



# Fiscal Impacts Appendix

This chapter focuses on the fiscal impacts to local governments and the State of Alaska resulting from Operation F-35 Beddown at Eielson, which we will hereafter refer to as the “F-35 Beddown”. For purposes of this chapter, the Eielson Regional Growth Plan team (RGP team) defines fiscal impacts as changes in revenues and expenditures for affected government entities. The affected local governments include the Fairbanks North Star Borough (FNSB), the City of Fairbanks, the City of North Pole and the FNSB School District (FNSBSD). The State of Alaska (SOA) is also an affected government entity, as the SOA is expected to experience increases in both taxes and fees as a result of the F-35 Beddown, as well as increases in expenditures for schools, public safety, and other general expenditures. Fiscal impacts of the federal government are not included in this assessment with the exception of additional impact aid payments to the FNSBSD.

## Overview of Methodology Used to Assess Fiscal Impacts

The RGP team uses a simple process to assess fiscal impacts. Specifically, the team assumes that for local governments, revenues and expenditures per capita are relatively stable. Thus, if the population of the FNSB increases in the future by five percent, then in general, taxes and fees are also assumed to increase by five percent, as are government expenditures.

As an example, the average per capita “general government” expenditures for the FNSB from 2007 to 2018 were \$183.02. In 2019, the baseline forecast population for the FNSB is expected to be 98,327. Therefore, the baseline forecast for general government expenditures in 2019 will equal  $\approx$  \$18.0 million (i.e.,  $98,327 \times \$183.02 = \$17,996,000$  after rounding). While the RGP team recognizes the “per capita” based assessment is a simplification of reality, the “per capita” methodology has contributed to accurate fiscal impact assessments for other Alaska communities.

There are important exceptions to the methodology described above. For example, local governments in the FNSB all collect a “bed” tax for each night a hotel room is rented. Bed taxes do not necessarily increase with population and instead are generally much more sensitive to trends in tourism. Another important exception is found with the SOA. While many SOA expenditures can be generally linked to population (school and public safety expenditures for example), most revenues coming to the SOA are not linked to population, and instead are generated through taxes and royalties related to resource extraction industries (oil and gas, fisheries, etc.), or from investment returns to the Permanent Fund.

Given the primary assumption that fiscal impacts are directly linked to changes in population, the

key to any fiscal impact assessment is the forecast changes in population, and in this study, specific locations within the FNSB in which the incremental population will choose to live. In the Baseline forecast of population, the RGP team assumes that in general, populations in the City of Fairbanks, the City of North Pole, and in other Census Designated Places (e.g. Salcha, Badger, Moose Creek) increase in proportion to their 2017 population—an exception under the Baseline forecast is the population at Eielson AFB itself is held constant at 2017 levels. Population by place in the F-35 Beddown forecast is more nuanced because it is assumed the majority of additional F-35 Beddown personnel and their dependents will be more likely choose to live on, or relatively near to Eielson AFB (i.e., in the 99705 ZIP code area—North Pole, Badger, or Moose Creek). The “additional induced population” under the F-35 Beddown forecast is (see Growth Projections Focus Area), however, expected to be distributed in the same proportions as in the baseline forecast. Additional details regarding the historic and future distributions of population under the Baseline and F-35 Beddown forecasts are provided in Section 1.1.

## Important Caveats Regarding the Fiscal Impact Assessment

The RGP team has undertaken this Fiscal Impact Assessment with the primary objective of determining whether the F-35 Beddown is likely to create significant funding issues or benefits for the affected government entities from a general, or big picture, perspective. The Fiscal Impact Assessment as developed is not intended to be an exhaustive financial analysis of how every dollar is categorized. There will undoubtedly be gaps in the assessment and funds that have not been fully described and documented.

## Roadmap to the Fiscal Impacts Chapter

The remainder of the Fiscal Impacts Chapter will provide the following:

**Section 1.1** will summarize historic and projected future populations for the FNSB as a whole, and for selected places. Two future forecasts developed using the Alaska REMI Model will be summarized:

- A Baseline Forecast will summarize the expected future as modeled without the F-35 Beddown. The baseline forecast will run from 2017 out through 2030.
- The F-35 Beddown Forecast will summarize the expected future as modeled with the F-35 Beddown. The F-35 Beddown Forecast will also run from 2017 out through 2030.

Both of the forecasts will provide summary information on the following drivers of fiscal impacts:

- Military population (including dependents)
- Non-military population
- Projected counts of school-aged children (ages 5–17)
- Numbers of school-aged children relative to total population

Both of the forecasts will summarize total population for specific places including:

- City of Fairbanks
- City of North Pole
- Other 99705 places (Badger Road, Moose Creek)
- Eielson AFB
- Other remaining areas of the FNSB

**Section 1.2** will include a summary of past and future tax and fee revenues and with subsections for the three primary types of revenues (property taxes, consumption taxes, and fees and user charges). For all three revenue types, information is organized by government entity.

- Section 1.2.1 summarizes property taxes collected by the FNSB, and the cities of Fairbanks and North Pole.
- Section 1.2.2 summarizes consumption taxes along with user fees and service charges, and is organized by local government entity. Taxes and fees collected and summarized by government include the following:
  - Alcohol Taxes that are shared by the FNSB, and the cities of Fairbanks and North Pole
  - Tobacco Taxes that are shared by the FNSB, and the cities of Fairbanks and North Pole
  - Bed Taxes (also referred to Accommodations Taxes) that are shared by the FNSB, and the cities of Fairbanks and North Pole
  - Sales Taxes that are collected only the City of North Pole
  - Tobacco and alcohol taxes and other per capita-based fees collected by the SOA
  - Fees and service charges including charges for permits fines and penalty that accrue to the government fund. Fees directly related separated funds, e.g. enterprise funds are not included

**Section 1.3** summarizes the projected government expenditures for schools, public safety, general government services, public works, and other general fund expenditures. The section is organized

by expenditure category, and each subsection summarizes expenditures for each affected government.

**Section 1.4** provides an overall summary that combines tax revenues and government spending for affected governments: the City of North Pole, City of Fairbanks, the larger FNSB and the SOA.

## 1.1 HISTORIC AND FORECAST POPULATION UNDER THE BASELINE AND THE F-35 BEDDOWN

The RGP team used the Alaska REMI Model to forecast future populations out to 2030 under the Baseline and with the F-35 Beddown. The process used to develop these forecasts using the Alaska REMI model is described in detail in the Growth Projections Focus Area. Both forecasts provide details for:

- Increases in Active Duty Military members and their dependents;
- Increases in the non-military population induced by additional economic activity related to the F-35 Beddown, including construction projects at Eielson AFB, other military construction projects, and other generalized economic activity related to the higher military population; and
- Increases in the numbers of school aged children (ages 5-17), including dependent children of military personnel, and children included in the “induced” population effect.

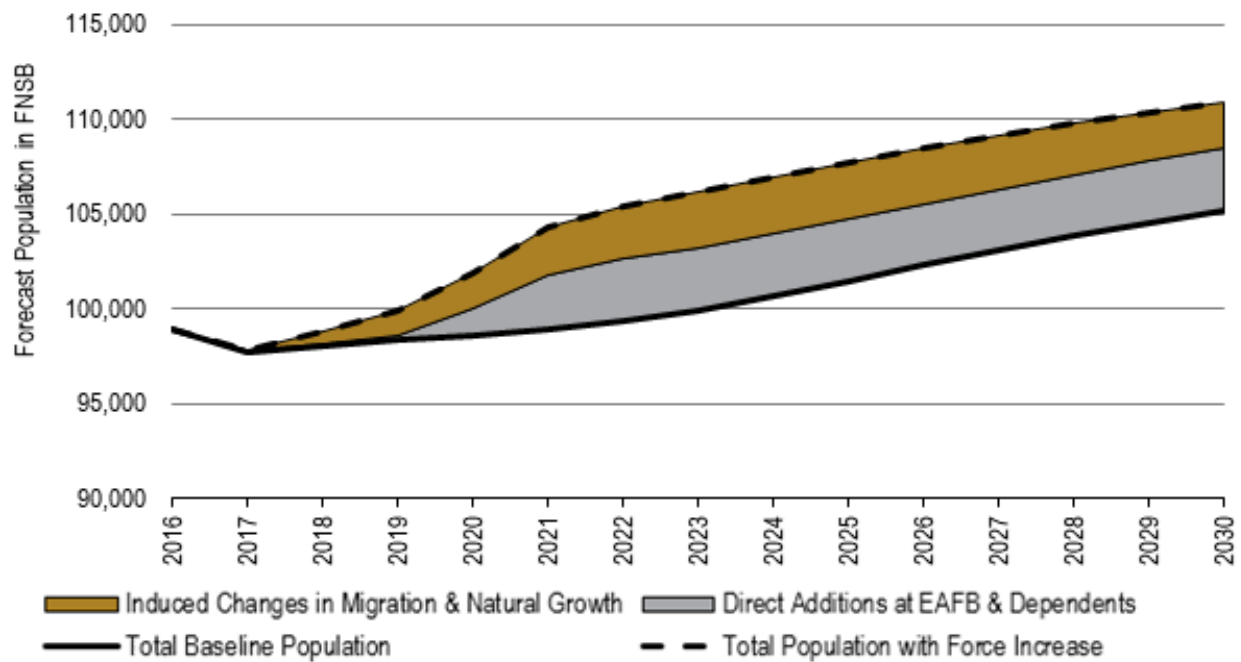
The RGP team notes the forecasts of future population developed using the Alaska REMI model do not generate population estimates for

specific cities and places within the FNSB, which are necessary for the fiscal impact assessment. Therefore, more detailed forecasts by city and place are developed in this subsection.

Figure 1 shows the baseline and F-35 Beddown forecasts of population in the FNSB for 2016–2030. The baseline forecast uses the Alaska REMI model’s standard forecast for the FNSB, without any additional assumptions regarding other factors that might affect the region’s growth. For example, the baseline does not account specifically for the long-term impacts of the SOA’s fiscal crisis, nor does the baseline consider future potential projects that could enhance growth, such as construction of the AK LNG pipeline.

Figure 2 provides historic population data from 2007 to 2016 along with the forecasts depicted in Figure 1. Data in this table, combined with historic population for cities and places within the FNSB (as shown in Figure 3), are used to facilitate the derivation of population forecasts for cities and places under the baseline and with F-35 Beddown. As indicated above, the population forecasts by place will be the primary driver of estimates of future government expenditures and revenues in the FNSB.

**FIGURE 1: BASELINE AND F-35 BEDDOWN PROJECTIONS OF FNSB POPULATION, 2016–2030**



**FIGURE 2: HISTORIC AND FUTURE FNSB POPULATION WITH DIFFERENCE FOR BASELINE AND F-35 BEDDOWN FORECASTS**

Year	Baseline Historical & Forecast Populations		F-35 Beddown Historical & Forecast Populations		Difference between Baseline & F-35 Beddown Forecasts	
	Military & Dependents	Total Population	Military & Dependents	Total Population	Change in Military & Dependents	Change in Total Population
2007	14,554	91,525	14,554	91,525	0	0
2008	16,272	92,762	16,272	92,762	0	0
2009	12,085	93,779	12,085	93,779	0	0
2010	14,436	97,581	14,436	97,581	0	0
2011	14,519	97,828	14,519	97,828	0	0
2012	13,122	100,243	13,122	100,243	0	0
2013	12,831	99,549	12,831	99,549	0	0
2014	13,354	97,972	13,354	97,972	0	0
2015	14,843	98,645	14,843	98,645	0	0
2016	14,532	98,954	14,532	98,954	0	0
2017	14,532	98,033	14,576	97,790	44	52
2018	14,532	98,034	14,599	98,765	67	731
2019	14,532	98,327	14,812	99,926	279	1,599
2020	14,532	98,589	15,947	101,921	1,415	3,332
2021	14,532	98,918	17,402	104,265	2,870	5,347
2022	14,532	99,349	17,789	105,399	3,256	6,050
2023	14,532	99,935	17,789	106,182	3,256	6,247
2024	14,532	100,654	17,789	106,972	3,256	6,318
2025	14,532	101,448	17,789	107,738	3,256	6,290
2026	14,532	102,262	17,789	108,460	3,256	6,197
2027	14,532	103,061	17,789	109,127	3,256	6,066
2028	14,532	103,828	17,789	109,753	3,256	5,925
2029	14,532	104,544	17,789	110,333	3,256	5,790
2030	14,532	105,208	17,789	110,879	3,256	5,671

Sources: Developed by NEI using data from ADOLWD (2018a, 2018b) and the Alaska REMI Model.

Figure 3 shows historic populations for selected places in the FNSB that are of importance to the fiscal impact assessment. The data are based on ADOLWD estimates of population by place data (ADOLWD 2018a, 2018b) for the FNSB. The table separates out the three local governments (FNSB, City of Fairbanks, and the City of North Pole), but also shows historic populations for Badger & Moose Creek (which combined with the City of North Pole comprise the 99705 ZIP code), Eielson AFB, and the remaining population of the

FNSB. The population of the 99705 ZIP code is used to sort out estimates of forecast property taxes from new housing development that results from the F-35 Beddown, and the population of Eielson AFB is important because future changes in the Eielson AFB population will be a key factor in determining Federal Impact Aid for school funding.

**FIGURE 3: HISTORIC POPULATION OF CITIES AND PLACES IN THE FNSB, 2007–2016**

Year	City of Fairbanks	City of North Pole	Other 99705 (Badger, Moose Creek)	Remainder of FNSB	Eielson AFB	FNSB Total
2007	31,801	1,977	18,928	34,567	4,252	91,525
2008	31,450	2,207	19,337	36,581	3,187	92,762
2009	32,506	2,200	19,452	36,725	2,896	93,779
2010	31,535	2,117	20,229	41,053	2,647	97,581
2011	30,599	2,102	20,628	42,168	2,331	97,828
2012	32,007	2,156	20,682	42,605	2,793	100,243
2013	32,185	2,206	20,143	42,422	2,593	99,549
2014	31,721	2,198	19,731	42,117	2,205	97,972
2015	32,116	2,138	19,722	41,802	2,867	98,645
2016	31,989	2,151	19,970	41,926	2,918	98,954
2017	31,905	2,124	19,617	41,134	2,958	97,738

Source: Developed by NEI using data from ADOLWD (2018a, 2018b).



Because the Alaska REMI Model does not break out population by city or CDP within the FNSB, forecasts of future populations by place under the baseline (as shown in Figure 4 on the following page) rely on two assumptions: 1) the population at Eielson AFB is held constant at 2017 levels, and 2) populations in places other than Eielson AFB maintain the same relative proportions as seen in 2017. The 2017 percentages for each place (excluding Eielson AFB) are shown in the top two rows of Figure 4, while the Baseline forecast for the FNSB as a whole from Figure 2 is shown in the rightmost column. The baseline forecasts for each of the FNSB places (excluding Eielson AFB) can be calculated by multiplying that place’s 2017 percentage by the FNSB Total after subtracting the Eielson population (2,958). Thus, the baseline forecasts of the City of Fairbanks population in 2018 = 33.7% × (98,034 – 2,958), or 32,005.

Figure 5 summarizes F-35 Beddown forecast of populations by place within the FNSB. Figure 5 utilizes information that is developed in the housing chapter and other data provided to the RGP team by Eielson AFB staff members for this assessment. Specifically, the RGP team assumes that 11.3 percent of the F-35 active duty personnel and their

families will live on base at Eielson AFB. Thus, the F-35 Beddown population forecast for Eielson AFB is calculated as the Baseline Forecast amount (2,958) + 11.3 percent of active duty personnel and dependents shown, which are in the second column from the right in Figure 2. In 2020 for example, 11.3 percent of the 1,415 F-35 Beddown military personnel and dependents (159 individuals) are forecast to live on base at Eielson, and 88.7 percent (1,256 individuals) are forecast to live off base. Of the 1,256 military personnel and dependents living off base, 1,067 (85 percent) are assumed to live in North Pole, Moose Creek, or Badger (i.e., within the 99705 ZIP code area), while 138 (11 percent) are expected to live within the City of Fairbanks, and the remaining 50 (4 percent) are expected to live in or around Salcha. Finally, the RGP Team assumes that the additional induced population that results from F-35 Beddown<sup>1</sup> will live throughout the FNSB in the same proportions (excluding Eielson AFB) as in the 2017 population.

<sup>1</sup> The “induced population” is the difference between the two columns on the right-side of Table 1. For example, the induced population in 2018 =664, (i.e. 731 – 67), while the induced population in 2030 is 2,415 (i.e. 5,671 – 3,256).

**FIGURE 4: FORECAST POPULATION OF CITIES AND PLACES IN THE FNSB UNDER THE BASELINE**

Year	City of Fairbanks	City of North Pole	Other 99705 (Badger, Moose Creek)	Remainder of FNSB	Eielson AFB	FNSB Total
<b>Percent of Total FNSB Population in 2017 Excluding Eielson AFB</b>						
<b>2017 Percentage</b>	<b>33.7%</b>	<b>2.2%</b>	<b>20.7%</b>	<b>43.4</b>	<b>NA</b>	<b>NA</b>
2018	32,005	2,131	19,678	41,262	2,958	<b>98,034</b>
2019	32,103	2,137	19,739	41,389	2,958	<b>98,327</b>
2020	32,191	2,143	19,793	41,503	2,958	<b>98,589</b>
2021	32,302	2,150	19,861	41,646	2,958	<b>98,918</b>
2022	32,447	2,160	19,950	41,833	2,958	<b>99,349</b>
2023	32,645	2,173	20,072	42,087	2,958	<b>99,935</b>
2024	32,887	2,189	20,221	42,400	2,958	<b>100,654</b>



Year	City of Fairbanks	City of North Pole	Other 99705 (Badger, Moose Creek)	Remainder of FNSB	Eielson AFB	FNSB Total
<b>Percent of Total FNSB Population in 2017 Excluding Eielson AFB</b>						
<b>2017 Percentage</b>	<b>33.7%</b>	<b>2.2%</b>	<b>20.7%</b>	<b>43.4</b>	<b>NA</b>	<b>NA</b>
2025	33,154	2,207	20,385	42,744	2,958	101,448
2026	33,428	2,225	20,553	43,097	2,958	102,262
2027	33,697	2,243	20,719	43,444	2,958	103,061
2028	33,955	2,260	20,878	43,777	2,958	103,828
2029	34,196	2,277	21,026	44,088	2,958	104,544
2030	34,420	2,291	21,163	44,376	2,958	105,208

Source: Developed by NEI using data from ADOLWD (2018a, 2018b), and the Alaska REMI Model.

