1 INTRODUCTION

NorthWestern Energy (the "Project Proponent," or "Proponent") proposes to build and operate a new 500kV transmission line between southwestern Montana and southeastern Idaho. This transmission line's main purposes will be to meet requests for transmission service from customers, and relieve constraints on the high-voltage transmission system in the region. A map of the Project region and alternative routings is shown in Exhibit 1.

The proposed Mountain States 500kV Transmission Intertie (MSTI) project will:

- Respond to customer requests for new transmission capacity.
- Strengthen the integrated transmission network.
- Relieve congestion on the existing facilities identified in the Department of Energy (DOE) study.
- Improve transmission system reliability by creating additional operating flexibility.
- Meet the growing demand for electricity and economic development of the region.
- Provide energy diversification, bi-directional transmission capacity, market competition, and supplier choice to the region.
- Develop positive economic impact along the corridor, increase tax base, create job opportunities, and increase the competitive energy markets in Montana and Idaho.

The proposed MSTI ("the Proposed Project," or "the Project") is subject to both Federal and State legislations governing planning and permitting. Due to governing legislation, an assessment of socioeconomic impacts of the Project was deemed by the Project proponent to be needed.

The technical area of socioeconomics addresses several interrelated areas of interest and concern regarding the MSTI Project. This socioeconomic assessment evaluates the likely short-term and long-term Project-related effects on public services. These include emergency health services, or fire protection, as well as the likely effects on local fiscal conditions and capability of local government to accommodate the needs presented by any population increases caused by the Project. This socioeconomic assessment also evaluates issues of environmental justice, or whether any Project impacts fall disproportionately upon low-income or minority populations.

1.1 LAWS, ORDINANCES, REGULATIONS, AND STANDARDS

1.1.1 FEDERAL

National Energy Policy Act

The National Energy Policy Act enacted by Congress in 2005 took important steps to strengthen the nation's electric power grid. Congress also authorized mandatory reliability and interconnection standards, and directed the Department of Energy (DOE) to conduct a nationwide study of electric transmission congestion of current systems, which was completed in August 2006.
The study identified a broad range of critical geographic areas that face potentially serious challenges for ensuring reliable and cost effective electricity delivery. One of the congestion areas identified in the study was the Montana, Idaho and Northwest Region.

National Environmental Policy Act

The Proposed Project may be approved only after a determination of whether an action is a major Federal action significantly affecting the quality of the human environment, as required by the National Environmental Policy Act (NEPA). Project options consist of the Proposed Action as described, which includes environmental protection measures to avoid or mitigate effects of the Proposed Project, and two Alternatives.

Should a NEPA analysis be conducted, a formal analysis of a No Action Alternative would also be conducted. In effect, the No Action Alternative would be no different from the Setting described herein (Section 2.0) because under a No Alternative Action, other methods to achieve the Projects objectives would likely be available.

Environmental Justice

Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," focuses federal attention on the environmental and human conditions of minority populations and calls on agencies to develop strategies to achieve environmental justice as part of this mission. The U.S. Environmental Protection Agency (USEPA) subsequently developed guidelines to assist all federal agencies to develop strategies to address the issue (USEPA, 1996). Federal agencies are required to address disproportionately high and adverse human health or environmental effects of their programs, policies and activities on low-income populations and minority populations.

1.1.2 STATE

Montana Major Facilities Siting Act

Montana Code Title 75, Chapter 20 (Major Facility Siting) established the Facility Siting Program within the Montana Department of Environmental Quality (MDEQ). In general, electrical transmission lines of 230 kV or more and 10 miles or more in length are covered under MFSA.

Of particular relevance is Title 75, Chapter 20, Part 102, abstracted below:

75-20-102. Policy and legislative findings**.** (1) The legislature, mindful of its constitutional obligations under Article II, section 3, and Article IX of the Montana constitution, has enacted the Montana Major Facility Siting Act. It is the legislature's intent that the requirements of this chapter provide adequate remedies for the protection of the environmental life support system from degradation and provide adequate remedies to prevent unreasonable depletion and degradation of natural resources.

……

(4) The legislature finds that the construction of additional electric transmission facilities, pipeline facilities, or geothermal facilities may be necessary to meet the increasing need for electricity, energy, and other products. Therefore, it is necessary to ensure that the location, construction, and operation of electric transmission facilities, pipeline facilities, or geothermal facilities are in compliance with state law and that an electric transmission facility, pipeline facility, or geothermal facility may not be constructed or operated within this state without a certificate of compliance acquired pursuant to this chapter.

(5) The legislature also finds that it is the purpose of this chapter to:

(a) ensure protection of the state's environmental resources, including but not limited to air, water, animals, plants, and soils;

(b) ensure consideration of socioeconomic impacts;
(c) provide citizens with the opportunity to participate in facility siting decisions; and
(d) establish a coordinated and efficient method for the processing of all authorizations required for regulated facilities under this chapter.

State of Idaho

No equivalent legislation corresponding to the MFSA exists in Idaho, and the Montana MFSA does not require impacts occurring in other states to be considered. However, should the Project be subject to impact assessment pursuant to NEPA, impacts in Idaho would be addressed.

Furthermore, localities in Idaho maintain planning, zoning and permitting powers that could affect the ability of the Project to be implemented should local jurisdictions find the Project to be in violation of their laws.

For completeness, this impact assessment includes a treatment of impacts in Idaho at the same level of detail as for Montana.

1.2 SUMMARY OF FINDINGS

This document:

- Addresses the potentially significant adverse socioeconomic impacts that may be associated with the planning, construction, or operation of the Project;
- addresses Environmental Justice issues; and
- as needed, discusses appropriate and feasible mitigation measures and alternatives that may be adopted to significantly reduce or avoid these impacts.

In summary, no significant adverse socioeconomic impacts are identified. The primary reason for this finding is that the Proposed Project would require a relatively small work force to construct and operate. With a small and temporary construction worker requirement, in-migration to the Study Area (southwest Montana and eastern Idaho) would be extremely small, placing minimal demands on area housing and public services.

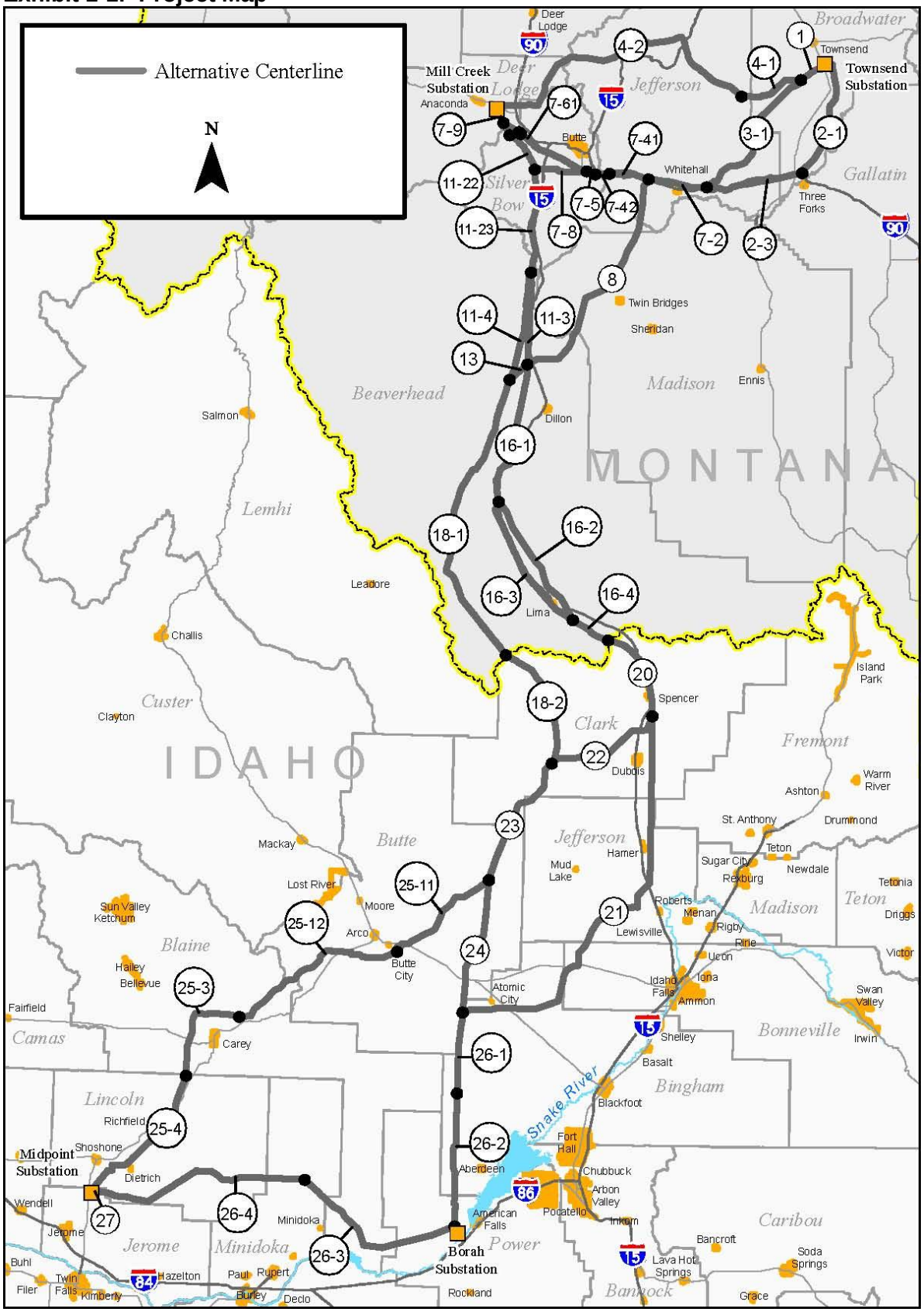
However, small beneficial impacts in the form of increased property tax revenues for many jurisdictions through which Project Alternatives would pass are expected to occur.

Because of a lack of significant adverse socioeconomic impacts, no socioeconomic mitigation measures are deemed to be required.

1.3 SETTING

The Study Area for this socioeconomic analysis was defined through examination of the Project Alternatives potential effects, in concert with the existing socioeconomic fabric of the area. The Proposed Project is located in southwest Montana and eastern Idaho, as shown in Exhibit 1-1. The Idaho/Montana Border of the Study Area is formed by the Continental Divide, which in addition to forming a political boundary, has historically been a physical boundary affecting social interaction between the populaces residing on either side.

Exhibit 1-1: Project Map



With improved road transportation, the Continental Divide became a less important feature segregating the socioeconomies of its two sides. Thus, a Study Area incorporating counties both in Idaho and Montana counties is appropriate. Because of the differences in the two States' regulatory frameworks (particularly the Montana MFSA, which has no counterpart in Idaho), this analysis reflects the Study Areas Idaho portion, and its Montana portion separately. In addition, since the Project is likely to be constructed using essentially separate crews on either side, impacts can be viewed as those arising from two related but separate projects. Therefore, this analysis segments the Study Area's Montana and Idaho portions, with occasional summary information for the combined areas.

In identifying the Study Area, two considerations prevailed. First, since beneficial impacts would occur to tax revenues of jurisdictions through which the ultimately-chosen alternative would be routed, all counties in which any alternative could be located were included in the Study Area.

However, Project alternatives could also have noticeable relationships with a somewhat broader area. The most important of such effects would be in drawing employees to construct and operate its facilities. Thus, in addition to the counties through which Project alternatives pass, local employment centers could be sources of noticeable numbers of workers. The regions major cities/labor market centers are, in Montana, Helena (Lewis and Clark County) and Bozeman (Gallatin County). In Idaho, the largest labor centers are Idaho Falls (Madison County), Pocatello (Bannock County), and Twin Falls (Twin Falls County). Each of these counties was included in the Study Area.

Finally, some counties in which the Project alternatives would not be sited, but which are of noticeable size and very near to the alternative routes were included. These additional counties, all in Idaho, were Fremont County, Cassia County, and Gooding County.

Counties included in the socioeconomic Study Area are shown in Exhibit 2-1. Exhibit 1-1 maps these counties.

Exhibit 2-1: List of Counties Included in the MSTI Socioeconomic Study Area

Montana Counties	**Idaho Counties**
Beaverhead*	Bannock
Broadwater*	Bingham*
Deer Lodge*	Blaine*
Gallatin	Bonneville*
Jefferson*	Butte*
Lewis and Clark	Cassia
Madison*	Clark*
Silver Bow*	Fremont
	Gooding
	Jefferson*
	Jerome*
	Lincoln*
	Madison
	Minidoka*
	Power*
	Twin Falls

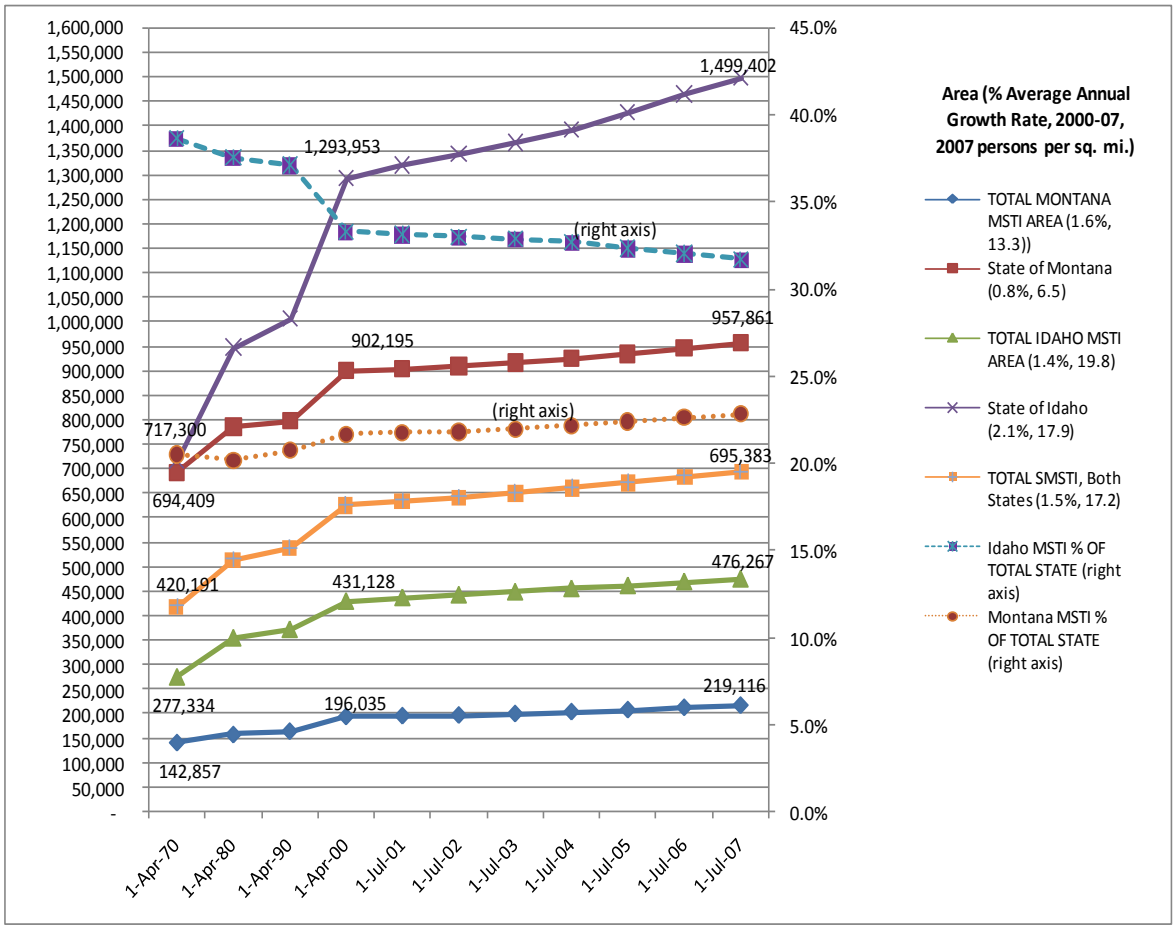
*Counties in which any Alternative routes are located.

2 POPULATION, DEMOGRAPHIC, AND HOUSING CHARACTERISTICS

Montana and Idaho are both relatively rural areas of the U.S., which applies to the MSTI Study Area as a whole, as well. In the Montana portion, the primary population centers are Helena, Bozeman, and Butte, while in the Idaho portion, Pocatello, Idaho Falls, and Twin Falls (to a lesser extent, Hailey), serve as the primary cities. The remainder of the Study Area is rural, with scattered smaller incorporated areas serving as rural service centers.

The population of the entire two-state study area was 695,383 in 2007. After relatively rapid growth of 2% annually from 1970 to 2000 (with a growth spurt in the 1990s in both States), the Study Areas population growth has moderated to a still-rapid 1.5% annually since 2000. Year 2007 population density in the Study Area averaged 17.9 persons per square mile in the Study Area, with the Idaho portion being slightly denser at 19.8 persons per square mile, compared to 13.3 in the Montana portion. These trends are depicted in Exhibit 2-2.

Exhibit 2-2: Historical Population Summary, MSTI Study Area



Source: Population Division, U.S. Census Bureau, Release Date: March 20, 2008

2.1 POPULATION, DEMOGRAPHIC, AND HOUSING CHARACTERISTICS, MONTANA COUNTIES AND COMMUNITIES

2.1.1 POPULATION

As noted above, the population of the (9-county) Montana portion of the MSTI Study area was 219,116 persons in 2007, with an average growth rate during the previous 7 years of 1.6% annually (compared to a national average of 1.0%), and a population density of 13.3 persons per square mile (the U.S average was 83). The population of this area is most concentrated in Gallatin (county seat: Bozeman) and Lewis and Clark (county seat and State capitol: Helena) Counties, with 87,369 and 59,998 population, respectively, in 2007. None of the Proposed or Alternative routes would traverse either county, meaning that the chosen route would mostly traverse the more rural areas of the Montana portion of the MSTI Study Area.[1] Montana Study Area population statistics are tabulated in Exhibit 2-3 and graphed in Exhibit 2-4.

Aside from Gallatin and Lewis and Clark Counties, the only significant urbanized area is Silver Bow County, with a 2007 population of 32,652. Silver Bow County (county seat: Butte) is only 719 square miles, and its 45.4 persons per square mile is the highest of any Study Area county. Deer Lodge County (county seat: Anaconda) is the next most dense county in the Study Area. Like Silver Bow County, Deer Lodge County is very small in land area (741 square miles); with a 2007 population of 8,852, its density is 11.9 persons per square mile.

The remaining 5 counties are all sparsely-settled, primarily farming, range, and public-lands areas. Their 2007 county seats and populations were: Beaverhead County (county seat: Dillon), 8,804; Broadwater County (county seat: Townsend), 4,590; Jefferson County (county seat: Boulder), 11,121; Madison County (county seat: Virginia City), 7,426; and Powell County (county seat: Deer Lodge), 7,118.

These more rural counties have also lagged in population growth between 2000 and 2007, probably reflecting the nationwide trend toward rural outmigration and increasing agricultural consolidation and efficiencies—the populations of Beaverhead, Powell, and Silver Bow Counties actually declined.

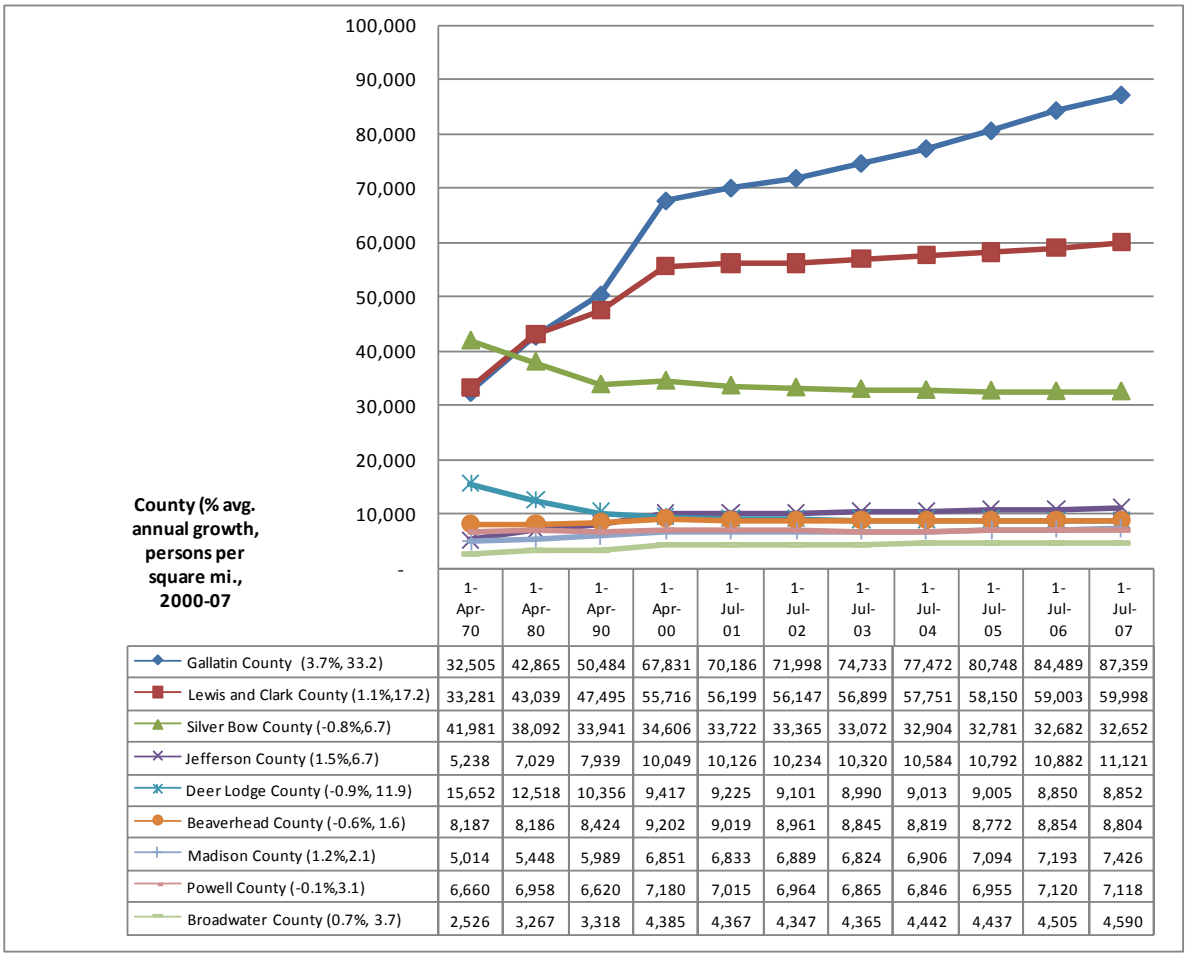
[1] Gallatin and Lewis and Clark Counties were included in the MSTI Study Area because they are likely to be primary sources of construction labor.

Exhibit 2-3: Historical Population, Montana Counties, Cities, and Places in the MSTI Study Area

City/Place and County	1-Apr-70	1-Apr-80	1-Apr-90	1-Apr-00	1-Jul-01	1-Jul-02	1-Jul-03	1-Jul-04	1-Jul-05	1-Jul-06	1-Jul-07	Land Area	Persons/ Sq. Mi. 2007	Average Annual % Ch 1970-2006	2000-2006
Beaverhead County	8,187	8,186	8,424	9,202	9,019	8,961	8,845	8,819	8,772	8,854	8,804	5,572.0	1.6	0.3	(0.6)
Dillon city*	4,548	3,976	3,991	3,752	4,189	4,150	4,113	4,084	4,070	4,056				(0.4)	1.3
Lima town	351	272	265	242	238	235	232	230	227	226				(1.7)	(1.1)
Wisdom CDP	n/a	n/a	n/a	114										#VALUE!	(100.0)
Rest of Beaverhead County														#DIV/0!	#DIV/0!
Broadwater County	2,526	3,267	3,318	4,385	4,367	4,347	4,365	4,442	4,437	4,505	4,590	1,238.9	3.7	2.3	0.5
Townsend city*	1,371	1,587	1,635	1,867	1,884	1,893	1,902	1,955	1,946	1,974				1.4	0.9
Radersburg CDP	n/a	n/a	n/a	70										#VALUE!	(100.0)
Toston CDP	n/a	n/a	n/a	105										#VALUE!	(100.0)
Winston CDP	n/a	n/a	n/a	73										#VALUE!	(100.0)
Rest of Broadwater County														#DIV/0!	#DIV/0!
Deer Lodge County	15,652	12,518	10,356	9,417	9,225	9,101	8,990	9,013	9,005	8,850	8,852	741.2	11.9	(2.2)	(1.0)
Anaconda-Deer Lodge*	9,771	12,518	10,356	9,417	**9203**	**9070**	**8970**	**8976**	**8986**	**8888**				(0.4)	(1.0)
Rest of Deer Lodge County														#DIV/0!	#DIV/0!
Gallatin County	32,505	42,865	50,484	67,831	70,186	71,998	74,733	77,472	80,748	84,489	87,359	2,631.8	33.2	3.7	3.7
Bozeman city*	18,670	21,645	22,660	27,509	28,736	29,541	30,876	32,430	33,584	35,061				2.5	4.1
Belgrade city	1,307	2,336	3,411	5,728	6,368	6,664	6,911	7,127	7,119	7,323				6.9	4.2
Big Sky CDP (part see also	n/a	n/a	n/a	1033										#VALUE!	(100.0)
Four Corners CDP	n/a	n/a	n/a	1828										#VALUE!	(100.0)
Manhattan town	816	988	1,034	1,396	1,417	1,420	1,451	1,483	1,466	1,492				2.3	1.1
Three Forks city	1,188	1,247	1,203	1,728	1,749	1,767	1,818	1,874	1,847	1,845				1.7	1.1
West Yellowstone town	756	735	913	1,177	1,184	1,202	1,218	1,233	1,224	1,232				1.9	0.8
Willow Creek CDP	n/a	n/a	n/a	209										#VALUE!	(100.0)
Rest of Gallatin County														#DIV/0!	#DIV/0!
Jefferson County	5,238	7,029	7,939	10,049	10,126	10,234	10,320	10,584	10,792	10,882	11,121	1,658.8	6.7	2.9	1.3
Boulder town*	1,342	1,441	1,316	1,300	1,322	1,345	1,360	1,398	1,432	1,445				0.3	1.8
Basin CDP	n/a	n/a	n/a	255										#VALUE!	(100.0)
Clancy CDP	n/a	n/a	n/a	1406										#VALUE!	(100.0)
Cardwell CDP	n/a	n/a	n/a	40										#VALUE!	(100.0)
Jefferson City CDP	n/a	n/a	n/a	295										#VALUE!	(100.0)
Montana City CDP	n/a	n/a	n/a	2094										#VALUE!	(100.0)
Whitehall town	1,035	1,030	1,067	1,044	1,068	1,088	1,100	1,134	1,153	1,165				0.5	1.8
Rest of Jefferson County														#DIV/0!	#DIV/0!
Lewis and Clark County	33,281	43,039	47,495	55,716	56,199	56,147	56,899	57,751	58,150	59,003	59,998	3,497.6	17.2	2.2	1.0
Helena City*	22,730	23,938	24,569	25,780	26,218	26,358	26,757	27,154	27,369	27,885				0.8	1.3
Augusta CDP	n/a	n/a	n/a	284										#VALUE!	(100.0)
East Helena town	1,651	1,647	1,538	1,642	1,660	1,664	1,700	1,808	1,860	2,068				0.9	3.9
Lincoln CDP	n/a	n/a	n/a	1100										#VALUE!	(100.0)
Helena Valley Northeast CDP			1,585	2,122										#DIV/0!	(100.0)
Helena Valley Northwest CDP			1,215	2,082											
Helena Valley Southeast CDP			4,601	7,141											
Helena Valley West Central CDP			6,327	6,983											
Helena West Side CDP			1,847	1,711											
Rest of Lewis and Clark County															
Madison County	5,014	5,448	5,989	6,851	6,833	6,889	6,824	6,906	7,094	7,193	7,426	3,602.9	2.1	1.4	0.8
Virginia City town*	149	192	142	130	130	132	130	132	135	137				(0.3)	0.9
Ennis town	501	660	773	840	848	856	880	921	970	1,005				2.7	3.0
Alder CDP	n/a	n/a	n/a	116										#VALUE!	(100.0)
Big Sky CDP (part see also	n/a	n/a	n/a	188										#VALUE!	(100.0)
Harrison CDP	n/a	n/a	n/a	162										#VALUE!	(100.0)
Sheridan town	636	646	652	659	663	669	662	674	687	699				0.4	1.0
Twin Bridges town	613	437	374	400	403	407	402	409	417	424				(1.4)	1.0
Rest of Madison County														#DIV/0!	#DIV/0!
Powell County	6,660	6,958	6,620	7,180	7,015	6,964	6,865	6,846	6,955	7,120	7,118	2,332.7	3.1	0.3	(0.1)
Deer Lodge City*	4,306	4,023	3,378	3,421	3,349	3,337	3,278	3,255	3,295	3,311				(1.0)	(0.5)
Avon CDP	n/a	n/a	n/a	124										#VALUE!	(100.0)
Elliston CDP	n/a	n/a	n/a	225										#VALUE!	(100.0)
Garrison CDP	n/a	n/a	n/a	112										#VALUE!	(100.0)
Ovando CDP	n/a	n/a	n/a	71										#VALUE!	(100.0)
Rest of Powell County														#DIV/0!	#DIV/0!
Silver Bow County	41,981	38,092	33,941	34,606	33,722	33,365	33,072	32,904	32,781	32,682	32,652	719.0	45.4	(1.0)	(0.9)
Butte-Silver Bow*	23,368	37,205	33,336	33,892	33,070	32,742	32,505	32,341	32,180	32,110	32,180			1.2	(0.9)
Walkerville town	1,097	887	605	714										(100.0)	(100.0)
TOTAL MONTANA MSTI ARE	142,857	159,216	166,142	196,035	197,673	199,045	202,068	205,918	209,962	214,724	219,116	16,422.8	13.3	1.6	1.5
State of Montana	694,409	786,690	799,065	902,195	906,098	910,282	917,453	926,721	935,784	946,795	957,861	147,042.4	6.5	1.2	0.8
MSTI % OF TOTAL STATE	20.6%	20.2%	20.8%	21.7%	21.8%	21.9%	22.0%	22.2%	22.4%	22.7%	22.9%				

Source: U.S. Bureau of the Census, decennial Census for 1970, 1980, 1990, and 2000. Annual Census estimates, July 1 for each year after 2000.

Exhibit 2-4: Historical Population Graph, Montana Counties in the MSTI Study Area



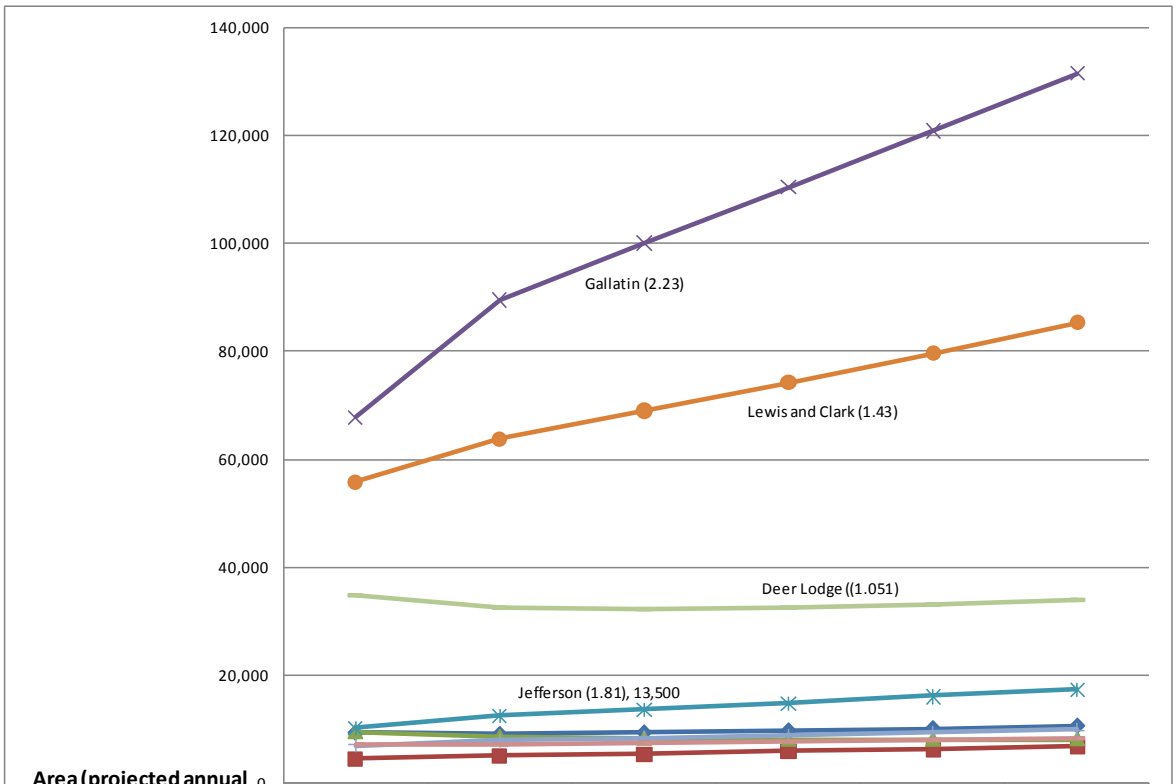
County (% avg. annual growth, persons per square mi., 2000-07	1-Apr-70	1-Apr-80	1-Apr-90	1-Apr-00	1-Jul-01	1-Jul-02	1-Jul-03	1-Jul-04	1-Jul-05	1-Jul-06	1-Jul-07
Gallatin County (3.7%, 33.2)	32,505	42,865	50,484	67,831	70,186	71,998	74,733	77,472	80,748	84,489	87,359
Lewis and Clark County (1.1%,17.2)	33,281	43,039	47,495	55,716	56,199	56,147	56,899	57,751	58,150	59,003	59,998
Silver Bow County (-0.8%,6.7)	41,981	38,092	33,941	34,606	33,722	33,365	33,072	32,904	32,781	32,682	32,652
Jefferson County (1.5%,6.7)	5,238	7,029	7,939	10,049	10,126	10,234	10,320	10,584	10,792	10,882	11,121
Deer Lodge County (-0.9%, 11.9)	15,652	12,518	10,356	9,417	9,225	9,101	8,990	9,013	9,005	8,850	8,852
Beaverhead County (-0.6%, 1.6)	8,187	8,186	8,424	9,202	9,019	8,961	8,845	8,819	8,772	8,854	8,804
Madison County (1.2%,2.1)	5,014	5,448	5,989	6,851	6,833	6,889	6,824	6,906	7,094	7,193	7,426
Powell County (-0.1%,3.1)	6,660	6,958	6,620	7,180	7,015	6,964	6,865	6,846	6,955	7,120	7,118
Broadwater County (0.7%, 3.7)	2,526	3,267	3,318	4,385	4,367	4,347	4,365	4,442	4,437	4,505	4,590

Source: U.S. Bureau of the Census, decennial Census for 1970, 1980, 1990, and 2000. Annual Census estimates, July 1 for each year after 2000.

Projections of the populations of the MSTI Study Area Counties call for essentially a continuation of recent trends. Gallatin and Lewis and Clark Counties are anticipated to account for nearly all of the increase in population. Overall, the Montana Study Area is projected to grow at a 1.4% average annual rate, from 205,237 in the year 2000 to 310,980 in 2030. Gallatin and Lewis and Clark Counties are projected to grow at annual rates of 2.2% and 1.4%, respectively.

Each of the other 7 counties is expected to experience lower growth, with only Broadwater County expected to meet the regional average of 1.4% per year. Silver Bow and Deer Lodge Counties are expected to slightly decline in population by 2030. These projections are shown in Exhibit 2-5.

Exhibit 2-5: Population Projections, Montana MSTI Counties, 2010-2030



Area (projected annual % Growth)	2000 Census	2010	2015	2020	2025	2030
Beaverhead (0.43)	9,202	8,950	9,220	9,600	10,000	10,460
Broadwater (1.39)	4,385	4,920	5,310	5,770	6,170	6,630
Deer Lodge (-0.51)	9,417	8,470	8,180	7,990	7,980	8,070
Gallatin (2.23)	67,831	89,540	100,030	110,430	120,790	131,450
Jefferson (1.81)	10,049	12,280	13,500	14,720	15,960	17,200
Lewis and Clark (1.43)	55,716	63,640	68,950	74,220	79,670	85,370
Madison (1.19)	6,851	7,800	8,250	8,690	9,230	9,780
Powell (0.44)	7,180	7,130	7,310	7,550	7,810	8,180
Silver Bow (-0.08)	34,606	32,360	32,130	32,290	32,890	33,840
Total MSTI Study Area (1.40)	205,237	235,090	252,880	271,260	290,500	310,980
MONTANA (0.99)	902,195	984,000	1,034,470	1,087,740	1,146,050	1,210,960

Source: Demographic Database, Economic Projections Series, NPA Data Services, Inc., Arlington, VA
Processed by: Census and Economic Information Center, Montana Dept. of Commerce, Helena, with permission from NPA Data Services, Inc., 11/07

2.1.2 DEMOGRAPHICS

Age Distribution

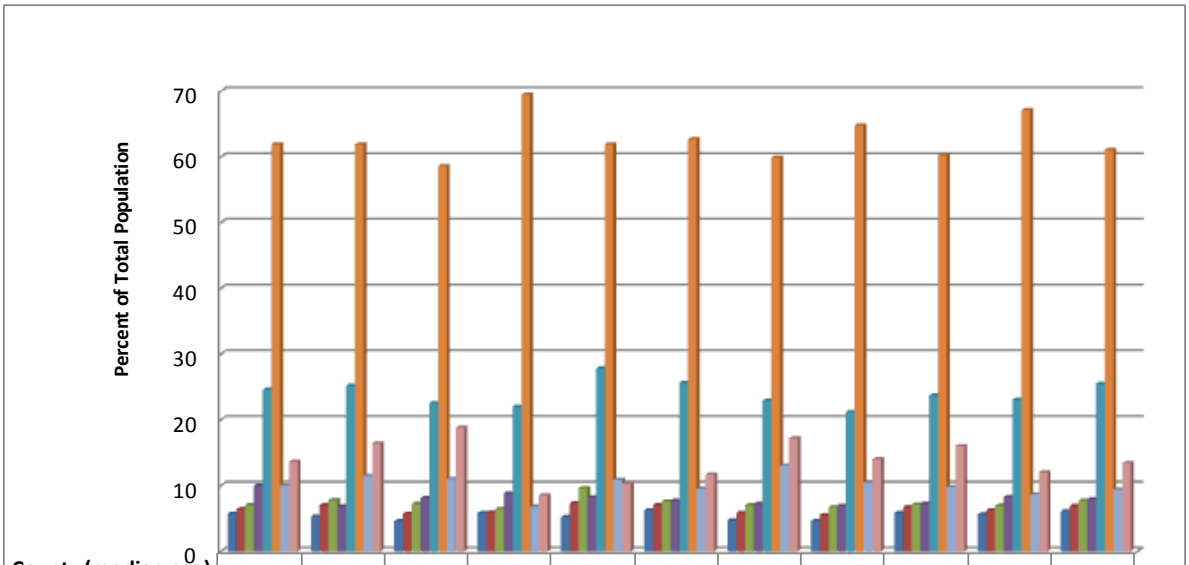
With the exception of Gallatin County, whose county seat, Bozeman, is an employment center with a noticeably different population distribution skewed toward younger working-age persons and few persons of retirement age, the median age among counties in the Montana MSTI Study Area was clustered around 40 years of age in the year 2000 (Gallatin County's median age was 30.7). Year 2000 age distributions are depicted in Exhibit 2-6.

Other county median ages ranged between 37.6 (Beaverhead County) and 43.4 (Madison County). Powell and Lewis and Clark Counties also had relatively large (percentage-wise) working-age

populations, with Lewis and Clark County also having a numerically-larger working-age population. Deer Lodge and Madison Counties had the lowest proportion of working-age populations, consistent with the overall lower total population growth in those counties. These data reflect the typical shrinkage or lack of economic growth in the more rural counties.

In summary, the data show that employment opportunities in the counties in which the Project will ultimately be routed are relatively lacking, and that the Project labor supply is most likely but that the labor force in those areas may be somewhat small.

Exhibit 2-6: Age Distribution, Montana Counties in the MSTI Study Area



County (median age)	Beaverhead (37.6)	Broadwater (41.3)	Deer Lodge (42.3)	Gallatin (30.7)	Jefferson (40.2)	Lewis & Clark (38.0)	Madison (43.4)	Powell (39.7)	Silver Bow (38.9)	Total MSTI	Statewide (37.5)
Under 5 years	5.7	5.3	4.6	5.8	5.2	6.2	4.7	4.6	5.8	5.6	6.1
5 to 9 years	6.4	7	5.7	5.9	7.3	7	5.8	5.5	6.7	6.2	6.9
10 to 14 years	7	7.8	7.2	6.4	9.6	7.6	7	6.7	7.1	6.9	7.7
15 to 19 years	10	6.8	8.1	8.8	8.2	7.7	7.2	6.9	7.2	8.3	7.9
Under 18 years	24.6	25.2	22.5	22	27.8	25.6	22.9	21.2	23.7	23.1	25.5
18 to 64 years	61.9	61.9	58.6	69.5	61.9	62.7	59.9	64.8	60.3	67.1	61.1
55 to 64 years	10	11.5	11	6.8	10.9	9.5	13	10.5	9.8	8.6	9.4
65 years and over	13.6	16.4	18.8	8.5	10.3	11.7	17.2	14	16	12.0	13.4

Source: U.S. Bureau of the Census, 2000 Census. QT-P1: Age Groups and Sex: 2000. Data Set: Census 2000 Summary File 1 (SF 1) 100-Percent Data

Ethnicity and Race

As with the State as a whole, the MSTI populations are predominantly White. Statewide, 92 percent of the population was classified as White in the 2000 Census. In the Montana MSTI area as a whole, the percentage of White persons is even higher, at 97 percent. Among the nine counties in this area, the proportion of White persons varied little: between 96.7 and 98.3 percent.

Among minority groups, the largest group represented in the MSTI Study Area is Native American (2.4% of the total population), followed by "Hispanic or Latino" (1.8% of the total).

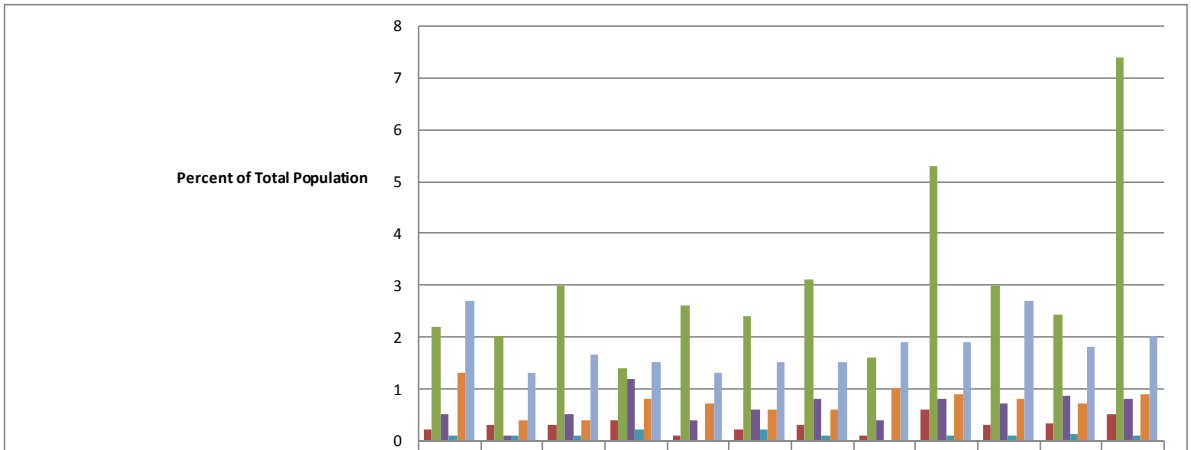
Exhibit 2-7 shows year 2000 ethnicity data for these jurisdictions, and Exhibit 2-7 graphs the data, focusing on the non-White populations.

Exhibit 2-7: Tabulated Ethnicity and Race, Montana Counties in the MSTI Study Area

	Montana		Beaverhead		Broadwater		Deer Lodge		Gallatin		Jefferson		Lewis and Clark		Madison		Powell		Silver Bow		Total Study Area	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total population (all races)	902,195	100	9,202	100	4,385	100	9,417	100	67,831	100	10,049	100	55,716	100	6,851	100	7,180	100	34,606	100	205,237	100
White alone or in combination1	831,978	92.2	8,926	97	4,298	98	9,180	97.5	65,999	97.3	9,819	97.7	53,918	96.8	6,737	98.3	6,798	94.7	33,458	96.7	199,133	97.0
Black or African American alone or in combination1	4,441	0.5	22	0.2	15	0.3	28	0.3	253	0.4	23	0.2	193	0.3	8	0.1	45	0.6	88	0.3	675	0.3
American Indian and Alaska Native alone or in combina	66,320	7.4	198	2.2	89	2	281	3	967	1.4	242	2.4	1,703	3.1	107	1.6	377	5.3	1,021	3	4,985	2.4
Asian alone or in combination1	7,101	0.8	44	0.5	6	0.1	50	0.5	837	1.2	62	0.6	447	0.8	29	0.4	61	0.8	230	0.7	1,766	0.9
Native Hawaiian and Other Pacific Islander alone or in	1,077	0.1	8	0.1	4	0.1	5	0.1	113	0.2	17	0.2	62	0.1	3	0	6	0.1	35	0.1	253	0.1
Some other race alone or in combination1	7,834	0.9	116	1.3	18	0.4	35	0.4	537	0.8	56	0.6	326	0.6	68	1	66	0.9	266	0.8	1,488	0.7
Hispanic or Latino (of any race)	18,081	2	246	2.7	58	1.3	155	1.6	1,047	1.5	149	1.5	843	1.5	130	1.9	140	1.9	950	2.7	3,718	1.8

Source: U.S. Census Bureau, QT-P5: Race Alone or in Combination: 2000
Data Set: Census 2000 Summary File 1 (SF 1) 100-Percent Data

Exhibit 2-8: Charted Ethnicity and Race, Montana Counties in the MSTI Study Area



County (% of total population that is White)	Beaverhead (97.0)	Broadwater (98.0)	Deer Lodge (97.5)	Gallatin (97.3)	Granite (97.3)	Jefferson (97.7)	Lewis and Clark (96.8)	Madison (98.3)	Powell (94.7)	Silver Bow (96.7)	Total MSTI Study Area (97.0)	Montana (92.2)
Black or African American alone or in combination	0.2	0.3	0.3	0.4	0.1	0.2	0.3	0.1	0.6	0.3	0.3	0.5
American Indian and Alaska Native alone or in combination	2.2	2	3	1.4	2.6	2.4	3.1	1.6	5.3	3	2.4	7.4
Asian alone or in combination	0.5	0.1	0.5	1.2	0.4	0.6	0.8	0.4	0.8	0.7	0.9	0.8
Native Hawaiian and Other Pacific Islander alone or in combination	0.1	0.1	0.1	0.2	0	0.2	0.1	0	0.1	0.1	0.1	0.1
Some other race alone or in combination	1.3	0.4	0.4	0.8	0.7	0.6	0.6	1	0.9	0.8	0.7	0.9
Hispanic or Latino (of any race)	2.7	1.3	1.6	1.5	1.3	1.5	1.5	1.9	1.9	2.7	1.8	2

2.1.3 HOUSING

The housing market in the MSTI Montana Study Area exhibits varying degrees of tightness. The most urban and higher-growth two counties, Gallatin and Lewis and Clark, had the lowest rental vacancy rates in the year 2000, at slightly under 6% (5% and less is usually regarded as a tight market). In the other counties, substantial excess capacity existed, reflecting amply excess rental unit capacity: Rental vacancy rates ranged from 9.1% in Broadwater County to 12.6% in Silver Bow County.

Exhibit 2-9: Housing Data, Montana Counties in the MSTI Study Area

					Vacant housing units				
					Percent			Vacancy rate	
	Total housing units	Occupied housing units	Vacant Housing Units, Total	Overall Vacancy Percent	For sale only	For rent	Seas., rec., or occ. use	Home-owner	Rental
MONTANA COUNTIES									
Beaverhead	4,571	3,684	887	19.4%	6.9	15.6	56.4	2.5	9.3
Broadwater	2,002	1,752	250	12.5%	10	14.4	47.6	1.8	9.1
Deer Lodge	4,958	3,995	963	19.4%	12.6	22.3	28	4	17
Gallatin	29,489	26,323	3,166	10.7%	9.7	18.8	54.4	1.8	5.7
Jefferson	4,199	3,747	452	10.8%	9.3	19.9	41.6	1.3	12.5
Lewis and Clark	25,672	22,850	2,822	11.0%	8.4	14.9	59.6	1.5	5.8
Madison	4,671	2,956	1,715	36.7%	5.7	6.2	66.7	4.5	10.8
Powell	2,930	2,422	508	17.3%	9.1	20.5	42.7	2.6	13
Silver Bow	16,176	14,432	1,744	10.8%	18.4	35.5	10.1	3.1	12.6
Montana Counties in MSTI Total	94,668	82,161	12,507	13.2%					

Source: U.S. Bureau of the Census, 2000 Census. GCT-H5: General Housing Characteristics: 2000. Data Set: Census 2000 Summary File 1 (SF 1) 100-Percent Data

Consistent with the area's status as a tourist destination, the area has extensive hotel/motel accommodations.

2.2 POPULATION, DEMOGRAPHIC, AND HOUSING CHARACTERISTICS, IDAHO COUNTIES AND COMMUNITIES

2.2.1 POPULATION

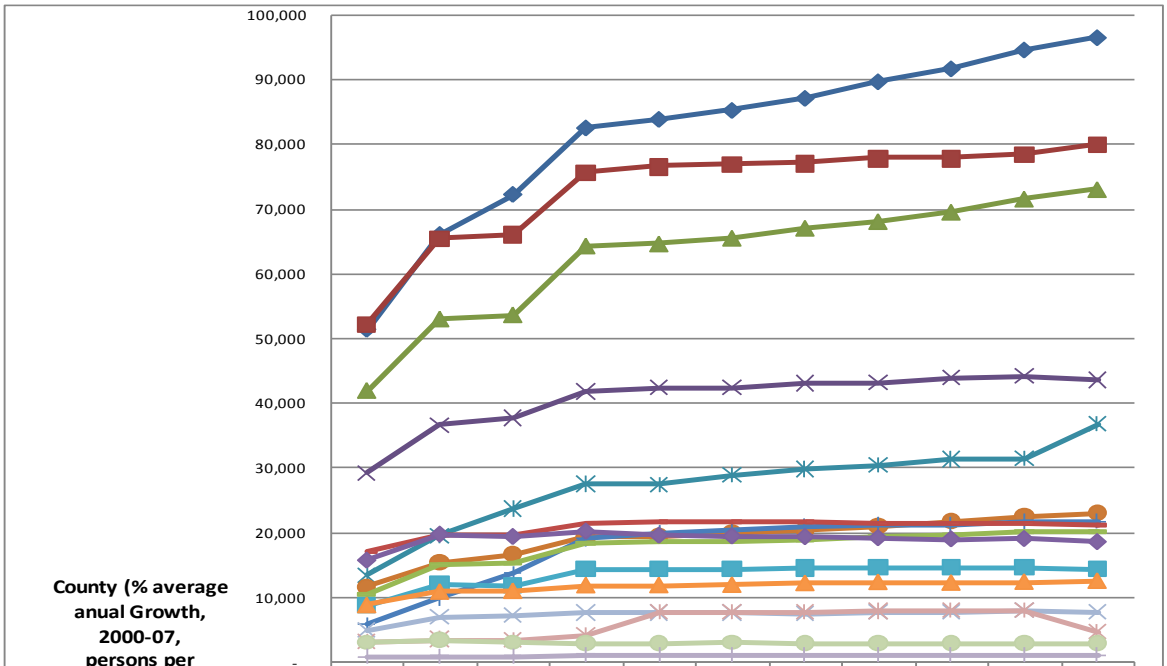
The population of the (16-county) Idaho portion of the MSTI Study area was 476,267 persons in 2007, with an average growth rate during the previous 7 years of 1.4% annually (compared to a national average of 1.0%), and a population density of 9.8 persons per square mile (the U.S. average was 83). Thus, the Idaho portion of the MSTI Study Area has a larger population, but lower population density, than the Montana portion, and in recent years has grown at a slightly lower, but still rapid, rate.

The main population (and employment) centers of this area are in Bonneville County (2007 population, 96,545; county seat: Idaho Falls), Bannock County (2007 population, 79,925; county seat: Pocatello), and Twin Falls County (2007 population, 73,058; county seat: Twin Falls). Only Bonneville County would be traversed by any of the Project Alternatives.

Secondary population and employment centers are in Bingham County (2007 population, 43,436; county seat: Blackfoot), Madison County (2007 population, 36,647; county seat: Rexburg), and Blaine County (2007 population, 21,501; county seat: Hailey).

The remaining 10 counties are all sparsely-settled, primarily farming, range, and public-lands areas. Their 2007 county seats and populations were: Beaverhead County (county seat: Dillon), 8,804; Broadwater County (county seat: Townsend), 4,590; Jefferson County (county seat: Boulder), 11,121; Madison County (county seat: Virginia City), 7,426; and Powell County (county seat: Deer Lodge), 7,118.

Exhibit 2-10: Historical Population Graph, Idaho Counties in the MSTI Study Area



County (% average anual Growth, 2000-07, persons per square mile)	1-Apr-70	1-Apr-80	1-Apr-90	1-Apr-00	1-Jul-01	1-Jul-02	1-Jul-03	1-Jul-04	1-Jul-05	1-Jul-06	1-Jul-07
Bonneville County (2.3%, 51.7)	51,250	65,980	72,207	82,522	83,856	85,243	87,118	89,697	91,702	94,630	96,545
Bannock County (0.6%,71.8)	52,200	65,421	66,026	75,565	76,539	76,917	77,023	77,785	77,794	78,443	79,925
Twin Falls County (1.8%, 38.0)	41,807	52,927	53,580	64,284	64,603	65,488	67,044	68,080	69,540	71,575	73,058
Bingham County (0.9%, 20.7)	29,167	36,489	37,583	41,735	42,259	42,362	42,912	43,126	43,775	44,051	43,466
Madison County (2.3%, 77.7)	13,452	19,480	23,674	27,467	27,376	28,836	29,732	30,326	31,207	31,393	36,647
Jefferson County (2.6%, 20.9)	11,619	15,304	16,543	19,155	19,352	19,781	20,217	20,827	21,613	22,350	22,851
Blaine County (2.1%, 8.2)	5,749	9,841	13,552	18,991	19,770	20,295	20,680	21,023	21,173	21,501	21,560
Cassia County (0.0%, 9.4)	17017	19427	19532	21416	21551	21551	21522	21379	21391	21365	20960
Jerome County (1.6%, 33.5)	10,400	14,900	15,138	18,342	18,481	18,698	18,927	19,303	19,677	20,130	20,066
Minidoka County (-1.0%, 24.4)	15,731	19,718	19,361	20,174	19,558	19,443	19,327	19,166	18,996	19,041	18,564
Gooding County (0.3, 19.5)	8,645	11,874	11,633	14,155	14,226	14,236	14,329	14,406	14,424	14,404	14,250
Fremont County (0.8, 6.7)	8,710	10,813	10,937	11,819	11,835	11,890	12,158	12,330	12,224	12,369	12,517
Power County (0.8, 5.5)	4,864	6,844	7,086	7,538	7,564	7,543	7,516	7,724	7,761	7,914	7,684
Lincoln County (11.9%, 3.7)	3,057	3,436	3,308	4,044	7,672	7,749	7,748	7,827	7,868	7,930	4,497
Butte County (-0.7%, 1.2)	2,925	3,342	2,918	2,899	2,861	2,924	2,847	2,819	2,782	2,781	2,771
Clark County (-1.7%, 0.5)	741	798	762	1,022	971	957	910	932	914	920	906

Source: U.S. Bureau of the Census, decennial Census for 1970, 1980, 1990, and 2000. Annual Census estimates, July 1 for each year after 2000.

These more rural counties have also lagged in population growth between 2000 and 2007, probably reflecting the nationwide trend toward rural out-migration and increasing agricultural consolidation and efficiencies—the populations of Beaverhead, Powell, and Silver Bow Counties actually declined.

Exhibit 2-11: Tabulated Historical Population, Idaho Counties in the MSTI Study Area

County	1-Apr-70	1-Apr-80	1-Apr-90	1-Jul-95	1-Apr-00	1-Jul-01	1-Jul-02	1-Jul-03	1-Jul-04	1-Jul-05	1-Jul-06	1-Jul-07	Land Area	2007 Persons Per Square Mile
Bannock County	52,200	65,421	66,026	73,603	75,565	76,539	76,917	77,023	77,785	77,794	78,443	79,925	1,113.20	71.80
Arimo	252	338	311		348	350	345	335	331	315	307			
Chubbuck	2,924	7,052	7,791		9,700	9,993	10,099	10,107	10,441	10,562	10,861			
Downey	586	645	626		613	621	613	602	597	569	553			
Inkom	522	830	769		738	747	737	718	712	677	668			
Lava Hot Springs	516	467	420		521	533	532	524	519	497	481			
McCammon	623	770	722		805	818	812	796	801	778	777			
Pocatello (pt.)*	40,036	46,340	46,080		51,442	51,845	52,127	52,463	52,885	53,268	53,803			
Balance of Bannock					11,398	11,632	11,652	11,478	11,499	11,128	10,993			
Bingham County	29,167	36,489	37,583	40,648	41,735	42,259	42,362	42,912	43,126	43,775	44,051	43,466	2,094.80	20.75
Aberdeen					1,840	1,845	1,834	1,838	1,824	1,830	1,809			
Atomic	24	34	25		25	25	25	25	25	26	25			
Basalt	349	414	407		419	423	422	426	425	428	427			
Blackfoot*	8,716	10,065	9,646		10,419	10,570	10,591	10,709	10,740	10,877	11,007			
Firth	362	460	429		408	413	412	415	415	417	416			
Shelley	2,614	3,300	3,536		3,813	3,852	3,853	3,910	3,967	4,153	4,195			
Balance of Bingham					24,811	25,131	25,225	25,589	25,730	26,044	26,172			
Blaine County	5,749	9,841	13,552	17,108	18,991	19,770	20,295	20,680	21,023	21,173	21,501	21,560	2,644.90	8.15
Bellevue	537	1,016	1,275		1,876	1,916	1,993	2,093	2,192	2,204	2,190			
Carey					513	516	519	520	519	511	508			
Hailey*	1,425	2,109	3,687		6,200	6,749	7,043	7,244	7,423	7,589	7,751			
Ketchum	1,454	2,200	2,523		3,003	3,064	3,091	3,110	3,130	3,146	3,226			
Sun Valley	180	545	938		1,427	1,450	1,456	1,459	1,453	1,442	1,452			
Balance of Blaine					5,972	6,075	6,193	6,254	6,306	6,281	6,374			
Bonneville County	51,250	65,980	72,207	79,527	82,522	83,856	85,243	87,118	89,697	91,702	94,630	96,545	1,868.60	51.67
Ammon	2,545	4,669	5,002		6,187	6,889	7,769	8,642	9,722	10,876	12,065			
Idaho Falls*	35,776	39,590	43,929		50,730	51,115	51,242	51,675	52,215	52,267	52,786			
Iona	890	1,072	1,049		1,201	1,206	1,211	1,223	1,246	1,254	1,276			
Irwin	228	113	108		157	157	157	156	156	154	156			
Ririe (pt.)	575	555	596		25	25	25	24	24	24	24			
Swan Valley	235	135	141		213	215	217	220	226	229	235			
Ucon	664	833	895		943	947	951	969	984	1,013	1,066			
Balance of Bonneville					23,066	23,302	23,671	24,209	25,124	25,885	27,022			
Butte County	2,925	3,342	2,918	3,017	2,899	2,861	2,924	2,847	2,819	2,782	2,781	2,771	2,232.90	1.24
Arco*	1,244	1,241	1,016		1,026	1,011	1,033	1,006	994	980	979			
Butte	42	93	59		76	75	77	75	74	73	73			
Moore	156	210	190		196	194	198	193	191	188	188			
Balance of Butte					1,601	1,581	1,616	1,573	1,560	1,541	1,541			
Cassia County	17,017	19,427	19,532	20,996	21,416	21,551	21,551	21,522	21,379	21,391	21,365	20,960	2,232.90	9.39
Albion	229	286	305		262	263	263	262	259	258	257			
Burley (pt.)*	8,279	8,761	8,702		9,074	9,136	9,103	9,073	8,977	8,961	8,930			
Declo	251	276	279		338	339	338	337	334	333	331			
Malta	196	196	171		177	178	177	177	175	175	174			
Oakley	656	663	635		668	725	723	720	713	719	712			
Balance of Cassia					10,897	10,910	10,947	10,953	10,921	10,945	10,961			
Clark County	741	798	762	866	1022	971	957	910	932	914	920	906	1,764.70	0.51
Dubois*	400	413	420		647	671	660	624	638	623	624			
Spencer	45	29	11		38	36	36	34	34	33	34			
Balance of Clark					337	264	261	252	260	258	262			
Fremont County	8,710	10,813	10,937	11,557	11,819	11,835	11,890	12,158	12,330	12,224	12,369	12,517	1,866.80	6.71
Ashton	1,187	1,219	1,114		1,129	1,119	1,112	1,125	1,131	1,100	1,092			
Drummond	13	25	37		15	15	15	15	15	15	15			
Island Park	136	154	159		215	267	268	270	276	273	275			
Newdale	267	329	377		358	357	358	361	365	359	355			
Parker	266	262	288		319	318	318	321	324	319	319			
St. Anthony*	2,877	3,212	3,010		3,342	3,325	3,308	3,423	3,431	3,357	3,376			
Teton	390	559	570		569	568	569	575	580	570	565			
Warm River	10	2	9		10	10	10	10	10	10	10			
Balance of Fremont					5,862	5,856	5,932	6,058	6,198	6,221	6,362			
Gooding County	8,645	11,874	11,633	12,987	14,155	14,226	14,236	14,329	14,406	14,424	14,404	14,250	730.8	19.50
Bliss	114	208	185		275	269	266	265	263	259	255			
Gooding*	2,599	2,949	2,820		3,384	3,350	3,326	3,330	3,327	3,312	3,282			
Hagerman	436	602	600		656	761	768	772	774	765	761			
Wendell	1,122	1,974	1,963		2,338	2,359	2,364	2,362	2,379	2,407	2,438			
Balance of Gooding					7,502	7,487	7,512	7,600	7,663	7,681	7,668			
Jefferson County	11,619	15,304	16,543	18,245	19,155	19,352	19,781	20,217	20,827	21,613	22,350	22,851	1,095.10	20.87
Hamer	81	93	79		12	12	12	12	12	12	12			
Lewisville	468	502	471		467	468	475	482	491	498	507			
Menan	545	605	601		707	703	711	716	718	727	719			
Mud Lake	194	243	179		270	267	272	272	270	270	275			
Rigby*	2,324	2,624	2,681		2,998	2,995	3,026	3,059	3,042	3,274	3,291			
Ririe (pt.)	575	555	596		520	514	517	517	514	507	502			
Roberts	393	466	557		647	664	672	672	668	666	655			
Balance of Jefferson					13,534	13,729	14,096	14,487	15,112	15,659	16,389			
Madison County	13,452	19,480	23,674	26,102	27,467	27,376	28,836	29,732	30,326	31,207	31,393	36,647	471.6	77.71
Rexburg*	8,272	11,559	14,302		17,257	17,676	18,847	21,789	24,496	26,068	26,657			
Sugar	617	1,022	1,275		1,242	1,246	1,263	1,345	1,448	1,428	1,458			
Balance of Madison					8,968	8,454	8,726	6,598	4,382	3,711	3,278			
Minidoka County	15,731	19,718	19,361	20,759	20,174	19,558	19,443	19,327	19,166	18,996	19,041	18,564	759.7	24.44
Acequia	107	100	106		144	140	139	138	137	135	135			
Burley (pt.)	8,279	8,761	8,702		242	240	240	240	240	240	244			
Heyburn	1,637	2,889	2,714		2,899	2,831	2,821	2,806	2,788	2,769	2,768			
Minidoka	131	101	67		129	125	124	123	122	121	121			
Paul	911	940	901		998	977	970	961	949	946	945			
Rupert*	4,563	5,476	5,455		5,645	5,453	5,400	5,350	5,288	5,221	5,214			
Balance of Minidoka					10,117	9,792	9,749	9,709	9,642	9,564	9,614			
Power County	4,864	6,844	7,086	7,720	7,538	7,564	7,543	7,516	7,724	7,761	7,914	7,684	1,405.70	5.47
American Falls*	2,769	3,626	3,757		4,111	4,111	4,092	4,067	4,178	4,167	4,225			
Pocatello (pt.)	40,036	46,340	46,080		24	32	36	38	25	72	129			
Rockland	209	283	264		316	315	314	315	329	329	330			
Balance of Power					3,087	3,106	3,101	3,096	3,192	3,193	3,230			
Twin Falls County	41,807	52,927	53,580	59,679	64,284	64,603	65,488	67,044	68,080	69,540	71,575	73,058	1,925.10	37.95
Buhl	2,975	3,629	3,516		3,985	3,962	3,971	4,010	3,979	4,024	4,023			
Castleford	174	191	179		277	275	275	277	273	275	273			
Filer	1,173	1,645	1,511		1,620	1,638	1,655	1,695	1,730	1,779	1,880			
Hansen	415	1,078	848		970	968	972	978	966	963	960			
Hollister	57	167	144		237	236	236	238	235	236	235			
Kimberly	1,557	2,307	2,367		2,614	2,621	2,669	2,693	2,679	2,691	2,782			
Murtaugh	124	114	134		139	138	138	140	139	138	140			
Twin Falls*	21,914	26,209	27,591		34,469	35,087	35,782	36,844	37,812	38,774	40,380			
Balance of Twin Falls					19,973	19,678	19,790	20,169	20,267	20,660	20,902			
TOTAL IDAHO MSTI AREA	**458,936**	**571,658**	**598,006**	**392,814**	**753,200**	**760,039**	**769,444**	**779,626**	**791,160**	**801,052**	**813,899**	**451,704**	**22,207**	**20.34**
State of Idaho	**717,300**	**948,600**	**1,006,734**	**1,177,322**	**1,293,953**	**1,321,446**	**1,344,266**	**1,367,428**	**1,394,524**	**1,429,367**	**1,466,465**	**1,499,402**	**83,574**	**17.94**

Source: U.S. Bureau of the Census, decennial Census for 1970, 1980, 1990, and 2000. Annual Census estimates, July 1 for each year after 2000.

