The following section supplements the analysis found in Chapter Three, Section 3.27 - Local Governments of the Draft EIS beginning on page 3.503.

DIRECT AND INDIRECT IMPACTS

The framework for this analysis, generally speaking, is a multiplier model that is driven by a projection of the value of the natural gas produced under each alternative. The multipliers are either factors extracted from recent trends or statutory rates and apportionments. The results may be considered a reasonable approximation of the magnitude and direction of impacts to revenues in response to the alternatives.

The mechanics of revenue collection, the timing of payments, and the intergovernmental transfers that occur under State law justify the classification of all revenue impacts as "indirect" impacts of the alternatives. Some revenues are more direct than others, as in the case of Federal Mineral Lease (FML) royalty revenue disbursements to the State, Colorado Severance Tax receipts at the State level, and the local government property tax. Further distribution of FML and severance tax revenue to local government is mandatory but it is either in the form of grants and loans or it is subject to criteria and procedures that weaken the direct linkage to the place and time of oil and gas development and production. Sales tax revenues at all levels are an indirect impact because they are derivative of market transactions that are partly secondary to industry spending and that hinge upon choices made by businesses and households at some distance in time and place from resource development.

The State and local government revenue impacts under the SJPL minerals program would vary by alternative. Alternative A results in the highest impacts, with Alternative D slightly less, followed by Alternatives B and C. The differences among the alternatives in all years are small. In many cases the differences disappear when impacts are rounded to thousands of dollars, which is an appropriate way to express the magnitude of these projections, which are subject to uncertainty and imprecision.

Federal Mineral Lease Royalties

FML Royalty payments to the State of Colorado would be one of the most immediate revenue effects of the SJPL plan alternatives. The payments directly shadow the value of oil and gas produced from federal minerals, and they are delayed only by the mechanics of reporting, data management and disbursement. Table S-3.27.1 presents the impact to the State's receipts from the alternatives, assuming a 12.5% royalty rate on the projected value of production at the assumed price of \$6.12 per mcf (thousand cubic feet). The impacts are presented by "County of Origin" (COO). COO shares are a factor used by the State to make direct distributions of FML receipts to local governments (see following section).

Table S-3.27.1 - Projected Impacts to Colorado FML Receipts Originating in the Counties Potentially Affected by the SJPL Minerals Program by Alternative for 2015 (thousands)

County	2007	2015	CHANGE FROM ALTERNATIVE A IN 2015		
	Base Year	Alternative A (No Action)	Alternative B	Alternative C	Alternative D
Dolores County	\$1,508	\$2,327	-\$36	-\$33	\$0
Montezuma County	\$11,143	\$3,986	-\$62	-\$57	\$0
San Miguel County	\$6,426	\$1,718	-\$27	-\$25	\$0

Note: The base year amount of this indicator variable reflects the existing SJPL minerals program and all other minerals production. The impact amounts are attributable just to the projected SJPL minerals program. A comparison of the impacts to the base year amount may be used to show the relative magnitude of the impacts associated with the alternatives. However, the comparisons should not be used to infer an amount or rate of "growth" or "decline" in the indicator variable because many other changes can affect this relationship over time.

Direct Distribution of FML Revenue to Local Government

In Colorado, the direct distribution of FML revenue to the counties of origin and affected areas draws upon a pool of roughly 20 percent of the state's total FML receipts. Projections of the impact to this apportionment because of the SJPL minerals program differ very little among the alternatives. The impact to FML direct distributions to these counties in 2015 is projected to be in the following ranges: Dolores County, \$56,000 to \$57,000; Montezuma County, \$222,000 to \$226,000, and San Miguel County, \$62,000 to \$63,000. These projections are based partly on the historical apportionment of FML revenues to the county level. However, an adjustment in the historical shares was made to reflect the change in allocation procedure that will be used in the future, pursuant to amendments enacted by the General Assembly in 2008.

Local Government Property Tax

The ability to tax oil and gas property is location-specific. The SJPL plan alternatives identify the county where wells would occur but no additional information on the location of wells within a county. Without specific well location within a county it is not possible to make reasonable projections of the specific property tax impacts to each taxing jurisdiction whose boundary is a sub-area of the county. Instead the property tax model projects an indicator defined as the aggregate "rural" property tax revenue. This indicator is derived by multiplying the assessed value impact to a county of an alternative by the average rural mill levy calculated from the last year of complete data, which is 2007 for this analysis. For each county, the 2007 average rural mill levy is derived by subtracting the municipal property tax revenue from the total property tax revenue and dividing by total county assessed value. The aggregate rural property tax revenue impact as calculated reflects the total revenue that would potentially be derived from new wells in rural areas of the county by county government, school districts, and special districts. Table S-3.27.2 presents these projected aggregate rural revenues for each potentially affected county. The amount presented in the table for base year total revenue in 2007 is the total property tax revenue derived from all property in each county in that year, including property located within cities and towns.

