

3.10 Social and Economic Values

Issues associated with social and economic values include potential impacts to local employment with related income and population effects, tax and other public revenue changes, effects on public services supply and demand, effects on property values, effects on growth and development of local communities, and effects on the local social fabric and quality of life. These issues include local concerns about the location and timing of displacement of homes, churches, cemeteries, and livelihoods. The proposed project would effectively be a replacement for the existing South Marshall Permit Area of the South Hallsville No. 1 Mine, which is nearing the end of its economic life. Consequently, the potential effects of the No Action Alternative will be of particular concern because the lack of a replacement mine could result in displacement of jobs and related economic activity. An additional issue relates to the project's potential effect on affordable energy.

The study area for social and economic values encompasses a four-county area near the proposed Rusk Permit Area, including portions of Rusk, Panola, and Harrison counties, and for selected topics, Gregg County. Gregg County does not overlap the proposed project boundary; however, approximately 32 percent of the workers employed by the existing South Marshall No. 1 Mine live in Gregg County. Therefore, the proposed project and alternatives could affect Gregg County's economy. The cumulative effects study area for social and economic values includes the same area as the study area for direct/indirect effects; in addition, projects or major economic activities outside of the study area that would affect communities within the study area also are considered in the analysis.

3.10.1 Affected Environment

3.10.1.1 Population

The estimated combined population of Panola, Rusk, Harrison, and Gregg counties was 253,093 in 2008, a net increase of 10.9 percent from the 1990 Census and a 3.9 percent increase from the 2000 Census. As shown in **Table 3.10-1**, Gregg County experienced the highest net population growth from 2000 to 2008 (5.5 percent). Panola, Rusk, and Harrison counties experienced lesser, although still increased, growth over this same time period. The statewide population grew from 20,851,820 in the 2000 Census to an estimated 24,326,974 in 2008, a 16.7 percent increase.

Table 3.10-1 Population Change 1990 to 2008

County	Population Level			Population Change (percent)		
	1990	2000	2008 (estimated)	1990 to 2000	2000 to 2008	1990 to 2008
Panola	22,035	22,756	23,084	3.3	1.4	4.8
Rusk	43,735	47,372	48,887	8.3	3.2	11.8
Harrison	57,583	62,110	63,594	7.9	2.4	10.4
Gregg	104,948	111,379	117,528	6.1	5.5	12.0
County Totals	228,301	243,617	253,093	6.7	3.9	10.9
State of Texas	16,986,510	20,851,820	24,326,974	22.8	16.7	43.2

Source: HDR 2009d.

Population in the local area and statewide grew at a slower rate between 2000 and 2008 than from 1990 to 2000. Only Gregg County was able to maintain and slightly increase its average annual growth rate after 2000; growth rates for each of the other three counties and for the state declined to varying degrees

after 2000. Growth in the four counties' combined lagged well behind the statewide growth rate over the past two decades.

Texas' statewide population is expected to increase by 50 percent from 2000 to 2030, as shown in **Table 3.10-2**. The four counties' combined population is expected to increase by 21 percent, less than half the rate for the state over the same time period.

Table 3.10-2 Projected Population Levels from 2000 to 2030

County	Actual/Estimated		Projected		
	2000	2008	2010	2020	2030
Panola	22,756	23,084	23,796	24,497	24,395
Rusk	47,372	48,887	49,652	51,792	52,789
Harrison	62,110	63,594	68,914	75,542	80,275
Gregg	111,379	117,528	121,068	130,314	138,599
County Totals	243,617	253,093	263,430	282,145	295,026
Statewide	20,851,820	24,326,974	24,395,179	27,917,492	31,197,014

Source: HDR 2009d.

Harrison County is projected to continue its relatively modest population growth of the past two decades into the future, growing 24 percent from 2000 to 2030. Gregg County's population also is expected to continue its expansion, increasing by 29 percent from 2000 to 2030, while the populations of Rusk and Panola counties are expected to grow at lower rates of 11 and 7 percent, respectively.

3.10.1.2 Employment

The size of a county's labor force is measured as the total number of people currently employed plus the number actively seeking employment. Of the four affected counties, Panola County has experienced the most rapid growth in the size of its labor force, growing by 3.6 percent per year from an average of 10,383 in 2000 to 14,234 in the first 9 months of 2009 (**Table 3.10-3**). This rate was more than double the average annual statewide growth rate of 1.6 percent over the same period, although the size of Panola County's work force is much smaller than the other counties in the study area. Gregg County experienced an average annual growth of 2 percent, while Rusk and Harrison counties' labor forces both increased at an average of 1.8 percent per year over the 9-year period. All of these growth rates were slightly above the state growth rate.

Unemployment rates in the four study area counties have fluctuated above and below the state average from 2000 to 2009. Since 2004, unemployment rates for three of the four counties generally have been below state levels, while Harrison County's rate generally has been above the statewide average.

