

AMATS: Seward Highway to Glenn Highway Connection Planning & Environmental Linkage Study State Project No.: CFHWY00550 Federal Project No.: 0001653

Traffic Forecast

March 2022

This planning document may be adopted in a subsequent environmental review process in accordance with 23 USC 168 Integration of Planning and Environmental Review.

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by DOT&PF pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated November 3, 2017, and executed by FHWA and DOT&PF.

Prepared for:

Alaska Department of Transportation and Public Facilities

Prepared by:

HDR 2525 C Street, Suite 500 Anchorage, AK 99503 907-644-2000 Phone | 907-644-2022 Fax This page intentionally left blank

Contents

1.	Intro	oduct	tion	L
2.	Met	thodo	ology	2
3.	Рор	ulatio	on	2
	3.1	Histo	orical Population	2
	3.2	Рори	ulation Projection	3
4.	Traf	fic		5
	4.1	Histo	orical Traffic	5
4	4.2	Traf	fic Forecast	5
	4.2.	1	Low-Growth Scenario	5
	4.2.	2	Medium-growth Scenario	3
	4.2.	3	High-growth Scenario	9

Tables

Table 1. Historical Population, 2000–2020	. 3
Table 2. Population by Area, 2020–2050	.4
Table 3. Historical Traffic Counts, 2010–2019	.6
Table 4. Low-growth Scenario, Projected Traffic Volumes, 2010–2050 in 5-year Increments	.7
Table 5. Medium Growth Scenario, Projected Traffic Volumes, 2010–2050	.8
Table 6. High-growth Scenario, Projected Traffic Volumes, 2010–2050	10

Figures

Figure 1. Seward Glenn PEL Study Area	1
Figure 2. Historical Population by Year, 2000–2020	
Figure 3. Population Projection, 2000–2050	4
Figure 4. Traffic Count and Continuous Count Station Locations	5
Figure 5. Low-growth Scenario, Projected Traffic Volumes, 2010–2050	8
Figure 6. Medium-growth Scenario, Projected Traffic Volumes, 2010–2050	9
Figure 7. High Growth Scenario, Projected Traffic Volumes, 2010–2050	10

Appendices

A – Traffic Forecasts for Low-, Medium-, and High-growth Scenarios, by Year

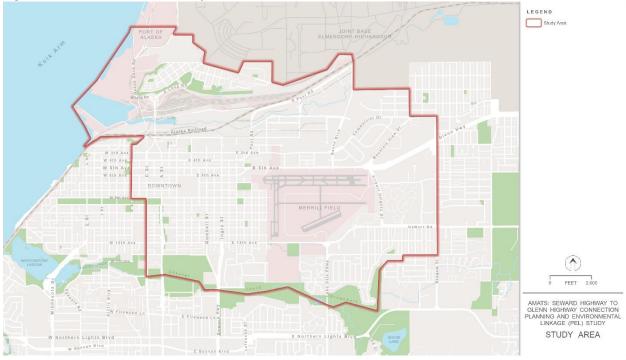
B – Graphs of Traffic Forecasts by Location

Acronyms

AADT	Annual Average Daily Traffic
CCS	Continuous Count Station
DOL&WD	Alaska Department of Labor & Workforce Development
DOT&PF	Alaska Department of Transportation and Public Facilities
MOA	Municipality of Anchorage
MSB	Matanuska-Susitna Borough

I. INTRODUCTION

This memorandum presents traffic forecasts for the Seward and Glenn Highways in the study area (see Figure 1) through 2050. This traffic forecast is to be used to help proposed alternatives meet the travel needs over the study's planning horizon. The planning horizon for this study begins in 2020 and extends to 2050, a period of 30 years.





This memorandum includes the following:

Section 2 presents a description of the methodology used to create the traffic forecast and summarizes the assumptions made in preparing the forecast.

Section 3 presents a population forecast from the State of Alaska Department of Labor & Workforce Development (DOL&WD) population projections for the Matanuska-Susitna Borough (MSB) and Municipality of Anchorage¹ (MOA). Historical population data and the current DOL&WD population projections are presented in tables and graphs.

Section 4 presents low-, medium-, and high-growth scenario traffic forecasts. The information includes tables and graphs showing historic traffic information and traffic forecasts in 5-year increments over the planning horizon (2050). Appendix A includes traffic forecasts by year for each scenario, and Appendix B shows graphs of the traffic forecasts by location.

