

3.15 SOCIAL AND ECONOMIC VALUES

This section provides an overview of the social and economic attributes of the four counties in which the project could be located (Eureka, Elko, Lander, and White Pine counties). This section also describes the potential direct and indirect socioeconomic effects that could result from project construction and operation, such as effects on employment, population growth, property tax, sales tax, transient occupancy tax, public services, and property values of private land owners.

3.15.1 AREA OF ANALYSIS AND METHODOLOGY

AREA OF ANALYSIS

The area of analysis for social and economic values is the four-county region in which the project is located. This includes all of Eureka and White Pine counties, the northern portion of Lander County including the towns of Battle Mountain and Austin, as well as the southwestern portions of Elko County. The socioeconomic analysis describes key features of those counties crossed by the route alternatives.

METHODOLOGY

The socioeconomic evaluation focuses on the demographic and economic characteristics of the four-county region. Demographic factors include population size and density, age distribution, and projected population. Economic factors include labor force, employment levels, occupational distribution, average annual personal income, tax rates, and assessed valuation. County-level socioeconomic statistics were obtained from the U.S. Bureau of the Census, the U.S. Bureau of Economic Analysis, the Nevada State Demographer, the Nevada State Department of Taxation, and the Nevada Division of Water Planning. In some cases, data were collected through personal communications.

The assessment of construction impacts involved determining the distance between centers of social or economic activity (cities, towns, and mining operations) and the project. Route alternatives less than 10 miles from any center of social or economic activity were analyzed for their potential effect, while routes beyond 10 miles were considered to have little or no socioeconomic effect.

The assessment also evaluated whether the influx of construction workers would require additional community services or facilities, including accommodations. The construction schedule, size of the work force, project hiring procedures, population distribution, and available accommodations within the counties crossed by the route alternatives were considered. The number of hotel/motel rooms in the project area was obtained from local chambers of commerce.

Potential economic benefits from the influx of workers were also considered. The transient occupancy taxes that would be generated by the construction workers were estimated by multiplying the percentage of out-of-town workers by an average hotel/motel room rate and the number of room-nights per worker. The sales taxes accrued to the local economy from worker spending were estimated by multiplying the percentage of out-of-town workers by a standard monthly sales rate. This figure was then multiplied by the average number of months the workers would be in any one region. An average sales tax rate for the four-county region was then applied to this figure.

Revenues from property taxes assessed on the project would provide long-term benefits not only to those living in the four-county project area, but to all Nevada counties in which SPPC operates. Each county in which SPPC has wire mileage would receive a benefit. However, the counties where wire mileage is added would receive more of a benefit. Property taxes generated by the project were estimated by multiplying the estimated assessed value of the project (i.e., equal to approximately 35% of the total

project cost) by a composite Nevada property tax rate for SPPC's electric department for the 2000-2001 tax year. The assessed value was distributed among the various counties based on the wire mileage that SPPC has in each of the Nevada counties. This assigned value was then multiplied by the appropriate tax rate for each district to arrive at total Nevada property taxes, as shown in Table 3.15-4.

The potential effects on property values were derived from professional studies and academic papers referenced in primary sources published by the International Right-of-Way Association, and through personal communications with local tax assessors and realtors.

3.15.2 AFFECTED ENVIRONMENT

Historically, the economies of the four-county study area have been influenced by the economic health of the mining industries. Since the 1880s, population and economies were subject to "boom-bust" cycles that followed gold and silver strikes in the area. However, in the early 1900s, this pattern changed when copper mining and smelting dominated the economic activity in these counties, providing stable employment opportunities (BLM 1995). Although mining has historically been the primary economic activity in the area, the counties' economies have diversified into other sectors, such as trade, construction, service, and government. The following provides a social and economic overview of the four counties within the study area.

Eureka County

As shown in Table 3.15-1, Eureka County had an estimated population of 1,660 in 1997, which has increased by approximately 6% since 1990. The Nevada State Demographer estimates that Eureka County's population will increase 41% by 2018, to 2,830. In 1997, Eureka County's average age of population was estimated at 36.3 years, similar to Nevada's overall average age of 35.7 years. The County's population density was approximately 0.4 person per square mile in 1997, with the lowest density of any county in Nevada and the lowest density of the four-county project region. This figure compares with an average density for the entire state of 16.1 persons per square mile (NDWP 1999).

