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SUNZIA

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**SunZia Southwest Transmission Project
Amendment of Federal Right-of-Way NM-114438**

6

DRAFT Report 11 – Social and Economic Conditions

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1 **ACRONYMS AND ABBREVIATIONS**

2	AC	alternating current
3	AZ	Arizona
4	BLM	Bureau of Land Management
5	DC	direct current
6	EFI	Economic and Fiscal Impact Report
7	EIS	Environmental Impact Statement
8	FY	fiscal year
9	GIS	geographic information system
10	GPD	Gross Domestic Product
11	GRT	Gross Receipts Tax
12	H	High Impact
13	kV	kilovolt
14	L	Low impact.
15	M	Moderate impact
16	Max	Maximum
17	Min	Minimum
18	NM	New Mexico
19	O&M	Operations and Maintenance
20	Project	SunZia Southwest Transmission Project
21	SQ	square
22	SunZia	SunZia Transmission, LLC
23	TPT	transaction privilege tax
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1 *This resource report presents the: (1) existing condition and (2) preliminary reasonably*
2 *foreseeable impacts on the social and economic conditions and environmental justice*
3 *communities of constructing, operating, and maintaining the additional or modified*
4 *Project features included in the currently proposed actions. The currently proposed*
5 *actions for which SunZia Transmission, LLC (SunZia) is requesting the amendment*
6 *include are described in detail in **Report 1 – Project Background and Methods**. The*
7 *methods for assessing the existing condition and reasonably foreseeable effects of the*
8 *currently proposed actions are: (1) the same (or very similar to) that conducted for and*
9 *included in the Final Environmental Impact Statement (EIS) (Bureau of Land*
10 *Management [BLM] 2013) and (2) substantially similar among all resources.*

11 *This document is tied to the 2013 Final EIS. The resource inventory and analysis of*
12 *reasonably foreseeable effects are focused on the currently proposed actions. Where*
13 *appropriate, the assessment of existing conditions and reasonably foreseeable effects is*
14 *focused on the change in the effects anticipated in the Final EIS (BLM 2013).*
15 *Additionally, SunZia’s updated Economic and Fiscal Impact Report (SunZia EFI Report*
16 *2021 attached as Appendix R11-A).¹*

17 **1.0 REGIONAL OVERVIEW**

18 This section of the report summarizes the geography, demographics, economic and fiscal resources in the
19 counties crossed by the currently proposed actions (i.e., Components 1, 2, 3, and 4, as described in
20 **Report 1 – Project Background and Methods**). Relevant summaries of those conditions are provided in
21 this report. However, the reader is directed to Section 2.1 of the updated SunZia EFI Report for a more
22 detailed analysis of these conditions the 12 counties directly affected by the SunZia Southwest
23 Transmission Project (SunZia Project or Project), and several surrounding counties that would likely
24 supply labor and materials for construction of the Project.

25 **1.1 Geography**

26 The SunZia Project traverses a biologically diverse geographical area, originating in high plains
27 rangeland, and giving way to tree covered mountains, riparian bosque, panoramic desert mountains and
28 Chihuahuan desert landscapes.

29 The SunZia Project traverses 12 counties across New Mexico and Arizona. The seven New Mexico
30 counties include: Torrance, Valencia, Socorro, Sierra, Luna, Grant, and Hidalgo. The five Arizona
31 counties consist of Greenlee, Graham, Cochise, Pima, and Pinal. The counties are listed by their
32 geographical location from east to west.

33 **1.2 Demographics**

34 All but four of the 12 counties crossed by the Project are rural, as reflected in population densities of less
35 than 10 persons per square mile. Table R11-1 also reveals that less than 10 percent of the population in

¹ The SunZia Southwest Transmission Project will not be submitting the updated economic and fiscal impacts analysis as part of its application to amend the existing right-of-way grant. However, SunZia intends that the updated analysis will be available as a public document. With the intent to avoid duplication and reduce the volume of material contained in this report, the updated analysis is referenced herein as providing data support for the specific findings related to the issues addressed in this Report 11 – Social and Economic Conditions.

1 these counties are in the seven New Mexico counties. Further, Pima County, Arizona, home to Tucson
2 and the only metropolitan area in the affected counties, represents more than 56 percent of the total
3 population in the counties crossed by the Project. In contrast, the geographic area of the New Mexico
4 counties comprises a relatively balanced 48.5 percent of the total geographic area, with the Arizona
5 counties constituting 51.5 percent of the square miles of the counties included in the analyses.

6 Table R11-1 **POPULATION OF COUNTIES CROSSED BY THE SUNZIA PROJECT**

COUNTY	POPULATION	GEOGRAPHIC AREA (SQ. MILES)	POPULATION DENSITY (PER SQ. MILE)
Valencia (NM)	76,688	1,066	72
Torrance (NM)	15,461	3,345	5
Socorro (NM)	16,637	6,647	3
Sierra (NM)	11,996	4,179	3
Luna (NM)	23,709	2,965	9
Grant (NM)	26,998	3,961	7
Hidalgo (NM)	4,198	3,437	1
New Mexico Study Area Totals	175,687	25,600	7
Greenlee (AZ)	9,498	1,843	5
Graham (AZ)	38,837	4,623	8
Cochise (AZ)	125,922	6,166	21
Pima (AZ)	1,047,279	9,187	107
Pinal (AZ)	462,789	5,366	70
Arizona Study Area Totals	1,684,325	27,184	62
Study Area Totals	1,860,012	52,784	35

7 NOTES: NM = New Mexico; AZ = Arizona; SQ = square.

8 The population in the counties crossed by the Project is diverse and complex. The population’s age
9 distribution is generally consistent with both the Arizona and New Mexico statewide age cohorts.
10 However, it is notable that the “retirement age” cohort (65 years and older) is slightly higher in these
11 counties than is found in either New Mexico or Arizona as a whole.² This observation suggests a general
12 expectation that residents in the counties the Project crosses are somewhat more dependent on retirement
13 income sources, including federal transfer payments (e.g., social security). In both New Mexico and
14 Arizona, the population has grown slowly and increased by less than 0.1 percent from 2010 to 2019 in the
15 counties crossed by the Project.

16 The United States Census Bureau’s American Community Survey reports in 2019³ that populations of the
17 counties crossed the Project have high rates of persons that self-identify their race as White. Ethnicity is
18 determined by a country of origin, and while many residents identify as White, residents also identify as

² New Mexico’s total population 65 and older composed 16 percent of the population and in Arizona persons age 65 and older composed 17 percent of the state’s population. The population 65 and older accounts for 20 percent of the residents in the counties crossed by the Project. See the SunZia EFI Report 2021 (attached as Appendix R11-A), Section 2.1 for greater detail.

³ The American Community Survey (United States Census Bureau) data are provided as a statistical-based profile based on sample data collected over the most recent five years and is presented with respect to its 2019 population race and ethnicity estimates. Thus, these population data are not the same as the one-year estimate of unemployment presented in the preceding discussion, but potentially are more meaningful with respect to these estimated demographic characteristics that can only be “measured” in the decennial census conducted in 2020, which is in process of being compiled.

1 Hispanic or Latino in these counties. Data for low-income residents was collected from the United States
2 Census American Community Survey’s one-year averages. The Environmental Justice discussion in this
3 report addresses additional detail with respect to the demographic profile of the counties crossed by the
4 Project.

5 **1.3 Economy**

6 The economy in the counties crossed by the Project is physically dominated by rural ranch and
7 agricultural activities, but the commercial centers dominate economic output. Total Gross Domestic
8 Product (GDP) for New Mexico counties that the Project crosses was reported to be \$5.3 billion in 2019.
9 The metropolitan area of Tucson contributes 75 percent of Arizona’s counties’ GDP, with the five
10 Arizona counties GDP reported as \$65 billion.⁴ Farm agriculture production in New Mexico and Arizona
11 counties crossed by the Project account for a small percentage of GDP, with total value of agricultural
12 output reported to be \$276 million and \$1.1 billion, respectively.

