Fiscal Effects of
Commercial Fishing, Mining and Tourism
Fiscal Years 2016-2019
What does Alaska receive in revenue?
What does it spend?

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Acronyms used in this report

CIP: Capital Improvement Project, a project for which money is appropriated from the capital budget
DCCED: Department of Commerce, Community and Economic Development
DEC: Department of Environmental Conservation
DF&G: Department of Fish and Game
DNR: Department of Natural Resources
DNR, Office of Project Management and Permitting (OPMP)
DOR: Department of Revenue
DPS: Department of Public Safety
FY: Fiscal Year
OMB: Office of Management and Budget

We occasionally use other acronyms, but they are used solely within a paragraph or two of being introduced. They are not included here.

Fiscal Effects of Commercial Fishing, Mining and Tourism
Fiscal Years 2016-2019, An Update
What does Alaska receive in revenue?
What does it spend?

Chapter 1. Summary

This report is an update of a 2015 report that summarizes the fiscal effects of the commercial fishing, mining, and tourism industries on Alaska's state government. The reports calculate state revenue collected from each industry and compares it to the state's expenditures for that industry. What revenue does the State of Alaska receive from commercial fishing? From the mining industry? From tourism? What does the state pay out to manage each resource?

While the comparison between the state's revenue and expenditures is useful information, this report is *not* an economic benefit-cost analysis. It does not discuss private sector income, employment, or other important benefits and costs. It is solely concerned with state's cost to manage and enhance these industries relative to the amount of money received. Also, the report does not consider federal funds, because they are not a cost to the State of Alaska.

In this report, commercial fishing includes commercial fish harvesting and processing. Mining includes the hard rock, coal, and placer portions of the industry but does not include sand and gravel. Tourism — also known as the visitor industry — includes revenue from nonresidents who come to Alaska for pleasure.

This report is an update: it is a mix of new data and data from the 2015 report. The report examines revenue collected by the state from the three industries during fiscal years 2016 through 2019. It compares the average revenue during those years to average spending from Alaska's operating and capital budget during those years.[1] The revenue and capital budget data is new for this report. The operating budget expenditures are extrapolated from analysis in the 2015 report. The method for doing that is explained in Chapter 6. However, extrapolating old data introduces some error. Therefore, the operating budget expenditures in this report should be considered approximate. Still, the overall conclusions – the overall comparison of revenues to costs – is unlikely to be much different.

The report also provides information on revenue to Alaska's municipalities from each industry, though it does not describe municipal expenditures related to the industries.

The two-page research summary of the 2015 report may be viewed here: 2015 Summary. The Full 2015 report may be viewed here: 2015 Full Report

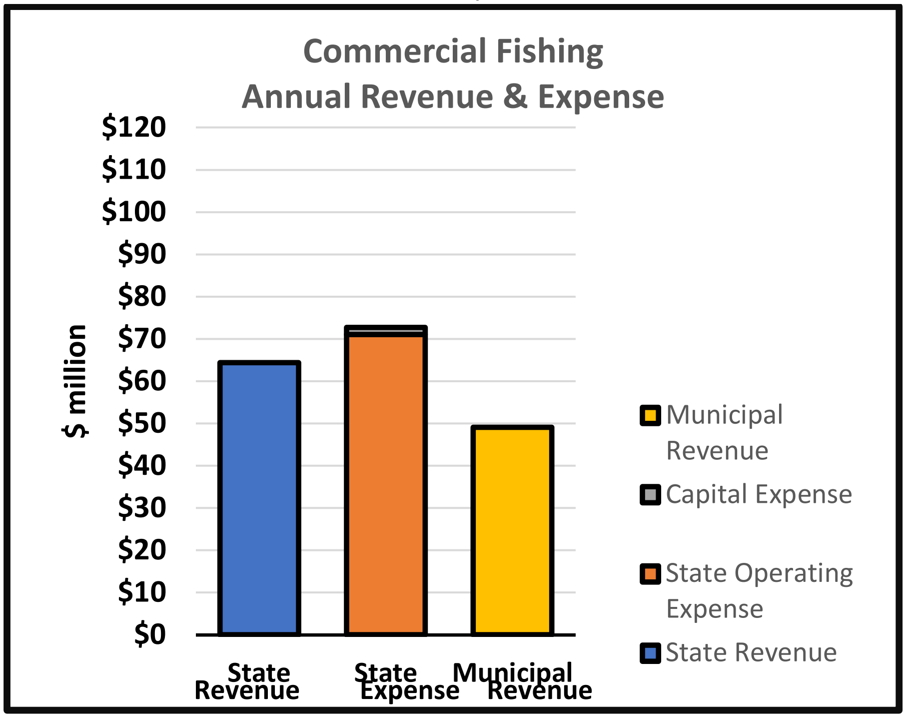
[1] While information was available for Fiscal Year 2020, a portion of that fiscal year occurred during the pandemic. Revenues and expenditures during that fiscal year were not representative.

1.1 Summary of Results for Commercial Fishing

Table 1-1. Commercial Fishing: Comparison of Revenue and Expenditures
Fiscal Years 2016-2019, Millions of Dollars

Commercial Fishing	**$ million**
Average state revenue	$64.4
Average Operating Expenditures	$70.9
Average capital expenditures	$1.8
Net state revenues (deficit)	($8.3)
Average Municipal Revenues (partial)	$49.0

Figure 1-1. Commercial Fishing: Comparison of Revenue and Expenditures
Fiscal Years 2016-2019, Millions of Dollars



In Fiscal Years 2016 through 2019, the State of Alaska collected an average of $64.4 million per year from the commercial fishing industry and expended approximately $70.9 million from the operating budget and an additional $1.8 million from the capital budget to manage and promote the industry. It spent approximately $72.7 million on the industry, which is $8.3 million more than it received.

Like other figures in this report, the revenue and expenditure amounts track fiscal effects — money brought in, and money spent by government. They do not include the income to Alaska's citizens from thousands of commercial fishing jobs, or purchases by the commercial fishing industry from Alaska businesses. In addition, funds collected by the state but remitted to municipalities are included as a municipal, not a state, revenue.

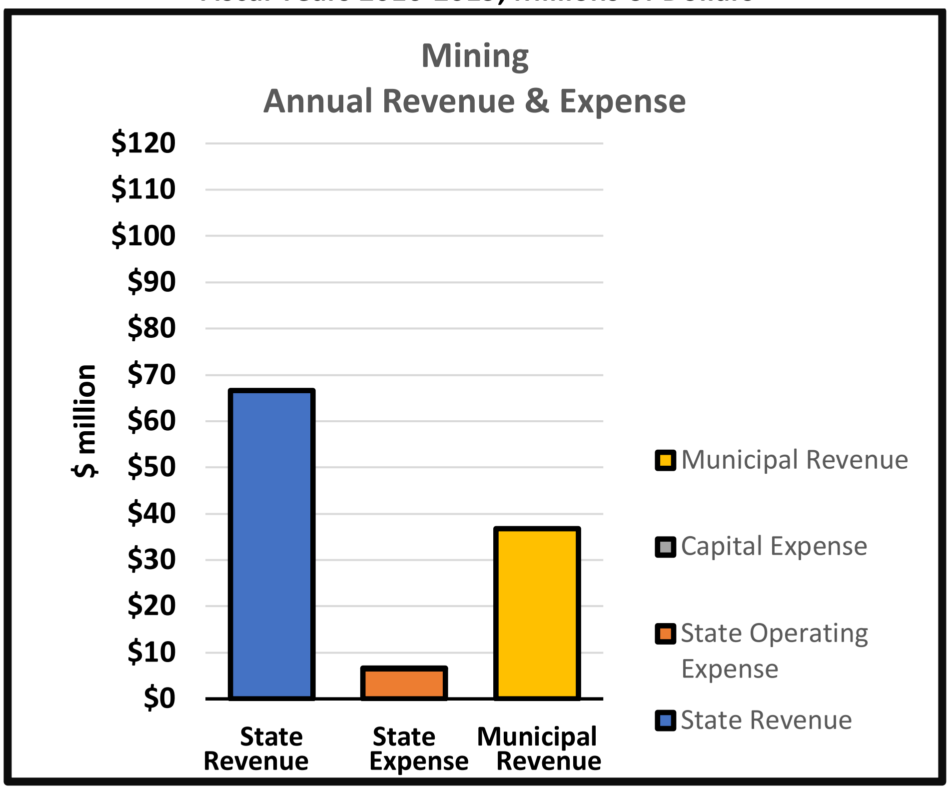
If municipal revenues are also considered, commercial fishing brings in more revenue than the governments expend. The calculations show that commercial fishing brings more to governments — state and local — than the state expends to manage and promote the industry. This documents what many people involved in fishing communities' local governments know: that the commercial fishing industry is mainstay of the finances of these municipal governments. Municipal governments collectively received $49.0 million per year from the industry during FY 2016-2019. This amount does not include all municipal revenue from the industry; it does not include revenue from broad taxes such as sales or property taxes. In addition, this report makes no effort to list municipal expenditures related to the industry.

1.2 Summary of Results for the Mining Industry

Table 1-2. Mining: Comparison of Revenue and Expenditures
Fiscal Years 2016-2019, Millions of Dollars

Mining	$ million
Average state revenue	$66.6
Average Operating Expenditures	$6.5
Average capital expenditures	$0.2
Net state revenues	$59.9
Average Municipal Revenues	$36.8

Figure 1-2. Mining: Comparison of Revenue and Expenditures
Fiscal Years 2016-2019, Millions of Dollars



State mining revenue is almost 10 times the amount the state spends to regulate and promote the industry. Average annual mining revenue to the state for fiscal years 2016-2019 was $66.6 million. Spending was a fraction of that amount: $6.7 million. These expenditures included $6.5 million per year in state funds from the operating budget, and $0.2 million per year from the capital budget. State spending is a relatively small amount for an important

Alaska industry. The small amount of spending is responsible for the difference in state revenues and spending: $59.0 million.

Municipal Revenue adds an additional $36.8 million from mining. Most of the municipal revenue comes from four hard rock mines – Fort Knox, Greens Creek, Kensington, and Red Dog Mines – and goes to the three boroughs in which the mines are located – the Fairbanks Northstar Borough; the City and Borough of Juneau (home of two large mines); and the Northwest Arctic Borough. For these boroughs, the mine is usually the borough government's largest taxpayer.

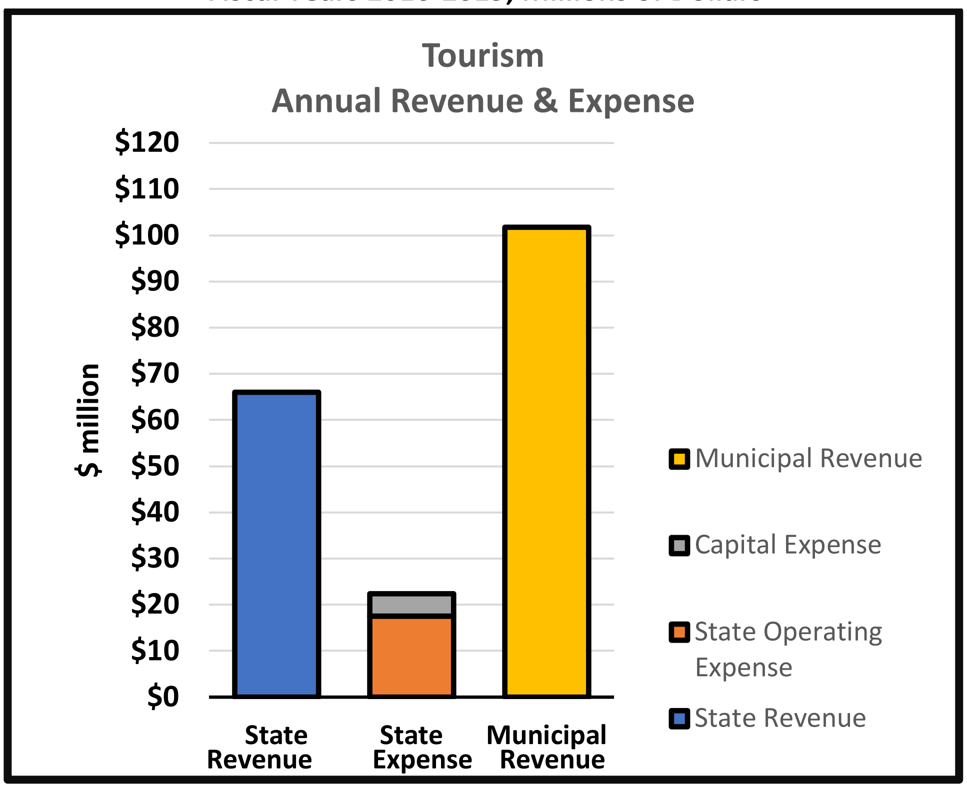
In addition, mining generates important revenue for independent state authorities — the Alaska Railroad Corporation and the Alaska Industrial Development and Export Authority. This revenue is excluded from the totals above because they are used by the railroad and AIDEA and are not available for appropriation by the legislature.

1.3 Summary of Results for the Tourism Industry

Table 1-3. Tourism: Comparison of Revenue and Expenditures
Fiscal Years 2016-2019, Millions of Dollars

Tourism	$ million
Average state revenue	$66.0
Average Operating Expenditures	$19.9
Average capital expenditures	$4.9
Net state revenues	$41.1
Average Municipal Revenues	$101.8

Figure 1-3. Tourism: Comparison of Revenue and Expenditures
Fiscal Years 2016-2019, Millions of Dollars



Tourism brings in more revenue to the state than the legislature expends through the operating budget to manage and promote the industry. In Fiscal Years 2016 through 2019, the state government received an average of $66.0 million per year in revenue from the tourism industry and expended approximately a third of that amount to manage and promote the industry: $23.0 million per year. Expenditures were $19.9 million per year from the operating budget and $4.9 million per year form the capital budget.

Tourism revenue to municipal government is $101.8 million. The municipal government figures in this report do not include local property tax paid by hotels and facilities that serve tourists or local sales tax.

Tourism expenditures are especially difficult to estimate. It is difficult, because tourism is not an industry for which data is reported by statistical agencies. Rather, tourism is a collection of products and services sold to nonresident visitors to Alaska. Most of these services are also sold to Alaskans. In addition, government actions that benefit tourism also benefit Alaskans. ADF&G manages sport fishing for Alaskans, but nonresidents account for 46.2% of all sport fishing angler days during 2016-2019. Determining the portion of sport fish expenditures that should be allocated to tourism is an economic judgment (we chose 46.2%). Most capital expenditures, such as an appropriation to improve a museum, similarly benefit both tourists and Alaskans. Other government activities for tourism are similar. For that reason, our estimates of tourism-related expenditures are less precise than those for commercial fishing or mining. The estimates are dependent on assumptions explained in other chapters of this report.

In addition to the revenue totals listed above, tourists provide an important revenue source to the Alaska Railroad Corporation and to the Alaska Marine Highway System (AMHS). The railroad revenue is excluded from the tourism total for the same reason it is excluded from mining (see above). The reasons for excluding AMHS revenue are more complicated and are explained in Chapter 5.

Tourism also supports the many businesses that also benefit Alaskans. Many restaurants or local businesses that residents use might not exist if it were not for the money from tourists. These are important benefits, but they are not a part of this report.

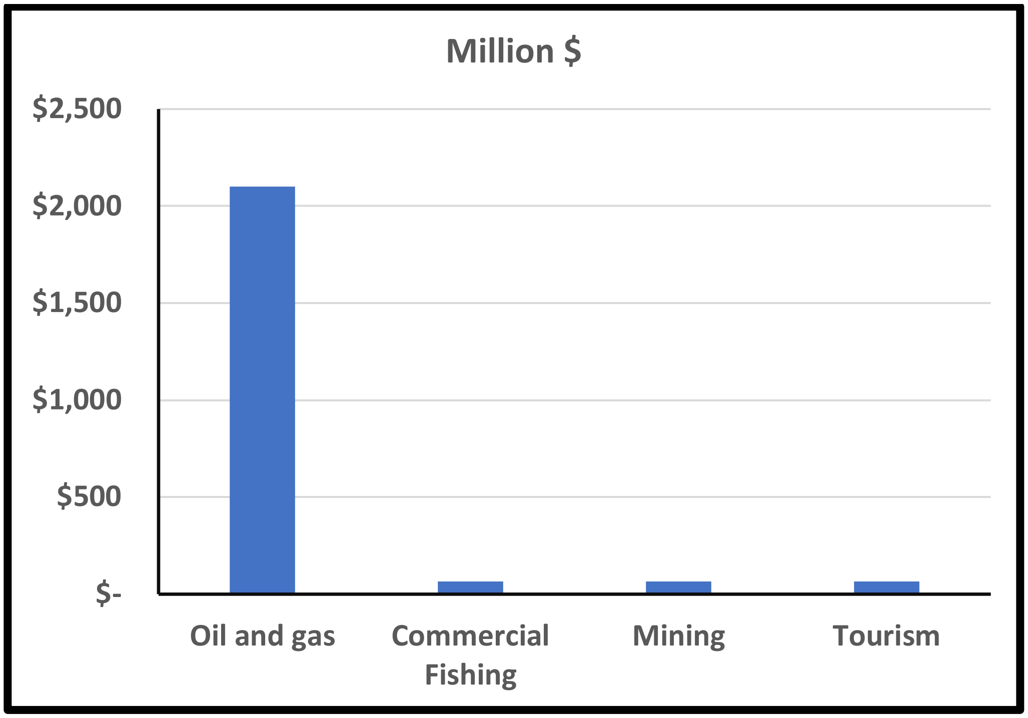
1.4. Observations

The revenue collected by the state from the three industries is very similar: $64.4, $66.6, and $66.0 million. This very close correspondence is interesting but will most likely change in future years. Commercial fishing revenue goes up and down with fish prices and run strength; mining revenue goes up and down with mineral prices; and tourism revenue changes as visitor volume changes.

The state spends relatively little to manage the mining industry. Total state spending to manage the mining industry is $6.7 million. This is a relatively small amount for an important Alaska industry. It is much less than the amounts to manage and promote commercial fishing or tourism.

Commercial fishing, mining, and tourism are important revenue sources for the communities in which they operate, but the fiscal impact on state government (revenue minus cost) pales in comparison with state oil revenue. The three industries profiled in this report employ thousands of Alaskans and are important for Alaska's economy in many ways. However, the oil industry is unique. When discussing revenue from commercial fishing, mining, and tourism, one can lose sight of the fact that the state revenue from these industries is extremely small — individually and collectively — when compared with oil industry revenue to Alaska. Figure 1-4 makes this point visually.

Figure 1-4. Annual State Oil Industry Revenue Compared with State Revenue from Commercial Fishing, Mining, and Tourism[2] FY 2016-2019



1.5 Cautions and Caveats

- **All amounts in this report are estimates.** Important numbers in this report are estimates. Revenue figures are mostly taken directly from government reports. However, expenditures involve judgment and economic assumptions. In the chapters that follow, we outline the data sources used and the assumptions made. In Chapters 2, 3, and 4, we discuss revenue and expenditures that we excluded because we determined they were inappropriate to include. Others may make different, defensible assumptions. Therefore, the comparisons should be considered estimates. However, we believe that although realistic judgments about including or excluding certain amounts might result in slightly different totals, such changes would not significantly affect the overall conclusions.

[2] Source: Alaska Department of Revenue Fall Sourcebook, 2019. http://www.tax.alaska.gov/programs/sourcebook/index.aspx

- **Operating budget numbers are less precise than the other numbers in this report.** Revenues are taken from Department of Revenue publications, and the capital budget analysis is taken from the 2016-2019 capital budget. However, the operating budget expense figures use information from our 2015 report. The 2015 report estimated percentages of each agency's budget component that were expended for promoting and managing the commercial fishing, mining, and tourism industries. These percentages were estimated from interviews with officials in each state department. This report did not repeat the interviews. Instead, it applied percentages from the 2015 report to budget components of the Alaska's 2016-2019 operating budgets.

  It is possible that responsibilities changed within a budget component that would result in a different percentage of the cost being used for an industry. However, most errors are likely to be perhaps a hundred thousand, or sometimes more or less. The cumulative error for an industry could be a few million. Therefore, it is possible that the actual operating budget expenditures are a few million higher or lower than the estimates in this report. The method is discussed further in Chapter 6.