Most of Eureka County's population tends to be concentrated in the southern portion of the county near the town of Eureka and in the community of Crescent Valley, near the Cortez mining area. With an estimated population of 1,100 in 1997, the town of Eureka contained about two-thirds of the county's population. The community of Crescent Valley has a population estimate of approximately 200 persons (personal communication with Eureka County Chamber of Commerce, March 3, 2000).

As shown in Table 3.15-1, nearly 90% of employed persons in Eureka County work in the mining industry (3,900 in 1998). Eureka County is also the state's dominant gold producer, with gold production totaling \$1.081 billion in 1997 and comprising 34% of the state's total gross proceeds on mines in that year (NDWP 1999). Due to the location of the county's major mines in the northern-most part of the county along the Carlin Trend, most of the county's mining workers reside in, and commute from, the town of Elko in Elko County (NDWP 1999). This is of special concern to county planners and officials who have the economic burdens for providing essential public services, but do not have the sales tax and residential property tax base to more fully support these services (NDWP 1999). The unemployment rate in Eureka County was 4.2% in 1998.

Eureka County's average annual wage rate in 1997 was \$49,761 per worker, with the mining industry providing an annual salary of \$52,784 per worker (NDWP 1999). The average annual salary of Eureka County's workers in 1997 was the highest of the four-county project region, and the highest of all Nevada's 17 counties. However, the high average salary figure greatly overstates the average salary of the county's "resident" workers, as most of the mine's workers live out of the county.

TABLE 3.15-1: ECONOMIC PROFILE OF ELKO, EUREKA, LANDER, AND WHITE PINE COUNTIES

	ELKO	EUREKA	LANDER	WHITE PINE
Population ¹				
1990	33,463	1,547	6,266	9,264
1997	47,710 Town of Elko: 19,670	1,660 Town of Eureka: 1,100	7,030 Battle Mountain: 4,500	10,640 Town of Ely: 5,190
% Change 1990-1997	+29%	+6%	+10%	+13%
Projected Population 1997-2018	+41% (81,710)	+41% (2,830)	+23% (9,170)	+20% (13,430)
Average Age	31.0	36.3	31.7	36.6
Population Density (persons per square mi.)	2.8	0.4	1.3	1.2
Employment in 1998 ²				
Labor Force	20,750	4,522	2,760	3,804
Total Employed	19,600	4,340	2,380	3,690
Unemployment Rate	5.4%	4.2%	9.3%	3.1%
Industry Employment (1998)				
Mining	1,210	3,900	1,050	690
Construction	1,210	30	40	110
Manufacturing	240	0	40	40
TCPU*	1,120	20	70	110
Trade	3,650	100	370	660
FIRE**	510	0	30	120
Service	8,230	30	180	620
Government	3,540	250	610	1,340
Income 1997 ³				
Average annual salary	\$25,369	\$49,761	\$35,883	\$28,507
Average annual mining salary	\$52,154	\$52,784	\$50,508	\$48,113

¹U.S. Bureau of Census (1990, 1997)

²State of Nevada Department of Employment, Training, and Rehabilitation (1998)

³Nevada Division of Water Planning (1999) using 1997 US Department of Commerce data

*Transportation, communication, and public utilities

**Finance, insurance, and real estate

As shown in Table 3.15-2, the current average home value in Eureka County is estimated to be \$55,000. According to The Nevada State Department of Taxation, gross taxable sales in Eureka County were \$173,649,694 in fiscal year 1998-1999, which is down 2.5% from the previous year (see Table 3.15-3).

TABLE 3.15-2 : CURRENT AVERAGE ESTIMATED HOME VALUES BY COUNTY

County	Current Estimated Home Values ¹
Elko	\$100,000
Eureka	\$55,000
White Pine	\$65,000
Lander	\$60,000

¹Estimates based on personal communications with County Tax Assessors and Desert Mountain Realty, February 29, 2000.

