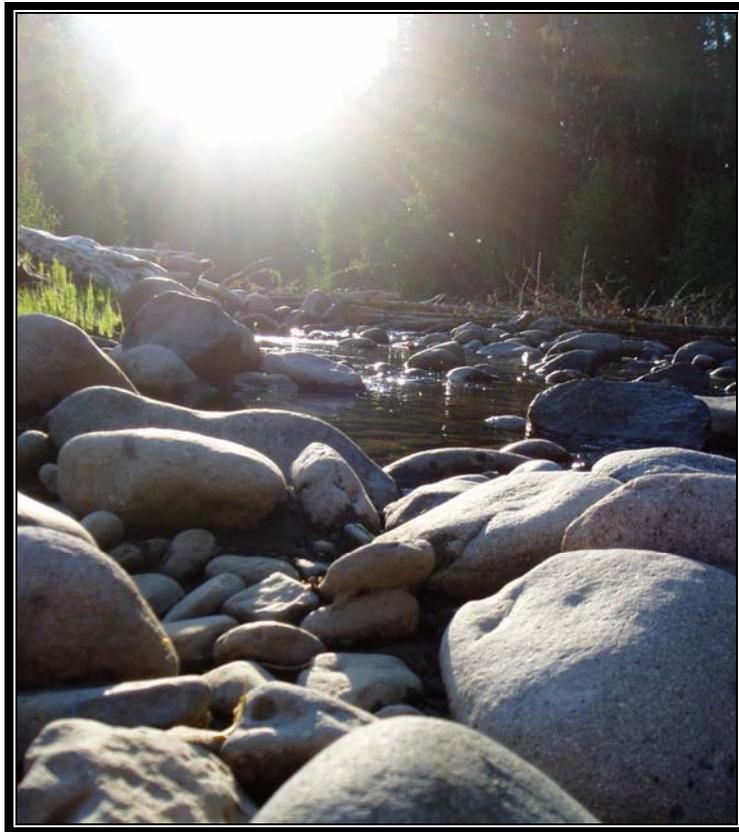


Final Report

Saguache Solar Energy Project Socioeconomic Impacts

SOLARRESERVE

Saguache County, Colorado



Final Report

April 18, 2011

**Saguache Solar Energy Project
Socioeconomic Impacts**

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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

SolarReserve Concentrated Solar Plant Socioeconomic and Fiscal Impact Analysis

This study documents the likely economic, housing and fiscal impacts of the construction and operation of the proposed SolarReserve concentrated solar power plant (Project) on Saguache County, Colorado and the central San Luis Valley.

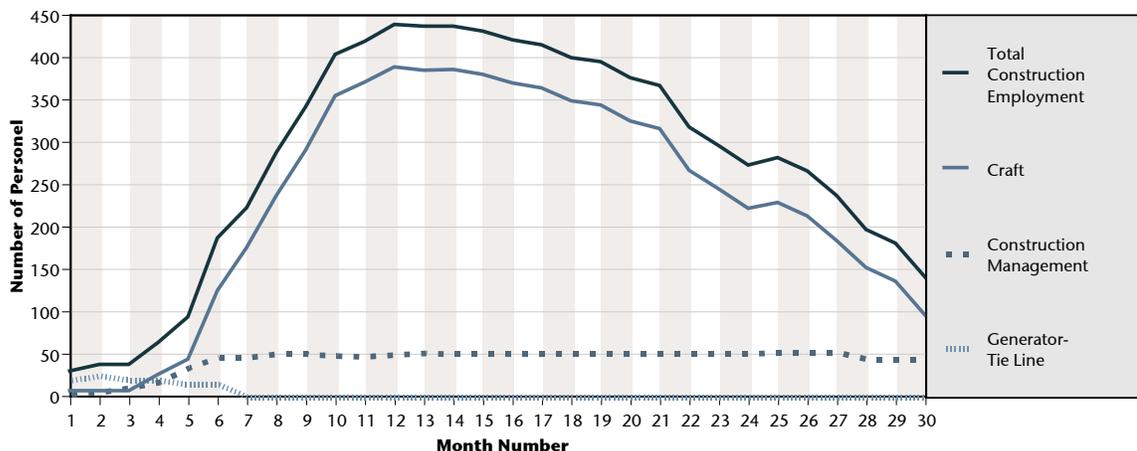
Project Description

SolarReserve, a California based developer of solar energy projects, has proposed construction of two 100-megawatt (MW) concentrated solar power plants on a 6,200 acre site in Saguache County, Colorado. This analysis examines the socioeconomic impacts of the single, Phase 100 MW facility. Similar solar projects have received final permits and are slated to break ground in both southern California and Nevada in 2011.

SolarReserve’s construction schedule anticipates a six month peak period of about 390 craftsmen and 50 operational and construction management staff for a total peak demand of about 440 workers. The majority of construction jobs are skilled positions that will likely require a mix of local workers and persons from outside the Valley. The latter will require temporary residences in the area.

Figure ES-1 shows the Phase I estimated construction employment schedule for the first 100 MW facility.

Figure ES-1.
Construction Personnel by Discipline — Phase I



Note: The 30 month construction period includes 3 months of compliance plant preparation, 24 months of construction and 3 months of Project commissioning.

Source: SolarReserve.

Construction activity will last about 30 months. About 50 persons will be employed fulltime at the new Plant when the facility is operational.

In addition to the direct economic stimulation associated with new expenditures and the new jobs created by SolarReserve (direct effects), including the wages and salaries paid to employees, the Project will also stimulate a secondary round of local economic activity during both the construction and operation phases known as *indirect* and *induced* effects.

BBC estimates that the construction phase of the Project will likely produce 75 indirect and induced jobs elsewhere in the San Luis Valley, and the full time operations workforce of about 50 persons will cause 25-30 workers additional jobs beyond direct employment at the facility. The secondary impacts of the Project are relatively modest, primarily because goods and materials will primarily be purchased outside the local area, and given the temporary impacts associated with the construction phase, most local businesses will likely try to absorb additional activity without aggressively expanding payroll or facilities.

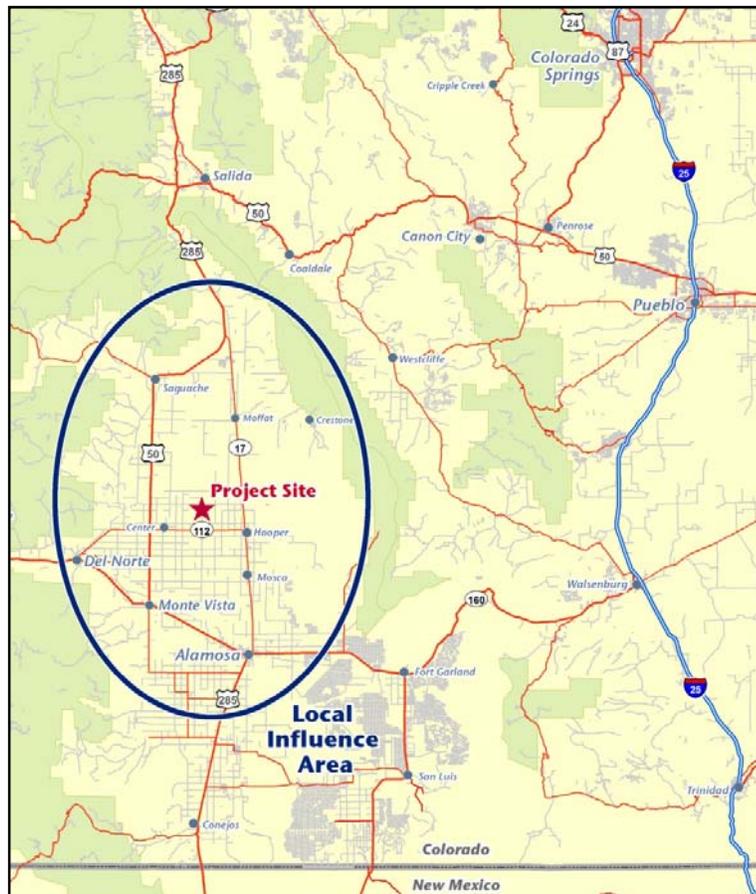
The Valley

The San Luis Valley (the Valley) is one of the longest settled, but least populated, areas in Colorado with some communities dating back to the 16th Century and the original Spanish Land Grants. The three-county area likely to be affected by the Solar Reserve Project has about 35,500 current residents. Saguache County has about 7,000 residents. As shown in the following Exhibit ES-2, the largest towns near the Project site are Alamosa, Del Norte and Monte Vista.

The area likely to be affected by the construction of operation of the Project comprises portions of Saguache, Alamosa and Rio Grande counties.

Figure ES-2.
Solar Reserve Economic
Influence Area, 2011

Source:
BBC Research & Consulting.



The local economy is based largely on agriculture, tourism and more recently on an emerging solar energy business. The local economy has been stagnant for many years.

Labor Force and Housing Requirements

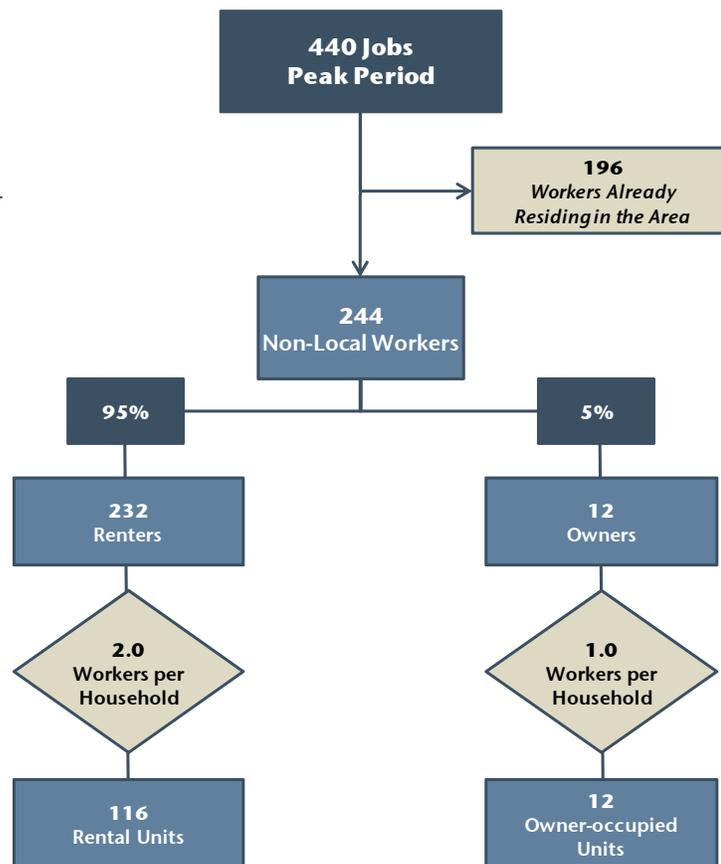
Developing a concentrated solar plant requires a skilled construction workforce, including a large number of positions for boilermakers, iron makers, engineers, pipefitters and millwrights, which are not common skill-sets in the area. As a result, a large share of workers is expected to migrate temporarily into the Valley. Nearby local communities—most notably Alamosa, Del Norte and Monte Vista—are expected to house most in-migrating workers. The smaller Saguache County communities of Saguache, Center and Crestone will also see some growth pressure. Very few temporary construction workers are expected to bring a family with them.