¹ The MOA includes the Anchorage Bowl, Chugiak-Eagle River, and Girdwood).

2. METHODOLOGY

Given the uncertainty for growth in Southcentral Alaska, the Alaska Department of Transportation and Public Facilities (DOT&PF) used a historical trend analysis technique for the traffic forecast that correlates the future MOA and MSB populations to a future traffic forecast. A historical trend analysis correlates past population with traffic and then projects future traffic based on the DOL&WD population projections.

To help reflect future uncertainty, the project team developed low-, medium-, and high-growth rate traffic forecasts for the Seward and Glenn Highways. The low-growth scenario assumes that traffic would remain constant at 2019 levels. The medium-growth scenario is based on the current DOL&WD population forecast for the MOA/MSB region.² This represents the most likely scenario based on existing demographic changes. Under this scenario, population in Southcentral Alaska would increase from 398,235 residents in 2020 to 470,528 residents in 2050 (an increase of 18.2 percent). This represents an annual growth of 0.61 percent. The high-growth scenario is based on the population growth the region experienced between 2000 and 2010 (19.5 percent). These three scenarios represent a reasonable range of potential conditions that could occur in the project area over the next 30 years.

The traffic forecasts presented in this memo are based on the following assumptions:³

- No major projects will occur that would substantially alter traffic patterns in the project area (e.g., commuter rail, High Occupancy Vehicle lanes, toll lanes, etc.).
- No substantial changes in mode preference will occur.
- No extraordinary events like the construction of a gas pipeline or the building of the Knik Arm Crossing will occur.
- Traffic data from 2020 was excluded from trendline analysis because COVID-19 is assumed to have altered travel patterns in that year. It is assumed that when the pandemic is over, travel will more closely resemble historic trends.
- Employment and disposable income levels will remain relatively constant.
- The MSB population continues to grow at a faster rate than the MOA (see Table 2).

3. POPULATION

This section summarizes the historical and projected population for the MOA and MSB. Data was obtained from the DOL&WD website (<u>https://live.laborstats.alaska.gov/pop/projections.cfm</u>) in June 2021.

3.1 HISTORICAL POPULATION

Table 1 and Figure 2 show historical population for the MOA and MSB. During the past 20 years, the population of the MSB has almost doubled, while the MOA population has only increased by

² The MOA/MSB region was studied because of the substantial number of people from the MSB who travel into Anchorage via the Glenn Highway on a frequent basis.

³ Please note that the project team acknowledges that not all increase in demand is automobile based. A traffic forecast based on the AMATS Travel Demand Model is also being prepared for this project. That forecast will consider other variables.

approximately 11 percent. The 2000 to 2010 period had the highest percent growth in both the MOA and MSB.

Location	Population			Pe	ercent Chang	ge	Annual Percent Growth			
	2000 ^a	2010 ^a	2020 ^b	2000-	2010-	2000-	2000-	2010-	2000-	
				2010	2020	2020	2010	2020	2020	
Municipality of Anchorage	260,283	291,826	288,970	12.12%	-0.98%	11.02%	1.21%	-0.5%	1.16%	
Matanuska Susitna Borough	59,322	88,995	107,305	50.02%	20.57%	80.89%	5.00%	2.12%	8.18%	
Region	319,605	319,605	396,275	19.15%	4.06%	23.99%	1.92%	0.46%	2.46%	

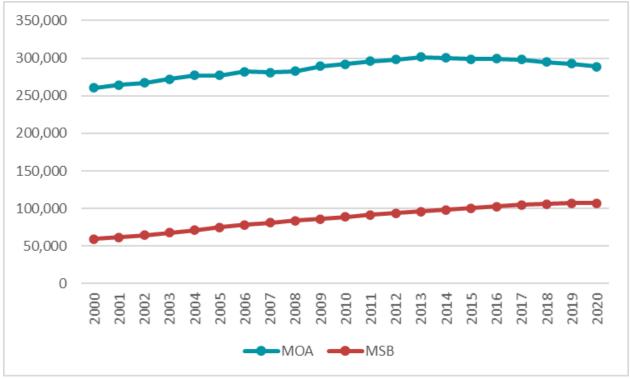
Table 1. Historical Population, 2000–2020

^a DOL&WD. 2021. Available at

https://live.laborstats.alaska.gov/pop/estimates/data/TotalPopulationBCA_2000to2010.xls, accessed June 21, 2021.