**TABLE 3.15-3: GROSS TAXABLE SALES COMPARISON BY COUNTY
(FISCAL YEAR 1998-1999)**

County	Amount	% Change from FY 1997-1998
Elko	\$727,860,858	-3.7%
Eureka	\$173,649,694	-2.5%
Lander	\$97,931,021	-11.6%
White Pine	\$109,932,613	-6.3%

Source: Nevada State Department of Taxation, 1999

White Pine County

As shown in Table 3.15-1, White Pine County had a 1997 estimated population of 10,640. The overall county population has increased by approximately 13% over 1990 population estimates. The Nevada State Demographer estimates that White Pine County's population will increase 20% by 2018, to 13,430. The county's population is relatively concentrated in the incorporated City of Ely (with a 1997 estimated population of 5,190 persons, or 49% of the county's total population) and in the nearby unincorporated towns of McGill (1997 estimated population of 1,360 persons, or 13% of the total county population) and Ruth (1997 estimated population of 470 persons, or 4.4% of the county population).

In 1997, the average age of White Pine County's population was estimated at 36.6 years. Based on 1997 population estimates, White Pine County's population density was approximately 1.2 persons per square mile (NDWP 1999). White Pine County has the second lowest density of the four-county study area, behind Eureka County.

Of the estimated 3,690 persons employed in the county in 1998, the highest percentage (36% or 1,340 workers) were employed in federal, state, and local government jobs, while 18% or 670 workers were employed in the mining industry. Although the mining industry has been highly cyclical over the past 20 years, it constitutes a crucial underpinning to the county's socioeconomic growth. Mining jobs in White Pine County averaged over \$48,113 in annual salaries, a level of pay much higher than the county average annual wage of \$28,507, which is the second lowest in the four-county project region, behind Elko County. The unemployment rate in White Pine County was 3.1% in 1998.

The average estimated home value in White Pine County is \$65,000 (see Table 3.15-2). Home prices are down approximately 10 – 40% over the past year due in part to the closure of BHP Mine, one of the area's largest employers (personal communication with Vivian Almberg, Desert Mountain Realty, February 29, 2000). Gross taxable sales in White Pine County were \$109,932,613 in fiscal year 1998, down 6.3% from the previous year (see Table 3.15-3).

Lander County

Lander County had an estimated 1997 population of 7,030, which represents an increase of approximately 10% since 1990 (see Table 3.15-1). The Nevada State Demographer estimates that Lander County's population will increase by 23% by 2018, to 9,170. The county's population is concentrated in three unincorporated towns including Battle Mountain, (4,500 residents in 1997 or 64% of the total county population), Austin (420 persons and 6%), and Kingston (250 residents and 3.6% of the total county population).

In 1997, Lander County's average age was estimated at 31 years, making Lander County the youngest county in the state and among the four counties in the project region (NDWP 1999). In 1997, Lander County had the sixth lowest population density of any county in Nevada at 1.3 persons per square miles, compared to an average density of 16.1 persons per square mile for the entire state.

Similar to neighboring Eureka County, mining is by far the dominant industry sector in Lander County. Nearly half of the county's 2,380 employed persons in 1997 were involved in the mining industry. Lander County's mines produced \$304.6 million in total gross proceeds, primarily in the form of gold production, making Lander County the fourth most important county behind Eureka, Elko, and Humboldt counties in terms of mine production value (NDWP 1999). The county's average annual wage rate in 1997 was \$35,883 per worker, with the mining industry showing the highest annual wage of \$50,508 per worker (NDWP 1999). In 1997, the average wage rate in Lander County was the second highest in the state, exceeded only by the mining wage rate of Eureka County. Unemployment in Lander County was 9.3% in 1998, the highest rate among the four counties.

The estimated average home value in Lander County is between \$58,000 - \$61,000 (see Table 3.15-2). Home prices in Lander County have fallen between 5% and 12% over the past 2 years due to mine foreclosures, layoffs, and local housing supply outstripping demand (personal communication with Laura Duvall, Lander County Tax Assessor, February 29, 2000). Lander County had \$97,931,021 in gross taxable sales in fiscal year 1998-1999, which is down 11.6% from the previous fiscal year. The amount of gross taxable sales in Lander County is also the lowest of the four counties (see Table 3.15-3).

Elko County

The population of Elko County was estimated to be 47,710 in 1997, which represents a 29% increase since 1990, and contains the highest population, as well as the greatest population increase, in the four-county region (see Table 3.15-1). The Nevada State Demographer estimates that Elko County's population will increase by 41% by the year 2018, to 81,710. The county's population is primarily concentrated in the towns of Elko (19,670 or 41% of the total county population), West Wendover (3,430 persons, or 7% of total county population), Carlin (2,680 persons, or 5.6% of county population), and Wells (1,540 persons, or 3% of Elko County's total population).

