



APPENDIX G

SOCIOECONOMICS



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G.1 ANALYSIS METHODOLOGY

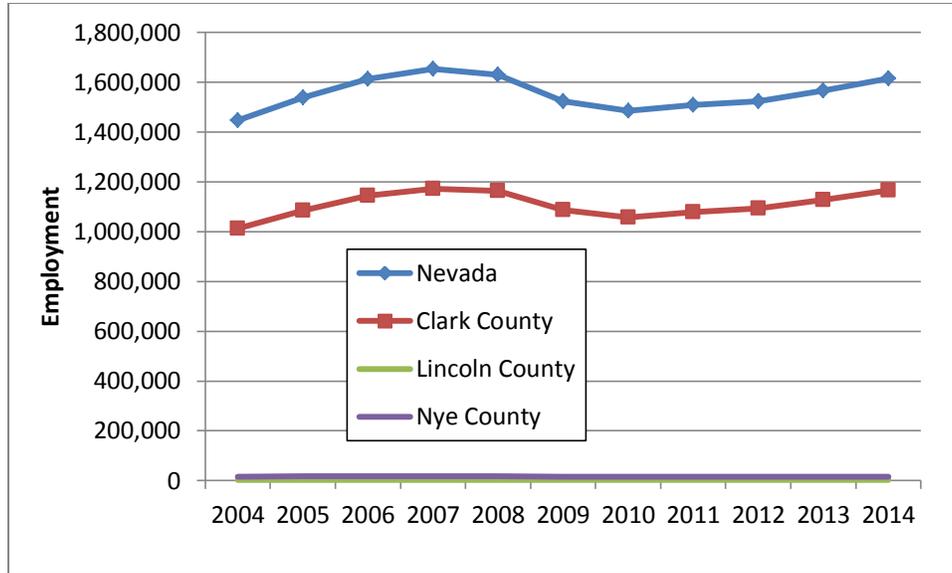
The primary goal of the Economic Impact Assessment (EIA) is to place an economic value on the Proposed Action. A commonly-used technique for conducting EIA is through the application of input-output (I-O) models. I-O models track the flow of income through the economy to measure the impacts on different industries. The I-O model estimates the change in expenditures and in employment that result from a proposed change in economic activity (such as not extending the NTTR land withdrawal) and then applies the changes in employment and expenditures to estimate total changes for each industry.

The Nellis AFB EIA model takes into effect that purchases from one industry may result in that industry purchasing services, parts, or other inputs from a different industry. In estimating these ripple effects from the change in NTTR activities on the region, the I-O models incorporate multipliers that reflect the total economic impact changes resulting from the change in the direct purchases and expenditures from the changes in activities at NTTR. The multipliers used in the EIA model determine the amount that each industrial category spends within each industrial category. This relationship between all industries is referred to as an I-O table, which can then be applied to estimate the impacts on other industries when expenditures have changed within the regional economy.

The three types of economic impacts from changes in the utilization of the NTTR can be summarized as:

- **Direct Impacts.** The economic changes in the impacted industry, i.e., the employment, income (payroll) paid and economic output related to the changes in the use of the NTTR and proposed expansion areas.
- **Indirect Impacts.** The changes in the local business sector as a result of the changes in demand from the directly affected industry. In this case, indirect impacts relate to the employment, income, and economic output related to the purchases of goods and services by the activities related to the NTTR and adjacent lands.
- **Induced Impacts.** Changes in employment, income, and economic output related to the changes in spending of the incomes earned through the direct and indirect expenditures.

The EIA for Nellis AFB, Creech AFB, and the NTTR estimates the total impact from its current operations by establishing a baseline that represents the proposed Status Quo alternative (Alternative 1). Using the Status Quo as the baseline allows a comparison of the impact from the changes in economic activity that would potentially result from the proposed action alternatives and the No Action Alternative.



(Note: Nye County and Lincoln County are nearly identical.)

Figure G-1. Total Employment in Nevada, Clark County, Lincoln County and Nye County, 2004–2014

Source: (U.S. Bureau of Economic Analysis, 2016)