13 In the counties crossed by the Project in New Mexico, the setting is largely rural, sparsely populated, and
14 the land use is primarily for agriculture-related business enterprises (particularly ranching). However, the
15 dominant economic activities — employing nearly half of the labor force — are related to healthcare,
16 retail trade, and accommodation and food services. In Arizona, healthcare is the dominate industry both
17 by number of establishments and employment.

18 Average annual wage and salary income data reported by the United States Bureau of Labor Statistics in
19 2019 for the counties affected by the Project report average annual compensation to be \$37,799 per year
20 in the affected New Mexico counties and \$49,069 for Arizona counties.

21 Unemployment rates reported for 2018 in counties crossed by the Project are similar, with 7.5 percent
22 unemployed in New Mexico and 7.7 percent unemployed in Arizona counties. New Mexico also has
23 lower labor force participation than the counties in Arizona. More detailed economic information for
24 these counties can be found in Section 2.1.2 of the SunZia EFI Report.

25 **1.4 Fiscal Resources**

26 The existing fiscal resources in the counties crossed by the Project are largely related to business privilege
27 taxes (i.e., Sales or Gross Receipts Taxes), property taxes and a variety of direct payments and grants.
28 Approximately 50 percent of the counties’ revenues, \$1.5 billion in fiscal year (FY) 2019, were from
29 property tax and business privilege taxes. Details of the fiscal resources are reported comprehensively in
30 Section 2.1.3 of the SunZia EFI Report.

31 **2.0 ISSUES FOR ANALYSIS**

32 Issues associated with social and economic condition that were identified and addressed in the 2013 Final
33 EIS (BLM 2013) include:

- 34 • How many local jobs would be created from the construction and operations of the Project
35 Components 3 and 4?

⁴ Gross Domestic Product figures are produced by the Federal Reserve Bank of St. Louis. The analysis in this report incorporates the GDP data for 2019.

- 1 • How many total jobs would be created from the construction and operations of the Project
2 Components 3 and 4?
- 3 • What fiscal and economic impacts would the development, construction and operation of Project
4 Components 3 and 4 on the economies of New Mexico, Arizona and the counties SunZia would
5 be located in?
- 6 • Would environmental justice populations be disproportionately affected by Project Components 3
7 and 4?
- 8 • What are the environmental justice differences between the route alternatives in Segment 4 of the
9 transmission line (Project Component 3)?

10 The analysis presented herein of Component 3 (Segment 4 Reroute) and Component 4 (SunZia West
11 Substation) addresses the reasonably foreseeable economic and fiscal impacts and possible effects on
12 Environmental Justice populations from construction and operations of the Project.

13 Component 1 (Localized Route Modifications) and Component 2 (Access Roads and Temporary Work
14 Areas Outside the Granted Right-of-Way) are not analyzed in detail in this report due to their limited
15 nature, scale, and scope in the proposed actions discussed in this Report, and the analysis in the 2013
16 Final EIS is still representative of these two components. That is, the construction and operation of
17 Components 1 and 2 would be anticipated to result in *de minimus* socioeconomic impacts.⁵

18 However, a review for change in status of Census tracts with Environmental Justice populations identified
19 in the 2013 Final EIS, as well as Census tracts crossed by the 2015 Selected Route in Segments 1 through
20 4 was conducted. These findings are included in this report.

21 **3.0 METHODOLOGY**

22 The two different analyses performed in this resource report — assessing specific reasonably foreseeable
23 economic and fiscal impacts and assessing reasonably foreseeable impacts on possible Environmental
24 Justice populations — are defined by distinct methodologies. These analysis methodologies are
25 summarized in this section. However, a more comprehensive description of the economic and fiscal
26 impact analysis methodology can be found in SunZia EFI Report (2021), Section 2.2.

27 **3.1 Economic and Fiscal Impact Analysis**

28 The construction and operational costs are based on SunZia’s estimates of the expenditures required to
29 accomplish the specific activity, and there is no effort to account for price inflation during any time period
30 considered.⁶ Economists refer to this methodology as “real” or “constant” dollar analysis, which allows

⁵ For example, the currently proposed actions were reviewed for identification of new Environmental Justice populations. The findings demonstrate that no new Environment Justice populations are present in the counties affected by Project Components 1 and 2.

⁶ The estimated impacts, including direct, indirect, and induced economic impacts, are allocated over an anticipated 42-month construction period first transmission line in the approved right-of-way beginning in mid-2022, and a 36-month period beginning in 2027 for the second transmission line in the approved right-of-way (refer to **Report 1 – Project Background and Methods**). During both construction periods, construction activities would be occurring concurrently at multiple locations in the approved right-of-way. The analysis does not include assumptions as to which months the construction of the portion of the transmission line in Segment 4 would occur. Rather, the analysis is based on average expenditures on a per month basis over the life of the construction period.

1 the use of a present value discount factor that ignores price inflation and reflects a social time preference
2 for money. Expenditure data provided by SunZia is measured and reported in terms of 2020 dollars.

3 Estimated economic and fiscal impacts⁷ related to Project Components' 3 and 4 spending is estimated
4 only for expenditures that occur in the affected counties and are evaluated based on state-level data. For
5 Project Component 3, this includes Tarrant, Valencia, and Socorro counties and New Mexico. Estimated
6 impacts for Project Component 4 are related to only Pinal county and Arizona state-level data.

7 Project Component 3 expenditures applicable to the updated analysis are determined on an average dollar-
8 per-mile of transmission line and would be realized over the planned construction period for Segment 4.
9 The SunZia West Substation would be constructed during the same period as the transmission line, and is
10 estimated to take approximately 42 months. Operation expenditures and impacts associated with the
11 SunZia West Substation are estimated from December 2025 (the required in-service date of the
12 transmission line) through 2059.

13 Labor wage and salary data are assumed to be fully burdened (i.e., includes benefits and proprietor and
14 employee income taxes). Employment is reported in number of job years. For example, the estimated 99
15 local jobs created during the construction of the Project in Segment 4 would translate to about 15 full-
16 time local jobs per year over the estimated 78 months it would take to construct the SunZia Project. Full-
17 time jobs typically assume a work year of 2,080 hours or a 40-hour work week. It is assumed that
18 construction workers would work overtime during the construction of the Project.

19 The analysis reports only jobs created directly from the construction and operations of the currently
20 proposed actions that are Components 3 and 4, which are assumed to be locally hired within the
21 counties.⁸ Detailed labor and salary information can be found in Section 2.2.2.3 in the SunZia EFI Report.

22 **3.2 Environmental Justice Population Analysis Methods**

23 Environmental Justice populations are identified when a defined minority population exceeds 50 percent
24 of the total population of a Census tract.⁹ Race is identified as American Indian or Alaska Native, Asian,
25 Black or African American, Native Hawaiian or Other Pacific Islander, and White. Ethnicity is
26 categorized as either Hispanic or Latino and Not Hispanic or Latino.¹⁰

⁷ Direct impacts for economic analysis are anticipated Project expenditures (i.e., paying subcontractors to build access roads). Multipliers provided by IMPLAN[®] are used to determine the indirect and induced economic impacts, accounting for the flow of dollars through the economy. Indirect impacts can be explained as expenditures by persons or companies that received contracts or wages from a project. Induced impacts account for impacts that can include government revenues and expenditures. IMPLAN[®] is used to determine the indirect and induced impacts. See Section 2.2.3.1 of the SunZia EFI attached as Appendix R11-A.