2.2.2 DEMOGRAPHICS

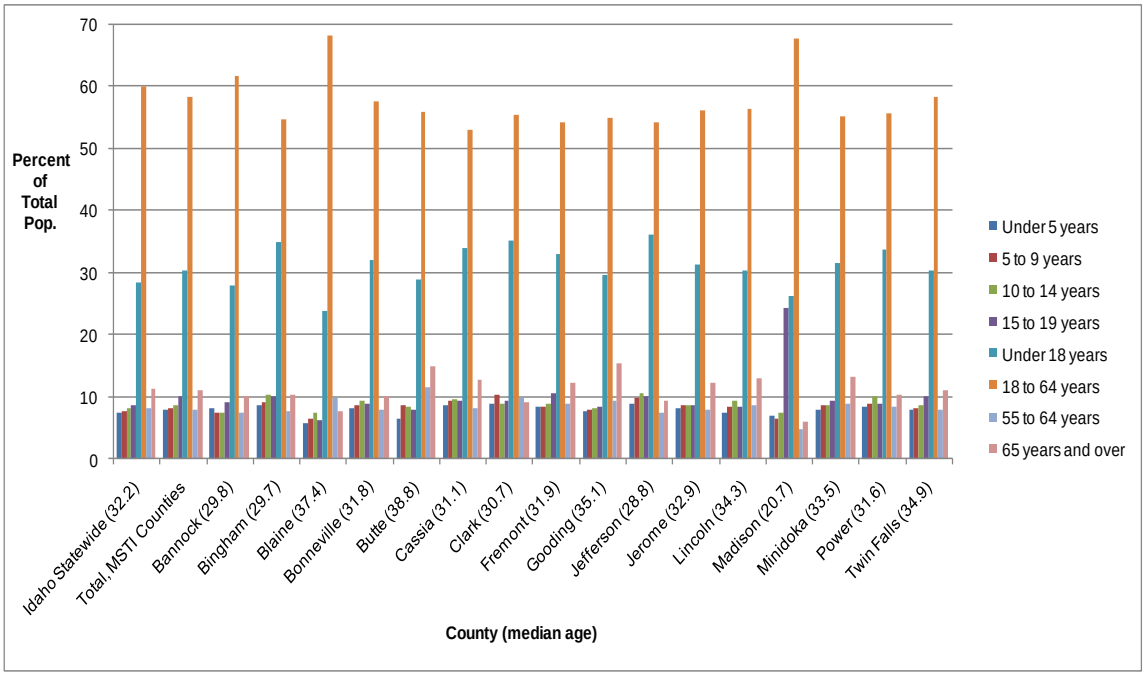
Age Distribution

The Idaho counties in the MSTI Study Area exhibit generally younger age profiles than in its Montana portion, just as statewide, Idaho is a younger-aged population than Montana. In the MSTI Study Area of Idaho, some of the counties' younger ages may be partially a result of the influence of Mormon culture.

In particular, Madison County has a median age of only 20.7 years, reflecting both its status as the U.S. county outside Utah with the largest proportion of Mormons (Church of Jesus Christ of the Latter Day Saints, 2005; web link http://www.adherents.com/largecom/com_lds.html), and its large college-aged population. Ricks College, formerly a two-year Mormon college, became (four-year) Brigham Young University-Idaho in the year 2000.

Other Idaho MSTI counties have median ages ranging from 28.8 (Jefferson County) to 38.8 (Butte County). Age distributions are shown in Exhibit 2-12.

Exhibit 2-12: Age Distribution, Idaho Counties in the MSTI Study Area



Source: U.S. Bureau of the Census, 2000 Census. QT-P1: Age Groups and Sex: 2000. Data Set: Census 2000 Summary File 1 (SF 1) 100-Percent Data

Racial and Ethnic Distribution

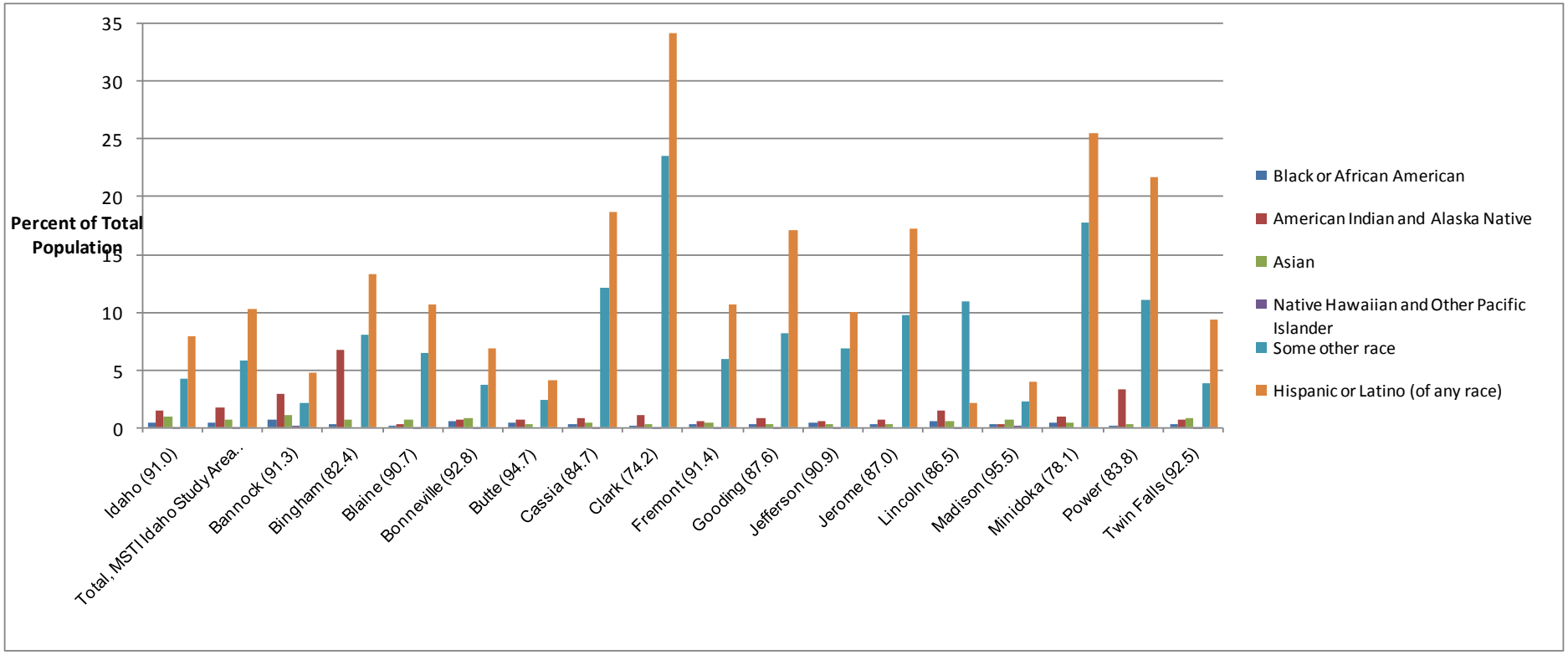
Like the Montana portion of the MSTI study area, the Idaho portion is predominantly of White race, comprising 89.7 percent of the population. Madison County had 95.2 percent of the population classified as White in the year 2000, the highest proportion of any Idaho MSTI county; Clark County had the lowest proportion, at 74.2 percent.

Exhibit 2-13: Tabulated Race and Ethnicity, Idaho Counties in the MSTI Study Area, 2000

	Idaho		Total, MSTI Idaho Study Area		Bannock		Bingham		Blaine		Bonneville		Butte		Cassia		Clark		Fremont		Gooding		Jefferson		Jerome		Lincoln		Madison		Minidoka		Power		Twin Falls	
RACE	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total population	1,293,953	100.0	431,128	100.0	75,565	100	41,735	100	18,991	100	82,522	100	2,899	100	21,416	100	1,022	100	11,819	100	14,155	100	19,155	100	18,342	100.0	4,044	100	27,467	100	20,174	100	7,538	100	64,284	100
One race	1,268,344	98.0	423,331	98.2	74,069	98	40,840	97.9	18,692	98.4	81,316	98.5	2,848	98.2	21,016	98.1	1,012	99	11,635	98.4	13,758	97.2	18,901	98.7	17,987	98.1	3,966	98.1	27,205	99	19,665	97.5	7,434	98.6	62,987	98
White	1,177,304	91.0	386,635	89.7	68,987	91.3	34,403	82.4	17,231	90.7	76,574	92.8	2,744	94.7	18,137	84.7	758	74.2	10,804	91.4	12,399	87.6	17,406	90.9	15,955	87.0	3,497	86.5	26,231	95.5	15,749	78.1	6,315	83.8	59,445	92.5
Black or African American	5,456	0.4	1,404	0.3	446	0.6	70	0.2	25	0.1	403	0.5	8	0.3	36	0.2	1	0.1	19	0.2	33	0.2	53	0.3	42	0.2	19	0.5	65	0.2	53	0.3	7	0.1	124	0.2
American Indian and Alaska Native	17,645	1.4	7,210	1.7	2,198	2.9	2,798	6.7	62	0.3	535	0.6	20	0.7	171	0.8	10	1	60	0.5	119	0.8	89	0.5	126	0.7	49	1.2	90	0.3	178	0.9	248	3.3	457	0.7
Asian	11,889	0.9	2,825	0.7	748	1	236	0.6	139	0.7	675	0.8	7	0.2	79	0.4	2	0.2	43	0.4	33	0.2	44	0.2	50	0.3	18	0.4	156	0.6	84	0.4	24	0.3	487	0.8
Native Hawaiian and Other Pacific Islander	1,308	0.1	367	0.1	122	0.2	13	0	13	0.1	56	0.1	0	0	11	0.1	1	0.1	7	0.1	8	0.1	15	0.1	9	0.0	2	0.0	50	0.2	4	0	3	0	53	0.1
Some other race	54,742	4.2	24,890	5.8	1,568	2.1	3,320	8	1,222	6.4	3,073	3.7	69	2.4	2,582	12.1	240	23.5	702	5.9	1,166	8.2	1,294	6.8	1,805	9.8	381	9.4	613	2.2	3,597	17.8	837	11.1	2,421	3.8
Hispanic or Latino (of any race)	101,690	7.9	44,453	10.3	3,540	4.7	5,550	13.3	2,030	10.7	5,703	6.9	120	4.1	4,013	18.7	350	34.2	1,255	10.6	2,414	17.1	1,907	10	3,150	17.2	542	13.4	1,078	3.9	5,137	25.5	1,638	21.7	6,026	9.4
Not Hispanic or Latino	1,192,263	92.1	386,675	89.7	72,025	95.3	36,185	86.7	16,961	89.3	76,819	93.1	2,779	95.9	17,403	81.3	672	65.8	10,564	89.4	11,741	82.9	17,248	90	15,192	82.8	3,502	86.6	26,389	96.1	15,037	74.5	5,900	78.3	58,258	90.6
Hispanic or Latino	94,342	7.3	41,489	9.6	3,102	4.1	5,132	12.3	1,944	10.2	5,301	6.4	109	3.8	3,798	17.7	345	33.8	1,187	10	2,247	15.9	1,782	9.3	3,004	16.4	534	13.2	1,013	3.7	4,850	24	1,579	20.9	5,562	8.7
Two or more races	25,609	2.0	7,797	1.8	1,496	2	895	2.1	299	1.6	1,206	1.5	51	1.8	400	1.9	10	1	184	1.6	397	2.8	254	1.3	355	1.9	78	1.9	262	1	509	2.5	104	1.4	1,297	2
Hispanic or Latino	7,348	0.6	2,964	0.7	438	0.6	418	1	86	0.5	402	0.5	11	0.4	215	1	5	0.5	68	0.6	167	1.2	125	0.7	146	0.8	8	0.2	65	0.2	287	1.4	59	0.8	464	0.7
Not Hispanic or Latino	18,261	1.4	4,833	1.1	1,058	1.4	477	1.1	213	1.1	804	1	40	1.4	185	0.9	5	0.5	116	1	230	1.6	129	0.7	209	1.1	70	1.7	197	0.7	222	1.1	45	0.6	833	1.3

Source: U.S. Bureau of the Census, 2000 Census. QT-P3: Race and Hispanic or Latino: 2000. Data Set: Census 2000 Summary File 1 (SF 1) 100-Percent Data.

Exhibit 2-14: Graphed Race and Ethnicity, Idaho Counties in the MSTI Study Area, 2000



Source: U.S. Bureau of the Census, 2000 Census. QT-P3: Race and Hispanic or Latino: 2000. Data Set: Census 2000 Summary File 1 (SF 1) 100-Percent Data

The second most prevalent racial/ethnic group is “Hispanic or Latino (of any race),” as defined in the year 2000 Census. These persons comprised 10.3 of the total MSTI population (some Hispanics/Latinos also classified themselves as White). Counties with the highest proportion of Hispanics or Latinos, in order, were Clark (34.2%), Minidoka (24%), Power (21.7%), Cassia (18.7%), Jerome (17.2%), and Gooding (17.1%).

Next in proportion in the Idaho MSTI Study Area were “some other race,” with 5.8% of the population. The “American Indian or Native Alaskan” was fourth in proportion, with 1.7 percent. Bingham County had the highest proportion of these persons, at 6.7%, and Blaine and Madison Counties had the lowest proportions of American Indian or Native Alaskans, at 0.3%. There are no Native American reservations in the MSTI Study Area.

2.2.3 HOUSING

The rental housing market in the Idaho portion of the MSTI Study Area varies from somewhat tight to very under occupied; in general, ample rental housing appeared to exist in the year 2000. Counties exhibiting rental vacancy rates closest to 5%, the threshold at which rental markets are often considered to be tight are Gooding (5.3%), Jerome (5.4%), Bonneville (5.9%), Power (6.1%), and Madison (7.0%). The counties with the highest rental vacancy rates were Fremont (15.2%), Butte (14.7%), Clark (14.2%), Blaine (13.6%), and Cassia (11.3%). For Blaine County, the prevalence of seasonal housing limited the effective amount of actual rental housing availability. Bannock, Bonneville, Fremont, and Twin Falls Counties had the largest numbers of available units for rent. Housing data are displayed in Exhibit 2-15.

Exhibit 2-15: Housing Data, Idaho Counties in the MSTI Study Area

					Vacant housing units				
					Percent			Vacancy rate	
	Total housing units	Occupied housing units	Vacant Housing Units, Total	Overall Vacancy Percent	For sale only	For rent	Seas., rec., or occ. use	Home-owner	Rental
IDAHO COUNTIES									
Bannock	29,102	27,192	1,910	6.6%	21.6	38.1	13.6	2.1	8.4
Bingham	14,303	13,317	986	6.9%	18.5	28.9	10.4	1.7	9.4
Blaine	12,186	7,780	4,406	36.2%	2.5	8.7	84.5	2	13.6
Bonneville	30,484	28,753	1,731	5.7%	20.2	26.2	21.8	1.6	5.9
Butte	1,290	1,089	201	15.6%	19.4	21.4	18.9	4.4	14.7
Cassia	7,862	7,060	802	10.2%	18	30.5	12.6	2.7	11.3
Clark	521	340	181	34.7%	4.4	9.9	69.1	3.3	14.2
Fremont	6,890	3,885	3,005	43.6%	4	3.6	77.7	3.5	15.2
Gooding	5,505	5,046	459	8.3%	16.3	17	19.6	2	5.3
Jefferson	6,287	5,901	386	6.1%	25.6	17.4	13.7	1.9	7
Jerome	6,713	6,298	415	6.2%	20.2	26	11.3	1.9	5.4
Lincoln	1,651	1,447	204	12.4%	17.6	18.1	17.6	3.2	9.2
Madison	7,630	7,129	501	6.6%	14	43.9	14	1.6	7
Minidoka	7,498	6,973	525	7.0%	17.5	37.9	5.9	1.7	11
Power	2,844	2,560	284	10.0%	23.9	14.8	10.2	3.4	6.1
Twin Falls	25,595	23,853	1,742	6.8%	21.9	35.2	12.2	2.3	7.5
MSTI Study Area Total	7,515	5,516	1,999	26.6%					
Idaho Total	166,361	148,623	17,738	10.7%					

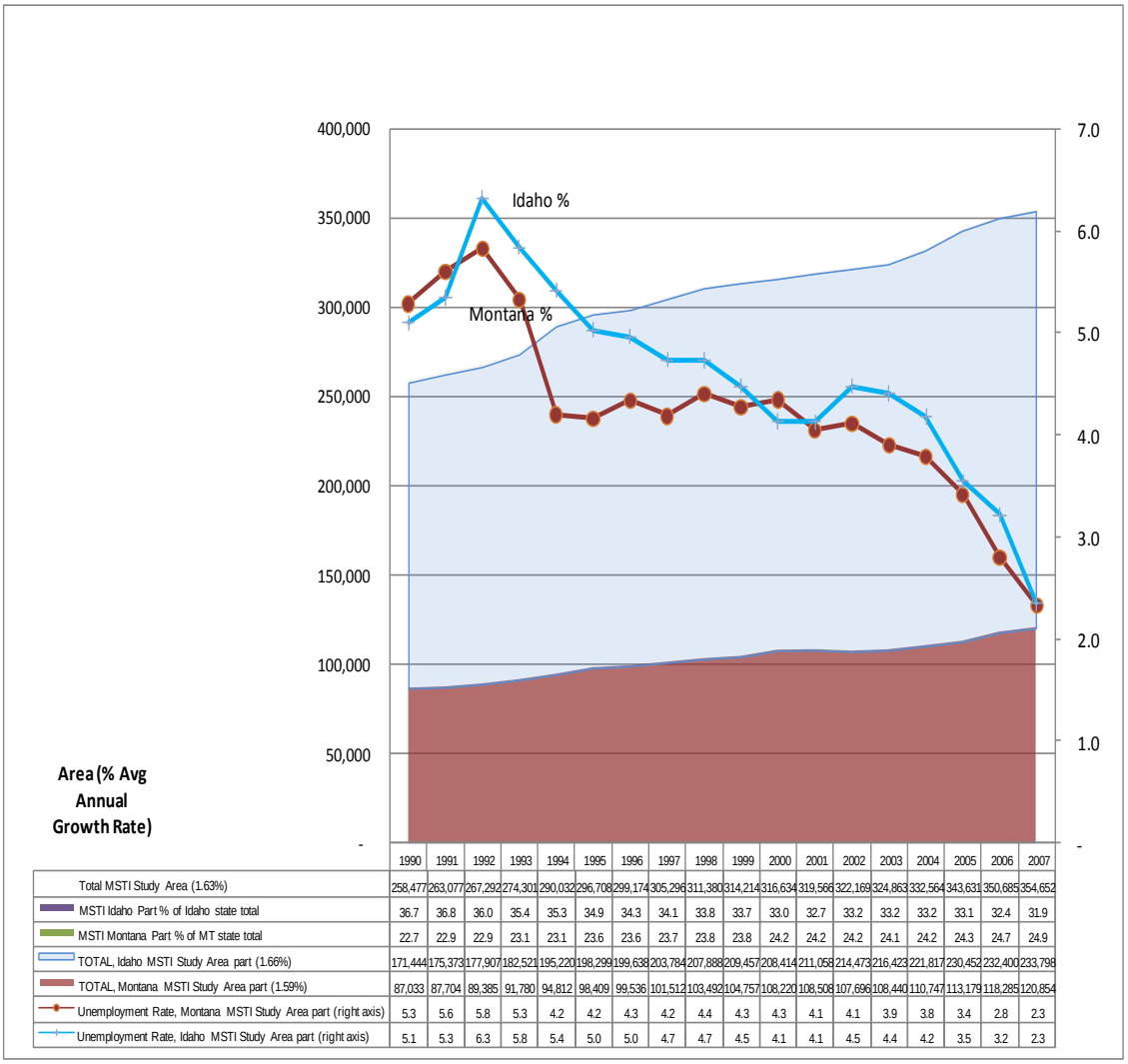
Source: U.S. Bureau of the Census, 2000 Census. GCT-H5: General Housing Characteristics: 2000, Data Set: Census 2000 Summary File 1 (SF 1) 100-Percent Data.

3 EMPLOYMENT AND ECONOMY

The MSTI Study Area, as a whole, has experienced healthy economic growth over the past two decades, providing the basis for the relatively rapid rates of population growth previously described in Section 2. Total employment was 354,652 in 2007, compared to 258,477 in 1990. Average annual employment has grown by 1.63% annually since the year 2000. MSTI Study Area employment is summarized in Exhibit 3-1.

About two-thirds of the total MSTI Study Area employment is in its Idaho portion, which has grown very slightly more rapidly than the Montana portion since the year 2000 (1.66% annually, compared to 1.59% for the Montana portion). At the same time, the unemployment rate in the Idaho portion, which since 1990 has usually been somewhat higher than the Montana portion, has in recent years declined sufficiently so that in the year 2000, the two states' portions unemployment rates were essentially equal, at 2.3%, historic lows in both areas.

Exhibit 3-1: Employment Summary, MSTI Study Area, 1990-2007 (total employment on left axis, percent unemployed on right axis)



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total MSTI Study Area (1.63%)	258,477	263,077	267,292	274,301	290,032	296,708	299,174	305,296	311,380	314,214	316,634	319,566	322,169	324,863	332,564	343,631	350,685	354,652
MSTI Idaho Part % of Idaho state total	36.7	36.8	36.0	35.4	35.3	34.9	34.3	34.1	33.8	33.7	33.0	32.7	33.2	33.2	33.2	33.1	32.4	31.9
MSTI Montana Part % of MT state total	22.7	22.9	22.9	23.1	23.1	23.6	23.6	23.7	23.8	23.8	24.2	24.2	24.2	24.1	24.2	24.3	24.7	24.9
TOTAL, Idaho MSTI Study Area part (1.66%)	171,444	175,373	177,907	182,521	195,220	198,299	199,638	203,784	207,888	209,457	208,414	211,058	214,473	216,423	221,817	230,452	232,400	233,798
TOTAL, Montana MSTI Study Area part (1.59%)	87,033	87,704	89,385	91,780	94,812	98,409	99,536	101,512	103,492	104,757	108,220	108,508	107,696	108,440	110,747	113,179	118,285	120,854
Unemployment Rate, Montana MSTI Study Area part (right axis)	5.3	5.6	5.8	5.3	4.2	4.2	4.3	4.2	4.4	4.3	4.3	4.1	4.1	3.9	3.8	3.4	2.8	2.3
Unemployment Rate, Idaho MSTI Study Area part (right axis)	5.1	5.3	6.3	5.8	5.4	5.0	5.0	4.7	4.7	4.5	4.1	4.1	4.5	4.4	4.2	3.5	3.2	2.3

Source: U.S. Bureau of Labor Statistics, Local Area Employment Statistics, not seasonally adjusted, downloaded April 6, 2008.

This relatively robust overall employment growth has been uneven across counties in the Study Area: The more rural areas generally have experienced slow or even negative economic growth, while the more urbanized areas have thrived. In the following sections, the differences across the state portions of the MSTI Study Area are described in greater detail.

3.1 EMPLOYMENT AND ECONOMY, MONTANA PORTION OF THE MSTI STUDY AREA

The most recent annual estimate of employment (2007) in the Montana portion of the MSTI Study Area is 120,854, an average annual growth rate of 1.6% since the year 2000. Gallatin County, with total employment 0f 49,824, and Lewis and Clark County, with 31,336, account for about two-thirds of total employment.

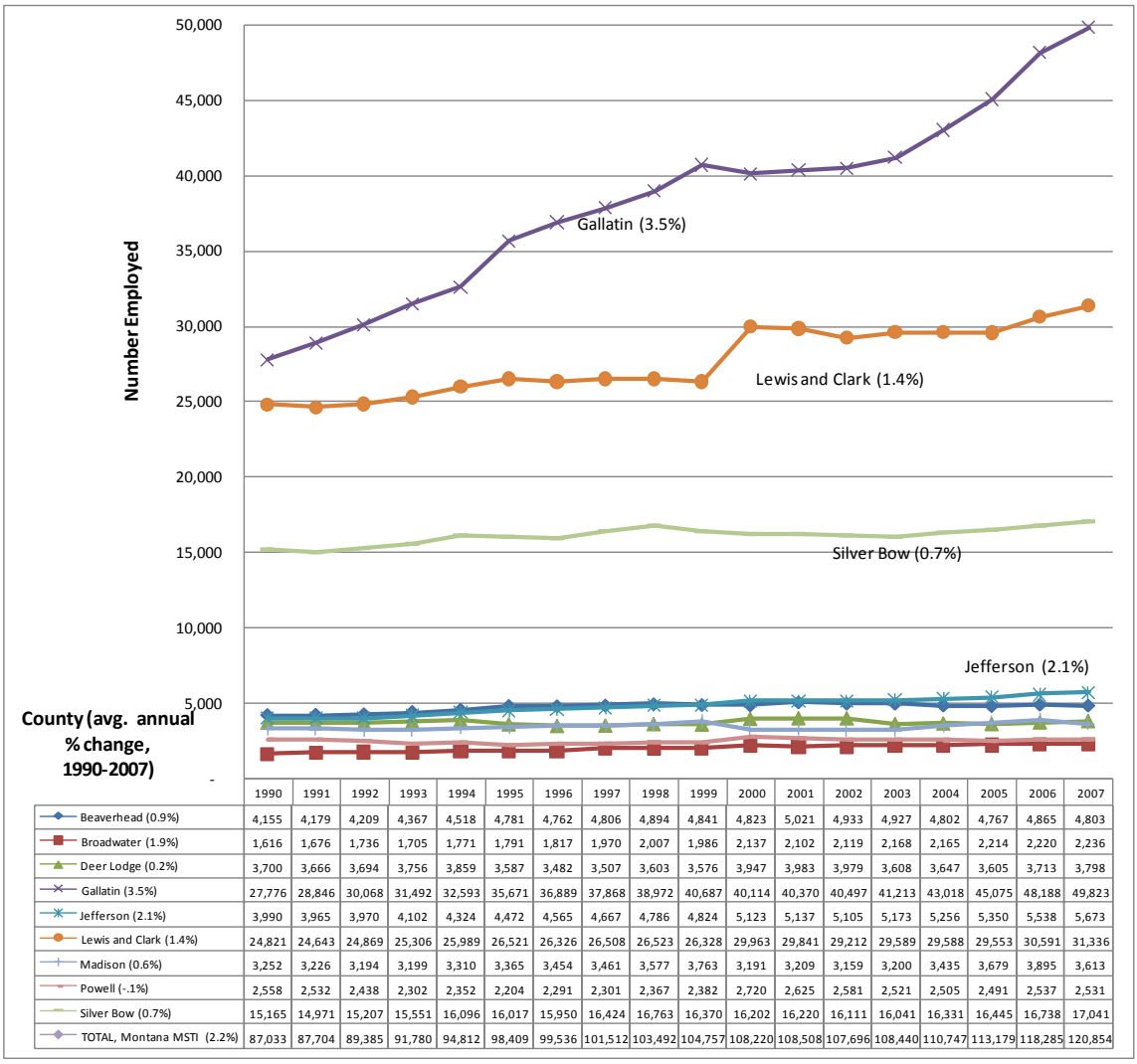
Gallatin and Lewis and Clark Counties also constitute the primary sources of employment increases in the region; not including these two counties, the region would have gained only 5,259 jobs over the period from 1990 to 2007, with growth in employment only about 0.6% annually since the year 2000. Historical County employment and unemployment data are depicted in Exhibit 3-2.

Of the five other Montana MSTI counties, only Silver Bow County had employment above 5,000 in 2007 (17,205 employed). However, over the 1990-2007 period, Silver Bows employment increased very little, by an average of 0.7% annually and 1,876 numerically over the 17-year period.

Of the remaining counties, Jefferson and Broadwater experienced noticeable growth, at 2.1% and 1.9% annually, respectively. However, the small size of their economies yielded very small numerical employment gains over the 1990-2007 period. Beaverhead and Madison Counties experienced moderate growth, at 0.6% and 0.9% annually. Deer Lodge County employment grew negligibly, and Powell County employment actually slightly fell.

When viewed on a monthly basis, however, it can be seen that there are substantial seasonal swings in the availability of labor across the MSTI Study Area. The harsh winters inhibit some employment, particularly construction. Thus, during the summer construction season, employment peaks noticeably, as shown in Exhibit 3-5. Similarly, the number of unemployed persons has historically been higher by about 600 to 1,000 in the winter than in summer, as shown in Exhibit 3-6.

Exhibit 3-2: Total Employment, Montana Counties in the MSTI Study Area, 1990-2007

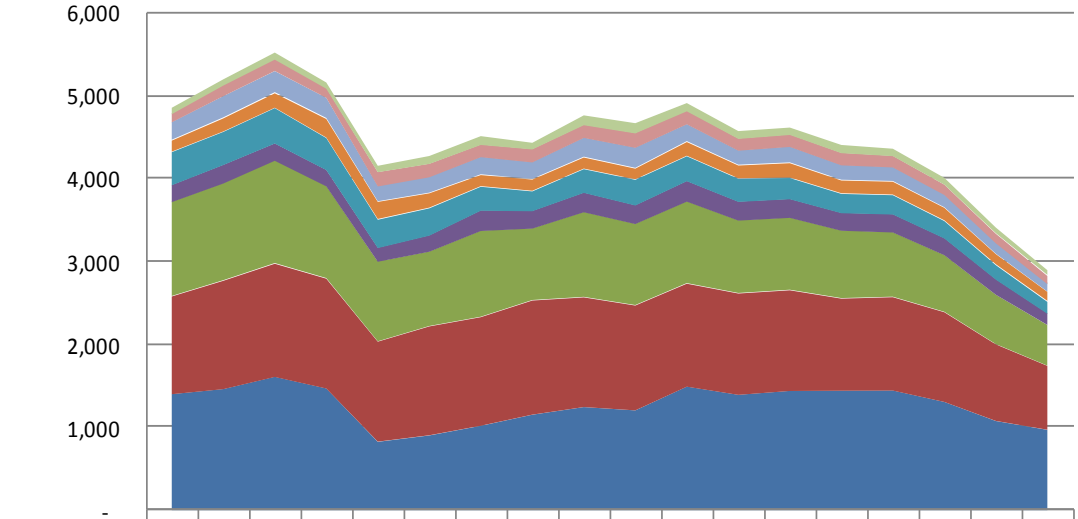


County (avg. annual % change, 1990-2007)	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Beaverhead (0.9%)	4,155	4,179	4,209	4,367	4,518	4,781	4,762	4,806	4,894	4,841	4,823	5,021	4,933	4,927	4,802	4,767	4,865	4,803
Broadwater (1.9%)	1,616	1,676	1,736	1,705	1,771	1,791	1,817	1,970	2,007	1,986	2,137	2,102	2,119	2,168	2,165	2,214	2,220	2,236
Deer Lodge (0.2%)	3,700	3,666	3,694	3,756	3,859	3,587	3,482	3,507	3,603	3,576	3,947	3,983	3,979	3,608	3,647	3,605	3,713	3,798
Gallatin (3.5%)	27,776	28,846	30,068	31,492	32,593	35,671	36,889	37,868	38,972	40,687	40,114	40,370	40,497	41,213	43,018	45,075	48,188	49,823
Jefferson (2.1%)	3,990	3,965	3,970	4,102	4,324	4,472	4,565	4,667	4,786	4,824	5,123	5,137	5,105	5,173	5,256	5,350	5,538	5,673
Lewis and Clark (1.4%)	24,821	24,643	24,869	25,306	25,989	26,521	26,326	26,508	26,523	26,328	29,963	29,841	29,212	29,589	29,588	29,553	30,591	31,336
Madison (0.6%)	3,252	3,226	3,194	3,199	3,310	3,365	3,454	3,461	3,577	3,763	3,191	3,209	3,159	3,200	3,435	3,679	3,895	3,613
Powell (-.1%)	2,558	2,532	2,438	2,302	2,352	2,204	2,291	2,301	2,367	2,382	2,720	2,625	2,581	2,521	2,505	2,491	2,537	2,531
Silver Bow (0.7%)	15,165	14,971	15,207	15,551	16,096	16,017	15,950	16,424	16,763	16,370	16,202	16,220	16,111	16,041	16,331	16,445	16,738	17,041
TOTAL, Montana MSTI (2.2%)	87,033	87,704	89,385	91,780	94,812	98,409	99,536	101,512	103,492	104,757	108,220	108,508	107,696	108,440	110,747	113,179	118,285	120,854

Source: U.S. Bureau of Labor Statistics, Local Area Employment Statistics, not seasonally adjusted, downloaded April 6, 2008.

The number of unemployed persons in the labor force in the Montana portion of the MSTI fell for all counties over the 1990-2007 period, particularly after the year 2000. The average annual unemployed labor force declined from almost 5,000 in 2000 to about 3,000 in 2007. This decline is likely due to the overall rapid rate of employment increases, and migration of workers. Unemployment rates similarly declined for all counties to historic lows in 2007. The highest unemployment rates were in Deer Lodge and Powell Counties, at 4.1% and 3.6% respectively. Employment rates below these latter rates can be considered essentially full employment when viewed as average annual figures. Unemployment information is presented in Exhibits 3-3 and 3-4.

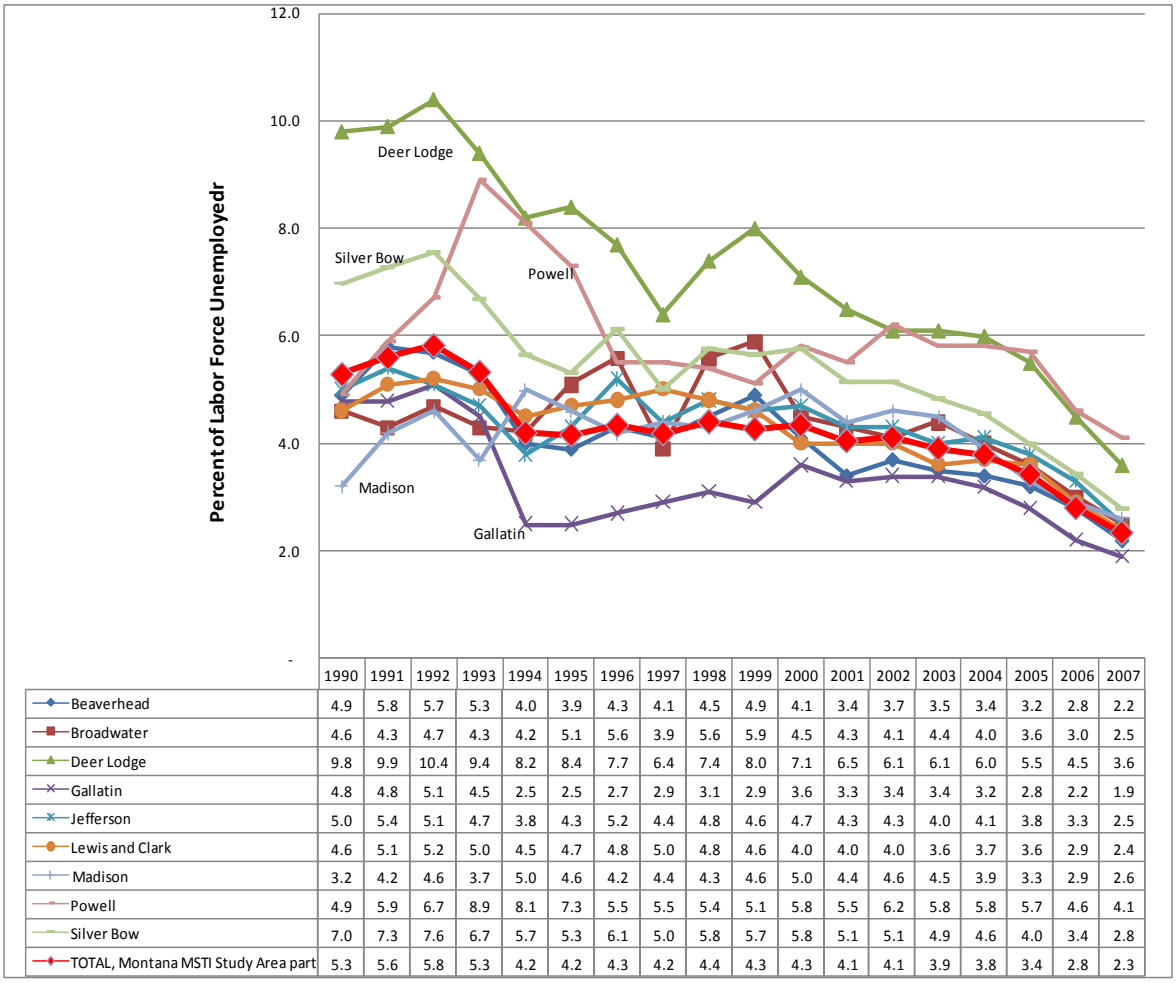
Exhibit 3-3: Total Annual Average Unemployed Labor Force, Montana Counties in the MSTI Study Area, 1990-2007



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Broadwater	78	76	86	76	78	97	107	81	120	124	100	95	90	100	90	83	68	57
Madison	108	141	154	123	173	163	153	161	161	181	167	148	151	151	140	124	115	98
Beaverhead	213	257	254	244	188	194	213	205	231	247	206	175	192	181	171	158	140	109
Powell	133	158	175	225	207	173	134	135	134	128	166	154	172	154	155	151	123	109
Deer Lodge	401	401	429	388	343	331	290	240	287	311	302	279	257	234	234	211	176	144
Jefferson	209	228	212	201	172	201	251	216	240	230	252	232	231	218	223	209	190	144
Silver Bow	1,13	1,17	1,24	1,11	964	900	1,04	867	1,02	983	990	879	873	818	780	686	596	491
Lewis and Clark	1,18	1,31	1,37	1,33	1,21	1,32	1,31	1,38	1,33	1,27	1,24	1,22	1,22	1,11	1,13	1,08	928	774
Gallatin	1,39	1,45	1,60	1,46	823	900	1,01	1,15	1,24	1,20	1,48	1,39	1,43	1,44	1,44	1,30	1,07	967

Source: U.S. Bureau of Labor Statistics, Local Area Employment Statistics, not seasonally adjusted, downloaded April 6, 2008.

Exhibit 3-4: Annual Average Unemployment Rates, Montana Counties in the MSTI Study Area, 1990-2007

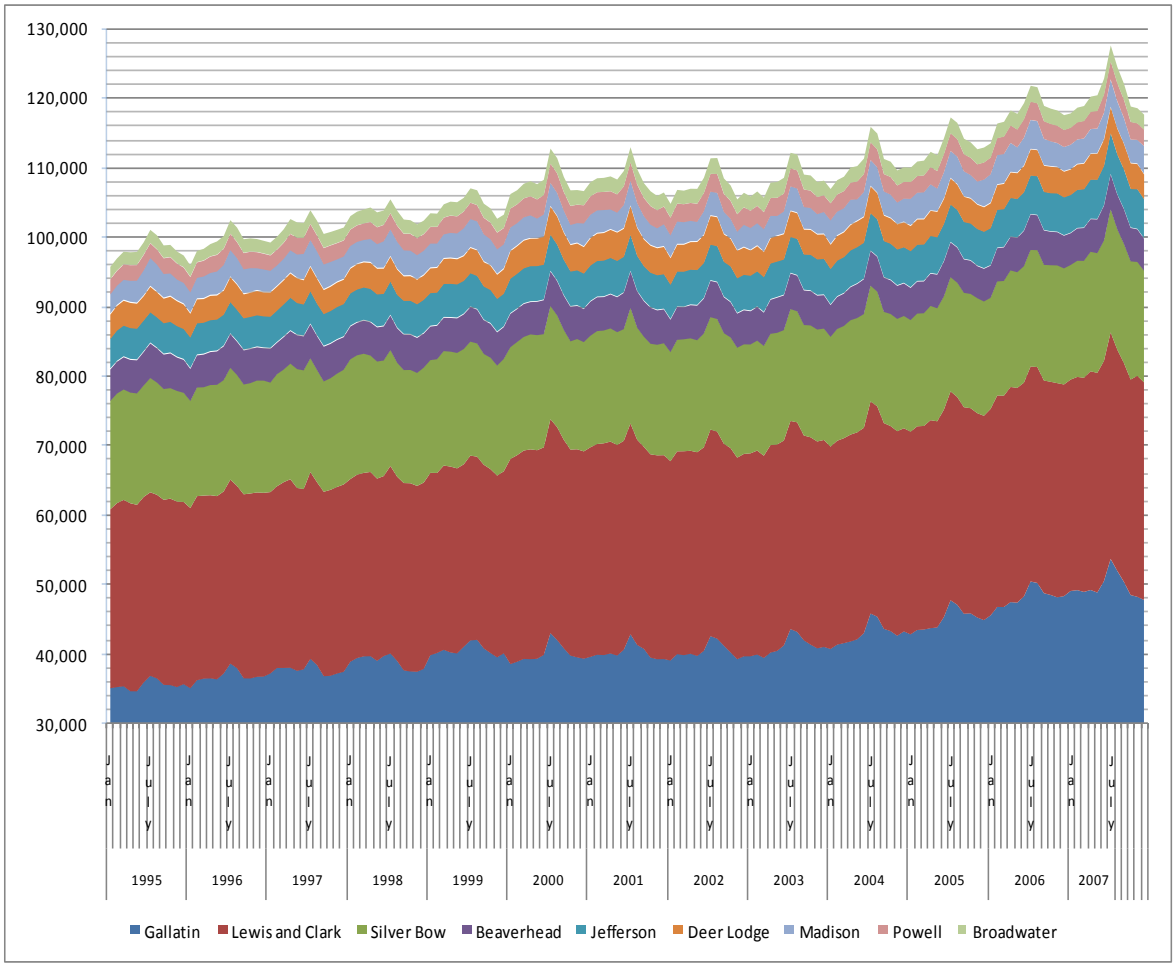


	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Beaverhead	4.9	5.8	5.7	5.3	4.0	3.9	4.3	4.1	4.5	4.9	4.1	3.4	3.7	3.5	3.4	3.2	2.8	2.2
Broadwater	4.6	4.3	4.7	4.3	4.2	5.1	5.6	3.9	5.6	5.9	4.5	4.3	4.1	4.4	4.0	3.6	3.0	2.5
Deer Lodge	9.8	9.9	10.4	9.4	8.2	8.4	7.7	6.4	7.4	8.0	7.1	6.5	6.1	6.1	6.0	5.5	4.5	3.6
Gallatin	4.8	4.8	5.1	4.5	2.5	2.5	2.7	2.9	3.1	2.9	3.6	3.3	3.4	3.4	3.2	2.8	2.2	1.9
Jefferson	5.0	5.4	5.1	4.7	3.8	4.3	5.2	4.4	4.8	4.6	4.7	4.3	4.3	4.0	4.1	3.8	3.3	2.5
Lewis and Clark	4.6	5.1	5.2	5.0	4.5	4.7	4.8	5.0	4.8	4.6	4.0	4.0	4.0	3.6	3.7	3.6	2.9	2.4
Madison	3.2	4.2	4.6	3.7	5.0	4.6	4.2	4.4	4.3	4.6	5.0	4.4	4.6	4.5	3.9	3.3	2.9	2.6
Powell	4.9	5.9	6.7	8.9	8.1	7.3	5.5	5.5	5.4	5.1	5.8	5.5	6.2	5.8	5.8	5.7	4.6	4.1
Silver Bow	7.0	7.3	7.6	6.7	5.7	5.3	6.1	5.0	5.8	5.7	5.8	5.1	5.1	4.9	4.6	4.0	3.4	2.8
TOTAL, Montana MSTI Study Area part	5.3	5.6	5.8	5.3	4.2	4.2	4.3	4.2	4.4	4.3	4.3	4.1	4.1	3.9	3.8	3.4	2.8	2.3

Source: U.S. Bureau of Labor Statistics, Local Area Employment Statistics, not seasonally adjusted, downloaded April 6, 2008.

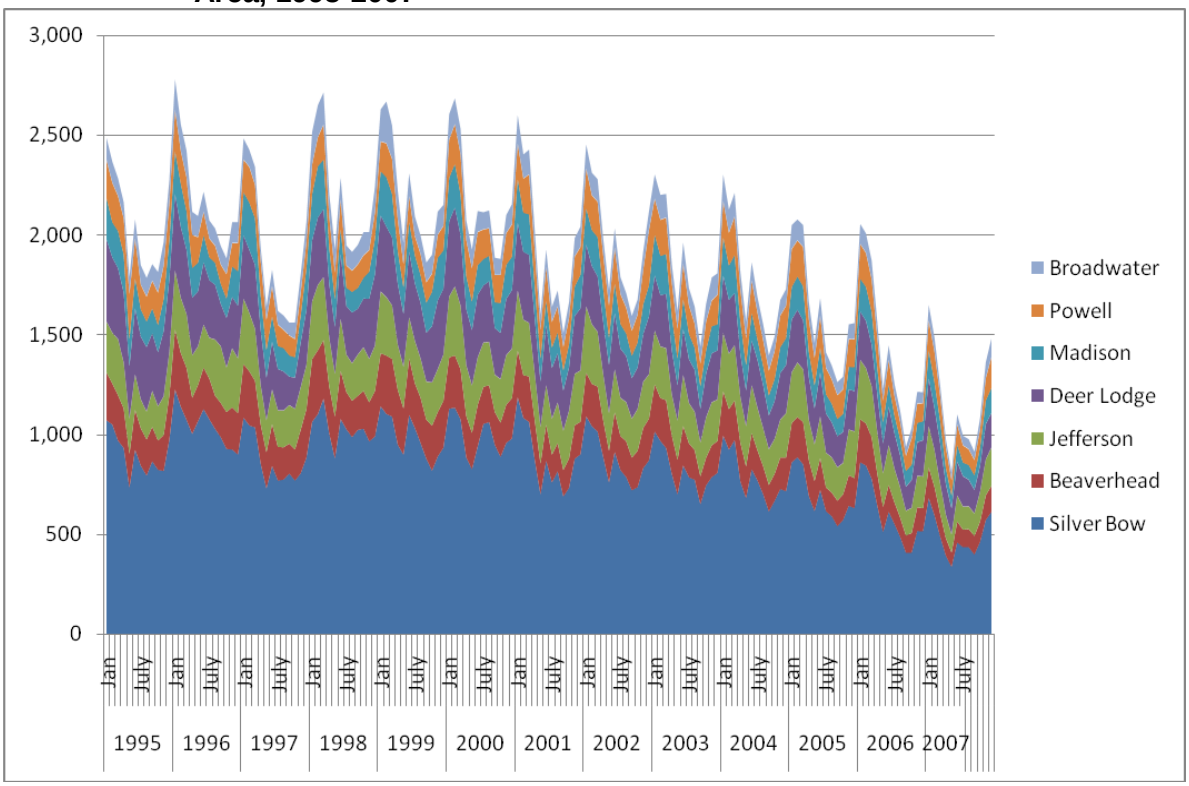
When viewed on a monthly basis, however, it can be seen that there are substantial seasonal swings in the availability of labor across the MSTI Study Area. The harsh winters inhibit some employment, particularly construction. Thus, during the summer construction season, employment peaks noticeably, as shown in Exhibit 3-5. Similarly, the number of unemployed persons has historically been higher by about 600 to 1,000 in the winter than in summer, as shown in Exhibit 3-6.

Exhibit 3-5: Monthly Employment, Montana Counties in the MSTI Study Area, 1995-2007



Source: U.S. Bureau of Labor Statistics, Local Area Employment Statistics, not seasonally adjusted, downloaded April 6, 2008.

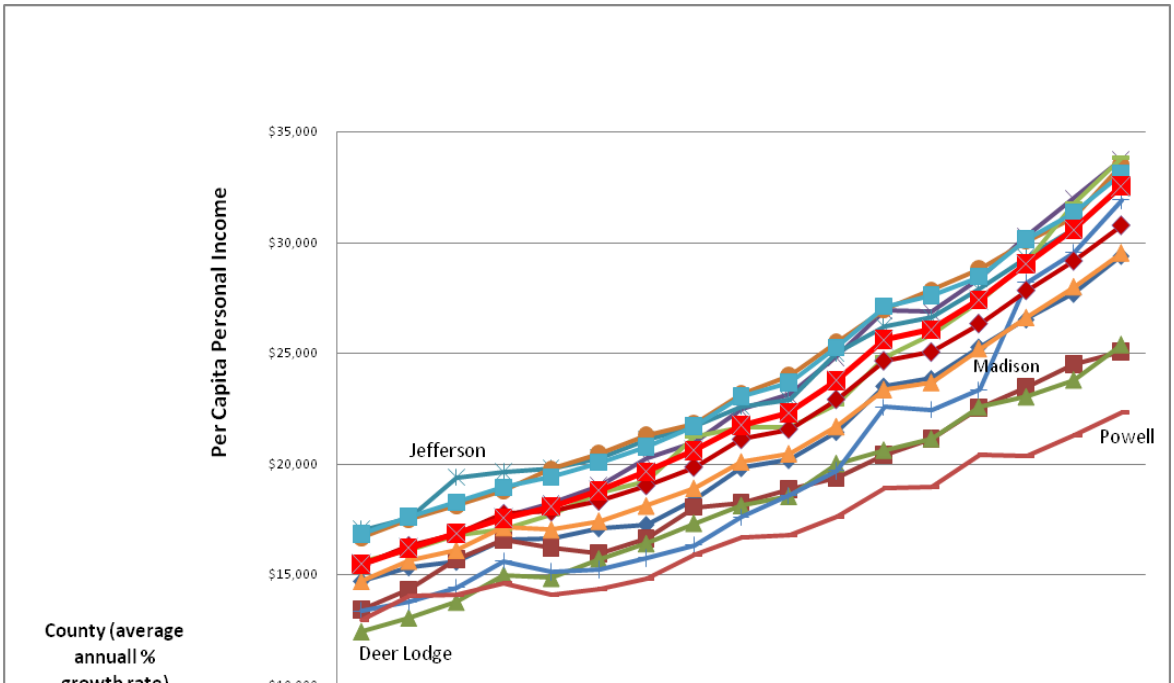
Exhibit 3-6: Monthly Unemployed Labor Force, Montana Counties in the MSTI Study Area, 1995-2007



Source: U.S. Bureau of Labor Statistics, Local Area Employment Statistics, not seasonally adjusted, downloaded April 6, 2008.

Per capita personal income trends in the Montana portion of the MTSI have shown consistent increases since 1990. Average annual growth rates ranged from 4.0% (Broadwater County) to 5.6% (Madison County) between 1990 and 2006. The more urbanized counties of Gallatin, Lewis and Clark, and Silver Bow had slightly higher than average per capita personal incomes (over $33,000 annually) than the less rural counties. Differences in per capita incomes are likely mitigated by differences in the cost of living across counties. Per capita personal income trends are depicted in Exhibit 3-7.

Exhibit 3-7: Per Capita Annual Income, Montana Counties in the MSTI Study Area, 1990-2007



County (average annual % growth rate)	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Beaverhead (4.4%)	$14,698	$15,317	$15,566	$16,568	$16,638	$17,081	$17,258	$18,360	$19,804	$20,164	$21,437	$23,517	$23,857	$25,283	$26,527	$27,681	$29,399
Broadwater (4.0%)	$13,419	$14,326	$15,708	$16,585	$16,225	$15,951	$16,617	$18,044	$18,255	$18,857	$19,344	$20,401	$21,132	$22,505	$23,450	$24,490	$25,061
Deer Lodge (4.6%)	$12,439	$13,060	$13,774	$14,990	$14,856	$15,723	$16,416	$17,331	$18,127	$18,543	$20,022	$20,628	$21,145	$22,564	$23,036	$23,794	$25,386
Gallatin (5.0%)	$15,457	$16,280	$16,840	$17,612	$18,224	$19,028	$20,255	$20,998	$22,473	$23,138	$24,854	$26,959	$26,889	$28,386	$30,311	$31,983	$33,758
Jefferson (4.1%)	$17,021	$17,596	$19,401	$19,640	$19,816	$20,269	$21,108	$21,707	$22,604	$22,929	$25,004	$26,221	$26,615	$27,900	$29,320	$30,609	$32,511
Lewis and Clark (4.5%)	$16,670	$17,477	$18,099	$18,796	$19,759	$20,459	$21,306	$21,827	$23,174	$23,986	$25,489	$26,994	$27,846	$28,826	$30,060	$31,138	$33,523
Madison (5.6%)	$13,380	$13,777	$14,436	$15,631	$15,160	$15,266	$15,779	$16,340	$17,602	$18,587	$19,705	$22,570	$22,460	$23,352	$28,197	$29,545	$31,915
Powell (3.5%)	$12,954	$14,036	$14,082	$14,598	$14,081	$14,357	$14,799	$15,905	$16,700	$16,795	$17,620	$18,908	$18,944	$20,395	$20,339	$21,293	$22,315
Silver Bow (5.0%)	$15,584	$16,122	$16,774	$17,053	$17,699	$18,702	$19,219	$21,238	$21,652	$21,648	$22,696	$24,816	$25,834	$27,356	$29,138	$31,772	$33,835
Montana (4.4%)	$15,448	$16,318	$16,867	$17,770	$17,861	$18,349	$19,047	$19,877	$21,130	$21,585	$22,933	$24,676	$25,068	$26,353	$27,854	$29,183	$30,790
Montana Metropolitan Portion (4.3%)	$16,819	$17,609	$18,258	$18,934	$19,384	$20,054	$20,775	$21,686	$23,051	$23,662	$25,239	$27,090	$27,606	$28,447	$30,118	$31,335	$33,086
Montana Nonmetropolitan Portion (4.5%)	$14,715	$15,624	$16,114	$17,139	$17,037	$17,430	$18,116	$18,908	$20,099	$20,469	$21,696	$23,371	$23,685	$25,210	$26,620	$28,008	$29,540
MTSI average (4.8%)	$15,463	$16,198	$16,852	$17,538	$18,076	$18,796	$19,641	$20,592	$21,736	$22,287	$23,758	$25,593	$26,050	$27,396	$29,026	$30,578	$32,544

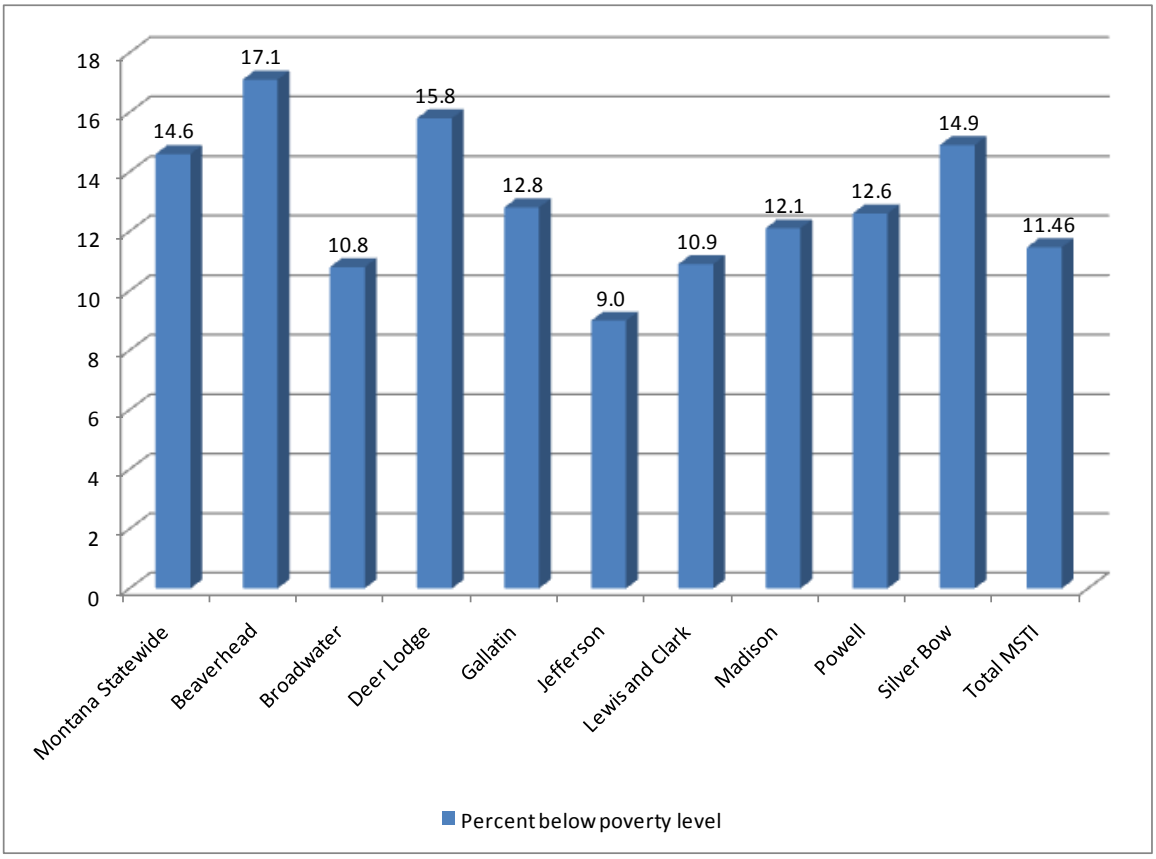
Source: U.S. Department of Labor, Bureau of Labor Statistics, May, 2008. State and Area Employment, Hours, and Earnings.

The most recenti information on the distribution of income within counties is the 2000 Census, for which personal income data from 1999 were reported. Of particular interest, due to environmental justice regulations, is the percent below poverty level.

Overall, 11.5% of individuals in the MSTI Study Areas Montana portion were classified as having incomes below poverty level in the 2000 Census, reflecting their 1999 incomes.[2] This is below the Montana Statewide proportion of 14.6%. Jefferson (9.0%) and Broadwater (10.8%) Counties had the lowest proportions, and Beaverhead (17.1%) and Deer Lodge (15.8%) had the highest incidences of poverty. These data are graphed in Exhibit 3-8.

[2] Poverty level dollar amounts used in the 2000 Census vary according to size of family and/or household and do not vary among states or regions. For definitions of poverty thresholds, see www.census.gov/hhes/poverty/threshld/thresh99.html.

Exhibit 3-8: Percent of Population with Incomes Below Poverty Level in 1999



Source: U.S. Bureau of the Census, 2000 Census. DP-3: Profile of Selected Economic Characteristics: 2000. Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data.

More details on poverty status and income status are presented in Exhibit 3-9. These data reveal that in 1999, Jefferson and Gallatin Counties had the highest proportions of households with over $100,000 annual incomes, as well as the highest median household incomes in the MSTI Montana Study Area. Lewis and Clark County households had the third-highest 1999 incomes. These data are reasonably consistent with the data in Exhibit 3-6, though measured in somewhat different ways.

