

4.21 SOCIAL AND ECONOMIC CONDITIONS

4.21.1 Effects Analysis Indicators and Methodology of Analysis

The analysis of effects to social and economic conditions includes the following issue and indicators:

Issue: The Stibnite Gold Project (SGP) may impact the socioeconomics of Valley and Adams counties and the State of Idaho.

Indicators:

- Contributions to employment levels (total, State of Idaho, and Valley and Adams counties).
- Estimated value of local income contributions.
- Estimated value of goods and services procured in Valley and Adams counties.
- Change in populations of Valley and Adams counties.
- Impacts to housing demand in Valley and Adams counties.
- Estimated tax revenue contributions.
- Changes in tourism and recreational based businesses.
- Changes in transportation and infrastructure.

Social and economic conditions were analyzed using the Economic Impact Analysis of the SGP (Highland Economics 2018), Populations at Risk profiles (Headwaters Economics 2019a,b,c), Midas Gold Idaho, Inc. (Midas Gold) Socioeconomics Baseline Study (Drage and Richins 2017), state and local tax and revenue data, U.S. Census Bureau (Census) data, geographic information system spatial analyses, scientific literature reviews, and other information and analysis documented in reports prepared for the SGP. Additional analysis also was performed when necessary to assess the validity of the data and analyses provided by Midas Gold to confirm their findings.

Assumptions used for this analysis include:

- The SGP is expected to employ both local and non-local area residents that commute in and out of the area on a bi-weekly basis. The nature and magnitude of the SGP's socioeconomic effects on the local analysis area economy are associated with the SGP-related employment impacts and potential population growth.
- There is uncertainty regarding the type and extent of local employment and in-migration resulting from the SGP. Due to the mine site's remote location and bi-weekly shift

staffing, it is difficult to project the actual extent and location of SGP-related in-migration to the local area. Because most workers would be housed on-site during their bi-weekly shifts, there is limited need or incentive for relocation to the local area. Idaho residents (particularly those living in rural areas) regularly commute or travel long distances, as do many workers in the mining industry. In the absence of benefits inducing workers to live locally, Midas Gold employees can choose from a wide variety of housing locations and base their housing decisions on factors including housing availability/affordability, local amenities, and social conditions, among others. As a result, most Midas Gold employees are expected to continue living in their current locations or choose to relocate to other larger non-local communities outside of the analysis area.

- Results from Economic Impact Analysis of the SGP (Highland Economics 2018) analysis of economic impacts are presented for each alternative and each phase of the SGP. The impact analysis presented in this environmental impact statement uses the Highland Economics' projected mid-range values of the local employment effects to discuss and evaluate the expected socioeconomic impacts to the local area.
- Valley County's labor force availability is limited, as current county unemployment levels are comparable with the state average. As a result, a high percentage of non-local employees would be expected due to local labor market constraints.

There is limited available information on use of the analysis area both by recreational visitors and Native American tribal members. As a result, the type, frequency, magnitude, and location of these users' activities are largely unknown, making it difficult to quantify their SGP-related socioeconomic impacts. Although adequate for the purposes of the socioeconomic impact analysis, limited fiscal information on Adams County's government services and revenues was available. Neither Midas Gold nor this socioeconomic analysis has been able to quantify direct revenue transfers to Valley and Adams counties resulting from the SGP's expected future mineral license fee payments to the state of Idaho.

4.21.2 Direct and Indirect Effects

The SGP would result in direct and indirect socioeconomic effects on residents, workers, and communities within the local analysis area (i.e., Valley and Adams counties and associated communities of Cascade, Council, Donnelly, McCall, New Meadows and Yellow Pine). For the purposes of the socioeconomic analysis, the indirect impacts also include induced socioeconomic effects that are attributable to the SGP activities.

Direct impacts are defined as those that would occur directly from the SGP activities in the same time and place. For example, direct employment includes not only Midas Gold employees but also other on-site construction workers that are employees of contractors hired for on-site construction or operational tasks. Indirect and induced impacts are defined as those that would be caused by an action but would occur later in time or would be farther removed in distance from the SGP activities. For example, indirect employment includes people who work for businesses that provide goods and services in support of the SGP. Induced effects are items that result from the direct and indirect effects. For example, induced employment includes

people who would be employed by businesses that obtain their revenues as a result of spending by direct and indirect employees and businesses.

The following analysis of effects associated with social and economic conditions is considered within the overall context of the local analysis area and economy consisting of Valley and Adams counties and associated communities. Given the remote locations of the SGP area and rural surrounding environment, most of the direct socioeconomic impacts are likely to occur within Valley County and the New Meadows area in Adams County. In addition, analysis of statewide socioeconomic impacts from the SGP also are provided when appropriate.

Evaluation of the potential effect generally includes four components of impact: magnitude or intensity, duration, geographic extent, and context. These impacts are quantitatively analyzed when sufficient information is available, otherwise they are evaluated qualitatively.

The magnitude or intensity of an impact refers to its severity (e.g., the level of impact compared to established metrics, thresholds, etc.). The duration and geographic extent assess the impact's temporal and physical span respectively. Context refers to the implication of an action within a setting, such as society as a whole (human, national), the affected region, the affected interests, and the locality.

4.21.2.1 Alternative 1

4.21.2.1.1 CONSTRUCTION

4.21.2.1.1.1 Employment Direct

Table 4.21-1 shows the projected average annual employment and work residency for all three SGP phases (construction, operations, and closure and reclamation). An average of approximately 640 total workers are expected to be employed annually (including subcontracted employees) over the initial 3-year construction period for Alternative 1 (Highland Economics 2018).

An important factor in determining the economic benefits to the local and state economy under Alternative 1 would be the home residency of the SGP workforce. The proportion of SGP jobs filled by local workers would determine the level of SGP wages that would benefit local residents and the amount of new income that would be re-spent in the local economy benefitting other local businesses (induced impacts). Highland Economics (2018) projected low, mid, and high values of local employee residency for each SGP phase; the range of low to high values is provided in **Table 4.21-1**. The mid-value employment projection is shown below and is used in the environmental impact statement analysis to represent the expected future economic impacts.

As shown in **Table 4.21-1**, most construction workers (ranging from 50 to 85 percent) are expected to be Idaho residents. Under the mid-value scenario, it is expected that SGP construction would provide employment for 640 employees of which 420 would be Idaho residents. It is further expected that 190 of SGP's construction positions would be filled by

individuals who would live in Valley or Adams counties. These local jobs would contribute to the local economy and could improve the standard of living for the employees and their families if wage rates are raised relative to current jobs. The number of SGP jobs for local residents are equivalent to 3.3 percent of the 2019 total employment for the local area of 5,777 (Idaho Department of Labor 2019).

Table 4.21-1 Projected Direct Annual Employment by Worker Residency and SGP Phase

	Total	Local Residents (Valley/Adams)	Other Idaho Residents	Out of State Residents
Construction (3 Years)				
Value Range (Low to High)	-	20% to 40%	30% to 45%	50% to 15%
Employment (Mid-Value)	640	190	230	220
Operations (12 to 15 Years)				
Value Range (Low to High)	-	20% to 50%	50% to 40%	30% to 10%
Employment (Mid-Value)	583	200	270	113
Closure and Reclamation (5 Years)				
Value Range (Low to High)	-	40% to 70%	30% to 20%	30% to 10%
Employment (Mid-Value)	160	90	40 / 20	30
Post-Closure (15 Years)				
Value Range (Low to High)	-	40% to 70%	30% to 20%	30% to 10%
Employment (Mid-Value)	40	20	20	0

Table Source: Highland Economics 2018

As discussed in the Employment Conclusion section below, current local unemployment rates and unemployed individuals in the labor force in Valley and Adams counties indicate while some of these positions could be filled by currently unemployed or under-employed local residents, it also is expected that many of the SGP construction jobs may be filled by non-local area residents that would choose to relocate to Valley or Adams County.

Indirect and Induced

Alternative 1 would result in indirect and induced economic effects on the local analysis area's economy as a result of direct employment and income from SGP construction activities.

Indirect jobs are created in the supply chain for materials and equipment used for construction. Indirect economic impacts include changes in sales, income, or jobs within the area's economy associated with the businesses that supply goods and services. For example, increased sales for local suppliers providing construction materials and equipment represent an indirect effect of Alternative 1's construction activity and spending. Induced effects represent increased

economic activity from household spending of labor income by both the SGP construction and supporting businesses' workers.

Highland Economics (2018) estimated the indirect and induced economic impacts from Alternative 1 for both the State of Idaho and Valley and Adams counties' combined local economy using an input-output economic model (IMPLAN). The IMPLAN modeling software estimates the impacts of changes in final demand (spending) on other sectors of an economy by measuring the relationship between the final demand and the local inputs required to satisfy that demand.

Under the mid-value scenario, the IMPLAN analysis estimated that up to 830 full and part-time indirect jobs would be supported within Idaho's economy during the 3-year construction period for Alternative 1. Similarly, up to 570 full and part-time induced jobs also would be supported within the Idaho economy over the same period. As a result, it is projected that a total of 1,400 indirect and induced jobs would be supported annually by the SGP during the 3-year construction phase. Most of this employment would occur outside the local economy, as a total of 300 Valley and Adams counties jobs (180 indirect and 120 induced) of the 1,400 total are projected to be supported by Alternative 1 during the 3-year construction period (Highland Economics 2018).

The total local, state, and national indirect and induced full and part-time jobs supported by the SGP would be approximately 4,050 (Highland Economics 2018). It is important to note that these are jobs and income supported by the SGP, but that, at the national level, these are not necessarily additional jobs and income in the United States (U.S.) compared to the No Action Alternative. If the capital and labor resources used for SGP's development were instead invested in mining or other economic activities elsewhere within the U.S., there would be employment and income benefits generated from these alternative activities (Highland Economics 2018).

The indirect and induced job projections are based on national data on the relationship between employment and output for each affected economic sector. Depending on the specific state and local economic conditions, businesses operating at under capacity or facing limited increased demand may increase their utilization of their existing employees rather than hire new workers.

Employment Summary

Based on the direct, indirect, and induced employment impacts analyzed above, under the mid-value scenario, the overall statewide employment impact for Alternative 1 is estimated to support 1,820 full and part-time jobs for Idaho residents annually during the 3-year construction period. The overall local employment impact of Alternative 1 during the 3-year construction phase is expected to provide approximately 500 full and part-time jobs for the residents of Valley and Adams counties (i.e., 190 direct and 310 indirect/induced jobs). This local job impact would correspond to 8.7 percent of the local area 2019 total employment of 5,777 (Idaho Department of Labor 2020a,b).

The number of unemployed residents in the labor force in 2019 in Valley and Adams counties was approximately 327 (Idaho Department of Labor 2020a,b). Therefore, the SGP could provide jobs to unemployed or under-employed residents in the labor force in those counties. The SGP also is expected to attract worker in-migration to the local area.

Overall, the SGP is estimated to support 4,690 direct, indirect, and induced jobs for residents nationwide (i.e., Idaho and elsewhere in the U.S.) (Highlands Economics 2018).

4.21.2.1.1.2 Income

Direct

Table 4.21-2 shows the average annual construction spending on labor, materials, equipment and services. Expenditures for Alternative 1 also are broken out by their sourcing location.

During the construction phase, it is projected that approximately \$66.7 million (in 2017 dollars) in salaries and wages would be paid annually to the 640 construction workers on average over the 3-year construction period. Under the mid-value scenario, \$42.4 million in salaries and wages are projected to be paid to Idaho residents working for SGP. Of that total, Valley County and Adams County residents are projected to receive \$17.4 million per year in salary and wage income from the SGP (Highland Economics 2018). Salaries and wages paid to out-of-state residents are projected to total \$24.3 million.

Table 4.21-2 Projected Direct Construction Spending Per Year (in millions) (2017 Dollars)

Direct Spending	Total	Local	State Non-Local	State - Total	Out of State
Salaries & Wages ¹	\$66.7	\$17.4	\$25.0	\$42.4	\$24.3
Vendor On-Site Operations	\$17.7	\$17.7	\$0	\$17.7	\$0
Material, Equipment & Services	\$260.1	\$27.2	\$179.6	\$206.8	\$53.3
Total	\$344.5	\$62.3	\$204.6	\$266.9	\$77.6

Table Source: Highland Economics 2018

Table Notes:

1 Does not include direct labor expenses/income for vendor on-site workers and business proprietors.

Based on the projected total annual direct labor cost of \$66.7 million, the average salary of all SGP employees (i.e., including management staff) is calculated to be \$108,000 (in 2017 dollars) (Highland Economics 2018). This fully burdened wage accounts for overtime compensation, as well as employee health and other benefits. The average wage for local residents is projected to be approximately \$96,600 per year (in 2017 dollars) and also is fully burdened to account for employee health and other benefits. The corresponding unburdened salary is estimated to be

\$67,700, which is comparable to the area's prevailing Davis-Bacon rates of \$20 to \$30 per hour depending on the position (Highland Economics 2018).¹

The projected construction worker salaries and wages are considerably higher than the prevailing wages in the local area and in the Boise area, which average approximately \$18 per hour (unburdened) for the construction and extraction sector and \$16 per hour across all occupations (Idaho Department of Labor 2020a, b). The average covered wage (i.e., for non-self-employed workers) statewide within Idaho is \$43,480 and is \$36,134 within Valley County and \$37,468 within Adams County (see **Table 3.21-5**). This high compensation rate for construction workers would partly reflect the specific work conditions and labor skill needs. Nonetheless, employment opportunities under Alternative 1 would represent well-paying and attractive job opportunities for both local and non-local residents, as the average unburdened wage for employees (\$67,700) would be 55 and 53 percent and higher than the average 2018 wage in Adams County (\$37,468) and Valley County (\$36,134), respectively (see **Table 3.21-5**).

The contribution of relatively well-paying local area employment and labor income from the SGP would result in an improved standard of living, increased spending, and increased economic activity within the local economy during the 3-year construction period.

SGP employees and contractors are expected to spend almost all of their earnings in their community of residence, given their bi-weekly shift schedules and employee housing at the mine site's remote location. As a result, the economic contributions to Valley and Adams counties' economies would be limited to the income earned by construction workers that live within the local area.

Alternative 1 would provide estimated annual income of \$17.4 million for local area residents during the 3-year construction period. Alternative 1-related local area growth in well-paying jobs and increased earnings would improve the standard of living for the employees and their families. The local income also would result in increased local spending and economic activity within the local economy, which in turn also would further support local employment and income earnings.

Indirect and Induced

As discussed above for the indirect and induced employment impact analysis, SGP-related impacts from construction activities would result in indirect and induced income contributions to the statewide and local analysis area's economies. Indirect income earnings would result from the increased sales and employment for the businesses that supply goods and services for construction of Alternative 1. Induced income effects represent the local workers' earnings resulting from increased household spending by both construction and support businesses' workers.

¹ The Davis-Bacon wage rate is based on the listing of wage rates and fringe benefit rates for each job classification determined by the Administrator of the Wage and Hour Division of the U.S. Department of Labor to be prevailing for a particular type of construction (e.g., building, heavy, highway, or residential) and location.

Under the mid-value scenario, the IMPLAN analysis estimated that \$44.3 million in indirect and \$21.2 million (in 2017 dollars) in induced income, for a total of \$65.5 million, would be supported within Idaho economy's during the 3-year construction phase for Alternative 1. Most of this income would occur outside the local economy. Construction activities are projected to support a total of \$7.4 million indirect and \$3.3 million per year (in 2017 dollars) in induced income within Valley and Adams counties' economies during the 3-year construction period (Highland Economics 2018). Outside of Idaho, the SGP is projected to support a total of \$191.8 million in indirect and induced income, resulting in a nationwide total of \$257.3 million in indirect and induced income (i.e., combined total of Idaho and elsewhere in the U.S.) (Highland Economics 2018).

Based on an assumed full-time equivalent employment rate of 80 percent for projected indirect and induced full-time and part-time local jobs, the average salary for these workers (including benefits) is estimated to range from \$34,400 (induced) to \$51,400 (indirect) per year.

