40	0	17	21	0	0	0	0	0	0	0	33	
	2036	SAT	45	0	48	34	0	0	0	0	0	0	0	51	
	2036	AM	146	0	98	40	0	0	0	0	0	0	0	48	Development "C" 100% Complete
	2036	PM	83	0	87	111	0	0	0	0	0	0	0	163	
	2036	SAT	113	0	126	113	0	0	0	0	0	0	0	148	
	2036	AM	71	0	0	0	103	0	0	0	0	0	18	12	Development "D" 100% Complete
	2036	PM	20	0	0	0	29	0	0	0	0	0	83	55	
	2036	SAT	2	0	0	0	4	0	0	0	0	0	3	2	
	2036	AM	370	0	356	258	382	0	0	0	0	0	290	186	Total Background Volumes 2036
	2036	PM	219	0	235	297	325	0	0	0	0	0	451	370	
	2036	SAT	238	0	301	274	286	0	0	0	0	0	229	309	
	2036	AM	10	67	-61	0	106	63	64	56	122	92	0	0	Site Generated Trips Phase II
	2036	PM	24	62	-43	0	92	71	80	74	117	136	0	0	
	2036	SAT	20	94	-80	0	138	94	123	107	134	139	0	0	
	2036	AM	-16	32	-16	-12	-19	31	45	28	35	45	-29	-16	Pass-by Trips Phase II
	2036	PM	-9	21	-12	-12	-14	26	39	35	23	50	-27	-23	
	2036	SAT	-17	40	-23	-17	-20	37	46	48	37	54	-23	-31	
	2036	AM	364	99	279	246	469	94	109	84	157	137	261	170	Total Trips 2036
	2036	PM	234	83	180	285	403	97	119	109	140	186	424	347	
	2036	SAT	241	134	198	257	404	131	169	155	171	193	206	278	

CR10 / CR21 / Distillery			Eastbound			Northbound			Westbound			Southbound			Volume Type
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
June	2023	AM	64	34	1	0	15	1	7	37	108	87	23	56	Registered Volumes
June	2023	PM	78	67	8	2	20	15	7	66	107	139	16	84	
June	2023	SAT	94	61	20	6	18	14	10	78	85	103	22	135	
Annual Growth Rate 2.00%															
	2023	AM	64	34	1	0	15	1	7	37	108	87	23	56	Existing Volumes (Projected)
	2023	PM	78	67	8	2	20	15	7	66	107	139	16	84	
	2023	SAT	94	61	20	6	18	14	10	78	85	103	22	135	Background Volumes (Projected)
	2026	AM	68	36	1	0	16	1	7	39	115	92	24	59	
	2026	PM	83	71	8	2	21	16	7	70	114	148	17	89	
	2026	SAT	100	65	21	6	19	15	11	83	90	109	23	143	Development "A" 50% Complete
	2026	AM	18	0	0	0	4	0	0	0	30	40	10	26	
	2026	PM	22	0	0	0	5	0	0	0	30	17	2	10	
	2026	SAT	29	0	0	0	1	0	0	0	23	18	4	24	Development "B" 100% Complete
	2026	AM	9	0	0	0	2	0	0	0	16	16	3	10	
	2026	PM	8	0	0	0	2	0	0	0	11	10	1	6	
	2026	SAT	16	0	0	0	4	0	0	0	14	19	4	25	Development "C" 50% Complete
	2026	AM	7	0	0	0	1	0	0	0	11	25	7	16	
	2026	PM	22	0	0	0	3	0	0	0	30	25	3	15	
	2026	SAT	27	0	0	0	5	0	0	0	24	25	5	32	Development "D" 0% Complete
	2026	AM	0	0	0	0	0	0	0	0	0	0	0	0	
	2026	PM	0	0	0	0	0	0	0	0	0	0	0	0	
	2026	SAT	0	0	0	0	0	0	0	0	0	0	0	0	Total Background Volumes 2026
	2026	AM	102	36	1	0	23	1	7	39	172	173	44	111	
	2026	PM	135	71	8	2	31	16	7	70	185	200	23	120	
	2026	SAT	172	65	21	6	29	15	11	83	151	171	36	224	Site Generated Trips Phase I
	2026	AM	22	0	0	0	4	0	0	0	38	23	6	15	
	2026	PM	32	0	0	0	7	0	0	0	45	30	4	18	
	2026	SAT	45	0	0	0	7	0	0	0	40	28	6	36	Total Trips 2026
	2026	AM	124	36	1	0	27	1	7	39	210	196	50	126	
	2026	PM	167	71	8	2	38	16	7	70	230	230	27	138	
	2026	SAT	217	65	21	6	36	15	11	83	191	199	42	260	
Annual Growth Rate 2.00%															
	2031	AM	75	40	1	0	18	1	8	43	127	102	27	66	Background Volumes (Projected)
	2031	PM	91	79	9	2	23	18	8	77	125	163	19	98	
	2031	SAT	110	71	23	7	21	16	12	91	100	121	26	158	
	2031	AM	36	0	0	0	8	0	0	0	60	81	21	52	Development "A" 100% Complete
	2031	PM	44	0	0	0	10	0	0	0	60	35	4	21	
	2031	SAT	58	0	0	0	3	0	0	0	47	37	8	49	
	2031	AM	9	0	0	0	2	0	0	0	16	16	3	10	Development "B" 100% Complete
	2031	PM	8	0	0	0	2	0	0	0	11	10	1	6	
	2031	SAT	16	0	0	0	4	0	0	0	14	19	4	25	
	2031	AM	14	0	0	0	3	0	0	0	23	51	14	33	Development "C" 100% Complete
	2031	PM	44	0	0	0	7	0	0	0	60	50	7	30	
	2031	SAT	54	0	0	0	10	0	0	0	49	50	11	65	
	2031	AM	17	0	0	0	4	0	0	0	29	4	1	3	Development "D" 50% Complete
	2031	PM	5	0	0	0	1	0	0	0	7	24	3	14	
	2031	SAT	1	0	0	0	0	0	0	0	1	0	0	1	
	2031	AM	151	40	1	0	35	1	8	43	255	254	66	164	Total Background Volumes 2031
	2031	PM	192	79	9	2	43	18	8	77	263	282	34	169	
	2031	SAT	239	71	23	7	38	16	12	91	211	227	49	298	
	2031	AM	57	0	0	0	13	0	0	0	99	33	9	22	Site Generated Trips Phase II
	2031	PM	64	0	0	0	14	0	0	0	85	46	6	28	
	2031	SAT	114	0	0	0	17	0	0	0	101	49	10	64	
	2031	AM	208	40	1	0	48	1	8	43	354	287	75	186	Total Trips 2031
	2031	PM	256	79	9	2	57	18	8	77	348	328	40	197	
	2031	SAT	353	71	23	7	55	16	12	91	312	276	59	362	
Annual Growth Rate 2.00%															
	2036	AM	83	44	1	0	19	1	9	48	140	113	30	72	Background Volumes (Projected)
	2036	PM	101	87	10	3	26	19	9	85	138	180	21	109	
	2036	SAT	122	79	26	8	23	18	13	101	110	133	28	175	
	2036	AM	36	0	0	0	8	0	0	0	60	81	21	52	Development "A" 100% Complete
	2036	PM	44	0	0	0	10	0	0	0	60	35	4	21	
	2036	SAT	58	0	0	0	3	0	0	0	47	37	8	49	
	2036	AM	9	0	0	0	2	0	0	0	16	16	3	10	Development "B" 100% Complete
	2036	PM	8	0	0	0	2	0	0	0	11	10	1	6	
	2036	SAT	16	0	0	0	4	0	0	0	14	19	4	25	
	2036	AM	14	0	0	0	3	0	0	0	23	51	14	33	Development "C" 100% Complete
	2036	PM	44	0	0	0	7	0	0	0	60	50	7	30	
	2036	SAT	54	0	0	0	10	0	0	0	49	50	11	65	
	2036	AM	35	0	0	0	9	0	0	0	59	9	3	6	Development "D" 100% Complete
	2036	PM	11	0	0	0	3	0	0	0	15	48	6	29	
	2036	SAT	2	0	0	0	0	0	0	0	2	1	0	2	
	2036	AM	177	44	1	0	41	1	9	48	298	270	71	173	Total Background Volumes 2036
	2036	PM	208	87	10	3	48	19	9	85	284	323	39	195	
	2036	SAT	252	79	26	8	40	18	13	101	222	240	51	316	
	2036	AM	57	0	0	0	13	0	0	0	99	33	9	22	Site Generated Trips Phase II
	2036	PM	64	0	0	0	14	0	0	0	85	46	6	28	
	2036	SAT	114	0	0	0	17	0	0	0	101	49	10	64	
	2036	AM	234	44	1	0	54	1	9	48	397	303	80	195	Total Trips 2036
	2036	PM	272	87	10	3	62	19	9	85	369	369	45	223	
	2036	SAT	366	79	26	8	57	18	13	101	323	289	61	380	

Fallis Line / Tapley			Eastbound			Northbound			Westbound			Southbound			Volume Type
Quarter Line			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
December	2021	AM	0	0	0	0	37	2	2	0	56	14	19	0	Registered Volumes
December	2021	PM	0	0	0	0	40	2	1	0	22	61	56	0	
December	2021	SAT	0	0	0	0	37	2	3	0	21	25	38	0	
Annual Growth Rate 2.00%															
	2023	AM	0	0	0	0	38	2	2	0	58	15	20	0	Existing Volumes (Projected)
	2023	PM	0	0	0	0	42	2	1	0	23	63	58	0	
	2023	SAT	0	0	0	0	38	2	3	0	22	26	40	0	Background Volumes (Projected)
	2026	AM	0	0	0	0	41	2	2	0	62	15	21	0	
	2026	PM	0	0	0	0	44	2	1	0	24	67	62	0	
	2026	SAT	0	0	0	0	41	2	3	0	23	28	42	0	Development "A" 50% Complete
	2026	AM	0	0	0	0	0	0	0	0	12	8	0	0	
	2026	PM	0	0	0	0	0	0	0	0	6	9	0	0	
	2026	SAT	0	0	0	0	0	0	0	0	8	9	0	0	Development "B" 100% Complete
	2026	AM	0	0	0	0	0	0	0	0	3	13	0	0	
	2026	PM	0	0	0	0	0	0	0	0	15	6	0	0	
	2026	SAT	0	0	0	0	0	0	0	0	7	11	0	0	Development "C" 50% Complete
	2026	AM	0	0	0	0	0	0	0	0	17	1	0	0	
	2026	PM	0	0	0	0	0	0	0	0	3	17	0	0	
	2026	SAT	0	0	0	0	0	0	0	0	5	7	0	0	Development "D" 50% Complete
	2026	AM	0	0	0	0	0	0	0	0	0	0	0	0	
	2026	PM	0	0	0	0	0	0	0	0	0	0	0	0	
	2026	SAT	0	0	0	0	0	0	0	0	0	0	0	0	Total Background Volumes 2026
	2026	AM	0	0	0	0	41	2	2	0	94	37	21	0	
	2026	PM	0	0	0	0	44	2	1	0	48	99	62	0	
	2026	SAT	0	0	0	0	41	2	3	0	43	55	42	0	Site Generated Trips Phase I
	2026	AM	0	0	0	0	0	0	0	0	13	9	0	0	
	2026	PM	0	0	0	0	0	0	0	0	7	25	0	0	
	2026	SAT	0	0	0	0	0	0	0	0	7	15	0	0	Total Trips 2026
	2026	AM	0	0	0	0	41	2	2	0	107	46	21	0	
	2026	PM	0	0	0	0	44	2	1	0	55	124	62	0	
	2026	SAT	0	0	0	0	41	2	3	0	50	70	42	0	
Annual Growth Rate 2.00%															
	2031	AM	0	0	0	0	45	2	2	0	68	17	23	0	Background Volumes (Projected)
	2031	PM	0	0	0	0	49	2	1	0	27	74	68	0	
	2031	SAT	0	0	0	0	45	2	4	0	26	30	46	0	
	2031	AM	0	0	0	0	0	0	0	0	25	16	0	0	Development "A" 100% Complete
	2031	PM	0	0	0	0	0	0	0	0	12	19	0	0	
	2031	SAT	0	0	0	0	0	0	0	0	17	18	0	0	
	2031	AM	0	0	0	0	0	0	0	0	3	13	0	0	Development "B" 100% Complete
	2031	PM	0	0	0	0	0	0	0	0	15	6	0	0	
	2031	SAT	0	0	0	0	0	0	0	0	7	11	0	0	
	2031	AM	0	0	0	0	0	0	0	0	35	3	0	0	Development "C" 100% Complete
	2031	PM	0	0	0	0	0	0	0	0	7	34	0	0	
	2031	SAT	0	0	0	0	0	0	0	0	11	15	0	0	
	2031	AM	0	0	0	0	0	0	0	0	0	0	0	0	Development "D" 50% Complete
	2031	PM	0	0	0	0	0	0	0	0	0	0	0	0	
	2031	SAT	0	0	0	0	0	0	0	0	0	0	0	0	
	2031	AM	0	0	0	0	45	2	2	0	131	49	23	0	Total Background Volumes 2031
	2031	PM	0	0	0	0	49	2	1	0	61	133	68	0	
	2031	SAT	0	0	0	0	45	2	4	0	61	74	46	0	
	2031	AM	0	0	0	0	0	0	0	0	17	16	0	0	Site Generated Trips Phase II
	2031	PM	0	0	0	0	0	0	0	0	9	43	0	0	
	2031	SAT	0	0	0	0	0	0	0	0	14	34	0	0	
	2031	AM	0	0	0	0	45	2	2	0	148	65	23	0	Total Trips 2031
	2031	PM	0	0	0	0	49	2	1	0	70	176	68	0	
	2031	SAT	0	0	0	0	45	2	4	0	75	108	46	0	
Annual Growth Rate 2.00%															
	2036	AM	0	0	0	0	50	3	3	0	75	19	26	0	Background Volumes (Projected)
	2036	PM	0	0	0	0	54	3	1	0	30	82	75	0	
	2036	SAT	0	0	0	0	50	3	4	0	28	34	51	0	
	2036	AM	0	0	0	0	0	0	0	0	25	16	0	0	Development "A" 100% Complete
	2036	PM	0	0	0	0	0	0	0	0	12	19	0	0	
	2036	SAT	0	0	0	0	0	0	0	0	17	18	0	0	
	2036	AM	0	0	0	0	0	0	0	0	3	13	0	0	Development "B" 100% Complete
	2036	PM	0	0	0	0	0	0	0	0	15	6	0	0	
	2036	SAT	0	0	0	0	0	0	0	0	7	11	0	0	
	2036	AM	0	0	0	0	0	0	0	0	35	3	0	0	Development "C" 100% Complete
	2036	PM	0	0	0	0	0	0	0	0	7	34	0	0	
	2036	SAT	0	0	0	0	0	0	0	0	11	15	0	0	
	2036	AM	0	0	0	0	0	0	0	0	0	0	0	0	Development "D" 100% Complete
	2036	PM	0	0	0	0	0	0	0	0	0	0	0	0	
	2036	SAT	0	0	0	0	0	0	0	0	0	0	0	0	
	2036	AM	0	0	0	0	50	3	3	0	138	51	26	0	Total Background Volumes 2036
	2036	PM	0	0	0	0	54	3	1	0	64	141	75	0	
	2036	SAT	0	0	0	0	50	3	4	0	63	78	51	0	
	2036	AM	0	0	0	0	0	0	0	0	17	16	0	0	Site Generated Trips Phase II
	2036	PM	0	0	0	0	0	0	0	0	9	43	0	0	
	2036	SAT	0	0	0	0	0	0	0	0	14	34	0	0	
	2036	AM	0	0	0	0	50	3	3	0	155	67	26	0	Total Trips 2036
	2036	PM	0	0	0	0	54	3	1	0	73	184	75	0	
	2036	SAT	0	0	0	0	50	3	4	0	77	112	51	0	

Appendix C

Synchro Reports

Existing Volumes 2023

HCM Unsignalized Intersection Capacity Analysis

3: CR10 & Larmer Line

Existing Volumes 2023

AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	3	14	10	3	13	5	327	7	5	204	5
Future Volume (Veh/h)	12	3	14	10	3	13	5	327	7	5	204	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	3	15	11	3	14	5	355	8	5	222	5
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	619	608	224	620	606	359	227			363		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	619	608	224	620	606	359	227			363		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	99	98	97	99	98	100			100		
cM capacity (veh/h)	388	407	815	388	408	685	1341			1196		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	31	28	368	232								
Volume Left	13	11	5	5								
Volume Right	15	14	8	5								
cSH	523	499	1341	1196								
Volume to Capacity	0.06	0.06	0.00	0.00								
Queue Length 95th (m)	1.4	1.4	0.1	0.1								
Control Delay (s)	12.3	12.6	0.1	0.2								
Lane LOS	B	B	A	A								
Approach Delay (s)	12.3	12.6	0.1	0.2								
Approach LOS	B	B										
Intersection Summary												
Average Delay			1.3									
Intersection Capacity Utilization			30.0%		ICU Level of Service					A		
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

6: CR10 & Fallis Line/Fallis Line Driveway

Existing Volumes 2023

AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	0	78	0	0	0	74	209	0	0	190	16
Future Volume (Veh/h)	41	0	78	0	0	0	74	209	0	0	190	16
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	45	0	85	0	0	0	80	227	0	0	207	17
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)	4											
Median type							None			None		
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	594	594	207	636	611	227	224				227	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	594	594	207	636	611	227	224				227	
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	89	100	90	100	100	100	94				100	
cM capacity (veh/h)	398	393	833	335	384	812	1345				1341	
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	130	0	80	227	207	17						
Volume Left	45	0	80	0	0	0						
Volume Right	85	0	0	0	0	17						
cSH	1149	1700	1345	1700	1341	1700						
Volume to Capacity	0.11	0.10	0.06	0.13	0.00	0.01						
Queue Length 95th (m)	2.9	0.0	1.4	0.0	0.0	0.0						
Control Delay (s)	11.7	0.0	7.8	0.0	0.0	0.0						
Lane LOS	B	A	A									
Approach Delay (s)	11.7	0.0	2.0	0.0								
Approach LOS	B	A										
Intersection Summary												
Average Delay	3.2											
Intersection Capacity Utilization	34.3%			ICU Level of Service					A			
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis 12: Distillery Rd/CR10 & King St (CR21)

Existing Volumes 2023
AM Peak Hour

																			
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR							
Lane Configurations																			
Sign Control		Stop			Stop			Stop			Stop								
Traffic Volume (vph)	64	34	1	7	37	108	0	15	1	87	23	56							
Future Volume (vph)	87	34	1	7	37	141	0	21	1	91	23	58							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92							
Hourly flow rate (vph)	95	37	1	8	40	153	0	23	1	99	25	63							
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2														
Volume Total (vph)	133	201	24	99	88														
Volume Left (vph)	95	8	0	99	0														
Volume Right (vph)	1	153	1	0	63														
Hadj (s)	0.17	-0.41	0.01	0.53	-0.47														
Departure Headway (s)	4.8	4.2	5.1	5.8	4.8														
Degree Utilization, x	0.18	0.23	0.03	0.16	0.12														
Capacity (veh/h)	701	811	652	582	700														
Control Delay (s)	8.9	8.5	8.2	8.7	7.3														
Approach Delay (s)	8.9	8.5	8.2	8.1															
Approach LOS	A	A	A	A															
Intersection Summary																			
Delay			8.4																
Level of Service			A																
Intersection Capacity Utilization			35.9%	ICU Level of Service	A														
Analysis Period (min)			15																

HCM Unsignalized Intersection Capacity Analysis

15: Tapley Quarter Line & Fallis Line

Existing Volumes 2023

AM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	2	58	38	2	15	20
Future Volume (Veh/h)	2	58	38	2	15	20
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	63	41	2	16	22
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	96	42			43	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	96	42			43	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	94			99	
cM capacity (veh/h)	894	1020			1547	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	65	43	38			
Volume Left	2	0	16			
Volume Right	63	2	0			
cSH	1016	1700	1547			
Volume to Capacity	0.06	0.03	0.01			
Queue Length 95th (m)	1.6	0.0	0.2			
Control Delay (s)	8.8	0.0	3.1			
Lane LOS	A		A			
Approach Delay (s)	8.8	0.0	3.1			
Approach LOS	A					
Intersection Summary						
Average Delay		4.7				
Intersection Capacity Utilization		18.9%		ICU Level of Service		A
Analysis Period (min)		15				

Intersection: 12: Distillery Rd/CR10 & King St (CR21)

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	LTR	L	TR
Maximum Queue (m)	16.5	22.6	9.2	15.9	16.2
Average Queue (m)	10.6	14.3	3.7	11.8	13.0
95th Queue (m)	15.5	22.6	11.1	17.2	18.8
Link Distance (m)	518.3	494.8	260.2		495.4
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)				12.0	
Storage Blk Time (%)				4	5
Queuing Penalty (veh)				4	5

HCM Unsignalized Intersection Capacity Analysis

3: CR10 & Larmer Line

Existing Volumes 2023

PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	6	9	6	5	3	7	225	7	11	289	14
Future Volume (Veh/h)	11	6	9	6	5	3	7	225	7	11	289	14
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	7	10	7	5	3	8	245	8	12	314	15
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None								None			
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	616	614	322	624	618	249	329	253				
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	616	614	322	624	618	249	329	253				
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1	4.1				
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2	2.2				
p0 queue free %	97	98	99	98	99	100	99	99				
cM capacity (veh/h)	393	400	719	383	399	790	1231	1312				
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	29	15	261	341								
Volume Left	12	7	8	12								
Volume Right	10	3	8	15								
cSH	468	433	1231	1312								
Volume to Capacity	0.06	0.03	0.01	0.01								
Queue Length 95th (m)	1.5	0.8	0.1	0.2								
Control Delay (s)	13.2	13.6	0.3	0.4								
Lane LOS	B	B	A	A								
Approach Delay (s)	13.2	13.6	0.3	0.4								
Approach LOS	B	B										
Intersection Summary												
Average Delay	1.2											
Intersection Capacity Utilization	30.9%			ICU Level of Service					A			
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis

6: CR10 & Fallis Line/Fallis Line Driveway

Existing Volumes 2023

PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	0	55	0	0	0	61	207	0	0	272	49
Future Volume (Veh/h)	32	0	55	0	0	0	61	207	0	0	272	49
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	35	0	60	0	0	0	66	225	0	0	296	53
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)	4											
Median type							None			None		
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	653	653	296	683	706	225	349				225	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	653	653	296	683	706	225	349				225	
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	90	100	92	100	100	100	95				100	
cM capacity (veh/h)	365	366	743	320	341	814	1210				1344	
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	95	0	66	225	296	53						
Volume Left	35	0	66	0	0	0						
Volume Right	60	0	0	0	0	53						
cSH	990	1700	1210	1700	1344	1700						
Volume to Capacity	0.10	0.10	0.05	0.13	0.00	0.03						
Queue Length 95th (m)	2.4	0.0	1.3	0.0	0.0	0.0						
Control Delay (s)	12.3	0.0	8.1	0.0	0.0	0.0						
Lane LOS	B	A	A									
Approach Delay (s)	12.3	0.0	1.8	0.0								
Approach LOS	B	A										
Intersection Summary												
Average Delay	2.3											
Intersection Capacity Utilization	38.5%			ICU Level of Service					A			
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis 12: Distillery Rd/CR10 & King St (CR21)

Existing Volumes 2023
PM Peak Hour

																			
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR							
Lane Configurations																			
Sign Control		Stop			Stop			Stop			Stop								
Traffic Volume (vph)	78	67	8	7	66	107	2	20	15	139	16	84							
Future Volume (vph)	101	67	8	7	66	140	2	26	15	143	16	86							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92							
Hourly flow rate (vph)	110	73	9	8	72	152	2	28	16	155	17	93							
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2														
Volume Total (vph)	192	232	46	155	110														
Volume Left (vph)	110	8	2	155	0														
Volume Right (vph)	9	152	16	0	93														
Hadj (s)	0.12	-0.35	-0.17	0.53	-0.56														
Departure Headway (s)	5.2	4.7	5.3	6.2	5.1														
Degree Utilization, x	0.28	0.30	0.07	0.27	0.15														
Capacity (veh/h)	655	727	604	551	667														
Control Delay (s)	10.1	9.6	8.7	10.2	7.8														
Approach Delay (s)	10.1	9.6	8.7	9.2															
Approach LOS	B	A	A	A															
Intersection Summary																			
Delay				9.5															
Level of Service				A															
Intersection Capacity Utilization				43.1%	ICU Level of Service	A													
Analysis Period (min)				15															

HCM Unsignalized Intersection Capacity Analysis

15: Tapley Quarter Line & Fallis Line

Existing Volumes 2023

PM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	23	42	2	63	58
Future Volume (Veh/h)	1	23	42	2	63	58
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	25	46	2	68	63
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	246	47			48	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	246	47			48	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	98			96	
cM capacity (veh/h)	710	1014			1540	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	26	48	131			
Volume Left	1	0	68			
Volume Right	25	2	0			
cSH	997	1700	1540			
Volume to Capacity	0.03	0.03	0.04			
Queue Length 95th (m)	0.6	0.0	1.1			
Control Delay (s)	8.7	0.0	4.0			
Lane LOS	A		A			
Approach Delay (s)	8.7	0.0	4.0			
Approach LOS	A					
Intersection Summary						
Average Delay		3.7				
Intersection Capacity Utilization		23.2%		ICU Level of Service		A
Analysis Period (min)		15				

Intersection: 12: Distillery Rd/CR10 & King St (CR21)

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	LTR	L	TR
Maximum Queue (m)	30.6	16.8	9.1	23.6	16.6
Average Queue (m)	13.5	12.2	6.9	16.3	11.6
95th Queue (m)	27.6	18.3	12.6	23.8	17.5
Link Distance (m)	518.3	494.8	260.2		495.4
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)				12.0	
Storage Blk Time (%)				7	3
Queuing Penalty (veh)				7	5

HCM Unsignalized Intersection Capacity Analysis

3: CR10 & Larmer Line

Existing Volumes 2023

SAT Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	5	6	11	7	2	15	217	4	2	242	11
Future Volume (Veh/h)	6	5	6	11	7	2	15	217	4	2	242	11
Sign Control	Stop		Stop		Free		Free		Free		Free	
Grade	0%		0%		0%		0%		0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	5	7	12	8	2	16	236	4	2	263	12
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	549	545	269	552	549	238	275				240	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	549	545	269	552	549	238	275				240	
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	98	99	99	97	98	100	99				100	
cM capacity (veh/h)	434	439	770	432	437	801	1288				1327	
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	19	22	256	277								
Volume Left	7	12	16	2								
Volume Right	7	2	4	12								
cSH	519	453	1288	1327								
Volume to Capacity	0.04	0.05	0.01	0.00								
Queue Length 95th (m)	0.9	1.2	0.3	0.0								
Control Delay (s)	12.2	13.4	0.6	0.1								
Lane LOS	B	B	A	A								
Approach Delay (s)	12.2	13.4	0.6	0.1								
Approach LOS	B	B										
Intersection Summary												
Average Delay			1.2									
Intersection Capacity Utilization			31.8%	ICU Level of Service					A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

6: CR10 & Fallis Line/Fallis Line Driveway

Existing Volumes 2023

SAT Peak Hour

																		
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR						
Lane Configurations																		
Traffic Volume (veh/h)	24	0	38	0	0	0	35	198	0	0	155	45						
Future Volume (Veh/h)	24	0	38	0	0	0	35	198	0	0	155	45						
Sign Control	Stop			Stop			Free			Free								
Grade	0%			0%			0%			0%								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92						
Hourly flow rate (vph)	26	0	41	0	0	0	38	215	0	0	168	49						
Pedestrians																		
Lane Width (m)																		
Walking Speed (m/s)																		
Percent Blockage																		
Right turn flare (veh)	4																	
Median type							None			None								
Median storage (veh)																		
Upstream signal (m)																		
pX, platoon unblocked																		
vC, conflicting volume	459	459	168	480	508	215	217				215							
vC1, stage 1 conf vol																		
vC2, stage 2 conf vol																		
vCu, unblocked vol	459	459	168	480	508	215	217				215							
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1				4.1							
tC, 2 stage (s)																		
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2							
p0 queue free %	95	100	95	100	100	100	97				100							
cM capacity (veh/h)	501	485	876	463	455	825	1353				1355							
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2												
Volume Total	67	0	38	215	168	49												
Volume Left	26	0	38	0	0	0												
Volume Right	41	0	0	0	0	49												
cSH	1292	1700	1353	1700	1355	1700												
Volume to Capacity	0.05	0.10	0.03	0.13	0.00	0.03												
Queue Length 95th (m)	1.2	0.0	0.7	0.0	0.0	0.0												
Control Delay (s)	10.6	0.0	7.7	0.0	0.0	0.0												
Lane LOS	B	A	A															
Approach Delay (s)	10.6	0.0	1.2	0.0														
Approach LOS	B	A																
Intersection Summary																		
Average Delay				1.9														
Intersection Capacity Utilization				31.9%	ICU Level of Service				A									
Analysis Period (min)				15														

HCM Unsignalized Intersection Capacity Analysis 12: Distillery Rd/CR10 & King St (CR21)

Existing Volumes 2023
SAT Peak Hour

																			
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR							
Lane Configurations																			
Sign Control		Stop			Stop			Stop			Stop								
Traffic Volume (vph)	94	61	20	10	78	85	6	18	14	103	22	135							
Future Volume (vph)	117	61	20	10	78	118	6	24	14	107	22	137							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92							
Hourly flow rate (vph)	127	66	22	11	85	128	7	26	15	116	24	149							
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2														
Volume Total (vph)	215	224	48	116	173														
Volume Left (vph)	127	11	7	116	0														
Volume Right (vph)	22	128	15	0	149														
Hadj (s)	0.09	-0.30	-0.12	0.53	-0.57														
Departure Headway (s)	5.2	4.8	5.5	6.2	5.1														
Degree Utilization, x	0.31	0.30	0.07	0.20	0.25														
Capacity (veh/h)	654	704	588	545	662														
Control Delay (s)	10.5	9.8	8.9	9.6	8.6														
Approach Delay (s)	10.5	9.8	8.9	9.0															
Approach LOS	B	A	A	A															
Intersection Summary																			
Delay				9.6															
Level of Service				A															
Intersection Capacity Utilization				41.9%	ICU Level of Service	A													
Analysis Period (min)				15															

HCM Unsignalized Intersection Capacity Analysis 15: Tapley Quarter Line & Fallis Line

Existing Volumes 2023
SAT Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	2	22	38	2	26	40
Future Volume (Veh/h)	2	22	38	2	26	40
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	24	41	2	28	43
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	141	42			43	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	141	42			43	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	98			98	
cM capacity (veh/h)	836	1020			1547	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	26	43	71			
Volume Left	2	0	28			
Volume Right	24	2	0			
cSH	1003	1700	1547			
Volume to Capacity	0.03	0.03	0.02			
Queue Length 95th (m)	0.6	0.0	0.4			
Control Delay (s)	8.7	0.0	3.0			
Lane LOS	A		A			
Approach Delay (s)	8.7	0.0	3.0			
Approach LOS	A					
Intersection Summary						
Average Delay		3.1				
Intersection Capacity Utilization		20.2%		ICU Level of Service	A	
Analysis Period (min)		15				

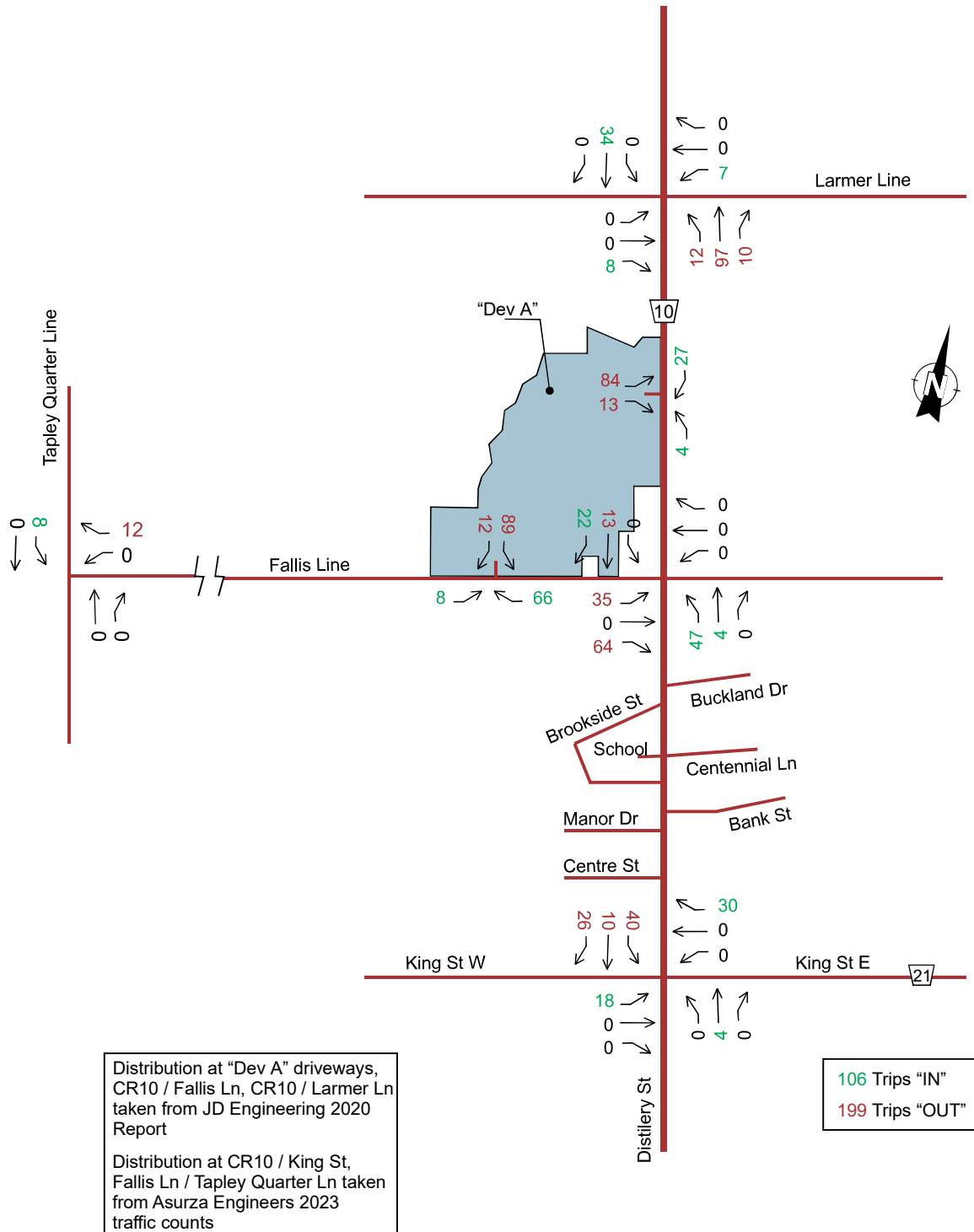
Intersection: 12: Distillery Rd/CR10 & King St (CR21)

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	LTR	L	TR
Maximum Queue (m)	16.7	15.8	9.0	16.3	16.2
Average Queue (m)	10.7	11.8	3.6	10.6	13.3
95th Queue (m)	15.7	17.1	10.9	15.3	18.9
Link Distance (m)	518.3	494.8	260.2		495.4
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)				12.0	
Storage Blk Time (%)				3	6
Queuing Penalty (veh)				5	6

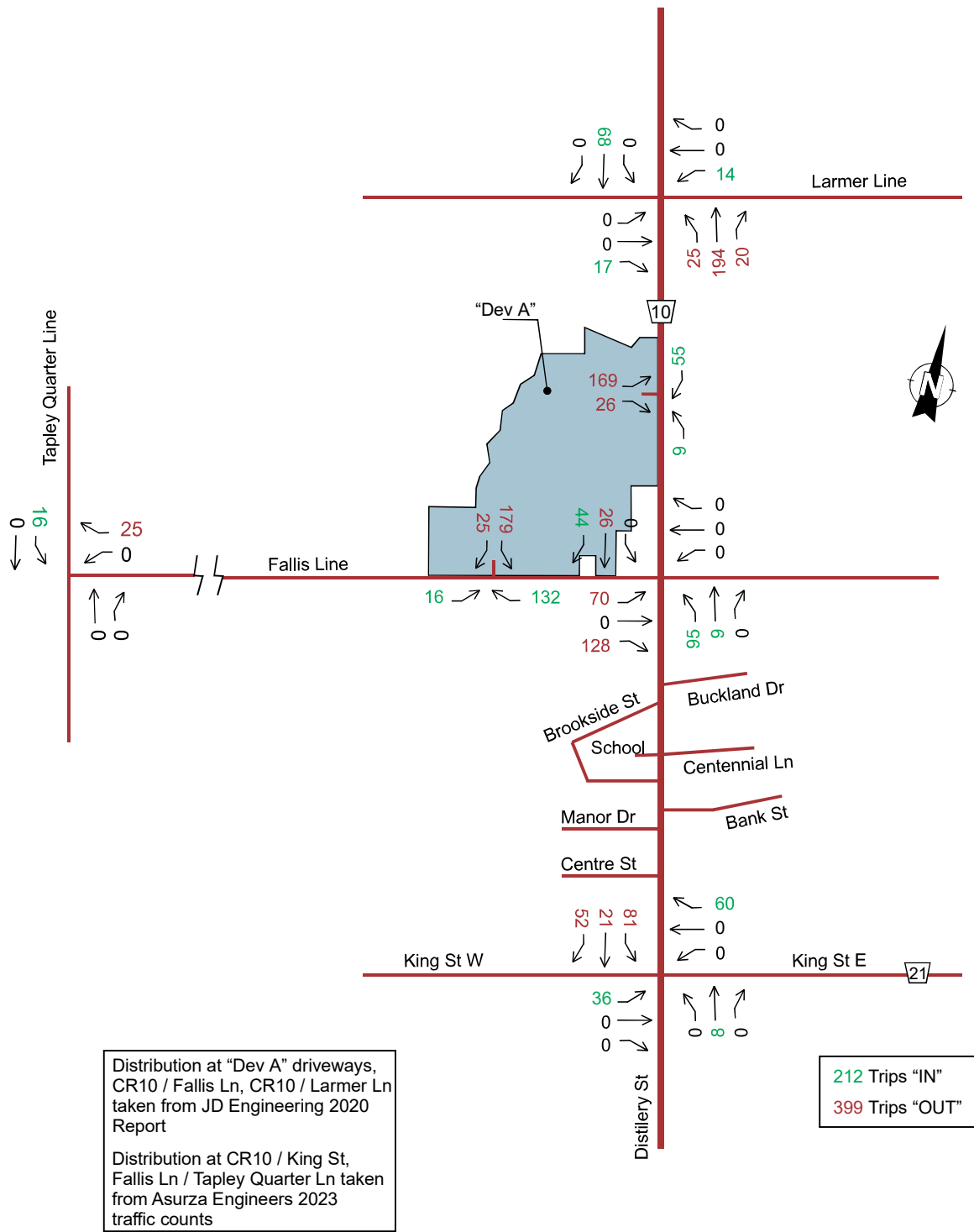
Appendix D

Volumes Added by
Nearby Developments

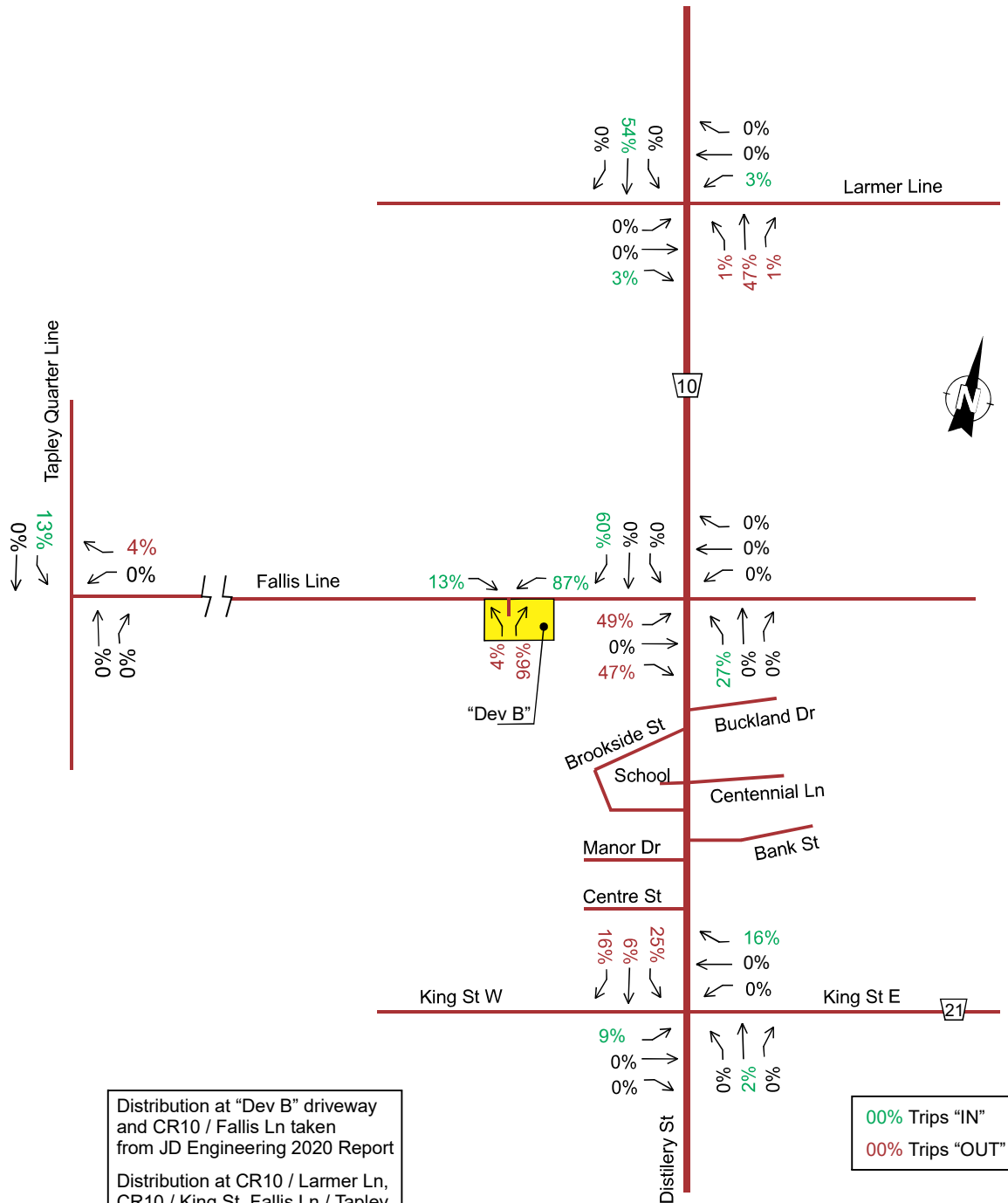
Trips Generated by “Development A” AM Peak Hour - 2026



Trips Generated by "Development A" AM Peak Hour - 2031



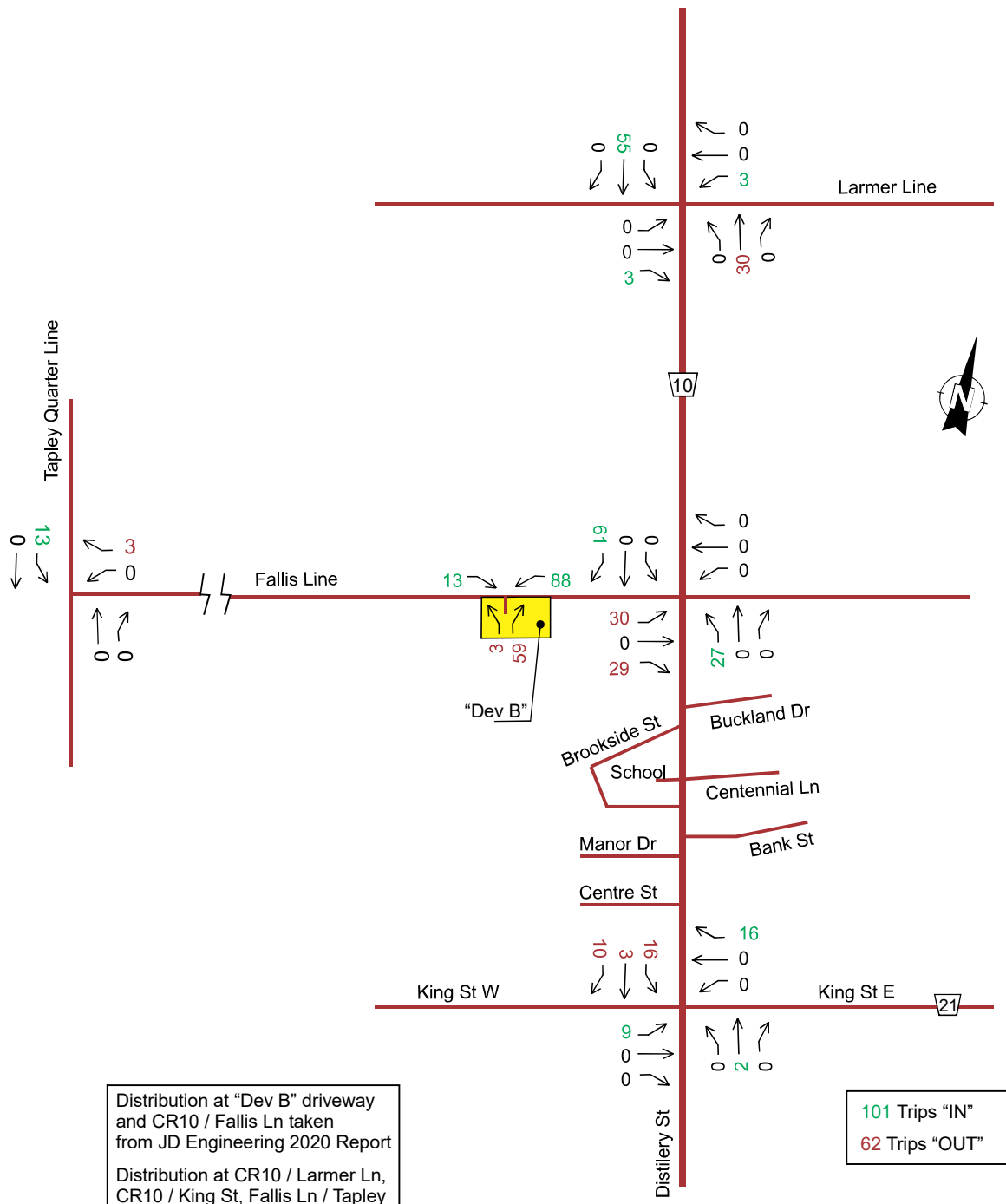
Distribution of Trips Generated by "Development B" AM Peak Hour - 2026



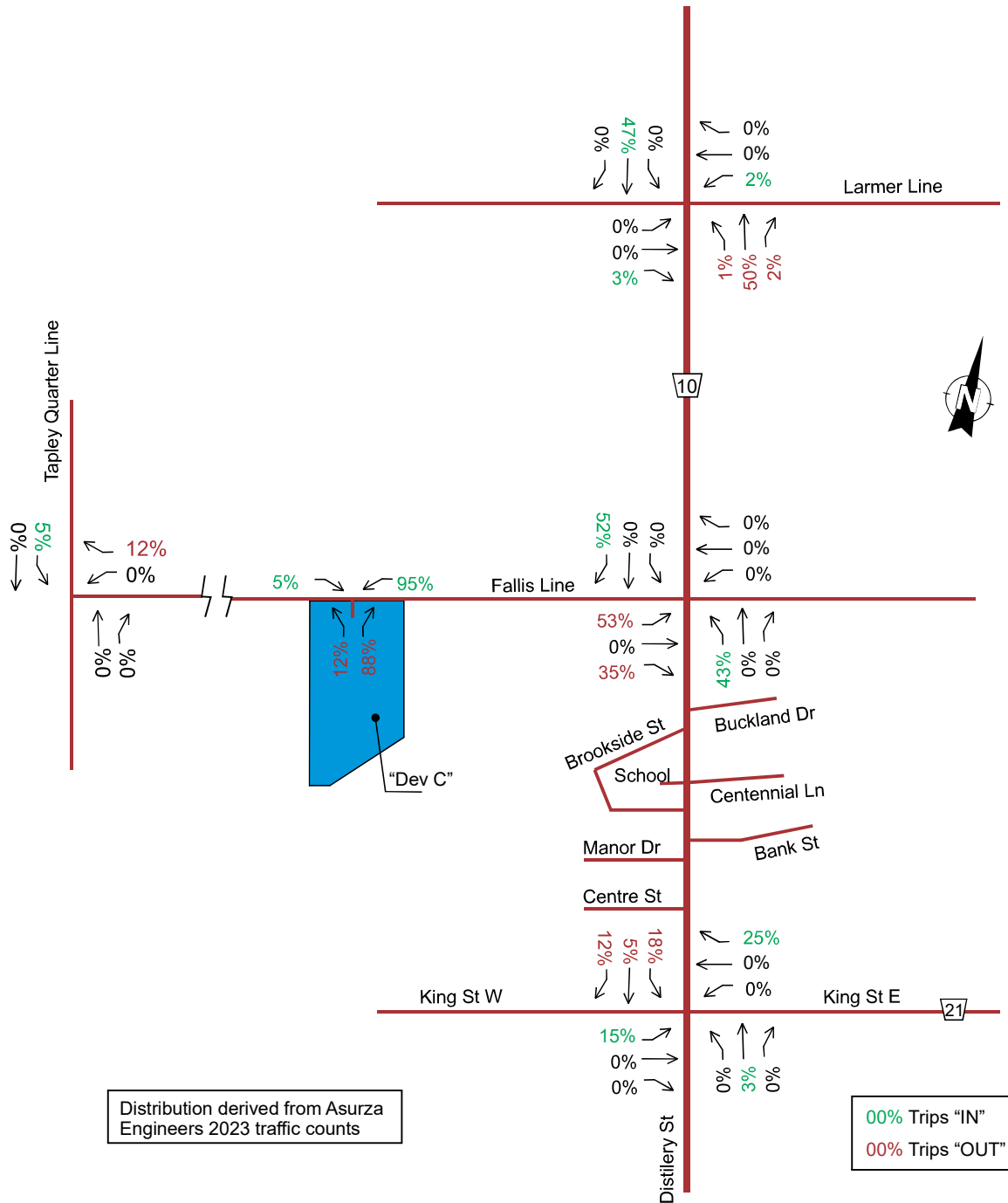
Distribution at "Dev B" driveway and CR10 / Fallis Ln taken from JD Engineering 2020 Report

Distribution at CR10 / Larmer Ln, CR10 / King St, Fallis Ln / Tapley Quarter Ln taken from Asurza Engineers 2023 traffic counts

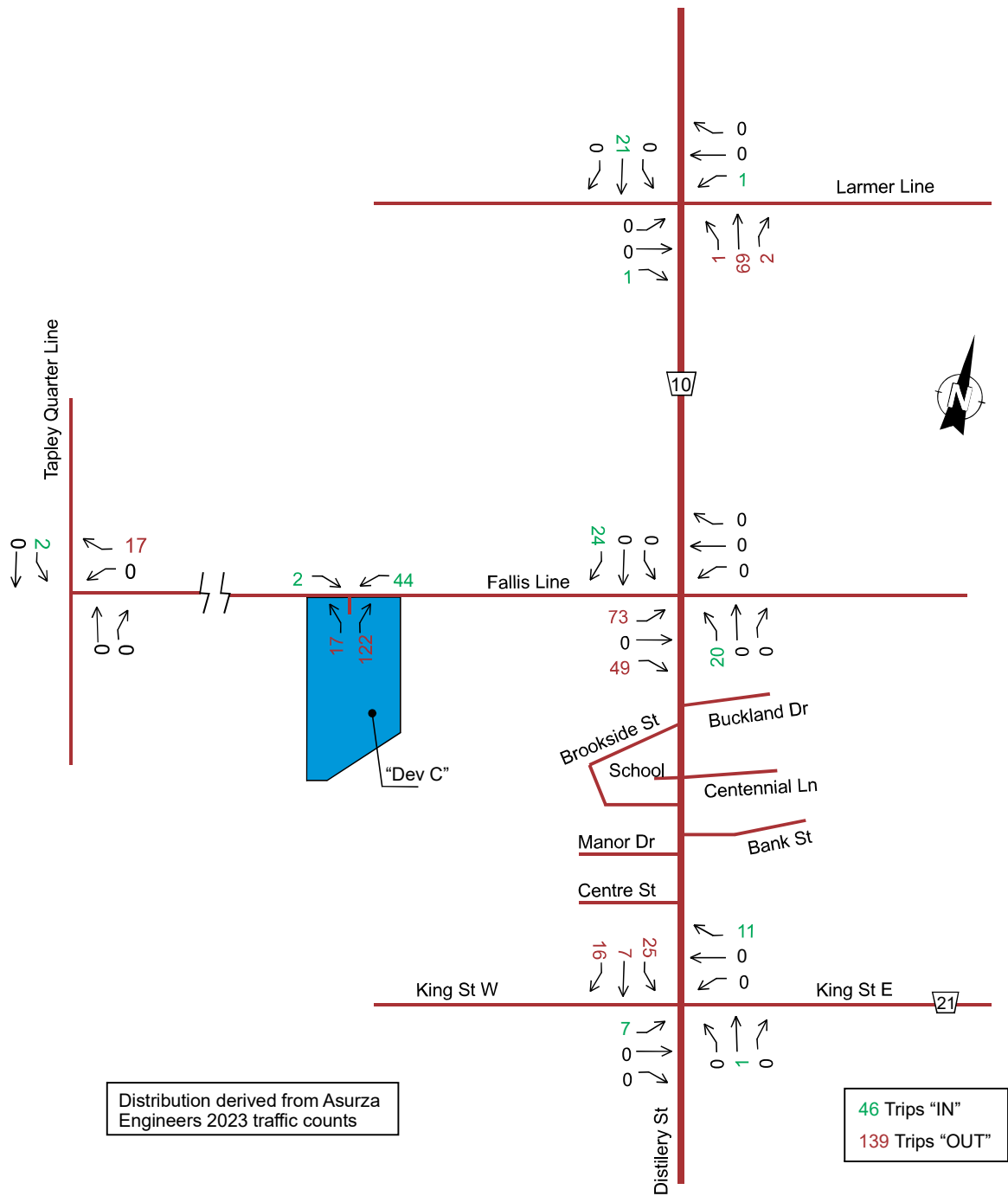
Trips Generated by "Development B" AM Peak Hour - 2026



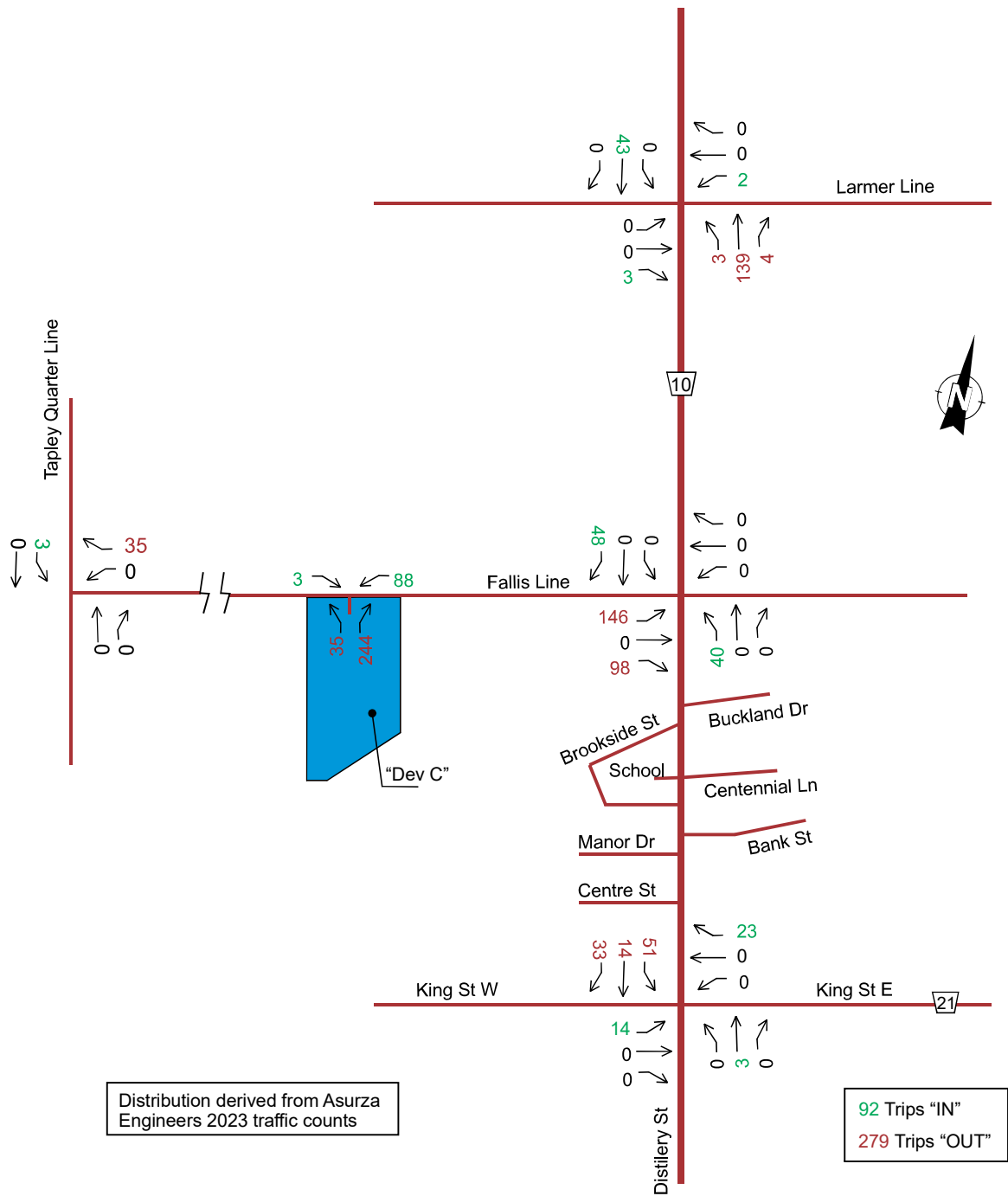
Distribution of Trips Generated by "Development C" AM Peak Hour - 2026



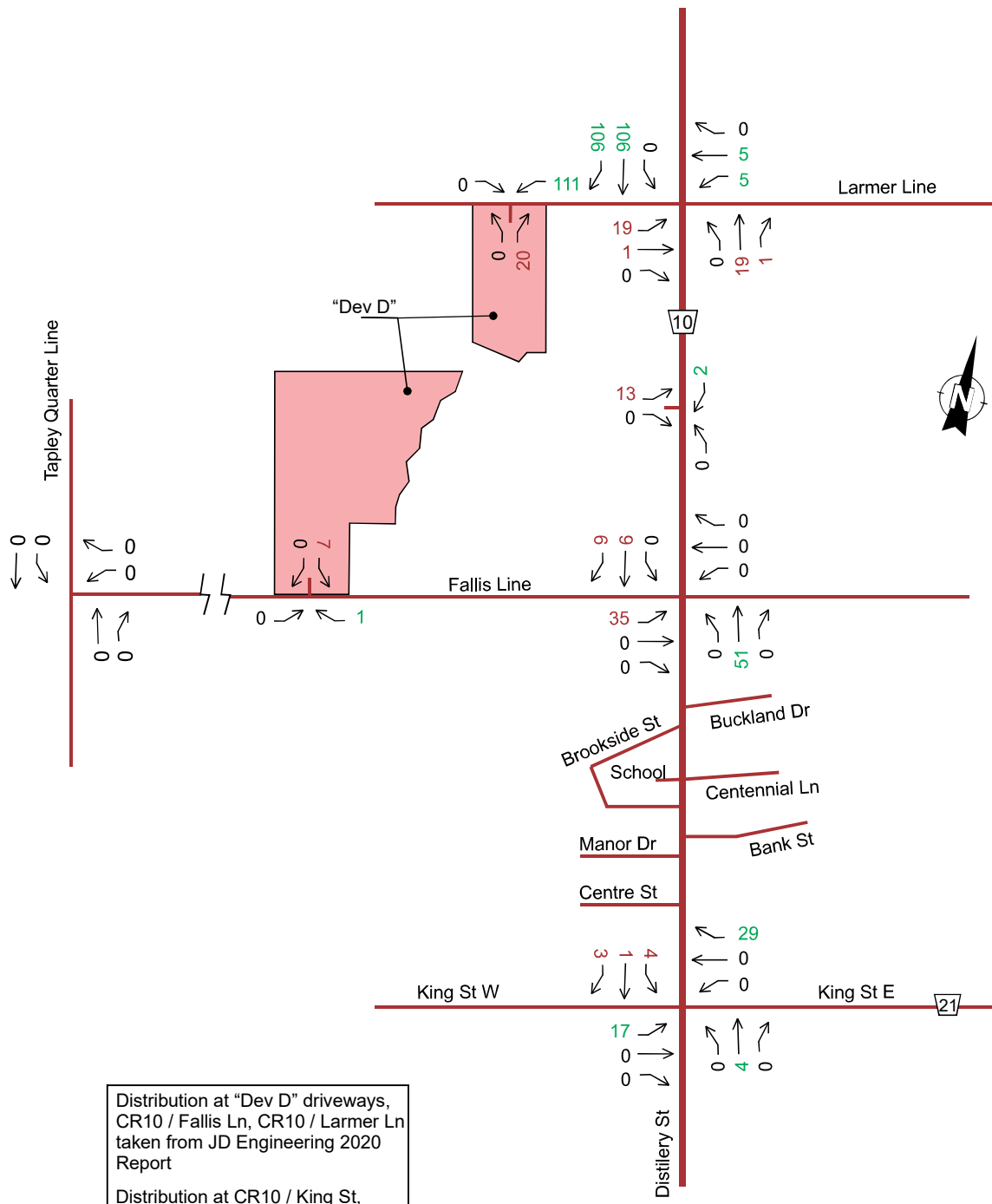
Trips Generated by "Development C" AM Peak Hour - 2026



Trips Generated by "Development C" AM Peak Hour - 2031



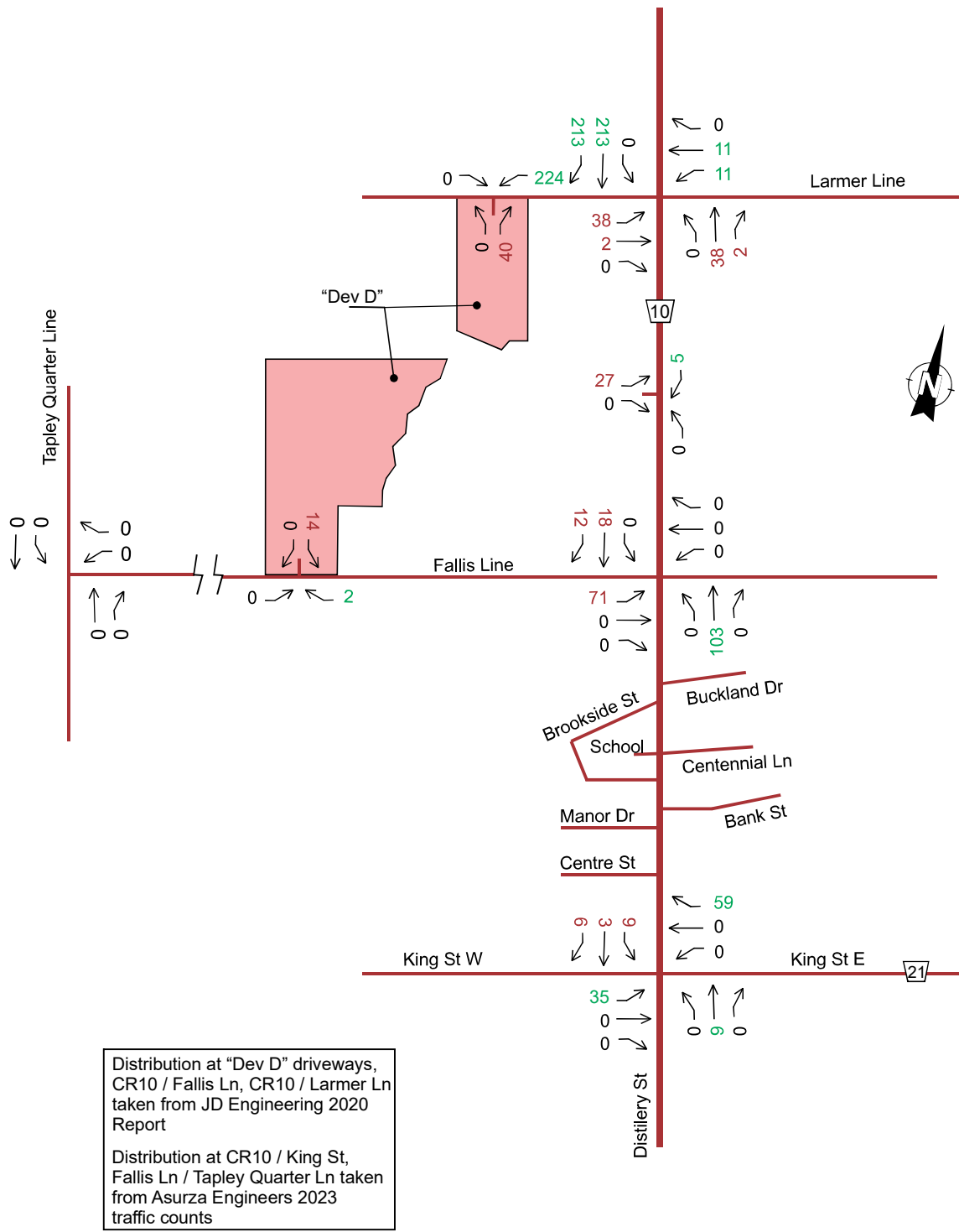
Trips Generated by "Development D" AM Peak Hour - 2031