^b DOL&WD. 2021. Available at <u>https://live.laborstats.alaska.qov/pop/estimates/data/TotalPopulationBCA.xls</u>, accessed June 21, 2021.

Figure 2. Historical Population by Year, 2000–2020



3.2 **POPULATION PROJECTION**

The DOL&WD provides population projections for boroughs and census areas within Alaska. Table 2 and Figure 3 provide the most recent forecast for the MOA, MSB, and MOA/MSB region. The DOL&WD

forecast only goes to 2045. A 2050 population projection was extrapolated from 2045 to 2050 based on the 2020–2045 annual population growth from the DOL&WD forecast.

Location				Year				Percent Chang		
	2020	2025	2030	2035	2040	2045	2050 ^a	2020– 2045	2000– 2045	
Municipality of Anchorage	290,406	295,779	299,883	302,642	304,353	305,393	308,390	5.2%	17.3%	
Matanuska- Susitna Borough	107,829	117,488	127,138	136,474	145,256	153,086	162,137	42.0%	158.1%	
Region	398,235	413,267	427,021	439,116	449,609	458,479	470,528	15.1%	43.5%	

Table 2. Population by Area, 2020–2050

^a The 2050 population forecast was developed by the project team based on the DOL&WD's annual population growth between 2020 and 2045.

Source: DOL&WD. 2021. Available at <u>https://live.laborstats.alaska.gov/pop/projections/data/BCAProjections.xls,</u> <u>accessed June 22, 2021.</u>

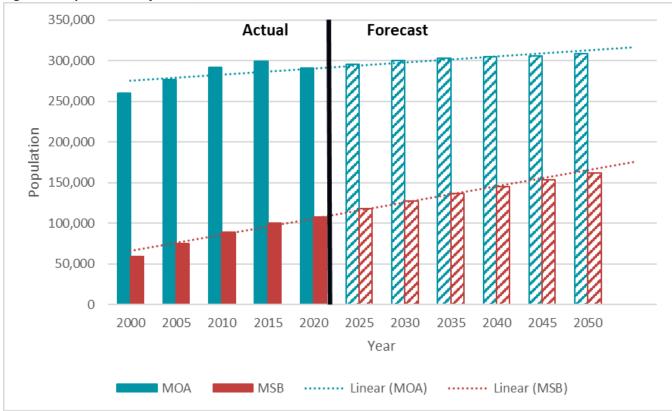
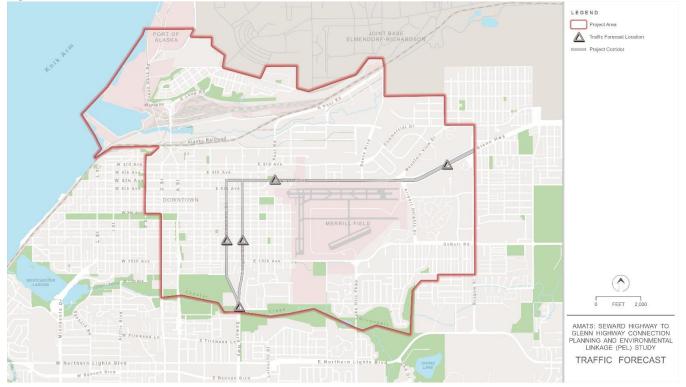


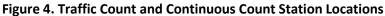
Figure 3. Population Projection, 2000–2050

Source: Historic population and projection to 2045 is from DOL&WD. Extrapolation from 2045 to 2050 is from HDR analysis.

4. TRAFFIC

This section documents historical and forecast traffic in the project area. Traffic counts and forecasts were identified for the Continuous Count Stations (CCS) along the Seward/Glenn Corridor closest to the project area (see Figure 4). The CCS locations were used because these sites are considered to have the most reliable traffic count data according to DOT&PF's Central Region Highway Data Manager. Traffic counts were also identified for 5th Avenue just east of Medfra Street (where the 5th/6th Avenue couplet ends), and Ingra and Gambell Streets (between 12th and 14th Avenue) although these locations are not CSS. Traffic count information was obtained from the DOT&PF Traffic Analysis and Data Application website (available at <u>https://alaskatrafficdata.drakewell.com/publicmultinodemap.asp</u>) and the DOT&PF Central Region 2010–2012 Traffic Volume Report.





4.1 HISTORICAL TRAFFIC

The primary routes into the project area are the Glenn and Seward Highways. Table 3 shows traffic on these routes at selected locations. Only data for the years 2010 through 2019 are reported. Traffic count data for 2020 is not included in this analysis because COVID-19 related conditions resulted in lower than typical traffic volumes. Overall, traffic at these locations has remained relatively flat.

