

EagExit Phase 2A Expenditures Analysis

Date: September 4, 2020 CORRECTED

To: EagExit Board

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This memo presents the findings of EagExit Project Phase 2A, with high-level estimates of expenditures for education, general government, road maintenance, parks and recreation, law enforcement, and a fire department. Phase 1 of the study, completed earlier this year, looked at potential revenue generation for the Assembly District 2 (AD2) area. Phase 2A serves as a complement to the Phase 1 revenue analysis and develops a “30,000-foot-level” look at expenditures within the study area.

This screening-level assessment examines the cost of providing typical government and educational services in the AD2 region by comparing each expenditure category to comparable regions (“comps”) in Alaska (except for law enforcement, which includes Worcester County, MD). The project selected the comps because they are communities with similar populations, school district average daily membership (ADM), geography, and land area to AD2. Table 1 shows the comps approved by the EagExit board for the Phase 2A analysis.

Table 1. Expenditure Categories and Comps

Primary Expenditure Categories	Comp 1	Comp 2	Comp 3
Education	Fairbanks North Star Borough	Kenai Peninsula Borough	Juneau City and Borough
General Government	Fairbanks North Star Borough	Kenai Peninsula Borough	City of Fairbanks
Road Maintenance	Chugiak/Birchwood/Eagle River Rural Road Service Area	N/A	N/A
Parks and Recreation	Municipality of Anchorage	Fairbanks North Star Borough	Kenai Peninsula Borough
Law Enforcement	City of Wasilla	City of Fairbanks	Worcester County, MD (Sheriff's Office)
Fire Department	Municipality of Anchorage/ Chugiak Volunteer Fire and Rescue Department	Central Mat-Su Fire Department	Nikiski Fire Service Area

Source: Northern Economics analysis

Estimated EagExit Expenditures

The analysis presented in this memo estimates a range of potential expenditures for both the government and the school district for a new borough based on AD2. Government expenditures include general government, road maintenance, parks and recreation, law enforcement, and a fire department, with estimated annual expenditures of \$49.8–\$80.3 million (see Table 2). Phase 1 of the project

estimated a range of \$62.2 to \$66.4 million for general government revenues, indicating that general government could be funded feasibly with the right level of service.

Table 2. Summary of Estimated Government Expenditure Ranges

Category	Range of Expenditures (millions of dollars)
Government Revenues	62.2–66.4
Government Expenditures	49.8–80.3
General Government	12.9–27.4
Road Maintenance	5.2
Parks and Recreation	6.0–17.0
Law Enforcement	24.2
Fire Department	1.5–6.4

Sources: Northern Economics analysis

Additionally, the borough would have annual expenditures ranging from \$197.8–\$198.8 million for education (see Table 3). This amount is substantially higher (by 53–89 percent) than the estimated minimum and maximum allowable range from the EagleExit Phase 1 revenue analysis of \$105 million and \$129 million. In order to meet the minimum and maximum allowable revenues, the new borough would need to reduce estimated education expenditures by 35–47 percent from the current projected operating costs.