In 1997, Elko County's average population age was estimated at 31.7 years, making Elko County the second youngest of Nevada's 17 counties. Based on 1997 populations, Elko County's population density was approximately 2.8 persons per square mile.

Based on Elko County's 19,600 employed persons in 1998, the 8,230 jobs in the county's service industry accounted for the greatest portion of total employment at 41%. Mining's 1,210 jobs in 1998 accounted for only 6% of total employment. Nonetheless, Elko County's mining industry has constituted a crucial underpinning to the county's growth and economic well-being since the county's founding in the mid-1800s. In addition to mining operations within Elko County, the town of Elko also serves as an important mining center for operations along the Carlin Trend in nearby Eureka and Lander counties. In 1997, Elko County's mines produced \$436.3 million in mineral resources, primarily gold, up significantly from \$232.5 million in 1996, making Elko County the second-most important mineral producing county after Eureka County in 1997 (NDWP 1999). The highest average annual salary in Elko County in 1997 was \$52,154 per worker per year, in the mining industry. This salary level was far greater than the county average annual salary of \$25,369 per worker, which is the lowest average annual salary in the four-county area.

Largely due to high mining wages, the average estimated home prices are the highest in the four counties, with an average home value of \$95,000 - \$105,000 (see Table 3.15-2). Elko County had \$727,860,858 in gross taxable sales in fiscal year 1998-1999, which is down 3.6% from the previous fiscal year but by far the highest amount of gross taxable sales of the four counties (see Table 3.15-3).

3.15.3 ENVIRONMENTAL CONSEQUENCES

This section addresses the social and economic effects associated with the project. The following describes the thresholds of significance for social and economic impacts in the four-county study area, followed by an evaluation of the project's potential socioeconomic effects region-wide.

SIGNIFICANCE CRITERIA

Thresholds of significance for social and economic impacts include the following.

- Substantial disruption of local social or economic activities due to proximity of transmission line construction.
- Overburdening of local accommodations for temporary worker housing.
- Substantial changes to local sales taxes.
- Substantial changes to the economic values of private property.

IMPACTS COMMON TO ALL ROUTE ALTERNATIVES

In general, the construction and operation of the project would have no substantial adverse social or economic impacts within the four-county study region, with the exception of potential impacts to active mining operations, which are discussed in Section 3.1, Geology and Minerals. The project would, however, have a number of positive economic effects. These effects are as described below.

Potential for Project-Related Disruption of Local Economic Activities

The primary centers of social and economic activity in the project area are the towns and communities nearest the route alternative segments, as well as the mining operations that are dispersed throughout the project region.

The project would be constructed primarily within rural regions of north-central Nevada. The cities and towns nearest to the project include Crescent Valley and Eureka in Eureka County, and Ely, Ruth, and McGill in White Pine County. None of the transmission line segments would traverse through these population centers. Some transmission line segments (B, I, and J) would pass near a few of these socioeconomic centers. These segments, and their potential effects, are described below. Other segments would be located too far away from existing towns or cities to have any discernable effect on their social or economic structure¹.

Segment B would be located approximately 1 mile west of the community of Crescent Valley, with an approximate population of 200. Due to the distance and the relatively small population of Crescent Valley, this segment would likely have no substantial socioeconomic effect, including disruption of social or economic activities located here. For additional information related to project's potential effects on this community, see Section 3.13, Land Use and Access.

Segment B would also be located approximately 0.5 mile from the Cortez Mining District operations. Potential disruptions to mining operations would be eliminated or minimized through the routing design, tower placement, and other methods of mitigation (see Section 3.1, Geology and Minerals).

¹ Segment B would be located approximately 17 miles southeast of Battle Mountain and approximately 48 miles east of Austin. Segment E would be approximately 38 miles and 40 miles from the towns of Elko and Wells, respectively. The community of Carlin would be approximately 18 miles away from the nearest portion of Segment E. Segments G and H would be approximately 6 miles from the town of Eureka. No towns or cities are located near Segments C, D, or F.

Segment I would be located approximately 2.2 miles north of the Town of Eureka (population 1,100). Due to the relatively far distance between the project from this population concentration, the project would not substantially disrupt the social and economic activities located here. Segment I would also pass within 0.5 mile from approximately 8 trailer homes located near Highway 50. Although the project would likely be visible from these homes, the project would not have a discernable effect on this small subdivision. For additional information related to project's potential effects on private properties near Segment I, see Section 3.13, Land Use and Access.