						Year				
Location	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Glenn Highway (Airport Heights to Bragaw)	47,089	48,230	47,836	47,958	48,166	50,416	50,450	48,304	48,484	49,423
5 th Avenue (just east of Medfra Street)	50,404	47,474	47,266	48,096	48,305	44,270	50,852	49,845	N/A	47,803
Ingra Street (between 12 th and 14 th Avenues)	22,150	N/A	N/A	N/A	N/A	22,656	22,918	20,475	20,193	21,306
Gambell Street (between 12 th and 14 th Avenues)	21,008	19,543	18,873	19,553	19,141	16,635	18,298	17,747	17,491	19,187
Seward Highway at Ingra Gambell Streets	52,206	51,113	49,085	47,565	50,037	51,490	51,446	49,074	47,977	48,503

 Table 3. Historical Traffic Counts, 2010–2019

Note: N/A = not applicable; Data for 2020 is excluded due to the changes in traffic due to COVID-19 related conditions.

Source: DOT&PF. 2021. Available at

https://akdot.maps.arcgis.com/home/webmap/viewer.html?webmap=7c1e1029fdb64d7a86449d55ef05e21c#!

4.2 TRAFFIC FORECAST

This section documents the three (low-, medium-, and high-growth) traffic forecasts developed for the project. A range of forecasts was developed to account for the uncertainty associated with a 30-year planning horizon. The most likely scenario is the medium-growth scenario. The medium-growth scenario is recommended for use as the basis for determining future infrastructure needs as it is the most likely scenario based on what is currently known. The low-growth scenario represents the lowest growth that is likely to occur during the planning horizon. A high-growth scenario is estimated because it establishes the probable upper bounds of potential traffic growth. Appendix A shows the forecasted traffic by year for each scenario, and Appendix B shows graphs of the traffic forecasts by location.

4.2.1 Low-growth Scenario

The low-growth scenario assumes that traffic would remain constant at 2019 levels. This scenario assumes that traffic volume in the corridor would not grow for a variety of purposes such as increases in

telecommuting and walking/biking. Table 4 and Figure 5 present the resulting low-growth forecast. For forecasted traffic volumes by year, see Appendix A.

Roadway Segment		(Actual) ata		Forecast – 2020–2050								
	2010	2015	2020	2025	2030	2035	2040	2045	2050	2010- 2050		
Glenn Highway (between Bragaw and Airport Heights)	47,089	50,416	49,423	49.423	49.423	49.423	49.423	49.423	49.423	5.0%		
5 th Avenue ^a	50,404	44,270	47.803	47.803	47.803	47.803	47.803	47.803	47.803	-5.2%		
Gambell Street	21,008	16,635	19.187	19.187	19.187	19.187	19.187	19.187	19.187	-8.7%		
Ingra Street ^b	22,150	22,656	21.306	21.306	21.306	21.306	21.306	21.306	21.306	-3.7%		
Seward Highway at 20 th Avenue	52,206	51,490	48.503	48.503	48.503	48.503	48.503	48.503	48.503	-7.1%		

 Table 4. Low-growth Scenario, Projected Traffic Volumes, 2010–2050 in 5-year Increments

^a The trend for 5th Avenue was based on data between 2010 and 2017 due to data for 2018 being not available. Only data in 5-year increments is shown. See Appendix A for year by year historical and projected traffic volumes by year.

^{b.} The trend for Ingra Street was based on AADT values between 2015 and 2019 because data for the previous years was unavailable. Only data in 5-year increments is shown. See Appendix A for historical and projected traffic volumes by year.

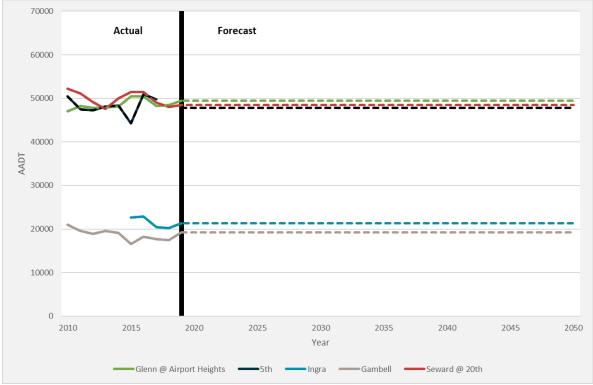


Figure 5. Low-growth Scenario, Projected Traffic Volumes, 2010–2050

4.2.2 Medium-growth Scenario

The medium-growth scenario is based on the DOL&WD population projection for the MOA/MSB region over the next 30 years. The DOL&WD population projection anticipates regional population increasing from 398,235 residents in 2020 to 458,479 residents in 2045, which represents an annual percent change of 0.61 percent. This scenario assumes that changes in traffic volumes are related to changes in population. **Error! Reference source not found.** and Figure 6 present the resulting forecast. For forecasted traffic volumes by year, see Appendix A.