**FIGURE 5: FORECAST POPULATION OF CITIES AND PLACES IN THE FNSB WITH THE F-35 BEDDOWN**

Year	City of Fairbanks	City of North Pole	Other 99705 (Badger, Moose Creek)	Remainder of FNSB	Eielson AFB	FNSB Total
2018	32,235	2,150	19,861	41,553	2,966	98,765
2019	32,575	2,187	20,202	41,972	2,989	99,926
2020	32,975	2,290	21,153	42,385	3,117	101,921
2021	33,416	2,417	22,327	42,823	3,281	104,265
2022	33,706	2,463	22,745	43,161	3,325	105,399
2023	33,969	2,480	22,907	43,501	3,325	106,182
2024	34,235	2,498	23,070	43,844	3,325	106,972
2025	34,493	2,515	23,229	44,176	3,325	107,738
2026	34,736	2,531	23,378	44,489	3,325	108,460
2027	34,960	2,546	23,516	44,779	3,325	109,127
2028	35,171	2,560	23,646	45,051	3,325	109,753
2029	35,367	2,573	23,766	45,303	3,325	110,333
2030	35,550	2,585	23,879	45,540	3,325	110,879

Source: Developed by NEI using data from ADOLWD (2018a, 2018b), and the Alaska REMI Model.

The Baseline and F-35 Beddown forecasts of school age children (ages 5–17) are shown in Figure 6 while Figure 7 shows the forecast differences by age group. The baseline forecast trends downward through 2020, and then begins a steady climb through the remainder of the forecast period. The F-35 Beddown forecast of school age children begins to increase relative to the baseline in 2018

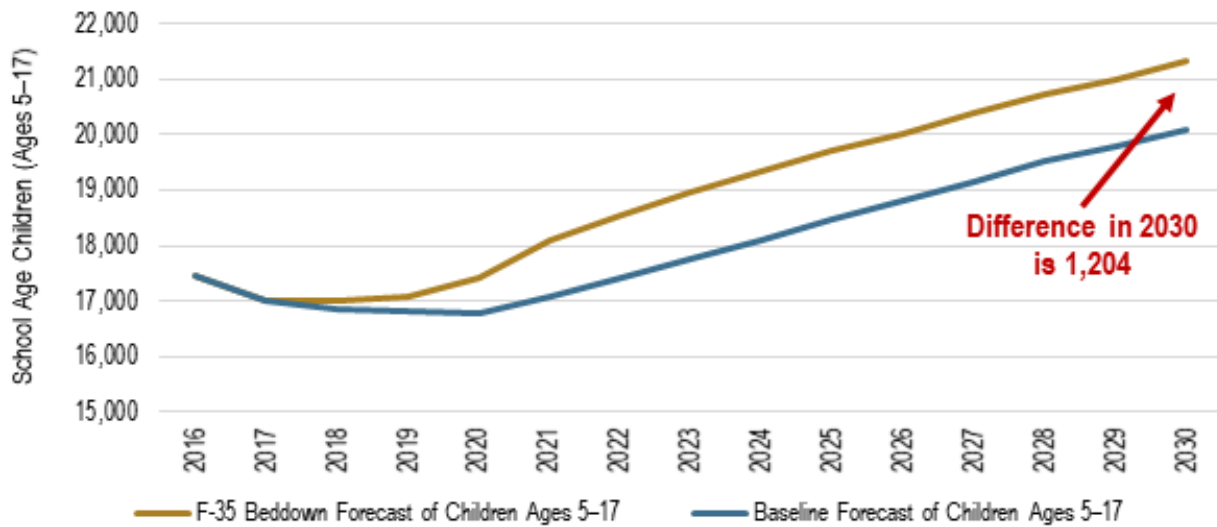
and reflects the increase in military personnel beginning in 2020. The increase in school-age children is highest in 2024 at 1,236, then declines to 1,204 by 2030. The increase in school-age children is ≈ 800 children less than the increases in all children (ages 0 – 17) reported in other sections of this report. Because the FNSBSD comprises the entire FNSB, forecasts of school age children

are not further disaggregated by place as was done for the general population.<sup>2</sup> Further, not all school age children attend FNSB funded schools—the FNSB’s Community Research Quarterly report that in 2017, 865 children attended private schools,

and another 1,675 children attended SOA funded correspondence schools.

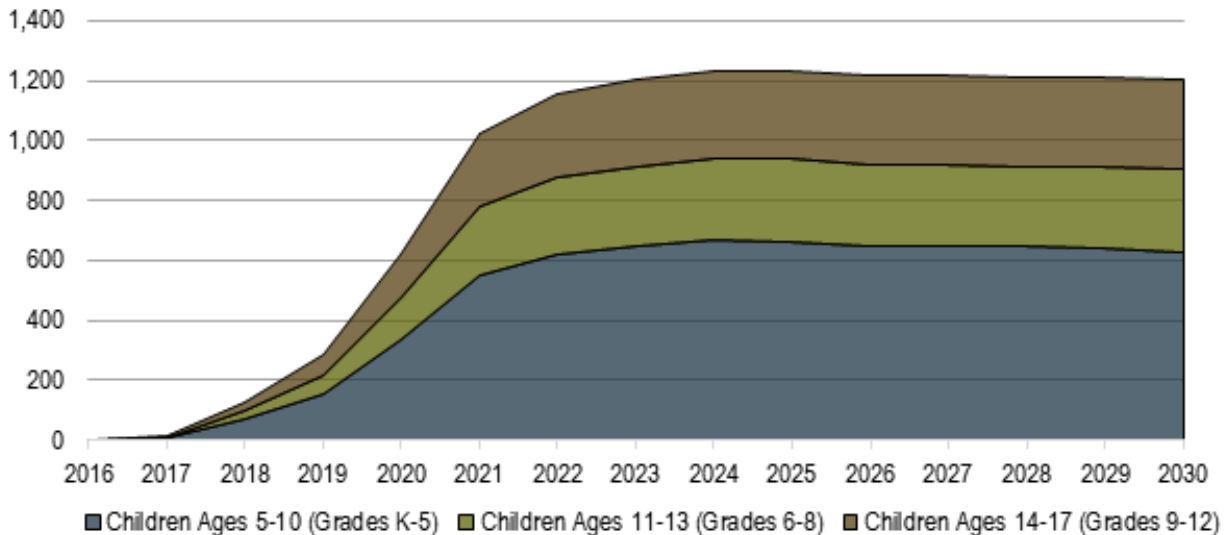
<sup>2</sup> The RGP team notes that Federal Impact Aid for school districts that provide education to children of military personnel is affected by the on-base and off-base distribution of children of military personnel; therefore, additional detail estimating increases in school-age children living at Eielson AFB will be provided in Section 1.3.1.

**FIGURE 6: BASELINE AND F-35 BEDDOWN FORECASTS OF SCHOOL AGE CHILDREN (AGES 5–17), 2016–2030**



Source: Developed by NEI using the Alaska REMI Model

**FIGURE 7: FORECAST CHANGE IN SCHOOL AGE CHILDREN BY AGE GROUP, 2017–2030**



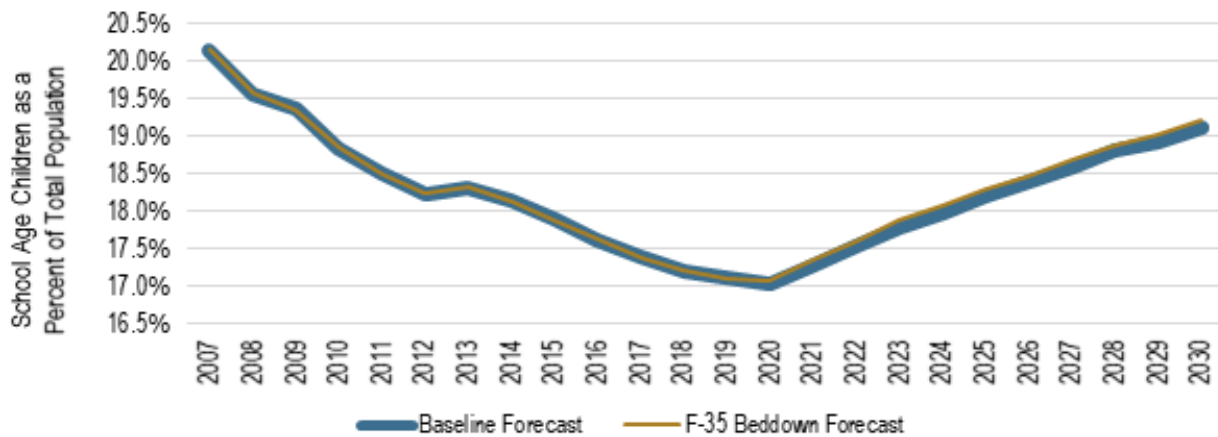
Source: Developed by NEI using the Alaska REMI Model

Figure 8 shows the long-term trend in school-age children as a percent of total population from the Alaska REMI Model. Trends under both the Baseline and the F-35 Beddown are virtually identical, as the Alaska REMI Models relies on a single demographic profile of population by age for the FNSB. The key feature to note is that after a long downward trend the relative size of the school age population is forecast to shift to an increasing trend beginning in 2020.

more adults among whom the cost of education can be spread. Conversely, when the relative size of the school-age population is increasing, there are proportionally fewer adults among whom the cost of education can be spread.

There are fiscal implications of this demographic shift: when the relative size of the school-age population is declining, there are proportionally

**FIGURE 8: SCHOOL AGE CHILDREN (AGES 5-17) AS A PERCENT OF TOTAL POPULATION, 2007-2030**



Source: Developed by NEI using the Alaska REMI Model

## 1.2 LOCAL GOVERNMENT REVENUES

Primary sources of local government revenue come from property taxes on private lands such as residential and commercial parcels, consumption taxes on sales, hotel rooms (bed tax), tobacco, and alcohol, and fees and service charges. This section discusses historical tax receipts for each of the revenue types and the projected changes in revenue for each government entity. Also included is a separate subsection that develops incremental increases in SOA revenues that can be expected with the F-35 Beddown. While the focus of this fiscal assessment is on taxes and fees, other sources of revenues are also important: including permanent funds, grants, and intergovernmental transfers.

### Property Taxes

This section provides estimated historical property tax revenue, broken out for the FNSB, the City of North Pole, and the City of Fairbanks. Historical property tax receipts presented in this section are based on Comprehensive Annual Financial Reports (CAFRs) (ADCCED, 2018) and on data in the FNSB Community Research Quarterly. As shown in Figure 9, property taxes are collected across the entire FNSB and separately for the City of Fairbanks and the City of North Pole. Property owners within the City of Fairbanks pay taxes to the City and to the FNSB; however, they only pay the “Areawide” portion to the FNSB. In 2017 for example, owners of property in the City of Fairbanks paid 5.874 mills to the City plus 11.913 mills to the FNSB for a total rate of 17.787. Property owners in the City of North Pole in 2017 paid 1.499 mills to the City, as well as the areawide assessment of 11.913 mills to FNSB, plus 1.401 mills to the Solid Waste District,<sup>3</sup> for a total of 14.813 mills. Owners of property that is located within the FNSB but outside the city limits of Fairbanks and North Pole pay the Non-Areawide taxes, the Areawide taxes, and taxes for the Solid Waste District—these three taxes combined for a total of 13.834 mill is 2017. Because the Fiscal Impact Assessment is focusing on General Fund revenues and expenditures, the remainder of this assessment will not include taxes collected for the Solid Waste District, nor will it explicitly address expenditures of the Solid Waste District. Similarly, other “special funds” and service districts will not be addressed in this assessment.

<sup>3</sup> The FNSB Solid Waste District comprises the entire FNSB area except for the City of Fairbanks. The City of Fairbanks uses a separate solid waste facility owned and operated by Doyon, and thus property owners in the City of Fairbanks do not pay property taxes to the Solid Waste District.

FIGURE 9: PROPERTY TAX MILL RATES OF GOVERNMENTS WITHIN THE FNSB

Fiscal Year Ending June 30th	Fairbanks North Star Borough				City of Fairbanks		City of North Pole	
	Non-Areawide	Areawide	Solid Waste District	Total Outside Cities	City of Fairbanks	City of Fairbanks + Areawide	City of North Pole	City of NP + Areawide + Solid Waste
2007	0.409	12.209	1.126	13.744	6.594	18.803	3.000	16.335
2008	0.400	11.287	1.103	12.790	5.991	17.278	3.000	15.390
2009	0.393	11.186	1.121	12.700	5.927	17.113	3.000	15.307
2010	0.400	11.432	1.141	12.973	5.803	17.235	3.000	15.573
2011	0.511	11.294	1.194	12.999	5.843	17.137	3.000	15.488
2012	0.525	11.216	1.229	12.970	5.734	16.950	3.000	15.445
2013	0.523	11.216	1.232	12.971	5.716	16.932	3.500	15.948
2014	0.493	11.356	1.300	13.149	5.549	16.905	3.500	16.156
2015	0.507	11.599	1.350	13.456	5.678	17.277	3.500	16.449
2016	0.520	11.418	1.389	13.327	5.651	17.069	3.500	16.307
2017	0.520	11.913	1.401	13.834	5.874	17.787	1.499	14.813

Source: Excerpted and reproduced from the Community Research Quarterly (FNSB 2017a,b).

The remainder of this assessment of property taxes will separately document the property taxes collected in recent years (2007–2016) for each of the three government entities beginning with the City of North Pole and ending with the FNSB. The assessment will then summarize projected future property tax revenues for the three local government entities under the baseline and with the F-35 Beddown.

### Historic Property Taxes Revenues for Government Entities Within the FNSB

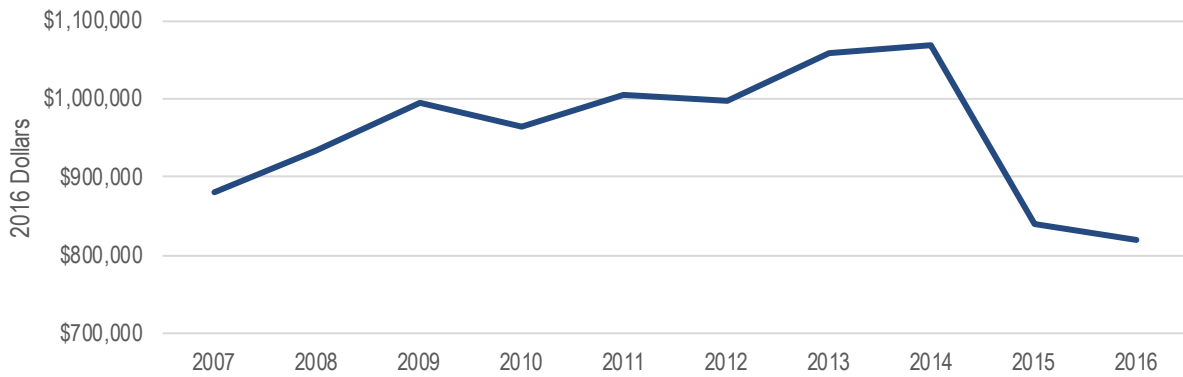
This subsection summarizes historic property tax revenues (2007–2016) collected by City of North Pole, the City of Fairbanks, and the FNSB.

#### City of North Pole

Figure 10 gives total property tax receipts by North Pole from 2007 to 2016 in 2016 dollars. On average, the City of North Pole received \$956,069 from 2007 to 2016 annually. In 2015, FNSB Community Research Quarterly (2017a,b) records show that total property values dropped in the City of North Pole from \$313.7 million to \$260.2 million a year, and again to \$252.9 million in 2016. This decrease in property value corresponds to a roughly equivalent decrease in property tax revenue—from an estimated \$1.06 million in revenue in 2014 to \$819,599 in 2016.<sup>4</sup>

<sup>4</sup> The closure and downsizing of the two oil refineries located in North Pole accounts for most, if not all the decline in property tax revenues from 2014 to 2016 (Cole, 2014).

**FIGURE 10: CITY OF NORTH POLE HISTORICAL PROPERTY TAX RECEIPTS**

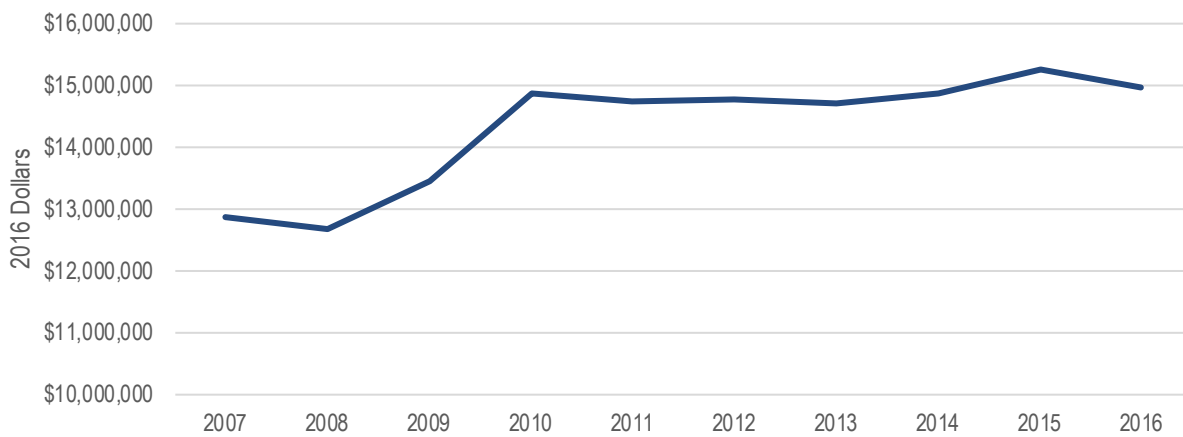


Source: Northern Economics using data from CAFRs  
 Note: Includes oil and gas property revenue

**City of Fairbanks**

The annual property tax receipts by the City of Fairbanks rose from roughly \$12.86 million in 2007 to just under \$15 million in 2016 (Figure 11), or an annual average of \$14.3 million.