Segment J would be located approximately 10 miles north of the town of Ely (population 5,190 persons, or 49% of the county's total population), approximately 4 miles south of McGill (population 1,360 persons, or 13% of total county population), and approximately 7 miles north of Ruth (population 470 persons, or 4.4% of the county population). Due to the distance between the population centers of McGill, Ely, Ruth, and Segment J, this segment would not have substantial adverse socioeconomic effects. Potential disruptions to private lands along Segments I or J would be avoided or minimized through the routing design, including distance of tower placement and other methods of avoidance. Segment J would pass within 0.5 mile of a small, residential subdivision near Hercules Gap; however, no substantial disruptions to the social or economic setting of this area is anticipated. For additional information related to project's potential effects on private properties near Segment J, see Section 3.13, Land Use and Access.

Growth Inducing Effects

A potential issue is the degree to which the project could foster population growth. Conceptually, population growth could impose new burdens on existing community service facilities, such as expansion of waste water treatment plants, need for new schools, increased demand for fire suppression services, etc. In addition, population growth could result in the need for construction of new housing with its associated environmental impacts. If the project were to employ a sustained, large labor force drawn from outside of the area, it could induce population growth (temporary construction labor force is excluded from this consideration). If the project were to foster economic growth, it could indirectly result in population growth and the attendant environmental consequences.

In general, the project would have minor growth inducing effects. The project would require only a small number of personnel for regular inspections and maintenance of the transmission line and substations.

Population in SPPC's service area continues to grow rapidly, particularly in the urban centers in and around Reno, Sparks, and Carson City. Population growth within the project study area, however, represents only modest population increases. The project would allow an additional major transmission link to provide reliable service to the large urban centers of the state and out of state areas. It also would provide additional reliability to supply local growth.

The project would accommodate anticipated growth in northern Nevada. The project conceptually could indirectly induce growth by providing electric power to business and industry, which may be attracted to SPPC's service territory; however, the impact is speculative. In general, other forces of economic development drive population growth and development in the SPPC service area and up to now the availability of power has not been an influencing factor in that growth. These conclusions apply to the project as a whole and are not dependent on the selected route alternatives.

Potential Effect on Local Accommodations for Temporary Worker Housing

The influx of the construction labor force can have both adverse and beneficial impacts on local communities. Potential adverse effects could include overburdening existing retail facilities, such as motels and restaurants, as well as public services and facilities, such as law enforcement and public roads.

Some conflicts could exist if the construction work force competes with tourists for space in motels or campgrounds. These potential impacts are temporary and would last only the duration of the construction period in a specific area.

According to SPPC, construction of the transmission line would require at least six construction contractors with a total of about 150 workers at peak times (SPPC 2000). Construction would occur in phases; site preparation crews would be followed by assembly crews, followed by erection and reclamation crews. Material would be brought to the site from pre-determined construction staging areas along the line. Depending on how the construction phases are contracted, the construction activity would likely move in sequence along the proposed alignment. Peak activity in any one location would typically last 3 to 6 months.

Because the construction work has not been contracted yet, it is not possible to determine the geographic region of the work force. Use of the local labor force would depend on the local labor market conditions, the contractor's labor force availability, the construction status, and the time of year. However, it is estimated that local unskilled labor would be between 30 and 40% of the total workforce, and skilled out-of-town labor would be between 60 and 70% of the total workforce (SPPC 2000). The contractor has two options related to the worker housing: (1) house the workforce in hotels located in nearby urban areas and bus them to the job sites, or (2) utilize or negotiate to expand existing long-term camping facilities located near urban areas and bus them to the job sites. As the contractor has not yet been selected, it is unknown which housing option would be chosen. It is possible that the contractor may choose a combination of both housing options.

The demand for temporary accommodations would depend on the workers' home base and percentage of local versus out-of-town labor. Workers from outside the area may be housed temporarily in the towns of Battle Mountain, Elko, or Carlin during construction work along Segments A, B, C, and D. Workers may be housed temporarily in the town of Eureka along Segments E, F, G, H, and I, and the towns of Ely or McGill for Segment J. The available accommodations in Battle Mountain, Carlin, Elko, Eureka, and Ely limit travel time to most parts of the project to less than one hour. For this reason, transporting workers to the job sites from hotels or campsites would likely be the contractor's preferred method of worker transportation.