⁸ Note that the employment reported for the Component analyses is associated with locally hired employment, and that there are significant additional (specialized) labor resources that must be brought in by the EPC contractor(s) from out-of-state sources.

⁹ The concept of Environmental Justice first became a required consideration for federal agencies with the publication of Executive Order 12898 on February 11, 1994 (Executive Order 12898, §59 Federal Register 7629, 1994). This analysis uses the same criteria as the 2013 Final EIS to identify Environmental Justice populations in Section 4.14 page 4-247 (see also 2013 Final EIS page 3-334).

¹⁰ The United States Office of Management and Budget's 1997 *Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity*.

1 The applicable threshold for populations in poverty is “meaningfully greater” than a reference population
2 (typically a state-wide average). The state-wide average rate of persons living in poverty in 2019 in
3 Arizona was 13.5 percent and 18.2 percent in New Mexico.

4 Consistent with the 2013 Final EIS, this analysis uses the geographical area of a United States Census
5 tract to determine if Environmental Justice populations exist. The nature and scope Components 1 and 2
6 have no significant change from the 2013 Final EIS and are not discussed in this report.¹¹ Based on the
7 stated definition of Environmental Justice populations, the specific routing and locations (for Components
8 3 and 4) were identified in geographic information system (GIS) data files provided by SunZia, and
9 mapped to the United States Department of Commerce census tracts to extract relevant economic and
10 demographic data for the alternative routes. Tracts identified to be within three miles of Components 3
11 and 4 were analyzed, and all tracts associated with the SunZia Project were reviewed for comparison the
12 Environmental Justice populations identified by the 2013 Final EIS.

13 An element of the Environmental Justice analysis includes assessment of whether property condemnation
14 is disproportionate (i.e., occurs at a much higher rate¹²) compared to condemnation anticipated for non-
15 Environmental Justice populations. The SunZia’s application to amend the existing right-of-way grant
16 relates only to BLM-administered lands, does not require any property condemnation for any of the
17 analyzed Project components, and this issue is dismissed on that basis.

18 The criteria for evaluating the degree of impacts on potential Environmental Justice populations is the
19 same as 2013 Final EIS (Table 2).

20 Table R11-2 **CRITERIA FOR ASSESSING DEGREE OF IMPACT ON ENVIRONMENTAL JUSTICE**
21 **POPULATIONS**

IMPACT LEVEL	IMPACT CRITERIA
High	High impacts occur in areas where the Project could create direct, long-term, and significant impacts on existing Environmental Justice populations. These impacts include the condemnation of residential, commercial, industrial, or other properties, and visual impacts on residences or public places in rural or urban areas. High impacts on Environmental Justice populations are experienced where property condemnation is disproportion (occurs at a much higher rate) compared to condemnation experienced by non-environmental justice populations. High impacts are likely to occur most frequently in dense urban areas because these properties are more difficult to avoid than in rural areas.
Moderate	Area where the Project would create a direct or indirect, short- or long-term impact on existing Environmental Justice populations. These impacts could include potential visual impacts in a rural or urban area. Short-term impacts typically are associated with construction and could include noise and dust generation as well as temporary traffic congestion. Long-term impacts could result from the permanent alteration of residential views. Overall, moderate impacts on Environmental Justice populations typically can be characterized as areas in proximity to the line (usually 1.0 mile or less) that would experience similar long-term impacts as non-Environmental Justice populations. The presence of moderate impacts does not mean that an Environmental Justice population is disproportionately affected when compared to other populations.

¹¹ Components 1 and 2 are relatively minor routing and access road modifications, which do not cause economic or fiscal impacts. Moreover, the Environmental Justice population analyses surveyed the entire route of the Project and did not identify any new Environmental Justice populations related to the Components 1 and 2.

¹² The measure of “much higher” related to property condemnation is subjective. However, since no property condemnation is prescribed for any Project components, the issue is not addressed in this report.

IMPACT LEVEL	IMPACT CRITERIA
Low	Areas where the Project would create a direct or indirect, short- or long-term impact on existing Environmental Justice populations. Long-term impacts could include visual impacts at greater distances. Similar to moderate impacts, short-term impacts typically are associated with construction and could include noise and dust generation as well as temporary traffic congestion; but to a lesser degree than residents living close to the lines. Generally, low impacts on Environmental Justice populations would be located between 1.0 and 3.0 miles from any Project alternative or just beyond. The presence of low impacts does not mean that Environmental Justice populations are disproportionately affected when compared to other populations.
No Impact	Areas where no potential Environmental Justice populations have been identified within 3.0 miles of the Project alternative routes.

1 **3.3 Data Sources**

2 A wide variety of data has been compiled and analyzed to complete the analysis related to economic and
3 fiscal impacts of construction and operations and locating Environmental Justice populations that
4 potentially could be affected by the SunZia Project.

5 Estimated economic and fiscal impacts are based primarily on data provided by SunZia, The data includes
6 estimated expenditures and required labor estimates separately identified for the construction and the
7 operations and maintenance (O&M) periods for the development of distinct transmission lines and
8 associated facilities. Data also were provided in a format that generally reflects the multi-year time
9 periods in which those activities take place and was allocated on an annual basis to the County, State, and
10 Project Total levels.¹³

11 The analysis conducted to locate existing Environmental Justice populations required the use of United
12 States Census American Community Survey — the 2019 dataset with five-year averages at the United
13 States Census tract level and included values for the race, ethnicity and one-year average for persons
14 living in poverty. SunZia provided geospatial data for the alternative routes considered in the Segment 4
15 Reroute and the 80.7-acre siting area for the SunZia West Substation.

16 **3.4 Study Area**

17 Consistent with the 2013 Final EIS, the affected area for Components 3 and 4 includes counties crossed
18 by the currently proposed actions. Component 3 is located exclusively in New Mexico. The affected area
19 includes Torrance, Valencia, and Socorro counties. Component 4 is located in Arizona. The study area is
20 Pinal County.

21 Analysis of Component 3 requires evaluation of three alternative routes for the SunZia Project in Segment
22 4 area (including 16 alternative sub-routes) (refer to Figure R1-16 in **Report 1 – Project Background
23 and Methods**).

¹³ No effort was made to precisely schedule Project activities. For example, a construction period activity that was stated to have a 42-month duration was allocated equally to each month in that period, with those activities then aggregated to the annual (calendar) time periods during which the activities are anticipated to occur.

1 **3.5 Types of Potential Reasonably Foreseeable Effects**

2 Types of reasonably foreseeable impacts of the Project on social and economic conditions and
3 environmental justice include:

- 4 • Creation of temporary jobs during construction.
- 5 • Creation of permanent jobs during operations.
- 6 • Effects of increased development, construction, and operations spending in local and state
7 economies.
- 8 • Increased revenues to state and local government.
- 9 • Disproportionate impacts on environmental justice populations.

10 **4.0 EXISTING CONDITION**

11 Existing conditions for Project Components 3 and 4 related to social, economic and Environmental
12 Justice populations are addressed in the following subsection.

13 **4.1 Social and Economic Conditions**

14 The common measures associated with current economic conditions in the study area include industry
15 employment, income, unemployment rates, economic output, and tax rates and fiscal revenues. Detailed
16 individual profiles for each county are available in the SunZia EFI Report Technical Appendix D.

17 **4.1.1 Component 3 – Segment 4 Reroute**

18 The three alternative routes for Segment 4 traverse largely rural areas in New Mexico, through the
19 counties of Torrance, Valencia and Socorro, with economic activity concentrated in Valencia and Socorro
20 counties. The 2015 Selected Route was planned to cross Torrance and Socorro counties. This section
21 summarizes current economic conditions of the Component 3 affected area related to production,
22 employment, income, and tax rates and revenues.