Roadway		orical I) Data			Foreca	ast – 2020	-2050			Percent Change
Segment	2010	2015	2020	2025	2030	2035	2040	2045	2050	2010– 2050
Glenn Highway (between Bragaw and Airport Heights)	47,089	50,416	49,722	51,245	52,814	54,431	56,098	57,816	59,587	26.54%
5 th Avenue ^a	50,404	44,270	48,092	49,565	51,083	52,647	54,260	55,921	57,634	14.34%

Table 5. Medium Growth Scenario, Projected Traffic Volumes, 2010–2050

Gambell Street	21,008	16,635	19,303	20,503	21,121	21,778	22,445	22,445	25,688	15.97%
Ingra Street ^b	22,150	22,656	21,435	22,091	22,768	23,465	24,184	24,924	23,133	10.11%
Seward Highway at 20 th Avenue	52,206	51,490	48,796	50,291	51,831	53,418	55,054	56,740	58,478	12.01%

^a The trend for 5th Avenue was based on data between 2010 and 2017 due to data for 2018 not being available. Only data in 5-year increments is shown. See Appendix A for historical and projected traffic volumes by year.

^{b.} The trend for Ingra Street was based on AADT values between 2015 and 2019 because data for the previous years was unavailable. Only data in 5-year increments is shown. See Appendix A for historical and projected traffic volumes by year.

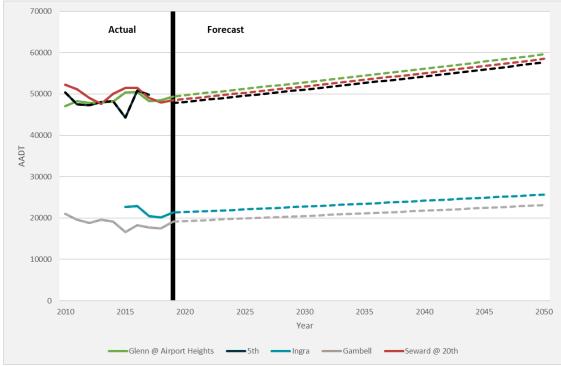


Figure 6. Medium-growth Scenario, Projected Traffic Volumes, 2010–2050

4.2.3 High-growth Scenario

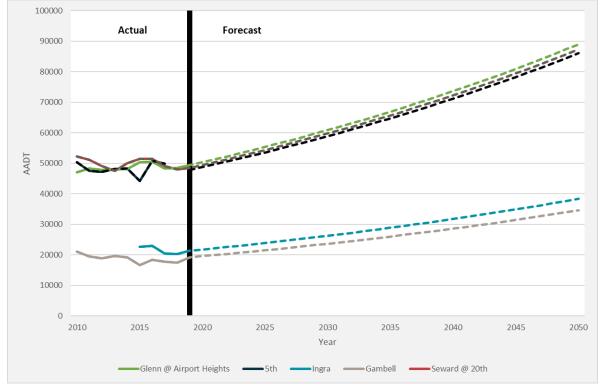
The high-growth scenario is based on the population growth rate experienced in the MOA/MSB region between 2000 and 2010. During this decade, population increased from 319,605 residents in 2000 to 380,821 residents in 2010, which represents an annual growth of 1.92 percent. To prepare the forecast, traffic volumes were grown by this annual growth rate out to 2050. While this level of growth is not anticipated given current economic conditions, such growth did occur recently in the region and therefore could occur again. Table 6 and Figure 7 present the results of the high-growth forecast. For forecasted traffic volumes by year, please see Appendix A.