Table 3. Summary of Estimated Educational Expenditure and Revenue Ranges

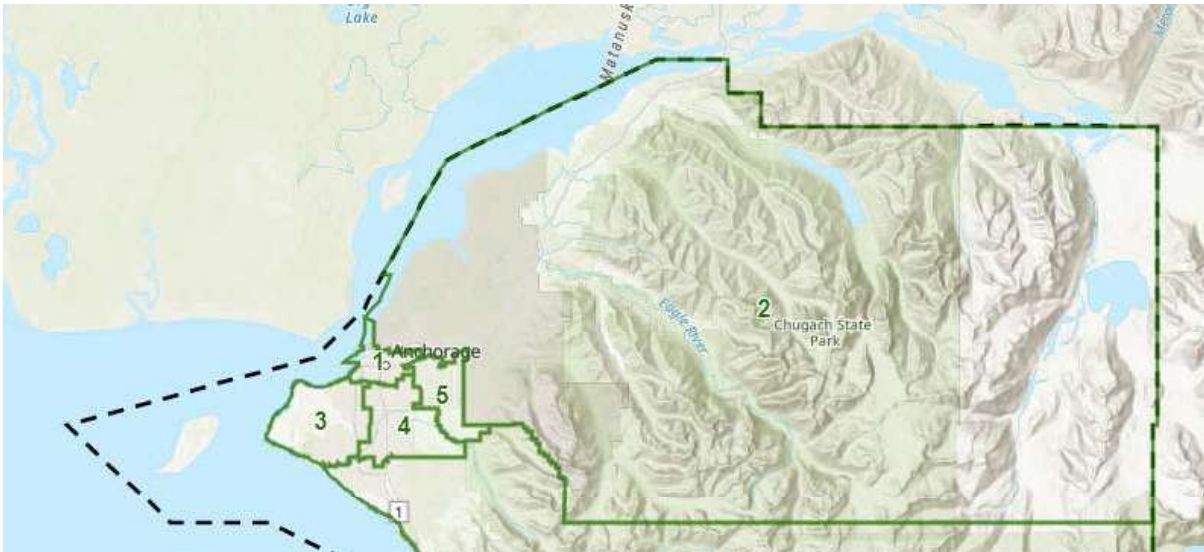
Category	Range (millions of dollars)
Education Revenues	105.2–129.1
Education Expenditures	197.8–198.8

Sources: Northern Economics analysis

Study Area

For the purposes of this project, the Assembly District 2 Eagle River/Chugiak, is defined by Anchorage Municipal Code 2.25.010 - Election districts. (Municipality of Anchorage [MOA] 2019a). The area of AD2 is approximately 1,050 square miles, or 672,000 acres, and the population was 51,281 in 2010 (USCB 2010, Northern Economics analysis). The study area includes 19 schools (including three schools that have attendance boundaries overlapping with the AD2 boundary, Creekside Elementary, Begich Middle, and Bartlett High Schools) with an estimated average daily membership (ADM) of 11,741 (Ratliff 2020, Northern Economics analysis). A map of AD2 is shown in Figure 1.