Income Summary

Based on the direct, indirect, and induced income effects analyzed above, under the mid-value scenario, Alternative 1's overall statewide income impact is estimated to contribute a total of \$110.9 million per year during the 3-year construction phase (in 2017 dollars). Of this total, the overall local income impact is projected to total \$28.1 million per year for Valley and Adams County residents. Outside of Idaho, the SGP is projected to support a total of \$215.5 million in direct, indirect, and induced income resulting in a nationwide total of \$326.4 million in direct, indirect, and induced income (i.e., combined total of Idaho and elsewhere in the U.S.) (Highland Economics 2018).

4.21.2.1.1.3 Population and Housing

Construction of Alternative 1 could affect the surrounding communities through local employment and income effects, which in turn could cause changes in population and housing needs of communities within the local analysis area. Any such population changes also could affect the level of community public services needed. The extent of induced population growth under Alternative 1 would be a primary factor determining potential economic and social impacts (e.g., increased housing and public services demand) for Alternative 1. Under the unlikely event that existing residents filled all total local employment positions (i.e., direct, indirect, and induced), then no population or housing impacts would be expected, because there would be no change in local population levels and housing demand.

As discussed in Section 4.21.2.1.1.1, Employment, it is projected that up to 500 total local jobs (i.e., direct and indirect/induced) would be supported by SGP construction activities (Highland Economics 2018).

Commuter and In-Migration Rates

SGP proposes to operate bus/vanpool pickup sites in Cascade, McCall, and Donnelly to transport construction workers to the mine site for their bi-weekly shifts (Highland Economics

2018). Most of these commuting employees are expected to come from communities outside the local analysis area. It was assumed that most workers would reside in the Boise metropolitan area (which is located approximately 75 miles and a 1.5-hour drive south from Cascade) or communities along Idaho State Highway 55 and U.S. Route 95 travel corridors that connect easily to the bus/vanpool pickup sites. In addition to the City of Boise's population of more than 220,000 residents (2018), a similar sized population lives within approximately a 2-hour drive from Cascade in the cities of Meridian, Nampa, and Caldwell.

It is difficult to predict the actual extent and location of SGP-related in-migration to the local area, especially due to the mine site's remote location and two-week shift staffing. The need or incentive for employee relocation to the local area is limited, because most of workers would be housed on-site during their bi-weekly shifts. Idaho residents (particularly those living in rural areas) commute or travel long distances on a regular basis, as do many workers in the mining industry. In the absence of benefits inducing workers to live locally, SGP employees can choose from a wide variety of housing locations and base their housing decisions on factors including housing availability/affordability, local amenities, and social conditions, among others. As a result, many SGP employees might be expected to continue living in their current locations or choose to relocate to other larger non-local communities closer to Boise with greater housing options, amenities, and public services options.

In-migration by SGP construction employees and contractors could be limited for several reasons. First, existing local residents may be expected to fill a portion of the construction jobs. Second, during their 2-week work-shift, most employees would be housed on-site and, consequently, there would be no benefit from living within the local analysis area. Thirdly, as discussed above, non-local communities closer to Boise would offer greater housing options, amenities, and public services options within a relatively close travel distance (i.e., less than 2 hours) from the proposed employee bus/van pool pick-up locations in Cascade, McCall, and Donnelly (Highland Economics 2018).

In-migration effects on indirect and induced employment can be expected to be weaker than direct employment effects. The wage rates for the indirect and induced jobs would be far lower and more comparable to prevailing wage rates within the local area and elsewhere in the state. Generally, indirect and induced employment opportunities under Alternative 1 also would be less specialized and less skilled. As a result, there would be a larger labor pool of potential employees for any new positions. Finally, given the relatively short-term nature (3 years) of the new jobs from SGP construction activities, many businesses can be expected to meet increased business demands through more interim measures (e.g., overtime and increased facility/equipment utilization) rather than business expansion (e.g., new hires or facility expansion). Consequently, projected indirect and induced employment impacts may be expected to result in comparatively less attraction and incentives for in-migration to occur than that from the SGP's higher paid and more secure job opportunities.

However, the local area's current relatively low unemployment rate increases the potential for future in-migration from Alternative 1's indirect and induced job demand. Currently, there is only

a limited labor pool of unemployed and under-employed local residents available to fill the projected new job positions.

As a result, this socioeconomic analysis identifies and evaluates the potential impacts assuming moderate in-migration rates under Highland Economics (2018) mid-value local worker residency scenario. **Table 4.21-3** shows the existing resident and new in-migrant worker populations expected under the mid-value local worker residency scenario for each of the phases of the SGP (construction, operations, and closure/reclamation). As shown in the table, new in-migrants relocating to the local analysis area could account for up to half of projected local direct employment and a third of the projected indirect and induced local employment for Alternative 1. As a result, Alternative 1 construction activities are projected to potentially result in total in-migration of approximately 198 workers.

Population Demographics

Based on Idaho statewide averages, it would be expected that 57 percent of the in-migrating workers would be married with an average of 0.64 child per capita (Census 2018). As a result, the 198 workers projected to relocate to the local analysis area during Alternative 1 construction phase would be expected to result in a total population increase of up to 438 new residents, which would consist of 240 dependents (113 spouses and 127 children).

This in-migration worker population could increase new local housing demand by up to approximately 200 homes. Although, the actual total housing demand would be less if relocating workers opt to share housing (either with existing residents or other in-migrating workers) or if in-migrating spouses also work on the SGP.

The potential for any such new housing demand to have an adverse impact on the local area’s affordable housing supply is a commonly held and understandable concern for many local residents (AECOM 2018). These concerns are likely more commonplace and acutely perceived by current local residents, of which many have lived in their current residence for more than 20 years (see **Table 3.21-3**). In addition, the local analysis area’s past population growth and in-migration rates also likely contribute to concerns of SGP-related adverse impacts on local affordable housing availability.

Table 4.21-3 Projected Employment by Worker Residency and SGP Phase

	Total Local Employees	Existing Local Residents	In-Migrant
Construction Employment			
Direct	190	95 (50%)	95 (50%)
Indirect and Induced ¹	310	207 (66.7%)	103 (33.3%)
Total – Construction ²	500	302	198

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	Total Local Employees	Existing Local Residents	In-Migrant
Operations Employment			
Direct	200	100 (50%)	100 (50%)
Indirect and Induced	270	180 (66.7%)	90 (33.3%)
Total – Operations	470	280	190
Closure and Reclamation Employment			
Direct	90 / 20	90 / 20 (100%)	0
Indirect and Induced	40 / 10	40 / 10 (100%)	0
Total – Reclamation / Closure	130 / 30	130 / 30 (100%)	0
Total – Annual Average ³	52	52 (100%)	0

Table Source: Highland Economics 2018

Table Notes:

- 1 Estimated increased employment includes both full and part-time positions.
- 2 Totals may not sum exactly due to rounding.
- 3 Based on 5-year closure and reclamation phase and 15-year post-closure phase durations.

Housing Availability and Affordability

As described in Section 3.21, Affected Environment, overall there were a total 91 homes for rent, 138 homes for sale, and 92 “other vacant” home in the Valley and Adams counties area available for in-migrating workers in 2018 (**Table 3.21-3**). The data suggests that most of the local housing has been sold to second home buyers, thereby increasing the number of occasional housing units and decreasing the availability of housing to local residents (Highland Economics 2018).

Most of the “occasional use” housing within Valley and Adams counties generally consists of more expensive second homes that may be unavailable or unsuitable for workers to rent or purchase, as these custom and/or newer homes are typically less affordable. However, Census data on housing prices does not show an increase in price resulting from the relatively low availability of housing.

However, the percentage of Valley County households paying more than 30 percent of their household income on rent grew from 33.5 percent to 59.1 percent between 2010 and 2018 (Census 2010, 2018). This increase indicates that the local housing market is becoming less affordable and that local demand for affordable housing already currently exceeds the available supply in Valley County. During the same period, the portion of Adams County residents that were paying more than 30 percent of their household income on rent each month decreased from approximately 50 percent to 39.9 percent, suggesting that the local housing market has become more affordable (Census 2010, 2018).

A future influx of new SGP employees and contractors into the local communities could increase local housing demand. In-migrating employees may live in dispersed areas of the two counties, limiting the effects on housing in any one location within the two-county area (Highland Economics 2018). Given their higher paying salaries, these in-migrating workers should be able to afford to rent or buy homes with values closer to the area's median and market values. Although the 2018 quantities of homes for sale or rent is limited (321 homes), this supply exceeds the projected 95 new SGP construction workers expected to in-migrate to the local area.

As a result, potential adverse housing availability impacts under Alternative 1 would likely predominantly result from the approximately 103 workers that may migrate into the local area for the indirect and induced jobs supported by SGP's construction activities. Given the lower typical salaries for the indirect and induced jobs supported by Alternative 1 construction activities, the workers in-migrating to the local area for these jobs could increase competition for lower-priced housing, which could in turn contribute to greater scarcity of affordable housing and increased housing price appreciation within the local area.

The number of currently available homes for sale or rent is limited (321 homes), and it is expected that the projected 95 new SGP construction workers relocating to the analysis area should be able to afford to buy or rent these available homes. In which case, 226 unoccupied homes would be expected to remain available for the approximately 103 in-migrant non-SGP workers (i.e., indirect or induced workers) that are projected to relocate to Valley or Adams counties. Adverse affordable housing availability impacts could result from Alternative 1 construction activities if there is an insufficient existing inventory of suitable housing within the affected communities. In which case, Alternative 1 construction activities could result in adverse impacts to housing availability and affordability within the local area. In addition, this impact would be expected to occur primarily during the start of Alternative 1 construction and/or operations phases and then subsequently stabilize in the absence of any further increase in local employment. As described under the Relocation discussion below, many factors affect the actual housing demand from in-migrating workers. These include the extent that SGP-related indirect and induced jobs might be filled by existing residents or SGP employee spouses, the extent that in-migrating workers would cohabitate and where they would reside within local communities, which would in turn affect local housing demand and affordability for the local analysis area's existing residential population.

Relocation

Factors affecting relocation include housing availability and schools, as well as other amenities such as parks, restaurants, and recreation. Relocation is a personal decision based on interest, commute preferences, family make-up, and background. As a result, it is inherently difficult to reliably predict the future geographic distribution of the expected population growth. However, several factors may be anticipated to contribute to future relocation outcomes. Some in-migrants may be former local residents who may reside with current residents when they return. Between 2010 and 2016, an estimated 540 working age individuals out-migrated from the local area, possibly for employment reasons. Coupled with an increased prevalence of multi-generational

households, a sizeable number of the in-migrating population may take up residence with friends or relatives that are existing residents and thereby have a lesser impact on local housing demand (Highland Economics 2018).

It also is possible that in-migrating SGP employees may live in dispersed areas within the two counties due to their bi-weekly work schedule and higher income levels, which would give them more housing opportunities – potentially including rental/purchase of more expensive “occasional use” second homes (Highland Economics 2018).

In-migrating workers attracted by the SGP-related indirect and induced labor demand would generally be expected to be less dispersed within the two counties. Instead these individuals may be expected to be more concentrated across the local area’s larger communities where there would likely be greater availability of affordable housing, access to public services and better proximity to local businesses with job opportunities.

As a result, given the existing distribution of population and housing within the McCall and Cascade areas, it might be expected those communities would attract a major share of in-migrating non-SGP workers. A lesser portion of employees might be expected to relocate to Council or New Meadows, while few, if any, new employees and their families would be expected to relocate to the small communities of Yellow Pine or Donnelly, or elsewhere within the unincorporated and more rural areas of the two counties.

Housing impacts under Alternative 1 may be adverse from the overall local area perspective, and it is possible that concentrated new in-migrant population increases could result in greater impacts within specific communities – especially if those communities are not well equipped to absorb the new residents. For example, while McCall has 4,259 housing units, only 1,440 are occupied year-round by residents (Census 2018). If half of the projected new in-migrant workers selected McCall for their place of residence, that would represent an approximate 3 percent increase in the community’s population (3,226 people), which would likely represent and could be perceived by current residents as a noticeable and possibly adverse population effect. As discussed under the Housing Availability and Affordability Section, the potential for affordable housing impacts would depend on the number of lower-paid in-migrants relocating to the specific community. As a result, if there is an insufficient existing inventory of suitable housing within the affected communities, it is possible that adverse affordable housing availability impacts could result from Alternative 1 construction activities.

Social Impacts

The nature of social impacts from the in-migrant work population would depend on numerous factors, including the existing population’s social character and context, the in-migrating population composition, and terms of their residency. A key factor would be the in-migrating populations’ social compatibility with the existing population’s demographic composition and social values/attitudes. The extent and duration of social disruption from new in-migrants would typically be reduced if the in-coming new residents have similar demographic characteristics, common social values, shared attitudes, and/or compatible lifestyles.

As discussed in Section 3.21.3.1, Population and Housing, there have been historically low rates of population growth and new residents moving into the local analysis area. Furthermore, the two-county area population has a high proportion (approximately 25 percent) of residents 65 years or older compared to the Idaho average of 15 percent. The two-county area also has a corresponding smaller proportion of residents under the age of 18 than the statewide average. The median age of the local population in Valley County is approximately 49 years old. The median age of Adams County residents is approximately 54 years old. The communities within Valley and Adams counties are well-established and very stable; most of the residents own their homes, and a large share of whom have lived in their current place of residence for 20 years or more. More than a quarter of Valley County residents and approximately a third of Adams County residents have lived in their current home more than 20 years. As a result, most existing residents likely have a strong connection and sense of ownership with their local community. These residents also may tend to value continuity and have some aversion to change. These factors may be reflected in their “sense of place” and “quality of life” that they perceive and attribute to their communities and relationships with their surroundings.

During SGP scoping, public comments ranged from support of the SGP to specific issues of concern about future SGP impacts. Commenter support for the SGP mentioned its benefits for the local, regional, and state economy by providing jobs. They also stated that year-round employment (as opposed to seasonal tourism-related jobs) would bring financial security to an economically depressed region from both the direct and indirect contributions to the local economy. Commenters not in support of the SGP expressed concerns about adverse effects on the environment, other industries, potential “boom and bust” impacts, and the influx of worker demand on public services like road maintenance and schools. Commenters also expressed social concerns of future property theft and vandalism (AECOM 2018).

The composition and residency of the future in-migrating population is unknown and difficult to predict. However, it is expected that a large share of the workers relocating to the area would likely be from elsewhere in Idaho or residents from adjoining states. In which case, while these in-migrating workers would likely be younger than most of the current population, it may be expected that most of the in-migrants would have a similar cultural, racial, and social backgrounds as existing residents.

The extent that the in-migrating population would have or would be perceived to have adverse impacts on the existing communities’ social character also would be dependent on other factors. The location and concentration of the incoming new resident population may affect the nature and extent of their interactions and relationships with existing residents. Given the well-paying positions, in-migrating SGP employees and contractors would have more housing choices and might be expected to be more dispersed within the local area. Non-SGP workers might be more likely to live within the area’s larger communities and closer to employment opportunities. In which case, non-SGP worker household’s presence would be more noticeable and more widely observed by existing residents. These in-migrants would have more frequent interactions with existing residents and may be perceived to be adding competition for affordable housing and jobs. Consequently, there may be more potential for adverse social effects from their relocation to local area.

Another factor would be the extent that the new in-migrant population seeks and is able to successfully integrate into the existing communities. The opportunities of relatively secure mine operations jobs might be expected to attract in-migrating SGP construction workers that would have a high likelihood of long-term residency and seek to integrate into their new community.

Typically, most substantial and serious social impact concerns of existing residents are focused on the potential disruptive actions by the in-migrating population (e.g., in the form of interpersonal conflicts, social disturbances, and incidents of crimes). For many of the reasons discussed above, the likelihood of such adverse social impacts occurring from the SGP's construction phase may be considered limited given the relative size and expected composition of the in-migrating populations.

