

(ADNR 2018b). This information was used to calculate the direct and indirect employment and income effects, as well as tax revenues during the production phase.

- Tariffs and transportation costs were used to calculate netback prices which are the bases for calculating royalty payments. Data on existing tariffs and transportation costs are from the ADNR Revenue Sources Book (ADNR 2018b).

The IMPLAN model for Alaska was used to estimate the potential direct and indirect employment and income effects of the various exploration, development, and production activities (MIG, Inc. 2018). The cash flow model developed by the ADNR (modified to fit the development and production assumptions used in this analysis) was used to generate the projected royalties and government taxes.

Jobs

Future exploration, development, and production activities in the program area for the two anchor fields and their associated satellite fields are estimated to generate about 250 direct jobs per year during exploration activities, 480 direct jobs per year during the development phase, and 730 direct jobs per year during the production phase. Exploration activities are anticipated to peak on the fifth year of the exploration phase, generating an estimated 650 jobs that year. The peak year of the development phase is estimated to generate 680 jobs, and 1,150 jobs are estimated to be required during the peak production year. Jobs during the exploration and development phases are seasonal and temporary, while production phase jobs are year-round and would last through the economic limit of the life of each oil field.

Table 3-35 also provides estimates of the indirect jobs that could be generated as a result of industry spending on exploration, development, and production activities.

Table 3-35
Projected Direct and Indirect Jobs: Exploration, Development, and Production Phases

Effects	Jobs (Average Number of Part-Time and Full-Time Jobs)	Annual Average	Peak
Direct	Exploration	250	650
	Development	480	680
	Production	730	1,150
Indirect	Exploration	190	560
	Development	3,180	4,570
	Production	3,160	4,970

Source: Northern Economics, Inc 2018 estimate

The assumed future exploration, development, and production activities are expected to generate job opportunities for workers residing in the North Slope, other areas of Alaska, and outside Alaska. The jobs shown in **Table 3-35** are total jobs that could be available for workers from any region, including outside Alaska. It is uncertain at this time how many workers from North Slope communities would participate in the direct oil and gas activities. Historically, very few North Slope residents participate in direct oil and gas activities in the North Slope. As noted in *Affected Environment*, above, less than 0.5 percent of the total oil and gas jobs in the North Slope in 2016 were held by NSB residents.

In 2016, 27.5 percent of the workers in the oil and gas extraction sector and 36.8 percent of the workers in oilfield services sector were from out of state (ADOLWD 2018g). These nonresident percentages have been consistent in the last decade, and it is possible that these levels would continue; however, it is also