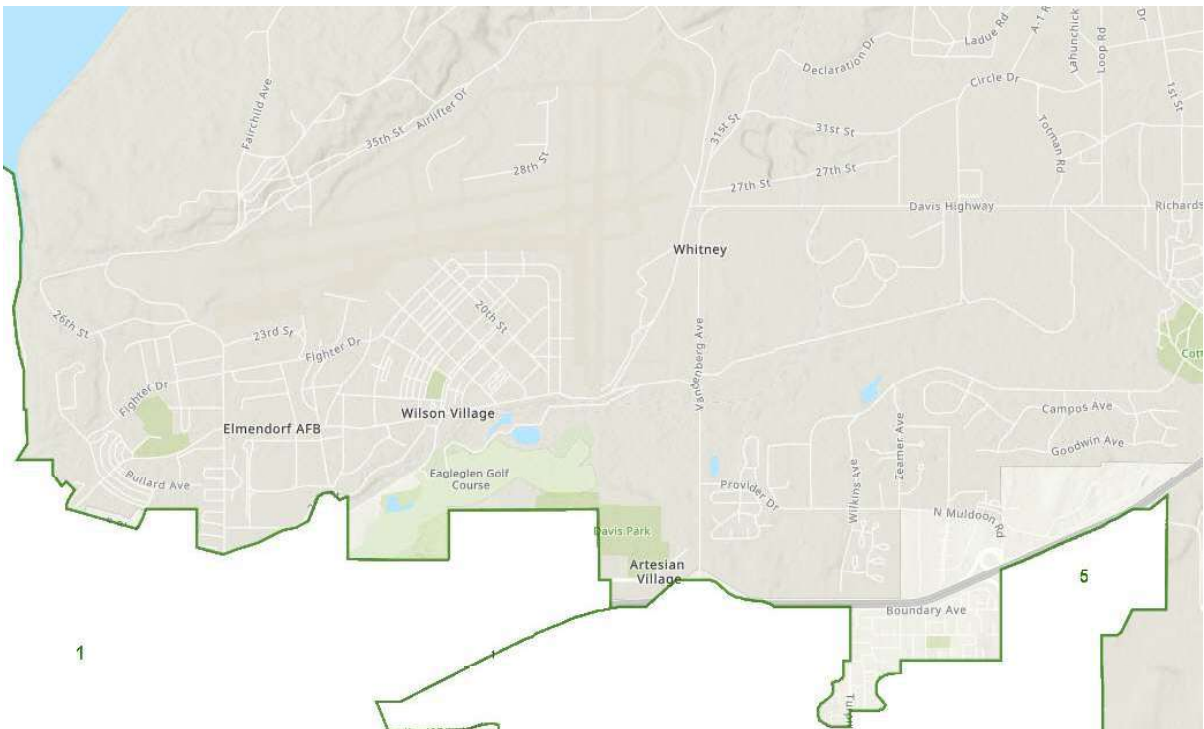
Figure 1. MOA Assembly District 2 Map



Source: MOA (undated)

Figure 2 shows a close-up view of the western section of AD2 to illustrate the boundary with Assembly Districts 1 and 3.

Figure 2. MOA Assembly District 2 Map, Close-up of JBER and Muldoon Area



Source: MOA (undated) with Northern Economics, Inc. modifications

A metes and bounds description of the study area is as follows:

As all the land in the Greater Anchorage Area Borough lying northerly of the following line commencing in Knik Arm on the west boundary of the Greater Anchorage Area Borough and the northern boundary of section 20, T14N,R3W,SM; thence southwest to the west boundary of section 31, T14N,R3W,SM; thence southeast along the boundary of Elmendorf Air Force Base; thence south along Terminal Rd; thence east along the boundary of Elmendorf Air Force Base; thence east along East Bluff Dr; thence east along the boundary of Elmendorf Air Force Base; thence east along 2nd Ave; thence south along North Reeve Blvd; thence east along the boundary of Elmendorf Air Force Base; thence east along Thompson Ave; thence north along Taylor St; thence east along McPhee Ave; thence south along North Pine St; thence south along Pine St; thence east along Mountain View Dr; thence south along McCarrey St; thence east along Glenn Hwy; thence east along Mountain View Dr; thence east along Glenn Hwy; thence south along Turpin St; thence west along Donna Dr; thence south along Krane Dr; thence southeast along Donna Dr; thence north along Turpin St; thence east along East 6th Ave; thence north along Fredricks Dr; thence north along Patterson St; thence east along Duben Ave; thence north along Muldoon Rd; thence northeasterly along the Glenn Hwy to the intersection of the Glenn Hwy and the boundary of Fort Richardson in section 7, T13N, R2W, SM; thence south along the west Boundary of Fort Richardson; thence southwest along Peck Ave; thence south along the eastern boundary of Fort Richardson to section 3, T13N, R2W, SM; thence east along the boundary of Fort Richardson to section 34, T13N, R2W, SM; thence southeasterly along the boundary of Chugach State Park and Fort Richardson to section 19, T12N, R1W, SM; thence southerly on the east boundary of sections 19, 30 and 31 T12N, R1W; thence east along the south boundaries of townships 12N, Ranges 1W, 1E, 2E, 3E, 4E and 5E to the east boundary of the Greater Anchorage Area Borough (MOA 2019b).