Given the relatively small size of the construction work force, adequate facilities should exist to provide temporary accommodations. The town of Ely has approximately 680-690 hotel/motel rooms, many of which are available for weekly rental (personal communication with Ely Chamber of Commerce, April 13, 2000). The largest town in the project area is Elko, with a total of 32 hotels or motels (personal communication with Elko Chamber of Commerce, April 13, 2000). The town of Eureka has 3 hotel/motels with a total of 91 rooms, most of which are double rooms (personal communication with Eureka Chamber of Commerce, April 13, 2000).

Lodging of construction crews would create additional transient occupancy tax (TOT) for local communities near the transmission line. To estimate TOT, it was assumed that 80% of the total workforce (about 120 workers) would be on the job for the entire 15-month construction window, when considering construction plus post-construction reclamation activities. It was further assumed that 50% of the out-of-town workforce (approximately 53 workers) would stay in a hotel, while the remaining 50% would stay at a long-term campsite.

TOT revenue generated by out-of-town workers is calculated as follows (note that local workers are not included in this calculation since they would be lodged at home):

$$53 \text{ workers} \times \$50 \text{ per room} \times 450^2 \text{ room-nights} = \$1,192,500 \text{ in room sales}$$

$$\$1,192,500 \times 8.00\% \text{ average TOT rate} = \$95,400$$

As shown in this calculation, housing of construction workers is estimated to generate \$95,400 in TOT revenue for local communities near the transmission line. These communities likely include the cities of Ely, Eureka, and Elko.

It is important to note, however, that this revenue stream does not necessarily correspond to \$95,400 in additional TOT revenue that these communities would have received beyond their baseline TOT revenue. Most lodging facilities have average occupancy rates of 70 to 80% for much of the year. During peak visitor periods, this occupancy rate can approach 100%. Lodging of construction crews would likely displace some visitor lodging that would normally have occurred. Therefore, only a fraction of the \$95,400 in TOT revenue, perhaps 25 to 50%, represents new, additional revenue that local communities would realize due to the construction of the transmission line.

Potential Effect on Local Sales Tax

Additional revenues may be generated through local sales taxes on purchases made by construction contractors and workers, but these revenues are generally small and transitory. Sales tax revenue would be realized from two sources: construction supplies (e.g., materials and equipment) and worker spending. Given the remoteness of the project area, it is anticipated that most construction supplies would be purchased from outside the project area and shipped to material yards as needed. In this respect, local communities would see little sales tax revenue generated from sales of construction supplies.

If construction crews are temporarily housed in communities near the transmission route, these workers would generate additional local sales tax revenue from food, beverage, and sundry sales. The incremental sales tax revenue generated by these workers is calculated as follows (note that local workers are not included in this calculation since they are already part of the local economy):

$$53 \text{ workers} \times \$400 \text{ in taxable sales/month/worker} \times 15 \text{ months} = \$318,000 \text{ in taxable sales}$$

$$\$318,000 \times 6.75\% \text{ average sales tax rate} = \$21,465$$

As shown in this calculation, construction worker spending is projected to create \$21,465 in additional sales taxes for the state of Nevada and local communities near the transmission line. Approximately \$6,440 of this increment would go to the state General Fund, with the balance (\$15,025) going to local counties and cities near the project area.

Property Taxes Generated from the Project

Revenues from property taxes assessed on the project would provide a long-term benefit to those living in the four-county project region and to all the Nevada counties in which SPPC operates. This benefit can be particularly important to those counties that have been experiencing declining tax bases, or where taxes are based primarily on one sector of the economy, such as mining. The SPPC Tax Department provided the following information on estimated property taxes generated from the proposed project.

In general, SPPC's assets, termed "electrical department," are valued as a total unit in the State of Nevada.³ The assessed value from property taxes is calculated as 35% of the total unit value for SPPC's electric department. The county tax rate per \$100 of assessed value is then spread to the various counties based on the wire mileage that SPPC has in each of the Nevada counties.

² 15-month construction period X 30 nights per month = 450 room-nights. This assumes one worker per room.