		: (Actual Ita)	Forecast – 2020–2050								
Roadway Segment	2010	2015	2020	2025	2030	2035	2040	2045	2050	2010– 2050	
Glenn Highway (between Bragaw and Airport Heights)	47,089	50,416	50,370	55,382	60,893	66,952	73,614	80,939	88,994	88.99%	
5 th Avenue ^a	50,404	44,270	48,719	53,566	58,897	64,757	71,201	78,286	86,077	70.77%	
Gambell Street	21,008	16,635	19,555	21,500	23,640	25,992	28,579	31,422	34,549	73.20%	
Ingra Street ^b	22,150	22,656	21,714	23,875	26,251	28,863	31,735	34,893	38,365	64.46%	
Seward Highway at 20 th Avenue	52,206	51,490	49,432	54,351	59,759	65,706	72,244	79,433	87,337	67.29%	

Table 6. High-growth Scenario, Projected Traffic Volumes, 2010–2050

^a The trend for 5th Avenue was based on data between 2010 and 2017 due to data for 2018 being not available.
 Only data in 5-year increments is shown. See Appendix A for historical and projected traffic volumes by year.
 ^b The trend for Ingra Street was based on AADT values between 2015 and 2019 because data for the previous years was unavailable. Only data in 5-year increments is shown. See Appendix A for historical and projected traffic volumes by year.





Appendix A: Traffic Forecasts for Low-, Medium-, and High-growth Scenarios, by Year

Year	Glenn Highway at Airport Heights	5 th Avenue	Ingra Street	Gambell Street	Seward Highway at 20 th Avenue
2010	47,089	50,404	22,150	21,008	52,206
2011	48,230	47,474	N/A	19,543	51,113
2012	47,836	47,266	N/A	18,873	49,085
2013	47,958	48,096	N/A	19,553	47,565
2014	48,166	48,305	N/A	19,141	50,037
2015	50,416	44,270	22,656	16,635	51,490
2016	50,450	50,852	22,918	18,298	51,446
2017	48,304	49,845	20,475	17,747	49,074
2018	48,484	N/A	20,193	17,491	47,977
2019	49,423	47,803	21,306	19,187	48,503
2020	49,423	47,803	21,306	19,187	48,503
2021	49,423	47,803	21,306	19,187	48,503
2022	49,423	47,803	21,306	19,187	48,503
2023	49,423	47,803	21,306	19,187	48,503
2024	49,423	47,803	21,306	19,187	48,503
2025	49,423	47,803	21,306	19,187	48,503
2026	49,423	47,803	21,306	19,187	48,503
2027	49,423	47,803	21,306	19,187	48,503
2028	49,423	47,803	21,306	19,187	48,503
2029	49,423	47,803	21,306	19,187	48,503
2030	49,423	47,803	21,306	19,187	48,503
2031	49,423	47,803	21,306	19,187	48,503
2032	49,423	47,803	21,306	19,187	48,503
2033	49,423	47,803	21,306	19,187	48,503
2034	49,423	47,803	21,306	19,187	48,503
2035	49,423	47,803	21,306	19,187	48,503
2036	49,423	47,803	21,306	19,187	48,503
2037	49,423	47,803	21,306	19,187	48,503
2038	49,423	47,803	21,306	19,187	48,503
2039	49,423	47,803	21,306	19,187	48,503
2040	49,423	47,803	21,306	19,187	48,503
2041	49,423	47,803	21,306	19,187	48,503
2042	49,423	47,803	21,306	19,187	48,503
2043	49,423	47,803	21,306	19,187	48,503
2044	49,423	47,803	21,306	19,187	48,503
2045	49,423	47,803	21,306	19,187	48,503
2046	49,423	47,803	21,306	19,187	48,503
2047	49,423	47,803	21,306	19,187	48,503
2048	49,423	47,803	21,306	19,187	48,503
2049	49,423	47,803	21,306	19,187	48,503
2050	49,423	47,803	21,306	19,187	48,503