The consultants have reviewed the construction workforce requirements by specialized skill level with SolarReserve and local economic development staff. As shown in Exhibit ES-3, BBC predicts about 244 new workers at peak period and a demand of approximately 116 rental units.

**Figure ES-3.
Housing Demand of
Construction Workforce**

Note:
The peak number of construction jobs (440), which occurs in month 12, does not align with the peak number of non-local worker (252), which occurs in month 15.

Source:
SolarReserve and BBC Research & Consulting.



Rental Housing Supply & Demand

Current area rental prices are low by statewide standards but supplies are limited and the local rental market is quite informal, particularly outside of Alamosa. Based on experience with other rural construction projects, the consultants expect that during the peak demand period, the current rental supply will be supplemented by motels and RV parks temporarily converting to year-round accommodations, and likely some for-sale housing being withdrawn from the market and offered as temporary rentals. It is common practice for many skilled workers who travel to remote sites to bring their own RV or mobile home and the area has capacity to accept additional RV hook ups.

Despite a relatively small local housing and rental market, the scale of this construction effort in relationship to the overall housing market is manageable, and pronounced increases in rental costs, or crowding-out of other rental submarkets, is not anticipated. Greater impacts would occur if other large solar projects are constructed in the same time period as the SolarReserve Project. At this time, a co-incident, large scale project development is not foreseen.

Project operations will require approximately 50 full time employees. Experience shows that some skilled and semi-skilled positions will be filled by persons who originally joined the Project as part of the construction workforce and therefore will have made housing arrangements. In total, BBC estimates that full time plant operations will attract additional 10 new workers into the area for specialized positions that cannot be easily filled from the existing workforce. This level of growth will not strain housing supplies or government services.

Public Services

Local public services will be most affected by the temporary influx of construction workers and the long term impact of increased property tax revenue associated with the Project's development and operations.

Law enforcement. The Saguache County Sheriff's Department will have responsibility for law enforcement and property protection on the Project site. The Sheriff's office does not anticipate significant impacts to county law enforcement services. The Sheriff does not plan to hire new staff to handle responsibilities associated with monitoring the facility and enforcing traffic laws in the area. SolarReserve will have some private on-site security to supplement the county's services.

Roads. Traffic impacts are expected to be minor. Costs associated with immediate site access will be absorbed by SolarReserve. Highway 17 will likely absorb most new traffic impacts associated with workers traveling from Alamosa to the Project site. SolarReserve has committed to work with the Saguache public works department to ensure that appropriate turn lanes and access easements are incorporated into the development plan. A separate study is examining traffic effects and will detail any road modifications made necessary by the Project.

Fire protection. The Center Fire district is a volunteer fire district with a current staff of 26 volunteers and the capacity for 35 volunteers. However, large fires often require the services of other volunteer fire departments in the San Luis Valley, including the Saguache County Fire Department. Neither the Center Fire Chief nor the Saguache Fire Chief anticipates significant impact to their district's respective operations or equipment needs. Solar Reserve will ensure that local fire districts understand any specialized fire demands of the facility and how to access to required water storage. During operations, Solar Reserve will maintain some first-line fire protection and life safety service on-site.

Schools. The Project site is served by two local school districts, which will be beneficiaries of increased property tax revenue but will not experience a great deal of enrollment growth associated with the Project. School enrollment growth will be most affected by the Project's permanent workforce. With only an estimated 10 new workers moving to the Valley for Project operations, impacts to local school districts will be very minor.

Sales taxes. The construction workers associated with the Project will generate new sales tax revenue for the communities with significant convenience and retail offerings. Alamosa will be the primary beneficiary of new retail activity, although most communities in the area with a retail presence will experience some new retail activity. The SolarReserve Project is likely to be a tourist draw. SolarReserve plans to have a visitor center and offer Project tours or interpretive services. If demand merits, this center could accommodate food services and some retailing. The growing assemblage of attractions in the Valley, ranging from solar projects to the national parks and heritage sites, will likely combine to generate lengthier stays more visitors to a wide variety of area attractions. Over time, and if appropriately promoted, the economic benefits of increased tourism may be substantial.

Property tax. The Colorado Department of Local Affairs' Division of Property Taxation provides a template for valuing solar facilities larger than 2-MW. This template incorporates recent changes to state assessment procedures. Per DOLA's valuation template, and assuming a continuation of the 70 mill levy that currently applies, the initial 100-MW facility will generate \$424,000 in annual property tax revenues. The county and school district will be the principal beneficiary.

Saguache County would receive \$136,000 in annual revenue from the facility, which is a net gain of approximately \$125,000 over current revenue levels. The fire district would receive about \$22,000 per year.

Summary

In sum, the SolarReserve Project will draw a large number of temporary construction workers into the area but the region appears to have sufficient temporary housing available, and the ability to expand housing opportunities, to serve this new demand. The operating workforce associated with this solar facility is small and likely to be drawn primarily from the existing workforce.

The project's construction payroll, which will approach \$25 million over a 30 month period, will be a significant stimulant for local retailers and service providers and an important source of new sales tax revenues for local governments.

The SolarReserve Project will not unduly burden any local service provider but will produce substantial property taxes for those entities that serve the Project site. The major tax effect of this Project will be significant new property taxes to Saguache County, the Center Fire District and the local school district as well as further diversification of local economy and reduced reliance on diminishing water resources as the 6,200 acre site is removed from agricultural production.

SECTION I.
Introduction

SECTION I

Introduction

This report documents the anticipated socioeconomic impact of a utility scale solar power project (the Project) proposed for construction by SolarReserve in the San Luis Valley (Valley) in Saguache County, Colorado.

Background

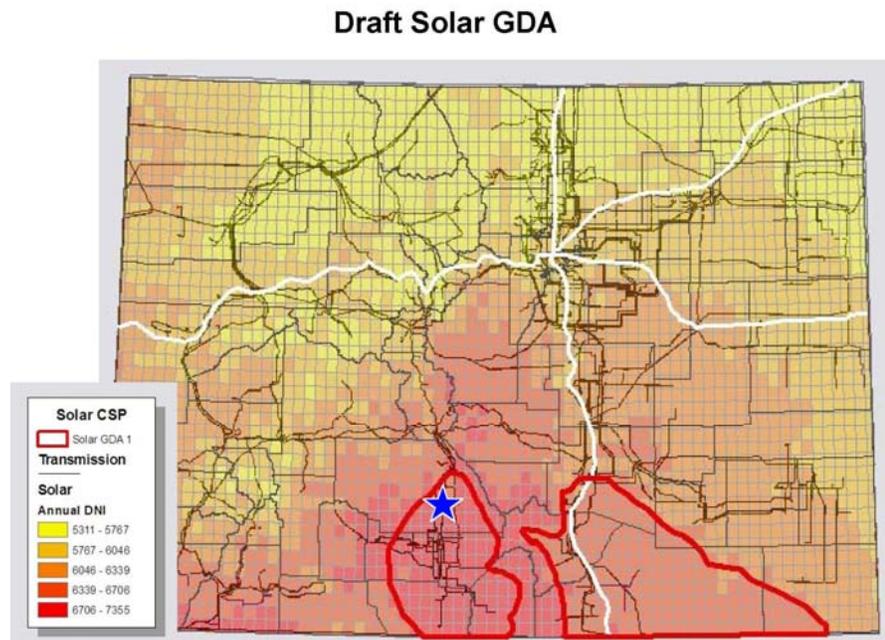
SolarReserve, a California based developer of solar energy projects, is seeking to develop two 100-megawatt (MW) concentrated solar power plants on a 6,200 acre site in Saguache County, Colorado.¹ SolarReserve has developed other large-scale solar projects. Two similarly designed domestic projects have received final permits and are slated to break ground in southern California and Nevada in 2011.

The San Luis Valley has a long agricultural history and a strong tradition of economic independence. Saguache County is one of the least populated counties in Colorado. It is also very well suited for solar energy development. As noted in Figure I-1 below, the State of Colorado has designated the San Luis Valley as one of state's most promising solar power generation development areas (GDA).

Figure I-1.
Saguache County
Impact Area, 2011

Note:
Taken from a presentation given by
the Take Force on Renewable
Resource Generation Development
Areas entitled "An Overview of the
SB07-91" on November 1, 2007.

Source:
Governor's Energy Office and
Recharge Colorado.



¹ SolarReserve will have control over 6,200 acres, but not all will be dedicated to solar development.

Study Objectives

San Luis Valley residents are generally receptive to new growth and desirous of new employment opportunities, but they are also protective of a unique and highly valued way of life. Housing opportunities and public services are sparse in the rural areas surrounding the SolarReserve development and the skilled trades necessary for construction of this facility are in short supply. It is likely that some workers will in-migrate for Project-related construction jobs, and housing demands related to the Project will affect residential markets in multiple communities surrounding the development site.

The objective of this analysis is to document the potential economic, housing and fiscal (government revenues and service delivery expenses) impacts of the proposed Project's construction and operations on Saguache County and the area influenced by Project development.

Report Organization

The remainder of this report is organized in the following sections:

- **Section II. Project Description and Analysis of Baseline Conditions.** This section provides a Project description and discusses current socioeconomic conditions in the influence area.
- **Section III. Socioeconomic and Fiscal Impact Analysis.** Section III discusses the anticipated socioeconomic effects of the proposed Project.

This report was prepared by BBC Research & Consulting of Denver, Colorado in March 2011.

SECTION II.
Project Description and
Baseline Socioeconomic Conditions

SECTION II

Project Description and Baseline Socioeconomic Conditions

This section describes the proposed SolarReserve Project and identifies current socioeconomic conditions in the area likely to be affected by the Project's construction and operations.

Project Description

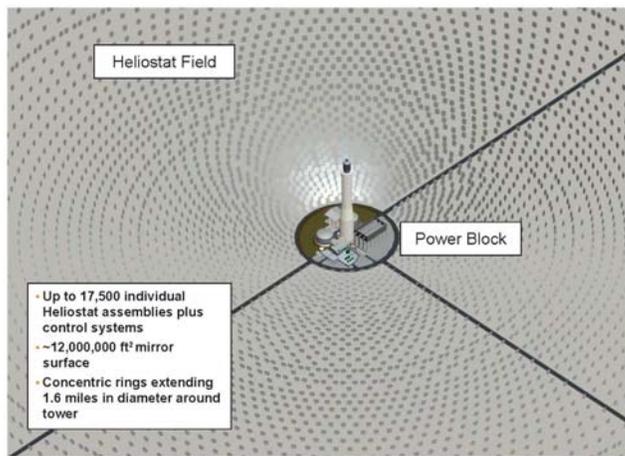
The proposed SolarReserve Project consists of two 100-megawatt (MW) solar thermal plants located on a 6,200 acre parcel of privately owned land currently held under a purchase option by SolarReserve. The Project area will be contained within a 4,000 acre subset of the development site. The property is located near Center, Colorado in unincorporated Saguache County. The site is currently zoned for agricultural use. County permitting for the Project installation is required.