Public Services

Direct

Alternative 1 construction activities could attract a projected 438 new residents (workers and families) that could relocate to the local analysis area (see Section 4.21.2.1.1.3, Population and Housing). This population growth would likely result in increased public services demand and use. The type and extent of the public service increases would depend on the demographics of the new residents. For example, the number and age of children relocating with in-migrating workers would determine increased enrollment impacts on the local public school system.

The population growth also would result in increased sales tax revenue (state and in some cases local), utility payments, and possibly property tax revenues (if existing property values appreciate or home development expands) (see Section 4.21.2.1.1.4, Government Revenues). Potential adverse impacts to public services may occur if the new residents' service demands exceed their revenue contribution and/or the specific public service/program's capabilities.

The local analysis area's public water utilities and school systems have the most potential to be impacted by the expected population increases. The communities of McCall, Cascade, New Meadows, and Donnelly all provide water and sewer services for their residents, and addition of new permanent residents may, in some cases, increase stress on their systems. Community members have expressed concern about these impacts (AECOM 2018).

The public school system within the local area consists of several independent school districts located in McCall, Donnelly, Cascade, New Meadows, and Council. Under the mid-value worker residency scenario for Alternative 1, it is projected that up to 121 children may relocate to the local analysis area. In which case, the potential increase in school enrollment demand would be approximately 80 students (Census 2015; Highland Economics 2018). If these new students are evenly distributed across grades, then the average enrollment increase per grade would be approximately six additional students in each grade.

As shown in **Table 3.21-8**, McCall school district's recent (2018) enrollment is higher than past 2000 and 2010 levels, while the Cascade school district's enrollment has decreased by approximately 38 percent over the last 20 years. Cascade and New Meadows are both under

enrolled, while McCall and Donnelly currently do not have capacity for additional students (Idaho Department of Education 2019). As a result, the SGP-related influx of new students would correspond to an approximately 6 percent increase in enrollment. Furthermore, if the in-migrating student population consists of more similarly aged children, then the increase for their corresponding grades would be higher and more likely to be difficult for the local school systems to accommodate. If this occurs, the adverse impact on the public school system could be very substantial if the current programs and facilities have insufficient capacity to absorb that additional student enrollment.

The population increase under Alternative 1 would likely result in limited effects to local police and fire protection services. Adams and Valley counties' telecommunications and internet infrastructure operate at near capacity and, therefore, may have difficulty in maintaining service levels from increased service demand in some locations.

Public service impacts under Alternative 1 would depend on both the location of any SGP-related population growth and the specific circumstances of the affected public services. It is possible that adverse public service impacts could occur to the local analysis area's water and public school system, particularly if in-migrants are more highly concentrated in individual communities such as McCall (though this is hard to predict). In which case, there could be substantial adverse impacts to those public services.

However, if the relatively limited projected population growth is not highly concentrated, then construction could have only minor or negligible adverse impact on most of the local area's public services.

Indirect

Valley County's 2019 unemployment rate was relatively low (3.9 percent). Adams County's unemployment rate was higher at 6.6 percent in 2019 (Idaho Department of Labor 2020a,b). While vacancies in these sectors might be more readily filled by Adams County's unemployed or under-employed residents, it is likely that Valley County communities would provide a larger share of Alternative 1 local area employees and, therefore, receive greater benefit of higher wage jobs in construction and mining. Consequently, Valley County's public agencies and service sectors also would have greater potential of possible adverse impacts from wage-inflation and/or understaffing. These jobs are important for the functioning of the local economies. A lack of employees able to fill these positions could negatively affect the local government service sectors, assuming new workers do not move into the area and government agencies have limited flexibility to adjust wages and/or increase funding to pay contractors.

Labor cost increases could adversely affect the capacity for public agencies that rely on lower paid, skilled workers for their operations (i.e., school bus drivers, garbage haulers, etc.) to continue providing their services. In addition to increasing their operating costs, in more serious cases the labor shortages could result in business contractions and reduced public services if their work positions remain unstaffed. Contraction also could occur for private businesses relying on lower-wage or competing wage workers; however, businesses may have greater

flexibility to react to increases in disposable income, adjust their wage rates, attract new workers, and benefit from the influx of higher wage jobs.

It also is possible that any adverse wage-inflation or staffing impacts would result in relatively short-term effects as the affected public agencies, private businesses, and local economy adjust their operations to the changes in labor force availability. These adjustments may occur during the both the mine construction and operation phases.

4.21.2.1.1.4 Government Revenues

Valley County and Adams County residents and businesses pay federal and state income taxes, and their purchases are subject to state sales taxes. In addition, the buildings within the local area owned by individuals and businesses are subject to local and state property taxes.

Table 4.21-4 shows the estimated projected annual tax revenues resulting from Alternative 1's construction activities.

Table 4.21-4 Projected Annual Taxes Generated and Supported by Alternative 1 - Construction (\$M/year, 2017 Dollars)

Impact Type	Midas Gold	Other	Total - Annual	Total - All Years ⁴
State Sales Tax ¹	\$4.9	\$0.7	\$5.6	\$16.8
State Personal Income Tax ²		\$3.4	\$3.4	\$10.2
State Corporate Income Tax		\$0.3	\$0.3	\$0.9
State and Local Subtotal	\$4.9	\$4.4	\$9.3	\$27.9
Federal Personal Income Tax ²		\$21.2	\$21.2	\$63.6
Federal Payroll Taxes ^{2,3}	\$7.1	\$27.9	\$35.0	\$105.0
Federal Corporate Tax		\$5.3	\$5.3	\$15.9
Federal Subtotal	\$7.1	\$54.4	\$61.5	\$184.5
Total (Local, State, Federal)	\$12.0	\$58.8	\$70.8	\$212.4

Table Source: Highland Economics 2018

Table Notes:

- 1 Does not include local sales taxes.
- 2 Tax payments for these items also are included in the employee compensation estimates.
- 3 Includes social security and Medicare payments by both employee and employer paid payroll taxes.
- 4 Based on a 3-year construction period.

M = million

The total annual government tax revenue benefits from Alternative 1 construction activities are estimated to be \$70.8 million per year and \$212.4 million over the 3-year construction period. Midas Gold is projected to pay \$12.0 million of these taxes annually or \$36.0 million over the construction period. The other \$58.8 million per year in total taxes would be obtained from

businesses and employees supporting the SGP. Over the entire 3-year construction period, the total taxes paid by SGP support businesses and employees are projected to total \$176.4 million.

The federal government is expected to receive most of total tax revenues resulting from Alternative 1 construction activities. The state and local tax revenues generated by Alternative 1 are projected to total \$9.3 million per year, of which the majority would be received by the State of Idaho. No property taxes are expected to be paid by Midas Gold until after the SGP facilities are completed and the mining operations begin. As a result, Alternative 1 construction activities are expected to result in negligible tax revenue benefits for the local area's economy.

4.21.2.1.1.5 Transportation and Infrastructure

Transportation

Changes in the local network of access roads and traffic use could potentially have socioeconomic impacts on the surrounding communities and their residents and businesses if it results in substantial changes in roadway use and/or user spending within those communities.

Alternative 1 construction phase impacts on the local analysis area's transportation system from both use and network changes are analyzed in detail in Section 4.16, Access and Transportation. The socioeconomic impact analysis evaluates the nature and extent of projected travel redistribution and changes in traffic conditions to assess if they would result in corresponding economic changes for local area residents, businesses, and the local area's economy.

During the 3-year construction phase, a total annual average daily traffic (AADT) increase of 65 vehicle trips is projected to occur, which would be distributed across several routes within the local roadway network. No measurable socioeconomic effects on the local area economy is expected due to the affected roadway system's remote location, very low use levels, and the limited traffic growth from Alternative 1's construction activities.

Some existing roads would be upgraded and maintained to support SGP-related traffic or to offset impacts to recreational use under Alternative 1. As noted in Section 4.16, Access and Transportation, Midas Gold would be responsible for roadway maintenance measures under a cooperative agreement with the U.S. Forest Service (Forest Service) and Valley County. The Burntlog Route would be constructed specifically to provide access to the mine site for construction and operational transportation needs. In addition, an off-highway vehicle (OHV) Connector trail (from a new transmission line access road to Meadow Creek Lookout Road [National Forest System Road (FR) 51290] in an area that does not have existing motorized use trails. The Stibnite Road portion of the McCall-Stibnite Road (County Road [CR] 50-412) also would be closed at Sugar Creek.

These roadway system changes have the potential to divert some recreational travel and spending from the village of Yellow Pine to other locations with access to the Payette National Forest and Boise National Forest. Traffic data on the number of annual recreationists travelling through Yellow Pine via this route is limited but is approximately 29 vehicles per day. This traffic

likely includes current SGP employees and contractors accessing the mine site area as part of ongoing exploration activities. As a result, there is the potential for reduced economic activity in Yellow Pine from May through November from Alternative 1 roadway system changes. However, it also may be expected that any of the spending from diverted recreationists would be spent locally elsewhere and recaptured by the local area economy.

While the roadway improvements may redirect some traffic within the local area, the improvements are not expected to induce significant new visitation. As a result, Alternative 1 changes to the local area's roadway system and use are not anticipated to result in any major new economic activity or economic development. Consequently, the transportation impacts under Alternative 1 are expected to have negligible socioeconomic effects on the local analysis area's economy during the construction phase.

Infrastructure

Other infrastructure changes, such as utility system upgrades, also could have socioeconomic impacts on surrounding communities depending on nature of the effects on local area residents and businesses.

All the transmission lines and electrical substations that would be upgraded or built are located within remote and underdeveloped areas with no current operating businesses or other economic activities. Concerns have been noted that the service capacity increase from Alternative 1 upgrade to the local area utility infrastructure could attract and result in other new development within the local study area that would result in additional socioeconomic impacts. However, it is considered highly unlikely that any such induced development would occur, because utility service capacity is not considered a primary limiting factor to current economic development within the vicinity of the upgraded or new utilities. Consequently, no utility service capacity related impacts are expected to occur from Alternative 1 utility service changes.

4.21.2.1.1.6 Tourism

Recreation and tourism are important sectors of the local area economy. Recreation and tourism businesses are Valley County's largest source of employment and provide more than 29 percent of county jobs (see **Table 3.21-5**).

There are several ways that SGP activities at the mine site and related infrastructure (including surrounding areas where SGP-related physical impacts may occur) could potentially affect recreation use. SGP-related physical impacts to the local analysis area's resources (e.g., noise/visual impacts and wildlife habitat conditions) could reduce the quality of the recreational resources (i.e., user opportunities and experiences) within the vicinity of the mine site and off-site facilities. The type and degree that such resource changes would affect recreational and tourism use also would depend on the relationship and extent that visitor use decisions would be influenced.

SGP-related changes in recreation access or opportunities (i.e., recreation and wildlife conditions) could affect the local area's economy through visitor spending changes at local

tourism businesses. The nature and extent of the impacts to the local area's tourism economy would depend on the type and magnitude of SGP-related changes in local visitation and use. Non-local visitor use changes would generally have greater potential to impact local tourism businesses due to their higher spending on goods and services than local residents.

Recreation use impacts are analyzed in detail separately in Section 4.19, Recreation. This section evaluates the potential impacts on tourism-related businesses and the region's economy from expected changes to recreation due to construction activities.

SGP-related changes in recreation access (and consequently use) may result from both restrictions on the areas open to public use and/or changes in the local transportation system that affect users' ability to travel to the local area's recreational destinations.

SGP construction and operations would require imposition of an Operations Area Boundary primarily surrounding the mine site. Public use would not be allowed within the 13,446 acres of public lands within the Operations Area Boundary. Existing dispersed recreational use and opportunities that occur in this area would be displaced to other locations in or adjacent to the analysis area.

However, once the Burntlog Route is constructed, access to recreation areas beyond the SGP area, such as Monumental Summit and Thunder Mountain would be available when other routes through the mine site are not open to the public. As a result, there could be short-term decrease in recreational use and tourism-related business revenues during the 3-year construction phase to these areas.

Impacts on recreation opportunities at and around the mine site would begin during construction and continue until the mine was closed, the site reclaimed and the area is reopened for dispersed recreation use. Some displaced visitors may choose to continue recreating at their current locations in other National Forest areas, such as the South Fork area, rather than return to the mine site area due to permanent changes in the recreation setting within the Operations Area Boundary. Nonetheless, there would be no net loss in recreation use and visitation for the local analysis area, and the socioeconomic impacts to the local analysis area's tourism sector and overall economy would be negligible.

However, it also is possible that SGP-related displacement of some recreational use and visitation from area's near local communities, such as Yellow Pine or Warm Lake, could reduce tourism spending at their businesses. Depending on the type and magnitude of any such lost spending, it is possible that adverse economic impacts on individual businesses and community economies could occur.

More specifically, SGP construction would affect access to the operating areas of three outfitters and guides as a result of the development of Burntlog Route and the OHV Trail, as well as the closure of Stibnite Road (CR 50-412) and the mine site Operations Area Boundary. In addition, the SGP also could degrade recreation experiences for customers participating in guided activities near construction of these components due to construction noise and activity. This

could negatively affect their ability to provide their licensed activities and may degrade their customer's recreation experiences. However, all outfitters would continue to be able to access and use major portions of their operating areas that would not be impacted by the SGP. It is likely that any of their permitted uses displaced by the SGP could be served elsewhere within their existing operating areas. As such, adverse impacts to their operations and customers would be very limited.

4.21.2.1.2 OPERATIONS

4.21.2.1.2.1 Employment

Direct

Table 4.21-1 shows the projected average annual employment and work residency for SGP operations. An average of 583 workers are expected to be employed annually (including subcontracted employees) over the expected 12- to 15-year operating period (Highland Economics 2018).

As shown in **Table 4.21-1**, the majority of SGP operations workers (ranging from 70 to 90 percent) are expected to be Idaho residents. Under the mid-value scenario, SGP operations would provide employment for 470 Idaho residents, of which 200 would live in Valley County or Adams County. As shown in **Table 4.21-3**, it is expected that about 100 of these jobs could be filled by workers relocating to the local two-county area.

It is expected that most of the local construction workers would be adequately qualified and/or trainable for mine operations work and that many construction workers living locally or elsewhere within Idaho would likely accept mine operations jobs. These, and other local residents, would be adequately qualified for the general, administrative, and maintenance positions. These job categories account for approximately one-half of the SGP's operations phase workforce needs (Highland Economics 2018).

This local area employment increase would improve the standard of living for the employees and their families and it can be expected to last for the duration of the mining operations phase. The estimated direct local job impact of 200 local resident employees from Alternative 1's operations would correspond to 3.5 percent of the local area's 2019 total employment of 5,777 (Idaho Department of Labor 2020a,b).

Indirect and Induced

As with the construction phase, operation's spending and employment also would result in indirect and induced employment effects on the state and local analysis area's economy.

Under the mid-value scenario, IMPLAN analysis estimates that up to 310 full- and part-time indirect jobs within the State of Idaho would be supported by Alternative 1 during the 12- to 15-year period of operations. Similarly, up to 370 full- and part-time induced jobs within Idaho also would be supported over the same period. As a result, it is projected that a total of

680 indirect and induced jobs would be supported annually by the SGP during the operations phase. Most of this employment would occur outside the local economy, as a total of 270 Valley and Adams County jobs (150 indirect and 120 induced) out of the 680 total are projected to be supported by Alternative 1 operations (Highland Economics 2018). Outside of Idaho, the total indirect and induced full and part-time jobs supported by the SGP would be approximately 1,430 (Highland Economics 2018).

Employment Summary

Based on the direct, indirect, and induced employment impacts described above, under the mid-value scenario, Alternative 1's overall statewide employment impact is estimated to support a total of 1,150 full- and part-time jobs for Idaho residents annually during the 12- to 15-year period of operations. The overall local employment impact of Alternative 1 during operations is expected to total 470 full- and part-time jobs. This local job impact would correspond to 8.1 percent of the local area's 2019 total employment of 5,777 (Idaho Department of Labor 2020a,b).