Figure 3.10-1 shows that unemployment rates for the study area counties have closely tracked the statewide rates over the past decade despite minor variances.

Table 3.10-4 shows the employment levels in the four-county study area by industry sector. All four counties have had growth in the natural resources and mining sector, where most of the project-related employment would be, although the absolute numbers and percent change from 2007 to 2008 vary considerably. The percent of employment in this sector in 2008 was highest in Rusk County at 14.3 percent, followed by 13.5 percent in Panola County, 8.9 percent in Harrison County, and 6.3 percent in Gregg County, which, as the commercial center of the region, has by far the largest and most diverse employment base in the area.

Table 3.10-3 Average Annual Labor Force

County	2000	2001	2002	2003	2004	2005¹	2006	2007	2008	2009²	Average Annual Growth Rate
Panola	10,383	10,627	10,903	11,167	11,377	11,668	12,015	12,423	13,165	14,234	3.6%
Rusk	21,042	21,290	21,492	21,876	22,613	22,806	22,931	23,503	24,081	24,646	1.8%
Harrison	29,347	29,154	30,146	30,790	31,425	31,247	31,503	32,185	32,950	34,464	1.8%
Gregg	55,124	55,864	57,094	58,243	60,274	60,780	61,510	62,620	64,182	65,606	2.0%
County Totals	115,896	116,935	119,635	122,076	125,689	126,501	127,959	130,731	134,378	138,950	2.0%
Texas	10,347,000	10,519,000	10,803,000	10,964,000	11,051,000	11,170,000	11,348,000	11,474,000	11,701,000	11,945,000	1.6%

¹ Because of substantial methodology changes for geographic areas below the state level, data from 2005 are not considered comparable to data from 2004 and earlier.

² Data for 2009 include January through September.

Source: HDR 2009d.

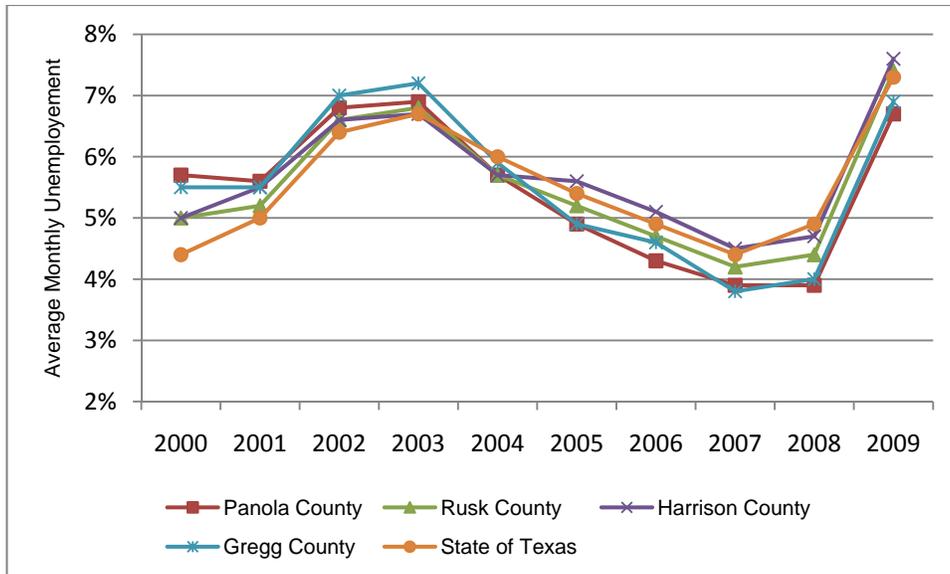


Figure 3.10-1 Comparison of Average Monthly Unemployment Rates (2000 to 2009) – Counties and Statewide

Table 3.10-4 Employment by Industry Sector

Industry Sector	Panola County			Rusk County			Harrison County			Gregg County		
	2007	2008	% Change	2007	2008	% Change	2007	2008	% Change	2007	2008	% Change
Natural Resources & Mining	790	1,140	44.30	1,870	2,010	7.49	1,570	2,060	31.21	3,920	4,680	9.39
Construction	1,500	1,500	0.00	1,360	1,550	13.97	1,210	1,480	22.31	4,700	5,030	7.02
Manufacturing	920	910	-1.09	1,480	1,580	6.76	4,660	4,660	0	11,770	11,760	-0.08
Trade, Transport, and Utilities	1,480	1,670	12.84	2,560	2,650	3.52	3,860	3,990	3.37	14,940	15,720	5.22
Information	NA	NA	NA	130	130	0	120	120	0	1,260	1,170	-7.14
Financial Activities Group	250	250	0.00	560	580	3.57	1,300	1,230	-5.38	2,950	2,990	1.36
Professional, Business, and Other Services	460	510	10.87	1,020	910	-10.78	1,770	1,730	-2.26	6,450	7,280	12.87
Education and Health Services	1,380	1,530	10.87	3,060	3,070	0.33	4,740	4,690	-1.05	15,450	15,460	0.06
Leisure and Hospitality Group	460	450	-2.17	690	830	20.29	1,680	1,680	0	6,030	6,360	5.47
Other Services	160	150	-6.25	330	320	-3.03	830	790	-4.82	1,960	1,990	1.53
Public Administration	280	290	3.57	420	440	4.76	620	630	1.61	1,950	2,020	3.59
Total All Industries	7,700	8,450	9.74	13,470	14,070	4.45	22,350	23,050	3.13	71,370	74,470	4.34