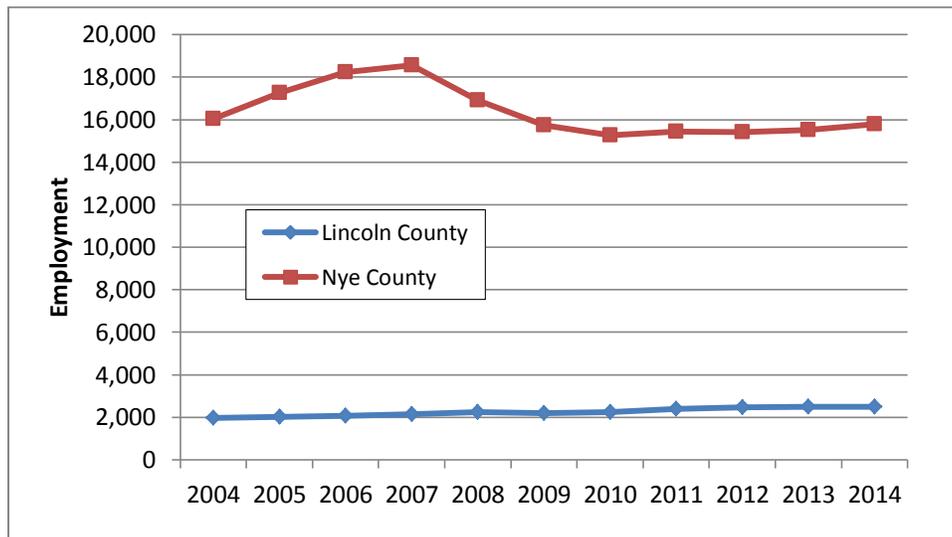


Figure G-2. Total Employment in Lincoln County and Nye County, 2004–2014

Source: (U.S. Bureau of Economic Analysis, 2016)

Table G-1. Employment by Sector in Nevada, Clark County, Lincoln County, and Nye County, 2014

Employment	Nevada		Clark County		Lincoln County		Nye County	
	Employed	% of Total	Employed	% of Total	Employed	% of Total	Employed	% of Total
Total Jobs	1,614,814	100	1,166,051	100	2,494	100	15,784	100
Farm	5,759	0.36	464	0.04	257	10.30	211	1.34
Nonfarm	1,609,055	99.64	1,165,587	99.96	2,237	89.70	15,573	98.66
Private	1,440,875	89.23	1,054,355	90.42	1,613	64.68	13,701	86.80
Forestry, fishing, and related activities	1,696	0.11	356	0.03	(D)	NA	94	0.60
Mining, oil and gas extraction	20,924	1.30	3,000	0.26	181	7.26	1,244	7.88
Utilities	4,108	0.25	2,670	0.23	(D)	NA	140	0.89
Construction	79,815	4.94	56,088	4.81	(D)	NA	723	4.58
Manufacturing	47,057	2.91	24,280	2.08	(D)	NA	232	1.47
Wholesale trade	39,006	2.42	25,581	2.19	(D)	NA	124	0.79
Retail trade	168,282	10.42	122,746	10.53	238	9.54	1,831	11.60
Transportation and warehousing	62,696	3.88	42,455	3.64	53	2.13	232	1.47
Information	19,387	1.20	14,936	1.28	(D)	NA	137	0.87
Finance and insurance	87,375	5.41	64,422	5.52	146	5.85	464	2.94
Real estate and rental and leasing	101,906	6.31	75,792	6.50	80	3.21	1,018	6.45
Professional, scientific, and technical services	86,901	5.38	61,142	5.24	278	11.15	1,643	10.41
Management of companies and enterprises	24,574	1.52	19,199	1.65	(D)	NA	167	1.06
Administrative and support and waste management and remediation services	111,203	6.89	85,084	7.30	(D)	NA	1,043	6.61
Educational services	15,371	0.95	10,775	0.92	(D)	NA	237	1.50
Health care and social assistance	122,764	7.60	87,008	7.46	(D)	NA	1,032	6.54
Arts, entertainment, and recreation	51,636	3.20	36,930	3.17	(D)	NA	676	4.28
Accommodation and food services	316,355	19.59	265,510	22.77	(D)	NA	1,602	10.15
Other services (except public administration)	79,819	4.94	56,381	4.84	(D)	NA	1,062	6.73

Table G-1. Employment by Sector in Nevada, Clark County, Lincoln County, and Nye County, 2014

Employment	Nevada		Clark County		Lincoln County		Nye County	
	Employed	% of Total	Employed	% of Total	Employed	% of Total	Employed	% of Total
Government	168,180	10.41	111,232	9.54	624	25.02	1,872	11.86
Federal, civilian	18,121	1.12	12,366	1.06	40	1.60	118	0.75
Military	18,550	1.15	15,709	1.35	14	0.56	121	0.77
State and local	131,509	8.14	83,157	7.13	570	22.85	1,633	10.35
State government	35,165	2.18	16,838	1.44	140	5.61	166	1.05
Local government	96,344	5.97	66,319	5.69	430	17.24	1,467	9.29

(D) - Not shown to avoid disclosure of confidential information. Totals include estimates for this item. NA - Data not available
Source: (U.S. Bureau of Economic Analysis, 2016)