³ This value is calculated using the historical cost less depreciation and the capitalized income approaches. Once each of the values are calculated, a final reconciled value is determined.

For example, first year property taxes by county were calculated by estimating the total cost of the project, multiplying by 35% to estimate the assessed value, and then multiplying the assessed value by the county’s property tax rate per \$100 of assessed value (2000-2001 tax year). To arrive at an overall first year property tax increase to the State, the Composite Nevada Property Tax Rate was used. The long-term property tax benefits were calculated by multiplying the estimated first year property taxes by 40 years. As SPPC would have the right to renew the BLM ROW grant, property tax benefits to local governments could continue.

The costs of the project would increase the total value of SPPC’s electric department and, therefore, would increase the assessed value that would be spread to the counties. Each county in which SPPC has wire mileage would receive a property tax increase. The counties where wire mileage is added would receive a greater share of the increase than those that do not have additional wire mileage. Table 3.15-4 provides an estimate of the additional property taxes that would be generated from the three route alternatives, by county, and for the entire State of Nevada.

TABLE 3.15-4: ESTIMATED PROPERTY TAXES GENERATED BY ROUTE ALTERNATIVE

County	ROUTE ALTERNATIVES					
	Crescent Valley*		Pine Valley*		Buck Mountain	
	Miles**	Taxes	Miles**	Taxes	Miles**	Taxes
Eureka	88	\$26,000	120	\$31,000	62	\$21,000
Elko	0	\$68,000	0	\$67,000	12	\$66,000
Lander	38	\$90,000	0	\$76,000	0	\$73,000
White Pine	60	\$31,000	60	\$30,000	93	\$40,000
Other Counties	0	\$727,000	0	\$713,000	0	\$680,000
Total State Taxes (first year)	n/a	\$942,000	n/a	\$917,000	n/a	\$880,000
Total State Taxes (over 40-year period)***	n/a	\$37,680,000	n/a	\$36,680,000	n/a	\$35,200,000

* Routes variations (a) and (b) have been excluded as the mileage difference between them (0.5 mile) would have a nominal effect on taxes in Eureka County.

** Mileage per county had been rounded to the nearest whole mile

*** Estimates are based on 40-year period. Actual amounts received will vary. This estimate is not adjusted for inflation or changes in valuation.

Source: SPPC Rates and Regulatory Affairs Department, January 20, 2001.

As shown in Table 3.15-4, the Crescent Valley route alternatives would generate approximately \$942,000 in the first year of operation and approximately \$37,680,000 over a 40-year period. The Pine Valley route alternatives would generate approximately \$917,000 in the first year of operation and approximately \$36,680,000 over a 40-year period. The Buck Mountain route alternative would generate approximately \$880,000 in the first year of operation and approximately \$35,200,000 over a 40-year period. In summary, there would be very little difference among route alternatives in terms of generated property taxes.

Potential Effects on Property Values

Impacts to private property values may result where the route would be located near enough to private properties to affect their value. Such impacts may include interference with agricultural operations or obstruction of views, as well as the perceived health effects of electromagnetic frequencies (EMF) on nearby private residences (see Section 3.10, Public Health and Safety, for information about public health studies on EMF).

Various technical studies and academic papers have been completed to estimate the impact of high voltage powerlines (345 kV or higher) on nearby property values. One well-known study found that over a 12-year timeframe, there were no negative effects on the value of vacant land due to the presence of high voltage power lines (International Right-of-Way Association 1991). For developed lots with higher-priced homes (in the \$225,000- \$250,000 range), there appeared to be a 0 to 5% negative effect on the value of residential lots immediately adjacent to power lines.

Most private property in the project area is in urbanized portions of the four-county region, including the cities of Ely, Elko, Eureka, and Battle Mountain. There are few residences in the rural and sparsely populated portions of the counties where most of the transmission line segments would be located. Fewer still are homes in the \$225,000- \$250,000 range. Personal communications with tax assessors in Eureka, Elko, White Pine, and Lander counties, as well as local realty professionals, confirm that construction of a transmission line through primarily rural and sparsely populated portions of the four-county region would have no significant adverse effect on local property values⁴. For additional information related to the visual effects on specific properties along the segments, see Section 3.9, Visual Resources.