The number of unemployed residents in the labor force in 2019 in Valley and Adams counties was approximately 327 (Idaho Department of Labor 2020a,b). Therefore, the SGP could provide jobs to unemployed or under-employed residents in the labor force in those counties and also may be expected to attract some worker in-migration to the local area.

Overall, the SGP is estimated to support 2,690 direct, indirect, and induced jobs for residents nationwide (i.e., Idaho and elsewhere in the U.S.) (Highlands Economics 2018).

4.21.2.1.2.2 Income

Direct

Under Alternative 1, a total of approximately 436 million tons of ore and development rock would be mined from the Yellow Pine, Hangar Flats, and West End pits. As discussed in Section 2.3, Alternative 1 – Action Identified in Midas Gold's Plan, SGP operations would recover 4 to 5 million ounces of gold, 2 to 3 million ounces of silver, and 100 to 200 million pounds of antimony. Based on the 2014 to 2018 average mineral prices (in 2017 dollars) for gold (\$1,216 per ounce), silver (\$16.50 per ounce), and antimony (\$3.67 per pound), the total future value of mineral production (after refining) would be estimated to range from approximately \$5.3 billion to \$6.9 billion (U.S. Geological Survey 2019). The annual value of extracted minerals would be between approximately \$439 million and \$572 million per year over the operations phase (U.S. Geological Survey 2019).

Table 4.21-5 shows the average annual spending on labor, materials, equipment, and services for SGP operations. Operations expenditures under Alternative 1 also are broken out by their sourcing location.

Table 4.21-5 Annual Operations Spending (\$M/year, 2017 Dollars)

Direct Spending	Total	Local	State Non-Local	State - Total	Out of State
Salaries & Wages	\$53.4	\$18.7	\$24.0	\$42.7	\$10.7
Vendor On-Site Labor	\$2.3	\$0.8	\$0.8	\$1.6	\$0.7
Vendor On-Site Operations	\$13.7	\$13.7	\$0.0	\$13.7	\$0.0
Material, Equipment & Services	\$165.3	\$26.8	\$48.1	\$74.9	\$90.4
Total	\$234.7	\$60.0	\$72.9	\$132.9	\$101.8

Table Source: Highland Economics 2018

During operations, it is projected that an average of approximately \$53.4 million (in 2017 dollars) in salaries and wages would be paid to its 583 operations workers. Under the mid-value local residency scenario, \$42.7 million in salaries and wages would be paid to Idaho residents working for SGP. Of this, Valley County and Adams County residents are projected to receive \$18.7 million in annual salary and wage income (Highland Economics 2018). Salaries and wages paid to out-of-state residents are projected to total \$10.7 million.

Based on the projected total annual direct labor cost of \$53.4 million, the average salary of all SGP employees (i.e., including management staff) is calculated to be \$90,600 (in 2017 dollars) (Highland Economics 2018). This fully burdened wage accounts for overtime compensation, as well as employee health and other benefits. The average wage for local residents is projected to be approximately \$92,500 per year (in 2017 dollars) and also is fully burdened to account for employee health and other benefits. The corresponding unburdened salary is estimated to be \$64,800, which is comparable to the area’s prevailing Davis-Bacon rates of \$20 to \$30 per hour depending on the position (Highland Economics 2018).

SGP employees are expected to spend all their earnings in their community of residence, given their bi-weekly shift schedules and employee housing at the mine site’s remote location. As a result, the direct economic impact to the Valley County and Adams County economies would be limited to the income earned by the 200 operations staff that live within the local area.

Indirect and Induced

As with the construction phase, SGP operational spending and employment would result in indirect and induced income changes to the state and local analysis area’s economy.

Under the mid-value scenario, IMPLAN analysis estimates SGP operations would result in \$15.7 million in indirect and \$13.7 million in induced income annually in Idaho. Most of this income would be earned outside the local economy, as Alternative 1 operations are projected to result in \$7.6 million in indirect and \$3.3 million in induced income within the two-county

economy (Highland Economics 2018). Based on an assumed full-time equivalent employment rate of 80 percent for projected indirect and induced full-time and part-time local jobs, the average salary for these workers (including benefits) is estimated to range from \$33,700 (induced) to \$63,300 (indirect) per year.

Income Summary

Based on the direct, indirect, and induced income effects analyzed above, under the mid-value scenario, Alternative 1 operations statewide total income impact during the 12- to 15-year period of operations is estimated to be \$71.6 million per year. Of this statewide total, the overall local income impact is expected to total \$29.3 million per year for Valley County and Adams County residents. Outside of Idaho, the SGP is projected to support a total of \$114.8 million in direct, indirect, and induced income resulting in a nationwide total of \$186.4 million in indirect and induced income (i.e., combined total of Idaho and elsewhere in the U.S.) (Highland Economics 2018).

4.21.2.1.2.3 Population and Housing

As shown in **Table 4.21-1**, Alternative 1 local employment levels during operations are expected to be comparable to the levels during construction. Furthermore, operations are projected to result in a similar level of in-migration with a total of 190 workers expected to relocate to the local analysis area as a result of Alternative's 1 operations labor needs. Of this total, 100 would be expected to be employed by SGP's operations and up to another 90 workers would be supported by the operations either indirectly (i.e., through support business) or induced (i.e., by increased spending by SGP or indirect workers).

A portion of Alternative 1 operations labor needs is expected to be staffed by existing local residents (either pre-construction or construction in-migrants). It is expected that most of Alternative 1's local construction workers would be adequately qualified and/or trainable for the operations positions. As a result, many of those workers would accept positions to work at the mine during operations. Both these and many other local residents would be adequately qualified for general, administrative, and maintenance positions. These job categories account for approximately one-half of the operations phase work force needs (Highland Economics 2018).

The population growth or housing demand impacts from operations would likely be very similar to those resulting from construction activities. The 190 workers projected to relocate to the local area during operations phase would be expected to result in a total population increase of up to 420 new residents, which would consist of 82 single individuals, 108 couples, and 122 children. This potential in-migration could add new local housing demand for up to 190 homes.

The approximately 90 workers that may migrate into the local area due to the increased labor demand for indirect and induced jobs may impact affordable housing availability. However, this is a relatively small number, and Alternative 1's operations are expected to result in relatively minor adverse impacts to housing availability and affordability within the local area. In addition,

this impact would be expected to occur primarily during the start of construction and operations phases and then subsequently stabilize in the absence of any additional local employment growth.

As discussed previously for Alternative 1 construction activity impacts, the potential for affordable housing impacts would depend on the number of lower-paid in-migrants relocating to the specific community (see subsection 4.21.1.1.3). It is possible that major adverse affordable housing availability impacts could result from Alternative 1 operations if there is an insufficient existing inventory of suitable housing within the affected communities.

Similarly, public service impacts from Alternative 1 operations would depend on both the location of any SGP-related population growth and the specific circumstances of the affected public services. It is possible that major adverse public service impacts could occur in the local area's water and public school system especially if its facilities have inadequate capacity to meet the increased service demands. However, provided the population growth from Alternative 1 operations is not highly concentrated, Alternative 1 operations would at most have only minor or negligible adverse impacts on most of the local area's public services.

The potential social impacts during SGP operations would be expected to be similar to those from SGP construction given that the expected SGP-related in-migration would be comparable between the phases. In addition, many local construction workers might subsequently be employed by the mine operations. The businesses and jobs supported by SGP operations also would be largely similar to those supported by SGP construction. As a result, the in-migrating worker population for SGP construction would be expected to continue to work and reside locally during the 12- to 15-year period of operations. Given the general continuity in SGP-related employment between the construction and operations phases, very limited net or new changes to the local area's social environment and character would be expected to be experienced or perceived by the existing residents. Furthermore, most of any social impacts from the in-migrating population would likely dissipate as the new residents integrate into their local communities and are accepted by the existing residents. As a result, the SGP operations phase may be expected to result in limited adverse social impacts over the 12- to 15-year period of operations.

4.21.2.1.2.4 Government Revenues

Table 4.21-6 shows projected annual tax revenues from SGP operations under Alternative 1. Annual government tax revenue benefits from SGP operations under Alternative 1 are estimated to total \$61.7 million. Midas Gold is projected to pay \$29.4 million in taxes annually. The other \$32.3 million would be paid by SGP support businesses and employees.

The federal government is expected to receive most of the total tax revenues resulting from Alternative 1 operations. Federal tax receipts during the SGP operations phase are projected to be \$51.6 million annually and total \$619 million over the entire operations period (based on a 12-year operations period). The state and local tax revenues generated under Alternative 1 are projected to be \$10.1 million per year and total \$121.4 million over the entire operations period.

Most of these taxes would be received by the State of Idaho. Local tax revenues paid by Midas Gold are projected to average \$0.3 million per year and total \$4.5 million over the entire assumed 12-year period of operations. In 2018, Valley County’s property tax totaled \$7.5 million; therefore, the SGP’s projected annual property tax would account for approximately 4 percent of Valley County’s current total property tax. As a result, operations under Alternative 1 are expected to result in a relatively limited tax revenue increase for the local area’s economy.

Table 4.21-6 Projected Annual Taxes Generated and Supported by Alternative 1 - Operations (\$M/year, 2017 Dollars)

Impact Type	Midas Gold	Other	Total - Annual	Total – All Years²
Property Tax	\$0.3	–	\$0.3	\$3.8
State Mine License	\$0.1	–	\$0.1	\$1.2
State Sales Tax	–	\$0.8	\$0.8	\$9.6
State Personal Income Tax	–	\$2.3	\$2.3	\$27.6
State Corporate Income Tax	\$6.4	\$0.2	\$6.6	\$79.2
State and Local Subtotal	\$6.8	\$3.3	\$10.1	\$121.4
Federal Personal Income Tax	–	\$10.7	\$10.7	\$128.4
Federal Payroll Taxes ¹	\$5.7	\$14.3	\$20.0	\$240.0
Federal Corporate Tax	\$16.9	\$4.0	\$20.9	\$250.8
Federal Subtotal	\$22.6	\$29.0	\$51.6	\$619.2
Total (Local, State, Federal)	\$29.4	\$32.3	\$61.7	\$740.6

Table Source: Highland Economics 2018

Table Notes:

1 Includes social security and Medicare payments by both employee and employer paid payroll taxes.

2 Based on a 12-year operations period.

“–” This cell is blank.

Local property taxes may be used to fund local schools, local governments, local law enforcement, fire protection, local roads, and other public services. The extent that the SGP-related increase in local tax revenues would result in a net benefit to Valley County’s public services would depend on the extent that they offset increases in costs to provide public services.

It is expected that SGP’s reliance on public services would be limited, as it would generally self-administer on-site security and fire protection services. As noted in Section 4.16, Access and Transportation, Midas Gold would be responsible for roadway maintenance measures under a cooperative agreement with Forest Service and Valley County. As such, there would be no increased cost to Valley County and its taxpayers as a result of any SGP-related roadway repair costs.

As discussed previously (see Public Services subsection in Section 4.21.2.1.1.3), public services demand impact would predominantly result from SGP-related local population increases (i.e., worker in-migration). In addition, Alternative 1 operations could result in adverse impacts on government provision of services and staffing from wage inflation and local worker shortages for lower paying jobs within the local area, contingent on the ability of agencies and contractors to backfill staff losses over the longer period of operations, compared to the 3-year construction phase.

4.21.2.1.2.5 Transportation and Infrastructure

Operations phase impacts under Alternative 1 on the local analysis area's transportation system from both use and network changes are analyzed in detail in Section 4.16, Access and Transportation. The socioeconomic impact analysis evaluates the nature and extent of projected travel redistribution and changes in traffic conditions to assess if they would result in corresponding economic changes for local area residents, businesses, and the local area's economy.

During operations, a total AADT increase of 68 vehicle trips is projected to occur, which would be mainly along Warm Lake Road and the Burntlog Route. This traffic growth is approximately the same as that projected during the construction phase. In addition, the roadway network would be generally the same under both the construction and operations phases, but the Burntlog Route would be the only route use to access the mine site. Therefore, Alternative 1 socioeconomic impacts from transportation during operations would be the same as those during the construction phase. Furthermore, as noted in Section 4.16.2.1.4, Access and Transportation, Midas Gold would be responsible for roadway maintenance measures under a cooperative agreement with Forest Service and Valley County. As such, there would be no increased cost to Valley County and its taxpayers as a result of SGP-related roadway repair costs. Consequently, Alternative 1 transportation impacts are expected to have negligible socioeconomic effects on the local analysis area's economy during the operations phase.

4.21.2.1.2.6 Tourism

The Operations Area Boundary established during SGP construction would remain in place during operations. SGP-related changes in recreation access and opportunities (i.e., recreation and wildlife conditions) during operations would be similar to construction, with the main difference being that mine access would be via Burntlog Route exclusively.

These SGP-related changes could result in increased or decreased recreation visitation (either in numbers of visitors and/or their recreation use). For example, new access could provide new recreation opportunities and increased access to the wilderness, but there also would be negative impacts and reduced opportunities for non-motorized uses and potential impacts to wilderness visitors.

Generally, it is expected that any impacted or displaced recreation would likely relocate to other National Forest areas within the local analysis area. This outcome may be expected due to both the limited recreation use levels of the affected areas and the existing availability of alternate

and comparable recreational areas and resources. As a result, the corresponding change in recreation use under Alternative 1 operations would have negligible socioeconomic impacts to the local area's tourism sector and overall economy.

However, it also is possible that SGP-related displacement of some recreational use and visitation from area's near local communities, such as Yellow Pine or Warm Lake, could reduce tourism spending at their businesses. Depending on the type and magnitude of any such lost spending, it is possible that adverse economic impacts on individual businesses and those community economies could occur.

Furthermore, as discussed in Section 4.21.2.1.1.6, Tourism, three of the outfitter businesses currently within the analysis area could have access to portions of their operating areas and their customer experiences impaired by the SGP facilities and operations. This could negatively affect their ability to provide their licensed activities and may degrade their customer's recreation experiences. However, all outfitters would continue to be able to access and use major portions of their operating areas that would be unimpacted by the SGP. It is likely that any of their permitted use displaced by the SGP could be served elsewhere within their existing operating areas. In which case, adverse impacts to their operations and customers would be very limited.

4.21.2.1.3 CLOSURE AND RECLAMATION

4.21.2.1.3.1 Employment

Direct

SGP employment under the post-operations phases would decline sharply from construction and operations phase levels. **Table 4.21-1** shows SGP's projected average annual employment and work residency for the closure and reclamation phase. During the 5-year closure and reclamation phase, the SGP would expect to employ a total of 160 workers, which would decrease to 40 workers for the subsequent monitoring (Highland Economics 2018).

As shown in **Table 4.21-1**, the majority of SGP closure and reclamation workers (ranging from 70 to 90 percent) are expected to be Idaho residents. SGP employment during the much of the closure and reclamation phase would total 160 positions, which would be a net decrease of 423 positions from the prior operations employment levels. The decrease in employment for Idaho residents is estimated to be 340 jobs, of which 110 are expected to be local resident jobs. As discussed in the Scoping and Issues Summary Report, Midas Gold has indicated that they could ramp up and ramp down employment in a measured way to result in a more gradual transition for local area residents and the economy (AECOM 2018).

After the major closure and reclamation tasks are complete, employment would decrease to 40 positions and would correspondingly result in a decrease of 120 jobs from the prior employment levels at the beginning of this phase. The decrease in employment for Idaho

residents is estimated to be 90 jobs, of which 70 are estimated to be Valley County and Adams County residents (Highland Economics 2018).

As discussed further below, the post-closure decrease in employment and other related economic activity could result in adverse economic impacts on the local area's economy from the "bust" following the prior "boom" from the SGP's construction and operations employment and spending. When mine operations cease, local communities and economies may experience a contraction in demand for private and public goods and services and a corresponding reduction in demand for labor. Investment and capacity expansion that occurred during mine operations may become under-utilized unless new economic productivity and business opportunities develop in the region. Post-closure economic expansion and investment may happen if tax revenue or fees from mining can be effectively re-invested in community services and infrastructure, creating an environment conducive for long-term economic growth.