Table G-2. Farm Statistics, State of Nevada and Affected Counties, 2012

Category	State of Nevada	Clark County	Lincoln County	Nye County
Total farms	4,137	252	185	198
Land in farms (acres)	5,913,761	15,620	(D)	65,116
Average farm size (acres)	1,429	62	(D)	329
Total cropland (acres)	756,852	4,426	22,380	26,354
Harvested cropland (acres)	582,494	2,690	20,299	15,329
Irrigated land (acres)	687,790	3,714	22,007	20,017
Market Value of Agricultural Products Sold:				
Total sales (thousands)	764,144	6,825	23,215	70,495
Average per farm (\$)	184,710	27,083	125,486	356,035
Estimated market value of land and buildings:				
Average per farm (\$)	1,324,673	347,791	1,074,735	703,429
Average per acre (\$)	927	5,611	2,906	2,139
Estimated market value of all machinery and equipment (\$ thousands)	556,947	16,714	26,876	25,189

(D) - Not shown to avoid disclosure of confidential information. Totals include estimates for this item.
Source: (U.S. Department of Agriculture, 2014)

Table G-3. Recreational Use of BLM-Administered Public Lands, U.S. Total, 2014

Activities	Visitor Days (Thousands)	Percent of Total
Land-Based Activities		
Camping and Picnicking	24,364	38.9
Non-Motorized Travel	6,987	11.2
Off-Highway Travel	6,566	10.5
Hunting	5,845	9.3
Specialized Sports, Events, and Activities	3,880	6.2
Viewing Public Land Resources	3,845	6.1
Driving for Pleasure	2,600	4.2
Interpretation and Education	1,618	2.6

Table G-3. Recreational Use of BLM-Administered Public Lands, U.S. Total, 2014

Activities	Visitor Days (Thousands)	Percent of Total
Water-Based Activities		
Boating/Row/Float/Paddle	2,605	4.2
Fishing	2,135	3.4
Boating/Motorized	1,134	1.8
Swimming and Other Water Activities	546	0.9
Snow and Ice-Based Activities		
Other Winter Activities	289	0.5
Snowmobile and Motorized Travel	235	0.4
Total	62,649	100.0

Source: (ECONorthwest, 2016)

Table G-4. Land Ownership Clark County, Lincoln County, Nye County, and Nevada 2012

Ownership	Clark County	Lincoln County	Nye County	County Total	Nevada
Bureau of Indian Affairs	80,687	0	10,152	90,839	1,005,024
Bureau of Land Management	2,658,717	5,579,994	6,551,860	14,790,571	47,302,951
Bureau of Reclamation	43,229	0	0	43,229	468,634
County	20,302	0	0	20,302	20,302
Department of Defense	391,410	778,915	1,844,321	3,014,646	3,370,301
Department of Energy	4,313	0	874,563	878,876	878,876
Fish and Wildlife Service	280,052	29,349	1,961,652	2,271,053	5,756,228
Forest Service	515,375	270,917	30,730	817,022	1,512,542
National Park Service	568,515	0	106,674	675,189	755,836
Nevada State	46,029	0	9,548	55,577	106,716
Regional Park	0	0	0	0	16,773
Private	533,633	142,952	250,696	927,281	9,214,549
Total	5,142,262	6,802,127	11,640,196	23,584,585	70,408,733

Source: (Bureau of Land Management, 2012)

Table G-5. Population in the ROI

Location	2000	2010	2015	Annual Growth Rate (2000-2015)
Clark County	1,375,765	1,951,269	2,114,801	2.9%
Lincoln County	4,165	5,345	5,036	1.3%
Nye County	32,485	43,946	47,319	2.5%
TOTAL ROI	1,412,415	2,000,560	2,162,314	2.9%
State of Nevada	1,998,257	2,700,551	2,891,845	2.5%

Source(s): USCB 2000; 2016
ROI = Region of Influence

Table G-6. Housing in the ROI

Location	Total Housing Units	Occupied Housing Units	Vacant Housing Units
Clark County	851,131	715,415	135,716
Lincoln County	2,790	1,916	874
Nye County	22,051	17,803	4,248
TOTAL ROI	875,972	735,134	140,838
State of Nevada	1,185,232	1,005,958	179,274

Source(s): USCB 2014b
ROI = Region of Influence

Table G-7. Public School District Information for the ROI, 2015-2016

District	Total Schools in District	Total Enrollment (# of Students)	Student-Teacher Ratio (All Schools)
Clark County School District	357	319,712	22:1
Lincoln County School District	9	1,006	15:1
Nye County School District	22	5,071	22:1