23 The analysis reports on the difference in economic and fiscal impacts for the three alternative routes and
24 includes estimated impacts identified by the 2015 Selected Route Segment 4 construction. It also should
25 be noted that much of the Segment 4 reroute is located parallel and in proximity to the New Mexico
26 Renewable Energy Transmission Authority’s transmission line right-of-way through Torrance, Socorro,
27 and Valencia counties.

28 **Economy, Employment, and Income**

29 Common measures of economies include industry employment, unemployment rates, and GDP. A brief
30 summary of the affected area economy, employment, and income (by county) associated with Component
31 3 is provided in this section.

32 GDP is the measure of goods and services produced in a region by dollar value (Table R11-3). In 2019,
33 Valencia County had the highest GDP in the study area, which is reported to be about three times larger

1 than Socorro or Torrance counties.¹⁴ When compared to New Mexico’s total GDP of \$105 billion, the
2 combined GDP of the counties in the study area compose about 2.5 percent of the state’s total output.

3 Table R11-3 **ECONOMIC OUTPUT BY COUNTY – SEGMENT 4 REROUTE**

COUNTY	GDP (\$ MILLIONS)
Torrance	\$441
Valencia	\$1,609
Socorro	\$549

4
5 Of the three counties in the Component 3 affected area, Socorro County had the most agricultural
6 production in 2017 valued at \$65.2 million. Valencia and Torrance counties’ agricultural production were
7 valued at \$46.1 and \$45.9 million, respectively.

8 The industry employment profiles for Torrance, Valencia, and Socorro counties indicate that most non-
9 farm employment is in the retail trade sector. Other sectors employing significant portions of the labor
10 force include construction, public administration, health care, and social assistance.

11 The top employment sectors reported annual wages range from \$25,367 to \$30,680. To put that in
12 perspective, the state’s average annual income is \$47,944. Also, notable and directly correlated with
13 GDP, Valencia’s top industries have more than double the number of establishments than either Torrance
14 or Socorro.

15 Unemployment is also an indicator of economic health. Out of those seeking jobs in the labor force in
16 2019, only 6.5 percent were unemployed in Valencia County. Torrance County has the lowest
17 unemployment rate of the three counties at 5.2 percent (i.e., about 291 people out of a reported labor force
18 of 5,591). New Mexico’s state unemployment rate is 6.1 percent.

19 **Tax Rates and Revenues**

20 This section summarizes the tax rates and sources revenues for Valencia, Torrance, and Socorro county
21 governments from Property Tax and Gross Receipts Tax (GRT) in 2019 (Table R11-4). In 2019, New
22 Mexico had a statewide GRT rate of 5.1 percent. New Mexico counties and municipalities also can
23 impose their own incremental GRT rates on top of the state’s base GRT rate. Valencia County, the
24 largest economy by GDP also has the highest GRT rate with an additional 1.8 percent imposed for a total
25 GRT of 6.9 percent.

26 Table R11-4 **GROSS RECEIPTS TAX RATES BY COUNTY – SEGMENT 4 REROUTE**

COUNTY	TOTAL GROSS RECEIPTS TAX RATE	LOCAL (COUNTY/MUNICIPAL) IMPOSED RATE
Torrance	6.8%	1.6%
Valencia	6.9%	1.8%
Socorro	6.4%	1.2%

27

¹⁴ Note, however, that the SunZia Segment 4 alternative routes traverse only a very limited portion of Valencia county, and are located essentially on the border between Valencia and Socorro counties.

1 County revenues from GRT in fiscal year 2019 totaled just over \$14.3 million in Valencia, about \$2.3
2 million in Socorro, and nearly \$3.0 million in Torrance county. Property Tax revenues for each of the
3 three counties surpasses GRT revenues by more than three times (Table R11-5). Valencia County had
4 Property Tax revenues of over \$44 million in FY 2019, Torrance followed with \$9.8 million and Socorro
5 County had Property Tax revenues over \$8.7 million.

6 Table R11-5 **REPORTED TAX REVENUES BY COUNTY – SEGMENT 4 REROUTE**

COUNTY	PROPERTY TAX*	GROSS RECEIPTS TAX
Torrance	\$9,782,925	\$2,969,773
Valencia	\$44,394,051	\$14,347,255
Socorro	\$8,760,870	\$2,328,545

7 * Property tax accessed on calendar year.

8 **4.1.2 Component 4 – SunZia West Substation**

9 Impacts from the proposed SunZia West Substation from Project expenditures and employment are
10 reasonably foreseeable and are discussed in this section. A summary of the existing economic and fiscal
11 conditions of Pinal County, the proposed location of the siting area for the SunZia West Substation is
12 presented. A full detail of the county profile is provided in the SunZia EFI Report (attached as Appendix
13 R11-A), Technical Appendix D.

14 **Economy, Employment, and Income**

15 Pinal County’s GDP contributed about 3.2 percent or \$8.4 billion of Arizona’s total GDP in 2019. Top
16 sectors of non-farm employment were retail trade and public administration, employing about 34 percent
17 of all workers in the county. Pinal County reported an agricultural output of \$861 million in 2017.

18 In 2019, the county had an unemployment rate of 7.8 percent exceeding Arizona’s rate of 6.5 percent.
19 The average annual wage in Pinal County is \$45,195, about 17 percent lower than Arizona’s average state
20 wage of \$55,068. The county’s per capita income also falls below the state’s by about 19 percent.

21 Pinal County has contributed 2.3 percent of Arizona’s GDP. The county generally has a relatively high
22 unemployment rate and lower wages and incomes than Arizona’s as a whole.

23 **Tax Rates and Revenues**

24 Arizona imposed a transaction privilege tax (TPT) that functions much like a sales tax, one outstanding
25 factor is that the tax varies by industry (Table R11-6). Counties and municipalities also are able to
26 impose their own rates. Arizona’s effective rate is 5.6 percent, but the Prime Contracting industry rate —
27 the one that most of the construction expenditures of the proposed SunZia West Substation would fall
28 under — is 7.2 percent.

29 Table R11-6 **PINAL COUNTY TRANSACTION PRIVILEGE TAX RATES**

COUNTY	015 CONTRACTING PRIME	013 COMMERCIAL LEASE	PROPERTY TAX RATES	EFFECTIVE STATE RATE
Pinal County	7.2%	0.5%	14.8%	5.6%

30

1 Total revenues from taxes in 2019 for Pinal County were just over \$190 million. Property tax is the
2 dominate contributor and composed more than 50 percent of the county’s budget revenues from taxes.
3 The county’s share of TPT was nearly \$55 million in FY 2019.

4 Table R11-7 **PINAL COUNTY TAX REVENUES FOR FY 2019**

PROPERTY TAX	COUNTY SHARE OF TPT	OTHER TAXES
\$97.1	\$54.8	\$30.1

5 **4.2 ENVIRONMENTAL JUSTICE**

6 Environmental Justice populations are defined in terms of race, ethnicity and income and are summarized
7 for the populations living in the study areas for Components 3 and 4. Detailed race and ethnicity data for
8 each county in the study areas is provided in Technical Appendix D of the SunZia EFI Report (attached as
9 Appendix R11-A).

10 **4.2.1 Component 3 – Segment 4 Reroute**

11 Of the three counties in the study area for Component 3, Valencia County is the largest by population.
12 Also, Valencia County has the largest rate of residents that identify their ethnicity as Hispanic at more
13 than 60 percent of its population. Almost half of Socorro County’s residents and approximately 43
14 percent of Torrance’s population identify as Hispanic. The counties have higher percentages of residents
15 that identify their race as White, including 83 percent in Valencia, 91.0 percent in Torrance, and 79.7
16 percent in Socorro; 78.4 percent of all New Mexican residents identify as White. The three Segment 4
17 alternative routes considered were assessed to determine the existence of tracts with Environmental
18 Justice populations that are different from the tracts associated with the 2015 Selected Route, with these
19 findings discussed further in this section.