- **Each of the industries have various segments. The "averages" in this report do not represent any one segment.** For example, Alaska benefits from federal fisheries that are managed by the federal agencies without significant state expenses. However, these fisheries pay Alaska taxes just the same. Even for the state-managed part of the industry, different fisheries have different economic characteristics. The state's cost and revenue will be different for, say, a fishery in Cook Inlet than they will be for a fishery on the Kuskokwim. Some fisheries may pay more in revenue and need less state management attention. Others are the opposite.

  The mining and tourism industries also have different segments that may not reflect the averages in this report. Placer mines are different from coal mines, which are different from hard rock mines, which are individually different from each other. The cruise ship segment of the tourism industry is different from remote bear guiding. Each of these segments may need more or less management and generate more or less revenue. Therefore, the industry totals in this report may not accurately portray any part of each industry.

- **The management goals for some or all these industries may not be to maximize revenue to the state.** Alaskans are used to thinking of taxes on the oil industry. None of the industries in this study have similar economic conditions. The return to investment, profit, and management costs are different for each industry and all differ from oil. In addition, the state appears to have other management goals, besides revenue to the state, for each industry. For commercial fishing, the main goals appear to be maximizing employment, individual fishing incomes, community health and other social objectives. For that reason, a low ratio of state revenue to state expenditures is not necessarily a sign that something is wrong with state tax policy or regulation. We have no opinion on whether current tax rates are right or wrong for any of these industries. We are not suggesting that if state revenue is less than costs then state policy is therefore wrong.

- **This report does not analyze the potential revenue-generating capacity of these industries.** Whether state revenue from an industry is lower or higher than the amount the state expends for that industry says nothing about what funds the state could or should collect from the industry, or what the economic and social implications of changing the level of revenue collected might be.

Chapter 2. Commercial Fishing Industry

In this report, the commercial fishing industry includes commercial fish harvesting and processing.

2.1 Commercial Fishing Revenue to the State of Alaska

The commercial fishing industry provides 15 sources of revenue for the State of Alaska. These sources include taxes imposed by the state, voluntary assessments collected by the state to promote the fishing industry, and fees collected to fund agency management. This section describes this revenue. Section 2.4 describes some revenue collected by local government. The report does not discuss federal revenue or expenses.

Most commercial fishing taxes are assessed as a percentage of the value of the fish landed – known in the industry as the ex-vessel value. This tax revenue is dependent on the strength of the fish runs around Alaska and on the price for that year's fish. As a result, revenue varies significantly from year to year. For example, between 2000 and 2020, the price per pound for Sockeye Salmon has varied from a low of $0.52/pound to a high of $1.76/pound.[3] For that reason, a single year's analysis of revenue is less likely to give an accurate picture than a longer-term analysis. This analysis uses the average revenue from the four years from 2016-2019. Table 2-1 shows average commercial fishing revenue, 2016-2019.

[3] https://www.adfg.alaska.gov/index.cfm?adfg=commercialbyfisherysalmon.salmoncatch_statewide

Table 2-1. State Commercial Fishing Revenue, FY 2016-2019
Figures in Million Dollars

	Average Annual Fishing Revenue		Fraction	Year 2016	2017	2018	2019
"True" Taxes	$ 20.1	Fisheries Business Tax, state share	1.00	$22.3	$15.5	$21.2	$21.3
	4.1	CFEC revenues in excess of operations	1.00	4.0	4.0	4.0	4.4
	3.8	Fishery Resource Landing Tax, state share	1.00	0.3	4.9	3.5	6.5
	2.8	Motor Fuel Tax, marine fuel	0.50	5.9	5.4	5.7	5.6
	2.3	Corporate Income Tax, fisheries sector	1.00	3.2	0.7	2.6	2.8
	1.3	Loan Fund Transfer to General Fund	1.00	See text			
Pass-through Taxes	9.8	Seafood Marketing Assessment	1.00	9.7	9.6	9.9	10.0
	7.0	Salmon Enhancement Tax (aquaculture)	1.00	6.8	5.4	9.1	6.6
	2.4	Seafood Development Tax	1.00	1.4	2.0	2.7	3.6
	0.6	Dive Fishery Management	1.00	0.5	0.6	0.5	0.8
Fees used to pay for agency management	0.01	Common Property Fishery Assessment	1.00	0.04	0.01	-	-
	3.6	CFEC revenue applied to operations	1.00	4.2	3.6	3.5	3.1
	3.3	Commercial Fishing Crewmember Licenses, total	1.00	3.4	3.3	3.2	3.2
	2.4	Test Fishery Receipts	1.00	2.8	2.9	1.9	2.2
	0.6	Seafood Processor and Similar Fees	1.00	See text			
	0.4	DNR Shore Fishery Lease Pmts & Mariculture Fee	1.00	0.4	0.4	0.4	0.5
	$64.4	**Total**					

"True" Taxes. The first six taxes in the table are "true" taxes in that they are collected by the state, deposited in the General Fund, and used by the legislature for any purpose. Of these the ***Fisheries Business Tax*** is by far the largest tax and is levied on all businesses that process fish or export unprocessed fish. Approximately half of the total tax receipts are remitted by the legislature to municipalities where the tax is collected. The ***Fisheries Resource Landing Tax*** is levied on "fish resources processed outside of and first landed in Alaska." It is primarily levied on factory trawlers and floating processors which operate outside the state's 3-mile limit but land fish in Alaska for transshipment. Like the Fisheries Business Tax, approximately 50% of Fisheries Resource Landing Tax is remitted to local government.

Table 2-1 shows only the state's share of these two taxes.[4] The municipal share of the taxes is provided in Section 2.4 which describes municipal revenue.

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[4] We recognize that others may consider the entirety of both taxes to be revenue to the state. However, Alaska law indicates that the legislature is expected to appropriate those funds back to municipal governments. The municipal governments expect their share of the tax revenue, receive it, and rely upon it. The Alaska Legislature has not treated it as revenue sharing, to be increased and decreased depending upon fiscal circumstances. As described by the Legislative Research Agency, "The portion of the fishery business tax returned to local government in whose jurisdiction these taxes were collected is not a general municipal revenue sharing program of the state. The fishery activity that generates this revenue is both a local and a statewide tax resource. The

The ***Marine Motor Fuel Tax*** is equal to five cents per gallon. For this analysis, we assume that 50% of this tax revenue is from fishing industry activity. Because this tax is only 4% of commercial fishing revenue, an error in this assumption does not introduce a large error in the overall result.

The ***Corporate Income Tax*** is the portion of Alaska's corporate income tax that the Department of Revenue determined to be from the fishing industry.

CFEC Revenue in excess of operations includes fees collected by the Commercial Fisheries Entry Commission (CFEC). The commission collects more revenue than the legislature appropriates for its use. That is, the CFEC collects fees for commercial fishing permits and licenses. The fees are deposited in the general fund. The legislature appropriates some of those fees back to CFEC for use by the Commission. Those that remain in the general fund, after the appropriation back to CFEC, are used for whatever purpose the legislature determines. Therefore, while not titled a "tax," the portion in excess of operation is effectively used by the legislature as a tax on the industry.

DCCED, Division of Economic Development oversees revolving loan funds to help commercial fishermen, hatcheries, and other parts of the industry. The division lends money, which is repaid into the fund. There is also loan interest, some of which is used by the Division to administer the funds, some of which is returned to the loan funds, and some of which remains in the General Fund to be used for any purpose by the legislature. The only revenue that we included in this report is the interest payments that remain in the General Fund. Unfortunately, we were unable to find this amount for 2016-2019. Therefore, we used the amount from the 2015 report. However, as most loans are for a long period, the error introduced is likely not large. In Table 2-1, this revenue is labeled ***Loan Fund Interest Retained in the General Fund.*** Otherwise, we treated the fund as a separate unit that is functionally outside the state's General Fund. Also, we did not include the Division's cost to manage the fund as a cost allocable to the commercial fishing industry, because the cost is paid for by interest payments generated by the fund.

"Pass-Through" Taxes. The next four revenue sources might be termed "pass-through" taxes. For these taxes, a majority of permit holders in a fishery or region elects to impose a tax on themselves to fund a specific purpose. The funds flow through the state treasury and are paid out to specific groups within the industry. Constitutionally, a tax cannot be legally dedicated to a specific purpose. For that reason, these "pass-through" taxes are collected and deposited in the General Fund, but the industry relies on the legislature to appropriate the collection for the purpose it was collected. To date, the legislature has respected that intent in its annual budgets.

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purpose of sharing fisheries business tax revenue with local governments where the tax is imposed is to compensate those governments for fisheries-related impacts." (State Revenues and Expenditures for Fisheries and Wildlife in FY 94; Research Request 95.089; March 31, 1995. Legislative Analyst, Maria Gladzsiewski, page 3.)

The ***Seafood Marketing Assessment*** is paid by fish processors and partially funds the Alaska Seafood Marketing Institute (ASMI). The ***Salmon Enhancement Tax*** is an elective tax in that it is only levied in areas where it is approved by a majority of fisheries permit holders, who also vote on the amount of the tax. The tax is used to provide financing for qualified regional aquaculture associations (i.e., hatcheries). The ***Seafood Development Tax*** is similar in that it is an elective tax but is used for regional seafood development associations. Three fisheries have elected to use this tax: the Prince William Sound drift gillnet fishery, the Prince William Sound set gillnet fishery, and the Bristol Bay drift gillnet fishery. The ***Common Property Fisheries Assessment*** is used to fund the operation of fish hatcheries. It is a cost-recovery fisheries assessment, authorized by the legislature in 2006, and allows hatcheries to recoup costs through an assessment on fish caught in the terminal harvest area (the area to which hatchery fish return, usually adjacent to the hatchery itself). The ***Dive Fishery Management Assessment*** is another elective assessment. It only applies to designated dive management areas and species and is assessed at a rate elected by a vote of permit holders. It applies to the geoduck, sea urchin, and sea cucumber dive fisheries in Southeast. Funds are deposited in the general fund with the expectation that the legislature will appropriate them to the Department of Fish and Game to fund the regional dive fishery development association.

We recognize that some people might consider these funds to be a cost of doing business for the seafood industry, rather than revenue to government to support public services. It is important to be consistent; it would be inappropriate to consider these "pass-through" taxes as revenue to the State of Alaska without also considering the related appropriation an expenditure. In this analysis, we have included the tax and appropriation as a revenue and an expenditure, respectively. However, it would also have been reasonable to exclude them, as long as the analysis excluded both.

Agency Fees and Other Revenue. The final four revenue sources are fees on the commercial fishing industry used, after appropriation by the legislature, to fund agency management activities or other General Fund purposes. ***The Commercial Fisheries Entry Commission (CFEC)*** collects fees for commercial fishing permits and vessel licenses. This portion of Table 2-1 includes the portion of CFEC receipts that the legislature appropriated back to the agency for it use. The remaining portion, which remains in the general fund and is appropriated for other purposes, is included as a "True Tax", and explained above.

Seafood Processors and other parts of the industry pay the Department of Environmental Conservation for inspection and certifications of food safety. We were unable to get data for this information for 2016-2019, and we applied revenue from the 2015 report.

Fishing ***Crewmember License Fees*** are collected by DF&G. They are deposited in the General Fund. ***Test Fishery Receipts*** are sales of fish harvested in "test fisheries" established by DF&G. The DF&G Commissioner has authority to "to sell fish caught during commercial fisheries test fishing operations." The legislature appropriates test fishery revenue back to DF&G as a program receipt authorization. That is, the Department may keep the test fishery sale revenue up to the authorization limit given by the legislature. These receipts are used to offset the cost of operating the test fisheries.

DNR ***Shore Fishery Lease Payments*** includes revenue from shore fishery leases, used by set-net permit holders. The legislature generally appropriates these funds back to DNR for management of the shore fishery lease program as a program receipt authorization. ***Mariculture Fees*** are DNR aquatic farm permit application fees and are deposited into the General Fund.

Revenue sources excluded from the analysis. This analysis accounts for the major revenue sources paid by the commercial fishing industry. There are undoubtedly some agency fees that are missed, though we did identify and include the largest fees, which are fees paid by fish processors for certifying and enforcing food safety.

There are several significant fees paid by the commercial fishing industry that cannot be appropriated by the legislature and are excluded from this report. The industry pays many fees to the federal government. This analysis excludes both federal revenue and expenditures; rather, it focuses on fiscal effects to the state.

The individual taxes and fees are described in more detail in Chapter 7.

2.2 Operating Budget Expenditures by the State

The legislature appropriates funds to manage the commercial fishing industry. This section describes the legislature's operating budget appropriations to state agencies averaged from FY 2016-2019.

Table 2-2. Agency Expenditures due to Commercial Fisheries, FY 2016-2019
Figures in Million Dollars

Expense by Department	$	%	Expense by Division	$	%
Environmental Conservation	$2.41	3%	Environmental Health	$ 0.9	1%
			SPAR	$ 0.3	0%
			Water Quality	$ 1.2	2%
Natural Resources	$ 0.5	0.7%	Mining Land and Water	$ 0.5	1%
Fish and Game	$61.1	86%	Commercial Fisheries	$44.5	63%
			Commercial Fisheries Entry Comm.	$ 3.6	5%
			Board Support	$ 0.7	1%
			Alaska Seafood Marketing Institute	$12.3	17%
Public Safety	$5.93	8%	Alaska Wildlife Troopers	$ 5.9	8%
Revenue	$ 1.0	1%	Tax Division	$ 1.0	1.4%
Total, All Departments	**$70.9**	**100%**	**Total, All Divisions**	**$70.9**	**100%**

Table 2-2 shows that the state government's total operating cost to manage and promote the commercial fishing industry is $70.9 million. The table shows that the major state expenses to manage the industry are made by DF&G's Commercial Fisheries Division, which expends 63% of the total cost. Another 17% is spent by the Alaska Seafood Marketing Institute, and the rest of the state's expenditures are spread through other departments. More detailed description and tables concerning operating budget expenditures are provided in Chapter 5.

2.3 Capital Budget Expenditures for the Commercial Fishing Industry

Alaska spends funds for the commercial fishing industry from the capital budget. In Fiscal Years 2016-2019, the legislature passed only three commercial-fishing-related capital projects. They totaled $7.1 million for the four years of the study, or $1.8 million per year.   Chapter 6 lists the three capital improvement projects that are attributable to commercial fishing.

2.4 Commercial Fishing Revenue to Local Government

For the communities with a significant fishery, tax revenue from the fishery is an important funding source for local government. The state collects the Fisheries Business Tax (also known as the "raw fish tax") and the Fishery Resource Landing Tax, and it distributes approximately 50% of the proceeds to qualifying boroughs and incorporated municipalities. DCCED publishes the amount of municipal fish taxes ultimately received by a borough or city. These are listed in Table 2-3.

The table does not include all municipal revenue attributable to commercial fishing. It does not include commercial-fishing-related sales taxes or property taxes. In addition, this report makes no effort to list municipal expenditures related to the industry. However, Table 4-3 shows that the commercial fishing industry is an important source of local government revenue; it provides funding for schools, police, fire, and other local services in the localities where it exists. Local government expenditures are not considered in this report but are expected to be much smaller than state expenditures.

Table 2-3. Local Government Revenue from Commercial Fishing Industry
Fiscal Years 2016-2019; Figures in Million Dollars

Average Annual Municipal			Year			
Commercial Fishing Revenue		**Fraction**	**2016**	**2017**	**2018**	**2019**
$ 21.2	Fisheries Business Tax, municipal share	1.00	$21.2	$16.2	$21.2	$23.7
5.8	Fishery Resource Landing Tax, municipal share	1.00	5.8	8.2	4.5	5.4
19.9	Municipally imposed fisheries taxes	1.00	19.9	18.8	19.5	23.1
$ 46.9	**Local Government Revenue Total**					

The amount of local government revenue is important. The three local government revenue sources in the table amount to $46.9 million.

2.5 Comparison of Revenue and Expenditures for the Commercial Fishing Industry

This section uses information from the previous sections to compare the revenue for the commercial fishing industry with expenses. Table 2-4 shows that, on average from Fiscal Years 2016-2019, state receive $64.4 million in revenue from the commercial fishing industry but spends $72.7 million to promote and manage the industry: $70.9 from the operating budget and $1.8 million from the capital budget. These figures show that the state spends $8.3 million more than it receives.

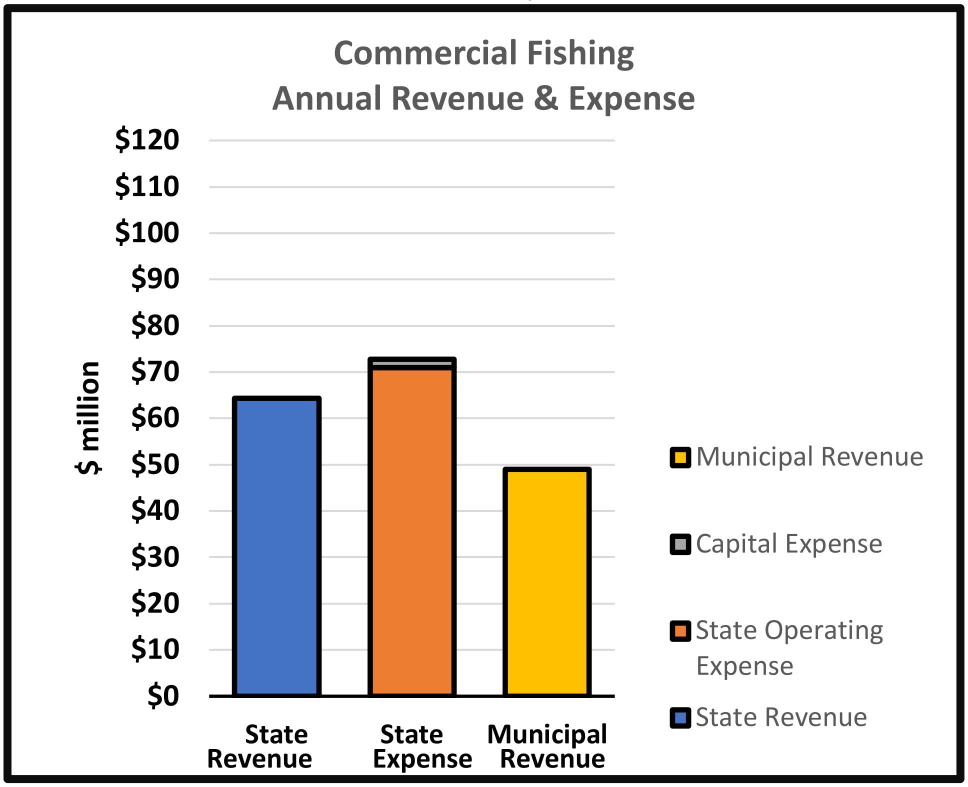
Table 2-4. Comparison of Commercial Fishing Revenue and Expenditures, FY 2016-2019
Average of those four years; Million $

Commercial Fishing	$ million
Average state revenue	$64.4
Average Operating Expenditures	$70.9
Average capital expenditures	$1.8
Net state revenues (deficit)	($8.3)
Average Municipal Revenues (partial)	$46.9

The table also shows that commercial fishing is a significant source of revenue to those municipal governments with a significant fishing industry. They receive $46.9 million in revenue, not counting municipal sales taxes, property taxes, or other generally applicable municipal taxes.

The information in Table 2-4 is shown visually in Figure 2-1.

Figure 2-1. Comparison of Commercial Fishing Revenue and Expenditures Fiscal Years 2016-2019; Million Dollars



2.6 Cautions

Some of the figures cited above are reasonably exact, some are estimates, and some are based on assumptions. It is important to understand the accuracy of the conclusions. In addition, there are some cautions that the reader should be aware of.

1. **"Average" conclusions are not accurate for any individual fishery.**

   The commercial fishing industry is not monolithic. Each individual fishery will be different from the average. It will be more or less profitable, pay more or less tax, and be more or less costly to manage. Federal fisheries are managed by the federal government. The state expends little or no money on these fisheries but receives taxes from them. Even within the state, costs and revenues are different in different fisheries. For example, the state's costs and revenues, as well as profits to harvesters, will be different in Bristol Bay than in the upper Yukon River.

   This study makes conclusions about the expenses and revenue for the industry as a whole. Those conclusions are unlikely to be accurate for any segment of the industry.

Some fisheries likely pay much more than the management cost; some likely pay much less.