Source: NV DOE 2016a; 2016b

Table G-8. Law Enforcement in the ROI, 2008

Location	Total Agencies	Total Personnel		Total Sworn Officers	
	#	#	Per 100,000 Residents	#	Per 100,000 Residents
State and Local Law Enforcement Agencies and Full-Time Employees					
Nevada	76	10,097	386	6,643	254
United States	17,985	1,133,915	373	765,246	251
Local Police Departments and Full-Time Employees					
Nevada	38	6,885	263	4,497	172
United States	12,501	593,013	195	431,063	151
Sheriffs' Offices and Full-Time Employees					
Nevada	16	1,594	61	1,061	41
United States	3,063	353,461	116	182,979	60

Source: BJS 2008

Table G-9. Fire Protection in the ROI

Location	Fire Stations	Support Staff	FTE Firefighters	Volunteers
Clark County	42	39	667	180
Lincoln County	5	6	1	74
Nye County	12	11	61	71
Total ROI	59	56	729	325

Sources: Clark County Government, 2013; Fire Department.Net 2016

Table G-10. Payments in Lieu of Taxes to Clark, Lincoln, and Nye Counties, 2016

County	Federal Acres	Unit Population	2016 Payment to County*	Payment Methodology
Clark County	4,820,547	50,000	\$ 3,369,095*	Population Limited Formula A
Lincoln County	6,411,587	5,000	\$ 874,508*	Population Limited Formula B
Nye County	8,548,257	42,000	\$ 3,108,497*	Formula B

*Payments were prorated to reflect appropriated funding for the year.
Source: (U.S. Department of Interior, 2016)

**Table G-11. Nellis AFB, Creech AFB, and NTTR
Total Economic Impact (Baseline), Fiscal Year 2015**

Economic Activity	Economic Baseline for this EIA
Annual Payroll	\$1,134,733,812
Retirees Payroll	\$735,384,000
Annual Expenditures	\$3,436,073,129
Annual Value of Jobs Created	242,654,680
Total	\$5,548,845,621

Source: (Nellis AFB, 2015)

Table G-12. Annual Indirect/Induced Jobs and Pay, Fiscal Year 2015

Branch of Service	Number of Base Jobs in 2015	Indirect/Induced Jobs Created	New Job Pay (in Millions)
Active Duty Military	9,103	3,732	\$156.6
Reserve/Air National Guard	620	99	\$4.1
Appropriated Fund Civilians	1,005	553	\$23.2
Other Civilians	2,543	1,399	\$58.7
Total	13,271	5,783	\$242.6

Source: (Nellis AFB, 2015)

Table G-13. Land Affected Acreage* by County from Alternatives 3A, 3B, and 3C

Alternative	Clark	Lincoln	Nye	Total
3A	-	-	17,9960	17,960
3B	46,740	-	9,780	57,000
3C	72,649	154,378	-	227,027
Total	119,389	154,378	27,740	301,507

* Approximate acres
Source: (U.S. Air Force, 2016a)

**Table G-14. Reduction in Economic Impact from Not Extending
the NTTR Land Withdrawal, based on Fiscal Year 2015**

Source of Impact	Economic Impact
Annual Payroll	\$138,760,363
Retirees Payroll*	\$0
Annual Expenditures	\$340,374,931
Annual Value of Jobs Created	\$21,693,320
Total	\$500,828,614

*Retirees are assumed not to be impacted by not extending the NTTR land withdrawal.