20 Table R11-8 **COUNTY RACE PROFILES – SEGMENT 4 REROUTE**

RACE	TORRANCE		VALENCIA		SOCORRO	
	POPULATION BY RACE	% OF POPULATION	POPULATION BY RACE	% OF POPULATION	POPULATION BY RACE	% OF POPULATION
White	14,222	91.0%	63,117	83.0%	13,439	79.7%
Black or African American	121	0.8%	1,059	1.4%	95	0.6%
American Indian & Alaska Native	50	0.3%	3,257	4.3%	2,057	12.2%
Asian	23	0.1%	707	0.9%	553	3.3%
Native Hawaiian & Other Pacific Islander	0	0.0%	0	0.0%	0	0.0%
Some Other Race	981	6.3%	5,358	7.0%	318	1.9%
Two or more races	222	1.4%	2,529	3.3%	396	2.3%
Total Population	15,519	-	76,027	-	16,858	-

1 Table R11-9 **COUNTY ETHNICITY PROFILES – SEGMENT 4 REROUTE**

RACE	TORRANCE		VALENCIA		SOCORRO	
	POPULATION BY ETHNICITY	% OF POPULATION	POPULATION BY ETHNICITY	% OF POPULATION	POPULATION BY ETHNICITY	% OF POPULATION
Hispanic or Latino (of any race)	6,687	43.1%	46,056	60.6%	8,388	49.8%
Mexican	2,556	38.2%	24,718	53.7%	2,074	24.7%
Puerto Rico	131	2.0%	247	0.5%	41	0.5%
Cuban	10	0.1%	217	0.5%	4	0.0%
Other Hispanic or Latino	3,990	59.7%	20,874	45.3%	6,269	74.7%
Not Hispanic or Latino	8,832	56.9%	29,971	39.4%	8,470	50.2%
White Alone	8,488	96.1%	24,784	82.7%	5,764	68.1%
Black or African American	121	1.4%	803	2.7%	95	1.1%
American Indian and Alaska Native	47	0.5%	2,877	9.6%	1,763	20.8%
Asian	23	0.3%	390	1.3%	548	6.5%
Native Hawaiian and Other Pacific Islander	0	0.0%	0	0.0%	0	0.0%
Some Other Race	22	0.2%	77	0.3%	0	0.0%
Two or more races	131	1.5%	1,040	3.5%	300	3.5%
Total	15,519	-	76,027	-	16,858	-

2
3 Rates of poverty are high in New Mexico — and the counties comprising Component 3 are no exception.
4 New Mexico’s rate of poverty, 18.2 percent, was almost double the national average in 2019.¹⁵ Socorro
5 County has the highest rates of poverty with 26.0 percent of its population earning income below the
6 poverty threshold. Valencia County has a slightly lower poverty rate (17.6 percent) than the state and the
7 lowest of all three counties in SunZia Segment 4 alternative routes — it also has more than four times the
8 populations of either Torrance or Socorro. Torrance county has 21.6 percent of its population earning
9 incomes below the defined poverty threshold.

10 Table R11-10 **PERCENTAGE OF POPULATION BELOW US POVERTY THRESHOLD – SEGMENT 4**
11 **REROUTE**

TORRANCE	VALENCIA	SOCORRO	NEW MEXICO
21.6%	17.6%	26.0%	18.2%

12
13 It should be noted that the development of the permitted Western Spirit Transmission Project would take
14 place prior to the construction of the SunZia Project, with corresponding economic and fiscal impacts on

¹⁵ The 2019 United States Census American Community Survey estimated the office United States poverty rate to be 10.5 percent, defined to be an annual income level of \$12,490.

1 the local economic and demographic conditions in Component 3 study area prior to the planned
2 development of the SunZia Project.

3 **4.2.2 Component 4 – SunZia West Substation**

4 In Pinal County, Arizona, 30.2 percent of residents identify as Hispanic, and almost 80 percent of Pinal
5 residents identify as White. In 2019, the rate of persons in poverty in Arizona was 13.5 percent. Pinal
6 County reported a slightly lower rate of 12.1 percent.

7 **5.0 PRELIMINARY REASONABLY FORESEEABLE EFFECTS**

8 This section presents reasonably foreseeable impacts related specifically to Project Components 3 and 4,
9 addressing both the local economic conditions as well as identifying potentially affected Environmental
10 Justice populations in the identified census areas in each study area. The reasonably foreseeable economic
11 and fiscal impacts associated with the Project expenditures and employment related to Components 3 and
12 4 are identified, and the impacts on housing and local community business are discussed in this section.
13 Environmental Justice populations are reported for Components 3 and 4.

14 **5.1 Economic and Fiscal Conditions**

15 Economic and fiscal impacts from implementing Component 3 would be related to construction activities.
16 Economic and fiscal impacts from Component 4 would be related from construction and operations.

17 **5.1.1 Component 3 – Segment 4 Reroute**

18 Expenditures related to the alternative routes analyzed for Component 3 would generate direct economic
19 and fiscal impacts. The direct economic impacts also would create indirect and induced economic impacts
20 associated with the development of the Project in Segment 4.

21 Note also that the Component 3 analysis relates only to the construction period, as the operational and
22 maintenance period impacts are assessed to be the same regardless of the specific right-of-way route
23 chosen for the construction of SunZia’s Phases 1 and 2.¹⁶

24 Three primary alternative routes, and sixteen different sub-routes, are analyzed for the Segment 4
25 Reroute.

26 However, it is critical to the analyses to understand that Alternative Route 1 co-locates the two
27 transmission lines in the same 400-foot-wide right-of-way. That is, Phase 1 — the direct current (DC)
28 transmission line to be constructed in the 42-month period from mid-2022 through 2025 — will be co-
29 located in the same right-of-way with the alternating current (AC) Phase 2 to be constructed during the

¹⁶ The SunZia EFI Report (attached as Appendix R11-A) required assumption of a specific timing for construction of both Lines 1 and 2, as the analysis of economic impacts is properly defined in discounted present value terms. SunZia directed Moss Adams to assume Phase 1 to be a DC transmission line, which would be constructed during the period of mid-2022 and in service by the end of 2025 (42 months). Phase 2, a AC transmission line, would be constructed in the period beginning in 2027 and completed prior to the end of 2029 (36 months).

1 36-month period during 2027 through 2029. Moss Adams made assumptions about construction timelines
2 in order to produce meaningful analysis of impacts. Construction timelines are may change.

3 The Alternative Route 2 relates only to the construction of Phase 1 (for this analysis, assumed to be a DC
4 transmission line; while Alternative Route 3 relates only to the construction of the Phase 2 (for this
5 analysis, assumed to be an AC transmission line in a different right-of-way from Phase 1.¹⁷

6 The analysis of impacts related to Component 3 is based primarily on mileage-based allocations for the
7 three alternative routes (Table R11-13). It was determined sufficient for each of the three alternative
8 routes that analyses be presented that reflect the maximum and minimum impacts related to the analyses
9 of the sub-route alternatives to the primary alternative routes.¹⁸

10 For Segment 4 Alternative Route 1, the selection of the minimum and maximum mileage sub-routes for
11 analysis is straight forward as the assumption is that both Phase 1 (DC) and Phase 2 (AC) are being
12 constructed in the same right-of-way.