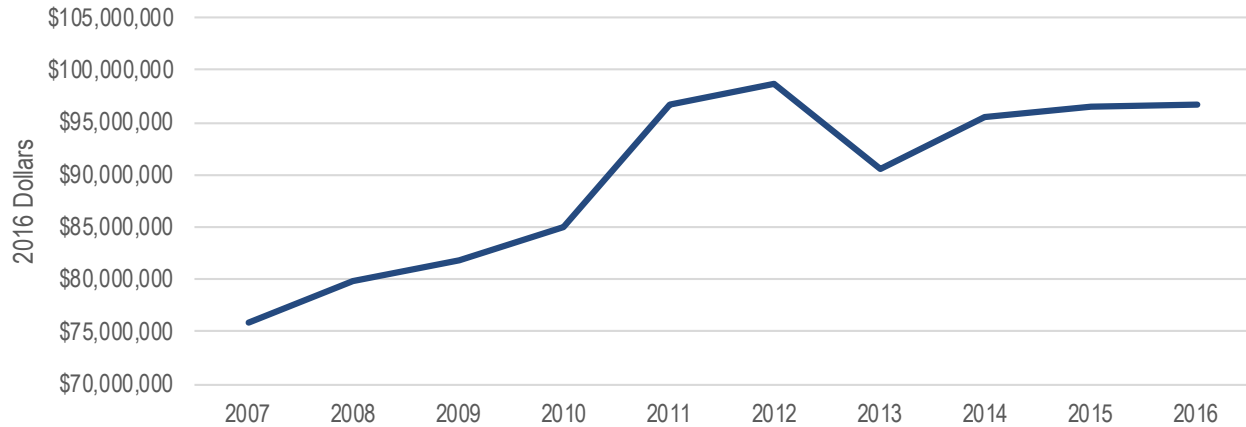
**FIGURE 11: CITY OF FAIRBANKS HISTORICAL PROPERTY TAX RECEIPTS**



### Fairbanks North Star Borough

Property tax revenues received specifically by the FNSB rose from roughly \$75.9 million in 2007 to \$96.7 million in 2016, for an annual average of \$89.7 million.

**FIGURE 12: FAIRBANKS NORTH STAR BOROUGH HISTORICAL PROPERTY TAX RECEIPTS**



Source: Northern Economics using data from CAFRs  
 Note: Includes oil and gas property revenue

### Forecasted Property Taxes under the Baseline and with the F-35 Beddown by Government

As construction increases, military personnel and their families move into the FNSB, and other supporting population increases because of F-35 Beddown, additional real property will be developed and taxed. Potential changes to the FNSB property tax revenues from 2017 to 2030, with and without F-35 Beddown, are calculated using historical property tax receipts—after excluding oil and gas property tax receipts that do not increase with population. In this case, the per capita calculations use only the last three years (2014–2016). Per capita calculations include all forms of property such as residential, commercial, industrial, farm, and vacant land.<sup>5</sup>

### City of North Pole

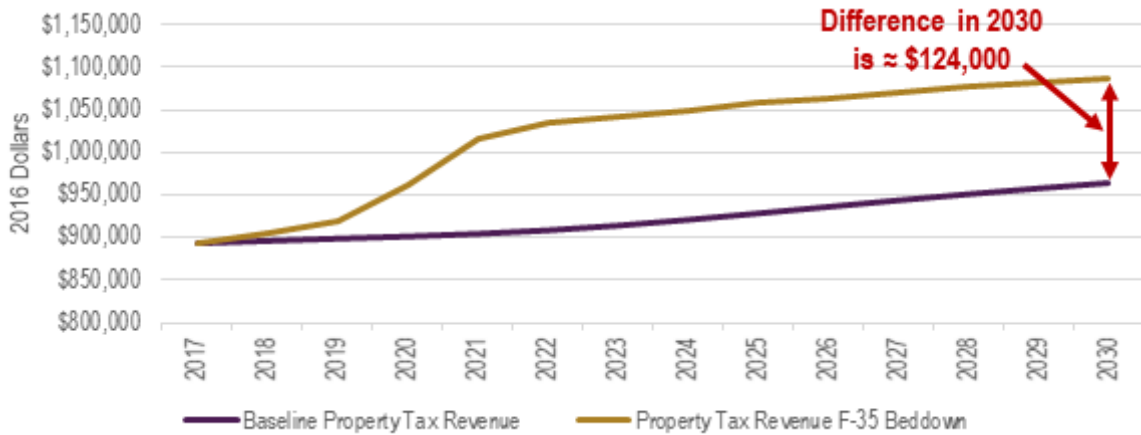
Figure 13 shows estimated property tax impacts in North Pole from 2017 to 2030. Baseline estimates (grey line in Figure 13) show that the City of North Pole would receive just over \$963,000 in property taxes by 2030 without F-35 Beddown impacts.

With a forecast increase in population of 294 persons with the F-35 Beddown, property taxes in the City of North Pole are expected to rise over the baseline by nearly \$130,000 annually by 2024. By 2030, annual property taxes are expected to increase from a baseline estimate of \$963,000, to \$1.09 million, or 13 percent.

<sup>5</sup> Oil and gas property revenues are removed prior to per capita calculations, and then added back into the projections as a fixed value using the most recent estimate available from the Alaska Taxable Database (ADCCED, 2018b). This methodology avoids the unrealistic assumption that population affects tax receipts from TAPS.



**FIGURE 13: CITY OF NORTH POLE PROJECTED BASELINE AND F-35 BEDDOWN: PROPERTY TAX RECEIPTS**



Source: Northern Economics using data from CAFRs  
 Note: Includes oil and gas property revenue

**City of Fairbanks**

Figure 14 shows estimated property tax impacts in the City of Fairbanks from 2017 to 2030. Baseline estimates show that the City of Fairbanks would receive roughly \$16.2 million in property taxes by 2030 without F-35 Beddown impacts. A total of 107 F-35-related housing units associated with military personnel and their dependents will be created or filled in the City of Fairbanks.<sup>6</sup> Combined with other property development such as commercial and industrial, property taxes in the City of

Fairbanks are expected to rise over the baseline by just over \$625,000 by 2024, because of the F-35 Beddown. By 2030, annual property taxes are expected to increase from a baseline estimate of \$16.2 million, to \$16.8 million, or 3.2 percent.

<sup>6</sup> See housing analysis in section Housing Focus Area. Based on current population, the City of Fairbanks is assumed to contain 11 percent of the Borough’s population or 73 percent of the total non-99705 ZIP code population.

**FIGURE 14: CITY OF FAIRBANKS PROJECTED BASELINE AND F-35 BEDDOWN: PROPERTY TAX RECEIPTS**



Source: Northern Economics using data from CAFRs  
 Note: Includes oil and gas property revenue

### Fairbanks North Star Borough

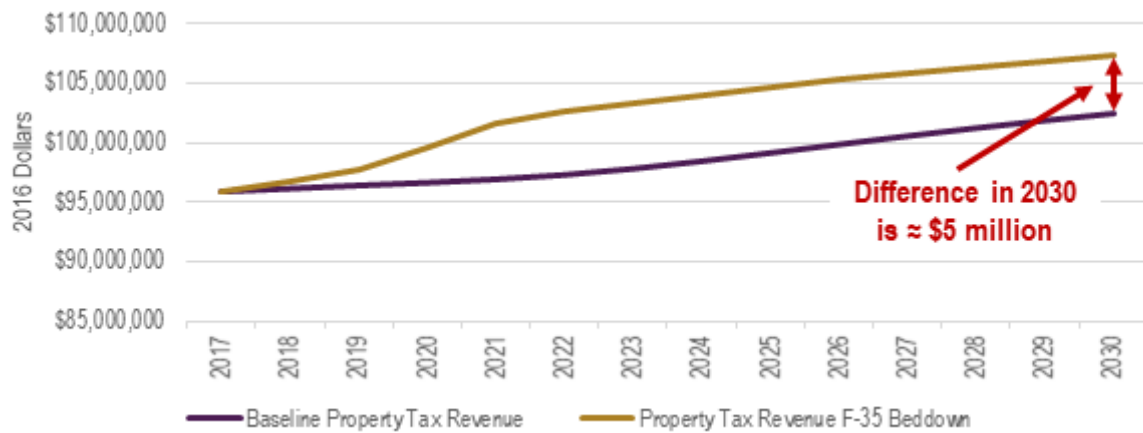
Figure 15 shows estimated property tax impacts in the FNSB from 2017 to 2030, not including the City of North Pole or the City of Fairbanks. Baseline estimates indicate the FNSB would receive roughly \$102.4 million in property taxes by 2030.

A total of 974 F-35-related housing units associated with military personnel and their dependents will be created or filled in the FNSB, the City of North Pole, or the City of Fairbanks, all of which will pay some portion of their property taxes to the Borough. Combined with other property development such as commercial and industrial,

property tax revenue in the FNSB is expected to rise by just over \$5.5 million annually over the baseline by 2024, because of the F-35 Beddown. By 2030, annual property taxes are expected to increase from a baseline estimate of \$102.4 million, to \$107.4 million, or 4.8 percent.

<sup>7</sup> See housing analysis in Housing Focus Area. Assumed by deduction from City of Fairbanks and City of North Pole calculations.

**FIGURE 15: FAIRBANKS NORTH STAR BOROUGH PROJECTED BASELINE AND F-35 BEDDOWN: PROPERTY TAX RECEIPTS**



Source: Northern Economics using data from CAFRs  
 Note: Includes oil and gas property revenue

Figure 16 provides detailed information on all annual property tax income baseline and impact estimates. Comparatively, the City of North Pole is likely to see the smallest annual impact in absolute dollar terms, but the largest impact in percent growth from baseline revenues (over 13 percent). The City of Fairbanks is projected to receive the

smallest percentage (3.7 percent in 2030) increase in annual property tax receipts, but the increase is likely made up of commercial and non-military connected property. The FNSB will likely see the largest annual impacts in absolute property tax dollars for both direct military and other F-35-related property growth.

**FIGURE 16: PROJECTED BASELINE AND F-35 PROPERTY TAX IMPACTS SUMMARY**

Year	City of Fairbanks Property Tax (2016\$) <sup>1,2</sup>		City of North Pole Property Tax (2016\$) <sup>1,2</sup>		FNSB Property Tax (2016\$) <sup>1,2</sup>	
	Baseline	F-35 Beddown	Baseline	F-35 Beddown	Baseline	F-35 Beddown
2017	15,081,016	15,084,363	892,895	894,330	95,876,003	95,921,882
2018	15,127,200	15,233,873	895,682	904,015	96,134,868	96,774,513
2019	15,172,916	15,391,665	898,440	919,531	96,391,111	97,790,823
2020	15,213,831	15,577,145	900,909	962,802	96,620,450	99,536,179
2021	15,265,225	15,781,867	904,010	1,016,238	96,908,517	101,587,465
2022	15,332,482	15,916,122	908,068	1,035,259	97,285,504	102,580,207
2023	15,424,021	16,038,407	913,592	1,042,638	97,798,589	103,265,632
2024	15,536,276	16,161,709	920,365	1,050,078	98,427,797	103,956,759
2025	15,660,234	16,281,262	927,845	1,057,292	99,122,594	104,626,870
2026	15,787,369	16,393,966	935,517	1,064,093	99,835,205	105,258,589
2027	15,912,049	16,498,167	943,040	1,070,380	100,534,053	105,842,649
2028	16,031,887	16,595,937	950,271	1,076,280	101,205,761	106,390,666
2029	16,143,564	16,686,487	957,009	1,081,743	101,831,726	106,898,208
2030	16,247,297	16,771,741	963,269	1,086,888	102,413,166	107,376,071

Sources: Northern Economics, Inc. using data from Borough Audited Financial Statements

Notes: 1) Values are normalized using U.S. Federal Housing Finance Agency All-Transactions House Price Index for Fairbanks North Star Borough. 2) Includes oil and gas property values.

## Consumption Taxes

This section addresses consumption-related taxes. The FNSB, the City of Fairbanks, and the City of North Pole all collect taxes on retail purchases of alcohol and tobacco, and as well as a tax on hotel/motel room rentals (bed tax). In addition, the City of North Pole has a general sales tax. The subsections below discuss historical tax receipts for each of the tax types and the projected changes in tax collections for each government entity. A per capita methodology is employed to forecast the alcohol, tobacco taxes and the sales taxes in North Pole, but because bed taxes rely more on tourism than on local populations, the RGP team forecasts bed tax revenues using the compound annual growth rate from 2007 to 2016.

## Existing Conditions by Government Entity

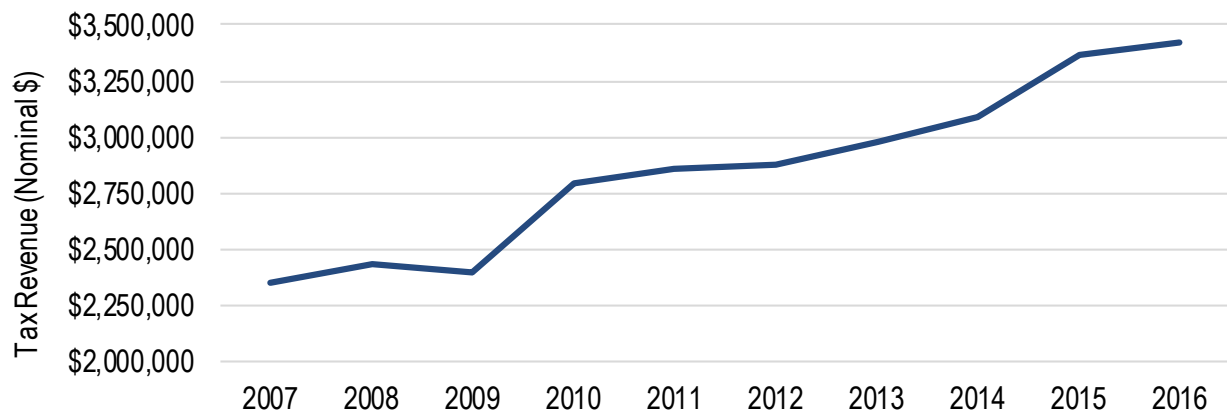
### City of North Pole

The City of North Pole collects several consumption-related taxes including a sales tax, bed tax, tobacco tax, and alcohol tax. Collectively, these taxes are projected to contribute 75 percent of the city’s general fund revenue for fiscal year 2018. These special taxes are factored at different rates per City Code 4.08.020 as follows:

- 5 percent general sales tax with a maximum tax of \$10.00 per transaction
- 8 percent bed tax
- 6 percent alcohol tax
- 10 percent wholesale tobacco

As shown in Figure 17, the aggregated tax receipts from these sources have been increasing since 2009. In 2009, a hotel was built within the North Pole city limits and the city began collecting an 8 percent bed tax with the stated purpose of funding services for the promotion of economic development, including the tourist industry, and for the funding of services for the public. The sales tax rate was also recently (in 2016) increased from 4 percent to 5 percent.

**FIGURE 17: CITY OF NORTH POLE, HISTORICAL AGGREGATED CONSUMPTION-RELATED TAXES, NOMINAL \$, 2007 TO 2016**

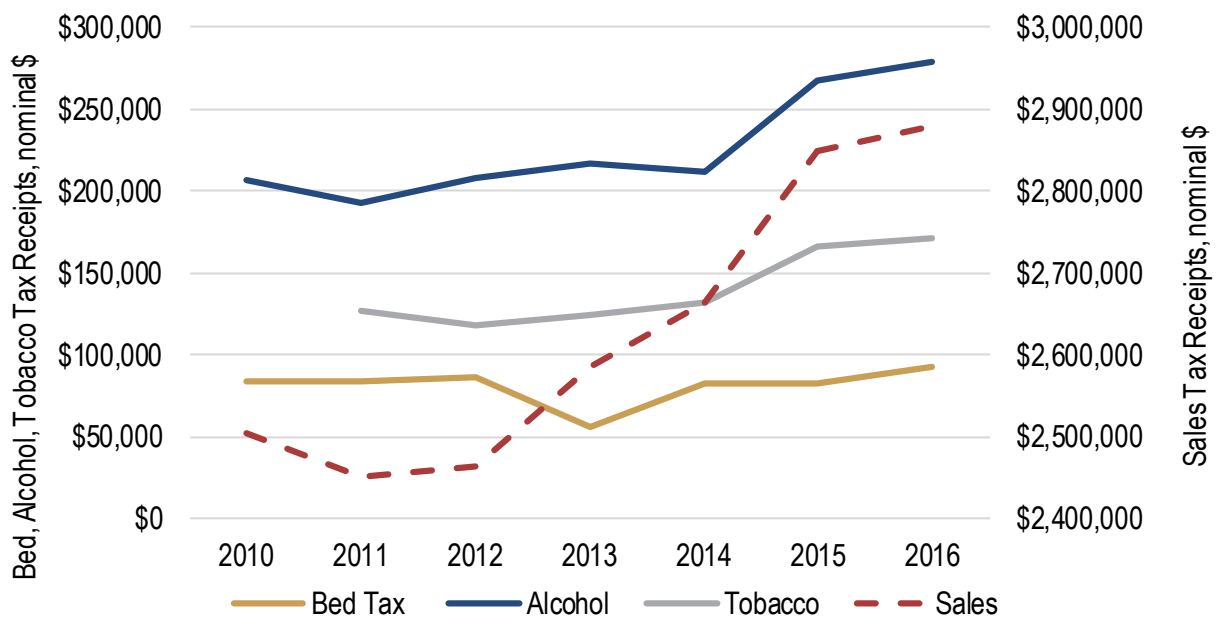


Source: City of North Pole Audited Financial Statements and Budget Documents, Fiscal Years 2007 to 2017.