 Table A-1. Low-growth Scenario Traffic Forecast by Year, 2010–2050

Notes: N/A = not applicable/available

Year	Glenn Highway at Airport Heights	5 th Avenue	Ingra Street	Gambell Street	Seward Highway at 20 th Avenue
2010	47,089	50,404	22,150	21,008	52,206
2011	48,230	47,474	N/A	19,543	51,113
2012	47,836	47,266	N/A	18,873	49,085
2013	47,958	48,096	N/A	19,553	47,565
2014	48,166	48,305	N/A	19,141	50,037
2015	50,416	44,270	22,656	16,635	51,490
2016	50,450	50,852	22,918	18,298	51,446
2017	48,304	49,845	20,475	17,747	49,074
2018	48,484	N/A	20,193	17,491	47,977
2019	49,423	47,803	21,306	19,187	48,503
2020	49,722	48,092	21,435	19,303	48,796
2021	50,023	48,383	21,565	19,420	49,092
2022	50,326	48,676	21,695	19,537	49,389
2023	50,630	48,971	21,826	19,656	49,688
2024	50,937	49,267	21,958	19,775	49,988
2025	51,245	49,565	22,091	19,894	50,291
2026	51,555	49,865	22,225	20,015	50,595
2027	51,867	50,167	22,360	20,136	50,901
2028	52,181	50,470	22,495	20,258	51,209
2029	52,496	50,776	22,631	20,380	51,519
2030	52,814	51,083	22,768	20,503	51,831
2031	53,134	51,392	22,906	20,628	52,145
2032	53,455	51,703	23,044	20,752	52,460
2033	53,779	52,016	23,184	20,878	52,778
2034	54,104	52,331	23,324	21,004	53,097
2035	54,431	52,647	23,465	21,131	53,418
2036	54,761	52,966	23,607	21,259	53,741
2037	55,092	53,286	23,750	21,388	54,067
2038	55,426	53,609	23,894	21,517	54,394
2039	55,761	53,933	24,038	21,648	54,723
2040	56,098	54,260	24,184	21,778	55,054
2041	56,438	54,588	24,330	21,910	55,387
2042	56,779	54,918	24,477	22,043	55,722
2043	57,123	55,250	24,625	22,176	56,060
2044	57,469	55,585	24,774	22,310	56,399
2045	57,816	55,921	24,924	22,445	56,740
2046	58,166	56,260	25,075	22,581	57,083
2047	58,518	56,600	25,227	22,718	57,429
2048	58,872	56,942	25,380	22,855	57,776
2049	59,228	57,287	25,533	22,994	58,126
2050	59,587	57,634	25,688	23,133	58,478

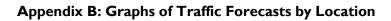
 Table A-2. Medium-growth Scenario Traffic Forecast by Year, 2010–2050

Notes: N/A = *not applicable/available*

Year	Glenn Highway at Airport Heights	5 th Avenue	Ingra Street	Gambell Street	Seward Highway at 20 th Avenue
2010	47,089	50,404	22,150	21,008	52,206
2011	48,230	47,474	N/A	19,543	51,113
2012	47,836	47,266	N/A	18,873	49,085
2013	47,958	48,096	N/A	19,553	47,565
2014	48,166	48,305	N/A	19,141	50,037
2015	50,416	44,270	22,656	16,635	51,490
2016	50,450	50,852	22,918	18,298	51,446
2017	48,304	49,845	20,475	17,747	49,074
2018	48,484	N/A	20,193	17,491	47,977
2019	49,423	47,803	21,306	19,187	48,503
2020	50,370	48,719	21,714	19,555	49,432
2021	51,334	49,652	22,130	19,929	50,379
2022	52,318	50,603	22,554	20,311	51,344
2023	53,320	51,572	22,986	20,700	52,327
2024	54,341	52,560	23,426	21,096	53,329
2025	55,382	53,566	23,875	21,500	54,351
2026	56,443	54,592	24,332	21,912	55,392
2027	57,524	55,638	24,798	22,332	56,453
2028	58,625	56,704	25,273	22,760	57,534
2029	59,748	57,790	25,757	23,195	58,636
2030	60,893	58,897	26,251	23,640	59,759
2031	62,059	60,025	26,753	24,093	60,904
2032	63,248	61,175	27,266	24,554	62,070
2033	64,459	62,346	27,788	25,024	63,259
2034	65,694	63,540	28,320	25,504	64,471
2035	66,952	64,757	28,863	25,992	65,706
2036	68,234	65,998	29,415	26,490	66,964
2037	69,541	67,262	29,979	26,997	68,247
2038	70,873	68,550	30,553	27,514	69,554
2039	72,231	69,863	31,138	28,041	70,886
2040	73,614	71,201	31,735	28,579	72,244
2041	75,024	72,565	32,343	29,126	73,628
2042	76,461	73,955	32,962	29,684	75,038
2043	77,926	75,371	33,593	30,252	76,475
2044	79,418	76,815	34,237	30,832	77,940
2045	80,939	78,286	34,893	31,422	79,433
2046	82,490	79,786	35,561	32,024	80,954
2047	84,070	81,314	36,242	32,638	82,505
2048	85,680	82,872	36,936	33,263	84,085
2049	87,321	84,459	37,644	33,900	85,696
2050	88,994	86,077	38,365	34,549	87,337