The total Project will be developed in two phases, each consisting of a 100-MW development. A 30 month construction period is anticipated for each phase. Phase I's target operation date is June 2014. Timing for development of the second phase is uncertain. Once development is completed, existing transmission lines that bisect the Project site will be used for delivery of generated power to the grid for consumption.

Project components. Each of the proposed two 100-MW facilities would contain the following components:¹

- **Solar array.** Each solar array contains up to 17,500 heliostats within a 1,400 acre circular field.

Figure II-1.
Power Block and Solar Array



Note: This graphic was taken directly from the Project application.
Source: SolarReserve.

- Each heliostat is 28 feet wide and 24 feet tall and has dual-axis tracking capabilities to allow the heliostat to track the sun.
- **Power block.** Each power block contains a "central receiver tower, storage tanks, steam turbine, cooling tower, transformers, heat exchangers, power block buildings and other ancillary equipment." All components of the power block are contained within a circular area with a 400 ft. radius. The central tower receiver stands approximately 650 ft. tall. Figure II-1 demonstrates the spatial relationship between the power block and the heliostat field.

¹ Information on the Project components is taking directly from the Project application submitted to Saguache County.

- **Support facilities.** Facilities used to support operations include an administration building, a warehouse and evaporation ponds, which are located next to the solar array.
- **Linear facilities.** Linear facilities include transmission lines, access roads and on-site water pipelines.
- **On-site switchyard.** The switchyard connects the Project to the existing transmission lines. One switchyard supports both 100-MW facilities.

Figure II-2 displays the entire site boundary, including both 100-MW facilities, as well as all Project components.

**Figure II-2.
Proposed Site Layout**

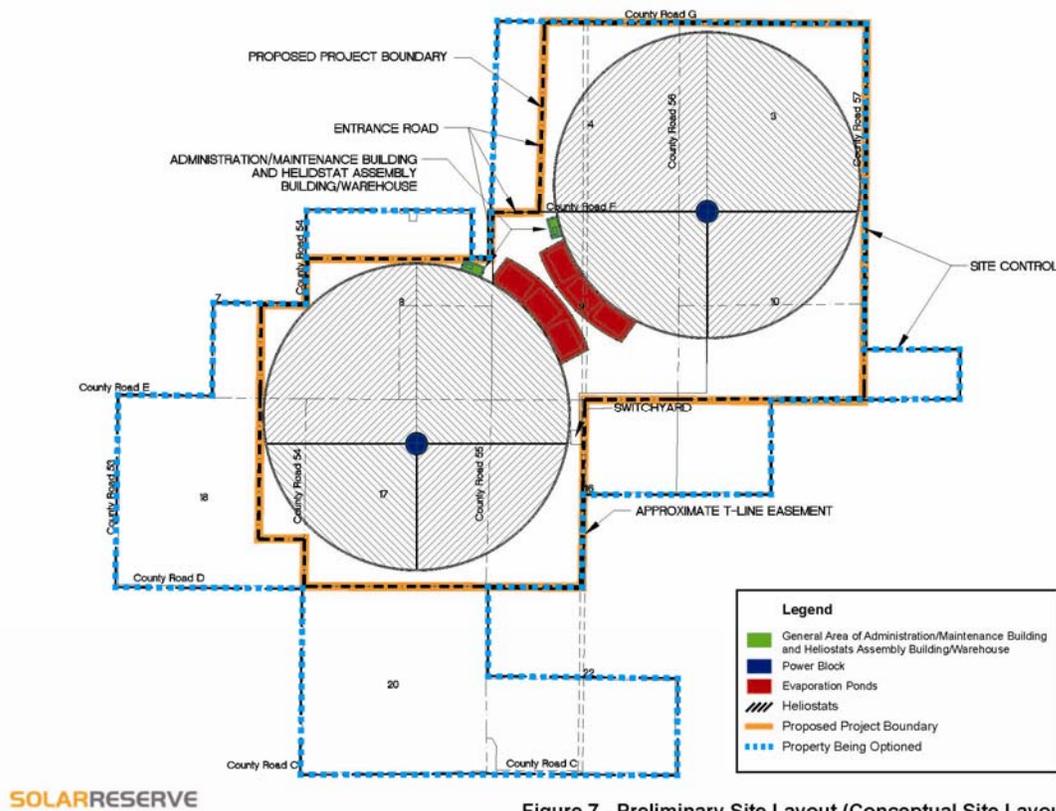


Figure 7 - Preliminary Site Layout (Conceptual Site Layout)

Note: This graphic was taken directly from the Project application.

Source: SolarReserve.

A full description of the Project's development and operations has been filed with Saguache County as part of the Project's 1041 Permit Application.

Project employment. The nature of construction and operations, particularly the timing and number of new jobs, and the skill requirements of those positions will dictate the population and housing impacts of the Project. With the development of Phase I, SolarReserve anticipates a 2.5 year construction period that supports an average monthly work force of about 280 persons with a peak of about 440 workers. Phase I operations, once fully operational, will support about 50 full-time employees. The majority of construction jobs are skilled positions, which will likely require a mix of local labor force and specialized skilled workers from outside the area.

Section III of this report provides additional detail on the timing and nature of employment requirements.

On-site services. SolarReserve has anticipated the utility, access and public safety requirements of this Project and has committed to on-site accommodations to support the facility and supplement public services. These commitments are summarized below:

- **Access roads.** The location of the access road is still under consideration.² All road improvements will be funded by SolarReserve and constructed in compliance with applicable Saguache County and Colorado Department of Transportation regulations.
- **Fire services.** The Project will rely on both on-site and off-site fire protection services and systems. On-site services are designed to protect employees and limit property loss. A raw water storage tank will be located on the Project site, which will serve as the primary water source in case of a fire emergency. The facility will be equipped with a water spray system, fire hydrants, hose stations and fire extinguishers.
- **Wastewater disposal.** Three evaporation ponds accompany each 100-MW facility, and also serve as the wastewater disposal mechanism.³ Ponds will be sized to allow for sufficient evaporative capacity.
- **Water and sanitation.** Potable water will be provided from an on-site water treatment unit for the purposes of eye washes, sinks and showers. Water used for operations will be drawn from on-site wells. Each solar facility will have two septic tanks and leach fields to capture and treat sanitary waste.

These measures are more fully described in the Project's 1041 Permit Application.

Area of Socioeconomic Influence

The area of Project socioeconomic influence (the Influence Area) is that area where residential population, public services and housing demand would be noticeably affected by construction or operation of the proposed facility. Saguache County and the applicable service districts will be responsible for public services required at the Project site and for maintenance of nearby roads. Nearby local communities, most notably Alamosa, Del Norte and Monte Vista are expected to house most workers.

² More specific information on the access road and other traffic impacts will be included in a separate traffic impact study.

³ Wastewater includes water used for plant operations and not sewage.

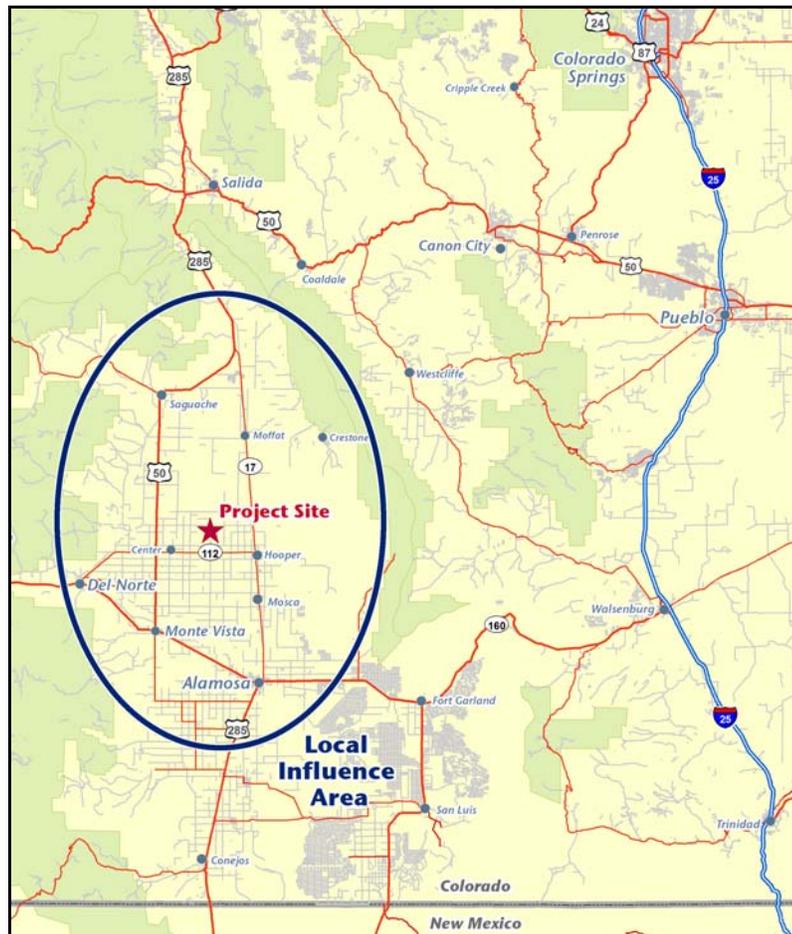
For a Project of this nature, the Influence Area is primarily defined by worker housing needs and the commuting distance to available housing. Ultimately, local housing decisions will be dictated by the size of the Project workforce, skill requirements, worker income levels, local housing availability, commuting times and SolarReserve's housing policies. The area's sparse population base and relatively small housing supply implies that the workforce will likely be housed across a widely dispersed area.

As construction nears, SolarReserve anticipates hiring a general contractor that will evaluate the local housing market and determine if efforts are needed to create additional housing. This stimulation effort might include master leasing for rental purposes, soliciting new rentals through owners of vacant or for sale housing, working with RV park and motel owners to expand availability, or developing temporary housing options, such that in-migrating skilled trades can find appropriate short term accommodations. Stimulating local rental housing is a common practice for attracting short term craftsmen who are often use to bringing an RV and commuting to their primary home on weekends or other periodic bases. Currently, neither SolarReserve nor the Project contractor have formal plans for housing development.

Figure II-3 shows San Louis Valley and the socioeconomic Influence Area that is likely to experience noticeable impacts from the Project. The Influence Area comprises portions of three counties: Saguache, Alamosa and Rio Grande.

Figure II-3.
Solar Reserve Economic
Influence Area, 2011

Source:
BBC Research & Consulting.