13 When considering the minimum mileage (e.g., expenditures) for Alternative Routes 2 and 3, the shortest
14 mileage for the Alternative Route 2 alternative sub-route was combined with the shortest mileage for the
15 Alternative Route 3 alternative sub-route. Likewise, the maximum impacts (i.e., greatest mileage) are
16 provided by the combined longest Alternative Route 2 alternative sub-route, combined with the longest
17 Alternative Route 3 alternative sub-route. These combinations define the maximum / minimum sub-route
18 alternatives available for the combined Alternative Route 2 (DC line) and Alternative Route 3 (AC line).
19 Selecting any other viable combinations of the Alternative Route 2 and Alternative Route 3 alternative
20 sub-routes would provide impacts that fall somewhere between the minimum and maximum impacts
21 reflected in Table R11-11.

22 The analysis summarized in Table R11-11 presents the combined impacts for Segment 4 Alternative
23 Route 1, and Alternative Routes 2 and 3 relating for the construction of both Phase 1 (DC line) and Phase
24 2 (AC line). These impacts will be presented with a minimum bound of the range and a maximum bound
25 of the range for viable sub-routes of the alternatives proposed by SunZia.

26
27 **Table R11-11 SUMMARY OF ECONOMIC AND FISCAL IMPACTS – SEGMENT 4 REROUTE**

	ALTERNATIVE ROUTE 1		ALTERNATIVE ROUTE 2		ALTERNATIVE ROUTE 3		COMBINED IMPACTS ALTERNATIVE ROUTES 2 AND 3		2015 SELECTED ROUTE
	Max	Min	Max	Min	Max	Min	Max	Min	-
Route Length (miles)	153	152	122	115	126	123	124	119	91
Estimated number of Jobs	99	98	43	41	45	43	88	84	59

¹⁷ To be entirely accurate, there are portions of Alternative Route 2 and Alternative Route 3 that are co-located in the same right-of-way, but the differences in the analyses of the sub-routes primarily related to the portion of those routes that are not co-located in the same right-of-way.

¹⁸ In March 3, 2021, a workshop focused on defining the socioeconomic analyses with representatives of the BLM and their third-party EIS contractor team, it was determined that presentation of the impacts by sub-route for each of the three alternative routes was not needed to sufficiently represent the reasonably foreseeable impacts of the alternative routes considered in the Segment 4 Reroute.

	ALTERNATIVE ROUTE 1		ALTERNATIVE ROUTE 2		ALTERNATIVE ROUTE 3		COMBINED IMPACTS ALTERNATIVE ROUTES 2 AND 3		2015 SELECTED ROUTE
	Max	Min	Max	Min	Max	Min	Max	Min	-
Estimated Wages and Salaries* (\$Million)	\$20.3	\$20.1	\$8.5	\$8.1	\$8.8	\$8.6	\$17.3	\$16.7	\$12.0
Estimated Per Diem** (\$Million)	\$23.1	\$22.9	\$9.4	\$8.9	\$9.8	\$9.5	\$19.2	\$18.4	\$13.3
Direct Impact	\$153.8	\$152.4	\$63.3	\$59.9	\$65.2	\$63.5	\$128.5	\$123.4	\$91.2
Direct & Indirect Impacts (\$Million)	\$191.4	\$189.7	\$78.3	\$74.1	\$76.0	\$74.1	\$154.4	\$148.2	\$113.5
Direct, Indirect, & Induced Impacts (\$Million)	\$242.2	\$240.1	\$99.1	\$93.8	\$96.2	\$93.8	\$195.4	\$187.5	\$143.6
Community Benefits (\$Million)	\$3.07	\$3.04	\$1.22	\$1.15	\$1.26	\$1.23	\$2.48	\$2.38	\$1.82

NOTES: Max = maximum; Min = Minimum
*Included in direct impacts
**Includes per diem for all construction workers

1
2
3
4 Socorro County would realize the majority of estimated benefits for all Reroute Alternatives, except for
5 Alternative Reroute 2’s Minimum option. Torrance County would be expected to have new direct
6 economic activity ranging from about 38 percent to just over 50 percent. Valencia County is expected to
7 experience the least amount of economic benefits. Of the Alternative Route 1 sub-routes that do cross the
8 border into Valencia County, it is only for very short distances, between five and six miles. The shortest
9 sub-route for all alternative routes travel only through Socorro and Torrance counties. See Table R11-12
10 for the distribution share of economic and fiscal benefits estimated impacts from Segment 4 construction
11 Alternative Route options.

12 Table R11-12 **SEGMENT 4 REROUTE – COUNTY SHARE OF IMPACTS**

ALTERNATIVE ROUTE OPTION	SOCORRO	TORRANCE	VALENCIA
Alternative Route 1 Maximum	57.8%	37.9%	4.3%
Alternative Route 1 Minimum	61.7%	38.3%	N/A
Alternative Route 2 Maximum	47.6%	47.8%	4.6%
Alternative Route 2 Minimum	49.5%	50.5%	N/A
Alternative Route 3 Maximum	49.4%	46.1%	4.5%
Alternative Route 3 Minimum	52.5%	47.5%	N/A

13 **Expenditures**

14 Consistent with the previously discussed method of identifying the minimum and maximum impacts
15 associated with the analyzed sub-route alternatives related to the three primary route alternatives in
16 Segment 4, the following summarizes the range of differences in expenditure impacts, which are reflected
17 in Table R11-11.

1 **Alternative Route 1**

2 Direct economic impacts are estimated between the minimum (\$152.4 million) and maximum (\$153.8
3 million) economic impacts for Alternative Route 1. An estimated \$1.4 million difference in direct impact
4 (based on direct expenditures), and approximately \$2.1 million more when total (i.e., direct, indirect and
5 induced) economic impacts are identified in the Alternative Route 1 sub-route options.

6 **Combined Alternative Route 2 (DC line) and Route 3 (AC line)**

7 With respect to combination of primary Alternative Route 2 and Alternative Route 3, the differences
8 between the minimum and maximum direct economic impacts range from \$123.4 million to \$128.5
9 million. Accounting for total economic impacts (i.e., direct, indirect and induced) the sub-route
10 alternatives presented for combined primary Alternative Route 2 and Alternative Route 3 would range
11 from \$187.5 million to 195.4 million between the minimum and maximum sub-routes identified for the
12 construction of SunZia Phases 1 and 2.

13 **Employment and Income**

14 Table R11-11 also depicts estimated minimum and maximum full-time jobs created during the assumed
15 estimated 78-month construction period, which are expected to be sourced from the counties crossed by
16 the Segment 4 alternative routes. For example, the 99 jobs for the maximum sub-route, Sub-Route 1A-1,
17 for Alternative Route 1 means that more than 15 temporary jobs a year (i.e., reported as annual full-time
18 jobs) would be created during the 78-month construction operations, about eight years, if Sub-Route 1A-1
19 is selected.

20 Job creation has very limited impacts on employment among the minimum and maximum sub-route
21 alternatives of the primary alternative routes in Segment 4. As a reminder, if Alternative Route 1 is not
22 selected, then an option combining both sub-routes associated with Alternative Routes 2 and 3 would
23 need to be selected. If the maximum impact route is selected for both Alternative Routes 2 and 3, an
24 estimated 88 locally sourced jobs would be created, about four more than if the minimum options for each
25 of the two routes were selected.

26 Overall, Alternative Route 1 would pay more wages and per diem over the same time period than
27 Alternative Routes 2 and 3. Wages paid to locally employed labor forces for the minimum option of
28 Alternative Route 1 are estimated to be \$20.1 million or about \$3.0 million more than if Alternative
29 Routes 2 and 3 are selected. Per diem paid to construction workers would be about \$3.0 million less if
30 Alternative Routes 2 and 3 are selected versus Alternative Route 1.