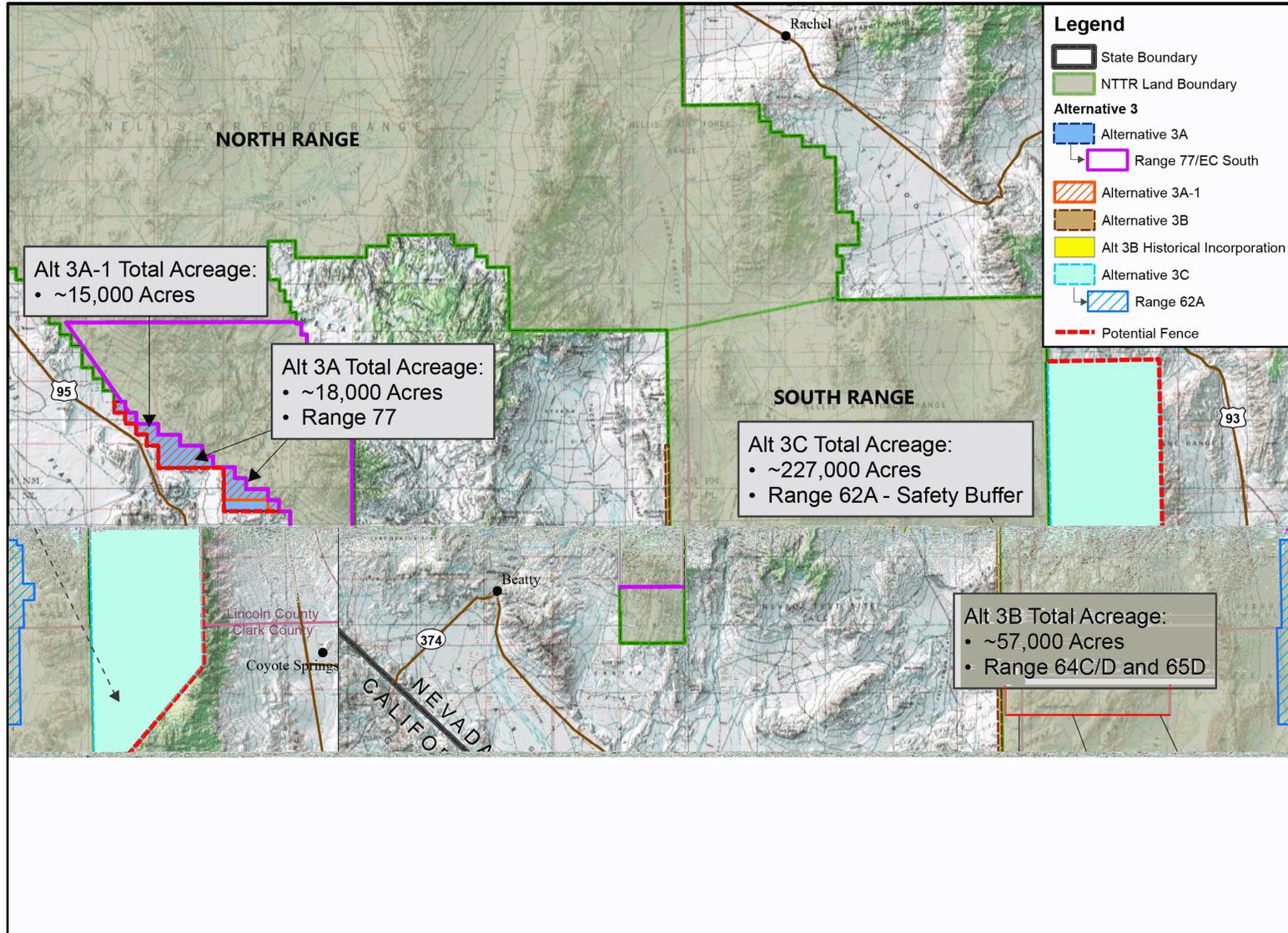


Figure G-3. Land Affected by Alternatives 3A, 3A-1, 3B and 3C

Source: (U.S. Air Force, 2016a)