Figure 18 shows the consumption-related tax payments collected by the City of North Pole broken out by tax type from 2010 to 2016. Disaggregated data by tax type are not publicly available prior to FY 2010.

Sales tax receipts (the vertical axis on the right side of the figure) account for about 85 percent of the total consumption-related taxes. Historical tax collections for all types have been increasing since 2014.

**FIGURE 18: CITY OF NORTH POLE HISTORICAL CONSUMPTION-RELATED TAXES, NOMINAL \$, 2010 TO 2016**



Source: City of North Pole budget documents, FY 2010 to FY 2017.

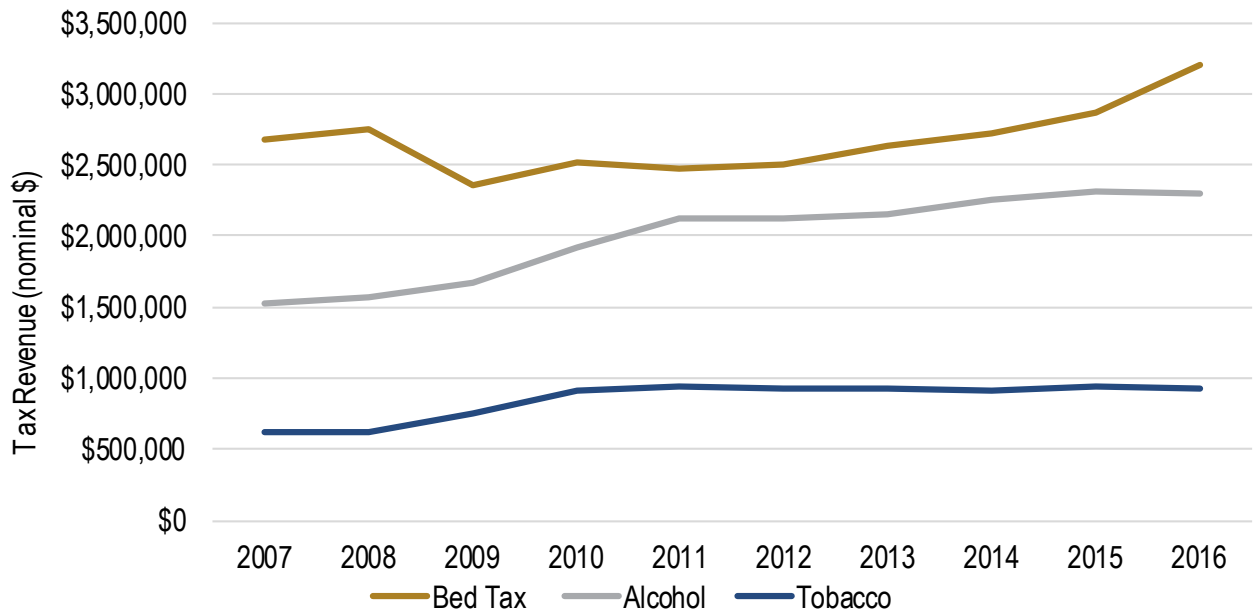
**City of Fairbanks**

The City of Fairbanks collects a bed tax (8 percent), alcohol tax (5 percent), and tobacco tax (8 percent) on hotel/motel room rental and alcohol and tobacco purchases made within the city limits.

tax collections have been increasing since 2009, while the rate of increase in tobacco and alcohol tax receipts in recent years has been relatively more modest. In fact, tobacco and alcohol tax receipts have declined in the last two years.

Figure 19 shows the City of Fairbanks’ historical collections for these taxes from 2007 to 2016. Bed

**FIGURE 19: CITY OF FAIRBANKS, HISTORICAL CONSUMPTION-RELATED TAXES, IN NOMINAL \$**



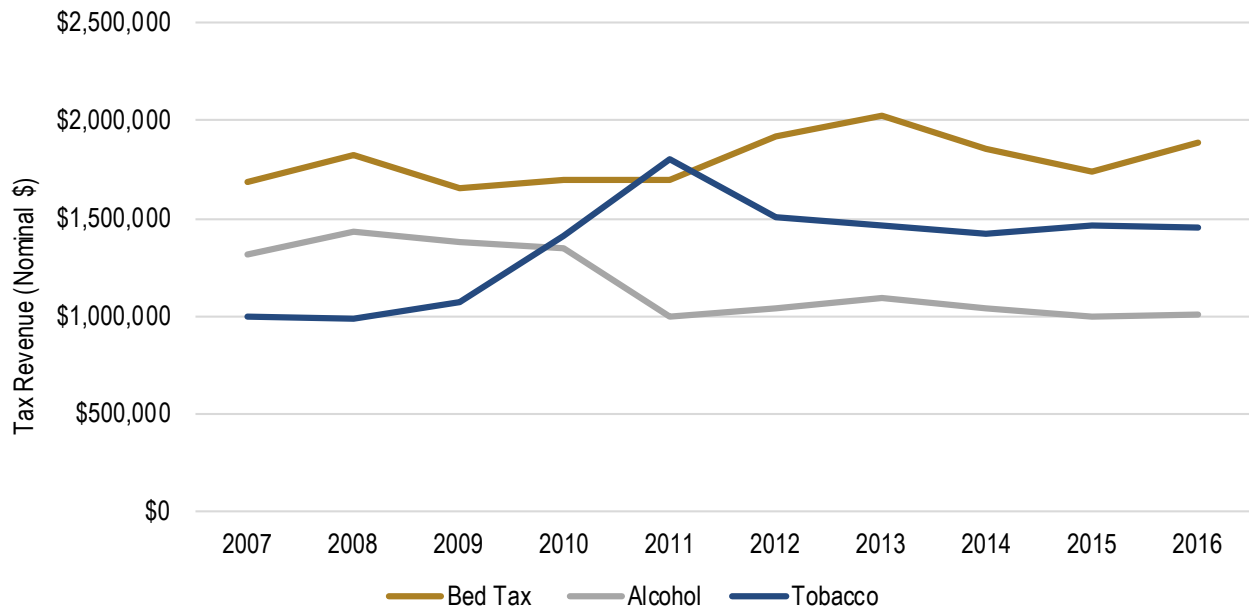
Source: City of Fairbanks Audited Financial Statements, FY2007 to FY2016.

**Fairbanks North Star Borough**

The FNSB collects a bed tax (8 percent), alcohol tax (5 percent), and tobacco tax (8 percent) on hotel/motel room rental and purchases made within the borough limits. Figure 20 show the Borough’s historical tax collections for consumption-related

taxes from 2007 to 2016. Bed tax collections have fluctuated up and down since 2007, while alcohol and tobacco tax receipts have been on a declining trend in the past 5 years.

**FIGURE 20: FAIRBANKS NORTH STAR BOROUGH HISTORICAL CONSUMPTION-RELATED TAX RECEIPTS, IN NOMINAL \$**



Source: Fairbanks North Star Borough Audited Financial Statements.



### Baseline and F-35 Beddown Projections by Government Entity

To project future tax collections under the Baseline and with the F-35 Beddown, an average per capita rate for each of the consumption-related tax types was calculated based on the historical tax payments (from 2010 to 2016) and the resident population of each jurisdiction (City of North Pole, City of Fairbanks, and Fairbanks North Star Borough). The average per capita tax calculations are adjusted for inflation to 2016\$ using the official U.S. consumer price index (CPI) published by the Bureau of Labor Statistics (BLS, 2018).

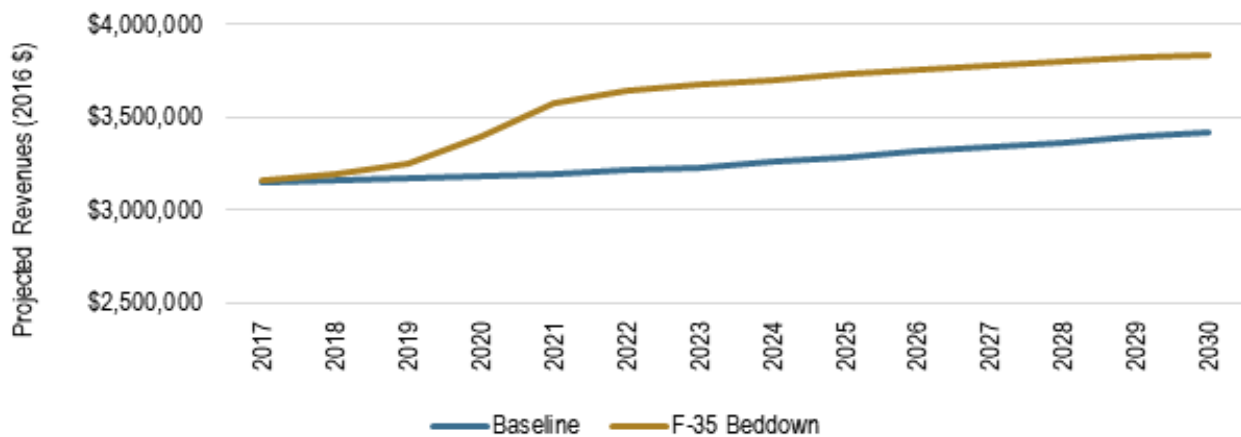
Tax receipts with the F-35 Beddown were projected with the same methodology but using the F-35 Beddown population forecast by place (see Figure 5 on page 170). The aggregated baseline projections and the F-35 Beddown case projections for each government entity are shown in the subsections below.

Bed taxes are not expected to be affected by population changes resulting from the F-35s basing at Eielson Air Force Base. The bed tax estimates included in the F-35 Beddown forecast below are the same as the estimates in the baseline forecast; only the sales, alcohol, and tobacco tax receipts are expected to change with changes in population resulting from the F-35 Beddown. Projected bed taxes are assumed to follow historical trends and were extrapolated using the compound annual growth rate of the historical bed tax collections for each government entity.

#### City of North Pole

Baseline consumption related tax receipts in the City of North Pole are projected to increase modestly from 3.15 million in 2017 to 3.41 million by 2030. Under the F-35 Beddown, the City of North Pole can expect an estimated \$3.84 million in total consumption-related tax revenue by 2030, or an increase of \$423,854 (Figure 21 and Figure 22).

**FIGURE 21: CITY OF NORTH POLE PROJECTED BASELINE AND F-35 BEDDOWN CONSUMPTION-RELATED TAXES, 2016\$**



Source: Northern Economics estimates.

**FIGURE 22: CITY OF NORTH POLE PROJECTED BASELINE AND F-35 BEDDOWN CONSUMPTION-RELATED TAXES IN 2016\$**

Year	Bed Tax (Baseline & F-35 Beddown)	Baseline				F-35 Beddown			
		Alcohol	Sales	Tobacco	Total	Alcohol	Sales	Tobacco	Total
(2016\$)									
2017	91,677	230,765	2,689,659	141,056	3,153,158	\$231,136	\$2,693,981	\$141,283	\$3,158,077
2018	91,277	231,486	2,698,054	141,496	3,162,313	\$233,639	\$2,723,156	\$142,813	\$3,190,886
2019	92,696	232,199	2,706,363	141,932	3,173,190	\$237,649	\$2,769,893	\$145,264	\$3,245,502
2020	94,137	232,837	2,713,800	142,322	3,183,096	\$248,833	\$2,900,239	\$152,100	\$3,395,309
2021	95,601	233,638	2,723,141	142,812	3,195,192	\$262,643	\$3,061,205	\$160,541	\$3,579,991
2022	97,087	234,687	2,735,366	143,453	3,210,594	\$267,559	\$3,118,502	\$163,546	\$3,646,694
2023	98,597	236,114	2,752,005	144,326	3,231,042	\$269,466	\$3,140,729	\$164,712	\$3,673,503
2024	100,130	237,865	2,772,408	145,396	3,255,799	\$271,389	\$3,163,140	\$165,887	\$3,700,546
2025	101,686	239,798	2,794,939	146,577	3,283,001	\$273,253	\$3,184,871	\$167,027	\$3,726,837
2026	103,267	241,781	2,818,048	147,789	3,310,885	\$275,011	\$3,205,356	\$168,101	\$3,751,736
2027	104,873	243,725	2,840,710	148,978	3,338,286	\$276,636	\$3,224,296	\$169,095	\$3,774,899
2028	106,504	245,594	2,862,492	150,120	3,364,710	\$278,160	\$3,242,067	\$170,027	\$3,796,757
2029	108,159	247,336	2,882,791	151,185	3,389,470	\$279,573	\$3,258,525	\$170,890	\$3,817,147
2030	109,841	248,953	2,901,646	152,174	3,412,613	\$280,902	\$3,274,021	\$171,702	\$3,836,467

Note: Totals for both Baseline and F-35 Beddown include the Bed Tax.

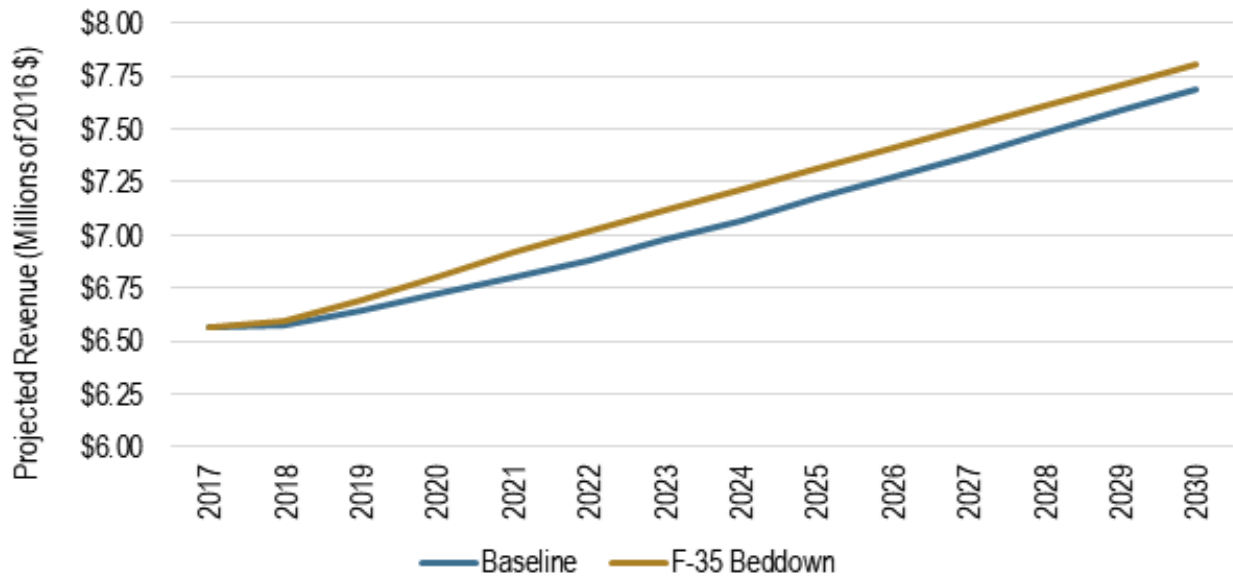
Source: Northern Economics estimates.

### City of Fairbanks

Baseline consumption related tax receipts in the City of Fairbanks are projected to increase modestly from \$6.56 million in 2017 to \$7.68 million by 2030. Under the F-35 Beddown, the City

of Fairbanks can expect an estimated \$7.8 million in total consumption-related tax revenue by 2030, or an increase of \$118,808 (Figure 23 and Figure 24).

**FIGURE 23: CITY OF FAIRBANKS PROJECTED BASELINE AND F-35 BEDDOWN CONSUMPTION-RELATED TAXES IN 2016\$**



Source: Northern Economics estimates.