However, the SGP closure and reclamation phase would result in net increases in local employment compared to the No Action conditions (Alternative 5). SGP reclamation's direct employment of 90 local workers during the first 5-years of closure and reclamation would correspond to 1.6 percent of the local area's 2019 total employment of 5,777 (Idaho Department of Labor 2020a,b).

SGP direct employment of 20 local workers during the final part of closure and reclamation would correspond to 0.3 percent of the local area's 2019 total employment of 5,777 (Idaho Department of Labor 2020a,b).

Indirect and Induced

As with the construction and operations phases, Alternative 1's closure and reclamation spending and employment would result in indirect and induced employment effects on the state and local analysis area's economy.

Under the mid-value scenario, IMPLAN analysis estimated that, on average, approximately 20 full- and part-time indirect jobs within Idaho would be supported annually by Alternative 1's reclamation activities during the first 5 years of this phase. Similarly, approximately 40 full- and part-time induced jobs within Idaho also would be supported over the same period. Most of these jobs would occur within the local economy. A total of 10 indirect and 30 induced local jobs are projected to be supported within the Valley and Adams counties' economy by Alternative 1's closure and reclamation phase during the first 5 years (Highland Economics 2018).

In addition, SGP closure and reclamation activities after the first 5 years is expected to support approximately 20 full- and part-time indirect and induced jobs for Idaho residents per year during the 15-year duration. Ten of these jobs are projected to be filled by local residents (Highland Economics 2018). The total local, state, and national indirect and induced full and part-time jobs supported by the SGP would be approximately 170 (Highland Economics 2018).

Employment Summary

Based on the direct, indirect, and induced employment impacts analyzed above, under the mid-value scenario, Alternative 1 overall statewide employment impact is estimated to total 190 full and part-time jobs during the first 5 years of the closure and reclamation phase. The overall local employment impact of Alternative 1 during this period is expected to total 130 full- and part-time jobs, resulting in a corresponding decrease in total employment of 340 full- and part-time jobs from prior employment levels during operations. This local employment corresponds to 2.2 percent of the local area's 2019 total employment of 5,777 (Idaho Department of Labor 2020a,b).

Under the mid-value scenario, Alternative 1 overall statewide employment impact is estimated to total 40 full- and part-time jobs during the additional 15-year period. The overall local employment impact of Alternative 1 during this phase is expected to total 30 full- and part-time jobs. This local employment corresponds to 0.5 percent of the local area's 2019 total employment of 5,777 (Idaho Department of Labor 2020a,b).

Alternative 1 is expected to support a total of 130 full- and part-time jobs (including direct, indirect and induced jobs) for local area residents during the 5-year closure and reclamation phase. Over the subsequent 15-year post-closure period Alternative 1 is expected to support 30 full- and part-time jobs for local area residents (see **Table 4.21-3**). Overall, the SGP is estimated to support 330 direct, indirect, and induced jobs during closure and reclamation for residents nationwide (i.e., Idaho and elsewhere in the U.S.) (Highlands Economics 2018).

Such potential “boom and bust” effects from a mine’s closure are commonly recognized as potential source of adverse socioeconomic impacts on the local area economy. The impacts on the local area’s economy depend on employees’ responses after their mine employment ends, as well as their other employment opportunities. If the local area’s economy is strong and there are sufficient job opportunities with adequate earning potential for the unemployed mine workers, then the adverse economic impacts on the local economy could be limited if the unemployed mine operations workers are re-employed locally elsewhere. While it may be difficult for the displaced mine workers to find equally high-paying replacement jobs, some individuals may be willing to accept less wages for job positions with more traditional work schedules, working conditions, and duties. As discussed in the Scoping and Issues Summary Report, Midas Gold also has indicated that they could ramp up and ramp down employment in a measured way to reduce the “bust” effects on the local area residents and economy (AECOM 2018).

In addition, economic development planning, job-retraining, and other mechanisms can be used to facilitate the transition after the mine’s closure. However, in the absence of established funding and implementation commitments (either by Midas Gold or state/local public agencies), potential adverse “boom and bust” impacts could occur.

When mine operations cease, local communities and economies may experience a contraction in demand for private and public goods and services and a corresponding reduction in demand

for labor. Investment and capacity expansion that occurred during mine operations may become under-utilized unless new economic productivity and business opportunities develop in the region. Post-mining economic expansion and investment may happen if tax revenue or fees from mining can be effectively re-invested in community services and infrastructure – creating an environment conducive for economic growth long-term.

These potential “boom and bust” effects after mine operations cease could result from both SGP’s projected 110-person reduction in the direct employment of local residents and the net 230 job decrease in local induced and indirect employment previously supported by the mining operations phase levels. Given the local analysis area’s largely rural and small economy, in the absence of adequate economic transition mitigation, the mine-closure related decrease in local employment and income could have an adverse impact on the local area’s residents, businesses, and overall economy.

4.21.2.1.3.2 Income

Direct

Table 4.21-7 shows the average annual spending on labor, materials, equipment, and services during closure and reclamation and post-closure activities. Closure and reclamation and post-closure expenditures also are broken out by their sourcing location.

Table 4.21-7 Annual Closure and Reclamation Spending (2017 Dollars)

Direct Spending (\$M/year)	Total	Local	State Non-Local	State - Total	Out of State
Closure and Reclamation					
Salaries & Wages	\$6.6	\$3.6	\$1.7	\$5.3	\$1.3
Material, Equipment & Services	\$11.9	\$1.2	\$6.4	\$7.5	\$4.4
Total - Reclamation	\$18.6	\$4.8	\$8.1	\$12.9	\$5.7
Post-Closure					
Salaries & Wages	\$1.6	\$0.9	\$0.4	\$1.3	\$0.3
Material, Equipment & Services	\$4.3	\$0.5	\$1.6	\$2.0	\$2.2
Total - Closure	\$5.9	\$1.4	\$2.0	\$3.3	\$2.6

Table Source: Highland Economics 2018

It is projected that an approximately \$6.6 million (2017 dollars) in salaries and wages would be paid annually to the 160 workers during closure and reclamation. Under the mid-value local residency scenario, \$5.3 million in salaries and wages would be paid to Idaho residents working for the SGP. Of this, Valley County and Adams County residents are projected to receive

\$3.6 million in annual salary and wage income (Highland Economics 2018). Salaries and wages paid to out-of-state residents are projected to total \$1.3 million.

SGP employees are expected to spend all their earnings within their community of residence, given their bi-weekly shift schedules and employee housing at the mine site's remote location. As a result, the economic benefits to the Valley County and Adams County economies would be limited to the income earned by SGP operations staff that live within the local area.

Alternative 1-related local jobs and earnings also would result in spending and economic activity within the local economy that would in turn support further local employment and income growth. The projected direct income impact from Alternative 1 reclamation activities is \$3.6 million annually. Alternative 1 is projected to support \$18.5 million (including direct, indirect and induced jobs) for local area residents during operations (see Section 4.21.2.1.2.1). Therefore, there would be a corresponding decrease in total local income of \$14.9 million from the prior employment levels during the operations phase.

During the subsequent post-closure phase, it is projected that approximately \$1.3 million (2017 dollars) in salaries and wages would be paid to the 40 workers (all of whom are expected to be Idaho residents). Valley County and Adams County residents are projected to account for 20 of these employees and to receive \$0.9 million in annual salary and wage income (Highland Economics 2018).

Indirect and Induced

Alternative 1 closure and reclamation spending and employment would result in indirect and induced income changes to the state and local analysis area's economy.

Under the mid-value scenario, IMPLAN analysis estimated that Alternative 1's closure and reclamation activities would support \$4.5 million in indirect and \$5.3 million in total induced income. The majority of this induced income would occur outside the Idaho economy, as Alternative 1 closure and reclamation activities are projected to support \$1.1 million in indirect and \$1.6 million in induced income out of the \$4.5 million and \$5.3 million totals. Of the statewide totals, Valley County and Adams Counties residents are projected to receive \$0.4 million in indirect and \$1.1 million in induced income. Based on an assumed full-time equivalent employment rate of 80 percent for projected indirect and induced full-time and part-time local job increase, the average salary for these workers (including benefits) is estimated to range from \$41,700 (induced) to \$50,000 (indirect) per year.

During the subsequent post-closure phase, it is projected that approximately \$3.0 million (\$2017) in salaries and wages for indirect and induced workers would be supported by the SGP's closure activities, of which approximately \$0.5 million would be expected to be received by Valley and Adams County residents (Highland Economics 2018).

Income Summary

Based on the direct, indirect, and induced income effects analyzed above, Alternative 1 closure and reclamation phase is estimated to support a total of \$7.8 million in annual income statewide under the mid-value scenario. The total local income supported by the SGP's closure and reclamation phase is expected to be \$5.0 million. In total, the SGP is estimated to contribute \$16.4 million direct, indirect, and induced income per year nationwide (i.e., \$7.8 million in Idaho and \$8.6 million elsewhere in the U.S.) (Highlands Economics 2018) during SGP's closure and reclamation phase.

As discussed under the closure and reclamation employment impact analysis, adverse economic disruption and dislocation impacts could occur as result of the decrease in activity from the prior levels during Alternative 1's construction and operations phases.

These potential "boom and bust" effects after mine operations cease could result from reduction in 110 local jobs and corresponding decrease in local residents' labor income by \$14.9 million. In addition, the projected reduction in 230 indirect and induced local jobs could result in a corresponding decrease in local residents' labor income by \$9.5 million from the prior levels during mine operations. In which case, there would be a total local labor income decrease of approximately \$24.3 million from the prior operations phase. Given the local analysis area's largely rural and small economy, in the absence of adequate economic transition mitigation, the mine-closure related decrease in local employment income could have an adverse impact on the local area's residents, businesses, and overall economy. The duration of this impact would depend on the affected workers and local area economy's ability to adapt in response to the economic dislocation.

4.21.2.1.3.3 Population and Housing

As shown in **Table 4.21-1**, a portion of the closure and reclamation labor under Alternative 1 would be staffed by local residents. Furthermore, Alternative 1 total local employment during closure and reclamation would be reduced from construction and operations levels. As a result, compared to the No Action Alternative (Alternative 5), no population or housing demand growth impacts would be expected during Alternative 1 closure and reclamation phase.

However, as discussed above, in the absence of interim measures, there would be potential for substantial "bust" impacts following the cessation of the SGP's mining operations from the subsequent local job and income losses. If there are insufficient replacement job opportunities for the local residents no longer employed (directly or indirectly), then the local area economy could experience increased unemployment and reduced economic activity. Depending on the severity and duration of the economic dislocation and recovery, many of the local residents formerly employed (direct or indirectly) by the SGP's mining operations may choose to relocate out of the local area to find employment. There could be some adverse housing supply impacts from worker out-migration in the form of increased home sales and decreased tenancy/demand for rental properties, which might reduce property values if there is not adequate demand for their vacated homes.

However, given the current shortage of affordable housing and high level of demand for occasional housing units, it is might be expected that there would be sufficient housing demand (either as a primary or secondary residence) for the local area’s housing market to absorb vacated homes and recover within a relatively short period of time. However, if future housing demand and supply conditions change, it may be possible that there could be adverse housing impacts to the local economy if any vacated properties remain unoccupied for an extended period of time.

In the absence of any population or housing demand growth impacts, no related adverse impacts from increased demand for public services would be expected. Nonetheless, out-migration following cessation of SGP operations may have the potential for adverse impacts to public services if it results in underuse and/or underfunding for any facility expansion that occurred to serve SGP-related population growth (e.g., development of new utility connections or school buildings). However, the potential type and extent for both operational and post-operational impacts to public services would be dependent on the location of any SGP-related population growth and the capabilities of the specific public systems serving the new residents.

4.21.2.1.3.4 Government Revenues

Table 4.21-8 shows estimated annual tax revenues resulting from Alternative 1 closure and reclamation activities and the percent change in tax revenue compared to the operations phase.

Table 4.21-8 Percent Change in Annual Taxes Generated and Supported by Alternative 1 – Operations Compared to Closure and Reclamation (\$M/year, 2017 Dollars)

Impact Type	Operations	Closure and Reclamation	Change from Operations
Property Tax	\$0.3	--	-100%
State Mine License	\$0.1	--	-100%
State Sales Tax	\$2.3	\$0.3	-87.0%
State Personal Income Tax	\$6.6	\$0.1	-98.4%
State and Local Subtotal	\$10.1	\$0.4	-96.0%
Federal Personal Income Tax	\$10.7	\$0.3	-97.2%
Federal Payroll Taxes ¹	\$20.0	\$0.7	-97.0%
Federal Corporate Tax	\$20.9	\$0.1	-99.5%
Federal Subtotal	\$51.6	\$1.1	-97.9%
Total (Local, State, Federal)	\$61.7	\$1.5	-97.6%

Table Source: Highland Economics 2018

Table Notes:

1 Includes social security and Medicare payments by both employee and employer paid payroll taxes.

The total annual government tax revenue benefits from Alternative 1 closure and reclamation activities are estimated to be \$1.5 million per year, of which the federal government is expected to receive the majority (\$1.1 million per year). State and local taxes revenues generated by Alternative 1 are projected to total \$0.4 million per year, of which the majority would be received by the State of Idaho. As a result, Alternative 1 closure and reclamation operations are expected to result in negligible tax revenue benefits for the local area's economy.

4.21.2.1.3.5 Transportation and Infrastructure

Alternative 1 closure and reclamation phase impacts on the local analysis area's transportation system from both use and network changes are analyzed in detail in Section 4.16, Access and Transportation. The socioeconomic impact analysis evaluates the nature and extent of projected travel redistribution and changes in traffic conditions to assess if they would result in corresponding economic changes for local area residents, businesses, and the local area's economy.

During Alternative 1 closure and reclamation phase, total SGP-related AADT of 25 vehicle trips is projected to occur, which would be distributed across several routes within the local roadway network. This traffic growth is less than that projected during Alternative 1 construction and operations phases. Alternative 1 socioeconomic impacts from transportation during closure and reclamation would be similar in nature but lesser in magnitude as those during the operations phase. Consequently, Alternative 1 transportation impacts are expected to have negligible socioeconomic effects on the local analysis area's economy during the closure and reclamation phase.

4.21.2.1.3.6 Tourism

The Operations Area Boundary established under the operations phase would continue to be enforced during the Alternative 1 closure and reclamation phase. During this phase, both the mine site and Burntlog Route would be reclaimed, and other SGP facilities also would be similarly decommissioned. However, it would take many years (20 or more) for major revegetation to occur and many physical features would remain. Closure and reclamation noise could be audible up to 1.2 miles, therefore reducing recreation opportunities in these areas for activities that depend on a quiet, natural environment, such as wilderness activities. As a result, many of the SGP's former facility sites would likely appear disturbed for a long time.

Consequently, the recreational setting for these locations are likely to be permanently altered and some recreational use may remain permanently displaced to other more natural locations within the local area. Detailed analysis of the recreation impacts is provided in Section 4.19.2.1.1.3, Closure and Reclamation.

The closure and reclamations phase recreation and tourism impacts are expected to be unchanged from the operations phase. Accordingly, the recreation use changes from Alternative 1 operations would be negligible and would have negligible socioeconomic impacts to the local area's tourism sector and overall economy.

However, it also is possible that SGP-related displacement of recreational use and visitation from areas near local communities, such as Yellow Pine or Warm Lake, could reduce tourism spending at their businesses. Depending on the type and magnitude of any such lost spending, it is possible that adverse economic impacts on individual businesses and those community economies could occur.

Furthermore, three of the outfitter businesses currently within the analysis area could have access to portions of their operating areas and their customer's experiences impaired during closure and reclamation activities. This could negatively affect their ability to provide their licensed activities and may degrade their customer's recreation experiences. However, all outfitters would continue to be able access and use major portions of their operating areas that would be unimpacted by the SGP. It is likely that any of their permitted use displaced by the SGP could be served elsewhere within their existing operating areas. As such, adverse impacts to their operations and customers would be very limited.