2. **The Commercial Fishing Industry is not managed for maximum revenue to the state. There is no implication in this report that it should be managed for that purpose.**

   This report is *not* an economic cost-benefit analysis of fisheries management by the state. Many Alaskans may think about resource taxes by considering the oil industry. Some individuals believe that Alaska policy should maximize revenue to the state from all industries. Others understand that industries vary, with differing ability to pay, and different management objectives.

   In fact, the ability of the fishing industry to pay taxes is very much unlike the ability of the oil industry. Thinking of the two in the same terms confuses the discussion. The industry return on investment, level of profit, and management costs are fundamentally different. Further, the State of Alaska has different taxing and management objectives for the commercial fishing industry than it has for other industries. For oil, the state's objective is arguably to maximize long-term revenue. For fish, the objective appears to be to maximize employment, fishing incomes, community health, and other social objectives. Indeed, the state restricts efficiencies in the fishing industry by prohibiting boats or nets above a certain size. The goal of these restrictions appears to be to increase employment.

   Our point is not that commercial fishery fees and taxes are set correctly. We have no opinion on that point. We believe an understanding of costs and revenue is useful for discussion of management of any industry, but there is no implication by the authors that because state revenue is less than state costs, state policy is necessarily wrong.

2.7 Differences from the 2015 report.

The revenue and expense conclusions in this report are similar to those from the 2015 report. The 2016-2019 revenue is approximately 8% less than in the previous report: a decrease of $5.8 million. Given the variability of fish prices and run strength, a difference of that level is not a surprise. State operating expenses have also decreased by 10%. This is also not surprising. The state operating budget has been cut due to declining oil revenues since the oil price crash in 2014. The smaller state budget includes a reduced capital budget: appropriations for commercial fishing-related capital projects have decreased significantly: from $18.5 million to $1.8 million, a decrease of over 90%.

Overall, this report shows a significantly smaller difference between state revenues and costs, primarily due to the decrease in the capital budget. The 2015 report shows a $26.6 million difference; this report shows the difference is less than one-third of that amount: $8.3 million.

This report shows that municipal revenue, like state revenue, has also decreased by 8%. However, the $46.9 million that municipalities receive from the industry remains an important revenue source for local governments that house a significant fishery.

Chapter 3. Mining Industry

In this report, the mining industry includes coal, hard rock, and placer gold mines. The information in this report does not include sand and gravel operations. For this report, revenue to the State of Alaska includes revenue to the Alaska Mental Health Trust, a quasi-independent state agency which funds a state function, providing mental health services to Alaskan citizens.

3.1 Mining Industry Revenue to the State of Alaska

Mineral industry revenue to the State of Alaska includes traditional taxes, such as the mining license tax or corporate income tax, and mineral rents and royalties. Most of these taxes are a percentage of a company's net profits. Because world mineral prices can fluctuate rapidly, mineral revenue to the State of Alaska varies greatly from year to year. This analysis averages four years of revenue, from 2016-2019, which helps adjust for the annual variation.

Table 3-1 shows the average annual revenue the mining industry provides to the State of Alaska.

Table 3-1. State Mining Revenue, Fiscal Years 2016-2019
Figures in Million Dollars

	Average Annual Mining Revenue		Fraction	Year 2016	2017	2018	2019
Applies to all landowners	$37.0	Mining License Tax	1.00	$11.1	$41.5	$47.3	$48.0
	0.2	State mining misc fees, total	1.00	0.3	0.3	0.1	0.2
	1.5	Motor Fuel Tax, mining share	1.00	2.1	1.3	1.4	1.0
	10.6	Corporate Income Tax, mining sector	1.00	1.6	(0.7)	34.6	6.9
	1.1	Large Mine Projects Fees via DNR OPMP	1.00	1.4	1.0	0.9	1.0
State land only	16.3	Mining rents and royalties, total	1.00	17.4	17.3	16.4	13.9
	$66.6	**Total**					

The mining industry has three different segments: hard rock, coal, and placer mining. Hard rock mines are typically large mines that extract minerals from bedrock. They may be open-pit or underground. Coal mines are large mines, but the technology, economics, and some taxes are different for coal than for hard rock mines. Placer mines are typically smaller and separate free particles of gold from current or old floodplain gravels using the flow of water. Taxes affect these three segments in somewhat different ways.

The five hard rock mines and Alaska's lone coal mine, the Usibelli Coal Mine, are Alaska's large mines. These six large mines pay most of the taxes and fees. They are large, capital-intensive facilities with sometimes hundreds of employees.

- Greens Creek silver mine within the City and Borough of Juneau (underground);
- Kensington gold mine within the City and Borough of Juneau (underground);
- Pogo gold mine north of Delta Junction (underground);

- Fort Knox gold mine within the Fairbanks North Star Borough (open pit);
- Red Dog lead zinc mine within the Northwest Arctic Borough (open pit); and
- Usibelli Coal Mine within the Denali Borough (open pit).

Placer mines are much different. There are many more of them, but they are much smaller. According to a DNR estimate, 295 placer mines had some activity in 2013. The average placer mine had four workers; 27% were run by one person though there were a few significantly larger mines (50+ workers).[5] Most of the income from these mines is paid out as wages or payments to individuals. While important in the areas where it occurs, placer mining production is a small part of the industry. It produced roughly 100,000 ounces of gold in 2013, while the rest of total statewide production of over one million ounces of gold was produced mostly from Alaska's hard rock gold mines.

Like the fishing industry, the mining industry has a special tax, the ***Mining License Tax***. The tax is up to 7% of net profits of mineral production. It produces the most revenue for the state, 56% of the total for the four years listed in Table 3-1. The ***Corporate Income Tax*** for mining is no different than for other industries, up to 9.4% of taxable income, and provides approximately a third of the mining revenue to the state. These two taxes apply to all mines in the state, though almost all the revenue comes from the six large mines. These taxes are a percentage of net business profits; most of the placer mine income is paid out in wages and payments to individuals who are not subject to these taxes. These two taxes apply to mines on all lands: state, Native, federal, or private.

Mining Rents and Royalties apply differently to different parts of the industry. Hard rock and placer mines on state land operate on state mining claims. Coal mines operate on a coal lease. The two categories are subject to different rent and royalty provisions. Also, mining rents and royalties apply only to mines on state land, not to those on federal, Native, or private land.

Hard rock and placer mines on state land are subject to a 3% net profits royalty. While most of the placer mines are on state land, only two of Alaska's hard rock mines are on state land. Royalty, like Mining License and Corporate Income Tax, is based on net business profits.[6] The average royalty from Alaska mines was $2.3 million.

Rents apply to all placer and hard rock mining properties, including exploration sites and mineral properties not in production. Mining rents are charged as escalating fees that apply to mining claims on state land. They begin at $35/year for a 40-acre claim and escalate after 11 years to $170/year for each 40-acre claim. Despite the relatively small fee per claim, the industry requires thousands of acres of claims; total rents varied from $7.3 to $9.1 million between 2016 and 2019.

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[5] Information from The Economic Impacts of Placer Mining in Alaska, October 2014. Prepared by the McDowell Group for the Alaska Miners Association. Pages 1 and 2.
[6] One of them, Fort Knox, mines ore from land owned by the Alaska Mental Health Trust. However, the Trust is treated as a state agency for purpose of this analysis.

Hard rock and placer mines on state land are also subject to an ***Annual Labor*** requirement. Each year the owner of a mining claim must either perform $100 of work per claim or may pay $100 to the state per claim. Revenue from the annual labor requirement averaged approximately $380,000 during the four years.

Coal Rents and Royalties are different than those for hard rock and placer mines. The economic characteristics of the coal industry are different from placer or hard rock mines and the terms are not directly comparable. Coal mines operate under a lease with the state, rather than a mining claim. The rent and royalty rates are specified in the lease. The terms of a typical coal lease have changed over time. Leases issued within the last decade require 5% payment of adjusted gross royalty (i.e., of revenue minus transportation costs internal to the mining area and a few other adjustments), plus $3 per acre as rent.

The total of coal, placer and hard-rock mining rents and royalties over the period averaged approximately $13 million. Between 25% and 50% of that amount went into the permanent fund, and the remainder went to the state's general fund.

State Mining Fees is a catch-all category that includes several various fees including application fees and filing fees. A significant part of these fees comes from bonus bids received from the auction of offshore leases near Nome.

Large Mine Project Fees are an unusual category. They are part of an unusual financial arrangement for mining, oil and gas, and a few other large projects. Mining-related pre-permitting review, permitting activities, and agency inspection are coordinated through DNR's Office of Project Management and Permitting (OPMP). Mines voluntarily pay for this coordinating function and reimburse the agencies for the work involved. This arrangement requires the mining company to develop a reimbursement agreement with DNR. In turn, DNR reimburses the individual agencies and divisions that work on the mine project. In this manner, the mining industry pays for most of the permitting and regulatory compliance work accomplished by DNR, DEC, DF&G, and frequently the Department of Law. These payments averaged $1.1 million.

The mining industry share of the ***Motor Fuel Tax*** is taken from the Alaska Mineral Industry Report, published by DNR and DCCED.[7]

Potential, Excluded Revenue Sources

- <u>*Usibelli Coal Mine, Inc.'s Payments to the Alaska Railroad*</u>. The Alaska Railroad's main source of income is the shipment of freight. Payments to the railroad, which are almost completely those made by Usibelli Coal Mine, Inc. averaged $18.0 million. This revenue is excluded for two reasons. First, we cannot include revenue without including the related cost. The related cost is the expense that the railroad incurs to ship the coal.

[7] https://dggs.alaska.gov/pubs/id/30658

That cost is unknown (to us) and proprietary. Second, the Alaska Railroad Corporation acts as an independent corporation, though it is state owned. It does not deposit revenue into the General Fund, nor does it receive General Fund appropriations. It is functionally not part of state revenue and expenses that are allocated by the legislature. Therefore, we excluded the mining payments to the Alaska Railroad from the calculations in this report.

- *Red Dog Road Payments to AIDEA.* Payment by the Red Dog Mine to the Alaska Industrial Development and Export Authority (AIDEA) is often considered revenue from the mining industry to the state. The payments are significant; approximately $9.5 million during the four years of this study. However, the payments are not included in Table 3-1. AIDEA issued bonds to finance the road from the Red Dog Mine to the port site where Red Dog's ore is exported. AIDEA owns the road and leases it to Red Dog in return for a per-ton fee on ore shipped over the road. It is not appropriate to include revenue without also including the related cost (the bond payments), and so both were excluded from this analysis. In addition, Red Dog payments do not go to the general fund but to AIDEA, which like the railroad is a state-owned corporation. Its revenue and costs are not a part of the general fund. Periodically, some AIDEA funds are transferred to the general fund; however, we did not determine the portion of those funds attributable to the net of Red Dog Payments minus AIDEA bond payments. Thus, excluding this amount from mining revenue results in a small underestimate of the revenue.

This analysis also excludes revenue from state sand and gravel sales. Sand and gravel are not included as "mining" in this report, and so its revenue and costs are both excluded.

Individual taxes and fees are explained in greater Detail in Chapter 7.

3.2 Operating Budget Expenditures by the State for Mining

This section of the report describes Alaska's operating budget expenditures from 2016-2019 attributable to the mining industry. The information is provided in Table 3-2.

Table 3-2 Agency Expenditures due to Mining, FY 2016-2019
Figures in Million Dollars

Expense by Department	$	%	Expense by Division	$	%
Environmental Conservation	$ 0.26	4%	Water	$ 0.04	1%
			SPAR	$ 0.2	3%
Natural Resources	$ 5.7	87%	DMLW	$ 2.2	35%
			DGGS	$ 1.6	25%
			OPMP	$ 1.1	16%
			Mental Health Trust	$ 0.4	6%
			Recorder's Office	$ 0.2	3%
			PIC	$ 0.1	2%
			OHA	$ 0.05	0.7%
Fish and Game	$ 0.1	2%	Habitat	$ 0.1	2%
Commerce, Cmty & Econ Dvpt	$ 0.03	0.5%	Economic Development	$ 0.03	0.5%
Revenue	$ 0.4	7%	Tax	$ 0.4	7%
Total, All Departments	**$ 6.5**	**100%**	**Total, All Divisions**	**$ 6.5**	**100%**

SPAR = Spill Prevention and Response; DMLW = Division of Mining, Land and Water; DGGS = Division of Geological and Geophysical Surveys; OPMP = Office of Management and Budget. PIC = Public Information Center; OHA = Office of History and Archaeology; Commerce and Econ Dvpt = Commerce, Community and Economic Development

The table suggests several conclusions. First, the total state operating cost — $6.5 million — is a relatively small cost to manage an important Alaska industry.

Second, most costs are concentrated within the Department of Natural Resources, and these, in turn, are concentrated in the Division of Mining, Land and Water, the Office of Project Management and Permitting (OPMP) and the Division of Geological and Geophysical Surveys. The OPMP costs are slightly misleading, however. While they are shown as OPMP expenditures, the office manages reimbursable services agreements by which the large mining companies agree to pay for coordination and the work performed in permitting and regulating the mines. Different divisions — primarily within DNR, DF&G, and DEC but also the Department of Law and sometimes others — charge OPMP for time spent on this work. OPMP, in turn, bills the mines. Therefore, while $1.6 million is shown in the table as OPMP expenses, most is spent on work done by DF&G, DEC, DOL and other divisions within DNR and is reimbursed by the industry under the Large Mine Project Fees described above.

Potential Operating Budget Sources Excluded. As indicated earlier, we also excluded costs associated with excluded revenue: material sales (sand and gravel) and AIDEA costs related to the Red Dog Road.

More detail about operating budget expenditures is provided in Chapter 5.

3.3 Capital Budget Expenditures

This section is short: There are three capital budget items that fund mining-related projects during the period FY 2016-2019. All involve geologic mapping for natural resource development. The total state cost over four years was $600,000. That translates to an annual cost of $150,000. Chapter 6 lists the three capital improvement projects attributable to mining.

3.4 Mining Revenue Collected by Local Government

Large mines are capital-intensive facilities. They have significant property and are subject to property taxes in the boroughs in which they are located. These mines are generally the largest property taxpayers in those communities.

- The Red Dog mine is the only taxpayer in the Northwest Arctic Borough.
- Fort Knox mine is the second largest private taxpayer in the Fairbanks North Star Borough, behind the Trans Alaska Pipeline.
- The Greens Creek and Kensington mines are the first and second largest taxpayers in the City and Borough of Juneau, and also the first and second largest taxpayers in southeast Alaska.
- The Usibelli Coal Mine pays a severance tax of $0.05 per ton of coal to the Denali Borough and a variety of payments to other Boroughs which total, together, approximately $125,000 per year.[8]

Collectively, the mines in Alaska paid local municipalities an average of $ 36.8 million per year for FY 2016-2019. These payments went primarily to the four boroughs in which large mines are located: Northwest Arctic Borough, Fairbanks North Star Borough, the City and Borough of Juneau, and the Denali Borough. The payments do not include other local taxes such as sales tax.

3.5 Comparison of Revenue and Expenditures for the Mining Industry.

This section uses information in the previous sections to compare the revenue for the mining industry with expenditures. Mining brings in $66.6 million to the state, but it costs the state very little to manage or promote: only an average of $7.6 million including both operating and capital expenses. Mining brings the state almost ten times its cost.

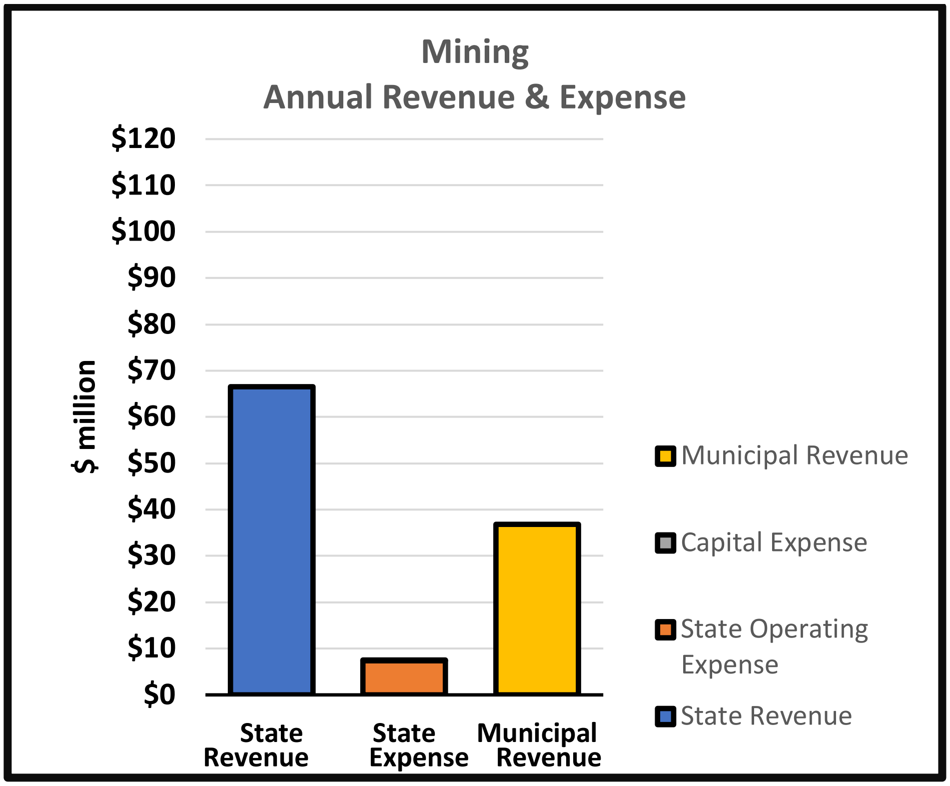
[8] Statewide Socioeconomic Impacts of Usibelli Coal Mine, Inc. January 2015. Prepared by the McDowell Group for Usibelli Coal Mine, Inc. Pages 2 and 3.

Table 3-3. Comparison of Mining Revenue and Expenditures, FY 2016-2019
Average of those four years; million Dollars

Mining		$ million
Average state revenue		$66.6
Average Operating Expenditures		$6.5
Average capital expenditures		$0.2
	Net state revenues	$59.9
Average Municipal Revenues		$36.8

Figure 3-1 provides the same information in graph. The capital expense is a part of the state's expense column – the middle column. It is difficult to see because it is so small.

Figure 3-1. Comparison of Mining Revenue and Expenditures, FY 2016-2019
Million dollars



3.6 A Caution: "Average" conclusions are not accurate for any individual mine, nor for the different segments of the mining industry. The conclusions of this report are for the mining industry as a whole: hard rock, coal, and placer. The three parts of the industry operate under different economic conditions. The figures in this report do not represent any individual segment, although Alaska's hard rock mines contribute most of the revenue and are responsible for much of the operating budget expenditures. Half of coal mine regulatory expenses are funded by federal funds, which are not costs to the state and are excluded from the analyses. While the hard rock segment may be most responsible for the figures in this report, the conclusions do not represent any individual hard rock mine. Every mine is different. At some mineral prices, some mines may be making a significant profit, while others may be losing money. The economics of individual mines can be very different. Mineral prices do not move in lockstep. Gold prices can be increasing while zinc prices are falling sharply. Or the opposite.

3.7 Differences from the 2015 report. Relative to the conclusions of the 2015 report, municipal revenues are up by $14.3 million (64%). State expenses have decreased by $7.1 million (almost 50%), and state revenue has decreased by $29.8 million (31%).

The increase in municipal revenues is in part due to normal inflation influencing property taxes, and on a new payment agreement between the Red Dog Mine and the Northwest Arctic Borough with significantly larger payments.

More than half of the cost decrease for mining has been due to the virtual elimination of the state's capital budget, with the remainder due to budget cuts that have affected the state agencies. In addition, payments to OPMP for permitting and inspection costs (which are both a cost and revenue) decreased due to the normal ebb and flow of permitting requirements.

Mining revenue to the state has decreased, by almost one-third since the 2015 report. Most of state revenue is gathered from net profits assessments. The Mining License Tax, production royalty, and corporate income tax are all net profits assessments. The overall value of mineral exports has remained stagnant over that time. The decrease in revenue is an indication that profits have decreased. Some of this may be due to lower prices – inflation-adjusted gold prices have decreased 16% between the two reports. Zinc prices are up, so most of the profit decrease is due to higher costs. The higher costs may be due to lower production and lower grade as some of the older mines exhaust the higher grades, and several mines have undertaken significant development expenditures to access new areas or to keep up production. These are the likely explanations for the significant decrease in state revenue.