The communities most immediately affected by the Project are Alamosa and the towns of Del Norte, Monte Vista and Saguache. Center, Crestone and Hooper may also accommodate some workers, although their housing capacities are very modest.

Socioeconomic Conditions within the Influence Area

The San Luis Valley has a long agricultural history and a strong tradition of economic independence. It is one of the longest settled areas in Colorado, with some communities dating back to the 16th Century and the original Spanish Land Grants. Many families in the area have lived in the region for many generations. Seasonal tourism is an important economic influence and very recently a number of solar plants, using various technologies, have expressed interest in capitalizing on the area's very consistent sunny weather. In Alamosa County, one small photovoltaic plant has been operating for two years and a second has recently completed construction. Other plants are in the permitting process.

Population. The area is one of the least populated regions in Colorado. Despite the physical size of the San Luis Valley, the three-county area likely to be affected by the Solar Reserve Project has only 35,500 current residents and comprises only a fraction of the state's overall population (<1 percent).

Figure II-4.
Population by County,
Influence Area, 2000,
2005 and 2009

Source:
Colorado State Demographer.

	2000	2005	2009	Annual Rate of Change 2000–2009
Alamosa	14,966	15,719	15,873	0.6%
Rio Grande	12,413	13,040	12,573	0.1%
Saguache	5,917	6,815	7,067	1.9%

Although Saguache County added 1,150 new residents between 2000 and 2009, the three-county area as a whole experienced very modest population growth over the past decade.

As shown in Figure II-5, the city of Alamosa is the largest municipality within the Influence Area with a 2009 population of 9,000 residents. The area's incorporated communities comprise less than half of the area's overall population.

Figure II-5.
County Population by Municipality,
Influence Area, 2009

Source:
Colorado State Demographer.

	Population	Percent of County Population
Alamosa	15,873	
Alamosa	8,972	57%
Hooper	121	1%
Rio Grande	12,573	
Center	26	0%
Del Norte	1,678	13%
Monte Vista	4,276	34%
Saguache	7,067	
Center	2,339	33%
Crestone	135	2%

The Local Economy

The San Luis Valley is supported largely by agriculture and seasonal tourism.

- Agriculture has long been the mainstay of the local economy. On the valley floor, a series of canals and ditches from the Rio Grande and the Conejos River and irrigation from groundwater sources supply water to Colorado’s most important farming areas, which produce potatoes, beer barley, alfalfa and other crops.
- Tourism is a major component of the region’s economy. The Great Sand Dunes National Park attracts about 300,000 visitors annually. Opportunities for outdoor recreation, camping and hiking, hunting, fishing and recreational vehicles are plentiful.
- The nation’s newest heritage area, the Sangre de Cristo National Heritage Area, covers a large portion of Alamosa, Conejos and Costilla counties and presents the Valley as a crossroads of Native American, Hispanic and Anglo cultures with over 20 cultural properties listed on the National Register of Historic Places, including historic Fort Garland and San Luis, the oldest town in Colorado.
- Recently, a number of solar energy projects have expressed interest in the San Luis Valley for solar energy production. The federal government has preliminarily designated four sites in the San Luis Valley as solar development zones, which could expedite permitting for solar uses on federal land. One small solar project was completed in 2008, a second project is under construction and two projects (including this facility) are in the permitting process. Multiple other projects are in various planning stages. Future development may be limited by restricted transmission capacity, changes in public policies, or changes in power acquisition practices by local utilities.

Employment. Figure II-6 displays jobs by industry for the three-county area. Jobs in the Influence Area are heavily concentrated in six industries: educational services, agriculture, health care/social assistance, retail trade, public administration and accommodation/food services.

**Figure II-6.
Job Distribution by Industry, San Luis Valley, 2Q2010**

Industry	Rio Grande		
	Alamosa	Grande	Saguache
Total Jobs	7,878	4,367	1,499
Agriculture	5.9%	25.1%	27.2%
Mining	0.5%	0.0%	0.0%
Utilities	0.7%	1.4%	2.9%
Construction	5.6%	3.7%	3.0%
Manufacturing	1.5%	3.3%	2.3%
Wholesale Trade	2.3%	5.8%	6.8%
Retail Trade	13.8%	8.9%	6.4%
Transportation and Warehousing	2.4%	1.6%	2.5%
Information	1.4%	1.0%	0.0%
Finance and Insurance	3.6%	2.7%	1.1%
Real Estate and Rental and Leasing	1.6%	0.6%	0.9%
Professional and Technical Services	2.5%	1.8%	0.0%
Management of Companies and Enterprises	1.4%	0.0%	0.0%
Administrative and Waste Services	0.7%	1.4%	0.4%
Educational Services	13.5%	9.1%	19.7%
Health Care and Social Assistance	17.8%	12.7%	3.3%
Arts, Entertainment, and Recreation	1.1%	1.0%	0.0%
Accommodation and Food Services	10.7%	7.4%	4.3%
Other Services, Ex. Public Admin	2.4%	2.4%	2.1%
Public Administration	10.4%	10.2%	17.2%

Source: Colorado Department of Labor and Employment, QCEW.

The area's largest employers are relatively small and dominated by public institutions and agricultural interests.

**Figure II-7.
Major Employers in
the San Luis Valley, 2008**

Note:
Largest employers include employers located outside the Influence Area in the counties of Conejos, Costilla and Mineral. These counties are considered part of the San Luis Valley.

Source:
San Luis Valley Development Group.

Employer	County	Employees
San Luis Valley Regional Hospital	Alamosa	400+
Adams State College	Alamosa	400+
Wal Mart	Alamosa	300-399
Alamosa Schools	Alamosa	300-399
Rekhra Mushroom Farm	Alamosa	200-299
Alamosa County	Alamosa	200-300
Smokin Spuds	Rio Grande	200-301
Monte Vista Schools	Rio Grande	200-302
Trinidad State Junior College	Alamosa	100-199
Valley Wide Health Services	Alamosa	100-200
SLV Comprehensive Mental Health	Alamosa	100-201
North Conejos School District	Conejos	100-202
Conejos County Hospital	Conejos	100-203
Conejos County	Conejos	100-204
Costilla County	Costilla	100-205
Wolf Creek Ski Corp	Mineral	100-206
Del Norte Schools	Rio Grande	100-207
Rio Grande County	Rio Grande	100-208
Growers Company	Saguache	100-209
Center Consolidated School District	Saguache	100-210
Saguache County	Saguache	100-211

Figure II-8 displays the number of jobs by industry located in Saguache County, the Project's host community. As shown in the exhibit, Saguache County has had stagnant employment growth since 2000. In fact, the county has lost nearly 100 jobs in the last ten years.

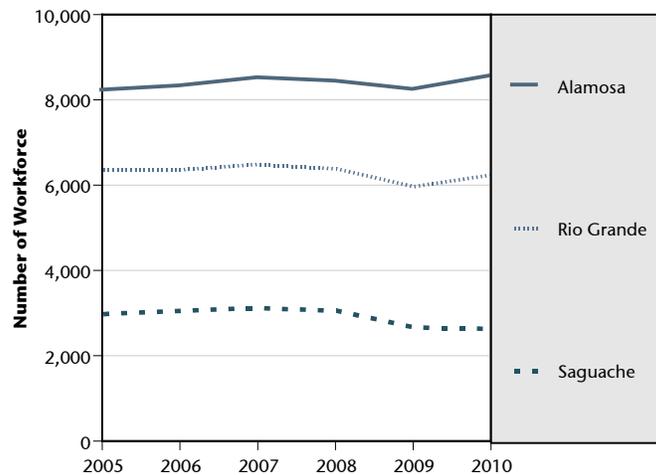
**Figure II-8.
Employment by Industry
Trends, Saguache County,
2Q2000, 2Q2005 and
2Q2010**

Source:
Colorado Department of Labor
and Employment, QCEW.

Industry	2Q00	2Q05	2Q10
Agriculture	529	528	407
Mining	-	-	-
Utilities	46	44	43
Construction	50	55	45
Manufacturing	33	41	34
Wholesale Trade	142	108	102
Retail Trade	102	108	96
Transportation and Warehousing	38	45	37
Information	-	-	-
Finance and Insurance	-	18	17
Real Estate and Rental and Leasing	15	12	13
Professional and Technical Services	9	11	-
Management of Companies and Enterprises	7	-	-
Administrative and Waste Services	2	12	6
Educational Services	252	268	296
Health Care and Social Assistance	-	51	49
Arts, Entertainment, and Recreation	-	34	-
Accommodation and Food Services	43	23	64
Other Services, Ex. Public Admin	44	41	32
Public Administration	279	226	258
Total Jobs	1,591	1,625	1,499

Labor force. The “labor force” is the sum of employed persons and persons seeking employment. The San Luis Valley has been hard hit by the current economic recession. The local labor force contracted, as workers either left the area or simply stopped looking for work altogether. As shown in Figure II-9, Saguache County’s labor force is currently still below the county’s 2005’s labor force.

**Figure II-9.
Labor Force, San Luis Valley, December 2010**

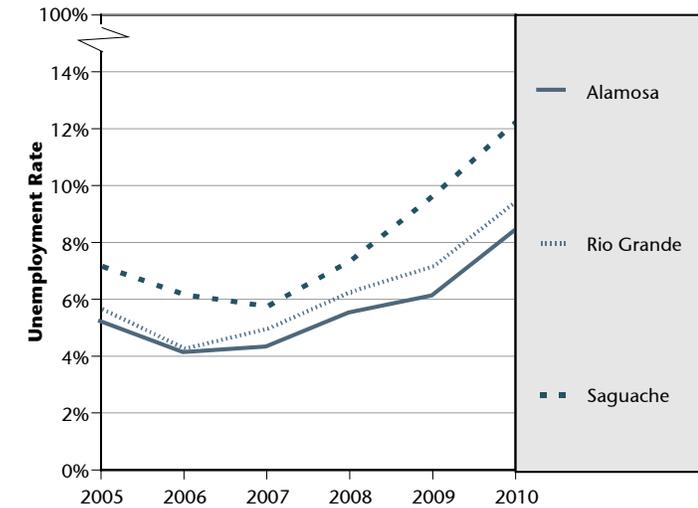


Source: Colorado Department of Labor and Employment, QCEW.

Unemployment. Since 2007, San Luis Valley unemployment rates have grown steadily, in line with national trends. Currently, unemployment rates in the Influence Area are higher than Colorado as a whole (8.6 percent). At over 12 percent, Saguache County has one of the highest unemployment rates in the state.

Wages. Jobs in the San Luis Valley pay modest wages. The average annual wage in the 2nd quarter of 2010 for all jobs in Colorado was \$45,240. All three counties in the Influence Area, including Saguache County, have average annual wages well below the state average.

Figure II-10. Unemployment Rates, San Luis Valley, December 2010



Source: Colorado Department of Labor and Employment, QCEW.

Figure II-11. Annual Averages Wages by Industry, San Luis Valley, 2Q2010

Note:
Annual average wages calculated by assuming a 52 week work year for

Source:
Colorado Department of Labor and Employment, QCEW.