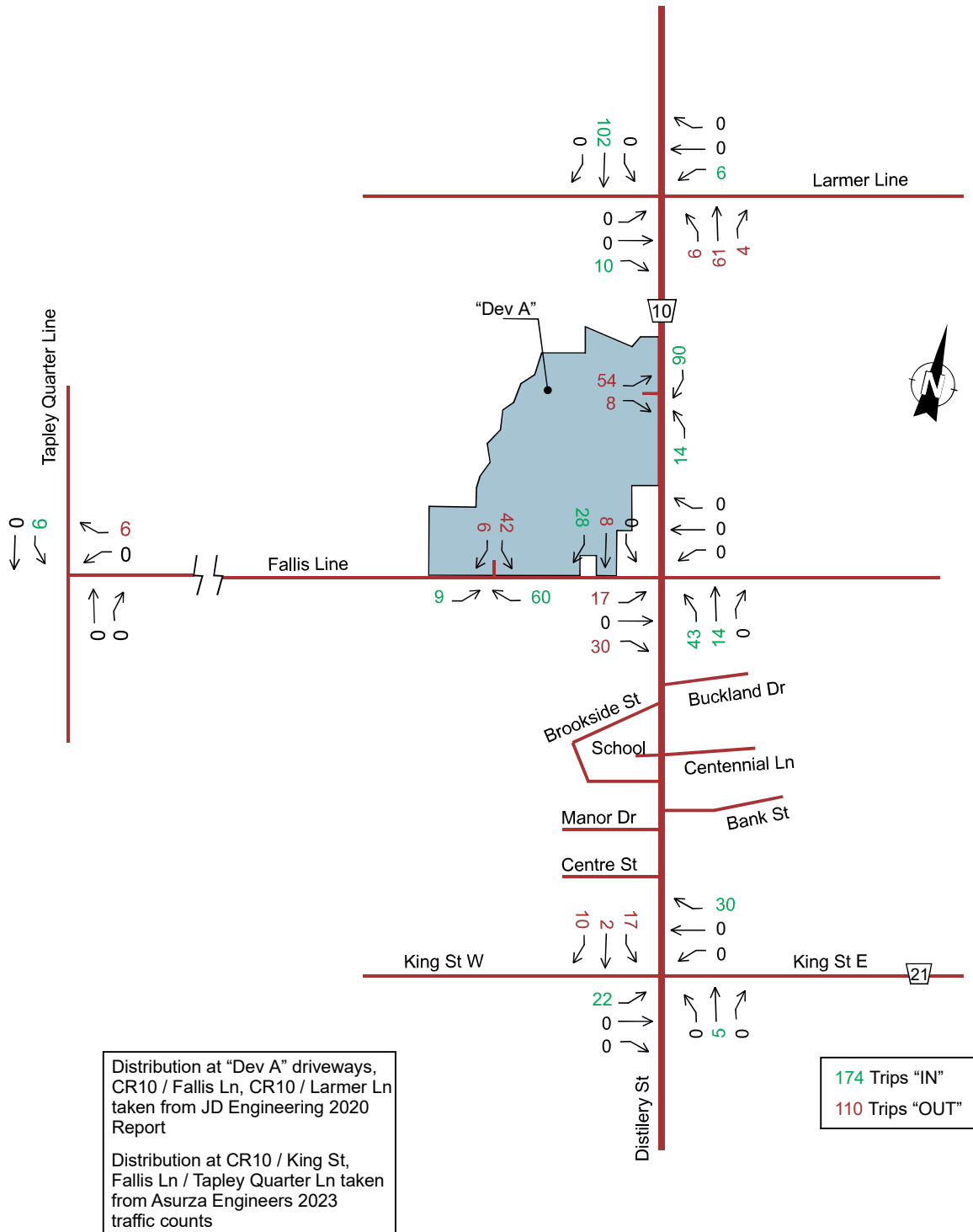
Distribution at "Dev D" driveways,
CR10 / Fallis Ln, CR10 / Larmer Ln
taken from JD Engineering 2020
Report

Distribution at CR10 / King St,
Fallis Ln / Tapley Quarter Ln taken
from Asurza Engineers 2023
traffic counts

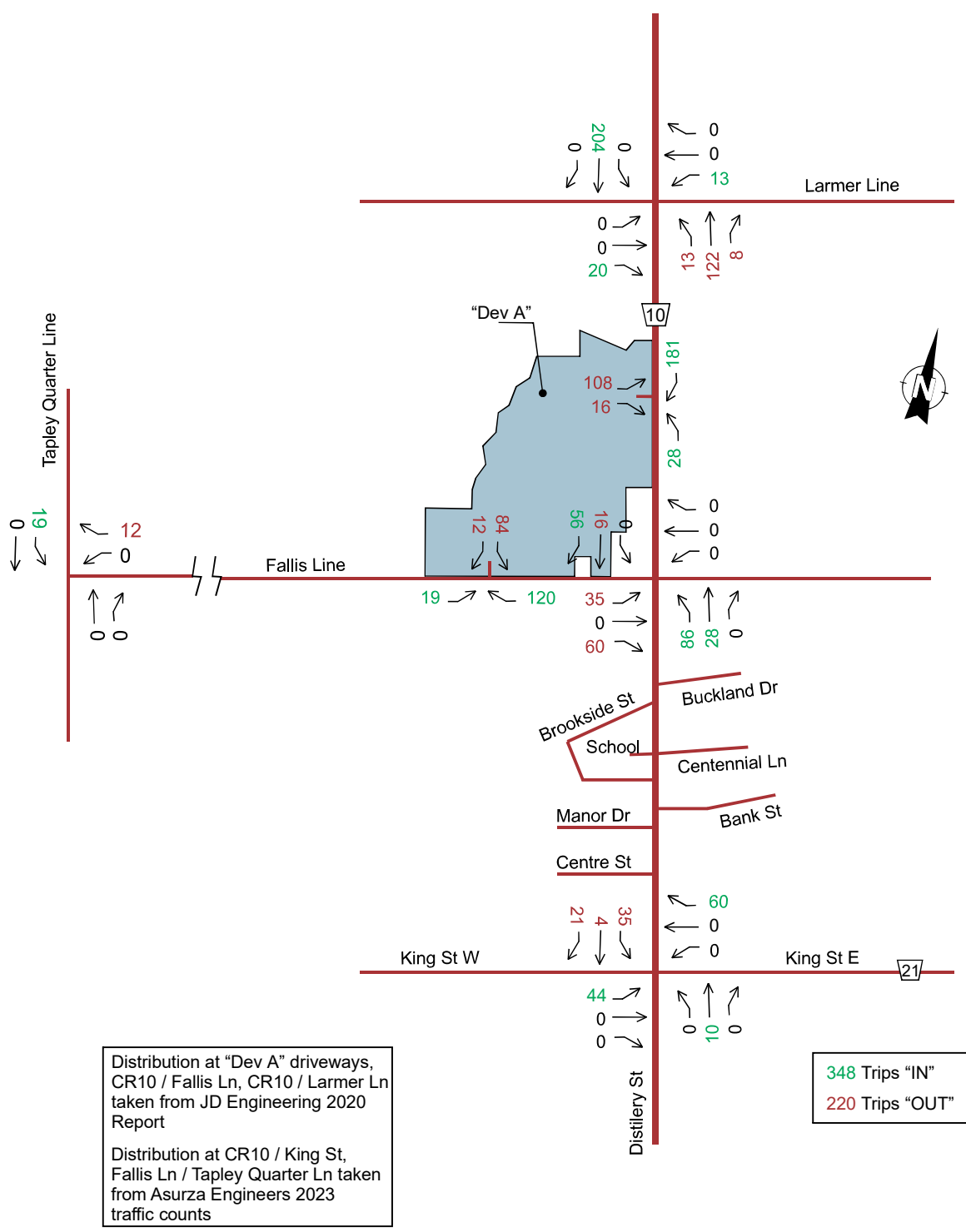
Trips Generated by "Development D" AM Peak Hour - 2036



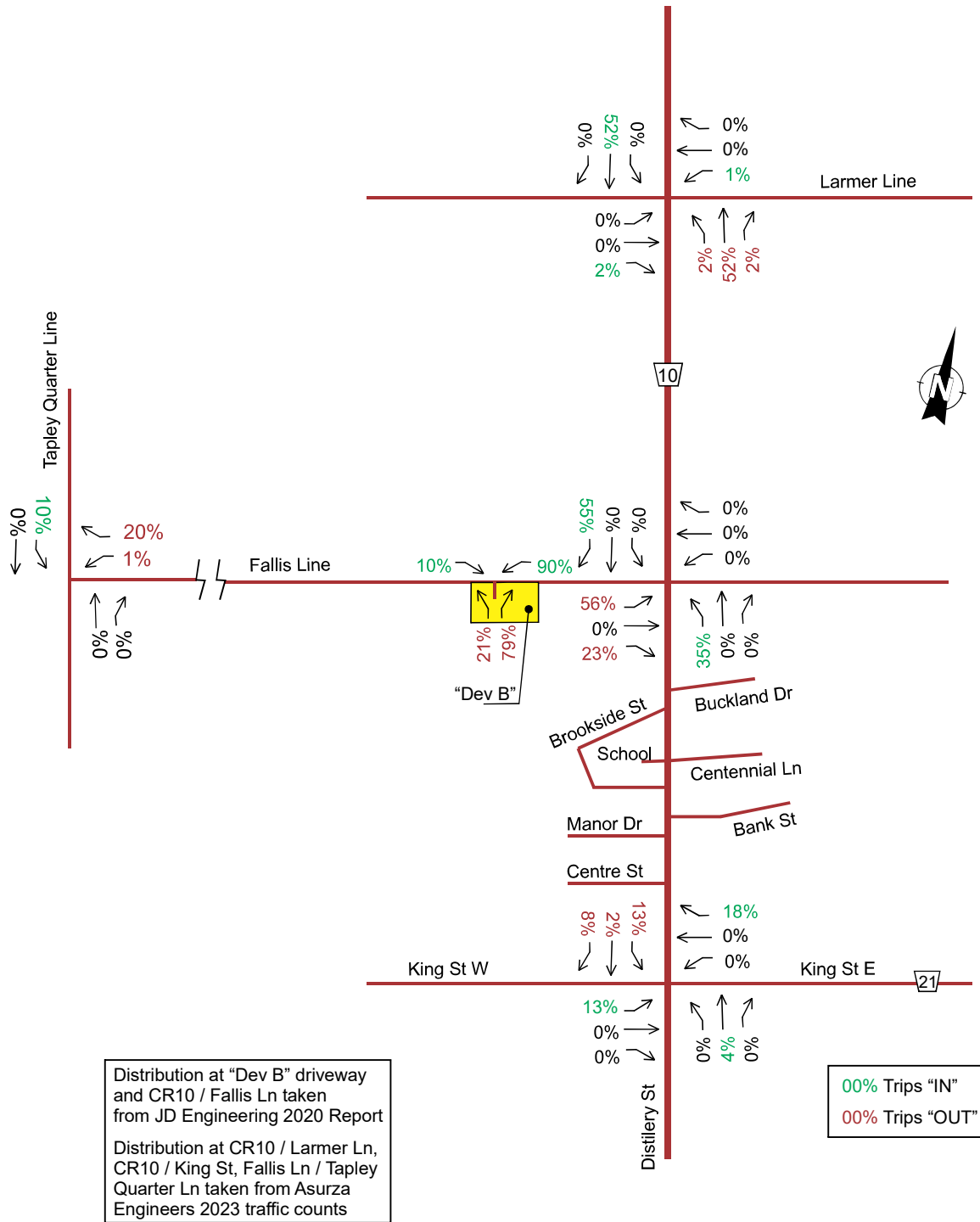
Trips Generated by “Development A” PM Peak Hour - 2026



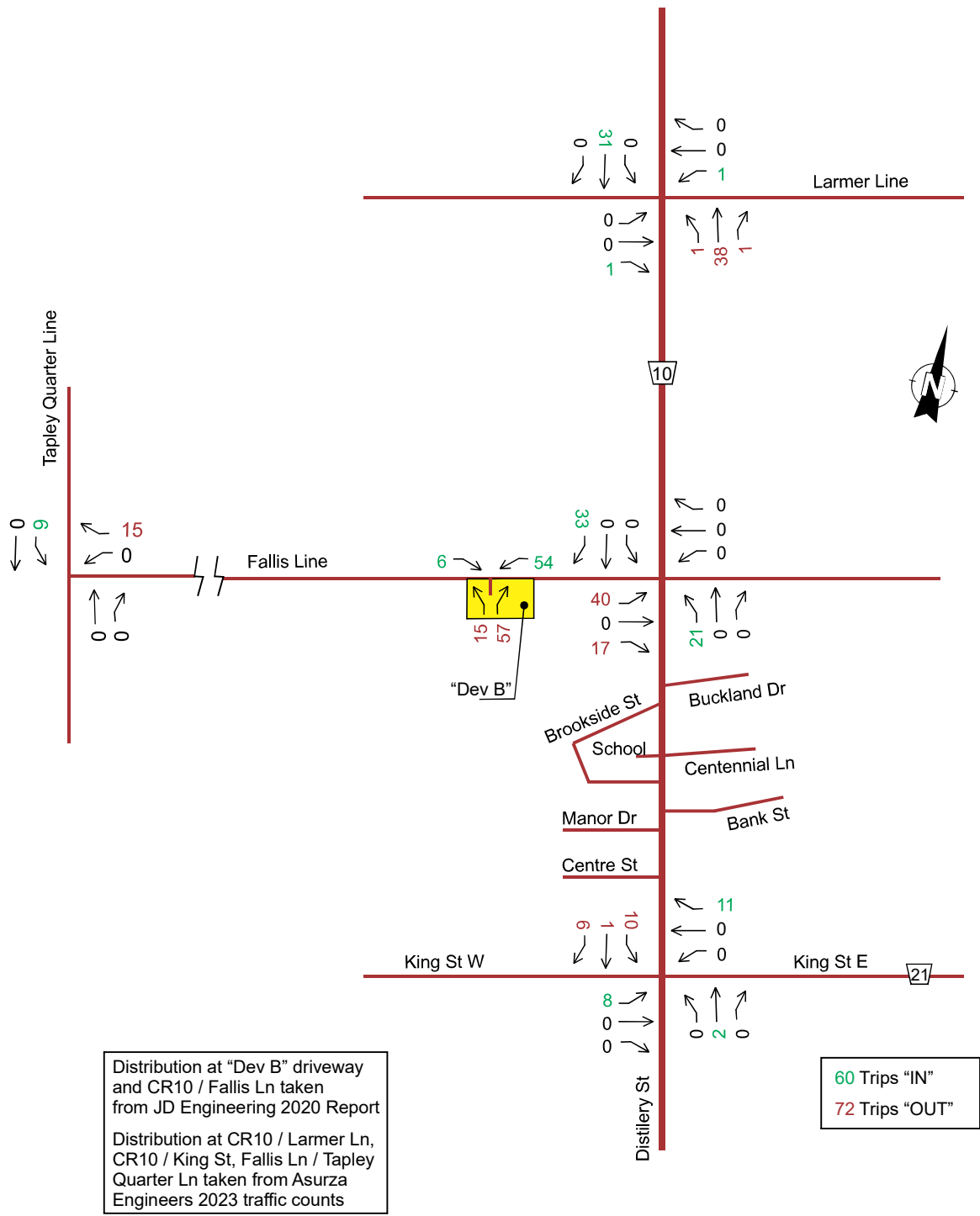
Trips Generated by "Development A" PM Peak Hour - 2031



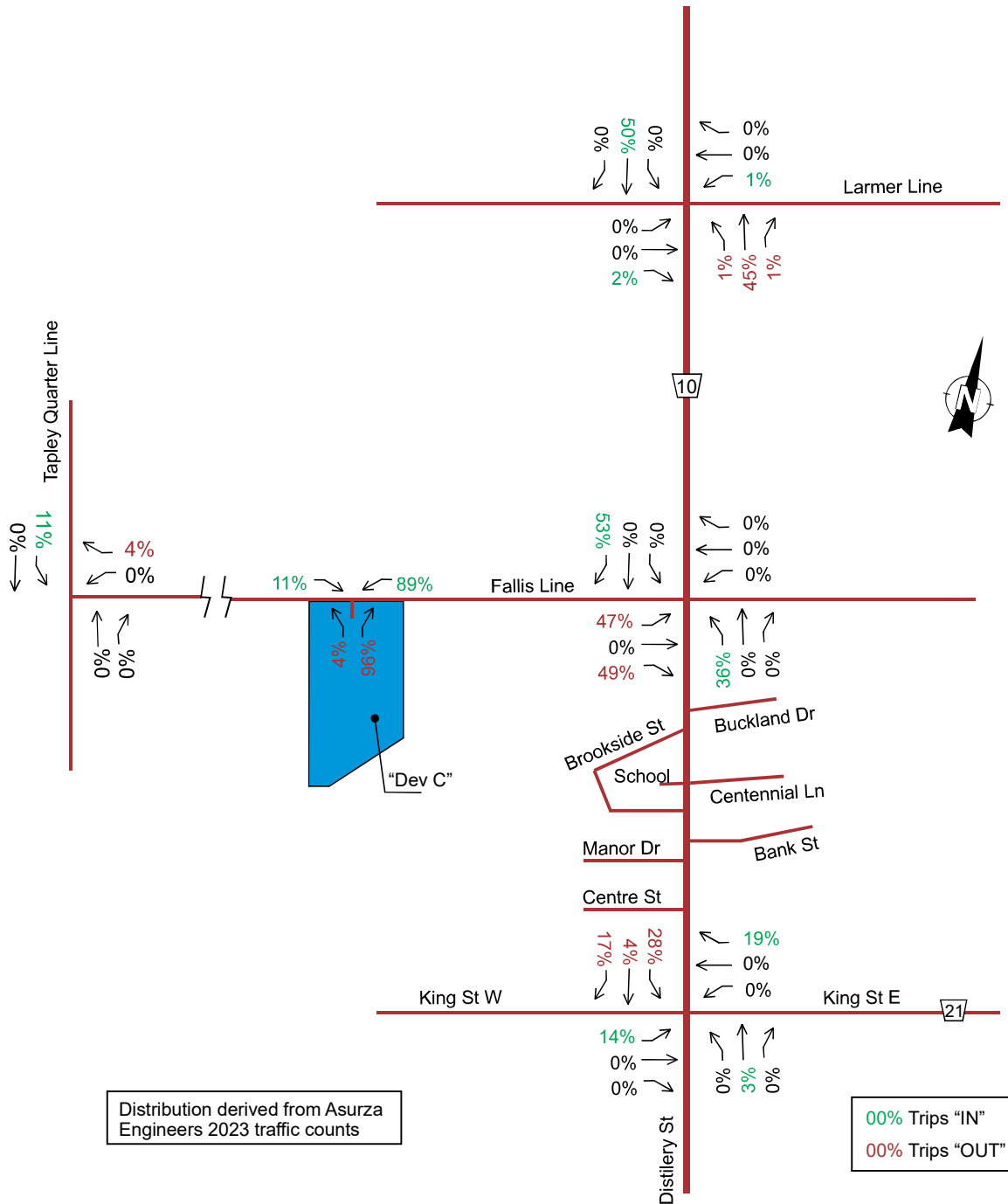
Distribution of Trips Generated by "Development B" PM Peak Hour - 2026



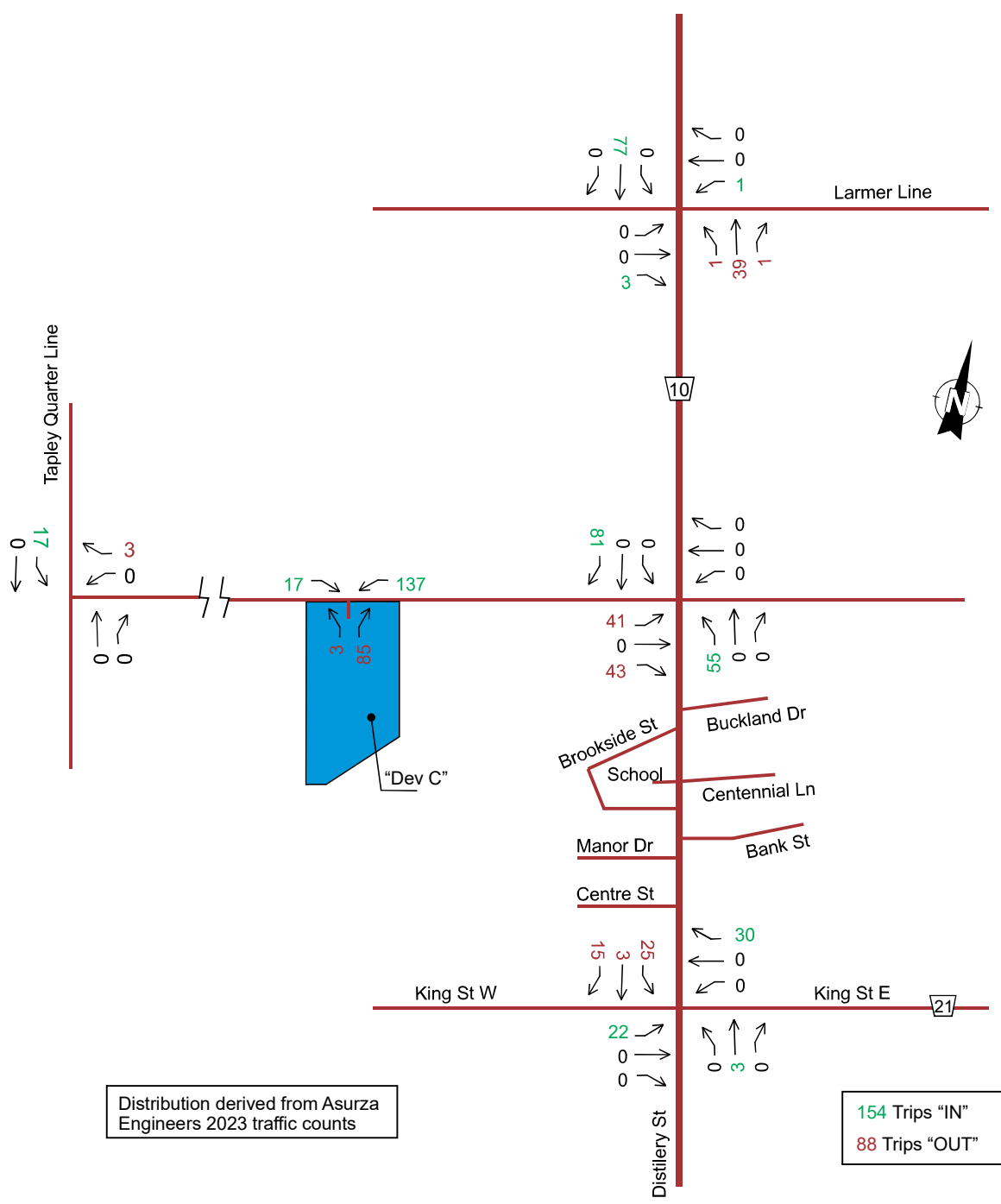
Trips Generated by "Development B" PM Peak Hour - 2026



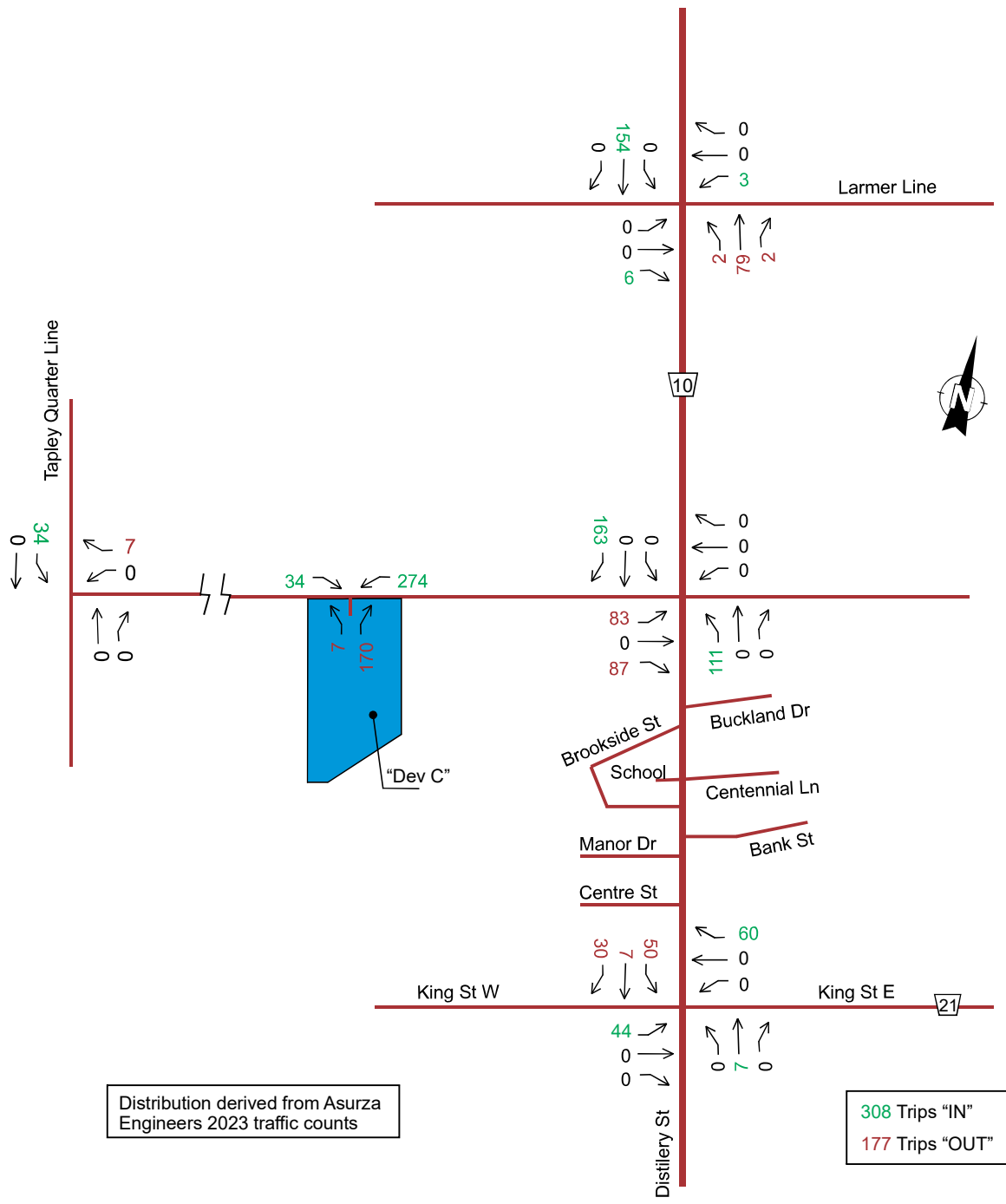
Distribution of Trips Generated by "Development C" PM Peak Hour - 2026



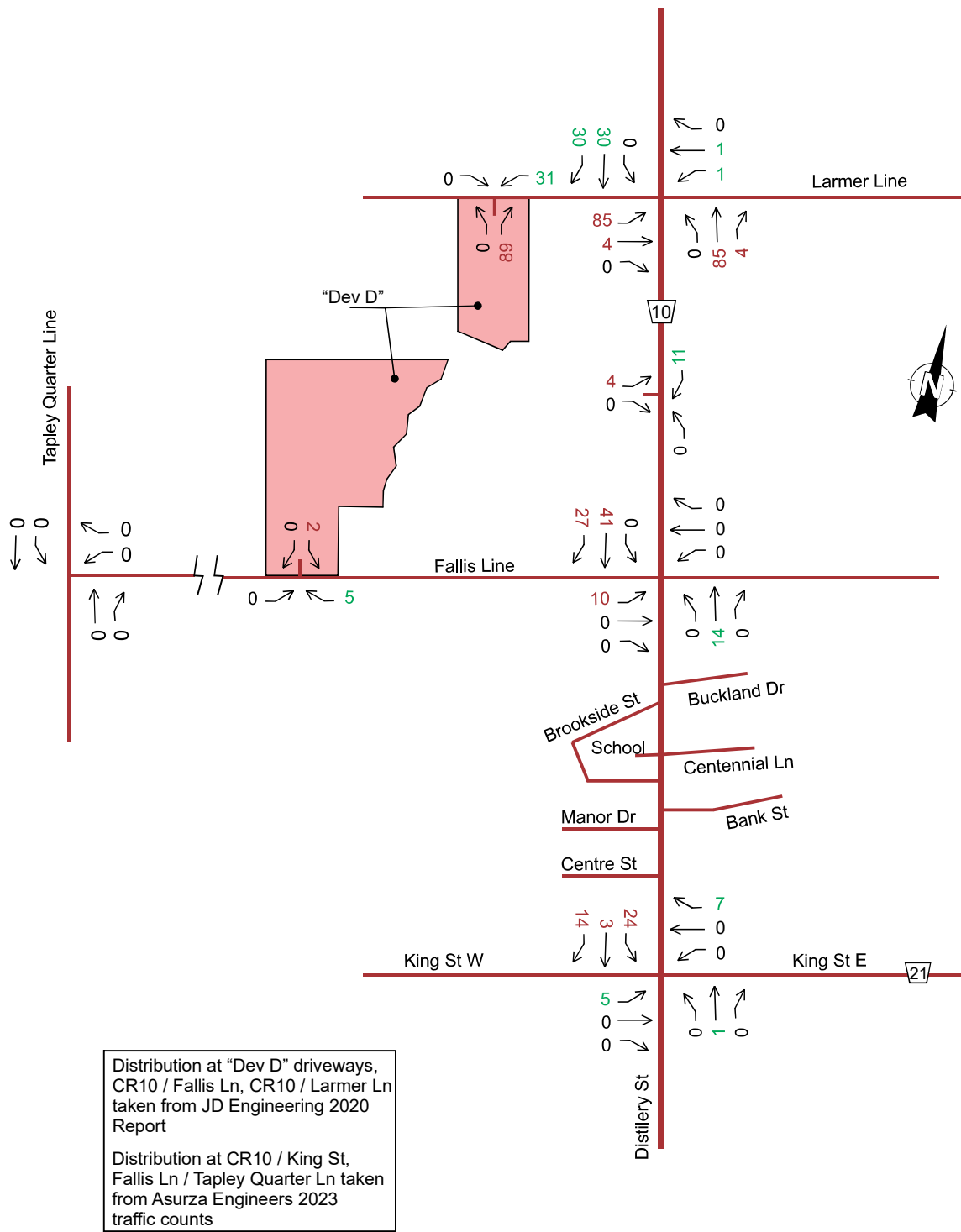
Trips Generated by "Development C" PM Peak Hour - 2026



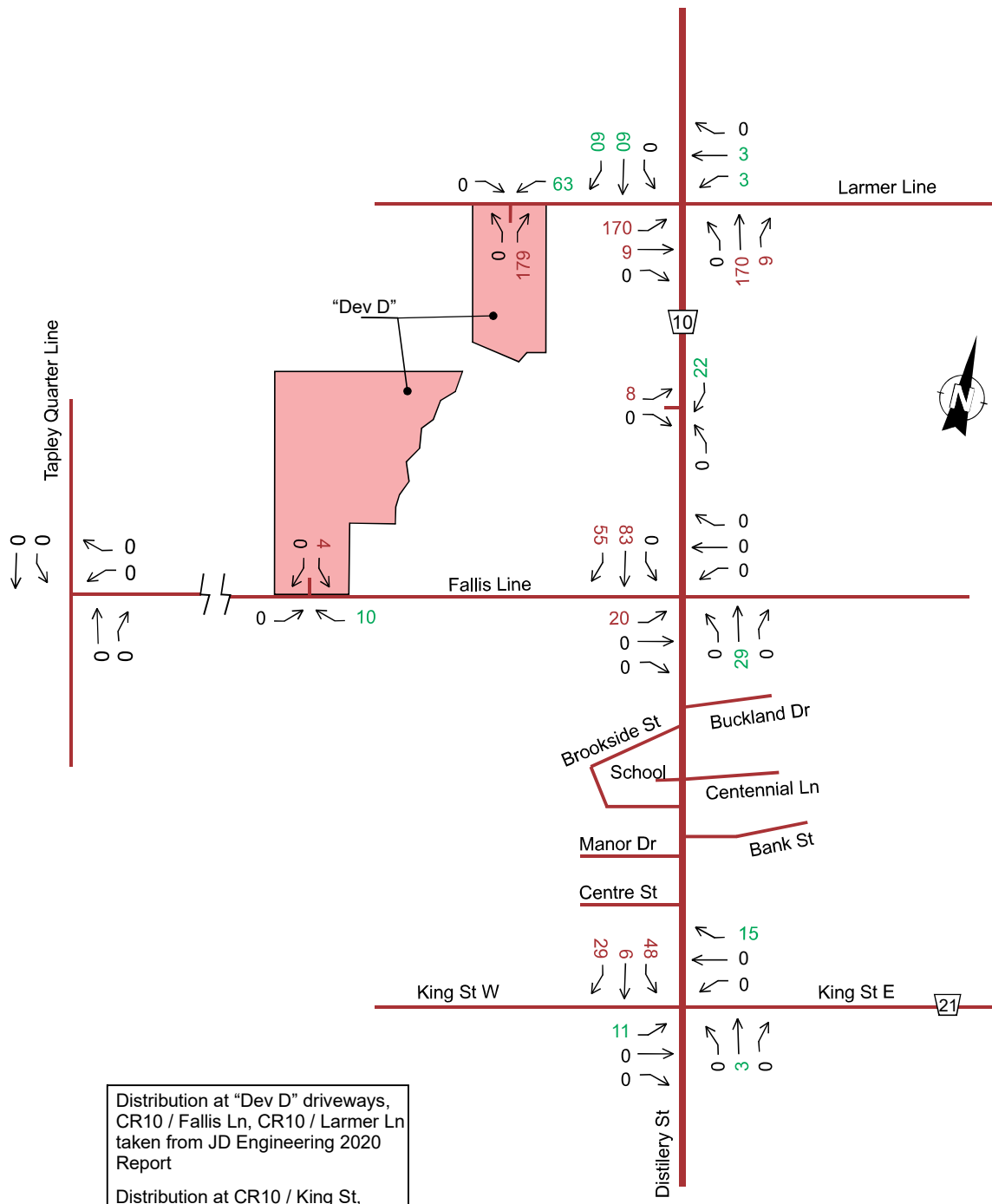
Trips Generated by "Development C" PM Peak Hour - 2031



Trips Generated by "Development D" PM Peak Hour - 2031



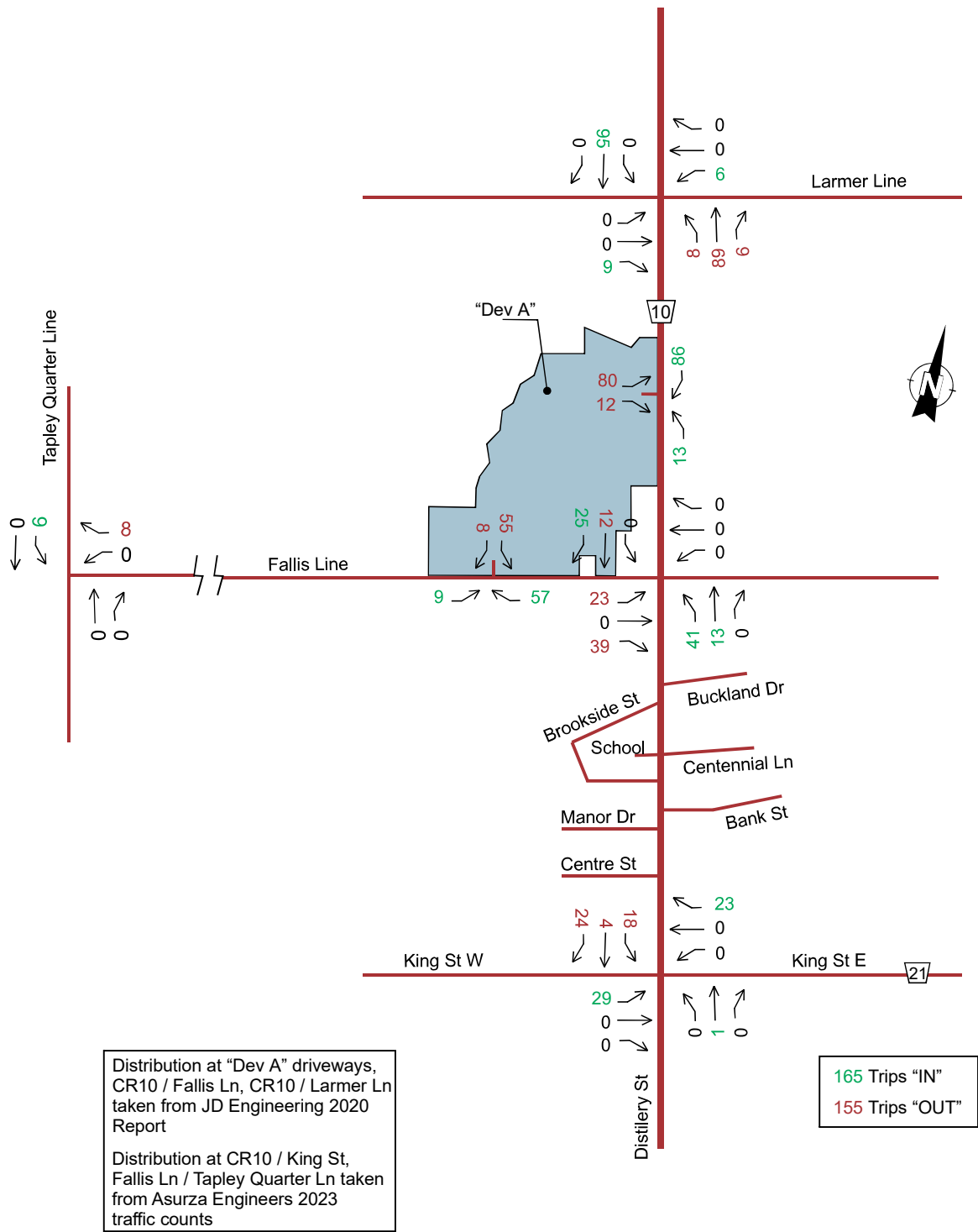
Trips Generated by "Development D" PM Peak Hour - 2036



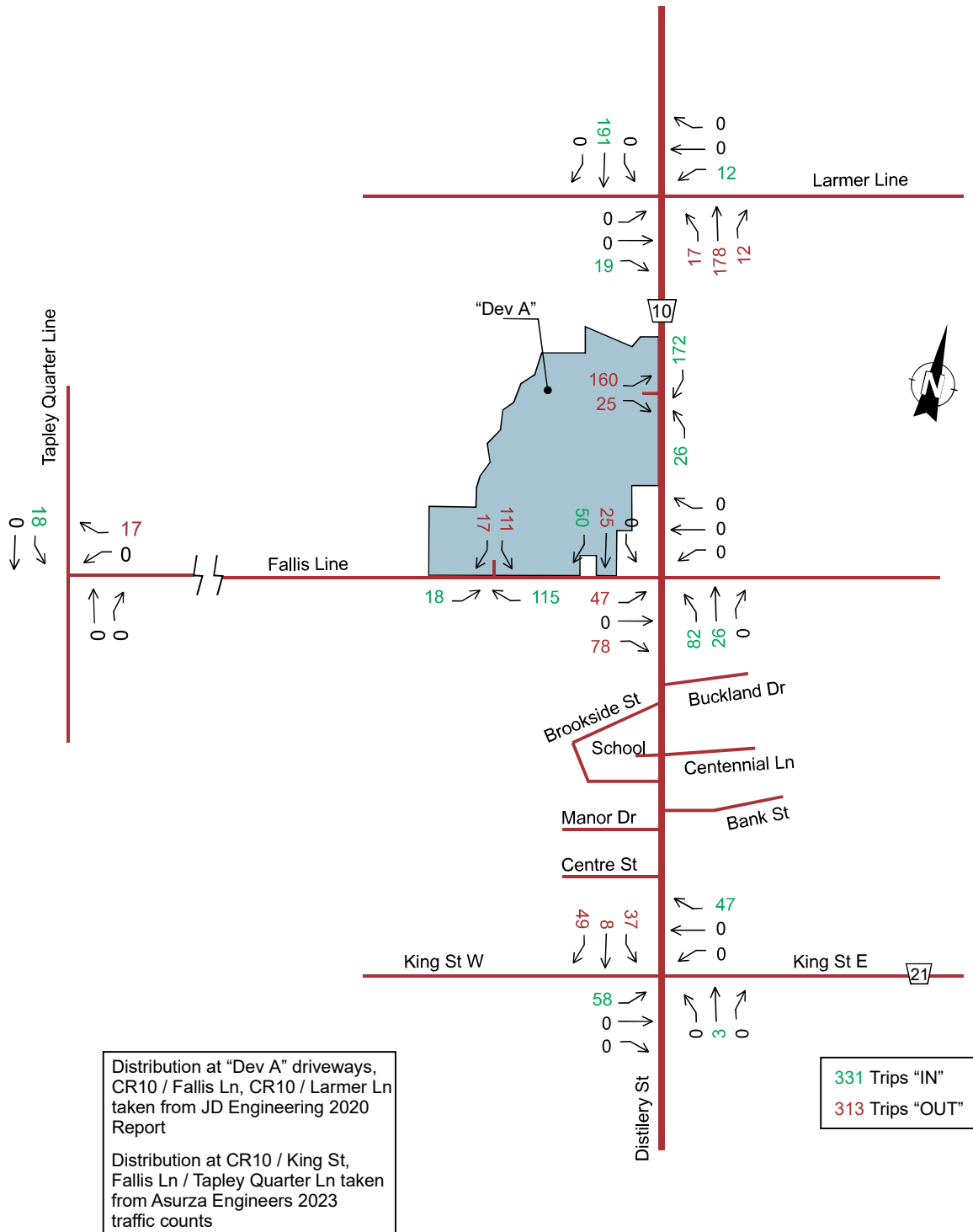
Distribution at "Dev D" driveways,
CR10 / Fallis Ln, CR10 / Larmer Ln
taken from JD Engineering 2020
Report

Distribution at CR10 / King St,
Fallis Ln / Tapley Quarter Ln taken
from Asurza Engineers 2023
traffic counts

Trips Generated by "Development A" SAT Peak Hour - 2026



Trips Generated by “Development A” SAT Peak Hour - 2031



The map illustrates the traffic distribution at the intersection of CR10 and King St. The following table summarizes the percentages for 'IN' (green) and 'OUT' (red) trips at various locations:

Location / Direction	IN (%)	OUT (%)
CR10 / Larmer Ln	50%	0%
CR10 / King St	17%	0%
CR10 / Falls Ln	11%	7%
CR10 / Tapley Quarter Line	11%	0%
CR10 / Brookside St	53%	0%
CR10 / School	89%	0%
CR10 / Manor Dr	45%	0%
CR10 / Centre St	19%	4%
CR10 / King St W	17%	0%
CR10 / King St E	15%	0%
CR10 / Buckland Dr	36%	0%
CR10 / Centennial Ln	0%	0%
CR10 / Bank St	0%	0%
CR10 / Distillery St	0%	0%
CR10 / Larmer Ln (Opposite)	0%	0%
CR10 / Falls Ln (Opposite)	0%	0%
CR10 / Tapley Quarter Line (Opposite)	0%	0%
CR10 / Brookside St (Opposite)	0%	0%
CR10 / School (Opposite)	0%	0%
CR10 / Manor Dr (Opposite)	0%	0%
CR10 / Centre St (Opposite)	0%	0%
CR10 / King St W (Opposite)	0%	0%
CR10 / King St E (Opposite)	0%	0%
CR10 / Buckland Dr (Opposite)	0%	0%
CR10 / Centennial Ln (Opposite)	0%	0%
CR10 / Bank St (Opposite)	0%	0%
CR10 / Distillery St (Opposite)	0%	0%

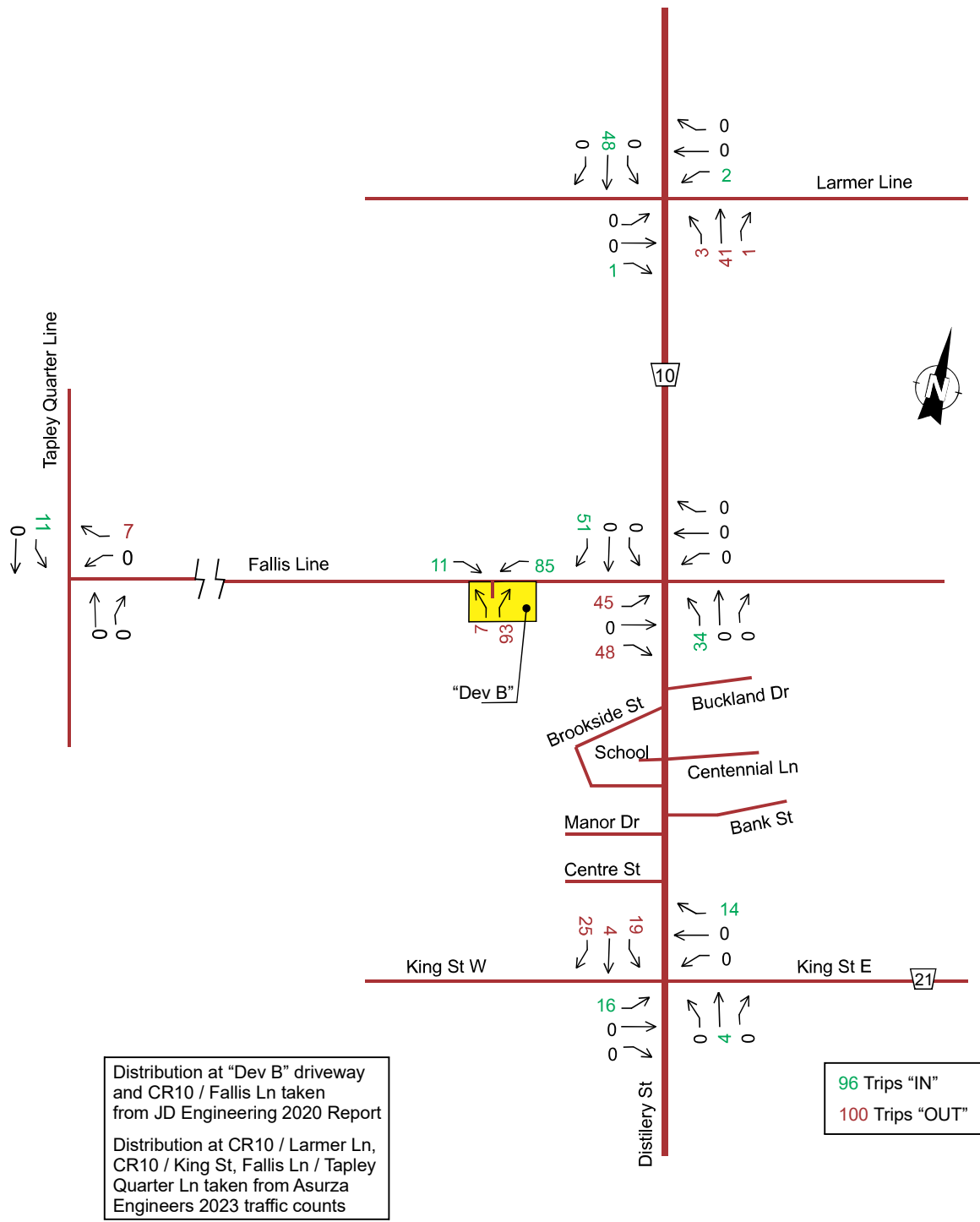
Legend:
 00% Trips "IN" (Green)
 00% Trips "OUT" (Red)

Notes:
 - Distribution at "Dev B" driveway and CR10 / Falls Ln taken from JD Engineering 2020 Report.
 - Distribution at CR10 / Larmer Ln, CR10 / King St, Falls Ln / Tapley, and CR10 / Brookside St taken from the 2020 Report.

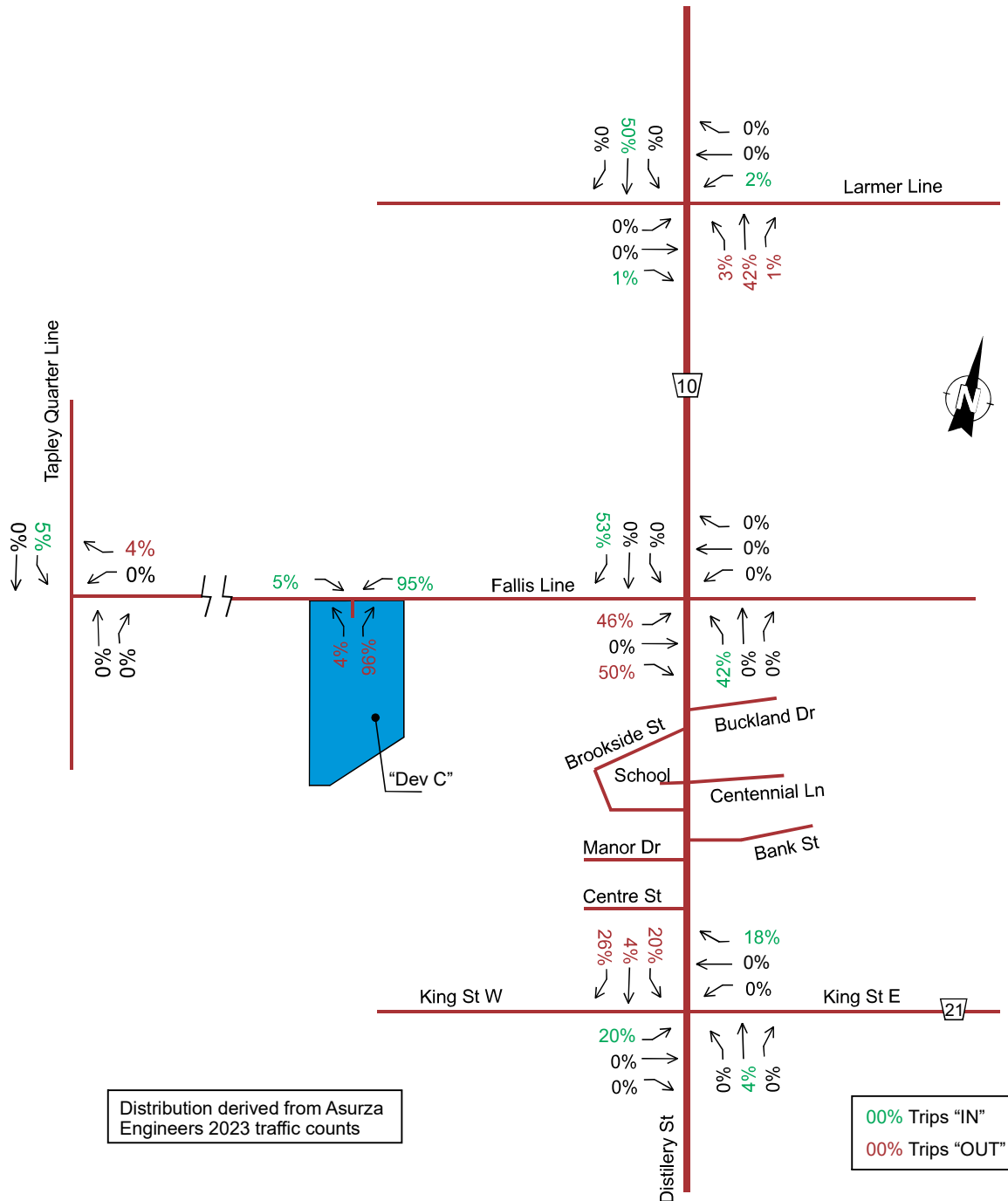
Distribution at CR10 / Larmer Ln,
CR10 / King St, Fallis Ln / Tapley
Quarter Ln taken from Asurza
Engineers 2023 traffic counts

00% Trips "IN"
00% Trips "OUT"

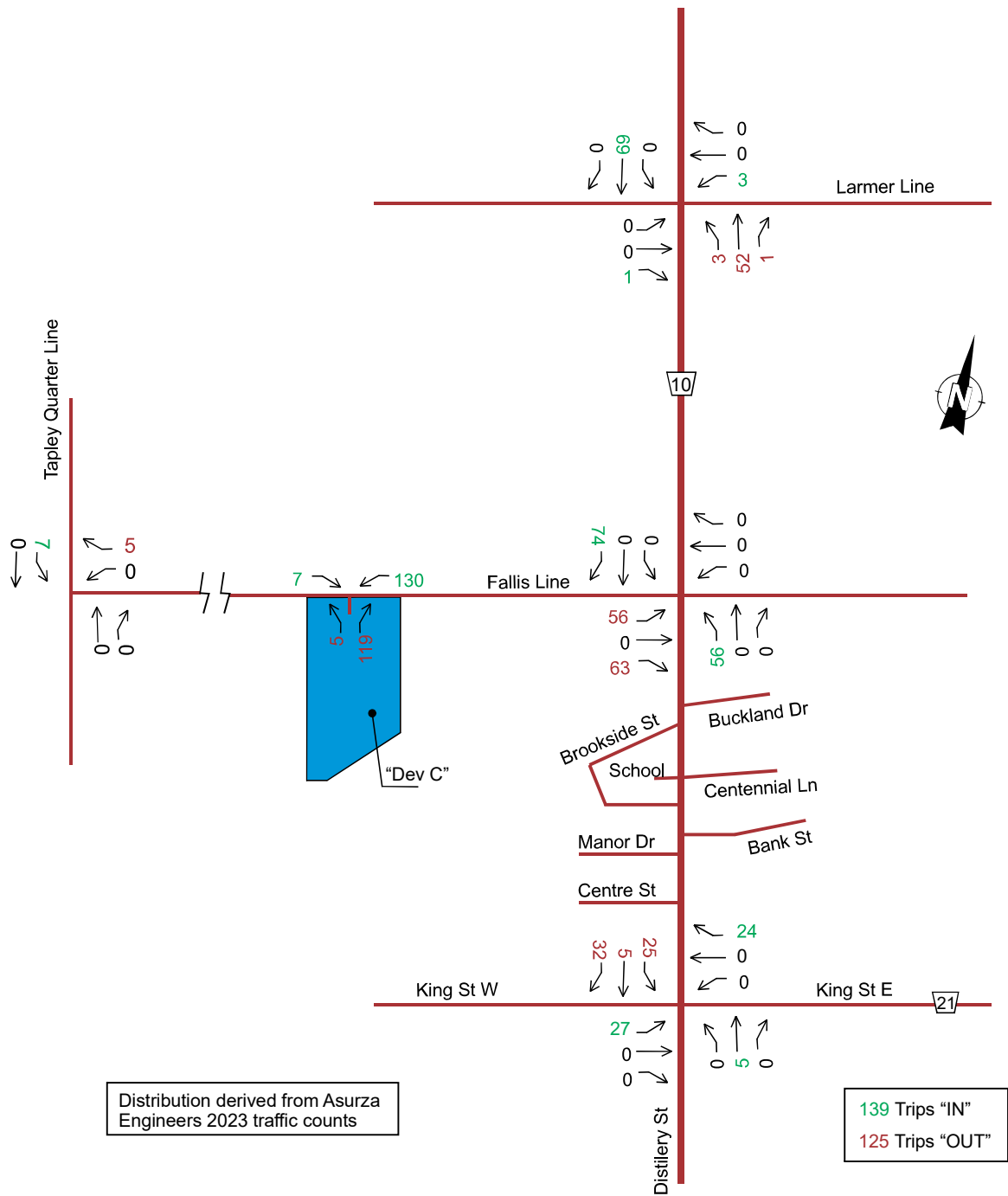
Trips Generated by "Development B" SAT Peak Hour - 2026



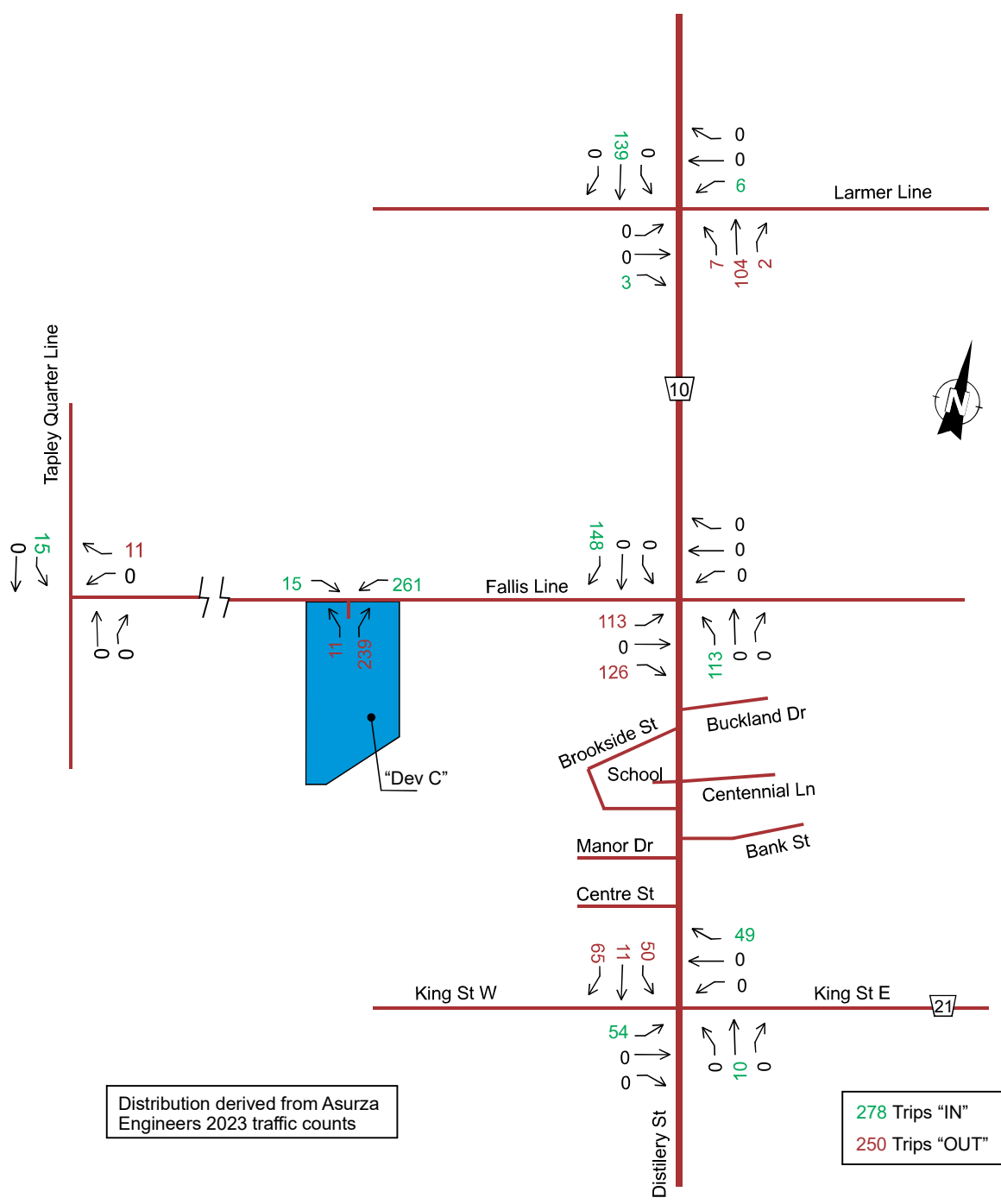
Distribution of Trips Generated by "Development C" SAT Peak Hour - 2026



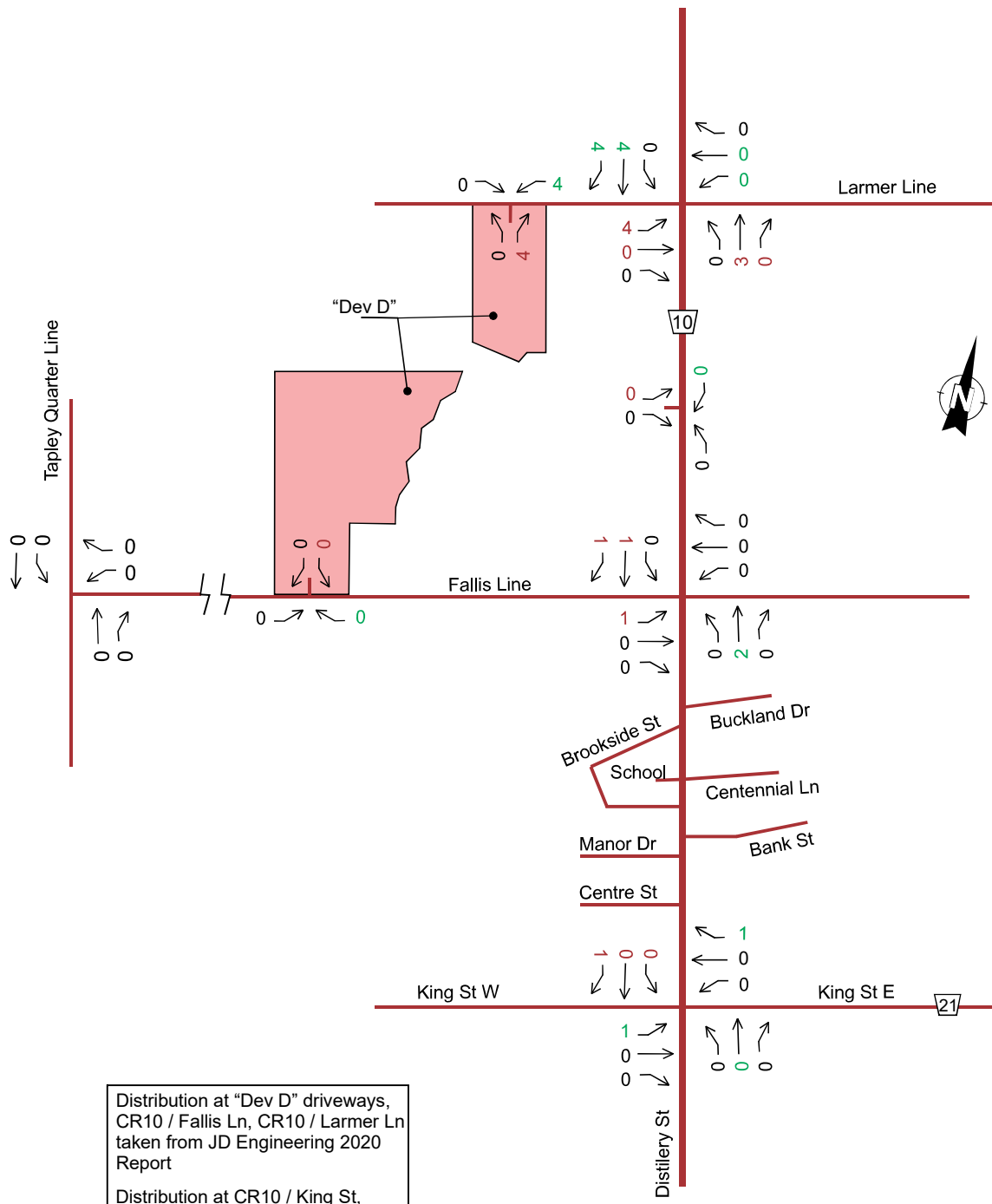
Trips Generated by "Development C" SAT Peak Hour - 2026



Trips Generated by "Development C" SAT Peak Hour - 2031



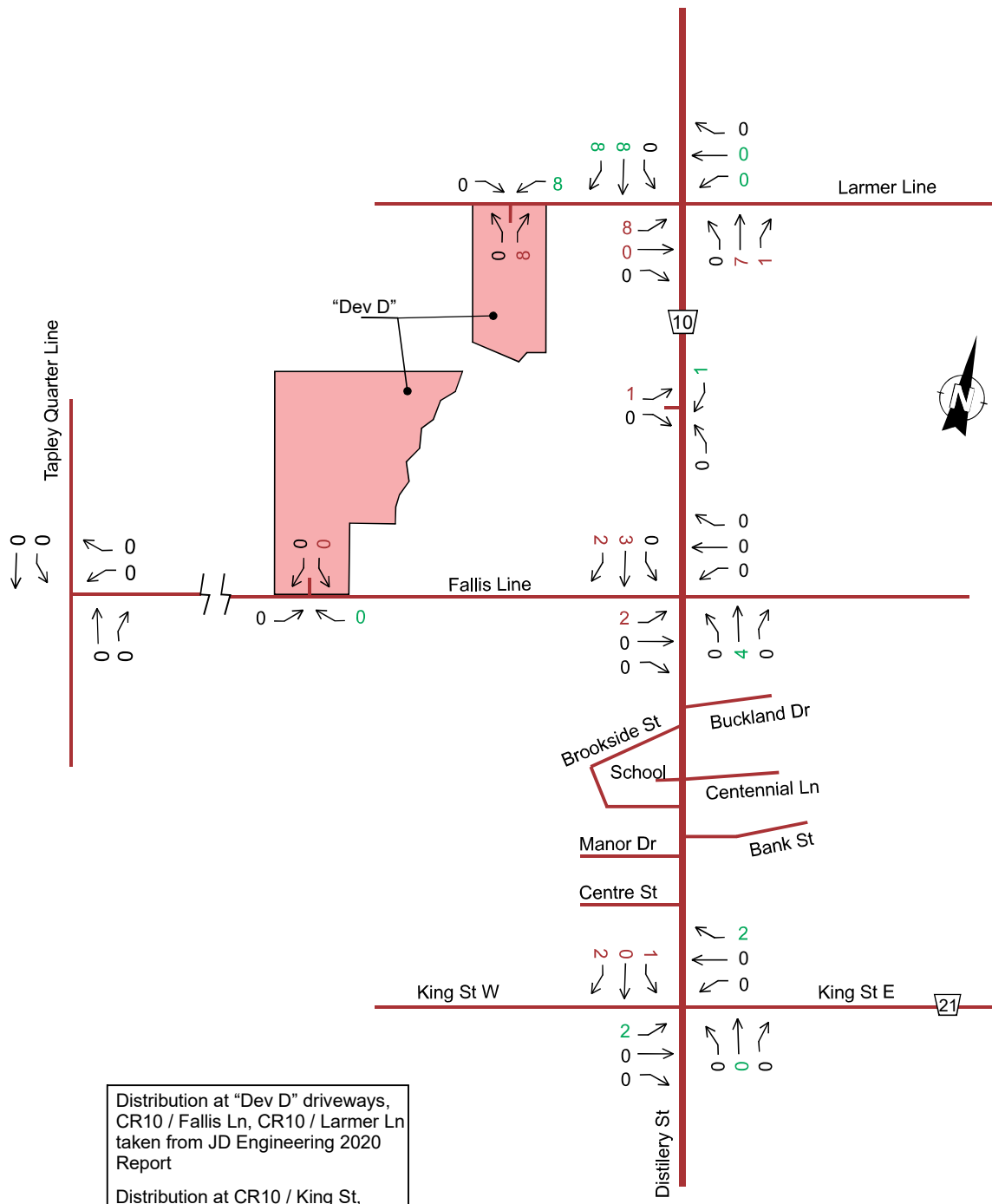
Trips Generated by "Development D" SAT Peak Hour - 2031



Distribution at "Dev D" driveways,
CR10 / Fallis Ln, CR10 / Larmer Ln
taken from JD Engineering 2020
Report

Distribution at CR10 / King St,
Fallis Ln / Tapley Quarter Ln taken
from Asurza Engineers 2023
traffic counts

Trips Generated by "Development D" SAT Peak Hour - 2036



Distribution at "Dev D" driveways,
CR10 / Fallis Ln, CR10 / Larmer Ln
taken from JD Engineering 2020
Report

Distribution at CR10 / King St,
Fallis Ln / Tapley Quarter Ln taken
from Asurza Engineers 2023
traffic counts

