## Section 7

Final Report Chapter 4 Appendix





# **Section 7: Final Report Chapter 4 Appendix**

Appendix A - Level of Service Tables

Appendix B - Employment and Population Data

# **Section 7 Final Report Chapter 4 Appendix**

Appendix A: Level of Service Tables





#### TABLE 1 EXISTING AM AND PM PEAK HOUR INTERSECTION OPERATIONS

	LOS¹	V/C1	Control delay (sec/ veh) 1	Crit. Mov't	LOS <sup>1</sup>	V/C1	Control delay (sec/veh) 1	Crit. Mov't
Intersection	AM Peak Hour			PM Peak Hour				
Glacier Hwy / Wildmeadow Ln	В	0.01	14.7	SB LT/RT	С	0.02	22.9	SB LT/RT
Glacier Hwy / Industrial Blvd	Е	0.08	42.4	SB LTR	F	0.46	>50	SB LTR
Egan Dr / Vintage Blvd / Glacier Hwy (North)	D	0.39	28.1	NB LT/RT	F	>1.0	>50	NB LT/RT
Egan Dr / Riverside Dr	С	0.39	22.8		С	0.70	24.8	
Egan Dr / Mendenhall Loop Rd	E	0.89	57.9		Е	0.99	59.9	
Egan Dr / Glacier Hwy (McNugget)	В	0.74	16.2		С	0.9	26.8	
Egan Dr / Yandukin Dr	С	0.23	19.1	WB LT	F	>1.0	>50	EB LT
Mendenhall Mall Rd / Vintage Blvd / Riverside Dr	С	0.50	25.7		С	0.56	31.4	
James Blvd. / Riverside Dr	С	0.14	18.8	WB LT/RT	D	0.18	27.8	WB LT/RT
James Blvd / Mendenhall Loop Rd	С	0.31	20.2	EB LT/RT	С	0.18	15.8	EB LT/RT
Mendenhall Mall Rd / Mendenhall Loop Rd	В	0.61	17.4		С	0.76	27.7	
Glacier Hwy (North) / Sunset Dr	Α	0.01	9.2	SB LT/RT	В	0.01	10.1	SB LT/RT
Glacier Hwy (North)/Mendenhall Loop Rd Ext	С	0.05	18.8	WB LTR	F	0.34	>50	WB LTR
Glacier Hwy (Airport) / Berners Ave.	С	0.05	19.8	NB LT	F	0.14	>50	NB LT
Glacier Hwy (Airport)/ Shell Simmons Dr. Existing – TWSC Planned – signalized	C B	0.24 0.45	24.5 10.6	SB LT 	F B	>1.0 0.68	>50 16.2	NB LT
Glacier Hwy (Airport) / Jordan Ave. Existing – TWSC Planned – signalized	C B	0.05 0.42	20.3 11.4	NB LT	F B	>1.0 0.62 <sup>2</sup>	>50 16.6	SB LT
Glacier Hwy (Airport) / Old Dairy Rd./Trout St. Existing - full access Planned - restricted EW-LT during PM Pk.	F	0.85 0.85	>50 >50	EB LT EB LT	F D	>1.0 0.62	>50 25.3	EB LT WB T/RT
Old Dairy Rd / Crest St	Α	0.05	9.3	NB LT/RT	В	0.15	10.7	NB LT/RT
Yandukin Dr / Old Dairy Rd	В	0.12	10.4	SB LTR	В	0.19	12.2	SB LTR
Yandukin Dr / Crest Street	Α	0.01	9.8	NB LTR	В	0.18	11.3	SB LTR
Glacier Hwy (Fred Meyer)/ Glacier Hwy (Lemon Rd)	В	0.02	10.8	EB TH/RT	D	0.52	26.8	EB TH/RT

<sup>&</sup>lt;sup>1</sup> Averaged over all movements at signalized intersections; for critical movement only at unsignalized intersections)

NB = northbound, SB = southbound, EB = eastbound, WB = westbound

LT = left, TH = through, RT = right; LTR = left/through/right

LOS = Level of Service, V/C= volume-to-capacity ratio

TWSC = Two-way stop-controlled

<sup>&</sup>lt;sup>2</sup> Includes left-turns rerouted from Trout Street and Old Dairy to Jordan Avenue.