31 **Fiscal Impacts**

32 For New Mexico, fiscal impacts result from direct receipts to the counties in the form of Community
33 Benefits payments from SunZia. The SunZia Project is proposed as a New Mexico Renewable Energy
34 Transmission Authority Project and exempt from Property Tax and GRT in New Mexico. Community
35 Benefits are calculated on a per mile basis at a rate of \$20,000/mile and paid to each county in which the
36 SunZia transmission lines are planned to be located.

37 ***Alternative Route 1:***

38 With respect to fiscal impacts associated with the sub-route alternatives for this Alternative Route 1, the
39 difference with respect to the minimum and maximum impacts is about \$30,000.

1 **Combined Alternative Routes 2 and 3:**

2 Turning to estimated fiscal impacts associated with the sub-route alternatives for Alternative Route 2 and
3 Alternative Route 3, the difference with respect to the minimum and maximum fiscal impacts is estimated
4 to be approximately \$100,000.

5 **5.1.2 Component 4 – SunZia West Substation**

6 The addition of the SunZia West Substation Station would generate new economic and fiscal benefits to
7 Pinal County and Arizona. The construction of the substation would take place during the construction of
8 SunZia Phase 1 and to take place during an assumed 42-month construction cycle. Operations for the
9 substation are assumed to commence prior to the end of 2025 and analysis of O&M impacts extends
10 through 2059. Table 11-14 summarizes the economic and fiscal impacts from construction and O&M of
11 the SunZia West Substation.

12 Table R11-13 **COMPONENT 4 – SUNZIA WEST SUBSTATION'S ECONOMIC AND FISCAL**
13 **IMPACTS**

PHASE	ECONOMIC						FISCAL		
	Jobs*	Wages & Salaries**	Per Diem ***	Direct Impact	Direct & Indirect Impacts	Direct, Indirect, & Induced Impacts	County Collected TPT	State Collected TPT	Property Tax****
Construction	8	\$2.42	\$4.41	\$65.00	\$80.30	\$101.68	\$0.03	\$0.03	\$10.11
O&M Total	3	\$21.24	N/A	\$59.32	\$85.11	\$99.01	N/A	N/A	\$20.21
Total	0	\$23.66	\$4.41	\$124.32	\$165.41	\$200.69	\$0.03	\$0.03	\$30.32

14 * Jobs reported are total man years and report only those estimated to be in sourced in county. Construction jobs reports total man-year jobs and would create
15 approximately two full-time jobs per year. Operations and Maintenance jobs are full-time annual. Meaning for the life of the operations the substation would
16 employ three full-time employees involved in O&M.
17 **Included in Direct Economic Impact.
18 ***Includes Per Diem for all construction workers.
19 ****Estimated at 75% of taxable value.

20 **Expenditures**

21 Estimated construction and O&M expenditures generate new direct economic activity of \$124 million, of
22 that total \$65 million is from construction spending and be realized in a rather short period of time — 42
23 months from the commencement of construction. O&M expenditures are estimated as annual impacts
24 over the life of the analysis period, starting with the first full year of operations in 2026 to 2060, and total
25 \$59 million. When total economic impacts are considered, activities associated with construction generate
26 a \$101 million in new economic activity and O&M activities generate \$99 million for the local and state
27 economies.

28 **Employment and Income**

29 During the 42-month construction of Component 4 it is estimated that eight full-time jobs would be
30 created and drawn from the labor pools of the Arizona study area and Maricopa County, over the life of
31 construction or more than two full-time (annual) jobs per year. The laborers would earn wages of \$2.4
32 million in that 42-month period and all construction workers, locally and non-locally sourced, would earn

1 per diem of \$4.4 million. It is assumed that workers would spend the per diem locally on lodging, gas,
2 and at retail establishments.

3 The O&M of the SunZia West Substation would employ three full-time employees engaged in O&M
4 activities for the life of the facility analysis. These jobs are assumed to be sourced from within the state.
5 Over the life of the operations, employees would earn wages of \$21.2 million.

6 **Fiscal Impacts**

7 During the construction of the substation, tax liabilities are estimated total \$30.4 million in new revenues
8 for state and local governments. Property tax is the largest contributor to these liabilities totaling \$30.2
9 million with \$10.1 million generated during the construction period. Property tax liabilities for the
10 analysis period of O&M for the substation are estimated to total approximately \$20.2 million.

11 **5.2 Environmental Justice**

12 This section describes the current Environmental Justice populations identified within a three-mile radius
13 of Components 3 and 4. **Report 4 – Land Use and Recreation** provides detail of land use and structures
14 in proximity to Components 3 and 4.

15 In addition to describing current Environmental Justice populations, the tracts identifying Environmental
16 Justice populations included in the 2013 Final EIS was compared to those census tracts identified in this
17 2021 analysis as having Environmental Justice populations. The data used in the 2013 Final EIS included
18 the United States Census Bureau’s American Community Survey.¹⁹

19 **5.2.1 Change in Identified Tracts with Environmental Justice Populations -** 20 **2013 Final EIS to 2021 Analysis**

21 This section addressed changes in census tracts identified with possibly affected Environmental Justice
22 populations for Segments 1, 2, and 3, and Components 3 and 4. The possibly affected tracts with
23 Environmental Justice populations above prescribed thresholds are addressed below. As previously
24 mentioned, Components 1 and 2 have not been significantly modified from the 2013 Final EIS and would
25 not be addressed in this section.

26 Three tracts identified in this 2021 analysis for Segments 1, 2, and 3 Environmental Justice analysis were
27 not identified in the 2013 Final EIS. These tracts identified in the 2021 analysis include tract 9615 in
28 Graham county where Segment 1 transitions to Segment 2 (20.7 percent of residents are low-income, and
29 50.2 percent identify as Hispanic or Latino and Other minorities). Segment 1 also includes Pinal County
30 tract 24 where over 77 percent of the population identifies as Hispanic or Latino and 24.5 percent of its
31 population are living in poverty. In Pinal County, tract 20 in the 2013 Final EIS are now tracts 20.01 and
32 20.02 are not considered to be newly identified in the 2021 analysis. In New Mexico, Sierra County tract
33 9624.02 in Segment 3 reported 22.1 percent of its residents are low-income. The identified changes in
34 tracts with Environmental Justice populations for Segments 1, 2, and 3 are not significantly different from
35 the 2013 Final EIS, the 2013 analysis remains pertinent and Environmental Justice issues are not analyzed
36 further (except with respect to Component 4).

¹⁹ Detailed information on that data can be found in Chapter 3 page 3-333 of the 2013 Final EIS.

1 For Component 3, four tracts were identified in the 2013 Final EIS that are not identified in this 2021
 2 analysis. They include tracts 9635, 9634 in Torrance County, tract 9700 in Hidalgo County and in Lincoln
 3 County tract 9602. These counties were associated with the 2015 Selected Route and are no longer in the
 4 proximity of the area of analysis.

5 Five tracts identified in this 2021 analysis which surpass defined Environmental Justice population
 6 thresholds were not identified in the 2013 Final EIS. Three of these tracts are in Valencia County (tracts
 7 9709.02, 9711 and 9713), where Segment 4 alternative routes are planned, but these tracts are rural and
 8 sparsely populated. Specifically, these three census tracts comprise an area of 688 square miles, have a
 9 population of 4,873, and a population density of 7.1 per square mile. The only population center located
 10 in these tracts is the census designated community of Jarales, which is more than three miles from the
 11 reroutes. Table R11-15 lists the tracts identified with possibly affected Environmental Justice populations
 12 from the 2013 Final EIS and the 2021 analysis.