Exhibit 3-9: Income and Poverty Status, 1999, State of Montana and MTSI Counties

	Montana Statewide		Beaverhead		Broadwater		Deer Lodge		Gallatin		Jefferson		Lewis and Clark		Madison		Powell		Silver Bow	
Subject	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
INCOME IN 1999																				
Households	**359,070**	**100**	**3,679**	**100**	**1,747**	**100**	**4,018**	**100**	**26,357**	**100**	**3,741**	**100**	**22,855**	**100**	**2,958**	**100**	**2,433**	**100**	**14,465**	**100**
Less than $10,000	40,535	11.3	481	13.1	165	9.4	601	15	2,139	8.1	320	8.6	2,176	9.5	351	11.9	263	10.8	1,741	12
$10,000 to $14,999	31,864	8.9	426	11.6	129	7.4	385	9.6	1,621	6.2	254	6.8	1,511	6.6	296	10	270	11.1	1,593	11
$15,000 to $24,999	61,573	17.1	689	18.7	311	17.8	917	22.8	3,996	15.2	514	13.7	3,343	14.6	533	18	456	18.7	2,638	18.2
$25,000 to $34,999	55,217	15.4	495	13.5	348	19.9	525	13.1	4,113	15.6	453	12.1	3,596	15.7	509	17.2	404	16.6	2,245	15.5
$35,000 to $49,999	65,393	18.2	621	16.9	312	17.9	752	18.7	5,215	19.8	703	18.8	4,180	18.3	551	18.6	553	22.7	2,284	15.8
$50,000 to $74,999	61,505	17.1	632	17.2	299	17.1	580	14.4	5,019	19	845	22.6	4,845	21.2	435	14.7	298	12.2	2,472	17.1
$75,000 to $99,999	23,007	6.4	188	5.1	98	5.6	163	4.1	2,157	8.2	390	10.4	1,823	8	141	4.8	105	4.3	776	5.4
$100,000 to $149,999	13,071	3.6	118	3.2	52	3	44	1.1	1,405	5.3	194	5.2	996	4.4	91	3.1	47	1.9	469	3.2
$150,000 to $199,999	3,182	0.9	15	0.4	23	1.3	17	0.4	375	1.4	37	1	212	0.9	28	0.9	15	0.6	108	0.7
$200,000 or more	3,723	1	14	0.4	10	0.6	34	0.8	317	1.2	31	0.8	173	0.8	23	0.8	22	0.9	139	1
Median household income (dollars)	33,024	(X)	28,962	(X)	32,689	(X)	26,305	(X)	38,120	(X)	41,506	(X)	37,360	(X)	30,233	(X)	30,625	(X)	30,402	(X)
With earnings	285,897	79.6	2,952	80.2	1,366	78.2	2,723	67.8	23,248	88.2	3,110	83.1	18,530	81.1	2,294	77.6	1,783	73.3	10,820	74.8
Mean earnings (dollars)	40,290	(X)	34,149	(X)	37,868	(X)	34,420	(X)	43,504	(X)	47,541	(X)	43,634	(X)	35,287	(X)	36,287	(X)	40,396	(X)
With Social Security income	99,432	27.7	1,099	29.9	615	35.2	1,606	40	4,513	17.1	905	24.2	5,752	25.2	916	31	842	34.6	4,611	31.9
(dollars)	11,074	(X)	11,200	(X)	11,492	(X)	10,827	(X)	11,717	(X)	11,228	(X)	11,073	(X)	10,509	(X)	11,159	(X)	10,724	(X)
Income	12,844	3.6	173	4.7	49	2.8	165	4.1	503	1.9	74	2	757	3.3	63	2.1	114	4.7	638	4.4
Income (dollars)	6,120	(X)	6,775	(X)	6,006	(X)	5,463	(X)	6,888	(X)	5,882	(X)	6,642	(X)	8,529	(X)	5,225	(X)	5,895	(X)
With public assistance income	11,818	3.3	108	2.9	48	2.7	165	4.1	308	1.2	89	2.4	679	3	42	1.4	105	4.3	622	4.3
(dollars)	2,436	(X)	2,362	(X)	4,138	(X)	1,906	(X)	1,992	(X)	3,198	(X)	2,058	(X)	1,507	(X)	2,670	(X)	2,815	(X)
With retirement income	58,637	16.3	582	15.8	360	20.6	988	24.6	3,170	12	695	18.6	4,378	19.2	549	18.6	526	21.6	3,025	20.9
Mean retirement income (dollars)	15,132	(X)	12,273	(X)	11,965	(X)	18,536	(X)	18,593	(X)	13,927	(X)	14,863	(X)	16,418	(X)	12,435	(X)	12,883	(X)
Families	**238,733**	**100**	**2,354**	**100**	**1,282**	**100**	**2,527**	**100**	**16,344**	**100**	**2,852**	**100**	**14,935**	**100**	**1,924**	**100**	**1,635**	**100**	**8,970**	**100**
Less than $10,000	15,176	6.4	168	7.1	60	4.7	204	8.1	665	4.1	106	3.7	687	4.6	121	6.3	107	6.5	560	6.2
$10,000 to $14,999	13,301	5.6	143	6.1	56	4.4	141	5.6	512	3.1	135	4.7	556	3.7	125	6.5	84	5.1	594	6.6
$15,000 to $24,999	34,241	14.3	384	16.3	190	14.8	466	18.4	1,772	10.8	297	10.4	1,635	10.9	304	15.8	297	18.2	1,242	13.8
$25,000 to $34,999	36,814	15.4	350	14.9	285	22.2	383	15.2	2,294	14	312	10.9	2,137	14.3	394	20.5	278	17	1,417	15.8
$35,000 to $49,999	49,929	20.9	497	21.1	261	20.4	588	23.3	3,609	22.1	613	21.5	2,930	19.6	402	20.9	454	27.8	1,751	19.5
$50,000 to $74,999	52,176	21.9	551	23.4	287	22.4	519	20.5	3,961	24.2	782	27.4	4,130	27.7	377	19.6	243	14.9	2,179	24.3
$75,000 to $99,999	19,981	8.4	157	6.7	76	5.9	150	5.9	1,720	10.5	363	12.7	1,652	11.1	96	5	95	5.8	610	6.8
$100,000 to $149,999	11,240	4.7	86	3.7	41	3.2	44	1.7	1,195	7.3	180	6.3	895	6	71	3.7	42	2.6	404	4.5
$150,000 to $199,999	2,810	1.2	8	0.3	16	1.2	11	0.4	344	2.1	35	1.2	181	1.2	17	0.9	15	0.9	108	1.2
$200,000 or more	3,065	1.3	10	0.4	10	0.8	21	0.8	272	1.7	29	1	132	0.9	17	0.9	20	1.2	105	1.2
Median family income (dollars)	40,487	(X)	38,971	(X)	36,524	(X)	36,158	(X)	46,639	(X)	48,912	(X)	46,766	(X)	35,536	(X)	35,836	(X)	40,018	(X)
Per capita income (dollars)	17,151	(X)	15,621	(X)	16,237	(X)	15,580	(X)	19,074	(X)	18,250	(X)	18,763	(X)	16,944	(X)	13,816	(X)	17,009	(X)
Median earnings (dollars):																				
POVERTY STATUS IN 1999																				
Families	**25,004**	**(X)**	**302**	**(X)**	**97**	**(X)**	**292**	**(X)**	**1,026**	**(X)**	**190**	**(X)**	**1,086**	**(X)**	**196**	**(X)**	**167**	**(X)**	**961**	**(X)**
Percent below poverty level	(X)	10.5	(X)	12.8	(X)	7.6	(X)	11.6	(X)	6.3	(X)	6.7	(X)	7.3	(X)	10.2	(X)	10.2	(X)	10.7
years	19,427	(X)	208	(X)	72	(X)	214	(X)	779	(X)	138	(X)	880	(X)	101	(X)	113	(X)	783	(X)
Percent below poverty level	(X)	16.4	(X)	18.2	(X)	13.4	(X)	19.7	(X)	9.6	(X)	9.9	(X)	11.5	(X)	13	(X)	15.9	(X)	17.9
With related children under 5 years	9,325	(X)	94	(X)	29	(X)	86	(X)	446	(X)	67	(X)	502	(X)	47	(X)	44	(X)	381	(X)
Percent below poverty level	(X)	21.6	(X)	22.7	(X)	15	(X)	24.2	(X)	14.1	(X)	14.8	(X)	19.1	(X)	20.4	(X)	20	(X)	24.5
Individuals	**128,355**	**(X)**	**1,491**	**(X)**	**466**	**(X)**	**1,451**	**(X)**	**8,319**	**(X)**	**882**	**(X)**	**5,960**	**(X)**	**821**	**(X)**	**719**	**(X)**	**5,005**	**(X)**
Percent below poverty level	(X)	14.6	(X)	17.1	(X)	10.8	(X)	15.8	(X)	12.8	(X)	9	(X)	10.9	(X)	12.1	(X)	12.6	(X)	14.9
18 years and over	85,443	(X)	1,052	(X)	312	(X)	986	(X)	6,684	(X)	590	(X)	4,081	(X)	590	(X)	486	(X)	3,439	(X)
Percent below poverty level	(X)	13.1	(X)	15.9	(X)	9.7	(X)	13.8	(X)	13.3	(X)	8.3	(X)	10	(X)	11.3	(X)	11.3	(X)	13.5
65 years and over	10,369	(X)	150	(X)	52	(X)	166	(X)	306	(X)	95	(X)	408	(X)	105	(X)	58	(X)	459	(X)
Percent below poverty level	(X)	9.1	(X)	12.2	(X)	7.9	(X)	9.8	(X)	5.6	(X)	9.6	(X)	6.5	(X)	9.3	(X)	6	(X)	8.9
Related children under 18 years	41,247	(X)	430	(X)	149	(X)	434	(X)	1,527	(X)	279	(X)	1,737	(X)	219	(X)	230	(X)	1,540	(X)
Percent below poverty level	(X)	18.4	(X)	20.3	(X)	13.7	(X)	21.4	(X)	10.5	(X)	10.4	(X)	12.6	(X)	14.2	(X)	16.2	(X)	19.2
Related children 5 to 17 years	29,073	(X)	312	(X)	117	(X)	328	(X)	897	(X)	208	(X)	1,119	(X)	160	(X)	174	(X)	1,068	(X)
Percent below poverty level	(X)	17.1	(X)	19.7	(X)	13.6	(X)	20	(X)	8.4	(X)	9.6	(X)	10.8	(X)	13.1	(X)	15.8	(X)	17.5
over	44,615	(X)	551	(X)	155	(X)	557	(X)	5,123	(X)	281	(X)	2,574	(X)	239	(X)	204	(X)	1,941	(X)
Percent below poverty level	(X)	27	(X)	32.5	(X)	26.6	(X)	30.1	(X)	30.7	(X)	24.7	(X)	24.5	(X)	18.9	(X)	20.6	(X)	27.7

Source: U.S. Bureau of the Census, 2000 Census; DP-3: Profile of Selected Economic Characteristics: 2000; Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data

The economy of the Study Areas Montana portion is based on agriculture, mining, and tourism-related industries, in general. Measured in terms of overall growth in employment, and personal income, the economy has been very healthy and growing.

Data on the industrial structure of each counties employment are shown in Exhibit 3-10 (due to Federal disclosure regulations, much industry-specific employment data are suppressed, and therefore in Exhibit 3-10, for the counties other than Gallatin and Lewis and Clark, some of the industries had to be collapsed). Appendix A presents the information shown in Exhibit 3-10 in greater detail. This includes a location quotient analysis, using the U.S. as the reference area to identify industries in which the local area appears to specialize.

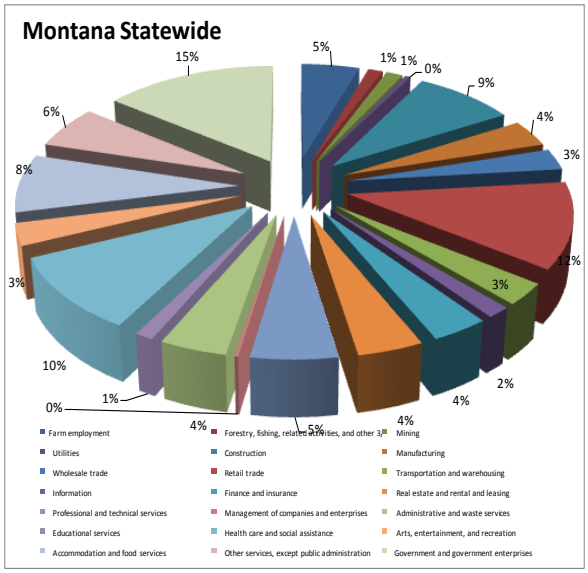
Both Gallatin and Lewis and Clark Counties serve as regional centers, with comparatively diversified economies and have led in growth, being less exposed to fluctuations in the agricultural and mining industries than the more rural counties. Lewis and Clark County, being home of the State Capitol (Helena) focuses on government services in a rapidly-growing state. Gallatin County has benefited as

a regional center for tourism, through which many tourists visiting Yellowstone National Park pass, or use hotels or RV parks.

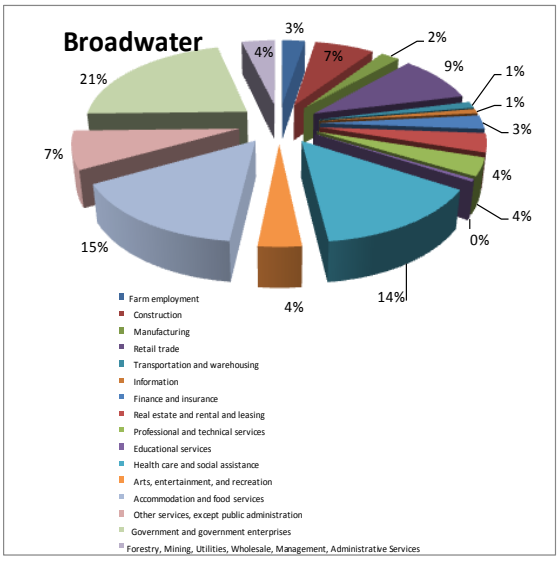
This health and growth has been somewhat uneven at the county level, however. Aside from Gallatin and Lewis and Clark Counties, the other Montana MSTI counties rely on agriculture, usually mining, and varying levels of outdoor-related tourism.

Some counties have depended more on mining industries, and have experienced boom-and-bust cycles: Deer Lodge County has experienced essentially no employment growth, while Powell and Silver Bow Counties have had negative growth over recent years. Beaverhead County, while attracting some tourism, remains highly dependent on farming. Broadwater and Powell Counties are almost solely dependent upon farming. Jefferson County is heavily dependent on mining but has not suffered employment contraction in recent years. Madison County is heavily dependent on agriculture, and secondarily mining.

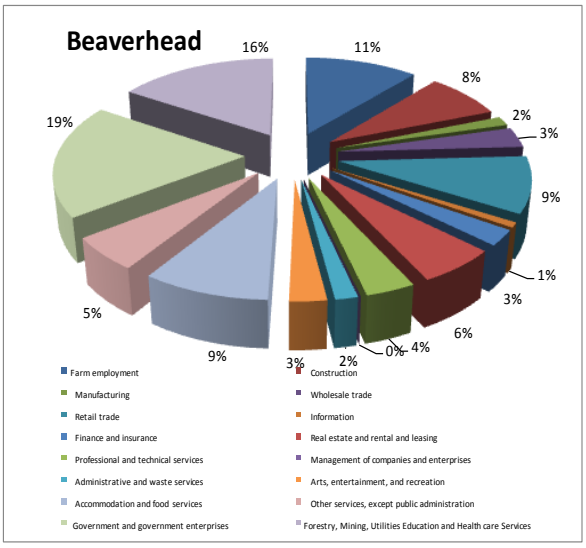
Exhibit 3-10: Employment by Industry, Montana MSTI Study Area Counties, 2006, and Summary Information



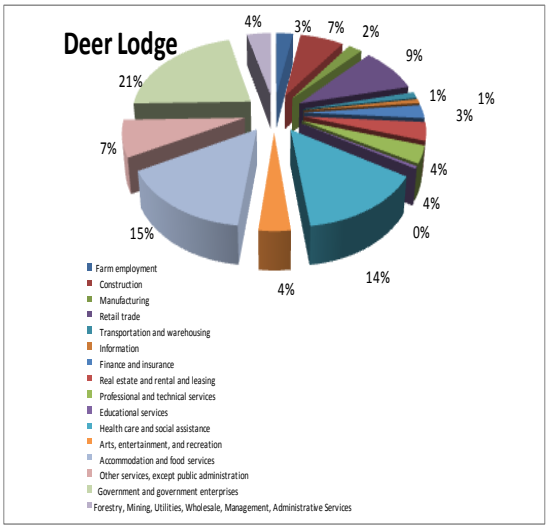
2007 Population (persons per square mile): 957,851 (6.2)
2007 Total Employment: 445,362
2007 Annual Average Unemployment Rate: 3.1
2006 Per Capita Personal Income: $30,790
2006 Primary Export Industries (see Appendix A): Farming; Accommodations and food services; Arts, entertainment and recreation services; Mining.



2007 Population (persons per square mile): 4,590 (3.7)
2007 Total Employment: 2,236
2007 Annual Average Unemployment Rate: 2.5%
2006 Per Capita Personal Income: $25,061
2006 Primary Export Industries (see Appendix A): Farming; Manufacturing.

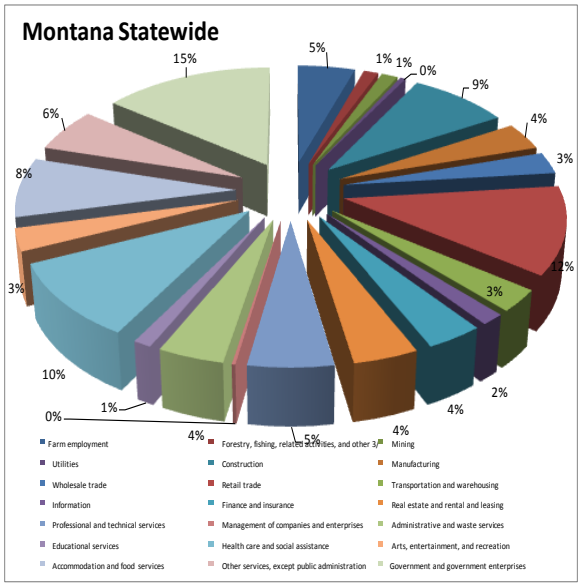


2007 Population (persons per square mile): 8,804 (1.6)
2007 Total Employment: 4,803
2007 Annual Average Unemployment Rate: 2.2%
2006 Per Capita Personal Income: $29,399
2006 Primary Export Industries (see Appendix A): Farming; Accommodations and food services; Arts, entertainment and recreation services.

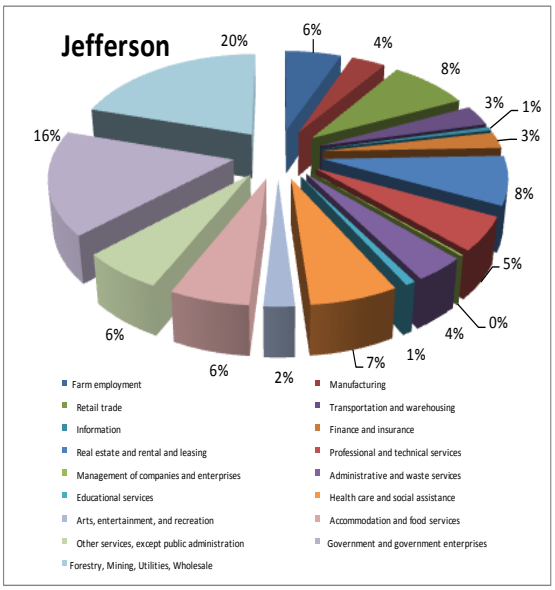


2007 Population (persons per square mile): 8,852 (11.9)
2007 Total Employment: 3,798
2007 Annual Average Unemployment Rate: 3.6%
2006 Per Capita Personal Income: $25,386
2006 Primary Export Industries (see Appendix A): Accommodations and food services; Arts, entertainment, and recreation services; Health care and social services; Other services.

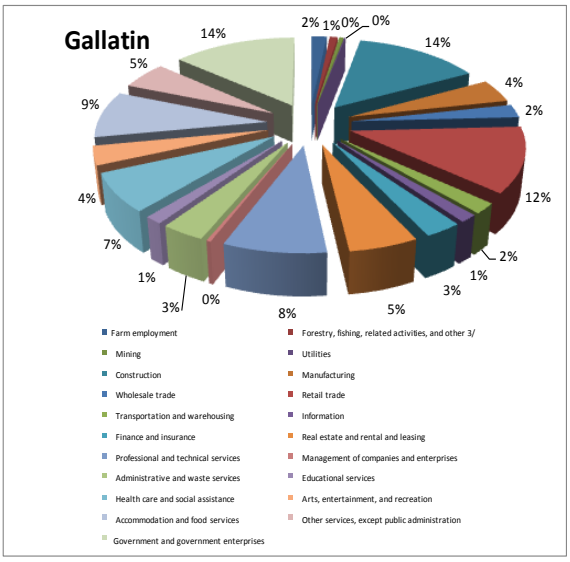
Exhibit 3-10 (continued): Employment by Industry, Montana MSTI Study Area Counties, 2006, and Summary Information



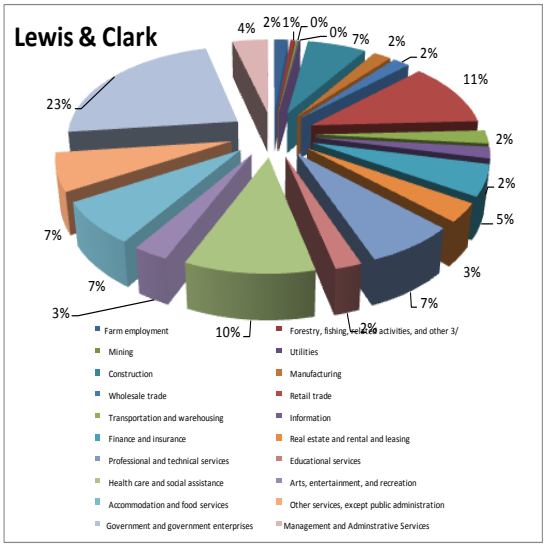
2007 Population (persons per square mile): 957,851 (6.2)
2007 Total Employment: 445,362
2007 Annual Average Unemployment Rate: 3.1
2006 Per Capita Personal Income: $30,790
2006 Primary Export Industries (see Appendix A): Farming; Accommodations and food services; Arts, entertainment and recreation services; Mining.



2007 Population (persons per square mile): 11,121 (6.7)
2007 Total Employment: 5,673
2007 Annual Average Unemployment Rate: 2.5%
2006 Per Capita Personal Income: $32,511
2006 Primary Export Industries (see Appendix A): Mining;Farming; Forestry, fisheries, and related services; Real estate.

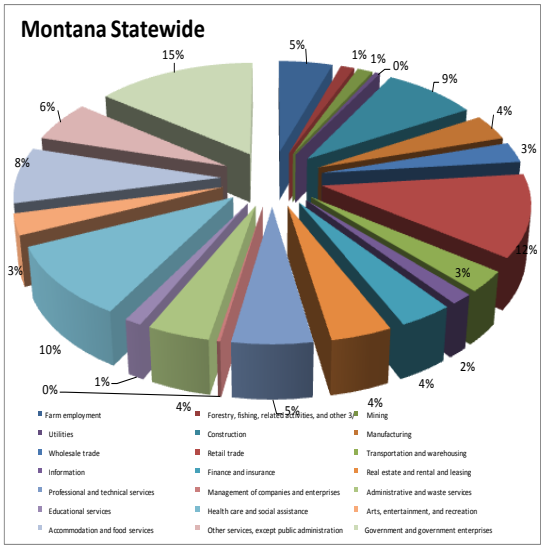


2007 Population (persons per square mile): 87,359 (33.2)
2007 Total Employment: 49,823
2007 Annual Average Unemployment Rate: 1.9%
2006 Per Capita Personal Income: $33.758
2006 Primary Export Industries (see Appendix A): Construction; Arts, entertainment, and recreationservices; Forestry, fishing, and related services; Accommodations and food services.

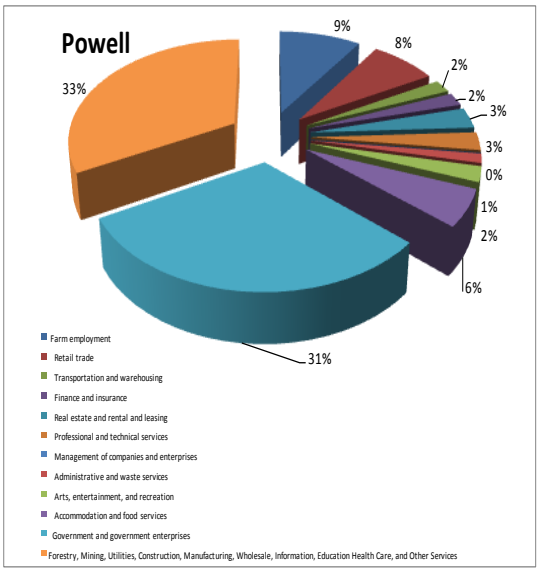


2007 Population (persons per square mile): 59,998 (17.2)
2007 Total Employment: 31,336
2007 Annual Average Unemployment Rate: 2.4%
2006 Per Capita Personal Income: $33,523
2006 Primary Export Industries (see Appendix A): Government; Arts, entertainment, and recreation services.

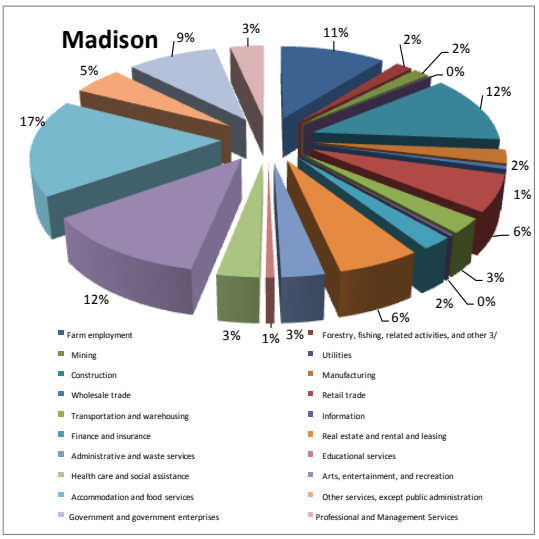
Exhibit 3-10 (continued): Employment by Industry, Montana MSTI Study Area Counties, 2006, and Summary Information



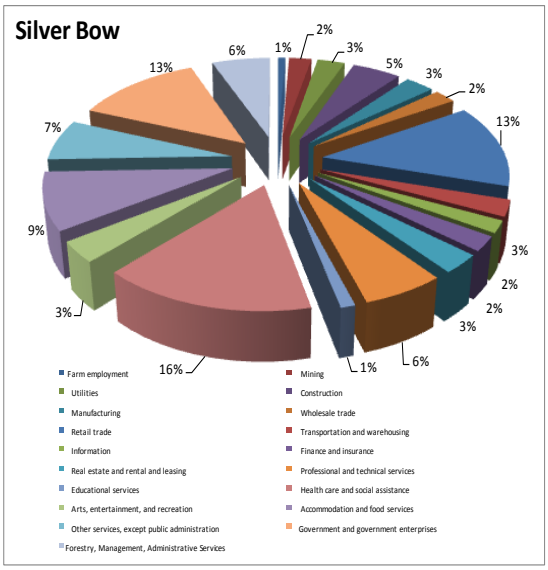
2007 Population (persons per square mile):
2007 Total Employment:
2007 Annual Average Unemployment Rate:
2006 Per Capita Personal Income:
2006 Primary Export Industries (see Appendix A): Farming; Accommodations and food services; Arts, entertainment and recreation services; Mining.



2007 Population (persons per square mile): 7,118 (3.1)
2007 Total Employment: 2,531
2007 Annual Average Unemployment Rate: 4.1%
2006 Per Capita Personal Income: $22,315
2006 Primary Export Industries (see Appendix A): Farming; Government.



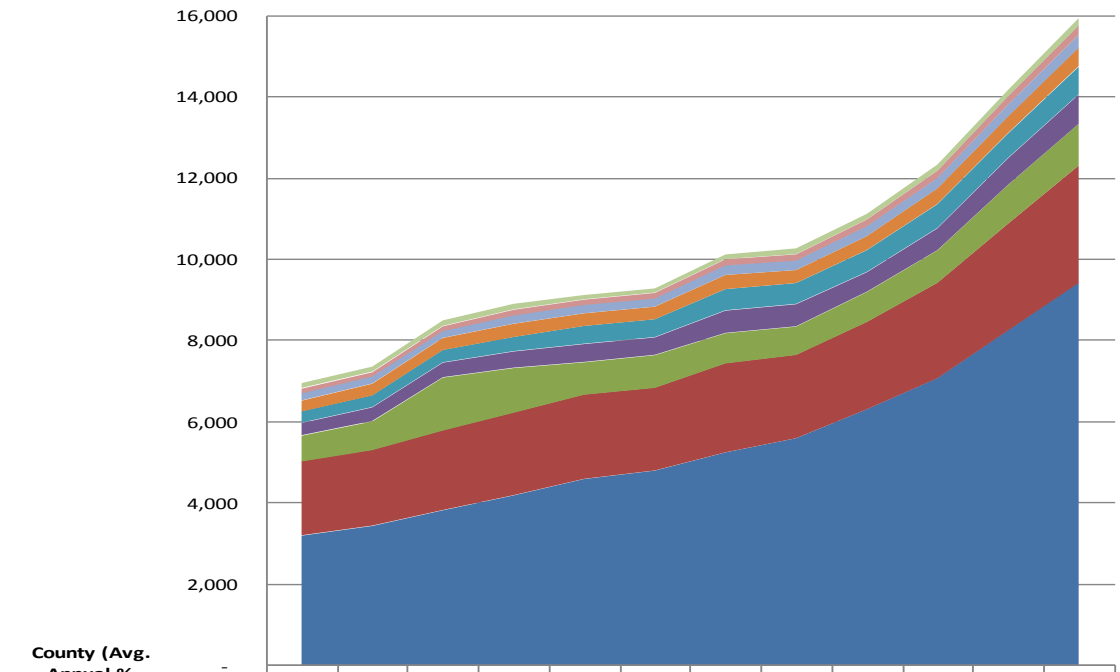
2007 Population (persons per square mile): 7,426 (2.1)
2007 Total Employment: 3,613
2007 Annual Average Unemployment Rate: 2.6%
2006 Per Capita Personal Income: $31,915
2006 Primary Export Industries (see Appendix A): Farming; arts, entertainment, and recreation services; Mining; Forestry, fishing, and related services; Accommodations and food services; Real Estate.



2007 Population (persons per square mile): 32m652 (45.4)
2007 Total Employment: 17,041
2007 Annual Average Unemployment Rate: 2.8%
2006 Per Capita Personal Income: $33,835
2006 Primary Export Industries (see Appendix A): Utilities; Mining; Arts, entertainment, and recreation services; Accommodations and food services.

The construction industry in the MSTI Study Area is of particular interest, because Project construction will add to demand for skilled and, to a lesser extent, unskilled, construction labor. Gallatin County had by far the largest construction employment in 2006, at 9,433 jobs, serving as the primary regional provider of construction labor. Lewis and Clark County was second at 2,901 jobs. Among the counties through which the Project alternatives would be located, Silver Bow County had the highest construction employment, at 1,027. Total construction employment in the Montana portion of the MSTI was estimated[3] at 15,966. Annual construction employment trends are shown in Exhibit 3-11.

Exhibit 3-11: Annual Construction Employment, Montana Counties in the MSTI Study Area, 1995-2007[4]



County (Avg. Annual % Growth Rate)	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Broadwater (4.3%)	119	122	134	136	104	102	113	142	138	153	162	189
Powell (6.8%)	116	105	118	141	131	139	152	154	167	185	212	239
Deer Lodge (4.8%)	192	190	180	216	218	212	246	245	254	262	298	321
Beaverhead (5.1%)	266	289	298	326	311	310	348	319	342	385	413	460
Jefferson (8.2%)	284	292	306	350	439	439	522	512	535	584	599	675
Madison (8.4%)	298	332	356	397	439	427	547	543	478	538	654	721
Siver Bow (4.5%)	635	707	1,306	1,102	799	807	745	700	742	801	957	1,027
Lewis and Clark (4.3%)%)	1,835	1,876	1,973	2,046	2,087	2,049	2,204	2,063	2,161	2,360	2,639	2,901
Gallatin (10.3%)	3,201	3,440	3,825	4,191	4,595	4,801	5,249	5,598	6,311	7,079	8,258	9,433

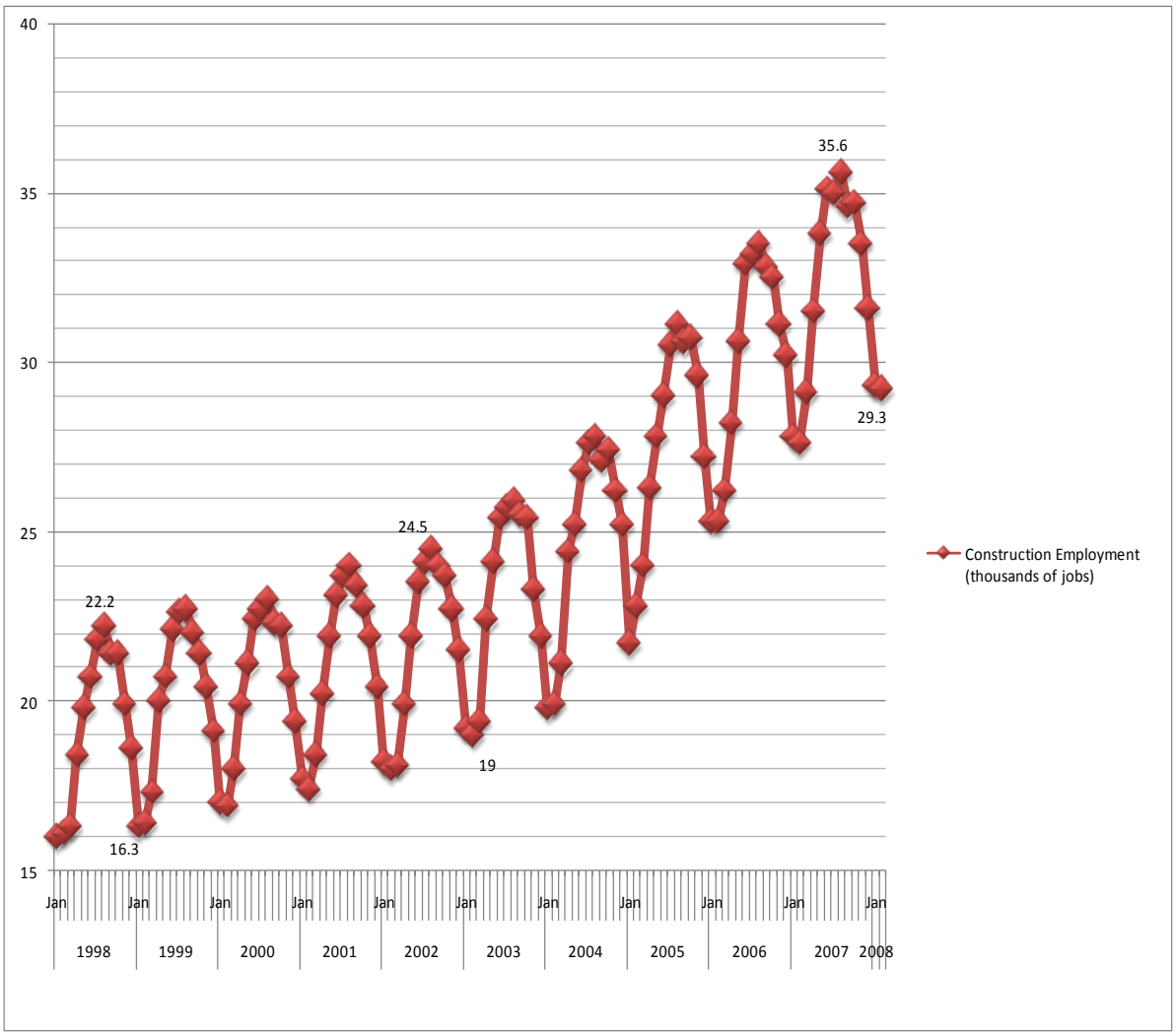
Source: Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce. CA25N. http://www.bea.gov/regional/reis/CA25Nfn.cfm

Construction employment in Powell County had to be estimated by Economic Planning Resources, since Federal disclosure regulations prevented their publication by federal agencies. The estimate was done assuming that in years in which data were suppressed, Powell County construction employment followed the same percentage changes as the total of construction employment in the other MSTI Montana counties combined. Any estimation error from this procedure is very small compared to regional total employment.
Construction employment in Powell and Broadwater Counties had to be estimated by Economic Planning Resources, since Federal disclosure regulations prevented their publication by federal agencies. These estimates assume that in years in which data were suppressed, Powell County construction employment followed the same percentage changes as the total of construction employment in the other MSTI Montana counties combined. Any estimation error from this procedure is very small compared to regional total employment.

Average annual construction employment figures described above do not reflect the presence of significant seasonality in construction employment, largely due to inclement winter weather in the Study Area. During the peak summer construction season, when demand is at its highest, significant tightening of the market for construction labor occurs. Conversely, in winter, it is likely that there is available labor in the Study Area due to relatively low demand.

Recent seasonal construction employment specific to the Montana MSTI Study Area do not exist. However, Monthly Montana statewide data are available, and are charted in Exhibit 3-12. It is likely that the seasonal swings that occur Statewide resemble those that occur in the MSTI Study Area due to similar weather, with the Study Area swings likely being somewhat more evident than Statewide because of the high altitudes, and hence more difficulty, of winter construction than is average Statewide. The -27 data in Exhibit 3-12 show that Montana's peak-month construction employment has historically been about one-third higher than the low-month construction employment.

Exhibit 3-12: Monthly Construction Employment, State of Montana, 1998-2007

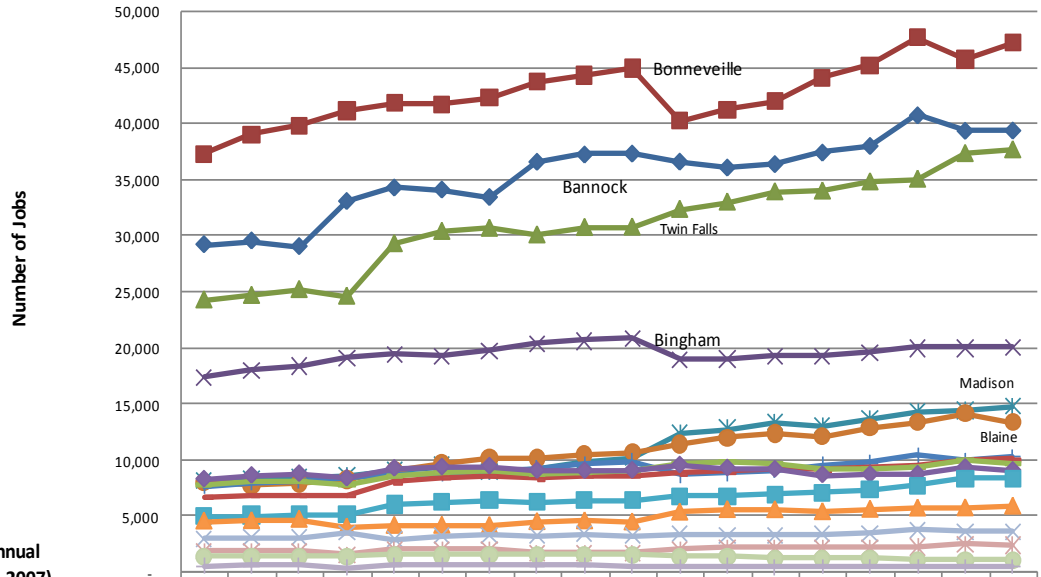


Source: U.S. Department of Labor, Bureau of Labor Statistics, May, 2008. State and Area Employment, Hours, and Earnings.

3.2 EMPLOYMENT AND ECONOMY, IDAHO PORTION OF THE MSTI STUDY AREA

Employment in the Idaho portion of the MSTI Study Area averaged 233,738 in 2007, having increased an average of 1.8% annually since 1990. The counties with the largest employment were Bonneville (county seat: Idaho Falls; 47,193 jobs), Bannock (county seat: Pocatello; 39,417 jobs), and Twin Falls (county seat: Twin Falls; 37,631 jobs); these represent the three primary business centers of the region and may be significant supply sources for labor and materials, though the Project alternatives only pass through Bonneville County, not Bannock or Twin Falls. Employment data are graphed in Exhibit 3-13.

Exhibit 3-13: Average Annual Employment, Idaho Counties in the MSTI, 1990-2007



County (avg. annual % growth, 1990-2007)	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Bannock (1.8%)	29,194	29,529	29,019	33,077	34,289	34,112	33,437	36,606	37,258	37,343	36,618	36,088	36,396	37,430	38,028	40,788	39,392	39,417
Bonneville (1.4%)	37,309	39,003	39,830	41,140	41,808	41,720	42,274	43,727	44,272	44,909	40,238	41,223	41,975	44,082	45,178	47,637	45,674	47,193
Twin Falls (2.6%)	24,325	24,724	25,244	24,656	29,325	30,417	30,693	30,105	30,765	30,799	32,376	33,024	33,938	34,004	34,820	35,060	37,336	37,671
Bingham (0.8%)	17,405	17,993	18,432	19,105	19,509	19,355	19,786	20,397	20,658	20,891	18,927	19,060	19,338	19,291	19,663	20,039	20,037	20,053
Madison (3.6%)	8,145	8,285	8,470	8,593	9,083	9,474	8,862	9,283	9,878	10,199	12,315	12,769	13,358	13,033	13,611	14,311	14,362	14,742
Blaine (3.0%)	8,104	7,819	8,036	8,314	9,121	9,788	10,186	10,189	10,495	10,724	11,445	12,031	12,386	12,141	12,902	13,408	14,152	13,406
Jefferson (1.8%)	7,670	7,933	8,118	8,448	8,768	8,787	9,002	9,223	9,626	9,871	8,700	8,867	9,078	9,537	9,775	10,432	10,002	10,334
Jerome (2.5%)	6,658	6,744	6,860	6,791	8,034	8,414	8,572	8,309	8,592	8,572	8,786	8,948	9,180	9,095	9,350	9,393	10,003	10,092
Cassia (1.3%)	7,835	8,081	8,232	7,861	8,704	8,933	9,171	8,867	8,941	9,053	9,808	9,857	9,785	9,290	9,321	9,418	10,082	9,790
Minidoka (0.5%)	8,303	8,648	8,809	8,391	9,304	9,418	9,502	9,096	9,077	9,120	9,604	9,329	9,206	8,700	8,727	8,761	9,379	9,107
Gooding (3.1%)	5,019	5,086	5,188	5,117	6,049	6,293	6,438	6,318	6,426	6,397	6,842	6,843	6,955	7,105	7,367	7,745	8,387	8,366
Fremont (1.5%)	4,584	4,618	4,743	4,053	4,196	4,202	4,185	4,534	4,604	4,504	5,385	5,615	5,605	5,425	5,641	5,751	5,772	5,925
Power (1.1%)	3,028	3,102	3,084	3,528	2,949	3,268	3,307	3,281	3,435	3,228	3,405	3,332	3,335	3,408	3,521	3,784	3,655	3,657
Lincoln (1.3%)	1,942	1,853	1,826	1,577	2,007	2,018	2,070	1,717	1,751	1,774	2,073	2,143	2,172	2,142	2,198	2,270	2,507	2,428
Butte (-1.3%)	1,387	1,380	1,411	1,464	1,488	1,499	1,539	1,561	1,544	1,537	1,388	1,399	1,292	1,233	1,210	1,146	1,149	1,105
Clark (-0.3%)	536	575	605	406	586	601	614	571	566	536	504	530	474	507	505	509	511	511
TOTAL, Idaho MSTI Study Area part (1.8%)	171,444	175,373	177,907	182,521	195,220	198,299	199,638	203,784	207,888	209,457	208,414	211,058	214,473	216,423	221,817	230,452	232,400	233,798

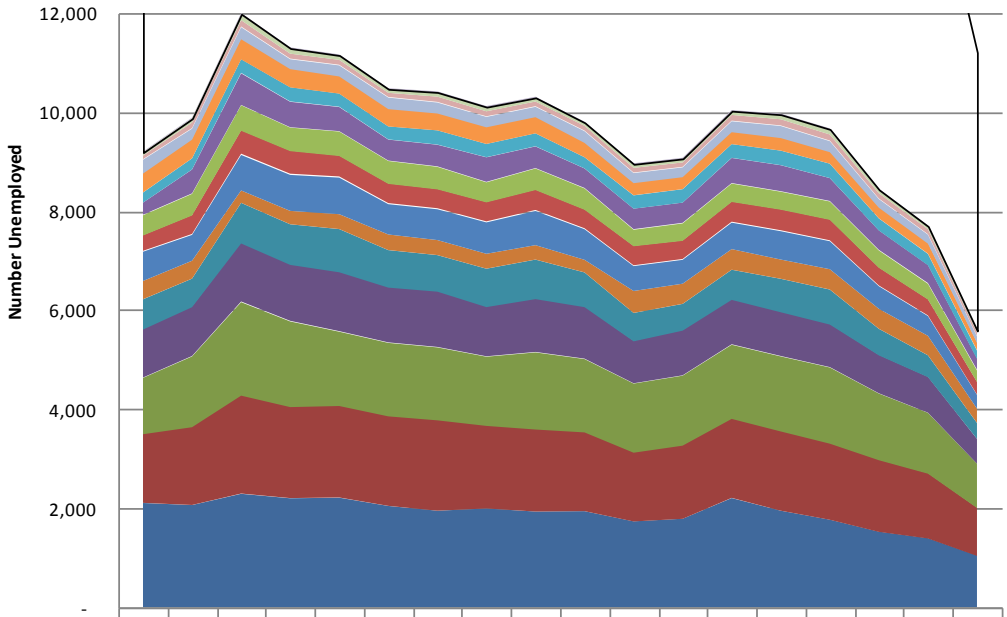
The second tier of higher-employment counties in the Idaho MSTI area are Bingham (county seat: Blackfoot; 20,055 jobs), Madison (county seat: Rexburg; 14,742 jobs), and Blaine (county seat: Hailey; 15,406 jobs) Counties. Blaine and Madison Counties experienced the two highest average annual increases in the Idaho MSTI Study Area between 1990 and 2007, but Bingham County's growth rate lagged, at 0.8%.

As is the case in the Montana portion of the MSTI, the healthy rates of total employment growth in the Idaho portion are not spread evenly among counties. Each of the remaining counties in the region had 2007 average employment of about 10,000 or less. These smaller, more rural counties tended to have lower rates of employment growth after 1990, or in the cases of the two smallest, Butte (county seat: Arco; 1,105 jobs) and Clark (county seat: Dubois; 511 jobs) Counties, negative growth. The only exception was Gooding County (county seat: Gooding), which grew by 3.1% annually from 1990 to 2007, to 8,366 jobs.

The overall healthy economy of the Idaho portion of the MSTI Study Area is reflected in the (1) the small number of unemployed persons, and (2) the declining and low unemployment rates. Only 5,615 persons in the labor force were unemployed, on average, in the year 2007, for an overall unemployment rate of only 2.3%. The largest numbers of unemployed persons were in the three largest-employment counties of Bannock (1,161 unemployed), Bonneville (972 unemployed), and Twin Falls (896 unemployed). The remaining 13 counties in Idaho portion of the MSTI had minimal numbers of unemployed due to their small labor forces and low unemployment rates.

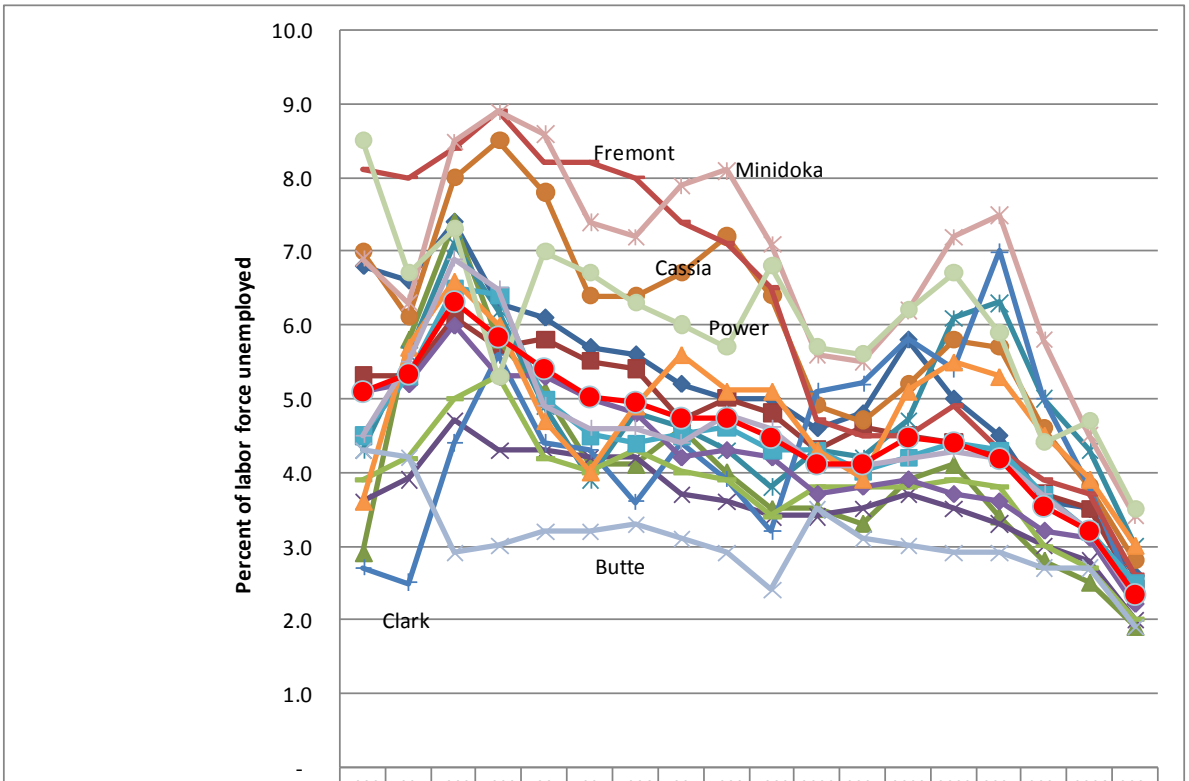
Unemployment rates varied little among counties, ranging from a low of 1.9% in Madison County, to 3.5% in Power County (county seat: American Falls; 3,657 jobs). Notable also is the universal trend of declining unemployment rates by county: The unemployment rate in every county was lower in 2007 than in 1990. Thus, it appears that uneven rates of employment growth among counties were mitigated somewhat by inter-county commuting, and in- and out- migration. Total unemployment and unemployment rates are shown in Exhibits 3-14 and 3-15.

Exhibit 3-14: Annual Average Unemployment Labor Force, Idaho Counties in the MSTI, 1990-2007



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
TOTAL, Idaho MSTI Study Area part	9,213	9,899	12,006	11,314	11,172	10,491	10,427	10,131	10,319	9,815	8,977	9,088	10,050	9,978	9,681	8,462	7,723	5,615
Clark	15	15	28	24	27	27	23	26	23	18	27	29	29	29	38	27	20	13
Butte	62	82	108	96	77	61	78	75	69	60	62	62	64	80	81	60	51	34
Lincoln	72	111	128	100	98	83	106	101	94	96	94	88	116	124	123	106	102	75
Power	280	222	244	199	223	234	222	210	209	237	204	198	221	243	222	175	182	134
Fremont	404	401	434	396	374	375	366	361	352	313	267	264	265	278	256	235	222	161
Gooding	203	223	275	285	265	261	286	266	260	224	268	270	276	292	289	243	229	168
Blaine	244	481	638	513	487	423	436	495	436	393	414	408	507	524	461	393	365	230
Jefferson	409	436	514	475	493	461	455	404	435	430	333	352	371	363	370	350	318	231
Jerome	317	381	474	466	423	398	390	393	411	382	392	374	407	423	422	363	327	255
Cassia	591	522	717	727	739	612	622	634	690	618	502	482	534	573	565	457	400	280
Madison	369	361	250	270	300	315	303	301	291	254	443	407	416	388	410	403	392	287
Minidoka	612	577	821	821	873	758	739	776	799	702	574	541	609	676	708	537	442	321
Bingham	979	999	1,194	1,149	1,207	1,122	1,131	1,007	1,081	1,053	856	913	912	897	871	773	721	498
Twin Falls	1,136	1,426	1,883	1,726	1,497	1,481	1,470	1,394	1,554	1,478	1,393	1,410	1,494	1,512	1,535	1,344	1,227	896
Bonneville	1,395	1,579	1,986	1,846	1,856	1,815	1,832	1,675	1,664	1,598	1,396	1,485	1,604	1,608	1,544	1,453	1,314	972
Bannock	2,125	2,083	2,312	2,221	2,233	2,065	1,968	2,013	1,951	1,959	1,752	1,805	2,225	1,968	1,786	1,543	1,411	1,061

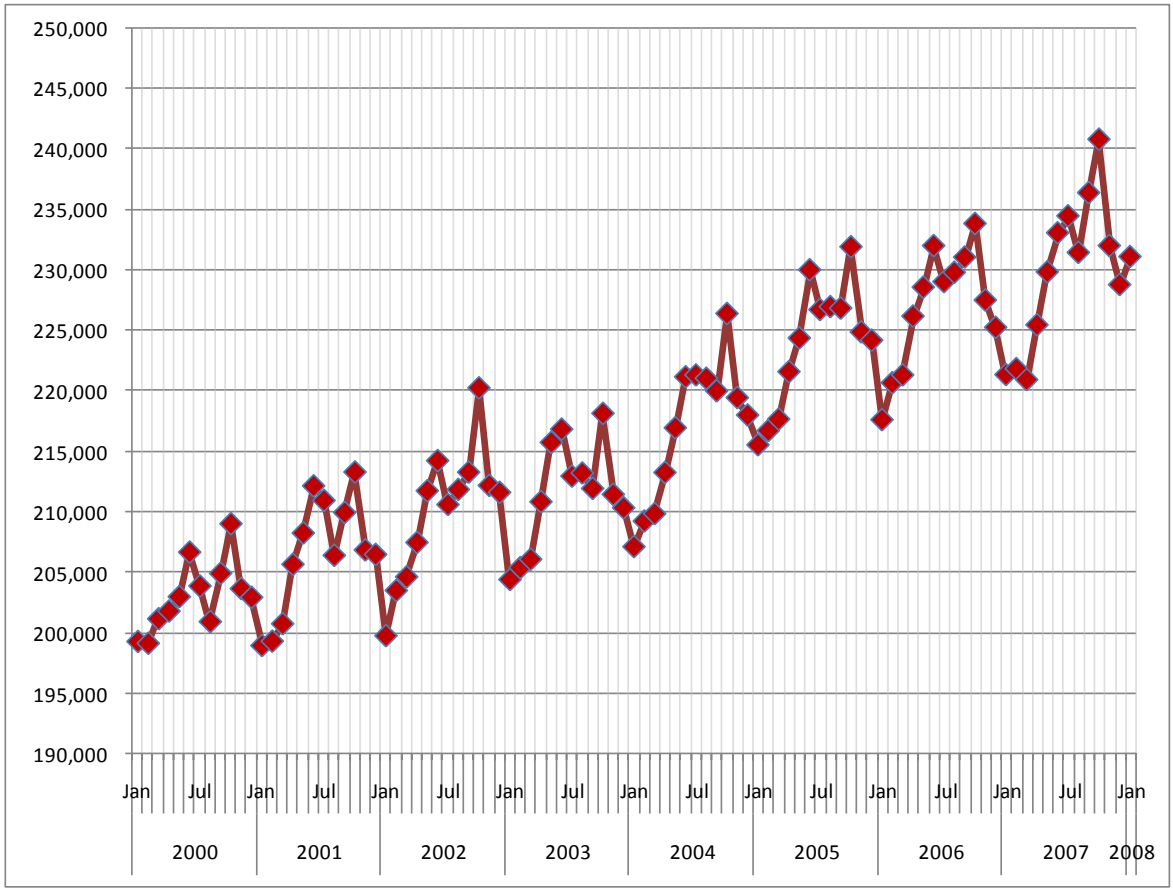
Exhibit 3-15: Average Annual Unemployment Rates, Idaho Counties in the MSTI, 1990-2007



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Bannock	6.8	6.6	7.4	6.3	6.1	5.7	5.6	5.2	5.0	5.0	4.6	4.8	5.8	5.0	4.5	3.6	3.5	2.6
Bingham	5.3	5.3	6.1	5.7	5.8	5.5	5.4	4.7	5.0	4.8	4.3	4.6	4.5	4.4	4.2	3.7	3.5	2.4
Blaine	2.9	5.8	7.4	5.8	5.1	4.1	4.1	4.6	4.0	3.5	3.5	3.3	3.9	4.1	3.4	2.8	2.5	1.9
Bonneville	3.6	3.9	4.7	4.3	4.3	4.2	4.2	3.7	3.6	3.4	3.4	3.5	3.7	3.5	3.3	3.0	2.8	2.0
Butte	4.3	5.6	7.1	6.2	4.9	3.9	4.8	4.6	4.3	3.8	4.3	4.2	4.7	6.1	6.3	5.0	4.3	3.0
Casia	7.0	6.1	8.0	8.5	7.8	6.4	6.4	6.7	7.2	6.4	4.9	4.7	5.2	5.8	5.7	4.6	3.8	2.8
Clark	2.7	2.5	4.4	5.6	4.4	4.3	3.6	4.4	3.9	3.2	5.1	5.2	5.8	5.4	7.0	5.0	3.8	2.3
Fremont	8.1	8.0	8.4	8.9	8.2	8.2	8.0	7.4	7.1	6.5	4.7	4.5	4.5	4.9	4.3	3.9	3.7	2.6
Gooding	3.9	4.2	5.0	5.3	4.2	4.0	4.3	4.0	3.9	3.4	3.8	3.8	3.8	3.9	3.8	3.0	2.7	2.0
Jefferson	5.1	5.2	6.0	5.3	5.3	5.0	4.8	4.2	4.3	4.2	3.7	3.8	3.9	3.7	3.6	3.2	3.1	2.2
Jerome	4.5	5.3	6.5	6.4	5.0	4.5	4.4	4.5	4.6	4.3	4.3	4.0	4.2	4.4	4.3	3.7	3.2	2.5
Lincoln	3.6	5.7	6.6	6.0	4.7	4.0	4.9	5.6	5.1	5.1	4.3	3.9	5.1	5.5	5.3	4.5	3.9	3.0
Madison	4.3	4.2	2.9	3.0	3.2	3.2	3.3	3.1	2.9	2.4	3.5	3.1	3.0	2.9	2.9	2.7	2.7	1.9
Minnidoka	6.9	6.3	8.5	8.9	8.6	7.4	7.2	7.9	8.1	7.1	5.6	5.5	6.2	7.2	7.5	5.8	4.5	3.4
Power	8.5	6.7	7.3	5.3	7.0	6.7	6.3	6.0	5.7	6.8	5.7	5.6	6.2	6.7	5.9	4.4	4.7	3.5
Twin Falls	4.5	5.5	6.9	6.5	4.9	4.6	4.6	4.4	4.8	4.6	4.1	4.1	4.2	4.3	4.2	3.7	3.2	2.3
TOTAL, Idaho MSTI Study Area part	5.1	5.3	6.3	5.8	5.4	5.0	5.0	4.7	4.7	4.5	4.1	4.1	4.5	4.4	4.2	3.5	3.2	2.3

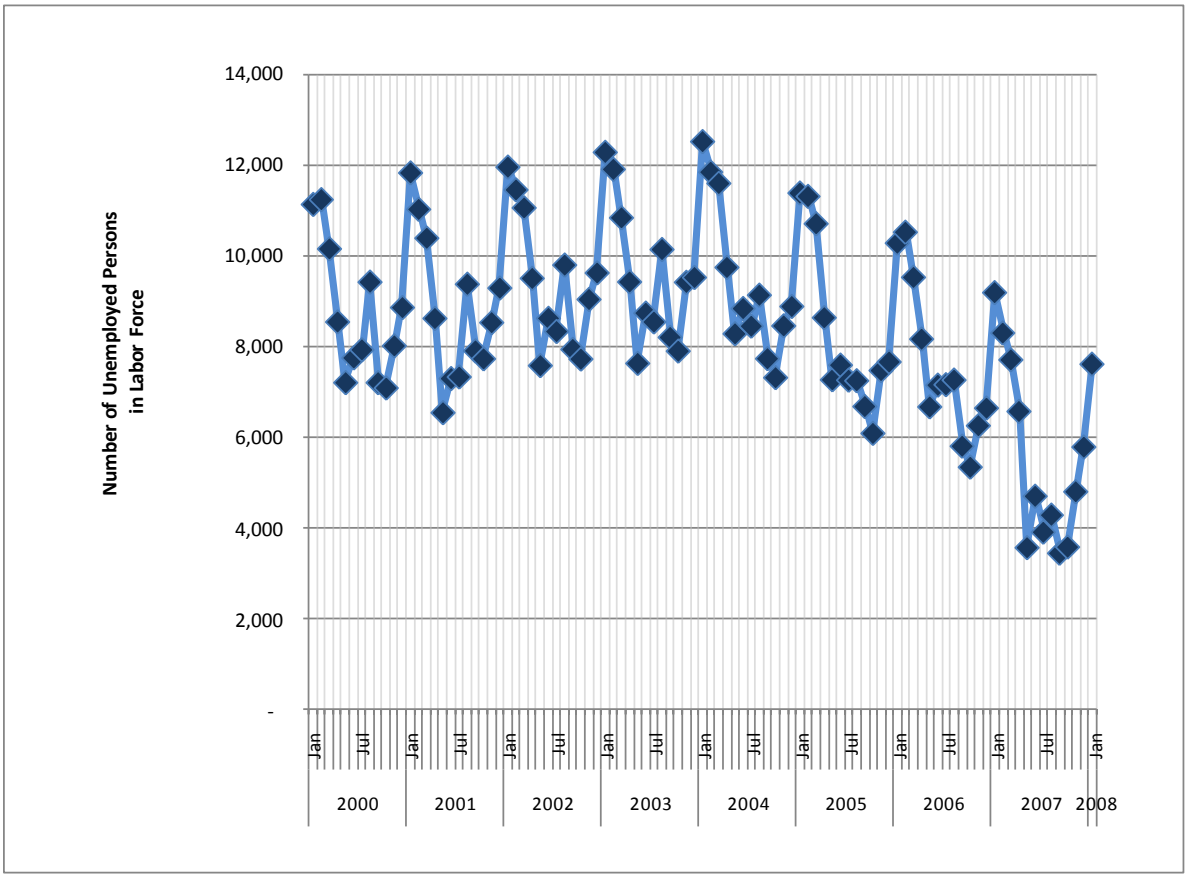
Like the Montana portion of the MSTI Study Area, the Idaho portion exhibits substantial annual swings. This is likely due to both the restrictions on outdoor construction presented by inclement winter weather, and the noticeable agricultural economy, both of which are highly seasonal. This fluctuation occurs in every county, but for clarity, is summarized simply in Exhibit 3-16, which shows monthly Idaho MSTI employment as a whole. These data show that the difference between the low-employment month of January, and the peak-employment month of September or October, has historically been up to 10%.

Exhibit 3-16: Monthly Total Employment, Idaho Portion of the MSTI, 2000-2008



Similarly, the unemployed labor force exhibits seasonal fluctuations, but much more dramatically, than total employment. Exhibit 3-17 shows that monthly employment in the Idaho MSTI Study Area has historically been up to about 50% less in the peak-employment months than in January. In 2007, the summer and early fall unemployed labor force was under 4,000.

Exhibit 3-17: Monthly Total Unemployed Labor Force, Idaho Portion of the MSTI, 2000-2008



The industry bases of the Idaho portion of the MSTI Study Area are primarily agriculture, forestry, fishing and related services, and, in some areas, mining and tourism-----the same industries that form the base of the Montana MSTI Study Area. These are the same industries that form the statewide export base, although tourism is more prominent in the Study Area than Statewide. Unlike the Montana portion of the MSTI Study area, the Idaho MSTI area lacks a state capitol and therefore heavy concentration of government services.

The three main urban centers (Pocatello, Idaho Springs, and Twin Falls) are essentially business service centers related to the regions basic industries. The following is a description of the economic structure of each county; data are graphed and tabulated in Exhibit 3-18. Appendix B contains the detailed employment-by-industry data analysis, including location quotients[5] as backup to the graphics in Exhibit 3-18.

By far the most prominent industry sector, throughout the Idaho portion of the MSTI Study Area, is farming. Every county in the Study Area except Blaine County had a higher proportion of its total employment in farming than the U.S. average of 1.6% in 2006 (the Idaho Statewide average was

[5] Location quotients are often used to identify industry concentrations, and therefore likely export industries, in an area. A location quotient under 1.0 indicates that a local area has a lower proportion of its employment in an industry than the reference area proportion, and above 1.0 means a higher proportion.

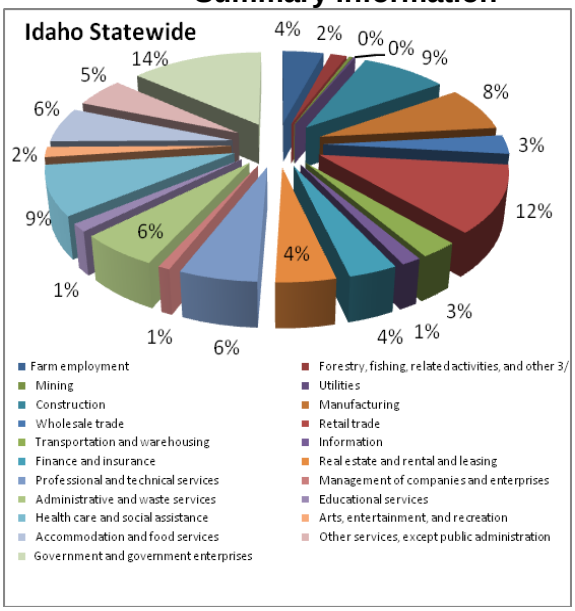
4.3%), indicating that farming is an export industry in every Idaho MSTI county except Blaine[6]. The counties with the lowest proportion of farming employment are Blaine, Bannock and Bonneville, at 1.5% (making Blaine the only county with a farming location quotient below 1.0), 1.7%, and 2.1% respectively.

The remaining counties are highly dependent upon farming. In order of location quotients, the top seven farm-concentrated counties are: Lincoln (14.1), Clark (13.9), Gooding (13.7), Power (12.8), Jerome (10.0), Fremont (9.0), and Minidoka (9.4). Overall, the Idaho portion of the Study Area had over four times the proportion of its work force than the U.S. average (location quotient 4.1). The statewide average was 2.7 times the national average proportion.

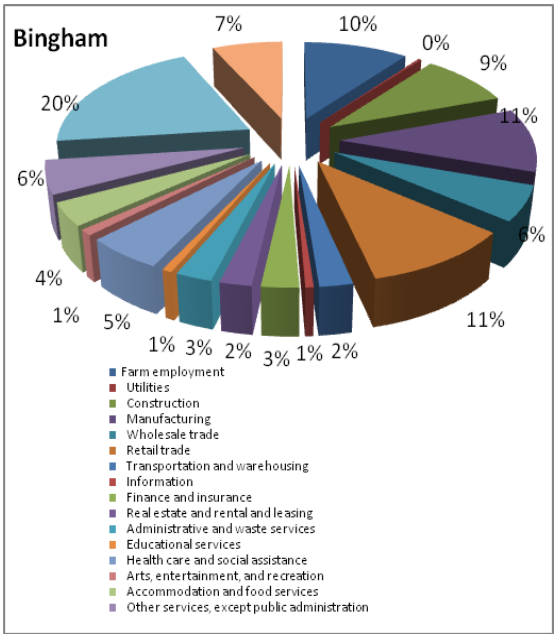
In terms of the sheer size of the farming sectors, as reflected by number of jobs in 2006, the leading counties in 2006 were: Twin Falls (2,772), Bingham (2,226), Gooding (1,887), Jerome (1,822), Minidoka (1,547), Bonneville (1,392), and Jefferson (1,352). Therefore, Gooding, Jerome, and Minidoka Counties were the counties with both the highest concentrations and highest sheer size of the farm sectors in the Idaho MSTI Study Area.

[6] Even counties with lower-than-nationwide farm employment could be exporting farm products in "niche" markets; location quotient analysis does not address the phenomenon of product specialization within an industry.