Source: HDR 2009d.

3.10.1.3 Income

As shown in **Table 3.10-5**, Gregg County had the highest personal income per capita (\$38,717) in 2007 of the four study area counties. Personal incomes for Harrison, Panola, and Rusk counties were from 16 percent to over 27 percent lower, with Rusk being the lowest (\$28,081). Harrison County experienced the greatest rate of increase in personal income from 2000 to 2007, with a total increase of 50.3 percent. Although the annual average per capita income was lower than the state average for Panola, Rusk, and Harrison counties during the 2000 to 2007 time period, the per capita personal income growth rate of all four study area counties exceeded the statewide growth rate for the same time period.

Table 3.10-5 Annual Per Capita Personal Income for 2000 through 2007

County	2000	2001	2002	2003	2004	2005	2006	2007	Net Change from 2000 to 2007
Panola	\$21,412	\$22,145	\$22,155	\$23,458	\$25,477	\$26,569	\$28,617	\$31,882	48.9%
Rusk	\$21,050	\$21,740	\$21,945	\$22,743	\$23,354	\$24,549	\$26,232	\$28,081	33.4%
Harrison	\$21,574	\$22,224	\$22,978	\$23,415	\$25,133	\$27,402	\$29,729	\$32,435	50.3%
Gregg	\$27,212	\$28,472	\$28,750	\$30,696	\$31,743	\$33,704	\$36,342	\$38,717	42.3%
Statewide	\$28,317	\$29,045	\$28,858	\$29,436	\$30,989	\$33,249	\$35,162	\$37,083	31.0%

Source: HDR 2009d.

The four-county study area hosts a variety of business activities. Total earnings for all industry in the four-county study area were approximately \$5.7 billion in 2007. Rusk County is home to oil and gas, manufacturing, tourism, agribusiness, and lignite mining. **Table 3.10-6** shows the average annual earnings by industry for Rusk County from 2001 to 2007. Its agribusiness sector produces beef cattle, nursery plants, and hay. Minerals and mining (which includes lignite mining and oil and natural gas operations) accounted for an average of 16.9 percent of the total industry earnings in Rusk County during the period from 2001 to 2007. Government was the next highest with an average of 16.5 percent and the manufacturing and construction industries accounted for 11.6 and 11.1 percent, respectively, of the total earnings in Rusk County from 2001 through 2007. Henderson is the largest city in Rusk County and the county seat. Henderson is home to a hospital as well as some varied manufacturing companies.

Harrison County's economy is composed of manufacturing, oil and gas production, lumber, pottery, and agribusiness. **Table 3.10-7** shows earnings by industry for industries in Harrison County. Manufacturing is the largest industry, representing 27.5 percent of total industry earnings. The next largest industries are government and minerals and mining, at 14.5 and 9.1 percent, respectively. The City of Marshall, the county seat, is home to some manufacturing, a college, and a hospital.

Panola County's economy has been heavily dominated by government and construction in recent years. Manufacturing has been a more consistent contributor since 2001, but fell to third place in 2004 and has not kept pace since. The minerals and mining and the transportation and warehousing industries round out the top five economic contributors. The central elements of the county's economy are oil and gas, agribusiness, timber, and food processing. The county's main agricultural products are broiler chickens, beef cattle, and hay. **Table 3.10-8** shows earnings by industry for Panola County from 2001 through 2007. The City of Carthage, the largest city in the county and the county seat, has a hospital, a community college, and is home to the Texas Country Music Hall of Fame.

Gregg County has multiple components to its economy. The City of Longview, the largest city in the study area and the Gregg County seat, has two hospitals, a university, and several large manufacturing companies. Kilgore, the second largest town in the county, has a community college, home of the famed Kilgore College Rangerettes. The county's chief agricultural products are cattle, horses, hay, and nursery crops. **Table 3.10-9** shows earnings by industry for Gregg County from 2001 through 2007. Manufacturing has been Gregg County's largest industry group, accounting for almost 22 percent of total earnings in 2007. Health and social assistance, government and government enterprises, retail trade, and minerals and mining round out the county's top five industries.