Education

The AD2 comps for education include the Fairbanks North Star Borough School District (FNSBSD), the Kenai Peninsula School District (KPBSD), and the Juneau School District (JSD). A new school district representing AD2, with estimated ADM of 11,741, would be smaller than the FNSBSD but larger than both the KPBSD and JSD (see Table 4). The table below shows revenues, expenditures, and ADM for each of the comps with the average of all in the bottom row. The expenditures range from \$223.9 million to \$81.9 million with an average of \$149.6 million. The right-most column of the table shows expenditures per ADM. The range among the comps is relatively small, with \$16,935 per ADM at JSD and \$16,845 at KPBSD and FNSBSD. Expenditures per ADM in the MOA are \$15,516, which is less than each of the comps (ASD 2019).

Applying the range of costs per ADM from the comps to AD2's ADM of 11,741 results in an estimated range of expenditures for education of \$197.8 million to \$198.8 million. This estimate is substantially higher (by 53–89 percent) than the estimated the minimum and maximum allowable range from the EagleExit Phase 1 revenue analysis of \$105 million and \$129 million. In order to fund 11,741 ADMs, expenses per ADM would need to be brought down to \$9,000–\$11,000, a reduction of 35–47 percent.

This result is similar to the results of the 2007 analysis, which concluded that the new borough would need to substantially reduce its education budget to comply with Alaska's education funding law (Northern Economics 2007). The 2007 report also noted that the proposed detachment area did not have the property tax base to support a school district with the level of service already provided by the MOA. The new borough's level of funding would be among the lowest in the State of Alaska, similar to

rural districts like Galena, Nenana, and Healy, the first two of which are outside of boroughs and rely heavily on federal funding.

Table 4. School District Expenditure Comparisons

District	FY19 Revenues (\$)	FY19 Expenditures (\$)	FY19 ADM	Expenditures per ADM (\$)
Fairbanks North Star Borough School District	229,048,000	223,863,000	13,290	16,845
Kenai Peninsula Borough School District	156,531,473	146,220,920	8,680	16,845
Juneau School District	81,941,031	78,708,119	4,648	16,935
Average	155,840,168	149,597,346	8,873	16,875

Sources: Fairbanks North Star Borough School District (2019), Kenai Peninsula Borough School District (2019), Juneau School District (2019), Ratliff (2020), Northern Economics analysis

Government Expenditures

General Government

The AD2 comps for general government include the City of Fairbanks, the Kenai Peninsula Borough (KPB), and the Fairbanks North Star Borough (FNSB). FY18 expenditures for the comps ranged from \$16.9 million to \$24.5 million, as shown below in Table 5. The table is sorted by population in ascending order and shows that per capita expenditures decrease with increasing population, so the City of Fairbanks has the highest per capita expenditures (\$535) and the FNSB has the lowest per capita expenditures among the comps (\$251). AD2 had an estimated 51,281 residents in 2010, so the KPB is the most similar among the comps if judged only by population. The KPB had per capita expenditures of \$333, and the average among the comps was \$373.

Applying the per capita general government expenditures of the comps to the population of the new AD2 borough results in an expenditure estimate range of \$12.9 million to \$27.4 million.

Table 5. General Government Expenditure Comparisons

Government	FY18 Expenditures (\$)	2010 Population	Per Capita Expenditures (\$)
City of Fairbanks	16,861,147	31,535	535
Kenai Peninsula Borough	18,439,842	55,400	333
Fairbanks North Star Borough	24,532,481	97,581	251
Average	19,944,490	61,505	373

Sources: City of Fairbanks (2019), Kenai Peninsula Borough (2019), Fairbanks North Star Borough (2019)

Road Maintenance

The EagleExit board has expressed that the current level of road maintenance service, including snow removal and summer maintenance, is satisfactory and would continue under the new borough. The current Chugiak/Birchwood/Eagle River Rural Road Service Area (CBERRRSA) is made up of over 350 lane-miles of roadway encompassing AD2 (MOA 2019d). The CBERRRSA road board, made up of five representatives from local area community councils, provides recommendations to the MOA on the level of service deserved by residents. Maintenance within the CBERRRSA is executed by private contractors and clearing of all driveway and mailbox snow berms is the responsibility of property owners.