Industry	Alamosa	Rio Grande	Saguache
Agriculture	\$23,088	\$24,544	\$26,260
Mining	\$34,060		
Utilities	\$80,704	\$63,076	\$20,748
Construction	\$35,620	\$26,364	\$25,168
Manufacturing	\$29,484	\$31,772	\$22,620
Wholesale Trade	\$37,492	\$39,936	\$34,892
Retail Trade	\$25,116	\$19,136	\$26,364
Transportation and Warehousing	\$42,432	\$42,952	\$26,052
Information	\$27,040	\$22,048	
Finance and Insurance	\$38,844	\$39,104	\$28,964
Real Estate and Rental and Leasing	\$24,024	\$22,776	\$23,504
Professional and Technical Services	\$35,360	\$27,456	
Management of Companies and Enterprises	\$36,140		
Administrative and Waste Services	\$19,968	\$20,228	\$9,204
Educational Services	\$25,636	\$29,432	\$30,732
Health Care and Social Assistance	\$38,948	\$23,816	\$27,820
Arts, Entertainment, and Recreation	\$29,224	\$13,052	
Accommodation and Food Services	\$12,480	\$10,920	\$14,196
Other Services, Ex. Public Admin	\$19,916	\$27,456	\$28,860
Public Administration	\$31,876	\$35,464	\$24,128
Total Annual Average Wage	\$29,536	\$26,832	\$26,520

Housing

Alamosa and Rio Grande counties have the largest housing stocks in the three-county area. Reported vacancies throughout the San Luis Valley are high; however, rural area vacancy rates in this region include second homes, which are statistically considered a form of vacancy.

Figure II-12.
Housing Unit and Vacancy Estimate,
San Luis Valley, 2009

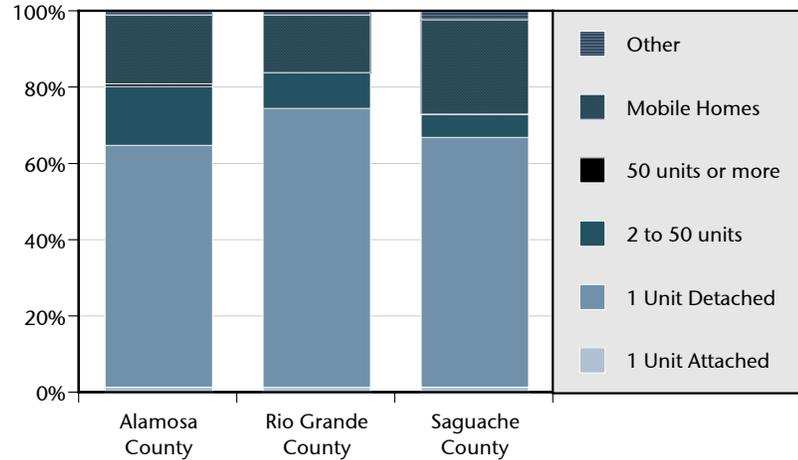
Source:
Claritas, 2009.

	Housing Units	Vacancy
Alamosa County	6,558	10%
Rio Grande County	6,388	26%
Saguache County	3,824	26%

Single family detached homes and mobile homes dominate the Influence Area's housing stock. As much as 25 percent of Saguache County's housing stock is mobile homes.

Figure II-13.
Units in Structure,
San Luis Valley, 2009

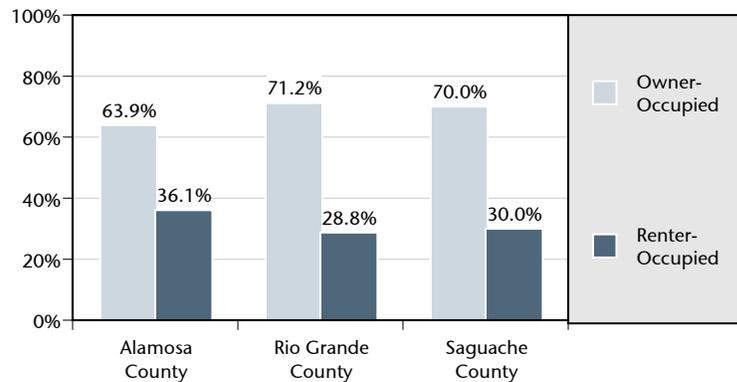
Source:
Claritas, 2009.



Homeownership rates throughout the Influence Area are high, perhaps reflecting the long tenure of many families in the area and indicating that the rental market may be small and competitive. Alamosa County has the lowest homeownership rate (and subsequent highest rental rate). As the regional hub of the valley, Alamosa County contains much of the area's rental stock.

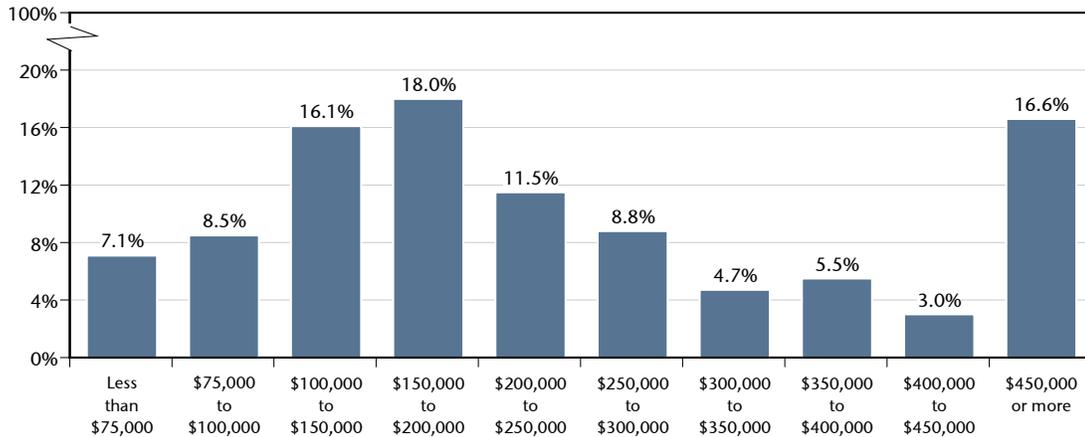
Figure II-14.
Tenure, San Luis
Valley, 2009

Source:
Claritas, 2009.



Housing costs. In 2009, a state-funded housing needs assessment was completed for the entire San Luis Valley. At the time the analysis was completed for the study, 655 homes were for sale in the 6-county valley region in 2009. One-third of the units were priced between \$100,000 and \$200,000.

**Figure II-15.
For Sale Listings, San Luis Valley, 2009**



Source: San Luis Valley Housing Needs Assessment.

Eighty-two percent of the homes on the market in 2009 were for single family units and 17 percent were for manufactured or mobile homes. The average listing price for single family homes in the Influence Area was over \$200,000 in Alamosa, Rio Grande and Saguache counties. Average listing prices for mobile and manufactured homes were much less. The presence of second homes, often sold on large land parcels, likely skews reported average prices for single family homes.

The San Luis Valley Housing Needs Assessment reported homes in the San Luis Valley were staying on the market for five months or more prior to sale. For counties in the Influence Area, the average length of time on the market for single family homes ranged from 204 days in Alamosa to 304 in Saguache. The lengthy listing period indicates that for sale housing stock may be priced higher than buyers are willing to pay, or that the market is still softening. Lengthy listing periods can also be an indicator of poor housing quality. According to a 2007 strategy report by the Development Resources Group (DRG), a regional organization serving the San Luis Valley, “while the valley is one of the most affordable places in Colorado for housing, the economies of its lower incomes and dependence on a more limited range of industry and job opportunities result in a somewhat overall lower quality of housing stock.”

Figure II-16 summarizes the average listing price and average number of days on the market for single family homes and mobile and manufactured homes in the Influence Area.

**Figure II-16.
Average Listing Price and Average Days on the Market by Type, Impact Area, 2009**

Source: San Luis Valley Housing Needs Assessment.

County	Average Listing Price		Average Days on the Market	
	Single Family Home	Mobile/Manufactured	Single Family Home	Mobile/Manufactured
Alamosa	\$ 217,631	\$ 136,356	204	192
Rio Grande	\$ 379,710	\$ 186,964	267	291
Saguache	\$ 236,303	\$ 99,350	304	113

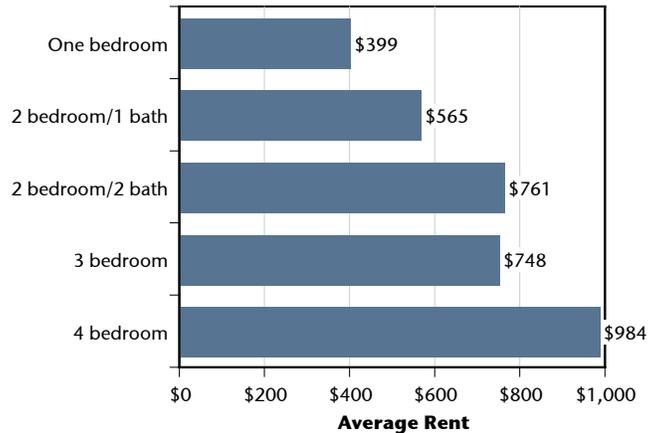
Figure II-17 shows local area housing rental costs. Rental prices in the San Luis Valley vary by size of unit. One-bedroom units average \$399 per month, while four-bedroom units will likely require a rent of closer to \$1,000 per month.

According to interviews with local brokers, most rentals are advertised by word of mouth, or similar informal channels. As such, the availability of rental units may present more of a challenge than the costs of rental units.

Schools

The Center and Sangre de Cristo school districts divide the Project site. Both school districts will likely reap some financial reward from the Project's development; however, neither school district will likely see substantial impacts to their enrollments. Both school districts have experienced stagnant or declining enrollment and a majority of students in both districts receive free and reduced lunches.

Figure II-17.
Rental Costs, San Luis Valley, 2009



Source: San Luis Valley Housing Needs Assessment.

The Center school district has an elementary, middle and high school, which serve a total of 580 students across the three schools. Current enrollment has declined since 2005, when the district reported an enrollment of 654 students. Approximately 88 percent of students in Kindergarten through 12th grade in the district received free and reduced lunch, which reflects the overall poor economy of the area.

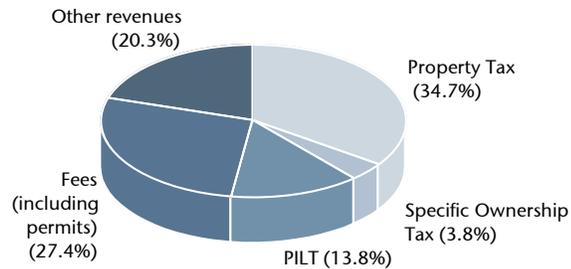
Sangre de Cristo is a small school district based in northern Alamosa County. The district has two schools, one which services elementary students and the other which serves as the district's junior and senior high. Total enrollment in 2010 was 312 students, which is nearly equal to the district's 2005 enrollment. Sixty percent of the district's students receive free and reduced lunches.