Appendix E

Synchro Reports

Background Volumes 2026

HCM Signalized Intersection Capacity Analysis

6: CR10 & Fallis Line/Fallis Line Driveway

Background Volumes 2026

AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	182	0	225	0	0	0	173	226	0	0	215	124
Future Volume (vph)	182	0	225	0	0	0	173	226	0	0	215	124
Satd. Flow (prot)	1789	1601	0	1883	1883	0	1789	1883	1883	1883	1883	1601
Flt Permitted	0.950						0.565					
Satd. Flow (perm)	1789	1601	0	1883	1883	0	1064	1883	1883	1883	1883	1601
Satd. Flow (RTOR)		731										135
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	198	245	0	0	0	0	188	246	0	0	234	135
Turn Type	pm+pt	NA		pm+pt			pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.0	20.7		11.0	20.7		11.0	20.7	20.7	11.0	20.7	20.7
Total Split (s)	16.0	22.0		16.0	22.0		12.0	40.0	40.0	12.0	40.0	40.0
Total Split (%)	17.8%	24.4%		17.8%	24.4%		13.3%	44.4%	44.4%	13.3%	44.4%	44.4%
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	0.0	1.0		0.0	1.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	4.7		3.0	4.7		3.0	4.7	4.7	3.0	4.7	4.7
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effect Green (s)	11.6	9.9					48.4	46.7			35.4	35.4
Actuated g/C Ratio	0.18	0.15					0.73	0.71			0.54	0.54
v/c Ratio	0.63	0.28					0.22	0.18			0.23	0.15
Control Delay	35.2	0.8					3.5	3.8			9.4	2.2
Queue Delay	0.0	0.0					0.0	0.0			0.0	0.0
Total Delay	35.2	0.8					3.5	3.8			9.4	2.2
LOS	D	A					A	A			A	A
Approach Delay		16.2						3.7			6.8	
Approach LOS		B						A			A	
Queue Length 50th (m)	23.1	0.0					5.6	8.6			14.9	0.0
Queue Length 95th (m)	41.7	0.0					10.6	15.3			26.4	6.8
Internal Link Dist (m)		155.2			89.4			842.8			154.8	
Turn Bay Length (m)	90.0						150.0					75.0
Base Capacity (vph)	353	959					879	1333			1008	920
Starvation Cap Reductn	0	0					0	0			0	0
Spillback Cap Reductn	0	0					0	0			0	0

HCM Signalized Intersection Capacity Analysis

6: CR10 & Fallis Line/Fallis Line Driveway

Background Volumes 2026

AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Storage Cap Reductn	0	0					0	0			0	0
Reduced v/c Ratio	0.56	0.26					0.21	0.18			0.23	0.15

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 66

Natural Cycle: 65

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 9.0

Intersection LOS: A

Intersection Capacity Utilization 46.0%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 6: CR10 & Fallis Line/Fallis Line Driveway

 Ø1	 Ø2	 Ø3	 Ø4
12 s	40 s	16 s	22 s
 Ø5	 Ø6	 Ø7	 Ø8
12 s	40 s	16 s	22 s

HCM Unsignalized Intersection Capacity Analysis

3: CR10 & Larmer Line

Background Volumes 2026

AM Peak Hour

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (veh/h)	13	3	27	22	3	14	18	448	19	5	326	5	
Future Volume (Veh/h)	13	3	27	22	3	14	18	448	19	5	326	5	
Sign Control	Stop			Stop			Free			Free			
Grade	0%			0%			0%			0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	14	3	29	24	3	15	20	487	21	5	354	5	
Pedestrians													
Lane Width (m)													
Walking Speed (m/s)													
Percent Blockage													
Right turn flare (veh)													
Median type							None			None			
Median storage veh													
Upstream signal (m)													
pX, platoon unblocked													
vC, conflicting volume	910	914	356	932	906	498	359						508
vC1, stage 1 conf vol													
vC2, stage 2 conf vol													
vCu, unblocked vol	910	914	356	932	906	498	359						508
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1						4.1
tC, 2 stage (s)													
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2						2.2
p0 queue free %	94	99	96	90	99	97	98						100
cM capacity (veh/h)	243	267	688	231	270	573	1200						1057
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2							
Volume Total	46	42	20	508	5	359							
Volume Left	14	24	20	0	5	0							
Volume Right	29	15	0	21	0	5							
cSH	414	297	1200	1700	1057	1700							
Volume to Capacity	0.11	0.14	0.02	0.30	0.00	0.21							
Queue Length 95th (m)	2.8	3.7	0.4	0.0	0.1	0.0							
Control Delay (s)	14.8	19.1	8.1	0.0	8.4	0.0							
Lane LOS	B	C	A	A									
Approach Delay (s)	14.8	19.1	0.3	0.1									
Approach LOS	B	C											
Intersection Summary													
Average Delay	1.7												
Intersection Capacity Utilization	35.4%			ICU Level of Service				A					
Analysis Period (min)	15												

HCM Unsignalized Intersection Capacity Analysis 12: Distillery Rd/CR10 & King St (CR21)

Background Volumes 2026
AM Peak Hour

																											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR															
Lane Configurations																											
Sign Control		Stop			Stop			Stop			Stop																
Traffic Volume (vph)	102	36	1	7	39	172	0	23	1	173	44	111															
Future Volume (vph)	102	36	1	7	39	172	0	23	1	173	44	111															
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92															
Hourly flow rate (vph)	111	39	1	8	42	187	0	25	1	188	48	121															
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2																						
Volume Total (vph)	151	237	26	188	169																						
Volume Left (vph)	111	8	0	188	0																						
Volume Right (vph)	1	187	1	0	121																						
Hadj (s)	0.18	-0.43	0.01	0.53	-0.47																						
Departure Headway (s)	5.4	4.7	5.5	6.1	5.1																						
Degree Utilization, x	0.23	0.31	0.04	0.32	0.24																						
Capacity (veh/h)	626	726	585	566	678																						
Control Delay (s)	9.9	9.7	8.8	10.6	8.4																						
Approach Delay (s)	9.9	9.7	8.8	9.6																							
Approach LOS	A	A	A	A																							
Intersection Summary																											
Delay			9.7																								
Level of Service			A																								
Intersection Capacity Utilization			46.9%	ICU Level of Service									A														
Analysis Period (min)			15																								

HCM Unsignalized Intersection Capacity Analysis

15: Tapley Quarter Line & Fallis Line

Background Volumes 2026

AM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	2	94	41	2	37	21
Future Volume (Veh/h)	2	94	41	2	37	21
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	102	45	2	40	23
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	149	46			47	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	149	46			47	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	90			97	
cM capacity (veh/h)	821	1015			1541	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	104	47	63			
Volume Left	2	0	40			
Volume Right	102	2	0			
cSH	1010	1700	1541			
Volume to Capacity	0.10	0.03	0.03			
Queue Length 95th (m)	2.6	0.0	0.6			
Control Delay (s)	9.0	0.0	4.8			
Lane LOS	A		A			
Approach Delay (s)	9.0	0.0	4.8			
Approach LOS	A					
Intersection Summary						
Average Delay		5.8				
Intersection Capacity Utilization		22.4%		ICU Level of Service		A
Analysis Period (min)		15				

Intersection: 12: Distillery Rd/CR10 & King St (CR21)

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	LTR	L	TR
Maximum Queue (m)	19.9	23.2	9.2	23.2	23.6
Average Queue (m)	11.4	15.7	5.4	14.9	13.2
95th Queue (m)	18.4	23.1	12.6	23.5	23.0
Link Distance (m)	518.3	494.8	260.2		495.4
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)				12.0	
Storage Blk Time (%)				11	6
Queuing Penalty (veh)				17	10

HCM Signalized Intersection Capacity Analysis

6: CR10 & Fallis Line/Fallis Line Driveway

Background Volumes 2026

PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	132	0	148	0	0	0	184	234	0	0	297	194
Future Volume (vph)	132	0	148	0	0	0	184	234	0	0	297	194
Satd. Flow (prot)	1789	1601	0	1883	1883	0	1789	1883	1883	1883	1883	1601
Flt Permitted	0.889						0.480					
Satd. Flow (perm)	1674	1601	0	1883	1883	0	904	1883	1883	1883	1883	1601
Satd. Flow (RTOR)		651										211
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	161	0	0	0	0	200	254	0	0	323	211
Turn Type	pm+pt	NA		pm+pt			pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.0	20.7		11.0	20.7		11.0	20.7	20.7	11.0	20.7	20.7
Total Split (s)	16.0	22.0		16.0	22.0		12.0	40.0	40.0	12.0	40.0	40.0
Total Split (%)	17.8%	24.4%		17.8%	24.4%		13.3%	44.4%	44.4%	13.3%	44.4%	44.4%
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	0.0	1.0		0.0	1.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	4.7		3.0	4.7		3.0	4.7	4.7	3.0	4.7	4.7
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effect Green (s)	10.5	8.8					48.5	46.8			35.4	35.4
Actuated g/C Ratio	0.16	0.14					0.75	0.72			0.54	0.54
v/c Ratio	0.49	0.21					0.25	0.19			0.32	0.22
Control Delay	31.2	0.6					3.4	3.6			9.7	2.1
Queue Delay	0.0	0.0					0.0	0.0			0.0	0.0
Total Delay	31.2	0.6					3.4	3.6			9.7	2.1
LOS	C	A					A	A			A	A
Approach Delay		15.0						3.5			6.7	
Approach LOS		B						A			A	
Queue Length 50th (m)	16.1	0.0					5.0	7.6			19.9	0.0
Queue Length 95th (m)	31.1	0.0					11.3	15.9			36.8	8.4
Internal Link Dist (m)		155.2			89.4			842.8			154.8	
Turn Bay Length (m)	90.0						150.0					75.0
Base Capacity (vph)	358	904					796	1354			1024	967
Starvation Cap Reductn	0	0					0	0			0	0
Spillback Cap Reductn	0	0					0	0			0	0

HCM Signalized Intersection Capacity Analysis

6: CR10 & Fallis Line/Fallis Line Driveway

Background Volumes 2026

PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Storage Cap Reductn	0	0					0	0			0	0
Reduced v/c Ratio	0.40	0.18					0.25	0.19			0.32	0.22

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 65

Natural Cycle: 65

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.49

Intersection Signal Delay: 7.5

Intersection LOS: A

Intersection Capacity Utilization 46.2%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 6: CR10 & Fallis Line/Fallis Line Driveway

 Ø1	 Ø2	 Ø3	 Ø4
12 s	40 s	16 s	22 s
 Ø5	 Ø6	 Ø7	 Ø8
12 s	40 s	16 s	22 s

HCM Unsignalized Intersection Capacity Analysis

3: CR10 & Larmer Line

Background Volumes 2026

PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	6	24	14	5	3	15	377	13	12	517	15
Future Volume (Veh/h)	12	6	24	14	5	3	15	377	13	12	517	15
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	7	26	15	5	3	16	410	14	13	562	16
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1044	1052	570	1066	1053	417	578			424		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1044	1052	570	1066	1053	417	578			424		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	93	97	95	92	98	100	98			99		
cM capacity (veh/h)	198	220	521	181	220	636	996			1135		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	46	23	16	424	13	578						
Volume Left	13	15	16	0	13	0						
Volume Right	26	3	0	14	0	16						
cSH	313	209	996	1700	1135	1700						
Volume to Capacity	0.15	0.11	0.02	0.25	0.01	0.34						
Queue Length 95th (m)	3.9	2.8	0.4	0.0	0.3	0.0						
Control Delay (s)	18.5	24.4	8.7	0.0	8.2	0.0						
Lane LOS	C	C	A		A							
Approach Delay (s)	18.5	24.4	0.3		0.2							
Approach LOS	C	C										
Intersection Summary												
Average Delay			1.5									
Intersection Capacity Utilization			38.1%		ICU Level of Service					A		
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 12: Distillery Rd/CR10 & King St (CR21)

Background Volumes 2026
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	135	71	8	7	70	185	2	31	16	200	23	120
Future Volume (vph)	135	71	8	7	70	185	2	31	16	200	23	120
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	147	77	9	8	76	201	2	34	17	217	25	130
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2							
Volume Total (vph)	233	285	53	217	155							
Volume Left (vph)	147	8	2	217	0							
Volume Right (vph)	9	201	17	0	130							
Hadj (s)	0.14	-0.38	-0.15	0.53	-0.55							
Departure Headway (s)	5.6	5.1	5.9	6.5	5.4							
Degree Utilization, x	0.36	0.40	0.09	0.39	0.23							
Capacity (veh/h)	599	667	520	523	625							
Control Delay (s)	11.8	11.4	9.5	12.5	8.9							
Approach Delay (s)	11.8	11.4	9.5	11.0								
Approach LOS	B	B	A	B								
Intersection Summary												
Delay			11.2									
Level of Service			B									
Intersection Capacity Utilization			54.9%			ICU Level of Service				A		
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

15: Tapley Quarter Line & Fallis Line

Background Volumes 2026

PM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	48	44	2	99	62
Future Volume (Veh/h)	1	48	44	2	99	62
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	52	48	2	108	67
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	332	49			50	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	332	49			50	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			93	
cM capacity (veh/h)	616	1011			1537	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	53	50	175			
Volume Left	1	0	108			
Volume Right	52	2	0			
cSH	999	1700	1537			
Volume to Capacity	0.05	0.03	0.07			
Queue Length 95th (m)	1.3	0.0	1.7			
Control Delay (s)	8.8	0.0	4.9			
Lane LOS	A		A			
Approach Delay (s)	8.8	0.0	4.9			
Approach LOS	A					
Intersection Summary						
Average Delay		4.7				
Intersection Capacity Utilization		25.4%		ICU Level of Service		A
Analysis Period (min)		15				

Queuing and Blocking Report

Baseline

07-19-2023

Intersection: 12: Distillery Rd/CR10 & King St (CR21)

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	LTR	L	TR
Maximum Queue (m)	23.6	22.4	9.3	16.4	16.5
Average Queue (m)	16.3	17.3	5.5	14.9	13.5
95th Queue (m)	23.8	25.3	13.0	19.5	19.2
Link Distance (m)	518.3	494.8	260.2		495.4
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)				12.0	
Storage Blk Time (%)				9	7
Queuing Penalty (veh)				13	13

HCM Signalized Intersection Capacity Analysis

6: CR10 & Fallis Line/Fallis Line Driveway

Background Volumes 2026

SAT Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	149	0	190	0	0	0	168	223	0	0	176	198
Future Volume (vph)	149	0	190	0	0	0	168	223	0	0	176	198
Satd. Flow (prot)	1789	1601	0	1883	1883	0	1789	1883	1883	1883	1883	1601
Flt Permitted	0.950						0.587					
Satd. Flow (perm)	1789	1601	0	1883	1883	0	1106	1883	1883	1883	1883	1601
Satd. Flow (RTOR)		779										215
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	162	207	0	0	0	0	183	242	0	0	191	215
Turn Type	pm+pt	NA		pm+pt			pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.0	20.7		11.0	20.7		11.0	20.7	20.7	11.0	20.7	20.7
Total Split (s)	16.0	22.0		16.0	22.0		12.0	40.0	40.0	12.0	40.0	40.0
Total Split (%)	17.8%	24.4%		17.8%	24.4%		13.3%	44.4%	44.4%	13.3%	44.4%	44.4%
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	0.0	1.0		0.0	1.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	4.7		3.0	4.7		3.0	4.7	4.7	3.0	4.7	4.7
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effect Green (s)	12.1	10.4					48.4	46.7			35.3	35.3
Actuated g/C Ratio	0.18	0.16					0.73	0.70			0.53	0.53
v/c Ratio	0.50	0.23					0.21	0.18			0.19	0.23
Control Delay	30.5	0.6					3.4	3.8			9.0	2.1
Queue Delay	0.0	0.0					0.0	0.0			0.0	0.0
Total Delay	30.5	0.6					3.4	3.8			9.0	2.1
LOS	C	A					A	A			A	A
Approach Delay		13.7						3.7			5.3	
Approach LOS		B						A			A	
Queue Length 50th (m)	18.3	0.0					5.1	7.9			11.3	0.0
Queue Length 95th (m)	34.8	0.0					10.3	15.1			21.7	8.5
Internal Link Dist (m)		155.2			89.4			842.8			154.8	
Turn Bay Length (m)	90.0						150.0					75.0
Base Capacity (vph)	350	992					896	1321			1000	951
Starvation Cap Reductn	0	0					0	0			0	0
Spillback Cap Reductn	0	0					0	0			0	0

HCM Signalized Intersection Capacity Analysis 6: CR10 & Fallis Line/Fallis Line Driveway

Background Volumes 2026
SAT Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Storage Cap Reductn	0	0					0	0			0	0
Reduced v/c Ratio	0.46	0.21					0.20	0.18			0.19	0.23

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 66.5

Natural Cycle: 65

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.50

Intersection Signal Delay: 7.3

Intersection LOS: A

Intersection Capacity Utilization 41.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 6: CR10 & Fallis Line/Fallis Line Driveway

 Ø1	 Ø2	 Ø3	 Ø4
12 s	40 s	16 s	22 s
 Ø5	 Ø6	 Ø7	 Ø8
12 s	40 s	16 s	22 s

HCM Unsignalized Intersection Capacity Analysis

3: CR10 & Larmer Line

Background Volumes 2026

SAT Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	5	17	23	7	2	30	412	12	2	469	12
Future Volume (Veh/h)	6	5	17	23	7	2	30	412	12	2	469	12
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	5	18	25	8	2	33	448	13	2	510	13
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1040	1048	516	1055	1048	454	523				461	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1040	1048	516	1055	1048	454	523				461	
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	96	98	97	87	96	100	97				100	
cM capacity (veh/h)	197	220	559	189	220	606	1043				1100	
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	30	35	33	461	2	523						
Volume Left	7	25	33	0	2	0						
Volume Right	18	2	0	13	0	13						
cSH	331	203	1043	1700	1100	1700						
Volume to Capacity	0.09	0.17	0.03	0.27	0.00	0.31						
Queue Length 95th (m)	2.3	4.6	0.7	0.0	0.0	0.0						
Control Delay (s)	16.9	26.4	8.6	0.0	8.3	0.0						
Lane LOS	C	D	A		A							
Approach Delay (s)	16.9	26.4	0.6		0.0							
Approach LOS	C	D										
Intersection Summary												
Average Delay				1.6								
Intersection Capacity Utilization				36.9%	ICU Level of Service					A		
Analysis Period (min)				15								

HCM Unsignalized Intersection Capacity Analysis 12: Distillery Rd/CR10 & King St (CR21)

Background Volumes 2026
SAT Peak Hour

																			
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR							
Lane Configurations																			
Sign Control		Stop			Stop			Stop			Stop								
Traffic Volume (vph)	172	65	21	11	83	151	6	29	15	171	36	224							
Future Volume (vph)	172	65	21	11	83	151	6	29	15	171	36	224							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92							
Hourly flow rate (vph)	187	71	23	12	90	164	7	32	16	186	39	243							
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2														
Volume Total (vph)	281	266	55	186	282														
Volume Left (vph)	187	12	7	186	0														
Volume Right (vph)	23	164	16	0	243														
Hadj (s)	0.12	-0.33	-0.12	0.53	-0.57														
Departure Headway (s)	5.8	5.4	6.3	6.7	5.6														
Degree Utilization, x	0.45	0.40	0.10	0.35	0.44														
Capacity (veh/h)	583	619	486	511	615														
Control Delay (s)	13.6	12.1	10.0	12.0	11.6														
Approach Delay (s)	13.6	12.1	10.0	11.8															
Approach LOS	B	B	A	B															
Intersection Summary																			
Delay				12.2															
Level of Service				B															
Intersection Capacity Utilization				54.6%	ICU Level of Service	A													
Analysis Period (min)				15															

HCM Unsignalized Intersection Capacity Analysis 15: Tapley Quarter Line & Fallis Line

Background Volumes 2026
SAT Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	3	43	41	2	55	42
Future Volume (Veh/h)	3	43	41	2	55	42
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	47	45	2	60	46
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	212	46			47	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	212	46			47	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			96	
cM capacity (veh/h)	746	1015			1541	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	50	47	106			
Volume Left	3	0	60			
Volume Right	47	2	0			
cSH	994	1700	1541			
Volume to Capacity	0.05	0.03	0.04			
Queue Length 95th (m)	1.2	0.0	0.9			
Control Delay (s)	8.8	0.0	4.3			
Lane LOS	A		A			
Approach Delay (s)	8.8	0.0	4.3			
Approach LOS	A					
Intersection Summary						
Average Delay			4.4			
Intersection Capacity Utilization			21.9%	ICU Level of Service	A	
Analysis Period (min)			15			

Intersection: 12: Distillery Rd/CR10 & King St (CR21)

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	LTR	L	TR
Maximum Queue (m)	16.5	23.2	9.3	23.2	28.5
Average Queue (m)	15.0	16.4	5.5	16.1	17.2
95th Queue (m)	19.8	23.8	12.9	26.4	29.9
Link Distance (m)	518.3	494.8	260.2		495.4
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)				12.0	
Storage Blk Time (%)				13	10
Queuing Penalty (veh)				34	17

Appendix F

Synchro Reports

Background Volumes 2031

HCM Signalized Intersection Capacity Analysis

6: CR10 & Fallis Line/Fallis Line Driveway

Background Volumes 2031

AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	329	0	346	0	0	0	249	305	0	0	258	178
Future Volume (vph)	329	0	346	0	0	0	249	305	0	0	258	178
Satd. Flow (prot)	1789	1601	0	1883	1883	0	1789	1883	1883	1883	1883	1601
Flt Permitted	0.950						0.522					
Satd. Flow (perm)	1789	1601	0	1883	1883	0	983	1883	1883	1883	1883	1601
Satd. Flow (RTOR)		687										193
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	358	376	0	0	0	0	271	332	0	0	280	193
Turn Type	pm+pt	NA		pm+pt			pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.0	20.7		11.0	20.7		11.0	20.7	20.7	11.0	20.7	20.7
Total Split (s)	16.0	22.0		16.0	22.0		12.0	40.0	40.0	12.0	40.0	40.0
Total Split (%)	17.8%	24.4%		17.8%	24.4%		13.3%	44.4%	44.4%	13.3%	44.4%	44.4%
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	0.0	1.0		0.0	1.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	4.7		3.0	4.7		3.0	4.7	4.7	3.0	4.7	4.7
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effect Green (s)	13.0	11.3					48.8	47.1			35.3	35.3
Actuated g/C Ratio	0.19	0.17					0.72	0.69			0.52	0.52
v/c Ratio	1.05	0.45					0.33	0.25			0.29	0.21
Control Delay	92.0	1.7					4.3	4.4			10.2	2.1
Queue Delay	0.0	0.0					0.0	0.0			0.0	0.0
Total Delay	92.0	1.7					4.3	4.4			10.2	2.1
LOS	F	A					A	A			B	A
Approach Delay		45.7						4.4			6.9	
Approach LOS		D						A			A	
Queue Length 50th (m)	~50.6	0.0					8.8	12.5			18.6	0.0
Queue Length 95th (m)	#96.0	0.0					15.2	20.9			31.6	8.0
Internal Link Dist (m)		109.6			89.4			842.8			154.8	
Turn Bay Length (m)	90.0						150.0					75.0
Base Capacity (vph)	343	920					815	1308			980	925
Starvation Cap Reductn	0	0					0	0			0	0
Spillback Cap Reductn	0	0					0	0			0	0

HCM Unsignalized Intersection Capacity Analysis

6: CR10 & Fallis Line/Fallis Line Driveway

Background Volumes 2031

AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Storage Cap Reductn	0	0					0	0			0	0
Reduced v/c Ratio	1.04	0.41					0.33	0.25			0.29	0.21

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 67.8

Natural Cycle: 65

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.05

Intersection Signal Delay: 21.8

Intersection LOS: C

Intersection Capacity Utilization 60.0%

ICU Level of Service B

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: CR10 & Fallis Line/Fallis Line Driveway

 Ø1	 Ø2	 Ø3	 Ø4
12 s	40 s	16 s	22 s
 Ø5	 Ø6	 Ø7	 Ø8
12 s	40 s	16 s	22 s

HCM Unsignalized Intersection Capacity Analysis

3: CR10 & Larmer Line

Background Volumes 2031

AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	5	39	36	9	15	34	660	33	6	511	112
Future Volume (Veh/h)	33	5	39	36	9	15	34	660	33	6	511	112
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	36	5	42	39	10	16	37	717	36	7	555	122
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None								None			
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1442	1457	616	1422	1500	735	677	753				
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1442	1457	616	1422	1500	735	677	753				
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1	4.1				
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2	2.2				
p0 queue free %	62	96	91	60	91	96	96	99				
cM capacity (veh/h)	95	123	491	97	116	420	915	857				
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	83	65	37	753	7	677						
Volume Left	36	39	37	0	7	0						
Volume Right	42	16	0	36	0	122						
cSH	165	124	915	1700	857	1700						
Volume to Capacity	0.50	0.53	0.04	0.44	0.01	0.40						
Queue Length 95th (m)	18.7	18.9	1.0	0.0	0.2	0.0						
Control Delay (s)	47.2	62.7	9.1	0.0	9.2	0.0						
Lane LOS	E	F	A		A							
Approach Delay (s)	47.2	62.7	0.4		0.1							
Approach LOS	E	F										
Intersection Summary												
Average Delay			5.2									
Intersection Capacity Utilization			48.4%	ICU Level of Service					A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 12: Distillery Rd/CR10 & King St (CR21)

Background Volumes 2031
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	151	40	1	8	43	255	0	35	1	254	66	164
Future Volume (vph)	151	40	1	8	43	255	0	35	1	254	66	164
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	164	43	1	9	47	277	0	38	1	276	72	178
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2							
Volume Total (vph)	208	333	39	276	250							
Volume Left (vph)	164	9	0	276	0							
Volume Right (vph)	1	277	1	0	178							
Hadj (s)	0.19	-0.46	0.02	0.53	-0.46							
Departure Headway (s)	6.1	5.3	6.5	6.6	5.6							
Degree Utilization, x	0.35	0.49	0.07	0.51	0.39							
Capacity (veh/h)	553	647	472	521	615							
Control Delay (s)	12.4	13.2	10.0	15.1	11.0							
Approach Delay (s)	12.4	13.2	10.0	13.1								
Approach LOS	B	B	A	B								
Intersection Summary												
Delay			12.9									
Level of Service			B									
Intersection Capacity Utilization			59.7%		ICU Level of Service				B			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 15: Tapley Quarter Line & Fallis Line

Background Volumes 2031
AM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	2	131	45	2	49	23
Future Volume (Veh/h)	2	131	45	2	49	23
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	142	49	2	53	25
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	181	50			51	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	181	50			51	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	86			97	
cM capacity (veh/h)	781	1010			1536	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	144	51	78			
Volume Left	2	0	53			
Volume Right	142	2	0			
cSH	1006	1700	1536			
Volume to Capacity	0.14	0.03	0.03			
Queue Length 95th (m)	3.8	0.0	0.8			
Control Delay (s)	9.2	0.0	5.1			
Lane LOS	A		A			
Approach Delay (s)	9.2	0.0	5.1			
Approach LOS	A					
Intersection Summary						
Average Delay		6.3				
Intersection Capacity Utilization		25.5%		ICU Level of Service		A
Analysis Period (min)		15				

Intersection: 12: Distillery Rd/CR10 & King St (CR21)

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	LTR	L	TR
Maximum Queue (m)	27.5	23.0	16.4	28.8	25.8
Average Queue (m)	14.4	16.0	10.4	21.6	19.6
95th Queue (m)	26.2	23.2	15.4	29.3	26.3
Link Distance (m)	518.3	494.8	260.2		495.4
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)				12.0	
Storage Blk Time (%)				18	15
Queuing Penalty (veh)				41	39

HCM Signalized Intersection Capacity Analysis

6: CR10 & Fallis Line/Fallis Line Driveway

Background Volumes 2031

PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	205	0	228	0	0	0	289	285	0	0	376	336
Future Volume (vph)	205	0	228	0	0	0	289	285	0	0	376	336
Satd. Flow (prot)	1789	1601	0	1883	1883	0	1789	1883	1883	1883	1883	1601
Flt Permitted	0.950						0.419					
Satd. Flow (perm)	1789	1601	0	1883	1883	0	789	1883	1883	1883	1883	1601
Satd. Flow (RTOR)		592										365
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	223	248	0	0	0	0	314	310	0	0	409	365
Turn Type	pm+pt	NA		pm+pt			pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.0	20.7		11.0	20.7		11.0	20.7	20.7	11.0	20.7	20.7
Total Split (s)	16.0	22.0		16.0	22.0		12.0	40.0	40.0	12.0	40.0	40.0
Total Split (%)	17.8%	24.4%		17.8%	24.4%		13.3%	44.4%	44.4%	13.3%	44.4%	44.4%
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	0.0	1.0		0.0	1.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	4.7		3.0	4.7		3.0	4.7	4.7	3.0	4.7	4.7
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effect Green (s)	11.8	10.1					48.9	47.2			35.3	35.3
Actuated g/C Ratio	0.18	0.15					0.73	0.71			0.53	0.53
v/c Ratio	0.70	0.33					0.44	0.23			0.41	0.36
Control Delay	39.1	1.2					5.2	4.1			11.3	2.2
Queue Delay	0.0	0.0					0.0	0.0			0.0	0.0
Total Delay	39.1	1.2					5.2	4.1			11.3	2.2
LOS	D	A					A	A			B	A
Approach Delay		19.1						4.7			7.0	
Approach LOS		B						A			A	
Queue Length 50th (m)	26.4	0.0					10.5	11.6			29.5	0.0
Queue Length 95th (m)	#51.7	0.0					17.7	19.4			48.0	10.8
Internal Link Dist (m)		109.6			89.4			842.8			154.8	
Turn Bay Length (m)	90.0						150.0					75.0
Base Capacity (vph)	349	853					712	1331			996	1019
Starvation Cap Reductn	0	0					0	0			0	0
Spillback Cap Reductn	0	0					0	0			0	0

HCM Signalized Intersection Capacity Analysis

6: CR10 & Fallis Line/Fallis Line Driveway

Background Volumes 2031

PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Storage Cap Reductn	0	0					0	0			0	0
Reduced v/c Ratio	0.64	0.29					0.44	0.23			0.41	0.36

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 66.7

Natural Cycle: 65

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 9.3

Intersection LOS: A

Intersection Capacity Utilization 61.1%

ICU Level of Service B

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: CR10 & Fallis Line/Fallis Line Driveway

 Ø1	 Ø2	 Ø3	 Ø4
12 s	40 s	16 s	22 s
 Ø5	 Ø6	 Ø7	 Ø8
12 s	40 s	16 s	22 s

HCM Unsignalized Intersection Capacity Analysis

3: CR10 & Larmer Line

Background Volumes 2031

PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	11	38	25	7	4	24	588	23	13	758	46
Future Volume (Veh/h)	98	11	38	25	7	4	24	588	23	13	758	46
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	107	12	41	27	8	4	26	639	25	14	824	50
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None								None			
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1576	1593	849	1602	1606	652	874	664				
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1576	1593	849	1602	1606	652	874	664				
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1	4.1				
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2	2.2				
p0 queue free %	0	88	89	59	92	99	97	98				
cM capacity (veh/h)	80	102	361	66	100	468	772	925				
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	160	39	26	664	14	874						
Volume Left	107	27	26	0	14	0						
Volume Right	41	4	0	25	0	50						
cSH	102	79	772	1700	925	1700						
Volume to Capacity	1.57	0.50	0.03	0.39	0.02	0.51						
Queue Length 95th (m)	92.8	15.8	0.8	0.0	0.4	0.0						
Control Delay (s)	374.0	89.4	9.8	0.0	9.0	0.0						
Lane LOS	F	F	A		A							
Approach Delay (s)	374.0	89.4	0.4		0.1							
Approach LOS	F	F										
Intersection Summary												
Average Delay			35.8									
Intersection Capacity Utilization			58.8%	ICU Level of Service					B			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 12: Distillery Rd/CR10 & King St (CR21)

Background Volumes 2031
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	192	79	9	8	77	263	2	43	18	282	34	169
Future Volume (vph)	192	79	9	8	77	263	2	43	18	282	34	169
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	209	86	10	9	84	286	2	47	20	307	37	184
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2							
Volume Total (vph)	305	379	69	307	221							
Volume Left (vph)	209	9	2	307	0							
Volume Right (vph)	10	286	20	0	184							
Hadj (s)	0.15	-0.41	-0.13	0.53	-0.55							
Departure Headway (s)	6.5	5.8	7.2	7.3	6.2							
Degree Utilization, x	0.55	0.62	0.14	0.62	0.38							
Capacity (veh/h)	515	588	410	476	560							
Control Delay (s)	17.2	17.7	11.3	20.3	11.7							
Approach Delay (s)	17.2	17.7	11.3	16.7								
Approach LOS	C	C	B	C								
Intersection Summary												
Delay			16.8									
Level of Service			C									
Intersection Capacity Utilization			68.3%		ICU Level of Service				C			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

15: Tapley Quarter Line & Fallis Line

Background Volumes 2031

PM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	61	49	2	133	68
Future Volume (Veh/h)	1	61	49	2	133	68
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	66	53	2	145	74
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	418	54			55	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	418	54			55	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	93			91	
cM capacity (veh/h)	535	1005			1531	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	67	55	219			
Volume Left	1	0	145			
Volume Right	66	2	0			
cSH	992	1700	1531			
Volume to Capacity	0.07	0.03	0.09			
Queue Length 95th (m)	1.6	0.0	2.4			
Control Delay (s)	8.9	0.0	5.3			
Lane LOS	A		A			
Approach Delay (s)	8.9	0.0	5.3			
Approach LOS	A					
Intersection Summary						
Average Delay		5.1				
Intersection Capacity Utilization		28.1%		ICU Level of Service		A
Analysis Period (min)		15				

Queuing and Blocking Report

Baseline

07-19-2023

Intersection: 12: Distillery Rd/CR10 & King St (CR21)

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	LTR	L	TR
Maximum Queue (m)	22.4	27.5	9.4	28.6	20.2
Average Queue (m)	18.6	22.8	5.5	18.7	15.5
95th Queue (m)	23.6	28.8	13.0	27.0	21.3
Link Distance (m)	518.3	494.8	260.2		495.4
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)				12.0	
Storage Blk Time (%)				14	10
Queuing Penalty (veh)				28	29

HCM Signalized Intersection Capacity Analysis

6: CR10 & Fallis Line/Fallis Line Driveway

Background Volumes 2031

SAT Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	234	0	297	0	0	0	270	260	0	0	208	303
Future Volume (vph)	234	0	297	0	0	0	270	260	0	0	208	303
Satd. Flow (prot)	1789	1601	0	1883	1883	0	1789	1883	1883	1883	1883	1601
Flt Permitted	0.950						0.569					
Satd. Flow (perm)	1789	1601	0	1883	1883	0	1072	1883	1883	1883	1883	1601
Satd. Flow (RTOR)		739										329
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	254	323	0	0	0	0	293	283	0	0	226	329
Turn Type	pm+pt	NA		pm+pt			pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.0	20.7		11.0	20.7		11.0	20.7	20.7	11.0	20.7	20.7
Total Split (s)	16.0	22.0		16.0	22.0		12.0	40.0	40.0	12.0	40.0	40.0
Total Split (%)	17.8%	24.4%		17.8%	24.4%		13.3%	44.4%	44.4%	13.3%	44.4%	44.4%
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	0.0	1.0		0.0	1.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	4.7		3.0	4.7		3.0	4.7	4.7	3.0	4.7	4.7
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effect Green (s)	12.2	10.5					48.9	47.2			35.3	35.3
Actuated g/C Ratio	0.18	0.16					0.73	0.70			0.53	0.53
v/c Ratio	0.78	0.37					0.34	0.21			0.23	0.33
Control Delay	44.6	1.2					4.2	4.1			9.6	2.2
Queue Delay	0.0	0.0					0.0	0.0			0.0	0.0
Total Delay	44.6	1.2					4.2	4.1			9.6	2.2
LOS	D	A					A	A			A	A
Approach Delay		20.3						4.2			5.2	
Approach LOS		C						A			A	
Queue Length 50th (m)	30.7	0.0					9.6	10.4			14.5	0.0
Queue Length 95th (m)	#62.2	0.0					16.4	17.6			25.5	10.2
Internal Link Dist (m)		109.6			89.4			842.8			154.8	
Turn Bay Length (m)	90.0						150.0					75.0
Base Capacity (vph)	347	961					876	1322			991	999
Starvation Cap Reductn	0	0					0	0			0	0
Spillback Cap Reductn	0	0					0	0			0	0

HCM Signalized Intersection Capacity Analysis

6: CR10 & Fallis Line/Fallis Line Driveway

Background Volumes 2031

SAT Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Storage Cap Reductn	0	0					0	0			0	0
Reduced v/c Ratio	0.73	0.34					0.33	0.21			0.23	0.33

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 67.1

Natural Cycle: 65

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 9.9

Intersection LOS: A

Intersection Capacity Utilization 55.5%

ICU Level of Service B

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: CR10 & Fallis Line/Fallis Line Driveway

 Ø1	 Ø2	 Ø3	 Ø4
12 s	40 s	16 s	22 s
 Ø5	 Ø6	 Ø7	 Ø8
12 s	40 s	16 s	22 s

HCM Unsignalized Intersection Capacity Analysis

3: CR10 & Larmer Line

Background Volumes 2031

SAT Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	6	30	33	8	2	45	580	20	2	666	17
Future Volume (Veh/h)	11	6	30	33	8	2	45	580	20	2	666	17
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	7	33	36	9	2	49	630	22	2	724	18
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1472	1487	733	1504	1485	641	742			652		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1472	1487	733	1504	1485	641	742			652		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	87	94	92	57	92	100	94			100		
cM capacity (veh/h)	94	117	421	84	117	475	865			935		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	52	47	49	652	2	742						
Volume Left	12	36	49	0	2	0						
Volume Right	33	2	0	22	0	18						
cSH	196	92	865	1700	935	1700						
Volume to Capacity	0.27	0.51	0.06	0.38	0.00	0.44						
Queue Length 95th (m)	7.8	17.0	1.4	0.0	0.0	0.0						
Control Delay (s)	29.9	79.2	9.4	0.0	8.9	0.0						
Lane LOS	D	F	A		A							
Approach Delay (s)	29.9	79.2	0.7		0.0							
Approach LOS	D	F										
Intersection Summary												
Average Delay			3.7									
Intersection Capacity Utilization			50.4%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 12: Distillery Rd/CR10 & King St (CR21)

Background Volumes 2031
SAT Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	239	71	23	12	91	211	7	38	16	227	49	298
Future Volume (vph)	239	71	23	12	91	211	7	38	16	227	49	298
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	260	77	25	13	99	229	8	41	17	247	53	324
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2							
Volume Total (vph)	362	341	66	247	377							
Volume Left (vph)	260	13	8	247	0							
Volume Right (vph)	25	229	17	0	324							
Hadj (s)	0.14	-0.36	-0.10	0.53	-0.57							
Departure Headway (s)	6.6	6.2	7.5	7.4	6.3							
Degree Utilization, x	0.66	0.59	0.14	0.51	0.66							
Capacity (veh/h)	518	543	388	468	549							
Control Delay (s)	21.7	17.6	11.7	16.7	19.4							
Approach Delay (s)	21.7	17.6	11.7	18.3								
Approach LOS	C	C	B	C								
Intersection Summary												
Delay			18.7									
Level of Service			C									
Intersection Capacity Utilization			67.7%		ICU Level of Service				C			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 15: Tapley Quarter Line & Fallis Line

Background Volumes 2031
SAT Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	4	61	45	2	74	46
Future Volume (Veh/h)	4	61	45	2	74	46
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	66	49	2	80	50
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	260	50			51	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	260	50			51	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	93			95	
cM capacity (veh/h)	691	1010			1536	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	70	51	130			
Volume Left	4	0	80			
Volume Right	66	2	0			
cSH	984	1700	1536			
Volume to Capacity	0.07	0.03	0.05			
Queue Length 95th (m)	1.7	0.0	1.3			
Control Delay (s)	8.9	0.0	4.8			
Lane LOS	A		A			
Approach Delay (s)	8.9	0.0	4.8			
Approach LOS	A					
Intersection Summary						
Average Delay			5.0			
Intersection Capacity Utilization			23.8%	ICU Level of Service	A	
Analysis Period (min)			15			

Intersection: 12: Distillery Rd/CR10 & King St (CR21)

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	LTR	L	TR
Maximum Queue (m)	29.4	21.6	20.4	29.6	29.7
Average Queue (m)	19.9	17.2	12.7	18.9	17.5
95th Queue (m)	28.7	20.8	20.3	30.2	30.6
Link Distance (m)	518.3	494.8	260.2		495.4
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)				12.0	
Storage Blk Time (%)				15	17
Queuing Penalty (veh)				53	38

Appendix G

Synchro Reports

Background Volumes 2036

HCM Signalized Intersection Capacity Analysis

6: CR10 & Fallis Line/Fallis Line Driveway

Background Volumes 2036

AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	370	0	356	0	0	0	258	382	0	0	290	186
Future Volume (vph)	370	0	356	0	0	0	258	382	0	0	290	186
Satd. Flow (prot)	1789	1601	0	1883	1883	0	1789	1883	1883	1883	1883	1601
Flt Permitted	0.950						0.492					
Satd. Flow (perm)	1789	1601	0	1883	1883	0	927	1883	1883	1883	1883	1601
Satd. Flow (RTOR)		657										202
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	402	387	0	0	0	0	280	415	0	0	315	202
Turn Type	pm+pt	NA		pm+pt			pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.0	20.7		11.0	20.7		11.0	20.7	20.7	11.0	20.7	20.7
Total Split (s)	16.0	22.0		16.0	22.0		12.0	40.0	40.0	12.0	40.0	40.0
Total Split (%)	17.8%	24.4%		17.8%	24.4%		13.3%	44.4%	44.4%	13.3%	44.4%	44.4%
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	0.0	1.0		0.0	1.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	4.7		3.0	4.7		3.0	4.7	4.7	3.0	4.7	4.7
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effect Green (s)	13.0	11.3					48.8	47.1			35.3	35.3
Actuated g/C Ratio	0.19	0.17					0.72	0.69			0.52	0.52
v/c Ratio	1.17	0.48					0.36	0.32			0.32	0.22
Control Delay	133.6	2.0					4.5	4.8			10.6	2.1
Queue Delay	0.0	0.0					0.0	0.0			0.0	0.0
Total Delay	133.6	2.0					4.5	4.8			10.6	2.1
LOS	F	A					A	A			B	A
Approach Delay		69.0						4.7			7.3	
Approach LOS		E						A			A	
Queue Length 50th (m)	~62.5	0.0					9.1	16.5			21.3	0.0
Queue Length 95th (m)	#110.1	0.0					15.6	27.0			35.8	8.2
Internal Link Dist (m)		109.6			89.4			842.8			154.8	
Turn Bay Length (m)	90.0						150.0					75.0
Base Capacity (vph)	343	898					782	1308			979	930
Starvation Cap Reductn	0	0					0	0			0	0
Spillback Cap Reductn	0	0					0	0			0	0

HCM Signalized Intersection Capacity Analysis 6: CR10 & Fallis Line/Fallis Line Driveway

Background Volumes 2036
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Storage Cap Reductn	0	0					0	0			0	0
Reduced v/c Ratio	1.17	0.43					0.36	0.32			0.32	0.22

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 67.8

Natural Cycle: 65

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.17

Intersection Signal Delay: 30.7

Intersection LOS: C

Intersection Capacity Utilization 62.8%

ICU Level of Service B

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: CR10 & Fallis Line/Fallis Line Driveway

 Ø1	 Ø2	 Ø3	 Ø4
12 s	40 s	16 s	22 s
 Ø5	 Ø6	 Ø7	 Ø8
12 s	40 s	16 s	22 s

HCM Unsignalized Intersection Capacity Analysis

3: CR10 & Larmer Line

Background Volumes 2036

AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	6	41	43	15	17	34	708	35	6	643	219
Future Volume (Veh/h)	54	6	41	43	15	17	34	708	35	6	643	219
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	59	7	45	47	16	18	37	770	38	7	699	238
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1702	1714	818	1624	1814	789	937			808		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1702	1714	818	1624	1814	789	937			808		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	92	88	27	78	95	95			99		
cM capacity (veh/h)	55	85	376	65	74	391	731			817		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	111	81	37	808	7	937						
Volume Left	59	47	37	0	7	0						
Volume Right	45	18	0	38	0	238						
cSH	87	82	731	1700	817	1700						
Volume to Capacity	1.27	0.99	0.05	0.48	0.01	0.55						
Queue Length 95th (m)	61.6	41.5	1.2	0.0	0.2	0.0						
Control Delay (s)	273.3	186.4	10.2	0.0	9.4	0.0						
Lane LOS	F	F	B		A							
Approach Delay (s)	273.3	186.4	0.4		0.1							
Approach LOS	F	F										
Intersection Summary												
Average Delay			23.2									
Intersection Capacity Utilization			60.7%	ICU Level of Service						B		
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 12: Distillery Rd/CR10 & King St (CR21)

Background Volumes 2036
AM Peak Hour

																			
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR							
Lane Configurations																			
Sign Control		Stop			Stop			Stop			Stop								
Traffic Volume (vph)	177	44	1	9	48	298	0	41	1	270	71	173							
Future Volume (vph)	177	44	1	9	48	298	0	41	1	270	71	173							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92							
Hourly flow rate (vph)	192	48	1	10	52	324	0	45	1	293	77	188							
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2														
Volume Total (vph)	241	386	46	293	265														
Volume Left (vph)	192	10	0	293	0														
Volume Right (vph)	1	324	1	0	188														
Hadj (s)	0.19	-0.46	0.02	0.53	-0.46														
Departure Headway (s)	6.4	5.5	7.0	7.0	6.0														
Degree Utilization, x	0.43	0.59	0.09	0.57	0.44														
Capacity (veh/h)	530	625	429	497	582														
Control Delay (s)	14.1	16.2	10.7	17.5	12.3														
Approach Delay (s)	14.1	16.2	10.7	15.1															
Approach LOS	B	C	B	C															
Intersection Summary																			
Delay				15.1															
Level of Service				C															
Intersection Capacity Utilization				65.2%	ICU Level of Service	C													
Analysis Period (min)				15															

HCM Unsignalized Intersection Capacity Analysis 15: Tapley Quarter Line & Fallis Line

Background Volumes 2036

AM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	3	138	50	3	51	26
Future Volume (Veh/h)	3	138	50	3	51	26
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	150	54	3	55	28
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	194	56			57	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	194	56			57	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	85			96	
cM capacity (veh/h)	767	1003			1528	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	153	57	83			
Volume Left	3	0	55			
Volume Right	150	3	0			
cSH	997	1700	1528			
Volume to Capacity	0.15	0.03	0.04			
Queue Length 95th (m)	4.1	0.0	0.9			
Control Delay (s)	9.3	0.0	5.0			
Lane LOS	A		A			
Approach Delay (s)	9.3	0.0	5.0			
Approach LOS	A					
Intersection Summary						
Average Delay		6.3				
Intersection Capacity Utilization		26.2%		ICU Level of Service		A
Analysis Period (min)		15				

Intersection: 12: Distillery Rd/CR10 & King St (CR21)

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	LTR	L	TR
Maximum Queue (m)	20.5	29.6	16.2	23.6	22.0
Average Queue (m)	15.7	22.9	10.6	16.0	17.6
95th Queue (m)	21.6	32.9	15.3	26.1	21.3
Link Distance (m)	518.3	494.8	260.2		495.4
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)				12.0	
Storage Blk Time (%)				12	10
Queuing Penalty (veh)				32	30

HCM Signalized Intersection Capacity Analysis

6: CR10 & Fallis Line/Fallis Line Driveway

Background Volumes 2036

PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	219	0	235	0	0	0	297	325	0	0	451	370
Future Volume (vph)	219	0	235	0	0	0	297	325	0	0	451	370
Satd. Flow (prot)	1789	1601	0	1883	1883	0	1789	1883	1883	1883	1883	1601
Flt Permitted	0.950						0.356					
Satd. Flow (perm)	1789	1601	0	1883	1883	0	671	1883	1883	1883	1883	1601
Satd. Flow (RTOR)		550										402
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	238	255	0	0	0	0	323	353	0	0	490	402
Turn Type	pm+pt	NA		pm+pt			pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.0	20.7		11.0	20.7		11.0	20.7	20.7	11.0	20.7	20.7
Total Split (s)	16.0	22.0		16.0	22.0		12.0	40.0	40.0	12.0	40.0	40.0
Total Split (%)	17.8%	24.4%		17.8%	24.4%		13.3%	44.4%	44.4%	13.3%	44.4%	44.4%
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	0.0	1.0		0.0	1.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	4.7		3.0	4.7		3.0	4.7	4.7	3.0	4.7	4.7
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effect Green (s)	12.1	10.4					49.0	47.3			35.3	35.3
Actuated g/C Ratio	0.18	0.15					0.73	0.70			0.53	0.53
v/c Ratio	0.74	0.36					0.50	0.27			0.49	0.39
Control Delay	41.7	1.4					6.1	4.3			12.6	2.3
Queue Delay	0.0	0.0					0.0	0.0			0.0	0.0
Total Delay	41.7	1.4					6.1	4.3			12.6	2.3
LOS	D	A					A	A			B	A
Approach Delay		20.9						5.2			7.9	
Approach LOS		C						A			A	
Queue Length 50th (m)	28.4	0.0					10.8	13.5			37.4	0.0
Queue Length 95th (m)	#56.8	0.0					18.2	22.4			60.1	11.2
Internal Link Dist (m)		109.6			89.4			842.8			154.8	
Turn Bay Length (m)	90.0						150.0					75.0
Base Capacity (vph)	347	821					640	1328			991	1033
Starvation Cap Reductn	0	0					0	0			0	0
Spillback Cap Reductn	0	0					0	0			0	0

HCM Signalized Intersection Capacity Analysis 6: CR10 & Fallis Line/Fallis Line Driveway

Background Volumes 2036
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Storage Cap Reductn	0	0					0	0			0	0
Reduced v/c Ratio	0.69	0.31					0.50	0.27			0.49	0.39

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 67.1

Natural Cycle: 70

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 10.1

Intersection LOS: B

Intersection Capacity Utilization 65.9%

ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: CR10 & Fallis Line/Fallis Line Driveway

 Ø1	 Ø2	 Ø3	 Ø4
12 s	40 s	16 s	22 s
 Ø5	 Ø6	 Ø7	 Ø8
12 s	40 s	16 s	22 s

HCM Unsignalized Intersection Capacity Analysis

3: CR10 & Larmer Line

Background Volumes 2036

PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	17	39	28	9	4	25	700	29	14	823	78
Future Volume (Veh/h)	184	17	39	28	9	4	25	700	29	14	823	78
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	200	18	42	30	10	4	27	761	32	15	895	85
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1792	1814	938	1807	1841	777	980				793	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1792	1814	938	1807	1841	777	980				793	
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	0	76	87	28	86	99	96				98	
cM capacity (veh/h)	53	74	321	41	71	397	704				828	
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	260	44	27	793	15	980						
Volume Left	200	30	27	0	15	0						
Volume Right	42	4	0	32	0	85						
cSH	63	50	704	1700	828	1700						
Volume to Capacity	4.14	0.88	0.04	0.47	0.02	0.58						
Queue Length 95th (m)	Err	28.0	0.9	0.0	0.4	0.0						
Control Delay (s)	Err	219.0	10.3	0.0	9.4	0.0						
Lane LOS	F	F	B		A							
Approach Delay (s)	Err	219.0	0.3		0.1							
Approach LOS	F	F										
Intersection Summary												
Average Delay	1231.6											
Intersection Capacity Utilization	70.9%			ICU Level of Service					C			
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis 12: Distillery Rd/CR10 & King St (CR21)

Background Volumes 2036
PM Peak Hour

																			
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR							
Lane Configurations																			
Sign Control		Stop			Stop			Stop			Stop								
Traffic Volume (vph)	208	87	10	9	85	284	3	48	19	323	39	195							
Future Volume (vph)	208	87	10	9	85	284	3	48	19	323	39	195							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92							
Hourly flow rate (vph)	226	95	11	10	92	309	3	52	21	351	42	212							
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2														
Volume Total (vph)	332	411	76	351	254														
Volume Left (vph)	226	10	3	351	0														
Volume Right (vph)	11	309	21	0	212														
Hadj (s)	0.15	-0.41	-0.12	0.53	-0.55														
Departure Headway (s)	6.9	6.2	7.8	7.6	6.5														
Degree Utilization, x	0.64	0.71	0.16	0.74	0.46														
Capacity (veh/h)	492	549	386	351	532														
Control Delay (s)	21.2	23.0	12.3	28.3	13.7														
Approach Delay (s)	21.2	23.0	12.3	22.2															
Approach LOS	C	C	B	C															
Intersection Summary																			
Delay				21.7															
Level of Service				C															
Intersection Capacity Utilization				73.7%	ICU Level of Service	D													
Analysis Period (min)				15															

HCM Unsignalized Intersection Capacity Analysis 15: Tapley Quarter Line & Fallis Line

Background Volumes 2036

PM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	64	54	3	141	75
Future Volume (Veh/h)	1	64	54	3	141	75
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	70	59	3	153	82
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	448	60			62	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	448	60			62	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	93			90	
cM capacity (veh/h)	511	996			1522	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	71	62	235			
Volume Left	1	0	153			
Volume Right	70	3	0			
cSH	983	1700	1522			
Volume to Capacity	0.07	0.04	0.10			
Queue Length 95th (m)	1.8	0.0	2.5			
Control Delay (s)	8.9	0.0	5.2			
Lane LOS	A		A			
Approach Delay (s)	8.9	0.0	5.2			
Approach LOS	A					
Intersection Summary						
Average Delay		5.1				
Intersection Capacity Utilization		29.1%		ICU Level of Service		A
Analysis Period (min)		15				

Queuing and Blocking Report

Baseline

07-19-2023

Intersection: 12: Distillery Rd/CR10 & King St (CR21)

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	LTR	L	TR
Maximum Queue (m)	35.4	35.4	9.3	33.4	22.8
Average Queue (m)	21.4	21.6	9.1	22.3	17.3
95th Queue (m)	33.5	33.9	9.5	32.7	25.4
Link Distance (m)	518.3	494.8	260.2		495.4
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)				12.0	
Storage Blk Time (%)				23	12
Queuing Penalty (veh)				55	37

HCM Signalized Intersection Capacity Analysis

6: CR10 & Fallis Line/Fallis Line Driveway

Background Volumes 2036

SAT Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	238	0	301	0	0	0	274	286	0	0	229	309
Future Volume (vph)	238	0	301	0	0	0	274	286	0	0	229	309
Satd. Flow (prot)	1789	1601	0	1883	1883	0	1789	1883	1883	1883	1883	1601
Flt Permitted	0.950						0.551					
Satd. Flow (perm)	1789	1601	0	1883	1883	0	1038	1883	1883	1883	1883	1601
Satd. Flow (RTOR)		716										336
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	259	327	0	0	0	0	298	311	0	0	249	336
Turn Type	pm+pt	NA		pm+pt			pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.0	20.7		11.0	20.7		11.0	20.7	20.7	11.0	20.7	20.7
Total Split (s)	16.0	22.0		16.0	22.0		12.0	40.0	40.0	12.0	40.0	40.0
Total Split (%)	17.8%	24.4%		17.8%	24.4%		13.3%	44.4%	44.4%	13.3%	44.4%	44.4%
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	0.0	1.0		0.0	1.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	4.7		3.0	4.7		3.0	4.7	4.7	3.0	4.7	4.7
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effect Green (s)	12.3	10.6					48.9	47.2			35.3	35.3
Actuated g/C Ratio	0.18	0.16					0.73	0.70			0.53	0.53
v/c Ratio	0.79	0.38					0.35	0.24			0.25	0.34
Control Delay	45.6	1.3					4.3	4.2			9.8	2.2
Queue Delay	0.0	0.0					0.0	0.0			0.0	0.0
Total Delay	45.6	1.3					4.3	4.2			9.8	2.2
LOS	D	A					A	A			A	A
Approach Delay		20.9						4.3			5.4	
Approach LOS		C						A			A	
Queue Length 50th (m)	31.4	0.0					9.8	11.6			16.2	0.0
Queue Length 95th (m)	#63.8	0.0					16.8	19.5			28.1	10.3
Internal Link Dist (m)		109.6			89.4			842.8			154.8	
Turn Bay Length (m)	90.0						150.0					75.0
Base Capacity (vph)	346	944					855	1321			990	1001
Starvation Cap Reductn	0	0					0	0			0	0
Spillback Cap Reductn	0	0					0	0			0	0

HCM Signalized Intersection Capacity Analysis

6: CR10 & Fallis Line/Fallis Line Driveway

Background Volumes 2036

SAT Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Storage Cap Reductn	0	0					0	0			0	0
Reduced v/c Ratio	0.75	0.35					0.35	0.24			0.25	0.34

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 67.2

Natural Cycle: 65

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 10.1

Intersection LOS: B

Intersection Capacity Utilization 57.0%

ICU Level of Service B

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: CR10 & Fallis Line/Fallis Line Driveway

 Ø1	 Ø2	 Ø3	 Ø4
12 s	40 s	16 s	22 s
 Ø5	 Ø6	 Ø7	 Ø8
12 s	40 s	16 s	22 s

HCM Unsignalized Intersection Capacity Analysis

3: CR10 & Larmer Line

Background Volumes 2036

SAT Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	6	31	34	9	3	46	611	21	3	699	22
Future Volume (Veh/h)	16	6	31	34	9	3	46	611	21	3	699	22
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	17	7	34	37	10	3	50	664	23	3	760	24
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None						None					
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1550	1565	772	1579	1566	676	784	687				
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1550	1565	772	1579	1566	676	784	687				
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1	4.1				
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2	2.2				
p0 queue free %	79	93	91	49	90	99	94	100				
cM capacity (veh/h)	81	104	400	73	104	454	834	907				
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	58	50	50	687	3	784						
Volume Left	17	37	50	0	3	0						
Volume Right	34	3	0	23	0	24						
cSH	160	82	834	1700	907	1700						
Volume to Capacity	0.36	0.61	0.06	0.40	0.00	0.46						
Queue Length 95th (m)	11.5	21.0	1.5	0.0	0.1	0.0						
Control Delay (s)	39.6	101.4	9.6	0.0	9.0	0.0						
Lane LOS	E	F	A		A							
Approach Delay (s)	39.6	101.4	0.7		0.0							
Approach LOS	E	F										
Intersection Summary												
Average Delay	4.8											
Intersection Capacity Utilization	50.4%			ICU Level of Service				A				
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis 12: Distillery Rd/CR10 & King St (CR21)

Background Volumes 2036
SAT Peak Hour

																			
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR							
Lane Configurations																			
Sign Control		Stop			Stop			Stop			Stop								
Traffic Volume (vph)	252	79	26	13	101	222	8	40	18	240	51	316							
Future Volume (vph)	252	79	26	13	101	222	8	40	18	240	51	316							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92							
Hourly flow rate (vph)	274	86	28	14	110	241	9	43	20	261	55	343							
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2														
Volume Total (vph)	388	365	72	261	398														
Volume Left (vph)	274	14	9	261	0														
Volume Right (vph)	28	241	20	0	343														
Hadj (s)	0.13	-0.35	-0.11	0.53	-0.57														
Departure Headway (s)	6.8	6.4	7.9	7.7	6.5														
Degree Utilization, x	0.74	0.65	0.16	0.56	0.72														
Capacity (veh/h)	506	527	380	454	532														
Control Delay (s)	26.5	20.8	12.4	18.7	23.7														
Approach Delay (s)	26.5	20.8	12.4	21.7															
Approach LOS	D	C	B	C															
Intersection Summary																			
Delay				22.3															
Level of Service				C															
Intersection Capacity Utilization				71.5%	ICU Level of Service	C													
Analysis Period (min)				15															

HCM Unsignalized Intersection Capacity Analysis 15: Tapley Quarter Line & Fallis Line

Background Volumes 2036

SAT Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	4	63	50	3	78	51
Future Volume (Veh/h)	4	63	50	3	78	51
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	68	54	3	85	55
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	280	56			57	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	280	56			57	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	93			94	
cM capacity (veh/h)	670	1003			1528	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	72	57	140			
Volume Left	4	0	85			
Volume Right	68	3	0			
cSH	976	1700	1528			
Volume to Capacity	0.07	0.03	0.06			
Queue Length 95th (m)	1.8	0.0	1.3			
Control Delay (s)	9.0	0.0	4.7			
Lane LOS	A		A			
Approach Delay (s)	9.0	0.0	4.7			
Approach LOS	A					
Intersection Summary						
Average Delay		4.9				
Intersection Capacity Utilization		24.5%		ICU Level of Service		A
Analysis Period (min)		15				

Intersection: 12: Distillery Rd/CR10 & King St (CR21)

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	LTR	L	TR
Maximum Queue (m)	21.9	27.8	15.6	33.6	42.8
Average Queue (m)	19.3	19.7	10.4	24.6	23.0
95th Queue (m)	23.4	28.9	14.7	36.9	39.9
Link Distance (m)	518.3	494.8	260.2		495.4
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)				12.0	
Storage Blk Time (%)				21	32
Queuing Penalty (veh)				76	76

Appendix H

Trip Generation

Scenario - 3

Scenario Name: AM 2026

User Group:

Dev. phase: 1

No. of Years to Project 0

Traffic :

Analyst Note:

Warning:

VEHICLE TRIPS BEFORE REDUCTION

Land Use & Data Source	Location	IV	Size	Time Period	Method	Entry	Exit	Total
					Rate/Equation	Split%	Split%	
710 - General Office Building	General	1000 Sq. Ft. GFA	11.65	Weekday, Peak Hour of	Average	16	2	18
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban			Adjacent Street Traffic,	1.52	88%	12%	
850 - Supermarket	General	1000 Sq. Ft. GFA	25.71	Weekday, Peak Hour of	Average	43	30	73
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban			Adjacent Street Traffic,	2.86	59%	41%	
934 - Fast-Food Restaurant with Drive-Through	General	1000 Sq. Ft. GFA	5.79	Weekday, Peak Hour of	Average	132	127	259
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban			Adjacent Street Traffic,	44.61	51%	49%	
960 - Super Convenience Market/Gas Station	General	Vehicle Fueling Positions	8	Weekday, Peak Hour of	Average	112	112	224
Data Source: Trip Generation Manual, 10th Ed +	Urban/Suburban			Adjacent Street Traffic,	28.08	50%	50%	
931 - Fine Dining Restaurant	General	1000 Sq. Ft. GFA	3.11	Weekday, Peak Hour of	Average	1	1	2
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban			of Adjacent Street	0.73	50%	50%	
210 - Single-Family Detached Housing	General	Dwelling Units	63	Weekday, Peak Hour of	Average	11	33	44
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban			Adjacent Street Traffic,	0.70	25%	75%	
220 - Multifamily Housing (Low-Rise) - Not Close	General	Dwelling Units	27	Weekday, Peak Hour of	Average	3	8	11
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban			Adjacent Street Traffic,	0.40	24%	76%	
231 - Mid-Rise Residential with 1st-Floor	General	Dwelling Units	80	Weekday, Peak Hour of	Average	7	17	24
Data Source: Trip Generation Manual, 10th Ed	Urban/Suburban			Adjacent Street Traffic,	0.30	28%	72%	

VEHICLE TO PERSON TRIP CONVERSION**BASELINE SITE VEHICLE CHARACTERISTICS:**

Land Use	Baseline Site Vehicle Mode Share		Baseline Site Vehicle Occupancy		Baseline Site Vehicle Directional Split	
	Entry (%)	Exit (%)	Entry	Exit	Entry (%)	Exit (%)
710 - General Office Building	99	100	1.1	1.1	88	12
850 - Supermarket	100	100	1	1	59	41
934 - Fast-Food Restaurant with Drive-Through Window	100	100	1	1	51	49
960 - Super Convenience Market/Gas Station	100	100	1	1	50	50
931 - Fine Dining Restaurant	100	100	1	1	50	50
210 - Single-Family Detached Housing	100	100	1	1	25	75
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	100	100	1	1	24	76
231 - Mid-Rise Residential with 1st-Floor Commercial	100	100	1	1	28	72

ESTIMATED BASELINE SITE PERSON TRIPS:

Land Use	Person Trips by Vehicle		Person Trips by Other Modes		Total Baseline Site Person Trips	
	Entry	Exit	Entry	Exit	Entry	Exit
710 - General Office Building	17	2	0	0	17	2
	19		0		19	
850 - Supermarket	43	30	0	0	43	30
	73		0		73	
934 - Fast-Food Restaurant with Drive-Through Window	132	127	0	0	132	127
	259		0		259	
960 - Super Convenience Market/Gas Station	112	112	0	0	112	112

960 - Super Convenience Market/Gas Station	224		0		224	
931 - Fine Dining Restaurant	1	1	0	0	1	1
	2		0		2	
210 - Single-Family Detached Housing	11	33	0	0	11	33
	44		0		44	
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	3	8	0	0	3	8
	11		0		11	
231 - Mid-Rise Residential with 1st-Floor Commercial	7	17	0	0	7	17
	24		0		24	

INTERNAL VEHICLE TRIP REDUCTION

LAND USE GROUP ASSIGNMENT:

Land Use	Land Use Group
710 - General Office Building	Office
850 - Supermarket	Retail
934 - Fast-Food Restaurant with Drive-Through Window	Resturant
960 - Super Convenience Market/Gas Station	Resturant
931 - Fine Dining Restaurant	Resturant
210 - Single-Family Detached Housing	Residential
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	Residential
231 - Mid-Rise Residential with 1st-Floor Commercial	Residential

BALANCED PERSON TRIPS:

710 - General Office Building					850 - Supermarket				
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry	
2	1	28	1	1	14	32	1	43	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
17	1	4	1	1	9	29	1	30	
710 - General Office Building					934 - Fast-Food Restaurant with Drive-Through Window				
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry	
2	1	21	0	0	10	7.66666666666667	1	132	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
17	1	4.66666666666667	1	1	13	10.33333333333334	1	127	
710 - General Office Building					960 - Super Convenience Market/Gas Station				
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry	
2	1	21	0	0	9	7.66666666666667	1	112	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
17	1	4.66666666666667	1	1	12	10.33333333333334	1	112	
710 - General Office Building					931 - Fine Dining Restaurant				
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry	
2	1	21	0	0	0	7.66666666666667	1	1	

Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
17	1	4.66666666666667	1	0	0	10.33333333333334	1	1
710 - General Office Building					210 - Single-Family Detached Housing			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
2	1	0.333333333333333	0	0	0	0	1	11
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
17	1	1	0	0	0	0.666666666666666	1	33
710 - General Office Building					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
2	1	0.333333333333333	0	0	0	0	1	3
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
17	1	1	0	0	0	0.666666666666666	1	8
710 - General Office Building					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
2	1	0.333333333333333	0	0	0	0	1	7
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
17	1	1	0	0	0	0.666666666666666	1	17
850 - Supermarket					934 - Fast-Food Restaurant with Drive-Through Window			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
30	1	4.33333333333333	1	1	22	16.6666666666667	1	132
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
43	1	2.66666666666667	1	1	6	4.66666666666667	1	127
850 - Supermarket					960 - Super Convenience Market/Gas Station			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
30	1	4.33333333333333	1	1	19	16.6666666666667	1	112
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
43	1	2.66666666666667	1	1	5	4.66666666666667	1	112
850 - Supermarket					931 - Fine Dining Restaurant			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
30	1	4.33333333333333	1	0	0	16.6666666666667	1	1
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
43	1	2.66666666666667	1	0	0	4.66666666666667	1	1
850 - Supermarket					210 - Single-Family Detached Housing			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
30	1	4.66666666666667	1	0	0	0.666666666666666	1	11

Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
43	1	5.66666666666667	2	0	0	0.333333333333333	1	33
850 - Supermarket					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>> BALANCED ==>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
30	1	4.66666666666667	1	0	0	0.666666666666666	1	3
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
43	1	5.66666666666667	2	0	0	0.333333333333333	1	8
850 - Supermarket					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>> BALANCED ==>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
30	1	4.66666666666667	1	0	0	0.666666666666666	1	7
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
43	1	5.66666666666667	2	0	0	0.333333333333333	1	17
934 - Fast-Food Restaurant with Drive-Through Window					960 - Super Convenience Market/Gas Station			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>> BALANCED ==>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
127	1	0	0	0	0	0	1	112
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
132	1	0	0	0	0	0	1	112
934 - Fast-Food Restaurant with Drive-Through Window					931 - Fine Dining Restaurant			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>> BALANCED ==>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
127	1	0	0	0	0	0	1	1
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
132	1	0	0	0	0	0	1	1
934 - Fast-Food Restaurant with Drive-Through Window					210 - Single-Family Detached Housing			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>> BALANCED ==>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
127	1	0.444444444444444	1	0	0	0.555555555555555	1	11
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
132	1	2.22222222222222	3	1	1	2.22222222222222	1	33
934 - Fast-Food Restaurant with Drive-Through Window					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>> BALANCED ==>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
127	1	0.444444444444444	1	0	0	0.555555555555555	1	3
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
132	1	2.22222222222222	3	0	0	2.22222222222222	1	8
934 - Fast-Food Restaurant with Drive-Through Window					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>> BALANCED ==>>	Unconstrained Demand	UIPTC	PAF	Persons Entry

127	1	0.4444444444444444	1	0	0	0.5555555555555556	1	7
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
132	1	2.2222222222222223	3	0	0	2.2222222222222223	1	17
960 - Super Convenience Market/Gas Station				931 - Fine Dining Restaurant				
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
112	1	0	0	0	0	0	1	1
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
112	1	0	0	0	0	0	1	1
960 - Super Convenience Market/Gas Station				210 - Single-Family Detached Housing				
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
112	1	0.4444444444444444	0	0	0	0.5555555555555556	1	11
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
112	1	2.2222222222222223	2	1	1	2.2222222222222223	1	33
960 - Super Convenience Market/Gas Station				220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit				
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
112	1	0.4444444444444444	0	0	0	0.5555555555555556	1	3
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
112	1	2.2222222222222223	2	0	0	2.2222222222222223	1	8
960 - Super Convenience Market/Gas Station				231 - Mid-Rise Residential with 1st-Floor Commercial				
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
112	1	0.4444444444444444	0	0	0	0.5555555555555556	1	7
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
112	1	2.2222222222222223	2	0	0	2.2222222222222223	1	17
931 - Fine Dining Restaurant				210 - Single-Family Detached Housing				
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
1	1	0.4444444444444444	0	0	0	0.5555555555555556	1	11
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
1	1	2.2222222222222223	0	0	1	2.2222222222222223	1	33
931 - Fine Dining Restaurant				220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit				
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
1	1	0.4444444444444444	0	0	0	0.5555555555555556	1	3
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
1	1	2.2222222222222223	0	0	0	2.2222222222222223	1	8
931 - Fine Dining Restaurant				231 - Mid-Rise Residential with 1st-Floor Commercial				
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
1	1	0.4444444444444444	0	0	0	0.5555555555555556	1	7
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit

1	1	2.22222222222223	0	0	0	2.22222222222223	1	17
210 - Single-Family Detached Housing					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
33	1	0	0	0	0	0	1	3
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
11	1	0	0	0	0	0	1	8
210 - Single-Family Detached Housing					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
33	1	0	0	0	0	0	1	7
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
11	1	0	0	0	0	0	1	17
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
8	1	0	0	0	0	0	1	7
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
3	1	0	0	0	0	0	1	17

INTERNAL PERSON TRIPS:**710 - General Office Building**

Internal Person Trips From	Entry	Exit	Total
850 - Supermarket	1	1	1
934 - Fast-Food Restaurant with Drive-Through Window	1	0	1
960 - Super Convenience Market/Gas Station	1	0	1
931 - Fine Dining Restaurant	0	0	0
210 - Single-Family Detached Housing	0	0	0
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	3	1	4

850 - Supermarket

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	1	1	1
934 - Fast-Food Restaurant with Drive-Through Window	1	1	2
960 - Super Convenience Market/Gas Station	1	1	2
931 - Fine Dining Restaurant	0	0	0
210 - Single-Family Detached Housing	0	0	0
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	3	3	6

934 - Fast-Food Restaurant with Drive-Through Window

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	1	1
850 - Supermarket	1	1	2
960 - Super Convenience Market/Gas Station	0	0	0

931 - Fine Dining Restaurant	0	0	0
210 - Single-Family Detached Housing	1	0	1
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	2	2	4

960 - Super Convenience Market/Gas Station

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	1	1
850 - Supermarket	1	1	2
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
931 - Fine Dining Restaurant	0	0	0
210 - Single-Family Detached Housing	1	0	1
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	2	2	4

931 - Fine Dining Restaurant

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	0	0	0
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
210 - Single-Family Detached Housing	0	0	0
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	0	0	0

210 - Single-Family Detached Housing

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	0	0	0
934 - Fast-Food Restaurant with Drive-Through Window	0	1	1
960 - Super Convenience Market/Gas Station	0	1	1
931 - Fine Dining Restaurant	0	0	0
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	0	2	2

220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	0	0	0
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
931 - Fine Dining Restaurant	0	0	0
210 - Single-Family Detached Housing	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	0	0	0

231 - Mid-Rise Residential with 1st-Floor Commercial

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	0	0	0
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0

960 - Super Convenience Market/Gas Station	0	0	0
931 - Fine Dining Restaurant	0	0	0
210 - Single-Family Detached Housing	0	0	0
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
Total Internal Person Trips	0	0	0

INTERNAL VEHICLE TRIPS AND CAPTURE:**710 - General Office Building**

Total Internal Person Trips	3	1	4
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	3	1	4
Total External Vehicle Trips	13	1	14
Internal Vehicle Trip Capture	19%	47%	0%

850 - Supermarket

Total Internal Person Trips	3	3	6
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	3	3	6
Total External Vehicle Trips	40	27	67
Internal Vehicle Trip Capture	7%	10%	0%

934 - Fast-Food Restaurant with Drive-Through Window

Total Internal Person Trips	2	2	4
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	2	2	4
Total External Vehicle Trips	130	125	255
Internal Vehicle Trip Capture	2%	2%	0%

960 - Super Convenience Market/Gas Station

Total Internal Person Trips	2	2	4
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	2	2	4
Total External Vehicle Trips	110	110	220
Internal Vehicle Trip Capture	2%	2%	0%

931 - Fine Dining Restaurant

Total Internal Person Trips	0	0	0
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	0	0	0
Total External Vehicle Trips	1	1	2
Internal Vehicle Trip Capture	0%	0%	0%

210 - Single-Family Detached Housing

Total Internal Person Trips	0	2	2
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Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	0	2	2
Total External Vehicle Trips	11	31	42
Internal Vehicle Trip Capture	0%	6%	0%

220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit

Total Internal Person Trips	0	0	0
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	0	0	0
Total External Vehicle Trips	3	8	11
Internal Vehicle Trip Capture	0%	0%	0%

231 - Mid-Rise Residential with 1st-Floor Commercial

Total Internal Person Trips	0	0	0
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	0	0	0
Total External Vehicle Trips	7	17	24
Internal Vehicle Trip Capture	0%	0%	0%

PASS-BY VEHICLE TRIP REDUCTION

Land Use	External Vehicle Trips		Pass-by Vehicle Trip %		Pass-by Vehicle Trips	
	Entry	Exit	Entry (%)	Exit (%)	Entry	Exit
710 - General Office Building	13	1	0.00%	0.00%	0	0
850 - Supermarket	40	27	0.00%	0.00%	0	0
934 - Fast-Food Restaurant with Drive-Through Window	130	125	49.00%	49.00%	64	61
960 - Super Convenience Market/Gas Station	110	110	63.00%	63.00%	69	69
931 - Fine Dining Restaurant	1	1	0.00%	0.00%	0	0
210 - Single-Family Detached Housing	11	31	0.00%	0.00%	0	0
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	3	8	0.00%	0.00%	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	7	17	0.00%	0.00%	0	0

DIVERTED VEHICLE TRIP REDUCTION

Land Use	External Vehicle Trips		Diverted Vehicle Trip %		Diverted Vehicle Trips	
	Entry	Exit	Entry (%)	Exit (%)	Entry	Exit
710 - General Office Building	13	1	0.00%	0.00%	0	0
850 - Supermarket	40	27	0.00%	0.00%	0	0
934 - Fast-Food Restaurant with Drive-Through Window	130	125	0.00%	0.00%	0	0
960 - Super Convenience Market/Gas Station	110	110	0.00%	0.00%	0	0
931 - Fine Dining Restaurant	1	1	0.00%	0.00%	0	0
210 - Single-Family Detached Housing	11	31	0.00%	0.00%	0	0
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	3	8	0.00%	0.00%	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	7	17	0.00%	0.00%	0	0

EXTRA VEHICLE TRIP REDUCTION

Land Use	(External - (Pass-by + Diverted)) Vehicle Trips		Extra Vehicle Trip Reduction %		Extra Reduced Vehicle Trips	
	Entry	Exit	Entry (%)	Exit (%)	Entry	Exit

710 - General Office Building	13	1	0.00%	0.00%	0	0
850 - Supermarket	40	27	0.00%	0.00%	0	0
934 - Fast-Food Restaurant with Drive-Through Window	66	64	0.00%	0.00%	0	0
960 - Super Convenience Market/Gas Station	41	41	0.00%	0.00%	0	0
931 - Fine Dining Restaurant	1	1	0.00%	0.00%	0	0
210 - Single-Family Detached Housing	11	31	0.00%	0.00%	0	0
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	3	8	0.00%	0.00%	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	7	17	0.00%	0.00%	0	0

NEW VEHICLE TRIPS

Land Use	New Vehicle Trips		
	Entry	Exit	Total
710 - General Office Building	13	1	14
850 - Supermarket	40	27	67
934 - Fast-Food Restaurant with Drive-Through Window	66	64	130
960 - Super Convenience Market/Gas Station	41	41	82
931 - Fine Dining Restaurant	1	1	2
210 - Single-Family Detached Housing	11	31	42
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	3	8	11
231 - Mid-Rise Residential with 1st-Floor Commercial	7	17	24

RESULTS

Site Totals	Entry	Exit	Total
Vehicle Trips Before Reduction	325	330	655
Internal Vehicle Trips	10	10	20
External Vehicle Trips	315	320	635
Internal Vehicle Trip Capture	3%	3%	3%
Pass-by Vehicle Trips	133	130	263
Diverted Vehicle Trips	0	0	0
Extra Reduced Vehicle Trips	0	0	0
New Vehicle Trips	182	190	372

Scenario - 5

Scenario Name: AM 2031

User Group:

Dev. phase: 1

No. of Years to Project 0

Traffic :

Analyst Note:

Warning: The time periods among the land uses do not appear to match.

VEHICLE TRIPS BEFORE REDUCTION

Land Use & Data Source	Location	IV	Size	Time Period	Method	Entry	Exit	Total
					Rate/Equation	Split%	Split%	
710 - General Office Building	General	1000 Sq. Ft. GFA	76.28	Weekday, Peak Hour of	Average	102	14	116
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban			Adjacent Street Traffic,	1.52	88%	12%	
850 - Supermarket	General	1000 Sq. Ft. GFA	25.71	Weekday, Peak Hour of	Average	43	30	73
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban			Adjacent Street Traffic,	2.86	59%	41%	
875 - Department Store	General	1000 Sq. Ft. GFA	96.49	Weekday, Peak Hour of	Average	36	20	56
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban			Adjacent Street Traffic,	0.58	64%	36%	
911 - Walk-in Bank	General	1000 Sq. Ft. GFA	3.23	Weekday, AM Peak Hour	Average	38	35	73
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban			of Generator	22.54	52%	48%	
934 - Fast-Food Restaurant with Drive-	General	1000 Sq. Ft. GFA	11.69	Weekday, Peak Hour	Average	266	256	522
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban			of Adjacent Street	44.61	51%	49%	
937 - Coffee/Donut Shop with Drive-Through	General	1000 Sq. Ft. GFA	1.95	Weekday, Peak Hour of	Average	85	82	167
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban			Adjacent Street Traffic,	85.88	51%	49%	
960 - Super Convenience Market/Gas Station	General	Vehicle Fueling Positions	8	Weekday, Peak Hour of	Average	112	112	224
Data Source: Trip Generation Manual, 10th Ed +	Urban/Suburban			Adjacent Street Traffic,	28.08	50%	50%	
210 - Single-Family Detached Housing	General	Dwelling Units	127	Weekday, Peak Hour of	Average	22	67	89
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban			Adjacent Street Traffic,	0.70	25%	75%	
220 - Multifamily Housing (Low-Rise) - Not Close	General	Dwelling Units	55	Weekday, Peak Hour of	Average	5	17	22
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban			Adjacent Street Traffic,	0.40	24%	76%	
231 - Mid-Rise Residential with 1st-Floor	General	Dwelling Units	80	Weekday, Peak Hour of	Average	7	17	24
Data Source: Trip Generation Manual, 10th Ed +	Urban/Suburban			Adjacent Street Traffic,	0.30	28%	72%	

VEHICLE TO PERSON TRIP CONVERSION**BASELINE SITE VEHICLE CHARACTERISTICS:**

Land Use	Baseline Site Vehicle Mode Share		Baseline Site Vehicle Occupancy		Baseline Site Vehicle Directional Split	
	Entry (%)	Exit (%)	Entry	Exit	Entry (%)	Exit (%)
710 - General Office Building	99	100	1.1	1.1	88	12
850 - Supermarket	100	100	1	1	59	41
875 - Department Store	100	100	1	1	64	36
911 - Walk-in Bank	100	100	1	1	52	48
934 - Fast-Food Restaurant with Drive-Through Window	100	100	1	1	51	49
937 - Coffee/Donut Shop with Drive-Through Window	100	100	1	1	51	49
960 - Super Convenience Market/Gas Station	100	100	1	1	50	50
210 - Single-Family Detached Housing	100	100	1	1	25	75
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	100	100	1	1	24	76
231 - Mid-Rise Residential with 1st-Floor Commercial	100	100	1	1	28	72

ESTIMATED BASELINE SITE PERSON TRIPS:

Land Use	Person Trips by Vehicle		Person Trips by Other Modes		Total Baseline Site Person Trips	
	Entry	Exit	Entry	Exit	Entry	Exit
710 - General Office Building	112	15	1	0	113	15

710 - General Office Building	127		1		128	
850 - Supermarket	43	30	0	0	43	30
	73		0		73	
875 - Department Store	36	20	0	0	36	20
	56		0		56	
911 - Walk-in Bank	38	35	0	0	38	35
	73		0		73	
934 - Fast-Food Restaurant with Drive-Through Window	266	256	0	0	266	256
	522		0		522	
937 - Coffee/Donut Shop with Drive-Through Window	85	82	0	0	85	82
	167		0		167	
960 - Super Convenience Market/Gas Station	112	112	0	0	112	112
	224		0		224	
210 - Single-Family Detached Housing	22	67	0	0	22	67
	89		0		89	
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	5	17	0	0	5	17
	22		0		22	
231 - Mid-Rise Residential with 1st-Floor Commercial	7	17	0	0	7	17
	24		0		24	

INTERNAL VEHICLE TRIP REDUCTION

LAND USE GROUP ASSIGNMENT:

Land Use	Land Use Group
710 - General Office Building	Office
850 - Supermarket	Retail
875 - Department Store	Retail
911 - Walk-in Bank	Resturant
934 - Fast-Food Restaurant with Drive-Through Window	Resturant
937 - Coffee/Donut Shop with Drive-Through Window	Resturant
960 - Super Convenience Market/Gas Station	Resturant
210 - Single-Family Detached Housing	Residential
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	Residential
231 - Mid-Rise Residential with 1st-Floor Commercial	Residential

BALANCED PERSON TRIPS:

710 - General Office Building					850 - Supermarket				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
15	1	14	2	2	7	16	1	43	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
113	1	2	2	2	4	14.5	1	30	
710 - General Office Building					875 - Department Store				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
15	1	14	2	2	6	16	1	36	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
113	1	2	2	2	3	14.5	1	20	
710 - General Office Building					911 - Walk-in Bank				

Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED <====>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
15	1	15.75	2	2	2	5.75	1	38
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
113	1	3.5	4	3	3	7.75	1	35
710 - General Office Building					934 - Fast-Food Restaurant with Drive-Through Window			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED <====>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
15	1	15.75	2	2	15	5.75	1	266
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
113	1	3.5	4	4	20	7.75	1	256
710 - General Office Building					937 - Coffee/Donut Shop with Drive-Through Window			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED <====>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
15	1	15.75	2	2	5	5.75	1	85
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
113	1	3.5	4	4	6	7.75	1	82
710 - General Office Building					960 - Super Convenience Market/Gas Station			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED <====>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
15	1	15.75	2	2	6	5.75	1	112
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
113	1	3.5	4	4	9	7.75	1	112
710 - General Office Building					210 - Single-Family Detached Housing			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED <====>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
15	1	0.3333333333333333	0	0	0	0	1	22
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
113	1	1	1	0	0	0.6666666666666666	1	67
710 - General Office Building					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED <====>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
15	1	0.3333333333333333	0	0	0	0	1	5
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
113	1	1	1	0	0	0.6666666666666666	1	17
710 - General Office Building					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED <====>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
15	1	0.3333333333333333	0	0	0	0	1	7
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
113	1	1	1	0	0	0.6666666666666666	1	17
850 - Supermarket					875 - Department Store			

Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED ==>>====	Unconstrained Demand	UIPTC	PAF	Persons Entry
30	1	0	0	0	0	0	1	36
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
43	1	0	0	0	0	0	1	20
850 - Supermarket					911 - Walk-in Bank			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED ==>>====	Unconstrained Demand	UIPTC	PAF	Persons Entry
30	1	1.625	0	0	2	6.25	1	38
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
43	1	1	0	0	1	1.75	1	35
850 - Supermarket					934 - Fast-Food Restaurant with Drive-Through Window			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED ==>>====	Unconstrained Demand	UIPTC	PAF	Persons Entry
30	1	1.625	0	0	17	6.25	1	266
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
43	1	1	0	0	4	1.75	1	256
850 - Supermarket					937 - Coffee/Donut Shop with Drive-Through Window			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED ==>>====	Unconstrained Demand	UIPTC	PAF	Persons Entry
30	1	1.625	0	0	5	6.25	1	85
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
43	1	1	0	0	1	1.75	1	82
850 - Supermarket					960 - Super Convenience Market/Gas Station			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED ==>>====	Unconstrained Demand	UIPTC	PAF	Persons Entry
30	1	1.625	0	0	7	6.25	1	112
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
43	1	1	0	0	2	1.75	1	112
850 - Supermarket					210 - Single-Family Detached Housing			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED ==>>====	Unconstrained Demand	UIPTC	PAF	Persons Entry
30	1	2.3333333333333335	1	0	0	0.3333333333333333	1	22
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
43	1	2.8333333333333335	1	0	0	0.16666666666666666	1	67
850 - Supermarket					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED ==>>====	Unconstrained Demand	UIPTC	PAF	Persons Entry
30	1	2.3333333333333335	1	0	0	0.3333333333333333	1	5
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
43	1	2.8333333333333335	1	0	0	0.16666666666666666	1	17

850 - Supermarket				Unconstrained Demand	====> BALANCED ==>>>	Unconstrained Demand	231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC					UIPTC	PAF	Persons Entry	
30	1	2.333333333333335		1	0	0	0.333333333333333	1	7	
Persons Entry	PAF	UIPTC		Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
43	1	2.833333333333335		1	0	0	0.166666666666666	1	17	
875 - Department Store				Unconstrained Demand	====> BALANCED ==>>>	Unconstrained Demand	911 - Walk-in Bank			
Persons Exit	PAF	UIPTC					UIPTC	PAF	Persons Entry	
20	1	1.625		0	0	2	6.25	1	38	
Persons Entry	PAF	UIPTC		Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
36	1	1		0	0	1	1.75	1	35	
875 - Department Store				Unconstrained Demand	====> BALANCED ==>>>	Unconstrained Demand	934 - Fast-Food Restaurant with Drive-Through Window			
Persons Exit	PAF	UIPTC					UIPTC	PAF	Persons Entry	
20	1	1.625		0	0	17	6.25	1	266	
Persons Entry	PAF	UIPTC		Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
36	1	1		0	0	4	1.75	1	256	
875 - Department Store				Unconstrained Demand	====> BALANCED ==>>>	Unconstrained Demand	937 - Coffee/Donut Shop with Drive-Through Window			
Persons Exit	PAF	UIPTC					UIPTC	PAF	Persons Entry	
20	1	1.625		0	0	5	6.25	1	85	
Persons Entry	PAF	UIPTC		Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
36	1	1		0	0	1	1.75	1	82	
875 - Department Store				Unconstrained Demand	====> BALANCED ==>>>	Unconstrained Demand	960 - Super Convenience Market/Gas Station			
Persons Exit	PAF	UIPTC					UIPTC	PAF	Persons Entry	
20	1	1.625		0	0	7	6.25	1	112	
Persons Entry	PAF	UIPTC		Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
36	1	1		0	0	2	1.75	1	112	
875 - Department Store				Unconstrained Demand	====> BALANCED ==>>>	Unconstrained Demand	210 - Single-Family Detached Housing			
Persons Exit	PAF	UIPTC					UIPTC	PAF	Persons Entry	
20	1	2.333333333333335		0	0	0	0.333333333333333	1	22	
Persons Entry	PAF	UIPTC		Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
36	1	2.833333333333335		1	0	0	0.166666666666666	1	67	
875 - Department Store				Unconstrained Demand	====> BALANCED ==>>>	Unconstrained Demand	220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC					UIPTC	PAF	Persons Entry	
20	1	2.333333333333335		0	0	0	0.333333333333333	1	5	
Persons Entry	PAF	UIPTC		Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
36	1	2.833333333333335		1	0	0	0.166666666666666	1	17	

875 - Department Store					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand		Unconstrained Demand	UIPTC	PAF	Persons Entry
20	1	2.333333333333335	0	====> BALANCED ==>==	0	0.333333333333333	1	7
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
36	1	2.833333333333335	1	0	0	0.166666666666666	1	17
911 - Walk-in Bank					934 - Fast-Food Restaurant with Drive-Through Window			
Persons Exit	PAF	UIPTC	Unconstrained Demand		Unconstrained Demand	UIPTC	PAF	Persons Entry
35	1	0	0	====> BALANCED ==>==	0	0	1	266
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
38	1	0	0	0	0	0	1	256
911 - Walk-in Bank					937 - Coffee/Donut Shop with Drive-Through Window			
Persons Exit	PAF	UIPTC	Unconstrained Demand		Unconstrained Demand	UIPTC	PAF	Persons Entry
35	1	0	0	====> BALANCED ==>==	0	0	1	85
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
38	1	0	0	0	0	0	1	82
911 - Walk-in Bank					960 - Super Convenience Market/Gas Station			
Persons Exit	PAF	UIPTC	Unconstrained Demand		Unconstrained Demand	UIPTC	PAF	Persons Entry
35	1	0	0	====> BALANCED ==>==	0	0	1	112
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
38	1	0	0	0	0	0	1	112
911 - Walk-in Bank					210 - Single-Family Detached Housing			
Persons Exit	PAF	UIPTC	Unconstrained Demand		Unconstrained Demand	UIPTC	PAF	Persons Entry
35	1	0.333333333333333	0	====> BALANCED ==>==	0	0.416666666666667	1	22
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
38	1	1.666666666666667	1	1	1	1.666666666666667	1	67
911 - Walk-in Bank					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand		Unconstrained Demand	UIPTC	PAF	Persons Entry
35	1	0.333333333333333	0	====> BALANCED ==>==	0	0.416666666666667	1	5
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
38	1	1.666666666666667	1	0	0	1.666666666666667	1	17
911 - Walk-in Bank					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand		Unconstrained Demand	UIPTC	PAF	Persons Entry
35	1	0.333333333333333	0	====> BALANCED ==>==	0	0.416666666666667	1	7
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
38	1	1.666666666666667	1	0	0	1.666666666666667	1	17

934 - Fast-Food Restaurant with Drive-Through Window					937 - Coffee/Donut Shop with Drive-Through Window				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
256	1	0	0	0	0	0	1	85	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<== BALANCED <<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
266	1	0	0	0	0	0	1	82	
934 - Fast-Food Restaurant with Drive-Through Window					960 - Super Convenience Market/Gas Station				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
256	1	0	0	0	0	0	1	112	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<== BALANCED <<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
266	1	0	0	0	0	0	1	112	
934 - Fast-Food Restaurant with Drive-Through Window					210 - Single-Family Detached Housing				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
256	1	0.3333333333333333	1	0	0	0.4166666666666667	1	22	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<== BALANCED <<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
266	1	1.6666666666666667	4	1	1	1.6666666666666667	1	67	
934 - Fast-Food Restaurant with Drive-Through Window					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
256	1	0.3333333333333333	1	0	0	0.4166666666666667	1	5	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<== BALANCED <<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
266	1	1.6666666666666667	4	0	0	1.6666666666666667	1	17	
934 - Fast-Food Restaurant with Drive-Through Window					231 - Mid-Rise Residential with 1st-Floor Commercial				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
256	1	0.3333333333333333	1	0	0	0.4166666666666667	1	7	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<== BALANCED <<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
266	1	1.6666666666666667	4	0	0	1.6666666666666667	1	17	
937 - Coffee/Donut Shop with Drive-Through Window					960 - Super Convenience Market/Gas Station				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
82	1	0	0	0	0	0	1	112	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<== BALANCED <<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
85	1	0	0	0	0	0	1	112	
937 - Coffee/Donut Shop with Drive-Through Window					210 - Single-Family Detached Housing				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
82	1	0.3333333333333333	0	0	0	0.4166666666666667	1	22	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<== BALANCED <<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
85	1	1.6666666666666667	1	1	1	1.6666666666666667	1	67	

937 - Coffee/Donut Shop with Drive-Through Window

Persons Exit	PAF	UIPTC	Unconstrained Demand
82	1	0.333333333333333	0
Persons Entry	PAF	UIPTC	Unconstrained Demand
85	1	1.66666666666667	1

937 - Coffee/Donut Shop with Drive-Through Window

Persons Exit	PAF	UIPTC	Unconstrained Demand
82	1	0.333333333333333	0
Persons Entry	PAF	UIPTC	Unconstrained Demand
85	1	1.66666666666667	1

960 - Super Convenience Market/Gas Station

Persons Exit	PAF	UIPTC	Unconstrained Demand
112	1	0.333333333333333	0
Persons Entry	PAF	UIPTC	Unconstrained Demand
112	1	1.66666666666667	2

960 - Super Convenience Market/Gas Station

Persons Exit	PAF	UIPTC	Unconstrained Demand
112	1	0.333333333333333	0
Persons Entry	PAF	UIPTC	Unconstrained Demand
112	1	1.66666666666667	2

960 - Super Convenience Market/Gas Station

Persons Exit	PAF	UIPTC	Unconstrained Demand
112	1	0.333333333333333	0
Persons Entry	PAF	UIPTC	Unconstrained Demand
112	1	1.66666666666667	2

210 - Single-Family Detached Housing

Persons Exit	PAF	UIPTC	Unconstrained Demand
67	1	0	0
Persons Entry	PAF	UIPTC	Unconstrained Demand
22	1	0	0

210 - Single-Family Detached Housing

Persons Exit	PAF	UIPTC	Unconstrained Demand
67	1	0	0
Persons Entry	PAF	UIPTC	Unconstrained Demand
22	1	0	0

====> BALANCED ==>==

0

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<<== BALANCED <<==

0

220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit

Unconstrained Demand	UIPTC	PAF	Persons Entry
0	0.416666666666667	1	5
Unconstrained Demand	UIPTC	PAF	Persons Exit
0	1.66666666666667	1	17

231 - Mid-Rise Residential with 1st-Floor Commercial

Unconstrained Demand	UIPTC	PAF	Persons Entry
0	0.416666666666667	1	7
Unconstrained Demand	UIPTC	PAF	Persons Exit
0	1.66666666666667	1	17

210 - Single-Family Detached Housing

Unconstrained Demand	UIPTC	PAF	Persons Entry
0	0.416666666666667	1	22
Unconstrained Demand	UIPTC	PAF	Persons Exit
1	1.66666666666667	1	67

220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit

Unconstrained Demand	UIPTC	PAF	Persons Entry
0	0.416666666666667	1	5
Unconstrained Demand	UIPTC	PAF	Persons Exit
0	1.66666666666667	1	17

231 - Mid-Rise Residential with 1st-Floor Commercial

Unconstrained Demand	UIPTC	PAF	Persons Entry
0	0.416666666666667	1	7
Unconstrained Demand	UIPTC	PAF	Persons Exit
0	1.66666666666667	1	17

220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit

Unconstrained Demand	UIPTC	PAF	Persons Entry
0	0	1	5
Unconstrained Demand	UIPTC	PAF	Persons Exit
0	0	1	17

231 - Mid-Rise Residential with 1st-Floor Commercial

Unconstrained Demand	UIPTC	PAF	Persons Entry
0	0	1	7
Unconstrained Demand	UIPTC	PAF	Persons Exit
0	0	1	17

220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit					231 - Mid-Rise Residential with 1st-Floor Commercial				
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry	
17	1	0	0	0	0	0	1	7	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
5	1	0	0	0	0	0	1	17	

INTERNAL PERSON TRIPS:**710 - General Office Building**

Internal Person Trips From	Entry	Exit	Total
850 - Supermarket	2	2	4
875 - Department Store	2	2	4
911 - Walk-in Bank	3	2	5
934 - Fast-Food Restaurant with Drive-Through Window	4	2	6
937 - Coffee/Donut Shop with Drive-Through Window	4	2	6
960 - Super Convenience Market/Gas Station	4	2	6
210 - Single-Family Detached Housing	0	0	0
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	19	12	31

850 - Supermarket

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	2	2	4
875 - Department Store	0	0	0
911 - Walk-in Bank	0	0	1
934 - Fast-Food Restaurant with Drive-Through Window	0	0	1
937 - Coffee/Donut Shop with Drive-Through Window	0	0	1
960 - Super Convenience Market/Gas Station	0	0	1
210 - Single-Family Detached Housing	0	0	0
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	2	2	4

875 - Department Store

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	2	2	4
850 - Supermarket	0	0	0
911 - Walk-in Bank	0	0	1
934 - Fast-Food Restaurant with Drive-Through Window	0	0	1
937 - Coffee/Donut Shop with Drive-Through Window	0	0	1
960 - Super Convenience Market/Gas Station	0	0	1
210 - Single-Family Detached Housing	0	0	0
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	2	2	4

911 - Walk-in Bank

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	2	3	5
850 - Supermarket	0	0	1
875 - Department Store	0	0	1

934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
937 - Coffee/Donut Shop with Drive-Through Window	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
210 - Single-Family Detached Housing	1	0	1
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	3	3	6

934 - Fast-Food Restaurant with Drive-Through Window

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	2	4	6
850 - Supermarket	0	0	1
875 - Department Store	0	0	1
911 - Walk-in Bank	0	0	0
937 - Coffee/Donut Shop with Drive-Through Window	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
210 - Single-Family Detached Housing	1	0	1
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	3	4	7

937 - Coffee/Donut Shop with Drive-Through Window

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	2	4	6
850 - Supermarket	0	0	1
875 - Department Store	0	0	1
911 - Walk-in Bank	0	0	0
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
210 - Single-Family Detached Housing	1	0	1
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	3	4	7

960 - Super Convenience Market/Gas Station

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	2	4	6
850 - Supermarket	0	0	1
875 - Department Store	0	0	1
911 - Walk-in Bank	0	0	0
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
937 - Coffee/Donut Shop with Drive-Through Window	0	0	0
210 - Single-Family Detached Housing	1	0	1
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	3	4	7

210 - Single-Family Detached Housing

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	0	0	0
875 - Department Store	0	0	0
911 - Walk-in Bank	0	1	1
934 - Fast-Food Restaurant with Drive-Through Window	0	1	1
937 - Coffee/Donut Shop with Drive-Through Window	0	1	1

960 - Super Convenience Market/Gas Station	0	1	1
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	0	4	4

220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	0	0	0
875 - Department Store	0	0	0
911 - Walk-in Bank	0	0	0
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
937 - Coffee/Donut Shop with Drive-Through Window	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
210 - Single-Family Detached Housing	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	0	0	0

231 - Mid-Rise Residential with 1st-Floor Commercial

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	0	0	0
875 - Department Store	0	0	0
911 - Walk-in Bank	0	0	0
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
937 - Coffee/Donut Shop with Drive-Through Window	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
210 - Single-Family Detached Housing	0	0	0
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
Total Internal Person Trips	0	0	0

INTERNAL VEHICLE TRIPS AND CAPTURE:**710 - General Office Building**

Total Internal Person Trips	19	12	31
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	19	12	31
Total External Vehicle Trips	83	2	85
Internal Vehicle Trip Capture	19%	86%	0%

850 - Supermarket

Total Internal Person Trips	2	2	4
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	2	2	4
Total External Vehicle Trips	41	28	69
Internal Vehicle Trip Capture	5%	7%	0%

875 - Department Store

Total Internal Person Trips	2	2	4
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-

Total Vehicle Internal Trips	2	2	4
Total External Vehicle Trips	34	18	52
Internal Vehicle Trip Capture	6%	10%	0%

911 - Walk-in Bank

Total Internal Person Trips	3	3	6
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	3	3	6
Total External Vehicle Trips	35	32	67
Internal Vehicle Trip Capture	8%	9%	0%

934 - Fast-Food Restaurant with Drive-Through Window

Total Internal Person Trips	3	4	7
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	3	4	7
Total External Vehicle Trips	263	252	515
Internal Vehicle Trip Capture	1%	2%	0%

937 - Coffee/Donut Shop with Drive-Through Window

Total Internal Person Trips	3	4	7
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	3	4	7
Total External Vehicle Trips	82	78	160
Internal Vehicle Trip Capture	4%	5%	0%

960 - Super Convenience Market/Gas Station

Total Internal Person Trips	3	4	7
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	3	4	7
Total External Vehicle Trips	109	108	217
Internal Vehicle Trip Capture	3%	4%	0%

210 - Single-Family Detached Housing

Total Internal Person Trips	0	4	4
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	0	4	4
Total External Vehicle Trips	22	63	85
Internal Vehicle Trip Capture	0%	6%	0%

220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit

Total Internal Person Trips	0	0	0
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	0	0	0

Total External Vehicle Trips	5	17	22
Internal Vehicle Trip Capture	0%	0%	0%

231 - Mid-Rise Residential with 1st-Floor Commercial

Total Internal Person Trips	0	0	0
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	0	0	0
Total External Vehicle Trips	7	17	24
Internal Vehicle Trip Capture	0%	0%	0%

PASS-BY VEHICLE TRIP REDUCTION

Land Use	External Vehicle Trips		Pass-by Vehicle Trip %		Pass-by Vehicle Trips	
	Entry	Exit	Entry (%)	Exit (%)	Entry	Exit
710 - General Office Building	83	2	0.00%	0.00%	0	0
850 - Supermarket	41	28	0.00%	0.00%	0	0
875 - Department Store	34	18	0.00%	0.00%	0	0
911 - Walk-in Bank	35	32	0.00%	0.00%	0	0
934 - Fast-Food Restaurant with Drive-Through Window	263	252	49.00%	49.00%	129	123
937 - Coffee/Donut Shop with Drive-Through Window	82	78	49.00%	49.00%	40	38
960 - Super Convenience Market/Gas Station	109	108	63.00%	63.00%	69	68
210 - Single-Family Detached Housing	22	63	0.00%	0.00%	0	0
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	5	17	0.00%	0.00%	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	7	17	0.00%	0.00%	0	0

DIVERTED VEHICLE TRIP REDUCTION

Land Use	External Vehicle Trips		Diverted Vehicle Trip %		Diverted Vehicle Trips	
	Entry	Exit	Entry (%)	Exit (%)	Entry	Exit
710 - General Office Building	83	2	0.00%	0.00%	0	0
850 - Supermarket	41	28	0.00%	0.00%	0	0
875 - Department Store	34	18	0.00%	0.00%	0	0
911 - Walk-in Bank	35	32	0.00%	0.00%	0	0
934 - Fast-Food Restaurant with Drive-Through Window	263	252	0.00%	0.00%	0	0
937 - Coffee/Donut Shop with Drive-Through Window	82	78	0.00%	0.00%	0	0
960 - Super Convenience Market/Gas Station	109	108	0.00%	0.00%	0	0
210 - Single-Family Detached Housing	22	63	0.00%	0.00%	0	0
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	5	17	0.00%	0.00%	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	7	17	0.00%	0.00%	0	0

EXTRA VEHICLE TRIP REDUCTION

Land Use	(External - (Pass-by + Diverted)) Vehicle Trips		Extra Vehicle Trip Reduction %		Extra Reduced Vehicle Trips	
	Entry	Exit	Entry (%)	Exit (%)	Entry	Exit
710 - General Office Building	83	2	0.00%	0.00%	0	0
850 - Supermarket	41	28	0.00%	0.00%	0	0
875 - Department Store	34	18	0.00%	0.00%	0	0
911 - Walk-in Bank	35	32	0.00%	0.00%	0	0
934 - Fast-Food Restaurant with Drive-Through Window	134	129	0.00%	0.00%	0	0
937 - Coffee/Donut Shop with Drive-Through Window	42	40	0.00%	0.00%	0	0
960 - Super Convenience Market/Gas Station	40	40	0.00%	0.00%	0	0
210 - Single-Family Detached Housing	22	63	0.00%	0.00%	0	0

220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	5	17	0.00%	0.00%	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	7	17	0.00%	0.00%	0	0

NEW VEHICLE TRIPS

Land Use	New Vehicle Trips		
	Entry	Exit	Total
710 - General Office Building	83	2	85
850 - Supermarket	41	28	69
875 - Department Store	34	18	52
911 - Walk-in Bank	35	32	67
934 - Fast-Food Restaurant with Drive-Through Window	134	129	263
937 - Coffee/Donut Shop with Drive-Through Window	42	40	82
960 - Super Convenience Market/Gas Station	40	40	80
210 - Single-Family Detached Housing	22	63	85
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	5	17	22
231 - Mid-Rise Residential with 1st-Floor Commercial	7	17	24

RESULTS

Site Totals	Entry	Exit	Total
Vehicle Trips Before Reduction	716	650	1366
Internal Vehicle Trips	35	35	70
External Vehicle Trips	681	615	1296
Internal Vehicle Trip Capture	5%	5%	5%
Pass-by Vehicle Trips	238	229	467
Diverted Vehicle Trips	0	0	0
Extra Reduced Vehicle Trips	0	0	0
New Vehicle Trips	443	386	829

Scenario - 2

Scenario Name: PM 2026

User Group:

Dev. phase: 1

No. of Years to Project 0

Analyst Note:

Traffic :

Warning:

VEHICLE TRIPS BEFORE REDUCTION

Land Use & Data Source	Location	IV	Size	Time Period	Method	Entry	Exit	Total
					Rate/Equation	Split%	Split%	
710 - General Office Building	General	1000 Sq. Ft. GFA	11.65	Weekday, Peak Hour of Adjacent Street Traffic,	Average	3	14	17
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				1.44	17%	83%	
850 - Supermarket	General	1000 Sq. Ft. GFA	25.71	Weekday, Peak Hour of Adjacent Street Traffic,	Average	115	115	230
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				8.95	50%	50%	
934 - Fast-Food Restaurant with Drive-Through	General	1000 Sq. Ft. GFA	5.79	Weekday, Peak Hour of Adjacent Street Traffic,	Average	99	92	191
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				33.03	52%	48%	
948 - Automated Car Wash	General	Car Wash Tunnels	1	Weekday, Peak Hour of Adjacent Street Traffic,	Average	39	39	78
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				77.50	50%	50%	
960 - Super Convenience Market/Gas	General	Vehicle Fueling Positions	8	Weekday, Peak Hour of Adjacent Street	Average	92	92	184
Data Source: Trip Generation Manual, 10th Ed +	Urban/Suburban				22.96	50%	50%	
931 - Fine Dining Restaurant	General	1000 Sq. Ft. GFA	3.11	Weekday, Peak Hour of Adjacent Street Traffic,	Average	16	8	24
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				7.80	67%	33%	
210 - Single-Family Detached Housing	General	Dwelling Units	63	Weekday, Peak Hour of Adjacent Street Traffic,	Average	37	22	59
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				0.94	63%	37%	
220 - Multifamily Housing (Low-Rise) - Not Close	General	Dwelling Units	27	Weekday, Peak Hour of Adjacent Street Traffic,	Average	9	5	14
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				0.51	63%	37%	
231 - Mid-Rise Residential with 1st-Floor	General	Dwelling Units	80	Weekday, Peak Hour of Adjacent Street Traffic,	Average	20	9	29
Data Source: Trip Generation Manual, 10th Ed +	Urban/Suburban				0.36	70%	30%	

VEHICLE TO PERSON TRIP CONVERSION

BASELINE SITE VEHICLE CHARACTERISTICS:

Land Use	Baseline Site Vehicle Mode Share		Baseline Site Vehicle Occupancy		Baseline Site Vehicle Directional Split	
	Entry (%)	Exit (%)	Entry	Exit	Entry (%)	Exit (%)
710 - General Office Building	100	99	1.1	1.1	17	83
850 - Supermarket	100	100	1	1	50	50
934 - Fast-Food Restaurant with Drive-Through Window	100	100	1	1	52	48
948 - Automated Car Wash	100	100	1	1	50	50
960 - Super Convenience Market/Gas Station	100	100	1	1	50	50
931 - Fine Dining Restaurant	100	100	1	1	67	33
210 - Single-Family Detached Housing	100	100	1	1	63	37
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	100	100	1	1	63	37
231 - Mid-Rise Residential with 1st-Floor Commercial	100	100	1	1	70	30

ESTIMATED BASELINE SITE PERSON TRIPS:

Land Use	Person Trips by Vehicle		Person Trips by Other Modes		Total Baseline Site Person Trips	
	Entry	Exit	Entry	Exit	Entry	Exit
710 - General Office Building	3	15	0	0	3	15
	18		0		18	
850 - Supermarket	115	115	0	0	115	115
	230		0		230	

934 - Fast-Food Restaurant with Drive-Through Window	99	92	0	0	99	92
	191		0		191	
948 - Automated Car Wash	39	39	0	0	39	39
	78		0		78	
960 - Super Convenience Market/Gas Station	92	92	0	0	92	92
	184		0		184	
931 - Fine Dining Restaurant	16	8	0	0	16	8
	24		0		24	
210 - Single-Family Detached Housing	37	22	0	0	37	22
	59		0		59	
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	9	5	0	0	9	5
	14		0		14	
231 - Mid-Rise Residential with 1st-Floor Commercial	20	9	0	0	20	9
	29		0		29	

INTERNAL VEHICLE TRIP REDUCTION

LAND USE GROUP ASSIGNMENT:

Land Use	Land Use Group
710 - General Office Building	Office
850 - Supermarket	Retail
934 - Fast-Food Restaurant with Drive-Through Window	Resturant
948 - Automated Car Wash	Resturant
960 - Super Convenience Market/Gas Station	Resturant
931 - Fine Dining Restaurant	Resturant
210 - Single-Family Detached Housing	Residential
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	Residential
231 - Mid-Rise Residential with 1st-Floor Commercial	Residential

BALANCED PERSON TRIPS:

710 - General Office Building					850 - Supermarket				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
15	1	20	3	3	9	8	1	115	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<== BALANCED <<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
3	1	31	1	1	2	2	1	115	
710 - General Office Building					934 - Fast-Food Restaurant with Drive-Through Window				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
15	1	1	0	0	0	0.5	1	99	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<== BALANCED <<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
3	1	7.5	0	0	1	0.75	1	92	
710 - General Office Building					948 - Automated Car Wash				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
15	1	1	0	0	0	0.5	1	39	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<== BALANCED <<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
3	1	7.5	0	0	0	0.75	1	39	

710 - General Office Building					960 - Super Convenience Market/Gas Station				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
15	1	1	0	0	0	0.5	1	92	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
3	1	7.5	0	0	1	0.75	1	92	
710 - General Office Building					931 - Fine Dining Restaurant				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
15	1	1	0	0	0	0.5	1	16	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
3	1	7.5	0	0	0	0.75	1	8	
710 - General Office Building					210 - Single-Family Detached Housing				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
15	1	0.6666666666666666	0	0	0	1.3333333333333333	1	37	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
3	1	19	1	0	0	1.3333333333333333	1	22	
710 - General Office Building					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
15	1	0.6666666666666666	0	0	0	1.3333333333333333	1	9	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
3	1	19	1	0	0	1.3333333333333333	1	5	
710 - General Office Building					231 - Mid-Rise Residential with 1st-Floor Commercial				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
15	1	0.6666666666666666	0	0	0	1.3333333333333333	1	20	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
3	1	19	1	0	0	1.3333333333333333	1	9	
850 - Supermarket					934 - Fast-Food Restaurant with Drive-Through Window				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
115	1	7.25	8	7	7	7.25	1	99	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
115	1	12.5	14	9	9	10.25	1	92	
850 - Supermarket					948 - Automated Car Wash				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
115	1	7.25	8	3	3	7.25	1	39	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
115	1	12.5	14	4	4	10.25	1	39	

850 - Supermarket					960 - Super Convenience Market/Gas Station				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED ==>>=	Unconstrained Demand	UIPTC	PAF	Persons Entry	
115	1	7.25	8	7	7	7.25	1	92	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
115	1	12.5	14	9	9	10.25	1	92	
850 - Supermarket					931 - Fine Dining Restaurant				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED ==>>=	Unconstrained Demand	UIPTC	PAF	Persons Entry	
115	1	7.25	8	1	1	7.25	1	16	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
115	1	12.5	14	1	1	10.25	1	8	
850 - Supermarket					210 - Single-Family Detached Housing				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED ==>>=	Unconstrained Demand	UIPTC	PAF	Persons Entry	
115	1	8.666666666666666	10	6	6	15.333333333333334	1	37	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
115	1	3.3333333333333335	4	3	3	14	1	22	
850 - Supermarket					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED ==>>=	Unconstrained Demand	UIPTC	PAF	Persons Entry	
115	1	8.666666666666666	10	1	1	15.333333333333334	1	9	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
115	1	3.3333333333333335	4	1	1	14	1	5	
850 - Supermarket					231 - Mid-Rise Residential with 1st-Floor Commercial				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED ==>>=	Unconstrained Demand	UIPTC	PAF	Persons Entry	
115	1	8.666666666666666	10	3	3	15.333333333333334	1	20	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
115	1	3.3333333333333335	4	1	1	14	1	9	
934 - Fast-Food Restaurant with Drive-Through Window					948 - Automated Car Wash				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED ==>>=	Unconstrained Demand	UIPTC	PAF	Persons Entry	
92	1	0	0	0	0	0	1	39	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
99	1	0	0	0	0	0	1	39	
934 - Fast-Food Restaurant with Drive-Through Window					960 - Super Convenience Market/Gas Station				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED ==>>=	Unconstrained Demand	UIPTC	PAF	Persons Entry	
92	1	0	0	0	0	0	1	92	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
99	1	0	0	0	0	0	1	92	

934 - Fast-Food Restaurant with Drive-Through Window					931 - Fine Dining Restaurant				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry	
92	1	0	0	0	0	0	1	16	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
99	1	0	0	0	0	0	1	8	
934 - Fast-Food Restaurant with Drive-Through Window					210 - Single-Family Detached Housing				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry	
92	1	1.5	1	0	0	1.33333333333333	1	37	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
99	1	1.16666666666667	1	0	0	1.75	1	22	
934 - Fast-Food Restaurant with Drive-Through Window					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry	
92	1	1.5	1	0	0	1.33333333333333	1	9	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
99	1	1.16666666666667	1	0	0	1.75	1	5	
934 - Fast-Food Restaurant with Drive-Through Window					231 - Mid-Rise Residential with 1st-Floor Commercial				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry	
92	1	1.5	1	0	0	1.33333333333333	1	20	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
99	1	1.16666666666667	1	0	0	1.75	1	9	
948 - Automated Car Wash					960 - Super Convenience Market/Gas Station				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry	
39	1	0	0	0	0	0	1	92	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
39	1	0	0	0	0	0	1	92	
948 - Automated Car Wash					931 - Fine Dining Restaurant				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry	
39	1	0	0	0	0	0	1	16	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
39	1	0	0	0	0	0	1	8	
948 - Automated Car Wash					210 - Single-Family Detached Housing				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry	
39	1	1.5	1	0	0	1.33333333333333	1	37	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
39	1	1.16666666666667	0	0	0	1.75	1	22	
948 - Automated Car Wash					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit				

Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED <====>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
39	1	1.5	1	0	0	1.3333333333333333	1	9
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
39	1	1.1666666666666667	0	0	0	1.75	1	5
948 - Automated Car Wash					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED <====>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
39	1	1.5	1	0	0	1.3333333333333333	1	20
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
39	1	1.1666666666666667	0	0	0	1.75	1	9
960 - Super Convenience Market/Gas Station					931 - Fine Dining Restaurant			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED <====>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
92	1	0	0	0	0	0	1	16
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
92	1	0	0	0	0	0	1	8
960 - Super Convenience Market/Gas Station					210 - Single-Family Detached Housing			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED <====>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
92	1	1.5	1	0	0	1.3333333333333333	1	37
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
92	1	1.1666666666666667	1	0	0	1.75	1	22
960 - Super Convenience Market/Gas Station					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED <====>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
92	1	1.5	1	0	0	1.3333333333333333	1	9
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
92	1	1.1666666666666667	1	0	0	1.75	1	5
960 - Super Convenience Market/Gas Station					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED <====>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
92	1	1.5	1	0	0	1.3333333333333333	1	20
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
92	1	1.1666666666666667	1	0	0	1.75	1	9
931 - Fine Dining Restaurant					210 - Single-Family Detached Housing			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED <====>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
8	1	1.5	0	0	0	1.3333333333333333	1	37
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
16	1	1.1666666666666667	0	0	0	1.75	1	22
931 - Fine Dining Restaurant					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			

Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED <====>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
8	1	1.5	0	0	0	1.33333333333333	1	9
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
16	1	1.16666666666667	0	0	0	1.75	1	5
931 - Fine Dining Restaurant					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED <====>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
8	1	1.5	0	0	0	1.33333333333333	1	20
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
16	1	1.16666666666667	0	0	0	1.75	1	9
210 - Single-Family Detached Housing					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED <====>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
22	1	0	0	0	0	0	1	9
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
37	1	0	0	0	0	0	1	5
210 - Single-Family Detached Housing					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED <====>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
22	1	0	0	0	0	0	1	20
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
37	1	0	0	0	0	0	1	9
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED <====>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
5	1	0	0	0	0	0	1	20
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
9	1	0	0	0	0	0	1	9

INTERNAL PERSON TRIPS:**710 - General Office Building**

Internal Person Trips From	Entry	Exit	Total
850 - Supermarket	1	3	4
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
948 - Automated Car Wash	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
931 - Fine Dining Restaurant	0	0	0
210 - Single-Family Detached Housing	0	0	0
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	1	3	4

850 - Supermarket

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	3	1	4

934 - Fast-Food Restaurant with Drive-Through Window	9	7	17
948 - Automated Car Wash	4	3	7
960 - Super Convenience Market/Gas Station	9	7	16
931 - Fine Dining Restaurant	1	1	2
210 - Single-Family Detached Housing	3	6	9
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	1	1	2
231 - Mid-Rise Residential with 1st-Floor Commercial	1	3	4
Total Internal Person Trips	31	29	60

934 - Fast-Food Restaurant with Drive-Through Window

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	7	9	17
948 - Automated Car Wash	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
931 - Fine Dining Restaurant	0	0	0
210 - Single-Family Detached Housing	0	1	1
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	7	10	17

948 - Automated Car Wash

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	3	4	7
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
931 - Fine Dining Restaurant	0	0	0
210 - Single-Family Detached Housing	0	1	1
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	3	5	8

960 - Super Convenience Market/Gas Station

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	7	9	16
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
948 - Automated Car Wash	0	0	0
931 - Fine Dining Restaurant	0	0	0
210 - Single-Family Detached Housing	0	1	1
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	7	10	17

931 - Fine Dining Restaurant

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	1	1	2
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
948 - Automated Car Wash	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
210 - Single-Family Detached Housing	0	0	0
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0

Total Internal Person Trips	1	1	2
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210 - Single-Family Detached Housing

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	6	3	9
934 - Fast-Food Restaurant with Drive-Through Window	1	0	1
948 - Automated Car Wash	1	0	1
960 - Super Convenience Market/Gas Station	1	0	1
931 - Fine Dining Restaurant	0	0	0
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	9	3	12

220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	1	1	2
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
948 - Automated Car Wash	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
931 - Fine Dining Restaurant	0	0	0
210 - Single-Family Detached Housing	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	1	1	2

231 - Mid-Rise Residential with 1st-Floor Commercial

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	3	1	4
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
948 - Automated Car Wash	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
931 - Fine Dining Restaurant	0	0	0
210 - Single-Family Detached Housing	0	0	0
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
Total Internal Person Trips	3	1	4

INTERNAL VEHICLE TRIPS AND CAPTURE:**710 - General Office Building**

Total Internal Person Trips	1	3	4
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	1	3	4
Total External Vehicle Trips	2	11	13
Internal Vehicle Trip Capture	35%	22%	0%

850 - Supermarket

Total Internal Person Trips	31	29	60
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	31	29	60
Total External Vehicle Trips	84	86	170

Internal Vehicle Trip Capture	27%	25%	0%
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934 - Fast-Food Restaurant with Drive-Through Window

Total Internal Person Trips	7	10	17
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	7	10	17
Total External Vehicle Trips	92	82	174
Internal Vehicle Trip Capture	7%	11%	0%

948 - Automated Car Wash

Total Internal Person Trips	3	5	8
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	3	5	8
Total External Vehicle Trips	36	34	70
Internal Vehicle Trip Capture	8%	13%	0%

960 - Super Convenience Market/Gas Station

Total Internal Person Trips	7	10	17
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	7	10	17
Total External Vehicle Trips	85	82	167
Internal Vehicle Trip Capture	8%	11%	0%

931 - Fine Dining Restaurant

Total Internal Person Trips	1	1	2
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	1	1	2
Total External Vehicle Trips	15	7	22
Internal Vehicle Trip Capture	6%	12%	0%

210 - Single-Family Detached Housing

Total Internal Person Trips	9	3	12
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	9	3	12
Total External Vehicle Trips	28	19	47
Internal Vehicle Trip Capture	24%	14%	0%

220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit

Total Internal Person Trips	1	1	2
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	1	1	2
Total External Vehicle Trips	8	4	12
Internal Vehicle Trip Capture	12%	20%	0%

231 - Mid-Rise Residential with 1st-Floor Commercial

Total Internal Person Trips	3	1	4
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	3	1	4
Total External Vehicle Trips	17	8	25
Internal Vehicle Trip Capture	15%	12%	0%

PASS-BY VEHICLE TRIP REDUCTION

Land Use	External Vehicle Trips		Pass-by Vehicle Trip %		Pass-by Vehicle Trips	
	Entry	Exit	Entry (%)	Exit (%)	Entry	Exit
710 - General Office Building	2	11	0.00%	0.00%	0	0
850 - Supermarket	84	86	33.00%	33.00%	28	28
934 - Fast-Food Restaurant with Drive-Through Window	92	82	49.90%	49.90%	46	41
948 - Automated Car Wash	36	34	0.00%	0.00%	0	0
960 - Super Convenience Market/Gas Station	85	82	66.00%	66.00%	56	54
931 - Fine Dining Restaurant	15	7	44.00%	44.00%	7	3
210 - Single-Family Detached Housing	28	19	0.00%	0.00%	0	0
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	8	4	0.00%	0.00%	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	17	8	0.00%	0.00%	0	0

DIVERTED VEHICLE TRIP REDUCTION

Land Use	External Vehicle Trips		Diverted Vehicle Trip %		Diverted Vehicle Trips	
	Entry	Exit	Entry (%)	Exit (%)	Entry	Exit
710 - General Office Building	2	11	0.00%	0.00%	0	0
850 - Supermarket	84	86	0.00%	0.00%	0	0
934 - Fast-Food Restaurant with Drive-Through Window	92	82	0.00%	0.00%	0	0
948 - Automated Car Wash	36	34	0.00%	0.00%	0	0
960 - Super Convenience Market/Gas Station	85	82	0.00%	0.00%	0	0
931 - Fine Dining Restaurant	15	7	0.00%	0.00%	0	0
210 - Single-Family Detached Housing	28	19	0.00%	0.00%	0	0
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	8	4	0.00%	0.00%	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	17	8	0.00%	0.00%	0	0

EXTRA VEHICLE TRIP REDUCTION

Land Use	(External - (Pass-by + Diverted)) Vehicle Trips		Extra Vehicle Trip Reduction %		Extra Reduced Vehicle Trips	
	Entry	Exit	Entry (%)	Exit (%)	Entry	Exit
710 - General Office Building	2	11	0.00%	0.00%	0	0
850 - Supermarket	56	58	0.00%	0.00%	0	0
934 - Fast-Food Restaurant with Drive-Through Window	46	41	0.00%	0.00%	0	0
948 - Automated Car Wash	36	34	0.00%	0.00%	0	0
960 - Super Convenience Market/Gas Station	29	28	0.00%	0.00%	0	0
931 - Fine Dining Restaurant	8	4	0.00%	0.00%	0	0
210 - Single-Family Detached Housing	28	19	0.00%	0.00%	0	0
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	8	4	0.00%	0.00%	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	17	8	0.00%	0.00%	0	0

NEW VEHICLE TRIPS

Land Use	New Vehicle Trips		
	Entry	Exit	Total
710 - General Office Building	2	11	13
850 - Supermarket	56	58	114
934 - Fast-Food Restaurant with Drive-Through Window	46	41	87
948 - Automated Car Wash	36	34	70
960 - Super Convenience Market/Gas Station	29	28	57
931 - Fine Dining Restaurant	8	4	12
210 - Single-Family Detached Housing	28	19	47
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	8	4	12
231 - Mid-Rise Residential with 1st-Floor Commercial	17	8	25

RESULTS

Site Totals	Entry	Exit	Total
Vehicle Trips Before Reduction	430	396	826
Internal Vehicle Trips	63	63	126
External Vehicle Trips	367	333	700
Internal Vehicle Trip Capture	15%	16%	16%
Pass-by Vehicle Trips	137	126	263
Diverted Vehicle Trips	0	0	0
Extra Reduced Vehicle Trips	0	0	0
New Vehicle Trips	230	207	437

Scenario - 1

Scenario Name: PM 2031

User Group:

Dev. phase: 1

No. of Years to Project 0

Traffic :

Analyst Note:

Warning:

VEHICLE TRIPS BEFORE REDUCTION

Land Use & Data Source	Location	IV	Size	Time Period	Method	Entry	Exit	Total
					Rate/Equation	Split%	Split%	
710 - General Office Building	General	1000 Sq. Ft. GFA	76.28	Weekday, Peak Hour of Adjacent Street Traffic,	Average	19	91	110
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				1.44	17%	83%	
850 - Supermarket	General	1000 Sq. Ft. GFA	25.71	Weekday, Peak Hour of Adjacent Street Traffic,	Average	115	115	230
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				8.95	50%	50%	
875 - Department Store	General	1000 Sq. Ft. GFA	96.49	Weekday, Peak Hour of Adjacent Street Traffic,	Average	94	94	188
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				1.95	50%	50%	
911 - Walk-in Bank	General	1000 Sq. Ft. GFA	3.23	Weekday, Peak Hour of Adjacent Street Traffic,	Average	17	22	39
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				12.13	44%	56%	
934 - Fast-Food Restaurant with Drive-	General	1000 Sq. Ft. GFA	11.69	Weekday, Peak Hour of Adjacent Street	Average	201	185	386
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				33.03	52%	48%	
937 - Coffee/Donut Shop with Drive-Through	General	1000 Sq. Ft. GFA	1.95	Weekday, Peak Hour of Adjacent Street Traffic,	Average	38	38	76
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				38.99	50%	50%	
948 - Automated Car Wash	General	Car Wash Tunnels	1	Weekday, Peak Hour of Adjacent Street Traffic,	Average	39	39	78
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				77.50	50%	50%	
960 - Super Convenience Market/Gas Station	General	Vehicle Fueling Positions	8	Weekday, Peak Hour of Adjacent Street Traffic,	Average	92	92	184
Data Source: Trip Generation Manual, 10th Ed +	Urban/Suburban				22.96	50%	50%	
210 - Single-Family Detached Housing	General	Dwelling Units	127	Weekday, Peak Hour of Adjacent Street Traffic,	Average	75	44	119
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				0.94	63%	37%	
220 - Multifamily Housing (Low-Rise) - Not Close	General	Dwelling Units	55	Weekday, Peak Hour of Adjacent Street Traffic,	Average	18	10	28
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				0.51	63%	37%	
231 - Mid-Rise Residential with 1st-Floor	General	Dwelling Units	80	Weekday, Peak Hour of Adjacent Street Traffic,	Average	20	9	29
Data Source: Trip Generation Manual, 10th Ed +	Urban/Suburban				0.36	70%	30%	

VEHICLE TO PERSON TRIP CONVERSION**BASELINE SITE VEHICLE CHARACTERISTICS:**

Land Use	Baseline Site Vehicle Mode Share		Baseline Site Vehicle Occupancy		Baseline Site Vehicle Directional Split	
	Entry (%)	Exit (%)	Entry	Exit	Entry (%)	Exit (%)
710 - General Office Building	100	99	1.1	1.1	17	83
850 - Supermarket	100	100	1	1	50	50
875 - Department Store	100	100	1	1	50	50
911 - Walk-in Bank	100	100	1	1	44	56
934 - Fast-Food Restaurant with Drive-Through Window	100	100	1	1	52	48
937 - Coffee/Donut Shop with Drive-Through Window	100	100	1	1	50	50
948 - Automated Car Wash	100	100	1	1	50	50
960 - Super Convenience Market/Gas Station	100	100	1	1	50	50
210 - Single-Family Detached Housing	100	100	1	1	63	37
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	100	100	1	1	63	37
231 - Mid-Rise Residential with 1st-Floor Commercial	100	100	1	1	70	30

ESTIMATED BASELINE SITE PERSON TRIPS:

Land Use	Person Trips by Vehicle		Person Trips by Other Modes		Total Baseline Site Person Trips	
	Entry	Exit	Entry	Exit	Entry	Exit
710 - General Office Building	21	100	0	1	21	101
	121		1		122	
850 - Supermarket	115	115	0	0	115	115
	230		0		230	
875 - Department Store	94	94	0	0	94	94
	188		0		188	
911 - Walk-in Bank	17	22	0	0	17	22
	39		0		39	
934 - Fast-Food Restaurant with Drive-Through Window	201	185	0	0	201	185
	386		0		386	
937 - Coffee/Donut Shop with Drive-Through Window	38	38	0	0	38	38
	76		0		76	
948 - Automated Car Wash	39	39	0	0	39	39
	78		0		78	
960 - Super Convenience Market/Gas Station	92	92	0	0	92	92
	184		0		184	
210 - Single-Family Detached Housing	75	44	0	0	75	44
	119		0		119	
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	18	10	0	0	18	10
	28		0		28	
231 - Mid-Rise Residential with 1st-Floor Commercial	20	9	0	0	20	9
	29		0		29	

INTERNAL VEHICLE TRIP REDUCTION

LAND USE GROUP ASSIGNMENT:

Land Use	Land Use Group
710 - General Office Building	Office
850 - Supermarket	Retail
875 - Department Store	Retail
911 - Walk-in Bank	Resturant
934 - Fast-Food Restaurant with Drive-Through Window	Resturant
937 - Coffee/Donut Shop with Drive-Through Window	Resturant
948 - Automated Car Wash	Resturant
960 - Super Convenience Market/Gas Station	Resturant
210 - Single-Family Detached Housing	Residential
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	Residential
231 - Mid-Rise Residential with 1st-Floor Commercial	Residential

BALANCED PERSON TRIPS:

710 - General Office Building					850 - Supermarket				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
101	1	10	10	5	5	4	1	115	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
21	1	15.5	3	1	1	1	1	115	
710 - General Office Building					875 - Department Store				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	

101	1	10	10	4	4	4	1	94
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
21	1	15.5	3	1	1	1	1	94
710 - General Office Building								911 - Walk-in Bank
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
101	1	0.8	1	0	0	0.4	1	17
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
21	1	6	1	0	0	0.6	1	22
710 - General Office Building								934 - Fast-Food Restaurant with Drive-Through Window
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
101	1	0.8	1	1	1	0.4	1	201
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
21	1	6	1	1	1	0.6	1	185
710 - General Office Building								937 - Coffee/Donut Shop with Drive-Through Window
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
101	1	0.8	1	0	0	0.4	1	38
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
21	1	6	1	0	0	0.6	1	38
710 - General Office Building								948 - Automated Car Wash
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
101	1	0.8	1	0	0	0.4	1	39
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
21	1	6	1	0	0	0.6	1	39
710 - General Office Building								960 - Super Convenience Market/Gas Station
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
101	1	0.8	1	0	0	0.4	1	92
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
21	1	6	1	1	1	0.6	1	92
710 - General Office Building								210 - Single-Family Detached Housing
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
101	1	0.6666666666666666	1	1	1	1.3333333333333333	1	75
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
21	1	19	4	1	1	1.3333333333333333	1	44
710 - General Office Building								220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry

101	1	0.6666666666666666	1	0	0	1.3333333333333333	1	18
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
21	1	19	4	0	0	1.3333333333333333	1	10
710 - General Office Building					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
101	1	0.6666666666666666	1	0	0	1.3333333333333333	1	20
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
21	1	19	4	0	0	1.3333333333333333	1	9
850 - Supermarket					875 - Department Store			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
115	1	0	0	0	0	0	1	94
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
115	1	0	0	0	0	0	1	94
850 - Supermarket					911 - Walk-in Bank			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
115	1	2.9	3	0	0	2.9	1	17
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
115	1	5	6	1	1	4.1	1	22
850 - Supermarket					934 - Fast-Food Restaurant with Drive-Through Window			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
115	1	2.9	3	3	6	2.9	1	201
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
115	1	5	6	6	8	4.1	1	185
850 - Supermarket					937 - Coffee/Donut Shop with Drive-Through Window			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
115	1	2.9	3	1	1	2.9	1	38
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
115	1	5	6	2	2	4.1	1	38
850 - Supermarket					948 - Automated Car Wash			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
115	1	2.9	3	1	1	2.9	1	39
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
115	1	5	6	2	2	4.1	1	39
850 - Supermarket					960 - Super Convenience Market/Gas Station			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry

115	1	2.9	3	3	3	2.9	1	92
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
115	1	5	6	4	4	4.1	1	92
850 - Supermarket				==>>> BALANCED ==>>>	210 - Single-Family Detached Housing			
Persons Exit	PAF	UIPTC	Unconstrained Demand	5	Unconstrained Demand	UIPTC	PAF	Persons Entry
115	1	4.33333333333333	5	<<<== BALANCED <<<==	6	7.66666666666667	1	75
Persons Entry	PAF	UIPTC	Unconstrained Demand	2	Unconstrained Demand	UIPTC	PAF	Persons Exit
115	1	1.66666666666667	2		3	7	1	44
850 - Supermarket				==>>> BALANCED ==>>>	220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand	1	Unconstrained Demand	UIPTC	PAF	Persons Entry
115	1	4.33333333333333	5	<<<== BALANCED <<<==	1	7.66666666666667	1	18
Persons Entry	PAF	UIPTC	Unconstrained Demand	1	Unconstrained Demand	UIPTC	PAF	Persons Exit
115	1	1.66666666666667	2		1	7	1	10
850 - Supermarket				==>>> BALANCED ==>>>	231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	2	Unconstrained Demand	UIPTC	PAF	Persons Entry
115	1	4.33333333333333	5	<<<== BALANCED <<<==	2	7.66666666666667	1	20
Persons Entry	PAF	UIPTC	Unconstrained Demand	1	Unconstrained Demand	UIPTC	PAF	Persons Exit
115	1	1.66666666666667	2		1	7	1	9
875 - Department Store				==>>> BALANCED ==>>>	911 - Walk-in Bank			
Persons Exit	PAF	UIPTC	Unconstrained Demand	0	Unconstrained Demand	UIPTC	PAF	Persons Entry
94	1	2.9	3	<<<== BALANCED <<<==	0	2.9	1	17
Persons Entry	PAF	UIPTC	Unconstrained Demand	1	Unconstrained Demand	UIPTC	PAF	Persons Exit
94	1	5	5		1	4.1	1	22
875 - Department Store				==>>> BALANCED ==>>>	934 - Fast-Food Restaurant with Drive-Through Window			
Persons Exit	PAF	UIPTC	Unconstrained Demand	3	Unconstrained Demand	UIPTC	PAF	Persons Entry
94	1	2.9	3	<<<== BALANCED <<<==	6	2.9	1	201
Persons Entry	PAF	UIPTC	Unconstrained Demand	5	Unconstrained Demand	UIPTC	PAF	Persons Exit
94	1	5	5		8	4.1	1	185
875 - Department Store				==>>> BALANCED ==>>>	937 - Coffee/Donut Shop with Drive-Through Window			
Persons Exit	PAF	UIPTC	Unconstrained Demand	1	Unconstrained Demand	UIPTC	PAF	Persons Entry
94	1	2.9	3	<<<== BALANCED <<<==	1	2.9	1	38
Persons Entry	PAF	UIPTC	Unconstrained Demand	2	Unconstrained Demand	UIPTC	PAF	Persons Exit
94	1	5	5		2	4.1	1	38
875 - Department Store				==>>> BALANCED ==>>>	948 - Automated Car Wash			
Persons Exit	PAF	UIPTC	Unconstrained Demand	1	Unconstrained Demand	UIPTC	PAF	Persons Entry
94	1	2.9	3		1	2.9	1	39

Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
94	1	5	5	2	2	4.1	1	39
875 - Department Store					960 - Super Convenience Market/Gas Station			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
94	1	2.9	3	3	3	2.9	1	92
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
94	1	5	5	4	4	4.1	1	92
875 - Department Store					210 - Single-Family Detached Housing			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
94	1	4.33333333333333	4	4	6	7.66666666666667	1	75
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
94	1	1.66666666666667	2	2	3	7	1	44
875 - Department Store					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
94	1	4.33333333333333	4	1	1	7.66666666666667	1	18
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
94	1	1.66666666666667	2	1	1	7	1	10
875 - Department Store					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
94	1	4.33333333333333	4	2	2	7.66666666666667	1	20
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
94	1	1.66666666666667	2	1	1	7	1	9
911 - Walk-in Bank					934 - Fast-Food Restaurant with Drive-Through Window			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
22	1	0	0	0	0	0	1	201
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
17	1	0	0	0	0	0	1	185
911 - Walk-in Bank					937 - Coffee/Donut Shop with Drive-Through Window			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
22	1	0	0	0	0	0	1	38
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
17	1	0	0	0	0	0	1	38
911 - Walk-in Bank					948 - Automated Car Wash			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
22	1	0	0	0	0	0	1	39

Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
17	1	0	0	0	0	0	1	39
911 - Walk-in Bank					960 - Super Convenience Market/Gas Station			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
22	1	0	0	0	0	0	1	92
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
17	1	0	0	0	0	0	1	92
911 - Walk-in Bank					210 - Single-Family Detached Housing			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
22	1	1.2	0	0	1	1.0666666666666667	1	75
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
17	1	0.9333333333333333	0	0	1	1.4	1	44
911 - Walk-in Bank					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
22	1	1.2	0	0	0	1.0666666666666667	1	18
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
17	1	0.9333333333333333	0	0	0	1.4	1	10
911 - Walk-in Bank					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
22	1	1.2	0	0	0	1.0666666666666667	1	20
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
17	1	0.9333333333333333	0	0	0	1.4	1	9
934 - Fast-Food Restaurant with Drive-Through Window					937 - Coffee/Donut Shop with Drive-Through Window			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
185	1	0	0	0	0	0	1	38
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
201	1	0	0	0	0	0	1	38
934 - Fast-Food Restaurant with Drive-Through Window					948 - Automated Car Wash			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
185	1	0	0	0	0	0	1	39
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
201	1	0	0	0	0	0	1	39
934 - Fast-Food Restaurant with Drive-Through Window					960 - Super Convenience Market/Gas Station			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
185	1	0	0	0	0	0	1	92

Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
201	1	0	0	0	0	0	1	92
934 - Fast-Food Restaurant with Drive-Through Window					210 - Single-Family Detached Housing			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
185	1	1.2	2	1	1	1.06666666666667	1	75
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
201	1	0.933333333333333	2	1	1	1.4	1	44
934 - Fast-Food Restaurant with Drive-Through Window					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
185	1	1.2	2	0	0	1.06666666666667	1	18
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
201	1	0.933333333333333	2	0	0	1.4	1	10
934 - Fast-Food Restaurant with Drive-Through Window					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
185	1	1.2	2	0	0	1.06666666666667	1	20
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
201	1	0.933333333333333	2	0	0	1.4	1	9
937 - Coffee/Donut Shop with Drive-Through Window					948 - Automated Car Wash			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
38	1	0	0	0	0	0	1	39
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
38	1	0	0	0	0	0	1	39
937 - Coffee/Donut Shop with Drive-Through Window					960 - Super Convenience Market/Gas Station			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
38	1	0	0	0	0	0	1	92
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
38	1	0	0	0	0	0	1	92
937 - Coffee/Donut Shop with Drive-Through Window					210 - Single-Family Detached Housing			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
38	1	1.2	0	0	1	1.06666666666667	1	75
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
38	1	0.933333333333333	0	0	1	1.4	1	44
937 - Coffee/Donut Shop with Drive-Through Window					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
38	1	1.2	0	0	0	1.06666666666667	1	18

Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
38	1	0.933333333333333	0	0	0	1.4	1	10
937 - Coffee/Donut Shop with Drive-Through Window					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
38	1	1.2	0	0	0	1.06666666666667	1	20
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
38	1	0.933333333333333	0	0	0	1.4	1	9
948 - Automated Car Wash					960 - Super Convenience Market/Gas Station			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
39	1	0	0	0	0	0	1	92
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
39	1	0	0	0	0	0	1	92
948 - Automated Car Wash					210 - Single-Family Detached Housing			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
39	1	1.2	0	0	1	1.06666666666667	1	75
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
39	1	0.933333333333333	0	0	1	1.4	1	44
948 - Automated Car Wash					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
39	1	1.2	0	0	0	1.06666666666667	1	18
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
39	1	0.933333333333333	0	0	0	1.4	1	10
948 - Automated Car Wash					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
39	1	1.2	0	0	0	1.06666666666667	1	20
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
39	1	0.933333333333333	0	0	0	1.4	1	9
960 - Super Convenience Market/Gas Station					210 - Single-Family Detached Housing			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
92	1	1.2	1	1	1	1.06666666666667	1	75
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
92	1	0.933333333333333	1	1	1	1.4	1	44
960 - Super Convenience Market/Gas Station					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
92	1	1.2	1	0	0	1.06666666666667	1	18

Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
92	1	0.9333333333333333	1	0	0	1.4	1	10
960 - Super Convenience Market/Gas Station					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
92	1	1.2	1	0	0	1.0666666666666667	1	20
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
92	1	0.9333333333333333	1	0	0	1.4	1	9
210 - Single-Family Detached Housing					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
44	1	0	0	0	0	0	1	18
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
75	1	0	0	0	0	0	1	10
210 - Single-Family Detached Housing					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
44	1	0	0	0	0	0	1	20
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
75	1	0	0	0	0	0	1	9
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
10	1	0	0	0	0	0	1	20
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
18	1	0	0	0	0	0	1	9

INTERNAL PERSON TRIPS:**710 - General Office Building**

Internal Person Trips From	Entry	Exit	Total
850 - Supermarket	1	5	6
875 - Department Store	1	4	5
911 - Walk-in Bank	0	0	0
934 - Fast-Food Restaurant with Drive-Through Window	1	1	2
937 - Coffee/Donut Shop with Drive-Through Window	0	0	0
948 - Automated Car Wash	0	0	0
960 - Super Convenience Market/Gas Station	1	0	1
210 - Single-Family Detached Housing	1	1	1
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	5	11	16

850 - Supermarket

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	5	1	6

875 - Department Store	0	0	0
911 - Walk-in Bank	1	1	1
934 - Fast-Food Restaurant with Drive-Through Window	6	3	9
937 - Coffee/Donut Shop with Drive-Through Window	2	1	3
948 - Automated Car Wash	2	1	3
960 - Super Convenience Market/Gas Station	4	3	6
210 - Single-Family Detached Housing	2	5	7
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	1	1	2
231 - Mid-Rise Residential with 1st-Floor Commercial	1	2	2
Total Internal Person Trips	24	18	42

875 - Department Store

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	4	1	5
850 - Supermarket	0	0	0
911 - Walk-in Bank	1	1	1
934 - Fast-Food Restaurant with Drive-Through Window	5	3	7
937 - Coffee/Donut Shop with Drive-Through Window	2	1	3
948 - Automated Car Wash	2	1	3
960 - Super Convenience Market/Gas Station	4	3	6
210 - Single-Family Detached Housing	2	4	6
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	1	1	2
231 - Mid-Rise Residential with 1st-Floor Commercial	1	2	2
Total Internal Person Trips	22	17	39

911 - Walk-in Bank

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	1	1	1
875 - Department Store	1	1	1
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
937 - Coffee/Donut Shop with Drive-Through Window	0	0	0
948 - Automated Car Wash	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
210 - Single-Family Detached Housing	0	0	0
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	2	2	4

934 - Fast-Food Restaurant with Drive-Through Window

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	1	1	2
850 - Supermarket	3	6	9
875 - Department Store	3	5	7
911 - Walk-in Bank	0	0	0
937 - Coffee/Donut Shop with Drive-Through Window	0	0	0
948 - Automated Car Wash	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
210 - Single-Family Detached Housing	1	1	1
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	8	13	21

937 - Coffee/Donut Shop with Drive-Through Window

Internal Person Trips From	Entry	Exit	Total
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710 - General Office Building	0	0	0
850 - Supermarket	1	2	3
875 - Department Store	1	2	3
911 - Walk-in Bank	0	0	0
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
948 - Automated Car Wash	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
210 - Single-Family Detached Housing	0	0	1
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	2	4	6

948 - Automated Car Wash

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	1	2	3
875 - Department Store	1	2	3
911 - Walk-in Bank	0	0	0
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
937 - Coffee/Donut Shop with Drive-Through Window	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
210 - Single-Family Detached Housing	0	0	1
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	2	4	6

960 - Super Convenience Market/Gas Station

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	1	1
850 - Supermarket	3	4	6
875 - Department Store	3	4	6
911 - Walk-in Bank	0	0	0
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
937 - Coffee/Donut Shop with Drive-Through Window	0	0	0
948 - Automated Car Wash	0	0	0
210 - Single-Family Detached Housing	1	1	1
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	7	10	17

210 - Single-Family Detached Housing

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	1	1	1
850 - Supermarket	5	2	7
875 - Department Store	4	2	6
911 - Walk-in Bank	0	0	0
934 - Fast-Food Restaurant with Drive-Through Window	1	1	1
937 - Coffee/Donut Shop with Drive-Through Window	0	0	1
948 - Automated Car Wash	0	0	1
960 - Super Convenience Market/Gas Station	1	1	1
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	12	7	19

220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	1	1	2
875 - Department Store	1	1	2
911 - Walk-in Bank	0	0	0
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
937 - Coffee/Donut Shop with Drive-Through Window	0	0	0
948 - Automated Car Wash	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
210 - Single-Family Detached Housing	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	2	2	4

231 - Mid-Rise Residential with 1st-Floor Commercial

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	2	1	2
875 - Department Store	2	1	2
911 - Walk-in Bank	0	0	0
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
937 - Coffee/Donut Shop with Drive-Through Window	0	0	0
948 - Automated Car Wash	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
210 - Single-Family Detached Housing	0	0	0
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
Total Internal Person Trips	4	2	6

INTERNAL VEHICLE TRIPS AND CAPTURE:**710 - General Office Building**

Total Internal Person Trips	5	11	16
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	5	11	16
Total External Vehicle Trips	14	80	94
Internal Vehicle Trip Capture	27%	12%	0%

850 - Supermarket

Total Internal Person Trips	24	18	42
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	24	18	42
Total External Vehicle Trips	91	97	188
Internal Vehicle Trip Capture	21%	16%	0%

875 - Department Store

Total Internal Person Trips	22	17	39
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	22	17	39
Total External Vehicle Trips	72	77	149
Internal Vehicle Trip Capture	23%	18%	0%

911 - Walk-in Bank

Total Internal Person Trips	2	2	4
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	2	2	4
Total External Vehicle Trips	15	20	35
Internal Vehicle Trip Capture	12%	9%	0%

934 - Fast-Food Restaurant with Drive-Through Window

Total Internal Person Trips	8	13	21
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	8	13	21
Total External Vehicle Trips	193	172	365
Internal Vehicle Trip Capture	4%	7%	0%

937 - Coffee/Donut Shop with Drive-Through Window

Total Internal Person Trips	2	4	6
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	2	4	6
Total External Vehicle Trips	36	34	70
Internal Vehicle Trip Capture	5%	11%	0%

948 - Automated Car Wash

Total Internal Person Trips	2	4	6
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	2	4	6
Total External Vehicle Trips	37	35	72
Internal Vehicle Trip Capture	5%	10%	0%

960 - Super Convenience Market/Gas Station

Total Internal Person Trips	7	10	17
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	7	10	17
Total External Vehicle Trips	85	82	167
Internal Vehicle Trip Capture	8%	11%	0%

210 - Single-Family Detached Housing

Total Internal Person Trips	12	7	19
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	12	7	19
Total External Vehicle Trips	63	37	100
Internal Vehicle Trip Capture	16%	16%	0%

220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit

Total Internal Person Trips	2	2	4
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	2	2	4
Total External Vehicle Trips	16	8	24
Internal Vehicle Trip Capture	11%	19%	0%

231 - Mid-Rise Residential with 1st-Floor Commercial

Total Internal Person Trips	4	2	6
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	4	2	6
Total External Vehicle Trips	16	7	23
Internal Vehicle Trip Capture	20%	23%	0%

PASS-BY VEHICLE TRIP REDUCTION

Land Use	External Vehicle Trips		Pass-by Vehicle Trip %		Pass-by Vehicle Trips	
	Entry	Exit	Entry (%)	Exit (%)	Entry	Exit
710 - General Office Building	14	80	0.00%	0.00%	0	0
850 - Supermarket	91	97	33.00%	33.00%	30	32
875 - Department Store	72	77	0.00%	0.00%	0	0
911 - Walk-in Bank	15	20	0.00%	0.00%	0	0
934 - Fast-Food Restaurant with Drive-Through Window	193	172	49.90%	49.90%	96	86
937 - Coffee/Donut Shop with Drive-Through Window	36	34	50.00%	50.00%	18	17
948 - Automated Car Wash	37	35	0.00%	0.00%	0	0
960 - Super Convenience Market/Gas Station	85	82	66.00%	66.00%	56	54
210 - Single-Family Detached Housing	63	37	0.00%	0.00%	0	0
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	16	8	0.00%	0.00%	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	16	7	0.00%	0.00%	0	0

DIVERTED VEHICLE TRIP REDUCTION

Land Use	External Vehicle Trips		Diverted Vehicle Trip %		Diverted Vehicle Trips	
	Entry	Exit	Entry (%)	Exit (%)	Entry	Exit
710 - General Office Building	14	80	0.00%	0.00%	0	0
850 - Supermarket	91	97	0.00%	0.00%	0	0
875 - Department Store	72	77	0.00%	0.00%	0	0
911 - Walk-in Bank	15	20	0.00%	0.00%	0	0
934 - Fast-Food Restaurant with Drive-Through Window	193	172	0.00%	0.00%	0	0
937 - Coffee/Donut Shop with Drive-Through Window	36	34	0.00%	0.00%	0	0
948 - Automated Car Wash	37	35	0.00%	0.00%	0	0
960 - Super Convenience Market/Gas Station	85	82	0.00%	0.00%	0	0
210 - Single-Family Detached Housing	63	37	0.00%	0.00%	0	0
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	16	8	0.00%	0.00%	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	16	7	0.00%	0.00%	0	0

EXTRA VEHICLE TRIP REDUCTION

Land Use	(External - (Pass-by + Diverted)) Vehicle Trips		Extra Vehicle Trip Reduction %		Extra Reduced Vehicle Trips	
	Entry	Exit	Entry (%)	Exit (%)	Entry	Exit
710 - General Office Building	14	80	0.00%	0.00%	0	0

850 - Supermarket	61	65	0.00%	0.00%	0	0
875 - Department Store	72	77	0.00%	0.00%	0	0
911 - Walk-in Bank	15	20	0.00%	0.00%	0	0
934 - Fast-Food Restaurant with Drive-Through Window	97	86	0.00%	0.00%	0	0
937 - Coffee/Donut Shop with Drive-Through Window	18	17	0.00%	0.00%	0	0
948 - Automated Car Wash	37	35	0.00%	0.00%	0	0
960 - Super Convenience Market/Gas Station	29	28	0.00%	0.00%	0	0
210 - Single-Family Detached Housing	63	37	0.00%	0.00%	0	0
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	16	8	0.00%	0.00%	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	16	7	0.00%	0.00%	0	0

NEW VEHICLE TRIPS

Land Use	New Vehicle Trips		
	Entry	Exit	Total
710 - General Office Building	14	80	94
850 - Supermarket	61	65	126
875 - Department Store	72	77	149
911 - Walk-in Bank	15	20	35
934 - Fast-Food Restaurant with Drive-Through Window	97	86	183
937 - Coffee/Donut Shop with Drive-Through Window	18	17	35
948 - Automated Car Wash	37	35	72
960 - Super Convenience Market/Gas Station	29	28	57
210 - Single-Family Detached Housing	63	37	100
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	16	8	24
231 - Mid-Rise Residential with 1st-Floor Commercial	16	7	23

RESULTS

Site Totals	Entry	Exit	Total
Vehicle Trips Before Reduction	728	739	1467
Internal Vehicle Trips	90	90	180
External Vehicle Trips	638	649	1287
Internal Vehicle Trip Capture	12%	12%	12%
Pass-by Vehicle Trips	200	189	389
Diverted Vehicle Trips	0	0	0
Extra Reduced Vehicle Trips	0	0	0
New Vehicle Trips	438	460	898

Scenario - 4

Scenario Name: SAT 2026

User Group:

Dev. phase: 1

No. of Years to Project 0

Traffic :

Analyst Note:

Warning:

VEHICLE TRIPS BEFORE REDUCTION

Land Use & Data Source	Location	IV	Size	Time Period	Method	Entry	Exit	Total
					Rate/Equation	Split%	Split%	
710 - General Office Building	General	1000 Sq. Ft. GFA	11.65	Saturday, Peak Hour of Generator	Average	3	3	6
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				0.53	54%	46%	
850 - Supermarket	General	1000 Sq. Ft. GFA	25.71	Saturday, Peak Hour of Generator	Average	130	130	260
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				10.10	50%	50%	
934 - Fast-Food Restaurant with Drive-Through	General	1000 Sq. Ft. GFA	5.79	Saturday, Peak Hour of Generator	Average	163	157	320
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				55.25	51%	49%	
960 - Super Convenience Market/Gas Station	General	Vehicle Fueling Positions	8	Saturday, Peak Hour of Generator	Average	93	93	186
Data Source: Trip Generation Manual, 10th Ed +	Urban/Suburban				23.26	50%	50%	
931 - Fine Dining Restaurant	General	1000 Sq. Ft. GFA	3.11	Saturday, Peak Hour of Generator	Average	20	14	34
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				10.68	59%	41%	
210 - Single-Family Detached Housing	General	Dwelling Units	63	Saturday, Peak Hour of Generator	Average	31	27	58
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				0.92	54%	46%	
220 - Multifamily Housing (Low-Rise) - Not Close	General	Dwelling Units	27	Saturday, Peak Hour of Generator	Average	6	6	12
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				0.41	50%	50%	
231 - Mid-Rise Residential with 1st-Floor	General	Dwelling Units	80	Saturday, Peak Hour of Generator	Average	34	34	68
Data Source: Trip Generation Manual, 10th Ed	Urban/Suburban				0.86	50%	50%	
948 - Automated Car Wash	General	Car Wash Tunnels	1	Saturday, Peak Hour of Generator	Average	19	22	41
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				41.00	46%	54%	

VEHICLE TO PERSON TRIP CONVERSION**BASELINE SITE VEHICLE CHARACTERISTICS:**

Land Use	Baseline Site Vehicle Mode Share		Baseline Site Vehicle Occupancy		Baseline Site Vehicle Directional Split	
	Entry (%)	Exit (%)	Entry	Exit	Entry (%)	Exit (%)
710 - General Office Building	100	100	1	1	54	46
850 - Supermarket	100	100	1	1	50	50
934 - Fast-Food Restaurant with Drive-Through Window	100	100	1	1	51	49
960 - Super Convenience Market/Gas Station	100	100	1	1	50	50
931 - Fine Dining Restaurant	100	100	1	1	59	41
210 - Single-Family Detached Housing	100	100	1	1	54	46
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	100	100	1	1	50	50
231 - Mid-Rise Residential with 1st-Floor Commercial	100	100	1	1	50	50
948 - Automated Car Wash	100	100	1	1	46	54

ESTIMATED BASELINE SITE PERSON TRIPS:

Land Use	Person Trips by Vehicle		Person Trips by Other Modes		Total Baseline Site Person Trips	
	Entry	Exit	Entry	Exit	Entry	Exit
710 - General Office Building	3	3	0	0	3	3
	6		0		6	
850 - Supermarket	130	130	0	0	130	130
	260		0		260	

934 - Fast-Food Restaurant with Drive-Through Window	163	157	0	0	163	157
	320		0		320	
960 - Super Convenience Market/Gas Station	93	93	0	0	93	93
	186		0		186	
931 - Fine Dining Restaurant	20	14	0	0	20	14
	34		0		34	
210 - Single-Family Detached Housing	31	27	0	0	31	27
	58		0		58	
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	6	6	0	0	6	6
	12		0		12	
231 - Mid-Rise Residential with 1st-Floor Commercial	34	34	0	0	34	34
	68		0		68	
948 - Automated Car Wash	19	22	0	0	19	22
	41		0		41	

INTERNAL VEHICLE TRIP REDUCTION

LAND USE GROUP ASSIGNMENT:

Land Use	Land Use Group
710 - General Office Building	Office
850 - Supermarket	Retail
934 - Fast-Food Restaurant with Drive-Through Window	Resturant
960 - Super Convenience Market/Gas Station	Resturant
931 - Fine Dining Restaurant	Resturant
210 - Single-Family Detached Housing	Residential
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	Residential
231 - Mid-Rise Residential with 1st-Floor Commercial	Residential
948 - Automated Car Wash	Resturant

BALANCED PERSON TRIPS:

710 - General Office Building					850 - Supermarket				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
3	1	20	1	1	10	8	1	130	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<== BALANCED <<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
3	1	31	1	1	3	2	1	130	
710 - General Office Building					934 - Fast-Food Restaurant with Drive-Through Window				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
3	1	1	0	0	1	0.5	1	163	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<== BALANCED <<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
3	1	7.5	0	0	1	0.75	1	157	
710 - General Office Building					960 - Super Convenience Market/Gas Station				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
3	1	1	0	0	0	0.5	1	93	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<== BALANCED <<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
3	1	7.5	0	0	1	0.75	1	93	

710 - General Office Building					931 - Fine Dining Restaurant				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED <====	Unconstrained Demand	UIPTC	PAF	Persons Entry	
3	1	1	0	0	0	0.5	1	20	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED >>>==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
3	1	7.5	0	0	0	0.75	1	14	
710 - General Office Building					210 - Single-Family Detached Housing				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED <====	Unconstrained Demand	UIPTC	PAF	Persons Entry	
3	1	0.67	0	0	0	1.33	1	31	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED >>>==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
3	1	19	1	0	0	1.33	1	27	
710 - General Office Building					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED <====	Unconstrained Demand	UIPTC	PAF	Persons Entry	
3	1	0.67	0	0	0	1.33	1	6	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED >>>==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
3	1	19	1	0	0	1.33	1	6	
710 - General Office Building					231 - Mid-Rise Residential with 1st-Floor Commercial				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED <====	Unconstrained Demand	UIPTC	PAF	Persons Entry	
3	1	0.67	0	0	0	1.33	1	34	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED >>>==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
3	1	19	1	0	0	1.33	1	34	
710 - General Office Building					948 - Automated Car Wash				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED <====	Unconstrained Demand	UIPTC	PAF	Persons Entry	
3	1	1	0	0	0	0.5	1	19	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED >>>==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
3	1	7.5	0	0	0	0.75	1	22	
850 - Supermarket					934 - Fast-Food Restaurant with Drive-Through Window				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED <====	Unconstrained Demand	UIPTC	PAF	Persons Entry	
130	1	7.25	9	9	12	7.25	1	163	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED >>>==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
130	1	12.5	16	16	16	10.25	1	157	
850 - Supermarket					960 - Super Convenience Market/Gas Station				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED <====	Unconstrained Demand	UIPTC	PAF	Persons Entry	
130	1	7.25	9	7	7	7.25	1	93	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED >>>==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
130	1	12.5	16	10	10	10.25	1	93	

850 - Supermarket										931 - Fine Dining Restaurant			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED ==>>=	Unconstrained Demand	UIPTC	PAF	Persons Entry					
130	1	7.25	9	1	1	7.25	1	20					
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit					
130	1	12.5	16	1	1	10.25	1	14					
850 - Supermarket										210 - Single-Family Detached Housing			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED ==>>=	Unconstrained Demand	UIPTC	PAF	Persons Entry					
130	1	8.67	11	5	5	15.33	1	31					
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit					
130	1	3.33	4	4	4	14	1	27					
850 - Supermarket										220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED ==>>=	Unconstrained Demand	UIPTC	PAF	Persons Entry					
130	1	8.67	11	1	1	15.33	1	6					
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit					
130	1	3.33	4	1	1	14	1	6					
850 - Supermarket										231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED ==>>=	Unconstrained Demand	UIPTC	PAF	Persons Entry					
130	1	8.67	11	5	5	15.33	1	34					
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit					
130	1	3.33	4	4	5	14	1	34					
850 - Supermarket										948 - Automated Car Wash			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED ==>>=	Unconstrained Demand	UIPTC	PAF	Persons Entry					
130	1	7.25	9	1	1	7.25	1	19					
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit					
130	1	12.5	16	2	2	10.25	1	22					
934 - Fast-Food Restaurant with Drive-Through Window										960 - Super Convenience Market/Gas Station			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED ==>>=	Unconstrained Demand	UIPTC	PAF	Persons Entry					
157	1	0	0	0	0	0	1	93					
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit					
163	1	0	0	0	0	0	1	93					
934 - Fast-Food Restaurant with Drive-Through Window										931 - Fine Dining Restaurant			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED ==>>=	Unconstrained Demand	UIPTC	PAF	Persons Entry					
157	1	0	0	0	0	0	1	20					
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit					
163	1	0	0	0	0	0	1	14					

934 - Fast-Food Restaurant with Drive-Through Window					210 - Single-Family Detached Housing				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
157	1	1.5	2	0	0	1.33	1	31	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<== BALANCED <<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
163	1	1.17	2	0	0	1.75	1	27	
934 - Fast-Food Restaurant with Drive-Through Window					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
157	1	1.5	2	0	0	1.33	1	6	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<== BALANCED <<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
163	1	1.17	2	0	0	1.75	1	6	
934 - Fast-Food Restaurant with Drive-Through Window					231 - Mid-Rise Residential with 1st-Floor Commercial				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
157	1	1.5	2	0	0	1.33	1	34	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<== BALANCED <<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
163	1	1.17	2	1	1	1.75	1	34	
934 - Fast-Food Restaurant with Drive-Through Window					948 - Automated Car Wash				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
157	1	0	0	0	0	0	1	19	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<== BALANCED <<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
163	1	0	0	0	0	0	1	22	
960 - Super Convenience Market/Gas Station					931 - Fine Dining Restaurant				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
93	1	0	0	0	0	0	1	20	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<== BALANCED <<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
93	1	0	0	0	0	0	1	14	
960 - Super Convenience Market/Gas Station					210 - Single-Family Detached Housing				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
93	1	1.5	1	0	0	1.33	1	31	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<== BALANCED <<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
93	1	1.17	1	0	0	1.75	1	27	
960 - Super Convenience Market/Gas Station					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
93	1	1.5	1	0	0	1.33	1	6	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<== BALANCED <<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
93	1	1.17	1	0	0	1.75	1	6	
960 - Super Convenience Market/Gas Station					231 - Mid-Rise Residential with 1st-Floor Commercial				

Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED <====>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
93	1	1.5	1	0	0	1.33	1	34
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
93	1	1.17	1	1	1	1.75	1	34
960 - Super Convenience Market/Gas Station					948 - Automated Car Wash			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED <====>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
93	1	0	0	0	0	0	1	19
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
93	1	0	0	0	0	0	1	22
931 - Fine Dining Restaurant					210 - Single-Family Detached Housing			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED <====>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
14	1	1.5	0	0	0	1.33	1	31
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
20	1	1.17	0	0	0	1.75	1	27
931 - Fine Dining Restaurant					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED <====>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
14	1	1.5	0	0	0	1.33	1	6
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
20	1	1.17	0	0	0	1.75	1	6
931 - Fine Dining Restaurant					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED <====>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
14	1	1.5	0	0	0	1.33	1	34
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
20	1	1.17	0	0	1	1.75	1	34
931 - Fine Dining Restaurant					948 - Automated Car Wash			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED <====>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
14	1	0	0	0	0	0	1	19
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
20	1	0	0	0	0	0	1	22
210 - Single-Family Detached Housing					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED <====>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
27	1	0	0	0	0	0	1	6
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
31	1	0	0	0	0	0	1	6
210 - Single-Family Detached Housing					231 - Mid-Rise Residential with 1st-Floor Commercial			

Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED ==>>====	Unconstrained Demand	UIPTC	PAF	Persons Entry
27	1	0	0	0	0	0	1	34
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
31	1	0	0	0	0	0	1	34
210 - Single-Family Detached Housing					948 - Automated Car Wash			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED ==>>====	Unconstrained Demand	UIPTC	PAF	Persons Entry
27	1	1.75	0	0	0	1.17	1	19
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
31	1	1.33	0	0	0	1.5	1	22
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED ==>>====	Unconstrained Demand	UIPTC	PAF	Persons Entry
6	1	0	0	0	0	0	1	34
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
6	1	0	0	0	0	0	1	34
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit					948 - Automated Car Wash			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED ==>>====	Unconstrained Demand	UIPTC	PAF	Persons Entry
6	1	1.75	0	0	0	1.17	1	19
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
6	1	1.33	0	0	0	1.5	1	22
231 - Mid-Rise Residential with 1st-Floor Commercial					948 - Automated Car Wash			
Persons Exit	PAF	UIPTC	Unconstrained Demand	====>> BALANCED ==>>====	Unconstrained Demand	UIPTC	PAF	Persons Entry
34	1	1.75	1	0	0	1.17	1	19
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
34	1	1.33	0	0	0	1.5	1	22

INTERNAL PERSON TRIPS:**710 - General Office Building**

Internal Person Trips From	Entry	Exit	Total
850 - Supermarket	1	1	2
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
931 - Fine Dining Restaurant	0	0	0
210 - Single-Family Detached Housing	0	0	0
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
948 - Automated Car Wash	0	0	0
Total Internal Person Trips	1	1	2

850 - Supermarket

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	1	1	2

934 - Fast-Food Restaurant with Drive-Through Window	16	9	25
960 - Super Convenience Market/Gas Station	10	7	16
931 - Fine Dining Restaurant	1	1	3
210 - Single-Family Detached Housing	4	5	9
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	1	1	2
231 - Mid-Rise Residential with 1st-Floor Commercial	4	5	10
948 - Automated Car Wash	2	1	4
Total Internal Person Trips	39	30	69

934 - Fast-Food Restaurant with Drive-Through Window

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	9	16	25
960 - Super Convenience Market/Gas Station	0	0	0
931 - Fine Dining Restaurant	0	0	0
210 - Single-Family Detached Housing	0	0	1
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	1	0	1
948 - Automated Car Wash	0	0	0
Total Internal Person Trips	10	16	26

960 - Super Convenience Market/Gas Station

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	7	10	16
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
931 - Fine Dining Restaurant	0	0	0
210 - Single-Family Detached Housing	0	0	1
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	1	0	1
948 - Automated Car Wash	0	0	0
Total Internal Person Trips	8	10	18

931 - Fine Dining Restaurant

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	1	1	3
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
210 - Single-Family Detached Housing	0	0	0
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
948 - Automated Car Wash	0	0	0
Total Internal Person Trips	1	1	2

210 - Single-Family Detached Housing

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	5	4	9
934 - Fast-Food Restaurant with Drive-Through Window	0	0	1
960 - Super Convenience Market/Gas Station	0	0	1
931 - Fine Dining Restaurant	0	0	0
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
948 - Automated Car Wash	0	0	1

Total Internal Person Trips	5	4	9
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220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	1	1	2
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
931 - Fine Dining Restaurant	0	0	0
210 - Single-Family Detached Housing	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
948 - Automated Car Wash	0	0	0
Total Internal Person Trips	1	1	2

231 - Mid-Rise Residential with 1st-Floor Commercial

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	5	4	10
934 - Fast-Food Restaurant with Drive-Through Window	0	1	1
960 - Super Convenience Market/Gas Station	0	1	1
931 - Fine Dining Restaurant	0	0	0
210 - Single-Family Detached Housing	0	0	0
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
948 - Automated Car Wash	0	0	1
Total Internal Person Trips	5	6	11

948 - Automated Car Wash

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	1	2	4
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
931 - Fine Dining Restaurant	0	0	0
210 - Single-Family Detached Housing	0	0	1
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	1
Total Internal Person Trips	1	2	3

INTERNAL VEHICLE TRIPS AND CAPTURE:**710 - General Office Building**

Total Internal Person Trips	1	1	2
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	1	1	2
Total External Vehicle Trips	2	2	4
Internal Vehicle Trip Capture	30%	35%	0%

850 - Supermarket

Total Internal Person Trips	39	30	69
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	39	30	69
Total External Vehicle Trips	91	100	191

Internal Vehicle Trip Capture	30%	23%	0%
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934 - Fast-Food Restaurant with Drive-Through Window

Total Internal Person Trips	10	16	26
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	10	16	26
Total External Vehicle Trips	153	141	294
Internal Vehicle Trip Capture	6%	10%	0%

960 - Super Convenience Market/Gas Station

Total Internal Person Trips	8	10	18
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	8	10	18
Total External Vehicle Trips	85	83	168
Internal Vehicle Trip Capture	9%	11%	0%

931 - Fine Dining Restaurant

Total Internal Person Trips	1	1	2
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	1	1	2
Total External Vehicle Trips	19	13	32
Internal Vehicle Trip Capture	5%	7%	0%

210 - Single-Family Detached Housing

Total Internal Person Trips	5	4	9
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	5	4	9
Total External Vehicle Trips	26	23	49
Internal Vehicle Trip Capture	16%	15%	0%

220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit

Total Internal Person Trips	1	1	2
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	1	1	2
Total External Vehicle Trips	5	5	10
Internal Vehicle Trip Capture	18%	18%	0%

231 - Mid-Rise Residential with 1st-Floor Commercial

Total Internal Person Trips	5	6	11
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	5	6	11
Total External Vehicle Trips	29	28	57
Internal Vehicle Trip Capture	15%	17%	0%

948 - Automated Car Wash

Total Internal Person Trips	1	2	3
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	1	2	3
Total External Vehicle Trips	18	20	38
Internal Vehicle Trip Capture	5%	9%	0%

PASS-BY VEHICLE TRIP REDUCTION

Land Use	External Vehicle Trips		Pass-by Vehicle Trip %		Pass-by Vehicle Trips	
	Entry	Exit	Entry (%)	Exit (%)	Entry	Exit
710 - General Office Building	2	2	0.00%	0.00%	0	0
850 - Supermarket	91	100	33.00%	33.00%	30	33
934 - Fast-Food Restaurant with Drive-Through Window	153	141	49.90%	49.90%	76	70
960 - Super Convenience Market/Gas Station	85	83	66.00%	66.00%	56	55
931 - Fine Dining Restaurant	19	13	44.00%	44.00%	8	6
210 - Single-Family Detached Housing	26	23	0.00%	0.00%	0	0
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	5	5	0.00%	0.00%	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	29	28	0.00%	0.00%	0	0
948 - Automated Car Wash	18	20	0.00%	0.00%	0	0

DIVERTED VEHICLE TRIP REDUCTION

Land Use	External Vehicle Trips		Diverted Vehicle Trip %		Diverted Vehicle Trips	
	Entry	Exit	Entry (%)	Exit (%)	Entry	Exit
710 - General Office Building	2	2	0.00%	0.00%	0	0
850 - Supermarket	91	100	0.00%	0.00%	0	0
934 - Fast-Food Restaurant with Drive-Through Window	153	141	0.00%	0.00%	0	0
960 - Super Convenience Market/Gas Station	85	83	0.00%	0.00%	0	0
931 - Fine Dining Restaurant	19	13	0.00%	0.00%	0	0
210 - Single-Family Detached Housing	26	23	0.00%	0.00%	0	0
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	5	5	0.00%	0.00%	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	29	28	0.00%	0.00%	0	0
948 - Automated Car Wash	18	20	0.00%	0.00%	0	0

EXTRA VEHICLE TRIP REDUCTION

Land Use	(External - (Pass-by + Diverted)) Vehicle Trips		Extra Vehicle Trip Reduction %		Extra Reduced Vehicle Trips	
	Entry	Exit	Entry (%)	Exit (%)	Entry	Exit
710 - General Office Building	2	2	0.00%	0.00%	0	0
850 - Supermarket	61	67	0.00%	0.00%	0	0
934 - Fast-Food Restaurant with Drive-Through Window	77	71	0.00%	0.00%	0	0
960 - Super Convenience Market/Gas Station	29	28	0.00%	0.00%	0	0
931 - Fine Dining Restaurant	11	7	0.00%	0.00%	0	0
210 - Single-Family Detached Housing	26	23	0.00%	0.00%	0	0
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	5	5	0.00%	0.00%	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	29	28	0.00%	0.00%	0	0
948 - Automated Car Wash	18	20	0.00%	0.00%	0	0

NEW VEHICLE TRIPS

Land Use	New Vehicle Trips		
	Entry	Exit	Total
710 - General Office Building	2	2	4
850 - Supermarket	61	67	128
934 - Fast-Food Restaurant with Drive-Through Window	77	71	148
960 - Super Convenience Market/Gas Station	29	28	57
931 - Fine Dining Restaurant	11	7	18
210 - Single-Family Detached Housing	26	23	49
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	5	5	10
231 - Mid-Rise Residential with 1st-Floor Commercial	29	28	57
948 - Automated Car Wash	18	20	38

RESULTS

Site Totals	Entry	Exit	Total
Vehicle Trips Before Reduction	499	486	985
Internal Vehicle Trips	71	71	142
External Vehicle Trips	428	415	843
Internal Vehicle Trip Capture	14%	15%	15%
Pass-by Vehicle Trips	170	164	334
Diverted Vehicle Trips	0	0	0
Extra Reduced Vehicle Trips	0	0	0
New Vehicle Trips	258	251	509

Scenario - 6

Scenario Name: SAT 2031

User Group:

Dev. phase: 1

No. of Years to Project 0

Traffic :

Analyst Note:

Warning: The time periods among the land uses do not appear to match.

VEHICLE TRIPS BEFORE REDUCTION

Land Use & Data Source	Location	IV	Size	Time Period	Method	Entry	Exit	Total
					Rate/Equation	Split%	Split%	
710 - General Office Building	General	1000 Sq. Ft. GFA	76.28	Saturday, Peak Hour of Generator	Average	22	19	41
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				0.53	54%	46%	
850 - Supermarket	General	1000 Sq. Ft. GFA	25.71	Saturday, Peak Hour of Generator	Average	130	130	260
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				10.10	50%	50%	
875 - Department Store	General	1000 Sq. Ft. GFA	96.49	Saturday, Peak Hour of Generator	Average	176	156	332
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				3.45	53%	47%	
911 - Walk-in Bank	General	1000 Sq. Ft. GFA	3.23	Weekday, AM Peak Hour of Generator	Average	38	35	73
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				22.54	52%	48%	
934 - Fast-Food Restaurant with Drive-Through	General	1000 Sq. Ft. GFA	11.69	Saturday, Peak Hour of Generator	Average	329	316	645
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				55.25	51%	49%	
937 - Coffee/Donut Shop with Drive-Through	General	1000 Sq. Ft. GFA	1.95	Saturday, Peak Hour of Generator	Average	86	86	172
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				87.91	50%	50%	
948 - Automated Car Wash	General	Car Wash Tunnels	1	Saturday, Peak Hour of Generator	Average	19	22	41
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				41.00	46%	54%	
960 - Super Convenience Market/Gas Station	General	Vehicle Fueling Positions	8	Saturday, Peak Hour of Generator	Average	93	93	186
Data Source: Trip Generation Manual, 10th Ed +	Urban/Suburban				23.26	50%	50%	
210 - Single-Family Detached Housing	General	Dwelling Units	127	Saturday, Peak Hour of Generator	Average	63	54	117
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				0.92	54%	46%	
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	General	Dwelling Units	55	Saturday, Peak Hour of Generator	Average	11	11	22
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				0.41	50%	50%	
231 - Mid-Rise Residential with 1st-Floor Commercial	General	Dwelling Units	80	Saturday, Peak Hour of Generator	Average	34	34	68
Data Source: Trip Generation Manual, 10th Ed +	Urban/Suburban				0.86	50%	50%	

VEHICLE TO PERSON TRIP CONVERSION**BASELINE SITE VEHICLE CHARACTERISTICS:**

Land Use	Baseline Site Vehicle Mode Share		Baseline Site Vehicle Occupancy		Baseline Site Vehicle Directional Split	
	Entry (%)	Exit (%)	Entry	Exit	Entry (%)	Exit (%)
710 - General Office Building	100	100	1	1	54	46
850 - Supermarket	100	100	1	1	50	50
875 - Department Store	100	100	1	1	53	47
911 - Walk-in Bank	100	100	1	1	52	48
934 - Fast-Food Restaurant with Drive-Through Window	100	100	1	1	51	49
937 - Coffee/Donut Shop with Drive-Through Window	100	100	1	1	50	50
948 - Automated Car Wash	100	100	1	1	46	54
960 - Super Convenience Market/Gas Station	100	100	1	1	50	50
210 - Single-Family Detached Housing	100	100	1	1	54	46
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	100	100	1	1	50	50
231 - Mid-Rise Residential with 1st-Floor Commercial	100	100	1	1	50	50

ESTIMATED BASELINE SITE PERSON TRIPS:

Land Use	Person Trips by Vehicle		Person Trips by Other Modes		Total Baseline Site Person Trips	
	Entry	Exit	Entry	Exit	Entry	Exit
710 - General Office Building	22	19	0	0	22	19
	41		0		41	
850 - Supermarket	130	130	0	0	130	130
	260		0		260	
875 - Department Store	176	156	0	0	176	156
	332		0		332	
911 - Walk-in Bank	38	35	0	0	38	35
	73		0		73	
934 - Fast-Food Restaurant with Drive-Through Window	329	316	0	0	329	316
	645		0		645	
937 - Coffee/Donut Shop with Drive-Through Window	86	86	0	0	86	86
	172		0		172	
948 - Automated Car Wash	19	22	0	0	19	22
	41		0		41	
960 - Super Convenience Market/Gas Station	93	93	0	0	93	93
	186		0		186	
210 - Single-Family Detached Housing	63	54	0	0	63	54
	117		0		117	
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	11	11	0	0	11	11
	22		0		22	
231 - Mid-Rise Residential with 1st-Floor Commercial	34	34	0	0	34	34
	68		0		68	

INTERNAL VEHICLE TRIP REDUCTION

LAND USE GROUP ASSIGNMENT:

Land Use	Land Use Group
710 - General Office Building	Office
850 - Supermarket	Retail
875 - Department Store	Retail
911 - Walk-in Bank	Resturant
934 - Fast-Food Restaurant with Drive-Through Window	Resturant
937 - Coffee/Donut Shop with Drive-Through Window	Resturant
948 - Automated Car Wash	Resturant
960 - Super Convenience Market/Gas Station	Resturant
210 - Single-Family Detached Housing	Residential
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	Residential
231 - Mid-Rise Residential with 1st-Floor Commercial	Residential

BALANCED PERSON TRIPS:

710 - General Office Building					850 - Supermarket				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	
19	1	10	2	2	5	4	1	130	
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit	
22	1	15.5	3	1	1	1	1	130	
710 - General Office Building					875 - Department Store				
Persons Exit	PAF	UIPTC	Unconstrained Demand	====> BALANCED ==>==	Unconstrained Demand	UIPTC	PAF	Persons Entry	

19	1	10	2	2	7	4	1	176
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
22	1	15.5	3	2	2	1	1	156
710 - General Office Building					911 - Walk-in Bank			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
19	1	0.8	0	0	0	0.4	1	38
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
22	1	6	1	0	0	0.6	1	35
710 - General Office Building					934 - Fast-Food Restaurant with Drive-Through Window			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
19	1	0.8	0	0	1	0.4	1	329
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
22	1	6	1	1	2	0.6	1	316
710 - General Office Building					937 - Coffee/Donut Shop with Drive-Through Window			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
19	1	0.8	0	0	0	0.4	1	86
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
22	1	6	1	1	1	0.6	1	86
710 - General Office Building					948 - Automated Car Wash			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
19	1	0.8	0	0	0	0.4	1	19
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
22	1	6	1	0	0	0.6	1	22
710 - General Office Building					960 - Super Convenience Market/Gas Station			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
19	1	0.8	0	0	0	0.4	1	93
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
22	1	6	1	1	1	0.6	1	93
710 - General Office Building					210 - Single-Family Detached Housing			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
19	1	0.6666666666666666	0	0	1	1.3333333333333333	1	63
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
22	1	19	4	1	1	1.3333333333333333	1	54
710 - General Office Building					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry

19	1	0.6666666666666666	0	0	0	1.3333333333333333	1	11
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
22	1	19	4	0	0	1.3333333333333333	1	11
710 - General Office Building					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
19	1	0.6666666666666666	0	0	0	1.3333333333333333	1	34
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
22	1	19	4	0	0	1.3333333333333333	1	34
850 - Supermarket					875 - Department Store			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
130	1	0	0	0	0	0	1	176
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
130	1	0	0	0	0	0	1	156
850 - Supermarket					911 - Walk-in Bank			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
130	1	2.9	4	1	1	2.9	1	38
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
130	1	5	6	1	1	4.1	1	35
850 - Supermarket					934 - Fast-Food Restaurant with Drive-Through Window			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
130	1	2.9	4	4	10	2.9	1	329
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
130	1	5	6	6	13	4.1	1	316
850 - Supermarket					937 - Coffee/Donut Shop with Drive-Through Window			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
130	1	2.9	4	2	2	2.9	1	86
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
130	1	5	6	4	4	4.1	1	86
850 - Supermarket					948 - Automated Car Wash			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
130	1	2.9	4	1	1	2.9	1	19
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
130	1	5	6	1	1	4.1	1	22
850 - Supermarket					960 - Super Convenience Market/Gas Station			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry

130	1	2.9	4	3	3	2.9	1	93
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
130	1	5	6	4	4	4.1	1	93
850 - Supermarket						210 - Single-Family Detached Housing		
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
130	1	4.33333333333333	6	5	5	7.66666666666667	1	63
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
130	1	1.66666666666667	2	2	4	7	1	54
850 - Supermarket						220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit		
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
130	1	4.33333333333333	6	1	1	7.66666666666667	1	11
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
130	1	1.66666666666667	2	1	1	7	1	11
850 - Supermarket						231 - Mid-Rise Residential with 1st-Floor Commercial		
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
130	1	4.33333333333333	6	3	3	7.66666666666667	1	34
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
130	1	1.66666666666667	2	2	2	7	1	34
875 - Department Store						911 - Walk-in Bank		
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
156	1	2.9	5	1	1	2.9	1	38
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
176	1	5	9	1	1	4.1	1	35
875 - Department Store						934 - Fast-Food Restaurant with Drive-Through Window		
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
156	1	2.9	5	5	10	2.9	1	329
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
176	1	5	9	9	13	4.1	1	316
875 - Department Store						937 - Coffee/Donut Shop with Drive-Through Window		
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
156	1	2.9	5	2	2	2.9	1	86
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
176	1	5	9	4	4	4.1	1	86
875 - Department Store						948 - Automated Car Wash		
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
156	1	2.9	5	1	1	2.9	1	19

Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
176	1	5	9	1	1	4.1	1	22
875 - Department Store					960 - Super Convenience Market/Gas Station			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
156	1	2.9	5	3	3	2.9	1	93
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
176	1	5	9	4	4	4.1	1	93
875 - Department Store					210 - Single-Family Detached Housing			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
156	1	4.33333333333333	7	5	5	7.66666666666667	1	63
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
176	1	1.66666666666667	3	3	4	7	1	54
875 - Department Store					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
156	1	4.33333333333333	7	1	1	7.66666666666667	1	11
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
176	1	1.66666666666667	3	1	1	7	1	11
875 - Department Store					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
156	1	4.33333333333333	7	3	3	7.66666666666667	1	34
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
176	1	1.66666666666667	3	2	2	7	1	34
911 - Walk-in Bank					934 - Fast-Food Restaurant with Drive-Through Window			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
35	1	0	0	0	0	0	1	329
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
38	1	0	0	0	0	0	1	316
911 - Walk-in Bank					937 - Coffee/Donut Shop with Drive-Through Window			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
35	1	0	0	0	0	0	1	86
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
38	1	0	0	0	0	0	1	86
911 - Walk-in Bank					948 - Automated Car Wash			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
35	1	0	0	0	0	0	1	19

Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
38	1	0	0	0	0	0	1	22
911 - Walk-in Bank					960 - Super Convenience Market/Gas Station			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
35	1	0	0	0	0	0	1	93
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
38	1	0	0	0	0	0	1	93
911 - Walk-in Bank					210 - Single-Family Detached Housing			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
35	1	1.2	0	0	1	1.06666666666667	1	63
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
38	1	0.933333333333333	0	0	1	1.4	1	54
911 - Walk-in Bank					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
35	1	1.2	0	0	0	1.06666666666667	1	11
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
38	1	0.933333333333333	0	0	0	1.4	1	11
911 - Walk-in Bank					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
35	1	1.2	0	0	0	1.06666666666667	1	34
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
38	1	0.933333333333333	0	0	0	1.4	1	34
934 - Fast-Food Restaurant with Drive-Through Window					937 - Coffee/Donut Shop with Drive-Through Window			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
316	1	0	0	0	0	0	1	86
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
329	1	0	0	0	0	0	1	86
934 - Fast-Food Restaurant with Drive-Through Window					948 - Automated Car Wash			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
316	1	0	0	0	0	0	1	19
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
329	1	0	0	0	0	0	1	22
934 - Fast-Food Restaurant with Drive-Through Window					960 - Super Convenience Market/Gas Station			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
316	1	0	0	0	0	0	1	93

Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
329	1	0	0	0	0	0	1	93
934 - Fast-Food Restaurant with Drive-Through Window					210 - Single-Family Detached Housing			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
316	1	1.2	4	1	1	1.06666666666667	1	63
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
329	1	0.933333333333333	3	1	1	1.4	1	54
934 - Fast-Food Restaurant with Drive-Through Window					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
316	1	1.2	4	0	0	1.06666666666667	1	11
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
329	1	0.933333333333333	3	0	0	1.4	1	11
934 - Fast-Food Restaurant with Drive-Through Window					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
316	1	1.2	4	0	0	1.06666666666667	1	34
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
329	1	0.933333333333333	3	0	0	1.4	1	34
937 - Coffee/Donut Shop with Drive-Through Window					948 - Automated Car Wash			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
86	1	0	0	0	0	0	1	19
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
86	1	0	0	0	0	0	1	22
937 - Coffee/Donut Shop with Drive-Through Window					960 - Super Convenience Market/Gas Station			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
86	1	0	0	0	0	0	1	93
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
86	1	0	0	0	0	0	1	93
937 - Coffee/Donut Shop with Drive-Through Window					210 - Single-Family Detached Housing			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
86	1	1.2	1	1	1	1.06666666666667	1	63
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
86	1	0.933333333333333	1	1	1	1.4	1	54
937 - Coffee/Donut Shop with Drive-Through Window					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
86	1	1.2	1	0	0	1.06666666666667	1	11

Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
86	1	0.933333333333333	1	0	0	1.4	1	11
937 - Coffee/Donut Shop with Drive-Through Window					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
86	1	1.2	1	0	0	1.06666666666667	1	34
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
86	1	0.933333333333333	1	0	0	1.4	1	34
948 - Automated Car Wash					960 - Super Convenience Market/Gas Station			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
22	1	0	0	0	0	0	1	93
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
19	1	0	0	0	0	0	1	93
948 - Automated Car Wash					210 - Single-Family Detached Housing			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
22	1	1.2	0	0	1	1.06666666666667	1	63
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
19	1	0.933333333333333	0	0	1	1.4	1	54
948 - Automated Car Wash					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
22	1	1.2	0	0	0	1.06666666666667	1	11
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
19	1	0.933333333333333	0	0	0	1.4	1	11
948 - Automated Car Wash					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
22	1	1.2	0	0	0	1.06666666666667	1	34
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
19	1	0.933333333333333	0	0	0	1.4	1	34
960 - Super Convenience Market/Gas Station					210 - Single-Family Detached Housing			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
93	1	1.2	1	1	1	1.06666666666667	1	63
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
93	1	0.933333333333333	1	1	1	1.4	1	54
960 - Super Convenience Market/Gas Station					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
93	1	1.2	1	0	0	1.06666666666667	1	11

Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
93	1	0.933333333333333	1	0	0	1.4	1	11
960 - Super Convenience Market/Gas Station					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
93	1	1.2	1	0	0	1.06666666666667	1	34
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
93	1	0.933333333333333	1	0	0	1.4	1	34
210 - Single-Family Detached Housing					220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
54	1	0	0	0	0	0	1	11
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
63	1	0	0	0	0	0	1	11
210 - Single-Family Detached Housing					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
54	1	0	0	0	0	0	1	34
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
63	1	0	0	0	0	0	1	34
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit					231 - Mid-Rise Residential with 1st-Floor Commercial			
Persons Exit	PAF	UIPTC	Unconstrained Demand	==>>> BALANCED ==>>>	Unconstrained Demand	UIPTC	PAF	Persons Entry
11	1	0	0	0	0	0	1	34
Persons Entry	PAF	UIPTC	Unconstrained Demand	<<<== BALANCED <<<==	Unconstrained Demand	UIPTC	PAF	Persons Exit
11	1	0	0	0	0	0	1	34

INTERNAL PERSON TRIPS:**710 - General Office Building**

Internal Person Trips From	Entry	Exit	Total
850 - Supermarket	1	2	3
875 - Department Store	2	2	3
911 - Walk-in Bank	0	0	0
934 - Fast-Food Restaurant with Drive-Through Window	1	0	1
937 - Coffee/Donut Shop with Drive-Through Window	1	0	1
948 - Automated Car Wash	0	0	0
960 - Super Convenience Market/Gas Station	1	0	1
210 - Single-Family Detached Housing	1	0	1
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	1
Total Internal Person Trips	7	4	11

850 - Supermarket

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	2	1	3

875 - Department Store	0	0	0
911 - Walk-in Bank	1	1	3
934 - Fast-Food Restaurant with Drive-Through Window	6	4	10
937 - Coffee/Donut Shop with Drive-Through Window	4	2	6
948 - Automated Car Wash	1	1	1
960 - Super Convenience Market/Gas Station	4	3	7
210 - Single-Family Detached Housing	2	5	7
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	1	1	2
231 - Mid-Rise Residential with 1st-Floor Commercial	2	3	5
Total Internal Person Trips	23	21	44

875 - Department Store

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	2	2	3
850 - Supermarket	0	0	0
911 - Walk-in Bank	1	1	3
934 - Fast-Food Restaurant with Drive-Through Window	9	5	13
937 - Coffee/Donut Shop with Drive-Through Window	4	2	6
948 - Automated Car Wash	1	1	1
960 - Super Convenience Market/Gas Station	4	3	7
210 - Single-Family Detached Housing	3	5	8
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	1	1	2
231 - Mid-Rise Residential with 1st-Floor Commercial	2	3	5
Total Internal Person Trips	27	23	50

911 - Walk-in Bank

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	1	1	3
875 - Department Store	1	1	3
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
937 - Coffee/Donut Shop with Drive-Through Window	0	0	0
948 - Automated Car Wash	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
210 - Single-Family Detached Housing	0	0	1
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	1
Total Internal Person Trips	2	2	4

934 - Fast-Food Restaurant with Drive-Through Window

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	1	1
850 - Supermarket	4	6	10
875 - Department Store	5	9	13
911 - Walk-in Bank	0	0	0
937 - Coffee/Donut Shop with Drive-Through Window	0	0	0
948 - Automated Car Wash	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
210 - Single-Family Detached Housing	1	1	1
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	1
Total Internal Person Trips	10	17	27

937 - Coffee/Donut Shop with Drive-Through Window

Internal Person Trips From	Entry	Exit	Total
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710 - General Office Building	0	1	1
850 - Supermarket	2	4	6
875 - Department Store	2	4	6
911 - Walk-in Bank	0	0	0
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
948 - Automated Car Wash	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
210 - Single-Family Detached Housing	1	1	1
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	1
Total Internal Person Trips	5	10	15

948 - Automated Car Wash

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	1	1	1
875 - Department Store	1	1	1
911 - Walk-in Bank	0	0	0
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
937 - Coffee/Donut Shop with Drive-Through Window	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
210 - Single-Family Detached Housing	0	0	0
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	2	2	4

960 - Super Convenience Market/Gas Station

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	1	1
850 - Supermarket	3	4	7
875 - Department Store	3	4	7
911 - Walk-in Bank	0	0	0
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
937 - Coffee/Donut Shop with Drive-Through Window	0	0	0
948 - Automated Car Wash	0	0	0
210 - Single-Family Detached Housing	1	1	1
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	1
Total Internal Person Trips	7	10	17

210 - Single-Family Detached Housing

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	1	1
850 - Supermarket	5	2	7
875 - Department Store	5	3	8
911 - Walk-in Bank	0	0	1
934 - Fast-Food Restaurant with Drive-Through Window	1	1	1
937 - Coffee/Donut Shop with Drive-Through Window	1	1	1
948 - Automated Car Wash	0	0	0
960 - Super Convenience Market/Gas Station	1	1	1
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	13	9	22

220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	0
850 - Supermarket	1	1	2
875 - Department Store	1	1	2
911 - Walk-in Bank	0	0	0
934 - Fast-Food Restaurant with Drive-Through Window	0	0	0
937 - Coffee/Donut Shop with Drive-Through Window	0	0	0
948 - Automated Car Wash	0	0	0
960 - Super Convenience Market/Gas Station	0	0	0
210 - Single-Family Detached Housing	0	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	0	0	0
Total Internal Person Trips	2	2	4

231 - Mid-Rise Residential with 1st-Floor Commercial

Internal Person Trips From	Entry	Exit	Total
710 - General Office Building	0	0	1
850 - Supermarket	3	2	5
875 - Department Store	3	2	5
911 - Walk-in Bank	0	0	1
934 - Fast-Food Restaurant with Drive-Through Window	0	0	1
937 - Coffee/Donut Shop with Drive-Through Window	0	0	1
948 - Automated Car Wash	0	0	0
960 - Super Convenience Market/Gas Station	0	0	1
210 - Single-Family Detached Housing	0	0	0
220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit	0	0	0
Total Internal Person Trips	6	4	10

INTERNAL VEHICLE TRIPS AND CAPTURE:**710 - General Office Building**

Total Internal Person Trips	7	4	11
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	7	4	11
Total External Vehicle Trips	15	15	30
Internal Vehicle Trip Capture	32%	22%	0%

850 - Supermarket

Total Internal Person Trips	23	21	44
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	23	21	44
Total External Vehicle Trips	107	109	216
Internal Vehicle Trip Capture	18%	16%	0%

875 - Department Store

Total Internal Person Trips	27	23	50
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	27	23	50
Total External Vehicle Trips	149	133	282
Internal Vehicle Trip Capture	15%	15%	0%

911 - Walk-in Bank

Total Internal Person Trips	2	2	4
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	2	2	4
Total External Vehicle Trips	36	33	69
Internal Vehicle Trip Capture	5%	6%	0%

934 - Fast-Food Restaurant with Drive-Through Window

Total Internal Person Trips	10	17	27
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	10	17	27
Total External Vehicle Trips	319	299	618
Internal Vehicle Trip Capture	3%	5%	0%

937 - Coffee/Donut Shop with Drive-Through Window

Total Internal Person Trips	5	10	15
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	5	10	15
Total External Vehicle Trips	81	76	157
Internal Vehicle Trip Capture	6%	12%	0%

948 - Automated Car Wash

Total Internal Person Trips	2	2	4
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	2	2	4
Total External Vehicle Trips	17	20	37
Internal Vehicle Trip Capture	11%	9%	0%

960 - Super Convenience Market/Gas Station

Total Internal Person Trips	7	10	17
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	7	10	17
Total External Vehicle Trips	86	83	169
Internal Vehicle Trip Capture	8%	11%	0%

210 - Single-Family Detached Housing

Total Internal Person Trips	13	9	22
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	13	9	22
Total External Vehicle Trips	50	45	95
Internal Vehicle Trip Capture	21%	17%	0%

220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit

Total Internal Person Trips	2	2	4
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	2	2	4
Total External Vehicle Trips	9	9	18
Internal Vehicle Trip Capture	18%	18%	0%

231 - Mid-Rise Residential with 1st-Floor Commercial

Total Internal Person Trips	6	4	10
Vehicle Mode Share	100%	100%	-
Vehicle Occupancy	1.00	1.00	-
Total Vehicle Internal Trips	6	4	10
Total External Vehicle Trips	28	30	58
Internal Vehicle Trip Capture	17%	12%	0%

PASS-BY VEHICLE TRIP REDUCTION

Land Use	External Vehicle Trips		Pass-by Vehicle Trip %		Pass-by Vehicle Trips	
	Entry	Exit	Entry (%)	Exit (%)	Entry	Exit
710 - General Office Building	15	15	0.00%	0.00%	0	0
850 - Supermarket	107	109	33.00%	33.00%	35	36
875 - Department Store	149	133	0.00%	0.00%	0	0
911 - Walk-in Bank	36	33	0.00%	0.00%	0	0
934 - Fast-Food Restaurant with Drive-Through Window	319	299	49.90%	49.90%	159	149
937 - Coffee/Donut Shop with Drive-Through Window	81	76	50.00%	50.00%	41	38
948 - Automated Car Wash	17	20	0.00%	0.00%	0	0
960 - Super Convenience Market/Gas Station	86	83	66.00%	66.00%	57	55
210 - Single-Family Detached Housing	50	45	0.00%	0.00%	0	0
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	9	9	0.00%	0.00%	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	28	30	0.00%	0.00%	0	0

DIVERTED VEHICLE TRIP REDUCTION

Land Use	External Vehicle Trips		Diverted Vehicle Trip %		Diverted Vehicle Trips	
	Entry	Exit	Entry (%)	Exit (%)	Entry	Exit
710 - General Office Building	15	15	0.00%	0.00%	0	0
850 - Supermarket	107	109	0.00%	0.00%	0	0
875 - Department Store	149	133	0.00%	0.00%	0	0
911 - Walk-in Bank	36	33	0.00%	0.00%	0	0
934 - Fast-Food Restaurant with Drive-Through Window	319	299	0.00%	0.00%	0	0
937 - Coffee/Donut Shop with Drive-Through Window	81	76	0.00%	0.00%	0	0
948 - Automated Car Wash	17	20	0.00%	0.00%	0	0
960 - Super Convenience Market/Gas Station	86	83	0.00%	0.00%	0	0
210 - Single-Family Detached Housing	50	45	0.00%	0.00%	0	0
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	9	9	0.00%	0.00%	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	28	30	0.00%	0.00%	0	0