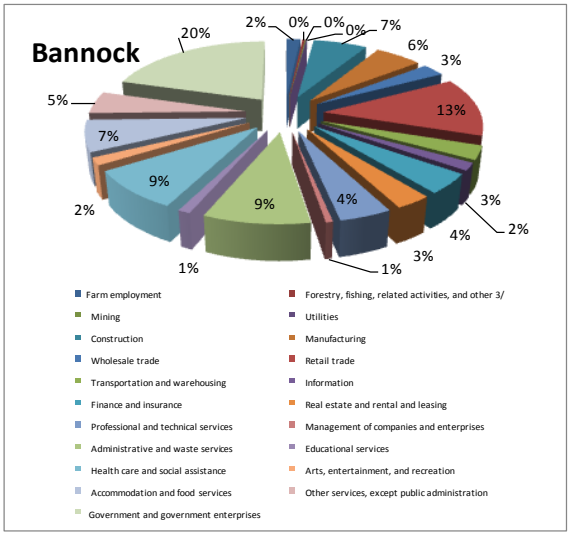
Exhibit 3-18: Employment by Industry, Idaho MSTI Study Area Counties, 2006, and Summary Information



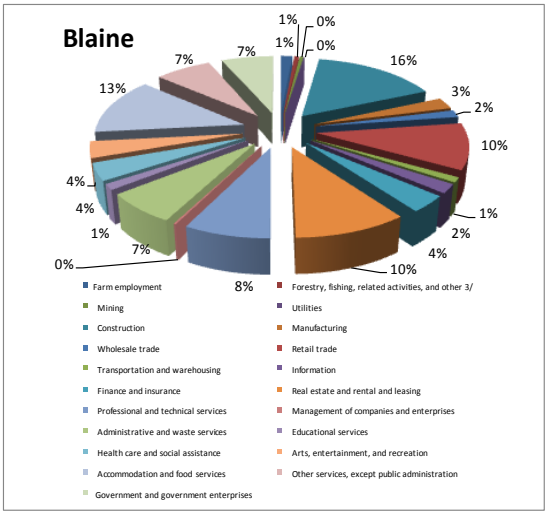
2007 Population (persons per square mile): 1,499,402 (17.9)
2007 Employment: 795,644
2007 Average Annual Unemployment Rate: 2.7%
2006 Per Capita Income: $29,920
Primary Export Industries (see Appendix B)[7]: Farming, Mining



2007 Population (persons per square mile): 43,466 (20.8)
2007 Employment: 20.053
2007 Average Annual Unemployment Rate: 2.4%
2006 Per Capita Income: $20,053
Primary Export Industries (see Appendix B): Farming; wholesale trade, Government; Construction



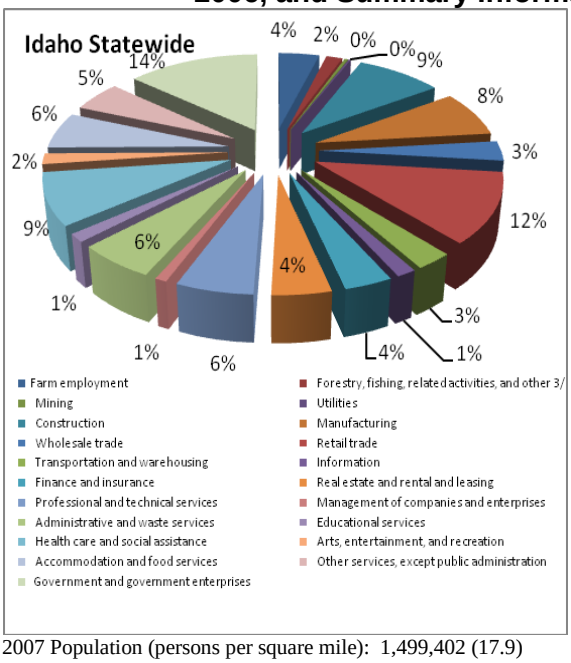
2007 Population (persons per square mile): 79,925 (71.8)
2007 Employment: 39,417
2007 Average Annual Unemployment Rate: 2.6%
2006 Per Capita Income: $25,871
Primary Export Industries (see Appendix B): Administrative and waste services; Government and government enterprises.



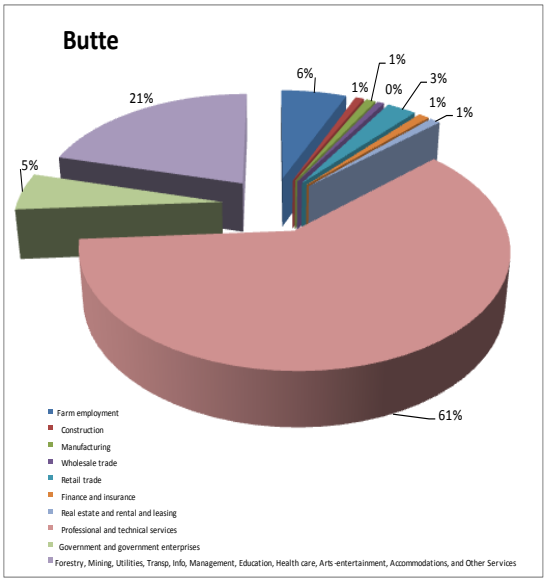
2007 Population (persons per square mile): 21,560 (8.2)
2007 Employment: 13,406
2007 Average Annual Unemployment Rate: 1.9%
2006 Per Capita Income: $59,939
Primary Export Industries (see Appendix B): Construction; Real estate; Accommodations and food services; Arts, entertainment, recreation services.

[7] As measured by Location Quotients over 1.3 (Appendix B)

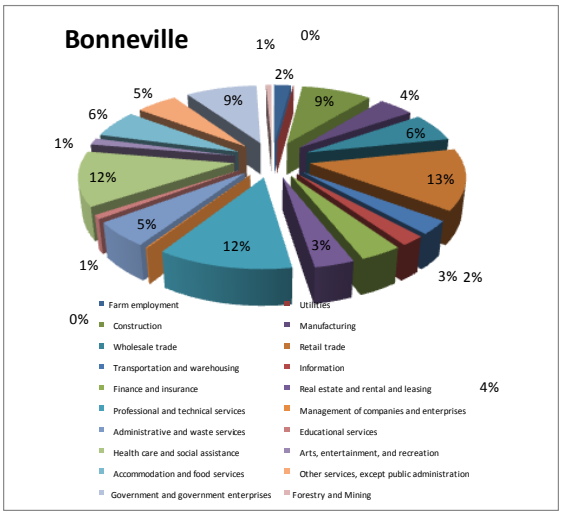
Exhibit 3-18 (continued): Employment by Industry, Idaho MSTI Study Area Counties, 2006, and Summary Information



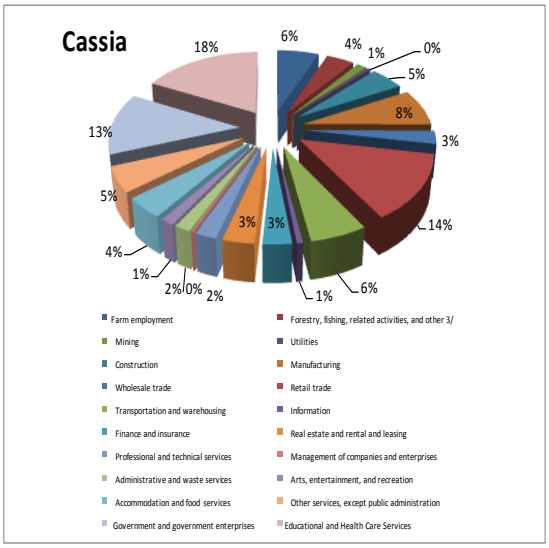
2007 Population (persons per square mile): 1,499,402 (17.9)
2007 Employment: 795,644
2007 Average Annual Unemployment Rate: 2.7%
2006 Per Capita Income: $29,920
Primary Export Industries (see Appendix B): Farming; Mining,



2007 Population (persons per square mile): 2,771 (1.2)
2007 Employment: 1.105
2007 Average Annual Unemployment Rate: 3.0%
2006 Per Capita Income: $24,472
Primary Export Industries (see Appendix B): Professional & technical services; Farming.

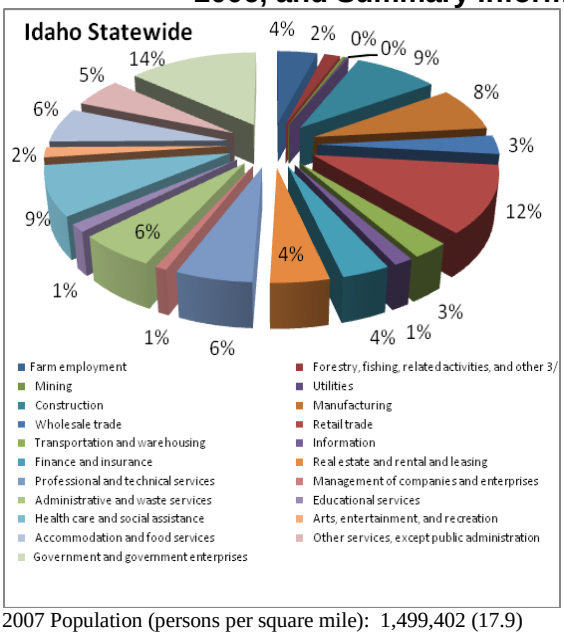


2007 Population (persons per square mile): 96,545 (71.8)
2007 Employment: 39,417
2007 Average Annual Unemployment Rate: 2.0%
2006 Per Capita Income: $32,348
Primary Export Industries (see Appendix B): Professional & technical services; Real estate; Accommodations and food services; Arts, entertainment, and recreation services.

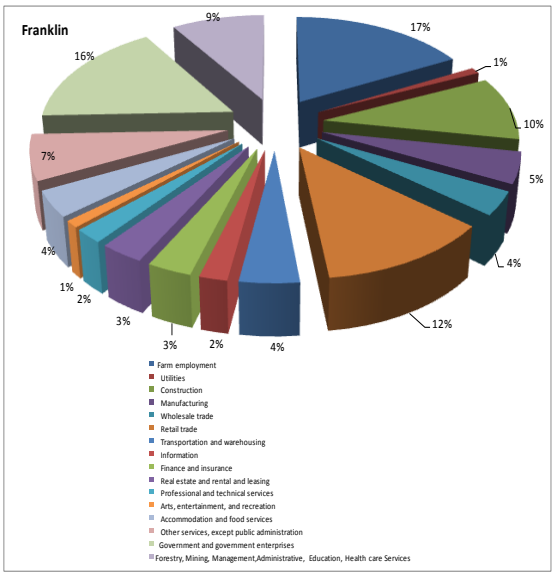


2007 Population (persons per square mile): 20,960 (9.4)
2007 Employment: 9,790
2007 Average Annual Unemployment Rate: 2.8%
2006 Per Capita Income: $25,894
Primary Export Industries (see Appendix B): Forestry, fishing, & related services; Farming; Mining; Utilities.

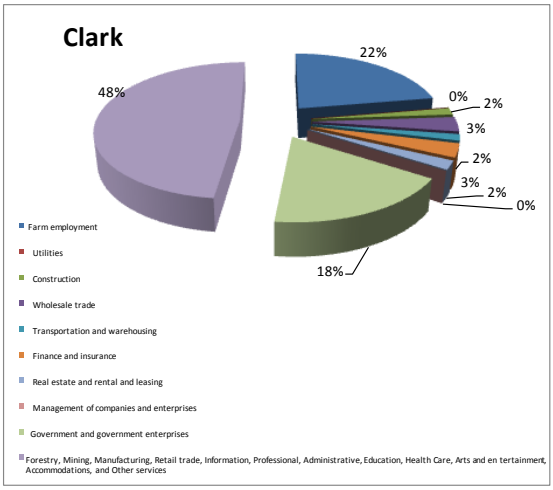
Exhibit 3-18 (continued): Employment by Industry, Idaho MSTI Study Area Counties, 2006, and Summary Information



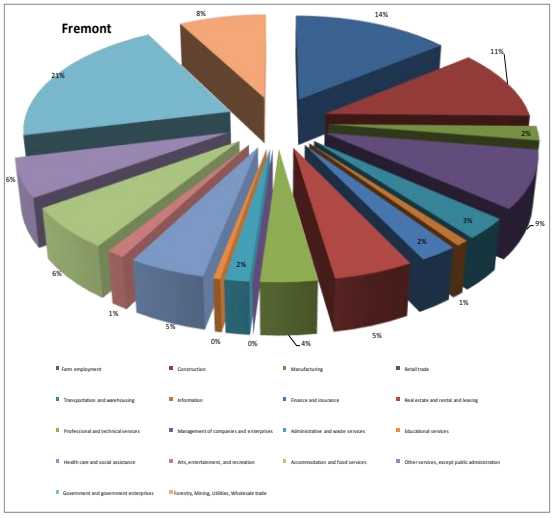
2007 Population (persons per square mile): 1,499,402 (17.9)
2007 Employment: 795,644
2007 Average Annual Unemployment Rate: 2.7%
2006 Per Capita Income: $29,920
Primary Export Industries (see Appendix B): Farming; Mining.



2007 Population:
2007 Employment:
2007 Average Annual Unemployment Rate: 2.6%
2006 Per Capita Income:
Primary Export Industries (see Appendix B):

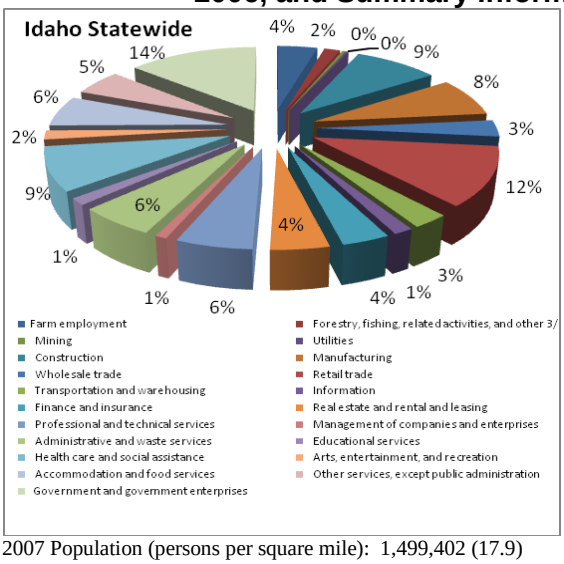


2007 Population (persons per square mile): 906 (0.5)
2007 Employment: 511
2007 Average Annual Unemployment Rate: 2.3%
2006 Per Capita Income: $24,649
Primary Export Industries (see Appendix B): Farming; Mining.

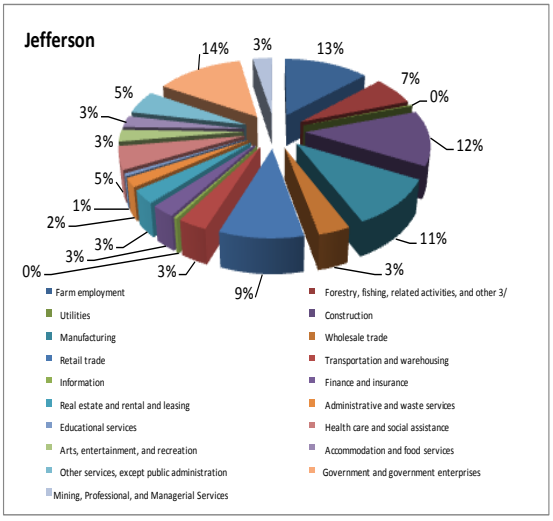


2007 Population (persons per square mile): 12,517 (6.7)
2007 Employment: 5,925
2007 Average Annual Unemployment Rate: 2.6%
2006 Per Capita Income: $21,959
Primary Export Industries (see Appendix B): Farming; Construction.

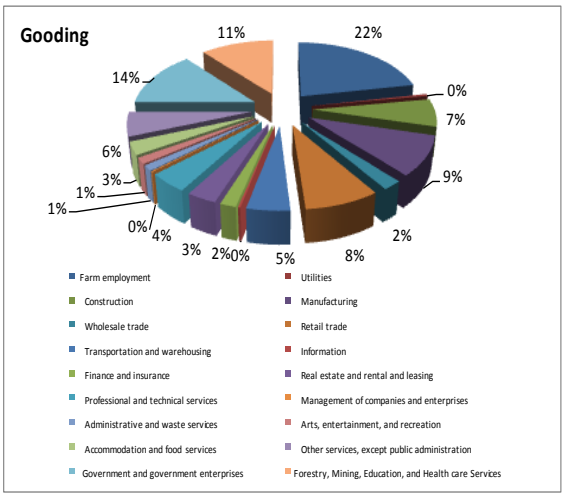
Exhibit 3-18 (continued): Employment by Industry, Idaho MSTI Study Area Counties, 2006, and Summary Information



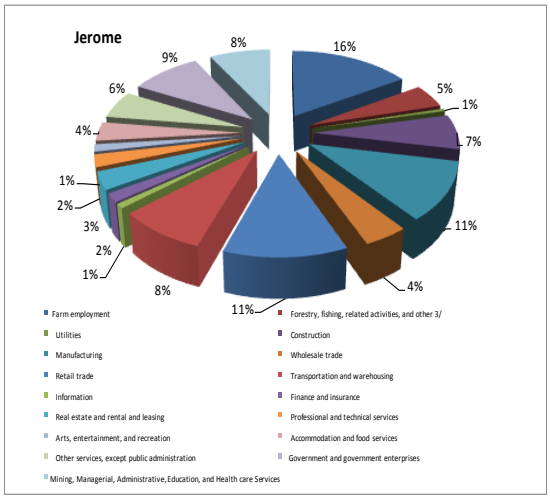
2007 Population (persons per square mile): 1,499,402 (17.9)
2007 Employment: 795,644
2007 Average Annual Unemployment Rate: 2.7
2006 Per Capita Income: $29,920
Primary Export Industries (see Appendix B): Farming; Mining.



2007 Population (persons per square mile): 22,851 (20.9)
2007 Employment: 10,334
2007 Average Annual Unemployment Rate: 2.2%
2006 Per Capita Income: $22,068
Primary Export Industries (see Appendix B): Forestry, fishing, & related services; Farming; Construction.

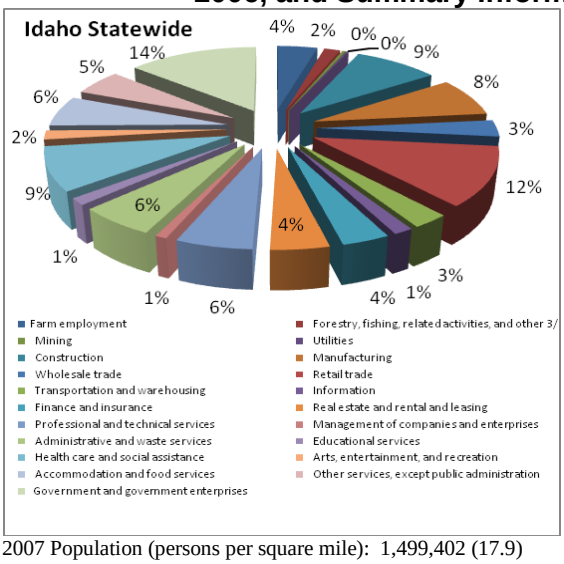


2007 Population (persons per square mile): 14,250 (19.5)
2007 Employment: 8,366
2007 Average Annual Unemployment Rate: 2.0%
2006 Per Capita Income: $31,069
Primary Export Industries (see Appendix B): Farming; Forestry, fishing, & related services; Utilities; Transportation and warehousing.

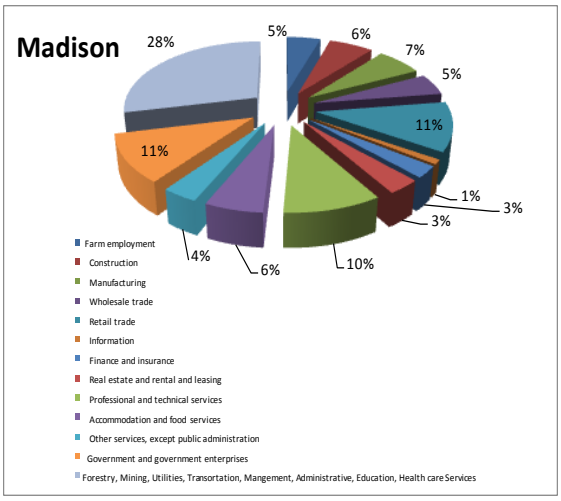


2007 Population:
2007 Employment: 10,092
2007 Average Annual Unemployment Rate: 2.5%
2006 Per Capita Income: $28,092
Primary Export Industries (see Appendix B): Farming; Forestry, fisheries, & related services; Transportation & warehousing; Manufacturing.

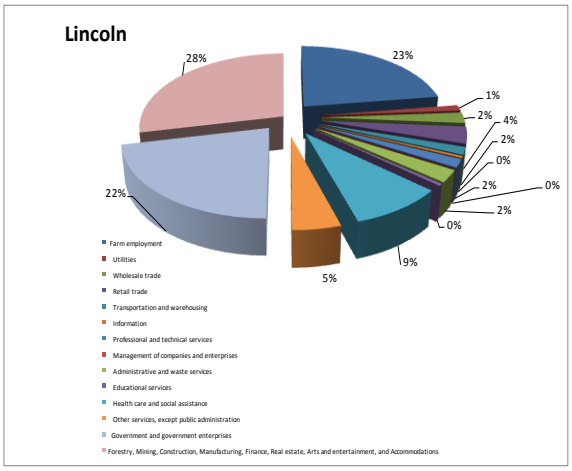
Exhibit 3-18 (continued): Employment by Industry, Idaho MSTI Study Area Counties, 2006, and Summary Information



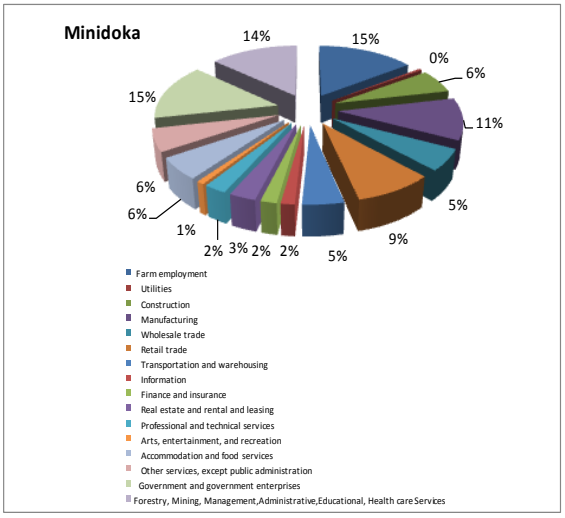
2007 Population (persons per square mile): 1,499,402 (17.9)
2007 Employment: 795,644
2007 Average Annual Unemployment Rate: 2.7%
2006 Per Capita Income: $29,920
Primary Export Industries (see Appendix B): Farming; mining.



2007 Population (persons per square mile): 36,647 (77.7)
2007 Employment: 14,742
2007 Average Annual Unemployment Rate: 1.9%
2006 Per Capita Income: $15,166
Primary Export Industries (see Appendix B): Farming; Professional& technical services; Wholesale trade.

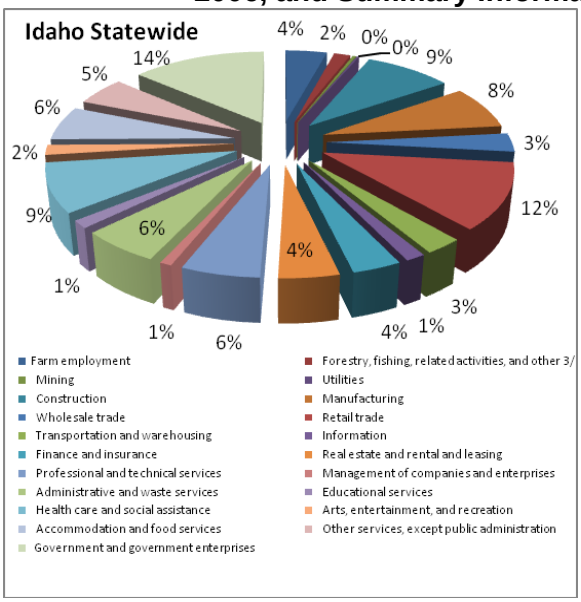


2007 Population (persons per square mile): 4,497 (3.7)
2007 Employment: 2,428
2007 Average Annual Unemployment Rate: 3.0%
2006 Per Capita Income: $23,031
Primary Export Industries (see Appendix B): Farming; Utilities.

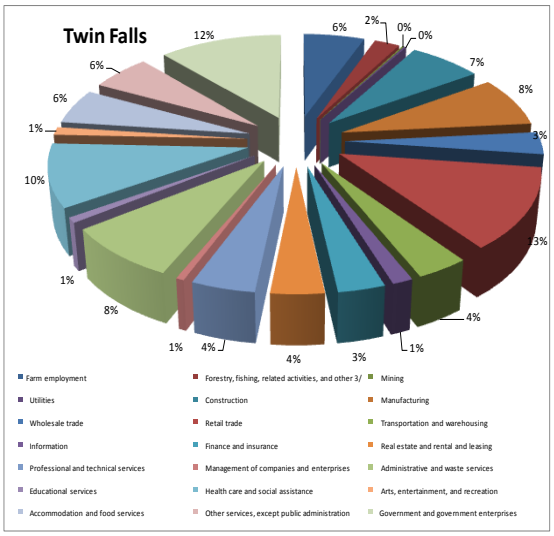


2007 Population (persons per square mile): 18,564 (24.4)
2007 Employment: 9,107
2007 Average Annual Unemployment Rate: 3.4%
2006 Per Capita Income: $21,904
Primary Export Industries (see Appendix B): Forestry, fishing, & related services; Farming; Utilities; Transportation & warehousing.

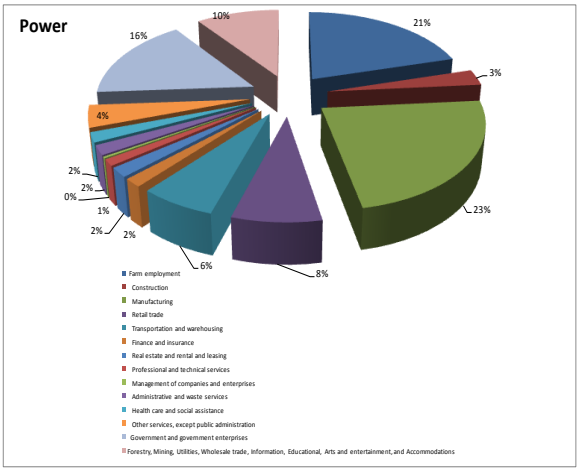
Exhibit 3-18 (continued): Employment by Industry, Idaho MSTI Study Area Counties, 2006, and Summary Information



2007 Population (persons per square mile): 1,499,402 (17.9)
2007 Employment: 795,644
2007 Average Annual Unemployment Rate: 2.7%
2006 Per Capita Income: $29,920
Primary Export Industries (see Appendix B): Farming; Mining.



2007 Population (persons per square mile): 73,058 (38.0)
2007 Employment: 37,671
2007 Average Annual Unemployment Rate: 2.3%
2006 Per Capita Income: $27,259
Primary Export Industries (see Appendix B): Forestry, fisheries, & related services; Administrative & waste services.



2007 Population (persons per square mile): 7,684 (5.5)
2007 Employment: 3,687
2007 Average Annual Unemployment Rate: 2.3%
2006 Per Capita Income: $21,535
Primary Export Industries (see Appendix B): Farming; Manufacturing; Transportation & warehousing.

Forestry, fishing, and related services are also prominent in many of the Idaho MSTI Study Area counties. Employment in these industries is often related to Eastern Idaho's status as a popular recreational fishing area, and the presence of national forests and reserve areas. Counties with the highest location quotients in these sectors (where data are not suppressed; data shown are for 2006 or the most recent previous year for which data are available) are Jefferson (11.6), Minidoka (11.1), Gooding (9.4), Jerome (8.3), Cassia (7.3), and Twin Falls (4.4). Twin Falls County, in terms of sheer size, is by far the leading center for forestry, fisheries, and related employment, with 1,155 jobs in 2006.

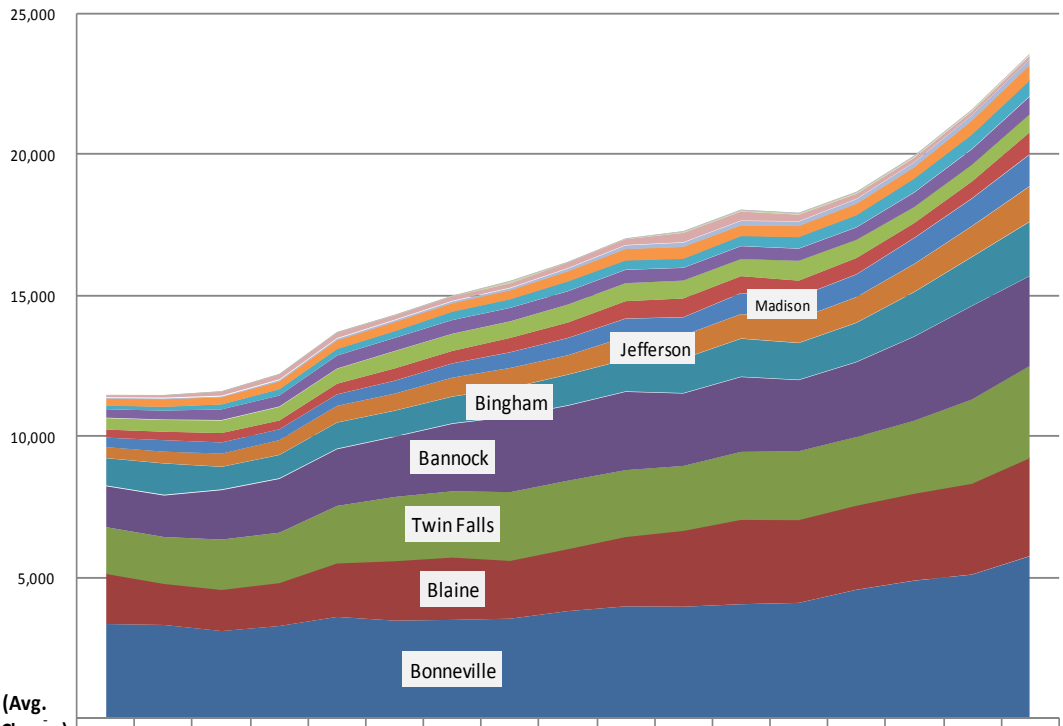
Mining is another of the Idaho MSTI Study Areas export industries. However, mining is concentrated only in Cassia and Clark Counties, and in Clark County is so small in numerical size as to be unimportant.

Finally, tourism is important to some Idaho MSTI Study Area counties. "Tourism" as a discrete sector is difficult to define, but expresses itself primarily in the sectors of accommodations/food services, and arts and entertainment. Tourism to the Idaho MSTI area is overwhelmingly for outdoor recreation such as fishing, rafting, hiking, snowmobiling, and camping. The only county with a very high concentration of tourism-related employment is Blaine County; however, in other counties there may be tourism activities that are not reflected in employment data.

The construction industry, while not an export industry for the Idaho MSTI Study Area as a whole, is important to this analysis because the chosen Alternative will constitute a noticeable increase in construction employment, particularly in more rural counties. The centers for construction employment in the region (in order of total employment in 2006) are Idaho Falls (Bonneville County; 5,726 jobs), Hailey (Blaine County; 3,506 jobs), Twin Falls (Twin Falls County; 3,286 jobs), and Pocatello (Bannock County; 3,195 jobs). Bingham County (1,925 jobs), Jefferson County (1,249 jobs), and Madison County (1,115 jobs) were the second-tier counties for construction employment. Exhibit 3-19 shows trends in annual construction employment.

Exhibit 3-19 also shows that construction employment has grown rapidly in the Idaho MSTI Study Area since 1990 – to 23,627 in 2006, 4.6% annual average, compared to total employment growth of 1.8% annually. Because construction employment is closely related to general rates of growth in an area, the relatively high regional 1.8% growth rate typically engenders higher construction employment growth rates to service local growth. All of the principal construction-employment counties above experienced very high growth rates in recent years. The implication of this high growth is that the construction labor force is likely nearly fully-employed, on average, and that immigration of construction workers, either temporarily to meet the needs of specific projects, or long-term for those who decide to remain, is common.

Exhibit 3-19: Annual Construction Employment, Idaho Counties in the MSTI, 1990-2006

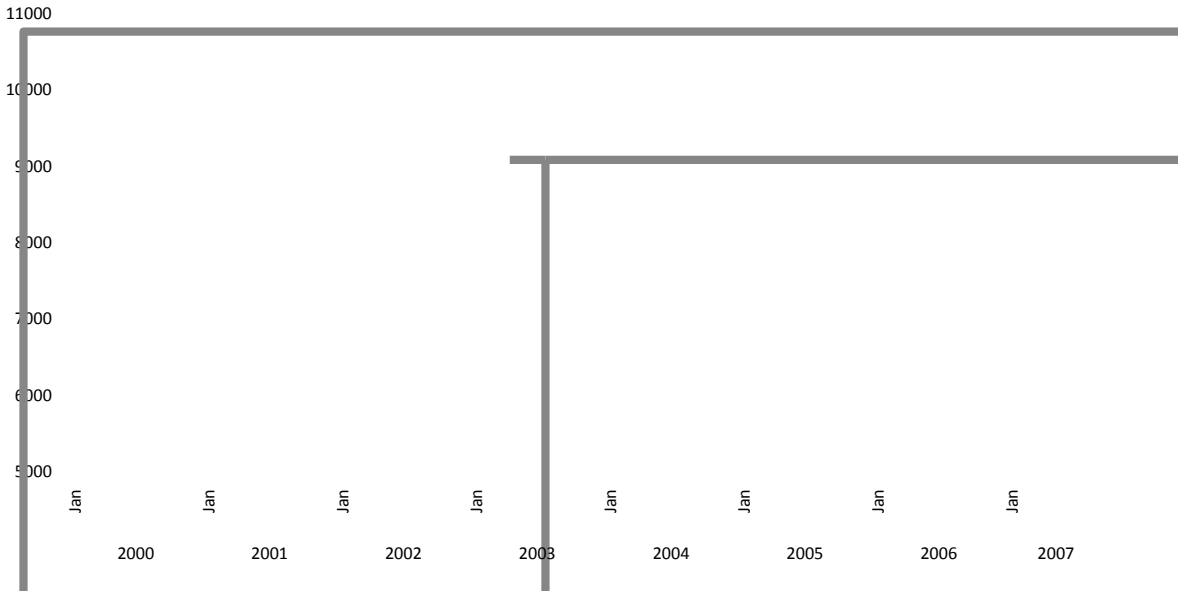


County (Avg. Annual % Change)	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Total MSTI (4.6%)	11,484	11,482	11,617	12,234	13,729	14,344	15,025	15,551	16,228	17,063	17,320	18,085	17,975	18,722	20,007	21,648	23,627
Clark (-0.4%)	15	17	15	16	18	19	19	20	21	22	22	23	23	24	26	23	14
Butte (3.2%)	27	27	27	29	32	34	35	97	28	32	63	66	65	68	64	53	45
Power (3.0%)	84	92	158	190	206	160	163	158	202	207	335	320	233	178	158	129	135
Lincoln (14.1%)	26	32	32	53	59	65	68	77	103	133	157	164	163	170	181	196	214
Gooding (5.1%)	256	281	265	287	323	339	316	335	373	422	437	396	411	425	417	518	565
Fremont (9.4%)	137	143	184	230	239	246	306	313	359	341	329	367	419	440	503	527	578
Minidoka (4.7%)	301	318	380	393	462	465	485	479	471	474	453	459	431	441	513	552	626
Cassia (3.2%)	407	419	447	484	532	615	609	588	640	644	639	614	712	656	587	616	671
Jerome (6.4%)	289	301	336	314	379	437	443	509	549	617	667	599	571	578	524	598	777
Madison (7.7%)	339	410	398	384	407	456	503	554	609	641	639	737	770	798	914	968	1,115
Jefferson (7.6%)	389	416	469	526	589	604	668	708	682	810	819	866	858	906	986	1,086	1,249
Bingham (4.4%)	972	1,114	802	826	925	909	948	1,004	1,087	1,122	1,221	1,350	1,303	1,386	1,577	1,733	1,925
Bannock (5.0%)	1,454	1,473	1,755	1,910	2,014	2,134	2,398	2,675	2,664	2,782	2,574	2,659	2,526	2,658	2,985	3,323	3,195
Twin Falls (4.3%)	1,663	1,668	1,791	1,793	2,047	2,283	2,356	2,445	2,436	2,380	2,312	2,420	2,453	2,446	2,601	3,000	3,286
Blaine (4.2%)	1,810	1,488	1,492	1,554	1,928	2,143	2,244	2,083	2,229	2,492	2,722	3,024	2,968	3,014	3,113	3,252	3,506
Bonneville (3.5%)	3,315	3,283	3,065	3,245	3,569	3,436	3,463	3,506	3,775	3,944	3,931	4,021	4,068	4,534	4,858	5,074	5,726

As with the Montana portion of the MSTI Study Area, the Idaho portion experiences large seasonal swings in construction employment, although not by as large a percentage between annual peaks and lows.

Construction employment data for the three primary labor market areas in the Idaho MSTI data from the Idaho Department of Labor, graphed in Exhibit 3-20, show that the summer peak employment has historically been about 25% greater than the low-employment months of January and February. Thus, there may be some appreciable construction labor availability during the slower months of about December to March in a typical year.

Exhibit 3-20: Monthly Variations in Construction Employment, South Central, southeastern, and East Central Idaho Labor Market Areas

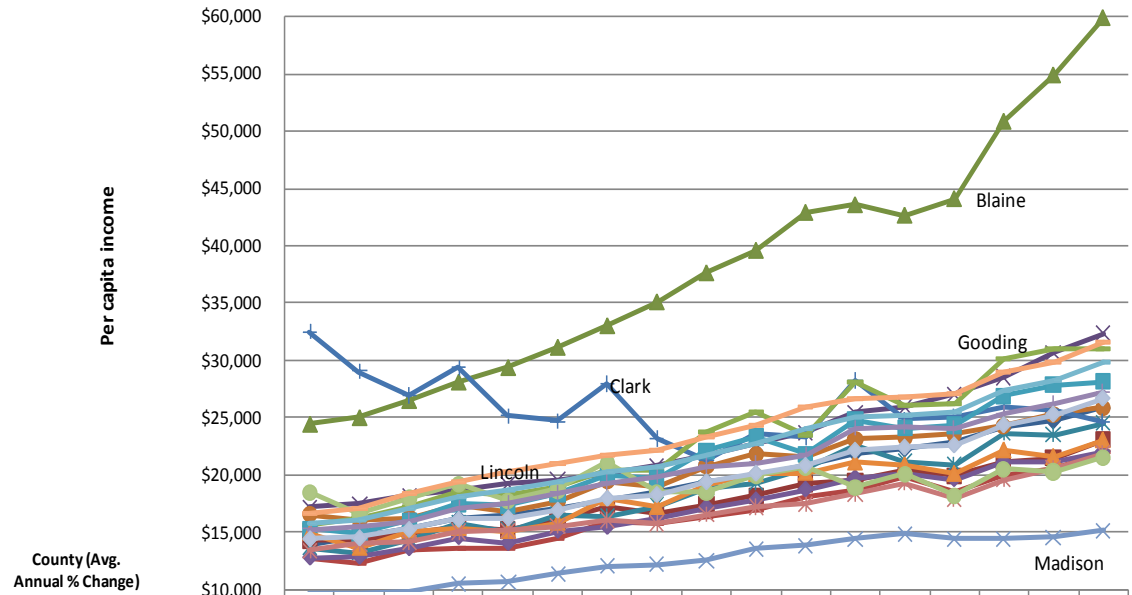


Note: The South Central Area Consists of Twin Falls and Jerome Counties; Southeastern Areas consists of Bannock and Power counties; and the East Central Area consists of Bonneville and Jefferson Counties.
Source: Idaho Department of Labor, 2008.

With the exception of two counties in the Idaho MSTI Study Area, per capita incomes have generally tracked closely with the statewide non-metropolitan average, which was $26,698 in the year 2006. The exceptions were Blaine County, where per capita income was $59,939 (making it one of the highest-income counties in the U.S.), and Madison County, where per capita income was only $15,166. Exhibit 3-21 shows per capita income trends by county.

All counties exhibited strong annual rates of growth except Power County (at an average annual growth rate of only 0.9%), and Clark County, where per capita income actually declined by 1.7% annually, between 1990 and 2006. The largest urban center counties generally reaped larger proportional gains during this period, with the more rural counties experiencing lower per capita income gains.

Exhibit 3-21: Per Capita Personal Income, Idaho Counties of the MSTI, 1990-2006



County (Avg. Annual % Change)	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Bannock (3.9%)	$13,957	$14,671	$15,421	$16,185	$16,550	$17,063	$17,854	$18,501	$19,411	$19,915	$20,833	$21,903	$22,284	$22,805	$24,101	$24,749	$25,871
Bingham (3.0%)	$14,320	$14,357	$14,925	$15,496	$15,241	$16,010	$17,190	$16,679	$17,444	$18,233	$19,298	$19,552	$20,412	$19,976	$21,219	$21,554	$23,105
Blaine (5.7%)	$24,505	$25,082	$26,573	$28,182	$29,443	$31,209	$33,091	$35,174	$37,703	$39,658	$42,965	$43,634	$42,722	$44,165	$50,902	$54,945	$59,939
Bonneville (4.0%)	$17,160	$17,441	$18,145	$18,655	$19,162	$19,541	$20,107	$20,744	$21,643	$22,641	$23,663	$25,448	$25,930	$27,021	$28,528	$30,670	$32,348
Butte (3.7%)	$13,699	$13,204	$14,417	$15,795	$15,149	$16,539	$16,402	$17,313	$18,811	$19,315	$20,603	$22,615	$21,131	$20,894	$23,669	$23,514	$24,472
Cassia (2.9%)	$16,497	$16,127	$16,272	$17,403	$16,897	$17,712	$19,499	$18,986	$20,744	$21,845	$21,595	$23,178	$23,301	$23,581	$24,256	$25,286	$25,894
Clark (-1.7%)	$32,443	$29,026	$26,925	$29,330	$25,178	$24,700	$27,964	$23,201	$21,283	$23,598	$23,322	$28,241	$24,886	$25,074	$25,939	$25,571	$24,649
Fremont (3.4%)	$12,829	$12,329	$13,532	$13,678	$13,618	$14,456	$15,903	$15,811	$16,403	$16,942	$18,074	$18,632	$19,840	$18,474	$19,888	$20,495	$21,959
Gooding (4.4%)	$15,654	$16,236	$17,296	$18,610	$18,332	$19,007	$20,433	$20,502	$23,756	$25,484	$23,466	$28,185	$26,089	$26,214	$30,153	$31,028	$31,069
Jefferson (3.5%)	$12,802	$12,875	$13,622	$14,601	$14,075	$15,148	$15,491	$16,271	$17,201	$17,818	$18,754	$19,764	$20,146	$19,670	$21,157	$21,234	$22,063
Jerome (3.9%)	$15,286	$14,876	$15,970	$17,420	$17,330	$18,380	$19,918	$19,697	$22,065	$23,341	$21,797	$24,816	$24,064	$24,311	$26,859	$27,847	$28,092
Lincoln (2.7%)	$14,933	$13,642	$15,134	$15,372	$15,113	$15,829	$17,975	$17,206	$19,122	$20,074	$20,193	$21,085	$20,853	$20,097	$22,154	$21,576	$23,031
Madison (2.9%)	$9,626	$9,664	$9,803	$10,437	$10,613	$11,303	$11,999	$12,167	$12,471	$13,499	$13,854	$14,438	$14,922	$14,456	$14,469	$14,638	$15,166
Minidoka (3.1%)	$13,390	$13,936	$14,125	$15,051	$15,084	$15,504	$16,051	$15,763	$16,520	$17,207	$17,452	$18,390	$19,287	$17,912	$19,606	$20,582	$21,904
Power (0.9%)	$18,523	$16,613	$17,970	$19,201	$17,727	$18,714	$21,052	$18,505	$18,505	$19,980	$20,673	$18,967	$20,071	$18,236	$20,519	$20,301	$21,535
Twin Falls (3.7%)	$15,244	$15,553	$16,012	$17,074	$17,584	$18,422	$19,365	$19,844	$20,800	$21,073	$21,783	$24,048	$24,264	$24,004	$25,356	$26,205	$27,259
Idaho Statewide (4.1%)	$15,724	$16,030	$17,093	$18,103	$18,707	$19,426	$20,248	$20,648	$21,789	$22,786	$24,077	$25,024	$25,221	$25,524	$27,361	$28,301	$29,920
Idaho Metropolitan Portion (4.1%)	$16,598	$17,046	$18,313	$19,397	$20,303	$21,033	$21,697	$22,129	$23,262	$24,387	$26,011	$26,696	$26,825	$27,174	$29,038	$29,947	$31,655
Idaho Nonmetropolitan Portion (3.9%)	$14,459	$14,536	$15,277	$16,152	$16,268	$16,948	$17,987	$18,312	$19,424	$20,170	$20,851	$22,168	$22,437	$22,630	$24,377	$25,308	$26,698

The distribution of incomes in the Idaho Portion of the Study area shows pockets of relative poverty. Overall, 12.8% of the Idaho MSTI population lived in poverty in 1999, according to the 2000 Census, slightly above the State average of 11.8%. The counties with the largest proportion of persons in poverty were Madison (30.5%), Clark (19.9%), Butte (18.2%), and Power (16.1%); Madison County's portion may be somewhat higher than the actual severity due to the high proportion of college students in the population. Franklin, Blaine and Jefferson Counties had very low poverty rates, at 7.4%, 7.8%, and 10.4%, respectively. Poverty status by county is shown in Exhibit 3-22. Exhibit 3-23 shows greater detail on income distribution.

Exhibit 3-22: Percent of Population in Households with Incomes Below Poverty, Idaho Portion of MSTI Study Area, 1999

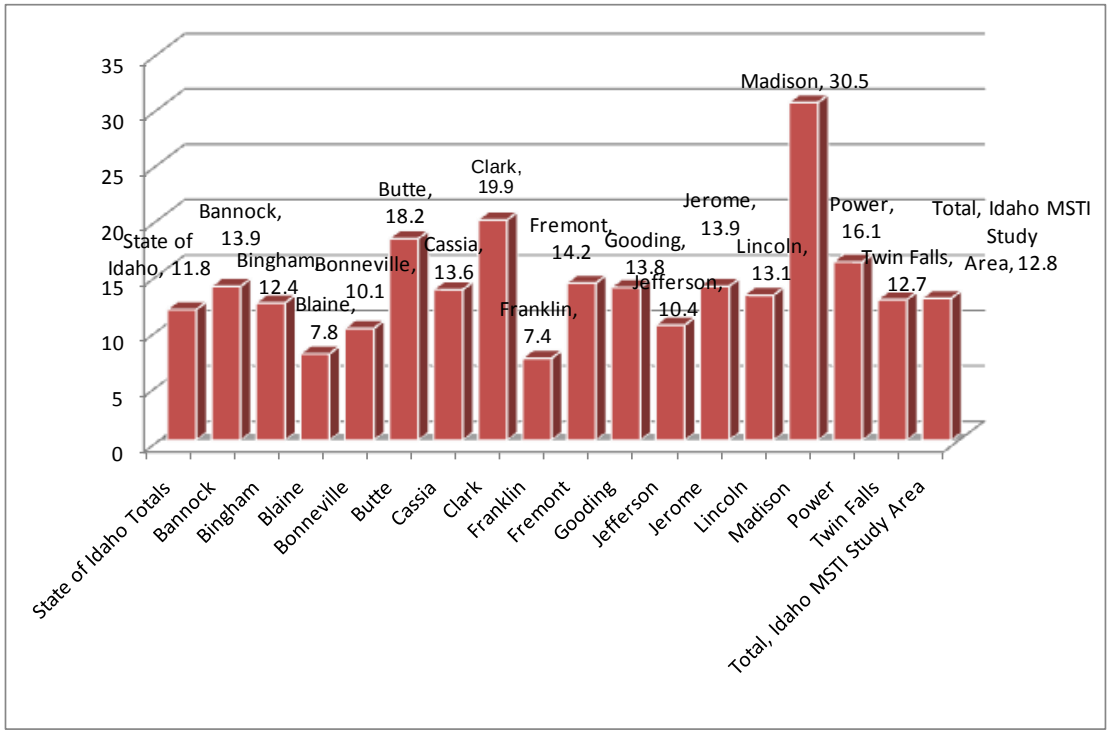


Exhibit 3-23: Income and Poverty Status, Idaho Statewide and MSTI Counties, 1999

Subject	State of Idaho Totals		Bannock		Bingham		Blaine		Bonneville		Butte		Cassia		Clark		Franklin		Fremont		Gooding		Jefferson		Jerome		Lincoln		Madison		Power		Twin Falls	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
INCOME IN 1999																																		
Households	**470,133**	**100**	**27,214**	**100**	**13,311**	**100**	**7,757**	**100**	**28,742**	**100**	**1,086**	**100**	**7,108**	**100**	**339**	**100**	**3,487**	**100**	**3,892**	**100**	**5,067**	**100**	**5,901**	**100**	**6,299**	**100**	**1,443**	**100**	**7,154**	**100**	**2,556**	**100**	**23,811**	**100**
Less than $10,000	40,676	8.7	2,832	10.4	1,171	8.8	467	6	2,334	8.1	139	12.8	656	9.2	43	12.7	192	5.5	322	8.3	518	10.2	446	7.6	531	8.4	112	7.8	635	8.9	293	11.5	2,193	9.2
$10,000 to $14,999	33,431	7.1	2,249	8.3	876	6.6	324	4.2	1,696	5.9	112	10.3	669	9.4	32	9.4	254	7.3	311	8	436	8.6	403	6.8	453	7.2	149	10.3	625	8.7	183	7.2	2,023	8.5
$15,000 to $24,999	71,921	15.3	4,109	15.1	1,992	15	847	10.9	3,996	13.9	153	14.1	1,259	17.7	62	18.3	481	13.8	714	18.3	893	17.6	983	16.7	1,171	18.6	243	16.8	1,379	19.3	451	17.6	4,119	17.3
$25,000 to $34,999	70,391	15	3,782	13.9	2,296	17.2	967	12.5	3,785	13.2	191	17.6	1,113	15.7	48	14.2	724	20.8	715	18.4	933	18.4	894	15.1	1,020	16.2	270	18.7	1,184	16.6	465	18.2	3,737	15.7
$35,000 to $49,999	89,612	19.1	4,800	17.6	2,772	20.8	1,231	15.9	5,251	18.3	200	18.4	1,482	20.8	108	31.9	764	21.9	857	22	933	18.4	1,205	20.4	1,330	21.1	250	17.3	1,273	17.8	481	18.8	4,716	19.8
$50,000 to $74,999	90,462	19.2	5,144	18.9	2,473	18.6	1,661	21.4	6,099	21.2	178	16.4	1,176	16.5	30	8.8	662	19	595	15.3	856	16.9	1,210	20.5	1,051	16.7	281	19.5	1,306	18.3	372	14.6	4,196	17.6
$75,000 to $99,999	39,249	8.3	2,339	8.6	1,023	7.7	842	10.9	3,031	10.5	65	6	449	6.3	13	3.8	241	6.9	230	5.9	296	5.8	440	7.5	441	7	84	5.8	428	6	174	6.8	1,470	6.2
$100,000 to $149,999	22,797	4.8	1,421	5.2	499	3.7	708	9.1	1,724	6	34	3.1	190	2.7	1	0.3	105	3	103	2.6	136	2.7	224	3.8	214	3.4	40	2.8	187	2.6	72	2.8	838	3.5
$150,000 to $199,999	5,395	1.1	263	1	94	0.7	219	2.8	396	1.4	7	0.6	41	0.6	2	0.6	38	1.1	10	0.3	35	0.7	40	0.7	33	0.5	10	0.7	68	1	7	0.3	164	0.7
$200,000 or more	6,199	1.3	275	1	115	0.9	491	6.3	430	1.5	7	0.6	73	1	0	0	26	0.7	35	0.9	31	0.6	56	0.9	55	0.9	4	0.3	69	1	58	2.3	355	1.5
Median household income (dollars)	37,572	(X)	36,683	(X)	36,423	(X)	50,496	(X)	41,805	(X)	30,473	(X)	33,322	(X)	31,576	(X)	36,061	(X)	33,424	(X)	31,888	(X)	37,737	(X)	34,696	(X)	32,484	(X)	32,607	(X)	32,226	(X)	34,506	(X)
With public assistance income	15,988	3.4	1,238	4.5	538	4	87	1.1	1,015	3.5	35	3.2	232	3.3	11	3.2	83	2.4	121	3.1	114	2.2	140	2.4	173	2.7	38	2.6	208	2.9	129	5	787	3.3
Mean public assistance income (dollars)	1,824	(X)	1,685	(X)	1,920	(X)	2,584	(X)	1,969	(X)	1,189	(X)	2,001	(X)	1,945	(X)	1,655	(X)	1,900	(X)	1,023	(X)	1,159	(X)	1,534	(X)	1,597	(X)	2,010	(X)	1,324	(X)	1,624	(X)
Families	**337,884**	**100**	**19,324**	**100**	**10,820**	**100**	**4,843**	**100**	**21,495**	**100**	**805**	**100**	**5,562**	**100**	**257**	**100**	**2,892**	**100**	**3,058**	**100**	**3,762**	**100**	**4,889**	**100**	**4,825**	**100**	**1,054**	**100**	**4,879**	**100**	**1,980**	**100**	**16,938**	**100**
Less than $10,000	16,047	4.7	1,084	5.6	567	5.2	149	3.1	858	4	80	9.9	305	5.5	27	10.5	65	2.2	130	4.3	200	5.3	188	3.8	273	5.7	53	5	226	4.6	112	5.7	808	4.8
$10,000 to $14,999	15,773	4.7	1,048	5.4	562	5.2	144	3	880	4.1	55	6.8	323	5.8	22	8.6	124	4.3	170	5.6	200	5.3	207	4.2	244	5.1	66	6.3	249	5.1	90	4.5	1,009	6
$15,000 to $24,999	44,523	13.2	2,592	13.4	1,477	13.7	400	8.3	2,445	11.4	92	11.4	905	16.3	47	18.3	375	13	523	17.1	673	17.9	760	15.5	742	15.4	161	15.3	782	16	308	15.6	2,504	14.8
$25,000 to $34,999	50,263	14.9	2,595	13.4	1,876	17.3	542	11.2	2,825	13.1	156	19.4	955	17.2	47	18.3	579	20	588	19.2	743	19.8	734	15	804	16.7	209	19.8	778	15.9	389	19.6	2,695	15.9
$35,000 to $49,999	70,384	20.8	3,730	19.3	2,447	22.6	630	13	4,257	19.8	169	21	1,303	23.4	76	29.6	719	24.9	744	24.3	782	20.8	1,121	22.9	1,107	22.9	212	20.1	1,011	20.7	443	22.4	3,822	22.6
$50,000 to $74,999	76,202	22.6	4,337	22.4	2,269	21	1,210	25	5,254	24.4	152	18.9	1,070	19.2	26	10.1	645	22.3	551	18	760	20.2	1,147	23.5	965	20	231	21.9	1,138	23.3	327	16.5	3,589	21.2
$75,000 to $99,999	34,470	10.2	2,138	11.1	984	9.1	597	12.3	2,697	12.5	57	7.1	430	7.7	9	3.5	223	7.7	223	7.3	234	6.2	428	8.8	399	8.3	75	7.1	389	8	174	8.8	1,321	7.8
$100,000 to $149,999	20,110	6	1,325	6.9	456	4.2	578	11.9	1,545	7.2	31	3.9	168	3	3	1.2	105	3.6	84	2.7	114	3	210	4.3	209	4.3	35	3.3	169	3.5	72	3.6	762	4.5
$150,000 to $199,999	4,746	1.4	239	1.2	76	0.7	176	3.6	356	1.7	7	0.9	32	0.6	0	0	35	1.2	10	0.3	29	0.8	38	0.8	27	0.6	10	0.9	68	1.4	7	0.4	136	0.8
$200,000 or more	5,366	1.6	236	1.2	106	1	417	8.6	378	1.8	6	0.7	71	1.3	0	0	22	0.8	35	1.1	27	0.7	56	1.1	55	1.1	2	0.2	69	1.4	58	2.9	292	1.7
Median family income (dollars)	43,490	(X)	44,192	(X)	40,312	(X)	60,037	(X)	48,216	(X)	36,950	(X)	38,162	(X)	31,534	(X)	40,185	(X)	36,715	(X)	36,290	(X)	41,530	(X)	39,083	(X)	36,792	(X)	40,880	(X)	36,685	(X)	39,886	(X)
Per capita income (dollars)	17,841	(X)	17,148	(X)	14,365	(X)	31,346	(X)	18,326	(X)	14,948	(X)	14,087	(X)	11,141	(X)	13,702	(X)	13,965	(X)	14,612	(X)	13,838	(X)	15,530	(X)	14,257	(X)	10,956	(X)	14,007	(X)	16,678	(X)
Median earnings (dollars):																																		
POVERTY STATUS IN 1999 (below poverty level)																																		
Families	**28,131**	**(X)**	**1,887**	**(X)**	**1,068**	**(X)**	**239**	**(X)**	**1,587**	**(X)**	**118**	**(X)**	**618**	**(X)**	**48**	**(X)**	**157**	**(X)**	**316**	**(X)**	**420**	**(X)**	**393**	**(X)**	**515**	**(X)**	**114**	**(X)**	**495**	**(X)**	**213**	**(X)**	**1,543**	**(X)**
Percent below poverty level	(X)	8.3	(X)	9.8	(X)	9.9	(X)	4.9	(X)	7.4	(X)	14.7	(X)	11.1	(X)	18.7	(X)	5.4	(X)	10.3	(X)	11.2	(X)	8	(X)	10.7	(X)	10.8	(X)	10.1	(X)	10.8	(X)	9.1
With related children under 18 years	22,205	(X)	1,514	(X)	910	(X)	214	(X)	1,385	(X)	97	(X)	542	(X)	41	(X)	124	(X)	239	(X)	336	(X)	330	(X)	438	(X)	87	(X)	325	(X)	175	(X)	1,212	(X)
Percent below poverty level	(X)	12.2	(X)	14.5	(X)	14.2	(X)	8.6	(X)	11.2	(X)	26	(X)	16.6	(X)	25.3	(X)	7.1	(X)	14.4	(X)	16.7	(X)	11.4	(X)	16.4	(X)	14.9	(X)	11.2	(X)	15.7	(X)	13.9
With related children under 5 years	11,846	(X)	933	(X)	488	(X)	137	(X)	846	(X)	49	(X)	296	(X)	30	(X)	94	(X)	133	(X)	154	(X)	180	(X)	265	(X)	36	(X)	181	(X)	74	(X)	703	(X)
Percent below poverty level	(X)	16	(X)	20.2	(X)	18.7	(X)	14.4	(X)	16.6	(X)	40.8	(X)	22.9	(X)	37	(X)	11.9	(X)	18.4	(X)	17.2	(X)	15.2	(X)	23.5	(X)	16.7	(X)	12.7	(X)	18	(X)	20.3
Individuals	**148,732**	**(X)**	**10,181**	**(X)**	**5,137**	**(X)**	**1,469**	**(X)**	**8,260**	**(X)**	**522**	**(X)**	**2,875**	**(X)**	**202**	**(X)**	**832**	**(X)**	**1,633**	**(X)**	**1,922**	**(X)**	**1,984**	**(X)**	**2,526**	**(X)**	**522**	**(X)**	**7,948**	**(X)**	**1,200**	**(X)**	**8,038**	**(X)**
Percent below poverty level	(X)	11.8	(X)	13.9	(X)	12.4	(X)	7.8	(X)	10.1	(X)	18.2	(X)	13.6	(X)	19.9	(X)	7.4	(X)	14.2	(X)	13.8	(X)	10.4	(X)	13.9	(X)	13.1	(X)	30.5	(X)	16.1	(X)	12.7
18 years and over	96,864	(X)	6,802	(X)	2,743	(X)	1,089	(X)	4,988	(X)	286	(X)	1,589	(X)	116	(X)	489	(X)	934	(X)	1,154	(X)	1,072	(X)	1,488	(X)	297	(X)	7,071	(X)	696	(X)	5,093	(X)
Percent below poverty level	(X)	10.8	(X)	13	(X)	10.2	(X)	7.6	(X)	9	(X)	14	(X)	11.4	(X)	17.4	(X)	6.9	(X)	12	(X)	11.7	(X)	8.8	(X)	11.9	(X)	10.7	(X)	37.4	(X)	14.1	(X)	11.2
65 years and over	11,635	(X)	562	(X)	306	(X)	74	(X)	489	(X)	34	(X)	209	(X)	11	(X)	68	(X)	197	(X)	246	(X)	154	(X)	222	(X)	35	(X)	158	(X)	93	(X)	810	(X)
Percent below poverty level	(X)	8.3	(X)	7.6	(X)	7.2	(X)	5.3	(X)	5.9	(X)	8.1	(X)	8	(X)	11.7	(X)	5.3	(X)	13.6	(X)	11.3	(X)	8.7	(X)	9.9	(X)	7	(X)	10.1	(X)	12.7	(X)	9.3
Related children under 18 years	49,787	(X)	3,258	(X)	2,355	(X)	350	(X)	3,161	(X)	227	(X)	1,259	(X)	83	(X)	338	(X)	687	(X)	754	(X)	895	(X)	1,029	(X)	221	(X)	832	(X)	504	(X)	2,780	(X)
Percent below poverty level	(X)	13.8	(X)	15.6	(X)	16.3	(X)	7.8	(X)	12.2	(X)	27.7	(X)	17.6	(X)	24.1	(X)	8	(X)	18.4	(X)	18.9	(X)	13	(X)	17.9	(X)	18.3	(X)	11.7	(X)	20.1	(X)	16
Related children 5 to 17 years	33,275	(X)	1,986	(X)	1,608	(X)	221	(X)	1,943	(X)	148	(X)	855	(X)	53	(X)	201	(X)	482	(X)	582	(X)	651	(X)	663	(X)	156	(X)	543	(X)	401	(X)	1,711	(X)
Percent below poverty level	(X)	12.6	(X)	13.4	(X)	14.9	(X)	6.6	(X)	10.2	(X)	23.5	(X)	15.8	(X)	20.5	(X)	6.5	(X)	17	(X)	19.6	(X)	12.5	(X)	15.5	(X)	17.2	(X)	10.6	(X)	21.2	(X)	13.4
Unrelated individuals 15 years and over	50,259	(X)	3,782	(X)	843	(X)	689	(X)	2,423	(X)	84	(X)	522	(X)	29	(X)	186	(X)	303	(X)	428	(X)	307	(X)	555	(X)	85	(X)	6,140	(X)	249	(X)	2,565	(X)
Percent below poverty level	(X)	25.9	(X)	33	(X)	24.5	(X)	15.6	(X)	24.1	(X)	23.7	(X)	25.3	(X)	24.8	(X)	23.7	(X)	27.5	(X)	23.7	(X)	23.2	(X)	25.5	(X)	16.6	(X)	76.6	(X)	34	(X)	25.7

(X) Not applicable.

Source: U.S. Bureau of the Census, 2000 Census; DP-3: Profile of Selected Economic Characteristics: 2000; Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data

4 IMPACT RESULTS

Potential socioeconomic impacts of construction and operation of each Project alternative are examined in this chapter. Socioeconomic impacts arise mostly from proposed Project's requirements for mobilizing and deploying labor, capital and material resources. Application of these factors of production in the Study Areas and setting would create changes in the levels and patterns of peoples' activities in the area. These changes include employment, housing, commercial activities, and public services and infrastructure (such as public safety and emergency health services).

The impact assessment begins with a description of the Proposed Project's relevant construction and operation resource requirements. The Project's requirements are then superimposed upon socioeconomic baseline conditions (which were described in Section 2 and 3). The difference between expected baseline conditions and conditions with the Project comprise the Project impacts.

Whether these changes are significant -- either beneficial or adverse -- largely depends on (1) the degree, or intensity, magnitude, duration, and reversibility of changes in the baseline levels of utilization and (2) the capacity of the Study Area's resources to accommodate changes in demand. The Study Area is addressed at four geographic levels:

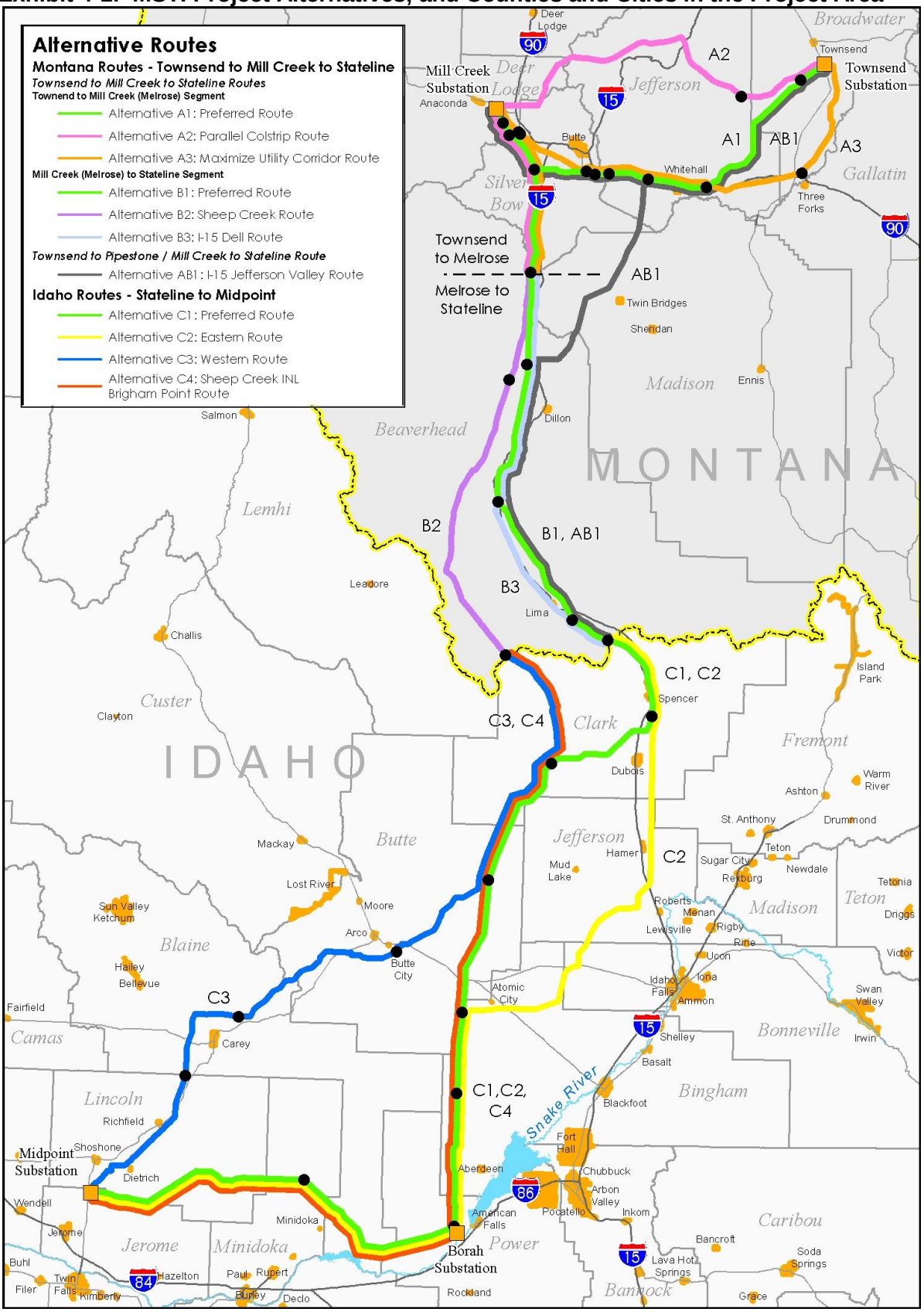
(1) The counties that comprise the Montana portion of the Study Area as a whole;
(2) the counties that comprise the Idaho portion of the Study Area as a whole;
(3) each county in (1) and (2) through which each Project Alternative would pass;
(4) affected cities; and
(5) the area within 6 miles of each Project alternative (for Environmental Justice considerations).