Chapter 4. The Tourism Industry

Tourism is a collection of products and services sold to nonresident visitors to Alaska. The industry is also commonly referred to as the visitor industry. Measurement of tourism activity is challenging because, for example, there is no simple way to know whether a given tank of gasoline is being sold to a visitor or an Alaska resident. The consumer of tourism and recreation experiences often purchases several goods and services and uses them as inputs to "produce" the experience. An angler might fly to Anchorage, rent a car, purchase gasoline and a fishing license, drive to the Kenai River, and go fishing with a licensed guide.

Similarly, many government activities that help the tourism industry are the same activities done to help Alaskans. Examples include setting hunting regulations, building museums, operating the state ferry system, and managing sport fisheries.   These are all done for Alaskans — but are important for tourism as well.

The conclusions in this report are based on several assumptions about how to allocate tourism costs and sometimes how to allocate revenue. We believe that this report makes reasonable assumptions, but other reasonable assumptions are probably also possible. For that reason, the figures in this report should be considered general estimates. They are less accurate than those for commercial fishing and mining.

4.1 Tourism Revenue to the State of Alaska

Some tourism revenue to the State of Alaska is easy to identify, such as nonresident hunting and fishing licenses, or payments made by cruise ships. Others are more difficult, such as the portion of the state's alcohol tax due to drinking by visitors.

Table 4-1 shows the annual revenue we attribute to tourism from FY 2016 through FY 2019. The table shows that the Tourism industry brought in an average annual revenue of $66.0 million to the state of Alaska for these four years.

There are some potential revenue sources that are difficult to quantify but could be attributed to tourism, such as alcohol tax revenue attributable to the drinks bought by tourists. Thus, the total in Table 4-1 may slightly underestimate tourism revenue. Revenue calculation details are discussed in Chapter 7.

Table 4-1. Tourism Revenue, Fiscal Years 2016-2017
Million $

Average Annual Tourism Revenue			Fraction	Year 2016	2017	2018	2019
Cruise Ship Taxes & Fees	$ 8.6	Large Passenger Vessel Gambling	1.00	$ 7.7	$ 8.2	$ 8.6	$10.1
	3.6	Comm Pass Vessel Tax, state share	1.00	3.3	2.5	4.1	4.3
	3.5	Ocean ranger fees	1.00	1.1	4.2	4.4	4.2
	1.1	Comm Pass Vessel Env Compliance Fee	1.00	1.0	1.1	1.1	1.3
Other	26.5	Non-resident Hunting & Fishing License	1.00	23.0	25.5	28.3	29.2
	15.4	Corporate Income Tax, tourism sector	1.00	10.0	14.4	17.4	20.0
	7.2	Vehicle Rental Tax	0.65	10.5	12.0	10.6	11.4
	$ 66.0	**Total**					

The table shows that the largest state revenue sources are hunting and fishing licenses from visitors, almost a third of the total.

The **Commercial Passenger Vessel Excise Tax** is $34.50 per passenger imposed on passengers travelling on commercial passenger vessels, typically cruise ships. The tax was established by a 2006 ballot initiative at $46 per passenger and changed by legislation in 2010 to its present rate. A portion of that tax is shared with qualifying municipalities that are cruise ship destinations. Table 4-1 shows only the portion that remains with the state. While the excise tax is imposed on passengers directly, the **Large Passenger Vessel Gambling tax** is imposed on the gambling-related gross income of cruise ship operators. Specifically, it is 33% of adjusted gross gambling income (less the cost of prizes and other federal and state taxes). The gambling tax was also established by the 2006 ballot initiative.

Ocean Ranger Fee was also established by the 2006 ballot measure. It levies a $4 per berth fee on cruise ship passengers to fund a DEC employee to monitor the ship's compliance with marine discharge and pollution laws. Funds from the fee are generally appropriated to DEC to fund the Ocean Ranger program. The same initiative also established the **Commercial Passenger Vessel Environmental Compliance Fee.** These fees are set based on the number of berths, starting with ships of 50 berths or greater. While the fees increase in a stair-step fashion depending on the number of berths, the fees are roughly $1/berth. Revenue from these fees is used to support DEC's work with the cruise ship industry such as vessel permitting, oil and hazardous substance spill prevention and response.

The **Vehicle Rental Tax** is imposed by the state on those who rent or lease passenger or recreational vehicles for less than 90 days. It is collected by the rental car agency. Using statistics from McDowell Group, we estimate that 70% of rental car revenue is due to out-of-state visitors coming all or in part for vacation, and 95% of that amount is due to non-business visitors (i.e., tourists).[9] Therefore 65% (0.95 x 0.70) is allocated to tourism from the rental tax.

Nonresident hunting and fishing license is the revenue gained from selling hunting and fishing licenses to visitors (nonresidents). The information is compiled by the Department of Fish and Game. **Corporate income tax** for the tourism sector is from information compiled by DOR.

Potential revenue sources excluded from this analysis. There are revenue sources to Alaska that are excluded from this analysis.

- *Nonresident payments to the Alaska Marine Highway: $16.0 million in 2017*. Alaska Marine highway receipts paid by nonresidents totaled $16.0 million in 2017. However, the marine highway system runs at a significant deficit. All of the ferries run at an operating deficit including the vessel operation, overhaul, fuel, and a few additional expenses. It is possible that without any tourists on at least some routes route, that the Marine Highway System would run the same number of trips just for Alaskans and incur almost the same cost. If so, the nonresident revenue is "free revenue" and should be included as a large tourism revenue source. However, if one ignored the tourists, the Marine Highway System might run fewer trips, perhaps many fewer, and save money. In that case, the nonresident use of the system is a *net expense* to the system. Either assumption seems plausible and the net effect of higher revenue vs. higher cost is likely different for different routes. However, it is quite likely that Alaskans enjoy a larger ferry system with more frequent sailings because of the tourism industry, even if the value is not captured in the statistics of this report.

  Previous comparisons of tourism revenue and costs by DCCED and the Legislative Research Agency have included the marine highway nonresident revenue and costs — which made the Marine Highway System a net expense for tourism. We were not able to reach this conclusion. Overall, given this level of uncertainty, and the fact that the system runs at such a large deficit, it did not seem accurate to include the nonresident fares as revenue without including any costs; nor did it seem accurate to conclude that $16 million in nonresident revenue resulted in a net cost. Therefore, this analysis excludes nonresident revenue to the Marine Highway System from calculations but notes the exclusion so that readers can decide for themselves.

- *Nonresident payments to the Alaska Railroad*: 31.9 million in 2017. Nonresident payments to the Alaska Railroad were $31.9 million in 2017. This revenue is more than a third of the total in Table 4-1. It includes individual passenger tickets purchased by nonresidents and payments to the railroad for including railroad cars owned by large

9 Alaska Visitor Statistics Program 7, prepared for the Alaska Travel Industry Association, by the McDowell Group Summer 2016. Table 8.2, Page 8-3.
https://www.alaskatia.org/wp-content/uploads/8.%20AVSP%207%20Summ%20Profiles%20Trip%20Purpose.pdf

tour companies on Alaska Railroad passenger trains. It is excluded for the same reasons that payment by the Usibelli Coal Mine, Inc. to the railroad is excluded from the mining revenue. First, we cannot include revenue without including the related cost. The related cost is the expense that the railroad incurs for passenger service – the nonresident portion of the cost of the passenger train, maintaining the tracks, etc. That cost is unknown (to us) and is proprietary to the railroad. Second, the Alaska Railroad Corporation acts as an independent corporation, though it is state owned. It does not deposit revenue into the General Fund, nor does it receive General Fund appropriations. It is functionally not part of state revenue and expenses that are allocated by the legislature. Therefore, we excluded the nonresident revenue to the Alaska Railroad from the calculations in this report. However, like the Alaska Marine Highway System, Alaskans enjoy a more profitable railroad, and one that gives them lower cargo costs, and more frequent schedules for resident trips because of the tourism industry.

- *Other Sources: some portion of the state alcohol tax, corporate income tax from restaurants and bars, and fuel tax on jet fuel*. It is certain that some of the approximately $900,000 in corporate income tax annually paid by restaurants and bars during this period is due to profits from tourists. The state alcohol tax brings in a greater amount: $40 million. We made a rough estimate of the amount due to nonresidents, about 5%. However, given the level of uncertainty, we excluded it from this calculation. If we were to include the 5%, the total additional revenue allocated to the tourism industry would be approximately $2 million — a significant amount but not enough to greatly change the conclusions of this report. Similarly, some of the fuel tax on jet fuel is due to the transportation of tourists. The total amount of the tax on jet fuel amounts to $4.2 million; we have no estimate of the amount due to tourists. Including any or all these sources would not change the overall conclusions of this study.

  Finally, there are a host of small fees that are not included: admission fees at the state museum, business licenses for tourism companies, etc.

4.2 State Operating Expenses

Actions by state government to help Alaskans recreate also help tourists. To allocate the cost of these joint actions, we made several assumptions, listed below. The result of those assumptions is Table 4-2.

Table 4-2. Agency Expenditures due to Tourism, Fiscal Years 2016-2019
Million Dollars

Expense by Department	$	%	Expense by Division	$	%
Environmental Conservation	$ 1.2	6%	Water	$ 1.2	6%
Natural Resources	$ 3.2	16%	Mining, Land and Water	$ 1.2	6%
			Parks	$ 1.9	10%
			Support Services	$0.02	0.1%
Fish and Game	$11.4	57%	Sport Fish	$ 9.4	47%
			Wildlife conservation	$ 1.8	9%
			Boards	$ 0.2	1%
Commerce, Cmty & Econ Dvpt	$1.81	9%	Economic Development	$ 1.2	6%
			Corporations	$ 0.7	3%
Public Safety	$ 1.2	6%	Wildlife Troopers	$ 1.2	6%
Revenue	$ 1.2	6%	Tax	$ 1.2	6%
Total, All Departments	$19.9	100%	Total, All Divisions	$19.9	100%

The table shows just over half the costs are made by the Department of Fish and Game to manage fish and wildlife. While DF&G would presumably expend some of these costs to manage fish and wildlife for Alaskans, we allocate them to Tourism based on the assumptions listed below.

- Non-residents account for 46.2% of angler-days sport fishing, and so that percentage of division costs are allocated to tourism.
- Similarly, 14% of hunting licenses are purchased by non-residents; therefore 14% of wildlife management costs are allocated to tourism.
- 20% of visits to State Parks are by non-residents (estimated in 2015).
- 12% of the activities of the Fish and Game advisory boards are allocated to tourism based on the time spent on sport fish and wildlife issues in 2015.

More information on these assumptions is provided in Chapter 5.

4.3. Capital Budget Expenses

Many of Alaska's capital budget appropriations benefit the tourism industry. However, few benefit only tourism without also benefiting Alaskans in some way. Hatcheries may create fish caught by resident and nonresident sport fishers; a capital improvement project for a museum benefits the resident and nonresident museum visitors. Deferred maintenance projects in Alaska State Parks benefit resident and nonresident visitors.

We reviewed all Fiscal Year 2016-2019 capital appropriations to DNR, DEC, DF&G, and DCCED. This review resulted in 236 CIP projects. Of these, 28 benefited the tourism industry in at least some fashion. The assumptions we used to allocate portions of the individual project costs to tourism are same as those explained to allocate the Operating Budget explained in the previous section.

Capital Budget appropriations attributable to the tourism industry totaled $19.7 million. These were spread over the four years in 2016-2019. The average annual expense therefore equals a quarter of that amount or $4.9 million per year.

Chapter 6 lists the capital improvement projects attributed to tourism. It also explains the assumptions made for the allocations.

4.4 Tourism Revenue Collected by Local Government

Municipal revenue received by local government from the tourism industry is greater than that received by state government. Local government gains $101.6 million as compared to the $66.0 million received by the state. See Table 4-3. The revenue includes funds collected for local government by the state (the municipal share of the commercial passenger vessel excise tax). The revenue also includes estimates of local sales tax and lodging tax revenues paid by nonresidents as well as dock moorage fees. The McDowell Group made these estimates for DCCED, Division of Economic Development.[10]

The estimates of sales tax and lodging tax allocated to nonresident visitors were adjusted to reflect the 95% of those visitors who are tourists. That estimate is from the Division of Economic Development's Visitor Statistics Program, 2016. The McDowell Group's intensive studies in 2016 determined the percentage of visitors who came for vacation, business, business/pleasure, and to visit friends and relatives. For this study, we assumed that tourism represented those who came for vacation, to visit friends and relatives, and those who said the purpose was business/pleasure.

The local government revenue is not complete. It does not include property taxes related to tourism (hotels, etc.), or tourist ticket fees at publicly owned facilities such as museums.

[10] Economic Impact of Alaska's Visitor Industry, 2017. November 2018. Prepared by the McDowell Group. Prepared for the Alaska Department of Commerce, Community and Economic Development, Division of Economic Development. https://www.alaskatia.org/wp-content/uploads/VisitorImpacts2016-17Report11_2_18.pdf

Table 4-3. Local Government Tourism Revenue, Fiscal Years 2016-2019
Million $

Average Annual Municipal Tourism Revenue		**Fraction**	**Year 2016**	**2017**	**2018**	**2019**
$16.8	Comm Passenger Vessel Tax, municipal share	1	$15.8	$16.0	$16.8	$18.7
35.7	Visitor-related Sales Tax Revenues	0.95	See Note	37.6	See Note	See Note
31.4	Lodging Tax Revenues	0.95	See Note	33.1	See Note	See Note
17.8	Dockage/moorage Revenues	1	See Note	17.8	See Note	See Note
$101.8	**Local Government Funds Total**					

Note: Information for three of the municipal revenue categories is only available for 2017

More than $100 million in local government revenue is a large source of funds for the municipalities with significant tourist traffic. This analysis does not, however, attempt to measure local government costs for tourism.

4.5 Comparison of Revenue and Expenditures for the Tourism Industry

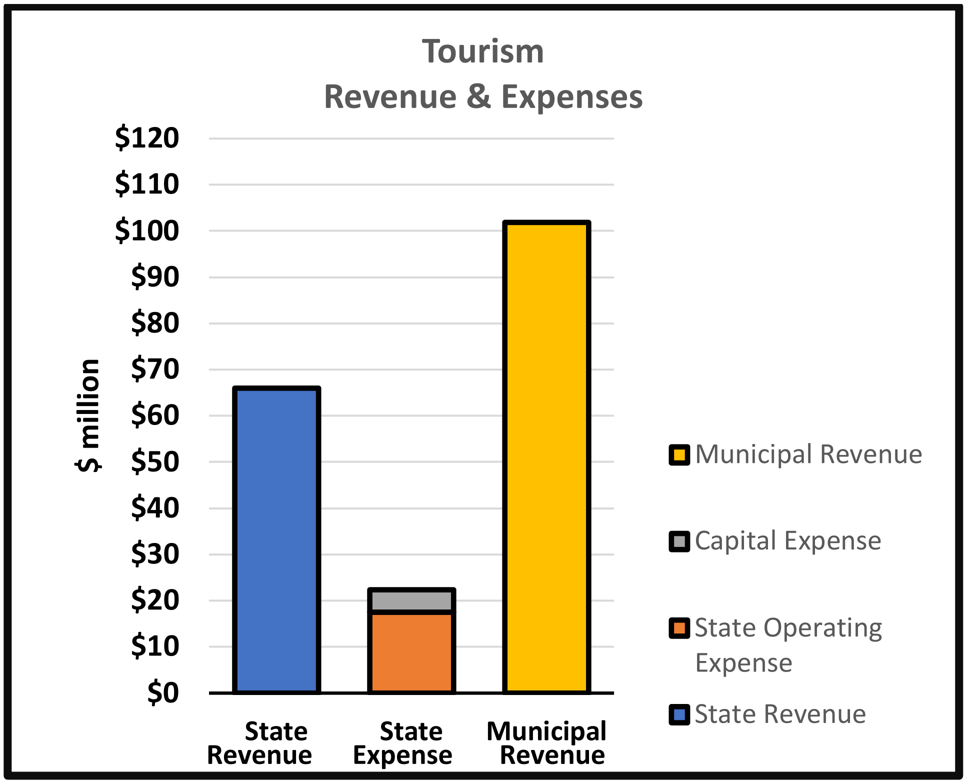
This section uses the information in the previous sections to compare the revenue for the tourism industry with expenditures. Tourism revenue to the state is greater than the state's operating expenses, and the industry's greatest fiscal impact is to local government. When local revenue is included, revenue is much greater than expenses. That is, tourism's greatest fiscal impact is to fund schools, police, and other local government services around Alaska.

Table 4-4. Comparison of Tourism Revenue and Expenditures, FY 2016-2019
Average of those four years; Millions $

Tourism	**$ million**
Average state revenue	$66.0
Average Operating Expenditures	$19.9
Average capital expenditures	$4.9
Net state revenues	$41.1
Average Municipal Revenues	$101.8

Table 4-4 shows that the state received, on average, $66 million per year to manage and promote the tourism industry from 2016 through 2019. The state spent approximately a third of that amount to manage and promote the industry. State expenditures averaged $17.5 million to fund the state agencies plus another $4.9 million in capital expenses. Municipal governments received over $100 million per year during the same period. This does not count municipal bed or property taxes, which are not included in the total. The information is also shown in Figure 4-1.

Figure 4-1. Tourism Revenue and Expenditures
Million Dollars



4.6 Cautions

1. **"Average" conclusions in this report may not be accurate for all segments of the tourism industry.** Like commercial fishing and mining, the tourism industry is not monolithic. It includes different segments. Lodges in Bristol Bay may be in a different economic situation with respect to taxes and state costs than a sport-fishing guide on the Kenai or a hunting guide in the remote Brooks Range. All may be different than the cruise ship companies with respect to taxes and management costs. Some may cost more to manage; some may cost less. Some will undoubtedly pay more in taxes, and some less. Therefore, one should not assume that the overall conclusions in this report apply to all segments of the varied tourism industry.

2. **Tourism industry costs are based on economic assumptions.** As previously indicated, many government actions that benefit the tourism industry also benefit Alaskans. We have outlined the assumptions used in this report and believe they are a useful way to analyze the industry revenue and cost. While different assumptions would result in somewhat different numbers, we believe that any plausible assumptions would not change the overall conclusions of the report. Those conclusions are that the tourism industry provides the state with almost three times more revenue than it expends. Revenue to local governments is large and important and is larger than the revenue to the state. The fiscal effects on local governments are the most important effect of tourism revenue.

3. **Tourism is an unusual industry in that it is integrated with services that many Alaskans use.** Tourism revenues support restaurants, retail stores, and many services that Alaskans use. Many businesses might not exist if it were not for the tourism revenue they receive. Some of these also provide revenue to the state that are difficult to estimate and are not included in this study. For example, tourists purchase alcohol and cigarettes, and pay the state of Alaska alcohol and cigarette taxes. Many may pay the state other taxes as well. These are difficult to estimate and, if included, might increase the revenue totals in this report by a few million. Therefore, the revenue estimates should be considered conservative.

4.7 Differences with the 2015 report.

There have been significant changes in tourism-related state costs and expenditures since the 2015 ISER report. The 2015 report was based on revenue received 2010-2014. Since that time the number of tourists coming to Alaska has grown. This report is based on revenue received 2016-2019. The number of tourists coming to Alaska grew by almost a third between 2014 and 2019. Some tourism revenue sources are proportional to the number of visitors, and some are not. Therefore, one would expect the revenue to increase, but not by a third. In fact, the state tourism revenue in this report is 18% more than that calculated in the 2015 report. (Municipal revenue has gone up by a similar amount – 19%).

In addition to revenue going up, state expenses have gone down. All state agencies have received budget cuts, and these cuts are reflected in lower expenses for all industries – tourism included. However, during the period of the 2015 report, DCCED administered a large grant for tourism marketing. While the grant size varied, it was roughly $15 million. That state marketing effort was cut between the 2015 and the current report, though the state funds much smaller marketing efforts through the capital budget. In addition to that major budget cut, agency expenses have gone down by approximately 12%. If you add the two together, state agency expenditures related to tourism have been cut approximately in half since 2015.