In FY2018, expenditures for the CBERRRSA were \$4,605,000 (MOA 2019c). No comps were considered for road maintenance, and private contracting of road maintenance service would likely continue at approximately the same expense. In addition to the CBERRRSA, there are expenditures on streetlight maintenance for MOA tax districts 50, 51, and 58; however, those costs are not considered within the scope of Phase 2A and will be addressed in future project phases.

The CBERRRSA does not include the portions of AD2 in Muldoon or north of the Glenn Highway, which together account for about 14 percent of AD2's population (excluding Joint Base Elmendorf Richardson). Service levels for these AD2 residents could change depending on what is currently provided in these areas. Assuming an increase of about 14 percent to account for additional maintenance outside the CBERRRSA, total expenditures for AD2 road maintenance would be \$5,238,000.

Parks and Recreation

The AD2 comps for parks and recreation include the existing Eagle River-Chugiak Parks and Recreation Service Area (under the MOA), the FNSB Parks and Recreation Department, and the North Peninsula Recreation Service Area (under the KPB). The comps illustrate a range of facilities and services that can be offered from local governments (see Table 6). The current level of service in AD2 under the MOA includes 2,500 acres of park properties, numerous outdoor facilities like playgrounds and pavilions, 32 km of groomed ski trails, day camp programs for 800 children for 10 weeks each summer, planting and maintenance of 3,000 flowers, plus maintenance of three major facilities: the Beach Lake Chalet, Chugiak Pool, and Harry J. McDonald Memorial Center. In FY18 the Eagle River-Chugiak Parks and Recreation Service Area had expenditures of \$4.5 million. Note that AD2 also has a library, but it is not included in the parks and recreation service area and would carry additional expense to the new borough government if it were to continue operating.

The FNSB Parks and Recreation Department includes facilities in both Fairbanks and North Pole, providing services to a much larger population base than AD2 (approximately 98,000 compared to 52,000). The department also maintains a rifle range and two indoor pools, rather than one (AD2's Chugiak Pool). The FNSB, although larger than AD2, offers similar services and facilities such as large trail networks and a series of pavilions at the Chena Lakes Recreation Area.

The KPB's North Peninsula Recreation Service Area includes a recreation center, pool, covered outdoor ice rink, library, skate park, trails, disc golf course, and other facilities. This department represents a smaller and centralized approach to parks and recreation, compared to either AD2's existing service or the FNSB. All the facilities are in a single location, with shared buildings and parking lots for the library, meeting rooms, fitness rooms, etc.

The per capita expenditures on parks and recreation for the comps range from \$108.9 to \$331.4 and the current expenditures for AD2 are lower, at \$90.6 per person. Applying the per capita expenditures from the North Peninsula Recreation Service Area to the population of the new AD2 borough results in an estimate of \$17 million, which represents the upper bound of the range estimate for parks and recreation service. The lower bound of the range is based on the existing MOA service, with expenditures of \$4.6 million. The lower range estimate does not include the Eagle River-Chugiak Library, and those expenditures are estimated separately, but the upper estimate already includes the cost of operating a library for the North Peninsula Recreation Service Area.

Table 6. Parks and Recreation Expenditure and Facilities Comps

Name	Eagle River - Chugiak Parks and Recreation Service Area (Municipality of Anchorage)	Fairbanks North Star Borough Parks and Recreation	North Peninsula Recreation Service Area (Kenai Peninsula Borough)
Cost (\$)	4,645,202	10,623,000	1,813,485
Population	51,281	97,581	5,473
Per Capita Expenses (\$)	90.6	108.9	331.4
Number of Facilities			
Playgrounds	10	22	1
Developed Parks/Pavilions	16	13	Unknown
Outdoor Athletic Courts	14	Unknown	Unknown
Ice Rink	1 (indoor)	1 (indoor)	1 (outdoor)
Indoor Turf	1	1	None
Indoor Track	1	1	None
Indoor Pool	1	2	1
Additional Facilities	Beach Lake Chalet	Rifle range	Fitness room, skate park, library, disc golf course