4.21.2.2 Alternative 2

Alternative 2 includes design and operations modifications to Alternative 1 to reduce the SGP impacts on water resources (streamflow, water temperature, and water quality), wildlife habitat and traffic. The Alternative 2 modifications potentially relevant to the socioeconomic analysis consist of:

- Relocation of the Landmark maintenance facility;
- Re-routing of a 5.3-mile segment of the Burntlog Route
- Producing lime on-site, reducing AADT to the mine site;
- Addition of a 3- or 4-mile public access road connecting Stibnite Road (CR 50-412) to Thunder Mountain Road (FR 50375) allowing public access through the mine site during operations; and
- Addition of a Centralized Water Treatment Plant.

Actions under Alternative 2 are very similar to those under Alternative 1 and, therefore, are expected to impact the local area residents, businesses and economy in predominantly the same way as identified under Alternative 1. The overall schedule of mining phases and activities under Alternative 2 also would be very similar to Alternative 1. Similarly, the quantities of ore extraction and mineral recovery under Alternative 2 are expected to be to the same as those under Alternative 1. The future construction and operating expenditures under Alternative 2 are not expected to be materially different from those estimated for Alternative 1. Consequently, their employment, income, population, housing, public services, and government revenue impacts would be the same as identified for Alternative 1. The water quality and aquatic habitat improvements under Alternative 2 may result in intrinsic, non-monetary benefits to recreational users or tribal members, if it results in actual or perceived improvements in the quality of recreational experiences, subsistence resources, and/or traditional use areas' conditions. Detailed evaluation of SGP-related impacts to water quality, fish and aquatic habitat, recreation, and tribal interests are provided in Section 4.9, Surface Water and Groundwater Quality;

Section 4.12, Fish Resources and Fish Habitat; Section 4.19, Recreation; and Section 4.24, Tribal Rights and Interests, respectively.

Socioeconomic impacts under Alternative 2 would be the same as those identified under Alternative 1, except for potential differences in the visitor use impacts from the roadway changes and maintenance facility relocation. Detailed evaluation of SGP-related impacts to recreation is provided in Section 4.19.2, Direct and Indirect Impacts to Recreation. The potential for these components of Alternative 2 to result in net socioeconomic impacts to the local area's tourism sector and overall economy are evaluated below on a phase by phase basis.

4.21.2.2.1 CONSTRUCTION

The majority of the construction impacts would be the same or very similar to those identified under Alternative 1. However, there also would be some relocation of construction impacts under Alternative 2 based on the Burntlog Route alignment and facility siting changes. As a result, there would be temporary increase or relocation of construction-related impacts in the vicinity of Alternative 2 roadway improvements and maintenance facility development (and a corresponding elimination of similar impacts from other locations that would otherwise be affected under Alternative 1).

The construction activities located under Alternative 2 could reduce recreational opportunities for noise-sensitive recreation activities, which could result in recreational displacement until the construction is completed. Completion of the roadway changes would be expected to occur during the construction with potential incidental public use beginning during the operations phase. As a result, the roadway improvements would not be expected to result in improved recreation access and use during Alternative 23-year construction phase. Consequently, Alternative 2 construction activities would be expected to have a negligible overall impact on the local area's tourism sector and local economy.

4.21.2.2.2 OPERATIONS

Completion of the Burntlog Route re-route and the Stibnite Road (CR 50-412) connection through the mine site to Thunder Mountain Road (FR 50375) could potentially improve recreation access and possibly increase visitor use of areas served by these new roadways. These roadway changes might result in some redistribution of recreational and other traffic but the increase in traffic to local recreation locations would be very limited given the roadways low traffic volumes.

Under Alternative 2, public access between where the Stibnite Road enters the mine site and Thunder Mountain Road would allow three outfitters access to their operating areas. The location of the Landmark Maintenance Facility could impact one outfitter due to the location within their operating area. Similarly, partial re-routing of Burntlog Route could impact two outfitter operations as a result of increased recreation use within their operating areas and potential impacts on wilderness activities. As a result, there could be varied and, in some cases, possibly substantial impacts to individual outfitters under Alternative 2.

However, overall the net change in local area's overall visitation and visitor spending would be expected to negligible. As a result, the tourism impact findings for the Alternative 2 operations would be expected to be the same as those determined for the Alternative 1 12-year operations phase. Consequently, Alternative 2 operations would be expected to have a negligible overall impact on the local area's tourism sector and local economy.

Under Alternative 2, the Centralized Water Treatment Plant operations would employ 2 to 4 workers.

4.21.2.2.3 CLOSURE AND RECLAMATION

Impacts of Alternative 2 during closure and reclamation would be the same as those described under Alternative 1, except for the Centralized Water Treatment Plant, which would remain in perpetuity. After closure, the analysis area would be reclaimed for potential subsequent public recreational use (such as dispersed camping). The recreational visitation and use impacts of this action would be very marginal and likely comparable to those that would otherwise occur at the Landmark site under Alternative 1. As a result, it would have a negligible net impact on the local area's tourism sector and local economy. Consequently, Alternative 2 closure and reclamation would have a negligible overall impact on the local area's tourism sector and local economy.

Under Alternative 2, the Centralized Water Treatment Plant would continue to operate and employ 2 to 4 workers in perpetuity.

4.21.2.2.4 OTHER BENEFITS AND COSTS

Alternative 2 includes design and operations modifications to potentially reduce the SGP impacts on water resources (streamflow, water temperature, and water quality) and aquatic habitat. These potential resource impacts are determined not to have quantifiable and/or monetizable impacts that can be incorporated as socioeconomic impacts. This is generally due to lack of discernable direct changes in human use that can be attributed to the resource changes.

The Alternative 2 design and operations modifications would result in both incremental costs to the owner/operator (e.g., increased water treatment facility capital and operations and management [O&M] costs) and benefits (e.g., improved water quality or probability of meeting water quality standards) due to their intrinsic, non-market value. More specifically, the expected water resource benefits under Alternative 2 are evaluated in Section 4.9.2.2, Surface Water and Groundwater Quality, while the impacts to aquatic habitat are evaluated in Section 4.12.2.4, Fish Resources and Fish Habitat.

While changes in these resources may nonetheless have non-monetary value, when these resource changes are not expected to result in any human use changes (e.g., by recreational or by tribal member users) that can be quantified. Consequently, for the purposes of this socioeconomic impact analysis, the non-monetary benefits of such water quality and wildlife habitat would not have any socioeconomic effects. Similarly, the related fisheries and

ecological/resiliency also are not recognized to have any socioeconomic effects for the purposes of this socioeconomic impact analysis.

In addition to the incremental non-monetary resource benefits discussed above, the owner/operator would incur some incremental capital and future O&M costs under Alternative 2. Costs associated with Alternative 2 would be primarily associated with the proposed centralized water treatment facility and its 2 to 4 employees, partial re-routing of Burntlog Route, construction and operation of the lime kiln on-site, and the addition of the road improvements for public access through the mine site. Overall, the capital costs for the design and operations modifications under Alternative 2 would be a relatively limited additional incremental cost, especially given the expected total future mineral production value of \$5.3 billion to \$6.9 billion over the SGP operating life (see subsection 4.21.2.1.2.2, Income).

The O&M costs for the design and operations modifications under Alternative 2 also are expected to be limited and predominantly associated with the lime generation equipment, the roadway O&M for the roadway miles requiring annual maintenance, and 2 to 4 employees required for operation of the Centralized Water Treatment Plant. The operational costs for the owner/operator resulting from these facility changes are expected to be relatively minor especially given the future value of the extracted minerals of \$5.3 billion to \$6.9 billion over the SGP operating life (see subsection 4.21.2.1.2.2, Income). As a result, the other benefits and costs under Alternative 2 would be very similar as those identified for Alternative 1.

4.21.2.3 Alternative 3

Alternative 3 includes SGP design modifications (i.e., relocation of the TSF and Hangar Flats DRSF to the East Fork South Fork Salmon River drainage) to reduce impacts on water resources (streamflow, water temperature, and water quality), aquatic and wildlife habitat, and recreation. Actions under Alternative 3 are very similar to those under Alternative 1 and, therefore, are expected to impact the local area residents, businesses, and economy in predominantly the same way as described under Alternative 1. The overall schedule of mining phases and activities under Alternative 3 also would be very similar to Alternative 1. Similarly, the quantities of ore extraction and mineral recovery under Alternative 3 are expected to be the same as those under Alternative 1. The future construction and operating expenditures under Alternative 3 are not expected to be materially different from those estimated for Alternative 1. Consequently, the employment, income, population, housing, public services, and government revenue impacts would be the same as those described for Alternative 1.

The modifications in design to potentially reduce impacts to water quality and aquatic and wildlife habitat under Alternative 3 may result in intrinsic, non-monetary benefits to recreational users or tribal members, if it results in actual or perceived improvements in the quality of recreational experiences, subsistence resources, and/or traditional use area conditions. Detailed evaluation of SGP-related impacts to water quality, fish and aquatic habitat, recreation, and tribal interests are provided in Section 4.9, Surface Water and Groundwater Quality; Section 4.12, Fish Resources and Fish Habitat; Section 4.19, Recreation; and Section 4.24, Tribal Rights and Interests, respectively.

The potential changes in socioeconomic impacts under Alternative 3 analyzed are limited to those physical changes that individually (or collectively) could result in overall net changes in future visitor use and spending to the local area's tourism sector and overall economy (e.g., changes in roadway access). However, no socioeconomic impacts are attributed to other physical resources when their improvement or impairment are not expected to result in any discernable direct changes in human use and/or activity. Although changes in these resources may nonetheless have intrinsic, existence, non-use, or other broader non-market value, it is beyond the scope of this socioeconomic analysis. As an example, the potential reduced impacts to federally-listed fish species; wetlands and riparian areas; and surface water and groundwater under Alternative 3 may result in incremental improvement in those resource conditions, but their magnitude is not expected to result in any human use changes (e.g., by recreational or by tribal member users). Consequently, for the purposes of this socioeconomic impact analysis, the non-monetary benefits of such water quality and wildlife habitat changes are not recognized to have any socioeconomic effects.

Under Alternative 3, public access would be restricted on 17,034 acres of public lands within the Operations Area Boundary. The size of the Operations Area Boundary could potentially result in impacts to recreation opportunities due to the larger area removed from recreational use.

However, as analyzed in more detail in Section 4.19, Recreation, due to the low level of wilderness recreation visitation, the recreation use impacts from the SGP are predominantly associated with SGP facility changes.

Socioeconomic changes under Alternative 3 would be limited to no construction of the OHV Trail. Detailed evaluation of SGP-related impacts to recreation is provided in Section 4.19.2.3, Direct and Indirection Impacts to Recreation. The potential for this SGP component to result in net socioeconomic impacts to the local area's tourism sector and overall economy is evaluated below on a phase by phase basis.

4.21.2.3.1 CONSTRUCTION

The Alternative 3 impacts would be similar to those identified under Alternative 1, except the temporary traffic delays on Meadow Creek Lookout Road (FR 51290) would not occur and the construction activity and impacts within two of the outfitters' operating areas would be reduced. Consequently, Alternative 3 construction activities would be expected to have a negligible overall impact on the local area's tourism sector and local economy.

4.21.2.3.2 OPERATIONS

Impacts would be similar to those described under Alternative 1; however, access to the mine site would be via a 3.2-mile road segment through Blowout Creek valley, rather than continuing on Meadow Creek Lookout Road (FR 51290) to Thunder Mountain Road (FR 50375). As a result, there would be no mine operations-related traffic on Meadow Creek Lookout Road (FR 51290) east of the new Blowout Creek valley road. This would result in fewer impacts to the area's recreation setting and recreation experiences for visitors using these roads and the sites/areas accessed from these roads.

The OHV Trail would not be built under Alternative 3 and, therefore, would not contribute any growth in the area's recreation use. Without this new trail, visitors would have limited access options to recreation sites off Thunder Mountain Road and would have to use the entire Burntlog Route to reach these sites.

In the absence of the OHV Trail's development, there would be reduced potential for impact to two outfitters who otherwise would face potential access and recreation experience impacts for their customers.

The magnitude of potential recreation use increases from these components of Alternative 3 are expected to be marginal. As a result, the overall recreational impact anticipated under Alternative 3, and, therefore, no net change in local area's overall visitation and visitor spending would be expected from that identified for Alternative 1. As a result, the tourism impact findings for the Alternative 3 operations would be expected to be the same as those identified for the Alternative 1 12-year operations phase. Consequently, Alternative 3 operations would be expected to have a negligible overall impact on the local area's tourism sector and local economy

4.21.2.3.3 CLOSURE AND RECLAMATION

Impacts under Alternative 3 during closure and reclamation would be the same as those identified for Alternative 1, except for those associated with no construction of the OHV Trail and addition of a new transmission line to the mine site.

As part of closure/reclamation, there would be less decommissioning activity and delays on Meadow Creek Lookout Road (FR 51290). The recreational visitation and use impacts under Alternative 3 may be expected to be marginal and have a negligible impact on the local area's tourism sector and local economy. As a result, the tourism impact findings for the Alternative 3 closure and reclamation phase would be expected to be the same as those correspondingly determined for the Alternative 1 closure and reclamation phase. Consequently, Alternative 3 would be expected to have a negligible overall impact on the local area's tourism sector and local economy.

4.21.2.3.4 OTHER BENEFITS AND COSTS

Alternative 3 includes design and operations modifications to potentially reduce the SGP's impacts on water resources (streamflow, water temperature, and water quality) and aquatic and wildlife habitat. As discussed above in Section 4.21.2.23, these resource changes related to the Alternative 3 modifications are determined not to have quantifiable and/or monetizable impacts that can be incorporated as socioeconomic impacts. This is generally due to lack of discernable direct changes in human use that can be attributed to the resource changes.

These modifications could result in both incremental changes in costs to the owner/operator (e.g., increased costs associated with water treatment facility capital and O&M costs) and potentially different impacts (e.g., improved water quality or probability of meeting water quality standards) due to their intrinsic, non-market value. More specifically, the expected water

resource benefits under Alternative 3 are evaluated in Section 4.9.2.3, Surface Water and Groundwater Quality, while the impacts to aquatic habitat are evaluated in Section 4.12.2.5, Fish Resources and Fish Habitat.

While changes in these resources may nonetheless have non-monetary value, when these resource changes are not expected to result in any human use changes (e.g., by recreational or by tribal member users) that can be quantified. Consequently, for the purposes of this socioeconomic impact analysis, the non-monetary benefits of such water quality and wildlife habitat would not have any socioeconomic effects. Similarly, the related fisheries and ecological resiliency also are not recognized to have any socioeconomic effects for the purposes of this socioeconomic impact analysis.

In addition to the incremental non-monetary resource benefits discussed above, the owner/operator may be expected to incur some incremental capital and O&M cost savings under Alternative 3, as compared to Alternative 1. These savings would be primarily from not constructing the OHV Trail. Under Alternative 3, 17,034 acres of public lands within the Operations Area Boundary would be restricted from public access. However, given the additional area's rural and undeveloped nature, the capital and future O&M cost impacts of the area is not expected to offset the OHV Trail savings. Overall, the net operational savings for the SGP resulting from these facility changes are expected to be comparatively minor, especially given the future value of the extracted minerals of \$5.3 billion to \$6.9 billion over the SGP operating life (see subsection 4.21.2.1.2.2, Income). As a result, the other benefits and costs' overall impacts under Alternative 3 would be the very similar as those identified for Alternative 1.

4.21.2.4 Alternative 4

The Alternative 4 design and operations modifications consist of use of the Yellow Pine Route as the only mine access route, and other on-site and off-site facilities modifications to potentially alter impacts to water quality, aquatic resources, wildlife habitat, public access and safety, wilderness, and other natural areas from those described under Alternative 1. The Alternative 4 modifications potentially relevant to the socioeconomic analysis consist of:

- Use of the Yellow Pine Route for access to the mine for all phases (and therefore, no construction or use of the Burntlog Route);
- Minor change in the location of the Landmark Maintenance Facility;
- Public road access through the mine during operations (similar to Alternative 2); and
- Use of helicopters for construction and maintenance of cell towers and repeater sites in inventoried roadless areas.