In addition to state agency expenses, Alaska's capital budget has been extremely small since the oil price crash in 2014. This has affected the tourism-related capital expenses, which have been cut by 75%. The 2015 report, which was based capital budgets for 2012-2014, calculated capital appropriations averaging $19.4 million per year. This report calculates only $4.9 million per year.

Chapter 5. Operating Budget

The operating budget funds personnel and operations of Alaska's government agencies. Most agency costs for commercial fishing, mining, and tourism are within Alaska's resource departments: the Department of Environmental Conservation (DEC), Department of Natural Resources (DNR), and the Department of Fish and Game (DF&G). There are also costs within the Department of Commerce, Community and Economic Development (DCCED), the Department of Public Safety (DPS), and the Department of Revenue (DOR)

The 2015 report used operating expenses from the 2014 fiscal year. To catalogue those expenses, we identified the relevant budget components and interviewed individuals from the department who estimated the cost or the percentage of the budget used to manage, promote, or regulate each industry. For this report, we did not re-interview agency personnel. We applied the percentages from the 2015 report to the agency costs in 2016-2019. For example, if 15% of the budget was estimated to serve a particular industry in 2015, we applied 15% of the 2016-2019 budget. Because of the cuts to all agencies since 2014, this always resulted in a smaller allocation than 2015.

Re-using percentages from the 2015 report introduces some error. However, the make-up of the operating budget changes slowly. Between FY 2014, the data for the previous study, and 2019, the DNR, DF&G, and DEC had their combined budgets cut by 11%. However, the make-up of the budget in each department did not change significantly. We compared the budget make-up by division within each of the resource agencies. In 2019 each division made up approximately the same proportion of the agency budget as it did in 2014. For example, the Habitat Division within the Department of Fish and Game made up 4% of the DF&G's state operating funds in 2014 and 4% of the (smaller amount of) state operating funds in 2019. DNR's Office of Project Management and Permitting, which coordinates mine permitting, made up 5% of DNR's budget in 2014 and 4% in 2019. The largest percentage change was the Commercial Fisheries Division which went from 47% of the DF&G in 2014 to 50% in 2019. We expect that the percent of effort within each division in FY 2016-2019 is similar to that of FY 2014.

It is possible that responsibilities changed within a budget component that would result in different percentage of the cost being used for an industry. However, most errors are likely to be perhaps a hundred thousand. Cumulatively the error could be a few million. Therefore, it is possible that the actual operating budget expenditures are a few million higher or lower than the estimates in this report.

Certain funding categories in the budget documents are excluded from the analysis. We exclude federal funds because federal revenue and the corresponding expenditures are not state funds. This report focuses on state revenue and costs. The analysis excludes operating expenditures that agencies make using funds from a capital appropriation. These expenditures are excluded from the operating budget because they are accounted for in our capital budget analysis. Finally, our analysis excludes most expenditures funded by inter-agency transfers (noted in the documents as I/A funds) because they are difficult to track, typically not a large part of an agency's expenses, were usually accounted for in another agency's budget, and because the work involved was often a specific project unrelated to regulation of the three target industries. In a few places the expenditures of I/A funds were included because they were an important cost not accounted for elsewhere.

This report focuses on the state's direct management costs for each agency. For example, we did not allocate to commercial fishing a portion of the DF&G Commissioners' Office on the assumption that DF&G will have a commissioner and staff even if there is a notable change in Commercial Fishing. Similarly, we did not allocate to mining a portion of the Director's staff for the DNR Division of Mining, Land and Water. The Division would have a director even with a notable decrease in mining. For similar reasons, we did not allocate a portion of each agency's administrative staff, computer specialists, etc. The analysis focused only on the direct management costs.

5.1. Department of Environmental Conservation

The legislature does not fund each department as a whole. It breaks each department into what the legislature labels budget components. Table 5-1 shows the cost for each budget component within the Department of Environmental Conservation. The department includes the Commissioner's Office and five divisions, which are funded through a total of 16 budget components. The four columns in the table – labelled FY 2016, FY 2017, FY 2018, FY 2019 – show the state operating funds appropriated by the legislature in each of the four years. As indicated previously, the table excludes federal funds, capital budget funds, and inter-agency transfers.

The three columns on the right side of the table display the percentage of that component's costs allocated to each of the commercial fishing, mining, or tourism industries. The three columns on the left side of the table show the annual cost. It is the sum of the four years of the funding, times the percentage, and then divided by four to make it an annual (not a four-year) cost. Figures are in thousands of dollars.

The table also has notes beneath it that explain any unusual circumstances for a particular number or calculation.

The table shows that from 2016 through 2019, DEC spent just over $2.4 million dollars per year on the commercial fishing industry, $257,000 on mining, and $4.1 million on the tourism industry. Note that some of the personnel time that DEC spent permitting mining industry projects were funded directly by the industry through an agreement with DNR's OPMP. These are not included in Table 6-1 but are included in the table which describes expenditures for DNR.

Table 5-1. Department of Environmental Conservation
FY 2014-2019 Budget Component Funding and Industry Expense
(Figures in thousands of dollars)

Line #	Comm Fishing	Mining	Tourism	Division	Budget Component	State Operating Funds Only (Nominal Thousand $) FY 2016	FY 2017	FY 2018	FY 2019	% of the Budget (from 2015 Study): Cm Fish	Mining	Tourism
				Department of Environmental Conservation								
1				Commission & Admin	Office of the Commissioner (633)	$ 691.7	$ 429.5	$ 434.1	$ 434.5			
2					Administrative Services (635)	$ 3,778.4	$ 3,714.8	$ 3,990.7	$ 3,194.1			
3					State Support Services (2750)	$ 2,119.5	$ 2,119.5	$ 1,934.0	$ 2,666.2			
4				Env Health	DEC Buildings Maint (2783)	$ 636.5	$ 635.2	$ 636.8	$ 645.9			
5					Environmental Health (3202)	$ -	$ -	$ -	$ 8,178.7			
6					Environmental Health Director (646)	$ 448.4	$ 448.1	$ 603.5	$ -			
7	$ 381				Food Safety & Sanitation (2343)	$ 3,391.1	$ 3,113.2	$ 3,017.1	$ -	16%		
8	$ 554				Laboratory Services (2065)	$ 2,636.2	$ 2,526.6	$ 2,467.5	$ 2,434.6	22%		
9					Drinking Water (2066)	$ 2,178.4	$ 2,170.8	$ 2,174.7	$ -			
10					Solid Waste Management (2344)	$ 1,983.6	$ 1,977.9	$ 1,991.0	$ -			
11				Air	Air Quality Director (2060)	$ 289.0	$ -	$ -	$ -			
12					Air Quality (2061)	$ 8,275.2	$ 8,488.8	$ 8,092.2	$ 8,044.7			
13	$ 302	$ 43		SPAR	Spill Prevention & Response (3094)	$ 13,889.4	$ 13,871.9	$ 13,967.4	$ 14,259.1	2%	0.3%	
14				Water	Water Quality, Infra, Support (3204)	$ -	$ -	$ -	$ 12,561.7	9%	2%	
15	$ 1,176	$ 214	$ 1,219		Water Quality (2062)	$ 11,553.7	$ 10,468.6	$ 10,486.5	$ -	11%	2%	15%
16					Facility Construction (637)	$ 2,741.5	$ 2,485.7	$ 2,129.6	$ -			
Total:	$ 2,412	$ 257	$ 1,219		Total:	$ 54,612.6	$ 52,450.6	$ 51,925.1	$ 52,419.5			

DEC Notes:

Lines 5 and 7: In 2019, it appears that most of the Environmental Health components were conslidated into a single Environmental Health Component. The figure in line 7 represents 22% of the component's budget for 2016-2018, and 6%, which is the equivelent amount of the combined component's budget for

Lines 9 and 15. Mining expenses for the drinking water and water quality components are funded by industry via DNR OPMP.

Lines 14 and 15: In 2019, it appears that the Water subcomponents were conslidated in a single component. The figure in line 15 represents percentage in Line 15 of the component's budget for 2016-2018, and percentage in line 14, which is the equivelent amount of the combined component's budget for 2019. Line 15 consolidates the average annual cost for the two components.

Commissioner's Office and Division of Administration

The Commissioner's Office and Division of Administration have no funding directly attributable to any of the three industries. For example, a significant change in any of the industries would not eliminate the Commissioner. The State Support Services component includes only contractual funds for a lease contractor to maintain some DEC buildings.

Division of Environmental Health

The legislature funds the Division of Environmental Health using seven components. Five of them fund no activities directly attributable to the industries.

The Division's food safety and sanitation program conducts food safety inspections for commercial food processors. The Laboratory Services component includes costs for certifying private laboratories and food testing for contaminants. The testing related to the commercial fishing industry is primarily shellfish testing including paralytic shellfish poisoning. The laboratory also tests fish samples for contaminant levels, primarily mercury. These are used for State of Alaska seafood consumption advisories. These advisories are for the public and are not allocated to the commercial fishing industry.

DEC also spends time and money for mining-related solid waste regulation, including regulation of waste rock and tailings facilities. However, some of the mining costs are included in the Division of Water, and others and in DNR's budget, because DNR distributes funds which industry pays DNR to fund some Division of Water work. The percentages used to calculate remaining Division of Environmental Health costs are from the 2015 report.

Division of Air Quality

The Division of Air Quality is funded through two budget components. The first is the division's Director's Office. Like other director or commissioner offices, it has no expenditures directly attributable to the industries. The second component, labeled Air Quality, includes the remainder of the division's budget. However, companies pay for all air quality costs through fees and reimbursements and are therefore not included as a legislative appropriation of state funds nor is the payment included as a revenue.

Division of Spill Prevention and Response

The major division cost related to industries is for emergency response to spills. Information in this report is based on estimates made in 2014 for the previous report. During that year there were 2,028 spills. Of these, 6% were mining-related, 7% were boats (almost all commercial fishing vessels), and 2% were canneries. A significant majority of the mining spills were process water (e.g., tailings) that was spilled inside the mine site. These required little or no cleanup by the company, and none by DEC. In addition, the large operators, including mines and fish processors, clean up any spills on their own (or would be subject to cost recovery by DEC). Thus, taking 6% of the component cost for mining or for 2% for canneries is likely an overestimate of actual costs. Costs for individual fish vessel spills are not necessarily recovered. Consistent with the explanation above, the analysis assumes that most mining-related spills and all cannery-related spills either require no DEC response or are cost-reimbursed by the operator. Thus, for a conservative estimate, the analysis allocates 1% of costs to mining, and 7% (i.e., the individual boat spills, but no percentage for canneries) to commercial fishing. However, these costs were a percentage of the budget in the 2015 report. The legislature has aggregated components since that report, and the equivalent percentages for the larger budget are those in Table 5-1.

Division of Water

The Division's work includes a wide variety of water-quality related activities including wastewater discharge permits, non-point source pollution control, stormwater, some grant programs, etc. The division has a wide range of funding sources in its main budget component.

With respect to Tourism, the division is the primary agency regulating cruise ship effluent, partly in response to a ballot measure passed by Alaskans in 2006. The measure created the Alaska Ocean Ranger program for cruise ships. The program and other cruise ship regulation are funded through the Ocean Ranger Fund and Commercial Vessel Fund. The amount reported in Table 6-1 is average actual expenses from these funds as reported by OMB budget documents for FY 2016-2019. The percentages for work related to commercial fishing and mining are taken from the 2015 report.

In addition to the mining expenses in this table, Division of water personnel complete solid waste permits for mining facilities (waste rock, tailings). They are part of the large mine team that works with DNR's Office of Project Management and Permitting. The mining companies reimbursed DEC's costs via an agreement with DNR's OPMP. These are included in OPMP expenditures as part of the DNR operating budget.

5.2 Department of Natural Resources

DNR is organized into the Commissioner's Office, seven divisions, and several offices. These groups are funded through 24 budget components, eight of which expend funds on at least one of commercial fishing, mining, or tourism. The other 16 budget components are within divisions and offices that expend only incidental time and funds on these industries.

Table 5-2 lists the budget components that fund DNR, and the costs attributed to commercial fishing, mining, and tourism.

Table 5-2. Department of Natural Resources
FY 2016-2019 Budget Component Funding and Industry Expense
(Figures in thousand dollars)

Line #	Comm Fishing	Mining	Tourism	Division	Budget Component	State Operating Funds Only (Nominal Thousand $) 2016	2017	2018	2019	% of the Budget (from 2015 Study): Cm Fish	Mining	Tourism
				Department of Natural Resources								
17				Oil and Gas	North Slope Gas Commercializat'n	$ 10,836.2	$ -	$ -	$ -			
18				DNR Office	Commissioner's Office	$ 1,569.9	$ 1,167.8	$ 1,180.7	$ 1,181.1			
19		$ 1,063		DNR Office	Office of Project Mgmt & Permitting	$ 6,561.1	$ 6,583.2	$ 5,969.5	$ 4,928.8		18%	
20				Admin and Support	Administrative Services	$ 2,420.1	$ 2,338.7	$ 2,345.1	$ 2,396.8			
21					Information Resource Management	$ 3,353.6	$ 3,249.9	$ 3,256.9	$ 3,223.4			
22					Interdepartmental Chargebacks	$ 1,233.9	$ 1,181.1	$ 1,181.1	$ 1,181.1			
23					Facilities	$ 2,802.0	$ 2,717.9	$ 2,717.9	$ 2,592.9			
24				DNR Office	Citizen's Advi Commiss on Fed Areas	$ 272.9	$ -	$ -	$ -			
25		$ 167		DNR Office	Recorder's Office/UCC	$ 4,516.7	$ 4,509.9	$ 3,795.4	$ 3,851.7		4%	
26				DNR Office	EVOS Trustee Council Projects	$ 191.3	$ 192.0	$ 133.0	$ 133.0			
27		$ 106	$ 16	DNR Office	Public Information Center	$ 545.7	$ 543.3	$ 547.3	$ 554.8		19%	3%
28		$ 394		DNR Office	Mental Health Trust Lands	$ 4,321.9	$ 4,418.9	$ 4,213.2	$ 4,539.2		9%	
29				Oil and Gas	Oil & Gas	$ 13,614.4	$ 21,343.3	$ 19,980.0	$ 20,090.8			
30				DNR Office	State Pipeline Coordinator's Office	$ 8,041.4	$ -	$ -	$ -			
31	$ 500	$ 2,249	$ 1,249	DMLW	Mining, Land & Water	$ 24,967.2	$ 24,336.4	$ 25,307.8	$ 25,326.8	2%	9%	5%
32				Forestry	Forest Management & Develop	$ 3,386.2	$ 3,310.6	$ 3,407.4	$ 3,461.7			
33		$ 1,637		DGGS	Geological & Geophysical Surveys	$ 4,813.5	$ 4,747.1	$ 4,286.2	$ 4,338.0		36%	
34				Forestry	Fire Suppression Preparedness	$ 15,950.0	$ 15,912.3	$ 15,985.8	$ 18,015.3			
35					Fire Suppression Activity	$ 55,659.1	$ 7,473.0	$ 7,473.0	$ 6,741.0			
36			$ 1,928	Parks	Parks Management & Access	$ 9,873.5	$ 9,722.1	$ 9,369.2	$ 9,591.7			20%
37		$ 46			Office of History and Archaeology	$ 464.5	$ 449.1	$ 452.5	$ 462.6		10%	
38				Agriculture	Agricultural Development	$ 1,548.5	$ 1,461.5	$ 1,576.3	$ 1,742.8			
39					North Latitude Plant Material Center	$ 1,975.0	$ 1,909.7	$ 1,692.4	$ 1,672.0			
40					Agriculture Revolving Loan Program Admin	$ 2,544.1	$ 2,540.7	$ 495.7	$ 421.7			
Total:	$ 500	$ 5,660	$ 3,193		Total:	$ 181,462.7	$ 120,108.5	$ 115,366.4	$ 116,447.2			

Note: DMLW is the Division of Mining, Land and Water; DGGS is the Division of Geological and Geophysical Surveys

Line 19: The mining cost for OPMP is taken from the Mineral Industry Report 2019. Special Report 75. Alaska Department of Natural Resources. Table 3 Page 9. The percentage is back-calculated fom the actual cost.

Commissioner's Office, Division of Support Services, and most DNR Offices

The Commissioner's Office has no expenditures directly attributable to the three industries. A significant change in those industries would not result in a change in funding to the Commissioner's Office. Similarly, the Division of Support Services provides general information technology services and other support functions for the department in general. Staffing and expenditures would not significantly change with a change in those industries. The Division of Support Services oversees the Recorder's Office and the Public Information Center, which are discussed further in this analysis.

Finally, the following offices and divisions have no management responsibility for these industries and expend few, if any, funds on them.

- Gas Pipeline Project Office.
- State Pipeline Coordinator's Office
- Information Resource Management
- Facilities
- Citizen's Advisory Committee on Federal Areas
- Conservation and Development Board
- EVOS Trustee Council Project
- Division of Forestry.

Office of Project Management and Permitting

The Office of Project Management and Permitting (OPMP) is an unusual organization in that it charges most of its expenditures to individual projects, which are funded by non-government project sponsors, such as a mining or oil company. The Office has no commercial fishing or recreation projects. However, it has two mining coordinators who work on numerous mining projects. OPMP coordinators assemble and facilitate a team from permitting divisions at DNR, DEC, and DF&G for pre-permitting review, permitting activities, and agency inspections. The mining companies voluntarily pay for this function. They pay the cost of all state personnel who work on the project. They execute a payment agreement with DNR. In turn, OPMP develops agreements to reimburse the individual agencies and divisions that work on the project. The company pays DNR, and DNR transmits the payments to each agency according to what that agency bills.

The amount that DNR receives from the mining industry is recorded in DNR's Mineral Industry Reports. It is recorded in Table 5-2 as an expenditure and recorded as a revenue to the state elsewhere in this report.

Recorder's Office

The Recorder's Office is within the Division of Support Services. Its main office is in Anchorage with satellite offices throughout Alaska. It serves as the recording center for deeds and documents for all of Alaska.

A valid mining claim must be recorded within 45 days of staking. In addition, an affidavit of annual labor must be annually recorded for each claim. In FY 14, the Recorder's office receipted 144,007 documents. Of those, 5,810 were mining (4.0%). There were an insignificant number of Recreation/Tourism, or Commercial Fishing Documents. Thus, the mining cost is allocated as 4% of the component's budget.

Public Information Center

The Public Information Center (PIC) is the public door for DNR. It is within the Division of Support Services. The PIC provides a single location for the public to come with questions, use status plats, make payments, reserve a Division of Parks cabin, submit a permit application, submit a land sale application, etc.

PIC staff keeps track of the number and purpose of their public contacts. In FY 14, the PIC helped 15,079 people including walk-in, phone, mail, and e-mail. Mining is 19.3% of the total, mostly mining claim owners who come in to pay their claim rent or pay for a permit. The mining cost is 19.3% of the total PIC budget. Alaska parks were the subject of 26.0% of the PIC's public contacts. However, PIC personnel estimate that only 12% of these parks-related contacts are from out-of-state, and therefore attributable to the tourist industry. The remaining 88% are Alaskans.

The PIC gets only a few questions related to commercial fishing, and no cost is allocated to that industry.

Mental Health Trust Land Office

The Mental Health Trust Land Office is an independent office housed for administrative convenience within DNR. The Trust Land Office does not report to the Commissioner of DNR; rather it reports to the Board of Directors of the Mental Health Trust, outside of DNR. The Trust Land Office manages a portfolio of land to generate income for the Mental Health Trust, which expends this and other income on mental health programs throughout Alaska.

The Office owns significant mining portfolios including the ore deposit at the Fort Knox Gold Mine near Fairbanks. The Executive Director of the Trust Land Office reported that it spent

$363,400 on mining-related issues in FY 14. That was 9% of its budget at the time. The Trust Land Office has no commercial fishing or tourism developments in its land portfolio, and so no expenditures are allocated to from the Office to those industries.

Divisions of Oil and Gas, Forestry, Agriculture

These three divisions spend little time on commercial fishing, mining, or tourism and have only incidental expenditures for these three industries.

Division of Mining, Land and Water

The Division of Mining, Land and Water (DMLW) is the land manager for most state land in Alaska. The Division oversees the coal regulatory program, and the mining claim system, and has regulatory authority over placer and hard rock mines on state, federal, and private land. The Division oversees many permits and leases for tourism-related activities and authorizes commercial shore fishery leases for the commercial set-net salmon fishery, and leases sites for the commercial mariculture (shellfish) industry. Finally, it must authorize all significant use of surface and groundwater in the state, including that for commercial fishing, mining, and tourist facilities.