#### TABLE 2 YEAR 2025 AM AND PM PEAK HOUR INTERSECTION OPERATIONS

			Control delay	Crit.			Control delay	Crit.	
	LOS	V/C <sup>1</sup>	(sec/ veh) 1	Mov't	LOS	V/C <sup>1</sup>	(sec/veh) 1	Mov't	
Intersection		AM	Peak Ho	ur		PM Peak Hour			
Glacier Hwy / Wildmeadow Ln	С	0.01	18.2	SB LT/RT	D	0.05	30.6	SB LT/RT	
Glacier Hwy / Industrial Blvd	F	>1.0	>50	NB LT	F	>1.0	>50	NB LT	
Egan Dr / Vintage Blvd / Glacier Hwy (North)	F	0.85	>50	NB LT/RT	F	>1.0	>50	NB LT/RT	
Egan Dr / Riverside Dr	O	0.49	21.9		E	>1.0	79.8		
Egan Dr / Mendenhall Loop Rd	F	>1.0	>80		F	>1.0	>80		
Egan Dr / Glacier Hwy (McNugget)	O	0.92	25.3		F	>1.0	>80		
Egan Dr / Yandukin Dr	D	0.35	27.2	WB LT	F	>1.0	>50	EB LT	
Mendenhall Mall Rd / Vintage Blvd / Riverside Dr	D	0.62	35.5		D	0.83	40.7		
James Blvd. / Riverside Dr	D	0.22	25	WB LT/RT	F	0.56	>50	WB LT/RT	
James Blvd / Mendenhall Loop Rd	F	>1.0	>50	EB LT/RT	С	0.29	24.3	EB LT/RT	
Mendenhall Mall Rd / Mendenhall Loop Rd	В	0.72	15.3		D	0.93	36.4		
Glacier Hwy (North) / Sunset Dr	В	0.01	10.2	SB LT/RT	В	0.02	11.6	SB LT/RT	
Glacier Hwy (North)/Mendenhall Loop Rd Ext	E	0.12	42.6	WB LTR	F	>1.0	>50	WB LTR	
Glacier Hwy (Airport) / Berners Ave.	D	0.14	33.4	NB LT	F	0.75	>50	NB LT	
Glacier Hwy (Airport)/ Shell Simmons Dr. Planned – signalized	В	0.59	12.9		D	1.01	45.7		
Glacier Hwy (Airport) / Jordan Ave. Planned – signalized	В	0.54	12.7		С	0.81	25.3		
Glacier Hwy (Airport) / Old Dairy Rd./Trout St. Planned - restricted EW-LT during PM Pk.	F	>1.0	>50	EB LT	F	>1.0	>50	WB TH/RT	
Old Dairy Rd / Crest St	Α	0.07	9.5	NB LT/RT	В	0.29	13.3	NB LT/RT	
Yandukin Dr / Old Dairy Rd	В	0.16	11.1	SB LTR	С	0.44	16.9	SB LTR	
Yandukin Dr / Crest Street	В	0.02	10.2	NB LTR	В	0.29	14.3	SB LTR	
Glacier Hwy (Fred Meyer)/ Glacier Hwy (Lemon Rd)	В	0.04	13.1	EB TH/RT	F	>1.0	>50	EB TH/RT	

<sup>&</sup>lt;sup>1</sup> Averaged over all movements at signalized intersections; for critical movement only at unsignalized intersections)

NB = northbound, SB = southbound, EB = eastbound, WB = westbound

LT = left, TH = through, RT = right; LTR = left/through/right

V/C= volume-to-capacity ratio

TWSC = Two-way stop-controlled

<sup>&</sup>lt;sup>2</sup> Includes left-turns rerouted from Trout Street and Old Dairy to Jordan Avenue.

# **Section 7 Final Report Chapter 4 Appendix**

Appendix B: Employment and Population Data





# Draft Memo #4 Draft Purpose and Need Statement

#### Employment Data and Projections Provided by CBJ 12/2000

#### **Employment** Annual Growth 1998 TAZ Area 2020 Rate Area A 9 Upper Valley 14 17 0.89% 10 Middle Valley 128 158 0.96% 150 185 1/2 of 20 Mendenhall Mall 0.96% 22 Mid-Central Valley 30 37 0.96% 16 20 23 Upper Central Valley 1.02% 69 24 Upper Tongass 56 0.95% 25 Lower Tongass 1.15% 27 Atlin Drive 1.32% Total 404 499 1.03% Average Annual Growth Rate

 Area B

 11 Upper River
 69
 85

 12 West Valley
 25
 31

1/2 of 18 Vintage Park 137.5 169.5 0.96% 1/2 of 20 Mendenhall Mall 150 185 0.96% 21 Mid Riverside 11 14 1.10% 26 Lower Tongass 385 474 0.95% 958.5 Total 777.5 Average Annual Growth Rate 0.98%

Delta

95

32

0.95%

0.98%

 Delta
 181

 Area C

 1/2 of 18 Vintage Park
 137.5
 169.5
 0.96%

 Average Annual Growth Rate
 0.96%

Delta

Area D 28 Hurlock Avenue 53 0.96% 23 28 29 Upper Raddiff 0.90% 27 1/2 of 30 Lower Raddiff 22 0.94% 1/2 of 31 Travel Lodge 155 191 0.95% Total 243 299 0.94% Average Annual Growth Rate