Fiscal Conditions in Saguache County

Saguache County. The county's 2010 estimated budget is \$3.3 million. As is the case in many communities, staff salaries and benefits account for a large proportion of the county's general fund expenditures. Property taxes, payments in lieu of taxes (PILT) and fees comprised more than 75 percent of the county's 2010 estimated revenues. Property taxes accounted for 35 percent of the county's revenues alone, generated from a county-wide assessed value of more than \$60 million. In 2008, the county passed a 1 percent sales tax; however, sales tax revenues are not used in county operations, but rather are distributed as grants for community development activities in the county.

Figure II-18.
Saguache County General Fund Revenues, 2010 (Estimated)

Source:
Saguache County.



The county's principal responsibilities for services at the site are police protection and road maintenance.

Service districts. The primary taxing entities at the Project site include Saguache County; San Luis Valley Water Conservation District; Rio Grande Water Conservation District; Center and Sangre de Cristo school districts; and the Center Fire District. The total mill levy varies by parcel within the site. There are 13 separate parcels within the current holdings. Levies range from 67.113 to 72.057. Figure II-11 displays mill levies by taxing entities on the Project site.

Figure II-19.
Mill Levies, 2010 (Estimated)

Source:
Saguache County.

Taxing Entity	Mill Levy
Saguache County	22.60
San Luis Valley Conservation District	0.38
Rio Grande Water Conservation District	2.08
Center Fire District	4.92
School District	
Center School District	42.08
Sangre de Cristo	41.10

Summary

The SolarReserve concentrated solar Project is proposed for a 6,200 acre parcel near the small town of Center in Saguache County, Colorado. The total Project will be developed in two phases, each consisting of a 100-MW development. Each phase includes a 30 month construction period with an anticipated peak of about 440 workers. Phase I operations, once fully operational, will support about 50 full-time employees. The majority of construction jobs are skilled positions, which will likely require a mix of local workers and persons from outside the San Luis Valley.

For a project of this nature, the Project Influence Area is primarily defined by worker housing needs and the commuting distance to available housing. Nearby local communities—most notably Alamosa, Del Norte and Monte Vista—are expected to house most workers. The smaller communities of Center and Crestone may also see some housing demand. Despite the physical size of the San Luis Valley, the three-county area likely to be affected by the SolarReserve Project has only about 35,500 current residents. The San Luis Valley is supported largely by agriculture and seasonal tourism.

Rental housing will be in strong demand during the Project's 3-year construction phase. Current housing rental prices are low, but supplies are limited and the local rental market is quite informal.

Saguache County will provide sheriff services to the site and has responsibility for maintaining the surrounding road network. The site is served by two school districts and a fire district, which will be beneficiaries of increased property tax.

An analysis of Project impacts is provided in the next section of this report.

SECTION III.
Socioeconomic and Fiscal Impacts Analysis

SECTION III

Socioeconomic and Fiscal Impact Analysis

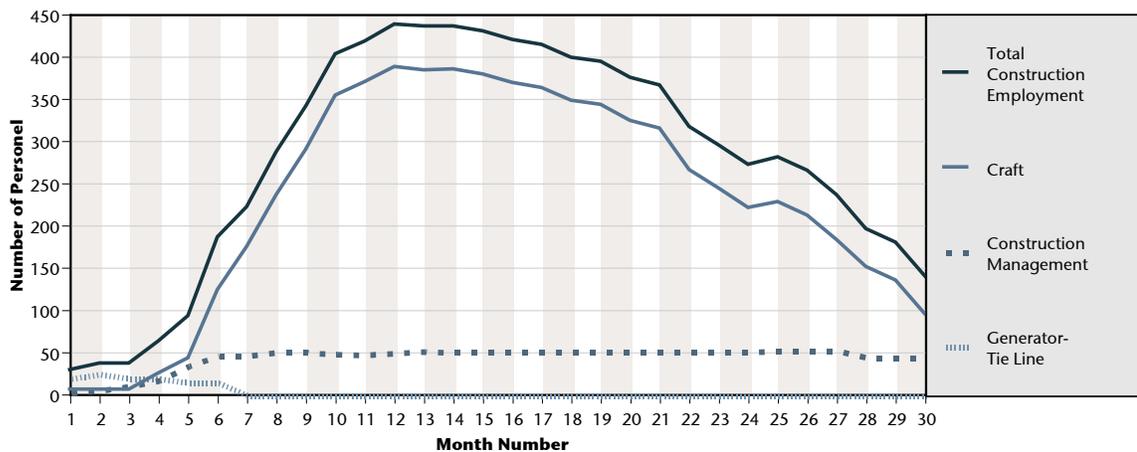
This section documents the impacts of the proposed SolarReserve Project on socioeconomic and fiscal conditions in Saguache County and the central San Luis Valley.

Project Employment

The employment effects of the Project include both construction and long term operations of the facility.

Construction employment. Figure III-1 shows the Phase I estimated construction employment schedule. Construction for Phase 1 is anticipated to last for 30 months. The entire construction staff includes three primary construction categories: craftsmen, construction management and gen-tie workers.¹

Figure III-1.
Construction Personnel by Discipline — Phase I



Note: The 30 month construction period includes 3 months of compliance Project preparation, 24 months of construction and 3 months of Project commissioning.

Source: SolarReserve.

Within one year of each phase’s commencement, construction employment will ramp up quickly, reaching a six month peak of about 390 craftsmen and 50 Project and construction management staff for a total peak demand of about 440 workers. After approximately 18 months from commencement, construction workforce levels begin to decline.

¹ Gen-tie workers are employed at the onset of the project. They are responsible for maintaining the interconnection of the facility to the transmission system.

Construction workforce residency. Figure III-2 documents staff requirements by specific positions for craftsmen, construction management and gen-tie workers. The figure also estimates the percentage of each position that will likely be filled by the existing workforce in the Valley, as well as those workers that will be non-local.² Staffing for constructing and operating the Projects will emphasize hiring resident workers, not only because it is most economical to hire locally, but also to ensure benefits of the Project are realized by the local community. However, the local workforce is limited in overall size and technical skills, and cannot provide all workers needed by the Project.

**Figure III-2.
Construction
Personnel by Craft
and Place of Origin**

Note:
Does not represent total imported workforce at one time, but rather imported workforce over the course of the 30 month construction period.

Source:
SolarReserve and BBC.

Craft	Maximum Needed	Percent Residing in the San Luis Valley	Imported Workforce
Boilermakers	11	10%	10
Carpenters	50	90%	5
Electricians	56	50%	28
Insulators	16	25%	12
Ironworkers	32	25%	24
Laborers	54	75%	14
Cement Masons	6	50%	3
Millwrights	16	10%	14
Operating Engineers	40	25%	30
Painters	8	100%	0
Pipefitters	80	25%	60
Teamsters	30	25%	23
Heliostat Assembly Craft	45	10%	41
Total Non-Local Craftsmen			263
Staff Position	Maximum Needed	Percent Residing in the San Luis Valley	Imported Workforce
Construction Staff	40	75%	10
Construction Management Staff	5	10%	5
Subcontractors	6	50%	3
TA	6	25%	5
Total Non-Local Construction Staff			22
Tie-Line	Maximum Needed	Percent Residing in the San Luis Valley	Imported Workforce
Laborer	4	100%	0
Operator	9	50%	5
Teamster	1	100%	0
Electrician	11	100%	0
Generator Tie Line	25	100%	0
Total Non-Local Tie-Line Staff			5
Total Non-Local Construction Workforce by Construction Specialty			289

² These assumptions are based on the scarcity of the skills required; discussions with local economic development persons; data on local workforce skills; and BBC's experience in working in other energy projects in rural parts of the state. Furthermore, the table was vetted with local economic development persons, who confirmed that it is difficult to know exactly the number of local residents available for each position.

BBC estimates that over the course of the construction period, there will likely be as many as 289 non-local construction workers assigned to the Project. These positions do not all occur concurrently, although there will be considerable overlap during the second year of construction.

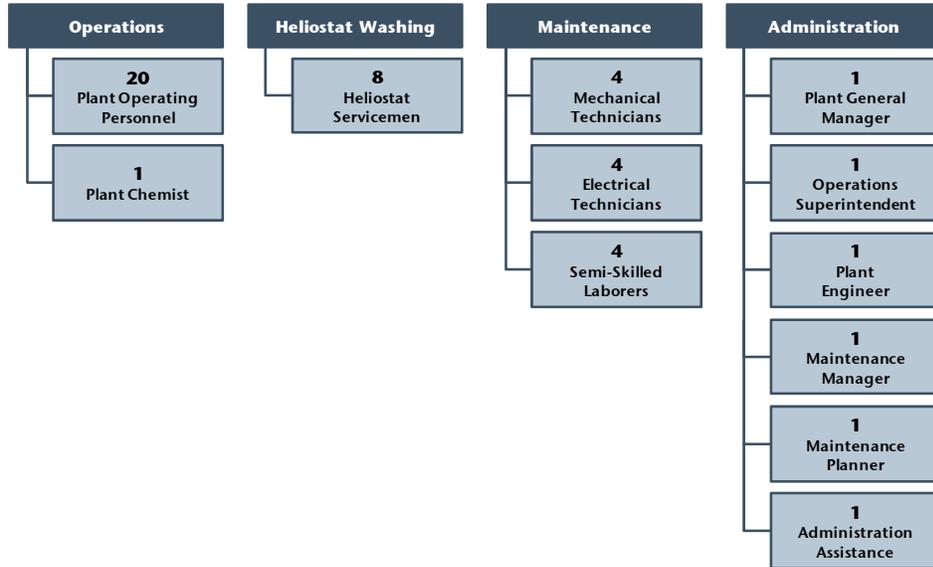
The ability to attract local workers is in large part dependent on the nature of the skills required:

- **Craftsmen.** Developing a concentrated solar plant requires specialized skills with a large number of positions for boilermakers, ironmakers, engineers, pipefitters and millwrights, which are not common skill-sets in the Project Influence Area. Trinidad State Community College representatives have expressed interest in expanding curriculum in these areas, although the short term nature of this construction may not merit college investment unless similar future projects are anticipated. Some of the solar construction that precedes this Project will induce an in-migration of skilled workers who may stay in the area in anticipation of employment with Solar Reserve. It has also been suggested that the area's irrigated agricultural industry may provide a workforce with greater construction, pipefitting and related skills than might be predicted from the labor force data.
- **Management.** Throughout the construction period, workforce requirements for construction oversight and Project management are stable at about 55 to 60 positions. As construction is completed, construction management will be replaced by operational and maintenance workers.
- **Gen-tie workers.** Employment related to connecting the utility tie-line is comparatively small and all tie-line activities occur within the first six months of construction. Given the presence of the San Luis Valley Rural Electric Cooperative, it is likely that many positions associated with gen-tie operations will be filled locally. As such, it is likely that approximately five employees will move into the area for this phase of the construction process.