4.1 PROJECT OVERVIEW

NorthWestern Energy proposes to construct, operate and maintain the MSTI 500kV transmission line to address the requests for transmission service from customers and relieve constraints on the high-voltage transmission system in the region. The new transmission line would begin at a new 500 kV substation, (Townsend Substation), which would be constructed about five miles south of Townsend, Montana, east of U.S. Highway 287 in Broadwater County. The northern segment would traverse through the southern area of Butte, Montana and terminate at a new substation, Mill Creek, near Anaconda, MT. The line would then proceed south into southeastern Idaho connecting to Idaho Power Company's (IPCO) existing Midpoint Substation, ten miles northeast of Jerome, Idaho.

An initial siting study was completed and alternative routes identified. Exhibit 4-1 shows the substation locations and the alternative routes being considered. The major components of each alternative include the 500kV AC transmission line, the proposed Townsend Substation, the proposed Mill Creek substation, and proposed modifications to the existing Midpoint Substation. The substation requirements for each station and their respective sites are firm and the differences among the alternatives in the construction program are chiefly in the routes chosen for the transmission lines (with the exception of the Townsend to Pipestone/Mill Creek to Stateline Route, which has minor substation differences described later). Therefore this report addresses the firm substation facilities first and then addresses the preferred and alternate line routes.

Exhibit 4-1: MSTI Project Alternatives, and Counties and Cities in the Project Area



4.1.1 SUBSTATION AND COMMUNICATION FACILITY CONSTRUCTION

This section describes the facilities that would not change according to the alternative that is ultimately chosen. These include all substation work lines (with the exception of the Jefferson Valley Alternative, which has minor substation differences described later), as well as communication facilities.

Townsend Substation

The new Townsend 500kV substation would be located five miles south of Townsend, Montana, east of SH 287 in Broadwater County, as shown in Exhibit 4-1. The substation site would be 52 acres in size.

The total cost of the Townsend substation would be $127 million (2008 dollars). Site preparation would begin on about July 1, 2010, and conclude approximately Feb 1 2013. The construction work force would peak at an estimated 63 workers in March and April, 2012 (assuming 50-hour week averages), as shown in Exhibit 4-2.

Mill Creek Substation

The Mill Creek substation would be located 3 miles southeast of Anaconda, Montana (see Exhibit 4-1).

The total cost of the Mill Creek substation would be $119 million (2008 dollars). Site preparation would begin on about July 1, 2010, and conclude approximately Feb 1 2013. The construction work force would peak at an estimated 40 workers in March and April, 2012 (assuming 50-hour week averages), as shown in Exhibit 4-2.

Midpoint Substation Modification

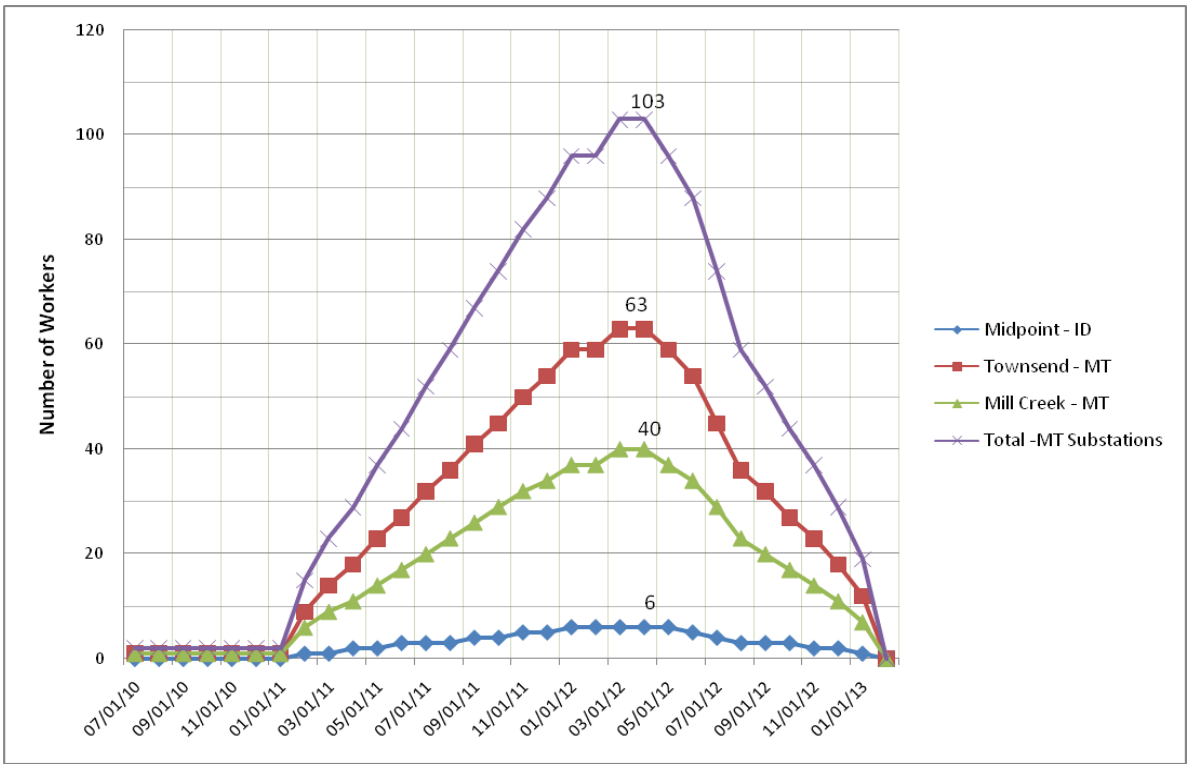
IPCO's existing Midpoint Substation located 10 miles northeast of Jerome, Idaho (see Exhibit 4-1) would be modified to accommodate the new MSTI 500kV transmission line. The proposed additions to the substation cannot be completed in the existing fenced area; expansion of the substation yard will be required.

The total cost of the Midpoint substation modification would be $23 million (2008 dollars). Site preparation would begin on about July 1, 2010, and conclude approximately Feb 1, 2013. The construction work force would be quite small relative to the Montana substations, peaking at only 6 workers in the first half of 2012 (assuming 50-hour week averages), as shown in Exhibit 4-2.

Communication Facilities

A microwave communications system would be used to provide a secondary means of communications. The primary component would be a set of microwave tower sites (see Chapter 2 for a graphic of the system).

Exhibit 4-2: Construction Workforce Schedule, Townsend, Mill Creek, and Midpoint Substations, All Alternatives Except the Jefferson Alternative



Construction costs for the network of microwave sites would be an estimated $3.8 million. Labor requirements would be very small relative to total Project labor construction requirements, at 116 worker-days on-site (additional labor time for travel from off-site locations but this would not affect local socioeconomic conditions).

Communication facility construction has not been firmly scheduled but would likely take place intermittently in 2011 and 2012. Up to about 5-10 workers may be on-site at any one time. Because this activity has not been scheduled, is unlikely to be scheduled during the peak of construction, and due to the low number of workers needed, these workers are not shown in the construction schedule graphics, but are included in evaluations of income and spending.

4.1.2 TRANSMISSION LINE CONSTRUCTION

With the exception of Alternative AB1 (Townsend to Pipestone/Mill Creek to Stateline Route), which entails different substation activities and transmission routing from the Preferred Route, the differences among the Project alternatives consist solely of differences in the transmission routes. Each of these alternative routes has differences in length traversed and the cost of construction.

The Preferred Route was chosen after extensive consultation with concerned citizens and State and local officials, an assessment of the most efficient way to achieve the Project Objectives, and preliminary assessment of the environmental impacts of each of the five alternative routes.

For each of the Preferred and Alternate routes, the general phasing of construction would be to begin near the Idaho/Montana state line, with two separate construction contractors proceeding, largely concurrently, to the north into Montana, and to the south into Idaho. Additional separate electrical contractors would build the Townsend and Mill Creek substations in Montana, and the Midpoint Substation in Idaho.

Exhibits 4-3 and 4-4 show the estimated costs for construction of each alternative transmission line (separate from costs for substation construction, project management, environmental permitting, permitting, ROW, and construction management). The most notable features evident in Exhibit 4-3 and 4-4 are that (1) most Alternative routes would cost slightly less than their respective Preferred Route links (exceptions being Alternatives B3 and C2), and (2) if combined to form complete routes (as A1, B1, C1, versus A2, B2, C2, etc.), all would be less costly to construct than a combined Preferred Route.

Exhibit 4-3: Cost Summary, Transmission Construction, All Alternatives (2008 dollars)

			2010	2011	2012
A1: Preferred Route	**Miles**	113.1			
	Cost	$157,481,577	$ 26,771,868	$ 74,016,341	$ 56,693,368
A2: Parallel Colstrip Lines	**Miles**	121.8			
	Cost	$135,646,032	$ 23,059,825	$ 63,753,635	$ 48,832,572
	Cost % Preferred	86.1%			
A3: Maximize Utility Corridors	**Miles**	128.8			
	Cost	$144,251,002	$ 24,522,670	$ 67,797,971	$ 51,930,361
	Cost % Preferred	91.6%			

			2010	2011	2012
B1: Preferred Route	**Miles**	87.2			
	Cost	$103,859,450	$ 16,617,512	$ 51,929,725	$ 35,312,213
B2: Sheep Creek	**Miles**	86.7			
	Cost	$103,256,199	$ 14,455,868	$ 51,628,100	$ 37,172,232
	Cost % Preferred	99.4%			
B3: I-15 Dell Valley	**Miles**	88.5			
	Cost	$105,354,643	$ 16,856,743	$ 52,677,322	$ 35,820,579
	Cost % Preferred	101.4%			

			2010	2011	2012
C1: Preferred Route	**Miles**	232.6			
	Cost	$223,047,908	$ 44,609,582	$ 98,141,080	$ 80,297,247
C2: Eastern Route	**Miles**	239.3			
	Cost	$228,916,572	$ 45,783,314	$ 100,723,292	$ 82,409,966
	Cost % Preferred	102.6%			
C3: Western Route	**Miles**	177.6			
	Cost	$193,097,508	$ 39,905,282	$ 87,791,620	$ 71,829,508
	Cost % Preferred	86.6%			
C4: Sheep Creek INL Brigham Point	**Miles**	188.8			
	Cost	$212,459,719	$ 42,491,438	$ 98,481,164	$ 76,484,589
	Cost % Preferred	95.3%			

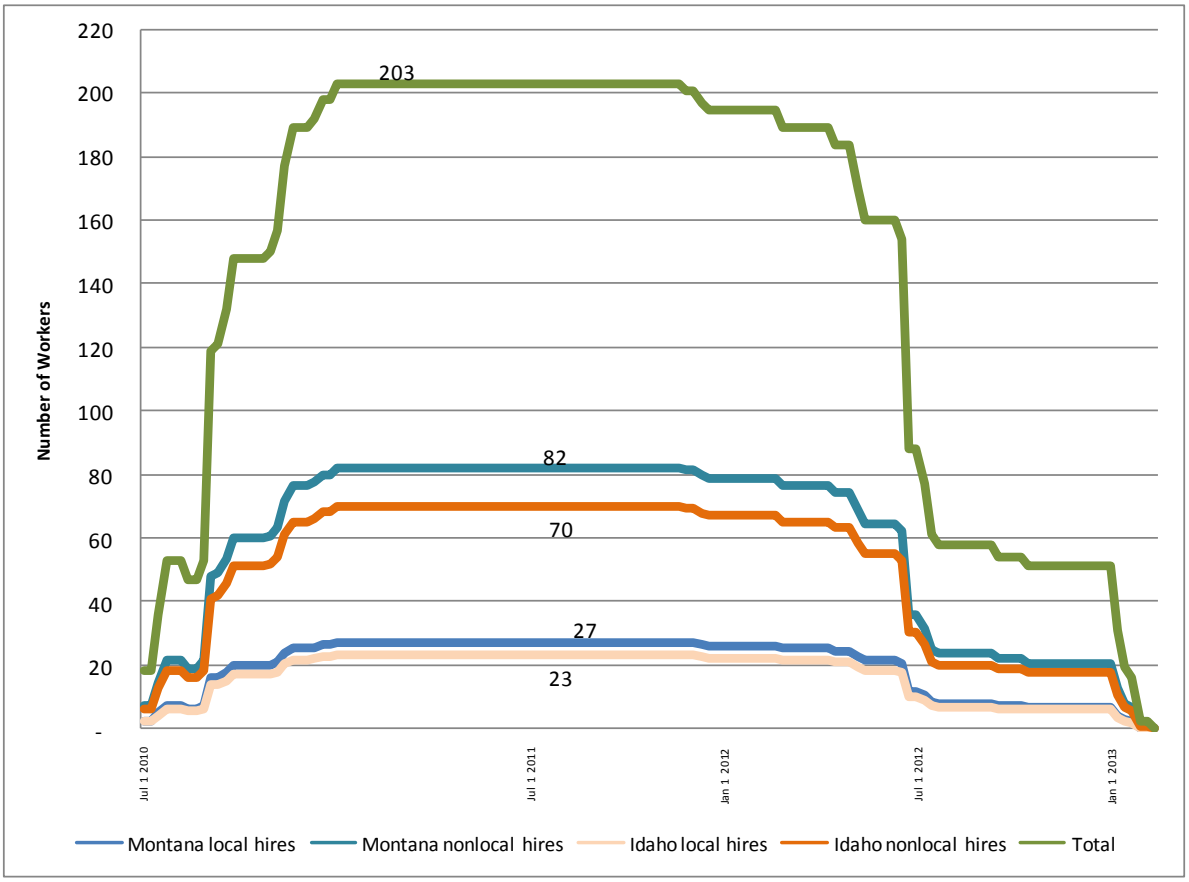
			2010	2011	2012
AB1: Townsend to Pipestone/Mill Creek to Stateline Route	**Miles**	209.2			
	Cost	$155,000,000	$ 21,700,000	$ 77,500,000	$ 55,800,000
(Note: cost comparison for this alternative are compared to Preferred Routes A1 and B1 combined)	Cost % Preferred	59.31%			

Exhibit 4-4: Construction-only Cost Summary, Transmission Construction, Selected Full-Route (Townsend to Midpoint) Combinations (2008 dollars)

Preferred	Total Costs A2, B2, C2	Total Costs A3, B3, C3	Least Cost except AB1 A2, B2, C3	Total Costs AB1, C1
$ 767.20	$ 750.60	$ 745.0	$ 714.80	$ 618.3
	97.8%	97.1%	93.2%	80.6%

A construction worker schedule was developed for the transmission line, on-site component, of the Preferred Alternative (A1, B1, and C1 combined), as shown in Exhibit 4-5. This schedule shows locally-hired versus nonlocally-hired workers, with 25% of the work force predicted to be hired from the local area (generally, the MTSI socioeconomic Study Area). This schedule shows that sustained relatively high levels of staffing would occur from approximately the winter in 2010-11 until the spring of 2012, with a sustained peak of 203 workers on-site along the transmission line segments for much of that period.

Exhibit 4-5: Local and Nonlocal, and Total Transmission Line Work Force Schedule, Preferred Alternatives A1, B1, and C1 Combined



In terms of construction manpower requirements, the generally lower costs of transmission construction for other alternatives relative to the combined Preferred Alternatives (Exhibit 4-3) imply

slightly lower construction workforce requirements for other alternatives. Detailed construction workforce schedules have not been developed for each alternative, however, because the costs are sufficiently close that the differences are well within the estimation error inherent in workforce planning. Rather than address uncertain and likely very small differences in construction labor force requirements, this assessment will address differing construction manpower requirements qualitatively. It should be emphasized that all alternatives have statistically insignificant estimable differences in worker requirements.

The distance of each alternative on private (taxable) lands in each county, however, would create measurable differences in their property tax benefits for local counties and other jurisdictions. Therefore, this impact assessment does discriminate in providing estimates of property taxes paid to each county; these will be addressed later.

4.2 DIRECT IMPACTS: DESCRIPTION OF PROJECT CHARACTERISTICS PERTINENT TO THE SOCIOECONOMIC IMPACT ASSESSMENT

Construction, rather than operation, impacts, are of primary consideration in this Technical Report because the main drivers of socioeconomic impacts are the demand for labor and the purchase of local goods and services, which are far greater during construction. The estimated annual operation and maintenance costs are only 3% of the total costs of construction. The primary impacts of concern for operation are positive impacts on local property tax bases and therefore property tax revenues.

Regardless of the line alternatives chosen, construction activities for the lines are scheduled to begin July 1, 2010, and last for 136 weeks, or (rounded upward) 32 months (two years and eight months), and conclude in early February, 2013. The peak construction work force, combining line and substation workers, is estimated at 298 workers, working 6 day weeks and an assumed 50-hour average workweek.

For operation and maintenance, at 3% of construction cost annually, this means that only about 9 workers, on average, will be needed; this could fluctuate somewhat if there are major emergency repairs to be made, but these would be rare unanticipated occurrences.

It is assumed the entire work force will be union workers, members of the International Brotherhood of Electrical Workers (IBEW). This is important since it will limit the workforce to union members, and will require payment of union wages and benefits by employees of the prime contractors (assumed to be one prime contractor for Idaho, and one for Montana).

4.2.1 DESCRIPTION OF THE PREFERRED ALTERNATIVE (COMBINED A1, B1, AND C1)

Introduction

The assessment of impacts of all 11 link alternatives mapped in Exhibit 4-1 ultimately depends on evaluation of each link separately then summing links to form a total. The approach used herein is to recognize that the Montana and Idaho components of the Proposed Project would effectively operate as two separate, but linked geographically and coordinated, projects.

Socioeconomic impacts on employment, income and population are a result of the sum of links in Montana. With 7 alternative links in Montana, the potential number of different routes numbers is 10 in Montana. Including the Idaho alternatives, the total number of permutations of alternates is 25.

Assessing these socioeconomic impacts using 25 different employment schedules would not create statistically measurable differences.

Therefore, the approach to the socioeconomic assessment is to describe a combined Preferred route. Impacts of other alternatives can later be assessed either qualitatively (as is the case for employment, income, population, and housing), or quantitatively where adequate data exist (such as property tax payments and impacts on the populations of concern for Environmental Justice).

This section therefore describes a combined Preferred Alternative (alternatives A1, B1, and C1 combined), to show how the project in sum would occur as the source of impacts to socioeconomics. Later sections will address impacts of the links themselves in comparison.

Viewed from north to south, the Preferred Alternative would run from the Townsend Substation (near Townsend, Montana, in Broadwater County) to the southeast, passing north of Whitehall, Montana (Jefferson County), then generally running along I-90 to the Butte Substation. A spur would be routed north to the new Mill Creek substation near Anaconda (Deer Lake County). The main route would run south from the Butte Substation, following I-15 to the Montana-Idaho state line at Monida Pass, passing near the communities of Melrose (Silver Bow County), then Dillon and Lima (Beaverhead County). The Preferred Route is mapped in Exhibit 4-1.

From Monida Pass, the Preferred Alternative would extend south to Spencer, Idaho (Clark County), then head westward to the Amps Substation, from which it would go south through the Idaho National Laboratories site to the Borah Substation (Power County). From the Borah Substation, it would route westward through Minidoka and Lincoln counties to the Midpoint Substation (Jerome County).

Combined Preferred Route Costs and Workforce

The total cost of construction, including planning expense beforehand but excluding ROW acquisition, is $833.7 million, plus ROW costs of $36.0 million, in 2008 dollars. These costs, summarized in Exhibit 4-6 and detailed in Exhibit 4-7, can be used as proxies for the ultimate valuation of the Project for ad valorem tax purposes.

Exhibit 4-6: Total Cost Summary By Alternative (2008 dollars)

Alternative	Miles	Costs ($mill.)	Townsend	Mill Creek	Dubois	Midpoint	Constructed (1)	Cost (2)
A1: PREFERRED ROUTE	112.9	$ 157.5	$ 126.7	$ 118.7			$ 402.9	$ 438.0
A2: PARALLEL COLSTRIP LINES	121.8	$ 135.6	$ 126.7	$ 118.7			$ 381.0	$ 414.1
A3: MAXIMIZE UTILITY CORRIDORS	128.8	$ 144.3	$ 126.7	$ 118.7			$ 389.7	$ 423.6
B1: PREFERRED ROUTE	87.1	$ 103.9					$ 103.9	$ 112.9
B2: SHEEP CREEK	86.9	$ 103.3					$ 103.3	$ 112.3
B3: I-15 ROUTE	88.4	$ 105.4					$ 105.4	$ 114.6
C1: PREFERRED ROUTE	232.6	$ 223.0			$ 14.7	$ 22.7	$ 260.4	$ 283.1
C2: EASTERN ROUTE	239.3	$ 228.9			$ 14.7	$ 22.7	$ 266.3	$ 289.5
C3: WESTERN ROUTE	177.6	$ 193.1			$ 14.7	$ 22.7	$ 230.5	$ 250.6
C4: SHEEP CREEK INL BRIGHAM POINT	214.2	$ 212.5			$ 14.7	$ 22.7	$ 249.9	$ 271.6
AB1: TOWNSEND TO PIPESTONE/MILL CREEK TO STATELINE ROUTE	209.2	$ 155.0	$ 202.9				$ 357.9	$ 389.0

Note: Cost of constructed facilities does not include communications/microwave facilities costing $3.8 million for entire project.

(1) "Total Costs Constructed" means costs directly associated with on-site activities during the construction period 7/1/10 to 2/1/13. Costs for ROW purchase, engineering, environmental permitting, project management, and construction management are not included. For example, the total cost of the Preferred Routes A1, B1, and C1 are estimated at $869.7 million compared to $767.2 million as their sum as shown here.

(2) "Total Costs" means all costs except ROW. Non-site costs include environmental permitting, engineering, procurement, project management, and construction management.

Exhibit 4-7: Total Cost and Details, Preferred Route (2008 dollars)

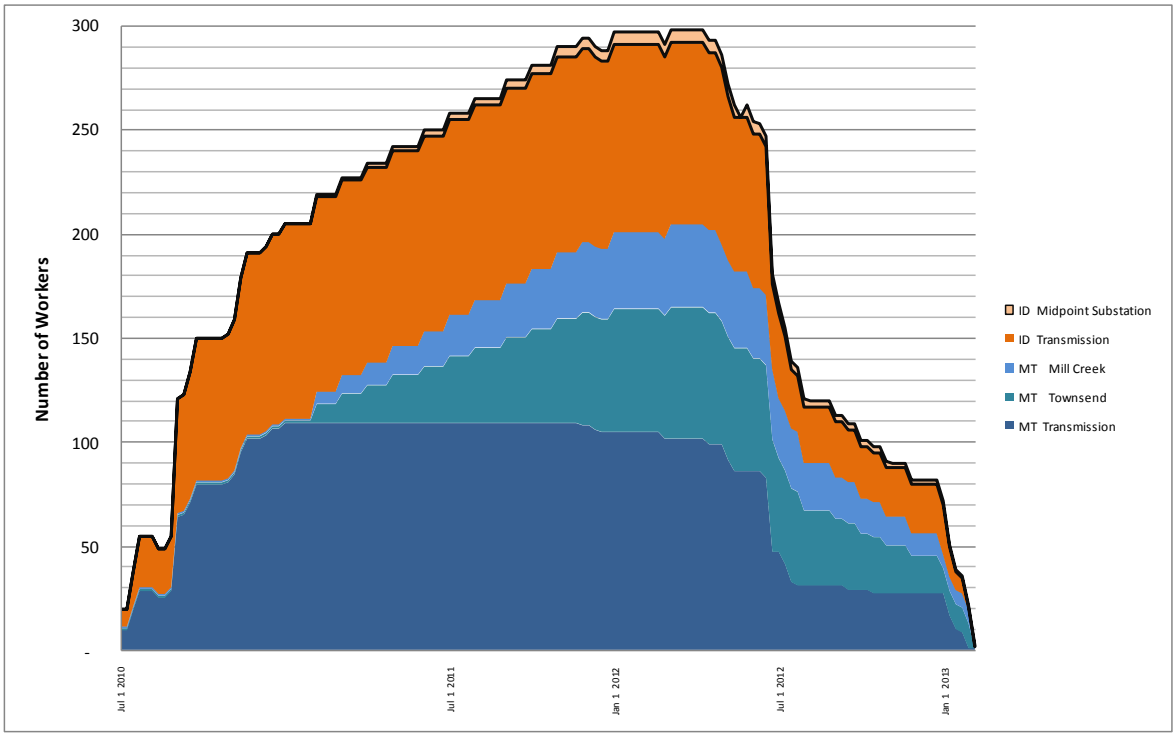
Description	Miles	Project Total	Total Cost (2008 Dollars) 2008	2009	2010	2011	2012	2013
ROW		**$36,000,000**	$1,800,000	$10,440,000	$18,000,000	$3,600,000	$1,800,000	$360,000
Environmental / Permitting		**$14,061,000**	$3,234,030	$3,515,250	$3,515,250	$1,406,100	$1,406,100	$984,270
Internal Labor and Supervision		**$13,500,000**	$1,000,000	$2,000,000	$2,500,000	$3,000,000	$3,000,000	$2,000,000
Transmission Lines - Construction								
Townsend to Mill Creek Alternative A1	112.9	$157,481,577			$26,771,868	$74,016,341	$56,693,368	
Mill Creek to State Line Alternative B1	87.1	$103,859,450			$16,617,512	$51,929,725	$35,312,213	
State Line to Midpoint Alternative C1	232.6	$223,047,908			$44,609,582	$98,141,080	$80,297,247	
Sub Total		**$484,388,935**	**$0**	**$0**	**$87,998,962**	**$224,087,146**	**$172,302,828**	**$0**
Substations - Construction								
Townsend Substation		$126,917,968			$15,230,156	$67,266,523	$38,075,390	$6,345,898
Mill Creek Substation		$118,664,910			$15,426,438	$61,705,753	$35,599,473	$5,933,246
Midpoint Substation		$22,757,859			$2,275,786	$12,516,822	$6,827,358	$1,137,893
Dubois Compensation Station		$14,749,368			$1,474,937	$8,112,152	$4,424,810	$737,468
Sub Total		**$283,090,105**	**$0**	**$0**	**$34,407,317**	**$149,601,251**	**$84,927,032**	**$14,154,505**
Communication - Construction								
Microwaves Facilities		$3,919,674			$476,405	$2,071,383	$1,175,902	$195,984
Sub Total		**$3,919,674**	**$0**	**$0**	**$476,405**	**$2,071,383**	**$1,175,902**	**$195,984**
Engineering								
Transmission Line		$7,758,000	$620,640	$3,956,580	$2,792,880	$387,900		
Substation		$7,751,322	$697,619	$2,790,476	$3,565,608	$697,619		
Dubois Compensation Station		$301,987	$27,179	$108,715	$138,914	$27,179		
Communication		$150,000	$27,000	$54,000	$69,000			
Sub Total		**$15,961,309**	**$1,372,438**	**$6,909,771**	**$6,566,402**	**$1,112,698**	**$0**	**$0**
Procurement								
Transmission Line		$330,739			$198,444	$66,148	$66,148	
Substation		$892,520			$535,512	$178,504	$178,504	
Communication		$58,795			$35,277	$11,759	$11,759	
Sub Total		**$1,282,055**	**$0**	**$0**	**$769,233**	**$256,411**	**$256,411**	**$0**
Project Management								
Transmission Line		$1,500,000	$165,000	$375,000	$375,000	$345,000	$210,000	$30,000
Substation		$593,577	$59,358	$118,715	$118,715	$118,715	$118,715	$59,358
Dubois Compensation Station		$60,397	$6,040	$12,079	$12,079	$12,079	$12,079	$6,040
Communications		$50,956	$5,096	$10,191	$10,191	$10,191	$10,191	$5,096
Sub Total		**$2,204,930**	**$235,493**	**$515,986**	**$515,986**	**$485,986**	**$350,986**	**$100,493**
Construction Management								
Transmission Line		$12,884,746		$644,237	$3,865,424	$3,865,424	$3,865,424	$644,237
Substation		$2,187,153		$174,972	$546,788	$546,788	$546,788	$371,816
Dubois Compensation Station		$120,795		$9,664	$30,199	$30,199	$30,199	$20,535
Communications		$107,791			$13,101	$56,963	$32,337	$5,390
Sub Total		**$15,300,485**	**$0**	**$828,873**	**$4,455,512**	**$4,499,374**	**$4,474,748**	**$1,041,978**
PROJECT TOTALS		$869,708,492	$7,641,961	$24,209,880	$159,205,066	$390,120,349	$269,694,006	$18,837,230

The costs shown in Exhibit 4-6 do not include right-of-way (ROW) acquisition costs, which are shown in Exhibit 4-7. These are estimated at $36.0 million for the combined Preferred Alternative, including acquisitions of ROW from Federal, State, and private landowners. Payments to other public entities such as the BLM, Forest Service, etc. would be used for ongoing maintenance of federal lands and therefore are not considered in this analysis. Costs of ROW acquisition will be built into the rate base for the Project Proponent. However, ROW are purchased at prevailing market rates; thus, there would be no change in its valuation for ad valorem property tax levies, and hence no impact.

Exhibit 4-8 shows the estimated labor schedule for the combined Preferred Alternative using combined transmission and substation staffing estimates. Construction will begin with access road and staging area clearing and construction. After about 10 weeks from the Project start (assumed to be July 1, 2010), the Project workforce will grow rapidly as the sequential construction of tower pads, erection of towers, and stringing of lines begins. In March and April, 2012, the total workforce in both Idaho and Montana will peak at an estimated 298 workers in and around the route and substations. As the major remaining tasks will be line stringing and site cleanup from that point to

completion, the construction work force will drop rapidly over the last 10 months of construction, concluding in February 2013.

Exhibit 4-8: Construction Work Force Schedule, Preferred Alternative (A1, B1, C1 Combined)

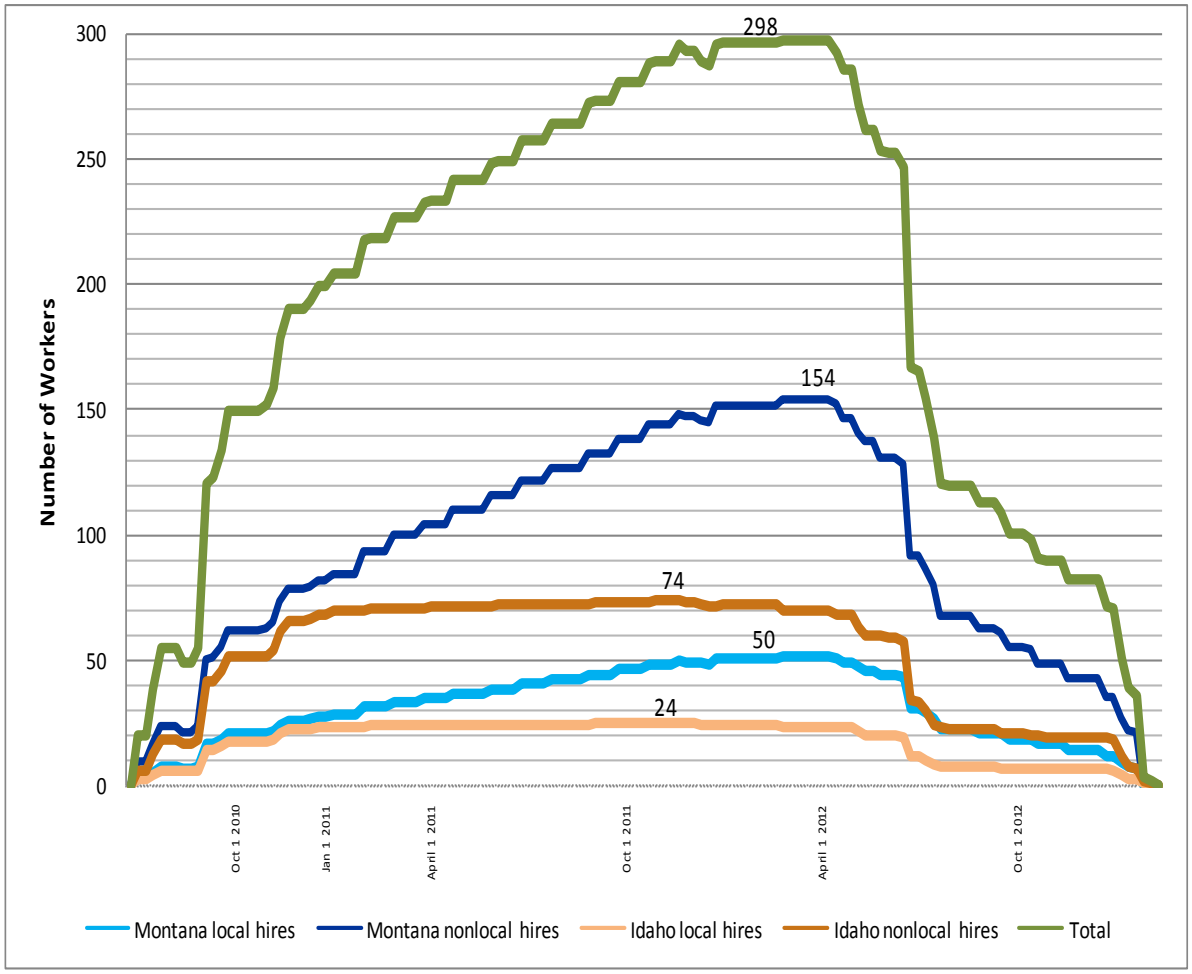


Source: Power Engineers, 2008d.

Exhibit 4-9 presents the construction workforce schedule with emphasis upon the numbers of workers expected to be hired from the MSTI Study Area labor pool, and those expected to be imported from other areas. By its nature, major electrical transmission line construction is specialized, and companies able to do such work operate in the national (and even international) markets. Skilled personnel are expected to all be IBEW members but who reside anywhere in the U.S., and some even overseas; they will relocate to the Study Area only to work on the Project, and departing once their work is completed. Such workers are expected to comprise about 75% of the Project construction work force. Lesser-specialized workers, who are likely to be hired from the MSTI labor pool, are expected to comprise about 25% of the Project labor demand.

The estimates in Exhibit 4-9 assume a skilled/unskilled split of 75%-25%. Furthermore, the labor forces are allocated between the Projects Idaho component and its Montana component according to the ratio of total construction costs of transmission line, and adding in substation costs (Exhibit 4-8). The Montana workforce is projected to be slightly larger than the Idaho workforce, at an at-peak total of 154 workers, with the at-peak Idaho construction work force at 144.

Exhibit 4-9: Local and Nonlocal Construction Workforce Schedule, Preferred Route (A1, B1, C1 Combined)



Source: Power Engineers, 2008d and assuming 25% of total work force is local hires.

Exhibit 4-10: Wage Payments to Construction Workers, Combined Preferred Route (A1, B1, C1 combined; constant 2008 dollars)

BY STATE

Worker-Weeks	7/1-12/31 2010	2011	2012	2013	Total
Montana	1,632	8,359	7,010	141	17,143
Idaho	1,349	5,081	3,040	61	9,530
Total	2,981	13,440	10,050	202	26,673

Worker-hours	50 hours/week				
	7/1-12/31 2010	2011	2012	2013	Total
Montana	81,584	417,962	350,518	7,065	857,129
Idaho	67,466	254,038	151,982	3,035	476,521
Total	149,050	672,000	502,500	10,100	1,333,650

Wages @ Base Rate: $42/hour skilled (nonlocal hires), $35/hour unskilled (local hires)
1 1/2 time overtime on 10 hours/week

	7/1-12/31 2010	2011	2012	2013	Total
Montana	$ 3,612,134	$ 18,505,275	$ 15,519,164	$ 271,995	$ 37,908,568
Idaho	$ 2,987,055	$ 11,247,525	$ 6,729,024	$ 134,383	$ 21,097,986
Total	$ 6,599,189	$ 29,752,800	$ 22,248,188	$ 406,378	$ 59,006,554

Hourly pay with overtime	
local $35/hr base	$ 38.50
nonlocal $42/hr ba:	$ 46.20

After-tax income @ Base Rate: $42/hour skilled (nonlocal hires), $35/hour unskilled (local hires)
1 1/2 time overtime on 8 hours/week
Monetizable benefits @ 20%, and after tax income @ 70% of total monetizable income

	7/1-12/31 2010	2011	2012	2013	Total
MT local	$ 659,607	$ 3,379,224	$ 2,833,934	$ 57,119	$ 6,929,884
MT nonlocal	$ 2,374,585	$ 12,165,207	$ 10,202,163	$ 171,357	$ 24,913,313
ID local	$ 545,462	$ 2,053,896	$ 1,228,778	$ 24,539	$ 3,852,676
ID nonlocal	$ 1,963,664	$ 7,394,025	$ 4,423,602	$ 88,342	$ 13,869,633
Total	$ 5,543,319	$ 24,992,352	$ 18,688,478	$ 341,358	$ 49,565,506

BY LOCAL-NONLOCAL AND STATE

Montana loca				0.25
Idaho local hire				0.25

Worker-Weeks	7/1-12/31 2010	2011	2012	2013	Total
MT local	408	2,090	1,753	35	4,286
MT nonlocal	1,224	6,269	5,258	106	12,857
ID local	337	1,270	760	15	2,383
ID nonlocal	1,012	3,811	2,280	46	7,148
Total	2,981	13,440	10,050	202	26,673

Worker-hours:	50 hours/week				
	7/1-12/31 2010	2011	2012	2013	Total
MT local	20,396	104,491	87,629	1,766	212,516
MT nonlocal	61,188	313,472	262,888	5,299	637,548
ID local	16,866	63,509	37,996	759	118,372
ID nonlocal	50,599	190,528	113,987	2,276	355,115
Total	149,050	672,000	502,500	10,100	1,333,650

Wages @ Base Rate: $42/hour skilled (nonlocal hires), $35/hour unskilled (local hires)
1 1/2 time overtime

	7/1-12/31 2010	2011	2012	2013	Total
MT local	$ 785,246	$ 4,022,886	$ 3,373,731	$ 67,999	$ 8,249,862
MT nonlocal	$ 2,826,887	$ 14,482,389	$ 12,145,433	$ 203,996	$ 29,658,706
ID local	$ 649,360	$ 2,445,114	$ 1,462,831	$ 29,214	$ 4,586,519
ID nonlocal	$ 2,337,695	$ 8,802,411	$ 5,266,192	$ 105,169	$ 16,511,468
Total	$ 6,599,189	$ 29,752,800	$ 22,248,188	$ 406,378	$ 59,006,554

Local spending by nonlocal workers @ $120/day ($840/week), 7 day weeks

	7/1-12/31 2010	2011	2012	2013	Total
Montana nonl	$ 1,027,959	$ 5,266,323	$ 4,416,521	$ 89,017	$ 10,799,820
Idaho nonloca	$ 850,071	$ 3,200,877	$ 1,914,979	$ 38,243	$ 6,004,170
Total	$ 1,878,030	$ 8,467,200	$ 6,331,500	$ 127,260	$ 16,803,990

Based on prevailing union wages and the schedule of construction manpower by skill type, total wages are estimated at $59.0 million for the combined Preferred Alternative.[8] Adding in the value of monetary benefits, and assuming combined 30% state and federal income tax rates and social security, the take-home pay for construction project workers are estimated at $49.6 million.

Overheads on site construction labor are likely to be paid to contractors located outside the MSTI Study Area. Therefore, these payments will not be earned (or re-spent) inside the Study Area and are not evaluated herein.

The wage estimates are important to the socioeconomic impact analysis because the workers imported into the area will spend a portion of their wages on temporary housing, increasing local housing demand somewhat. They will also purchase food and miscellaneous personal goods and services locally. The bulk of their wages, however, are expected to be spent in their own home areas. By contrast, workers hired from the MSTI Study Area will not require significant new housing (most would be expected to commute), but much more of their wages would be spent in the region than for nonlocal workers.

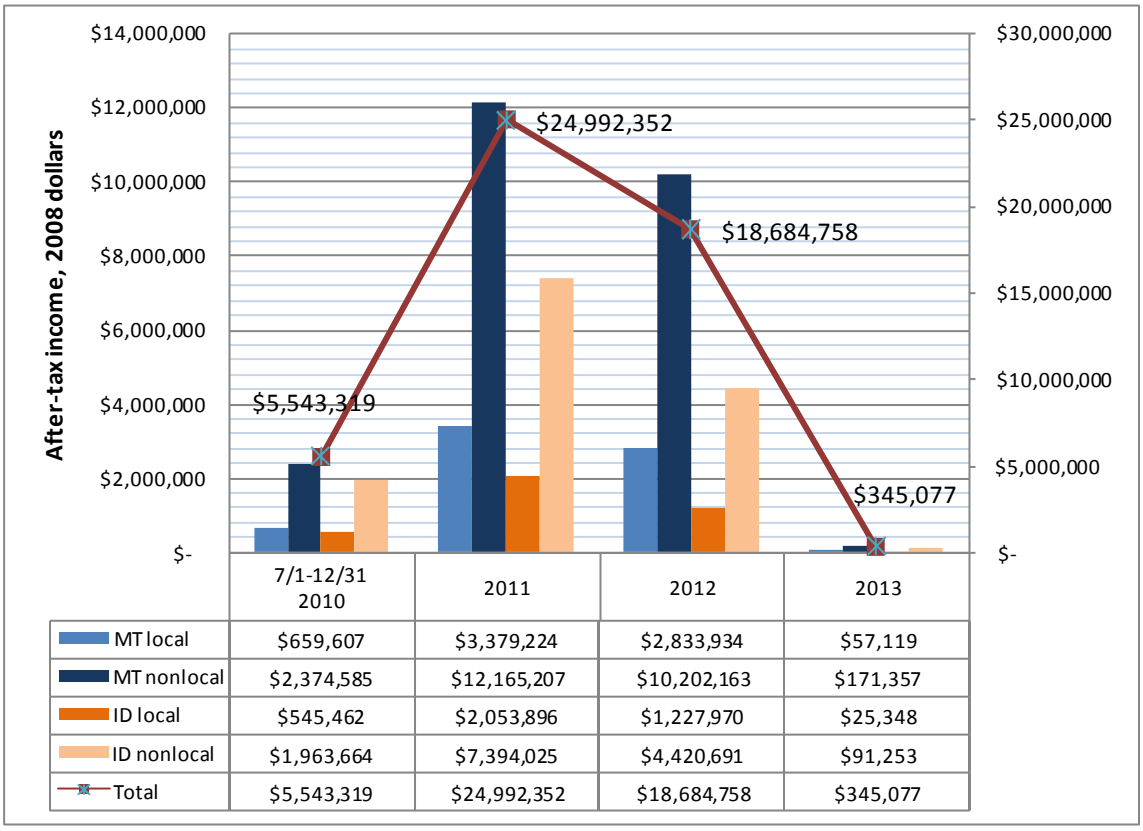
The wage payment breakdown displayed in Exhibit 4-10 shows the total of $49.6 million in after-tax earnings would be divided into $31.8 million to workers at the Montana project component, and

[8] The average hourly wage paid is segregated into relatively unskilled labor, which is likely to be subject to local hiring (within the respective state MSTI counties), and skilled labor, which is likely to be imported into the MSTI Study Area from other areas of the U.S.. Average wage rates for local-hire labor are assumed to be $35 per hour, and imported labor to be $42 per hour. Time and a half overtime is assumed for 10 hours of the 6-day work week.

$17.7 million in its Idaho component. Only $6.9 million would be paid to workers hired from the Montana MSTI Study Area, and $3.9 million to its Idaho residents, over the course of construction; by far the bulk of Project wage payments would be to higher-paid nonresidents.

Exhibit 4-11 graphs the after-tax incomes of construction workers. State income taxes paid by Project workers are not considered in this analysis since they primarily are re-spent on statewide projects and programs. After-tax incomes are important to the analysis since they represent increases to final demand by MSTI Study Area residents, and thereby result in further re-spending of incomes, creating "indirect and induced" income and employment. These indirect and induced impacts are discussed later in this section.

Exhibit 4-11: After-Tax Wage Payments to Construction Workers, combined Preferred Alternative (constant 2008 dollars; totals on right axis)



	7/1-12/31 2010	2011	2012	2013
MT local	$659,607	$3,379,224	$2,833,934	$57,119
MT nonlocal	$2,374,585	$12,165,207	$10,202,163	$171,357
ID local	$545,462	$2,053,896	$1,227,970	$25,348
ID nonlocal	$1,963,664	$7,394,025	$4,420,691	$91,253
Total	$5,543,319	$24,992,352	$18,684,758	$345,077

Source: Power Engineers, 2008d and assumptions noted in Exhibit 4-8.

Per Diem payments to nonlocal construction workers for food and lodging are assumed to be paid by the Project contractors. Regardless of the level of such payments (assumed at $60 per day for project costing), visiting nonlocal workers will have to find accommodations and purchase food and miscellaneous personal goods and services, thereby benefitting local merchants. It is assumed these expenditures will average $120 per worker per day ($50 per day for lodging $50 per day for food, and $20 per day for miscellaneous purposes). Based on these assumptions and the projected number of visiting nonlocal workers, estimates of spending in the local economy were developed as shown in Exhibit 4-8. Local spending by visiting workers will total $10.8 million in Montana. In Idaho, the corresponding nonlocal worker spending will be $6.8 million. Thus, in terms of local spending of income, the visiting nonlocal workers will provide a greater total benefit to the local economy than

the workers hired from the local market area (refer to total after-tax income of local workers in Exhibit 4-10).

Local purchases and rentals of materials and supplies, and larger-ticket Project components are important in this analysis to the extent that they are bought from local companies and residents, benefitting local economies. For the MSTI, however, such purchases are likely to represent a very small proportion of the total purchases because of a lack of local suppliers for specialty components such as towers, cables, conductors, electrical machinery, etc. The primary local purchases are expected to be consumable supplies, small mechanical rentals, aggregate materials and concrete for access roads, substation sites, and tower foundations.

Based on Project cost estimates, approximately $4.6 million are expected to be purchases of foundation materials. Rentals of locally-supplied small construction equipment and machinery would also be minimal, as would purchases of materials and supplies, over the 32 months of the Project construction. A final small, but noticeable component of local purchases would be fuel. All tolled, total Project local purchases would be an estimated $20 million (2008 dollars).

Cost Allocation to Counties

Costs of construction will not be spread evenly among the counties in the MSTA Study Area due to lengths of transmission line differences, per-mile cost differences (largely due to different difficulties of terrain for construction), and locations of substations. These issues are important to the evaluation of property tax benefits accruing to counties in which the Project would be built.

Exhibit 4-12 also shows the total cost of Project Construction as allocated to the counties in which it would be built. These estimates were made by calculating average total per-mile transmission costs, increasing those by 8.7 percent to reflect permitting, engineering, procurement, and construction and project management costs, and adding in the cost of the substations and Dubois shunt facility costs (which were also increased by 8.7% over construction-only costs).

In terms of the dollar increases in county built values, the combined Preferred Alternative (the sum of Alternative A1, B1, and C1) would most benefit Broadwater and Deer Lodge counties in Montana, and Power and Clark counties in Idaho.

Exhibit 4-12: Miles of Transmission Line by County and Land Jurisdiction, and Built Values, Combined Preferred Route (A1, B1, C1)

Alternative A1: Preferred (all Montana Counties) County	Land Jurisdiction	Miles	Constructed Cost ($1,392,410/mile)	Cost With Engineering, Permitting, Procurement, Management (8.7% Additional)	With Substation Costs
Beaverhead	BLM	0.91	$ 1,271,404	$ 1,381,622	
Beaverhead	Private	2.61	$ 3,629,979	$ 3,944,662	
Beaverhead	State of Montana - FWP	0.16	$ 228,063	$ 247,834	
TOTAL BEAVERHEAD COUNTY		**3.68**	**$ 5,129,447**	**$ 5,574,118**	**$ 5,574,118**
Broadwater	BLM	1.58	$ 2,193,301	$ 2,383,438	
Broadwater	Private	17.39	$ 24,217,984	$ 26,317,439	$ 164,237,913
Broadwater	State of Montana - DL	3.29	$ 4,580,039	$ 4,977,082	
Broadwater	Water	0.12	$ 172,315	$ 187,252	
TOTAL BROADWATER COUNTY		**22.38**	**$ 31,163,638**	**$ 33,865,211**	**$ 171,785,685**
Deer Lodge	Private	3.78	$ 5,260,116	$ 5,716,115	$ 134,668,075
Deer Lodge	State of Montana - FWP	0.88	$ 1,226,090	$ 1,332,379	
TOTAL DEER LODGE COUNTY		**4.66**	**$ 6,486,206**	**$ 7,048,495**	**$ 136,000,454**
Jefferson	BLM	5.39	$ 7,500,544	$ 8,150,765	
Jefferson	Private	25.88	$ 36,039,821	$ 39,164,109	
Jefferson	State of Montana - DL	3.75	$ 5,219,042	$ 5,671,480	
Jefferson	USDA FS	3.91	$ 5,449,020	$ 5,921,395	
TOTAL JEFFERSON COUNTY		**38.93**	**$ 54,208,427**	**$ 58,907,750**	**$ 58,907,750**
Silver Bow	BLM	2.60	$ 3,621,844	$ 3,935,821	
Silver Bow	Private	34.84	$ 48,510,466	$ 52,715,833	
Silver Bow	State of Montana - DL	2.86	$ 3,975,490	$ 4,320,125	
Silver Bow	State of Montana - FWP	0.38	$ 529,337	$ 575,225	
Silver Bow	USDA FS	2.55	$ 3,550,082	$ 3,857,838	
TOTAL SILVER BOW COUNTY		**43.23**	**$ 60,187,219**	**$ 65,404,843**	**$ 65,404,843**
	Total	**112.88**	**$ 157,174,936**	**$ 170,800,416**	**$ 437,672,849**
	Total Private	84.50	$ 117,658,367	$ 127,858,159	$ 394,730,592
B1: Preferred (Montana) County	**Land Jurisdiction**	**Miles**	**Cost ($1,392,410/mile)**	**Cost With Engineering, Permitting, Procurement, Management (8.7% Additional)**	
Beaverhead	BLM	20.60	$ 24,540,032	$ 26,667,405	
Beaverhead	Private	36.83	$ 43,861,521	$ 47,663,872	
Beaverhead	State of Montana - DL	29.63	$ 35,296,406	$ 38,356,248	
	Total	87.06	$ 103,697,959	$ 112,687,525	
	Total Private	36.83	$ 43,861,521	$ 47,663,872	
C1: Preferred County	**Land Jurisdiction**	**Miles**	**Transmission Cost ($958,503/mile)**	**Cost With Engineering, Permitting, Procurement, Management (8.7% Additional)**	**With Substation Costs**
Bingham	BLM	25.57	$ 24,510,217	$ 26,635,005	
Bingham	DOE	0.00	$ 271	$ 295	
Bingham	Private	15.12	$ 14,491,406	$ 15,747,664	
BINGHAM COUNTY TOTAL		**40.69**	**$ 39,001,894**	**$ 42,382,964**	**$ 42,382,964**
Blaine	BLM	17.77	$ 17,031,532	$ 18,507,994	
Blaine	Private	0.86	$ 824,314	$ 895,774	
Blaine	State of Idaho Dept of Lands	1.16	$ 1,110,218	$ 1,206,462	
BLAINE COUNTY TOTAL		**19.79**	**$ 18,966,064**	**$ 20,610,230**	**$ 20,610,230**
Butte	DOE	35.29	$ 33,826,563	$ 36,758,984	
Butte	Private	2.62	$ 2,513,135	$ 2,730,999	
BUTTE COUNTY TOTAL		**37.91**	**$ 36,339,698**	**$ 39,489,983**	**$ 39,489,983**
Clark	BLM	16.70	$ 16,008,328	$ 17,396,088	
Clark	DOE	3.21	$ 3,074,691	$ 3,341,236	
Clark	Private	24.32	$ 23,307,557	$ 25,328,087	$ 41,356,076
Clark	State of Idaho Dept of Lands	3.74	$ 3,586,137	$ 3,897,019	
Clark	USDA - Sheep	6.06	$ 5,808,467	$ 6,312,002	
Clark	USFS	5.53	$ 5,295,807	$ 5,754,900	
CLARK COUNTY TOTAL		**59.55**	**$ 57,080,987**	**$ 62,029,332**	**$ 78,057,321**
Jefferson	BLM	2.50	$ 2,395,202	$ 2,602,842	
JEFFERSON COUNTY TOTAL		**2.50**	**$ 2,395,202**	**$ 2,602,842**	**$ 2,602,842**
Jerome	BLM	3.06	$ 2,935,623	$ 3,190,112	
Jerome	Private	0.37	$ 356,168	$ 387,044	$ 37,237,578
JEROME COUNTY TOTAL		**3.43**	**$ 3,291,792**	**$ 3,577,157**	**$ 28,307,892**
Lincoln	BLM	32.60	$ 31,247,499	$ 33,956,342	
Lincoln	BOR	0.25	$ 244,066	$ 265,224	
Lincoln	Private	1.20	$ 1,153,264	$ 1,253,241	
Lincoln	State of Idaho Dept of Lands	2.02	$ 1,931,468	$ 2,098,907	
LINCOLN COUNTY TOTAL		**36.07**	**$ 34,576,297**	**$ 37,573,713**	**$ 37,573,713**
Minidoka	BLM	12.72	$ 12,195,631	$ 13,252,869	
Minidoka	State of Idaho Dept of Lands	1.00	$ 959,487	$ 1,042,664	
MINIDOKA COUNTY TOTAL		**13.72**	**$ 13,155,118**	**$ 14,295,534**	**$ 14,295,534**
Power	BLM	6.92	$ 6,637,567	$ 7,212,977	
Power	Private	12.01	$ 11,509,118	$ 12,506,843	
Power	State of Idaho Dept of Lands	0.03	$ 29,893	$ 32,485	
POWER COUNTY TOTAL		**18.96**	**$ 18,176,579**	**$ 19,752,304**	**$ 19,752,304**
	PROJECT TOTAL	**232.64**	**$ 222,983,630**	**$ 242,314,059**	**$ 283,072,784**
	Total Private Land	53.88	$ 51,641,828	$ 56,118,653	$ 134,712,307

4.2.2 DESCRIPTION OF ALTERNATIVES OTHER THAN THE COMBINED PREFERRED ROUTE

In this section, the individual links that comprise all the Project Alternatives are described, including by breaking down the combined Preferred Alternative Routes into its three subcomponents (A1, A2, and A3). In this way, the impacts among alternatives can be compared with the Preferred Alternatives.

Before these alternatives are described, it is useful to revisit the issue of the separation of subsets of what would in essence be a sum-total Project. Isolation of the impacts of individual links is both difficult and somewhat misleading in terms of actual socioeconomic impact.

A full, viable Project selected will be the sum of three links: (1) The "A" link generally running from Townsend, thru Butte, then south to Melrose, Montana, with a tie into the Mill Creek Substation; (2) the "B" link connecting from Melrose to the Montana-Idaho state line; and (3) the Idaho component running from the state line to the Midpoint substation. There will be some intermingling of socioeconomic impacts among the three links, whichever are chosen, owing to the mobility of workers in the region. Some may reside in Idaho and work in Montana, or vice versa; some may reside in the area north of Melrose, Montana, yet work on the "B" link south of Melrose. Segregating these interconnections in Montana is all but impossible in any reliable predictive way and is not attempted herein.

These analytical problems are less important for the division of impacts between Montana and Idaho. The entire Project would be subcontracted to separate contractors in Idaho and Montana, operating somewhat independently. The long road distance between the nearest significant communities on either side of the state line (Dillon, Montana, and Dubois, Idaho) is sufficiently long that inter-state commuting by construction workers is sufficiently small as to be negligible, although inter-area commuting in Montana for work on the Projects Montana links may be significant. This analytical difficulty will be generally addressed later in this Section.

There will also be differences in the construction workforce requirements, depending on which alternatives are formed to create ultimate Project that is built. As stated earlier in this Section, a construction work schedule has been created only for the combined Preferred Route and was described earlier in this section. No similar schedules for other Alternatives were assembled, in large part due to the error inherent in workforce planning for projects such as the Proposed Project.

Another important aspect of interconnectedness are the presence of Project costs not associated with any particular Alternative. General overhead costs of project management, procurement, construction management, environmental permitting, and engineering are not readily allocated to particular links, let alone individual counties. However, for local property tax purposes, some allocation will be made to derive taxable value.

The issue of estimating error for construction workforces and full Project costs can be illustrated, using the estimates in Exhibit 4-13. Exhibit 4-13 begins with the total constructed cost of the combined Preferred Route of $767.2 million. The total cost of this construction project, including general costs, is $833.7 million, indicating total costs that are 8.7% higher than the constructed cost, based on the full analysis done for this combination of routes.

It is reasonable to expect that the non-construction costs associated with any combination of alternatives comprising a full Project would be close to the 8.7% calculated. Therefore, total costs can be estimated for any combination. In Exhibit 4-13, three possible other combinations are evaluated by using this 8.7% factor.

The results show that in terms of total cost, the minimum cost of any combination of alternatives (A2, B2, and C3) is 93.2% of the total combined Preferred Route, except the Townsend to Pipestone/Mill Creek to Stateline Route (AB3) combined with the lowest-cost Idaho alternative (C3). The Townsend to Pipestone/Mill Creek to Stateline Route differs in that it does not pass through the Melrose, Montana area, and has a different substation configuration than any other alternative. Therefore, the Townsend to Pipestone/Mill Creek to Stateline Route (AB3) Alternative is discussed last in this section.

With estimated costs of all other potential routings being so close to the combined Preferred Route, workforce requirements and wage costs are described only generally and probabilistically, being ranked (with some uncertainty) against that of the Preferred Alternative rather than precisely estimated.

Exhibit 4-13: Total Cost Summary, Selected Combined Alternatives (2008 dollars)

	Preferred A1, A2, A3	Total Costs A2,B2,C2	Total Costs A3,B3,C3	Total Costs AB1+C1	Least Cost A2,B2,C3
Constructed Cost	**$ 767.2**	$ 750.6	$ 745.0	$ 641.0	$ 714.8
Percent of Preferred		97.8%	97.1%	83.6%	93.2%
Total Cost non-ROW	$ 833.7	$ 815.7	$ 809.6	$ 696.6	$ 776.8
Ratio Total to Constructed Costs	**1.087**	1.087	1.087	1.087	1.087

The evaluation of key Project impacts on property tax valuations, on the other hand, is judged to be suitably based on an allocation of non-construction costs to each alternative. By using distances of land travelled by alternative and transmission average costs per mile, the location and cost of substations, and the 6.2 escalation factor to derive total costs from constructed cost estimates, the approximate change in the value of local property tax bases can be estimated with a more reasonable expectation of meaningful values.

Therefore, in the sections that follow, each Project alternative is described primarily in terms of its likely construction and total value by county. A more thorough description of the Townsend to Pipestone/Mill Creek to Stateline Route (AB3) is then provided below in this section.

Description of Alternative A1 (Preferred Route)

Viewed from north to south, Alternative A1 (the Preferred Route) would run from the Townsend Substation (near Townsend, Montana, in Broadwater County) to the southeast, passing north of Whitehall, Montana (Jefferson County), and then generally running along I-90 to the Butte Substation. A spur would be routed north to the new Mill Creek substation near Anaconda (Deer Lake County). The main route would run south from the Butte Substation, following I-15 to Melrose, Montana.

The total construction cost for Alternative A1 facilities is an estimated $438 million. Of the total cost, $137.9 million is estimated for the Townsend substation, $128.9 million for the Mill Creek Substation, and $170.8 for transmission lines. These costs are shown in Exhibit 4-14.

Exhibit 4-14: Land Ownership and Value Built, Alternative A1 (Preferred Route)

Alternative A1: Preferred (all Montana Counties) County	Land Jurisdiction	Miles	Constructed Cost ($1,392,410/mile)	Cost With Engineering, Permitting, Procurement, Management (8.7% Additional)	With Substation Costs
Beaverhead	BLM	0.91	$ 1,271,404	$ 1,381,622	
Beaverhead	Private	2.61	$ 3,629,979	$ 3,944,662	
Beaverhead	State of Montana - FWP	0.16	$ 228,063	$ 247,834	
TOTAL BEAVERHEAD COUNTY		**3.68**	**$ 5,129,447**	**$ 5,574,118**	**$ 5,574,118**
Broadwater	BLM	1.58	$ 2,193,301	$ 2,383,438	
Broadwater	Private	17.39	$ 24,217,984	$ 26,317,439	$ 164,237,913
Broadwater	State of Montana - DL	3.29	$ 4,580,039	$ 4,977,082	
Broadwater	Water	0.12	$ 172,315	$ 187,252	
TOTAL BROADWATER COUNTY		**22.38**	**$ 31,163,638**	**$ 33,865,211**	**$ 171,785,685**
Deer Lodge	Private	3.78	$ 5,260,116	$ 5,716,115	$ 134,668,075
Deer Lodge	State of Montana - FWP	0.88	$ 1,226,090	$ 1,332,379	
TOTAL DEER LODGE COUNTY		**4.66**	**$ 6,486,206**	**$ 7,048,495**	**$ 136,000,454**
Jefferson	BLM	5.39	$ 7,500,544	$ 8,150,765	
Jefferson	Private	25.88	$ 36,039,821	$ 39,164,109	
Jefferson	State of Montana - DL	3.75	$ 5,219,042	$ 5,671,480	
Jefferson	USDA FS	3.91	$ 5,449,020	$ 5,921,395	
TOTAL JEFFERSON COUNTY		**38.93**	**$ 54,208,427**	**$ 58,907,750**	**$ 58,907,750**
Silver Bow	BLM	2.60	$ 3,621,844	$ 3,935,821	
Silver Bow	Private	34.84	$ 48,510,466	$ 52,715,833	
Silver Bow	State of Montana - DL	2.86	$ 3,975,490	$ 4,320,125	
Silver Bow	State of Montana - FWP	0.38	$ 529,337	$ 575,225	
Silver Bow	USDA FS	2.55	$ 3,550,082	$ 3,857,838	
TOTAL SILVER BOW COUNTY		**43.23**	**$ 60,187,219**	**$ 65,404,843**	**$ 65,404,843**
	Total	**112.88**	**$ 157,174,936**	**$ 170,800,416**	**$ 437,672,849**
	Total Private	84.50	$ 117,658,367	$ 127,858,159	$ 394,730,592

Description of Alternative A2 (Parallel Colstrip Lines)

Alternative A2 (Sheep Creek), mapped in Exhibit 4-1, differs from other "A" alternatives primary because it follows the northernmost route between the Townsend and Mill Creek substations in Montana.

The total construction cost for Alternative A2 facilities is an estimated $414.1 million. Of the total cost, $137.9 million is estimated for the Townsend substation, $128.9 million for the Mill Creek Substation, and $147.3 million for transmission lines.

Exhibit 4-15: Land Ownership and Value Built, Alternative A2 (Parallel Colstrip Lines)

A2: Parallel Colstrip lines County	Land Jurisdiction	Miles	Cost ($1,113,678/mile)	Cost With Engineering, Permitting, Procurement, Management (8.7% Additional)	With Substation Costs
Beaverhead	BLM	0.91	$ 1,016,895	$ 1,105,050	
Beaverhead	**Private**	2.61	$ 2,903,333	$ 3,155,023	
Beaverhead	State of Montana - FWP	0.16	$ 182,410	$ 198,223	
TOTAL BEAVERHEAD COUNTY		**3.68**	**$ 4,102,638**	**$ 4,458,295**	**$ 4,458,295**
Broadwater	BLM	4.63	$ 5,157,487	$ 5,604,590	
Broadwater	Private	13.84	$ 15,417,132	$ 16,753,642	$ 154,674,116
Broadwater	Water	0.12	$ 137,821	$ 149,768	
TOTAL BROADWATER COUNTY		**18.60**	**$ 20,712,440**	**$ 22,508,000**	**$ 160,428,474**
Deer Lodge	Private	8.94	$ 9,950,959	$ 10,813,607	$ 139,765,566
Deer Lodge	State of Montana - FWP	0.88	$ 980,652	$ 1,065,664	
Deer Lodge	USDA FS	11.59	$ 12,903,595	$ 14,022,206	
TOTAL DEER LODGE COUNTY		**21.40**	**$ 23,835,206**	**$ 25,901,477**	**$ 154,853,437**
Jefferson	BLM	11.95	$ 13,313,506	$ 14,467,653	
Jefferson	Private	13.71	$ 15,270,255	$ 16,594,032	
Jefferson	State of Montana - DL	0.20	$ 222,432	$ 241,715	
Jefferson	USDA FS	18.42	$ 20,512,333	$ 22,290,546	
TOTAL JEFFERSON COUNTY		**44.28**	**$ 49,318,527**	**$ 53,593,945**	**$ 53,593,945**
Silver Bow	BLM	2.60	$ 2,896,826	$ 3,147,951	
Silver Bow	Private	26.99	$ 30,056,571	$ 32,662,173	
Silver Bow	State of Montana - DL	1.64	$ 1,825,480	$ 1,983,730	
Silver Bow	State of Montana - FWP	0.38	$ 423,374	$ 460,077	
Silver Bow	USDA FS	2.15	$ 2,390,171	$ 2,597,375	
TOTAL SILVER BOW COUNTY		**33.76**	**$ 37,592,423**	**$ 40,851,306**	**$ 40,851,306**
	Total	**121.72**	**$ 135,561,234**	**$ 147,313,023**	**$ 414,185,457**
	Private Land	66.09	$ 73,598,251	$ 79,978,476	$ 346,850,909

Description of Alternative A3 (Maximize Utility Corridors)

Alternative A2 (Maximize Utility Corridors), mapped in Exhibit 4-1, differs from other "A" alternatives primary because it departs due south from the Townsend Substation, toward Three Forks, Montana east of the Preferred route, before heading west using the same route as the Preferred (A1) Route. It also deviates slightly between Butte and the Mill Creek Substation, being a more westerly route for that stretch.