**FIGURE 24: CITY OF FAIRBANKS PROJECTED BASELINE AND F-35 BEDDOWN  
CONSUMPTION-RELATED TAXES IN 2016\$**

Year	Bed Tax (Baseline & F-35 Beddown)	Baseline			F-35 Beddown		
		Alcohol	Tobacco	Total	Alcohol	Tobacco	Total
<b>(2016\$)</b>							
2017	3,210,061	2,343,758	1,008,519	6,562,338	\$2,344,288	\$1,008,748	\$6,563,097
2018	3,210,135	2,351,073	1,011,667	6,572,875	\$2,367,969	\$1,018,937	\$6,597,041
2019	3,274,413	2,358,314	1,014,783	6,647,509	\$2,392,961	\$1,029,691	\$6,697,065
2020	3,339,978	2,364,794	1,017,571	6,722,344	\$2,422,339	\$1,042,333	\$6,804,649
2021	3,406,856	2,372,934	1,021,074	6,800,864	\$2,454,764	\$1,056,285	\$6,917,905
2022	3,475,073	2,383,587	1,025,658	6,884,318	\$2,476,028	\$1,065,435	\$7,016,537
2023	3,544,656	2,398,086	1,031,897	6,974,638	\$2,495,397	\$1,073,770	\$7,113,822
2024	3,615,633	2,415,865	1,039,547	7,071,045	\$2,514,926	\$1,082,173	\$7,212,732
2025	3,688,030	2,435,499	1,047,995	7,171,524	\$2,533,862	\$1,090,321	\$7,312,213
2026	3,761,877	2,455,635	1,056,660	7,274,173	\$2,551,713	\$1,098,002	\$7,411,592
2027	3,837,203	2,475,383	1,065,158	7,377,744	\$2,568,217	\$1,105,104	\$7,510,524
2028	3,914,038	2,494,364	1,073,325	7,481,727	\$2,583,702	\$1,111,767	\$7,609,507
2029	3,992,410	2,512,052	1,080,936	7,585,399	\$2,598,044	\$1,117,939	\$7,708,393
2030	4,072,352	2,528,482	1,088,006	7,688,841	\$2,611,547	\$1,123,749	\$7,807,649

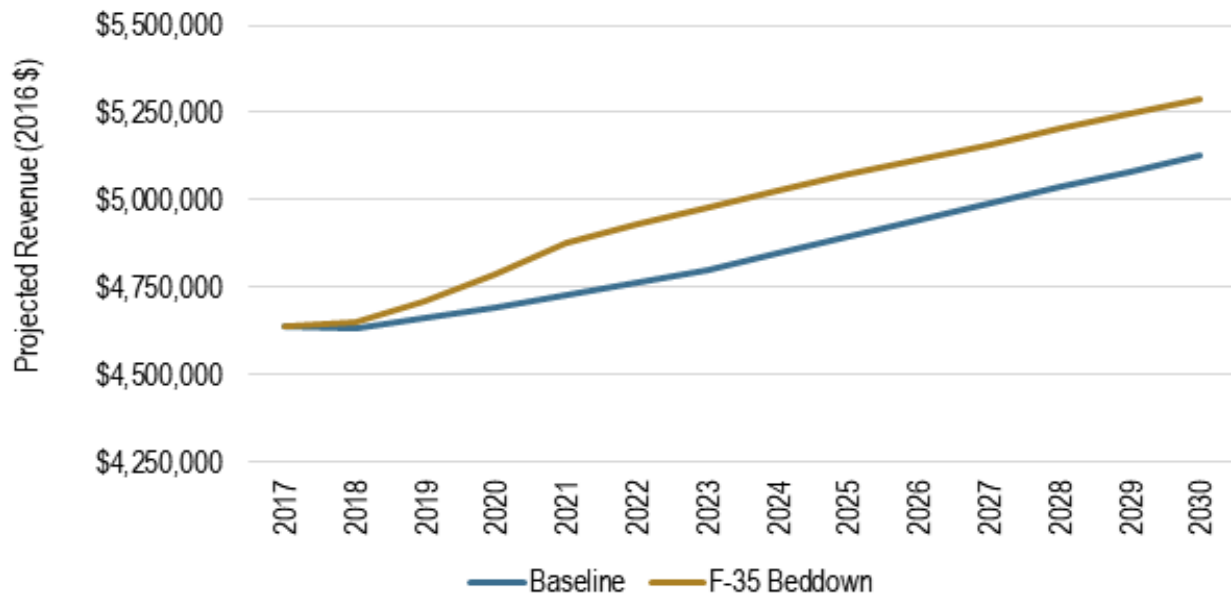
Note: Totals for both baseline and F-35 Beddown include the Bed Tax.  
Source: Northern Economics estimates.

### Fairbanks North Star Borough

Baseline consumption related tax receipts in the FNSB (not including City of North Pole or and the City of Fairbanks) are projected to increase from \$4.63 million in 2017 to roughly \$5.12 million

by 2030. Under the F-35 Beddown scenario, the FNSB can expect an estimated \$5.29 million in total consumption related tax revenue by 2030, or an increase of \$160,515 (Figure 25 and Figure 26).

**FIGURE 25: FNSB PROJECTED BASELINE AND F-35 BEDDOWN CONSUMPTION-RELATED TAXES IN 2016\$**



Source: Northern Economics estimates.

**FIGURE 26: FNSB PROJECTED BASELINE AND F-35 BEDDOWN CONSUMPTION-RELATED TAXES BY TYPE, 2016\$**

Year	Bed Tax (Baseline & F-35 Beddown)	Baseline			F-35 Beddown		
		Alcohol	Tobacco	Total	Alcohol	Tobacco	Total
<b>(2016\$)</b>							
2017	1,871,983	1,156,088	1,610,247	4,638,318	\$1,156,707	\$1,611,110	\$4,639,801
2018	1,857,626	1,159,587	1,615,120	4,632,333	\$1,168,233	\$1,627,163	\$4,653,021
2019	1,880,246	1,163,050	1,619,945	4,663,241	\$1,181,970	\$1,646,296	\$4,708,512
2020	1,903,142	1,166,150	1,624,262	4,693,554	\$1,205,561	\$1,679,155	\$4,787,857
2021	1,926,316	1,170,044	1,629,685	4,726,045	\$1,233,287	\$1,717,773	\$4,877,376
2022	1,949,772	1,175,139	1,636,783	4,761,695	\$1,246,705	\$1,736,463	\$4,932,941
2023	1,973,515	1,182,075	1,646,442	4,802,031	\$1,255,970	\$1,749,367	\$4,978,852
2024	1,997,546	1,190,579	1,658,288	4,846,413	\$1,265,312	\$1,762,378	\$5,025,236
2025	2,021,870	1,199,970	1,671,369	4,893,209	\$1,274,369	\$1,774,994	\$5,071,233
2026	2,046,490	1,209,603	1,684,784	4,940,877	\$1,282,908	\$1,786,887	\$5,116,285
2027	2,071,410	1,219,049	1,697,941	4,988,400	\$1,290,802	\$1,797,883	\$5,160,095
2028	2,096,633	1,228,128	1,710,587	5,035,348	\$1,298,210	\$1,808,200	\$5,203,043
2029	2,122,164	1,236,589	1,722,372	5,081,124	\$1,305,070	\$1,817,755	\$5,244,989
2030	2,148,005	1,244,448	1,733,318	5,125,771	\$1,311,529	\$1,826,752	\$5,286,286

Note: Totals for both baseline and F-35 Beddown include the Bed Tax.  
Source: Northern Economics estimates.

## State of Alaska Revenues Generated in the FNSB

Oil and gas taxes, by and large, make up the greatest percent of annual state revenues. However, taxes on oil production and leasing do not meaningfully vary with state population. The SOA also collects marginal levels of tax revenue from the general population, mostly through consumption of tobacco, fuel, and alcohol. Other state level per capita revenue comes from vehicle rentals,

gaming, utility cooperatives, and tire sales. Shown in Figure 27, population-based revenues were roughly \$240.55 per person in 2016. As discussed in Section 1.1 the total population is expected to rise by 5,724 by 2030 because of the F-35 Beddown. This means that on a per capita basis, the SOA will receive an estimated increase in revenues of \$1.37 million ( $\$240.55 \times 5,724$ ) by 2030.

FIGURE 27: STATE OF ALASKA PER CAPITAL REVENUES

Category	FY 2016 Revenue (\$)	Percentage of Total (%)	Per Capita Population-Based Revenues (\$)
Oil & Gas Production Tax	259,145,422	35.9	-
Oil & Gas Property Tax	111,736,765	15.5	-
Tobacco Tax	67,918,506	9.4	91.82
Corporate Income Tax	67,456,950	9.3	-
Motor Fuel Tax	48,773,877	6.8	65.94
Alcoholic Beverages Tax	42,430,408	5.9	57.36
Fisheries Business Tax	39,901,481	5.5	-
Commercial Passenger Vessel Excise Tax	19,066,852	2.6	-
Mining License Tax	11,137,900	1.5	-
Vehicle Rental Tax	10,472,558	1.4	14.16
Fishery Resource Landing Tax	9,765,515	1.4	-
Seafood Marketing Assessment	9,681,785	1.3	-
Large Passenger Vessel Gambling Tax	7,736,499	1.1	-
Salmon Enhancement Tax	6,805,741	0.9	-
Charitable Gaming	2,569,107	0.4	3.47
Telephone Cooperative Tax	2,287,312	0.3	3.09
Electric Cooperative Tax	2,015,794	0.3	2.73
Tire Fee	1,469,382	0.2	1.99
Regional Seafood Development Tax	1,409,426	0.2	-
Dive Fishery Management Assessment	460,822	0.1	-
Common Property Fishery Assessment	36,062	0.0	-
<b>Total</b>	<b>722,278,164</b>	<b>100.0</b>	<b>240.55</b>

Sources: Developed by Northern Economics using data from ADCEED (2018a), and ADOLWD (2018a).  
Note: Alaska's population was 739,709 in 2016.

As discussed in Section 1.1, the total population in the FNSB is expected to rise by 5,724 by 2030 because of the F-35 Beddown. This means that on a

per capita basis, the SOA will receive an estimated increase in revenues of \$1.371.36 million ( $\$240.55 \times 5,724$ ) by 2030.



## Fees, Fines and Service Charges

User fees, service charges, fines and penalties can be important sources of revenues for local governments and in general vary annually based on population. The relative importance of the fees, fines, and service charges varies by community. Fees, fines and service charges are relatively unimportant for the FNSB—in 2016 the included amount of \$2.75 million was 2.7 percent of combined revenues from property taxes, consumption taxes, and fees. For the City of Fairbanks, fees, fines and service charges were approximately the same order of magnitude as consumption taxes at \$6.9 million and were 24.4 percent of all taxes and fees combined. Fees, fines and service charges for the City of North Pole in 2016 were \$0.7 million or 14.1 percent of combined fees, property taxes and consumption taxes.

### Fees, Fines and Service Charges for the City of North Pole

The City of North Pole’s financial report for 2016 includes several line items that have been included by the RGP Team as fees, fines and service charges

including: licenses and permits, ambulance service charges, citations, and charges for other public safety reports and services. Of these the largest single item is the charges for ambulance service. In 2016, fees, fines and service charges generated \$682,719, or given the 5,151 population, \$317.40 per capita. Fees, fines and service charges are a relatively small portion of total tax and fee-based revenues—14.1 percent. Figure 28 summarizes forecast fees, fines and service charges under the baseline from 2017–2030 and with the F-35 Beddown. Also shown are the differences between the baseline and F-35 Beddown. Forecasts are estimated by multiplying the \$317.40 per capita fee from 2016 by the forecast population in North Pole from 2017–2030 under the two scenarios. Under the baseline, fees are expected to increase to \$727,283 by 2030, an increase of \$53,133 from 2017 forecast levels. With the F-35 Beddown, fees in 2030 are expected to reach \$820,617, a difference of \$93,334 from the baseline.

**FIGURE 28: CITY OF NORTH POLE FORECAST FEES, FINES AND SERVICE CHARGES UNDER THE BASELINE AND F-35 BEDDOWN**

Year	Baseline	F-35 Beddown	Difference
2017	\$674,149	\$675,232	\$1,083
2018	\$676,253	\$682,545	\$6,292
2019	\$678,336	\$694,260	\$15,924
2020	\$680,200	\$726,930	\$46,730
2021	\$682,541	\$767,275	\$84,734
2022	\$685,606	\$781,636	\$96,031
2023	\$689,776	\$787,208	\$97,432
2024	\$694,890	\$792,825	\$97,935
2025	\$700,537	\$798,272	\$97,734
2026	\$706,329	\$803,406	\$97,077
2027	\$712,009	\$808,153	\$96,144
2028	\$717,469	\$812,607	\$95,139
2029	\$722,557	\$816,733	\$94,176
2030	\$727,283	\$820,617	\$93,334

Source: Northern Economics Estimates

## Fees, Fines and Service Charges for the City of Fairbanks

The City of Fairbanks' financial report for 2016 specifically includes line items for "service charges", "licenses and permits", and "fines and forfeitures" and these are the revenues included by the RGP Team in estimates of fees, fines and service charges. In 2016 these revenues amounted to \$6.93 million, an amount that slightly higher than revenues from included consumption-based taxes (\$6.4 million in 2016). Given the population of Fairbanks in 2016, fees, fines and service charges are estimated to be \$216.71 per capita. Fees, fines and service charges are a large portion—24 percent—of total tax and fee-based revenues for the City of Fairbanks.

Figure 29 summarizes the forecast fees, fines and service charges under the baseline from 2017–2030 and with the F-35 Beddown. Forecasts are estimated by multiplying the estimated per capita fee from 2016 by the forecast population under the two scenarios. Under the baseline, fees are expected to increase to \$7.5 million by 2030, an increase of \$544,931 from 2017 forecast levels. With the F-35 Beddown, fees in 2030 are expected to reach \$7.7 million, a difference of \$245,040 from the baseline.

**FIGURE 29: CITY OF FAIRBANKS FORECAST FEES, FINES AND SERVICE CHARGES UNDER THE BASELINE AND F-35 BEDDOWN**

Year	Baseline	F-35 Beddown	Difference
2017	\$6,914,020	\$6,915,584	\$1,564
2018	\$6,935,598	\$6,985,440	\$49,842
2019	\$6,956,958	\$7,059,167	\$102,208
2020	\$6,976,076	\$7,145,830	\$169,754
2021	\$7,000,089	\$7,241,484	\$241,395
2022	\$7,031,514	\$7,304,213	\$272,698
2023	\$7,074,284	\$7,361,349	\$287,065
2024	\$7,126,734	\$7,418,960	\$292,226
2025	\$7,184,652	\$7,474,820	\$290,168
2026	\$7,244,054	\$7,527,480	\$283,425
2027	\$7,302,310	\$7,576,166	\$273,857
2028	\$7,358,302	\$7,621,848	\$263,546
2029	\$7,410,482	\$7,664,156	\$253,674
2030	\$7,458,950	\$7,703,991	\$245,040

Source: Northern Economics Estimates

## Fees, Fines and Service Charges for the FNSB

The FNSB's 2016 audited financial report lists several non-tax revenue items which the RGP Team has categorized into two general categories: 1) Fees, Fines and Service charges, and 2) Intergovernmental Transfers, Grants, and other Unspecified Revenues. Included in the former are "Charges for Services" and "Interest and Penalties on Taxes". All other non-tax line items are assigned to the latter category (Intergovernmental Transfers). In 2016 revenues from fees, fines and service charges amounted to \$2.76 million. Based on the 2016 population of FNSB, fees, fines and service charges are estimated to be \$27.84 per capita and account for only 2.7 percent of total tax and fee-based revenues for the FNSB.

Figure 30 summarizes the forecast fees, fines and service charges which are estimated based on forecast population and the per capita fee amount. Under the baseline, fees are expected to increase to \$2.9 million by 2030, an increase of \$207,995 from 2017 forecast levels. With the F-35 Beddown, fees in 2030 are expected to reach \$3.1 million, a difference of \$157,905 from the baseline.

**FIGURE 30: FNSB FORECAST FEES, FINES AND SERVICE CHARGES UNDER THE BASELINE AND F-35 BEDDOWN**

Year	Baseline	F-35 Beddown	Difference
2017	\$2,721,357	\$2,722,817	\$2,722,817
2018	\$2,729,595	\$2,749,946	\$2,749,946
2019	\$2,737,748	\$2,782,282	\$2,782,282
2020	\$2,745,045	\$2,837,815	\$2,837,815
2021	\$2,754,210	\$2,903,080	\$2,903,080
2022	\$2,766,205	\$2,934,667	\$2,934,667
2023	\$2,782,529	\$2,956,475	\$2,956,475
2024	\$2,802,549	\$2,978,465	\$2,978,465
2025	\$2,824,655	\$2,999,786	\$2,999,786
2026	\$2,847,329	\$3,019,885	\$3,019,885
2027	\$2,869,564	\$3,038,468	\$3,038,468
2028	\$2,890,936	\$3,055,904	\$3,055,904
2029	\$2,910,852	\$3,072,053	\$3,072,053
2030	\$2,929,352	\$3,087,257	\$3,087,257

Source: Northern Economics Estimates

## 1.3 EXISTING CONDITIONS AND FORECAST CHANGES IN GOVERNMENT SPENDING

In this section we document existing conditions and forecast changes in government spending related to the F-35 Beddown. This section is subdivided into two parts: Schools and Other Government Spending.

### Schools Spending

Schools spend all the revenues they receive as they operate under a balanced budget. FNSBSD receives its revenues from the FNSB, the State of Alaska, the federal government, and other sources. The following analysis looks at FNSBSD revenues in total and by source. Given how school

districts operate, these revenues also represent the expenditures of the school district as well as the expenditures of the government entities that provide funding.

### Historic School Enrollments

The number of school-age children in the FNSB was presented in Section 1.1. In 2016, there were 17,445 school-age children in the borough, as seen in Figure 31. FNSBSD had an average daily membership (ADM) of 13,844 students in 2016, representing 79.5 percent of school-age children. This ratio has been relatively stable over the last 10 years, averaging 78.4 percent. Other school-age children attend private or correspondence schools. Within FNSBSD, the student to teacher ratio has averaged 17.4 over the last 10 years, though the ratio increased to 18 in 2016, reflecting larger class sizes.

FIGURE 31: SCHOOL-AGE CHILDREN, FNSBSD ENROLLMENT, AND STUDENT/TEACHER RATIOS, 2007-2016

Year	Data for Fairbanks North Star Borough School District			School Age Children		Other K-12 School Enrollments	
	Student Total ADM	Total Teachers (FTE)	Student/Teacher Ratio	Total Children Ages 5-17	Percent of School Age Children Enrolled in FNSB Schools	Private Schools in FNSB	Correspondence Schools outside FNSB
2007	14,162	813	17.40	18,444	76.8	1,148	1,181
2008	14,083	825	17.10	18,156	77.6	1,098	1,221
2009	14,148	806	17.60	18,155	77.9	1,102	1,218
2010	13,999	837	16.70	18,392	76.1	1,034	1,173
2011	14,215	806	17.60	18,102	78.5	989	1,216
2012	14,257	805	17.70	18,283	78.0	935	1,254
2013	14,308	834	17.20	18,232	78.5	912	1,283
2014	14,034	802	17.50	17,774	79.0	947	1,249
2015	13,746	797	17.20	17,650	77.9	921	1,422
2016	13,844	770	18.00	17,445	79.4	869	1,897

Sources: Developed by Northern Economics using data from ADEED (2018b) for FNSBSD enrollments, and FNSB (2018a) for data on private and correspondence enrollments.