EXTRA VEHICLE TRIP REDUCTION

Land Use	(External - (Pass-by + Diverted)) Vehicle Trips		Extra Vehicle Trip Reduction %		Extra Reduced Vehicle Trips	
	Entry	Exit	Entry (%)	Exit (%)	Entry	Exit
710 - General Office Building	15	15	0.00%	0.00%	0	0

850 - Supermarket	72	73	0.00%	0.00%	0	0
875 - Department Store	149	133	0.00%	0.00%	0	0
911 - Walk-in Bank	36	33	0.00%	0.00%	0	0
934 - Fast-Food Restaurant with Drive-Through Window	160	150	0.00%	0.00%	0	0
937 - Coffee/Donut Shop with Drive-Through Window	40	38	0.00%	0.00%	0	0
948 - Automated Car Wash	17	20	0.00%	0.00%	0	0
960 - Super Convenience Market/Gas Station	29	28	0.00%	0.00%	0	0
210 - Single-Family Detached Housing	50	45	0.00%	0.00%	0	0
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	9	9	0.00%	0.00%	0	0
231 - Mid-Rise Residential with 1st-Floor Commercial	28	30	0.00%	0.00%	0	0

NEW VEHICLE TRIPS

Land Use	New Vehicle Trips		
	Entry	Exit	Total
710 - General Office Building	15	15	30
850 - Supermarket	72	73	145
875 - Department Store	149	133	282
911 - Walk-in Bank	36	33	69
934 - Fast-Food Restaurant with Drive-Through Window	160	150	310
937 - Coffee/Donut Shop with Drive-Through Window	40	38	78
948 - Automated Car Wash	17	20	37
960 - Super Convenience Market/Gas Station	29	28	57
210 - Single-Family Detached Housing	50	45	95
220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit	9	9	18
231 - Mid-Rise Residential with 1st-Floor Commercial	28	30	58

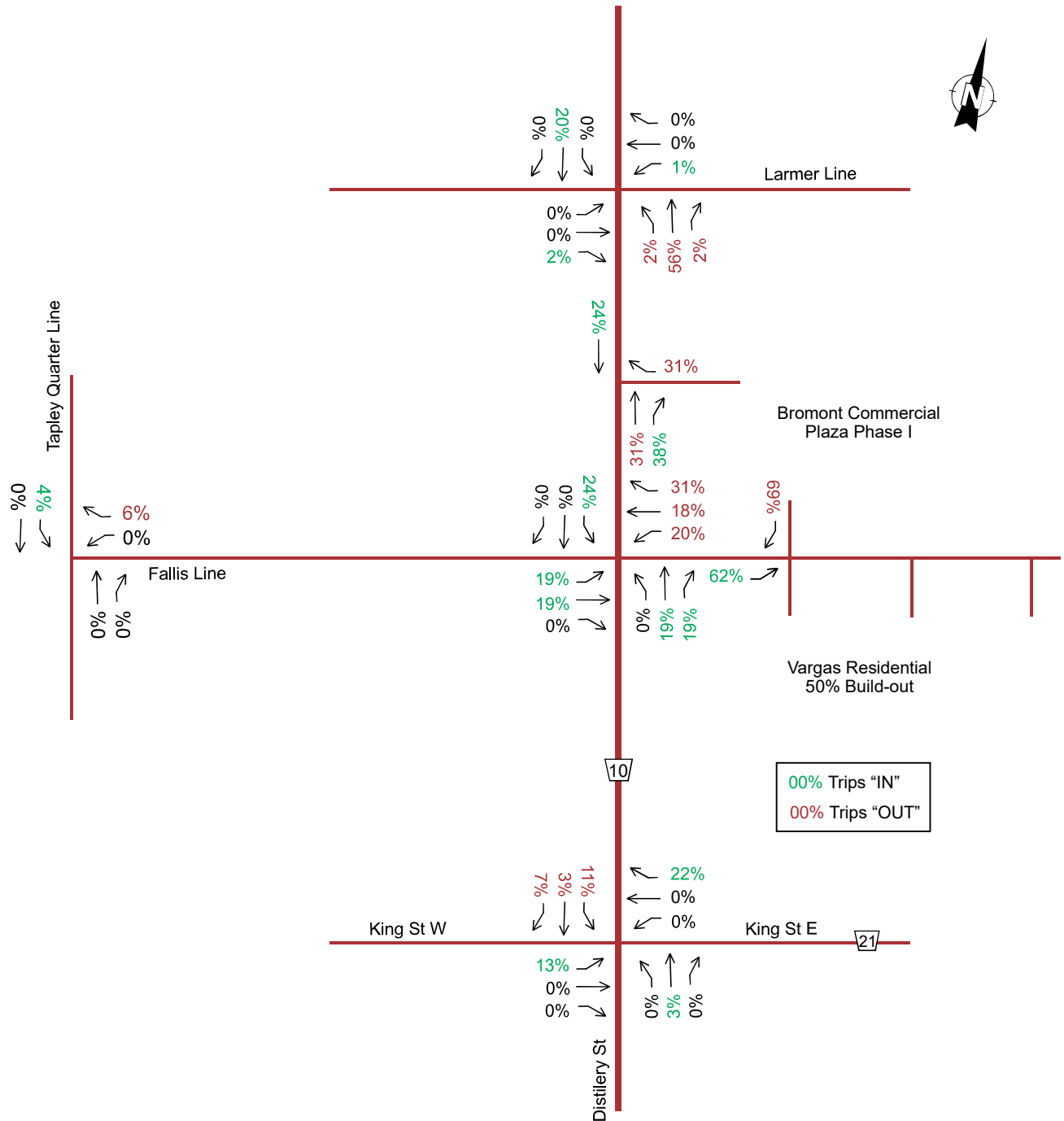
RESULTS

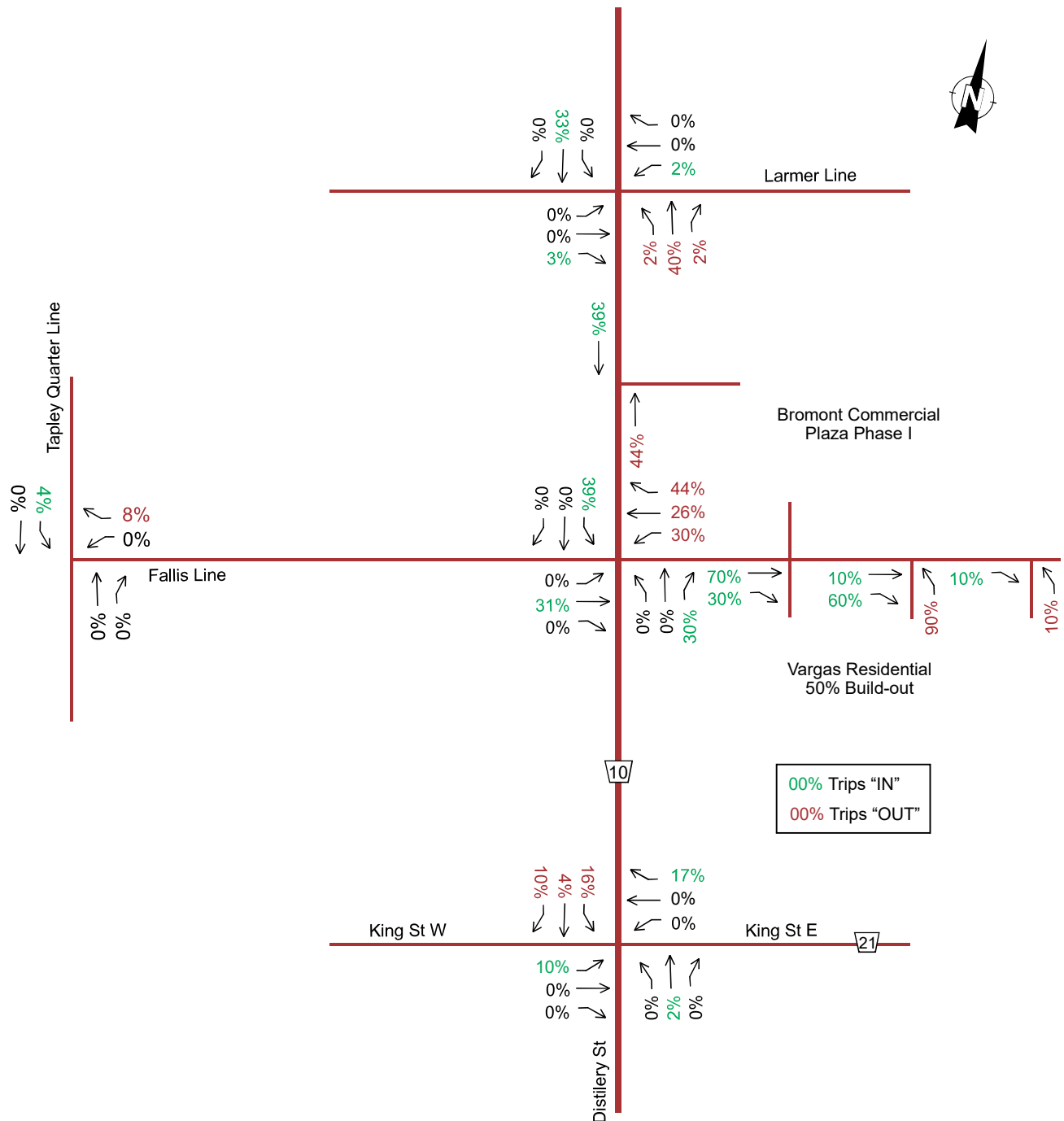
Site Totals	Entry	Exit	Total
Vehicle Trips Before Reduction	1001	956	1957
Internal Vehicle Trips	104	104	208
External Vehicle Trips	897	852	1749
Internal Vehicle Trip Capture	10%	11%	11%
Pass-by Vehicle Trips	292	278	570
Diverted Vehicle Trips	0	0	0
Extra Reduced Vehicle Trips	0	0	0
New Vehicle Trips	605	574	1179

Appendix I

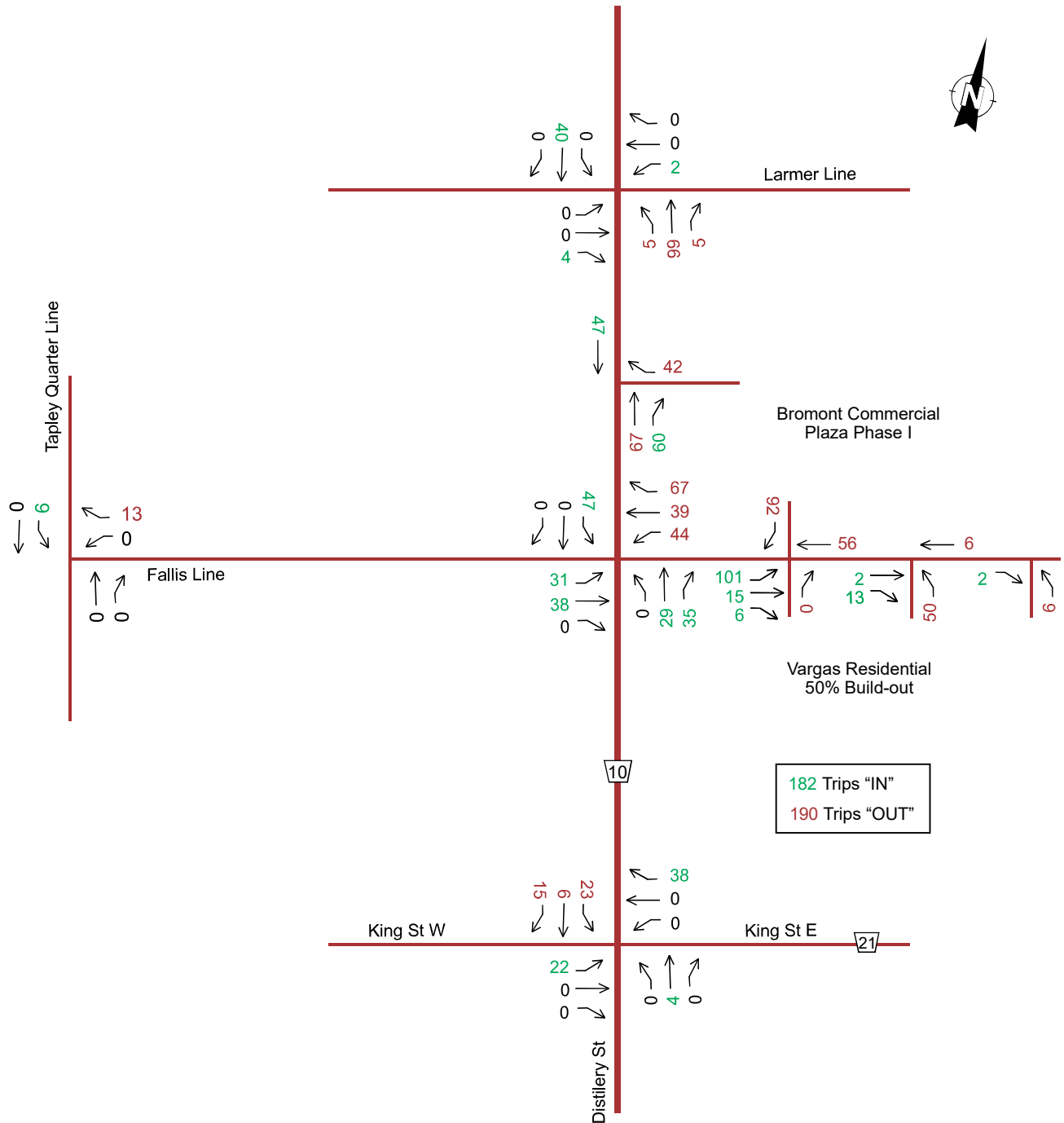
Trip Distribution

AM Distribution of Trips for Commercial Plaza - 2026

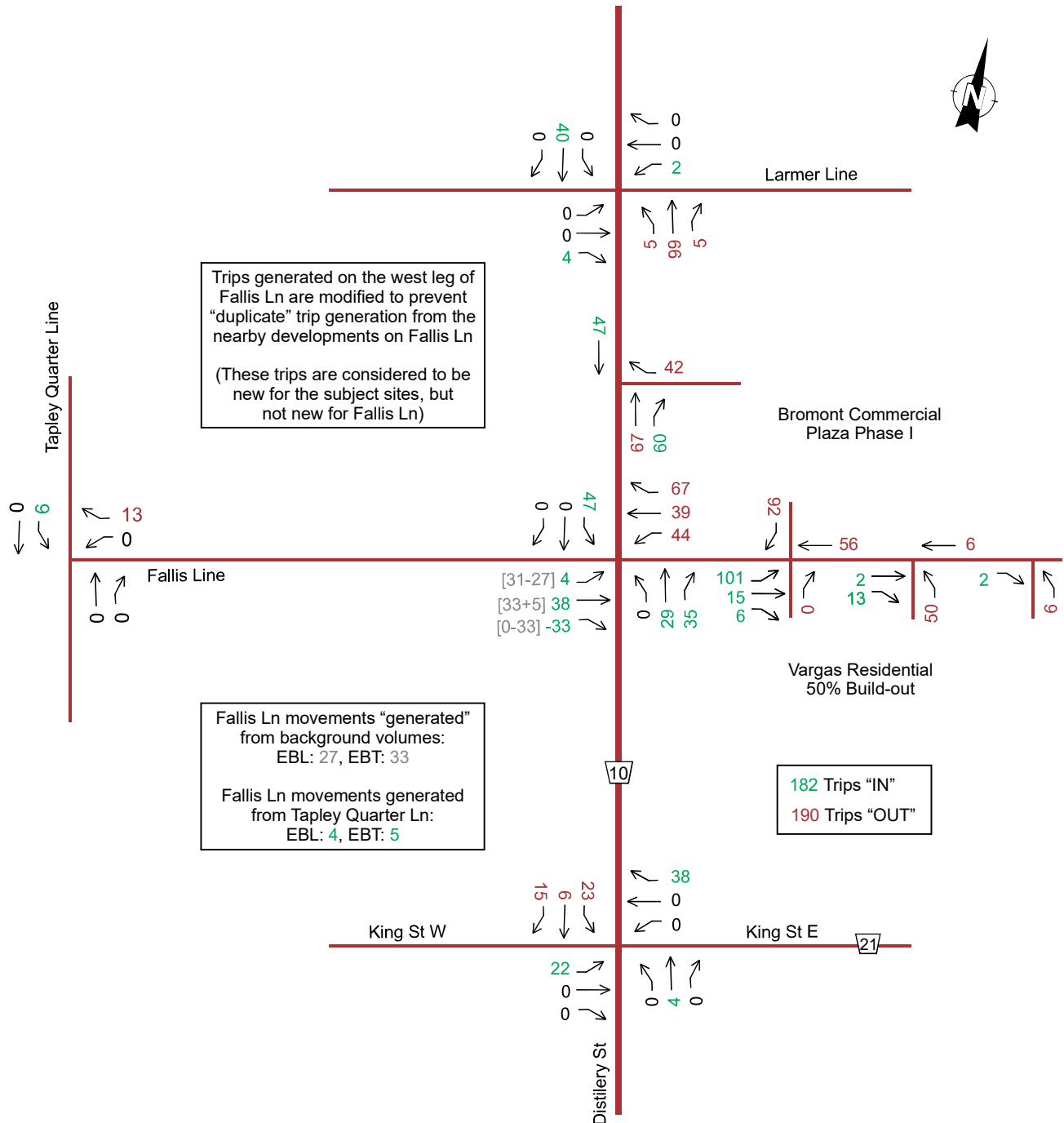




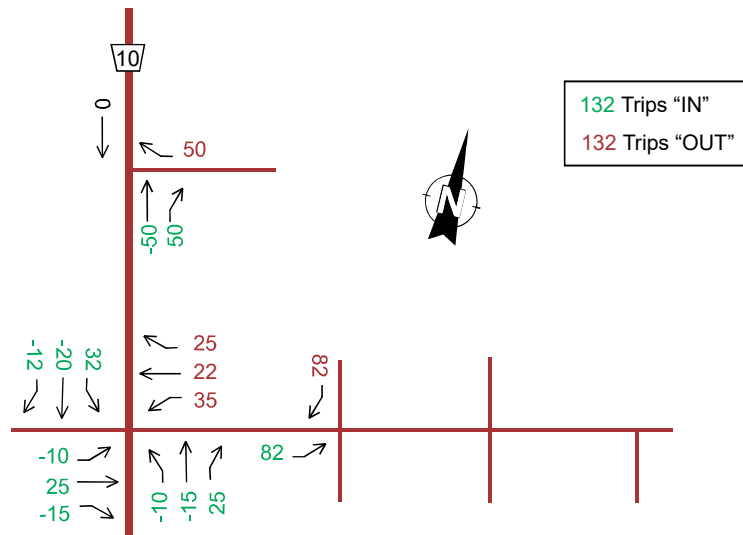
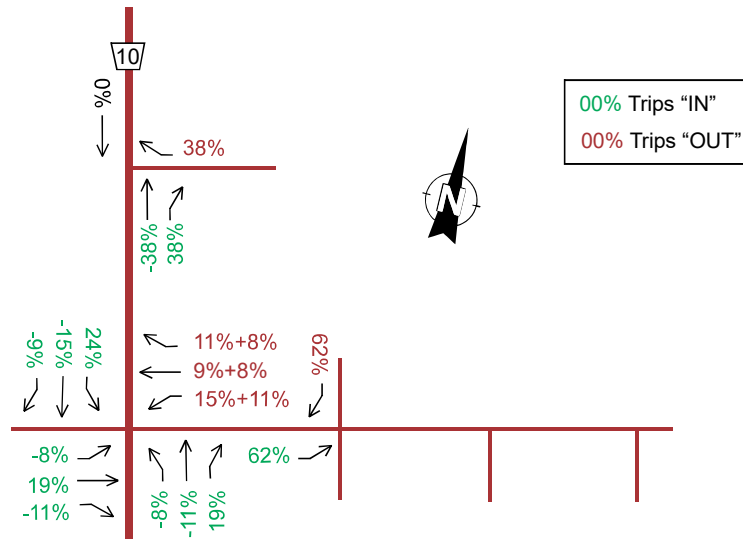
AM External Site Generated Trips 2026 (Bromont Commercial Phase 1 + Vargas Residential 50%)



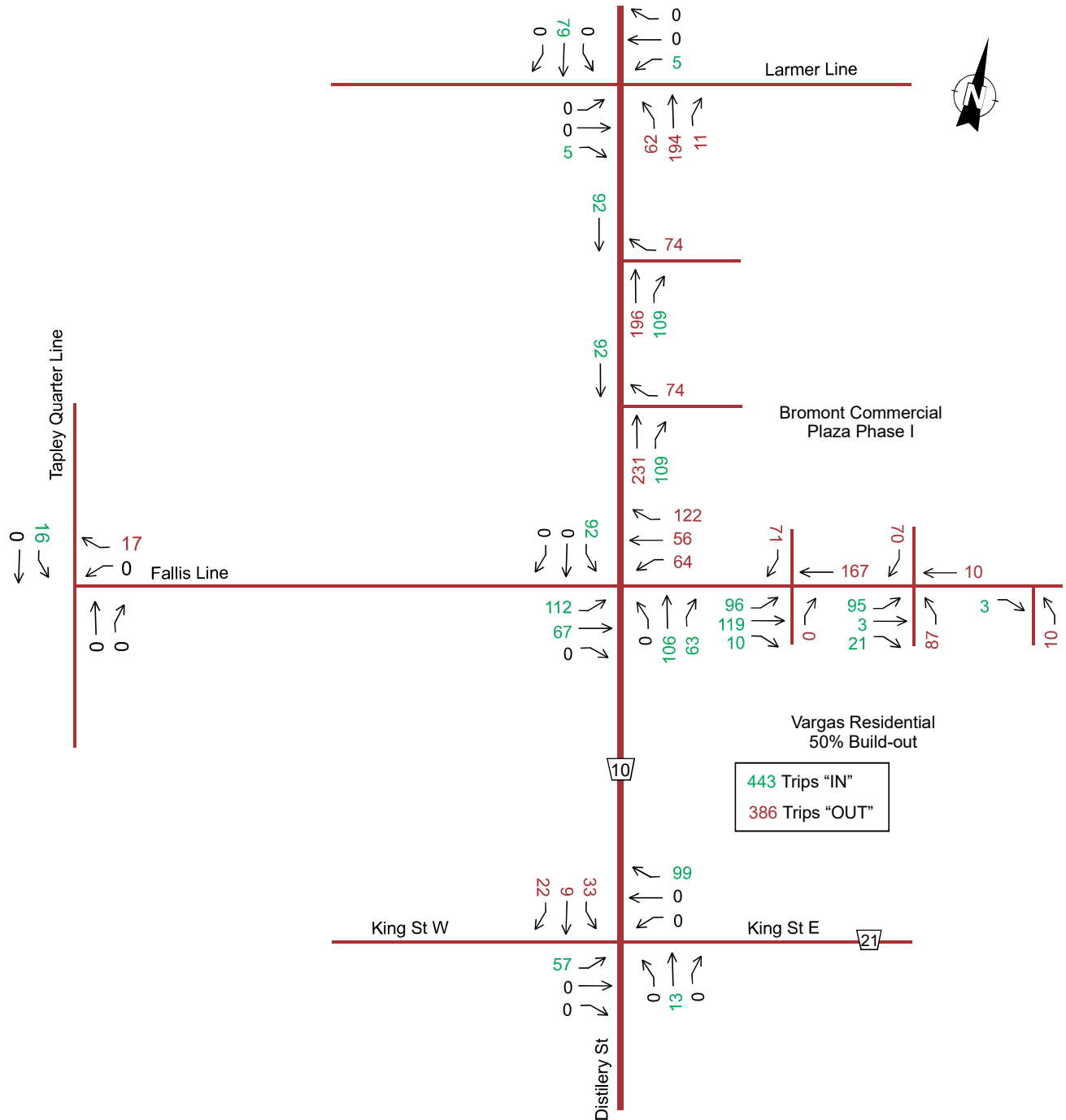
AM Site Generated Trips w/ Diversion 2026 (Bromont Commercial Phase 1 + Vargas Residential 50%)



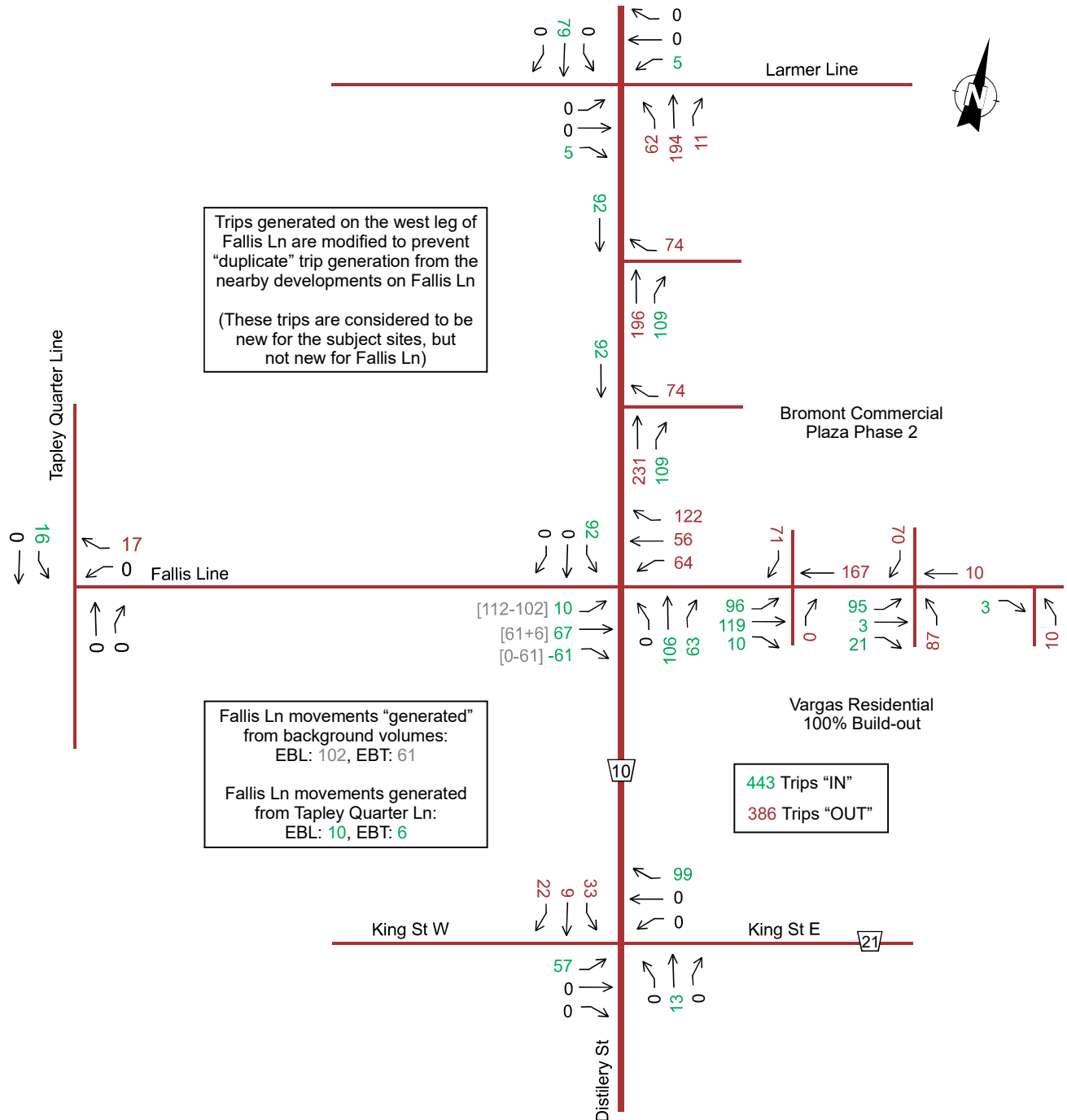
AM Pass-by Trip Distribution 2026 (Bromont Commercial Phase 1)



AM External Site Generated Trips 2031 (Bromont Commercial Phase 2 + Vargas Residential 100%)

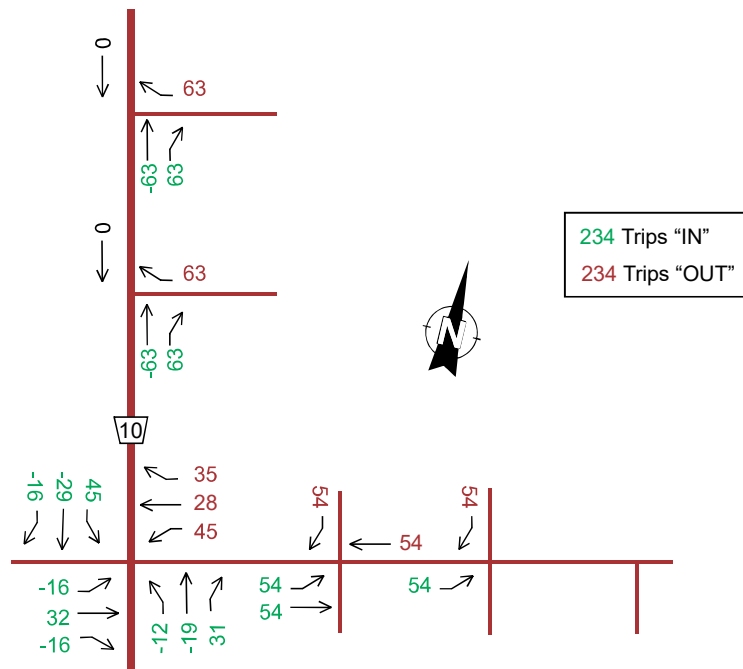


AM Site Generated Trips w/ Diversion 2031 (Bromont Commercial Phase 2 + Vargas Residential 100%)

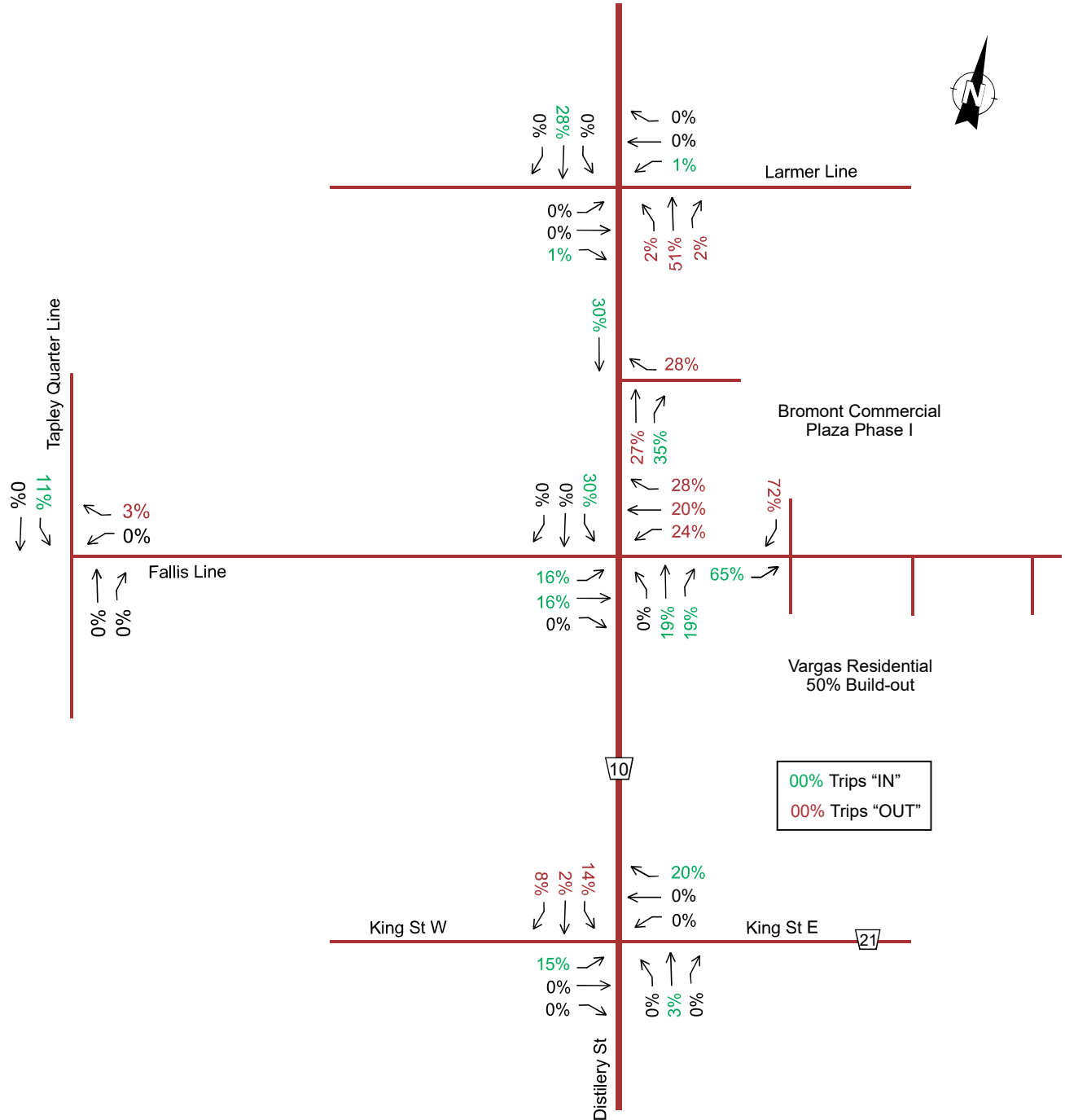


00% Trips "IN"

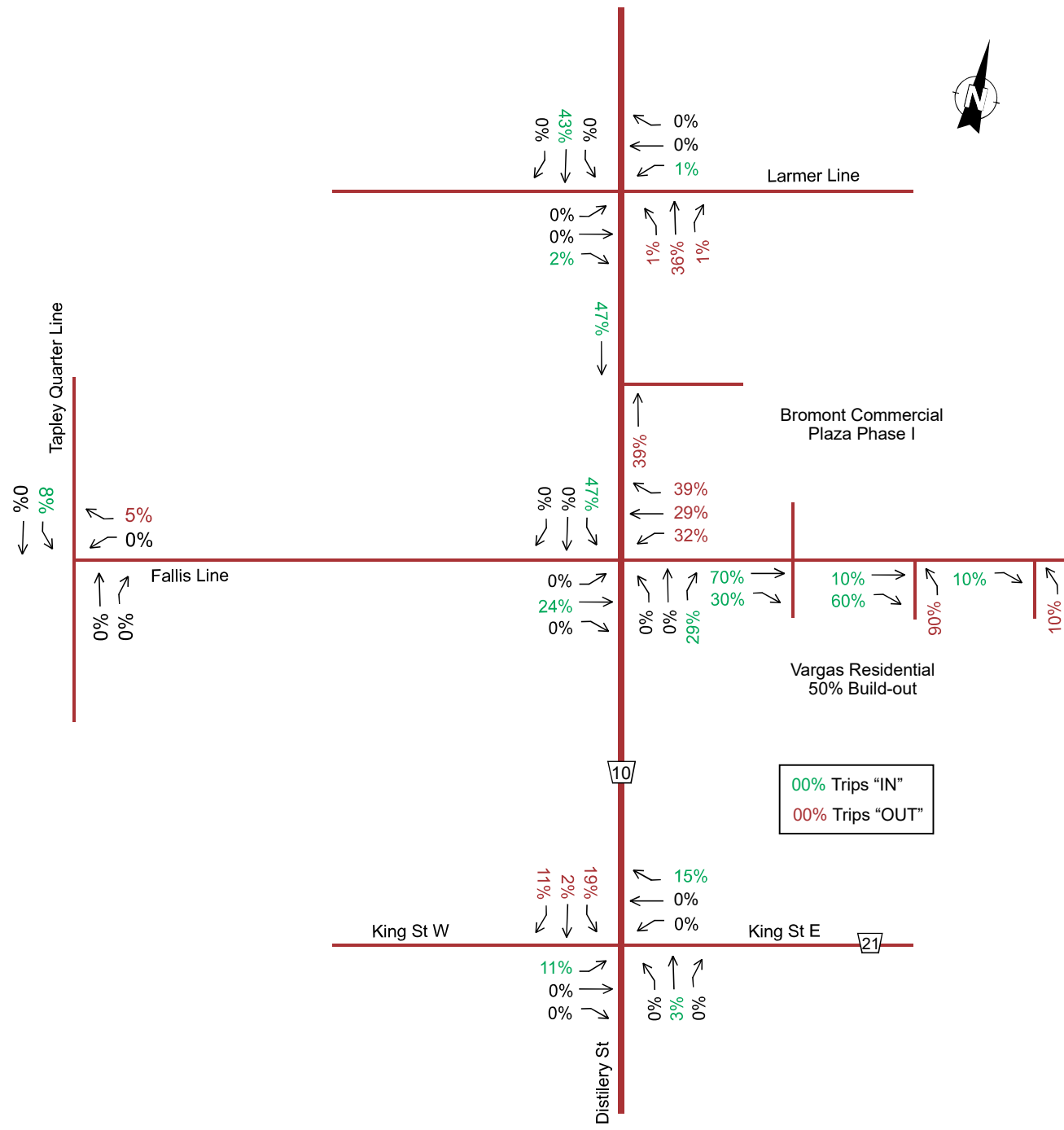
00% Trips "OUT"



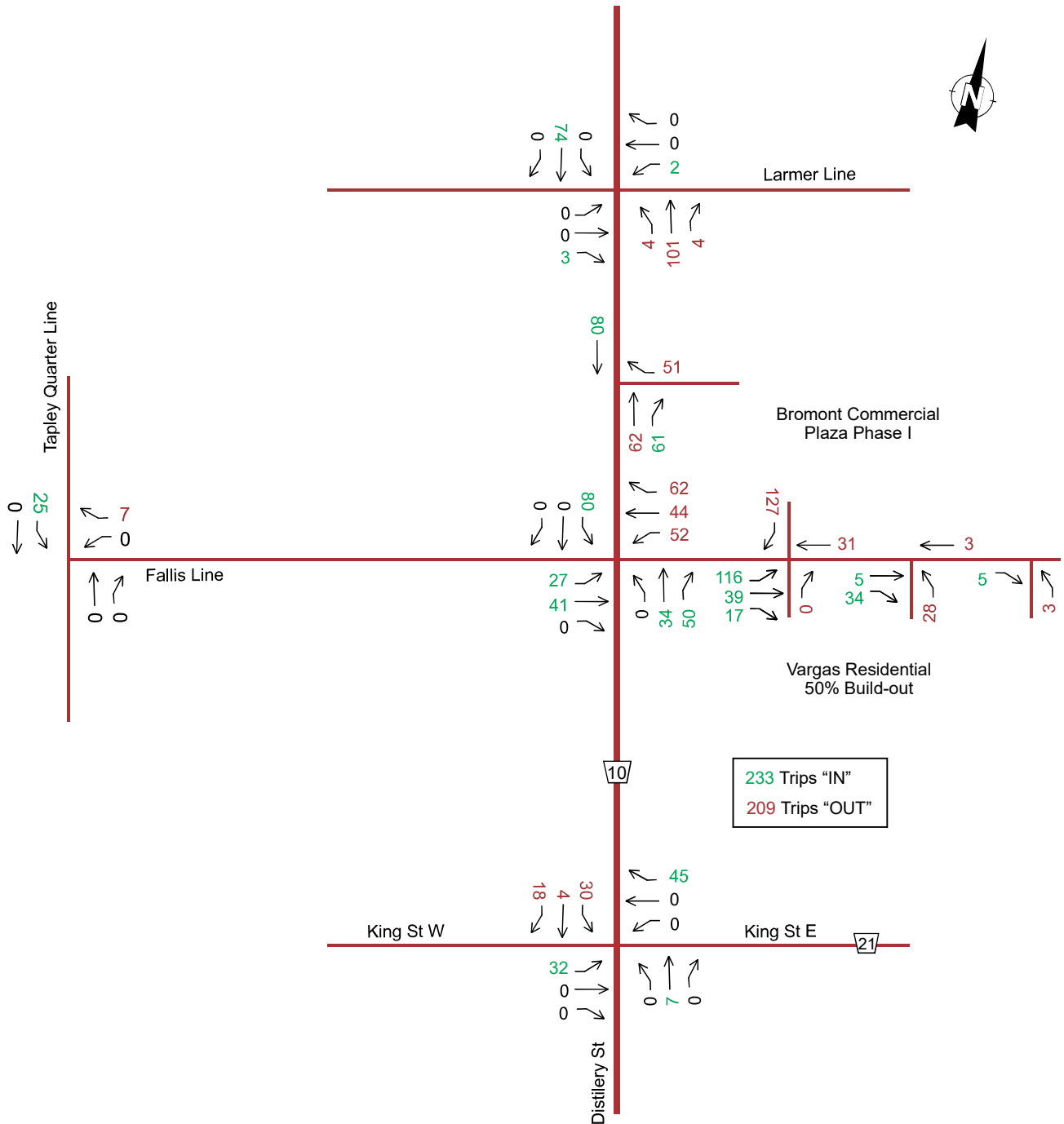
PM Distribution of Trips for Commercial Plaza - 2026



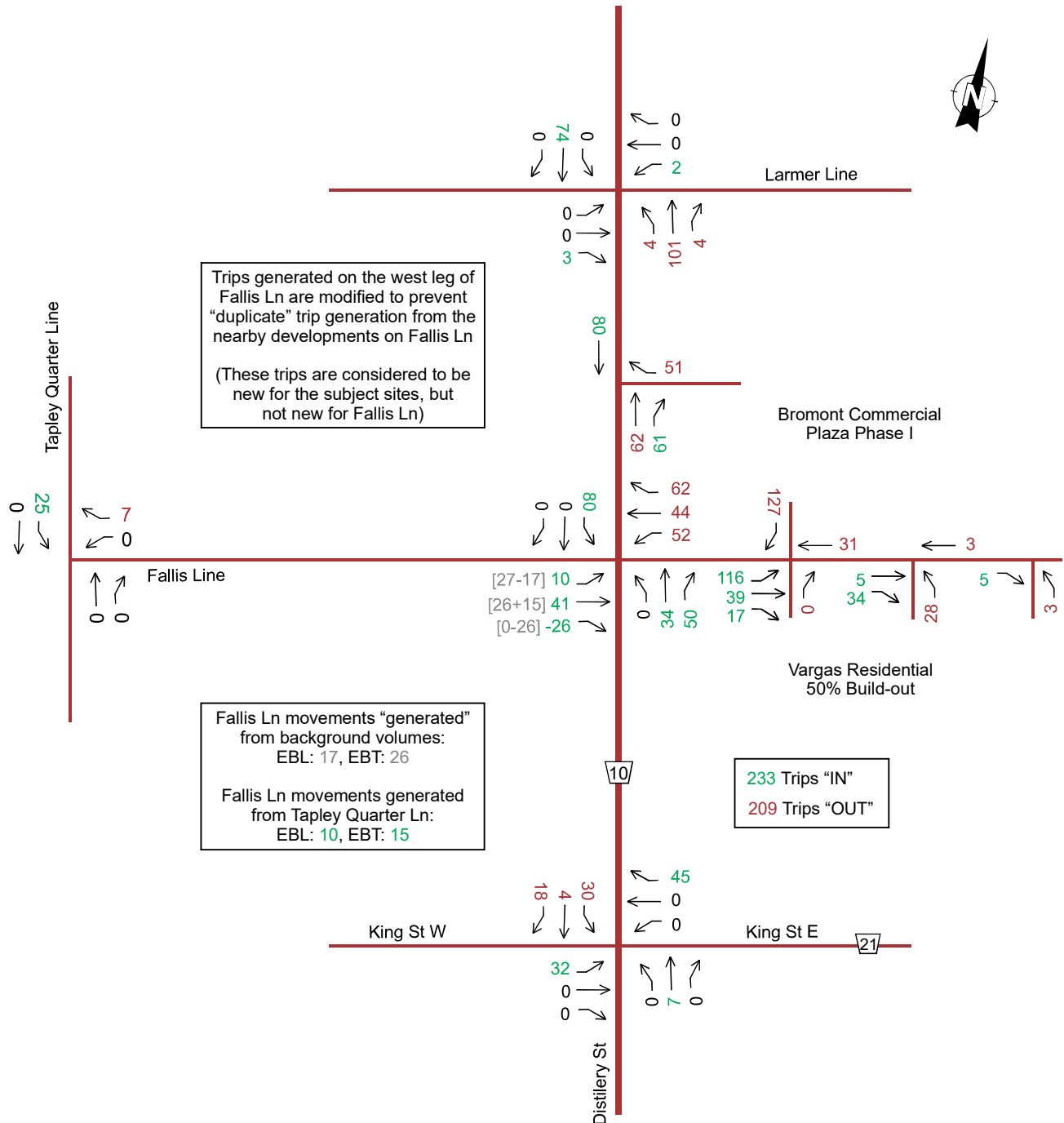
PM Distribution of Trips for Residential Development - 2026



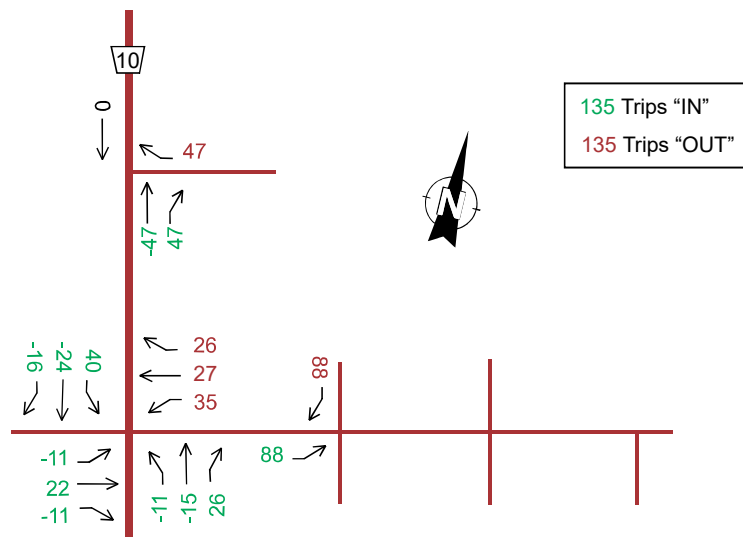
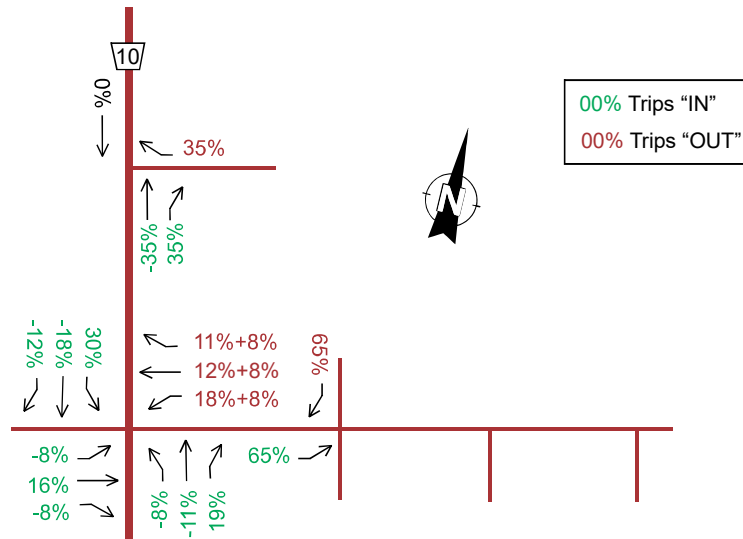
PM External Site Generated Trips 2026 (Bromont Commercial Phase 1 + Vargas Residential 50%)



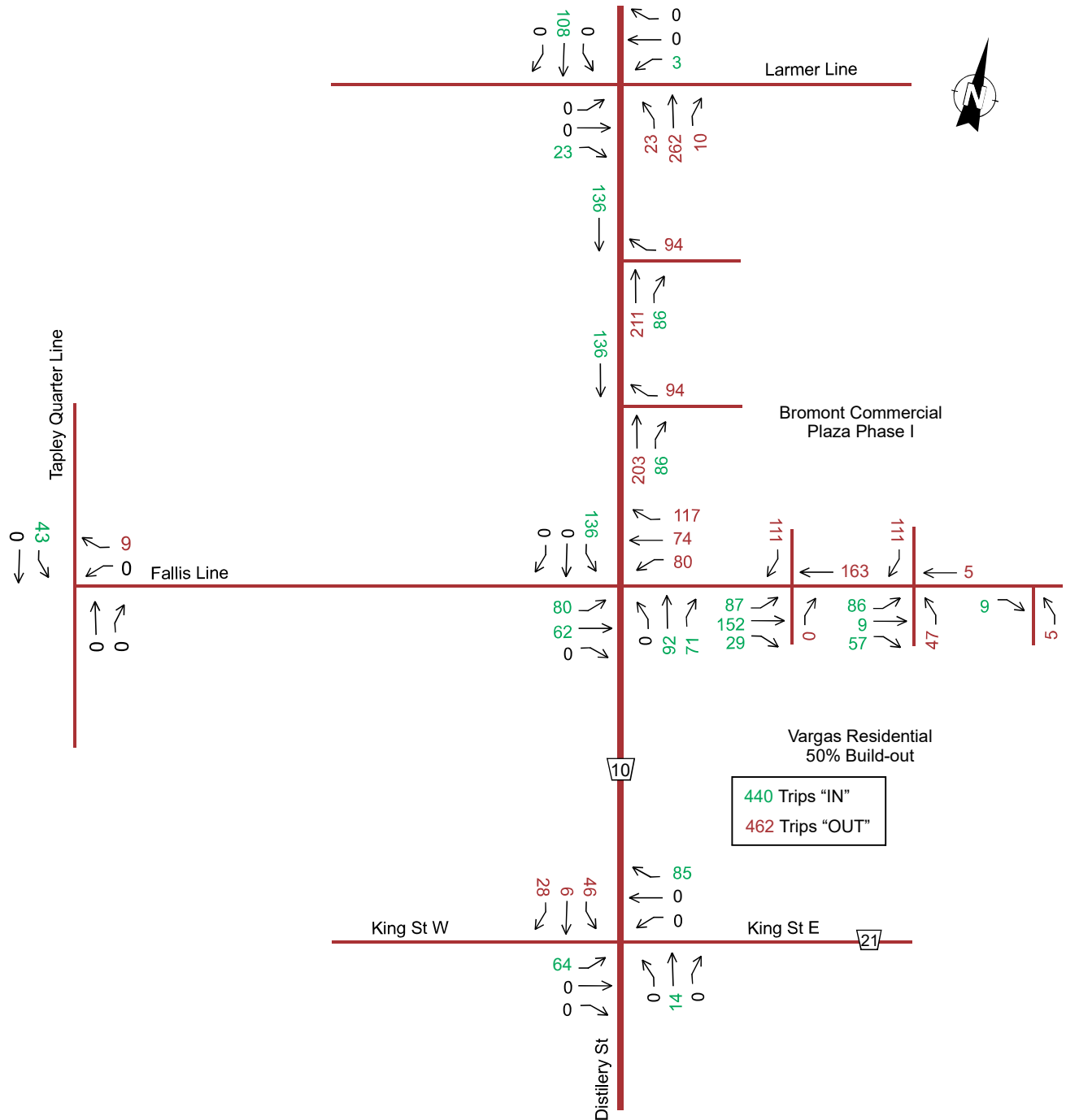
PM Site Generated Trips w/ Diversion 2026 (Bromont Commercial Phase 1 + Vargas Residential 50%)



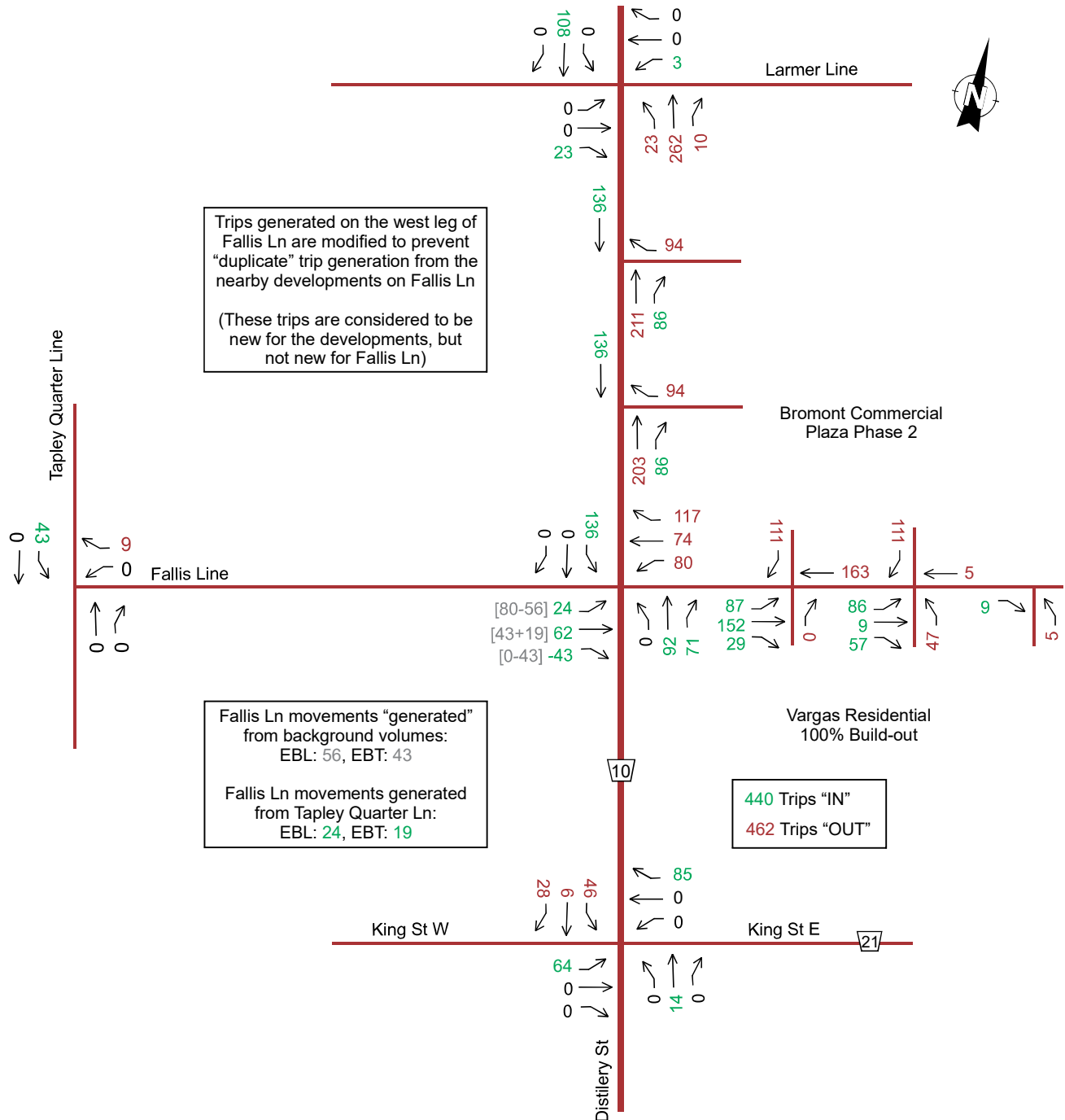
PM Pass-by Trip Distribution 2026 (Bromont Commercial Phase 1)



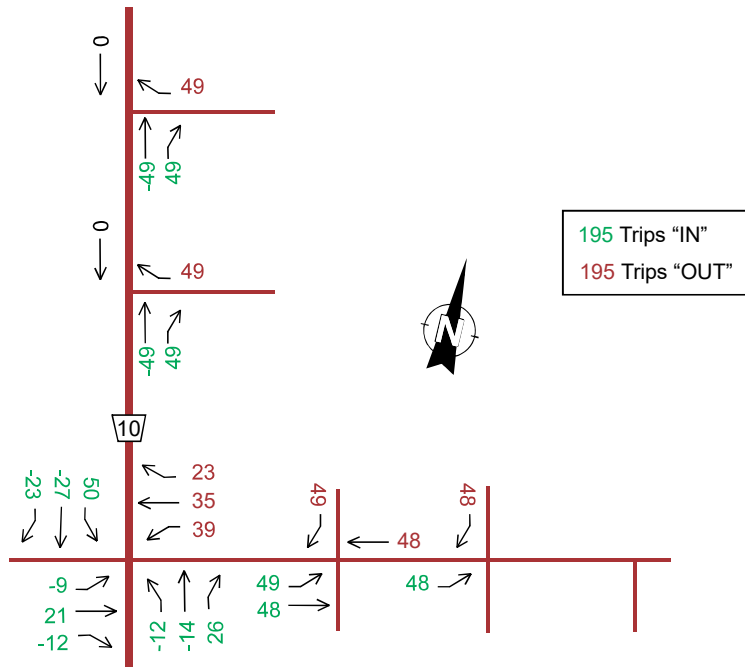
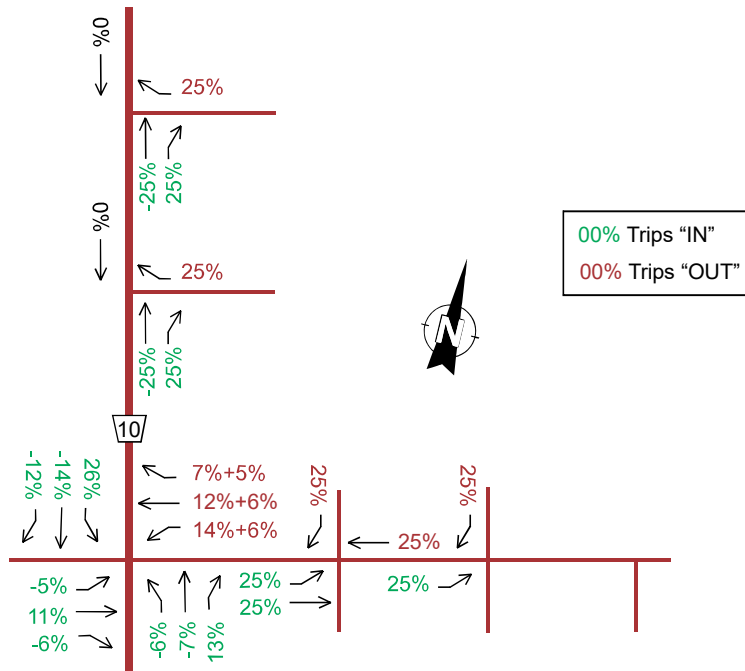
PM External Site Generated Trips 2031 (Bromont Commercial Phase 2 + Vargas Residential 100%)



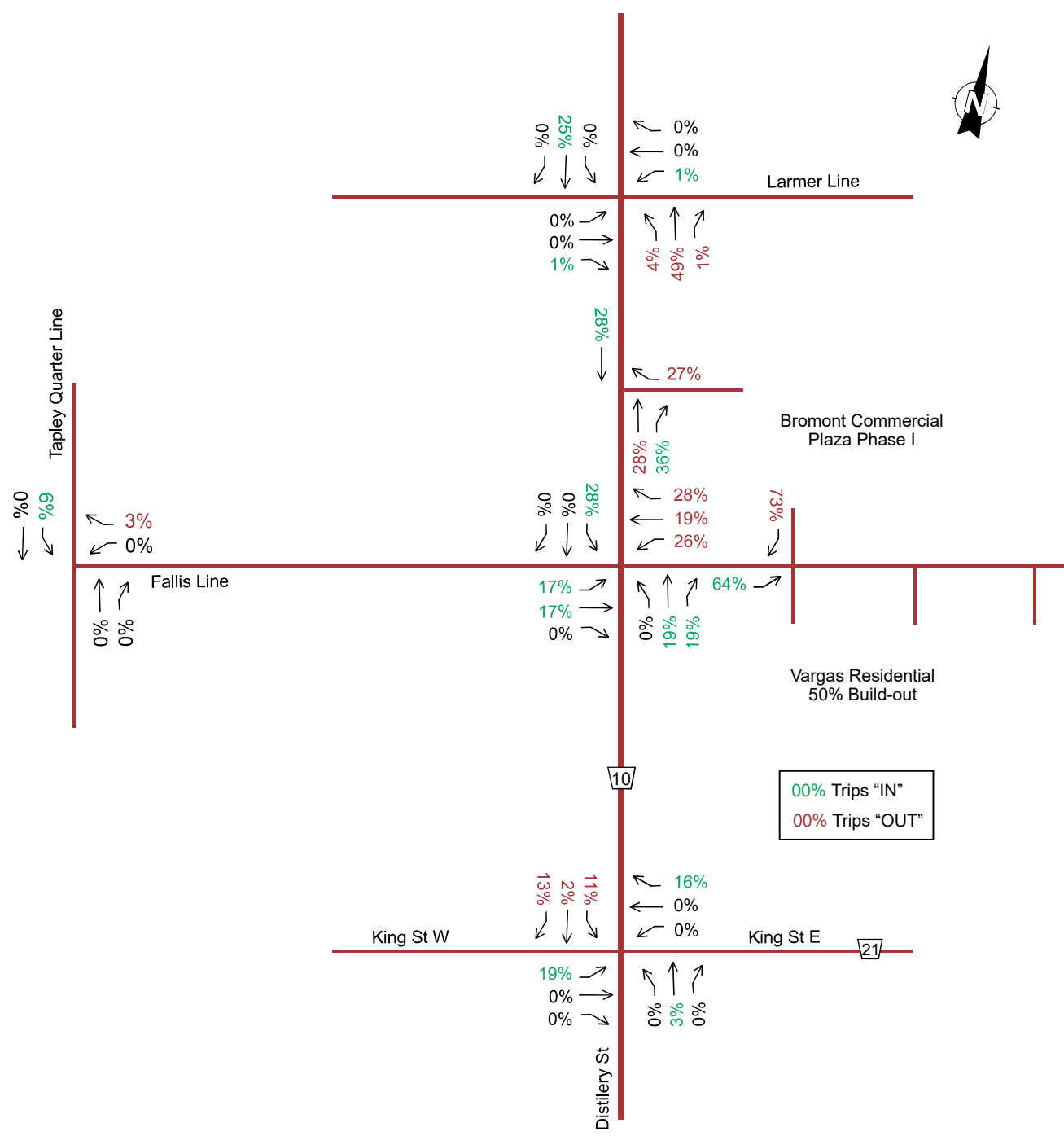
PM Site Generated Trips w/ Diversion 2031 (Bromont Commercial Phase 2 + Vargas Residential 100%)



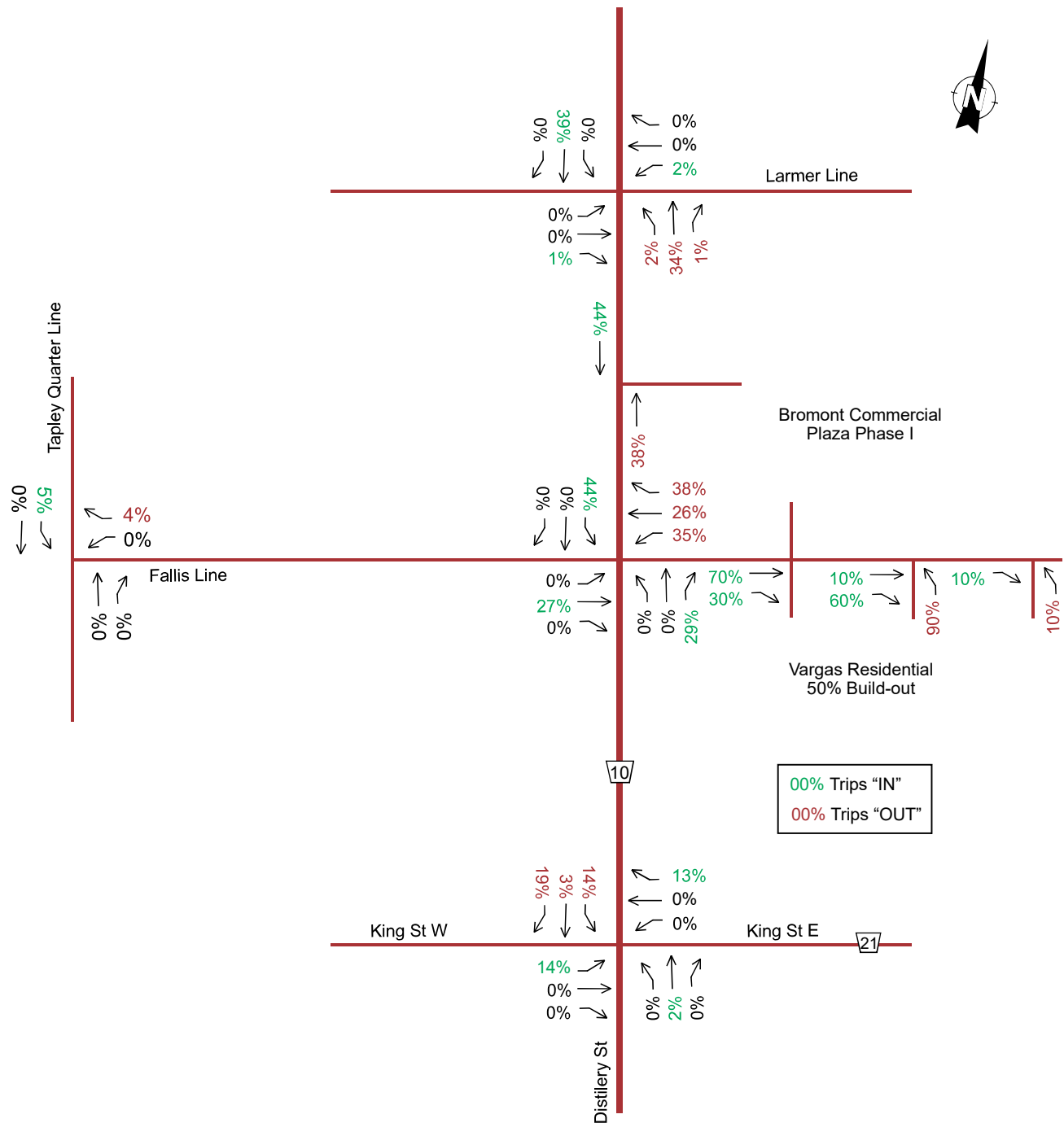
PM Pass-by Trip Distribution 2031 (Bromont Commercial Phase 2)



