

Appendix 6
Impedance Modifications,
Friction Factors,
Through Trips

Coded Intrazonal Times

TAZ	Min.	TAZ	Min.	TAZ	Min.	TAZ	Min.
1	0.45	51	0.75	101	0.70	151	1.15
2	0.45	52	0.75	102	0.75	152	1.15
3	0.30	53	0.55	103	0.80	153	1.00
4	0.50	54	0.65	104	0.55	154	1.75
5	0.50	55	0.90	105	0.75	155	1.50
6	0.35	56	1.10	106	0.85	156	1.75
7	0.35	57	1.05	107	0.70	157	1.45
8	0.30	58	0.65	108	0.80	158	1.45
9	0.35	59	0.80	109	0.40	159	1.50
10	0.40	60	0.95	110	0.75	160	0.90
11	0.30	61	1.10	111	0.60	161	1.45
12	0.45	62	0.50	112	0.55	162	1.30
13	0.40	63	0.75	113	0.60	163	0.90
14	0.35	64	0.80	114	0.65	164	1.05
15	0.40	65	0.60	115	0.70	165	1.00
16	0.30	66	0.60	116	0.55	166	1.10
17	0.30	67	0.75	117	0.75	167	0.90
18	0.25	68	0.60	118	0.95	168	1.25
19	0.80	69	0.65	119	0.15	169	1.65
20	1.45	70	0.60	120	1.60	170	1.55
21	1.25	71	1.15	121	1.05	171	1.50
22	2.45	72	0.60	122	1.60	172	1.30
23	0.75	73	0.60	123	0.65	173	1.35
24	1.15	74	0.60	124	1.00	174	1.40
25	0.65	75	0.65	125	1.10	175	1.55
26	0.75	76	0.80	126	1.30	176	1.00
27	0.90	77	0.75	127	1.30	177	1.30
28	0.70	78	0.70	128	0.95	178	2.35
29	0.85	79	0.70	129	1.15	179	0.85
30	0.65	80	0.80	130	1.95	180	1.15
31	0.55	81	1.15	131	1.55	181	1.10
32	0.80	82	0.60	132	1.20	182	1.00
33	0.50	83	0.95	133	1.15	183	1.35
34	0.60	84	0.80	134	1.60	184	1.25
35	0.55	85	1.00	135	1.55	185	1.35
36	0.50	86	0.90	136	0.85	186	2.25
37	0.75	87	0.70	137	0.80	187	1.90
38	0.70	88	0.90	138	1.20	188	1.90
39	0.55	89	0.65	139	1.20	189	1.70
40	0.60	90	0.95	140	0.95	190	1.35
41	0.70	91	0.75	141	1.25	191	1.40
42	0.75	92	0.55	142	0.80	192	1.65
43	0.70	93	0.60	143	0.95	193	1.80
44	0.75	94	0.70	144	1.40	194	2.15
45	0.80	95	0.60	145	1.35	195	2.00
46	0.60	96	0.75	146	1.05	196	2.15
47	0.70	97	0.90	147	0.70	197	0.95
48	0.85	98	0.70	148	1.50	198	1.10
49	2.10	99	0.65	149	0.70	199	1.00
50	0.70	100	0.50	150	0.85	200	1.65

TAZ	Min.	TAZ	Min.	TAZ	Min.
201	1.55	251	2.55	301	1.85
202	2.30	252	3.45	302	2.45
203	1.65	253	1.30	303	3.20
204	1.45	254	1.70	304	1.65
205	1.35	255	1.85	305	1.55
206	1.85	256	3.70	306	1.75
207	1.55	257	1.30	307	3.70
208	1.45	258	2.05	308	2.05
209	1.45	259	1.80	309	1.50
210	1.35	260	0.80	310	3.10
211	1.75	261	1.30	311	2.90
212	1.55	262	1.10	312	0.90
213	2.05	263	1.20		
214	2.00	264	0.85		
215	1.55	265	1.10		
216	1.70	266	0.85		
217	2.25	267	0.65		
218	2.35	268	3.65		
219	2.40	269	2.00		
220	1.70	270	1.30		
221	2.20	271	1.40		
222	1.00	272	1.60		
223	1.25	273	5.05		
224	2.15	274	1.40		
225	1.95	275	2.65		
226	1.90	276	2.05		
227	2.25	277	4.20		
228	2.95	278	3.25		
229	2.40	279	3.25		
230	2.65	280	2.90		
231	2.50	281	1.80		
232	3.10	282	2.00		
233	1.75	283	0.95		
234	1.80	284	0.30		
235	3.20	285	0.45		
236	3.75	286	1.70		
237	1.45	287	0.95		
238	2.75	288	1.15		
239	2.35	289	2.95		
240	1.70	290	2.40		
241	1.95	291	2.40		
242	1.50	292	2.40		
243	1.90	293	2.45		
244	3.20	294	1.60		
245	2.70	295	1.85		
246	2.75	296	1.30		
247	2.10	297	1.35		
248	1.95	298	1.90		
249	2.95	299	1.15		
250	2.90	300	1.65		