13 Table R11-14 **TRACTS IDENTIFIED WITH POSSIBLY AFFECTED ENVIRONMENTAL JUSTICE**
 14 **POPULATIONS – 2013 FINAL EIS AND 2021 ANALYSIS**

SEGMENTS FOR NEWLY IDENTIFIED ENVIRONMENTAL JUSTICE TRACTS	STATE	COUNTY	TRACT	2013 FINAL EIS	2021 ANALYSIS	2021 ANALYSIS % HISPANIC OR LATINO	2021 ANALYSIS % OTHER MINORITIES	2021 RATE OF LOW INCOME RESIDENTS
	AZ	Cochise	2	x				
	AZ	Graham	9616	x	x	42.4%	8.8%	18.7%
Segments 1 and 2	AZ	Graham	9615		x	28.2%	4.5%	20.7%
	AZ	Graham	9912	x				
	AZ	Greenlee	9603	x	x	34.4%	2.3%	20.0%
Segment 1	AZ	Pinal	24		x	77.7%	12.8%	24.5%
	AZ	Pinal	7	x	x	57.2%	6.3%	20.8%
	AZ	Pinal	6.01	x				
	AZ	Pinal	12	x	x	28.0%	4.0%	20.2%
	AZ	Pinal	20	x				
	AZ	Pinal	20.01		x	57.0%	21.2%	17.7%
	AZ	Pinal	20.02		x	47.0%	10.0%	32.5%
Segment 4	NM	Cibola	9415		x	4.9%	0.5%	18.3%
	NM	Grant	9648	x	x	62.3%	4.3%	14.3%
	NM	Hidalgo	9700	x				
	NM	Lincoln	9602	x				
	NM	Luna	5	x	x	63.0%	3.0%	33.4%
Segment 3	NM	Sierra	9624.02		x	41.6%	1.3%	22.1%
Segment 4	NM	Socorro	9400		x	0.2%	0.0%	80.1%
	NM	Socorro	9781	x	x	66.6%	1.5%	23.9%
	NM	Socorro	9783.01	x	x	55.5%	5.0%	33.5%
	NM	Socorro	9783.02	x	x	31.4%	1.7%	26.3%
	NM	Socorro	9783.03	x	x	61.1%	6.8%	24.7%
	NM	Torrance	9637	x	x	43.4%	5.3%	25.4%
	NM	Torrance	9634	x				
	NM	Torrance	9635	x				

SEGMENTS FOR NEWLY IDENTIFIED ENVIRONMENTAL JUSTICE TRACTS	STATE	COUNTY	TRACT	2013 FINAL EIS	2021 ANALYSIS	2021 ANALYSIS % HISPANIC OR LATINO	2021 ANALYSIS % OTHER MINORITIES	2021 RATE OF LOW INCOME RESIDENTS
Segment 4	NM	Valencia	9709.02		x	67.0%	8.8%	14.4%
Segment 4	NM	Valencia	9711		x	62.6%	9.2%	25.7%
Segment 4	NM	Valencia	9713		x	48.7%	14.9%	15.8%

NOTES: AZ = Arizona; NM = New Mexico.

5.2.2 Component 3 – Segment 4 Reroute

Segment 4 Alternative Routes to cross Torrance, Valencia, and Socorro counties. No property condemnation is prescribed for any tracts in Segment 4. Newly identified tracts in the 2021 analysis to be within one mile and tracts between one and three miles for the three Segment 4 alternative routes are presented in this section with Environmental Justice populations.

Three of the newly identified tracts, in the 2021 analysis, are in Valencia County (tracts 9709.02, 9711 and 9713). There are a few residences on agricultural land where the reroutes would cross the Rio Grande in Valencia County tract 9709.02. Residents in these tracts are expected to experience low impacts from the construction and operations of the SunZia transmission lines associated with Segment 4.

Alternative Route 1 and Sub-Routes

Previously identified tracts in the 2013 Final EIS include Socorro County tract 9781 and Torrance County tract 9637.

Alternative Route 1 Sub-Routes 1A-1 and 1A-4 cross the southern border of three Valencia County tracts including, tracts 9709.02, 9711 and 9713. Tract 9711 has low-income residents over the state threshold, all three Valencia County tracts have minority populations totaling well over 50 percent of total population (Table R11-16).

Table R11-15 **SEGMENT 4 ALTERNATIVE ROUTE 1 SUB-ROUTES 1A-1 AND 1A-4¹ WITHIN 1.0 MILE OF VALENCIA COUNTY TRACTS OF THE ROUTE**

COUNTY	CENSUS TRACT	H	M	L	TOTAL POPULATION	HISPANIC POPULATION	HISPANIC % OF TOTAL	OTHER MINORITY	OTHER % OF TOTAL	LOW INCOME POPULATION	LOW INCOME % OF TOTAL
Valencia	9709.2	-	-	X	1,916	1,283	67.0%	168	8.8%	276	14.4%
Valencia	9711	-	-	X	1,320	826	62.6%	121	9.2%	339	25.7%
Valencia	9713	-	-	X	1,662	809	48.7%	247	14.9%	263	15.8%

NOTES:

H = High Impact; M = Moderate Impact; L = Low Impact.

Additional tracts with Environmental Justice populations possibly affected in tracts that are between one and three miles of Alternative Route 1 include all tracts within one mile and tract 9415 in Cibola County that is to the northwest of the Alternative Route 1 and tract 9400 in Socorro County, both of which are rural.

1 Alternative Route 1 Sub-Route 1A-2 includes newly identified Valencia County tract 9711 within one
2 mile. Sub-Route 1A-3 does not include any newly identified tracts. Sub-Routes 1A-2 and 1A-3 have the
3 same affected tracts as 1A-1 and 1A-4 between one and three miles from Alternative Route 1.

4 **Alternative Route 2 and Sub-Routes**

5 Newly identified tracts in the 2021 analysis within one mile of Alternative Route 2 and associated sub-
6 routes include:

- 7 • Sub-Routes 2A-1 and 2A-4 include the three Valencia County tracts (tracts 9709.02, 9711, and
8 9713). Previously identified tracts in the 2013 Final EIS include Socorro County tracts 9781,
9 9782 and Torrance County tract 9637.
- 10 • Sub-Route 2A-2 would affect Valencia County tract 9711.
- 11 • Sub-Route 2A-3 has no newly identified tracts with Environmental Justice populations.

12 Newly identified tracts with Environmental Justice populations between one and three miles from the
13 Alternative Route 2 with sub-routes include:

- 14 • Sub-Route 2A-1 and 2A-4 could affect populations in tracts 9711 and 9713 in Valencia County.
- 15 • Sub-Route 2A-2 and 2A-3 could affect tract 9711 in Valencia County.

16 **Alternative Route 3 and Sub-Routes**

17 Newly identified tracts in the 2020 analysis for Segment 4 Alternative Route 3 are the same for within
18 one mile and between one and three miles from Alternative Route 3 and include:

- 19 • Sub-Routes 3A-1 and 3B-1, and 3A-1 and 3B-2 could affect Valencia County tracts 9711 and
20 9713.
- 21 • Sub-Routes 3A-2 and 3B1, and 3A-2 and 3B-2, and could affect tract 9711.
- 22 • Sub-Routes 3A-3 and 3B-1, and 3A-3 and 3B-2 no tracts.
- 23 • Sub-Routes 3A-4 and 3B-1, and 3A-4 and 3B-2 could affect all three Valencia County tracts
24 (tracts 9709.02, 9711 and 9713).

25 Previously identified tracts in the 2013 Final EIS include Socorro County tracts 9781, 9783.01 and
26 Torrance County tract 9637. Valencia County includes the same three tracts as Sub-Routes 3A-1 and
27 3B-1, 3A-1 and 3B-2.

28 **5.2.3 Component 4 – SunZia West Substation**

29 SunZia West Substation does not affect any tracts with Environmental Justice populations.

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1 **6.0 REFERENCES**

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1 **APPENDIX R11-A 2021 SUNZIA EFI REPORT**

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