Actions under Alternative 4 are similar to those under Alternative 1 and, therefore, are expected to impact most local area residents, businesses, and economy in predominantly the same way as identified under Alternative 1. The SGP construction period under Alternative 4 is 5 years and consequently would be 2 years longer than that under the other build alternatives. The overall schedule of mining post-construction phases and activities under Alternative 4 also

would be very similar to Alternative 1. Similarly, the quantities of ore extraction and mineral recovery under Alternative 4 are expected to be the same as those under Alternative 1. Future construction and operating expenditures under Alternative 4 are expected to be higher than those estimated for Alternative 1. The net additional construction cost of the Yellow Pine Route is estimated to total \$62.5 million. Midas Gold estimates that the overall net cost effect could reduce the SGP's value by up to \$174 million due to the combined capital, operating (i.e., longer haul routes and increased roadway O&M) and financial costs (i.e., resulting from the extended construction period and delayed operations) (Midas Gold 2019). However, the related employment, income, population, housing, public services, and government revenue impacts (which would be predominately related to the increase construction and operations spending) would be marginally higher than those identified under Alternative 1.

The design changes to potentially reduce impacts to water quality and aquatic and wildlife habitat under Alternative 4 may result in intrinsic, non-monetary benefits to recreational users or tribal members, if it results in actual or perceived improvements in the quality of recreational experiences, subsistence resources, and/or traditional use area conditions. Detailed evaluation of SGP-related impacts to water quality, fish and aquatic habitat, recreation, and tribal interests are provided in Section 4.9, Surface Water and Groundwater Quality; Section 4.12, Fish Resources and Fish Habitat; Section 4.19, Recreation; and Section 4.24, Tribal Rights and Interests, respectively.

The potential changes in socioeconomic impacts under Alternative 4 analyzed for the socioeconomic analysis are limited to those physical changes that individually (or collectively) could ultimately result in overall net changes in future visitor use and spending to the local area's tourism sector and overall economy (e.g., changes in roadway access). However, no socioeconomic impacts are attributed to other physical resources when their improvement or impairment are not expected to result in any discernable direct changes in human use and/or activity. Although changes in these resources may nonetheless have intrinsic, existence, non-use or other broader non-market value, it is beyond the scope of this socioeconomic analysis to incorporate in this socioeconomic analysis. The potential reduced impacts to water quality and quantity, wetlands, fish resources, and cultural resources under Alternative 4 may result in incremental changes in those resource conditions. For example, upgrade and use of the Yellow Pine Route for the project's future operations would reduce roadway-related surface disturbance, stream diversions and wetland impacts. But the Yellow Pine Route's greater proximity to Johnson Creek and the East Fork South Fork Salmon River may be expected to increase the roadway development and use within both avalanche-prone areas and riparian conservation areas and thereby could result in increased public safety and environmental risks and impacts. However, the combined and overall magnitude of these impacts is not expected to result in any human use changes (e.g., by recreational or by tribal member users). Consequently, for the purposes of this socioeconomic impact analysis, the non-monetary benefits of these design changes are not recognized to have any socioeconomic effects.

Impacts on public access within the Operations Area Boundary under Alternative 4 would generally be the same as those identified under Alternative 1 except for potential differences in the visitor use impacts from the roadway changes, maintenance facility relocation, and

helicopter usage. Alternative 4's roadway changes are expected to include potential increased adverse impacts on public access and safety. Detailed evaluation of SGP-related impacts to recreation is provided in Section 4.19.2.4, Recreation. The potential for these components of Alternative 4 to result in net socioeconomic impacts to the local area's tourism sector and general economy are evaluated below on a phase by phase basis.

4.21.2.4.1 CONSTRUCTION

Under Alternative 4, the access route to the mine would be via the Yellow Pine Route. The Yellow Pine Route starts at the intersections of Warm Lake Road (CR 10-579) and Johnson Creek Road (CR 10-413) and includes Johnson Creek Road (CR 10-413) and the Stibnite Road section of the McCall-Stibnite Road (CR 50-412). The Yellow Pine Route would be used as the primary route to the mine site during construction, operations, and reclamation/closure would result in increased traffic on Johnson Creek and Stibnite roads. During the 5-year construction phase, AADT on Johnson Creek Road would increase from 57 to 122 and from 39 to 104 on Stibnite Road. This traffic growth would increase the noise and activity near campgrounds, dispersed camping areas, trailheads, and recreational residences adjacent to these roads which could change their recreation setting and reduce visitor recreation experiences. The Village of Yellow Pine would experience an increase in truck traffic from SGP vehicles use of the Yellow Pine Route to the mine site throughout all phases. Truck traffic increases along the Yellow Pine Route also could have some effects on other roadway users travelling along the roadway to and from Yellow Pine.

Road closures on Stibnite Road would occur on a daily basis for three years during construction and more periodically on Johnson Creek Road. These road closures would result in reduced access to recreation sites/areas, decreases in recreational opportunities/settings, and decreased recreation experiences. As a result of these impacts, visitors may be displaced from these areas during Alternative 4 construction.

The minor relocation of Landmark Maintenance Facility would be expected to solely result in reduced noise impacts to the historic Landmark cabins.

Under Alternative 4, public road access through the mine during construction would be permitted and would be similar to that under Alternative 2. As result, the impacts during construction would be expected to be the same as those identified for Alternative 2 but would occur over a two-year longer construction period.

Noise and disruption from the use of helicopters during construction of some communication and utility facilities (rather than building an access road) may affect the recreation setting for users within visual and audible distance of the helicopters. The resulting temporary changes to the recreation setting of these locations could lead to displacement of dispersed recreational use, particularly related to non-motorized activities, wilderness activities, and wildlife-related activities (due to wildlife displacement).

The magnitude of the recreation use changes from these components of Alternative 4 are expected to be marginal and localized. As a result, overall recreational impact is anticipated to

be minimal and, therefore, no net change in local area's overall visitation and visitor spending would be expected. As a result, the tourism impact findings during Alternative 4 construction phase would be expected to be the same as those determined for the Alternative 1 construction phase. Consequently, Alternative 4's construction activities would be expected to have a negligible overall impact on the local area's tourism sector and local economy.

4.21.2.4.2 OPERATIONS

The village of Yellow Pine would experience an increase in future truck traffic from SGP vehicle use of the Yellow Pine Route to the mine site during SGP operations. Truck traffic increases along the Yellow Pine Route (estimated to average 60 vehicles daily) also could have some effects on other roadway users travelling along the roadway to and from Yellow Pine. Roadway changes under Alternative 4 might also result in some redistribution of recreational and other traffic. Given the very low use levels of these roadways the increase in traffic to local recreation locations would be very limited. The additional SGP-related traffic along the Yellow Pine Route may displace some recreation use to other less noisy locations. Under Alternative 4 outfitters would not experience the adverse changes in their ability to access their operating areas.

Overall, no net or very limited change in local area's overall visitation and visitor spending would be expected compared to that under Alternative 1 operation. Recreational traffic along the Yellow Pine Route would have to share the road with mine traffic (est. 60 vehicles/day) during operations which may be expected to increase travel times. However, the public access would be maintained and traffic impacts to recreation users may be expected to result in relatively limited user displacement. As a result, the overall tourism impact findings for Alternative 4 operations would be expected to be the same as those determined for the Alternative 1 operations phase.

The minor change in location of the Landmark Maintenance Facility would result in negligible operational impact changes from Alternative 1.

Under Alternative 4, public road access through the mine during operations would be permitted and be similar to Alternative 2. As a result, the impacts during operations would be expected to be the same as those determined for Alternative 2.

Noise and disruption from the use of helicopters for maintenance activities may affect the recreation setting for users within visual and audible distance of the helicopters. These occasional changes to the recreation setting of these locations could lead to displacement of dispersed recreational use, particularly related to wilderness and wildlife-related activities (due to wildlife displacement).

The magnitude of the recreation use changes from these components of Alternative 4 are expected to be marginal and localized. As a result, there overall recreational impact is anticipated to be minimal and therefore no net change in local area's overall visitation and visitor spending would be expected. As a result, the tourism impact findings for the Alternative 4 operations would be expected to be the same as those determined for the Alternative 1

operations phase. Consequently, Alternative 4's operations would be expected to have a negligible overall impact on the local area's tourism sector and local economy.

4.21.2.4.3 CLOSURE AND RECLAMATION

Impacts of Alternative 4 during closure and reclamation would be similar to those described under Alternative 1, except roadway improvements along the Yellow Pine Route would remain. Traffic volumes and road closures would be reduced from construction and operational phases. In addition, because both Burntlog Route and OHV Trail would not be constructed under Alternative 4, the reclamation activity and long-term recreational resource impacts for those facilities also would be avoided.

The net recreational visitation and use impacts resulting from Alternative 4's reduced recreational and decommissioning impacts may be expected to be limited. Consequently, Alternative 4 would be expected to have a negligible overall impact on the local area's tourism sector and local economy.

4.21.2.4.4 OTHER BENEFITS AND COSTS

Alternative 4 includes design and operations modifications to potentially reduce the SGP's impacts on water resources (streamflow, water temperature, and water quality); cultural resources (moving the Landmark Maintenance Facility and no construction of Burntlog Route); and wildlife habitat. These resource changes related to the Alternative 4 modifications are determined not to have quantifiable and/or monetizable impacts that can be incorporated as socioeconomic impacts. This is generally due to lack of discernable direct changes in human use that can be attributed to the resource changes.

These modifications would result in both incremental costs to the owner/operator (e.g., surface water treatment and O&M costs) and benefits (e.g., improved water quality or probability of meeting water quality standards) due to their intrinsic, non-market value. More specifically, the water resource impacts under Alternative 4 are evaluated in Section 4.9.2.4, Surface Water and Groundwater Quality, impacts to aquatic habitat are evaluated in Section 4.12.2.6, Fish Resources and Fish Habitat, and cultural resources are evaluated in Section 4.17.2.4, Cultural Resources.

While changes in these resources may nonetheless have non-monetary value, when these resource changes are not expected to result in any human use changes (e.g., by recreational or by tribal member users) that can be quantified. Consequently, for the purposes of this socioeconomic impact analysis, the non-monetary benefits of such water quality and wildlife habitat changes are not attributed to have any socioeconomic effects. Similarly, the related fisheries and ecological/resiliency also are not recognized to have any socioeconomic effects for the purposes of the socioeconomic impact analysis.

The relocation of the Landmark Maintenance facility is expected to have negligible incremental cost effect. However, there would be a substantial net capital and O&M cost increase under Alternative 4 would result from the upgrade of the existing Yellow Pine Route instead of

construction of new roadway segments for the Burntlog Route. As discussed above, the net additional cost for construction of the Yellow Pine Route is estimated to total \$62.5 million. Midas Gold estimates that the overall net cost effect could reduce the SGP's value by up to \$174 million due to the combined capital, operating (i.e., longer haul routes and increased roadway O&M) and financial costs (i.e., resulting from the extended construction period and delayed operations) (Midas Gold 2019). Overall, the SGP cost increase under Alternative 4 would correspond to 3.3 to 2.5 percent of the project's expected total mineral production value of \$5.3 billion to \$6.9 billion over the SGP overall operating life (see subsection 4.21.2.1.2.2 Income) and result in a major decrease in the project's expecting operating profits. Besides that, the other benefits and costs under Alternative 4 would be the very similar as those identified for Alternative 1.

4.21.2.5 Alternative 5

Under Alternative 5, there would be no large-scale mining operations. As a result, no new mine site and off-site facilities, access roads, or utility infrastructure changes would occur.

Under Alternative 5, current uses by other users on patented mine/millsite claims and on the Payette National Forest and Boise National Forest would continue in compliance with all existing applicable codes and regulations. These uses of National Forest System (NFS) lands include mineral exploration, dispersed and developed recreation, such as pleasure driving, hunting, off-highway-vehicle use, camping, hiking, snowmobiling, bird watching, target shooting, firewood cutting, and other forms of recreation. Private businesses, such as outfitter and guide services, also operate on NFS lands through special use permits. Traditional cultural uses of the area would continue, including the collection of plants, hunting, and fishing. Access to public land in the area would continue as governed by law, regulation, policy, and existing and future landownership constraints.

Midas Gold would continue to implement surface exploration and associated activities that have been previously approved on NFS lands as part of the Golden Meadows Exploration Project, per the Golden Meadows Exploration Project Plan of Operations and the Golden Meadows Exploration Project Environmental Assessment (Forest Service 2015). These approved activities include construction of several temporary roads to access drill sites (total of 28 drill sites), drill pad construction (total of 182 drill pads) and drilling on both NFS and private lands at and in the vicinity of the mine site. The continuation of approved exploration activities at the mine site would result in the continued use of the existing man camp, office trailers, truck maintenance shop area, potable water supply system, wastewater treatment facility, helipad and hangar, and airstrip.

Any impacts on recreation, infrastructure development, revenues, population, housing, and transportation impacts would be temporary and short term and no long-term changes to socioeconomic resources would occur (Forest Service 2015).

4.21.3 Mitigation Measures

Mitigation measures required by the Forest Service and measures committed to by Midas Gold as part of design features of the SGP are described in **Appendix D**, Mitigation Measures and Environmental Commitments; see **Table D-1**, Preliminary Mitigation Measures Required by the Forest Service, and **Table D-2**, Mitigation Measures Proposed by Midas Gold as Project Design Features, respectively. The preceding impact analysis has taken these mitigation measures into consideration, as well as measures routinely required through federal, state, or local laws, regulations or permitting, such that the identified potential impacts of the SGP are those that remain after their consideration.

Mitigation measures may be added, revised, or refined based on public comment, agency comment, or continued discussions with Midas Gold and will be finalized in the Final EIS.

4.21.4 Cumulative Effects

The cumulative effects analysis area for socioeconomic is the same area as the analysis area as described for direct and indirect socioeconomic effects. Other past, present, and reasonably foreseeable actions occurring on federal and non-federal lands, with similar effects that overlap in time and space include forest management, mining and mine reclamation, roadway changes, campground upgrades, and winter motorized use of forest roads.

Past and present mining and mining-related activities have occurred around the Stibnite Mining District for over 100 years. These activities have contributed to the local analysis area's present socioeconomic conditions.

4.21.4.1 Common to All Action Alternatives

The SGP activities under Alternatives 1 through 4 would have a socioeconomic impact on the local area's economy. The action alternatives other resource effects (e.g., recreation or access and transportation changes to the tourism sector economy), combined with impacts from other past, present, and reasonably foreseeable actions, would be very minor or marginal.

4.21.4.2 Alternative 5

Under Alternative 5, no action alternative would be approved by the Forest Service. There would be no open-pit mining or ore processing in the SGP area, no new or upgraded access roads, no changes to utilities, and no construction of off-site facilities. Although none of the Reasonably Foreseeable Future Actions identified in **Table 4.1-2** would physically overlap with action alternative disturbance footprints, forest management, motorized use of road systems, fire suppression, prescribed fire and wildfire, dispersed camping, fishing, and hunting activities would continue in the cumulative effects area and vicinity, which would remain and continue to contribute to the cumulative socioeconomic effects on the local area's residents, businesses or economy. Under Alternative 5, the Golden Meadows Exploration Project would have negligible direct and indirect effects to socioeconomic conditions on the local area's residents, businesses,

and economy. Therefore, Alternative 5 would result in negligible cumulative effects on the local area's residents, businesses, and economy.

4.21.5 Irreversible and Irretrievable Commitments of Public Resources

4.21.5.1 Common to All Action Alternatives

Implementation of all action alternatives would result in the commitment of natural and human-made resources for new infrastructure, mine operations, closure and reclamation, and other post-mining activities. The predominant commitment of resources would result from the mining, which would deplete the valuable mineral assets in the targeted ore bodies. Extraction and use of the non-renewable mineral resources would constitute an irreversible commitment. However, the SGP is proposed in a legacy mining area, where substantial habitat reclamation is needed. The SGP may mitigate some existing environmental impacts, which would improve their resource conditions.