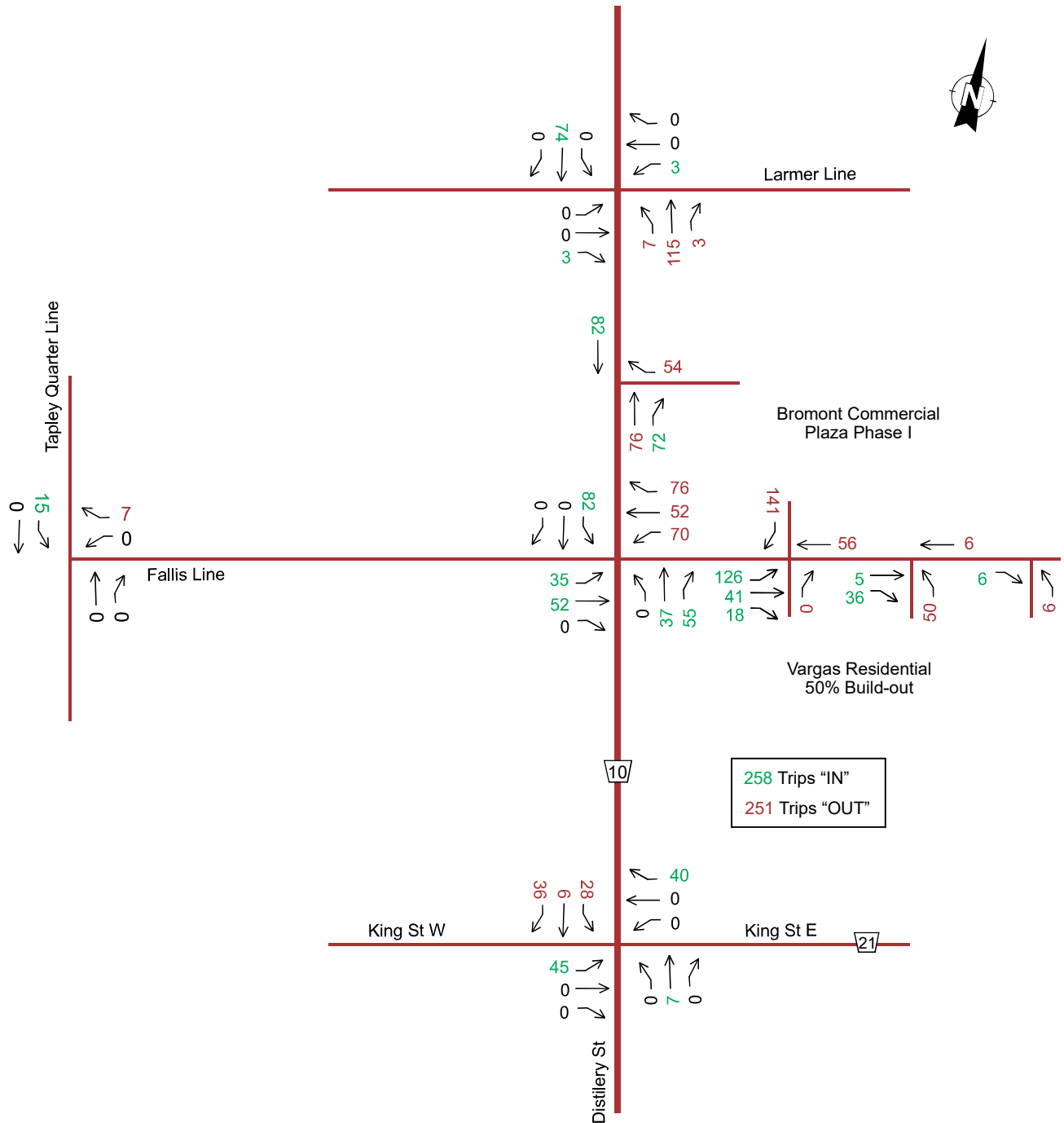
SAT Distribution of Trips for Commercial Plaza - 2026



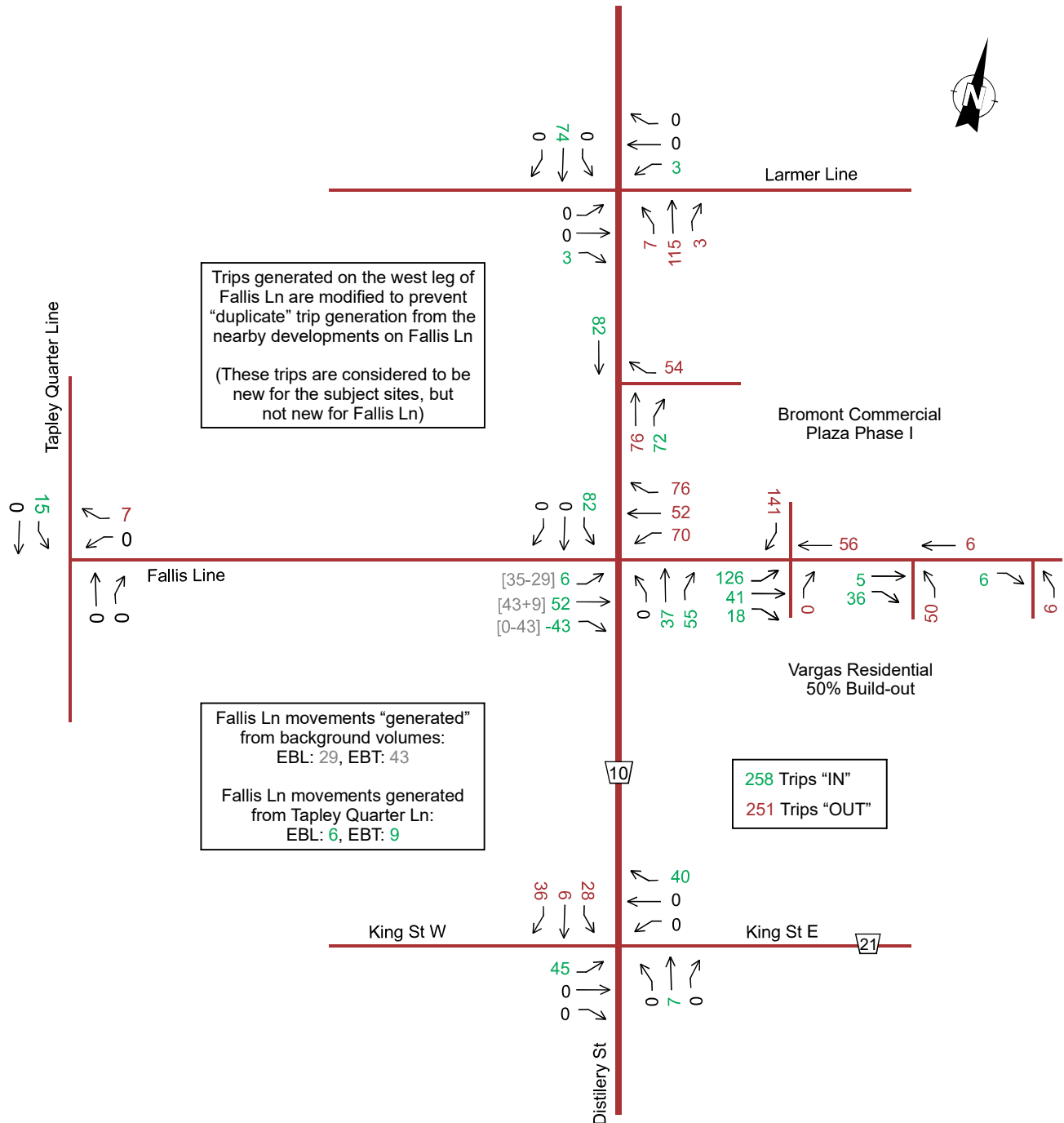
SAT Distribution of Trips for Residential Development - 2026



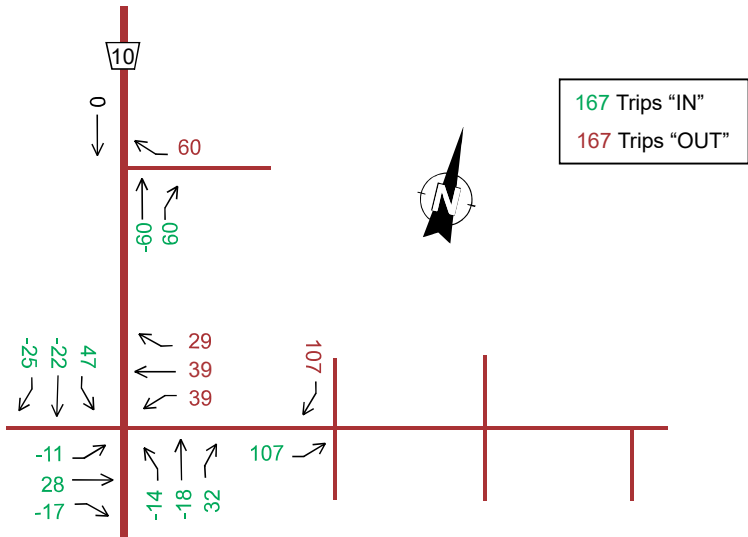
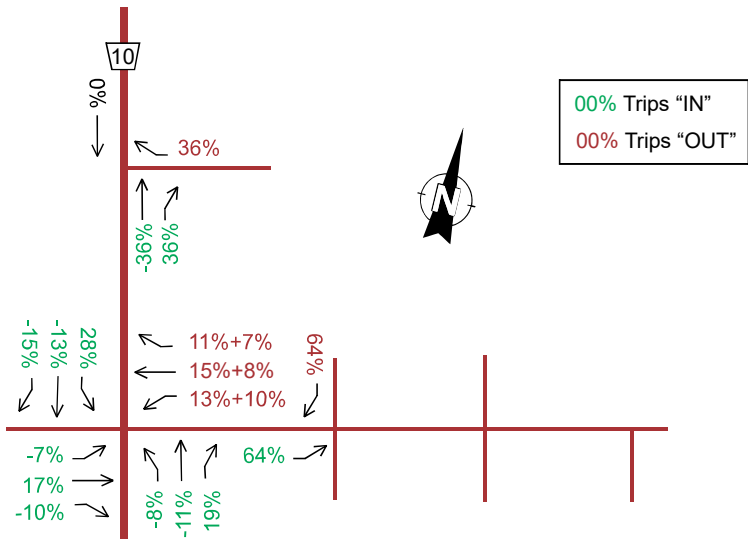
SAT External Site Generated Trips 2026 (Bromont Commercial Phase 1 + Vargas Residential 50%)



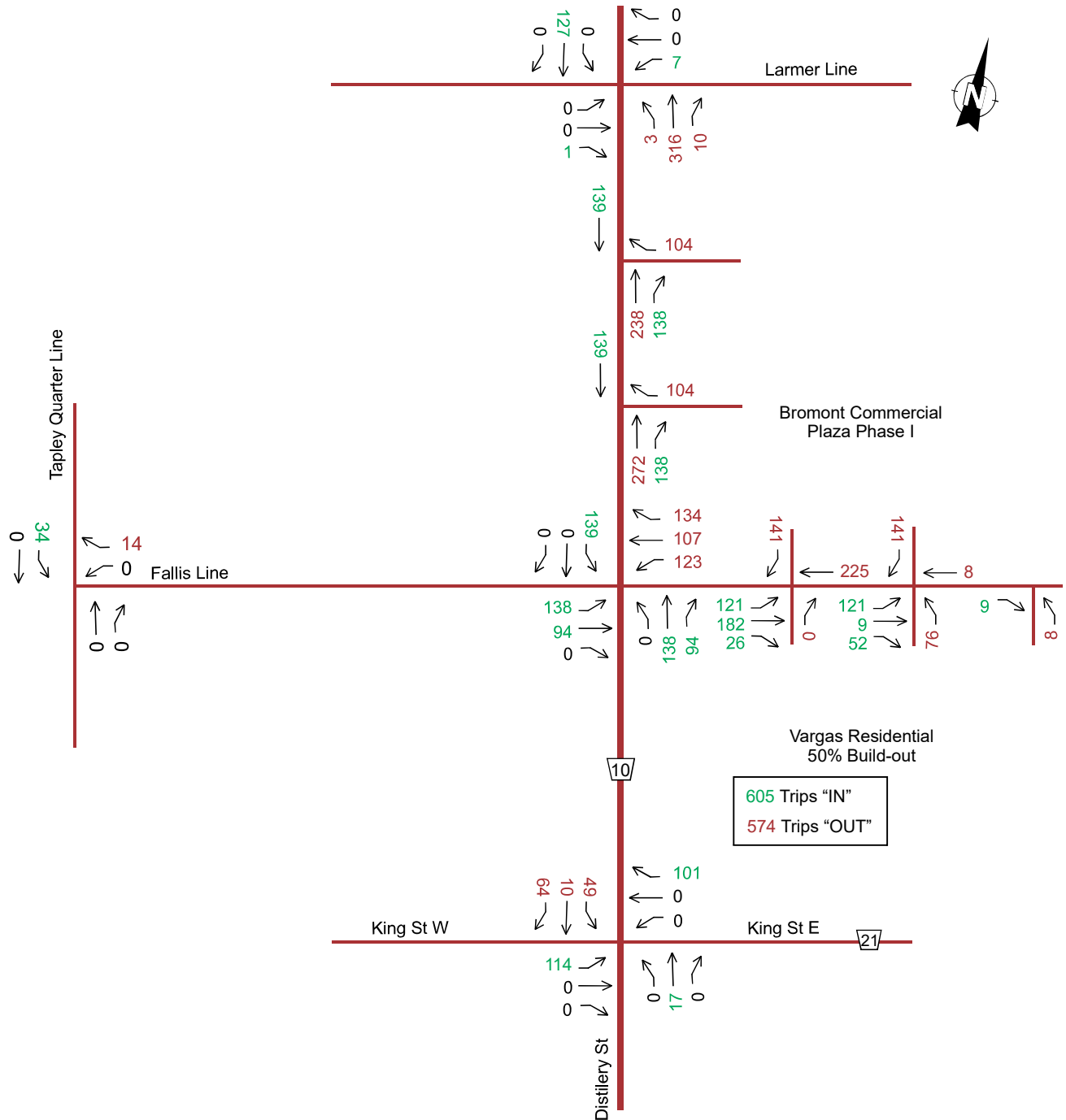
SAT Site Generated Trips w/ Diversion 2026 (Bromont Commercial Phase 1 + Vargas Residential 50%)

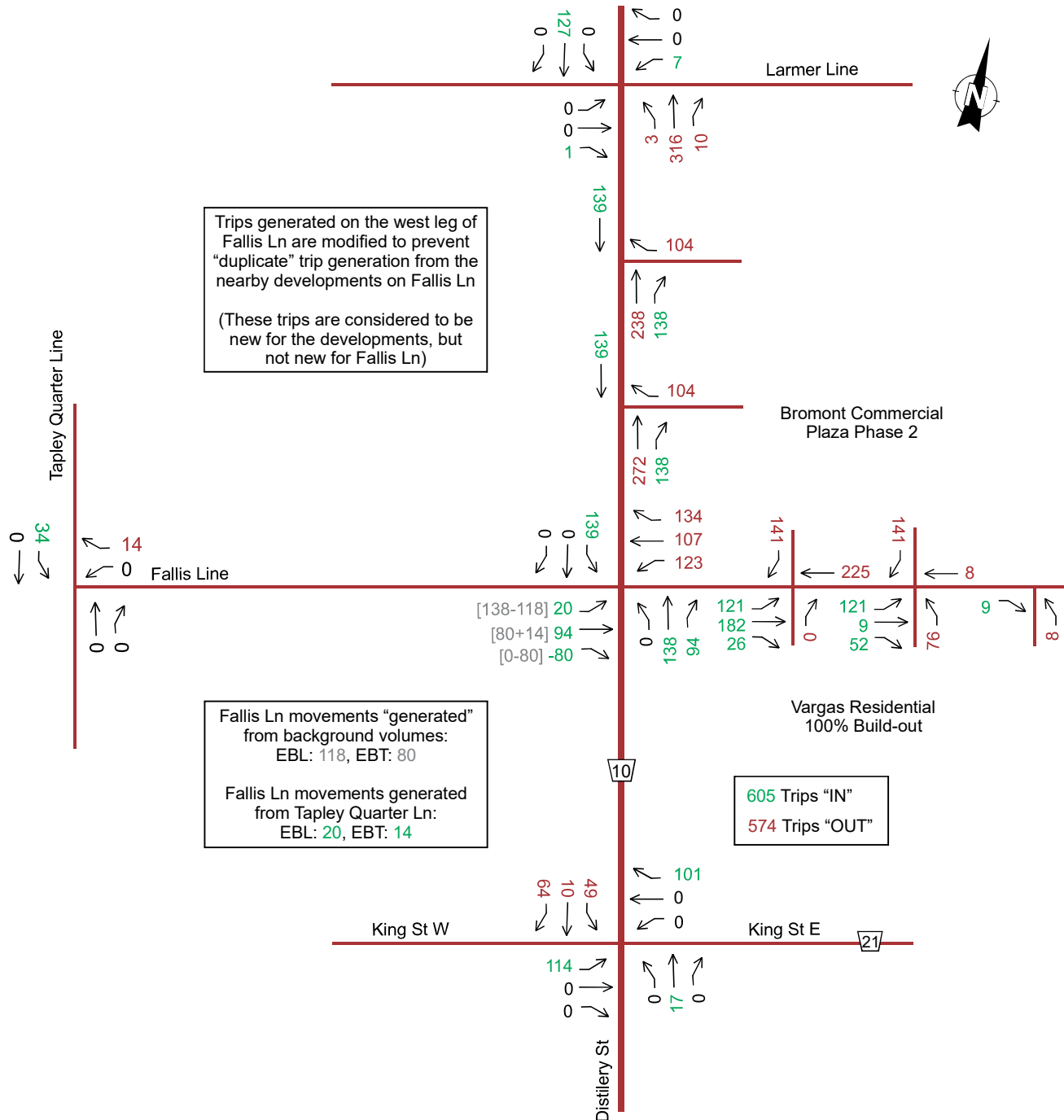


SAT Pass-by Trip Distribution 2026 (Bromont Commercial Phase 1)

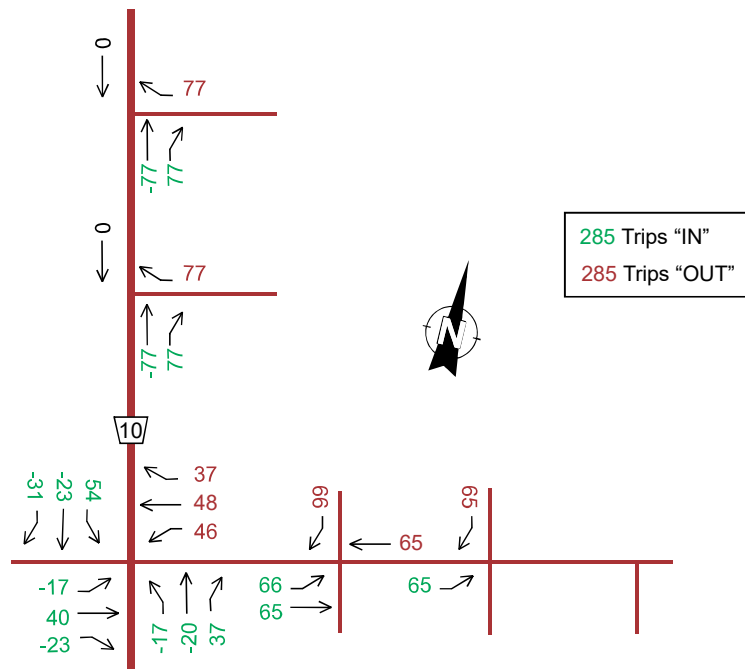
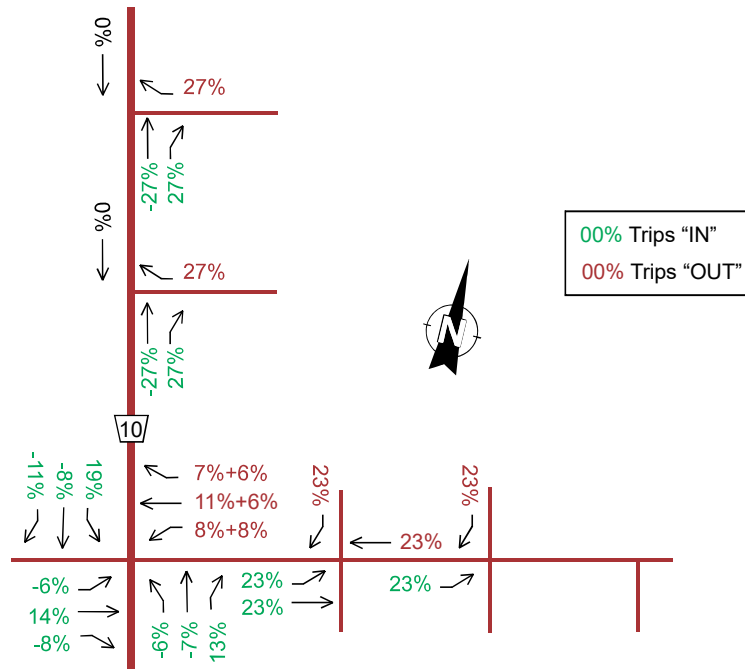


SAT External Site Generated Trips 2031 (Bromont Commercial Phase 2 + Vargas Residential 100%)





SAT Pass-by Trip Distribution 2031 (Bromont Commercial Phase 2)



Appendix J

Synchro Reports

Total Volumes 2026

HCM Signalized intersection Capacity Analysis

6: CR10 & Fallis Line/Fallis Line Driveway

Total Volumes 2026 (upgraded)

AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	176	63	177	79	61	92	163	240	60	79	195	112
Future Volume (vph)	176	63	177	79	61	92	163	240	60	79	195	112
Satd. Flow (prot)	1789	1674	0	1789	1714	0	1789	1883	1601	1789	1883	1601
Flt Permitted	0.409			0.568			0.574			0.577		
Satd. Flow (perm)	770	1674	0	1070	1714	0	1081	1883	1601	1087	1883	1601
Satd. Flow (RTOR)		144			77				93			122
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	191	260	0	86	166	0	177	261	65	86	212	122
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.0	20.7		11.0	20.7		10.0	20.7	20.7	10.0	20.7	20.7
Total Split (s)	20.0	24.0		20.0	24.0		10.0	36.0	36.0	10.0	36.0	36.0
Total Split (%)	22.2%	26.7%		22.2%	26.7%		11.1%	40.0%	40.0%	11.1%	40.0%	40.0%
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	0.0	1.0		0.0	1.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	4.7		3.0	4.7		3.0	4.7	4.7	3.0	4.7	4.7
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effect Green (s)	26.3	15.6		19.8	9.9		40.9	33.6	33.6	40.2	31.5	31.5
Actuated g/C Ratio	0.35	0.21		0.26	0.13		0.54	0.45	0.45	0.53	0.42	0.42
v/c Ratio	0.45	0.57		0.24	0.57		0.27	0.31	0.09	0.13	0.27	0.17
Control Delay	21.1	18.1		18.3	25.6		10.3	17.1	2.3	9.4	17.0	4.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.1	18.1		18.3	25.6		10.3	17.1	2.3	9.4	17.0	4.2
LOS	C	B		B	C		B	B	A	A	B	A
Approach Delay		19.4			23.1			12.8			11.7	
Approach LOS		B			C			B			B	
Queue Length 50th (m)	19.4	14.6		8.2	11.8		10.6	23.9	0.0	4.9	18.8	0.0
Queue Length 95th (m)	33.4	36.9		16.7	30.3		25.7	49.2	4.5	13.8	40.0	10.1
Internal Link Dist (m)		1217.2			71.7			842.8			154.8	
Turn Bay Length (m)	100.0			40.0			150.0		75.0	60.0		75.0
Base Capacity (vph)	498	541		530	497		650	839	764	644	784	738
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0

HCM Signalized intersection Capacity Analysis 6: CR10 & Fallis Line/Fallis Line Driveway

Total Volumes 2026 (upgraded)
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.48		0.16	0.33		0.27	0.31	0.09	0.13	0.27	0.17

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 75.5

Natural Cycle: 65

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.57

Intersection Signal Delay: 15.9

Intersection LOS: B

Intersection Capacity Utilization 53.8%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 6: CR10 & Fallis Line/Fallis Line Driveway

 Ø1	 Ø2	 Ø3	 Ø4
10 s	36 s	20 s	24 s
 Ø5	 Ø6	 Ø7	 Ø8
10 s	36 s	20 s	24 s

HCM Unsignalized intersection Capacity Analysis

3: CR10 & Larmer Line

Total Volumes 2026 (upgraded)
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	3	31	24	3	14	23	547	24	5	366	5
Future Volume (Veh/h)	13	3	31	24	3	14	23	547	24	5	366	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	14	3	34	26	3	15	25	595	26	5	398	5
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1085	1082	400	1104	1071	608	403			621		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1085	1082	400	1104	1071	608	403			621		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	92	99	95	85	99	97	98			99		
cM capacity (veh/h)	182	212	650	173	215	496	1156			960		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	51	44	646	408								
Volume Left	14	26	25	5								
Volume Right	34	15	26	5								
cSH	356	226	1156	960								
Volume to Capacity	0.14	0.19	0.02	0.01								
Queue Length 95th (m)	3.8	5.3	0.5	0.1								
Control Delay (s)	16.8	24.7	0.6	0.2								
Lane LOS	C	C	A	A								
Approach Delay (s)	16.8	24.7	0.6	0.2								
Approach LOS	C	C										
Intersection Summary												
Average Delay			2.1									
Intersection Capacity Utilization			55.0%		ICU Level of Service					B		
Analysis Period (min)			15									

HCM Unsignalized intersection Capacity Analysis 12: Distillery Rd/CR10 & King St (CR21)

Total Volumes 2026 (upgraded)
AM Peak Hour

																			
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR							
Lane Configurations																			
Sign Control		Stop			Stop			Stop			Stop								
Traffic Volume (vph)	124	36	1	7	39	210	0	27	1	196	50	126							
Future Volume (vph)	124	36	1	7	39	210	0	27	1	196	50	126							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92							
Hourly flow rate (vph)	135	39	1	8	42	228	0	29	1	213	54	137							
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2														
Volume Total (vph)	175	278	30	213	191														
Volume Left (vph)	135	8	0	213	0														
Volume Right (vph)	1	228	1	0	137														
Hadj (s)	0.18	-0.45	0.01	0.53	-0.47														
Departure Headway (s)	5.6	4.9	5.9	6.3	5.3														
Degree Utilization, x	0.27	0.37	0.05	0.37	0.28														
Capacity (veh/h)	600	699	534	547	652														
Control Delay (s)	10.7	10.7	9.2	11.7	9.1														
Approach Delay (s)	10.7	10.7	9.2	10.5															
Approach LOS	B	B	A	B															
Intersection Summary																			
Delay				10.6															
Level of Service				B															
Intersection Capacity Utilization				51.7%	ICU Level of Service	A													
Analysis Period (min)				15															

HCM Unsignalized intersection Capacity Analysis 15: Tapley Quarter Line & Fallis Line

Total Volumes 2026 (upgraded)
AM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	2	107	41	2	46	21
Future Volume (Veh/h)	2	107	41	2	46	21
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	116	45	2	50	23
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	169	46			47	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	169	46			47	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	89			97	
cM capacity (veh/h)	795	1015			1541	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	118	47	73			
Volume Left	2	0	50			
Volume Right	116	2	0			
cSH	1010	1700	1541			
Volume to Capacity	0.12	0.03	0.03			
Queue Length 95th (m)	3.0	0.0	0.8			
Control Delay (s)	9.0	0.0	5.2			
Lane LOS	A		A			
Approach Delay (s)	9.0	0.0	5.2			
Approach LOS	A					
Intersection Summary						
Average Delay		6.1				
Intersection Capacity Utilization		23.7%		ICU Level of Service		A
Analysis Period (min)		15				

Intersection: 12: Distillery Rd/CR10 & King St (CR21)

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	LTR	L	TR
Maximum Queue (m)	16.6	16.5	14.9	27.9	23.6
Average Queue (m)	13.5	15.8	8.5	17.3	13.5
95th Queue (m)	19.1	16.7	16.3	27.2	23.1
Link Distance (m)	518.3	494.8	260.2		495.4
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)				12.0	
Storage Blk Time (%)				13	6
Queuing Penalty (veh)				23	12

HCM Signalized intersection Capacity Analysis

6: CR10 & Fallis Line/Fallis Line Driveway

Total Volumes 2026 (upgraded)
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	131	63	111	87	71	88	173	253	76	120	273	178
Future Volume (vph)	131	63	111	87	71	88	173	253	76	120	273	178
Satd. Flow (prot)	1789	1703	0	1789	1727	0	1789	1883	1601	1789	1883	1601
Flt Permitted	0.413			0.639			0.486			0.565		
Satd. Flow (perm)	778	1703	0	1204	1727	0	915	1883	1601	1064	1883	1601
Satd. Flow (RTOR)		91			63				93			193
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	142	189	0	95	173	0	188	275	83	130	297	193
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.0	20.7		11.0	20.7		10.0	20.7	20.7	10.0	20.7	20.7
Total Split (s)	20.0	24.0		20.0	24.0		10.0	36.0	36.0	10.0	36.0	36.0
Total Split (%)	22.2%	26.7%		22.2%	26.7%		11.1%	40.0%	40.0%	11.1%	40.0%	40.0%
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	0.0	1.0		0.0	1.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	4.7		3.0	4.7		3.0	4.7	4.7	3.0	4.7	4.7
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effect Green (s)	24.3	14.2		20.6	10.5		40.9	33.7	33.7	40.2	31.5	31.5
Actuated g/C Ratio	0.33	0.19		0.28	0.14		0.55	0.45	0.45	0.54	0.42	0.42
v/c Ratio	0.37	0.47		0.24	0.58		0.32	0.32	0.11	0.20	0.37	0.24
Control Delay	20.0	19.4		18.3	27.6		10.3	16.7	3.8	9.3	17.7	3.6
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.0	19.4		18.3	27.6		10.3	16.7	3.8	9.3	17.7	3.6
LOS	B	B		B	C		B	B	A	A	B	A
Approach Delay		19.6			24.3			12.5			11.6	
Approach LOS		B			C			B			B	
Queue Length 50th (m)	14.0	12.3		9.1	14.3		11.0	24.8	0.0	7.3	27.1	0.0
Queue Length 95th (m)	25.7	30.6		18.3	33.2		26.2	50.6	7.2	18.8	54.7	12.2
Internal Link Dist (m)		1217.2			71.7			842.8			154.8	
Turn Bay Length (m)	100.0			40.0			150.0		75.0	60.0		75.0
Base Capacity (vph)	495	511		541	496		585	851	775	643	796	788
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0

HCM Signalized intersection Capacity Analysis 6: CR10 & Fallis Line/Fallis Line Driveway

Total Volumes 2026 (upgraded)
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.37		0.18	0.35		0.32	0.32	0.11	0.20	0.37	0.24

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 74.4

Natural Cycle: 65

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 15.3

Intersection LOS: B

Intersection Capacity Utilization 54.8%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 6: CR10 & Fallis Line/Fallis Line Driveway

 Ø1	 Ø2	 Ø3	 Ø4
10 s	36 s	20 s	24 s
 Ø5	 Ø6	 Ø7	 Ø8
10 s	36 s	20 s	24 s

HCM Unsignalized intersection Capacity Analysis

3: CR10 & Larmer Line

Total Volumes 2026 (upgraded)
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	6	27	16	5	3	19	478	17	12	591	15
Future Volume (Veh/h)	12	6	27	16	5	3	19	478	17	12	591	15
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	7	29	17	5	3	21	520	18	13	642	16
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None								None			
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1252	1256	650	1280	1255	529	658			538		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1252	1256	650	1280	1255	529	658			538		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	91	96	94	87	97	99	98			99		
cM capacity (veh/h)	141	165	469	126	166	550	930			1030		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	49	25	559	671								
Volume Left	13	17	21	13								
Volume Right	29	3	18	16								
cSH	249	147	930	1030								
Volume to Capacity	0.20	0.17	0.02	0.01								
Queue Length 95th (m)	5.4	4.5	0.5	0.3								
Control Delay (s)	22.9	34.5	0.6	0.3								
Lane LOS	C	D	A	A								
Approach Delay (s)	22.9	34.5	0.6	0.3								
Approach LOS	C	D										
Intersection Summary												
Average Delay	2.0											
Intersection Capacity Utilization	46.7%			ICU Level of Service					A			
Analysis Period (min)	15											

HCM Unsignalized intersection Capacity Analysis 12: Distillery Rd/CR10 & King St (CR21)

Total Volumes 2026 (upgraded)
PM Peak Hour

																			
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR							
Lane Configurations																			
Sign Control		Stop			Stop			Stop			Stop								
Traffic Volume (vph)	167	71	8	7	70	230	2	38	16	230	27	138							
Future Volume (vph)	167	71	8	7	70	230	2	38	16	230	27	138							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92							
Hourly flow rate (vph)	182	77	9	8	76	250	2	41	17	250	29	150							
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2														
Volume Total (vph)	268	334	60	250	179														
Volume Left (vph)	182	8	2	250	0														
Volume Right (vph)	9	250	17	0	150														
Hadj (s)	0.15	-0.41	-0.13	0.53	-0.55														
Departure Headway (s)	6.0	5.4	6.4	6.8	5.7														
Degree Utilization, x	0.45	0.50	0.11	0.48	0.29														
Capacity (veh/h)	566	635	467	499	592														
Control Delay (s)	13.7	13.5	10.2	14.7	9.8														
Approach Delay (s)	13.7	13.5	10.2	12.7															
Approach LOS	B	B	B	B															
Intersection Summary																			
Delay				13.0															
Level of Service				B															
Intersection Capacity Utilization				61.1%	ICU Level of Service	B													
Analysis Period (min)				15															

HCM Unsignalized intersection Capacity Analysis

15: Tapley Quarter Line & Fallis Line

Total Volumes 2026 (upgraded)
PM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	55	44	2	124	62
Future Volume (Veh/h)	1	55	44	2	124	62
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	60	48	2	135	67
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	386	49			50	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	386	49			50	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	94			91	
cM capacity (veh/h)	563	1011			1537	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	61	50	202			
Volume Left	1	0	135			
Volume Right	60	2	0			
cSH	998	1700	1537			
Volume to Capacity	0.06	0.03	0.09			
Queue Length 95th (m)	1.5	0.0	2.2			
Control Delay (s)	8.8	0.0	5.3			
Lane LOS	A		A			
Approach Delay (s)	8.8	0.0	5.3			
Approach LOS	A					
Intersection Summary						
Average Delay			5.1			
Intersection Capacity Utilization			26.9%	ICU Level of Service	A	
Analysis Period (min)			15			

Queuing and Blocking Report

Baseline

07-20-2023

Intersection: 12: Distillery Rd/CR10 & King St (CR21)

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	LTR	L	TR
Maximum Queue (m)	23.9	29.2	23.7	16.7	16.4
Average Queue (m)	17.9	21.4	12.1	12.2	11.7
95th Queue (m)	22.9	29.0	21.7	18.0	17.1
Link Distance (m)	518.3	494.8	260.2		495.4
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)				12.0	
Storage Blk Time (%)				7	8
Queuing Penalty (veh)				12	18

HCM Signalized intersection Capacity Analysis

6: CR10 & Fallis Line/Fallis Line Driveway

Total Volumes 2026 (upgraded)
SAT Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	144	80	130	109	91	105	154	242	87	129	154	173
Future Volume (vph)	144	80	130	109	91	105	154	242	87	129	154	173
Satd. Flow (prot)	1789	1708	0	1789	1733	0	1789	1883	1601	1789	1883	1601
Flt Permitted	0.358			0.555			0.651			0.537		
Satd. Flow (perm)	674	1708	0	1045	1733	0	1226	1883	1601	1011	1883	1601
Satd. Flow (RTOR)		83			59				95			188
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	157	228	0	118	213	0	167	263	95	140	167	188
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.0	20.7		11.0	20.7		10.0	20.7	20.7	10.0	20.7	20.7
Total Split (s)	20.0	24.0		20.0	24.0		10.0	36.0	36.0	10.0	36.0	36.0
Total Split (%)	22.2%	26.7%		22.2%	26.7%		11.1%	40.0%	40.0%	11.1%	40.0%	40.0%
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	0.0	1.0		0.0	1.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	4.7		3.0	4.7		3.0	4.7	4.7	3.0	4.7	4.7
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effect Green (s)	26.4	16.0		23.1	12.3		40.3	31.5	31.5	40.3	31.5	31.5
Actuated g/C Ratio	0.34	0.21		0.30	0.16		0.52	0.41	0.41	0.52	0.41	0.41
v/c Ratio	0.41	0.54		0.29	0.65		0.24	0.34	0.13	0.23	0.22	0.25
Control Delay	20.1	23.1		18.4	31.6		10.7	18.7	4.8	10.7	17.3	3.9
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.1	23.1		18.4	31.6		10.7	18.7	4.8	10.7	17.3	3.9
LOS	C	C		B	C		B	B	A	B	B	A
Approach Delay		21.9			26.9			13.6			10.4	
Approach LOS		C			C			B			B	
Queue Length 50th (m)	15.6	19.0		11.5	20.7		10.6	25.2	0.0	8.8	15.1	0.0
Queue Length 95th (m)	27.8	40.7		21.6	43.0		25.9	51.9	9.2	22.1	33.6	12.6
Internal Link Dist (m)		1217.2			71.7			842.8			154.8	
Turn Bay Length (m)	100.0			40.0			150.0		75.0	60.0		75.0
Base Capacity (vph)	489	502		538	482		694	772	713	601	772	767
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0

HCM Signalized intersection Capacity Analysis 6: CR10 & Fallis Line/Fallis Line Driveway

Total Volumes 2026 (upgraded)
SAT Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.45		0.22	0.44		0.24	0.34	0.13	0.23	0.22	0.25

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 76.8

Natural Cycle: 65

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 17.0

Intersection LOS: B

Intersection Capacity Utilization 53.6%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 6: CR10 & Fallis Line/Fallis Line Driveway

 Ø1	 Ø2	 Ø3	 Ø4
10 s	36 s	20 s	24 s
 Ø5	 Ø6	 Ø7	 Ø8
10 s	36 s	20 s	24 s

HCM Unsignalized intersection Capacity Analysis

3: CR10 & Larmer Line

Total Volumes 2026 (upgraded)
SAT Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	5	20	26	7	2	37	527	15	2	543	12
Future Volume (Veh/h)	6	5	20	26	7	2	37	527	15	2	543	12
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	5	22	28	8	2	40	573	16	2	590	13
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1268	1270	596	1286	1268	581	603			589		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1268	1270	596	1286	1268	581	603			589		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	95	97	96	78	95	100	96			100		
cM capacity (veh/h)	135	161	503	128	161	514	975			986		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	34	38	629	605								
Volume Left	7	28	40	2								
Volume Right	22	2	16	13								
cSH	268	139	975	986								
Volume to Capacity	0.13	0.27	0.04	0.00								
Queue Length 95th (m)	3.3	7.9	1.0	0.0								
Control Delay (s)	20.3	40.3	1.1	0.1								
Lane LOS	C	E	A	A								
Approach Delay (s)	20.3	40.3	1.1	0.1								
Approach LOS	C	E										
Intersection Summary												
Average Delay			2.2									
Intersection Capacity Utilization			68.8%		ICU Level of Service					C		
Analysis Period (min)			15									

HCM Unsignalized intersection Capacity Analysis 12: Distillery Rd/CR10 & King St (CR21)

Total Volumes 2026 (upgraded)
SAT Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	217	65	21	11	83	191	6	36	15	199	42	260
Future Volume (vph)	217	65	21	11	83	191	6	36	15	199	42	260
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	236	71	23	12	90	208	7	39	16	216	46	283
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2							
Volume Total (vph)	330	310	62	216	329							
Volume Left (vph)	236	12	7	216	0							
Volume Right (vph)	23	208	16	0	283							
Hadj (s)	0.14	-0.36	-0.10	0.53	-0.57							
Departure Headway (s)	6.3	5.8	7.0	7.1	6.0							
Degree Utilization, x	0.57	0.50	0.12	0.43	0.55							
Capacity (veh/h)	551	581	428	485	569							
Control Delay (s)	17.3	14.6	10.9	14.1	14.8							
Approach Delay (s)	17.3	14.6	10.9	14.5								
Approach LOS	C	B	B	B								
Intersection Summary												
Delay			15.1									
Level of Service			C									
Intersection Capacity Utilization			61.7%	ICU Level of Service					B			
Analysis Period (min)			15									

HCM Unsignalized intersection Capacity Analysis 15: Tapley Quarter Line & Fallis Line

Total Volumes 2026 (upgraded)
SAT Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	3	50	41	2	70	42
Future Volume (Veh/h)	3	50	41	2	70	42
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	54	45	2	76	46
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	244	46			47	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	244	46			47	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			95	
cM capacity (veh/h)	708	1015			1541	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	57	47	122			
Volume Left	3	0	76			
Volume Right	54	2	0			
cSH	992	1700	1541			
Volume to Capacity	0.06	0.03	0.05			
Queue Length 95th (m)	1.4	0.0	1.2			
Control Delay (s)	8.8	0.0	4.8			
Lane LOS	A		A			
Approach Delay (s)	8.8	0.0	4.8			
Approach LOS	A					
Intersection Summary						
Average Delay			4.8			
Intersection Capacity Utilization			22.8%	ICU Level of Service	A	
Analysis Period (min)			15			

Intersection: 12: Distillery Rd/CR10 & King St (CR21)

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	LTR	L	TR
Maximum Queue (m)	22.5	16.6	16.4	21.3	35.3
Average Queue (m)	17.8	15.0	11.7	13.2	20.2
95th Queue (m)	21.7	19.7	17.0	21.5	32.7
Link Distance (m)	518.3	494.8	260.2		495.4
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)				12.0	
Storage Blk Time (%)				9	15
Queuing Penalty (veh)				27	29

Appendix K

Synchro Reports

Total Volumes 2031

HCM Signalized Intersection Capacity Analysis

3: CR10 & Larmer Line

Total Volumes 2031 (upgraded)

AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	5	44	41	9	15	96	854	44	6	590	112
Future Volume (vph)	33	5	44	41	9	15	96	854	44	6	590	112
Satd. Flow (prot)	1789	1627	0	1789	1710	0	1789	1883	1601	1789	1883	1601
Flt Permitted	0.740			0.584			0.296			0.199		
Satd. Flow (perm)	1394	1627	0	1100	1710	0	557	1883	1601	375	1883	1601
Satd. Flow (RTOR)		48			16				93			122
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	53	0	45	26	0	104	928	48	7	641	122
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.0	20.7		11.0	20.7		11.0	20.7	20.7	11.0	20.7	20.7
Total Split (s)	11.0	20.7		11.0	20.7		11.0	47.3	47.3	11.0	47.3	47.3
Total Split (%)	12.2%	23.0%		12.2%	23.0%		12.2%	52.6%	52.6%	12.2%	52.6%	52.6%
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	0.0	1.0		0.0	1.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	4.7		3.0	4.7		3.0	4.7	4.7	3.0	4.7	4.7
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effct Green (s)	13.7	10.2		14.5	12.2		57.9	57.0	57.0	55.4	49.3	49.3
Actuated g/C Ratio	0.18	0.14		0.19	0.16		0.77	0.76	0.76	0.74	0.66	0.66
v/c Ratio	0.12	0.20		0.16	0.09		0.19	0.65	0.04	0.02	0.52	0.11
Control Delay	24.2	14.4		24.7	20.8		5.4	14.2	0.6	5.2	13.9	2.6
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.2	14.4		24.7	20.8		5.4	14.2	0.6	5.2	13.9	2.6
LOS	C	B		C	C		A	B	A	A	B	A
Approach Delay		18.4			23.3			12.7			12.0	
Approach LOS		B			C			B			B	
Queue Length 50th (m)	4.3	0.7		5.4	1.2		5.2	92.4	0.0	0.3	71.2	0.0
Queue Length 95th (m)	11.2	10.5		13.0	8.5		10.4	#216.8	1.3	1.6	109.4	7.6
Internal Link Dist (m)		122.6			269.3			709.3			158.9	
Turn Bay Length (m)	50.0			25.0			60.0		75.0	60.0		75.0
Base Capacity (vph)	311	392		294	403		564	1431	1239	435	1238	1094
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.14		0.15	0.06		0.18	0.65	0.04	0.02	0.52	0.11

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 75

Natural Cycle: 90

HCM Signalized Intersection Capacity Analysis

3: CR10 & Larmer Line

Total Volumes 2031 (upgraded)
AM Peak Hour

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 13.1

Intersection LOS: B

Intersection Capacity Utilization 70.9%

ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: CR10 & Larmer Line

 Ø1	 Ø2	 Ø3	 Ø4
11 s	47.3 s	11 s	20.7 s
 Ø5	 Ø6	 Ø7	 Ø8
11 s	47.3 s	11 s	20.7 s

HCM Signalized Intersection Capacity Analysis

6: CR10 & Fallis Line/Fallis Line Driveway

Total Volumes 2031 (upgraded)

AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	323	99	269	109	84	157	237	392	94	137	229	162
Future Volume (vph)	323	99	269	109	84	157	237	392	94	137	229	162
Satd. Flow (prot)	1789	1676	0	1789	1699	0	1789	1883	1601	1789	1883	1601
Flt Permitted	0.242			0.357			0.534			0.326		
Satd. Flow (perm)	456	1676	0	672	1699	0	1006	1883	1601	614	1883	1601
Satd. Flow (RTOR)		138			96				102			176
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	351	400	0	118	262	0	258	426	102	149	249	176
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.0	20.7		11.0	20.7		10.0	20.7	20.7	10.0	20.7	20.7
Total Split (s)	20.0	24.0		20.0	24.0		10.0	36.0	36.0	10.0	36.0	36.0
Total Split (%)	22.2%	26.7%		22.2%	26.7%		11.1%	40.0%	40.0%	11.1%	40.0%	40.0%
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	0.0	1.0		0.0	1.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	4.7		3.0	4.7		3.0	4.7	4.7	3.0	4.7	4.7
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effct Green (s)	33.9	22.4		24.1	13.4		40.2	31.5	31.5	40.2	31.5	31.5
Actuated g/C Ratio	0.41	0.27		0.29	0.16		0.48	0.38	0.38	0.48	0.38	0.38
v/c Ratio	0.80	0.73		0.37	0.74		0.47	0.60	0.15	0.38	0.35	0.25
Control Delay	33.1	27.2		19.2	34.0		16.4	26.3	5.1	14.9	21.6	4.4
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.1	27.2		19.2	34.0		16.4	26.3	5.1	14.9	21.6	4.4
LOS	C	C		B	C		B	C	A	B	C	A
Approach Delay		30.0			29.4			20.3			14.6	
Approach LOS		C			C			C			B	
Queue Length 50th (m)	39.7	38.9		11.5	25.4		22.7	55.0	0.0	12.2	28.7	0.0
Queue Length 95th (m)	#72.1	73.7		21.4	49.9		42.2	92.6	9.9	25.0	51.6	12.8
Internal Link Dist (m)		462.5			78.6			842.8			154.8	
Turn Bay Length (m)	100.0			40.0			150.0		75.0	60.0		75.0
Base Capacity (vph)	459	556		487	469		552	712	669	396	712	715
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.76	0.72		0.24	0.56		0.47	0.60	0.15	0.38	0.35	0.25

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 83.2

Natural Cycle: 65

HCM Signalized Intersection Capacity Analysis 6: CR10 & Fallis Line/Fallis Line Driveway

Total Volumes 2031 (upgraded)
AM Peak Hour

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 23.3

Intersection LOS: C

Intersection Capacity Utilization 74.7%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: CR10 & Fallis Line/Fallis Line Driveway

 Ø1	 Ø2	 Ø3	 Ø4
10 s	36 s	20 s	24 s
 Ø5	 Ø6	 Ø7	 Ø8
10 s	36 s	20 s	24 s

HCM Signalized Intersection Capacity Analysis

12: Distillery Rd/CR10 & King St (CR21)

Total Volumes 2031 (upgraded)
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	208	40	1	8	43	354	0	48	1	287	75	186
Future Volume (vph)	208	40	1	8	43	354	0	48	1	287	75	186
Satd. Flow (prot)	1789	1878	0	0	1868	1601	0	1878	0	1789	1682	0
Flt Permitted	0.572				0.956					0.647		
Satd. Flow (perm)	1077	1878	0	0	1801	1601	0	1878	0	1219	1682	0
Satd. Flow (RTOR)		1				385		1			182	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	226	44	0	0	56	385	0	53	0	312	284	0
Turn Type	pm+pt	NA		Perm	NA	Perm		NA		pm+pt	NA	
Protected Phases	7	4			8			2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		8	8	8	2	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	10.0		10.0	10.0	10.0	10.0	10.0		7.0	10.0	
Minimum Split (s)	11.0	20.7		20.7	20.7	20.7	20.7	20.7		11.2	20.7	
Total Split (s)	16.0	44.0		28.0	28.0	28.0	25.0	25.0		21.0	46.0	
Total Split (%)	17.8%	48.9%		31.1%	31.1%	31.1%	27.8%	27.8%		23.3%	51.1%	
Yellow Time (s)	3.0	3.7		3.7	3.7	3.7	3.7	3.7		3.0	3.7	
All-Red Time (s)	0.0	1.0		1.0	1.0	1.0	1.0	1.0		0.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)	3.0	4.7			4.7	4.7		4.7		3.0	4.7	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes		
Recall Mode	None	None		None	None	None	Max	Max		None	Max	
Act Effct Green (s)	28.5	26.8			11.6	11.6		25.7		43.1	41.4	
Actuated g/C Ratio	0.37	0.35			0.15	0.15		0.33		0.56	0.53	
v/c Ratio	0.45	0.07			0.21	0.68		0.09		0.41	0.29	
Control Delay	20.6	16.6			31.0	10.2		21.3		11.8	5.0	
Queue Delay	0.0	0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay	20.6	16.6			31.0	10.2		21.3		11.8	5.0	
LOS	C	B			C	B		C		B	A	
Approach Delay		20.0			12.8			21.3			8.6	
Approach LOS		B			B			C			A	
Queue Length 50th (m)	23.5	4.2			7.4	0.0		5.1		22.1	6.7	
Queue Length 95th (m)	39.3	10.3			16.8	21.8		15.4		45.5	21.8	
Internal Link Dist (m)		501.4			478.0			241.5			482.0	
Turn Bay Length (m)	75.0					35.0				65.0		
Base Capacity (vph)	514	953			542	750		622		809	982	
Starvation Cap Reductn	0	0			0	0		0		0	0	
Spillback Cap Reductn	0	0			0	0		0		0	0	
Storage Cap Reductn	0	0			0	0		0		0	0	
Reduced v/c Ratio	0.44	0.05			0.10	0.51		0.09		0.39	0.29	
Intersection Summary												
Cycle Length: 90												
Actuated Cycle Length: 77.6												
Natural Cycle: 65												

HCM Signalized Intersection Capacity Analysis 12: Distillery Rd/CR10 & King St (CR21)

Total Volumes 2031 (upgraded)
AM Peak Hour

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.68

Intersection Signal Delay: 12.7

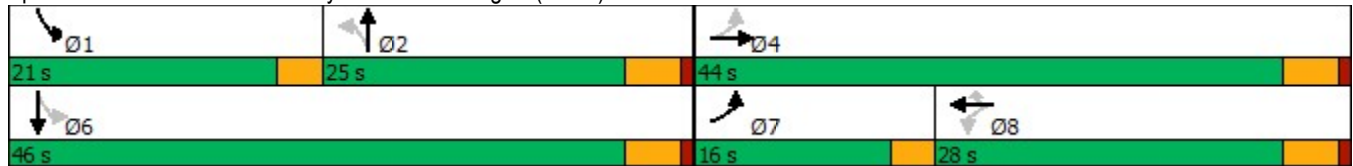
Intersection LOS: B

Intersection Capacity Utilization 53.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 12: Distillery Rd/CR10 & King St (CR21)



HCM Unsignalized Intersection Capacity Analysis 15: Tapley Quarter Line & Fallis Line

Total Volumes 2031 (upgraded)
AM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	3	155	50	3	67	26
Future Volume (Veh/h)	3	155	50	3	67	26
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	168	54	3	73	28
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	230	56			57	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	230	56			57	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	83			95	
cM capacity (veh/h)	722	1003			1528	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	171	57	101			
Volume Left	3	0	73			
Volume Right	168	3	0			
cSH	996	1700	1528			
Volume to Capacity	0.17	0.03	0.05			
Queue Length 95th (m)	4.7	0.0	1.1			
Control Delay (s)	9.4	0.0	5.5			
Lane LOS	A		A			
Approach Delay (s)	9.4	0.0	5.5			
Approach LOS	A					
Intersection Summary						
Average Delay		6.6				
Intersection Capacity Utilization		28.2%		ICU Level of Service		A
Analysis Period (min)		15				

Intersection: 12: Distillery Rd/CR10 & King St (CR21)

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	LTR	L	TR
Maximum Queue (m)	16.4	49.5	9.3	16.6	16.6
Average Queue (m)	13.2	31.4	9.2	15.0	16.1
95th Queue (m)	18.6	54.6	9.4	19.7	16.6
Link Distance (m)	518.3	494.8	260.2		495.4
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)				12.0	
Storage Blk Time (%)				7	12
Queuing Penalty (veh)				18	33

HCM Signalized Intersection Capacity Analysis

3: CR10 & Larmer Line

Total Volumes 2031 (upgraded)

PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	11	61	28	7	4	47	850	33	13	866	46
Future Volume (vph)	98	11	61	28	7	4	47	850	33	13	866	46
Satd. Flow (prot)	1789	1644	0	1789	1789	0	1789	1883	1601	1789	1883	1601
Flt Permitted	0.833						0.118			0.173		
Satd. Flow (perm)	1569	1644	0	1883	1789	0	222	1883	1601	326	1883	1601
Satd. Flow (RTOR)		66			4				93			93
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	107	78	0	30	12	0	51	924	36	14	941	50
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.0	20.7		11.0	20.7		11.0	20.7	20.7	11.0	20.7	20.7
Total Split (s)	11.0	20.7		11.0	20.7		11.0	47.3	47.3	11.0	47.3	47.3
Total Split (%)	12.2%	23.0%		12.2%	23.0%		12.2%	52.6%	52.6%	12.2%	52.6%	52.6%
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	0.0	1.0		0.0	1.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	4.7		3.0	4.7		3.0	4.7	4.7	3.0	4.7	4.7
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effct Green (s)	14.0	10.1		9.4	10.1		54.8	52.9	52.9	53.5	49.0	49.0
Actuated g/C Ratio	0.19	0.14		0.13	0.14		0.74	0.72	0.72	0.73	0.67	0.67
v/c Ratio	0.32	0.28		0.13	0.05		0.16	0.68	0.03	0.04	0.75	0.05
Control Delay	27.4	14.6		29.3	27.4		5.4	14.4	0.1	4.8	19.9	0.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.4	14.6		29.3	27.4		5.4	14.4	0.1	4.8	19.9	0.7
LOS	C	B		C	C		A	B	A	A	B	A
Approach Delay		22.0			28.7			13.5			18.8	
Approach LOS		C			C			B			B	
Queue Length 50th (m)	13.1	1.4		3.8	1.0		1.3	51.4	0.0	0.4	93.1	0.0
Queue Length 95th (m)	25.6	13.6		9.6	5.8		5.9	#215.6	0.0	2.4	#223.1	1.5
Internal Link Dist (m)		122.6			269.3			709.3			158.9	
Turn Bay Length (m)	50.0			25.0			60.0		75.0	60.0		75.0
Base Capacity (vph)	340	413		249	397		338	1354	1177	400	1254	1097
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.19		0.12	0.03		0.15	0.68	0.03	0.04	0.75	0.05

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 73.6

Natural Cycle: 90

HCM Signalized Intersection Capacity Analysis

3: CR10 & Larmer Line

Total Volumes 2031 (upgraded)
PM Peak Hour

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 16.8

Intersection LOS: B

Intersection Capacity Utilization 65.5%

ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: CR10 & Larmer Line

 Ø1	 Ø2	 Ø3	 Ø4
11 s	47.3 s	11 s	20.7 s
 Ø5	 Ø6	 Ø7	 Ø8
11 s	47.3 s	11 s	20.7 s

HCM Signalized Intersection Capacity Analysis

6: CR10 & Fallis Line/Fallis Line Driveway

Total Volumes 2031 (upgraded)
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	83	173	119	109	140	277	363	97	186	349	313
Future Volume (vph)	220	83	173	119	109	140	277	363	97	186	349	313
Satd. Flow (prot)	1789	1693	0	1789	1725	0	1789	1883	1601	1789	1883	1601
Flt Permitted	0.260			0.559			0.384			0.366		
Satd. Flow (perm)	490	1693	0	1053	1725	0	723	1883	1601	689	1883	1601
Satd. Flow (RTOR)		106			66				105			340
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	239	278	0	129	270	0	301	395	105	202	379	340
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.0	20.7		11.0	20.7		10.0	20.7	20.7	10.0	20.7	20.7
Total Split (s)	20.0	24.0		20.0	24.0		10.0	36.0	36.0	10.0	36.0	36.0
Total Split (%)	22.2%	26.7%		22.2%	26.7%		11.1%	40.0%	40.0%	11.1%	40.0%	40.0%
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	0.0	1.0		0.0	1.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	4.7		3.0	4.7		3.0	4.7	4.7	3.0	4.7	4.7
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effct Green (s)	32.8	21.0		25.5	14.5		40.3	31.5	31.5	40.3	31.5	31.5
Actuated g/C Ratio	0.40	0.26		0.31	0.18		0.49	0.38	0.38	0.49	0.38	0.38
v/c Ratio	0.58	0.54		0.31	0.75		0.67	0.55	0.15	0.47	0.52	0.41
Control Delay	22.7	21.2		17.8	38.3		23.8	24.8	5.0	16.3	24.3	4.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.7	21.2		17.8	38.3		23.8	24.8	5.0	16.3	24.3	4.2
LOS	C	C		B	D		C	C	A	B	C	A
Approach Delay		21.9			31.7			21.8			15.1	
Approach LOS		C			C			C			B	
Queue Length 50th (m)	25.1	23.2		12.6	30.5		25.8	48.0	0.0	16.3	45.6	0.0
Queue Length 95th (m)	40.9	48.3		23.1	57.7		#56.2	84.7	10.1	33.2	80.8	16.9
Internal Link Dist (m)		462.5			78.6			842.8			154.8	
Turn Bay Length (m)	100.0			40.0			150.0		75.0	60.0		75.0
Base Capacity (vph)	466	525		561	458		446	722	679	432	722	823
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.53		0.23	0.59		0.67	0.55	0.15	0.47	0.52	0.41

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 82.1

Natural Cycle: 65

HCM Signalized Intersection Capacity Analysis 6: CR10 & Fallis Line/Fallis Line Driveway

Total Volumes 2031 (upgraded)
PM Peak Hour

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 21.0

Intersection LOS: C

Intersection Capacity Utilization 74.7%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: CR10 & Fallis Line/Fallis Line Driveway

 Ø1	 Ø2	 Ø3	 Ø4
10 s	36 s	20 s	24 s
 Ø5	 Ø6	 Ø7	 Ø8
10 s	36 s	20 s	24 s

HCM Signalized Intersection Capacity Analysis

12: Distillery Rd/CR10 & King St (CR21)

Total Volumes 2031 (upgraded)
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	256	79	9	8	77	348	2	57	18	328	40	197
Future Volume (vph)	256	79	9	8	77	348	2	57	18	328	40	197
Satd. Flow (prot)	1789	1853	0	0	1874	1601	0	1821	0	1789	1648	0
Flt Permitted	0.556				0.968			0.994		0.686		
Satd. Flow (perm)	1047	1853	0	0	1823	1601	0	1812	0	1292	1648	0
Satd. Flow (RTOR)		8				378		16			214	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	278	96	0	0	93	378	0	84	0	357	257	0
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	7	4			8			2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		8	8	8	2	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	10.0		10.0	10.0	10.0	10.0	10.0		7.0	10.0	
Minimum Split (s)	11.0	20.7		20.7	20.7	20.7	20.7	20.7		11.0	20.7	
Total Split (s)	16.0	44.0		28.0	28.0	28.0	25.0	25.0		21.0	46.0	
Total Split (%)	17.8%	48.9%		31.1%	31.1%	31.1%	27.8%	27.8%		23.3%	51.1%	
Yellow Time (s)	3.0	3.7		3.7	3.7	3.7	3.7	3.7		3.0	3.7	
All-Red Time (s)	0.0	1.0		1.0	1.0	1.0	1.0	1.0		0.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)	3.0	4.7			4.7	4.7		4.7		3.0	4.7	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes		
Recall Mode	None	None		None	None	None	Max	Max		None	Max	
Act Effct Green (s)	29.1	27.4			11.7	11.7		24.6		43.1	41.4	
Actuated g/C Ratio	0.37	0.35			0.15	0.15		0.31		0.55	0.53	
v/c Ratio	0.55	0.15			0.34	0.67		0.15		0.45	0.26	
Control Delay	22.6	16.2			33.2	10.1		19.4		12.5	3.4	
Queue Delay	0.0	0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay	22.6	16.2			33.2	10.1		19.4		12.5	3.4	
LOS	C	B			C	B		B		B	A	
Approach Delay		21.0			14.7			19.4			8.7	
Approach LOS		C			B			B			A	
Queue Length 50th (m)	29.9	8.7			12.6	0.0		6.9		26.1	2.7	
Queue Length 95th (m)	48.6	18.0			25.1	21.6		19.8		52.5	15.1	
Internal Link Dist (m)		501.4			478.0			241.5			482.0	
Turn Bay Length (m)	75.0					35.0				65.0		
Base Capacity (vph)	513	937			544	743		579		826	972	
Starvation Cap Reductn	0	0			0	0		0		0	0	
Spillback Cap Reductn	0	0			0	0		0		0	0	
Storage Cap Reductn	0	0			0	0		0		0	0	
Reduced v/c Ratio	0.54	0.10			0.17	0.51		0.15		0.43	0.26	
Intersection Summary												
Cycle Length: 90												
Actuated Cycle Length: 78.2												
Natural Cycle: 65												

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.67

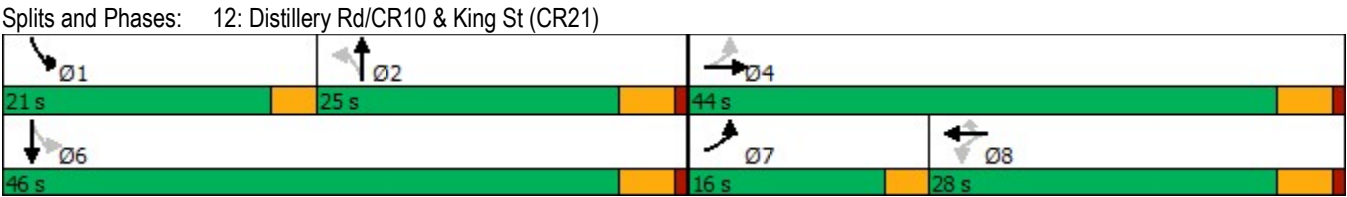
Intersection Signal Delay: 14.1

Intersection LOS: B

Intersection Capacity Utilization 55.8%

ICU Level of Service B

Analysis Period (min) 15



HCM Unsignalized Intersection Capacity Analysis 15: Tapley Quarter Line & Fallis Line

Total Volumes 2031 (upgraded)
PM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	73	54	2	184	75
Future Volume (Veh/h)	1	73	54	2	184	75
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	79	59	2	200	82
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	542	60			61	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	542	60			61	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	92			87	
cM capacity (veh/h)	436	997			1523	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	80	61	282			
Volume Left	1	0	200			
Volume Right	79	2	0			
cSH	981	1700	1523			
Volume to Capacity	0.08	0.04	0.13			
Queue Length 95th (m)	2.0	0.0	3.4			
Control Delay (s)	9.0	0.0	5.8			
Lane LOS	A		A			
Approach Delay (s)	9.0	0.0	5.8			
Approach LOS	A					
Intersection Summary						
Average Delay		5.6				
Intersection Capacity Utilization		32.0%		ICU Level of Service	A	
Analysis Period (min)		15				

Queuing and Blocking Report

Baseline

07-20-2023

Intersection: 12: Distillery Rd/CR10 & King St (CR21)

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	LTR	L	TR
Maximum Queue (m)	37.6	28.4	16.6	23.6	16.4
Average Queue (m)	22.8	21.4	11.8	14.9	13.2
95th Queue (m)	38.7	28.8	17.3	23.9	18.6
Link Distance (m)	518.3	494.8	260.2		495.4
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)				12.0	
Storage Blk Time (%)				15	9
Queuing Penalty (veh)				35	28

HCM Signalized Intersection Capacity Analysis

3: CR10 & Larmer Line

Total Volumes 2031 (upgraded)
SAT Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	6	31	40	8	2	48	896	30	2	793	17
Future Volume (vph)	11	6	31	40	8	2	48	896	30	2	793	17
Satd. Flow (prot)	1789	1650	0	1789	1833	0	1789	1883	1601	1789	1883	1601
Flt Permitted	0.750			0.510			0.183			0.160		
Satd. Flow (perm)	1413	1650	0	961	1833	0	345	1883	1601	301	1883	1601
Satd. Flow (RTOR)		34			2				93			93
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	12	41	0	43	11	0	52	974	33	2	862	18
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.0	20.7		11.0	20.7		11.0	20.7	20.7	11.0	20.7	20.7
Total Split (s)	11.0	20.7		11.0	20.7		11.0	47.3	47.3	11.0	47.3	47.3
Total Split (%)	12.2%	23.0%		12.2%	23.0%		12.2%	52.6%	52.6%	12.2%	52.6%	52.6%
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	0.0	1.0		0.0	1.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	4.7		3.0	4.7		3.0	4.7	4.7	3.0	4.7	4.7
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effct Green (s)	13.5	10.2		15.0	14.1		57.4	56.6	56.6	56.2	52.9	52.9
Actuated g/C Ratio	0.18	0.14		0.20	0.19		0.77	0.76	0.76	0.75	0.71	0.71
v/c Ratio	0.04	0.16		0.16	0.03		0.13	0.68	0.03	0.01	0.65	0.02
Control Delay	22.8	16.4		24.4	26.1		5.3	15.1	0.0	5.0	17.2	0.0
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.8	16.4		24.4	26.1		5.3	15.1	0.0	5.0	17.2	0.0
LOS	C	B		C	C		A	B	A	A	B	A
Approach Delay		17.8			24.8			14.2			16.8	
Approach LOS		B			C			B			B	
Queue Length 50th (m)	1.4	1.0		5.0	1.1		2.5	99.8	0.0	0.1	112.2	0.0
Queue Length 95th (m)	5.2	9.6		12.6	5.7		6.0	#233.0	0.0	0.7	#194.6	0.0
Internal Link Dist (m)		122.6			269.3			709.3			158.9	
Turn Bay Length (m)	50.0			25.0			60.0		75.0	60.0		75.0
Base Capacity (vph)	315	387		290	440		423	1429	1237	391	1335	1162
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.11		0.15	0.03		0.12	0.68	0.03	0.01	0.65	0.02
Intersection Summary												
Cycle Length: 90												
Actuated Cycle Length: 74.6												
Natural Cycle: 100												