Potential Effects on Rate Payers

Since the project costs would vary depending on which route was selected, the cost to rate payers would also vary. At 186 miles and costing approximately \$97.2 million, the Crescent Valley route alternatives would be the longest and the most expensive route to construct.⁵ At 168 miles and costing approximately \$91.1 million, the Buck Mountain route alternative would be the shortest and the least expensive route to construct. At 180 miles and costing approximately \$95.3 million, the Pine Valley route alternatives would fall in the middle.

The project's impact on SPPC's current rates is estimated to be approximately 10% of the estimated total project cost annually, plus operation and maintenance costs. The 10% annual cost approximates SPPC's rate-of-return authorized by the State of Nevada PUC. Therefore, the Crescent Valley route alternatives would result in an estimated \$9.72 million annual cost to rate payers. The Pine Valley route alternatives would result in an estimated \$9.53 million annual cost to rate payers, and the Buck Mountain route alternative would result in an estimated \$9.11 million annual cost to rate payers.

Before any project costs could be passed along to rate payers, however, SPPC would need to file for a General Rate Increase with the State of Nevada PUC. The PUCN reviews all rate increases and would make a determination on whether to pass on any reasonable costs to the rate payers. Recently, SPPC has had several rate increases related to adjustments for energy costs or for fuel and purchased power. These rate increases do not take into account the costs associated with the construction of new electric facilities, like the Falcon to Gonder project. SPPC has not filed for a rate increase for costs associated with the construction of new electric facilities since 1991. SPPC has been able to avoid rate increases for the cost associated with the construction of new electric facilities by balancing the expenditures for new facilities with the retirement of older facilities and changes in depreciation.⁶ For this reason, there would likely be no discernable effects to rate payers as a result of the proposed project.

⁴ Personal communications with Joseph Aguirre, Elko County Assessor; James Ithurrealde, Eureka County Assessor; Robert Bishop, White Pine County Assessor; Laura Duvall, Lander County Assessor, and Vivian Almberg, Desert Mountain Realty, with Brad Brewster, EDAW, Inc. February 29, 2000.

⁵ The project total cost estimate of \$97,190,000 includes 186 miles of 345 kV line, Falcon substation, Gonder substation, environmental permits, lands and rights-of-way, and project administration. According to the SPPC Tax Department, SPPC would pay taxes on all components of project cost, including environmental permits, land, etc., not just facility costs. The estimated cost for the other routes is calculated by reducing the \$97,190,000 estimate by a differential cost of \$340,000 per mile for transmission line costs. All other cost components are considered equal.

⁶ Source: Prepared by SPPC Rates and Regulatory Affairs Department, December 19, 2000.

Potential Effects of Access Roads

As part of the project, many miles of existing dirt roads would be improved for enhanced access, and a few new spur roads would be constructed. These improved or new roads leading from state highways to the project area would be constructed in sparsely developed locations and primarily on public lands. The improved access roads would not create a substantial disruption of local social or economic activities due to relatively remote nature of the project area. These roads would avoid population concentrations such as towns, cities, or rural subdivisions, and would avoid important economic activities such as local mining enterprises. Since most of these roads would be located on public property, the effects on local sales taxes or private property taxes would be negligible. Improved access roads may have a slightly beneficial socioeconomic effect by providing additional employment opportunities for local labor.

ALTERNATIVE-SPECIFIC IMPACTS

As described above, no substantial adverse effects to social and economic values were identified in the four-county project area, with the exception of potential impacts to active mining operations, as discussed in Section 3.1, Geology and Minerals. As described above, Segment B is located proximate to the Cortez mining operation, which is planning an expansion that could conflict with the transmission line if either of the Crescent Valley route alternatives were selected. The estimates of property taxes that would be generated by each alternative over the 40-year period are relatively similar (i.e., between \$37,680,000 and \$35,200,000).

RESIDUAL IMPACTS

With the exception of potential impacts to mining operations discussed in Section 3.1, Geology and Minerals, no adverse effects to social and economic values are expected as a result of the project. Therefore, no mitigation measures would be necessary. Thus the project would have no residual impacts to social and economic values.

NO ACTION ALTERNATIVE

Under the No Action Alternative, impacts (including beneficial) to existing socioeconomic resources associated with this project would not occur. However, socioeconomic impacts (either adverse or beneficial) could occur in other areas as SPPC and the Nevada PUC would begin emergency planning efforts to pursue other transmission and/or generation projects to meet the projected energy load capacity shortfall.