As shown in Figure 32, funding for the school district comes from multiple sources, including locally generated revenues, state formula and other funding, federal funding, and other. Federal funds

are provided for federally-connected students and vary substantially, depending on whether a military student lives and attends school on base or off base.

FIGURE 32: FNSBSD PER-STUDENT REVENUES BY SOURCE

Year	Average Daily Membership (ADM)	School District Revenue by Source, per Student (ADM)					
		Operating Fund				Special Revenue	Total
		Local	State	Federal	Other		
2007	14,442	2,771	6,334	815	65	908	10,895
2008	14,082	2,998	6,647	819	60	1,078	11,603
2009	14,148	3,126	6,914	678	47	1,063	11,829
2010	14,418	3,006	7,739	834	51	1,525	13,155
2011	14,238	3,182	8,032	1,014	75	1,436	13,740
2012	14,277	3,263	8,221	984	85	1,300	13,853
2013	14,273	3,237	8,724	1,034	72	1,155	14,223
2014	14,063	3,382	8,656	994	76	1,206	14,314
2015	13,770	3,624	9,019	1,288	86	1,112	15,130
2016	13,876	3,990	8,662	1,249	77	1,041	15,019

Source: Developed by Northern Economics using data from ADEED (2018a).

### Future Conditions for School Spending

School spending under the baseline and with F-35 Beddown will depend on the number of children attending FNSBSD schools. Differences in numbers of forecast FNSBSD students between the Baseline and F-35 Beddown are summarized in Figure 33, along with estimates of students that are “Federally Connected”. As mentioned above Federal Impact Aid to schools depends in part on the number of students that are “Federally Connected” including all children whose parents work on military bases in the FNSB. With F-35 Beddown, the number of FNSBSD students are

expected to increase by 957 by 2030. Of this total 495 are expected to be “Federally Connected”, in other words directed affiliated with the F-35 Beddown at EAFB. The bottom section of the table breaks down the Federally Connected students into two categories, those forecast to live at EAFB and those living off-base. The number of students living at EAFB is expected to peak at 59 students, while the number of Federally Connected students living off-base increases by 436.

**FIGURE 33: FORECAST INCREASES IN SCHOOL AGE CHILDREN AND FNSBSD STUDENTS WITH F-35 BEDDOWN**

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<b>Category of Students</b>	<b>Difference in Forecast of Students at FNSBSD Schools with and without Affiliation to Military Bases</b>													
<b>Total Children Ages 5-17</b>	10	127	283	621	1,020	1,155	1,203	1,235	1,236	1,220	1,216	1,213	1,209	1,204
<b>Students Attending FNSBSD (79.5%)</b>	8	100	225	494	811	918	956	981	983	970	966	964	961	957
<b>Additional Students without a Federal Connection</b>	8	94	215	453	600	488	467	489	490	476	471	469	466	462
<b>Additional Federally Connected Students</b>	0	6	10	41	211	430	489	492	493	494	495	495	495	495
<b>Category of Students</b>	<b>Additional Federally Connected Students Living On- and Off-base with F-35 Beddown</b>													
<b>Additional Students Living at EAFB</b>	0	1	1	5	25	51	58	59	59	59	59	59	59	59
<b>Additional Students Living Off-base</b>	0	5	9	36	186	379	431	433	434	435	436	436	436	436

Source: Estimated by Northern Economics using data the Alaska REMI Model and data from ADEED (2018a).

Estimates of future spending per student in the future are set equal to spending in 2016, i.e. at \$15,019 per student. The location where each F-35-related student lives will affect the amount of Federal Impact Aid received. The net effect of each additional dollar of Federal Impact Aid is, approximately, a fifty-cent reduction in the local and state share. The estimated Federal Impact Aid for each student living on base is \$7,626. Students living off base would generate only \$80 of Federal

Impact Aid. At the peak enrollment impact, however, only 0.5 percent of students would be living on base, generating that higher impact aid amount. As Figure 34 shows, federal impact aid will increase with the F-35 Beddown to over \$390,832 in 2030, resulting in reductions in state and local shares of education funding requirements by \$195,416 relative to funding if the same increase in students were not federally connected.

**FIGURE 34: PROJECTED FEDERAL IMPACT AID, 2017–2030, IN 2016\$**

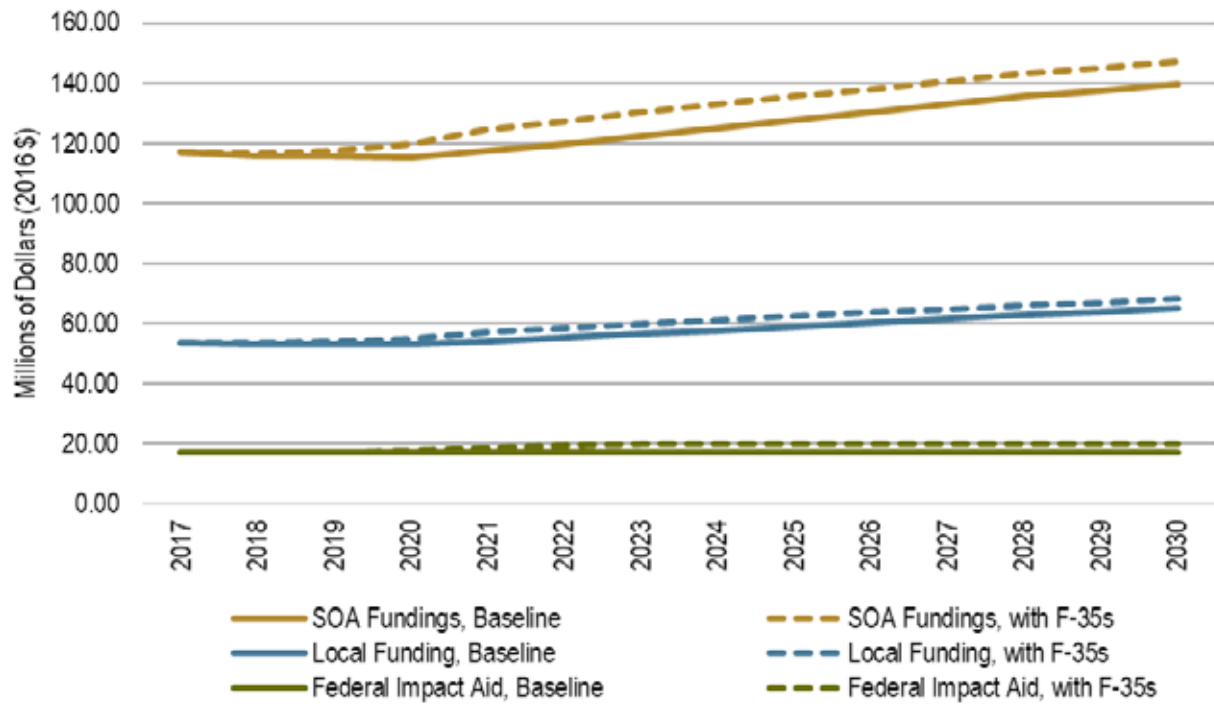
Year	Total Impact Aid From F-35	Estimated State Education Funding Reduction	Estimated Local Education Funding Reduction
	2016 \$		
2017	0	0	0
2018	5,027	2,513	2,513
2019	7,540	3,770	3,770
2020	32,046	16,023	16,023
2021	166,512	83,256	83,256
2022	339,308	169,654	169,654
2023	386,434	193,217	193,217
2024	388,319	194,159	194,159
2025	389,575	194,788	194,788
2026	390,204	195,102	195,102
2027	390,832	195,416	195,416
2028	390,832	195,416	195,416
2029	390,832	195,416	195,416
2030	390,832	195,416	195,416

Figure 35 and Figure 36 show the projected FNSBSD revenues by source under the baseline and with the F-35 Beddown, as well as the incremental changes between the two scenarios.

**FIGURE 35: PROJECTED FNSBSD REVENUES BY SOURCE UNDER BASELINE, WITH F-35S, AND INCREMENTAL, IN MILLIONS OF DOLLARS, 2017-2030**

Year	Operating Revenues Under the Baseline				Operating Revenues with the F-35 Beddown				Incremental Change in Operating Revenues			
	Local (FNSB)	SOA	Federal Impact Aid	Other & Special Revenue	Local (FNSB)	SOA	Federal Impact Aid	Other & Special Revenue	Local (FNSB)	SOA	Federal Impact Aid	Other & Special Revenue
<b>Projected Revenues in Millions of 2016\$</b>												
2017	53.73	116.91	17.33	15.12	53.77	116.98	17.33	15.12	0.04	0.08	0.00	0.01
2018	53.24	115.90	17.33	14.99	53.68	116.82	17.36	15.11	0.45	0.92	0.03	0.11
2019	53.07	115.57	17.33	14.95	54.08	117.64	17.38	15.21	1.01	2.07	0.05	0.25
2020	52.94	115.31	17.33	14.92	55.12	119.79	17.54	15.48	2.18	4.48	0.21	0.55
2021	54.05	117.54	17.33	15.19	57.25	124.53	18.42	16.10	3.20	6.99	1.09	0.91
2022	55.23	119.92	17.33	15.48	58.35	127.33	19.55	16.50	3.13	7.42	2.22	1.03
2023	56.56	122.60	17.33	15.80	59.71	130.22	19.85	16.87	3.15	7.62	2.53	1.07
2024	57.80	125.10	17.33	16.10	61.06	132.94	19.87	17.20	3.26	7.84	2.54	1.10
2025	59.13	127.76	17.33	16.42	62.40	135.62	19.87	17.52	3.27	7.86	2.54	1.10
2026	60.39	130.30	17.33	16.73	63.59	138.04	19.87	17.81	3.21	7.74	2.54	1.08
2027	61.69	132.93	17.33	17.04	64.88	140.63	19.87	18.12	3.19	7.70	2.55	1.08
2028	63.00	135.55	17.33	17.36	66.17	143.23	19.87	18.44	3.18	7.68	2.54	1.08
2029	63.91	137.38	17.33	17.58	67.08	145.04	19.87	18.65	3.17	7.66	2.54	1.07

FIGURE 36: PROJECTED FNSBSD FUNDING BY MAJOR SOURCES, 2017-2030



Source: Developed by Northern Economics using data from ADEED (2018).



## Other Government Expenditures

The assessment of impacts of government expenditures of the F-35 Beddown on the FNSB, the City of Fairbanks and on the City of North Pole will first show an overall forecast of historic and expected future general fund expenditures, and will then drill down describe and forecast expenditures in four sub-categories of expenditures: Public Safety, General Government, Public Works, and a catch-all category of “All Other General Fund Expenditures”. Note that education expenditures in the FNSB were already discussed in Section 1.3.1, and are excluded from expenditures in this section.

The assessment focuses on the “General Fund” expenditures of the three “local” governments. The RGP Team notes that all three local governments have other funds in addition their General Fund that have not been included in this assessment.

To estimate fiscal impacts to the cities of North Pole and Fairbanks, and the FNSB, a per capita methodology was employed using historic expenditures (2007–2016) on police, fire, emergency operations services, general government, public works, and all other general fund expenditures as documented in Audited Financial Statements available from ADCCED (2018b). The per capita coefficient used to estimate the baseline and F-35 Beddown scenarios is calculated using the following process:

1. Adjust annual expenditures for each government entity by type for inflation to 2016\$ using the consumer price index.<sup>8</sup>
2. Divide each expenditure in #1 by population for the entity in that year—this is the per capita expenditure for the year.
3. Take the average of per capita expenditures for each year (from #2) over the historic period from 2007–2016.<sup>9</sup>

The average per capita expenditure coefficient primarily includes operational expenditures from the General Funds, but also includes some specific capital outlay expenditures. Therefore, it is assumed that not only operational expenditures will change as a function of population, but that some minimum level of capital will also need to be built/maintained as the population changes.

This introductory section provides a summary of total general fund expenditures by the City of North Pole, City of Fairbanks, and FNSB.<sup>10</sup> The subsequent sections provide further detail on the different general fund service components with a focus on public safety expenditures, but also documenting and forecasting “general government” expenditures, public works expenditures, and “other general fund” expenditures. While these sections describe the fiscal conditions quantitatively, much of the qualitative information regarding the organization of each jurisdiction’s local government can be found in sections public safety and utilities and infrastructure focus areas.

Total general fund expenditures by the City of North Pole, City of Fairbanks, and Fairbanks North Star Borough, adjusted for inflation to 2016\$, are shown in Figure 37 for 2007–2016.

<sup>8</sup> Nominal expenditures from 2007–2016 were inflated using the U.S. Consumer Price Index. (BLS, 2016).

<sup>9</sup> Fire service categories for the City of North Pole were consolidated in 2007. Therefore, the coefficient for North Pole fire services is calculated as the average per-capita expenditure from 2008–2016.

<sup>10</sup> FNSB expenditures reported in this section do not include expenditures for education/schools.

**FIGURE 37: GENERAL FUND EXPENDITURES (2016\$), EXISTING CONDITIONS, 2007–2016**

Year	City of North Pole	City of Fairbanks	FNSB
	(2016\$)		
2007	4,466,734	36,730,653	39,138,334
2008	5,521,632	38,418,212	39,990,243
2009	5,529,959	33,729,867	41,496,587
2010	5,353,592	31,952,017	44,500,459
2011	5,265,496	34,855,799	44,927,094
2012	5,445,937	32,933,762	45,575,474
2013	5,208,637	32,858,691	45,109,376
2014	5,636,559	33,394,695	44,730,463
2015	5,672,335	33,392,659	47,012,964
2016	5,362,694	31,636,944	45,066,695

Source: Developed by Northern Economics using data from ADCCED (2018a)  
 Note that general fund expenditures as shown here for the FNSB exclude FNSB’s funding for FNSBSD.

General fund expenditures by the City of North Pole, City of Fairbanks, and FNSB are forecast to increase in both the baseline and with the F-35 Beddown (Figure 38). The total change over baseline in the F-35 Beddown scenario ranges between 0.3 percent (City of Fairbanks in 2017) and 13.8 percent (City of North Pole in 2024), i.e. in direct proportion to increases in population. In general forecast spending in all categories will increase under the F-35 Beddown at these same rates.

**FIGURE 38: FORECAST TOTAL GENERAL FUND EXPENDITURES (2016\$), BASELINE AND F-35 BEDDOWN, 2017-2030**

Year	City of North Pole			City of Fairbanks			Fairbanks North Star Borough		
	Baseline	F-35 Beddown	Difference as a Percent of Baseline	Baseline	F-35 Beddown	Difference as a Percent of Baseline	Baseline	F-35 Beddown	Difference as a Percent of Baseline
	(2016\$)			(2016\$)			(2016\$)		
2017	5,276,969	5,285,448	0.2	34,131,861	34,139,581	0.0	44,107,937	44,131,596	0.1
2018	5,293,438	5,342,689	0.9	34,238,387	34,484,437	0.7	44,241,431	44,571,292	0.7
2019	5,309,741	5,434,384	2.3	34,343,834	34,848,396	1.5	44,373,574	45,095,396	1.6
2020	5,324,332	5,690,116	6.9	34,438,209	35,276,220	2.4	44,491,843	45,995,464	3.4
2021	5,342,659	6,005,923	12.4	34,556,752	35,748,426	3.4	44,640,397	47,053,298	5.4
2022	5,366,644	6,118,335	14.0	34,711,886	36,058,094	3.9	44,834,806	47,565,249	6.1
2023	5,399,287	6,161,943	14.1	34,923,026	36,340,154	4.1	45,099,401	47,918,718	6.3
2024	5,439,318	6,205,914	14.1	35,181,952	36,624,560	4.1	45,423,879	48,275,127	6.3
2025	5,483,523	6,248,547	14.0	35,467,869	36,900,318	4.0	45,782,181	48,620,699	6.2
2026	5,528,860	6,288,739	13.7	35,761,116	37,160,278	3.9	46,149,670	48,946,472	6.1

Year	City of North Pole			City of Fairbanks			Fairbanks North Star Borough		
	Baseline	F-35 Beddown	Difference as a Percent of Baseline	Baseline	F-35 Beddown	Difference as a Percent of Baseline	Baseline	F-35 Beddown	Difference as a Percent of Baseline
	(2016\$)			(2016\$)			(2016\$)		
2027	5,573,322	6,325,898	13.5	36,048,700	37,400,625	3.8	46,510,061	49,247,668	5.9
2028	5,616,058	6,360,763	13.3	36,325,115	37,626,140	3.6	46,856,457	49,530,277	5.7
2029	5,655,882	6,393,054	13.0	36,582,706	37,834,999	3.4	47,179,262	49,792,013	5.5
2030	5,692,875	6,423,457	12.8	36,821,975	38,031,645	3.3	47,479,107	50,038,443	5.4

Note: Table does not include FNSB general fund expenditures for schools.

## Police

Figure 39 and Figure 40 summarize historical, future baseline, and F-35 Beddown expenditures on police services for the cities of North Pole and Fairbanks, as the FNSB is policed by several different authorities (as outlined in the public safety focus area). The information in the tables is derived using the same per capita methodology described on page 40.

### Historic Police Expenditures (2007–2016) and Forecast Police Expenditures Under the Baseline and with the F-35 Beddown

Figure 39 summarizes historic police expenditures for the cities of North Pole and Fairbanks for the years 2007–2016. The data are adjusted for inflation to 2016\$. FNSB does not maintain a separate police force. Police expenditures for both cities have been relatively flat with annual variations up and down..