MATS Impedance Adjustments

Terminal times and centroid connector (local street) speeds are based on the Land Use type calculated from the Activity INdex. The values by land use category are as follows:

	Terminal Time (minutes)	Local Speed (mph)
CBD	5	12
Activity Center	4	18
Urban	3	24
Suburban	2	27
Undeveloped	1	30

Intrazonal times are calculated with the following formula:

$$.5 \times MI^{\wedge}.5 \times 60 / S$$

where: MI= TAZ area in square miles
 S = TAZ Connector (Local) speed in mph.

Through Trips

All through trips enter and leave the study area on the roads listed below. Prohibited interchanges are indicated by the shaded cells.

	I-10 E	DIP	SR 188	I-10 W	GRND-BAY WM	APB	US 98	US 45	US 43	I-65
I-10 E	Shaded									
DIP		Shaded								
SR 188			Shaded							
I-10 W				Shaded						
GRND-BAY WM					Shaded					
APB						Shaded				
US 98							Shaded			
US 45								Shaded		
US 43									Shaded	
I-65										Shaded

Friction Factors

Trip Length (minutes)					Trip Length (minutes)				
	HBW	HBO	NHB	INX		HBW	HBO	NHB	INX
1	13000	24000	30000	0	50	895	2	17	1050
2	11600	66839	72059	0	51	810	2	16	930
3	10412	30356	30771	165000	52	732	2	14	800
4	93673	16843	16630	140000	53	662	2	13	700
5	84381	10429	10226	125000	54	599	1	12	610
6	76073	6922	6823	112500	55	542	1	11	540
7	68622	4819	4816	105000	56	490	1	11	480
8	61926	3475	3543	97000	57	443	1	10	430
9	55901	2574	2689	92000	58	401	1	9	380
10	50475	1947	2093	86000	59	363	1	8	340
11	45585	1498	1662	81000	60	328	1	8	300
12	41175	1169	1342	78000	61	297	1	7	260
13	37197	923	1098	72000	62	268	0	7	230
14	33608	737	910	68000	63	243	0	6	200
15	30367	593	762	65000	64	220	0	6	170
16	27442	481	643	62000	65	199	0	5	140
17	24801	392	547	59000	66	180	0	5	120
18	22415	322	469	56000	67	163	0	5	100
19	20260	266	405	54000	68	147	0	4	80
20	18313	220	351	52000	69	133	0	4	60
21	16554	184	306	50000	70	120	0	4	50
22	14965	153	268	49000	71	109	0	4	40
23	13529	129	235	47000	72	98	0	3	30
24	12231	108	208	45000	73	89	0	3	20
25	11058	91	184	43000	74	81	0	3	10
26	9998	77	163	41000	75	73	0	3	5
27	9040	66	145	39000	76	66	0	3	5
28	8173	56	130	36500	77	60	0	2	5
29	7390	48	116	34000	78	54	0	2	5
30	6683	41	104	31000	79	49	0	2	5
31	6043	35	94	28000	80	44	0	2	5
32	5464	30	85	24500					
33	4941	26	77	20500					
34	4468	22	69	16500					
35	4041	19	63	13500					
36	3654	16	57	11000					
37	3305	14	52	9000					
38	2989	12	47	7400					
39	2703	11	43	6000					
40	2444	9	39	5000					
41	2211	8	36	4250					
42	1999	7	33	3500					
43	1808	6	30	3050					
44	1635	5	28	2600					
45	1479	5	25	2250					
46	1338	4	23	1900					
47	1210	3	22	1650					
48	1094	3	20	1400					
49	990	3	18	1230					