The total construction cost for Alternative A2 facilities is an estimated $423.6 million. Of the total cost, $137.9 million is estimated for the Townsend substation, $128.9 million for the Mill Creek Substation, and $156.7 million for transmission lines. These costs are detailed in Exhibit 4-16.

Exhibit 4-16: Land Ownership and Value Built, Alternative A3 (Maximize Utility Corridors)

A3: Maximize Utility Corridors County	Land Jurisdiction	Miles	Cost ($1,119,961/mile)	Cost With Engineering, Permitting, Procurement, Management (8.7% Additional)	With Substation Costs
Beaverhead	BLM	0.91	$ 1,022,632	$ 1,111,284	
Beaverhead	Private	2.61	$ 2,919,712	$ 3,172,822	
Beaverhead	State of Montana - FWP	0.16	$ 183,439	$ 199,341	
TOTAL BEAVERHEAD COUNTY		**3.68**	**$ 4,125,783**	**$ 4,483,447**	**$ 4,483,447**
Broadwater	BLM	1.38	$ 1,539,952	$ 1,673,450	
Broadwater	BOR	1.14	$ 1,271,191	$ 1,381,390	
Broadwater	Private	25.83	$ 28,926,548	$ 31,434,187	$ 169,354,661
Broadwater	State of Montana - DL	2.21	$ 2,477,959	$ 2,692,773	
Broadwater	Water	0.07	$ 74,707	$ 81,183	
TOTAL BROADWATER COUNTY		**30.62**	**$ 34,290,357**	**$ 37,262,984**	**$ 175,183,458**
Deer Lodge	Private	5.97	$ 6,685,284	$ 7,264,831	$ 136,216,790
Deer Lodge	State of Montana - FWP	1.00	$ 1,123,391	$ 1,220,777	
TOTAL DEER LODGE COUNTY		**6.97**	**$ 7,808,675**	**$ 8,485,608**	**$ 137,437,567**
Jefferson	BLM	5.08	$ 5,685,080	$ 6,177,920	
Jefferson	Private	24.33	$ 27,244,654	$ 29,606,490	
Jefferson	State of Montana - DL	4.19	$ 4,696,204	$ 5,103,318	
Jefferson	USDA FS	3.91	$ 4,382,826	$ 4,762,773	
TOTAL JEFFERSON COUNTY		**37.51**	**$ 42,008,765**	**$ 45,650,501**	**$ 45,650,501**
Silver Bow	BLM	2.60	$ 2,913,168	$ 3,165,710	
Silver Bow	Private	42.82	$ 47,957,329	$ 52,114,746	
Silver Bow	State of Montana - DL	1.64	$ 1,835,778	$ 1,994,922	
Silver Bow	State of Montana - FWP	0.38	$ 425,763	$ 462,672	
Silver Bow	USDA FS	2.55	$ 2,855,448	$ 3,102,986	
TOTAL SILVER BOW COUNTY		**49.99**	**$ 55,987,486**	**$ 60,841,036**	**$ 60,841,036**
Total		**128.77**	**$ 144,221,066**	**$ 156,723,576**	**$ 423,596,009**
	Private land	101.55	$ 113,733,527	$ 123,593,075	$ 429,164,526

Description of Alternative B1 (Preferred Route)

Alternative B1, the Preferred Route, would run along I-15 from Melrose, Montana, to the Montana-Idaho state border at Monida pass. Its location is depicted in Exhibit 4-1.

The total cost for Alternative B1 facilities is an estimated $112.9 million. There are no substations or shunt facilities planned for any of the "B" alternatives. These costs are detailed in Exhibit 4-17.

Exhibit 4-17: Land Ownership and Value Built, Alternative B1 (Preferred Route)

B1: Preferred County	Land Jurisdiction	Miles	Cost ($1,191,049/ mile)	Cost With Engineering, Permitting, Procurement, Management (8.7% Additional)
Beaverhead	BLM	20.60	$ 24,540,032	$ 26,667,405
	Private	36.83	$ 43,861,521	$ 47,663,872
	State of Montana - ST	29.63	$ 35,296,406	$ 38,356,248
	Total	87.06	$ 103,697,959	$ 112,687,525
	Total Private Land	**36.83**	**$ 43,861,521**	**$ 47,663,872**

Description of Alternative B2 (Sheep Creek)

Alternative B2 veers away from the I-90 corridor near Melrose, Montana, following a more westward path, to the Petersen Flats substation in the Horse Prairie, southward to the Idaho state line, crossing it to the west of the crossing for the Preferred Route (A1). Alternative B2 is mapped in Exhibit 4-1.

The total cost for Alternative B2 facilities is an estimated $112.3 million. There are no substation or shunt facilities planned for any of the "B" alternatives. These costs are detailed in Exhibit 4-18.

Exhibit 4-18: Land Ownership and Built Values, Alternative B2 (Sheep Creek)

B2: Sheep Creek County	Land Jurisdiction	Miles	Cost ($1,190,960/ mile)	Cost With Engineering, Permitting, Procurement, Management (8.7% Additional)
Beaverhead	BLM	44.84	$ 53,396,778	$ 58,025,740
	Private	33.70	$ 40,138,089	$ 43,617,656
	State of Montana - ST	6.01	$ 7,153,074	$ 7,773,173
	USDA FS	2.32	$ 2,758,224	$ 2,997,334
	USFS	0.00	$ 1,935	$ 2,103
	Total	86.86	$ 103,448,100	$ 112,416,006
	Total Private Land	**33.70**	**$ 40,138,089**	**$ 43,617,656**

Description of Alternative B3 (I-15 Route)

Alternative B3, like Preferred Route B1, follows I-15 from Melrose, Montana, to the Montana-Idaho state line. It is located closer to I-15 and slightly more to the west than the Preferred Route. Alternative B3 is mapped in Exhibit 4-1.

The total cost for Alternative B3 facilities is an estimated $105.4 million. There are no substation or shunt facilities planned for any of the "B" alternatives. These costs are detailed in Exhibit 4-19.

Exhibit 4-19: Land Ownership and Built Value, Alternative B3 (I-15 Route)

B3: I-15 Route County	Land Jurisdiction	Miles	Cost ($1,190,448/mile)	Cost With Engineering, Permitting, Procurement, Management (8.7% Additional)
Beaverhead	BLM	4.03	$ 4,802,876	$ 5,219,237
Beaverhead	**Private**	8.82	$ 10,497,274	$ 11,407,282
Beaverhead	State of Montana - DL	6.25	$ 7,438,164	$ 8,082,978
Beaverhead	BLM	7.25	$ 8,627,426	$ 9,375,336
Beaverhead	**Private**	13.53	$ 16,111,526	$ 17,508,232
Beaverhead	State of Montana - DL	9.30	$ 11,068,896	$ 12,028,458
Beaverhead	BLM	3.06	$ 3,639,653	$ 3,955,175
Beaverhead	**Private**	18.68	$ 22,233,311	$ 24,160,715
Beaverhead	State of Montana - DL	8.79	$ 10,468,776	$ 11,376,313
Beaverhead	BLM	0.08	$ 94,110	$ 102,268
Beaverhead	**Private**	4.41	$ 5,251,525	$ 5,706,779
Beaverhead	State of Montana - DL	4.15	$ 4,937,853	$ 5,365,915
	Total	**88.35**	**$ 105,171,390**	**$ 114,288,688**
	Total Private Land	45.44	$ 54,093,636	$ 58,783,008

Description of Alternative C1 (Preferred Route)

Alternative C1 (the Preferred Route) would follow I-15 south from the Montana-Idaho state line at Monida Pass, passing near the community of Dubois (Clark County), then depart near Spencer, Idaho to head southwest to the Amps Substation. It would then route south to the Borah Substation (Power County) before heading due west to its terminus at the Midpoint Substation (Jerome County). The Preferred Route is mapped in Exhibit 4-1.

The total construction cost for Alternative C1 facilities is an estimated $283.1 million. Of the total cost, $25.7 million is estimated for the Midpoint substation, $16.0 million for the Dubois Shunt facility, and $274.9 million for transmission lines. These costs are detailed in Exhibit 4-20.

Exhibit 4-20: Land Ownership and Value Built, Alternative C1 (Preferred Route)

C1: Preferred County	Land Jurisdiction	Miles	Transmission Cost ($958,503/mile)	Cost with Engineering, Permitting, Procurement, Management (8.7% Additional)	With Substation Costs
Bingham	BLM	25.57	$ 24,510,217	$ 26,635,005	
Bingham	DOE	0.00	$ 271	$ 295	
Bingham	Private	15.12	$ 14,491,406	$ 15,747,664	
BINGHAM COUNTY TOTAL		**40.69**	**$ 39,001,894**	**$ 42,382,964**	**$ 42,382,964**
Blaine	BLM	17.77	$ 17,031,532	$ 18,507,994	
Blaine	Private	0.86	$ 824,314	$ 895,774	
Blaine	State of Idaho Dept of Lands	1.16	$ 1,110,218	$ 1,206,462	
BLAINE COUNTY TOTAL		**19.79**	**$ 18,966,064**	**$ 20,610,230**	**$ 20,610,230**
Butte	DOE	35.29	$ 33,826,563	$ 36,758,984	
Butte	Private	2.62	$ 2,513,135	$ 2,730,999	
BUTTE COUNTY TOTAL		**37.91**	**$ 36,339,698**	**$ 39,489,983**	**$ 39,489,983**
Clark	BLM	16.70	$ 16,008,328	$ 17,396,088	
Clark	DOE	3.21	$ 3,074,691	$ 3,341,236	
Clark	Private	24.32	$ 23,307,557	$ 25,328,087	$ 41,356,076
Clark	State of Idaho Dept of Lands	3.74	$ 3,586,137	$ 3,897,019	
Clark	USDA - Sheep	6.06	$ 5,808,467	$ 6,312,002	
Clark	USFS	5.53	$ 5,295,807	$ 5,754,900	
CLARK COUNTY TOTAL		**59.55**	**$ 57,080,987**	**$ 62,029,332**	**$ 78,057,321**
Jefferson	BLM	2.50	$ 2,395,202	$ 2,602,842	
JEFFERSON COUNTY TOTAL		**2.50**	**$ 2,395,202**	**$ 2,602,842**	**$ 2,602,842**
Jerome	BLM	3.06	$ 2,935,623	$ 3,190,112	
Jerome	Private	0.37	$ 356,168	$ 387,044	$ 37,237,578
JEROME COUNTY TOTAL		**3.43**	**$ 3,291,792**	**$ 3,577,157**	**$ 28,307,892**
Lincoln	BLM	32.60	$ 31,247,499	$ 33,956,342	
Lincoln	BOR	0.25	$ 244,066	$ 265,224	
Lincoln	Private	1.20	$ 1,153,264	$ 1,253,241	
Lincoln	State of Idaho Dept of Lands	2.02	$ 1,931,468	$ 2,098,907	
LINCOLN COUNTY TOTAL		**36.07**	**$ 34,576,297**	**$ 37,573,713**	**$ 37,573,713**
Minidoka	BLM	12.72	$ 12,195,631	$ 13,252,869	
Minidoka	State of Idaho Dept of Lands	1.00	$ 959,487	$ 1,042,664	
MINIDOKA COUNTY TOTAL		**13.72**	**$ 13,155,118**	**$ 14,295,534**	**$ 14,295,534**
Power	BLM	6.92	$ 6,637,567	$ 7,212,977	
Power	Private	12.01	$ 11,509,118	$ 12,506,843	
Power	State of Idaho Dept of Lands	0.03	$ 29,893	$ 32,485	
POWER COUNTY TOTAL		**18.96**	**$ 18,176,579**	**$ 19,752,304**	**$ 19,752,304**
	PROJECT TOTAL	**232.64**	**$ 222,983,630**	**$ 242,314,059**	**$ 283,072,784**
	Total Private Land	53.88	$ 51,641,828	$ 56,118,653	$ 134,712,307

Description of Alternative C2 (Eastern Route)

Alternative C2 (the Eastern Route) would follow I-15 south from the Montana-Idaho state line at Monida Pass, passing near the community of Dubois (Clark County), then depart the Preferred Route near Spencer, Idaho to head south to just north of the Jefferson Substation (Jefferson County). It would then route southwest of the Idaho National Laboratory to join the Preferred Route, heading south toward the Borah Substation (Power County) before heading due west to its terminus at the Midpoint Substation (Jerome County). The Preferred Route is mapped in Exhibit 4-1.

The total construction cost for Alternative C2 facilities is an estimated $289.5 million. Of the total cost, $25.7 million is estimated for the Midpoint substation, $16.0 million for the Dubois Shunt facility, and $248.8 million for transmission lines. These costs are detailed in Exhibit 4-21.

Exhibit 4-21: Land Ownership and Built Value, Alternative C2 (Eastern Route)

C2: Eastern Route County	Land Jurisdiction	Miles	Cost ($956,609/mile)	Cost With Engineering, Permitting, Procurement, Management (8.7% Additional)	With Substation Costs
Bingham	BLM	35.34	$ 33,807,672	$ 36,738,456	
Bingham	**Private**	16.86	$ 16,128,032	$ 17,526,169	
Bingham	State of Idaho Dept of La	11.29	$ 10,800,248	$ 11,736,520	
Blaine	BLM	17.77	$ 16,997,881	$ 18,471,425	
Blaine	**Private**	0.86	$ 822,686	$ 894,004	
Blaine	State of Idaho Dept of La	1.16	$ 1,108,024	$ 1,204,079	
Bonneville	BLM	4.87	$ 4,663,408	$ 5,067,678	
Bonneville	**Private**	3.86	$ 3,688,989	$ 4,008,787	
Bonneville	State of Idaho Dept of La	0.64	$ 611,014	$ 663,983	
Butte	**Private**	0.14	$ 133,227	$ 144,777	
Clark	BLM	3.42	$ 3,270,088	$ 3,553,572	
Clark	**Private**	17.09	$ 16,346,401	$ 17,763,469	$ 33,791,458
Clark	State of Idaho Dept of La	3.00	$ 2,873,029	$ 3,122,091	
Clark	USDA - Sheep	7.96	$ 7,610,866	$ 8,270,652	
Clark	USFS	5.53	$ 5,285,344	$ 5,743,530	
Jefferson	BLM	20.88	$ 19,973,096	$ 21,704,561	
Jefferson	**Private**	15.84	$ 15,149,433	$ 16,462,736	
Jefferson	State of Idaho Dept of La	0.52	$ 496,514	$ 539,557	
Jefferson	State of Idaho Fish and G	0.12	$ 115,449	$ 125,458	
Jerome	BLM	3.06	$ 2,929,823	$ 3,183,809	
Jerome	**Private**	0.37	$ 355,465	$ 386,280	
Lincoln	BLM	32.60	$ 31,185,759	$ 33,889,250	
Lincoln	BOR	0.25	$ 243,583	$ 264,700	
Lincoln	**Private**	1.20	$ 1,150,986	$ 1,250,765	
Lincoln	State of Idaho Dept of La	2.02	$ 1,927,652	$ 2,094,760	
Minidoka	BLM	12.72	$ 12,171,535	$ 13,226,684	
Minidoka	State of Idaho Dept of La	1.00	$ 957,591	$ 1,040,604	
Power	BLM	6.92	$ 6,624,452	$ 7,198,726	
Power	**Private**	12.01	$ 11,486,378	$ 12,482,131	$ 37,212,867
Power	State of Idaho Dept of La	0.03	$ 29,834	$ 32,420	
	Total	239.33	$ 228,944,460	$ 248,791,632	$ 319,795,957
	Total Private Land	**68.22**	**$ 65,261,597**	$ 70,919,118	**$ 141,923,443**

Description of Alternative C3 (Western Route)

Alternative C3 connects from the Idaho-Montana state line southward to the Amps Substation north of Idaho National Laboratories (INL), then proceeds southwestward, skirting the INL northern boundary. Farther southwestward, the Alternative C3 route also skirts the northern boundary of the Craters of the Moon National Monument, before heading further southwest to the Midpoint Substation.

The Preferred Route is mapped in Exhibit 4-1.

The total construction cost for Alternative C3 facilities is an estimated $250.6 million. Of the total cost, $25.7 million is estimated for the Midpoint substation, $16.0 million for the Dubois Shunt facility, and $209.9 million for transmission lines. These costs are detailed in Exhibit 4-22.

Exhibit 4-22: Land Ownership and Value Built, Alternative C3 (Western Route)

C3: Western Route County	Land Jurisdiction	Miles	Cost ($1,087,261/mile)	Cost With Engineering, Permitting, Procurement, Management (8.7% Additional)	With Substation Costs
Blaine	BLM	28.50	$ 30,992,218	$ 33,678,930	
Blaine	Private	5.41	$ 5,880,250	$ 6,390,008	
Blaine	State of Idaho Dept of Lands	2.78	$ 3,019,453	$ 3,281,209	
BLAINE COUNTY TOTAL		**36.69**	**$ 39,891,921**	**$ 43,350,148**	**$ 43,350,148**
Butte	DOE	25.59	$ 27,827,628	$ 30,240,002	
Butte	BLM	23.06	$ 25,076,592	$ 27,250,480	
Butte	State of Idaho Dept of Lands	1.57	$ 1,703,546	$ 1,851,227	
Butte	Private	12.78	$ 13,895,011	$ 15,099,569	
BUTTE COUNTY TOTAL		**63.00**	**$ 68,502,778**	**$ 74,441,277**	**$ 74,441,277**
Clark	BLM	20.21	$ 21,968,296	$ 23,872,726	
Clark	DOE	3.21	$ 3,487,722	$ 3,790,072	
Clark	Private	11.70	$ 12,725,336	$ 13,828,494	$ 29,856,483
Clark	State of Idaho Dept of Lands	1.01	$ 1,099,850	$ 1,195,196	
Clark	USFS	5.05	$ 5,488,179	$ 5,963,949	
CLARK COUNTY TOTAL		**41.18**	**$ 44,769,382**	**$ 48,650,436**	**$ 64,678,425**
Jefferson	BLM	2.50	$ 2,716,956	$ 2,952,488	
JEFFERSON COUNTY TOTAL		**2.50**	**$ 2,716,956**	**$ 2,952,488**	**$ 2,952,488**
Jerome	BLM	0.90	$ 980,324	$ 1,065,308	
Jerome	Private	0.36	$ 393,169	$ 427,252	$ 24,730,736
JEROME COUNTY TOTAL		**1.26**	**$ 1,373,493**	**$ 1,492,561**	**$ 26,223,296**
Lincoln	BLM	26.23	$ 28,516,485	$ 30,988,576	
Lincoln	BOR	0.25	$ 271,509	$ 295,046	
Lincoln	Private	2.91	$ 3,162,396	$ 3,436,544	
Lincoln	State of Idaho Dept of Lands	3.59	$ 3,899,943	$ 4,238,029	
LINCOLN COUNTY TOTAL		**32.97**	**$ 35,850,333**	**$ 38,958,194**	**$ 38,958,194**
	PROJECT TOTAL	**177.61**	**$ 193,104,863**	**$ 209,845,105**	**$ 250,603,829**
	Total Private Lands	33.16	$ 36,056,161	$ 39,181,867	$ 63,912,602

Description of Alternative C4 (Sheep Creek INL Brigham Point)

Alternative C4 (Sheep Creek INL Brigham Point) connects from the Idaho-Montana state line at Sheep Valley, going southward to the Amps Substation north of Idaho National Laboratories (INL). It then follows the same route as Preferred Route C1 southward to the Borah Substation, then westward to its terminus at the Midpoint Substation. The C4 Alternative is mapped in Exhibit 4-1.

The total construction cost for Alternative C4 facilities is an estimated $271.6 million. Of the total cost, $25.7 million is estimated for the Midpoint substation, $16.0 million for the Dubois Shunt facility, and $231.0 million for transmission lines. These costs are detailed in Exhibit 4-23.

Exhibit 4-23: Land Ownership and Built Values, Alternative C4 (Sheep Creek INL Brigham Point)

C4: Sheep Creek INL Brigham Point		Miles	Cost ($992,063/mile)	Cost With Engineering, Permitting, Procurement, Management	With Substation
Bingham	BLM	25.57	$ 25,368,391	$ 27,567,575	
Bingham	DOE	0.00	$ 281	$ 305	
Bingham	Private	15.12	$ 14,998,792	$ 16,299,036	
TOTAL BINGHAM COUNTY		**40.69**	**$ 40,367,464**	**$ 43,866,916**	**$ 43,866,916**
Blaine	BLM	17.77	$ 17,627,856	$ 19,156,013	
Blaine	Private	0.86	$ 853,176	$ 927,138	
Blaine	State of Idaho Dept of Lands	1.16	$ 1,149,090	$ 1,248,704	
TOTAL BLAINE COUNTY		**19.79**	**$ 19,630,122**	**$ 21,331,855**	**$ 21,331,855**
Butte	DOE	35.29	$ 35,010,930	$ 38,046,024	
Butte	'Private	2.62	$ 2,601,127	$ 2,826,619	
TOTAL BUTTE COUNTY		**37.91**	**$ 37,612,057**	**$ 40,872,643**	**$ 40,872,643**
Clark	BLM	20.21	$ 20,044,804	$ 21,782,486	
Clark	DOE	3.21	$ 3,182,345	$ 3,458,222	
Clark	Private	11.70	$ 11,611,135	$ 12,617,704	$ 28,645,693
Clark	State of Idaho Dept of Lands	1.01	$ 1,003,550	$ 1,090,547	
Clark	USFS	5.05	$ 5,007,647	$ 5,441,760	
TOTAL CLARK COUNTY		**41.18**	**$ 40,849,481**	**$ 44,390,719**	**$ 60,418,708**
Jefferson	BLM	2.50	$ 2,479,065	$ 2,693,975	
TOTAL JEFFERSON COUNTY		**2.50**	**$ 2,479,065**	**$ 2,693,975**	**$ 2,693,975**
Jerome	BLM	3.06	$ 3,038,408	$ 3,301,807	
Jerome	Private	0.37	$ 368,639	$ 400,596	$ 37,675,479
TOTAL JEROME COUNTY		**3.43**	**$ 3,407,047**	**$ 3,702,403**	**$ 28,433,139**
Lincoln	BLM	32.60	$ 32,341,566	$ 35,145,253	
Lincoln	BOR	0.25	$ 252,611	$ 274,510	
Lincoln	Private	1.20	$ 1,193,644	$ 1,297,120	
Lincoln	State of Idaho Dept of Lands	2.02	$ 1,999,095	$ 2,172,396	
TOTAL LINCOLN COUNTY		**36.07**	**$ 35,786,915**	**$ 38,889,279**	**$ 38,889,279**
Minidoka	BLM	12.72	$ 12,622,636	$ 13,716,891	
Minidoka	State of Idaho Dept of Lands	1.00	$ 993,081	$ 1,079,171	
TOTAL MINIDOKA COUNTY		**13.72**	**$ 13,615,717**	**$ 14,796,062**	**$ 14,796,062**
Power	BLM	6.92	$ 6,869,968	$ 7,465,525	
Power	Private	12.01	$ 11,912,086	$ 12,944,744	
Power	State of Idaho Dept of Lands	0.03	$ 30,940	$ 33,622	
TOTAL POWER COUNTY		**18.96**	**$ 18,812,994**	**$ 20,443,891**	**$ 20,443,891**
	PROJECT TOTAL	**214.26**	**$ 212,560,863**	**$ 230,987,743**	**$ 271,746,467**
	Total Private Lands	43.89	$ 43,538,600	$ 47,312,957	$ 113,634,129

Description of the Townsend to Pipestone/Mill Creek to Stateline Route (AB1)

The Townsend to Pipestone/Mill Creek to Stateline alternative differs from other alternatives in that it has different substation configurations, and a does not pass through Melrose, as do all "A" and "B" alternatives. Its transmission line follows the same route from the Townsend, Montana substation site to near Whitehall, Montana (Silver Bow County), and then splits to head southwest, joining the Preferred A1 route again north of Dillon. It then follows the Preferred A1 Route south to Monida Pass at the Montana-Idaho state line.

Alternative AB1 further differs from other alternatives because it does not include any substation at Mill Creek. Instead, additional work at the new Townsend Substation is included, raising its cost.

Because Alternative AB1 has noticeable substation construction differences, it is useful to examine their likely implications on demand for construction workers. Exhibit 4-24 shows a construction schedule which includes no workers at the Mill Creek site, and an increase in the workforce for the Townsend Substation. The implication of this shift in workers is small—16 workers less than the combined Preferred Alternatives workforce of 298. The differences are shown in comparing Exhibit 4-24, with the combined Preferred Alternatives schedule previously shown in Exhibit 4-8. By comparing the split of local versus nonlocal workers (Exhibits 4-25 and 4-9), it is clear that the differences in work force requirements are also very small.

Exhibit 4-24: Construction Workforce Schedule, Townsend to Pipestone/Mill Creek to Stateline Route

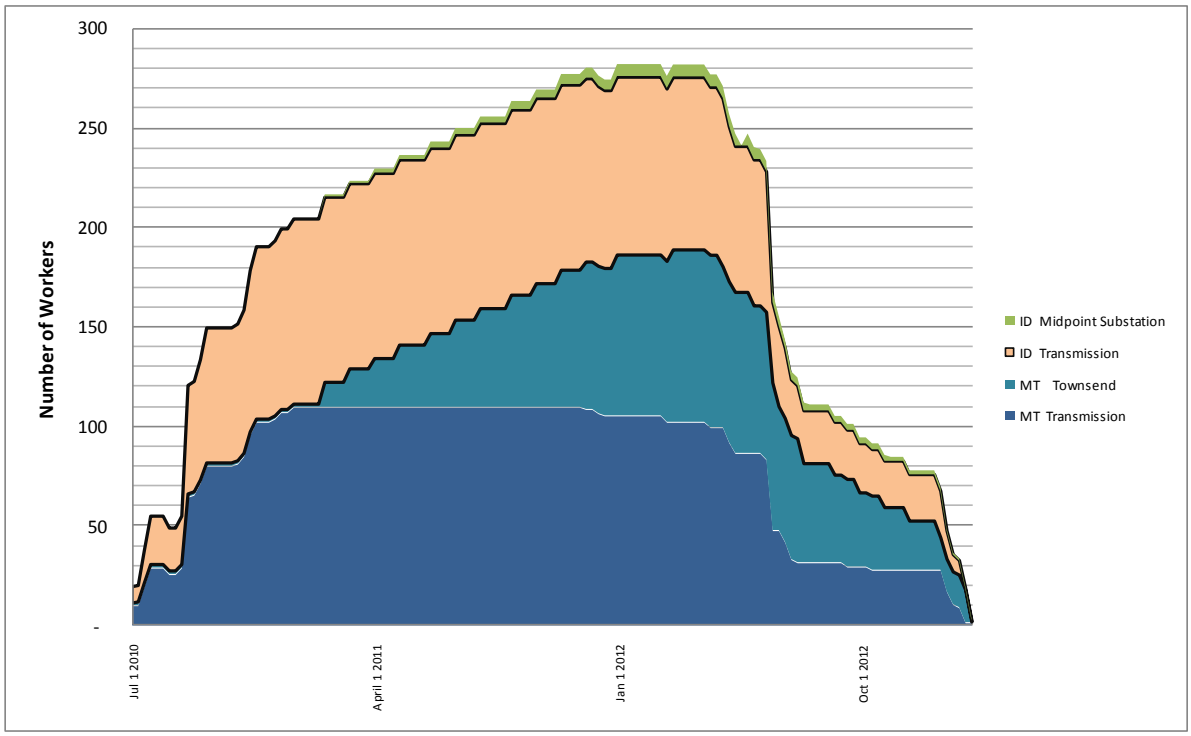
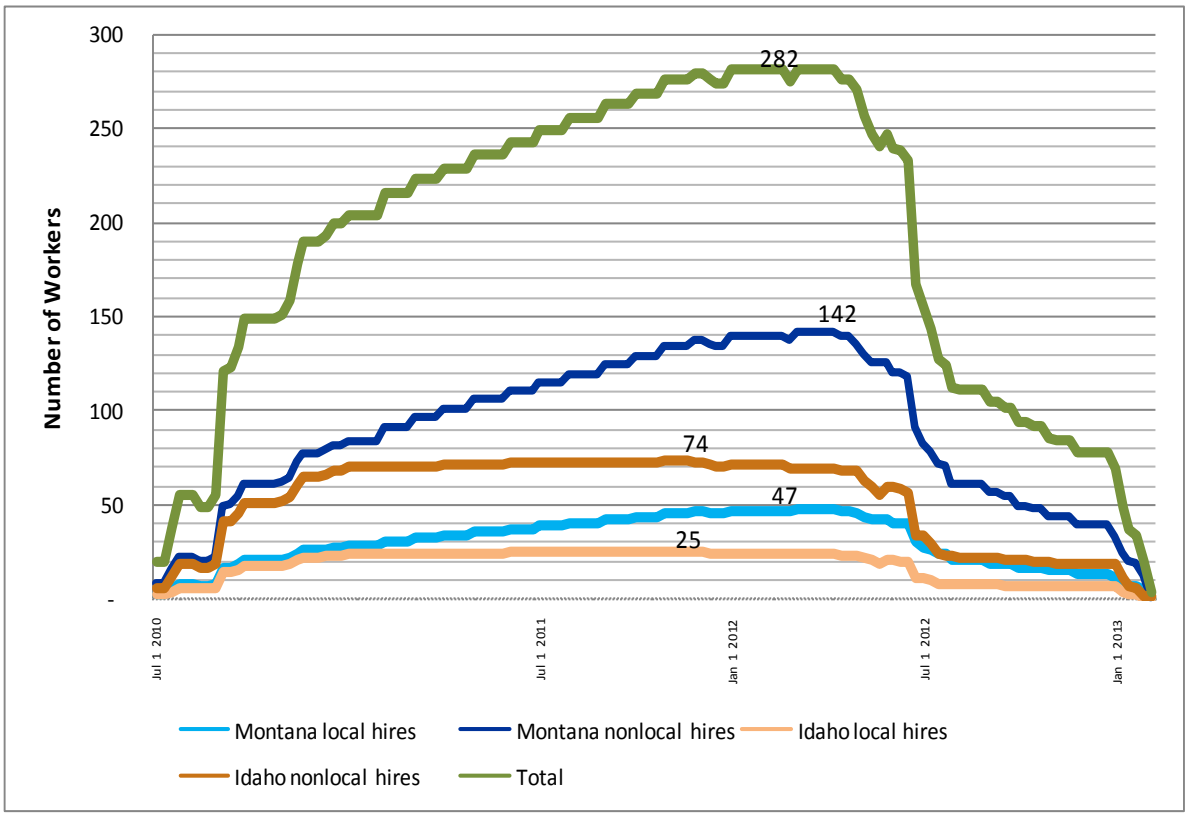


Exhibit 4-25: Construction Workforce Schedule, Local and Nonlocal Workers, Townsend to Pipestone/Mill Creek to Stateline Route



The smaller workforce requirements of Alternative AB1 will also mean slightly lower total wage and benefit payments to its construction workers. Because employment figures vary little from combined Preferred Alternative (A1 and B1), there would be similarly small reductions in wage, benefit, and take-home pay provided.

The total construction cost for Alternative AB1 facilities is an estimated $389.0 million. Of the total cost, $220.2 million is estimated for the Townsend substation, and $168.4 million for transmission lines. These costs are detailed in Exhibit 4-26.

Exhibit 4-26: Land Ownership and Built Values, Townsend to Pipestone/Mill Creek to Stateline Route

Townsend to Pipestone/Mill Creek to Stateline Route					
County	Land Jurisdiction	Miles	Cost ($740,918/mile)	Cost With Engineering, Permitting, Procurement, Management (8.7% Additional)	With Substation Costs
Beaverhead	BLM	16.57	$ 12,276,424	$ 13,340,665	
Beaverhead	Private	35.02	$ 25,945,221	$ 28,194,410	
Beaverhead	State of Montana - DL	29.57	$ 21,905,342	$ 23,804,314	
TOTAL BEAVERHEAD COUNTY		**81.15**	**$ 60,126,987**	**$ 65,339,389**	**$ 65,339,389**
Broadwater	BLM	1.58	$ 1,167,081	$ 1,268,256	
Broadwater	Private	17.39	$ 12,886,679	$ 14,003,824	$ 234,493,204
Broadwater	State of Montana - DL	3.29	$ 2,437,094	$ 2,648,365	
Broadwater	Water	0.12	$ 91,691	$ 99,639	
TOTAL BROADWATER COUNTY		**22.38**	**$ 16,582,544**	**$ 18,020,083**	**$ 238,509,464**
Deer Lodge	Private	3.78	$ 2,798,971	$ 3,041,613	
Deer Lodge	State of Montana - FWP	0.88	$ 652,417	$ 708,975	
TOTAL DEER LODGE COUNTY		**4.66**	**$ 3,451,388**	**$ 3,750,588**	**$ 3,750,588**
Jefferson	BLM	5.39	$ 3,991,129	$ 4,337,120	
Jefferson	Private	35.56	$ 26,344,205	$ 28,627,981	
Jefferson	State of Montana - DL	3.75	$ 2,777,115	$ 3,017,862	
Jefferson	USDA FS	3.91	$ 2,899,489	$ 3,150,845	
TOTAL JEFFERSON COUNTY		**48.60**	**$ 36,011,937**	**$ 39,133,808**	**$ 39,133,808**
Madison	BLM	16.11	$ 11,936,062	$ 12,970,798	
Madison	Private	8.60	$ 6,368,839	$ 6,920,953	
Madison	State of Montana - DL	0.91	$ 671,523	$ 729,737	
TOTAL MADISON COUNTY		**25.61**	**$ 18,976,424**	**$ 20,621,489**	**$ 20,621,489**
Silver Bow	Private	22.77	$ 16,868,280	$ 18,330,590	
Silver Bow	State of Montana - DL	1.22	$ 900,934	$ 979,036	
Silver Bow	State of Montana - FWP	0.24	$ 180,258	$ 195,885	
Silver Bow	USDA FS	2.55	$ 1,889,041	$ 2,052,802	
TOTAL SILVER BOW COUNTY		**26.78**	**$ 19,838,513**	**$ 21,558,312**	**$ 21,558,312**
	Total	**209.18**	**154,987,793.80**	**168,423,670.29**	**$ 388,913,051**
	Total Private Lands	119.33	$ 88,413,224	$ 96,077,757	$ 330,570,962

4.3 IMPACTS OF PROJECT ALTERNATIVES

4.3.1 IMPACTS IN MONTANA

The overall approach to addressing impacts of Project alternatives in Montana is to first address those of the combined Preferred Route (A-1 and B-1) on the regions socioeconomy, specifically:

- Employment and income,
- population,
- environmental justice,
- housing,
- public services, and
- fiscal conditions.

As stated earlier, describing the socioeconomic impacts of the Project as a whole is best accomplished by viewing the whole project, including both its Montana and Idaho components; one cannot function without the other. However, the Montana component of the Project can be viewed essentially as a standalone project in terms of its impacts on the Montana MSTI Study Area socioeconomy.

However, it is more meaningful to describe its socioeconomic impacts as a subproject in Montana, rather than in a segmented manner. Thus, in describing the impacts of the Project a "combined Preferred Route" is addressed, consisting of the sum of Preferred Routes A-1 and B-1.

The combined Preferred Route is the most costly of any combination of the Montana alternatives at an estimated $550.9 million constructed cost, as shown in Exhibit 4-6. The least-cost alternative in Montana is Alternative AB-1, at $389 million. Other potential combinations of alternatives that would comprise a full Montana component (such as A-2 plus B-3, etc.) all would be nearer in cost to the combined Preferred Route, yet still slightly below its cost. The similarities in project costs for all but Alternative AB-1 renders construction work force estimates essentially equal, given the range of prediction error, for all but comparisons between the combined Preferred Route and Alternative AB-1. This comparison is useful since the costs of these two alternatives "bound" the estimated costs, from above and below, of any other combination of alternatives.

Therefore, the socioeconomic impacts of the combined Preferred Route are described first, below in this section. Then, the impacts of Alternative AB-1 are summarized for comparison to those of the Preferred Route, later within this section. It is important to note that the description of the Project for Alternative AB-1 is primarily constructed by scaling from the detailed cost and manpower estimates of the Preferred Route, as described earlier within this report.

After these two alternatives are described, the other alternatives are described separately, as discrete links. The links do not have specific impacts on the socioeconomic indicators of employment, income, population, and housing because they so closely resemble those of the combined Preferred Route.

The indicator that does measurably distinguish the links is that of fiscal impacts, which consist of impacts on property tax income for counties. These are estimated in the descriptions of the alternative links.

Impacts of the Combined Preferred Route

The Preferred Route has been described earlier within this report and is mapped in Exhibit 4-1. In this section, impacts of this alternative on the Study Areas employment, income, population, low-income and minority populations (pursuant to environmental justice considerations), housing, public services, and fiscal conditions are described.

Impacts on Employment and Income

In the socioeconomic context of the 9-county Study Area, the infusion of workers' wages and local construction procurements would place an unnoticeable burden on the assimilative capacity of the local economy. Workers' local consumer goods purchases and contractors' procurements of construction supplies would be the principal vehicles for economic benefits accruing to the local economy. These expenditures would be beneficial, albeit largely unnoticeable compared to the sum of economic activity in the region.

Providers of transient accommodations, eating and drinking places, fuel stations, and construction materials vendors (e.g., sand and gravel, concrete, small equipment rental, etc.) in communities near the proposed Project site would be the most noticeable beneficiaries. As incomes are re-spent in the regions economy, however, much of the re-spent income, and hence employment, would likely accrue to the larger urban centers of Bozeman and Helena, which provide some of the goods and services not available in communities most proximate to the construction sites.

In Montana, the Preferred Route work force would peak at an estimated 205 workers, around spring 2012 before falling precipitously to completion of construction in February 2013. Only 51 of these workers would be hired from the Study Area, with the remaining 154 being specialized workers imported to the area for construction. Exhibits 4-27 and 4-28 show the construction work schedule broken down into substation/transmission components, and local/nonlocal hires.

Exhibit 4-27: Construction Worker Schedule, Preferred Route, Montana Only (A1 and B1)

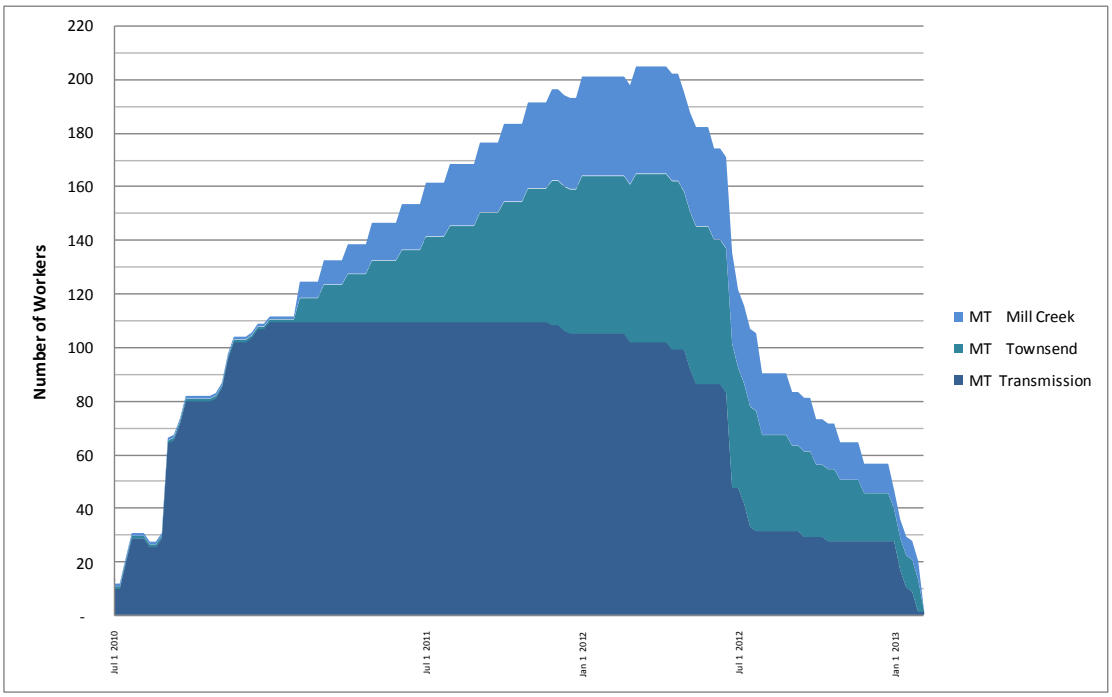
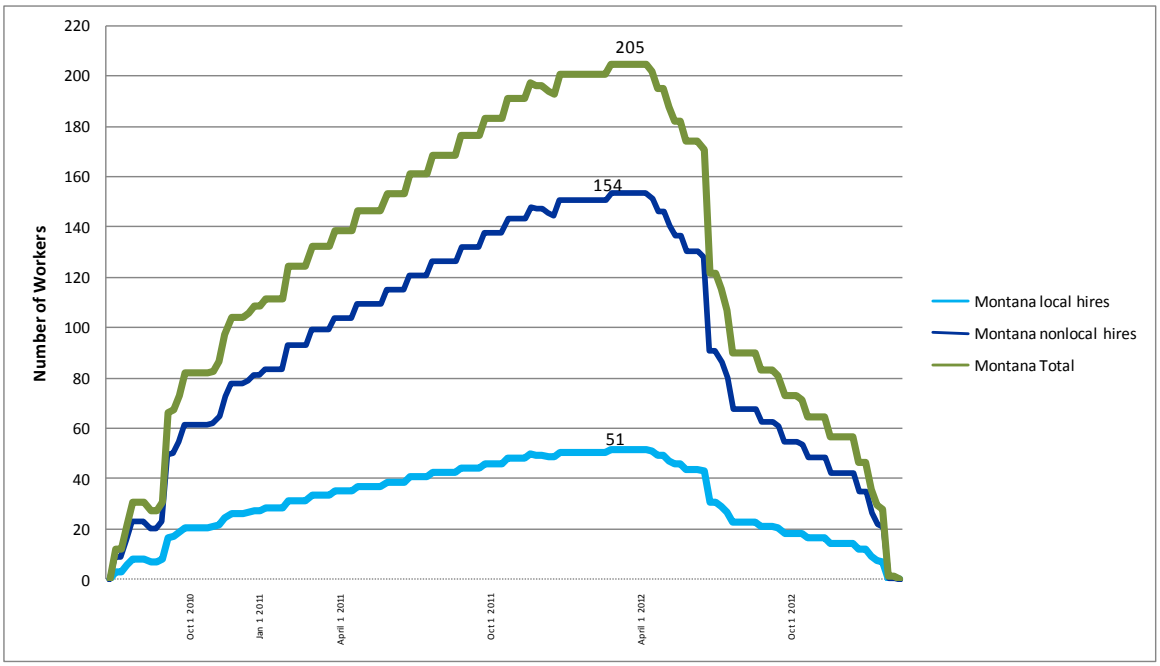


Exhibit 4-28: Local and Non-local Construction Worker Schedule, Preferred Route, Montana Only (A1 and B1)



Wage and benefit payments to locally-hired and imported construction workers would constitute benefits to the receiving households, and to the businesses and governments on which they spend their disposable after-tax incomes. Although the imported workers would earn substantial salaries (about $45 per hour before overtime, plus union benefits), they are expected to spend money almost solely on local hotel/motels/RV facilities, restaurants, food stores, and miscellaneous retail goods near the routes and substations. The smaller portion (25%) of the construction work force will earn both lower wages (about $35 an hour before overtime and union benefits), and will live more diffusely around the MSTI Study Area. Therefore, their spending--and the employment and earnings of businesses supported by their spending—will tend to be less visible at any particular locations. The total wage bill for the combined Preferred Route is shown in Exhibit 4-29, indicating $37.9 million in wages and benefits, and $31.8 million in disposable income increases. The nonlocal workers are expected to spend (assuming $120 per day per worker) about $10.8 million locally, while the local workers will reap approximately $6.9 million in added household income. Thus, spending by imported workers would have the greater impact on the local economy, although in light of total activity, the increase would be small and short-term.

Exhibit 4-29: Local and Non-local Construction Worker Schedule, Preferred Route, Montana Only (A1 and B1)

MONTANA

Worker-Weeks

	7/1-12/31 2010	2011	2012	2013	Total
Montana	1,632	8,359	7,010	141	17,143

Worker-hours: 50 hours/week

	7/1-12/31 2010	2011	2012	2013	Total
Montana	81,584	417,962	350,518	7,065	857,129

Wages @ Base Rate: $42/hour skilled (nonlocal hires), $35/hour unskilled (local hires)
1 1/2 time overtime on 10 hours/week

	7/1-12/31 2010	2011	2012	2013	Total
Montana	$ 3,612,134	$ 18,505,275	$ 15,519,164	$ 271,995	$ 37,908,568

Hourly pay with overtime	
local $35/hr base	$ 38.50
nonlocal $42/hr base	$ 46.20

After-tax income @ Base Rate: $42/hour skilled (nonlocal hires), $35/hour unskilled (local hires)
1 1/2 time overtime on 8 hours/week

Monetizable benefits @ 20%, and after tax income @ 70% of total monetizable income

	7/1-12/31 2010	2011	2012	2013	Total
MT local	$ 659,607	$ 3,379,224	$ 2,833,934	$ 57,119	$ 6,929,884
MT nonlocal	$ 2,374,585	$ 12,165,207	$ 10,202,163	$ 171,357	$ 24,913,313
Total	$ 3,034,192	$ 15,544,431	$ 13,036,098	$ 228,476	$ 31,843,197

BY LOCAL-NONLOCAL — **Montana local hires 25.0%**

Worker-Weeks

	7/1-12/31 2010	2011	2012	2013	Total
MT local	408	2,090	1,753	35	4,286
MT nonlocal	1,224	6,269	5,258	106	12,857
Total	1,632	8,359	7,010	141	17,143

Worker-hours: 50 hours/week

	7/1-12/31 2010	2011	2012	2013	Total
MT local	20,396	104,491	87,629	1,766	214,282
MT nonlocal	61,188	313,472	262,888	5,299	642,846
Total	81,584	417,962	350,518	7,065	857,129

Wages @ Base Rate: $42/hour skilled (nonlocal hires), $35/hour unskilled (local hires)
1 1/2 time overtime

	7/1-12/31 2010	2011	2012	2013	Total
MT local	$ 785,246	$ 4,022,886	$ 3,373,731	$ 67,999	$ 8,249,862
MT nonlocal	$ 2,826,887	$ 14,482,389	$ 12,145,433	$ 203,996	$ 29,658,706
Total	$ 3,612,134	$ 18,505,275	$ 15,519,164	$ 271,995	$ 37,908,568

Local spending by nonlocal workers @ $120/day ($840/week), 7 day weeks

	7/1-12/31 2010	2011	2012	2013	Total
Montana nonlocal	$ 1,027,959	$ 5,266,323	$ 4,416,521	$ 89,017	$ 10,799,820

Economic multiplier effects would arise from the local expenditures for Project materials, fuel, and supplies, in addition to from the increases in worker incomes and spending in the MSTI Study Area. As these moneys are re-spent within the region, the total increment to the original direct Project payments would be a multiple of those direct payments.

To estimate the increases in jobs and income caused by the combined Preferred Route, the IMPLAN model was employed. IMPLAN, commonly used for impact analysis across the country, is an input-output model developed by IMG, Inc. to enable users to simulate the indirect and induced impacts of any specified project, using the projects direct spending on labor and materials as inputs. In order to run IMPLAN, an input-output model of the 9-county Montana MSTI Study Area was assembled, and the combined Preferred Route local purchases were added to the regions existing structure. The inputs used are shown in Exhibit 4-30. The model inputs were developed from the information in Exhibits 4-28 through 4-29, and additional estimates described for the full Preferred Route (both Idaho and Montana) detailed earlier in this section. The inputs shown in Exhibit 4-30 show that of the construction cost of the combined Preferred Alternatives Montana component of $550.9 million (Exhibit 4-6), only about $33 million will result in an injection of dollars into the MSTI Study Areas Montana portion.[9] This low amount is due to the predominance of imported construction labor and the very low amount of project capital purchases that will be made in the region.

[9] The IMPLAN model is developed on the basis of year 2006 data, but dollar values in Exhibit 4-31 were deflated from their 2008 to 2006 values for model input. Employment needed not be adjusted.

Exhibit 4-30: IMPLAN Model Inputs (2008 dollars), Combined Preferred Route, Montana Component

	2010	2011	2012	2013	Total	Assumptions
Nonlocal worker spending						
Food	$ 171,326	$ 877,721	$ 744,207	$ 14,836	$ 1,808,090	IMPLAN model sector 481; used assumed 40% margin.
Lodging	$ 300,012	$ 2,157,120	$ 1,966,125	$ 44,761	$ 4,468,019	IMPLAN model sector 479
Misc retail	$ 68,531	$ 351,088	$ 297,683	$ 5,934	$ 723,236	IMPLAN sector 410; used assumed 40% margin.
Total	$1,027,959	$ 5,266,323	$ 4,465,241	$ 89,017	$10,848,540	
Local Worker Gross Income (plus 20% monetizable benefits)	$ 942,296	$ 4,827,463	$ 4,048,478	$ 81,599	$ 9,899,835	IMPLAN model sector 5001
Aggregate	$ 800,000	$ 1,000,000	$ 700,000	$100,000	$ 2,600,000	IMPLAN model sector 25
Equipment rental	$ 815,840	$ 4,179,622	$ 3,505,175	$ 70,648	$ 8,571,286	IMPLAN sector 434
Fuel etc	$ 140,400	$ 563,143	$ 281,571	$ 23,143	$ 1,008,257	IMPLAN model sector 409; $1,000/day 2010, $,2000/day 2011-12, $1,000/day 2013
Office Supplies	$ 12,480	$ 25,029	$ 25,029	$ 2,057	$ 64,594	$200 per day 6 days/week' 40% margin
Total local payments	$3,738,975	$15,861,580	$13,025,494	$366,463	$32,992,512	

Model results regarding employment in the Montana MSTI Study Area are summarized in Exhibit 4-31. The results shown are restricted to employment results because (1) employment changes are critical to the assessment of population changes, and hence impacts on housing, and (2) when viewed as percentage changes to baseline conditions, the IMPLAN results tend to be very much the same, whether the economic indicator is personal income, value added, output, etc., and hence percentage employment changes to baseline conditions can be viewed as proxies, for simplicity.

The results show that the combined (A-1 plus B-2) Preferred Route in Montana would result in a total of 330 worker-years needed for direct construction from 2010 to 2013. Because of Project spending on labor and materials, another 248 worker-years would be supported. The re-spending of income initially earned by project workers and the Projects suppliers would result in further indirect and induced worker-years of 128. In sum, the combined Preferred Route construction in Montana would support a total of 706 worker-years' of employment.

Exhibit 4-31 further shows that these worker-years would be spread across the four calendar years of construction. The year 2011, with 344 worker-years supported, would be the year of most impact, although substantial employment would also be supported by year 2012 construction, at 289 worker-years.

These worker-years are annual averages, and assume that all the actual employment impacts would occur immediately upon the expenditures shown in Exhibit 4-30. The overall project multiplier on employment was calculated based on the number of total worker-years created (706) divided by the number of jobs on-site (330 worker years), or 2.14. In general, this multiplier could be applied to the monthly, or even weekly, expenditures of the Project. For example, with a Project peak weekly employment of 205, the regional multiplier of 2.14 could be applied to yield a peak regional Project-supported employment of 438.

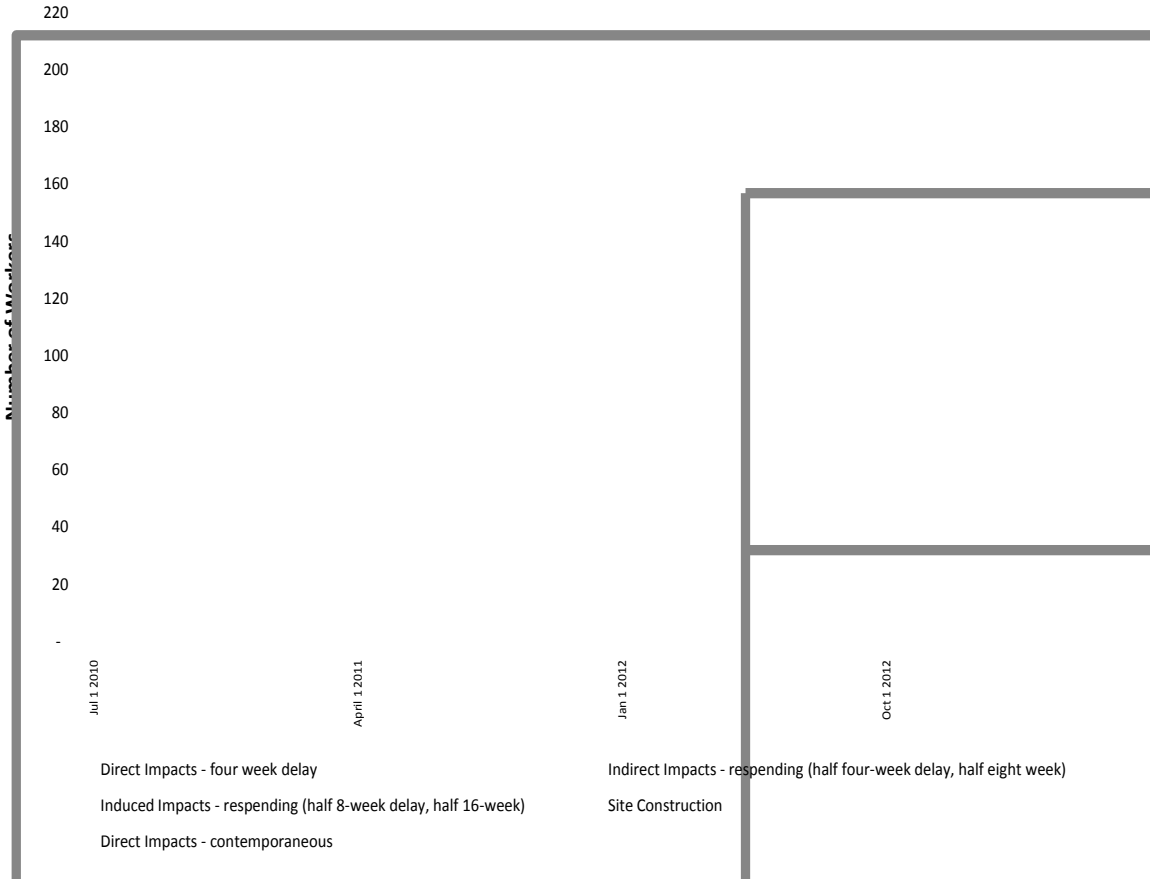
However, some of the dynamics of multiplier effects are not considered in this timing. On-site employment occurs immediately, and employment in the industries supplying goods and services to its workers, and materials for construction, also occurs very quickly, in general. However, indirect and induced effects, which arise due to the recycling of income within the regions economy, take some time to be realized.

Exhibit 4-31: IMPLAN Model Results Direct and Indirect Employment, Combined Preferred Route, Montana Component

	2010	2011	2012	2013	TOTAL
(1) Preferred Route Employment (Direct Employment)					
Worker Weeks	1,632	8,359	7,010	141	17,143
Worker Years (avg.)	31	161	135	3	330
(2) From Project Purchases on Labor/Materials Including Nonlocal Worker Spending					
Employment	24	121	101	2	248
(3) From Indirect and Induced Effects					
Employment	12	62	52	1	128
(4) Total Including Direct and Indirect					
Employment	36	183	154	3	376
(5) Total Including Preferred Route Employment					
Employment	67	344	289	6	706
(6) Employment Multiplier [(5)/(1)]	2.141				

To derive a more realistic picture of what would actually occur, a simple model was developed to provide an indication of the actual timing of impact. A reasonable time for virtually all the indirect and induced impacts to make their way through the economy would be about 4 months. Based on these assumptions, a more time-accurate model can be constructed showing the more likely pattern of project impacts. Exhibit 4-32 presents these results.

Exhibit 4-32: Timing of Employment Impacts, Combined Preferred Route, Montana Component



Interpreting Exhibit 4-32 in ways that illustrate likely timing and location of employment impacts sheds light on the Project's likely impacts on activity near the site:

(1) Site construction: These are on-site construction jobs and would occur almost entirely within the site ROW and substation sites. These jobs would be comprised of 75% nonlocal hires who would largely seek transient accommodations (with a very few rental apartments) near their place of work.
(2) Direct impacts – contemporaneous: These are workers at the locations where site workers would spend their incomes (with nonlocal workers patronizing hotels, restaurants, and miscellaneous retail establishments nearby). Thus, they would be likely to work in communities along the ROW and near the substations.
(3) Direct impacts – four-week delay: These are primarily workers at firms supplying aggregate, office supplies, equipment rental, and fuel for the project. Their jobs could be located anywhere in the Montana portion of the MSTI Study Area.
(4) Indirect Impacts – re-spending (half four-week delay, half eight-week delay): These are workers who work at businesses in the supply chains of firms supplying project materials These workers could also reside anywhere in the region, but would be most likely to occur in the regional centers of Bozeman, Helena, and perhaps Butte.
(5) Induced Impacts – re-spending (half 8-week delay, half 16-week delay). These jobs would be created through the general, extended recycling of all project payments throughout the region. The jobs could be located anywhere in the region, but would be most likely to occur in the regional centers of Bozeman, Helena, and perhaps Butte.

The significance of the above description is that jobs classified above as (1) and (2) would be strongly tied to the communities near the transmission route and substations. These jobs are indicated as line diagrams in Exhibit 4-32. Regarding construction workers (1), they would be clearly temporary and would bring no dependents. In (2), the jobs would be likely to be known as temporary since they would be so closely tied to Project purchases, and workers taking these positions would most likely be residents of communities tied most closely to the route. These workers would be unlikely to be immigrants to the region, and therefore would not significantly affect regional or sub-regional populations. In fact, many of these "jobs" could be filled by extending hours of existing workers, rather than by hiring of new employees, since they would known to be short-term.

The remainder of the jobs shown in Exhibit 4-32 would be jobs that would likely be viewed as increases in the number of workers in the broader region—as part of normal economic growth. These jobs could ultimately cause workers to migrate to the Montana MSTI Study Area, many bringing dependents. The area graph portion of Exhibit 4-32 shows that about 140 such jobs, at peak, would be created in Spring/Summer of 2012. These jobs would likely cause both increases in population, and demand for housing, both rental and owner-occupied. Population and housing impacts are described in the following section.

Operation employment, wage payments, and purchases of materials would be extremely minimal, and therefore are not addressed in this analysis.

Impacts on Population

Increases in employment in an area generally lead to increases in population, as some of those who take jobs associated with a project move to the area, some with dependents. As noted, the direct Project construction work force is likely to be drawn from both within and outside the Study Area; however, those who relocate to the Study Area for construction are unlikely to bring dependents. Furthermore, workers in (2) above are likely to be local residents known to be working only temporarily.

Population increases would occur primarily due to jobs created in categories (3)-(5) above, numbering about 140 jobs at peak. Assuming an average household size of migrating workers, the 140 jobs attracting in migrants would mean a population increase of 280 persons.

The increase would likely take place according to the historic growth patterns in the region, meaning in those counties and communities with the highest population growth. Gallatin and Lewis and Clark counties would therefore experience the bulk of the increase of 280 persons, which would represent insignificant changes to their populations. Communities near the Preferred Route have in general grown only slowly, and in fact in some cases have declined in population, and would be unlikely to capture discernable shares of this growth.

Operational employment may also indirectly cause some of these indirect population increases. However, the level of employment (about 10 jobs) and expenditures for operations would be so minimal that population increases would be extremely minimal (no more than a handful of persons), if they occur at all.

Environmental Justice

Appendix C shows the ethnic and income distribution, respectively, by Census Block Group for areas within 6 miles of the Preferred Route, and for each alternative. The data are derived from the 2000 census, as specified by the U.S. Environmental Protection Agency (1996) guidelines. According to the Guidelines, a significant minority population exists if minorities comprise 50 percent or more of the affected areas general population.

Census Block Groups within 6 miles of Preferred Route A-1 average 96.0% persons of White race only. No Block Group in the 6-mile radius has less than 84.1% of the population as White only. Thus, there are no significant number of minorities in this area. Regarding ethnicity, the Hispanic or Latino population averages 2.3% of the population within 6 miles. The highest concentration in any Census Block is 16.0 percent.

Census Block Groups within 6 miles of Preferred Route B-1 average 93.6% persons of White race only. No Block Group in the 6-mile radius has less than 92.2% of the population as White only. Thus, there are no significant number of minorities in this area. Regarding ethnicity, the Hispanic or Latino population averages 4.9% of the population within 6 miles. The highest concentration in any Census Block is 36.5 percent (Block Group 1, Census Block 1, in Clark County, Idaho). The next highest proportion of Hispanic or Latino persons in any Block Group is 9.0 percent.

Appendix C also shows the proportion of persons living in poverty by Census Block Group within 6 miles of the Preferred and each alternative route. For Alternative A-1, on average, 14.0% of the population for which poverty status could be determined for the year 1999, had incomes below the poverty level. The Block Group with the highest proportion of persons in poverty, 60.5%, was Block Group 5, Census Tract 1, in Silver Bow County (in the City of Butte). Three other Block Groups had over 30% of their residents with earnings below the poverty threshold.

For Preferred Route B-1, on average, 16.1% of the population for which poverty status could be determined for the year 1999, had incomes below the poverty level. The Block Group with the highest proportion of persons in poverty, 29.5%, was Block Group 2, Census Tract 1, in Beaverhead County. Four of the 13 Block Groups within 6 miles of Preferred Route B-1 had over 30% of their residents with earnings below the poverty threshold.

Impacts on Housing

As described in Section 2, the Study Area supply of rental and for-sale units is somewhat tight. However, since only about 280 persons are projected to be added to the regional population by the Project, almost all in the regional centers of Bozeman and Helena, no impact on rental or owner housing availability is expected.

However, workers on the Preferred Route who relocate to the Study Area are most likely to choose transient accommodations such as hotel/motel rooms or RV parks, rather than to rent or buy homes. This might be regarded as a cost in the sense that they might overload available space or displace customary users of motels and RV parks nearest the Project work sites.

Nonlocal workers are expected to move to hotels, motels, and RV parks that are nearest available to their Project work locations; a small proportion, whose work extends past a few months, are likely to seek rental housing. Since over half of the Project jobs would be located in the northern part of the Study Area (the Townsend and Mill Creek substations, and over half of the total transmission substation jobs), the bulk of the 154 imported workers—about 100-- are likely to seek housing in or

near the communities of Townsend, White Hall, Butte, and Anaconda, during the construction peak in the Spring of 2012.

For work locations within a reasonable commuting distance of Butte, substantial hotel/motel space is available. Very limited space may be available in Three Forks, Montana, about 29 miles from the Townsend substation, but Townsend Substation construction workers can also find adequate hotel availability in Helena, at a somewhat greater distance (about 50 miles one-way). There are also several hotels in Anaconda, for workers at the Preferred (A-1) spur northwest of Butte.

To the south, those working on the B-1 alternative, numbering up to about 80, about 60 of whom would be nonlocal hires seeking temporary quarters, would have only a few hotel/motel/RV park location choices, primarily Dillon. Dillon may also attract a few locally-hired workers who live distant from the construction sites (such as Bozeman, Helena, and to a lesser extent, Butte) who work onsite during the week, commuting on a weekly basis from their residences in the Study Area. Thus it is estimated that the Dillon area could experience hotel/motel/RV park demand increases of up to about 70 workers at the peak of construction, from about Winter 2010-11 through Spring 2012. It is possible that the seven hotel/motels in Dillon may not have 70 excess available units during that time, and workers may double up in hotel/motel rooms or choose quarters, and make the long commute, from Butte.

After completion of construction, Project operation and maintenance activities would have essentially no socioeconomic effects on the proposed Project area. Personnel requirements would be negligible, and would place no extra burden on the housing market.