FIGURE 39: POLICE EXPENDITURES (2016\$), EXISTING CONDITIONS, 2007-2016

Year	City of North Pole	City of Fairbanks
	(2016\$)	
2007	1,331,989	6,701,447
2008	1,776,716	7,081,075
2009	1,731,283	6,971,001
2010	1,783,879	6,289,464
2011	1,859,814	6,477,238
2012	1,757,462	6,687,285
2013	1,713,095	6,704,233
2014	1,884,092	6,888,954
2015	1,701,542	6,812,338
2016	1,946,535	6,621,078

Source: Developed by Northern Economics using data from ADCCED (2018a).

FIGURE 40: POLICE EXPENDITURES (2016\$), BASELINE AND F-35 BEDDOWN, 2017-2030

Year	City of North Pole			City of Fairbanks		
	Baseline	F-35 Beddown	Difference as a Percent of Baseline	Baseline	F-35 Beddown	Difference as a Percent of Baseline
	(2016\$)			(2016\$)		
2017	1,729,541	1,736,752	0.4	6,747,802	6,766,619	0.3
2018	1,734,939	1,750,522	0.9	6,768,862	6,815,325	0.7
2019	1,740,283	1,773,708	1.9	6,789,708	6,860,483	1.0
2020	1,745,065	1,852,293	6.1	6,808,366	6,924,651	1.7
2021	1,751,072	1,954,636	11.6	6,831,802	7,013,465	2.7
2022	1,758,933	1,994,720	13.4	6,862,472	7,087,329	3.3
2023	1,769,632	2,011,368	13.7	6,904,213	7,152,281	3.6
2024	1,782,752	2,028,101	13.8	6,955,403	7,217,567	3.8
2025	1,797,240	2,044,122	13.7	7,011,928	7,280,071	3.8
2027	1,826,672	2,072,446	13.5	7,126,757	7,390,576	3.7
2028	1,840,679	2,084,795	13.3	7,181,404	7,438,758	3.6
2029	1,853,732	2,095,971	13.1	7,232,329	7,482,361	3.5
2030	1,865,856	2,106,271	12.9	7,279,632	7,522,544	3.3

Source: Estimated by Northern Economics.

## State Troopers

Estimating the impact on Alaska State Trooper expenditures within the FNSB required a slightly different methodology than that used for all other public safety components. While an inflation-adjusted per capita expenditure coefficient is used, the calculation of the coefficient uses total statewide expenditures and population as shown in Figure 41. This was done given the lack of area-specific data on Alaska State Trooper expenditures.<sup>11</sup> Total expenditures on Alaska State Troopers include all units within the Alaska State Troopers, such as the Alaska Bureau of Highway Patrol, Search and Rescue, Detachments, Alaska Bureau of Investigation, Alaska Wildlife Troopers, etc. The real per capita expenditures estimated in Figure 41, are then applied to forecast populations in the FNSB under the Baseline and the F-35 Beddown to arrive at the forecasts of expenditures shown in Figure 42.

<sup>11</sup> The RGP team reached out to Alaska's Public Safety office for budget information specific to Alaska State Troopers' D detachment (which includes the Fairbanks area) but has been unsuccessful in obtaining data to date.

**FIGURE 41: ALASKA STATE TROOPER EXPENDITURES (2016\$), STATE OF ALASKA, EXISTING CONDITIONS, 2007-2016**

Year	State Trooper Expenditures (Nominal \$)	AK population	Per Capita Expenditures (Nominal \$)	Per Capita Expenditures (2016\$)
2007	93,205,200	680,169	137.0	158.6
2008	106,698,500	686,818	155.4	173.2
2009	101,790,300	697,828	145.9	163.2
2010	108,322,300	710,231	152.5	167.9
2011	101,926,900	722,886	141.0	150.5
2012	113,523,100	731,238	155.2	162.3
2013	118,605,000	735,859	161.2	166.1
2014	125,166,400	736,818	169.9	172.2
2015	130,979,700	737,183	177.7	179.9
2016	130,451,700	739,828	176.3	176.3
<b>Average</b>	<b>113,066,910</b>	<b>717,886</b>	<b>157.2</b>	<b>167.0</b>

Source: Northern Economic estimates using AOMB (2018) and ADOLWD (2018a)

**FIGURE 42: ALASKA STATE TROOPER EXPENDITURES (2016\$) UNDER THE BASELINE AND F-35 BEDDOWN, 2017-2030**

Year	Baseline (2016\$)	F-35 Beddown (2016\$)	Difference as a Percent of Baseline
2017	16,323,873	16,332,629	0.1
2018	16,373,278	16,495,356	0.7
2019	16,422,182	16,689,321	1.6
2020	16,465,952	17,022,426	3.4
2021	16,520,931	17,413,919	5.4
2022	16,592,879	17,603,387	6.1
2023	16,690,803	17,734,202	6.3
2024	16,810,889	17,866,105	6.3
2025	16,943,493	17,993,998	6.2
2026	17,079,496	18,114,563	6.1
2027	17,212,873	18,226,032	5.9
2028	17,341,070	18,330,622	5.7
2029	17,460,537	18,427,488	5.5
2030	17,571,507	18,518,689	5.4

Source: Northern Economic estimates.

### Fire Protection Services

Figure 43 and Figure 44 summarize historical, future baseline, and F-35 Beddown expenditures on fire services for the cities of North Pole and Fairbanks. A description of fire services offered in each jurisdiction is outlined in the public

safety chapter. The FNSB does not list specific expenditures for fire protection, but there are several “Special Service Area Funds” for fire protection reported separately in the FNSB financial statements that are not included in this assessment.

**FIGURE 43: FIRE EXPENDITURES (2016\$), EXISTING CONDITIONS, 2007–2016**

Year	City of North Pole	City of Fairbanks
	(2016\$)	
2007	1,918,517	5,544,935
2008	1,950,638	6,256,986
2009	2,137,512	6,230,430
2010	1,949,603	6,256,744
2011	2,012,868	6,208,890
2012	2,010,863	6,378,928
2013	1,927,797	6,405,564
2014	2,088,682	6,350,830
2015	1,767,109	6,543,262
2016	1,859,823	6,189,127

Source: Developed by Northern Economics using data from ADCCED (2018b).

**FIGURE 44: FORECAST FIRE EXPENDITURES (2016\$) UNDER THE BASELINE AND WITH F-35 BEDDOWN, 2017-2030**

Year	City of North Pole			City of Fairbanks		
	Baseline	F-35 Beddown	Difference as a Percent of Baseline	Baseline	F-35 Beddown	Difference as a Percent of Baseline
	(2016\$)			(2016\$)		
2017	1,930,817	1,933,919	0.2	6,259,912	6,261,327	0.0
2018	1,936,843	1,954,863	0.9	6,279,449	6,324,575	0.7
2019	1,942,808	1,988,414	2.3	6,298,788	6,391,327	1.5
2020	1,948,147	2,081,985	6.9	6,316,097	6,469,791	2.4
2021	1,954,853	2,197,537	12.4	6,337,838	6,556,395	3.4
2022	1,963,628	2,238,669	14.0	6,366,290	6,613,190	3.9
2023	1,975,572	2,254,625	14.1	6,405,014	6,664,921	4.1
2024	1,990,220	2,270,713	14.1	6,452,502	6,717,082	4.1

Year	City of North Pole			City of Fairbanks		
	Baseline	F-35 Beddown	Difference as a Percent of Baseline	Baseline	F-35 Beddown	Difference as a Percent of Baseline
	(2016\$)			(2016\$)		
2025	2,006,394	2,286,313	14.0	6,504,940	6,767,657	4.0
2026	2,022,983	2,301,018	13.7	6,558,723	6,815,334	3.9
2027	2,039,251	2,314,615	13.5	6,611,467	6,859,415	3.8
2028	2,054,888	2,327,372	13.3	6,662,163	6,900,775	3.6
2029	2,069,459	2,339,187	13.0	6,709,406	6,939,081	3.4
2030	2,082,995	2,350,311	12.8	6,753,289	6,975,146	3.3

### Spending for Emergency Operations in the FNSB

FNSB provides 911 services, animal control, and ambulance services, all of which are covered under their department of emergency operations (Figure 45).

Figure 46 provides forecasts of expenditures for emergency operations services under the Baseline and F-35 Beddown. These services are described

in additional detail in the public safety focus area. The cities of Fairbanks and North Pole do not have similar expenditures.

**FIGURE 45: HISTORIC EMERGENCY OPERATIONS EXPENDITURES, 2007-2016**

Year	Fairbanks North Star Borough (Nominal \$)
2007	2,027,534
2008	2,114,991
2009	2,112,967
2010	2,134,345
2011	2,234,448
2012	1,896,470
2013	1,845,579
2014	1,896,814
2015	1,888,783
2016	1,779,203

Source: Developed by Northern Economics using data from ADCCED (2018b).

**FIGURE 46: FORECAST EMERGENCY OPERATIONS EXPENDITURES UNDER THE BASELINE AND F-35 BEDDOWN, 2017-2030**

Year	Fairbanks North Star Borough		
	Baseline (2016\$)	F-35 Beddown (2016\$)	Difference as a Percent of Baseline
2017	2,014,808	2,015,888	0.1
2018	2,020,906	2,035,973	0.7
2019	2,026,942	2,059,914	1.6
2020	2,032,344	2,101,028	3.4
2021	2,039,130	2,149,349	5.4
2022	2,048,010	2,172,734	6.1
2023	2,060,097	2,188,880	6.3
2024	2,074,919	2,205,161	6.3
2025	2,091,285	2,220,946	6.2
2026	2,108,072	2,235,827	6.1
2027	2,124,534	2,249,586	5.9
2028	2,140,357	2,262,495	5.7
2029	2,155,103	2,274,451	5.5
2030	2,168,799	2,285,707	5.4

### General Government Expenditures

General government expenditures typically include expenditures for the Mayor, the Assembly, legal services, computer services, financial services, the assessor's office, and human resources. Figure 47 shows historic (2007–2016) general government expenditure (in nominal \$) for the cities of North Pole and Fairbanks and for the FNSB.

Figure 48 that follows uses the standard per capita process described in earlier sections to derive forecast expenditures under the Baseline and with the F-35 Beddown.



FIGURE 47: HISTORIC GENERAL GOVERNMENT EXPENDITURES, 2007–2016

Year	City of North Pole	City of Fairbanks	FNSB
	(Nominal \$)		
2007	664,743	14,597,038	13,425,303
2008	860,884	14,260,763	13,308,735
2009	884,484	9,856,210	13,883,885
2010	844,096	9,823,569	16,190,579
2011	812,735	10,008,114	20,746,847
2012	871,910	10,348,206	20,458,305
2013	812,147	9,987,241	20,523,696
2014	901,101	11,762,682	18,976,269
2015	915,568	11,421,732	20,697,172
2016	841,148	10,481,243	19,816,849

Source: Developed by Northern Economics using data from ADCCED (2018b).

FIGURE 48: GENERAL GOVERNMENT EXPENDITURES UNDER THE BASELINE AND WITH F-35 BEDDOWN, 2017–2030

Year	City of North Pole			City of Fairbanks			Fairbanks North Star Borough		
	Baseline	F-35 Beddown	Difference as a Percent of Baseline	Baseline	F-35 Beddown	Difference as a Percent of Baseline	Baseline	F-35 Beddown	Difference as a Percent of Baseline
	(2016\$)			(2016\$)			(2016\$)		
2017	831,659	832,995	0.2	11,300,684	11,303,240	0.0	17,888,224	17,897,820	0.1
2018	834,254	842,016	0.9	11,335,954	11,417,418	0.7	17,942,364	18,076,141	0.7
2019	836,824	856,468	2.3	11,370,866	11,537,921	1.5	17,995,955	18,288,694	1.6
2020	839,123	896,772	6.9	11,402,113	11,679,569	2.4	18,043,920	18,653,722	3.4
2021	842,012	946,543	12.4	11,441,361	11,835,911	3.4	18,104,167	19,082,733	5.4
2022	845,792	964,260	14.0	11,492,724	11,938,439	3.9	18,183,011	19,290,357	6.1
2023	850,936	971,132	14.1	11,562,630	12,031,826	4.1	18,290,318	19,433,708	6.3
2024	857,245	978,062	14.1	11,648,358	12,125,989	4.1	18,421,912	19,578,252	6.3
2025	864,212	984,781	14.0	11,743,022	12,217,290	4.0	18,567,224	19,718,401	6.2
2026	871,357	991,115	13.7	11,840,113	12,303,360	3.9	18,716,261	19,850,520	6.1
2027	878,365	996,972	13.5	11,935,328	12,382,936	3.8	18,862,420	19,972,672	5.9
2028	885,100	1,002,467	13.3	12,026,846	12,457,601	3.6	19,002,902	20,087,285	5.7
2029	891,376	1,007,556	13.0	12,112,132	12,526,752	3.4	19,133,818	20,193,434	5.5
2030	897,206	1,012,347	12.8	12,191,351	12,591,860	3.3	19,255,422	20,293,375	5.4

## Spending on Public Works

This section summarizes historic and forecast future expenditures for public works by local government entities. Typically, public works expenditures in the general fund include normal design, repair, and maintenance of roads and other public facilities. Design and construction of new infrastructures are typically, but not always accounted for in funds other than the general fund. Figure 49 shows historic (2007–2016) general government expenditure (in nominal \$) for the cities of North Pole and Fairbanks and for the FNSB.

Figure 50 that follows uses the standard per capita process described in earlier sections to derive forecast expenditures under the Baseline and with the F-35 Beddown.

**FIGURE 49: HISTORIC PUBLIC WORKS EXPENDITURES, 2007–2016**

Year	City of North Pole	City of Fairbanks	FNSB
	(Nominal \$)		
2007	393,833	7,369,080	4,586,778
2008	702,625	8,366,119	5,041,999
2009	557,121	8,258,754	5,480,080
2010	549,405	7,172,692	5,632,933
2011	418,412	7,577,294	5,656,102
2012	630,007	7,920,925	6,505,162
2013	645,693	8,164,679	6,306,759
2014	631,611	7,746,466	6,330,370
2015	613,466	7,940,614	6,265,411
2016	541,605	7,645,011	5,460,711

Source: Developed by Northern Economics using data from ADCED (2018b).

**FIGURE 50: PUBLIC WORKS EXPENDITURES UNDER THE BASELINE AND F-35 BEDDOWN, 2017-2030**

Year	City of North Pole			City of Fairbanks			Fairbanks North Star Borough		
	Baseline	F-35 Beddown	Difference as a Percent of Baseline	Baseline	F-35 Beddown	Difference as a Percent of Baseline	Baseline	F-35 Beddown	Difference as a Percent of Baseline
	(2016\$)			(2016\$)			(2016\$)		
2017	560,816	561,717	0.2	7,843,806	7,845,580	0.0	5,766,622	5,769,715	0.1
2018	562,566	567,800	0.9	7,868,286	7,924,831	0.7	5,784,075	5,827,200	0.7
2019	564,299	577,545	2.3	7,892,519	8,008,472	1.5	5,801,351	5,895,721	1.6
2020	565,849	604,723	6.9	7,914,207	8,106,789	2.4	5,816,813	6,013,395	3.4
2021	567,797	638,286	12.4	7,941,449	8,215,307	3.4	5,836,235	6,151,695	5.4
2022	570,346	650,233	14.0	7,977,101	8,286,471	3.9	5,861,652	6,218,627	6.1
2023	573,815	654,867	14.1	8,025,622	8,351,291	4.1	5,896,245	6,264,839	6.3
2024	578,070	659,540	14.1	8,085,126	8,416,650	4.1	5,938,667	6,311,436	6.3
2025	582,767	664,071	14.0	8,150,832	8,480,022	4.0	5,985,511	6,356,615	6.2
2026	587,586	668,343	13.7	8,218,223	8,539,763	3.9	6,033,556	6,399,207	6.1
2027	592,311	672,292	13.5	8,284,312	8,594,997	3.8	6,080,673	6,438,585	5.9
2028	596,853	675,997	13.3	8,347,835	8,646,822	3.6	6,125,960	6,475,533	5.7
2029	601,085	679,429	13.0	8,407,032	8,694,820	3.4	6,168,164	6,509,752	5.5
2030	605,016	682,660	12.8	8,462,018	8,740,011	3.3	6,207,365	6,541,970	5.4

Source: Northern Economics estimates.

## All Other General Fund Expenditures

This section summarizes historic and forecast future expenditures for all other general fund expenditures that not have already been included. As an example, these “Other” expenditures for the FNSB include community planning and expenditures on the library. Figure 51 shows historic (2007–2016) “Other” expenditure (in nominal \$) for the cities of North Pole and Fairbanks and for the FNSB. Figure 52 that follows uses the standard per capita process described in earlier sections to derive forecast for “Other” expenditures under the Baseline and with the F-35 Beddown.

In 2013, the City of Fairbanks retired \$883,215 (in nominal \$) in debt service payments, and thus the “Other” expenditures for the City of Fairbanks is reduced by that amount. In 2015, the City of North Pole incurred a special “PERS on-behalf” expenditure of \$619,234, increasing their other general fund expenditures for that year. Future expenditures take the average over existing years, and thus these “special cases” are incorporated into the General Fund Expenditures.

**FIGURE 51: ALL OTHER GENERAL FUND EXPENDITURES FOR THE HISTORIC PERIOD, 2007-2016**

Year	City of North Pole	City of Fairbanks	FNSB
	(Nominal \$)		
2007	157,653	2,518,153	19,098,719
2008	230,768	2,453,269	19,524,518
2009	219,558	2,413,471	20,019,654
2010	226,610	2,409,547	20,542,602
2011	161,667	4,584,264	16,289,696
2012	175,695	1,598,418	16,715,537
2013	109,905	1,596,974	16,433,344
2014	131,072	645,763	17,527,010
2015	674,650	674,713	18,161,598
2016	173,583	700,485	18,009,932

Source: Developed by Northern Economics using data from ADCED (2018b).