 Table A-3. High Growth Scenario Traffic Forecast by Year, 2010–2050

Notes: N/A = not applicable/available



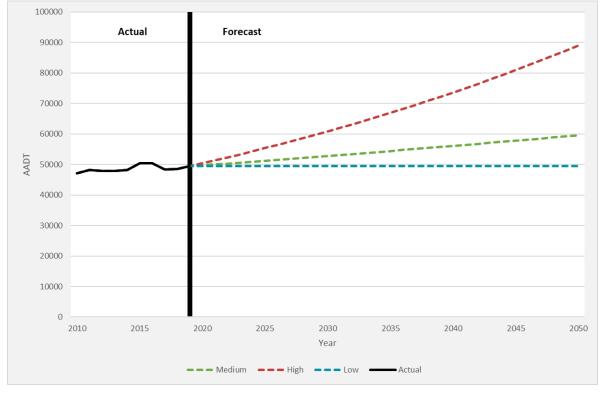


Figure B-1. Glenn Highway at Airport Heights

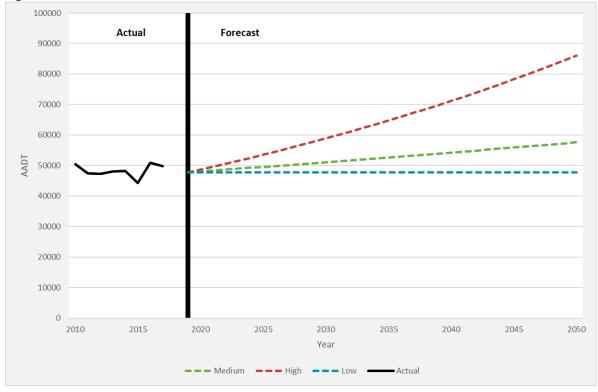


Figure B-2. 5th Avenue

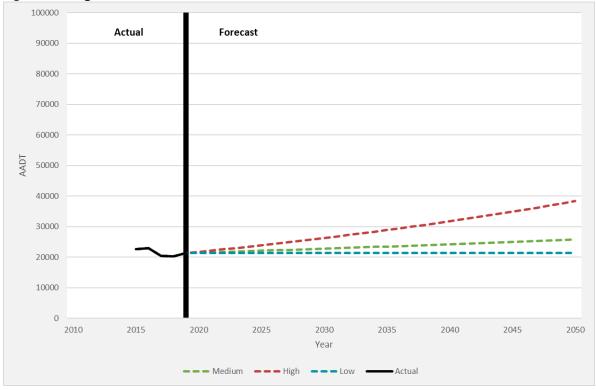
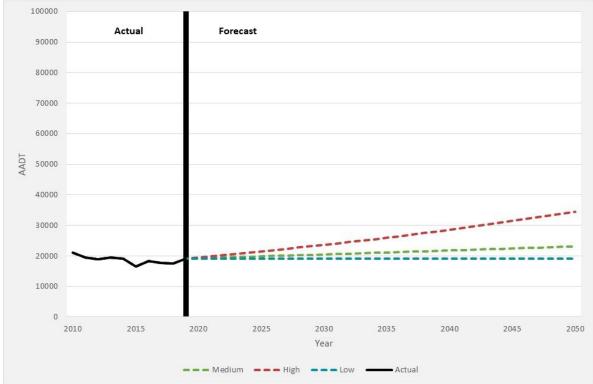


Figure B-3. Ingra Street





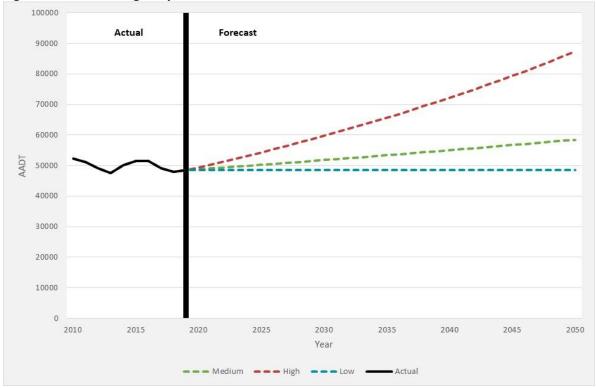


Figure B-5. Seward Highway at 20th Avenue

This page intentionally left blank