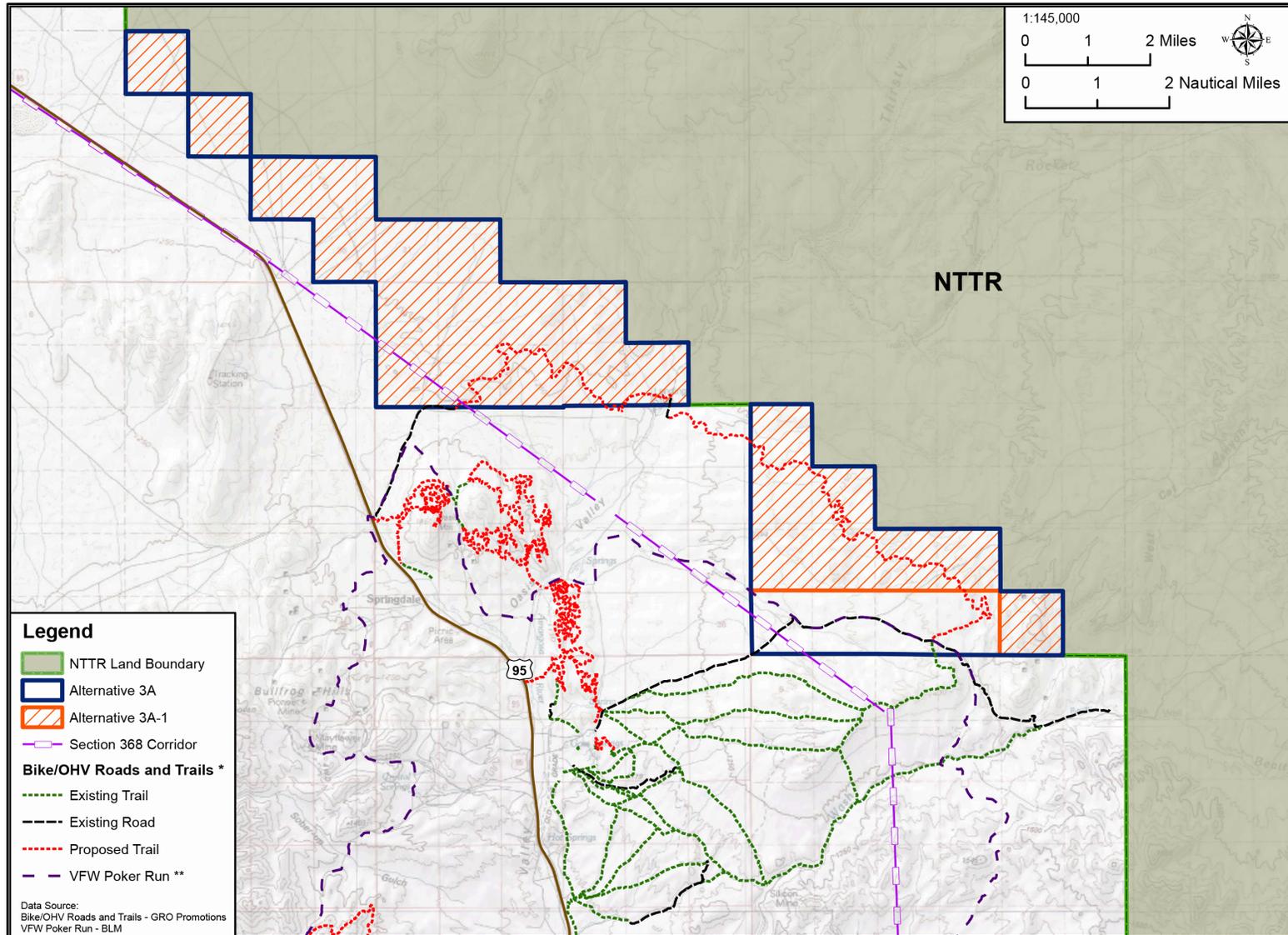


Figure G-4. Land Impacts on Bike Trails from Alternative 3A

Source: (Leidos, Inc., 2017)