Impacts on Public Services

Due to the low level of population change associated with the Project (up to about 48 people), no significant impacts on public services such as sewer, water, schools, police, or fire are expected. The most direct potential demands would likely be, if they occur at all, incidents of fire, worker accidents at the site, oil or hazardous materials events, or, construction materials theft, and vandalism.

After completion of construction, Project operations and maintenance activities would have essentially no socioeconomic effects on the proposed Project area public services providers. Personnel requirements would be negligible, and would place no extra burden on public services.

Impacts on Fiscal Conditions

Impacts of the combined Preferred Alternative on local fiscal conditions would take the form of increased property tax payments to taxing jurisdictions in which Project facilities are located. The amount of these payments depends on the extent to which Project facilities are located on private lands, and the rate at which each jurisdiction taxes improvements to that land.

Exhibit 4-33 displays the mil levy rates for each county in which any of the combined Preferred Route facilities would be built. County rates vary from a low of 115.16 mils (dollars per $10,000 of assessed value), to 263.55 in Deer Lodge County.

Exhibit 4-33: Mil Levy Rates and Property Tax Collections, Montana Counties in Which Project Facilities Would Be Located

	Mil Levy (dollars per thousand value)		2006/07 Total Property Tax Collections
Beaverhead	148.67	$	2,421,145
Broadwater	153.38	$	1,666,998
Deer Lodge	263.55	$	277,924
Jefferson	139.26	$	2,988,454
Madison	115.16	$	6,061,415
Silver Bow	260.55	$	15,399,898

Source: County budgets as indicated.

Based on the FY 2006/07 mil levies shown in Exhibit 4-33, and the value of improvements on all land within the tax district boundaries, private as well as public property tax payments were calculated by county for different alternatives (Exhibit 4-34). Due to depreciation of the project (typically straight-line depreciation over the project life of about 40 years), this benefit would decline gradually each year.

The estimated property tax payments shown in Exhibit 35 were calculated based on the assumption that the MSTI transmission line would be Class 9 property as defined by Montana Code (MCA 15-6-141). Class 9 property includes, ". . . centrally assessed allocations of an electric power company that owns or operates transmission or distribution facilities or both . . ." Class 9 property is taxed at 12% of market value. For example, it is estimated that for Alternative A1, the portion of the transmission line in Beaverhead County would have a market value of $5,574,118. This property would be taxed at 12% of the estimated market value, or $668,894. The mil levy rate for the county is $148.67 per $1,000) (see Exhibit 4-33). Therefore, the property tax in Beaverhead County would be the levy rate multiplied by $668,894, or $99,444.

The Montana legislature recently enacted tax breaks for "clean and green" transmission lines (Class 14) (MCA 15-6-157), which are taxed at 3% of market value. No analysis or comparison was performed with the assumption that the transmission line would be Class 14 property because it is not known at this time whether the MSTI project would qualify for this tax break.

It is particularly noteworthy that while the benefits to each county are non-trivial, for Deer Lodge County the benefits are extremely large. This is because Deer Lodge County has a very low total taxable base, and the Mill Creek Substation, in particular, would be a very large increase in that base. Such an increase could allow Deer Lodge County to substantially lower its ad valorem rate, which is currently relatively high.

Exhibit 4-34: Property Tax Payments by County, All Alternatives

County	A1: Preferred Route	A2: Parallel Colstrip Lines	A3: Maximize Utility Corridors	B1: Preffered Route	B2: Sheep Creek	B3: I-15 Dell Valley	AB1: Townsend to Pipestone/Mill Creek to Stateline Route	Mil Levy	Total FY 2006/07 Property Tax Revenue
TOTAL CONSTRUCTION VALUE									
Beaverhead	$ 5,574,118	$ 4,458,295	$ 4,483,447	$112,687,525	$112,416,006	$101,145,484	$ 80,453,185	148.67	$ 2,421,145
Broadwater	$ 198,103,123	$ 151,459,959	$ 175,183,458	$ -	$ -	$ -	$ 225,106,256	153.38	$ 1,666,998
Deer Lodge	$ 136,000,454	$ 154,853,437	$ 137,437,567	$ -	$ -	$ -	$ 4,618,145	263.55	$ 277,924
Jefferson	$ 58,907,750	$ 53,593,945	$ 29,606,490	$ -	$ -	$ -	$ 42,350,480	139.26	$ 2,988,454
Madison	$ -	$ -	$ -	$ -	$ -	$ -	$ 25,391,490	115.16	$ 6,061,415
Silver Bow	$ 65,404,843	$ 40,851,306	$ 60,841,036	$ -	$ -	$ -	$ 5,717,387	260.55	$ 15,399,898
Total Montana	$ 463,990,288	$ 405,216,942	$ 407,551,999	$112,687,525	$112,416,006	$101,145,484	$ 383,636,944		$ 28,815,834
PROPERTY TAX PAYMENTS									
Beaverhead	$ 99,444	$ 79,538	$ 79,986	$ 2,010,391	$ 2,005,547	$ 1,804,476	$ 1,435,317		
Broadwater	$ 3,646,207	$ 2,787,711	$ 3,224,357	$ -	$ -	$ -	$ 4,143,216		
Deer Lodge	$ 4,301,150	$ 4,897,395	$ 4,346,601	$ -	$ -	$ -	$ 146,053		
Jefferson	$ 984,419	$ 895,619	$ 494,760	$ -	$ -	$ -	$ 707,727		
Madison	$ -	$ -	$ -	$ -	$ -	$ -	$ 350,890		
Silver Bow	$ 2,044,948	$ 1,277,257	$ 1,902,256	$ -	$ -	$ -	$ 178,760		
Total Montana	$ 11,076,169	$ 9,937,520	$ 10,047,959	$ 2,010,391	$ 2,005,547	$ 1,804,476	$ 6,961,963		
PROPERTY TAX PAYMENTS AS PERCENT OF TOTAL COUNTY (county-wide only) PROPERTY TAX REVENUE									
Beaverhead	4.1%	3.3%	3.3%	83.0%	82.8%	74.5%	59.3%		
Broadwater	218.7%	167.2%	193.4%	-	-	-	248.5%		
Deer Lodge	1547.6%	1762.1%	1564.0%	-	-	-	52.6%		
Jefferson	32.9%	30.0%	16.6%	-	-	-	23.7%		
Madison	-	-	-	-	-	-	5.8%		
Silver Bow	13.3%	8.3%	12.4%	-	-	-	1.2%		
Total Montana	38.4%	34.5%	34.9%	7.0%	7.0%	6.3%	24.2%		

Minor increases in sales taxes would occur due to spending of wages on retail goods and services in the Study area by workers whose wages are provided in part or in total by the Project. These increases would be so small as to be negligible.

After completion of construction, Project operations and maintenance activities would have essentially no socioeconomic effects on the Project area. Tax payments to local entities would be negligible, comprised of only retail sales taxes on any spending of workers' wages and minimal capital and operating supply purchases from the Study Area.

Impacts of Alternative AB-1 (Townsend to Pipestone/Mill Creek to Stateline)

Impacts on Employment and Income

The Alternative AB-1 construction work force would peak at an estimated 160 workers, around spring 2012 before falling precipitously to completion of construction in February 2013. Only 40 of these workers would be hired from the Montana MSTI Study Area, with the remaining 120 being specialized workers imported to the area for construction. Exhibits 4-35 and 4-36 show the construction work schedule broken down into substation/transmission components, and local/nonlocal hires.

Exhibit 4-35: Construction Worker Schedule, Alternative AB-1, Montana Only

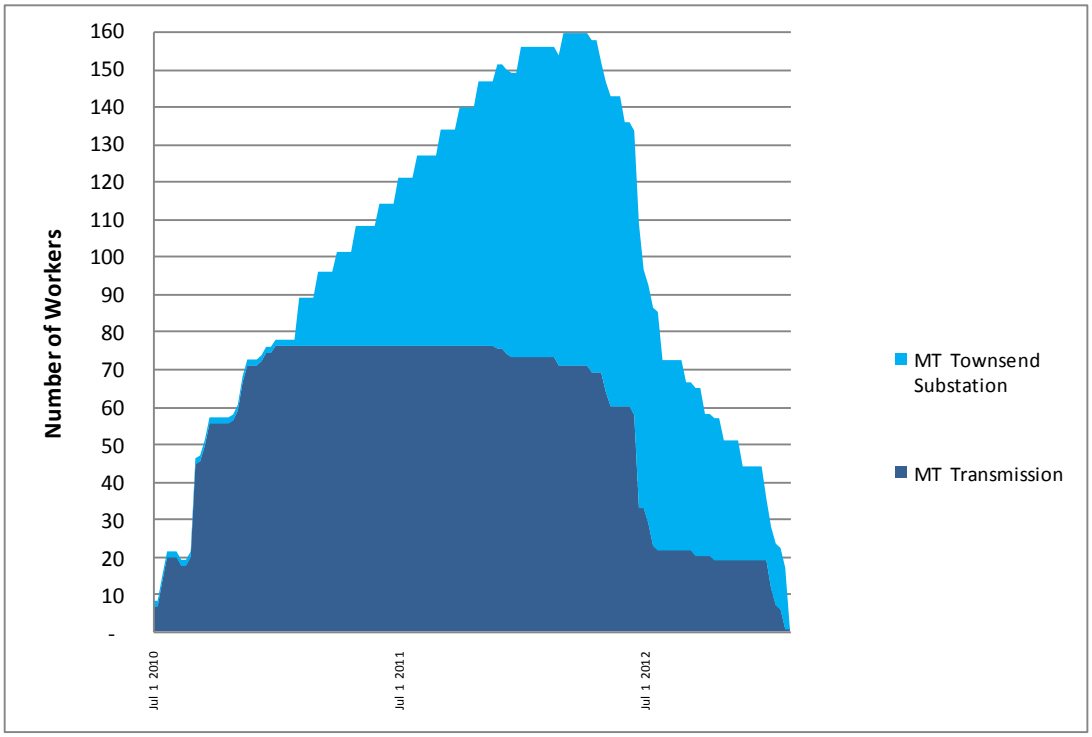
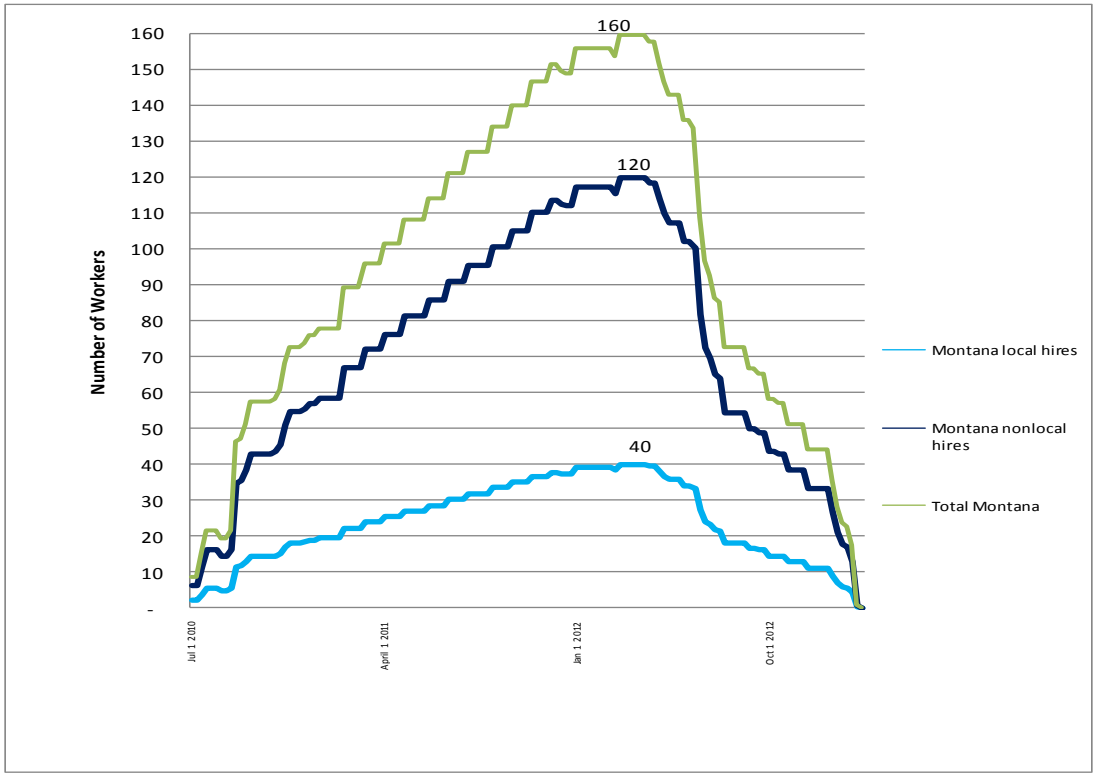


Exhibit 4-36: Construction Worker Schedule, Local and Nonlocal Hires, Alternative AB-1, Montana Only



Wage and benefit payments to locally-hired and imported construction workers would constitute benefits to the receiving households, and to the businesses and governments on which they spend their disposable after-tax incomes. Although the imported workers would earn substantial salaries (about $45 per hour before overtime, plus union benefits), they are expected to spend money almost solely on local hotel/motels/RV facilities, restaurants, food stores, and miscellaneous retail goods near the routes and substations. The smaller portion (25%) of the construction work force will earn both lower wages (about $35 an hour before overtime and union benefits), and will live more diffusely around the MSTI Study Area. Therefore, their spending--and the employment and earnings of businesses supported by their spending—will tend to be less visible at any particular locations. The wages and benefits earned during construction for Alternative AB-1 is shown in Exhibit 4-36, indicating $28.7 million in wages and benefits, and $24.1 million in disposable income increases. The nonlocal workers are expected to spend (assuming $120 per day per worker) about $8.2 million locally, while the local workers will reap approximately $5.3 million in added household income. Thus, spending by imported workers would have the greater impact on the local economy, although in light of total activity, the increase would be small and short-term.

Exhibit 4-36: Local and Non-local Construction Worker Schedule, Alternative AB-1 (Townsend to Pipeline/Mill Creek Brigham Point), Montana Component

MONTANA

Worker-Weeks

	7/1-12/31 2010	2011	2012	2013	Total
Montana	1,143	6,163	5,560	128	12,993

Worker-hours: **50 hours/week**

	7/1-12/31 2010	2011	2012	2013	Total
Montana	57,145	308,160	277,975	6,394	649,675

Wages @ Base Rate: $42/hour skilled (nonlocal hires), $35/hour unskilled (local hires)
1 1/2 time overtime on 10 hours/week

	7/1-12/31 2010	2011	2012	2013	Total
Montana	$ 2,530,097	$ 13,643,787	$ 12,307,345	$ 246,187	$ 28,727,417

Hourly pay with overtime	
local $35/hr base	$ 38.50
nonlocal $42/hr base	$ 46.20

After-tax income @ Base Rate: $42/hour skilled (nonlocal hires), $35/hour unskilled (local hires)
1 1/2 time overtime on 8 hours/week

Monetizable benefits @ 20%, and after tax income @ 70% of total monetizable income

	7/1-12/31 2010	2011	2012	2013	Total
MT local	$ 462,018	$ 2,491,474	$ 2,247,428	$ 51,699	$ 5,252,619
MT nonlocal	$ 1,663,264	$ 8,969,307	$ 8,090,742	$ 155,098	$ 18,878,411
Total	$ 2,125,282	$ 11,460,781	$ 10,338,170	$ 206,797	$ 24,131,030

BY LOCAL-NONLOCAL **Montana local hires 25.0%**

Worker-Weeks

	7/1-12/31 2010	2011	2012	2013	Total
MT local	286	1,541	1,390	32	3,248
MT nonlocal	857	4,622	4,170	96	9,745
Total	1,143	6,163	5,560	128	12,993

Worker-hours: **50 hours/week**

	7/1-12/31 2010	2011	2012	2013	Total
MT local	14,286	77,040	69,494	1,599	162,419
MT nonlocal	42,859	231,120	208,481	4,796	487,256
Total	57,145	308,160	277,975	6,394	649,675

Wages @ Base Rate: $42/hour skilled (nonlocal hires), $35/hour unskilled (local hires)
1 1/2 time overtime

	7/1-12/31 2010	2011	2012	2013	Total
MT local	$ 550,021	$ 2,966,041	$ 2,675,510	$ 61,547	$ 6,253,118
MT nonlocal	$ 1,980,076	$ 10,677,746	$ 9,631,835	$ 184,641	$ 22,474,298
Total	$ 2,530,097	$ 13,643,787	$ 12,307,345	$ 246,187	$ 28,727,417

Local spending by nonlocal workers @ $120/day ($840/week), 7 day weeks

	7/1-12/31 2010	2011	2012	2013	Total
Montana nonlocal	$ 720,028	$ 3,882,817	$ 3,502,486	$ 80,570	$ 8,185,901

Economic multiplier effects would arise from the local expenditures for Project materials, fuel, and supplies, in addition to from the increases in worker incomes and spending in the MSTI Study Area. As these moneys are re-spent within the region, the total increment to the original direct Project payments would be a multiple of those direct payments.

To estimate the increases in regional jobs and income caused by construction of Alternative AB-1, the IMPLAN model was employed. The inputs used are shown in Exhibit 4-30. The model inputs were developed from the information in Exhibits 4-27 through 4-38, and additional estimates described for the full Preferred Route (both Idaho and Montana) detailed earlier in this section.

The inputs shown in Exhibit 4-38 show that of the construction cost of Alternative AB-1 of $357.9 million (Exhibit 4-6), only about $23.1 million will result in an injection of dollars into the MSTI Study Areas Montana portion.[10] This low amount is due to the predominance of imported construction labor and the very low amount of project capital purchases that will be made in the region.

Exhibit 4-38: IMPLAN Model Inputs Direct and Indirect Employment, Alternative AB-1 (Townsend to Pipeline/Mill Creek Brigham Point), Montana Component

	2010	2011	2012	2013	Total	Assumptions
Nonlocal worker spending						
Food	$ 120,005	$ 862,848	$ 786,450	$ 17,905	$ 1,787,207	IMPLAN model sector 481; used assumed 40% margin.
Lodging	$ 300,012	$ 2,157,120	$1,966,125	$ 44,761	$ 4,468,019	IMPLAN model sector 479
Misc retail	$ 48,002	$ 345,139	$ 314,580	$ 7,162	$ 714,883	IMPLAN sector 410; used assumed 40% margin.
Total	$ 468,018	$ 3,365,108	$3,067,156	$ 69,828	$ 6,970,109	
Local Worker Gross Income (plus 20% monetizable benefits)	$ 660,025	$ 3,559,249	$3,210,612	$ 73,856	$ 7,503,742	IMPLAN model sector 5001
Aggregate	$ 564,957	$ 706,196	$ 494,337	$ 70,620	$ 1,836,109	IMPLAN model sector 25; scale 88.9% of Preferred Route
Equipment rental	$ 576,143	$ 2,951,631	$2,475,340	$ 49,891	$ 6,053,005	IMPLAN sector 434; scale 88.9% of Preferred Route
Fuel etc	$ 99,150	$ 397,689	$ 198,845	$ 16,343	$ 712,027	IMPLAN model sector 409; $1,000/day 2010, $,2000/day 2011-12, $1,000/day 2013; scale 88.9% of Preferred Route
Office Supplies	$ 8,813	$ 17,675	$ 17,675	$ 1,453	$ 45,616	$200 per day 6 days/week' 40% margin; scale 88.9% of Preferred Route
Total local payments	$2,377,106	$10,997,547	$9,463,964	$281,991	$23,120,609	

Model results regarding employment in the Montana MSTI Study Area are summarized in Exhibit 4-39. The results shown are restricted to employment results because (1) employment changes are critical to the assessment of population changes, and hence impacts on housing, and (2) when viewed as percentage changes to baseline conditions, the IMPLAN results tend to be very much the same, whether the economic indicator is personal income, value added, output, etc., and hence percentage employment changes to baseline conditions can be viewed as proxies, for simplicity.

[10] The IMPLAN model is developed on the basis of year 2006 data, but dollar values in Exhibit 4-30 were deflated from their 2008 to 2006 values for model input. Employment needed not be adjusted.

The results show that construction of Alternative AB-1 would result in a total of 250 worker-years needed for direct construction from 2010 to 2013 (compared to 330 for the combined Preferred Route, described previously). Because of Project spending on labor and materials, another 203 worker-years would be supported (compared to 248 for the combined Preferred Route). The re-spending of income initially earned by project workers and the Projects suppliers would result in further indirect and induced worker-years of 98, compared to 128 for the combined Preferred Route. In sum, Alternative AB-1 construction in Montana would support a total of 551 worker-years' employment, substantially under the 706 worker-years supported by the combined Preferred Alternative.

Exhibit 4-39 further shows that these worker-years would be spread across the four calendar years of construction. The year 2011, with 261 worker-years supported, would be the year of most impact, although substantial employment would also be supported by year 2012 construction, at 236 worker-years.

These worker-years are annual averages, and assume that all the actual employment impacts would occur immediately upon the expenditures shown in Exhibit 4-38. The overall project multiplier on employment can be calculated based on the number of total worker-years created (551) divided by the number of jobs on-site (250 worker years), or 2.2. In general, this multiplier could be applied to the monthly, or even weekly, expenditures of the Project. For example, with a Project peak weekly employment of 160, the regional multiplier of 2.2 could be applied to yield a peak regional Project-supported employment of 353.

Exhibit 4-39: IMPLAN Model Results Direct and Indirect Employment, Alternative AB-1 (Townsend to Pipeline/Mill Creek Brigham Point), Montana Component

	2010	2011	2012	2013	TOTAL
(1) Alternative AB1 Employment (Direct Employment)					
Worker Weeks	1,143	6,163	5,560	128	12,993
Worker Years (avg.)	22	119	107	2	250
(2) From Project Purchases on Labor/Materials Including Nonlocal Worker Spending					
Employment	18	96	87	2	203
(3) From Indirect and Induced Effects					
Employment	9	47	42	1	98
(4) Total Including Direct and Indirect					
Employment	26	143	129	3	301
(5) Total Including Alternative AB1 Employment					
Employment	48	261	236	5	551
(6) Employment Multiplier [(5)/(1)]	2.205				

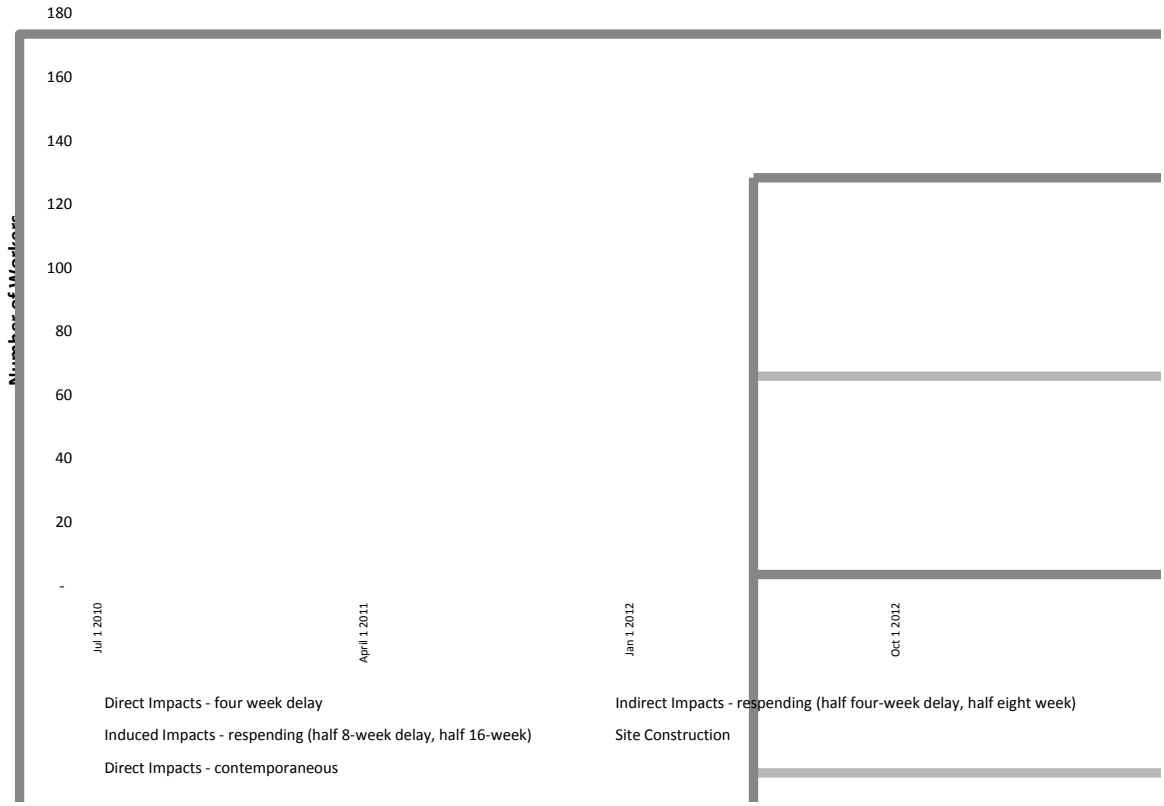
However, as was described for the combined Preferred Alternative, the timing of the dynamics of multiplier effects would lead to some lags as the impacts of the Project would be realized. Exhibit 4-40 graphs the timing of these lags, under the same conditions described earlier for the combined Preferred Alternative.

The jobs shown in the area graph format in Exhibit 4-40 would be jobs that would likely be viewed as increases in the number of workers in the broader region—as part of normal economic growth. These jobs could ultimately cause workers to migrate to the Montana MSTI Study Area, many bringing

dependents. The area graph portion of Exhibit 4-40 shows that about 110 of such jobs, at peak, would be created in Spring/Summer of 2012 (compared to 140 for the combined Preferred Route). These jobs would likely cause both increases in population, and demand for housing, both rental and owner-occupied. Population and housing impacts are described in the following section.

Operation employment, wage payments, and purchases of materials would be extremely minimal, and therefore are not addressed in this analysis.

Exhibit 4-40: Timing of Employment Impacts, Alternative AB-1 (Townsend to Pipestone/Mill Creek Brigham Point), Montana Component



Impacts on Population

Increases in employment in an area generally lead to increases in population, as some of those who take jobs associated with a project move to the area, some with dependents. As noted, the direct Project construction work force is likely to be drawn from both within and outside the Study Area; however, those who relocate to the Study Area for construction are unlikely to bring dependents.

Based on an average of two persons per household for in-migrating workers, the MSTI regions population would increase by about 220 persons due to construction of Alternative AB1, somewhat under the 280 projected increase attributed to the combined Preferred Route.

The increase would likely take place according to the historic growth patterns in the region, meaning in those counties and communities with the highest population growth. Gallatin and Lewis and Clark counties would therefore experience the bulk of the increase of 180 persons, which would represent insignificant changes to their populations. Communities near Alternative AB-1 route have in general

grown only slowly, and in fact in some cases have declined in population, and would be unlikely to capture discernable shares of this growth.

Operational employment may also indirectly cause some of these indirect population increases. However, the level of employment (slightly under the approximately 10 jobs created by construction of the Preferred Route) and expenditures for operations would be so small that population increases would be extremely minimal (no more than a handful of persons), if they occur at all.

Environmental Justice

Appendix C shows the ethnic and income distribution, respectively, by Census Block Group for areas within 6 miles of the Alternative Route AB-1, and for each alternative. The data are derived from the 2000 census, as specified by the U.S. Environmental Protection Agency (1996) guidelines. According to the Guidelines, a significant minority population exists if minorities comprise 50 percent or more of the affected areas general population.

Census Block Groups within 6 miles of Alternative AB-1 average less than 6.4% minority population. No Block Group in the 6-mile radius has less than 84.1% of the population as White only. Thus, there are no significant numbers of minorities in this area. Regarding ethnicity, the Hispanic or Latino population averages 2.3% of the population within 6 miles. The highest concentration in any Census Block in Montana is 16.0 percent. Across the state border in Clark County Idaho, Block Group 1 in Census Tract 9305 (also within the 6-mile radius of Alternative AB-1) has a Hispanic/Latino concentration of 38.5 percent.

Appendix C also shows the proportion of persons living in poverty by Census Block Group within 6 miles of the Preferred and each alternative route. For Alternative AB-1, on average, 14.5% of the population for which poverty status could be determined for the year 1999, had incomes below the poverty level (very slightly higher than the 14.0% for Preferred Route A-1). The Block Group with the highest proportion of persons in poverty, 60.5%, was Block Group 5, Census Tract 1, in Silver Bow County (in the City of Butte). Three other Block Groups had over 30% of their residents with earnings below the poverty threshold (the same as for Preferred Route A-1).

Impacts on Housing

As described in Section 2, the Study Area supply of rental and for-sale units is somewhat tight. However, since only about 220 persons (110 households) are projected to be added to the regional population by Alternative AB-1, almost all in the regional centers of Bozeman and Helena, no impact on rental or owner housing availability is expected.

However, workers on Alternative AB-1 who relocate to the Study Area are most likely to choose transient accommodations such as hotel/motel rooms or RV parks, rather than to rent or buy homes. This might be regarded as a cost in the sense that they might overload available space or displace customary users of motels and RV parks nearest the Project work sites. As has been described, this impact would be slightly less than that of the combined Preferred Alternative.

Nonlocal workers are expected to move to hotels, motels, and RV parks that are nearest available to their Project work locations; a small proportion, whose work extends past a few months, are likely to seek rental housing. Since over half of the Project jobs would be located in the northern part of the Study Area (the Townsend substation, and over half of the total transmission substation jobs), the bulk of the 120 imported workers—about 80-- are likely to seek housing in or near the communities of Townsend, White Hall, Butte, and Anaconda, during the construction peak in the Spring of 2012.

For work locations within a reasonable commuting distance of Butte, substantial hotel/motel space is available. Very limited space may be available in Three Forks, Montana, about 29 miles from the Townsend substation, but Townsend Substation construction workers can also find adequate hotel availability in Helena, at a somewhat greater distance (about 50 miles one-way).

To the south, those working on Alternative AB-1, numbering up to about 40, about 30 of whom would be nonlocal hires seeking temporary quarters, would have only a few hotel/motel/RV park location choices, primarily Dillon. Dillon may also attract a few locally-hired workers who live distant from the construction sites (such as Bozeman, Helena, and to a lesser extent, Butte) who work onsite during the week, commuting on a weekly basis from their residences in the Study Area. Thus it is estimated that the Dillon area could experience hotel/motel/RV park demand increases of up to about 40 workers at the peak of construction, from about Winter 2010-11 through Spring 2012. It is possible that the seven hotel/motels in Dillon may not have 40 excess available units during that time, and workers may double up in hotel/motel rooms or choose quarters, and make the long commute, from Butte.

After completion of construction, Project operation and maintenance activities would have essentially no socioeconomic effects on the proposed Project area. Personnel requirements would be negligible, and would place no extra burden on the housing market.

Impacts on Public Services

Impacts of Alternative AB-1 on emergency services such as police, fire protection, emergency medical, rescue, and toxic spill response could be slightly higher than those for the combined Preferred Route. Much of the route for Alternative AB-1 is quite rural, without the quality of highway access as would be the case for the combined Preferred Route.

Impacts on Fiscal Conditions

As shown in Exhibit 4-35, property taxes generated by Alternative AB-1 in its first year are estimated to total $6.9 million or (24.2% of FY 2006/07 collections) for the combined counties in which property taxes would be paid.

The breakdown of property taxes paid by Alternative AB-1 among counties would be: Beaverhead County, $1,435,317 (59% of FY 2006/07 collections); Broadwater County, $4,143,216 (248.5% of FY 2006/07 collections); Deer Lodge County, $146,053 (52.6% of FY 2006/07 collections); Jefferson County, $707,727 (23.7% of FY 2006/07 collections); Madison County, $350,890 (5.8% of FY 2006/07 collections); and Silver Bow County, $178,760 (1.2% of FY 2006/07 collections).

Impacts of Alternative A-1 (Preferred Route)

Impacts of Alternative A-1 on socioeconomic conditions of employment, income, population and housing are not readily segregated from those of the combined Preferred Route, previously detailed within this section, being essentially the same as those described for its northern part.

Environmental Justice

Appendix C shows the ethnic and income distribution, respectively, by Census Block Group for areas within 6 miles of Alternative Route A-1, and for each alternative. The data are derived from the 2000 census, as specified by the U.S. Environmental Protection Agency (1996) guidelines. According to the Guidelines, a significant minority population exists if minorities comprise 50 percent or more of the affected areas general population.

Census Block Groups within 6 miles of Alternative AB-1 average 96.0% persons of White race only. No Block Group in the 6-mile radius has less than 84.1% of the population as White only. Thus, there is no significant number of minorities in this area. Regarding ethnicity, the Hispanic or Latino population averages 2.3% of the population within 6 miles. The highest concentration in any Census Block is 16.0 percent.

Appendix C also shows the proportion of persons living in poverty by Census Block Group within 6 miles of the Preferred and each alternative route. For Alternative A-1, on average, 14.0% of the population for which poverty status could be determined for the year 1999, had incomes below the poverty level. The Block Group with the highest proportion of persons in poverty, 60.5%, was Block Group 5, Census Tract 1, in Silver Bow County (in the City of Butte). Three other Block Groups had over 30% of their residents with earnings below the poverty threshold.

Impacts on Public Services

Alternative A-1 is generally aligned with existing main roads, providing ready access for emergency service providers such as police, fire, emergency medical, and toxic spill response. Thus, no significant impact is expected from construction of Alternative A-1.

Impacts on Fiscal Conditions

As shown in Exhibit 4-34, property taxes generated by Preferred Route A-1 are estimated to total $11 million or (38.4% of FY 2006/07 collections) for the combined counties in which property taxes would be paid.

The breakdown of property taxes paid by Alternative A-1 among counties would be: Beaverhead County, $99,444 (4.1% of FY 2006/07 collections); Broadwater County, $3,646,207 (218.7% of FY 2006/07 collections); Deer Lodge County, $4,301,150 (1,547% of FY 2006/07 collections); Jefferson County, $984,419 (32.9% of FY 2006/07 collections); and Silver Bow County, $2,044,948 (13.3% of FY 2006/07 collections).

Impacts of Alternative A-2 (Parallel Colstrip Lines)

Impacts of Alternative A-2 on socioeconomic conditions would in generally likely be somewhat less than those of the Preferred Route (A-1), because the cost of construction for Alternative A-2 is slightly less. Although detailed construction worker schedule has not been prepared for Alternative A-2, its slightly lower cost likely means a slightly lower work force, and hence increases on income, population, and housing demand would be somewhat less.

Environmental Justice

Appendix C shows the ethnic and income distribution, respectively, by Census Block Group for areas within 6 miles of the Alternative A-2, and for each alternative. The data are derived from the 2000 census, as specified by the U.S. Environmental Protection Agency (1996) guidelines. According to the Guidelines, a significant minority population exists if minorities comprise 50 percent or more of the affected areas general population.

Census Block Groups within 6 miles of Alternative A-2 average 96.0% persons of White race only. No Block Group in the 6-mile radius has less than 89.5% of the population as White only. Thus, there is no significant number of minorities in this area. Regarding ethnicity, the Hispanic or Latino population averages 1.7% of the population within 6 miles. The highest concentration in any Census Block is 5.2 percent.

Appendix C also shows the proportion of persons living in poverty by Census Block Group within 6 miles of each alternative route. For Alternative A-2, on average, 12.9% of the population for which poverty status could be determined for the year 1999, had incomes below the poverty level (lower than the 14.0% for Preferred Route A-1). The Block Group with the highest proportion of persons in poverty had 32.8%, and was the only Block Group with over 30% of its residents having 1999 earnings below the poverty threshold.

Impacts on Public Services

Impacts of Alternative A-2 on emergency services such as police, fire protection, emergency medical, rescue, and toxic spill response could be slightly higher than those for Preferred Route A-1. Much of the route for Alternative A-2 is quite rural, without the quality of highway access as would be the case for the Preferred Route.

Impacts on Fiscal Conditions

As shown in Exhibit 4-35, property taxes generated by Alternative A-2 in its first year are estimated to total $9.9 million or (34.5% of FY 2006/07 collections) for the combined counties in which property taxes would be paid.

The breakdown of property taxes paid by Alternative A-2 among counties would be: Beaverhead County, $79,538 (3.3% of FY 2006/07 collections); Broadwater County, $2,787,711 (167.2% of FY 2006/07 collections); Deer Lodge County, $4,897,395 (1,762.1% of FY 2006/07 collections); Jefferson County, $895,619 (30% of FY 2006/07 collections); and Silver Bow County, $1,277,256 (8.3% of FY 2006/07 collections).

Impacts of Alternative A-3 (Maximize Utility Corridors)

Impacts of Alternative A-3 on socioeconomic conditions would in generally likely be somewhat less than those of the Preferred Route (A-1), because the cost of construction for Alternative A-3 is slightly less. Although a detailed construction worker schedule has not been prepared for Alternative A-3, its slightly lower cost likely means a slightly lower work force, and hence increases on income, population, and housing demand would be somewhat less.

Environmental Justice

Appendix C shows the ethnic and income distribution, respectively, by Census Block Group for areas within 6 miles of the Alternative A-3, and for each alternative. The data are derived from the 2000 census, as specified by the U.S. Environmental Protection Agency (1996) guidelines. According to the Guidelines, a significant minority population exists if minorities comprise 50 percent or more of the affected areas general population.

Census Block Groups within 6 miles of Alternative A-3 average 96.0% persons of White race only, the same as for the Preferred Route A-1. No Block Group in the 6-mile radius has less than 84.1% of the population as White only. Thus, there is no significant number of minorities in this area. Regarding ethnicity, the Hispanic or Latino population averages 2.6% of the population within 6 miles, compared to 2.3% for the Preferred Route A-1. Two Block Groups had Hispanic/Latino concentration over 15%.

Appendix C also shows the proportion of persons living in poverty by Census Block Group within 6 miles of each alternative route. For Alternative A-3, on average, 14.0% of the population for which poverty status could be determined for the year 1999, had incomes below the poverty level (the same as the Preferred Route A-1). The Block Group with the highest proportion of persons in poverty had

60.5%. Six other Blocks had over 30% of their residents with 1999 earnings below the poverty threshold.

Impacts on Public Services

Impacts of Alternative A-3 on emergency services such as police, fire protection, emergency medical, rescue, and toxic spill response could be slightly higher than those for Preferred Route A-1. The eastern stretch of the route for Alternative A-3 is somewhat more rural than for Alternative A-1 (see Exhibit 4-1), without the quality of highway access as would be the case for the Preferred Route.

Impacts on Fiscal Conditions

As shown in Exhibit 4-35, property taxes generated by Preferred Route A-3 are estimated to total $10 million or (34.9% of FY 2006/07 collections) for the combined counties in which property taxes would be paid.

The breakdown of property taxes paid by Alternative A-3 among counties would be: Beaverhead County, $79,986 (3.3% of FY 2006/07 collections); Broadwater County, $3,224,357 (193.4% of FY 2006/07 collections); Deer Lodge County, $4,346,601 (1,564% of FY 2006/07 collections); Jefferson County, $494,760 (16.6% of FY 2006/07 collections); and Silver Bow County, $1,902,256 (12.4% of FY 2006/07 collections).

Impacts of Preferred Route B-1

Impacts of Preferred Route B-1 on socioeconomic conditions of employment, income, population and housing are not readily segregated from those of the combined Preferred Route, previously detailed in within this section, being essentially the same as those described for its southern part.

Environmental Justice

Appendix C shows the ethnic and income distribution, respectively, by Census Block Group for areas within 6 miles of the Preferred Route B-1, and for each alternative.

Census Block Groups within 6 miles of Preferred Route B-1 average 93.6% persons of White race only. No Block Group in the 6-mile radius has less than 92.2% of the population as White only. Thus, there is no significant number of minorities in this area. Regarding ethnicity, the Hispanic or Latino population averages 4.9% of the population within 6 miles. Block Group 1 in Census Tract 9305 in adjacent Clark County, Idaho, had a Hispanic/Latino concentration of 38.5%.

Appendix C also shows the proportion of persons living in poverty by Census Block Group within 6 miles of each alternative route. For Preferred Route B-1, on average, 16.1% of the population for which poverty status could be determined for the year 1999, had incomes below the poverty level. Three Block Groups had proportions of persons in poverty over 25 %.

Impacts on Public Services

Alternative B-1 is generally aligned with existing main roads, providing ready access for emergency service providers such as police, fire, emergency medical, and toxic spill response. Thus, no significant impact is expected from construction of Alternative B-1.

Impacts on Fiscal Conditions

As shown in Exhibit 4-34, property taxes generated by Preferred Route B-1 are estimated to total $2,010,391 or (7% of FY 2006/07 collections).

Impacts of Alternative B-2 (Sheep Creek)

Impacts of Alternative B-2 on socioeconomic conditions would in generally likely be very slightly less than those of the Preferred Route (A-1), because the cost of construction for Alternative A-2 is slightly less. However, the constructed cost estimate differences are so small as to be unnoticeable. Although detailed construction worker schedule has not been prepared for Alternative B-2, its slightly lower cost could mean a slightly lower work force, and hence increases on income, population, and housing demand would be somewhat less.

Environmental Justice

Appendix C shows the ethnic and income distribution, respectively, by Census Block Group for areas within 6 miles of the Alternative Route B-2, and for each alternative.

Census Block Groups within 6 miles of Preferred Route B-2 average 93.5% persons of White race only, nearly the same as for Preferred Route B-1. No Block Group in the 6-mile radius has less than 94.7% of the population as White only. Thus, there is no significant number of minorities in this area. Regarding ethnicity, the Hispanic or Latino population averages 7.4% of the population within 6 miles (for Preferred Route B-1, the proportion was 4.9%). Block Group 1 in Census Tract 9305 in adjacent Clark County, Idaho, also within the 6-mile radius of Preferred Route B-1, had a Hispanic/Latino concentration of 38.5%.

Appendix C also shows the proportion of persons living in poverty by Census Block Group within 6 miles of each alternative route. For Preferred Route B-2, on average, 15.3% of the population for which poverty status could be determined for the year 1999, had incomes below the poverty level (lower than that of the Preferred Route B-1 of 16.1%). One Block Group had a proportion of persons in poverty over 25 %, compared to three for Preferred Route B-1.

Impacts on Public Services

Impacts of Alternative A-2 on emergency services such as police, fire protection, emergency medical, rescue, and toxic spill response could be slightly higher than those for Preferred Route B-1. Most of the route for Alternative B-2 is quite rural, without the quality of highway access as would be the case for the Preferred Route. Thus, should emergencies arise, somewhat higher response times would likely occur.

Impacts on Fiscal Conditions

As shown in Exhibit 4-34, property taxes generated by Alternative B-2 are estimated to total $2,005,547 or (7% of FY 2006/07 collections).

Impacts of Alternative B-3 (I-15 Route)

Impacts of Alternative B-3 on socioeconomic conditions would in generally likely be very slightly greater than those of the Preferred Route (B-1), because the cost of construction for Alternative B-3 is slightly greater ($105.4 million, versus $103.9 million). However, the constructed cost estimate differences are so small as to be unnoticeable. Although a detailed construction worker schedule has not been prepared for Alternative B-3, its slightly greater cost could mean a slightly higher work force, and hence increases on income, population, and housing demand could be somewhat greater.

Environmental Justice

Appendix C shows the ethnic and income distribution, respectively, by Census Block Group for areas within 6 miles of the Alternative Route B-3, and for each alternative.

Census Block Groups within 6 miles of Preferred Route B-3 average 93.2% persons of White race only, nearly the same as for Preferred Route B-1. No Block Group in the 6-mile radius has less than 94.7% of the population as White only. Thus, there is no significant number of minorities in this area. Regarding ethnicity, the Hispanic or Latino population averaged 7.5% of the population within 6 miles (for Preferred Route B-1, the proportion was 4.9%). Block Group 1 in Census Tract 9305 in adjacent Clark County, Idaho, also within the 6-mile radius of Preferred Route B-1, had a Hispanic/Latino concentration of 38.5%.

Appendix C also shows the proportion of persons living in poverty by Census Block Group within 6 miles of each alternative route. For Preferred Route B-3, on average, 16.1% of the population for which poverty status could be determined for the year 1999, had incomes below the poverty level (the same as the Preferred Route B-1). Three Block Groups had proportions of persons in poverty over 25 %, as did the Preferred Route B-1.

Impacts on Public Services

Impacts of Alternative B-3 on emergency services such as police, fire protection, emergency medical, rescue, and toxic spill response would be essentially equal to those for Preferred Route B-1. Most of the route for Alternative B-3 has essentially equal quality of highway access as the Preferred Route. Thus, should emergencies arise, response times would likely be approximately the same.

Impacts on Fiscal Conditions

As shown in Exhibit 4-35, property taxes generated by Alternative B-3 are estimated to total $1,804,476 or (6.3% of FY 2006/07 collections).

4.3.2 IMPACTS IN IDAHO

The approach to impact analysis for the Idaho component of the Project is similar to that of the Montana portion, previously described in Section 4.3.1. The workforce and cost estimates developed for the combination of Preferred Routes (A1, B1, and C1) are used to develop workforce and cost details for Idaho alone, for Preferred Route C1.

These allocated work force and cost details are then used to produce estimates of total economic impacts (employment and income) for the Idaho portion of the MSTI Study Area as a whole, for Preferred Route C1. From these estimates, inferences can be drawn regarding impacts on population and housing impacts by area, arising from construction of Preferred Route C1.

The construction cost estimates for Alternatives C2, C3, and C4 were developed based on the more detailed estimates for Preferred Route C1 and are subject to some uncertainty as to their ultimate accuracy. Since the cost estimates are close to one another, detailed, quantitative socioeconomic analysis is not attempted; rather, the impacts on employment, income, population, and housing are qualitatively assessed for Alternatives C2, C3, and C4, as compared to the more detailed impacts of Preferred Route C1.

Environmental Justice issues are quantitatively developed for each alternative, pursuant to Federal guidelines (U.S. Environmental Protection Agency, 1996). Minority and poverty populations in all Block Groups within 6 miles are described, based on estimates from the 2000 Census.

Quantitative comparisons between the Preferred and alternative routes can also be made for property tax comparisons. Estimates of the total value of construction by county, and line and substation, are used as proxies for the property tax valuations by county, and local property tax rates are applied to yield estimates of property tax benefits by county, for each alternative.

Operation employment, wage payments, and purchases of materials would be extremely minimal, and therefore are not addressed in this analysis. With average annual operation costs estimated at 3% of total construction costs, the work force required to maintain and operate Project facilities would average only a handful of persons; as described in the following section, the construction work force required to construct the Preferred Route is only 184 worker years, which would translate to a maximum of only about six workers for operation and maintenance.

IMPACTS OF ALTERNATIVE C1 (PREFERRED ROUTE)

Impacts on Employment and Income

In the socioeconomic context of the 16-county Idaho portion of the MSTI Study Area, the infusion of workers' wages and local construction procurements would place an unnoticeable burden on the assimilative capacity of the local economy. These impacts would be similar to those described earlier for the combined Preferred Route A1 and B1 for Montana, but lower because the Idaho workforce would be about half of the Montana workforce. Furthermore, the Idaho MSTI Study Area economy is slightly larger than its Montana portion, rendering impacts somewhat less as proportions of total area economic activity.

Workers' local consumer goods purchases and contractors' procurements of construction supplies would be the principal vehicles for economic benefits accruing to the local economy. These expenditures would be beneficial, albeit largely unnoticeable compared to the sum of economic activity in the region.

Providers of transient accommodations, eating and drinking places, fuel stations, and construction materials vendors (e.g., sand and gravel, concrete, small equipment rental, etc.), in communities near the proposed Project site would be the most noticeable beneficiaries. As incomes are re-spent in the regions economy, however, much of the re-spent income, and hence employment, would likely accrue to the larger urban centers of Pocatello, Idaho Falls, and Twin Falls, which provide some of the goods and services not available in communities most proximate to the construction sites.

In Idaho, the Preferred Route work force would peak at an estimated 98 workers, around spring 2012 before falling precipitously to completion of construction in February 2013. Only 24 of these workers would be hired from the Study Area, based on an appraisal of the skill levels required for construction, which call for about 25% of the total workforce, or 74 workers, having relatively non-specialized skills that are readily available in the 16-county labor force; the remaining 75% of the Project workforce requirements call for specialized skills and would be highly likely to be filled by workers from other areas who relocate temporarily to work on the Project. Exhibits 4-42 and 4-43 show the construction work schedule broken down into substation/transmission components, and local/nonlocal hires.

Exhibit 4-41: Construction Worker Schedule, Preferred Route C1

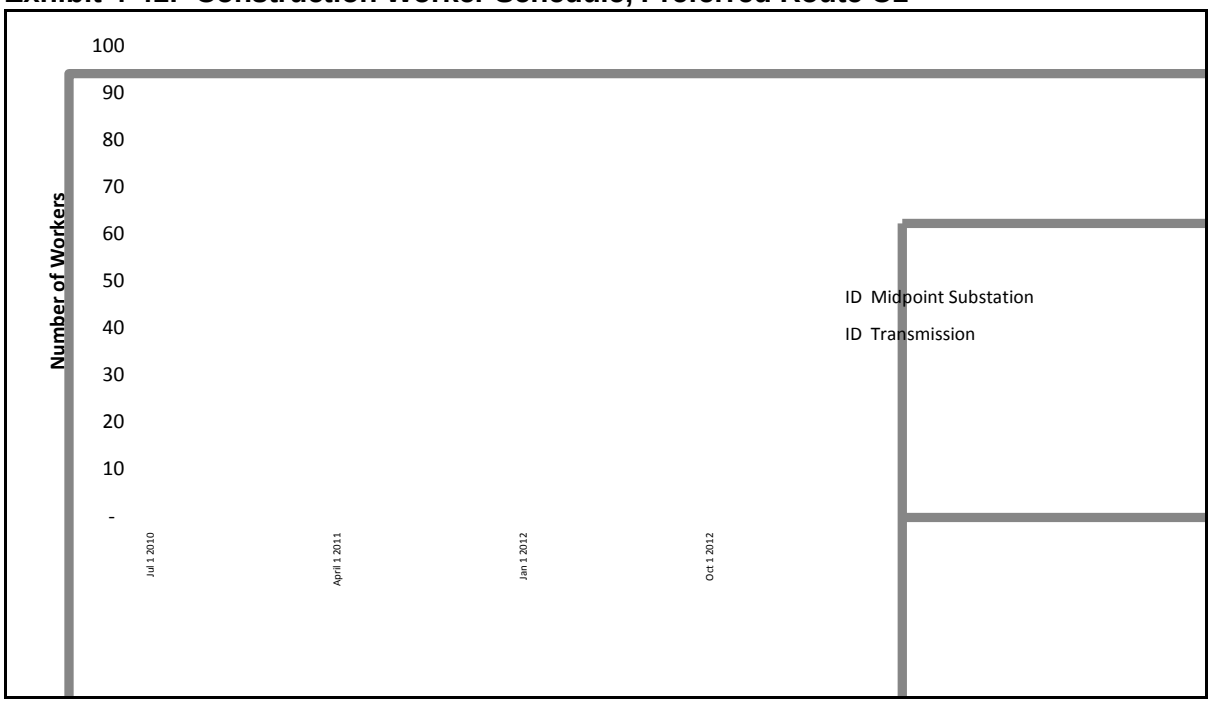
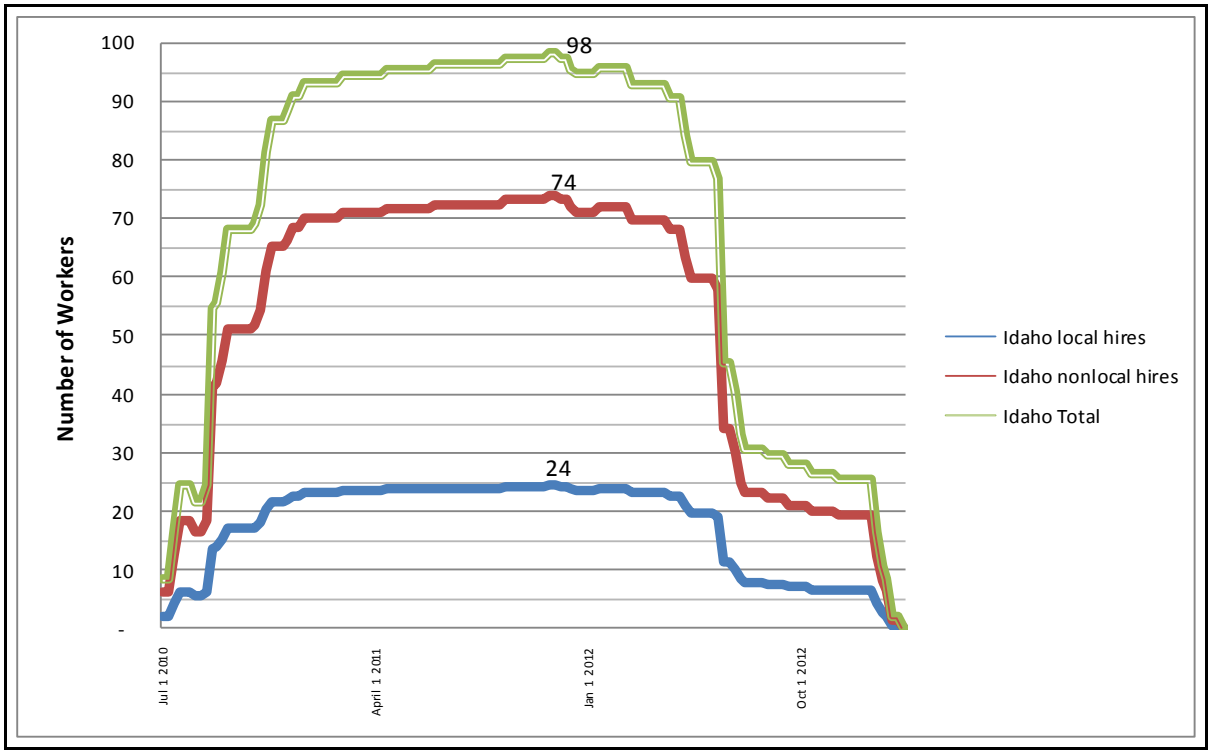


Exhibit 4-42: Local and Non-local Construction Worker Schedule, Preferred Route C-1



Wage and benefit payments to locally-hired and imported construction workers would constitute benefits to the receiving households, and to the businesses providing goods and services on which they spend their disposable after-tax incomes. Although the imported workers would earn substantial salaries (about $45 per hour before overtime, plus union benefits), they are expected to spend money almost solely on local hotel/motel/RV facilities, restaurants, food stores, and miscellaneous retail goods near the routes and substations. The smaller portion (25%) of the construction work force will earn both lower wages (about $35 an hour before overtime and union benefits), and will probably reside, at the time of their hiring, diffusely around the MSTI Study Area. Therefore, their spending--and the employment and earnings of businesses supported by their spending—will tend to be less visible at any concentrated locations.

The total wage bill for the combined Preferred Route is shown in Exhibit 4-43, indicating $21.2 million in wages, and $17.8 million in disposable income increases, over the entire course of construction.

The nonlocal workers are expected to spend (assuming $120 per day per worker) about $6.0 million locally, while the local workers will reap approximately $3.9 million in added after-tax household income (some of which will be spent out of the Idaho portion of the MSTI Idaho Study Area). Thus, spending by imported workers would have the greater impact on the local economy, although in light of total activity, the increase would be small and short-term.

Exhibit 4-43: Local and Non-local Construction Worker Schedule and Wage Payments, and Local Purchases by Imported Workers, Preferred Route C1

IDAHO HOURS, WAGES, BENEFITS, LOCAL SPENDING BY NONLOCAL HIRES

Worker-Weeks	7/1-12/31 2010	2011	2012	2013	Total
Idaho	1,349	5,100	3,079	65	9,592

Worker-hours:	50 hours/week				
	7/1-12/31 2010	2011	2012	2013	Total
Idaho	67,466	254,988	153,932	3,235	479,621

Wages @ Base Rate: $42/hour skilled (nonlocal hires), $35/hour unskilled (local hires)
1 1/2 time overtime on 10 hours/week

	7/1-12/31 2010	2011	2012	2013	Total
Idaho	$ 2,987,055	$ 11,289,586	$ 6,815,360	$ 143,238	$ 21,235,239

Hourly pay with overtime	
local $35/hr base	$ 38.50
nonlocal $42/hr ba:	$ 46.20

After-tax income @ Base Rate: $42/hour skilled (nonlocal hires), $35/hour unskilled (local hires)
1 1/2 time overtime on 8 hours/week
Monetizable benefits @ 20%, and after tax income @ 70% of total monetizable income

	7/1-12/31 2010	2011	2012	2013	Total
ID local	$ 545,462	$ 2,061,577	$ 1,244,544	$ 26,156	$ 3,877,739
ID nonlocal	$ 1,963,664	$ 7,421,676	$ 4,480,358	$ 94,163	$ 13,959,861
Total	$ 2,509,126	$ 9,483,252	$ 5,724,902	$ 120,320	$ 17,837,601

BY LOCAL-NONLOCAL AND STATE

			Idaho local hire	0.25	
Worker-Weeks					
	7/1-12/31 2010	2011	2012	2013	Total
ID local	337	1,275	770	16	2,398
ID nonlocal	1,012	3,825	2,309	49	7,194
Total	1,349	5,100	3,079	65	9,592

Worker-hours:	50 hours/week				
	7/1-12/31 2010	2011	2012	2013	Total
ID local	16,866	63,747	38,483	809	119,905
ID nonlocal	50,599	191,241	115,449	2,426	359,716
Total	67,466	254,988	153,932	3,235	479,621

Wages @ Base Rate: $42/hour skilled (nonlocal hires), $35/hour unskilled (local hires)
1 1/2 time overtime

	7/1-12/31 2010	2011	2012	2013	Total
ID local	$ 649,360	$ 2,454,258	$ 1,481,600	$ 31,139	$ 4,616,356
ID nonlocal	$ 2,337,695	$ 8,835,328	$ 5,333,760	$ 112,099	$ 16,618,883
Total	$ 2,987,055	$ 11,289,586	$ 6,815,360	$ 143,238	$ 21,235,239

Local spending by nonlocal workers @ $120/day ($840/week), 7 day weeks

	7/1-12/31 2010	2011	2012	2013	Total
Idaho nonloca	$ 850,071	$ 3,212,847	$ 1,939,549	$ 40,763	$ 6,043,230

Economic multiplier effects would arise from the local expenditures for Project materials, fuel, and supplies, in addition to from the increases in worker incomes and spending in the MSTI Study Area. As these moneys are re-spent within the region, the total increment to the original direct Project payments would be a multiple of those direct payments.

To estimate the increases in jobs and income caused by construction of Preferred Route C1, the IMPLAN model was employed. IMPLAN, commonly used for impact analysis for a variety of projects across the U.S., is an input-output model developed by IMG, Inc. to enable users to simulate the indirect and induced impacts of any specified project, using the projects user-defined direct spending on labor and materials as inputs.

In order to run IMPLAN, an input-output model of the 16-county Idaho MSTI Study Area was assembled, and the combined Preferred Route wage payments and local purchases were added to the regions existing structure. The inputs used are shown in Exhibit 4-18.

The model inputs were developed from the information in Exhibits 4-41 through 4-43, and additional estimates described for the full Preferred Route (both Idaho and Montana). The inputs shown in Exhibit 4-44 show that of the construction cost of the Preferred Route C1 of $283.1 million, only about $18.9 million will result in an injection of dollars into the MSTI Study Areas Idaho portion. [11] This low amount is due to the predominance of imported construction labor and the very low amount of project capital purchases that will be made in the region.

Exhibit 4-44: IMPLAN Model Inputs (2008 dollars), Preferred Route C1

	2010	2011	2012	2013	Total	Assumptions
Nonlocal worker spending						
Food & Drinking Places	$ 354,196	$ 1,338,686	$ 808,145	$ 16,985	$ 2,518,013	IMPLAN model sector 481
Lodging	$ 354,196	$ 1,338,686	$ 808,145	$ 16,985	$ 2,518,013	IMPLAN model sector 479
Misc retail	$ 56,671	$ 212,972	$ 128,085	$ 2,718	$ 400,446	IMPLAN sector 410; used assumed 40% margin.
TOTAL	$ 765,064	$ 2,890,344	$ 1,744,376	$ 36,687	$ 5,436,471	
Local Worker Gross Income (plus 20% monetizable benefits)	$ 779,232	$ 2,945,109	$ 1,777,920	$ 37,366	$ 5,539,628	IMPLAN model sector 5001
Aggregate	$ 600,000	$ 800,000	$ 500,000	$100,000	$ 2,000,000	IMPLAN model sector 25
Equipment rental	$ 674,660	$ 2,549,878	$ 1,539,325	$ 32,352	$ 4,796,214	IMPLAN sector 434; $5 per worker hour
Fuel etc	$ 124,800	$ 469,286	$ 469,286	$ 21,257	$ 1,084,629	IMPLAN model sector 409; $800/day 2010, $1,500/day 2011-12, $800/day 2013
Office Supplies	$ 9,360	$ 18,771	$ 18,771	$ 2,623	$ 49,526	$150 per day 6 days/week; assumed 40% margin
Total local payments	$ 2,953,115	$ 9,673,389	$ 6,049,678	$230,285	$ 18,906,467	

Model results regarding employment in the Idaho MSTI Study Area are summarized in Exhibit 4-45. The results shown are restricted to employment results because (1) employment changes are critical to the assessment of population changes, and hence impacts on housing, and (2) when viewed as percentage changes to baseline conditions, the IMPLAN results tend to be very much the same, whether the economic indicator is personal income, value added, output, etc., and hence percentage employment changes to baseline conditions can be viewed as proxies, for simplicity.

[11] The IMPLAN model is developed on the basis of year 2006 data, but dollar values in Exhibit 4-18 were deflated from their 2008 to 2006 values for model input. Employment needed not be adjusted.

The results show that construction of Preferred Route C1 would result in a total of 184 worker-years needed for construction from 2010 to 2013 (worker-years, when expressed as number of jobs in any particular year, can be viewed as equivalent to number of fulltime equivalent jobs). Because of Project spending on labor and materials, another 183 worker-years would be directly supported in firms supplying goods and services.

The further re-spending of income initially earned by project workers and the Projects suppliers would result in further indirect and induced worker-years of 87. In sum, the combined Preferred Route construction in Montana would support a total of 454 worker-years' of employment.

Exhibit 4-45 further shows that these worker-years would be spread across four calendar years of construction, 2010 to 2013. The year 2011, with 241 worker-years supported, would be the year of most impact. Compared to year 2006 total employment in the 16-county MSTI Idaho Study Area, this would represent an increase of only 0.1 percent, which would be beneficial, but not a noticeable impact. In the year 2012, the Project would also support substantial employment, at 146 jobs.

These worker-years are annual averages, and assume that all the actual employment impacts would occur immediately upon the expenditures shown in Exhibit 4-44. The overall project multiplier on employment was calculated based on the number of total worker-years created (454) divided by the number of jobs on-site (184 worker years), or 2.46. In general, this multiplier could be applied to the monthly, or even weekly, expenditures of the Project. For example, with a Project peak weekly employment of 98, the regional multiplier of 2.46 could be applied to yield an estimate of the peak regional Project-supported jobs of 241.

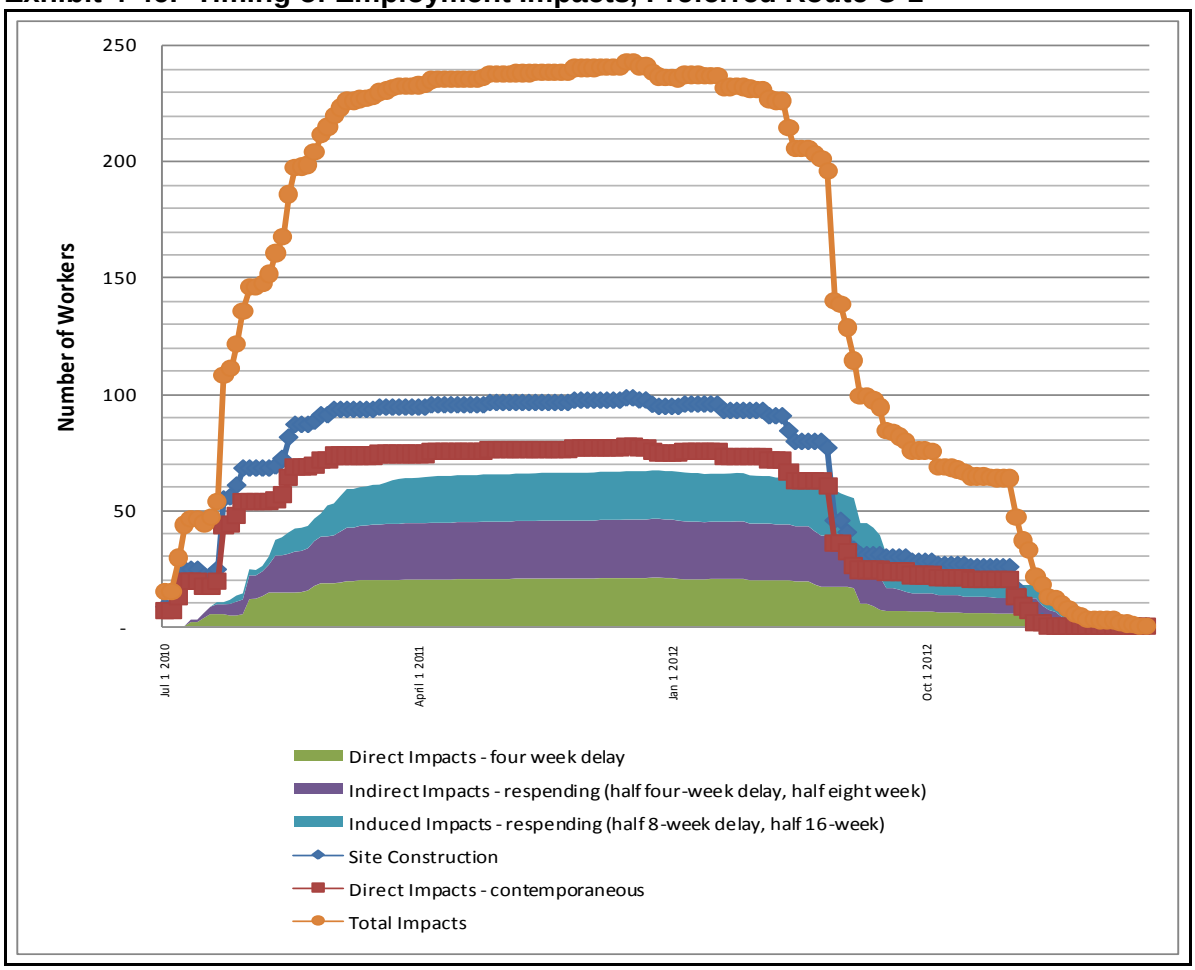
However, some of the dynamics of multiplier effects are not considered in this timing. On-site employment occurs immediately, and employment in the industries supplying goods and services to its workers, and materials for construction, also occurs very quickly, in general. However, indirect and induced effects, which arise due to the recycling of income within the regions economy, take some time to be realized.