The division's mining section regulates coal, maintains the state's mining claim system, and regulates placer and hard rock mines. It provides water permits to industry, particularly to the mining industry. DMLW's southcentral regional office runs two commercial fishing related programs: mariculture and the shore fishery lease program. It also provides water rights to leaseholders and commercial processing facilities. Finally, DNR staff in 2014 estimated that it spent roughly 35% of their time and energy on recreation and tourism issues including easements, leases, guide permits, etc. Revenue is minimal. Of that proportion, approximately 60% is spent on tourism-related actions.

The figures in Table 5-2 reflect the budget percentages for these activities estimated for the 2015 report.

Division of Geologic and Geophysical Surveys

The Division of Geologic and Geophysical Surveys (DGGS) has six sections. The minerals section works primarily on mining. The geological materials estimated that 25% of their effort or is mining related. The geological communication section helps scientists with their publications and the public with access to DGGS scientific materials. Staff estimated that 20% of the section's budget, should be allocated to mining. Three other sections — Energy, Volcano, and Engineering Geology — have only incidental impact on the mining industry**.** The cost of these three sections is not allocated to mining.   The percentages in Table 5-2 reflect the 2014 budget percentages from these sections.

Division of Parks and Outdoor Recreation

Parks expenditures are used to maintain state parks and recreation facilities for tourism and for Alaskans. Staff estimated in 2015 that statewide, 80% of state park visitation is by Alaska residents, and 20% is by nonresidents. Thus, 20% of the total budget is allocated to Tourism.

Office of History and Archaeology

In 2015, Staff estimates that it spends 10% of its time on mining-related issues. Therefore, that percentage of its state funds are allocated to mining. OHA staff spends only incidental time on commercial fishing or tourism.

5.3 Department of Fish and Game

DF&G is organized into the Commissioner's Office, five divisions, and three associated offices. These groups are funded through 21 budget components, 12 of which expend funds on at least one of commercial fishing, mining, or tourism. The remaining 9 budget components are within divisions and offices that expend only incidental time and funds on these industries.

Table 5-3 lists the budget components that fund DF&G and the costs attributed to commercial fishing, mining, and tourism.

Expenditures for sport fishing and hunting are made for Alaskans, but also to manage fish and wildlife for tourists. The same activity (the same cost) serves both groups. The extent to which these expenditures are described as tourism expenditures is an important assumption for this analysis.   The Department of Fish and Game annually conducts a survey to determine numbers of residents and nonresident who fish, and the total number of angler-days fished by residents and nonresidents. For purposes of this analysis, nonresidents are considered tourists; residents are not. Data is available for 2016 and 2017 but not for later years. During those two years, , nonresidents fished 46.2% of the angler days. For this analysis, 46.2% of the relevant sports fishing expenditures were allocated as tourism expenditures.

Wildlife expenditures were distributed similarly. Wildlife hunting or watching days are not available by residents and nonresidents, but the Department tracks the number of hunting licenses purchased by residents and nonresidents. Over this study period, 2016-2019, nonresidents purchased 12.1 % of hunting licenses; therefore, 12.1% of the relevant wildlife conservation expenditures are allocated as tourism expenditures.

Table 5-3. Department of Fish and Game
FY 2016-2019 Budget Component Funding and Ind6stry Expense
(Figures in thousand dollars)

Line #	Tourism	Dept.	Budget Component	FY 2016	FY 2017	FY 2018	FY 2019	Cm Fish	Mining	Tourism
				State Operating Funds Only (Nominal Thousand $)				% of the Budget (from 2015 Study):		
15	$ 1,219	DEC	Water Quality (2062)	$ 11,553.7	$ 10,468.6	$ 10,486.5	$ -	11%	2%	15%
27	$ 16	DNR	Public Information Center	$ 545.7	$ 543.3	$ 547.3	$ 554.8		19%	3%
31	$ 1,249	DNR	Mining, Land & Water	$ 24,967.2	$ 24,336.4	$ 25,307.8	$ 25,326.8	2%	9%	5%
36	$ 1,928	DNR	Parks Management & Access	$ 9,873.5	$ 9,722.1	$ 9,369.2	$ 9,591.7			20%
47	$ 9,293	DF&G	Sport Fisheries	$ 21,440.4	$ 21,354.7	$ 22,054.1	$ 22,616.4			43%
48	$ 112	DF&G	Sport Fish Hatcheries	$ 261.8	$ 262.0	$ 262.6	$ 264.9			43%
49	$ 1,564	DF&G	Wildlife Conservation	$ 13,050.3	$ 11,605.6	$ 11,830.9	$ 15,226.6			12%
50	$ 194	DF&G	Wildlife Conservation Special Prjct	$ 2,143.4	$ 2,140.0	$ 2,145.6	$ -			12%
55	$ 140	DF&G	Boards of Fisheries and Game	$ 974.3	$ 1,225.7	$ 1,236.7	$ 1,233.8	41%		12%
56	$ 56	DF&G	Advisory Committees	$ 418.7	$ 484.0	$ 485.7	$ 487.5	41%		12%
62	$ 657	DCCED	Corporations, Business & Profl Lic.	$ 12,052.9	$ 12,778.7	$ 13,527.4	$ 14,224.8			5%
63	$ 1,152	DCCED	Economic Development	$ 2,662.9	$ 1,239.6	$ 1,248.4	$ 1,251.1		2%	72%
65	$ 1,017	DPS	AK Wildlife Troopers	$ 20,512.3	$ 19,859.5	$ 20,510.7	$ 20,446.5	18%		5%
66	$ 137	DPS	Aircraft Section	$ 3,364.9	$ 3,356.3	$ 3,367.0	$ 3,567.3	13%		4%
68	$ 1,161	DOR	Tax Division	$ 15,284.9	$ 14,278.1	$ 14,141.5	$ 14,357.5	10%	9%	4%
	$ 19,897									

Division of Commercial Fisheries

The Division of Commercial Fisheries manages commercial fisheries and also manages subsistence and personal use fisheries. The budget was allocated to commercial fishing expenditures with some exceptions. In 2015, The division director made a rough estimate that 15% of division staff time and expenditures are spent on personal use and subsistence fisheries; therefore, 15% of the division's costs are excluded; 85% are included.

Several line items in the budget are program receipt authorizations. Program receipt authorities authorize the Division to spend funds from a specific source, but it can spend them only if they can be collected. In some cases, divisions do not collect as much as expected and therefore an estimate based on the authorization will over-estimate expenditure. (Sometimes a division may collect more than expected). While this potential error occurs in many divisions in state government, it is pronounced for the Division of Commercial Fisheries' test fisheries. For each of four component budget regions, the division is authorized to collect and spend a certain amount from the test fisheries in the region. The division only spent the funds that the test fisheries earned, which was less than the legislature authorized. Correcting for this fact, the overall percentage allocated to commercial fisheries is 82% of the appropriated amount for the four regional components, and 85% for the statewide component, which does not run test fisheries.

The Division does not spend appreciable funds with respect to the mining or tourism industries.

Division of Sport Fisheries

The Division of Sport Fisheries expends funds in support of the tourism industry in that, as explained previously, nonresidents (i.e., tourists) fish 46.2% of sport fishing angler days. Thus, 46.2% of division expenditures are allocated to sport fishing. No funds from the division are allocated toward mining or commercial fishing expenditures. Information from 2015 indicates that 8% of division funds are authorized-but-uncollected program receipts. Therefore, the 42.5% of the division's authorized budget is allocated to tourism. Finally receipts from the *Exxon Valdez Oil Spill* are not considered state funds for this analysis.

Division of Wildlife Conservation

Similar to the Division of Sport Fisheries, expenditures are considered tourism in this analysis in proportion to the nonresident hunters, which over the last 5 years have been 12.1% of the total hunters, measured by hunting license purchases.

The Division is funded through three components. The last component is titled Hunter Education Public Shooting Ranges. This component provides service to Alaskans and only a few nonresidents. It is excluded from tourism costs.

Division of Habitat

In 2015, The Acting Director of the Division of Habitat estimated that the Division spends only incidental time on commercial fishing or tourism, but it spent approximately $150,000 on regulating placer and hard-rock exploration. This was 3.2% of the FY 2014 budget. In addition, the Division spends much more time on mining for activities reimbursed by industry through DNR's OPMP. That expenditure is included for mining in OPMP's budget.

Board Support Section

The Boards Support Section provides staff support and funding for the Board of Fish and Board of Game. Funds for this section, though not a large amount, were allocated in a complex fashion, based on information collected in 2015. That information indicated that 41% of the Board Support budget is allocated to commercial fishing, and 12% to tourism, and none to mining.

Commercial Fisheries Entry Commission

The Commercial Fisheries Entry Commission provides services to the commercial fishing industry. The commission's website shows the following services:

- Limit entry into commercial fisheries.
- Issue and transfer annual commercial fishing permits and vessel licenses.
- Adjudicate appeals of actions including denials of applications and transfers.
- Study, analyze, and report on the economics and stability of commercial fisheries.
- Ensure reliable and timely access to fishery data.

All the commission's expenses are allocated to commercial fishing.

Commissioner's Office; Division of Administrative Services; Division of Subsistence; and *Exxon Valdez* Oil Spill Trustee Council.

Consistent with the treatment of other Departments, none of the Commissioner's Office or Division of Administrative Services is allocated to any of the three industries. While habitat restoration and protection funded by the *Exxon Valdez* Oil Spill Trustee Council benefits fish and wildlife, and therefore commercial fishing and tourism, the EVOS Trustee Council spends non-General Fund money collected after the 1989 oil spill. Its expenditures are not part of this analysis. Divisions of Subsistence activities only incidentally support the three target industries. No funds are allocated from these components of the DF&G.

5.4 Department of Commerce, Community, & Economic Development

The Department of Commerce, Community, & Economic Development (DCCED) includes a wide variety of functions housed in seven divisions and seven independent corporations and boards. These are funded through 25 budget components. Most, like the Alcohol Control Board, have little to do with commercial fishing, mining, or tourism.

Three budget components fund two divisions and one institute to provide services to commercial fishing, mining, or tourism: The Division of Economic Development; Division of Corporations, Business, and Professional Licensing, and the Alaska Seafood Marketing Institute. These three components are shown in Table 5-4.

Table 5-4. Department of Commerce, Community and Economic Development
FY 2016-2019 Budge Component Funding and Industry Expense
(Figures in thousand dollars)

Line #	Comm Fishing	Mining	Tourism	Division	Budget Component	State Operating Funds Only (Nominal Thousand $) 2016	2017	2018	2019	% of the Budget Cm Fish	Mining	Tourism
				Department of Commerce, Community, and Economic Development								
62			$ 657	DCBPL	Corporations, Business & Profl Lic.	$ 12,052.9	$ 12,778.7	$ 13,527.4	$ 14,224.8			5%
63		$ 32	$ 1,152	Econ Dvpt	Economic Development	$ 2,662.9	$ 1,239.6	$ 1,248.4	$ 1,251.1		2%	72%
64	$ 12,341			ASMI	Alaska Seafood Marketing Institute	$ 14,964.0	$ 11,347.3	$ 11,841.4	$ 11,211.4	100%		
Total:	$ 12,341	$ 32	$ 1,810									

DCCED Notes

DCBPL is the Division of Corporations, Business and Professional Licensing. ASMI is the Alaska Seafood Marketting Institute.

Line 64. State funds for the Alaska Seafood Marketing Institute are from ASMI Annual reports, rather than from OMB.

Division of Corporations, Business and Professional Licensing

The division runs a variety of professional licensing programs. The Big Game Commercial Services Board accounted for approximately 5% of the Division budget in the FY 2015 report. As a significant majority of big game guides' clients are nonresidents, this amount is allocated to tourism.

Division of Economic Development

The Division of Economic Development supports the growth and diversification of Alaska's economy through business assistance, financing, promotion, and public policy. The Division is funded by two components: economic development and investments. The Division funds a mining specialist and a larger program focused on tourism. The percentages in the table are based on information gathered in 2015.

The investment budget component funds the division to administer loan funds for industry. Four funds are relevant to the commercial fishing industry. For each of these loan funds, the division lends money, which is repaid into the fund. There is also loan interest earned by the fund, some of which goes to fund the division's costs in overseeing the funds, some is returned to the fund, and some remains in the General Fund to be used for any purpose by the legislature. Because the division's cost to manage the fund is paid for by the fund, not by the General Fund, we did not treat it as a cost allocable to the commercial fishing industry. That is, we excluded both the cost — the division's management cost — and the revenue, that part of the fund earnings which goes to fund the division's management cost. We included the fund interest that remains in the General Fund as commercial fishing revenue.

Alaska Seafood Marketing Institute

ASMI's expenditures are intended to benefit Alaska's seafood industry.   The Institute may roll unused funds forward from year to year. In addition, the program receipts authorization does not always reflect amount collected.   For that reason, the information on the amount collected comes from ASMI annual reports rather than OMB budget information. The table reflects only the funds that the annual reports indicate were actually collected from state sources.

Other DCCED Divisions and Organizations

None of the remaining DCCED budget components directly funded programs that more than incidentally benefited commercial fishing, mining, or tourism.

5.5 Department of Public Safety

Within the Department of Public Safety, the Division of Wildlife Troopers is focused on protecting natural resources. Four of the six components of the Division's mission statement are directed at enforcing fishing and hunting regulations including those of the commercial fishing industry, sport fishing, and guiding. Specifically, the mission's components (from the website) include:

- Statewide Patrol of Commercial Big Game Services: Identification of Illegal Guiding and Transporter Activities
- Statewide Commercial Fisheries: Reduction of Unlawful Harvest and Sales of Wild-Stocks
- Statewide Sport Fish and Sport Fish Guiding: Reduction of Illegal Harvest and Sale of Sport Fish
- Statewide Game and Trapping: Prevention of Waste and Illegal Harvest
- Boating Safety: Reduction of Boating Related Deaths and Injuries
- Safeguarding Habitat: Reduction of Watershed Damage and Non-Compliance of Environmental Permits

The Division is funded through three budget components: Alaska Wildlife Troopers, Aircraft Section, and Marine Enforcement.

In 2015, Staff estimated that approximately 18% of the Alaska Wildlife Trooper budget component is spent on commercial fishing and 5% on commercial hunting (allocated as tourism as part of this analysis). Staff also estimates that between 15% and 20% of the Aircraft Section is spent on these uses. Using 17% as a mid-point and using the same ratio as the Trooper budget component between commercial fishing and tourism provides that 13% of the Aircraft section is spent on commercial fishing and 4% on tourism.

Staff also estimates that 85% of general funds in the marine section are spent on commercial fishing. The large boats do little work outside of commercial fishing enforcement.

Table 5-5. Department Public Safety, Division of Wildlife Troopers
FY 2016-2019 Budge Component Funding and Industry Expense
(Figures in thousand dollars)

	Comm Fishing	Mining	Tourism	Division	Budget Component	State Operating Funds Only (Nominal Thousand $) 2016	2017	2018	2019	% of the Budget Cm Fish	Mining	Tourism
				Department of Public Safety								
65	$ 3,660		$ 1,017	Alaska	AK Wildlife Troopers	$ 20,512.3	$ 19,859.5	$ 20,510.7	$ 20,446.5	18%		5%
66	$ 444		$ 137	Wildlife	Aircraft Section	$ 3,364.9	$ 3,356.3	$ 3,367.0	$ 3,567.3	13%		4%
67	$ 1,825			Troopers	Marine Enforcement	$ 2,342.7	$ 2,031.8	$ 2,038.3	$ 2,173.1	85%		
Total:	$ 5,928	$ -	$ 1,153		Total:	$ 26,219.9	$ 25,247.6	$ 25,916.0	$ 26,186.9			

5.6. Department of Revenue

Table 6-6 shows the funds the Department of Revenue expends to collect taxes from each industry. The percentages and amounts were estimated by DOR for this update.

Table 5-6. Department of Revenue
FY 2016-2019 Budge Component Funding and Industry Expense
(Figures in thousand dollars)

	Comm Fishing	Mining	Tourism	Division	Budget Component	State Operating Funds Only (Nominal Thousand $) 2016	2017	2018	2019	(from DOR) Cm Fish	Mining	Tourism
				Department of Revenue: Tax Division								
68	$ 1,016	$ 435	$ 1,161	Tax Divisio	Tax Division	$ 15,284.9	$ 14,278.1	$ 14,141.5	$ 14,357.5	7%	3%	8%
Total:	$ 1,016	$ 435	$ 1,161		Total:	$ 15,284.9	$ 14,278.1	$ 14,141.5	$ 14,357.5			

Chapter 6. Capital Budget

Funding to promote or regulate Alaska's resource industries involves salaries for state employees, travel, and similar expenses. Most of these expenses are in the operating budget for the state agencies. But Alaska also makes large expenditures for one-time projects. These project expenditures are capital improvement projects (CIPs) and are appropriated in the legislature's capital budget.

In four years reviewed for this study, 2016-2019, we reviewed CIPs passed by the legislature in the capital budget and allocated the appropriate costs to each of the three industries. During those four years, the legislature had a relatively small capital budget, and the four years included approximately 690 CIPs. Most of these projects had little to do with Commercial Fishing, Mining, or Tourism. To focus on those most likely to affect the industries, we created a list of capital projects appropriated to the DF&G, DNR, DEC, and DCCED: 236 projects.

A quick review of 30 Capital Improvement Projects (CIPs) appropriated to DEC showed that none of them were relevant to the industries, and DEC projects were excluded from the list for analysis. For the remaining 206 projects, we reviewed the title and, if necessary, the project description to allocate the cost, if any, to commercial fishing, mining, or tourism.

6.1 Key Assumptions for Allocating Capital Budget Appropriations

After reviewing the capital projects identified as potentially applicable to one of the industries, we assigned the cost of each project to an industry according to the assumptions below.

General

- This analysis focuses on costs to the State of Alaska. Therefore, it excludes federal funds. If a CIP appropriation included state and federal funds, only the state funds are part of the calculation. If a CIP appropriation included only federal funds, the project was ignored.

- If it was evident that the CIP was targeted fully toward one of the three industries, the full cost of the project was assigned to that industry. For example, the appropriation for the 2017 CIP "USGS State Map Grant to Spur Mineral Investment Exploration" was assigned 100% to the mining industry.

- If it was evident that the CIP did not significantly benefit any of the industries, no cost was allocated. Most of the CIPs fell into this category, for example a FY 2016 CIP for a "Hoonah Biomass District Heating Loop."

- Of the 236 projects for FY 2016-2019, 208 of them did not benefit any of the three industries and no cost was assigned; 28 benefited one or more of the industries. Of these, 3 benefited commercial fishing; 23 benefited tourism; and 3 benefited mining. The numbers add to 29 because one CIP affected both commercial fishing and tourism. In addition, projects that benefited an industry may have benefited more than that industry. In that case, we allocated only the percentage of the benefits that industry would receive for the project, according to the assumptions explained below.

Tourism

- **State Parks.** Some CIPs fund improvements to a State Park. In 2015, staff from the DNR Division of Parks and Outdoor Recreation estimate that 80% of Parks visitation is from Alaska, 20% from nonresidents. Therefore, 20% of the cost of these CIPs is allocated to tourism.

- **Local Parks & Fairgrounds.** CIPs for improvements to local parks, e.g., City of Wainwright Park Fencing, are assumed to primarily benefit Alaska residents and not allocated to tourism or to the other industries. Improvements to state and borough fairgrounds are also assumed to be for primarily local use and not allocated to tourism or other industries.

- **Sport Fishing.** The ADF&G Sport Fishing Division records estimates the number of anglers and angle-days fished by residents and nonresidents. The most recent report estimated that non-resident visitors fished 46.2% of the total fishing days in 2016 and 2017 (the most recent data available). Thus, 46.2% of the cost of sport fishing-related CIPs was allocated to tourism.[11]

- **Wildlife-related CIPS.** ADF&G Division of Wildlife Conservation provides a record of the number of individuals who purchase different types of hunting licenses each year. Over the four years from 2016-2019, 12.1% of hunting licenses were purchased by non-residents. Therefore, 12.1% of the cost of wildlife-related CIPs is allocated to tourism.[12]

- **Habitat Restoration.** Habitat restoration is, in general, not allocated to any industry. The restoration of stream-side habitat should be allocated to whatever process damaged it. In general, the cause of the damage is not evident from the CIP and the cost of that CIP is not allocated to any of the three industries.