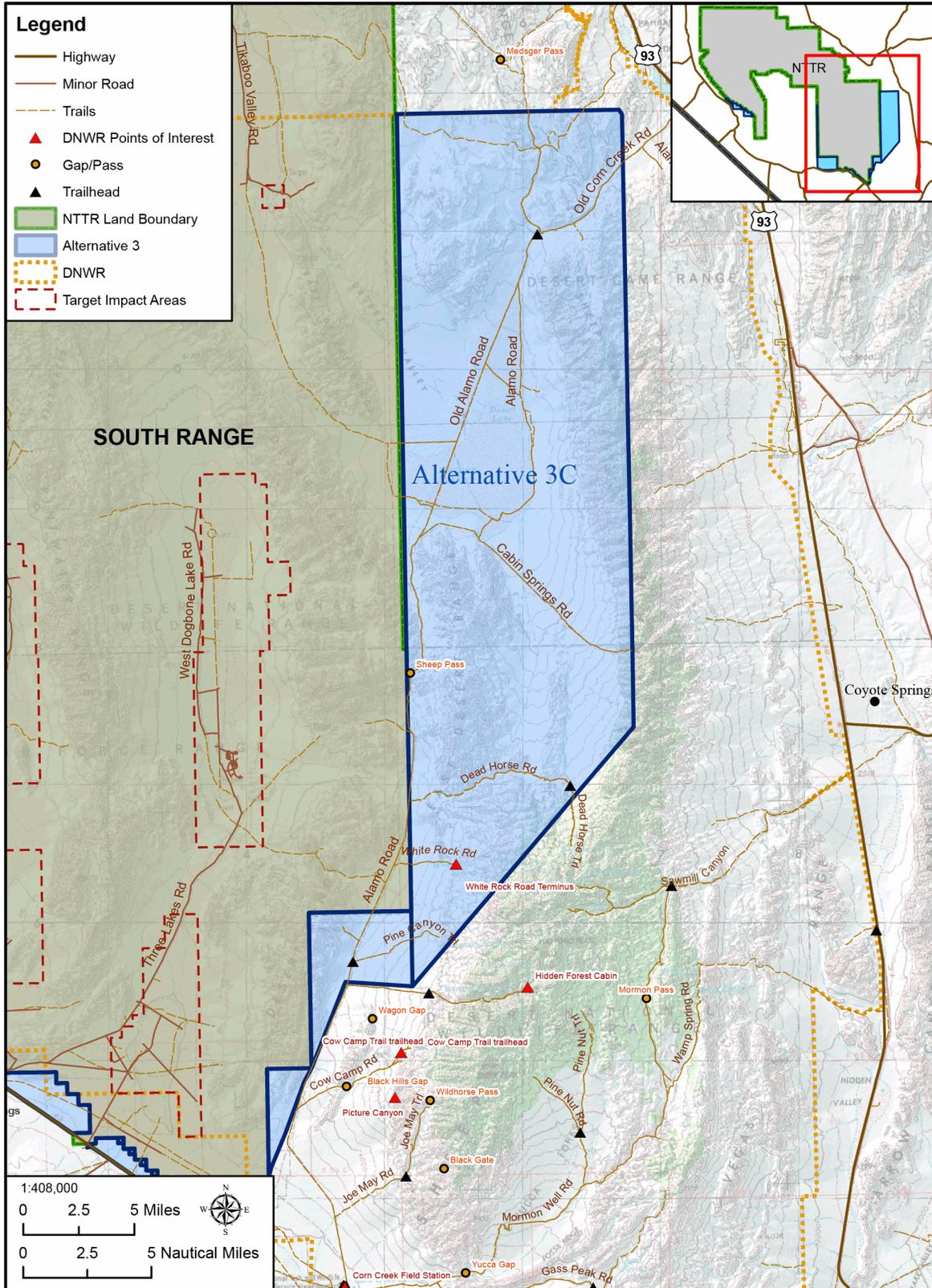


Figure G-5. Land Impacts on Hiking Trails from Alternative 3C

Source: (Leidos, Inc., 2017)

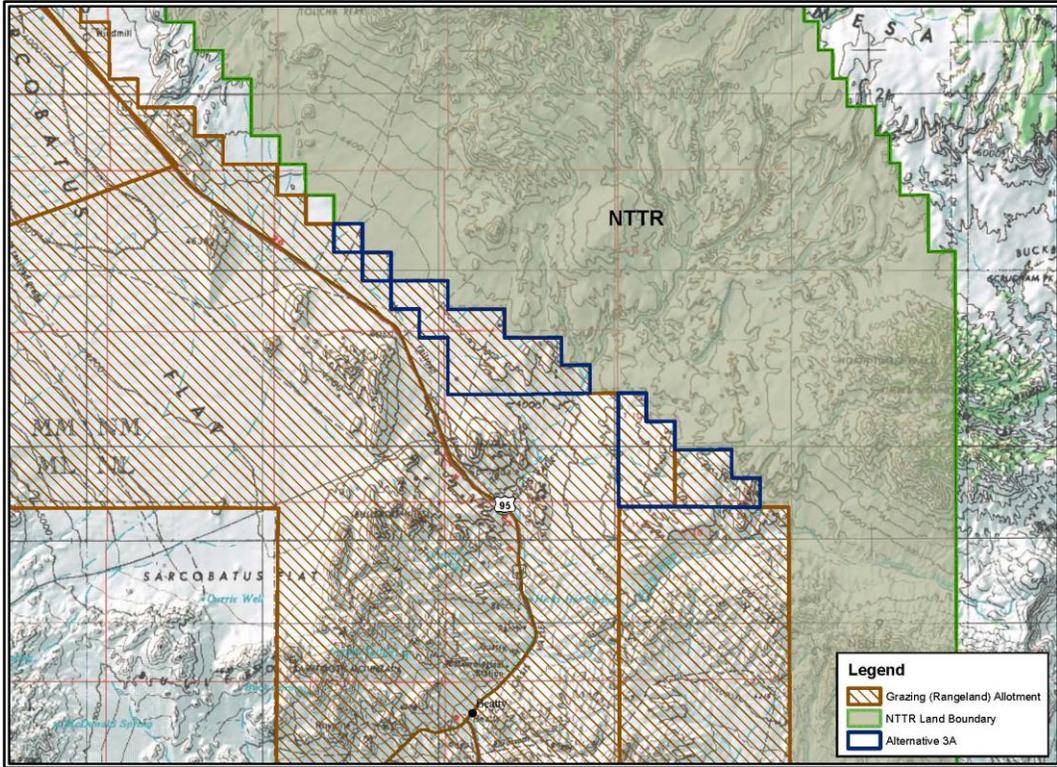


Figure G-6. Rangeland Allotments Impacted by Alternative 3A

Source: (Leidos, Inc., 2017)