Notes:

- 1) AD2 and the FNSB have libraries, however those are not included in the parks and recreation departments. The Nikiski Community Recreation Center has several facilities, including a library, and the expenditures are combined with all other parks and recreation department expenditures for the North Peninsula Recreation Service Area.
- 2) Population for the North Peninsula Recreation Service Area includes Nikiski CDP and Salamatof CDP.

Sources: MOA (2019c; 2020), KPB (2019; 2020); FNSB (2019), FNSB Parks and Recreation (2020)

The City of Palmer and the City of Wasilla each have a single library that serves a population similar in size to AD2 (see Table 7). The Palmer Public Library has about 7 employees with expenditures of \$616,257 in 2018, and the Wasilla Public Library has 10 employees with expenditures of \$1,214,717. On a per capita basis, the expenditures range from \$28.37 to \$22.79 with an average of \$25.58. At a per capita rate of \$25.58 per resident, the expenditures for maintaining a library in AD2 would be \$1,311,868.

Table 7. Library Expenditure Comps

Library	Population of Legal Service Area	2018 Expenditures	Expenditures per Capita
AD2	51,281	N/A	N/A
City of Palmer	27,036	616,257	\$22.79
City of Wasilla	42,817	1,214,717	\$28.37

Sources: City of Wasilla (2019), City of Palmer (2019), Alaska State Library (2020), Northern Economics analysis

Adding the estimated expenditures for a library (\$1.3 million) plus the low-range estimate of expenditures for other parks and recreation services (\$4.6 million) results in a total estimate of about 6 million based on the existing services in AD2. As discussed above, the high-range estimate is \$17 million based on the North Peninsula Recreation Service Area. The expenditure estimate range for the comps for parks and recreation, including a public library, is \$6 million to \$17 million.

Law Enforcement

Law enforcement service includes expenditures for officers, administrative workers, investigators, dispatch services, building and technology costs, and other overhead costs. The law enforcement comps selected for AD2 include the sheriff's department of Worcester County, MD with 73 sworn officers and the police departments of the City of Fairbanks (45 sworn officers) and City of Wasilla (25 sworn officers). The expenditures for the comps range from \$10.5 million to \$7.5 million, and the expenditures per sworn officer range from \$197,000 to \$302,000 (see Table 8). The per capita rate of officers is relatively consistent among the comps, with Worcester county at 1.42 officers per 1,000 residents and the City of Fairbanks at 1.43. Current law enforcement service in the MOA supports 442 sworn officers (1.51 officers per 1,000 residents) at a cost of about \$147 million, or an average expense of \$331,464 per officer.

The board has stated that Eagle River and Chugiak could be served by three shifts with 14 officers per shift, for a total of 42 officers. Additional officers would be required to account for the other parts of AD2 such as Muldoon. This analysis assumes that the new borough could be served by 73 officers, which is equivalent to a rate of 1.4 officers per 1,000 residents. With 73 officers at a per officer expense of \$331,464 (MOA's current expenditure rate), the new borough's estimated law enforcement expenditures are \$24,196,857.

By aligning with the per capita rate of officers observed in the comps, this analysis is conservative. It is also consistent with the board's belief that rate of crime in AD2 is lower than in Anchorage, so fewer officers are needed relative to the MOA (1.4 per 1,000 vs the current MOA rate of 1.51).