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[11] Estimates of Participation, Catch, and Harvest in Alaska Sport Fisheries During 2017. Romberg, W., Sundet, K., Martz, M., and Raffety I. Fisheries Data Series No. 21-03. Alaska Department of Fish and Game, Division of Sport and Commercial Fisheries. Table 2, P. 38.

[12] http://www.adfg.alaska.gov/index.cfm?adfg=license.statistics

Commercial Fishing

- **Management Improvement/Boat Refurbishment.** There was one CIP to improve management of the fishery, a 2017 CIP titled, "Wild/Hatchery Salmon Management Tools." From the project description, this appeared to benefit mostly the commercial fishing industry, and its cost – funded by the commercial fishing groups – was allocated to the commercial fishing industry. A CIP to refurbish a research boat based out of Kodiak appeared to be mostly used for commercial fishing related research and was allocated to commercial fishing industry.

- **Vessel and Aircraft Repair and Upgrades.** The description for this CIP stated that the vessels and aircraft would be used for fishing and wildlife. We allocated this evenly between commercial fishing, sport fishing, and wildlife.

Mining. There are only three mining-related CIPS. Two were related solely to mineral development (costs allocated 100% to mining). The purpose of the third CIP was split between oil and gas, and mining and the cost was therefore allocated 50% to mining.

6.2 Caution

Assumptions. Conclusions about CIP costs especially those attributable to commercial fishing and tourism are dependent on the assumptions explained above. Other assumptions are possible. Therefore, the conclusions about CIP costs attributable to each industry should be taken as an approximation rather than a precise calculation.

For reasons explained in Chapter 4, we have excluded revenues and costs which primarily benefit the Alaska Railroad. There are two CIPs what are arguably tourism-related but are primarily for the railroad. We have included these in the table at the end of this section to illustrate the effect of this assumption, but for the reasons explained earlier, did not include these as tourism-related appropriations.

***Other CIPs**.* The project analyzed the 236 capital appropriations from FY 16 through FY 19 that were most likely to be related to commercial fishing, mining, or tourism. It is possible that somewhere in the approximately 460 CIPs that this analysis did not review, there are other appropriations that should be allocated to one or more of the industries. Therefore, the conclusions concerning CIP costs could underestimate the true amount of capital funds spent on these industries.

6.3 List of Capital Projects

The table on the next pages shows the 31 capital projects for which funds were allocated to one of the three industries. It shows the proportion of the capital project allocated to each of the industries. The list shows only the state fund portion of the capital project. The amount shows the actual appropriation; no adjustment has been made for inflation. In some cases, the name of the capital project has been adjusted to fit the space available.

The column labelled "percentage" shows the proportion of the project allocated to an industry, consistent with the assumptions explained previously. The columns labeled Comm Fish, Mining, and Tourism record the dollar amount allocated to each industry from the CIP. Note that the total at the bottom of the table shows the cost over the four years of projects. It is not an annual cost.

Table 6-1. Capital Improvement Projects Related to Commercial Fishing, Mining, or Tourism FY 2016-2019.

Fiscal Year	Comm Fish	Mining	Tourism	Percentage		Project Title	Explanation	Non-federal Appropriation
2016			$ 0.35	46.2%	Tourism	Sport Fish Recreational Boating and Angler Access	% non-resident angler days	$ 750,000
2016			$ 0.12	12.1%	Tourism	Wildlife Management, Research and Hunting Access	% non-resident hunting Licenses	$ 1,000,000
2017			$ 0.35	46.2%	Tourism	Sport Fish Recreational Boating and Angler Access	% non-resident angler days	$ 750,000
2017	$ 5.95			100.0%	Comm Fish	Wild/Hatchery Salmon Management Tools	Per Project Description	$ 5,950,000
2017			$ 0.36	12.1%	Tourism	Wildlife Management, Research and Hunting Access	% non-resident hunting Licenses	$ 3,000,000
2018	$ 1.00			100.0%	Comm Fish	R/V Resolution Refurbishment and Repair	Per Project Description	$ 1,000,000
2018			$ 0.35	46.2%	Tourism	Sport Fish Recreational Boating and Angler Access	% non-resident angler days	$ 750,000
2019			$ 0.69	46.2%	Tourism	Sport Fish Hatchery Facility Upgrades and Improvements - Crystal Lake	% non-resident angler days	$ 1,500,000
2019			$ 0.35	46.2%	Tourism	Sport Fish Recreational Boating and Angler Access	% non-resident angler days	$ 750,000
2019	$ 0.10		$ 0.06	See note	Tour/Comm F	Vessels and Aircraft Maintenance, Repair and Upgrades	see text	$ 300,000
2019			$ 0.85	12.1%	Tourism	Wildlife Management, Research and Hunting Access	% non-resident hunting Licenses	$ 7,000,000
2016			$ 0.04	20.0%	Tourism	National Recreational Trails Federal Grant Program	20% State Parks use by visitors	$ 200,000
2017			$ 0.04	20.0%	Tourism	National Recreational Trails Federal Grant Program	20% State Parks use by visitors	$ 200,000
2017		$ 0.30		100.0%	Mining	USGS Statemap Grant to Spur Mineral Investment and Exploration	From CIP Title	$ 300,000
2017			$ 0.05	20.0%	Tourism	Snowmobile Trail Development Program and Grants	20% State Parks use by visitors	$ 250,000
2018		$ 0.15		50.0%	Mining	Geologic Mapping for Natural Resource Development	From CIP Description	$ 300,000
2019			$ 0.04	20.0%	Tourism	National Recreational Trails Federal Grant Program	20% State Parks use by visitors	$ 200,000
2019			$ 0.06	20.0%	Tourism	State Parks Electronic Fee Stations	20% State Parks use by visitors	$ 310,000
2019			$ 0.06	20.0%	Tourism	State Parks Public Use Cabins	20% State Parks use by visitors	$ 300,000
2019		$ 0.15		50.0%	Mining	USGS Statemap Grant to Spur Mineral Investment and Exploration	From CIP Description	$ 300,000
2016			$ 1.36	100.0%	Tourism	Alaska Travel Industry Association -Visitor Statistics Research	From CIP Title	$ 1,364,802
2018				0.0%		Alaska Railroad Corporation -- Seward Cruise Ship Terminal Planning	See Text; ARR Costs excluded	$ 300,000
2018				0.0%		Alaska Railroad Corporation -- Seward Dock Safety Enhancements	See Text; ARR Costs excluded	$ 1,200,000
2018			$ 3.00	100.0%	Tourism	Alaska Travel Industry Assoc Grant for Tourism Marketing & Devpment	From CIP Title	$ 3,000,000
2018			$ 2.00	100.0%	Tourism	Hoonah Cruise Ship Dock Company -- Inner Point Sophia Phase 1	From CIP Title	$ 2,000,000
2018			$ 0.50	100.0%	Tourism	Hoonah Cruise Ship Dock Company -- Outer Point Sophia Dock Safety	From CIP Title	$ 500,000
2018			$ 2.00	100.0%	Tourism	Ketchikan - Port of Ketchikan Cruise Ship Berths	From CIP Title	$ 2,000,000
2019			$ 3.00	100.0%	Tourism	Alaska Travel Industry Assoc Grant for Tourism Marketing & Devpment	From CIP Title	$ 3,000,000
2019			$ 1.11	100.0%	Tourism	Hoonah Cruise Ship Dock Company - Cruise Ship Tender Dock	From CIP Title	$ 1,105,000
2019			$ 3.00	100.0%	Tourism	Ketchikan- Cruise Ship Berths Expansion	From CIP Title	$ 3,000,000
Total:	$ 7.05	$ 0.60	$ 19.73					

Note: From the project description in this CIP, the cost is allocated evenly for the purposes of commercial fishing, sport fishing, and wildlife. Therefore, 1/3 of the cost is for commercial fishing. The portion allocated to sport fishing is multiplied by 0.462 for reasons explained in Section 7.1 and allocated to tourism. In addition, the portion allocated to wildlife is multiplied by 0.121 for reasons explained earlier

Chapter 7. Revenue Detail

This chapter describes each revenue source used in this report. If we have adjusted the reported revenue, the chapter describes how and why it is adjusted.

7.1 Commercial Fishing Revenue

Table 7-1 shows commercial fishing revenue to the state and to municipalities.

Table 7-1 Commercial Fishing Revenue, Fiscal Years 2016-2019

(Figures in million $)

Revenue to the State		Fiscal Year			
Revenue Category	**Average**	**2016**	**2017**	**2018**	**2019**
Fisheries Business Tax, state share	$20.1	$ 22.3	$ 15.5	$21.2	$21.3
Salmon Enhancement Tax (aquaculture)	7.0	6.8	5.4	9.1	6.6
Fishery Resource Landing Tax, state share	3.8	0.3	4.9	3.5	6.5
Seafood Marketing Assessment	9.8	9.7	9.6	9.9	10.0
Common Property Fishery Assessment	0.01	0.04	0.01	-	-
Test Fishery Receipts	2.4	2.8	2.9	1.9	2.2
CFEC revenues from permit fees & vessel licenses	7.7	8.2	7.5	7.4	7.5
Commercial Fishing Crewmember Licenses, total	3.3	3.4	3.3	3.2	3.2
Corporate Income Tax, fisheries sector	2.3	3.2	0.7	2.6	2.8
Seafood Processor and Similar Fees	0.6	See Text			
Seafood Development Tax	2.4	1.4	2.0	2.7	3.6
Motor Fuel Tax, marine fuel	2.8	3.0	2.7	2.9	2.8
Dive Fishery Management	0.6	0.5	0.6	0.5	0.8
Loan Fund Transfer to General Fund	1.3	See Text			
DNR Shore Fishery Lease Payments & Mariculture Fee	0.4	0.4	0.4	0.4	0.5
Total Revenue to the State:	**$ 64.4**	**$ 61.9**	**$ 55.3**	**$ 65.4**	**$ 67.7**

Municipal Revenue					**Fiscal Year**
Revenue Category	**Average**	**2016**	**2017**	**2018**	**2019**
Fisheries Business Tax, municipal share	$ 22.4	$ 17.6	$22.9	$25.0	$24.1
Fishery Resource Landing Tax, municipal share	6.7	9.4	5.1	6.3	6.0
Municipally imposed fisheries taxes	19.9	18.8	19.5	23.1	18.1
Payment to Municipalities	**$ 49.0**	**$ 45.9**	**$47.5**	**$54.4**	**$48.2**

The remainder of this section describes each revenue source. It expands on the information presented in Chapter 2.

<u>"True" Taxes</u>. Funds from the six taxes below are deposited in the General Fund and used for whatever purpose the legislature decides.

- ***Fisheries Business Tax.*** The Fisheries Business Tax "(also known as the "raw fish tax") [is levied] on fisheries businesses and persons who process fisheries resources in, or export unprocessed fisheries resources from Alaska. The tax is based on the price paid to commercial fishermen for the raw resource, or fair market value when there is no arms-length transaction prior to processing or export." It is one of the oldest taxes in the state, established in 1913. The current rates are 3% for a shore-based processor and 5% for a floating processor. "Developing fisheries" as classified by the Alaska Department of Fish and Game pay lower rates (1% and 3%). This tax revenue is shared: "The Division shares 50% of tax collected with the incorporated city or organized borough in which the processing took place. If an incorporated city is within an organized borough, the Division divides the 50% shareable amount equally between the incorporated city and the organized borough equally." For landings outside a municipality or organized borough, the 50% municipal share is distributed through an allocation program administered by DCCED. In this analysis, the state share of the tax is included as state revenue, and the municipal share of the tax is included as municipal revenue. Information for this revenue source is taken from the DOR 2019 Annual Report. http://www.tax.alaska.gov/programs/sourcebook/index.aspx

- ***Fishery Resource Landing Tax.*** This tax is levied "on fishery resources processed outside of and first landed in Alaska, based on the unprocessed value of the resource. …The Division collects the fishery resource landing tax primarily from factory trawlers and floating processors that process fishery resources outside of the state's 3-mile limit and bring their products into Alaska for transshipment." The rate is 3% with a lower 1% rate for "developing" fisheries designated by DF&G. 50% of the tax is remitted to local municipalities, boroughs, and unorganized communities in the same manner as the Fisheries Business Tax. As with the fisheries business tax, the state share is considered state revenue and the municipal share is considered municipal revenue. Data for this revenue source are taken from the DOR 2019 Annual Report. (Link provided above)

- ***Corporate Income Tax***. Alaska DOR estimates receipts from the fisheries sector and includes in its estimates receipts from seafood processors. Data for this revenue source is available from DOR. This report used DOR's 2020 information for fiscal years 2019 and 2018, and the 2019 information for the previous two years. http://tax.alaska.gov/programs/programs/reports/index.aspx?60380

- ***Marine Motor Fuel Tax.*** *"*Alaska levies a motor fuel tax on motor fuel sold, transferred, or used within Alaska. The tax is collected primarily from wholesalers and distributors. The tax on marine fuel is 5 cents per gallon. We estimate that 50% of this tax revenue is from fishing industry activity. The 50% amount is shown in Table 8-1. Information is from DOR's 2019 Annual Report (link provided above).

- ***CFEC Revenue from Permit Fees and Vessel Licenses.*** The Commercial Fisheries Entry Commission (CFEC) collects fees for commercial fishing permits and vessel licenses. Permit fees are described in the recent CFEC *Program Review*[13]: "CFEC revenue is generated by fees it collects from commercial fishing permits and vessel licenses…. The formulas for calculating fees for limited entry permits and interim use permits are established in regulation. In brief, the fee for "… an entry permit or an interim use permit in a limited fishery is four tenths of one percent of the estimated value of the entry permit, rounded…" to the nearest of 40 fee classes, ranging from $75 to $3000, in $75 increments. The fee for "… an interim use permit in an unlimited fishery is four-tenths of one percent of the estimated average gross earnings per permit in the most recent three years for which data are available rounded…" to the nearest of the 40 fee classes. Nonresidents pay a surcharge calculated based on a formula established by Carlson v State, 919 P.2d 1337,1342-45 (Alaska 1996). Reduced fee exceptions are made for low-income resident and nonresident permittees. Reduced permit fees are also granted to fishers of halibut and sablefish based on low quota shares specified in regulation. Permit fees are reset annually based on calculations by the Research Section of CFEC.

  During 2016-2019 CFEC receipts have exceeded CFEC operating budget needs and have been appropriated for other fish-related operating and capital expenditures. "Depending on the fiscal year, the excess revenue collected in the current fiscal year or carried forward from the prior fiscal year has been appropriated in the budget bills to cover a portion of the operating expenditures of the Division of Commercial Fisheries and/or miscellaneous capital projects within ADF&G's capital budget or as grants to named recipients through the Department of Commerce, Community and Economic Development.

  The average CFEC revenue between FY 2016 and FY 2016 has been $7.7 million dollars. The average appropriation during that time was $3.6 million. The difference, $3.1 million, is a true tax in that it is funds that may be used by the legislature for any purpose. The amount appropriated back for CFEC operations is considered revenue used for agency management. Information for this revenue source was provided by CFEC staff.

- ***General Fund Retained Loan Fund Earnings.*** In 2014, DCCED Division of Economic Development administered 11 revolving loan funds). Four of these involve the commercial fishing industry (description taken from the Division website):

[13] Alaska ADF&G. 2015. CFEC Program Review ("Lawson Report"), p. 19. http://www.adfg.alaska.gov/static-f/home/pdfs/cfec_program_review_final_report.pdf

- Commercial Fishing: To provide long-term, low interest loans to promote the development of predominantly resident fisheries, and continued maintenance of commercial fishing vessels and gear for the purpose of improving the quality of Alaska seafood products.

- Fisheries Enhancement: provides loans for planning, permitting, construction, and operation of fish hatchery facilities.

- Mariculture: provides loans for the planning, construction, and operation of a mariculture business.

- Community Quota Entity: provides long-term, low interest loans to Community Quota Entities for the purchase of halibut and sable fish quota shares through the National Marine Fisheries Service program, and then lease the quota back to local resident fishermen.

The agency's cost for administering the loan funds is taken directly from earnings on the loan fund (as authorized by the legislature). Earnings more than that authorized for agency use remain in the General Fund for use by the legislature. Retained earnings on the fund have dropped from $2.4 million in 2010 to $0.58 million in 2014. The average amount of loan fund earnings retained in the General Fund during that time was $1.3 million.[14] This analysis assumed that the size of the individual loan funds was roughly proportional to the Division's management expenses, which are broken out for each loan program. Therefore, we allocated the retained earnings to commercial fishing revenue in proportion to the Division's management costs that were for commercial fishing loans: approximately 95% of the retained earnings

For this report, we were unable to obtain updated information. We applied the information in the 2015 report. While this introduces an error, it is likely small because most of the loans are relatively long-term, and because this is not a large revenue source.

<u>"Pass-through" Taxes</u>. The next five taxes are "pass-through" taxes in that they are assessed on the commercial fishing industry to pay for marketing or enhancement. All but the first one are elective taxes that are established (and may be rescinded) by a vote of permit holders in a region or fishery. While they are deposited in the General Fund (to avoid a constitutional prohibition on dedicated funds), the legislature has historically appropriated them for their designated purpose.

[14] Information is from the 2015 report. It was provided by DCCED personnel in 2015; figures taken from DCCED 2014 Mission and Measures Report to the legislature; Division of Economic Development Component.

- ***Seafood Marketing Assessment.*** The assessment is generated from a levy of 0.5% on the value of "of seafood products exported from, processed, or first landed in Alaska." This revenue is deposited in the General Fund and has traditionally been appropriated to fund in part the Alaska Seafood Marketing Institute (ASMI). Information for this revenue source was obtained from DOR's 2019 Annual Report (link provided above).

- ***Salmon Enhancement Tax.*** This revenue comes from an elective tax levied on salmon sold in or exported from established aquaculture regions in Alaska. Fishermen pay salmon enhancement taxes to licensed buyers at the time of sale, or to the Division for salmon sold to unlicensed buyers or exported from the region. Buyers remit taxes collected from fishermen to the Division." The rates vary — either 2% or 3% — by aquaculture region and the proceeds go to the General Fund. "Under AS 43.76.025(c), the legislature may appropriate salmon enhancement tax revenue to provide financing for qualified regional aquaculture associations." Information for this revenue source was obtained from DOR's 2019 Annual Report (link provided above).

- ***Seafood Development Tax***. This tax "is an elective tax levied on certain fishery resources using specific gear types sold in or exported from designated seafood development regions." The rate is 1% of the ex-vessel value. Three fisheries have elected this tax: Prince William Sound drift gillnet, Prince William Sound set gillnet, and Bristol Bay drift gillnet. All monies are deposited in the General Fund, and "the legislature may appropriate seafood development tax revenue to provide financing for qualified regional seafood development associations." The tax was first established in 2005. Information for this revenue source was obtained from DOR's 2019 Annual Report (link provided above).

- ***Common Property Fishery Assessment.*** The assessment "is a cost recovery fisheries assessment…[it] allows hatcheries to establish a common property fishery and recoup costs through an assessment on fishery resources taken in the terminal harvest area [typically adjacent to the hatchery]." The law authorizing the assessment took effect in 2006 but was first used in 2012. It is a relatively small amount. In FY 2016, the assessment totaled $36,062. In FY 2017, it totaled $13,262. There was no assessment in the next two fiscal years. Information for this revenue source was obtained from DOR's 2019 Annual Report (link provided above).

- ***Dive Fishery Management Assessment.*** The tax "is an elective assessment on the value of fisheries resources taken using dive gear. The assessment only applies to designated management areas and species and is assessed at a rate elected by a vote of the permit holders." To date, it has been only used in southeast Alaska. The assessment was first established in 1997. Information for this revenue source was obtained from DOR's 2019 Annual Report (link provided above).

Agency Fees and Payments. The three revenue sources below are collected by agencies, rather than DOR. (Also, a portion of CFEC revenue is appropriated as an agency fee – see discussion of CFEC revenue under "true taxes.")