In sum, the Solar Reserve Project anticipates a 30 month construction effort with a peak employment of 450 workers. During this peak period, many of these workers are expected to be temporarily drawn to the Valley in association with the construction requirements of the Solar Reserve Project. Most of these individuals will be skilled workers, who will stay in the area for an average of six to nine months and will most likely seek rental housing. Very few of these workers are expected to bring a family with them.

Operations Employment. The Solar Reserve Project will require 47 operational workers for heliostat washing, maintenance and administration jobs for the 100-MW facility. The organization of the operating staff is displayed in Figure III-3.

**Figure III-3.
Anticipated
Operations
Staff for
each 100-
MW facility**



Source:
SolarReserve.

In other western, rural industrial developments, operational employees are often recruited from the construction workforce. Based on job descriptions, BBC estimates that 80 percent of operational employees will be hired from the existing area workforce and the remaining 20 percent, roughly ten positions, will move into the area from outside the Valley. The average annual wage in the San Luis Valley is approximately \$26,500. Operational positions at the Solar facility will likely average about \$50,000 annually.

Indirect and induced employment. In addition to the direct economic stimulation associated with new expenditures and the new jobs created by SolarReserve (direct effects), including the wages and salaries paid to employees, SolarReserve spending will also stimulate a secondary round of local economic activity during both the construction and operation phases. Secondary effects are also referred to as *indirect* and *induced* effects. In simplest terms, indirect and induced effects are the result of the additional rounds of local spending that occur as direct dollars circulate through the local economy. *Indirect* effects are the secondary impacts of Project acquisitions of local goods, materials and specialized services. *Induced* effects occur when SolarReserve employees spend their wages on local items such as food, housing, transportation and medical services.

There are a number of local conditions that will restrain the magnitude of indirect and induced impacts attributable to the Solar Reserve Project. First, most SolarReserve expenditures for goods and materials, such as the acquisition of solar reflectors, will mostly occur outside of the local area. Additionally, most rural businesses recognize the temporary nature of a construction activity and will try to absorb additional activity without aggressively expanding payroll or facilities. Finally, in this instance, temporary construction workers will often commute periodically to their primary residence or send a share of their earnings home, and thus will have a lesser economic impact on the local economy than would a similarly sized permanent workforce.

In this instance, we expect a modest indirect and induced response to the construction workforce, most likely on the order of .15-.2 additional jobs per full time direct construction worker, which suggests about 75 indirect and induced jobs elsewhere in the area. The full time workforce of about 50 persons will have a more robust impact, causing 25-30 workers additional jobs beyond direct employment at the facility (.5 multiplier). Most new positions will be in local services and retailing.

Housing Demand

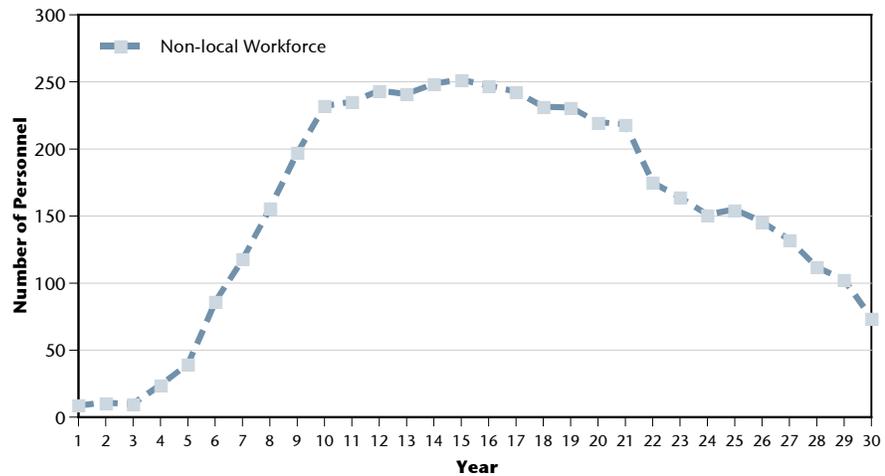
Estimates of demand for owner-occupied and rental housing reflect the timing and nature of the Project workforce and the character and quantity of local housing supply.

Non-local construction workforce. Construction activities will produce the greatest impact on the area's housing markets, although most demand will be temporary. Based on the data presented in prior Figure III-2, 289 non-local workers are anticipated to enter the area to assist in the construction process. Not all of these workers will be required at the same time, thus the in-migrating workforce is estimated to peak at about 250 workers, which is displayed in Figure III-4.

**Figure III-4.
Estimated Non-
local Construction
Workforce**

Note:
The 30 month construction period includes 3 months of compliance plant preparation, 24 months of construction and 3 months of project commissioning.

Source:
SolarReserve and BBC Research
February 2011.



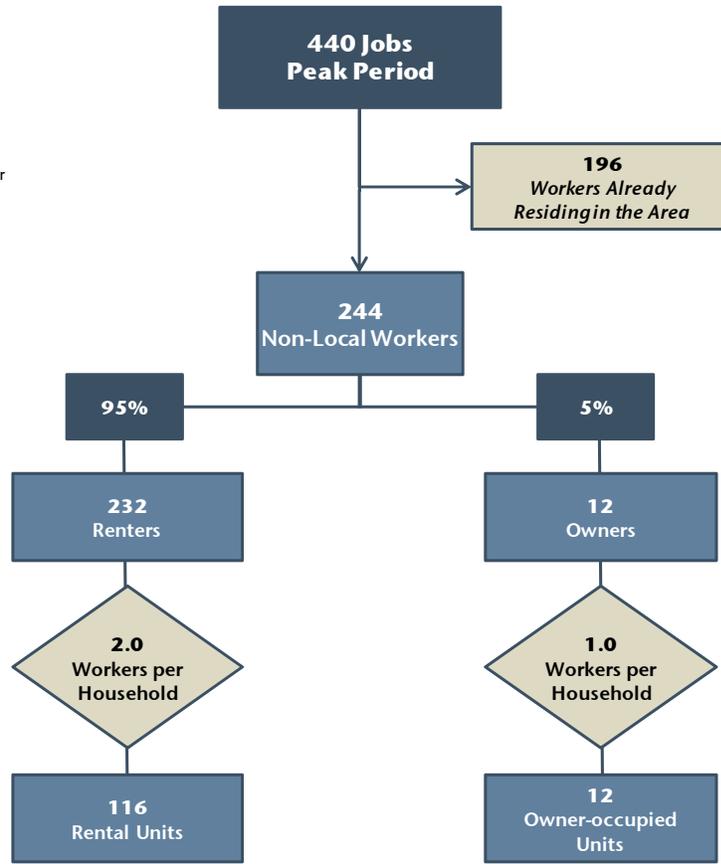
The number of in-migrating personnel will average about 200 persons for a period of about 18 months.

Housing demand. As shown in Figure III-5, the construction period of one 100-MW facility will create a peak demand for approximately 116 rental units and 12 owner-occupied units (purchases). Home purchases generated from non-local workforce will likely occur if a spouse accompanies a worker to the area and finds employment. Assumptions of housing choice and workers per household are based on BBC's experience working with other energy projects throughout Colorado and the western U.S, discussions with SolarReserve and the nature of the local housing stock.

**Figure III-5.
Housing Demand of
Construction Workforce**

Note:
The peak number of construction jobs (440), which occurs in month 12, does not align with the peak number of non-local worker (252), which occurs in month 15.

Source:
SolarReserve and BBC Research & Consulting.



Pressure on the local housing stock will be influenced in part by the company’s housing policies. Many of the skilled workers likely to move temporarily into the area will have mobile homes or RVs and will commute home on weekends. It is a common practice for temporary personnel to bring mobile housing for this kind of short term assignment. Saguache County may consider changes to local zoning codes to encourage development of temporary housing facilities. In many rural locations, seasonal campgrounds can be induced to open for the full year in order to accommodate workers. Local motels will often pursue a similar year-round strategy.

Location of workers. Location preferences for renters will be influenced by housing availability, accessibility to the Project site and proximity to basic amenities, such as services and grocery stores. As such, three communities are anticipated to receive much of the housing impacts: Alamosa, Monte Vista and Del Norte. Some workers will be absorbed in Saguache, Center and Crestone or rural areas in Saguache County.

Housing demand will likely occur in rough proportion to the existing population and housing distribution. In other words, the largest community in the San Luis Valley, Alamosa, with the largest and most diverse housing stock, will likely receive the greatest population impact from the Project. Figure III-6 offers an estimate of housing demand by community.

**Figure III-6.
Rental Housing Impacts
by Community**

Source:
BBC Research & Consulting.

Community	Population	Estimated Rental (Units)
Alamosa	8,972	70
Del Norte	1,678	13
Monte Vista	4,276	33
Other		
Total	14,926	116

The city of Alamosa has a population of about 9,000 persons in roughly 3,000 units. At peak period, the Solar Reserve workforce is expected to require nearly 70 units or less than three percent of the community's housing stock.

Housing Availability. Recent housing investigations in the San Luis Valley suggest a fairly tight Alamosa rental market, the result of growing student populations at Adams State College and Trinidad State Jr. College and challenges in developing new rental housing as a result of a difficult commercial lending environment. Anecdotally, local Realtors also cite a tightening in the rental market associated with the upcoming construction of smaller solar facilities near Alamosa. The rental markets in Monte Vista and Del Norte appear to be highly informal and largely comprised of single family homes.

Homes in the for-sale market are sometimes leased on a month-to-month basis to provide the owner with temporary income and flexibility in case of a possible sale. Local Realtors report that traditionally, for-sale homes in the Valley have not been used for rental purposes. With the prospective of attractive, long term leases associated with this Project, and the current difficulties in selling residential units, it is quite possible that local homeowners will be willing to offer long term rentals to help supplement the local rental market.

Temporary housing (e.g., hotels, RV parks and mobile homes) will likely supplement the existing rental market as necessary. There are currently two operating RV parks in Alamosa County, which include a larger KOA park and a smaller Alamosa Economy Campground. Alamosa County has identified a potential RV site in the northern portion of the city if additional temporary housing is necessary. In similar rural environments, faced with a large influx of workers, local motels commonly rent long term, accepting the benefits of steady income over the higher per diem charges associated with nightly rentals.

Saguache County's RV parks are not as organized as Alamosa County's facilities. Reportedly, migrant workers contributing to the annual wheat and potato harvests have established temporary housing sites in Center and Saguache. If required, these facilities could be expanded and winterized to accommodate temporary workers.

Despite a relatively small local rental market, the scale of this Project in relationship to the overall housing market is small, and sharp increases in rental costs or crowding out of other rental submarkets is not anticipated. The construction phase of the Project will create temporary pressure on rental availability but motels, RV parks and conversion of for sale units to rental units offer a rental relief value.. The temporary nature of this demand and the prospect of spreading occupancy among multiple towns and rural enclaves will limit the impact on housing rental rates and occupancy. Greater impacts would occur if other large solar projects are constructed in the same time period as the SolarReserve Project. At this time, co-incident large scale project development is not foreseen.