HCM Signalized Intersection Capacity Analysis

3: CR10 & Larmer Line

Total Volumes 2031 (upgraded)
SAT Peak Hour

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.68

Intersection Signal Delay: 15.7

Intersection LOS: B

Intersection Capacity Utilization 63.9%

ICU Level of Service B

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: CR10 & Larmer Line

 Ø1	 Ø2	 Ø3	 Ø4
11 s	47.3 s	11 s	20.7 s
 Ø5	 Ø6	 Ø7	 Ø8
11 s	47.3 s	11 s	20.7 s

HCM Signalized Intersection Capacity Analysis

6: CR10 & Fallis Line/Fallis Line Driveway

Total Volumes 2031 (upgraded)
SAT Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	237	134	194	169	155	171	253	378	131	193	185	272
Future Volume (vph)	237	134	194	169	155	171	253	378	131	193	185	272
Satd. Flow (prot)	1789	1716	0	1789	1735	0	1789	1883	1601	1789	1883	1601
Flt Permitted	0.195			0.280			0.590			0.334		
Satd. Flow (perm)	367	1716	0	527	1735	0	1111	1883	1601	629	1883	1601
Satd. Flow (RTOR)		74			56				142			296
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	258	357	0	184	354	0	275	411	142	210	201	296
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.0	20.7		11.0	20.7		10.0	20.7	20.7	10.0	20.7	20.7
Total Split (s)	20.0	24.0		20.0	24.0		10.0	36.0	36.0	10.0	36.0	36.0
Total Split (%)	22.2%	26.7%		22.2%	26.7%		11.1%	40.0%	40.0%	11.1%	40.0%	40.0%
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	0.0	1.0		0.0	1.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	4.7		3.0	4.7		3.0	4.7	4.7	3.0	4.7	4.7
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effct Green (s)	35.8	20.5		30.7	17.9		40.1	31.4	31.4	40.1	31.4	31.4
Actuated g/C Ratio	0.42	0.24		0.36	0.21		0.47	0.37	0.37	0.47	0.37	0.37
v/c Ratio	0.68	0.76		0.52	0.87		0.48	0.59	0.21	0.54	0.29	0.38
Control Delay	26.4	36.4		21.4	50.7		17.4	27.2	4.6	19.3	21.7	4.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.4	36.4		21.4	50.7		17.4	27.2	4.6	19.3	21.7	4.2
LOS	C	D		C	D		B	C	A	B	C	A
Approach Delay		32.2			40.7			20.1			13.7	
Approach LOS		C			D			C			B	
Queue Length 50th (m)	27.4	43.2		18.6	48.0		26.2	55.3	0.0	19.1	23.7	0.0
Queue Length 95th (m)	46.5	#87.5		31.8	#96.6		45.1	88.7	11.5	34.4	41.9	16.0
Internal Link Dist (m)		462.5			78.6			842.8			154.8	
Turn Bay Length (m)	100.0			40.0			150.0		75.0	60.0		75.0
Base Capacity (vph)	438	484		469	436		577	691	677	390	691	775
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.74		0.39	0.81		0.48	0.59	0.21	0.54	0.29	0.38
Intersection Summary												
Cycle Length: 90												
Actuated Cycle Length: 85.5												
Natural Cycle: 65												

Total Volumes 2031 (upgraded)
SAT Peak Hour

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 25.3

Intersection LOS: C

Intersection Capacity Utilization 76.8%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: CR10 & Fallis Line/Fallis Line Driveway

 Ø1	 Ø2	 Ø3	 Ø4
10 s	36 s	20 s	24 s
 Ø5	 Ø6	 Ø7	 Ø8
10 s	36 s	20 s	24 s

HCM Signalized Intersection Capacity Analysis

12: Distillery Rd/CR10 & King St (CR21)

Total Volumes 2031 (upgraded)
SAT Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	353	71	23	12	91	312	7	55	16	276	59	362
Future Volume (vph)	353	71	23	12	91	312	7	55	16	276	59	362
Satd. Flow (prot)	1789	1814	0	0	1872	1601	0	1823	0	1789	1640	0
Flt Permitted	0.546				0.958			0.956		0.688		
Satd. Flow (perm)	1028	1814	0	0	1804	1601	0	1752	0	1296	1640	0
Satd. Flow (RTOR)		23				339		13			393	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	384	102	0	0	112	339	0	85	0	300	457	0
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	7	4			8			2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		8	8	8	2	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	10.0		10.0	10.0	10.0	10.0	10.0		7.0	10.0	
Minimum Split (s)	11.0	20.7		20.7	20.7	20.7	20.7	20.7		11.0	20.7	
Total Split (s)	16.0	44.0		28.0	28.0	28.0	25.0	25.0		21.0	46.0	
Total Split (%)	17.8%	48.9%		31.1%	31.1%	31.1%	27.8%	27.8%		23.3%	51.1%	
Yellow Time (s)	3.0	3.7		3.7	3.7	3.7	3.7	3.7		3.0	3.7	
All-Red Time (s)	0.0	1.0		1.0	1.0	1.0	1.0	1.0		0.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)	3.0	4.7			4.7	4.7		4.7		3.0	4.7	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes		
Recall Mode	None	None		None	None	None	Max	Max		None	Max	
Act Effct Green (s)	29.5	27.8			11.8	11.8		25.6		43.0	41.3	
Actuated g/C Ratio	0.38	0.35			0.15	0.15		0.33		0.55	0.53	
v/c Ratio	0.75	0.16			0.41	0.64		0.15		0.38	0.44	
Control Delay	30.2	14.1			35.0	9.8		19.4		11.7	3.6	
Queue Delay	0.0	0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay	30.2	14.1			35.0	9.8		19.4		11.7	3.6	
LOS	C	B			C	A		B		B	A	
Approach Delay		26.8			16.1			19.4			6.8	
Approach LOS		C			B			B			A	
Queue Length 50th (m)	44.5	7.8			15.3	0.0		7.1		21.1	4.1	
Queue Length 95th (m)	69.6	17.4			29.4	20.6		20.4		42.1	20.0	
Internal Link Dist (m)		501.4			478.0			241.5			482.0	
Turn Bay Length (m)	75.0					35.0				65.0		
Base Capacity (vph)	512	919			535	713		579		823	1049	
Starvation Cap Reductn	0	0			0	0		0		0	0	
Spillback Cap Reductn	0	0			0	0		0		0	0	
Storage Cap Reductn	0	0			0	0		0		0	0	
Reduced v/c Ratio	0.75	0.11			0.21	0.48		0.15		0.36	0.44	
Intersection Summary												
Cycle Length: 90												
Actuated Cycle Length: 78.5												
Natural Cycle: 65												

HCM Signalized Intersection Capacity Analysis 12: Distillery Rd/CR10 & King St (CR21)

Total Volumes 2031 (upgraded)
 SAT Peak Hour

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 15.2

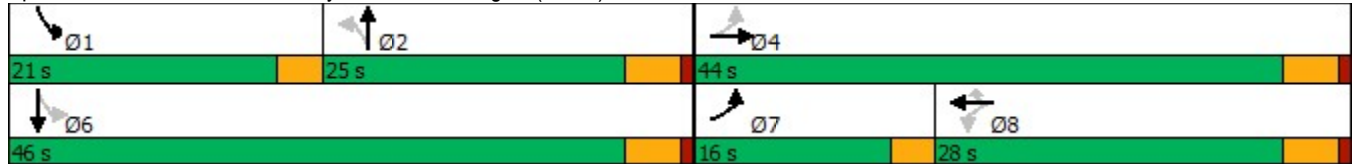
Intersection LOS: B

Intersection Capacity Utilization 59.5%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 12: Distillery Rd/CR10 & King St (CR21)



HCM Unsignalized Intersection Capacity Analysis 15: Tapley Quarter Line & Fallis Line

Total Volumes 2031 (upgraded)
SAT Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	5	76	50	3	112	51
Future Volume (Veh/h)	5	76	50	3	112	51
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	83	54	3	122	55
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	354	56			57	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	354	56			57	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	92			92	
cM capacity (veh/h)	592	1003			1528	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	88	57	177			
Volume Left	5	0	122			
Volume Right	83	3	0			
cSH	965	1700	1528			
Volume to Capacity	0.09	0.03	0.08			
Queue Length 95th (m)	2.3	0.0	2.0			
Control Delay (s)	9.1	0.0	5.4			
Lane LOS	A		A			
Approach Delay (s)	9.1	0.0	5.4			
Approach LOS	A					
Intersection Summary						
Average Delay		5.5				
Intersection Capacity Utilization		27.2%		ICU Level of Service		A
Analysis Period (min)		15				

Intersection: 12: Distillery Rd/CR10 & King St (CR21)

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	LTR	L	TR
Maximum Queue (m)	35.6	70.1	15.7	16.3	28.8
Average Queue (m)	29.6	41.3	11.5	13.0	20.8
95th Queue (m)	35.5	71.5	16.8	18.2	30.4
Link Distance (m)	518.3	494.8	260.2		495.4
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)				12.0	
Storage Blk Time (%)				9	21
Queuing Penalty (veh)				37	59

Appendix L

Synchro Reports

Total Volumes 2036

HCM Signalized Intersection Capacity Analysis

3: CR10 & Larmer Line

Total Volumes 2036 (upgraded)

AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	54	6	46	48	15	17	96	902	46	6	722	219
Future Volume (vph)	54	6	46	48	15	17	96	902	46	6	722	219
Satd. Flow (prot)	1789	1635	0	1789	1735	0	1789	1883	1601	1789	1883	1601
Flt Permitted	0.741			0.755			0.212			0.172		
Satd. Flow (perm)	1396	1635	0	1422	1735	0	399	1883	1601	324	1883	1601
Satd. Flow (RTOR)		50			18				93			238
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	59	57	0	52	34	0	104	980	50	7	785	238
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.0	20.7		11.0	20.7		11.0	20.7	20.7	11.0	20.7	20.7
Total Split (s)	11.0	20.7		11.0	20.7		11.0	47.3	47.3	11.0	47.3	47.3
Total Split (%)	12.2%	23.0%		12.2%	23.0%		12.2%	52.6%	52.6%	12.2%	52.6%	52.6%
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	0.0	1.0		0.0	1.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	4.7		3.0	4.7		3.0	4.7	4.7	3.0	4.7	4.7
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effct Green (s)	13.9	10.3		13.8	10.3		57.3	56.4	56.4	54.8	48.6	48.6
Actuated g/C Ratio	0.19	0.14		0.19	0.14		0.77	0.76	0.76	0.74	0.65	0.65
v/c Ratio	0.20	0.21		0.17	0.13		0.23	0.69	0.04	0.02	0.64	0.21
Control Delay	25.1	14.8		24.8	22.7		5.8	15.3	0.7	5.2	17.0	2.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.1	14.8		24.8	22.7		5.8	15.3	0.7	5.2	17.0	2.2
LOS	C	B		C	C		A	B	A	A	B	A
Approach Delay		20.0			24.0			13.8			13.5	
Approach LOS		C			C			B			B	
Queue Length 50th (m)	7.1	1.0		6.2	2.3		5.2	103.1	0.0	0.3	98.7	0.0
Queue Length 95th (m)	16.1	11.2		14.6	10.3		10.4	#235.3	1.5	1.6	#159.9	10.2
Internal Link Dist (m)		122.6			269.3			709.3			158.9	
Turn Bay Length (m)	50.0			25.0			60.0		75.0	60.0		75.0
Base Capacity (vph)	315	400		316	397		461	1430	1238	404	1232	1130
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.14		0.16	0.09		0.23	0.69	0.04	0.02	0.64	0.21

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 74.3

Natural Cycle: 100

HCM Signalized Intersection Capacity Analysis

3: CR10 & Larmer Line

Total Volumes 2036 (upgraded)
AM Peak Hour

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 14.3

Intersection LOS: B

Intersection Capacity Utilization 74.1%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: CR10 & Larmer Line

 Ø1	 Ø2	 Ø3	 Ø4
11 s	47.3 s	11 s	20.7 s
 Ø5	 Ø6	 Ø7	 Ø8
11 s	47.3 s	11 s	20.7 s

HCM Signalized Intersection Capacity Analysis

6: CR10 & Fallis Line/Fallis Line Driveway

Total Volumes 2036 (upgraded)
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	364	99	279	109	84	157	246	469	94	137	261	170
Future Volume (vph)	364	99	279	109	84	157	246	469	94	137	261	170
Satd. Flow (prot)	1789	1674	0	1789	1699	0	1789	1883	1601	1789	1883	1601
Flt Permitted	0.237			0.365			0.487			0.228		
Satd. Flow (perm)	446	1674	0	687	1699	0	917	1883	1601	429	1883	1601
Satd. Flow (RTOR)		143			96				102			185
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	396	411	0	118	262	0	267	510	102	149	284	185
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.0	20.7		11.0	20.7		10.0	20.7	20.7	10.0	20.7	20.7
Total Split (s)	20.0	24.0		20.0	24.0		10.0	36.0	36.0	10.0	36.0	36.0
Total Split (%)	22.2%	26.7%		22.2%	26.7%		11.1%	40.0%	40.0%	11.1%	40.0%	40.0%
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	0.0	1.0		0.0	1.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	4.7		3.0	4.7		3.0	4.7	4.7	3.0	4.7	4.7
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effct Green (s)	34.9	23.3		24.2	13.4		40.1	31.4	31.4	40.1	31.4	31.4
Actuated g/C Ratio	0.42	0.28		0.29	0.16		0.48	0.37	0.37	0.48	0.37	0.37
v/c Ratio	0.88	0.72		0.37	0.74		0.52	0.73	0.15	0.47	0.40	0.26
Control Delay	41.2	26.9		19.2	34.3		17.9	31.0	5.1	17.3	22.6	4.3
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.2	26.9		19.2	34.3		17.9	31.0	5.1	17.3	22.6	4.3
LOS	D	C		B	C		B	C	A	B	C	A
Approach Delay		33.9			29.7			24.0			15.9	
Approach LOS		C			C			C			B	
Queue Length 50th (m)	46.2	40.1		11.5	25.4		23.6	69.8	0.0	12.2	33.4	0.0
Queue Length 95th (m)	#92.4	#76.1		21.4	49.9		43.6	#124.8	9.9	25.0	58.8	13.0
Internal Link Dist (m)		462.5			78.6			842.8			154.8	
Turn Bay Length (m)	100.0			40.0			150.0		75.0	60.0		75.0
Base Capacity (vph)	457	567		486	465		510	703	662	318	703	714
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.87	0.72		0.24	0.56		0.52	0.73	0.15	0.47	0.40	0.26
Intersection Summary												
Cycle Length: 90												
Actuated Cycle Length: 84												
Natural Cycle: 75												

HCM Signalized Intersection Capacity Analysis 6: CR10 & Fallis Line/Fallis Line Driveway

Total Volumes 2036 (upgraded)
AM Peak Hour

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 25.9

Intersection LOS: C

Intersection Capacity Utilization 81.0%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: CR10 & Fallis Line/Fallis Line Driveway

 Ø1	 Ø2	 Ø3	 Ø4
10 s	36 s	20 s	24 s
 Ø5	 Ø6	 Ø7	 Ø8
10 s	36 s	20 s	24 s

HCM Signalized Intersection Capacity Analysis

12: Distillery Rd/CR10 & King St (CR21)

Total Volumes 2036 (upgraded)
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	234	44	1	9	48	397	0	54	1	303	80	195
Future Volume (vph)	234	44	1	9	48	397	0	54	1	303	80	195
Satd. Flow (prot)	1789	1878	0	0	1868	1601	0	1880	0	1789	1684	0
Flt Permitted	0.571				0.954					0.642		
Satd. Flow (perm)	1075	1878	0	0	1797	1601	0	1880	0	1209	1684	0
Satd. Flow (RTOR)		1				432		1			180	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	254	49	0	0	62	432	0	60	0	329	299	0
Turn Type	pm+pt	NA		Perm	NA	Perm		NA		pm+pt	NA	
Protected Phases	7	4			8			2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		8	8	8	2	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	10.0		10.0	10.0	10.0	10.0	10.0		7.0	10.0	
Minimum Split (s)	11.0	20.7		20.7	20.7	20.7	20.7	20.7		11.2	20.7	
Total Split (s)	16.0	44.0		28.0	28.0	28.0	25.0	25.0		21.0	46.0	
Total Split (%)	17.8%	48.9%		31.1%	31.1%	31.1%	27.8%	27.8%		23.3%	51.1%	
Yellow Time (s)	3.0	3.7		3.7	3.7	3.7	3.7	3.7		3.0	3.7	
All-Red Time (s)	0.0	1.0		1.0	1.0	1.0	1.0	1.0		0.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)	3.0	4.7			4.7	4.7		4.7		3.0	4.7	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes		
Recall Mode	None	None		None	None	None	Max	Max		None	Max	
Act Effct Green (s)	29.1	27.3			11.9	11.9		25.3		43.1	41.4	
Actuated g/C Ratio	0.37	0.35			0.15	0.15		0.32		0.55	0.53	
v/c Ratio	0.50	0.07			0.23	0.71		0.10		0.43	0.31	
Control Delay	21.4	16.6			31.1	10.4		21.9		12.4	5.5	
Queue Delay	0.0	0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay	21.4	16.6			31.1	10.4		21.9		12.4	5.5	
LOS	C	B			C	B		C		B	A	
Approach Delay		20.7			13.0			21.9			9.1	
Approach LOS		C			B			C			A	
Queue Length 50th (m)	26.9	4.7			8.2	0.0		5.8		23.6	8.0	
Queue Length 95th (m)	44.2	11.1			18.1	23.0		17.3		49.6	24.8	
Internal Link Dist (m)		501.4			478.0			241.5			482.0	
Turn Bay Length (m)	75.0					35.0				65.0		
Base Capacity (vph)	518	946			536	781		609		800	976	
Starvation Cap Reductn	0	0			0	0		0		0	0	
Spillback Cap Reductn	0	0			0	0		0		0	0	
Storage Cap Reductn	0	0			0	0		0		0	0	
Reduced v/c Ratio	0.49	0.05			0.12	0.55		0.10		0.41	0.31	
Intersection Summary												
Cycle Length: 90												
Actuated Cycle Length: 78.2												
Natural Cycle: 65												

HCM Signalized Intersection Capacity Analysis 12: Distillery Rd/CR10 & King St (CR21)

Total Volumes 2036 (upgraded)
 AM Peak Hour

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 13.3

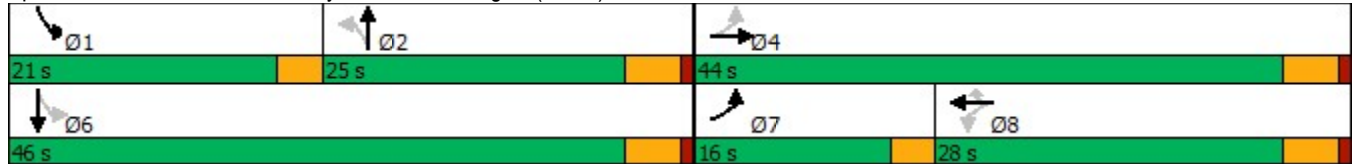
Intersection LOS: B

Intersection Capacity Utilization 57.6%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 12: Distillery Rd/CR10 & King St (CR21)



HCM Unsignalized Intersection Capacity Analysis 15: Tapley Quarter Line & Fallis Line

Total Volumes 2036 (upgraded)
AM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	3	155	50	3	67	26
Future Volume (Veh/h)	3	155	50	3	67	26
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	168	54	3	73	28
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	230	56			57	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	230	56			57	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	83			95	
cM capacity (veh/h)	722	1003			1528	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	171	57	101			
Volume Left	3	0	73			
Volume Right	168	3	0			
cSH	996	1700	1528			
Volume to Capacity	0.17	0.03	0.05			
Queue Length 95th (m)	4.7	0.0	1.1			
Control Delay (s)	9.4	0.0	5.5			
Lane LOS	A		A			
Approach Delay (s)	9.4	0.0	5.5			
Approach LOS	A					
Intersection Summary						
Average Delay			6.6			
Intersection Capacity Utilization			28.2%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Signalized Intersection Capacity Analysis

3: CR10 & Larmer Line

Total Volumes 2036 (upgraded)
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	184	17	62	31	9	4	48	962	39	14	931	78
Future Volume (vph)	184	17	62	31	9	4	48	962	39	14	931	78
Satd. Flow (prot)	1789	1661	0	1789	1802	0	1789	1883	1601	1789	1883	1601
Flt Permitted	0.816						0.080			0.084		
Satd. Flow (perm)	1537	1661	0	1883	1802	0	151	1883	1601	158	1883	1601
Satd. Flow (RTOR)		67			4				93			93
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	200	85	0	34	14	0	52	1046	42	15	1012	85
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.0	20.7		11.0	20.7		11.0	20.7	20.7	11.0	20.7	20.7
Total Split (s)	11.0	20.7		11.0	20.7		11.0	47.3	47.3	11.0	47.3	47.3
Total Split (%)	12.2%	23.0%		12.2%	23.0%		12.2%	52.6%	52.6%	12.2%	52.6%	52.6%
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	0.0	1.0		0.0	1.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	4.7		3.0	4.7		3.0	4.7	4.7	3.0	4.7	4.7
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effct Green (s)	17.3	10.2		9.6	10.2		53.1	50.0	50.0	51.8	46.2	46.2
Actuated g/C Ratio	0.22	0.13		0.12	0.13		0.69	0.65	0.65	0.67	0.60	0.60
v/c Ratio	0.51	0.31		0.15	0.06		0.20	0.86	0.04	0.06	0.90	0.09
Control Delay	30.8	16.1		30.4	28.5		6.8	23.1	0.3	5.5	31.0	2.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.8	16.1		30.4	28.5		6.8	23.1	0.3	5.5	31.0	2.5
LOS	C	B		C	C		A	C	A	A	C	A
Approach Delay		26.4			29.8			21.5			28.5	
Approach LOS		C			C			C			C	
Queue Length 50th (m)	25.8	2.5		5.1	1.4		2.5	116.5	0.0	0.7	~172.3	0.0
Queue Length 95th (m)	44.7	15.2		10.5	6.6		6.1	#259.5	0.6	2.5	#249.0	5.8
Internal Link Dist (m)		122.6			269.3			709.3			158.9	
Turn Bay Length (m)	50.0			25.0			60.0		75.0	60.0		75.0
Base Capacity (vph)	391	400		240	379		274	1215	1066	277	1121	991
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.21		0.14	0.04		0.19	0.86	0.04	0.05	0.90	0.09
Intersection Summary												
Cycle Length: 90												
Actuated Cycle Length: 77.5												
Natural Cycle: 100												

HCM Signalized Intersection Capacity Analysis

3: CR10 & Larmer Line

Total Volumes 2036 (upgraded)

PM Peak Hour

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 25.2

Intersection LOS: C

Intersection Capacity Utilization 75.3%

ICU Level of Service D

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: CR10 & Larmer Line

 Ø1	 Ø2	 Ø3	 Ø4
11 s	47.3 s	11 s	20.7 s
 Ø5	 Ø6	 Ø7	 Ø8
11 s	47.3 s	11 s	20.7 s

HCM Signalized Intersection Capacity Analysis

6: CR10 & Fallis Line/Fallis Line Driveway

Total Volumes 2036 (upgraded)

PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	234	83	180	119	109	140	285	403	97	186	424	347
Future Volume (vph)	234	83	180	119	109	140	285	403	97	186	424	347
Satd. Flow (prot)	1789	1689	0	1789	1725	0	1789	1883	1601	1789	1883	1601
Flt Permitted	0.257			0.559			0.291			0.316		
Satd. Flow (perm)	484	1689	0	1053	1725	0	548	1883	1601	595	1883	1601
Satd. Flow (RTOR)		111			66				105			377
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	254	286	0	129	270	0	310	438	105	202	461	377
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.0	20.7		11.0	20.7		10.0	20.7	20.7	10.0	20.7	20.7
Total Split (s)	20.0	24.0		20.0	24.0		10.0	36.0	36.0	10.0	36.0	36.0
Total Split (%)	22.2%	26.7%		22.2%	26.7%		11.1%	40.0%	40.0%	11.1%	40.0%	40.0%
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	0.0	1.0		0.0	1.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	4.7		3.0	4.7		3.0	4.7	4.7	3.0	4.7	4.7
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effct Green (s)	33.4	21.5		25.6	14.5		40.3	31.5	31.5	40.3	31.5	31.5
Actuated g/C Ratio	0.40	0.26		0.31	0.18		0.49	0.38	0.38	0.49	0.38	0.38
v/c Ratio	0.61	0.55		0.32	0.76		0.83	0.61	0.16	0.52	0.64	0.45
Control Delay	23.3	21.0		17.8	38.6		37.9	26.6	5.1	17.9	27.5	4.3
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.3	21.0		17.8	38.6		37.9	26.6	5.1	17.9	27.5	4.3
LOS	C	C		B	D		D	C	A	B	C	A
Approach Delay		22.1			31.9			28.1			17.2	
Approach LOS		C			C			C			B	
Queue Length 50th (m)	26.9	23.7		12.6	30.8		27.3	55.7	0.0	16.6	59.6	0.0
Queue Length 95th (m)	43.5	49.5		23.1	57.7		#74.1	95.6	10.1	33.2	101.9	17.6
Internal Link Dist (m)		462.5			78.6			842.8			154.8	
Turn Bay Length (m)	100.0			40.0			150.0		75.0	60.0		75.0
Base Capacity (vph)	465	533		561	455		372	717	675	391	717	843
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.54		0.23	0.59		0.83	0.61	0.16	0.52	0.64	0.45

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 82.7

Natural Cycle: 70

HCM Signalized Intersection Capacity Analysis 6: CR10 & Fallis Line/Fallis Line Driveway

Total Volumes 2036 (upgraded)
PM Peak Hour

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 23.5

Intersection LOS: C

Intersection Capacity Utilization 79.9%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: CR10 & Fallis Line/Fallis Line Driveway

 Ø1	 Ø2	 Ø3	 Ø4
10 s	36 s	20 s	24 s
 Ø5	 Ø6	 Ø7	 Ø8
10 s	36 s	20 s	24 s

HCM Signalized Intersection Capacity Analysis

12: Distillery Rd/CR10 & King St (CR21)

Total Volumes 2036 (upgraded)
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	272	87	10	9	85	369	3	62	19	369	45	223
Future Volume (vph)	272	87	10	9	85	369	3	62	19	369	45	223
Satd. Flow (prot)	1789	1853	0	0	1874	1601	0	1821	0	1789	1648	0
Flt Permitted	0.554				0.966			0.990		0.669		
Satd. Flow (perm)	1043	1853	0	0	1819	1601	0	1807	0	1260	1648	0
Satd. Flow (RTOR)		8				401		15			242	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	296	106	0	0	102	401	0	91	0	401	291	0
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	7	4			8			2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		8	8	8	2	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	10.0		10.0	10.0	10.0	10.0	10.0		7.0	10.0	
Minimum Split (s)	11.0	20.7		20.7	20.7	20.7	20.7	20.7		11.0	20.7	
Total Split (s)	16.0	44.0		28.0	28.0	28.0	25.0	25.0		21.0	46.0	
Total Split (%)	17.8%	48.9%		31.1%	31.1%	31.1%	27.8%	27.8%		23.3%	51.1%	
Yellow Time (s)	3.0	3.7		3.7	3.7	3.7	3.7	3.7		3.0	3.7	
All-Red Time (s)	0.0	1.0		1.0	1.0	1.0	1.0	1.0		0.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)	3.0	4.7			4.7	4.7		4.7		3.0	4.7	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes		
Recall Mode	None	None		None	None	None	Max	Max		None	Max	
Act Effct Green (s)	29.5	27.8			12.1	12.1		23.5		43.1	41.4	
Actuated g/C Ratio	0.38	0.35			0.15	0.15		0.30		0.55	0.53	
v/c Ratio	0.58	0.16			0.37	0.69		0.17		0.51	0.30	
Control Delay	23.3	16.4			33.6	10.1		20.6		13.6	3.5	
Queue Delay	0.0	0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay	23.3	16.4			33.6	10.1		20.6		13.6	3.5	
LOS	C	B			C	B		C		B	A	
Approach Delay		21.5			14.8			20.6			9.4	
Approach LOS		C			B			C			A	
Queue Length 50th (m)	32.2	9.8			13.9	0.0		8.1		30.8	3.2	
Queue Length 95th (m)	51.8	19.5			27.0	22.3		21.6		61.1	16.6	
Internal Link Dist (m)		501.4			478.0			241.5			482.0	
Turn Bay Length (m)	75.0					35.0				65.0		
Base Capacity (vph)	515	932			539	757		550		811	982	
Starvation Cap Reductn	0	0			0	0		0		0	0	
Spillback Cap Reductn	0	0			0	0		0		0	0	
Storage Cap Reductn	0	0			0	0		0		0	0	
Reduced v/c Ratio	0.57	0.11			0.19	0.53		0.17		0.49	0.30	
Intersection Summary												
Cycle Length: 90												
Actuated Cycle Length: 78.6												
Natural Cycle: 65												

HCM Signalized Intersection Capacity Analysis 12: Distillery Rd/CR10 & King St (CR21)

Total Volumes 2036 (upgraded)
 PM Peak Hour

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 14.5

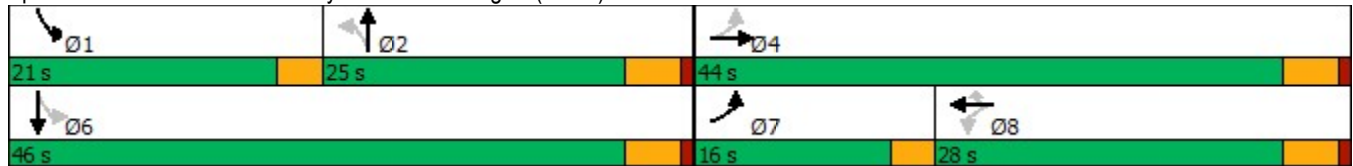
Intersection LOS: B

Intersection Capacity Utilization 58.0%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 12: Distillery Rd/CR10 & King St (CR21)



HCM Unsignalized Intersection Capacity Analysis 15: Tapley Quarter Line & Fallis Line

Total Volumes 2036 (upgraded)
PM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	73	54	2	184	75
Future Volume (Veh/h)	1	73	54	2	184	75
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	79	59	2	200	82
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	542	60			61	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	542	60			61	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	92			87	
cM capacity (veh/h)	436	997			1523	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	80	61	282			
Volume Left	1	0	200			
Volume Right	79	2	0			
cSH	981	1700	1523			
Volume to Capacity	0.08	0.04	0.13			
Queue Length 95th (m)	2.0	0.0	3.4			
Control Delay (s)	9.0	0.0	5.8			
Lane LOS	A		A			
Approach Delay (s)	9.0	0.0	5.8			
Approach LOS	A					
Intersection Summary						
Average Delay			5.6			
Intersection Capacity Utilization			32.0%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Signalized Intersection Capacity Analysis

3: CR10 & Larmer Line

Total Volumes 2036 (upgraded)
SAT Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	6	32	41	9	3	49	927	31	3	826	22
Future Volume (vph)	16	6	32	41	9	3	49	927	31	3	826	22
Satd. Flow (prot)	1789	1648	0	1789	1818	0	1789	1883	1601	1789	1883	1601
Flt Permitted	0.749			0.510			0.163			0.140		
Satd. Flow (perm)	1411	1648	0	961	1818	0	307	1883	1601	264	1883	1601
Satd. Flow (RTOR)		35			3				93			93
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	42	0	45	13	0	53	1008	34	3	898	24
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.0	20.7		11.0	20.7		11.0	20.7	20.7	11.0	20.7	20.7
Total Split (s)	11.0	20.7		11.0	20.7		11.0	47.3	47.3	11.0	47.3	47.3
Total Split (%)	12.2%	23.0%		12.2%	23.0%		12.2%	52.6%	52.6%	12.2%	52.6%	52.6%
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	0.0	1.0		0.0	1.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	4.7		3.0	4.7		3.0	4.7	4.7	3.0	4.7	4.7
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effct Green (s)	13.5	10.2		15.0	14.1		57.4	56.6	56.6	56.1	52.9	52.9
Actuated g/C Ratio	0.18	0.14		0.20	0.19		0.77	0.76	0.76	0.75	0.71	0.71
v/c Ratio	0.06	0.16		0.16	0.04		0.14	0.71	0.03	0.01	0.67	0.02
Control Delay	23.1	16.3		24.5	25.4		5.5	15.9	0.0	5.0	18.3	0.0
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.1	16.3		24.5	25.4		5.5	15.9	0.0	5.0	18.3	0.0
LOS	C	B		C	C		A	B	A	A	B	A
Approach Delay		18.2			24.7			14.9			17.8	
Approach LOS		B			C			B			B	
Queue Length 50th (m)	2.0	1.0		5.3	1.2		2.5	107.4	0.0	0.2	121.2	0.0
Queue Length 95th (m)	6.7	9.8		13.0	6.4		6.1	#245.1	0.0	1.0	#207.7	0.0
Internal Link Dist (m)		122.6			269.3			709.3			158.9	
Turn Bay Length (m)	50.0			25.0			60.0		75.0	60.0		75.0
Base Capacity (vph)	314	387		290	439		398	1427	1236	367	1334	1161
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.11		0.16	0.03		0.13	0.71	0.03	0.01	0.67	0.02
Intersection Summary												
Cycle Length: 90												
Actuated Cycle Length: 74.6												
Natural Cycle: 100												

HCM Signalized Intersection Capacity Analysis

3: CR10 & Larmer Line

Total Volumes 2036 (upgraded)
SAT Peak Hour

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 16.5

Intersection LOS: B

Intersection Capacity Utilization 65.6%

ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: CR10 & Larmer Line

 Ø1	 Ø2	 Ø3	 Ø4
11 s	47.3 s	11 s	20.7 s
 Ø5	 Ø6	 Ø7	 Ø8
11 s	47.3 s	11 s	20.7 s

HCM Signalized Intersection Capacity Analysis

6: CR10 & Fallis Line/Fallis Line Driveway

Total Volumes 2036 (upgraded)
SAT Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	241	134	198	169	155	171	257	404	131	193	206	278
Future Volume (vph)	241	134	198	169	155	171	257	404	131	193	206	278
Satd. Flow (prot)	1789	1716	0	1789	1735	0	1789	1883	1601	1789	1883	1601
Flt Permitted	0.193			0.278			0.559			0.301		
Satd. Flow (perm)	364	1716	0	524	1735	0	1053	1883	1601	567	1883	1601
Satd. Flow (RTOR)		75			56				142			302
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	262	361	0	184	354	0	279	439	142	210	224	302
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	11.0	20.7		11.0	20.7		10.0	20.7	20.7	10.0	20.7	20.7
Total Split (s)	20.0	24.0		20.0	24.0		10.0	36.0	36.0	10.0	36.0	36.0
Total Split (%)	22.2%	26.7%		22.2%	26.7%		11.1%	40.0%	40.0%	11.1%	40.0%	40.0%
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.7	3.7	3.0	3.7	3.7
All-Red Time (s)	0.0	1.0		0.0	1.0		0.0	1.0	1.0	0.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	4.7		3.0	4.7		3.0	4.7	4.7	3.0	4.7	4.7
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effct Green (s)	36.0	20.7		30.7	17.9		40.2	31.4	31.4	40.2	31.4	31.4
Actuated g/C Ratio	0.42	0.24		0.36	0.21		0.47	0.37	0.37	0.47	0.37	0.37
v/c Ratio	0.68	0.77		0.52	0.87		0.50	0.64	0.21	0.57	0.32	0.39
Control Delay	26.7	36.5		21.4	50.9		18.1	28.5	4.7	20.7	22.2	4.3
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.7	36.5		21.4	50.9		18.1	28.5	4.7	20.7	22.2	4.3
LOS	C	D		C	D		B	C	A	C	C	A
Approach Delay		32.4			40.8			21.2			14.4	
Approach LOS		C			D			C			B	
Queue Length 50th (m)	27.9	43.7		18.6	48.1		26.8	60.5	0.0	19.2	26.8	0.0
Queue Length 95th (m)	47.6	#88.7		31.8	#96.6		45.8	95.9	11.5	34.4	46.6	16.1
Internal Link Dist (m)		462.5			78.6			842.8			154.8	
Turn Bay Length (m)	100.0			40.0			150.0		75.0	60.0		75.0
Base Capacity (vph)	438	487		468	435		553	690	677	366	690	778
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.74		0.39	0.81		0.50	0.64	0.21	0.57	0.32	0.39
Intersection Summary												
Cycle Length: 90												
Actuated Cycle Length: 85.7												
Natural Cycle: 65												

HCM Signalized Intersection Capacity Analysis 6: CR10 & Fallis Line/Fallis Line Driveway

Total Volumes 2036 (upgraded)
SAT Peak Hour

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 25.7

Intersection LOS: C

Intersection Capacity Utilization 78.4%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: CR10 & Fallis Line/Fallis Line Driveway

 Ø1	 Ø2	 Ø3	 Ø4
10 s	36 s	20 s	24 s
 Ø5	 Ø6	 Ø7	 Ø8
10 s	36 s	20 s	24 s

HCM Signalized Intersection Capacity Analysis

12: Distillery Rd/CR10 & King St (CR21)

Total Volumes 2036 (upgraded)
SAT Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	366	79	26	13	101	323	8	57	18	289	61	380
Future Volume (vph)	366	79	26	13	101	323	8	57	18	289	61	380
Satd. Flow (prot)	1789	1814	0	0	1872	1601	0	1818	0	1789	1640	0
Flt Permitted	0.532				0.957			0.950		0.677		
Satd. Flow (perm)	1002	1814	0	0	1802	1601	0	1736	0	1275	1640	0
Satd. Flow (RTOR)		23				351		15			413	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	398	114	0	0	124	351	0	91	0	314	479	0
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	7	4			8			2		1	6	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		8	8	8	2	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	10.0		10.0	10.0	10.0	10.0	10.0		7.0	10.0	
Minimum Split (s)	11.0	20.7		20.7	20.7	20.7	20.7	20.7		11.0	20.7	
Total Split (s)	16.0	44.0		28.0	28.0	28.0	25.0	25.0		21.0	46.0	
Total Split (%)	17.8%	48.9%		31.1%	31.1%	31.1%	27.8%	27.8%		23.3%	51.1%	
Yellow Time (s)	3.0	3.7		3.7	3.7	3.7	3.7	3.7		3.0	3.7	
All-Red Time (s)	0.0	1.0		1.0	1.0	1.0	1.0	1.0		0.0	1.0	
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)	3.0	4.7			4.7	4.7		4.7		3.0	4.7	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes		
Recall Mode	None	None		None	None	None	Max	Max		None	Max	
Act Effct Green (s)	29.8	28.1			12.1	12.1		25.2		43.0	41.3	
Actuated g/C Ratio	0.38	0.36			0.15	0.15		0.32		0.55	0.52	
v/c Ratio	0.78	0.17			0.45	0.65		0.16		0.40	0.45	
Control Delay	32.4	14.4			35.7	9.8		19.5		12.1	3.7	
Queue Delay	0.0	0.0			0.0	0.0		0.0		0.0	0.0	
Total Delay	32.4	14.4			35.7	9.8		19.5		12.1	3.7	
LOS	C	B			D	A		B		B	A	
Approach Delay		28.4			16.5			19.5			7.0	
Approach LOS		C			B			B			A	
Queue Length 50th (m)	46.5	9.1			17.1	0.0		7.7		22.7	4.3	
Queue Length 95th (m)	#75.7	19.2			32.1	20.9		21.3		44.7	20.8	
Internal Link Dist (m)		501.4			478.0			241.5			482.0	
Turn Bay Length (m)	75.0					35.0				65.0		
Base Capacity (vph)	508	916			533	720		565		813	1056	
Starvation Cap Reductn	0	0			0	0		0		0	0	
Spillback Cap Reductn	0	0			0	0		0		0	0	
Storage Cap Reductn	0	0			0	0		0		0	0	
Reduced v/c Ratio	0.78	0.12			0.23	0.49		0.16		0.39	0.45	
Intersection Summary												
Cycle Length: 90												
Actuated Cycle Length: 78.8												
Natural Cycle: 65												

Total Volumes 2036 (upgraded)
SAT Peak Hour

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 15.9

Intersection LOS: B

Intersection Capacity Utilization 61.4%

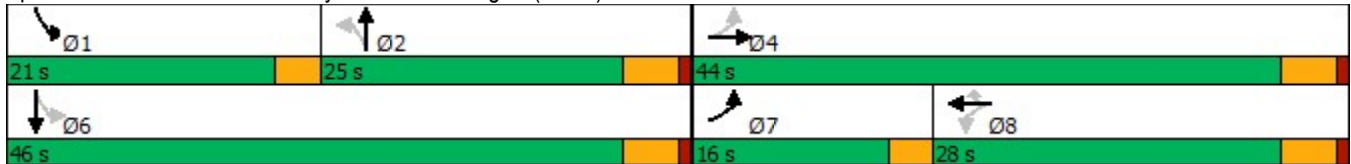
ICU Level of Service B

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 12: Distillery Rd/CR10 & King St (CR21)



HCM Unsignalized Intersection Capacity Analysis 15: Tapley Quarter Line & Fallis Line

Total Volumes 2036 (upgraded)
SAT Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	5	76	50	3	112	51
Future Volume (Veh/h)	5	76	50	3	112	51
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	83	54	3	122	55
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	354	56			57	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	354	56			57	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	92			92	
cM capacity (veh/h)	592	1003			1528	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	88	57	177			
Volume Left	5	0	122			
Volume Right	83	3	0			
cSH	965	1700	1528			
Volume to Capacity	0.09	0.03	0.08			
Queue Length 95th (m)	2.3	0.0	2.0			
Control Delay (s)	9.1	0.0	5.4			
Lane LOS	A		A			
Approach Delay (s)	9.1	0.0	5.4			
Approach LOS	A					
Intersection Summary						
Average Delay			5.5			
Intersection Capacity Utilization			27.2%	ICU Level of Service	A	
Analysis Period (min)			15			

Appendix M

Synchro Reports

Total Volumes at Entrances 2036

HCM Unsignalized Intersection Capacity Analysis 26: West Res/Comm Entrance & Fallis Line Driveway

Total Volumes 2036 (upgraded)
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	173	10	0	221	0	0	0	0	0	0	125
Future Volume (Veh/h)	150	173	10	0	221	0	0	0	0	0	0	125
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	163	188	11	0	240	0	0	0	0	0	0	136
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (m)	103											
pX, platoon unblocked												
vC, conflicting volume	240			199			896	760	194	754	765	240
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	240			199			896	760	194	754	765	240
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	88			100			100	100	100	100	100	83
cM capacity (veh/h)	1327			1373			196	295	848	295	292	799
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1							
Volume Total	163	199	240	0	136							
Volume Left	163	0	0	0	0							
Volume Right	0	11	0	0	136							
cSH	1327	1700	1373	1700	799							
Volume to Capacity	0.12	0.12	0.00	0.00	0.17							
Queue Length 95th (m)	3.2	0.0	0.0	0.0	4.6							
Control Delay (s)	8.1	0.0	0.0	0.0	10.4							
Lane LOS	A			A	B							
Approach Delay (s)	3.6		0.0	0.0	10.4							
Approach LOS				A	B							
Intersection Summary												
Average Delay			3.7									
Intersection Capacity Utilization			39.1%	ICU Level of Service					A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

29: Middle Res/Comm Entrance & Fallis Line Driveway

Total Volumes 2036 (upgraded)

AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	3	21	0	10	0	87	0	0	0	0	124
Future Volume (Veh/h)	149	3	21	0	10	0	87	0	0	0	0	124
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	162	3	23	0	11	0	95	0	0	0	0	135
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None			None								
Median storage veh												
Upstream signal (m)	225											
pX, platoon unblocked												
vC, conflicting volume	11			26			484	350	14	350	361	11
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	11			26			484	350	14	350	361	11
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	90			100			76	100	100	100	100	87
cM capacity (veh/h)	1608			1588			397	517	1065	558	509	1070
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	188	11	95	135								
Volume Left	162	0	95	0								
Volume Right	23	0	0	135								
cSH	1608	1588	397	1070								
Volume to Capacity	0.10	0.00	0.24	0.13								
Queue Length 95th (m)	2.5	0.0	7.0	3.3								
Control Delay (s)	6.6	0.0	16.9	8.8								
Lane LOS	A		C	A								
Approach Delay (s)	6.6	0.0	16.9	8.8								
Approach LOS			C	A								
Intersection Summary												
Average Delay				9.4								
Intersection Capacity Utilization				38.9%	ICU Level of Service			A				
Analysis Period (min)				15								

HCM Unsignalized Intersection Capacity Analysis 26: West Res/Comm Entrance & Fallis Line Driveway

Total Volumes 2036 (upgraded)
PM Peak Hour

																									
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR													
Lane Configurations																									
Traffic Volume (veh/h)	136	200	29	0	211	0	0	0	0	0	0	160													
Future Volume (Veh/h)	136	200	29	0	211	0	0	0	0	0	0	160													
Sign Control	Free			Free			Stop			Stop															
Grade	0%			0%			0%			0%															
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92													
Hourly flow rate (vph)	148	217	32	0	229	0	0	0	0	0	0	174													
Pedestrians																									
Lane Width (m)																									
Walking Speed (m/s)																									
Percent Blockage																									
Right turn flare (veh)																									
Median type	None			None																					
Median storage veh																									
Upstream signal (m)	103																								
pX, platoon unblocked				0.98				0.98	0.98	0.98	0.98	0.98													
vC, conflicting volume	229				249				932	758	233	742													
vC1, stage 1 conf vol																									
vC2, stage 2 conf vol																									
vCu, unblocked vol	229				222				920	742	205	725													
tC, single (s)	4.1				4.1				7.1	6.5	6.2	7.1													
tC, 2 stage (s)																									
tF (s)	2.2				2.2				3.5	4.0	3.3	3.5													
p0 queue free %	89				100				100	100	100	100													
cM capacity (veh/h)	1339				1319				177	299	817	305													
293																									
810																									
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1																				
Volume Total	148	249	229	0	174																				
Volume Left	148	0	0	0	0																				
Volume Right	0	32	0	0	174																				
cSH	1339	1700	1319	1700	810																				
Volume to Capacity	0.11	0.15	0.00	0.00	0.21																				
Queue Length 95th (m)	2.8	0.0	0.0	0.0	6.2																				
Control Delay (s)	8.0	0.0	0.0	0.0	10.7																				
Lane LOS	A				A	B																			
Approach Delay (s)	3.0				0.0	10.7																			
Approach LOS				A	B																				
Intersection Summary																									
Average Delay				3.8																					
Intersection Capacity Utilization				43.3%	ICU Level of Service				A																
Analysis Period (min)				15																					

HCM Unsignalized Intersection Capacity Analysis 29: Middle Res/Comm Entrance & Fallis Line Driveway

Total Volumes 2036 (upgraded)
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	134	9	57	0	5	0	47	0	0	0	0	159
Future Volume (Veh/h)	134	9	57	0	5	0	47	0	0	0	0	159
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	146	10	62	0	5	0	51	0	0	0	0	173
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None			None								
Median storage veh												
Upstream signal (m)	225											
pX, platoon unblocked												
vC, conflicting volume	5			72			511	338	41	338	369	5
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	5			72			511	338	41	338	369	5
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	91			100			86	100	100	100	100	84
cM capacity (veh/h)	1616			1528			370	530	1030	573	510	1078
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	218	5	51	173								
Volume Left	146	0	51	0								
Volume Right	62	0	0	173								
cSH	1616	1528	370	1078								
Volume to Capacity	0.09	0.00	0.14	0.16								
Queue Length 95th (m)	2.3	0.0	3.6	4.3								
Control Delay (s)	5.2	0.0	16.3	9.0								
Lane LOS	A		C	A								
Approach Delay (s)	5.2	0.0	16.3	9.0								
Approach LOS			C	A								
Intersection Summary												
Average Delay				7.9								
Intersection Capacity Utilization				41.2%	ICU Level of Service				A			
Analysis Period (min)				15								

HCM Unsignalized Intersection Capacity Analysis 26: West Res/Comm Entrance & Fallis Line Driveway

Total Volumes 2036 (upgraded)
SAT Peak Hour

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (veh/h)	187	247	26	0	290	0	0	0	0	0	0	207	
Future Volume (Veh/h)	187	247	26	0	290	0	0	0	0	0	0	207	
Sign Control	Free			Free			Stop			Stop			
Grade	0%			0%			0%			0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	203	268	28	0	315	0	0	0	0	0	0	225	
Pedestrians													
Lane Width (m)													
Walking Speed (m/s)													
Percent Blockage													
Right turn flare (veh)													
Median type	None			None									
Median storage veh													
Upstream signal (m)	103												
pX, platoon unblocked				0.99			0.99			0.99			
vC, conflicting volume	315				296			1228			1003		
vC1, stage 1 conf vol													
vC2, stage 2 conf vol													
vCu, unblocked vol	315				284			1225			998		
tC, single (s)	4.1				4.1			7.1			6.5		
tC, 2 stage (s)													
tF (s)	2.2				2.2			3.5			4.0		
p0 queue free %	84				100			100			100		
cM capacity (veh/h)	1245				1266			93			202		
Intersection Summary													
Average Delay				4.3									
Intersection Capacity Utilization				52.7%			ICU Level of Service			A			
Analysis Period (min)				15									

HCM Unsignalized Intersection Capacity Analysis 29: Middle Res/Comm Entrance & Fallis Line Driveway

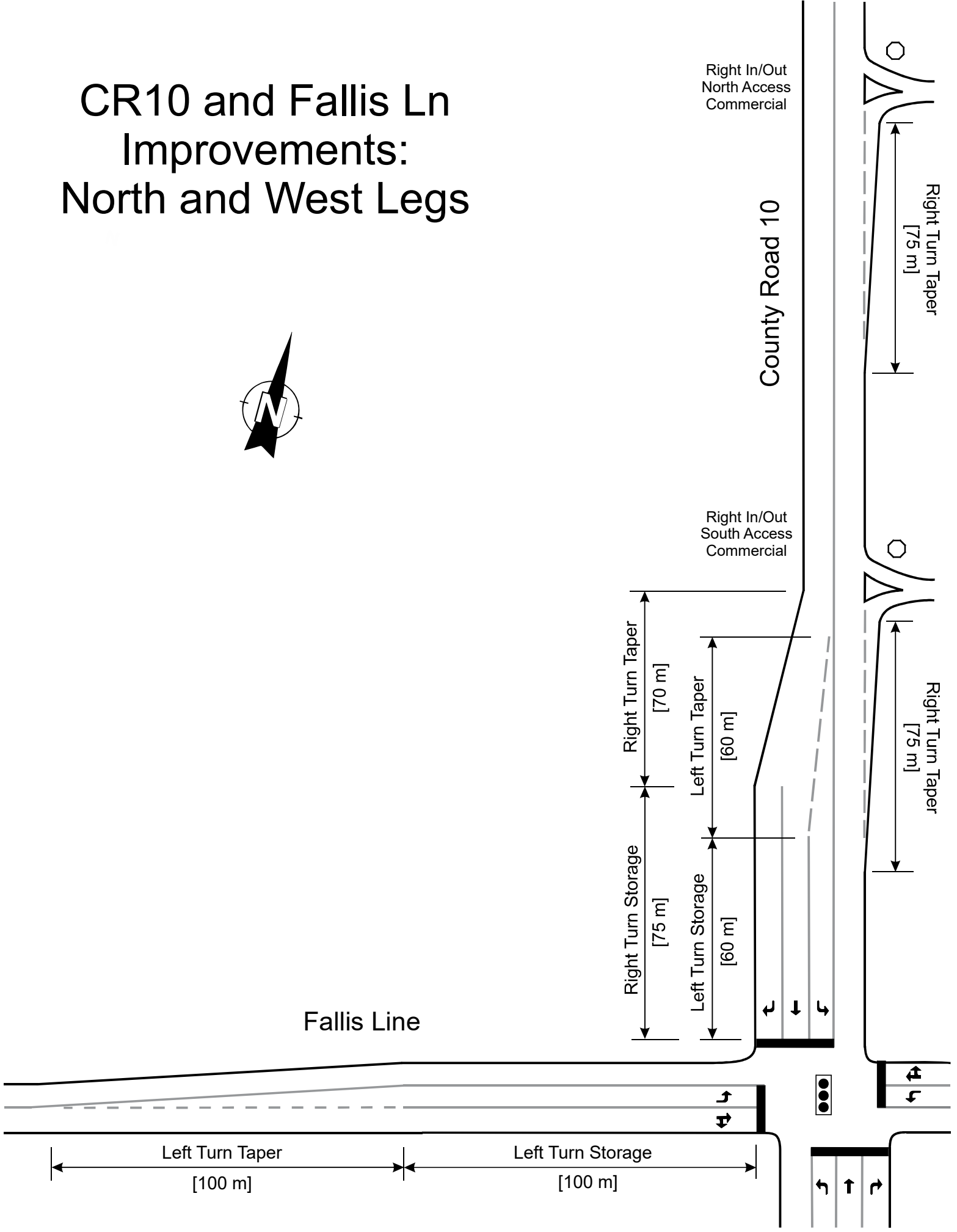
Total Volumes 2036 (upgraded)
SAT Peak Hour

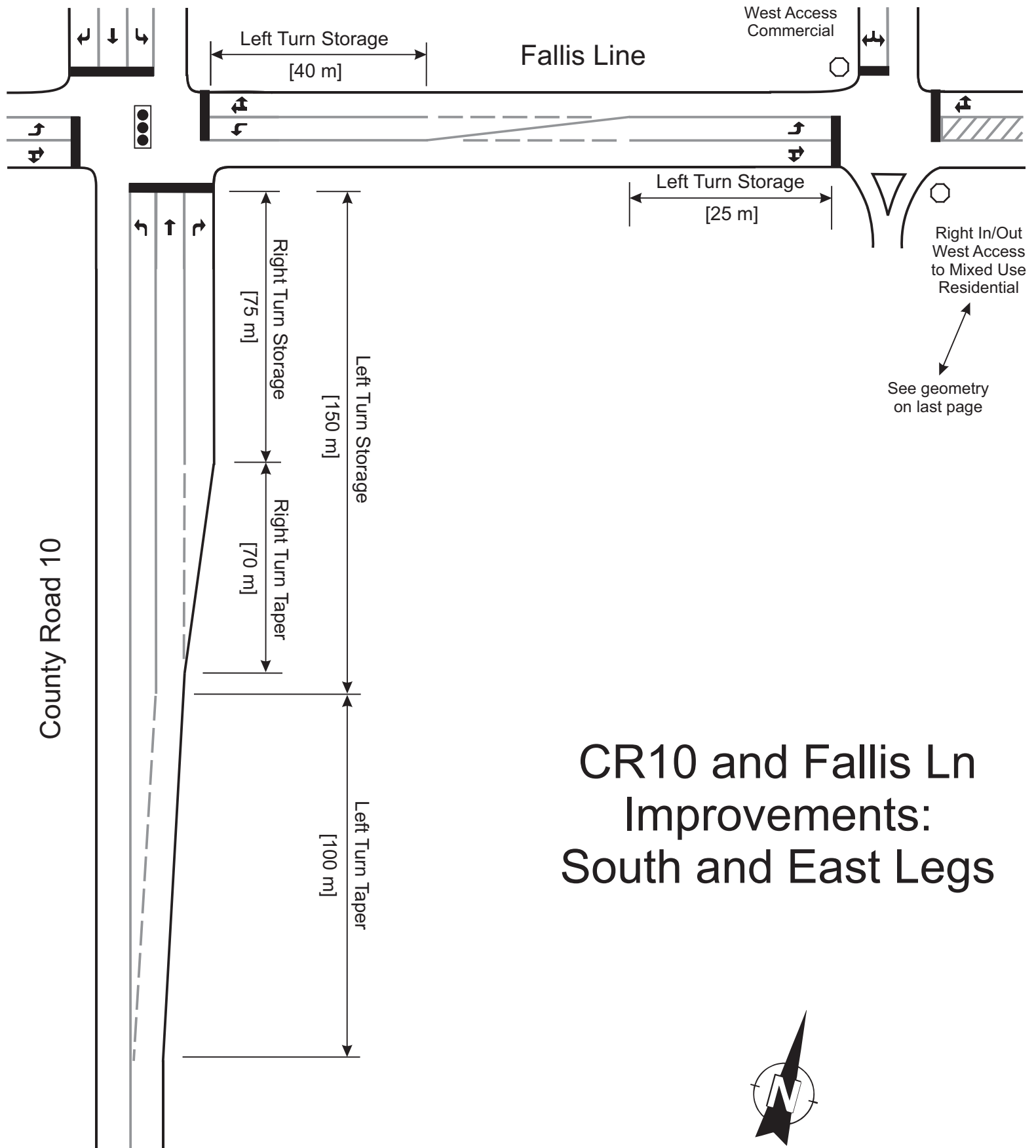
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	186	9	52	0	8	0	76	0	0	0	0	206
Future Volume (Veh/h)	186	9	52	0	8	0	76	0	0	0	0	206
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	202	10	57	0	9	0	83	0	0	0	0	224
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None			None								
Median storage veh												
Upstream signal (m)	225											
pX, platoon unblocked												
vC, conflicting volume	9			67			676	452	38	452	480	9
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	9			67			676	452	38	452	480	9
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	87			100			68	100	100	100	100	79
cM capacity (veh/h)	1611			1535			263	440	1033	468	424	1073
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	269	9	83	224								
Volume Left	202	0	83	0								
Volume Right	57	0	0	224								
cSH	1611	1535	263	1073								
Volume to Capacity	0.13	0.00	0.32	0.21								
Queue Length 95th (m)	3.3	0.0	9.9	6.0								
Control Delay (s)	5.9	0.0	24.9	9.2								
Lane LOS	A		C	A								
Approach Delay (s)	5.9	0.0	24.9	9.2								
Approach LOS			C	A								
Intersection Summary												
Average Delay				9.8								
Intersection Capacity Utilization				47.6%	ICU Level of Service				A			
Analysis Period (min)				15								

Appendix N

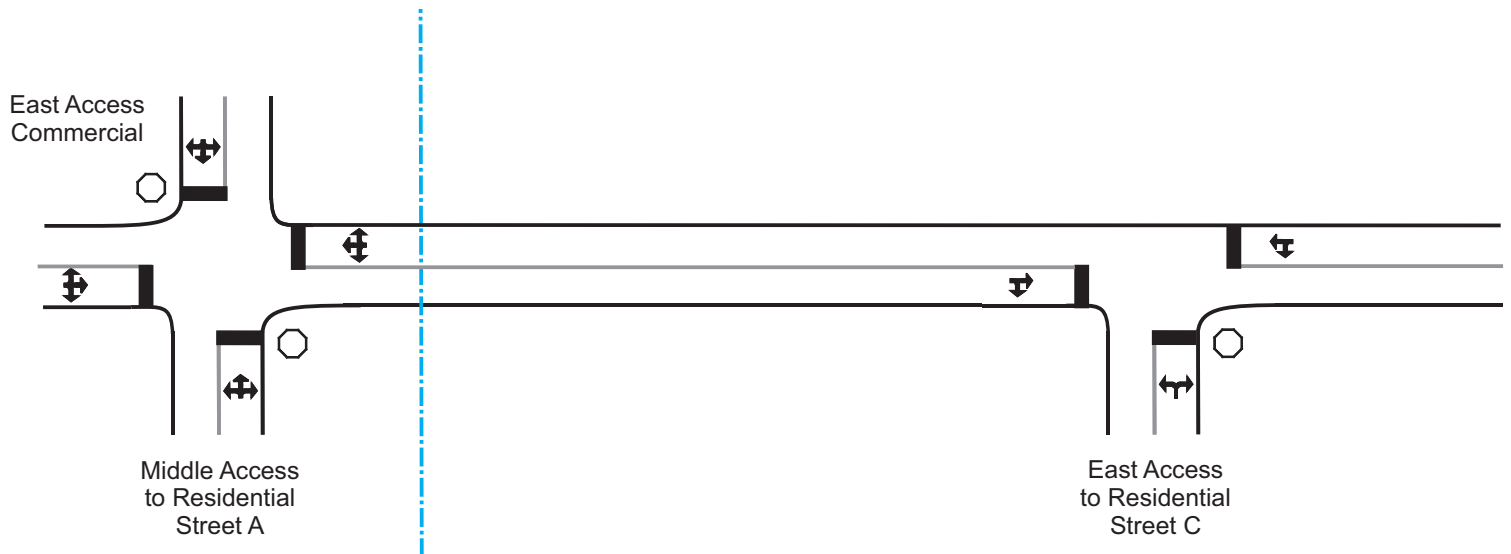
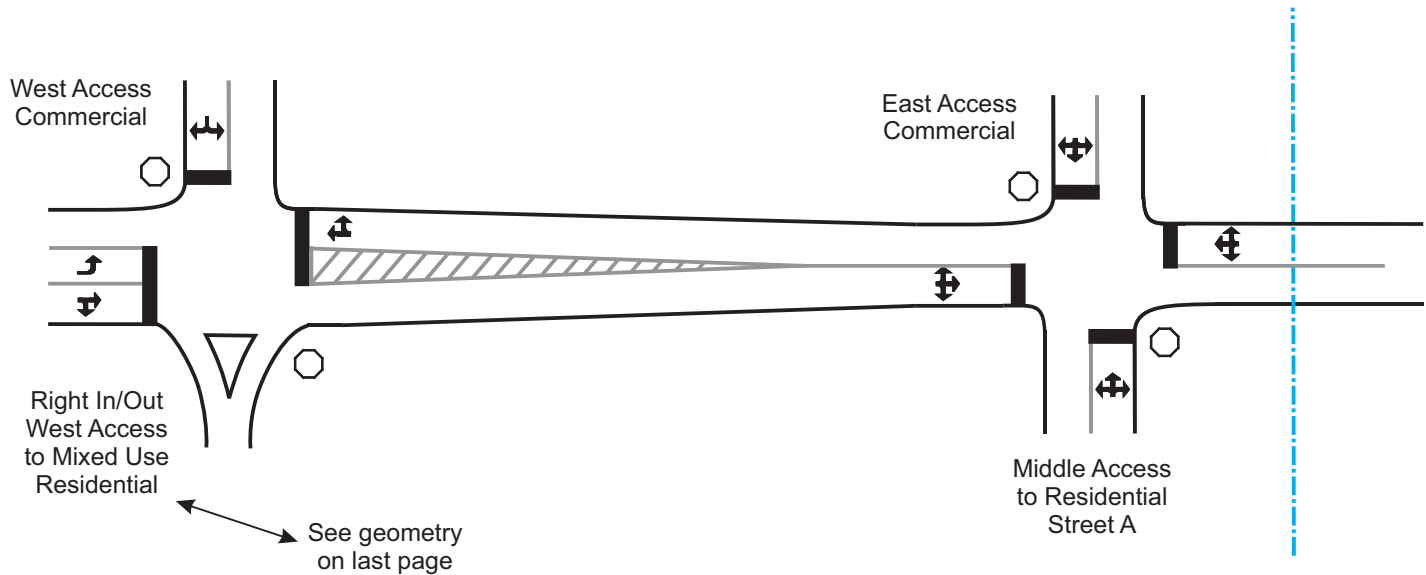
Proposed Final
Entrances Configuration

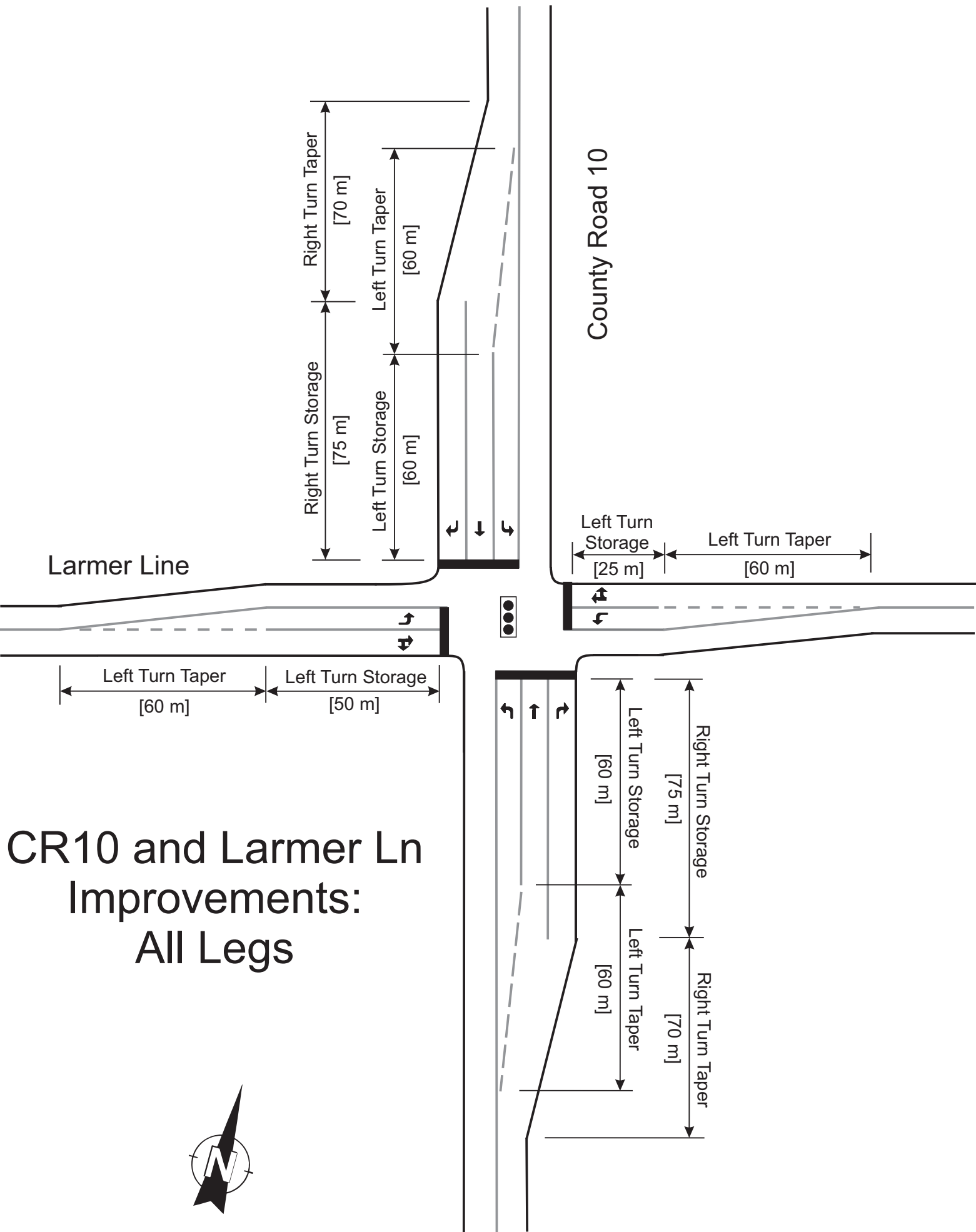
CR10 and Fallis Ln Improvements: North and West Legs





Fallis Line Accesses to Commercial and Residential





CR10 and Larmer Ln Improvements: All Legs

CR10 and King St Improvements: All Legs