Delta 56

### Population Data and Projections Provided by CBJ 12/2000

			Population	on
				Annual Growth
TAZ	Area	1998	2020	Rate
	Α	rea A		
9	Upper Valley	1029	1088	0.25%
10	Middle Valley	1186	1462	0.96%
1/2 of 20	Mendenhall Mall	0	0	0.00%
22	Mid-Central Valley	884	1018	0.64%
23	Upper Central Valley	2109	2193	0.18%
24	Upper Tongass	768	852	0.47%
25	Lower Tongass	706	870	0.95%
27	Atlin Drive	43	112	4.45%
	Total	6725	7595	·
	Average Annual Gro	wth Rate		0.99%
	<u> </u>	Dolta	870	<u> </u>

Delta 870

	Area B				
11 Upper River	2202	2311	0.22%		
12 West Valley	898	1107	0.96%		
1/2 of 18 Vintage Park	0	0	0.00%		
1/2 of 20 Mendenhall Mall	0	0	0.00%		
21 Mid Riverside	1026	1065	0.17%		
26 James Blvd.	569	628	0.45%		
Total	4695	5111			
Average Annual C	0.30%				
_	Delta	416			

Area C					
1/2 of 18 Vintage Park	0	0	0.00%		
Average Annual Gr	0.00%				
	Delta	0			

Area D				
28	Hurlock Avenue	97	120	0.97%
29	Upper Raddiff	390	419	0.33%
1/2 of 30	Lower Raddiff	241	271	0.54%
1/2 of 31	Travel Lodge	120.5	132.5	0.43%
Average Annual Growth Rate				0.57%

Delta 94



### **Draft Memo #4 Draft Purpose and Need Statement**

#### **Employment Data and Projections** Provided by CBJ 12/2000

#### Area E 1/2 of 30 Lower Raddiff 27 0.94% 1/2 of 31 Travel Lodge 155 191 0.95% 32 Airport Mall 317 391 0.96% 33 Nugget Jordan Mall 592 730 0.96% 34 Ka-See-An 101 124 0.94% 77.5 95.5 1/2 of 35 Crest Street 0.95% 1/2 of 36 Old Dairy 138.5 170.5 0.95% Total 1403 1729 0.95% Average Annual Growth Rate

326 Delta

	Area F				
7	Airport	352	434	0.96%	
19	Glacier Fire Station	48	59	0.94%	
	Crest Street	77.5	95.5	0.95%	
1/2 of 36	Old Dairy	138.5	170.5	0.95%	
	Total	616	759		
Average Annual Growth Rate				0.95%	
	_	Delta	143		

Area G 1/2 of 6 Fred Meyer 176 0.95% Average Annual Growth Rate 0.95% 33 Delta

Area H				
8 Enginee	rs Cutoff	1	1	0.00%
13 Petersor	ı Hill	395	487	0.96%
14 Fritz Co	<i>r</i> e	8	10	1.02%
15 Universi	ty of Alaska	105	129	0.94%
16 Tee Har	oor	465	573	0.95%
17 Industria	l Boulevard	1096	1351	0.96%
Total		2070	2551	
Average Annual Growth Rate			0.80%	

Delta 481

#### Population Data and Projections Provided by CBJ 12/2000

	Average Annual Gro	Delta	132	0.0070		
	3.90%					
	Total	650.5	782.5			
1/2 of 36	Old Dairy	0	0	0.00%		
1/2 of 35	Crest Street	1	12	11.97%		
34	Ka-See-An	225	249	0.46%		
33	Nugget Jordan Mall	3	42	12.76%		
32	Airport Mall	60	77	1.14%		
1/2 of 31	Travel Lodge	120.5	132.5	0.43%		
1/2 of 30	Lower Raddiff	241	270	0.52%		
	Area E: Glacier Highway East to Egan Drive					

	Area F				
7	Airport	0	0	0.00%	
19	Glacier Fire Station	0	0	0.00%	
1/2 of 35	Crest Street	1	12	11.97%	
1/2 of 36	Old Dairy	0	0	0.00%	
	Total	1	12		
	Average Annual Growth Rate				
	_	Delta	11		

Area G

1/2 of 6 Fred Meyer 112 13.09% Average Annual Growth Rate 13.09% 104.5 Delta

	Area H				
8	Engineers Cutoff	243	407	2.37%	
13	Peterson Hill	677	1036	1.95%	
14	Fritz Cove	646	705	0.40%	
15	University of Alaska	449	961	3.52%	
16	Tee Harbor	1942	2393	0.95%	
17	Industrial Boulevard	87	696	9.92%	
	Total	4044	6198		
Average Annual Growth Rate				3.19%	

Delta 2154