Substantial labor and materials needs are anticipated throughout the life of the SGP – these are irretrievable. Utility upgrades and new infrastructure are required to facilitate mine operations and reclamation of historically damaged areas. Legacy mined waste rock would be incorporated into new construction to the extent feasible. Contaminated areas would be remediated during new construction as required.

Implementation of the action alternatives would remove the land from other uses while it is in operation, but the use would eventually be reversed through reclamation. The temporal loss of the land's availability for other uses during that period would be irretrievable.

4.21.5.2 Alternative 5

No irretrievable or irreversible commitments of public resources are anticipated under Alternative 5.

4.21.6 Short-term Uses versus Long-term Productivity

4.21.6.1 Common to All Action Alternatives

All action alternatives would result in short-term use of the mine site area, and construction of new roadways in the SGP area. After closure, the mine site and new roads would be reclaimed/decommissioned.

Short-term uses of both the mineral resources and other natural and human-made resources (i.e., for construction, operations and closure/reclamation) would represent a lucrative use of these resources. The socioeconomic value of the short-term use of the resources is represented by both the extracted minerals market value and the monetary cost of the resources used to mine them.

As a non-renewable resource, the mineral extraction activities by the action alternatives would permanently reduce the site's future productivity for mineral production and economic development potential. However, the activities under the action alternatives would result in reclamation and environmental improvements that would be expected to enhance other future use potential.

Use of the mine site and other facility locations on NFS lands also would result in a short-term decrease in the acreage available for recreation. The mining activities and Operations Area Boundary would result in short-term displacement of recreational use as well as changes in recreation opportunities and setting within sections of the local area. These changes to local outfitter businesses and their customers' and other visitors' recreation experiences changes would have the potential to result in short-term socioeconomic impacts on the local area's tourism sector and economy.

After reclamation is completed, the Operations Area Boundary would be re-opened to recreation. As a result, there would not be recreation access impacts to long-term use of the mine site, access roads, and other facility locations for recreation after mine closure. However, it possible that long-term impacts to the recreation setting and recreation experiences (e.g., reduced wildlife populations) that could adversely affect local outfitter businesses and their customers' and other visitors' recreation experiences. In which case, if these changes result in adverse socioeconomic impacts on the local area's tourism sector and economy, there could be a long-term reduction in the area's economic productivity for future tourism use.

4.21.6.2 Alternative 5

Under Alternative 5, No Action would be undertaken. Consequently, there would be no short-term use that would affect recreation resources, and no effect on long-term productivity.

4.21.7 Summary

Construction and operation of the SGP would provide jobs and income for both individuals directly employed for the SGP, as well as for other individuals whose employment and incomes would be indirectly or induced by SGP's activities. Most of these employment and income impacts would support Idaho residents, of which a portion are expected to be local area (Valley and Adams counties) residents. Given the local area's population and current low unemployment conditions, it is expected that the SGP would result in in-migration of up to 200 individuals and another 230 dependents for SGP-related employment opportunities.

The potential for socioeconomic impacts to the local area's economy and social conditions would primarily result from the new in-migrant population. The potential influx of new residents (especially those that would be non-SGP employees) may increase the demand and supply of affordable housing within the local area. It also is expected that there could be potential for "boom and bust" impacts on the local area economy if there are insufficient alternative employment opportunities when SGP operations end.

Although there are some construction and operational differences between the action alternatives, overall socioeconomic impacts would be very comparable between Alternatives 1, 2, and 3. As a result, while some locational or distributional differences between socioeconomic effects would occur, they would be relatively marginal. Alternative 4 would have substantial increased construction and O&M costs from use of the Yellow Pine Route. However, due to its longer construction period (5 years instead of 3 years) and the operating phase's extended duration, Alternative 4's resulting socioeconomic impacts (i.e., employment, income, population, housing, public services, and government revenue impacts) would be expected to be marginally higher than those identified under Alternative 1, 2, and 3.

The potential for other adverse impacts to the local area's economy is expected to be relatively limited. This is due to both the relatively limited extent and remote location of SGP's expected resource impacts. In addition, the availability of alternate recreational opportunities for public use displaced by SGP's activities would likely be relocated elsewhere within the local area. As a result, overall these other SGP-related impacts generally are not expected to result in future visitation changes or other impacts to the local area's overall economy.

Table 4.21-9 provides a summary comparison of socioeconomic impacts by issue and indicators for each alternative.

The SGP action alternatives also would result in other benefits and costs besides those identified above. The primary purpose and benefit of all the SGP action alternatives for the owner/operator would be mineral extraction. Although there are some construction and operational differences between the action alternatives, their total future revenues are expected to be approximately the same. As shown below in **Table 4.21-9**, several types of resources would be differently impacted under the various action alternatives. Generally Alternative 3 is expected to have the largest total adverse resource impacts while Alternative 2 would generally result in the least resource impacts. Alternative 4 has differences in SGP costs (both for construction and operations) and transportation impacts to the community of Yellow Pine due to the proposed upgrade of the existing Yellow Pine Route instead of construction of a new and more direct roadway to the mine site (i.e., the Burntlog Route) as proposed under Alternatives 1, 2, and 3. Alternative 4 also will potentially have both increased environmental benefits (e.g., less roadway-related surface disturbance, stream diversions and wetland impacts) and adverse impacts (increase public safety risks). Otherwise, Alternative 4 is expected to have overall resource impacts generally comparable to those under Alternative 1.

As discussed in the comparative analysis of Alternative 2, 3, and 4 (see subsections 4.21.2.2, 4.21.2.3, and 4.21.2.4, respectively), no socioeconomic impacts are attributed to other physical resource changes when their improvement or impairment are not expected to result in any discernable direct changes in human use and/or activity. Although changes in these resources may nonetheless have intrinsic, existence, non-use or other broader non-market value, it is beyond the scope of this socioeconomic analysis to incorporate in this environmental impact statement. Nonetheless, the summary of other benefits and costs are provided below to clearly disclose key issues and differences for additional consideration and evaluation between the action alternatives.

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Table 4.21-9 Comparison of Socioeconomic Impacts by Alternative

Issue	Indicator	Baseline Conditions	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
The SGP may impact the socioeconomics of Valley and Adams counties and the State of Idaho.	Total contributions to employment levels.	No change in recent employment trends.	Employment – Total (annual) <u>Construction</u> <ul style="list-style-type: none"> • Direct: 640 • Total¹: 4,690 <u>Operations</u> <ul style="list-style-type: none"> • Direct: 583 • Total¹: 2,690 <u>Closure and Reclamation</u> <ul style="list-style-type: none"> • Direct: 160 / 40 • Total¹: 330 / 90 	Same as Alternative 1, except there would be an additional 2 to 4 employees for operation of the Centralized Water Treatment Plant during operations and continuing post-closure.	Same as Alternative 1.	Marginally higher than Alternative 1 due to increased construction and operations spending from use of Yellow Pine Route. However, construction impacts spread over longer 5-year period of construction.	No change from baseline conditions.
	Contributions to employment levels in Idaho.	No change in recent employment trends.	Employment – Idaho (annual) <u>Construction</u> <ul style="list-style-type: none"> • Direct: 420 • Total¹: 1,820 <u>Operations</u> <ul style="list-style-type: none"> • Direct: 470 • Total¹: 1,150 <u>Closure and Reclamation</u> <ul style="list-style-type: none"> • Direct: 130 / 40 • Total¹: 190 / 60 	Same as Alternative 1, except there would be an additional 2 to 4 employees for operation of the Centralized Water Treatment Plant during operations and continuing post-closure.	Same as Alternative 1.	Marginally higher than Alternative 1 due to increased construction and operations spending from use of Yellow Pine Route. However, construction impacts spread over longer 5-year period of construction.	No change from baseline conditions.
	Contributions to employment levels in Valley and Adams counties.	No change in recent employment trends.	Employment – Valley and Adams counties (annual) <u>Construction</u> <ul style="list-style-type: none"> • Direct: 190 • Total¹: 500 <u>Operations</u> <ul style="list-style-type: none"> • Direct: 200 • Total¹: 470 <u>Closure and Reclamation</u> <ul style="list-style-type: none"> • Direct: 90 / 20 • Total¹: 130 / 30 	Same as Alternative 1, except there would be an additional 2 to 4 employees for operation of the Centralized Water Treatment Plant during operations and continuing post-closure.	Same as Alternative 1.	Marginally higher than Alternative 1 due to increased construction and operations spending from use of Yellow Pine Route. However, construction impacts spread over longer 5-year period of construction.	No change from baseline conditions.

4 ENVIRONMENTAL CONSEQUENCES
4.21 SOCIAL AND ECONOMIC CONDITIONS

Issue	Indicator	Baseline Conditions	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
	Estimated value of local income contributions.	No change in recent employment trends.	Income – Valley and Adams counties (annual) <u>Construction</u> <ul style="list-style-type: none"> • Direct: \$18.1 million/year • Total¹: \$28.1 million/year <u>Operations</u> <ul style="list-style-type: none"> • Direct: \$18.5 million/year • Total¹: \$29.3 million/year <u>Closure and Reclamation</u> <ul style="list-style-type: none"> • Direct: \$3.6 million/year Total¹: \$5.0M/year <u>Post-Closure</u> <ul style="list-style-type: none"> • Direct: \$0.9 million/year • Total¹: \$1.3 million/year 	Same as Alternative 1.	Same as Alternative 1.	Marginally higher than Alternative 1 due to increased construction and operations spending from use of Yellow Pine Route. However, construction impacts spread over longer 5-year period of construction.	No change from baseline conditions.
	Estimated value of goods and services procured in Valley and Adams counties.	No additional procured goods or services.	Direct Spending in Valley and Adams Counties (annual) <u>Construction</u> <ul style="list-style-type: none"> • Total: \$62.3 million/year <u>Operations</u> <ul style="list-style-type: none"> • Total: \$60.0 million/year <u>Closure and Reclamation</u> <ul style="list-style-type: none"> • Total: \$4.8 million/year <u>Post-Closure</u> <ul style="list-style-type: none"> • Total: \$1.4 million/year 	Same as Alternative 1.	Same as Alternative 1.	Marginally higher than Alternative 1 due to increased construction and operations spending from use of Yellow Pine Route. However, construction impacts spread over longer 5-year period of construction.	No change from baseline conditions.
	Change in populations of Valley and Adams counties.	No change in recent population growth trends. <ul style="list-style-type: none"> • Valley County: 0.4%/year (35 people) • Adams County: 0%/year (0 people) 	In-migration by workers to Valley and Adams counties <u>Construction</u> <ul style="list-style-type: none"> • SGP: 95 • Total¹: 198 <u>Operations</u> Net construction change limited by local workers job transfers: <ul style="list-style-type: none"> • SGP: 100 • Total¹: 190 <u>Closure and Reclamation</u> <ul style="list-style-type: none"> • No in-migration 	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1.	No change from baseline conditions.

4 ENVIRONMENTAL CONSEQUENCES
4.21 SOCIAL AND ECONOMIC CONDITIONS

Issue	Indicator	Baseline Conditions	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
	Impacts to housing demand in Valley and Adams counties.	No increase in housing demand or population from current conditions.	<u>Construction</u> <ul style="list-style-type: none"> Housing demand increase up to 198 units Total¹: 438 new residents (85 single, 113 married, 127 children). <u>Operations</u> <ul style="list-style-type: none"> Negligible net change from construction – many workers transfer Housing demand increase up to 190 units Total¹: 420 new residents (82 single, 108 married, 122 children) <u>Closure and Reclamation</u> <ul style="list-style-type: none"> No new residents 	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1.	No change from baseline conditions.
	Estimated tax revenue contributions.	No tax revenue increase from current conditions.	Total Tax Revenues (annual)² <u>Construction</u> <ul style="list-style-type: none"> State/Local: \$9.3M Federal: \$61.5M <u>Operations</u> <ul style="list-style-type: none"> State/Local: \$10.1M Federal: \$51.6M <u>Closure and Reclamation</u> <ul style="list-style-type: none"> State/Local: \$0.4M Federal: \$1.1M 	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1.	No change from baseline conditions.
	Changes in tourism and recreational based businesses.	No increase in tourism sector from current conditions and trends.	Limited displaced recreation due to low use levels and likely local area relocation. Negligible adverse impact to local area tourism economy expected. Potential for adverse impacts to specific individual recreation businesses and/or communities.	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1.	No change from baseline conditions.
	Changes in transportation and infrastructure.	No major changes expected that would result in economic activity or development changes that would substantially impact the local area's current economic conditions.	Local area infrastructure and/or roadway use changes are not expected to result in any major changes in economic activity or development that would result in substantial impacts on the local area's economy.	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1.	No change from baseline conditions.

Table Notes:

1 Consists of direct, indirect and induced employment (and includes both full and part-time positions).

2 Estimated annual tax revenues generated from action alternatives related direct, indirect and induced economic activity.

Table 4.21-10 Comparison of SGP Other Benefits and Costs by Alternative

Issue	Indicator	Baseline Conditions	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
SGP mineral extraction revenue.	Market values of extracted minerals.	No mineral extraction.	SGP mineral production projected value (after refining) = \$5.3 to \$6.5 billion over the SGP operating life	Same as Alternative 1.	Same as Alternative 1.	Same as Alternative 1. SGP value reduced by up to \$174 million due to increased construction, O&M and financial costs from use of Yellow Pine Route.	No change from baseline conditions.
Water quality impacts from SGP construction and operations	Removal of legacy mine tailings and waste rock. Volume and disposition of mineralized waste from mining operations.	Legacy waste in Meadow Creek valley from historical mining. No new mining waste production.	Removal of legacy mine waste materials in Meadow Creek Valley. New mineralized waste generated by operations will result in water quality impacts.	Least water quality impacts due to Centralized Water Treatment Plant and other mitigation to reduce water quality impacts The Centralized Water Treatment Plant will add O&M costs during operations and continuing post-closure.	Greatest decrease in water quality as no removal of legacy mine waste materials in Meadow Creek Valley.	Same as Alternative 1.	No change from baseline conditions.
Fish resources and fish habitat resource impacts from SGP construction and operations.	Fish population and fish habitat conditions.	Mine site and area streams currently provide important habitat for Chinook salmon, bull and steelhead trout populations.	Changes in fish habitat during construction and operations. Habitat decreases at mine site and Meadow Creek. Restored fish passage would increase habitat available upstream of Yellow Pine Pit. Overall short-term habitat loss adversely impact fish populations during construction and operations.	Least adverse fish population impacts from changes in habitat, streamflow and temperatures	Largest adverse fish population impacts from habitat, streamflow and temperature changes.	Similar to Alternative 1 with reduced fish passage that reduces available habitat but avoids fish mortality at mine site streams.	No change from baseline conditions.
Wildlife impacts from SGP construction and operations	Wildlife population and habitat conditions	Mine site and area streams currently provide important habitat for other wildlife populations.	Short-time adverse impacts on wildlife from SGP-related development (both at mine site and other areas within the analysis area), loss of habitat, and increased human activity within those areas.	Although some construction and operational differences, overall impact would be same as Alternative 1.	Largest adverse impact on wildlife habitat due to largest mine site footprint.	Decrease in adverse impacts on wildlife habitat due to smaller mine site footprint and no construction of Burntlog Route.	No change from baseline conditions.
Incremental costs to the SGP as a result of proposed facility and operation modifications.	Changes in the SGP's construction costs and/or future operating expenses.	The SGP is not built and no mining operations occurs.	Construction of SGP estimated to cost approximately \$334 million. Annual operations estimated to cost approximately \$234 million / year	Limited increase in future construction costs and annual O&M expenses compared to Alternative 1 from Centralized Water Treatment Plant and roadway changes (Burntlog Route and Stibnite-Thunder Mtn Rd).	Very limited decrease in future construction costs and O&M expenses compared to Alternative 1 from elimination of OHV Trail.	Additional construction costs compared to Alternative 1 from upgrade of Yellow Pine Route instead of Burntlog Route construction. Net increase in future annual O&M cost due to longer haul distances.	No costs for SGP construction or future O&M expenses.