Table S-3.27.2 - Projected Impacts to Local Property Tax Revenue (thousands) Originating in the Potentially Affected Counties Related to the SJPL Minerals Program by Alternative for 2015

	2007	2015	CHANGE FROM ALTERNATIVE A IN 2015		
County	Base Year Total Revenue to All Taxing Jurisdictions	Alternative A (No Action)	Alternative B	Alternative C	Alternative D
Dolores County	\$3,372	\$1,663	-\$26	-\$24	\$0
Montezuma County	\$21,447	\$2,150	-\$33	-\$31	\$0
San Miguel County	\$35,795	\$695	-\$11	-\$10	\$0

Note: The base year amount of this indicator variable reflects total of current assessed value, which existing SJPL minerals program and all other economic drivers. The impact amounts are attributable just to the projected SJPL minerals program. A comparison of the impacts to the base year amount may be used to show the relative magnitude of the impacts associated with the alternatives. However, the comparisons should not be used to infer an amount or rate of "growth" or "decline" in the indicator variable because many other changes can affect this relationship over time. Impact revenue assumes the assessed value of production under the alternatives, taxed at the average total rate (mill levy) for all non-municipal taxing jurisdictions estimated from data for the base year 2007.

Colorado Severance Tax

The amount of Colorado Severance Tax revenue redirected to the local government level in 2008, the base year available for this revenue category, \$153,000 to Dolores County, \$367,000 to Montezuma County, \$9,000 to San Juan County, and \$46,000 to San Miguel County. These amounts reflect distributions attributable to all severance-taxable minerals produced in the counties. Impacts to severance tax direct distributions to these counties in 2015 from the SJPL minerals alternatives are projected to be small in absolute terms and small relative to the base year: \$4,000 to Dolores County, \$6,000 to Montezuma County, and \$1,000 to San Miguel County. Severance Tax direct distributions received at the county level are to be split between county and municipal governments using a formula whose factors are minerals employee residency, population and road miles. The Severance Tax direct distributions to local governments are allocated from a pool of 15% of total severance tax receipts by the State. A pool of 35% of total State severance tax receipts is commonly placed in a trust with FML receipts in the Energy and Minerals Impact Assistance Fund and used for grants and loans. Impacts to this type of local government funding are described in the next section.

Energy and Mineral Impact Assistance Fund Grants and Loans

Though historically the largest of the impact mitigation revenues available mineral producing local governments as a whole (see Table S-3.27.8) the grants and loans program of the Energy and Mineral Impact Assistance Fund (EIAF) is discretionary and would not react formulaically to the plan alternatives for the SJPL minerals program. For that reason, no projection is made of how new outputs of federal minerals might lead to additional grants and loans to local governments in the counties potentially affected counties by the SJPL plan. However, large increases in EIAF funding have historically resulted in more awards in greater amounts.

Table S-3.27.1 (above) presents how the production in SJPL counties may impact the receipts of the Colorado Federal Mineral Leasing Fund, while the previous section, Colorado Severance Tax, described but did not project the pool of 35% of total State severance tax receipts that would be augmented to some degree by taxing production in the SJPL counties. The alternatives proposed for the SJPL minerals program are projected to increase these revenue streams, which underwrite the EIAF. In the past, the expectation of more money flowing into the EIAF translated into an expectation of more grants and loans being awarded at the State's discretion to communities whose generation of these funds is related to the SJPL minerals program. However, due to budget cuts in the past two years (FY 2010 and 2011), the state has retained the

EIAF dollars to cover the state's budget, rather than making them available for local government grants and loans.

State and Local Government Sales Tax Revenue in Colorado

Table S-3.27.3 presents impacts to State and local sales tax revenue originating in the potentially affected counties. The sales tax is a substantial revenue source for local government, especially city and town government. The sales tax impacts are estimated from projections of impacts to business activity modeled in Section 3.25 (of this document) using a relationship between gross industry sales and net sales tax revenue derived from historical sales tax information at the state level. The total amount of sales tax reported in the base year in Table S-3.27.3 includes sales derived from all types of business activity, with oil and gas development and production being only one among many economic drivers in the SJPL planning region. The impacts presented in the table driven solely by the economic impacts of the minerals program projected in Section 3.25 of this document.