To derive a more realistic picture of what would actually occur, a simple model was developed to provide an indication of the actual timing of impact. Based on this simple model, which incorporates lags in the occurrence of indirect project impacts, a more time-accurate representation of the likely pattern of project impacts was developed. Exhibit 4-46 presents these results.

Exhibit 4-45: IMPLAN Model Results (2008 dollars), Preferred Route C-1

	2010	2011	2012	2013	TOTAL
(1) PREFERRED ROUTE C-1 EMPLOYMENT (DIRECT EMPLOYMENT)					
Worker Weeks	1349	5100	3079	65	9592
Worker Years (avg.)	26	98	59	1	184
(2) FROM PROJECT PURCHASES ON LABOR/MATERIALS INCLUDING NONLOCAL WORKER SPENDING					
Employment	26	97	59	1	183
(3) FROM INDIRECT AND INDUCED EFFECTS					
Employment	12	46	28	1	87
(4) TOTAL INCLUDING DIRECT AND INDIRECT					
Employment	38	143	87	2	270
(5) TOTAL INCLUDING PREFERRED ROUTE EMPLOYMENT					
Employment	64	241	146	3	454
(6) EMPLOYMENT MULTIPLIER [(5)/(1)]	2.462				

Exhibit 4-46: Timing of Employment Impacts, Preferred Route C-1



The significance of Exhibit 4-46 that jobs classified above as "Site Construction" and "Direct Impacts – contemporaneous" would be strongly tied to the communities near the transmission route and substations. These jobs are indicated as line diagrams in Exhibit 4-46. Project construction workers would be clearly temporary and would bring no dependents. Thus, the jobs noted as "Direct Impacts – contemporary" would be likely to be known as temporary since they would be so closely tied to Project purchases and spending by visiting construction workers; workers taking these positions would most likely be residents of communities tied most closely to the route – either nonlocal construction workers residing in transient accommodations, or workers at the restaurants, hotel/motel/RV parks, or retail stores patronized by the nonlocal construction workers. These workers would be unlikely to in-migrate to the region to take these temporary positions, and therefore would not significantly affect regional or sub-regional populations. Many of these "jobs" could be filled by extending hours of existing workers, rather than by new hires, since they would known to be short-term.

The remainder of the jobs shown in Exhibit 4-46 would be jobs that would more likely be viewed by local firms as part of normal economic growth. These jobs could ultimately cause workers to migrate to the Montana MSTI Study Area, many bringing dependents. The area graph portion of Exhibit 4-46 shows that about 68 such jobs, at peak, would be created with almost all continuing from about Spring 2011 through Fall 2012. These jobs would likely cause both increases in population, and

demand for housing, both rental and owner-occupied. Population and housing impacts are described in the following section.

Operation employment, wage payments, and purchases of materials would be extremely minimal, and therefore are not addressed in this analysis. With average annual operation costs estimated at 3% of total construction costs, the work force required to maintain and operate Project facilities would average only a handful of persons. The construction work force required to construct Preferred Route C-1 is estimated at only 184 worker years, which would translate to a maximum of only about six workers for operation and maintenance.

Impacts on Population

Increases in employment in an area generally lead to increases in population, as some of those who take jobs associated with a project move to the area, some with dependents. As noted, the direct Project construction work force is likely to be drawn from both within and outside the Study Area; however, those who relocate to the Study Area for construction are unlikely to bring dependents. Furthermore, workers in hotels/motels/RV parks, restaurants, and retail stores near the Preferred Route C1 are likely to be local residents working only temporarily to meet short-term increases in demand.

Population increases would occur primarily due to jobs created due to re-spending of incomes derived from the Project, numbering about 68 jobs at peak. With a historically very tight labor market in the Study Area, ultimately in-migration would be a primary vehicle for meeting increased labor demand. Some of the in-migrating workers would bring dependents, so that the population increase would be a multiple of the increase in employment attributable to the Project.

The increase to the total population of the 16-county Idaho MSTI Study Area is estimated based on the average household size of workers who migrated to Idaho between 1995 and 2000, according to the U.S. Bureau of the Census year 2000 census. In-migrants to Idaho during these years had household sizes averaging 2.0 in the year 2000. Thus, the impact of construction of Preferred Route C-1 on population in the region would be about 136 new residents.

The increase would likely take place according to the historic growth patterns in the region, meaning in those counties and communities with the highest population growth. Bonneville, Bannock, and Twin Falls counties would therefore experience the bulk of the increase of 136 persons, which would represent insignificant changes to their populations. Communities near the Preferred Route have in general grown only slowly, and in fact in some cases have declined in population, and would be unlikely to capture discernable shares of this growth.

Operational employment may also indirectly cause some of these indirect population increases. However, the level of employment (up to about 5 jobs, assuming operations employment at 3% of construction jobs) and expenditures for operations would be so minimal that population increases would be extremely minimal (no more than a handful of persons), if they occur at all.

Environmental Justice

Environmental Justice issues are evaluated using data on race/ethnicity and poverty at the Block Group level from Census 2000 (Source: U.S. Bureau of the Census, 2000 Census, Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data). These data are shown in Appendix D, "Environmental Justice Data, Idaho," in Table D-1 for Preferred Route C1.

The reference areas for evaluating the presence of minorities and those living in poverty are (1) the State of Idaho, and (2) the 16-county Idaho portion of the MSTI Study Area. Data are also presented for each county in the Idaho MSTI Study Area. Census Block groups within 6 miles of each Idaho alternative were identified and their race/ethnicity and poverty data were evaluated.

The State of Idaho was overwhelmingly classified as being "White Only" in its racial composition in the year 2000, comprising 90.9% of the total population. "American Indian or Native Alaskan alone" represented the next largest population of specified race (next to "Some Other Race"), with 1.4 percent of the total population. Regarding ethnicity, the largest minority was "Hispanic or Latino," with 7.9 percent.

In the 16-county Idaho MSTI Study Area, slightly lower proportion of the total population was White Only, at 89.8 percent. Slightly more were classified as American Indian or Native Alaskan Alone, with 1.6% reporting their race as such. Slightly more also were Hispanic or Latino, with 10.4% of the total. The highest proportions occurred in Clark (35.6%) and Minidoka (25.8%) counties.

At the Census Block Group level, for Block Groups within 6 miles of Preferred Route C1, 83.5% of the population was White Alone, indicating a somewhat higher minority (all other except White Alone) population than in either the State as a whole, or the Idaho MSTI Study Area. However, American Indian or Alaskan Native persons represented only 0.7% of the total population, noticeably lower than in either the State or the Idaho MSTI Study Area. On the other hand, the Hispanic or Latino population represented a far higher proportion of the population, at 25.8 percent.

Examining minority populations in specific Census Block Groups, the highest proportion of American Indian or Native Alaskan population was in Block Group 2, Census Tract 9802, in Power County. However, the proportion was only 3.1 percent of the total population, indicating that no substantial concentrations of American Indian or Native Alaskans existed within 6 miles of Preferred Route C-1 in the year 2000.

Regarding the Hispanic or Latino populations, significant concentrations did exist within 6 miles of Preferred Route C1. In Block Group 4, Census Tract 9803, Minidoka County, 54.5 % were Hispanic or Latino. Block Group 5, Census Tract 9503, in Bingham County, Idaho had 48.6% Hispanic or Latino, and Block Group 4, Census Tract 9503, also in Bingham County had 42.3% Hispanic or Latino. No other Block groups had Hispanic or Latino populations exceeding 40% of their total population.

The population with incomes below poverty level defined by the Census totaled 11.8% of the total in the State of Idaho as a whole in 1999 (the 2000 Census reports income in the year 1999). A slightly higher proportion (13.5%) were below the poverty threshold in the 16-county MSTI Idaho Study Area. In all Census Block Groups within 6 miles of Preferred Route C1, the population included 12.1 percent – slightly higher than the State as a whole, but slightly lower than in the MSTI Idaho Study Area.

Among Block Groups within 6 miles of the Preferred Route, only two had over 25% of their populations under the poverty threshold in 1999: Block Group 4, Census Tract 9701, in Butte County (28.3%), and Block Group 2, Census Tract 9501, in Clark County (27.3%).

Impacts on Housing

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Long-term housing demand would increase by only about 68 households, the bulk of which would be dispersed among the larger metropolitan areas of Twin Falls, Pocatello, and Idaho Falls, which can readily handle such an increase. The most noticeable increase in housing demand would be by construction workers who would seek hotel/motel/RV quarters as near as available along the transmission route; about 10 of these workers, assigned to the Dubois and Midpoint sites, would seek temporary housing in the Dubois and Twin Falls areas.

Exhibit 4-42 shows that up to an estimated 74 construction workers would be hired from outside the MSTI Idaho Study Area during the construction peak, lasting from about the start of 2011 to the summer of 2012. Almost all of these workers would seek hotel/motel/RV units.

In addition, some of the up to 24 workers hired from the local area during this peak period may live a distance from their homes in the MSTI Idaho Study Area from their work locations along the transmission route, preferring to take temporary quarters nearer to work, since driving distances could be up to about 200 miles for some of them. Since work would proceed sequentially from north to south with site preparation, tower erection, and line stringing being the primary activities, workers would also move along the route sequentially.

Assuming that at any given time about half of the locally-hired workers seek temporary quarters, a total of about 80 workers could conceivably be seeking transient accommodations at any one time, in the general location of work sites. The communities in closest proximity the Preferred Route are all relatively small, with correspondingly small housing stocks.

The communities most likely to be affected by such demand would be those along the Preferred Route: From north to south, these would include Spencer (2006 population 624) and Dubois (2006 population 920) in Clark County. According to the publication "RV Idaho" (Idaho RV Campgrounds Association, 2008), there are 12 RV and/or camping spaces in Spencer, and 65 in Dubois. There are no hotel/motels listed for Spencer, but 7 are listed in the Yellow Pages[12] for Dubois, and between the Best Western, Motel 8 and Guest House in Dillon, 150 hotel units exist (personal communication Holly Rowe, Best Western Inns, Dubois, ID, June 28, 2008). Thus, the total supply of RV/camping and hotel/motel units appears to be in excess of 270 units. During the summer peak season, it is unlikely that 80 separate units would be normally available to accommodate construction worker demands. This could result in workers doubling up on rooms/campers, or using accommodations in more distant communities such as St. Anthony (2006 population 3,376) in Fremont County, some 40 miles distant.

Farther south, a considerable stretch of the Preferred Route, about 100 miles from Dubois to Aberdeen, is through sparsely settled lands, including about 50 miles in and near the Idaho National Laboratories. The primary communities along the Preferred route are Aberdeen (2006 population 1,809) in Bingham County, and American Falls (2006 population 4,225) in Power County. At approximately the halfway-point, Arco (2006 population 979) in Butte County is slightly farther from the Preferred Route, but could present limited locations for transient workers: "RV Idaho" lists 115 RV/campsite units available in Arco, but there are no hotel/motels in Arco or nearby cities Butte City or Atomic City listed.

Few transient accommodations exist in the approximately 100 miles from Dubois to Aberdeen, close to the Preferred Route. "RV Idaho" lists 42 RV/campsites in Aberdeen, and 116 in American Falls.

[12] http://www.yellowpages.com/Dubois-ID/Hotels?search_terms=hotel

Aberdeen has no hotel/motels listed in the Yellow Pages, and American Falls has only three, with a total of approximately 55 units (personal communication, Marna Nichols, Hillview Motel, American Falls, Idaho, June 28, 2008), which are typically fully-occupied during the peak summer season. Thus, long commutes for many of the Projects construction workers are likely, from accommodations in larger regional cities such as Pocatello and Idaho Springs.

Along the southern stretch of the Preferred Route, there are also few communities for about 100 miles between American Falls and the route terminus at the Midpoint Substation, near Jerome (Exhibit 3-1). Minidoka (2006 population 126) in Minidoka County has no listings for either RV/campsites, or hotel/motels. Along the southern stretch of the Preferred Alternative, the nearest communities with hotel/motel rooms are Rupert (2006 population 5,214) in Minidoka County, and Burley (2006 population 9,174 including its portions both in Minidoka and Cassia counties). Rupert has 37 RV/camper units (Idaho RV Campgrounds Association, 2008), and one small hotel. Burley has no RV/campsites, but has 4 hotels listed in the Yellow Pages, including the 126-room Best Western; hotel/motel units in Burley probably number in excess of 200 (personal communication, Paige Anderson, Best Western Hotel, Burley, Idaho, June 28, 2008). As with the other hotel/motels along the Preferred Route, the summer season is traditionally at near-full occupancy. Thus some excess demand may occur, forcing some workers to look for accommodations at either Pocatello or Twin Falls, the major regional population centers.

Jerome (2006 population 8,687) in Jerome County, is near the Midpoint Substation and has 25 RV/camp spaces (Idaho RV Campgrounds Association, 2008), and about 200 hotel rooms (personal communication Rachel Steen, Best Western Inns, Jerome, ID, June 28, 2008). At this end of the Preferred Route, should construction workers require accommodations in Jerome be unavailable, Twin Falls, a regional center, has a plentiful supply of transient accommodations. There should be adequate accommodations for about 80 additional persons within a reasonable commute of the southern terminus of the Preferred Route.

In summary, no adverse impacts on supplies of rental or for-sale housing are expected due to the general population increase of about 136 persons. However, it appears that a RV/hotel/motel unit availability for transient workers is limited in communities most proximate to the Preferred Alternative. This could result in doubling-up of transient units by workers, or commuting some distance from the regional centers of Idaho Springs, Pocatello, or Twin Falls, as well as the secondary center of St. Anthony in Fremont County.

Impacts on Fiscal Conditions

Impacts on local assessed property values would be the primary fiscal impacts of Preferred Route C1, as well as all alternatives. The increase in local assessed values would allow some increase in property tax collections by taxing jurisdictions, but these would be limited by Idaho State Statutory limits on annual rates of increase in property tax revenues.[13] Therefore, simple multiplication of the value of improvements by the existing property tax rate derives an amount indicative not of actual property tax payments that would be made, but primarily the amount by which property tax rates, and hence payments, can be reduced for nearly all property owners in each jurisdiction. This section quantifies these benefits for each of the counties in which the Preferred Route would be sited.

[13] Idaho property tax laws are complex, but in general, annual growth in taxing district revenues are limited to 3% plus each jurisdictions value of new construction. See Idaho State Code, Title 63, Revenue and Taxation, Chapter 8, Levy and Apportionment of Taxes, 63-802. Limitation on Budget Requests – Limitation on Tax Charges --Exceptions.

Other tax benefits would also derive from construction of Preferred Route C1. Idahos sales and use tax, applied at a 6.0% rate to retail sales, would rise due to Project purchases, and wages paid to its workers would be spent, in part on taxable goods and services, and re-spent through the State and local economies. A portion of total revenues from sales and use taxes are redistributed to local jurisdictions by the State under a complex formula. These revenues would be relatively small and are not addressed in this analysis.

State personal income taxes would also be paid, to both the construction and operation workers employed for the Project, but also on the incomes that result from the re-spending of incomes attributable directly to the Project. A portion of State income taxes, as with sales and use taxes, are allocated to local jurisdictions, including school districts,[14] and/or spent on projects throughout the State, many of which occur in the MSTI Idaho Study Area. These impacts are not addressed in this analysis.

In general, projects which increase the population of an area also result in some additional costs of public services, such as schools, general government, and infrastructure. These public costs are not addressed in this analysis due to the extremely low population impacts of Preferred Route C1, described earlier. However, it is likely that the additional costs of public services will be less than the additional sales and use, and State income taxes, generated by any of the Project alternatives, in large part because much of the increases to personal incomes derived therefrom will be construction worker incomes, which would be substantially higher than the average wage paid in Idaho.

The increase in local property tax assessments derived from Preferred Route C1 were estimated by using the total constructed value of the Project as a proxy for the value at which it will ultimately be assessed by the Idaho State Tax Commission, upon its completion. This total value was then apportioned among counties according to the total constructed value estimated for each county. Finally, to obtain a measure of the local property tax benefits derived, hypothetical "property tax 'payments'" were calculated by applying the average county property tax rates to the countys estimated total constructed value. It should be noted that the assessed value of the facilities would decline gradually over time due to depreciation, possibly through straight-line depreciation over the Project life. The estimates herein are for the first year of operation.

Average county property tax rates are estimated by the Idaho State Tax Commission (2008) for both rural and urban areas, incorporating all types of taxing districts in each county. These include but are not limited to school districts, fire districts, auditorium districts, and county governments. Calculation of property tax benefits for every taxing district in each county was not attempted in this analysis. Rather, the key indicators of impact were the increase in total county assessed values caused by Preferred Route C1, and the hypothetical property taxes paid to all taxing jurisdictions.

The results of this analysis are shown in Exhibit 4-47. In total, the increase to overall county property assessments would be about 1.6 percent. Clark and Butte counties would experience the largest increases in assessed values, by 70.7 and 31.2 percent, respectively. These large increases would clearly be significant benefits to both counties, which have the lowest year 2007 total assessed valuations of any of the counties in which Preferred Route C1 would be located. Lincoln County would benefit by a lesser, but noticeable amount, at 13.7 percent. Other counties would benefit by relatively small amounts.

[14] For example, between the State of Idaho's fiscal years 2000 and 2004, approximately 47.5 percent of general fund revenues were distributed to school districts (EcoNorthwest, 2005). In addition, sales taxes are redistributed to local jurisdictions in accord with Idaho Code 63-3638(9)(a).

Exhibit 4-47: Property Tax Benefits by County, Preferred Route C-1

C1: Preferred County	Land Jurisdiction	Miles	Transmission Cost ($958,503/mile)	Cost with Engineering, Permitting, Procurement, Management (8.7% Additional)	With Substation Costs	Total 2007 County Taxable Valuation	Percent of Total Property Tax Valuation	Average County Property Tax Rate (percent)	Total Property Taxes Paid
Bingham	BLM	25.57	$ 24,510,217	$ 26,635,005					
Bingham	DOE	0.00	$ 271	$ 295					
Bingham	Private	15.12	$ 14,491,406	$ 15,747,664					
BINGHAM COUNTY TOTAL		**40.69**	**$ 39,001,894**	**$ 42,382,964**	**$ 42,382,964**	**$ 1,354,374,252**	**3.13%**	**1.223%**	**$ 518,344**
Blaine	BLM	17.77	$ 17,031,532	$ 18,507,994					
Blaine	Private	0.86	$ 824,314	$ 895,774					
Blaine	State of Idaho Dept of Lands	1.16	$ 1,110,218	$ 1,206,462					
BLAINE COUNTY TOTAL		**19.79**	**$ 18,966,064**	**$ 20,610,230**	**$ 20,610,230**	**$ 12,339,477,306**	**0.17%**	**0.425%**	**$ 87,593**
Butte	DOE	35.29	$ 33,826,563	$ 36,758,984					
Butte	Private	2.62	$ 2,513,135	$ 2,730,999					
BUTTE COUNTY TOTAL		**37.91**	**$ 36,339,698**	**$ 39,489,983**	**$ 39,489,983**	**$ 126,731,538**	**31.16%**	**1.380%**	**$ 544,962**
Clark	BLM	16.70	$ 16,008,328	$ 17,396,088					
Clark	DOE	3.21	$ 3,074,691	$ 3,341,236					
Clark	Private	24.32	$ 23,307,557	$ 25,328,087	$ 41,356,076				
Clark	State of Idaho Dept of Lands	3.74	$ 3,586,137	$ 3,897,019					
Clark	USDA - Sheep	6.06	$ 5,808,467	$ 6,312,002					
Clark	USFS	5.53	$ 5,295,807	$ 5,754,900					
CLARK COUNTY TOTAL		**59.55**	**$ 57,080,987**	**$ 62,029,332**	**$ 78,057,321**	**$ 110,491,287**	**70.65%**	**1.380%**	**$ 1,077,191**
Jefferson	BLM	2.50	$ 2,395,202	$ 2,602,842					
JEFFERSON COUNTY TOTAL		**2.50**	**$ 2,395,202**	**$ 2,602,842**	**$ 2,602,842**	**$ 949,604,437**	**0.27%**	**0.899%**	**$ 23,400**
Jerome	BLM	3.06	$ 2,935,623	$ 3,190,112					
Jerome	Private	0.37	$ 356,168	$ 387,044	$ 37,237,578				
JEROME COUNTY TOTAL		**3.43**	**$ 3,291,792**	**$ 3,577,157**	**$ 28,307,892**	**$ 1,027,893,946**	**2.75%**	**1.093%**	**$ 309,405**
Lincoln	BLM	32.60	$ 31,247,499	$ 33,956,342					
Lincoln	BOR	0.25	$ 244,066	$ 265,224					
Lincoln	Private	1.20	$ 1,153,264	$ 1,253,241					
Lincoln	State of Idaho Dept of Lands	2.02	$ 1,931,468	$ 2,098,907					
LINCOLN COUNTY TOTAL		**36.07**	**$ 34,576,297**	**$ 37,573,713**	**$ 37,573,713**	**$ 273,799,770**	**13.72%**	**0.970%**	**$ 364,465**
Minidoka	BLM	12.72	$ 12,195,631	$ 13,252,869					
Minidoka	State of Idaho Dept of Lands	1.00	$ 959,487	$ 1,042,664					
MINIDOKA COUNTY TOTAL		**13.72**	**$ 13,155,118**	**$ 14,295,534**	**$ 14,295,534**	**$ 877,574,258**	**1.63%**	**0.917%**	**$ 131,090**
Power	BLM	6.92	$ 6,637,567	$ 7,212,977					
Power	Private	12.01	$ 11,509,118	$ 12,506,843					
Power	State of Idaho Dept of Lands	0.03	$ 29,893	$ 32,485					
POWER COUNTY TOTAL		**18.96**	**$ 18,176,579**	**$ 19,752,304**	**$ 19,752,304**	**$ 625,605,669**	**3.16%**	**1.460%**	**$ 288,384**
	PROJECT TOTAL	**232.64**	**$ 222,983,630**	**$ 242,314,059**	**$ 283,072,784**	**$ 17,685,552,463**	**1.60%**		**$ 3,056,450**
	Total Private Land	53.88	$ 51,641,828	$ 56,118,653	$ 134,712,307				

Source: Idaho State Tax Commission (2008) for county assessed valuations and property tax rates.

IMPACTS OF ALTERNATIVE C2 (EASTERN ROUTE)

Impacts on Employment and Income, Population, and Housing

As shown in Exhibit 4-3, the cost of construction of Alternative C-2 would be very slightly above those estimated for Preferred Route C1 – about 2 percent higher. No detailed construction workforce schedules have been developed for Alternative C2, but since the cost difference is quite small, it is expected that the employment schedule, as well as wage bill, would be for analytical purposes the same as for the Preferred Route. Thus, the impacts on employment and income for the Preferred Route can be considered as also applying to Alternative C2: That is, a peak work force of roughly 98 workers, 75% or 74 of whom would be hired from outside the MSTI Idaho Study Area, a total wage bill of about $21 million, and local purchases (of aggregate, small equipment purchase and lease, and office supplies) totaling only about $8 million (2008 dollars).

Total impacts on regional employment from re-spending of worker incomes and incomes derived from Project purchases are also predicted to be approximately equal for Alternative C2 as for Preferred Route C1. The indirect and induced employment impacts described for the Preferred Route would still be diffused throughout the MSTI Idaho Study Area but most likely concentrated in its three regional centers of Pocatello, Idaho Falls, and Twin Falls.

The primary difference would be the location of some of the more immediate, direct employment impacts. With Alternative C2 having a portion of its route to the east of Preferred Alternative C1 (Exhibit 4-1), the more direct impacts on local restaurants, stores, and miscellaneous retail establishments patronized by Project workers would depend on the communities from which they commute. For this more easterly route, there would be no demand for transient accommodations in Butte City, as would be the case for the Preferred Route, and more demand for accommodations in the Jefferson County Seat of Rigby (2006 population 3,291), in Roberts (2006 population 655) in Jefferson County, or in the Idaho Falls area. Since Rigby has only 20 RV spots listed in "RV Idaho" (Idaho RV Campgrounds Association, 2008), and Hamer has only one small motel, construction workers would most likely locate in Idaho Springs. However, the bulk of Alternative C2s route is identical to that of Preferred Route C1, and hence employment impacts would otherwise be the same.

Population impacts for Alternative C2 would also be about equal to those for the Preferred Route. At the margin, in-migrants who come to the region to take jobs induced by the Project would number about the same (about 136) and would likely choose to live in its regional centers. Thus, no noticeable population impacts would occur.

Impacts on rental and ownership housing for these in-migrants would also not be noticeable, since they would take place primarily in the regional centers. However, slight differences in the impact on transient housing may occur, also due to the location of Alternative C2.

As noted above, the up to approximately 80 construction workers who may seek transient accommodations will have a slightly easier time finding RV/hotel/motel units within a reasonable commuted of the route, for that portion that is located to the east of Preferred Route C1. Idaho Falls would present a more reasonable commute for this part of the route than would the few, small communities in the middle of Preferred Route C1. For the remainder of the route, the impacts would be the same as for the Preferred Route.

Environmental Justice

Environmental Justice issues are evaluated using data on race/ethnicity and poverty at the Block Group level from Census 2000 (Source: U.S. Bureau of the Census, 2000 Census, Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data). These data are shown in Appendix D, "Environmental Justice Data, Idaho," in Table D-2 for Alternative C2. The description of Alternative C2 is primarily in comparison to Preferred Route C-1 described in Section 4.2.1.3..

The State of Idaho was overwhelmingly classified as being "White Only" in its racial compostion in the year 2000, comprising 90.9% of the total population. "American Indian or Native Alaskan alone" represented the next largest population of specified race (next to "Some Other Race"), with 1.4 percent of the total population. Regarding ethnicity, the largest minority was "Hispanic or Latino,", with 7.9 percent.

In the 16-county MSTI Idaho Study Area, slightly lower proportion of the total population was White Only, at 89.8 percent. Slightly more were classified as American Indian or Native Alaskan Alone, with 1.6% reporting their race as such. Slightly more also were Hispanic or Latino, with 10.4% of the total. The highest proportions occurred in Clark (35.6%) and Minidoka (25.8%) counties.

At the Census Block Group level, for Block Groups within 6 miles of Alternative C2, 84.7% of the population was White Alone, indicating a somewhat lower minority (all other except White Alone) population than for Preferred Route C1. However, American Indian or Alaskan Native persons

represented only 0.7% of the total population, the same as Preferred Route C1. The Hispanic or Latino population also represented a lower proportion of the population, at 22.1 percent.

Examining minority populations in specific Census Block Groups, the highest proportion of American Indian or Native Alaskan population was in Block Group 2, Census Tract 9802, in Power County, which is also within 6 miles of Preferred Route C1. However, its proportion was only 3.1 percent of the total population, indicating that no substantial concentrations of American Indian or Native Alaskans existed within 6 miles of Preferred Route C-2 in the year 2000.

Regarding the Hispanic or Latino populations, significant concentrations did exist within 6 miles of Preferred Route C1. In Block Group 4, Census Tract 9803, Minidoka County, 54.5 % were Hispanic or Latino. Although under 50%, two Block Groups had relatively high proportions of Hispanic or Latino persons: Block Group 5, Census Tract 9503, in Bingham County, Idaho had 48.6% Hispanic or Latino, and Block Group 4, Census Tract 9503, in Bingham County had 42.3% Hispanic or Latino. No other Block groups had Hispanic or Latino populations exceeding 40% of their total population. All these Block Groups are also within 6 miles of Preferred Route C1.

The population with incomes below poverty level defined by the Census totaled 11.8% of the total in the State of Idaho as a whole in 1999 (the 2000 Census reports income in the year 1999). A slightly higher proportion (13.5%) were below the poverty threshold in the 16-county MSTI Idaho Study Area. In all Census Block Groups within 6 miles of Alternative C1, the population included 11.7 percent – slightly lower than either the State as a whole or in the MSTI Idaho Study Area. Relative to Preferred Route C1, the population within 6 miles of Alternative C2 had a slightly lower poverty rate.

Among Block Groups within 6 miles of the Preferred Route, only two had over 25% of their populations under the poverty threshold in 1999: Block Group 4, Census Tract 9701, in Butte County (28.3%), and Block Group 2, Census Tract 9501, in Clark County (27.3%). These Block Groups are also within 6 miles of Preferred Route C1.

Impacts on Fiscal Conditions

Impacts on local assessed property values would be the primary fiscal impacts of Alternative C2, as well as all alternatives. The increase in local assessed values would allow some increase in property tax collections by taxing jurisdictions, but these would be limited by Idaho State Statutory limits on annual rates of increase in property tax revenues.[15] Therefore, simple multiplication of the value of improvements by the existing property tax rate derives an amount indicative not of actual property tax payments that would be made, but primarily the amount by which property tax rates, and hence payments, can be reduced for nearly all property owners in each jurisdiction. This section quantifies these benefits for each of the counties in which Alternative C2 would be sited. Other tax revenues, such as sales and use, and personal income taxes, are not analyzed, nor are the costs of public services.

The increase in local property tax assessments derived from Alternative C2 were estimated by using the total constructed value of the Project as a proxy for the value at which it will ultimately be assessed by the Idaho State Tax Commission, upon its completion. This total value was then

[15] Idaho property tax laws are complex, but in general, annual growth in taxing district revenues are limited to 3% plus each jurisdictions value of new construction . See Idaho State Code, Title 63, Revenue and Taxation, Chapter 8, Levy and Apportionment of Taxes, 63-802. Limitation on Budget Requests – Limitation on Tax Charges --Exceptions.

apportioned among counties according to the total constructed value estimated for each county. Finally, to obtain a measure of the local property tax benefits derived, hypothetical "property tax 'payments'" were calculated by applying the average county property tax rates to the countys estimated total constructed value. It should be noted that the assessed value of the facilities would decline gradually over time due to depreciation, possibly through straight-line depreciation over the Project life. The estimates herein are for the first year of operation.

Average county property tax rates are estimated by the Idaho State Tax Commission (2008) for both rural and urban areas, incorporating all types of taxing districts in each county. These include but are not limited to school districts, fire districts, auditorium districts, and county governments. Calculation of property tax benefits for every taxing district in each county was not attempted in this analysis. Rather, the key indicators of impact were the increase in total county assessed values caused by Preferred Route C1, and the hypothetical total of property taxes paid to all taxing jurisdictions.

The results of this analysis are shown in Exhibit 4-48. In total, the increase to overall county property assessments would be about 1.3 percent from Alternative C2, less than the 1.6% calculated for Preferred Route C1. Although the total value of Alternative C- facilities, and the total property taxes paid, would be greater than those of the Preferred Route, the percentage changes would be lower due to different areas traversed. Clark and Lincoln counties would experience the only sizable proportional increases in assessed values, by 49.3 and 13.7 percent, respectively. These large increases would be significant benefits to both counties; Clark County had the lowest year 2007 total assessed valuations of any of the counties in which Preferred Route C2 would be located, while Lincoln County had the third lowest.

Power and Jefferson counties would benefit by lesser, but noticeable amounts, at 7.1 and 4.1 percent, respectively. Other counties would benefit by relatively small proportional amounts. Bingham County would have the greatest dollar increase in assessed value, at $66 million annually, but the county economy is relatively large, hence its proportional increase would be only 4.7 percent, the third largest proportional increase in assessed valuations, slightly greater than Jefferson County, with a 4.1% proportional increase. Bonneville County would receive a small increase in assessed value (0.2%), making Alternative C2 the only alternative that would benefit the county at all.

Exhibit 4-48: Property Tax Benefits by County, Alternative C-2

C2: Eastern Route County	Land Jurisdiction	Miles	Cost ($956,609/mile)	Cost With Engineering, Permitting, Procurement, Management (8.7% Additional)	With Substation Costs	Total 2007 County Taxable Valuation	Percent of Total Property Tax Valuation	Average County Property Tax Rate (percent)	Total Property Taxes Paid
Bingham	BLM	35.34	$ 33,807,667	$ 36,738,450					
Bingham	Private	16.86	$ 16,128,032	$ 17,526,169					
Bingham	State of Idaho Dept of Lands	11.29	$ 10,800,248	$ 11,736,520					
BINGHAM COUNTY TOTAL		**63.49**	**$ 60,735,946**	**$ 66,001,139**	**$ 66,001,139**	**$ 1,354,374,252**	**4.87%**	1.223%	**$ 807,193.93**
Blaine	BLM	17.77	$ 16,997,881	$ 18,471,425					
Blaine	Private	0.86	$ 822,686	$ 894,004					
Blaine	State of Idaho Dept of Lands	1.16	$ 1,108,024	$ 1,204,079					
BLAINE COUNTY TOTAL		**19.79**	**$ 18,928,590**	**$ 20,569,508**	**$ 20,569,508**	**$ 12,339,477,306**	**0.17%**	0.425%	**$ 87,420.41**
Bonneville	BLM	4.87	$ 4,663,408	$ 5,067,678					
Bonneville	Private	3.86	$ 3,688,989	$ 4,008,787					
Bonneville	State of Idaho Dept of Lands	0.64	$ 611,014	$ 663,983					
BONNEVILLE COUNTY TOTAL		**9.37**	**$ 8,963,411**	**$ 9,740,449**	**$ 9,740,449**	**$ 4,759,866,113**	**0.20%**	1.449%	**$ 141,139.10**
Butte	Private	0.14	$ 133,227	$ 144,777	**$ 144,777**				
BUTTE COUNTY TOTAL		**0.14**	**$ 133,227**	**$ 144,777**	**$ 144,777**	**$ 126,731,538**	**0.11%**	1.380%	**$ 1,997.92**
Clark	BLM	3.42	$ 3,270,088	$ 3,553,572					
Clark	Private	17.09	$ 16,346,401	$ 17,763,469	$ 33,791,458				
Clark	State of Idaho Dept of Lands	3.00	$ 2,873,029	$ 3,122,091					
Clark	USDA - Sheep	7.96	$ 7,610,866	$ 8,270,652					
Clark	USFS	5.53	$ 5,285,344	$ 5,743,530					
CLARK COUNTY TOTAL		**36.99**	**$ 35,385,728**	**$ 38,453,314**	**$ 54,481,303**	**$ 110,491,287**	**49.31%**	1.380%	**$ 751,841.98**
Jefferson	BLM	20.88	$ 19,973,096	$ 21,704,561					
Jefferson	Private	15.84	$ 15,149,433	$ 16,462,736					
Jefferson	State of Idaho Dept of Lands	0.52	$ 496,514	$ 539,557					
Jefferson	State of Idaho Fish and Game	0.12	$ 115,449	$ 125,458					
JEFFERSON COUNTY TOTAL		**37.36**	**$ 35,734,493**	**$ 38,832,312**	**$ 38,832,312**	**$ 949,604,437**	**4.09%**	0.899%	**$ 349,102.49**
Jerome	BLM	3.06	$ 2,929,823	$ 3,183,809					
Jerome	Private	0.37	$ 355,465	$ 386,280	$ 37,212,867				
JEROME COUNTY TOTAL		**3.43**	**$ 3,285,287**	**$ 3,570,089**	**$ 28,300,824**	**$ 1,027,893,946**	**2.75%**	1.093%	**$ 309,328.01**
Lincoln	BLM	32.60	$ 31,185,759	$ 33,889,250					
Lincoln	BOR	0.25	$ 243,583	$ 264,700					
Lincoln	Private	1.20	$ 1,150,986	$ 1,250,765					
Lincoln	State of Idaho Dept of Lands	2.02	$ 1,927,652	$ 2,094,760					
LINCOLN COUNTY TOTAL		**36.07**	**$ 34,507,980**	**$ 37,499,474**	**$ 37,499,474**	**$ 273,799,770**	**13.70%**	0.970%	**$ 363,744.89**
Minidoka	BLM	12.72	$ 12,171,535	$ 13,226,684					
Minidoka	State of Idaho Dept of Lands	1.00	$ 957,591	$ 1,040,604					
MINIDOKA COUNTY TOTAL		**13.72**	**$ 13,129,126**	**$ 14,267,288**	**$ 14,267,288**	**$ 877,574,258**	**1.63%**	0.917%	**$ 130,831.03**
Power	BLM	6.92	$ 6,624,452	$ 7,198,726					
Power	Private	12.01	$ 11,486,378	$ 12,482,131					
Power	State of Idaho Dept of Lands	0.03	$ 29,834	$ 32,420					
POWER COUNTY TOTAL		**18.96**	**$ 18,140,665**	**$ 19,713,277**	**$ 19,713,277**	**$ 625,605,669**	**3.15%**	1.460%	**$ 287,814**
	PROJECT TOTAL	**239.33**	**$ 228,944,454**	**$ 248,791,626**	**$ 289,550,351**	**$ 21,819,812,907**	**1.33%**		**$ 3,230,414**
	Total Private Land	68.22	$ 65,261,597	$ 70,919,118	$ 141,923,443				

Source: Idaho State Tax Commission (2008) for county assessed valuations and property tax rates.

IMPACTS OF ALTERNATIVE C-3 (WESTERN ROUTE)

Impacts on Employment and Income, Population, and Housing

As shown in Exhibit 4-3, the cost of construction of Alternative C3 would be somewhat lower than those estimated for Preferred Route C1 – about 11 percent lower. No detailed construction workforce schedules have been developed for Alternative C3, but since the cost difference is small, it is expected that the employment schedule, as well as wage bill, would be for analytical purposes similar to, but slightly less than, the Preferred Route. Thus, the impacts of Alternative C-3 on employment and income would likely be slightly lower than the impacts for the Preferred Route: That is, a peak work force of roughly 90 (compared to 98 workers for Preferred Route C1), 75% or 70 of whom would be hired from outside the MSTI Idaho Study Area, a total wage bill of about $20 million, and local purchases (of aggregate, small equipment purchase and lease, and office supplies) totaling only about $7 million (2008 dollars).

Total impacts on regional employment from re-spending of worker incomes and incomes derived from Project purchases are also predicted to be approximately equal, but slightly lower, for Alternative C3 as for Preferred Route C1. The indirect and induced employment impacts described for the Preferred Route would still be diffused throughout the MSTI Idaho Study Area but most likely concentrated in its three regional centers of Pocatello, Idaho Falls, and Twin Falls.

Considering the population that would migrate to the MSTI Idaho Study Area permanently as a result of Alternative C3, Population impacts for Alternative C3 would also be about equal to, but slightly less than, those for the Preferred Route because its work force and total wage bill and project purchases would be slightly smaller. At the margin, in-migrants who come to the region to take jobs induced by the Project would number about 120 (compared to about 136 for the Preferred Route) and would likely choose to live in its regional centers. Thus, no noticeable population impacts would occur.

Impacts on rental and ownership housing for these in-migrants would also not be noticeable, since they would take place primarily in the regional centers. However, slight differences in the impact on transient housing may occur, also due to the location of Alternative C2.

The primary difference would be the location of some of the more immediate, direct employment impacts. With Alternative C3 having a portion of its route to the west of Preferred Alternative C1 (Exhibit 4-1), the more direct impacts on local restaurants, stores, and miscellaneous retail establishments patronized by Project workers would depend on the communities from which they commute.

For this more westerly route, there would be no demand for transient accommodations in Aberdeen or American City, Rupert, or Burley, as would be the case for the Preferred Route. Instead, the demand for accommodations, and restaurants and miscellaneous retail stores, would shift to the more western communities in the MSTI Idaho Study area: Carey (2006 population - 508), Bellevue (2006 population – 2,190), and Hailey (2006 population – 7,751), in Blaine County, and Richfield (2006 population – 3,059) and Shoshone (2006 population – 4,738), in Lincoln County.

Since Carey has only 21 RV spots listed in "RV Idaho" (Idaho RV Campgrounds Association, 2008), and no hotel/motels, construction workers on the transmission lines Blaine County stretch would most likely wish to locate in Bellevue or Hailey, the County seat. Bellevue has 48 RV spaces listed in "RV Idaho," while Hailey has only nine, making RV spots along this stretch of Alternative C-3 scarce, since the Hailey area is a popular tourist destination year-round. Hotel space may be similarly limited, with a total of only 7 hotel/motels listed in the Yellow Pages for Hailey and Bellevue combined. The combined total number of hotel/motel rooms in Hailey and Bellevue is approximately 160, and vacancies are limited year-round (personal communication, Jacqueline Moore, Wind River Inn, Hailey, Idaho, June 28, 2008). Thus, only about 240 RV/hotel/motel units have been identified for the Blaine County area with limited vacancies (excluding Ketchum another 10 miles further up the Wind River Valley), compared to potential demand of up to 70. Project construction workers would be likely to have to double up on accommodations, and/or live farther from their construction work sites.

Transient housing availability in Lincoln County is lower than in Blaine County. Only 45 RV spaces were located in Shoshone, and none in Richfield (Idaho RV Campgrounds Association, 2008),, and no hotel/motels are listed in the Yellow Pages. Short-term rentals may, however, be available, although a Yellow Pages search yielded no apartments in Richfield, and only one in Shoshone.

In summary, many of the up to approximately 70 construction workers who may seek transient accommodations probably will have difficulty finding RV/hotel/motel units within a reasonable commuted of the route, for that portion that is located to the west of Preferred Route C1. However, the magnitude of this difficulty would probably be about the same as for Preferred Route C1.

Environmental Justice

Environmental Justice issues are evaluated using data on race/ethnicity and poverty at the Block Group level from Census 2000 (Source: U.S. Bureau of the Census, 2000 Census, Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data). These data are shown in Appendix D, "Environmental Justice Data, Idaho," in Table D-3 for Alternative C-3. The description of Alternative C-3 is primarily in comparison to Preferred Route C1.

The State of Idaho was overwhelmingly classified as being "White Only" in its racial compostion in the year 2000, comprising 90.9% of the total population. "American Indian or Native Alaskan alone" represented the next largest population of specified race (next to "Some Other Race"), with 1.4 percent of the total population. Regarding ethnicity, the largest minority was "Hispanic or Latino,", with 7.9 percent.

In the 16-county MSTI Idaho Study Area, slightly lower proportion of the total population was White Only, at 89.8 percent. Slightly more were classified as American Indian or Native Alaskan Alone, with 1.6% reporting their race as such. Slightly more also were Hispanic or Latino, with 10.4% of the total. The highest proportions occurred in Clark (35.6%) and Minidoka (25.8%) counties.

At the Census Block Group level, for Block Groups within 6 miles of Alternative C3, 87.3% of the population was White Alone, indicating a somewhat lower minority (all other except White Alone) population than for Preferred Route C1, for which the corresponding figure was 84.7 percent. American Indian or Alaskan Native persons represented only 0.7% of the total population, the same as Preferred Route C1. The Hispanic or Latino population also represented a substantially lower proportion of the population, at 14.5%, compared to 22.1% for Preferred Route C1.

Examining minority populations in specific Census Block Groups, the highest proportion of American Indian or Native Alaskan population was in Block Group 1, Census Tract 9501, in Clark County, at 1.1%. This low proportion indicates that no substantial concentrations of American Indian or Native Alaskans existed within 6 miles of Alternative C2 in the year 2000.

Regarding the Hispanic or Latino populations, no concentrations over 50% of Hispanic or Latino persons existed within 6 miles of Preferred Route C3. The highest proportion of any Block Group was in Block Group 1, Census Tract 9501, in Clark County, with 38.5 percent of its total population. Thus, compared to Preferred Route C1, there are substantially fewer concentrations of persons of Hispanic or Latino ethnicity proximate to Alternative C-3.

The population with incomes below poverty level defined by the Census totaled 11.8% of the total in the State of Idaho as a whole in 1999 (the 2000 Census reports income in the year 1999). A slightly higher proportion (13.5%) were below the poverty threshold in the 16-county MSTI Idaho Study Area. In all Census Block Groups within 6 miles of Alternative C3, the population included 15.4 percent – somewhat higher than either the State as a whole or in the MSTI Idaho Study Area. Relative to Preferred Route C1, the population within 6 miles of Alternative C3 had a noticeably, but not substantially, higher poverty rate.

Among Block Groups within 6 miles of Alternative C3, only one had over 25% of its populations under the poverty threshold in 1999: Block Group 2, Census Tract 1, in Beaverhead County, Montana (29.5%). Three other Block Groups had poverty rates above 20% but under 25 percent: Block Group 3, Census Tract 9601, in Jefferson County, Idaho (23.3%), Block Group 3, Census Tract 1, Beaverhead County, Montana (20.3%), and Block Group 3, Census Tract 9701, Butte County, Idaho (20.0%). Thus, concentrations of persons in poverty within 6 miles of Alternative C3 were less noticeable than for Preferred Route C1.

Impacts on Fiscal Conditions

Impacts on local assessed property values would be the primary fiscal impacts of Alternative C3, as well as all alternatives. The increase in local assessed values would allow some increase in property tax collections by taxing jurisdictions, but these would be limited by Idaho State Statutory limits on annual rates of increase in property tax revenues.[16] Therefore, simple multiplication of the value of improvements by the existing property tax rate derives an amount indicative not of actual property tax payments that would be made, but primarily the amount by which property tax rates, and hence payments, can be reduced for nearly all property owners in each jurisdiction. This section quantifies these benefits for each of the counties in which Alternative C3 would be sited. Other tax revenues, such as sales and use, and personal income taxes, are not analyzed, nor are the costs of public services.

The increase in local property tax assessments derived from Preferred Route C3 were estimated by using the total constructed value of the Project as a proxy for the value at which it will ultimately be assessed by the Idaho State Tax Commission, upon its completion. This total value was then apportioned among counties according to the total constructed value estimated for each county. Finally, to obtain a measure of the local property tax benefits derived, hypothetical "property tax 'payments'" were calculated by applying the average county property tax rates to the countys share of the estimated total Project constructed value. It should be noted that the assessed value of the facilities would decline gradually over time due to depreciation, possibly through straight-line depreciation over the Project life. The estimates herein are for the first year of operation.

Average county property tax rates are estimated by the Idaho State Tax Commission (2008) for both rural and urban areas, incorporating all types of taxing districts in each county. These include but are not limited to school districts, fire districts, auditorium districts, and county governments. Calculation of property tax benefits for every taxing district in each county was not attempted in this analysis. Rather, the key indicators of impact were the increase in total county assessed values caused by Preferred Route C-3, and the hypothetical total of property taxes paid to all taxing jurisdictions.

The results of this analysis are shown in Exhibit 4-49. In total, the increase to overall county property assessments would be about 1.6 percent from Alternative C2, the same as for for Preferred Route C1. However, the distribution among counties would be different from the Preferred Route.

Butte, Clark, and Lincoln counties would experience the only sizable proportional increases in assessed values, by 58.7, 58.4, and 14.2 percent, respectively. These large increases would be

[16] Idaho property tax laws are complex, but in general, annual growth in taxing district revenues are limited to 3% plus each jurisdictions value of new construction . See Idaho State Code, Title 63, Revenue and Taxation, Chapter 8, Levy and Apportionment of Taxes, 63-802. Limitation on Budget Requests – Limitation on Tax Charges --Exceptions.

significant benefits to each county; they had the three lowest year 2007 total assessed valuations of any of the counties in which Alternative C3 would be located. Other counties would benefit by relatively small proportional amounts. Since Alternative C3 would not traverse Bingham County at all, unlike the Preferred Route and other alternatives, Bingham County would receive no property tax benefit at all.

Exhibit 4-49: Property Tax Benefits by County, Alternative C3

C3: Western Route County	Land Jurisdiction	Miles	Cost ($1,087,261/mile)	Cost With Engineering, Permitting, Procurement, Management (8.7% Additional)	With Substation Costs	Total 2007 County Taxable Valuation	Percent of Total Property Tax Valuation	Average County Property Tax Rate	Total Property Taxes Paid
Blaine	BLM	28.50	$ 30,992,218	$ 33,678,930					
Blaine	Private	5.41	$ 5,880,250	$ 6,390,008					
Blaine	State of Idaho Dept of Lands	2.78	$ 3,019,453	$ 3,281,209					
BLAINE COUNTY TOTAL		**36.69**	**$ 39,891,921**	**$ 43,350,148**	**$ 43,350,148**	**$ 12,339,477,306**	**0.35%**	0.425%	**$ 184,238**
Butte	DOE	25.59	$ 27,827,628	$ 30,240,002					
Butte	BLM	23.06	$ 25,076,592	$ 27,250,480					
Butte	State of Idaho Dept of Lands	1.57	$ 1,703,546	$ 1,851,227					
Butte	Private	12.78	$ 13,895,011	$ 15,099,569					
BUTTE COUNTY TOTAL		**63.00**	**$ 68,502,778**	**$ 74,441,277**	**$ 74,441,277**	**$ 126,731,538**	**58.74%**	1.380%	**$ 1,027,290**
Clark	BLM	20.21	$ 21,968,296	$ 23,872,726					
Clark	DOE	3.21	$ 3,487,722	$ 3,790,072					
Clark	Private	11.70	$ 12,725,336	$ 13,828,494	$ 29,856,483				
Clark	State of Idaho Dept of Lands	1.01	$ 1,099,850	$ 1,195,196					
Clark	USFS	5.05	$ 5,488,179	$ 5,963,949					
CLARK COUNTY TOTAL		**41.18**	**$ 44,769,382**	**$ 48,650,436**	**$ 64,678,425**	**$ 110,491,287**	**58.54%**	1.380%	**$ 892,562**
Jefferson	BLM	2.50	$ 2,716,956	$ 2,952,488					
JEFFERSON COUNTY TOTAL		**2.50**	**$ 2,716,956**	**$ 2,952,488**	**$ 2,952,488**	**$ 949,604,437**	**0.31%**	0.899%	**$ 26,543**
Jerome	BLM	0.90	$ 980,324	$ 1,065,308					
Jerome	Private	0.36	$ 393,169	$ 427,252	$ 24,730,736				
JEROME COUNTY TOTAL		**1.26**	**$ 1,373,493**	**$ 1,492,561**	**$ 26,223,296**	**$ 1,027,893,946**	**2.55%**	1.093%	**$ 286,621**
Lincoln	BLM	26.23	$ 28,516,485	$ 30,988,576					
Lincoln	BOR	0.25	$ 271,509	$ 295,046					
Lincoln	Private	2.91	$ 3,162,396	$ 3,436,544					
Lincoln	State of Idaho Dept of Lands	3.59	$ 3,899,943	$ 4,238,029					
LINCOLN COUNTY TOTAL		**32.97**	**$ 35,850,333**	**$ 38,958,194**	**$ 38,958,194**	**$ 273,799,770**	**14.23%**	0.970%	**$ 377,894**
	PROJECT TOTAL	**177.61**	**$ 193,104,863**	**$ 209,845,105**	**$ 250,603,829**	**$ 14,827,998,284**	**1.69%**		**$ 2,795,148**
	Total Private Lands	33.16	$ 36,056,161	$ 39,181,867	$ 63,912,602				

Source: Idaho State Tax Commission (2008) for county assessed valuations and property tax rates.

IMPACTS OF ALTERNATIVE C4 (SHEEP CREEK INL BRIGHAM POINT)

Impacts on Employment and Income, Population, and Housing

As shown in Exhibit 4-3, the cost of construction of Alternative C4 would be very slightly below those estimated for Preferred Route C-1 – about 4 percent lower. No detailed construction workforce schedules have been developed for Alternative C-4, but since the cost difference is quite small, it is expected that the employment schedule, as well as wage bill, would be for analytical purposes the same as for the Preferred Route. Thus, the impacts on employment and income for the Preferred Route can be considered as also applying to Alternative C4: That is, a peak work force of roughly 98 workers, 75% or 74 of whom would be hired from outside the MSTI Idaho Study Area, a total wage bill of about $21 million, and local purchases (of aggregate, small equipment purchase and lease, and office supplies) totaling only about $8 million (2008 dollars).

Total impacts on regional employment from re-spending of worker incomes and incomes derived from Project purchases are also predicted to be approximately equal for Alternative C4 as for Preferred Route C1. The indirect and induced employment impacts described for the Preferred Route would still be diffused throughout the MSTI Idaho Study Area but most likely concentrated in its three regional centers of Pocatello, Idaho Falls, and Twin Falls.

There is little difference between Alternative C4 and the Preferred Route, that being in the area north of the Amps Substation (see Exhibit 4-1). North of the Amps Substation, at which both routes converge and remain the same to their termini at the Midpoint Substation, the route vicinities are quite different: Alternative C4 traverses essentially uninhabited areas, while the Preferred Route traverses near Spencer and Dubois along the I-15 corridor. However, the communities available for workers seeking transient accommodations would not noticeably change, remaining Spencer and Dubois in Clark County, because none are available in western Clark County. Thus, aside from longer commute distances, there would not be noticeable differences in the locations chosen by in-migrating construction workers for Alternative C4, and therefore localized impacts of their spending on goods and services would remain the same as for Preferred Route C1.

Therefore, impacts of Alternative C4 on employment, population, and housing would be essentially the same as those described for the Preferred Route.

Environmental Justice

Environmental Justice issues are evaluated using data on race/ethnicity and poverty at the Block Group level from Census 2000 (Source: U.S. Bureau of the Census, 2000 Census, Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data). These data are shown in Appendix D, "Environmental Justice Data, Idaho," in Table D-4 for Alternative C4. The description of Alternative C4 is primarily in comparison to Preferred Route C1.

The State of Idaho was overwhelmingly classified as being "White Only" in its racial compostion in the year 2000, comprising 90.9% of the total population. "American Indian or Native Alaskan alone" represented the next largest population of specified race (next to "Some Other Race"), with 1.4 percent of the total population. Regarding ethnicity, the largest minority was "Hispanic or Latino,", with 7.9 percent.

In the 16-county MSTI Idaho Study Area, slightly lower proportion of the total population was White Only, at 89.8 percent. Slightly more were classified as American Indian or Native Alaskan Alone, with 1.6% reporting their race as such. Slightly more also were Hispanic or Latino, with 10.4% of the total. The highest proportions occurred in Clark (35.6%) and Minidoka (25.8%) counties.

At the Census Block Group level, for Block Groups within 6 miles of Alternative C4, 83.5% of the population was White Alone, indicating a somewhat larger minority (all other except White Alone) population than for Preferred Route C1, for which the corresponding figure was 84.7 percent. American Indian or Alaskan Native persons represented only 0.7% of the total population, the same as Preferred Route C1. The Hispanic or Latino population also represented a somewhat higher proportion of the population, at 25.6 %, compared to 22.1% for Preferred Route C1.

Examining minority populations in specific Census Block Groups, the highest proportion of American Indian or Native Alaskan population was in Block Group 3, Census Tract 9501, in Lincoln County, at 1.2%. This low proportion indicates that no substantial concentrations of American Indian or Native Alaskans existed within 6 miles of Preferred Route C2 in the year 2000.

Regarding the Hispanic or Latino populations, one Block Group with a concentration over 50% of Hispanic or Latino persons existed within 6 miles of Alternative C4: Block Group 4, Census Tract 9803, in Minidoka County (54.5%). Two other Block Groups had Hispanic or Latino populations over 40 percent: Block Group 4, Census Tract 9503, in Bingham County (48.6%), and Block Group 5, Census Tract 9503, also in Bingham County (42.3%). Thus, compared to Preferred Route C1, there are substantially fewer concentrations of persons of Hispanic or Latino ethnicity proximate to Alternative C4. All the above Block Groups are also within 6 miles of Preferred Route C1.

The population with incomes below poverty level defined by the Census totaled 11.8% of the total in the State of Idaho as a whole in 1999 (the 2000 Census reports income in the year 1999). A slightly higher proportion (13.5%) were below the poverty threshold in the 16-county MSTI Idaho Study Area. In all Census Block Groups within 6 miles of Alternative C4, the population included 12.4 percent – somewhat higher than either the State as a whole, but slightly lower than in the MSTI Idaho Study Area. Relative to Preferred Route C1, the population within 6 miles of Alternative C-4 had a noticeably, but not substantially, higher poverty rate.

Among Block Groups within 6 miles of Alternative C4, two had over 25% of their populations under the poverty threshold in 1999: Block Group 4, Census Tract 9701, in Butte County (28.3%), and Block Group 2, Census Tract 9501, in Clark County (27.3%). Four other Block Groups had poverty rates above 20% but under 25 percent: Block Group 3, Census Tract 9601, in Jefferson County (23.3%), Block Group 4, Census Tract 9803, in Minidoka County (22.9%), Block Group 4, Census Tract 9503, in Bingham County (21.1%), and Block Group 3, Census Tract 1, in Beaverhead County, Montana (20.3%). Thus, concentrations of persons in poverty within 6 miles of Alternative C3 were slightly more noticeable than for Preferred Route C1.

Impacts on Fiscal Conditions

Impacts on local assessed property values would be the primary fiscal impacts of Alternative C4, as well as all alternatives. The increase in local assessed values would allow some increase in property tax collections by taxing jurisdictions, but these would be limited by Idaho State Statutory limits on annual rates of increase in property tax revenues.[17] Therefore, simple multiplication of the value of improvements by the existing property tax rate derives an amount indicative not of actual property tax payments that would be made, but primarily the amount by which property tax rates, and hence payments, can be reduced for nearly all property owners in each jurisdiction. This section quantifies these benefits for each of the counties in which Alternative C4 would be sited. Other tax revenues, such as sales and use, and personal income taxes, are not analyzed, nor are the costs of public services.

The increase in local property tax assessments derived from Preferred Route C4 were estimated by using the total constructed value of the Project as a proxy for the value at which it will ultimately be assessed by the Idaho State Tax Commission, upon its completion. This total value was then apportioned among counties according to the total constructed value estimated for each county. Finally, to obtain a measure of the local property tax benefits derived, hypothetical "property tax 'payments'" were calculated by applying the average county property tax rates to the countys estimated total constructed value. It should be noted that the assessed value of the facilities would

[17] Idaho property tax laws are complex, but in general, annual growth in taxing district revenues are limited to 3% plus each jurisdictions value of new construction . See Idaho State Code, Title 63, Revenue and Taxation, Chapter 8, Levy and Apportionment of Taxes, 63-802. Limitation on Budget Requests – Limitation on Tax Charges --Exceptions.

decline gradually over time due to depreciation, possibly through straight-line depreciation over the Project life. The estimates herein are for the first year of operation.

Average county property tax rates are estimated by the Idaho State Tax Commission (2008) for both rural and urban areas, incorporating all types of taxing districts in each county. These include but are not limited to school districts, fire districts, auditorium districts, and county governments. Calculation of property tax benefits for every taxing district in each county was not attempted in this analysis. Rather, the key indicators of impact were the increase in total county assessed values caused by Alternative C4, and the hypothetical total of property taxes paid to all taxing jurisdictions.

The results of this analysis are shown in Exhibit 4-50. In total, the increase to overall county property assessments would be about 1.7 percent from Alternative C4, slightly higher than for Preferred Route C-1. However, the distribution among counties would be different from the Preferred Route.

Clark, Butte, and Lincoln counties would experience the only sizable proportional increases in assessed values, by 60.1, 42.0, and 16.1 percent, respectively. These large increases would be significant benefits to each county; they had the three lowest year 2007 total assessed valuations of any of the counties in which Alternative C4 would be located.. Power and Bingham counties would benefit by lesser, but noticeable amounts, 3.7% and 3.4 percent, respectively. Other counties would benefit by relatively small proportional amounts.

Exhibit 4-50: Property Tax Benefits by County, Alternative C4

C4: Sheep Creek INL Brigham Point		Miles	Cost ($992,063/mile)	Cost With Engineering, Permitting, Procurement, Management	With Substation	Total 2007 County Taxable Valuation	Percent of Total Property Tax Valuation	Average County Property Tax Rate	Total Property Taxes Paid
Bingham	BLM	25.57	$ 25,368,391	$ 27,567,575					
Bingham	DOE	0.00	$ 318	$ 346					
Bingham	Private	15.12	$ 17,013,416	$ 18,488,308					
TOTAL BINGHAM COUNTY		**40.69**	**$ 42,382,126**	**$ 46,056,229**	**$ 46,056,229**	**$ 1,354,374,252**	**3.40%**	1.223%	**$ 563,268**
Blaine	BLM	17.77	$ 19,995,613	$ 21,729,031					
Blaine	Private	0.86	$ 967,774	$ 1,051,670					
Blaine	State of Idaho Dept of Lands	1.16	$ 1,303,434	$ 1,416,429					
TOTAL BLAINE COUNTY		**19.79**	**$ 22,266,822**	**$ 24,197,130**	**$ 24,197,130**	**$ 12,339,477,306**	**0.20%**	0.425%	**$ 102,838**
Butte	DOE	35.29	$ 39,713,566	$ 43,156,331					
Butte	Private	2.62	$ 2,950,508	$ 3,206,288					
TOTAL BUTTE COUNTY		**37.91**	**$ 42,664,075**	**$ 46,362,619**	**$ 46,362,619**	**$ 110,491,287**	**41.96%**	1.380%	**$ 639,804**
Clark	BLM	20.21	$ 22,737,204	$ 24,708,290					
Clark	DOE	3.21	$ 3,609,795	$ 3,922,728					
Clark	Private	11.70	$ 13,170,732	$ 14,312,502	$ 30,340,491				
Clark	State of Idaho Dept of Lands	1.01	$ 1,138,345	$ 1,237,028					
Clark	USFS	5.05	$ 5,680,270	$ 6,172,692					
TOTAL CLARK COUNTY		**41.18**	**$ 46,336,346**	**$ 50,353,240**	**$ 66,381,229**	**$ 110,491,287**	**60.08%**	1.380%	**$ 916,061**
Jefferson	BLM	2.50	$ 2,812,051	$ 3,055,828					
TOTAL JEFFERSON COUNTY		**2.50**	**$ 2,812,051**	**$ 3,055,828**	**$ 3,055,828**	**$ 949,604,437**	**0.32%**	0.899%	**$ 27,472**
Jerome	BLM	3.06	$ 3,446,524	$ 3,745,303					
Jerome	Private	0.37	$ 418,154	$ 454,404	$ 39,414,206				
TOTAL JEROME COUNTY		**3.43**	**$ 3,864,678**	**$ 4,199,707**	**$ 28,930,442**	**$ 1,027,893,946**	**2.81%**	1.093%	**$ 316,210**
Lincoln	BLM	32.60	$ 36,685,655	$ 39,865,931					
Lincoln	BOR	0.25	$ 286,541	$ 311,382					
Lincoln	Private	1.20	$ 1,353,973	$ 1,471,348					
Lincoln	State of Idaho Dept of Lands	2.02	$ 2,267,611	$ 2,464,190					
TOTAL LINCOLN COUNTY		**36.07**	**$ 40,593,781**	**$ 44,112,851**	**$ 44,112,851**	**$ 273,799,770**	**16.11%**	0.970%	**$ 427,895**
Minidoka	BLM	12.72	$ 14,318,097	$ 15,559,332					
Minidoka	State of Idaho Dept of Lands	1.00	$ 1,126,471	$ 1,224,124					
TOTAL MINIDOKA COUNTY		**13.72**	**$ 15,444,568**	**$ 16,783,456**	**$ 16,783,456**	**$ 877,574,258**	**1.91%**	0.917%	**$ 153,904**
Power	BLM	6.92	$ 7,792,736	$ 8,468,287					
Power	Private	12.01	$ 13,512,107	$ 14,683,470					
Power	State of Idaho Dept of Lands	0.03	$ 35,096	$ 38,138					
TOTAL POWER COUNTY		**18.96**	**$ 21,339,938**	**$ 23,189,895**	**$ 23,189,895**	**$ 625,605,669**	**3.71%**	1.460%	**$ 338,572**
	PROJECT TOTAL	**214.26**	**$ 237,704,385**	**$ 258,310,955**	**$ 299,069,679**	**$ 17,669,312,212**	**1.69%**		**$ 3,486,024**
	Total Private Lands	43.89	$ 49,386,665	$ 53,667,990	$ 123,422,687				

Source: Idaho State Tax Commission (2008) for county assessed valuations and property tax rates.

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