Housing for operations staff. Facility operations will require approximately 50 full-time employees. Experience shows that some skilled and semi-skilled positions will be filled by persons who originally joined the Project as part of the construction workforce and therefore will have made housing arrangements. In total, BBC estimates that full-time plant operations will attract additional 10-15 new workers into the area for specialized positions that cannot be easily filled from the existing workforce.

Most non-local workers will eventually seek owner-occupied housing, although many will rent for a period of time before making an ownership commitment. Homeownership impacts will generally geographically resemble rental impacts; however, operational employees may gravitate more towards the larger communities in order to find jobs for spouses and a greater range of school and housing choices. Although the local housing market is small, we believe that the modest demand associated with Project operations will be fully accommodated.

Fiscal Impacts – Revenues

The Solar Project will be built in Saguache County. The county and local taxing districts will be the principal property tax beneficiaries. Most workers will live in Alamosa, which will likely receive the majority share of residential sales and use taxes.

Property tax. The 6,200 acre site currently identified by SolarReserve contains both land dedicated to solar production and land that will remain in agricultural production or as vacant property. These two land uses will be discussed separately.

Land used for solar production. The Colorado Division of Property Taxation is responsible for electric generating facility valuations in the state of Colorado. Valuation for utility-scale, electric-generating facilities are based on the facility's installed cost, and land associated with the facility is not taxed separately, but is included in the overall property valuation.

The Division of Property Taxation provides a template for valuing solar facilities larger than 2-MW. The template was utilized for this study. All property calculations discussed below were approved by the Colorado Division of Property Taxation.³

³ BBC received guidance in calculating the assessed value of the site from Deborah Myer, Property Tax Specialist with the Colorado Division of Property Taxation.

Renewable energy facilities are assessed as though their installed costs were comparable to those of non-renewable energy facilities. For 2010, the nonrenewable facility actual value was determined to be \$418 per kW for installed solar systems of 100-MW or more. Over a 20-year period, the total projected property tax generated from the SolarReserve facility, calculated from the assessed value, is estimated to be approximately \$8.5 million.

In 2010, the Colorado Legislature adjusted the process by which **annual** property tax payments on solar facilities were calculated. While the process for calculating the 20-year project valuation stayed intact (\$418 per kW), the state now requires annual property tax payments to reflect production levels, instead of the capital depreciation. The factors now used for calculating annual property tax payments are included in Figure III-7. The inputs used below are indicative of industry-wide values only and do not represent contracts currently in place for this particular Project. Power Purchase Agreement (PPA) details are typically confidential between the utility and developer, and are sensitive to many factors that are not finalized or publicly available at this time.

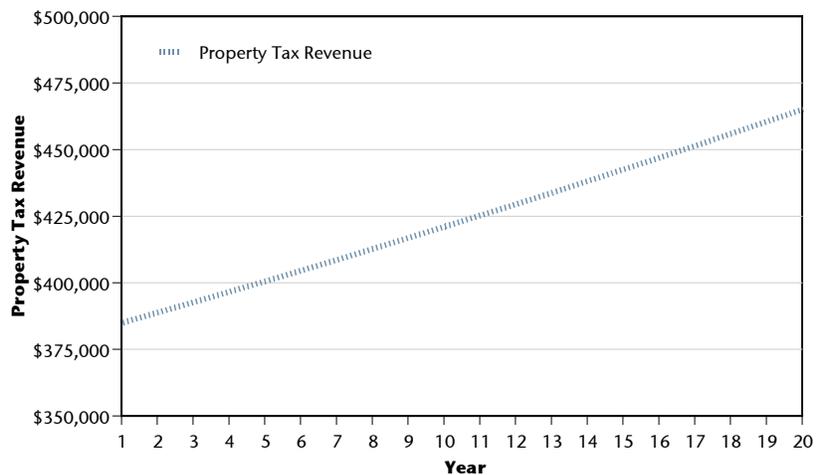
Figure III-7.
Factors for Calculating Annual Property Tax Returns

Factors	Input
Net Capacity Factor	50%
Plant Capacity	100-MW
Energy Price	\$135/MWh
Mill Levy	70
Gross Revenue Escalation Factor	1% per year

Source:
Colorado Division of Property Taxation and SolarReserve.

Figure III-8 displays the estimated annual property tax returns from the 100-MW facility. The initial 100-MW facility will generate \$424,000 in average annual revenues, or approximately \$8.5 million during the first 20 years of operations. Annual property tax revenues range from \$385,000 in the first year of operation to \$465,000 in year 20.⁴

Figure III-8.
Annual Property Tax Returns



Source:
DOLA.

⁴ Annual returns and total project valuation calculated from the template provided by the Colorado Division of Property Taxation.

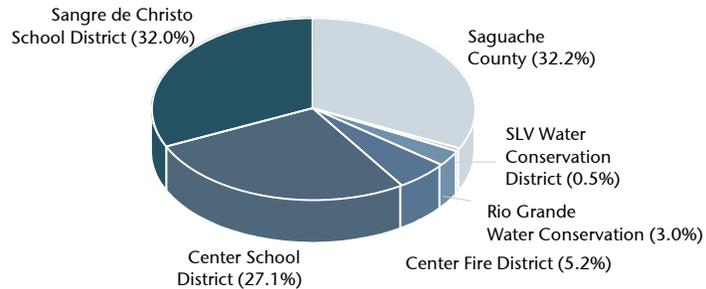
The entire property is subject to taxation by multiple entities including the county, the Center Fire District and two water districts. Part of the property is in the Center School district and part is in the Sangre de Christo District. The mill levy for both school districts is virtually the same (42 and 41 mills, respectively).

Figure III-9 shows the distribution of Project associated property tax revenues to the various taxing districts, based on the current property tax distribution. Saguache County can anticipate \$2.7 million in property tax revenue during the first 20 years of Project operations. As shown in Figure III-10, on an annual basis, Saguache County would receive \$136,000 in annual revenue from the facility, which is a net gain of approximately \$125,000 over current payments. The fire district would receive about \$22,000 per year. It should be noted that the distribution of revenues by district will depend on a final determination of where SolarReserve develops on the 6,200 site. It is unlikely that all parcels on the site will be included in the initial 100-MW facility, indicating that only certain taxing bodies will benefit from the development during the first phase.

Figure III-9.
20-Year Property Tax Revenue by Taxing Body

Note:
Assumes property tax distribution of parcels comprising proposed Project site remains the same.

Source:
BBC Research & Consulting.



BBC's best estimate of the distribution of Phase I revenues is provided in Exhibit III-10.

Figure III-10.
Annual Average Property Tax Revenue by Taxing Body

Source:
BBC Research & Consulting.

Taxing Entity	Average Annual Revenues
Saguache County	\$ 136,417
San Luis Valley Conservation District	\$ 2,300
Rio Grande Water Conservation District	\$ 12,557
Center Fire District	\$ 22,212
School Districts	
Center	\$ 115,032
Sangre de Christo	\$ 135,753

It is also notable that neither school district collecting tax revenue from the Project site should witness any substantial increase in student enrollment or associated costs with the Project's construction, and very few new students with Project operations.

Property owned but not used for solar development. SolarReserve has an option to acquire the 6,200 acres underlying this Project. There are currently 14 separate parcels represented by five different owners within the acquisition area, and all parcels are currently designated as *agricultural use* for property tax assessment purposes. Currently, cumulative property taxes are about \$33,000 annually. Not all the 6,200 acre site will be used by SolarReserve for Phase I solar power generation. At the time Phase I operations begin, the taxing entities represented on the 100-MW facility would collectively receive \$424,000 annually (see above), while the remaining portions of the property may continue to retain their agricultural exemption.

In neighboring Alamosa County, land used for solar production, even if outside of the immediate facility boundaries, was re-designated and re-assessed as vacant industrial land and subject to higher assessment ratios. If SolarReserve does not continue agricultural uses, Saguache County and other taxing bodies levying taxes on the SolarReserve site may see substantially more property tax revenue than currently collected. As such, the property tax impacts of this Project may be understated.

Sales and use tax. Saguache County has a one percent sales tax on items purchased within the county. Most materials used for Project construction will likely be purchased outside Saguache County. The SolarReserve Project will support a 30 month construction workforce that averages about 225 jobs and generates a local payroll of about \$25 million. The local economy and local communities will benefit from this substantial fiscal stimulus. Saguache County will feel only modest sales tax impacts, as most new employees will live and shop in Alamosa and Rio Grande counties. As the major local service center, the city of Alamosa is likely to be the principal beneficiary of new sales tax revenues. The towns of Center and Moffat have limited commercial offerings and will likely experience only minor sales tax benefits.⁵

The SolarReserve Project is likely to be a tourist draw. Saguache County may benefit from a Project-related visitor center as well as Project tours or interpretive services. If demand merits, this center could accommodate food services and retailing. The growing assemblage of attractions in the Valley, ranging from solar projects to the national park and heritage sites, will likely combine to generate more visitors and lengthier stays. Over time, and if appropriately promoted, the additional economic benefits of increased tourism could be substantial.

Fiscal Impacts – Expenditures

Fiscal impacts to Saguache County service expenditures is expected to be minimal, primarily because new residents are likely to live outside the county and the Project itself will require very few public services.

Roads. Highway capacity in the area is adequate and traffic impacts are expected to be minimal. Costs associated with immediate site access will be absorbed by SolarReserve. Highway 17 will likely absorb most new traffic impacts associated with workers traveling from Alamosa to the Project site. A separate study is examining traffic effects and will detail any road modifications made necessary by the Project.

Fire protection. The Center Fire Department is a volunteer fire department with a current volunteer staff of 26 and the capacity for 35 volunteers. However, large fires often require the services of other volunteer fire departments in the San Luis Valley, including Saguache County Fire Department. The fire chief anticipates little impact to the department's operations. However, they have requested information from SolarReserve to ensure they understand the specialized fire demands of the facility.

⁵ Center and Moffat have local sales tax rates of 2 percent.

Law enforcement. Law enforcement responsibilities for the Project site would fall under the jurisdiction of the Saguache County Sheriff. The Sheriff's office anticipates little impact to county law enforcement services. Impacts during the construction phase will likely fall on Alamosa County, where a majority of the construction staff will reside. The Sheriff's office does not anticipate hiring new staff to handle responsibilities associated with monitoring the facility and enforcing traffic laws in the area.

Water. Water is in short supply in the Valley and critical to the local agricultural industry. Detailed water management and consumption estimates for this Project are described in other environmental analyses provided by SolarReserve. The land assembled for this Project is largely used for irrigated agriculture. One benefit of the SolarReserve Project is that ground water will be removed from agricultural uses, reducing demand pressure on this limited resource, but the new still facility will produce jobs, taxes and economic activity.