Table S-3.27.3 - Projected Impacts to State and Local Sales Tax Revenue (thousands)
Originating in the Potentially Affected Counties Related to the SJPL Minerals Program by
Alternative for 2015

County and Taxing Jurisdiction	2005	2015	CHANGE FROM ALTERNATIVE A IN 2015			
	Base Year	Alternative A (No Action)	Alternative B	Alternative C	Alternative D	
Dolores County						
State of Colorado	\$252	\$42	-\$1	-\$1	\$0	
All County and Municipal Government	\$178	\$30	\$0	\$0	\$0	
Montezuma County						
State of Colorado	\$6,754	\$388	-\$6	-\$6	\$0	
All County and Municipal Government	\$9,385	\$487	-\$8	-\$7	\$0	

Note: The base year is 2005 because it is the last year of complete data for these jurisdictions available at the time of this analysis. Drilling would be limited in San Miguel County under all alternatives. It has been assumed that industry, contractor and labor support for the limited program in San Miguel County would be staged from outside the county, meaning economic change in the county from the alternatives would be negligible and sales tax revenues would negligible as well. The base year amount of this indicator variable reflects the total of current economic activity, which comprises the existing SJPL minerals program and all other economic drivers. The impact amounts are attributable to just the projected SJPL minerals program. A comparison of the impacts to the base year may be used to show the relative magnitude of the impacts. However, the comparisons should not be used to infer an amount or rate of "growth" or "decline" in the indicator variable because many other changes can affect this relationship over time. Local taxing jurisdictions are Archuleta County and the Town of Pagosa Springs, Dolores County, the Town of Dove Creek, and the Town of Rico; La Plata County, the Town of Bayfield, the City of Durango, and the Town of Ignacio, and Montezuma County, the City of Cortez, the Town of Dolores and the Town of Mancos.

Impacts to Local Government Costs

Local governments in the SJPL plan area shoulder the cost of providing general government services, such as property assessment, recordation of documents, elections, planning and finance. Local governments also provide police and detention services, either through the county sheriff or through municipal departments. They operate courts and employ judges, administer and house local and state funded social services programs, and maintain and repair roads.

Impacts to county expenditures from the SJPL alternatives may be expected to some degree, but they have not been quantified for this analysis. Comparing the alternatives in terms of indicators that have been quantified, namely the employment impacts described in Section 3.25 (of this document) and the revenue impacts described above, strongly indicates that impacts to government costs, should they occur, would be very much the same regardless of alternative.

Past experience in the region and that of other energy development regions Colorado has identified the government services most likely to impose costs on local government under the SJPL alternatives. The use of heavy trucks for oil and gas development causes higher impacts to public roads than do the passenger vehicles and light trucks of local residents, livestock operators, and tourism and recreation users of public lands. Labor force commuting may subject specific public roads to traffic volumes that exceed design capacities and structure, which also raises maintenance, repair and policing costs. Well sites and facilities may also require law enforcement and emergency management to employ levels of service and types of equipment that differ from those suited to typical urban and rural needs in the region. Detailed quantitative analysis is needed but not provided here to determine whether these types of costs related to oil and gas activities would exceed revenues under the alternatives. State policy intends for impact revenues from minerals development, as projected above, to balance development-driven impact costs. Still, instances may occur where additional revenues would have to be raised locally through taxes or fees. For example, La Plata County-which has hosted a large share of the region's minerals development in the past-imposes a fee on oil and gas wells to help the county pay its road expenses.

Impacts to government operating costs from demand for housing and community services also may occur within the region. These costs are driven by population changes associated with the employment impacts projected in Section 3.25 of this document. The pattern set by minerals development in the region in the recent past is for contractors and their workers to commute into the area from Farmington, New Mexico, which is the region's industry hub. If the pattern holds, population growth and associated community services costs related to the SJPL minerals program would be avoided. The size of the SJPL minerals program, as measured by the number of wells that would be developed under the alternatives, indicates that the future pace of development will be comparable to that of the recent past. This strongly suggests that new demand for community services that can be tied specifically to the alternatives would be limited, and it is likely that local government would be able to serve limited community growth from the alternatives, should it occur, within the current revenue structure.

CUMULATIVE IMPACTS

Cumulative effects analysis considers the consequences of the alternatives in concert with the consequences of other actions. As discussed in other parts of the Communities section of this chapter, state projections of population, employment, and income growth represent the collective consequences of other actions within the planning area. Twenty-five percent of fund payments would not be affected by these actions, but Payments in Lieu of Taxes (PILT) could be, because PILT calculations are based in part on county populations. None of the SJPL minerals program alternatives analyzed here alter the population growth anticipated for the planning area, assuming the pattern holds as set by minerals development in the region in the recent past, which as described above is for contractors and their workers to commute into the area from Farmington, New Mexico. Thus, it is unlikely that PILT would be affected. It is also unlikely that any alternative would substantively change the role federal payments play in general county or school district revenues. As populations and tax revenues increase, it is likely that federal payments would play a lesser role in local and special government revenues. If the No Lease Alternative is adopted, it is possible that, at some point, annual production from federal minerals would decline as the federal wells in existence now age and no new federal wells are drilled, which would cause a decline in the absolute amount of federal payments from FML royalties and from production-based State and local revenues.