- ***Commercial Fishing Crewmember Licenses.*** Commercial fishermen require licenses issued by DF&G. There is a fee for the licenses, which is higher for nonresidents. The information for this revenue source is available on DF&G's website. http://www.adfg.alaska.gov/index.cfm?adfg=licensevendors.statistics

- ***Test Fishery Receipts.*** The receipts come from sales of fish harvested in so-called "test fisheries" established by ADFG under AS 16.05.050. The ADFG Commissioner has the authority "to sell fish caught during commercial fisheries test fishing operations."[15] The legislature appropriates a program receipt authorization for the Commercial Fisheries Division to use revenue to fund the division's operations. The authorization is typically greater than what DF&G actually collects, presumably to ensure that whatever is collected maybe used by the agency. While the issue of appropriation-in-excess-of-collection may be true for several agencies, it is particularly true for the test fishery receipts. Therefore, the revenue for this category uses actual receipts from the State Office of Management and Budget Component Detail. https://www.omb.alaska.gov

- ***Shore fishery lease payments and Mariculture fees.*** DNR Division of Mining, Land and Water administers the shore fishery lease program, which provides the option for set-net permit holders to acquire a location from which to fish their permit (i.e., so some other permit holders cannot take the location away). The lease is valid for 10 years and may be used only for the purpose of commercial salmon fishing. It does not give the leaseholder the right to exclude the public from the lease area. There is a $100 application fee, a $150 diagram review fee, and an annual $300 rental fee.

  DNR also administers a lease program to allow businesses to lease sites for aquatic farming (mariculture). An example of an aquatic farm lease would be an area to grow oysters. The annual fee is $450 for the first acre and $125 per acre for additional area. Like the shore fishery program, leases are for 10 years and do not give the lessee exclusive rights to the site. The amount of these revenue sources was provided by DNR staff.

Municipal Revenue.

- ***The Fisheries Business Tax and Fishery Resource Landing Tax** are* explained above. The only addition is that the amount recorded as "municipal share" in Table 7-1 includes the amount distributed to communities outside incorporated municipalities or organized boroughs.

[15] http://www.legis.state.ak.us/basis/statutes.asp#16.05.050

- ***Municipally imposed fisheries taxes (raw fish taxes are similar).*** Some municipalities impose a raw fish tax or landing tax in addition to the taxes collected by the state and redistributed. These are catalogued in Alaska Taxable, a publication of DCCED. The 2019 and 2018 data were downloaded from the interactive tables on DCEED's website. The 2017 and 2016 data are from the Alaska Taxable Supplement, also available on the website.
https://www.commerce.alaska.gov/dcra/DCRARepoExt/Pages/AlaskaTaxableDatabase.aspx

7.2 Mining Revenue

DNR and DCCED annually publish a report summarizing Alaska's mineral industry. That report has a detailed breakdown of revenue from the mineral industry. It is reproduced here as Table 7-2. The table shows how the different categories of the mineral industry contribute to state and local revenue.

The table is detailed and useful. However, the table reports revenue by calendar year. The remainder of this report makes fiscal year comparisons. Therefore, we substituted some information that is reported by the Department of Revenue by fiscal year for the data in the table; specifically, we used DOR's fiscal year data for rents and royalty, mining license tax, and corporate income tax. Further, we deleted material sales (because it is not "mining" for purposes of this report), and AIDEA Facility Use Fee (for reasons described in Chapter 3). The result is Table 7-3, which summarizes mineral revenue. In Table 7-2, state fuel taxes and state mining miscellaneous fees remain in calendar year, as they are taken directly from the *Mineral Industry Report*. This introduces some minor distortion into the comparisons, though it is minimized by using four years of data.

Table 7-2. Mineral Industry Revenue from Alaska Mineral Industry 2020, Table 3

	2016	2017	2018	2019
State mineral rents and royalties [a,b]				
State claim rentals	7,327,630	7,658,003	7,192,888	9,104,615
Production royalties [c]	2,816,884	3,125,925	2,472,558	797,152
Annual labor	331,986	374,244	392,085	438,098
Subtotal	**$ 10,476,500**	**$11,158,173**	**$ 10,057,531**	**$ 10,339,865**
State coal rents and royalties [b]				
Rents	347,324	268,866	231,159	223,799
Royalties [c]	2,237,777	2,232,394	1,971,999	2,519,086
Bonus	- -	- -	100	-100
Subtotal	**$ 2,585,101**	**$ 2,501,260**	**$ 2,203,258**	**$ 2,742,785**
State material Sales [b]				
Mental Health	25,130	24,366	50,558	15,144
Division of Land	6,412,271	4,637,844	4,540,134	6,734,784
State Pipeline Coordinator's Office	121,994	288,511	93,359	47,327
Subtotal	**$ 6,559,395**	**$ 4,950,720**	**$ 4,684,051**	**$ 6,797,255**
State mining miscellaneous fees [b]				
Filing fees	9,650	4,825	5,150	4,200
Bid Bonus	193,963	- -	- -	- -
Penalty fees	95,677	220,770	91,920	135,611
Exploration incentive app filing fee	- -	- -	- -	- -
Surface mine investment interest	19,690	- -	- -	- -
Surface coal mining app fee	7,218	8,000	7,342	-653
APMA mining fees	21,627	21,302	29,024	66,171
Subtotal	**$ 347,826**	**$ 254,897**	**$ 133,436**	**$ 205,329**
Other Fees				
AIDEA - Facilities use fees [d]	10,709,000	10,014,951	9,081,619	8,129,483
State Fuel Taxes [e]	2,066,313	1,338,843	1,411,896	1,015,005
State corporate income tax [f]	1,636,850	-734,744	34,594,928	6,859,747
Mining License Tax [g]	11,131,203	41,525,192	47,297,409	47,777,544
Large Mine Permit Coordination Program Receipts [h]	1,364,952	968,827	928,035	991,271
Alaska Railroad receipts [i]	17,500,000	21,200,000	15,900,000	17,400,000
STATE TOTAL	**64,377,140**	**93,178,119**	**126,292,163**	**102,258,284**
Payments to Municipalities [j]	22,656,383	48,628,626	34,282,140	41,481,284
TOTAL	**$ 87,033,523**	**141,806,745**	**160,574,303**	**143,739,568**

The above is taken from the Alaska Mineral Industry 2020 (forthcoming). Alaska Department of Natural Resources. Notes to the table are on the next page.

Notes to Table 7-2.

[a] Includes upland lease and offshore lease rentals. Figures are reported by calendar year by the Alaska Department of Natural Resources.

[b] Figures are reported by calendar year by the Alaska Department of Natural Resources.

[c] Reported on a cash basis; payments actually received during the given year.

[d] AIDEA user fees for use of the State-owned roads and ports: the De Long Mountain Transportation System by Teck Alaska Inc., operator of the Red Dog Mine; and for use of the Skagway Ore Terminal by Minto Explorations Ltd., a subsidiary of Pembridge Resources. AIDEA figures are reported by fiscal year.

[e] Values from 2016–2020 were reported by the major operating mines, less their fuel tax refund.

[f] Only subchapter C corporations pay income tax. This report may not reflect 100% of the returns received in a year. The amount of corporate income tax reported in each fiscal year is the amount of tax actually received and may not agree with the amount reported on a corporation's tax return. This is due primarily to timing differences.

[g] In 2012 and later, Mining License Tax was not collected on materials. Figures are reported by fiscal year. http://tax.alaska.gov/programs/programs/reports/AnnualData.aspx?60610

[h] The DNR, Office of Project Management and Permitting (OPMP) recovers costs from applicants for large mine permit coordination, per AS 38.05.020(b)(9) and AS 37.05.146(b)(3). Figures are reported by fiscal year.

[i] Alaska Railroad revenue for transportation of coal, sand, and gravel. From "The Economic Impact of Alaska's Mining Industry" published by the Alaska Miners Association, February 2021.

[j] Payments to Municipalities include property taxes, payments in lieu of taxes (PILT), and severance taxes. Data should be considered a minimum estimate. Data were primarily provided by the major operating mines.

Table 7-3. Mining Revenue, Fiscal Years 2016-2019

(Figures in million $)

Revenue to the State			**Fiscal Year**		
Revenue Category	**Average**	**2016**	**2017**	**2018**	**2019**
Mining License Tax	$ 37.0	$ 11.1	$ 41.5	$ 47.3	$ 48.0
Mining rents and royalties, total	16.3	17.4	17.3	16.4	13.9
State mining misc fees, total	0.2	0.3	0.3	0.1	0.2
Motor Fuel Tax, mining share	1.5	2.1	1.3	1.4	1.0
Corporate Income Tax, mining sector	10.6	1.6	(0.7)	34.6	6.9
Large Mine Projects Fees through DNR OPMP	1.1	1.4	1.0	0.9	1.0
Total Revenue to the State:	**$ 66.6**	**$ 34.0**	**$ 60.7**	**$100.7**	**$ 70.9**

Municipal Revenue			**Fiscal Year**		
Revenue Category	**Average**	**2016**	**2017**	**2018**	**2019**
Payment to Municipalities	**$36.8**	**$ 22.7**	**$ 48.6**	**$ 34.3**	**$ 41.5**

Taxes and Fees that Apply to Mines on All Lands

- ***Mining License Tax***. This is one of Alaska's oldest taxes, established in 1913 as a 0.5% tax on net income of more than $5,000. It was amended numerous times until the present rate structure was established in 1953. It has been amended since then to establish and modify credits. The current structure is a four-tiered graduated rate. The highest rate is 7% of net income for incomes over $100,000. The large majority of the tax is paid at the 7% rate by the 6 large mines described in Chapter 3. The revenue figure for this revenue source is taken from DOR's 2019 Annual Report. http://www.tax.alaska.gov/programs/sourcebook/index.aspx

- ***Corporate Income Tax.*** The corporate income tax for mining companies is the same as for other companies. It is described further in the Commercial Fishing section, above.

- ***State Mining Fees.*** This category covers a variety of fees listed in Table 7-2. The totals for each fee category are relatively small. The figures in Table 7-3 are taken from DNR's Alaska Mineral Industry Report 2020 (forthcoming), Table 7-2.

- ***Large Mine Project Fees through DNR OPMP.*** The large mine permit program is a voluntary program to coordinate the permitting and sometimes compliance activities for mining. When requested by a mining company, the Office of Project Management and Permitting supplies a project manager to coordinate a state team to work on pre-permitting, permitting, and sometimes post-permitting compliance for the mine. The team is usually composed of representatives of different divisions within DNR, DF&G, DEC, DOL, and sometimes other agencies. In this fashion, the agencies work on as a team, establish a group timeline, and work on their permits, review baseline data, and perform similar activities as a team. It is more efficient for the mining company to use this team approach, and more efficient for the public who has a single point of contact —the OPMP project manager, rather than having to work through each agency to get their issues addressed. However, the program is not free to the mining company. The mining company must agree to pay the time of the OPMP project manager and the individual state agencies for agency staff time spent on their project. OPMP establishes a reimbursable services agreement with the mining company. The agencies bill OPMP, and OPMP, in turn, bills the company. . The figures in Table 7-3 are taken from DNR's Alaska Mineral Industry Report 2020 (forthcoming), Table 7-2.

- ***Motor Fuel Tax, mining share.*** As indicated in the commercial fishing section of this chapter, Alaska has a tax on motor fuels. The fuel tax on highway vehicles is 8 cents per gallon. The figure in Table 7-3 is the average taken from DNR's annual Mineral Industry Report 2020 (forthcoming), Table 7-2.

Rents and Royalties from Mining Activity on State Land. Rents and royalties are established differently for coal than they are for locatable minerals. Locatable minerals are typically metals such as gold, zinc, silver, lead, etc. The property right for a coal deposit is auctioned at a lease sale, and the mineral exploration and development occurs under a lease with the state. The rent and royalty provisions are established in the lease between the coal company and the state. On state land, the property right for gold, zinc or similar "locatable" minerals is established by staking a mining claim. Claims have different royalty and rent provisions from coal. Hard rock and placer mines operating on state land do so on mining claims. The rent and royalty provisions are different between coal and locatable minerals, reflecting, in part, the different economic situations in the different segments of the mining industry. The two revenue sources below are taken from DNR's annual Mineral Industry Report 2020 (forthcoming), Table 7-2.

- ***Rent and Royalty for Locatable Minerals (i.e., for hard rock and placer mines).*** Hard rock and placer mines operating on state land must pay a mineral rent to DNR that escalates according to the amount of time the claim is held. State mining claims are either 40-acres or 160 acres. The annual claim rental for a 40-acre claim is $35 per year from the time of the initial staking through year 5, $70 per year for years 6-10, and $170 per year for years 11 and for older claims. The annual rent for 160-acre claims is four times the rent for the 40-acre claims. A mining company producing minerals from a claim must pay 3% of net profits to the state. Alaska has only two large mines operating on state mining claims: The Fort Knox Gold Mine near Fairbanks and the Pogo Gold Mine near Delta Junction. These two mines pay the majority of state royalties

- ***Coal Rent and Royalty.*** The rights to explore for and mine coal on state land are generally established by a competitive auction for a coal lease. The rent and royalty rates for that lease are established in the lease itself. Leases within the last decade require 5% payment of adjusted gross income (i.e., revenue minus transportation costs internal to the mining area and a few other adjustments), plus $3 per acre rent. There are three coal fields in Alaska with state coal leases: near Healy Alaska, in the Matanuska Valley, and across Cook Inlet from Anchorage near Beluga. However, only one field is operating. Usibelli Coal Mine, Inc. produces coal from leases that were issued at different times, some dating back many decades. Therefore, Usibelli Coal Mine, Inc. pays all coal royalties to the state.

- ***Provisions Affecting Both Coal and Locatable Minerals.*** A portion of mining royalty and rent is deposited in the Alaska Permanent Fund rather than the General Fund. The permanent fund portion is 50% of the royalty and rent from mining claims and leases established after February 15, 1980, and 25% from mining claims and leases established on or before that date. This report makes no distinction between funds deposited to the state's General Fund and those deposited in the Permanent Fund. This analysis treats both as revenue to the state.

<u>Municipal Mining Revenue</u>. The figure for municipal revenue is taken from DNR's annual Mineral Industry Report 2020 (forthcoming), Table 7-2.

7.3 Tourism Revenue

Table 7-4 shows tourism revenue to the state and to municipalities.

Table 7-4. Tourism Revenue, Fiscal Years 2016-2019
(Figures in million $)

Revenue to the State		**Fiscal Year**			
Revenue Category	**Average**	**2016**	**2017**	**2018**	**2019**
Commercial Passenger Vessel Excise Tax, state share	$ 3.6	$ 3.3	$ 2.5	$ 4.1	$ 4.3
Vehicle Rental Tax	7.2	6.8	7.8	6.9	7.4
Large Passenger Vessel Gambling	8.6	7.7	8.2	8.6	10.1
Ocean ranger fees	3.5	1.1	4.2	4.4	4.2
Commercial Passenger Vessel Env Compliance Fee	1.1	1.0	1.1	1.1	1.3
Non-resident Hunting and Fishing Licenses	26.5	23.0	25.5	28.3	29.2
Corporate Income Tax, tourism sector (per DOR)	15.4	10.0	14.4	17.4	20.0
Total Revenue to the State:	**$ 66.0**	**$53.0**	**$63.7**	**$70.7**	**$76.4**

Municipal Revenue					**Fiscal Year**
Revenue Category	**Average**	**2016**	**2017**	**2018**	**2019**
Commercial Passenger Vessel Excise Tax, municipal share	$ 16.8	$ 15.8	$ 16.0	$ 16.8	$ 18.7
Visitor-related Sales Tax Revenues	35.7		35.7		
Lodging Tax Revenues	31.4		31.4		
Dockage/moorage Revenues	17.8		17.8		
Payment to Municipalities	**$ 101.8**				

State Taxes. In 2006, Ballot Measure 2 enacted the first four taxes shown in the table. They target the cruise ship industry in Alaska. They became law December 17, 2006 and were first applied during the spring 2007 tourism season.

- ***Commercial Passenger Vessel Excise Tax.*** The first of the taxes imposed by the 2006 Ballot Measure 2 is the Commercial Passenger Vessel Excise Tax. The tax imposes a $34.50/passenger imposed on passengers travelling on commercial passenger vessels, typically cruise ships that have 250 or more berths and provide overnight accommodations in the state's marine waters. Essentially it is an excise tax on cruise ship passengers. Subject to legislative appropriation, the state distributes $5 per passenger to each of the first seven ports of call in Alaska (less any taxes that the municipality imposes). Thus, while the tax is collected by the Department of Revenue, most of the value is distributed to the first seven ports of call; it is primarily a municipal tax. Information for this revenue source was obtained from DOR's 2019 Annual Report. http://www.tax.alaska.gov/programs/sourcebook/index.aspx

- ***Large Passenger Vessel Gambling Tax.*** This tax is imposed "on the adjusted gross income of gambling activities about large passenger vessels [cruise ships] in the state…The tax is imposed on the operator of…gambling activities" [i.e., not the individual, but the cruise ship company]. The tax rate is 33% of adjusted gross income less prizes and federal and municipal taxes. Information for this revenue source was obtained from DOR's 2019 annual report (link provided above).

- ***Ocean Ranger Fee*** funds DEC's ocean ranger program which requires "U.S. Coast Guard licensed marine engineers on board vessels to act as independent observers monitoring state environmental and marine discharge requirements." The rangers report on such topics as oil pollution, safety, health, wastewater, and air pollution. Fees are $4 per birth (i.e., vessel bed) and are collected by the DEC. Information was taken from DOR's Fall Revenue Sourcebooks. http://www.tax.alaska.gov/programs/sourcebook/index.aspx

- ***Commercial Passenger Vessel Environmental Compliance Fee*** is assessed on vessels with more than 50 commercial passenger berths. It is a stair-stepped fee (e.g., vessels with 50-99 passengers are charged $75; vessels with 100-249 passengers are charged $175, etc.). In general, the fee is approximately $1/berth. Fees range from $75 to $3,75, and funds are used to support environmental compliance programs, particularly for cruise ships. Information taken from DOR's Fall Revenue Sourcebooks (link provided above).

<u>**Other State Taxes and Fees**</u>

- ***Vehicle Rental Tax.*** This tax is collected by the DOR. "Alaska levies an excise tax on fees and costs charged for the lease or rental of a passenger or recreational vehicle if the lease or rental does not exceed a period of 90 consecutive days. The tax is levied on the renter but is collected by the rental agency for DOR. The tax is 10% of passenger vehicle fees and costs, and 3% of recreational vehicle fees and costs. While the tax is deposited into a special vehicle rental account within Alaska's General Fund, "The legislature may appropriate the balance in the vehicle rental tax account for tourism development and marketing." The discussion of the vehicle rental tax in Section 4.1 explains that 70% of the overall rental tax revenue is due to rentals by nonresidents, and that 95% (or 65% in total) is due to the tourism industry (i.e., excluding rentals by nonresident business travelers). Information for this source is taken from DOR's 2019 Annual Report (link provided above). The visitor statistics concerning the percent of non-residents is taken from Alaska Visitor Statistics Program VII, Section 4, 2016 prepared by the McDowell Group and available on the Alaska Travel Industry Association website. https://www.alaskatia.org/marketing/alaska-visitors-statistics-program-avsp-vii

- ***Nonresident Hunting and Fishing Licenses.*** The Department of Fish and Game sells hunting and fishing licenses. Nonresidents are required to get a different license than Alaskans. The Department sells approximately 30 different types of nonresident hunting and fishing licenses and stamps, each with different requirements and cost. This report considers the funds from nonresident sales as tourism revenue. Information is available on the DF&G website. http://www.adfg.alaska.gov/index.cfm?adfg=license.statistics

- ***Income Tax*** for the tourism sector is provided by the DOR. The tax is the same as that explained in the commercial fishing section of this chapter.

Municipal Revenue.

- ***Commercial Passenger Vessel Excise Tax.*** Local governments at cruise ship ports receive $5 per passenger (less any municipal taxes) from the Commercial Passenger Vessel Excise Tax as described above.

- ***Visitor-related Sales Tax Revenues, Lodging Tax Revenues, and Dockage Moorage Revenues.*** The other three municipal taxes — sales tax revenue from tourism purchases, lodging tax revenue (often referred to as bed taxes), and dockage moorage fees — are reported by the McDowell Group, on contract to DCCED, Division of Economic Development as part of the Division's Visitor Statistics Program. The work was completed in 2017. Because other years are not available, the 2017 value was used as the average value for the four years of this report. (Link provided above.)