**FIGURE 52: ALL OTHER GENERAL FUND EXPENDITURES UNDER THE BASELINE AND F-35 BEDDOWN, 2017-2030**

Year	City of North Pole			City of Fairbanks			Fairbanks North Star Borough		
	Baseline	F-35 Beddown	Difference as a Percent of Baseline	Baseline	F-35 Beddown	Difference as a Percent of Baseline	Baseline	F-35 Beddown	Difference as a Percent of Baseline
	(2016\$)			(2016\$)			(2016\$)		
2017	224,136	224,496	0.2	1,979,658	1,980,106	0.0	18,438,283	18,448,173	0.1
2018	224,836	226,927	0.9	1,985,837	2,000,108	0.7	18,494,087	18,631,977	0.7
2019	225,528	230,822	2.3	1,991,953	2,021,217	1.5	18,549,326	18,851,067	1.6
2020	226,148	241,684	6.9	1,997,426	2,046,031	2.4	18,598,765	19,227,319	3.4
2021	226,926	255,098	12.4	2,004,302	2,073,419	3.4	18,660,865	19,669,522	5.4
2022	227,945	259,873	14.0	2,013,300	2,091,380	3.9	18,742,133	19,883,530	6.1
2023	229,331	261,725	14.1	2,025,546	2,107,740	4.1	18,852,741	20,031,290	6.3
2024	231,032	263,592	14.1	2,040,564	2,124,235	4.1	18,988,381	20,180,278	6.3
2025	232,909	265,403	14.0	2,057,147	2,140,229	4.0	19,138,161	20,324,737	6.2
2026	234,835	267,110	13.7	2,074,155	2,155,307	3.9	19,291,781	20,460,918	6.1
2027	236,723	268,689	13.5	2,090,835	2,169,247	3.8	19,442,434	20,586,826	5.9
2028	238,539	270,170	13.3	2,106,868	2,182,327	3.6	19,587,237	20,704,964	5.7
2029	240,230	271,541	13.0	2,121,808	2,194,441	3.4	19,722,178	20,814,377	5.5
2030	241,801	272,832	12.8	2,135,686	2,205,847	3.3	19,847,521	20,917,391	5.4

## 1.4 SUMMARY OF FISCAL IMPACTS

This section summarizes benefits (revenues) to major affected governmental entities such as the FNSB and the SOA, along with costs (spending), described above as a result of the F-35 Beddown. This summary outlines revenue and expenditures categories that are likely to see impacts.

Again, this fiscal impact assessment has been undertaken with the primary objective of determining whether the F-35 Beddown is likely to create significant funding issues for the affected government entities from a “big picture” perspective. The Fiscal Impact Assessment is not

intended to be an exhaustive accounting exercise in which every dollar is categorized and every fund is balanced and examined. There will undoubtedly be gaps in the assessment and funds that have not been fully described and documented.

### City of North Pole, City of Fairbanks, and FNSB

Figure 53 summarizes the estimated difference in annual fiscal position for the City of North Pole, the City of Fairbanks, and the FNSB, related to F-35

FIGURE 53: SUMMARY OF FISCAL IMPACTS BY GOVERNMENT IN 2022 AND 2030

Government	Differences Between F-35 Beddown and the Baseline (2016\$)	
	2022	2030
<b>City of North Pole</b>		
<b>Revenues<sup>1</sup></b>	<b>731,753</b>	<b>705,378</b>
Property Tax	127,191	123,619
Consumption Related Tax	436,100	423,854
Fees, Services Charges, Fines & Forfeitures	168,462	157,905
<b>Expenditures</b>	<b>751,691</b>	<b>730,582</b>
<b>City of Fairbanks</b>		
<b>Revenues<sup>1</sup></b>	<b>988,556</b>	<b>888,292</b>
Property Tax	583,639	524,444
Consumption Related Taxes	132,218	118,808
Fees, Services Charges, Fines & Forfeitures	272,698	245,040
<b>Expenditures</b>	<b>1,346,208</b>	<b>1,209,669</b>
<b>FNSB</b>		
<b>Revenues<sup>1</sup></b>	<b>5,738,647</b>	<b>5,368,460</b>
Property Tax	5,294,703	4,962,905
Consumption Related Tax	171,246	160,515
Fees, Services Charges, Fines & Forfeitures	168,462	157,905
<b>Expenditures</b>	<b>5,856,203</b>	<b>5,707,832</b>
General Fund	2,730,442	2,559,336
Education <sup>2</sup>	3,125,761	3,148,496

Notes:

<sup>1</sup> Does not include additional grants, state and federal funds, trust and invested fund income, and other miscellaneous income.

<sup>2</sup> General Fund includes public safety but does not include state troopers.

<sup>3</sup> Education costs to the Borough, represent revenue to the FNSB School district

Beddown. Impacts are described in 2022, the year when the majority of active duty military population will be fully moved into the region, and 2030, the end of the study period.

## Summary of Results for the City of North Pole

With the F-35 Beddown, the population in the 99705 ZIP code area—which includes North Pole, Moose Creek and Badger—is projected to be 13.5 percent higher than under the Baseline. Because of this higher than average growth, property and consumption taxes for the City North Pole are expected to increase faster than for the City of Fairbanks (with 3.7 percent more population under F-35 Beddown) or the FNSB as a whole (with 5.9 percent more population with F-35 Beddown). Similarly, general fund expenditures in the City of North Pole are expected to experience greater percentage increases than the City of Fairbanks or the FNSB.

For the City of North Pole, the difference between quantifiable F-35 Beddown related expenditures and revenues relative to the size of the general fund budget is quite small. While expected revenue increases with F-35 Beddown are less than expected spending increases, the difference over the entire forecast period is just 0.2 percent of total general fund expenditures from 2017–2030 with the F-35 Beddown.

For example, in 2030, the City of North Pole will receive an estimated increase of \$705,378 from F-35 related property taxes, consumption taxes, and various fees, while general fund spending to provide local services is forecast to increase by \$730,582 a difference of \$25,204. Compared to

the forecast total general fund expenditures with F-35 Beddown in 2030 of \$6.4 million, the \$25,204 incremental revenue shortfall represents just 0.4 percent of the budget. The RGP team also notes that spending and revenue associated with F-35 population could also vary depending on current infrastructure needs, and spending habits of the new and neighboring populations.

## Summary of Results for the City of Fairbanks

The impacts to the City of Fairbanks are similar to those for the City of North Pole—the difference between quantifiable F-35 Beddown related expenditures and revenues relative to the size of the general fund budget is small—averaging just 1.02 percent of total general fund expenditures from 2017–2030 with the F-35 Beddown. In 2024, the difference between forecasts of increased revenues and increased expenditures is \$499,573—an amount that is just 1.36% of the forecast of all general fund expenditures. In other words, the F-35 Beddown is forecast to slightly increase the amount of funding required from other sources, such as intergovernmental transfers or draw-downs from the City’s permanent fund, in order to balance the annual budget.

The RGP team also notes that because the City of Fairbanks is a hub for much of the consumption in the region, consumption related taxes could increase by a greater percentage than the increase in population.

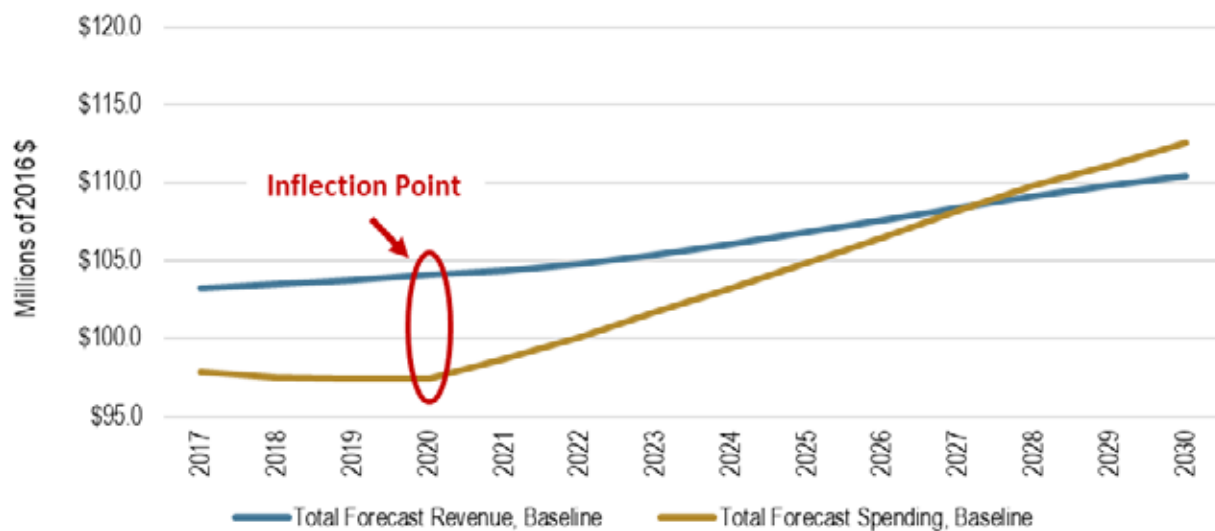
## Summary of Results for the Fairbanks North Star Borough

The differences between general fund revenues and expenditures for the FNSB (summarized in Figure 53 above) are relatively minor when compared to the overall general fund revenues and expenditures. Over the entire forecast period from 2017–2030, the weighted average gap between additional revenues and additional expenditures is -0.19 percent relative to total forecast expenditures under F-35 Beddown. In 2030 for example, additional expenditures exceed additional revenues by \$339,372, while the total general fund expenditures with F-35 Beddown in 2030 are forecast at \$118.3 million. The additional difference is 0.29 percent of the total ( $\$339,372 \div \$118,328,370 = 0.29\%$ ).

Perhaps more importantly the RGP teams finds that unlike forecast revenues and expenditures for the City of North Pole and the City of Fairbanks, forecast revenues and expenditures for the FNSB do not follow generally parallel tracks. Under the

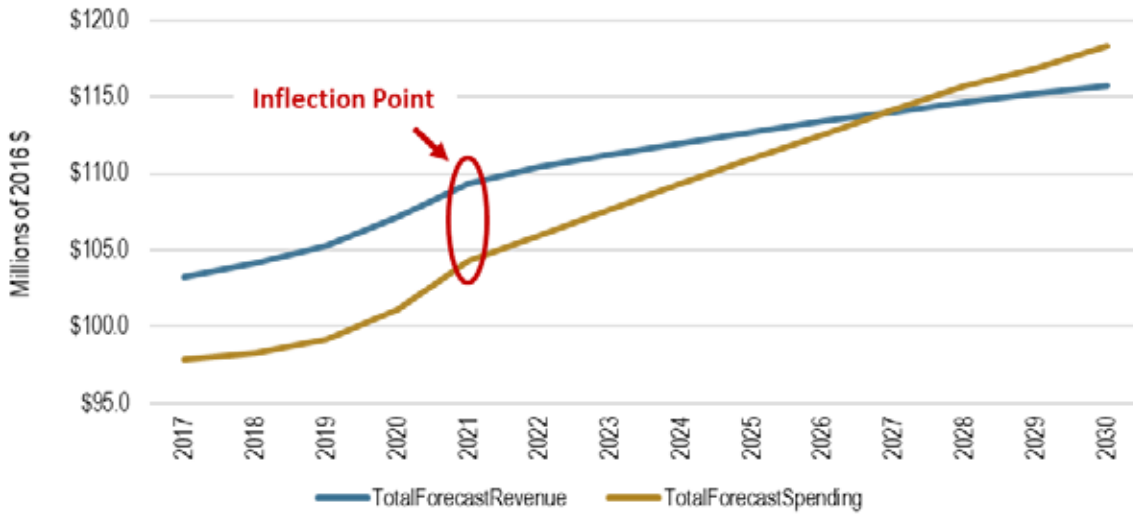
baseline, revenues for the FNSB are forecast to exceed expenditures from 2017 to 2024, but in 2025 through 2030, general fund expenditures are expected to exceed forecast revenues. Similarly, under the F-35 Beddown forecast, revenues are forecast to exceed expenditures from 2017 to 2023, but in 2024 through 2030, expenditures are expected to exceed forecast revenues. Figure 19 demonstrates this issue for the Baseline, while Figure 20 shows forecast expenditures and revenues with the F-35 Beddown. In both figures there is a clearly defined inflection point in the spending forecast. The inflection occurs in 2020 under the baseline, and in 2021 with the F-35 Beddown. If this inflection point were only present in the F-35 Beddown case it might be attributed to the F-35 Beddown, but since the inflection is also present in the baseline, the root cause of the inflection must be attributed to something that is occurring in both the baseline case, and in the F-35 Beddown case.

**FIGURE 54: FORECAST GENERAL FUND REVENUE AND SPENDING UNDER THE BASELINE FOR THE FNSB**



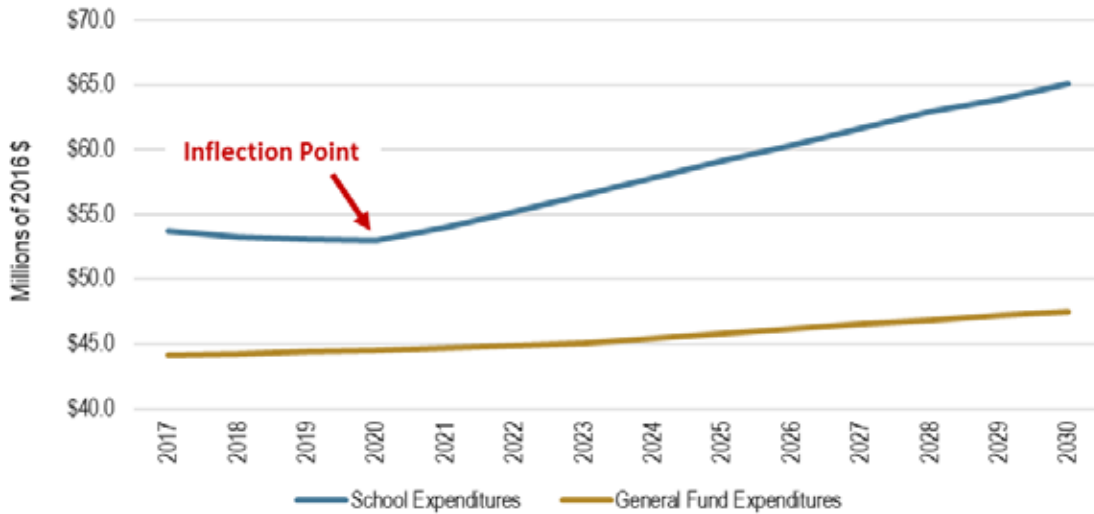
Source: Developed by Northern Economics using the Alaska REMI Model.

**FIGURE 55: FORECAST GENERAL FUND REVENUE AND SPENDING WITH THE F-35 BEDDOWN FOR THE FNSB**



Developed by Northern Economics using the Alaska REMI Model

**FIGURE 56: BASELINE FORECAST OF FNSB SCHOOL AND GENERAL FUND EXPENDITURES**



Developed by Northern Economics using the Alaska REMI Model

## State of Alaska

Figure 57 summarizes the estimated change in annual fiscal position for the SOA resulting from F-35 Beddown relative to Baseline forecasts. As with Borough summaries above, SOA impacts are described in 2022, the year when most of active duty military population will be fully moved into

the region, and 2030, the end of the study period. Revenues shown in Figure 57 are calculated by multiplying per capita expenditures in Figure 27 (on page 32) by F-35 Beddown-related population increases. Costs were estimated separately; costs to the SOA for schools were estimated in Section 1.3.1.2, and costs for State Troopers were estimated in Section 1.3.2.2.



FIGURE 57: SUMMARY OF FISCAL IMPACTS TO THE STATE OF ALASKA IN 2022 AND 2030

Revenue and Cost by Government	Change from Baseline (2016\$)	
	2022	2030
Revenues(receipts)	1,455,409	1,364,204
Tobacco Tax	555,529	520,716
Motor Fuel Tax	398,939	373,939
Alcoholic Beverages Tax	347,053	325,305
Vehicle Rental Tax	85,659	80,291
Charitable Gaming	21,014	19,697
Telephone Cooperative Tax	18,709	17,536
Electric Cooperative Tax	16,488	15,455
Tire Fee	12,019	11,265
Costs(outlays) <sup>1</sup>	8,040,507	8,847,183
State Troopers	1,010,507	947,183
Education	7,030,000	7,900,000

Notes:

<sup>1</sup> Does not estimate AKDOTF road construction and maintenance.

Forecast of revenues generated for the SOA within the FNSB under both the Baseline and with the F-35 Beddown are much lower than forecast expenditures. Revenues generated for the SOA on a per capita basis are estimated to be just \$240.55, while the SOA is forecast to spend \$176 per capita on State Troopers alone. In addition, the SOA incurs the largest portion of costs for K-12 education within the FNSB. Under the baseline, the SOA is forecast to provide \$8,683 per student to the FNSBSD. With the F-35 Beddown, the SOA's average contribution per student declines by an average \$26/student because of increases in

Federal Impact Aid. However, the increase in the overall number of students with the F-35 Beddown increases the SOA's total education contribution by \$7.42 million in 2022 and \$7.62 million in 2030. The RGP notes that the expenditure estimates for the SOA do not consider additional spending by the Alaska Department of Transportation and Public Facilities for increased road and infrastructure maintenance, potential increases in spending in the university system, increased per capita spending on Medicaid, or on other state-funded social programs.

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