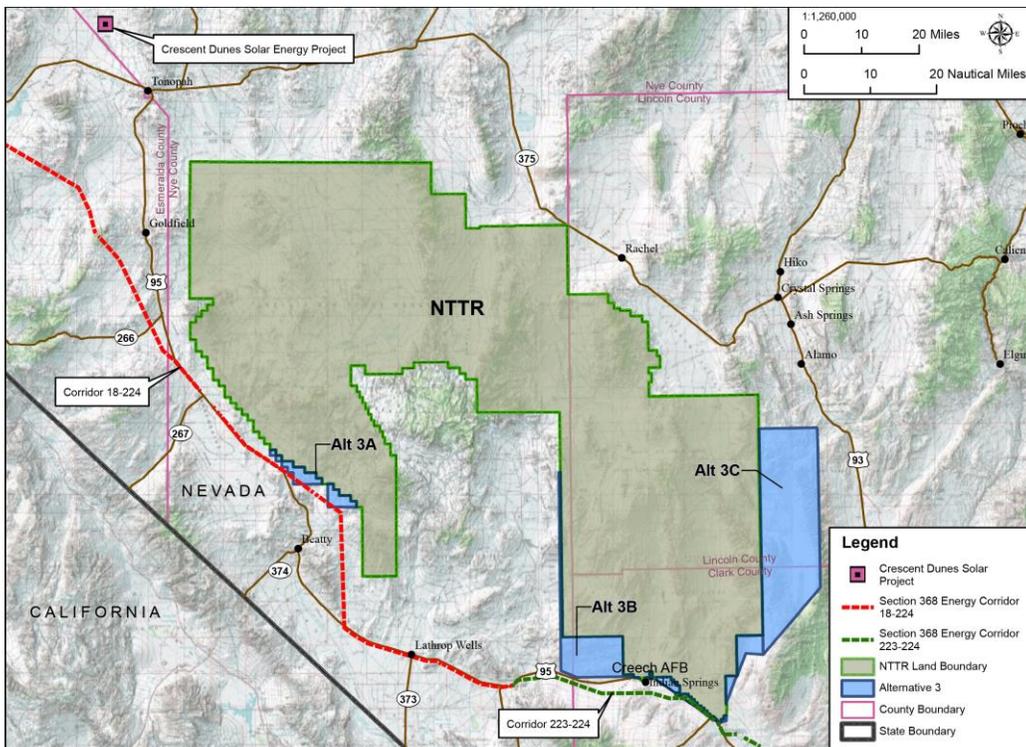


Figure G-7. Section 368 Energy Corridor 18-224

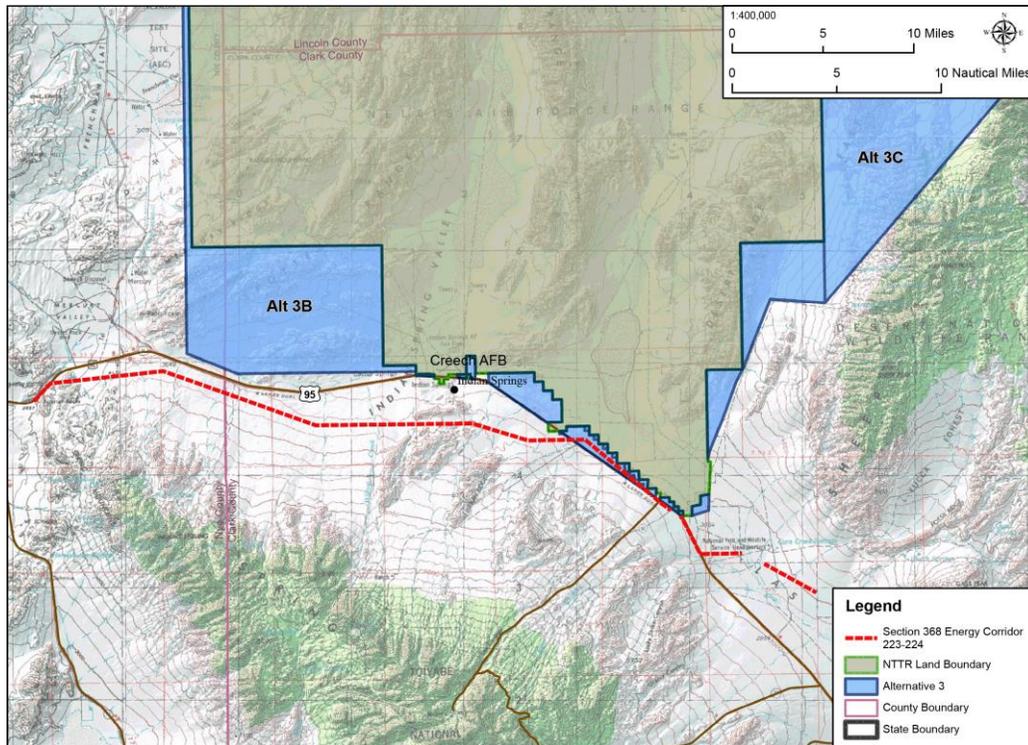


Figure G-8. Section 368 Energy Corridor 223-224

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