Table 8. Law Enforcement Expenditure Comps

Government	Population	Number of Sworn Officers	FY18 Expenditures (\$)	Sworn Officers per 1,000 Residents	FY18 Expenditures per Sworn Officer (\$)
Municipality of Anchorage (MOA)	291,826	442	146,507,000	1.51	331,464
Assembly District 2 (AD2)	52,281	N/A	N/A	1.4	N/A
Comps					
Worcester County, MD	51,454	73	10,516,086	1.42	197,216
City of Fairbanks	31,535	45	8,407,639	1.43	234,974
City of Wasilla	7,831	25	7,549,499	3.19	301,980
Comps Average	30,273	48	8,824,408	2.01	244,723

Sources: MOA (2019c), Worcester County (2019), Worcester County Sheriff's Department (2020), City of Fairbanks (2019; 2020), City of Wasilla (2019; 2020), Anchorage Police Department (2020)

The Eagle River board requested that a Sheriff's department be included in the law enforcement comps, and provided several examples to consider. Ultimately, Worcester County, MD was selected based on its similarity to AD2 and the availability and quality of financial data. Worcester County had an estimated 51,454 residents in 2010, which is about two percent less than AD2's population of 52,281 residents, making it a strong comparison for law enforcement services (USCB 2020). The Worcester County Sheriff's Department has 53 full time and 39 part time sworn officers, as shown in Table 9. Seven of those officers are investigators, and 14 are dedicated to serve schools in Worcester County.

Table 9. Worcester County Sheriff's Department Sworn Officers

Sworn Officers	Full Time	Part Time	Full Time Equivalent
Criminal task force investigator	3	1	3.5
Drug task force investigator	4	0	4
Background checks	0	1	0.5
School officers (14)	4	10	9
Officers	42	27	55.5
Total	53	39	72.5

Notes:

- 1) The table excludes administrative and dispatching staff.
- 2) There are 14 schools in Worcester County, MD. Four of them are high schools, so it is likely that there is one full time officer assigned to each high school and one part time officer for each of the other 10 schools (Worcester County Public Schools 2020).

Sources: Worcester County Sheriff's Department (2020)

Fire Department

The AD2 comps for fire departments include the Central Mat-Su Fire Department (8 stations), the North Kenai Nikiski Volunteer Department (4 stations), and the existing departments for AD2. The Central Mat-Su Department and North Nikiski Volunteer Department rely on a mixture of full-time employees, on-call firefighters, and volunteers.

AD2's current service in the Chugiak Fire Service Area is based on two independent operations: Anchorage Fire Department's Station 11, and Chugiak Volunteer Fire and Rescue Department (CVFRD) stations 31–35 which rely solely on volunteers (CVFRD 2020). The cost per station for the CVFRD is \$244,789 which is the lowest among the three comps. Assuming that same rate of expenditures for AFD Station 11, a volunteer fire department serving AD2 would cost \$1,468,734 per year (see Table 10). The highest rate per station among the comps is North Kenai Nikiski Volunteer at \$1,068,572, which would represent a total cost of \$6,411,435 if applied to all 6 stations in AD2. The estimated range of expenditures for fire departments in AD2 is \$1.5 million to \$6.4 million.

Table 10. Fire Department Expenditure Comps

Fire Department	FY18 Expenditures (\$)	Number of Stations	Cost per Station (\$)	Cost for Six Stations
Chugiak Volunteer Fire and Rescue Department	1,223,945	5	244,789	N/A
Anchorage Fire Department Chugiak Fire Service Area	N/A	1	N/A	N/A
AD2	N/A	6	244,789	1,468,734
Comps				
Central Mat-Su Fire Department	4,901,498	8	612,687	3,676,122
North Kenai Nikiski Volunteer	4,274,290	4	1,068,572	6,411,435
Comps Average	4,587,894	N/A	840,630	5,043,779

Note: Expenditures do not account for dispatching, which is included in law enforcement expenditures.

Sources: MOA (2019c), Matanuska Susitna Borough (2019, 2020), Kenai Peninsula Borough (2019, 2020), CVFRD (2020),

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