3.10.1.4 Public Finance

Harrison County has the highest property tax rate of the four counties in the study area; Panola and Rusk counties' rates are only slightly lower (**Table 3.10-10**). Gregg County's rate is approximately \$0.07 to \$0.08 lower per \$100 of assessed property value; however, with the highest total appraised value of the four counties, Gregg County receives almost as much revenue from its property tax as Harrison County and notably more than either Panola County or Rusk County.

The current (2009) Texas state retail sales tax rate is 6.25 percent. City and county sales tax rates vary by jurisdiction at the discretion of the local governing body. Gregg County imposes a 0.50 percent sales and use tax; it is the only one of the four counties in the study area that collects a sales tax for county revenue (HDR 2009d). The City of Tatum (in Rusk and Panola counties) collects a local sales and use tax of 1.75 percent that, when combined with the state tax, results in a total sales and use tax of 8.0 percent in the city (HDR 2009d).

Gregg County ranks highest of the four study area counties in total sales subject to state and local sales tax, largely because of its position as the trade center for the region. Taxable sales in Gregg County have been more than eight times the taxable sales in Panola County in recent years (**Table 3.10-11**). Notably, taxable sales in Panola County have grown at an average annual rate of over 22 percent since 2002, compared with just under 9 percent in Gregg County. Nevertheless, Panola County still trails the other three study area counties in total taxable sales. Rusk and Harrison counties have experienced average annual rates of growth in taxable sales of approximately 13 percent and 11 percent, respectively. Gregg County's 0.5 percent sales and use tax generated approximately \$12.9 million for county purposes in 2008.

Table 3.10-6 Annual Earnings by Industry in Rusk County from 2001 to 2007 (in \$000s)

Industry	2001	2002	2003	2004	2005	2006	2007
Farm	\$23,559	\$23,733	\$26,206	\$29,473	\$24,881	\$21,579	\$23,742
Forestry, Fishing, and Related Activities	\$6,100	\$4,945	\$5,988	\$6,378	\$6,344	\$6,229	\$6,166
Minerals and Mining	\$72,966	\$71,829	\$80,335	\$94,000	\$117,298	\$134,980	\$157,325
Utilities	\$36,633	\$38,484	\$41,832	\$44,828	\$46,135	\$47,939	\$48,466
Construction	\$60,936	\$77,334	\$67,062	\$57,393	\$66,209	\$69,291	\$81,568
Manufacturing	\$72,198	\$63,448	\$61,266	\$68,761	\$60,758	\$65,197	\$67,965
Wholesale Trade	\$9,309	\$9,233	\$9,188	\$12,422	\$16,057	\$22,502	\$28,928
Retail Trade	\$36,188	\$40,700	\$46,151	\$45,688	\$48,146	\$49,003	\$49,208
Transportation and Warehousing	\$16,894	\$15,211	\$16,795	\$24,390	\$36,960	\$26,732	\$31,953

Table 3.10-6 Annual Earnings by Industry in Rusk County from 2001 to 2007 (in \$000s)

Industry	2001	2002	2003	2004	2005	2006	2007
Information	\$6,385	\$6,903	\$7,697	\$8,465	\$8,320	\$8,397	\$8,731
Finance and Insurance	\$22,275	\$20,521	\$20,139	\$19,437	\$21,454	\$22,994	\$27,632
Real Estate, Rental, and Leasing	\$4,291	\$4,096	\$4,795	\$4,849	\$6,094	\$6,835	\$8,373
Professional, Scientific, and Tech Services	C ¹	\$24,590	C ¹				
Management of Companies and Enterprises	C ¹						
Admin and Waste Services	\$17,424	\$18,211	\$17,274	\$15,521	\$15,722	C ¹	\$17,377
Educational Services	C ¹	\$1,108	\$1,223	\$1,305	\$1,351	C ¹	\$1,563
Health and Social Assistance	C ¹	\$34,812	\$36,775	\$38,892	\$40,713	C ¹	\$47,740
Arts, Entertainment, and Recreation	\$1,306	\$1,088	\$1,190	\$1,179	\$1,334	\$1,273	\$1,071
Accommodation and Food Services	\$10,496	\$11,190	\$11,686	\$8,250	\$9,199	\$10,174	\$11,474
Other Services	\$19,333	\$20,499	\$22,076	\$21,963	\$22,565	\$24,157	\$24,362
Government	\$79,466	\$82,027	\$85,297	\$88,360	\$91,572	\$97,511	\$104,485
Total	\$495,759	\$545,372	\$562,975	\$591,554	\$641,112	\$639,383	\$748,129

¹ C = Confidential information not shown to avoid disclosure; however, estimates for this item are included in the totals.

Source: HDR 2009d.

Table 3.10-7 Annual Earnings by Industry in Harrison County from 2001 to 2007 (in \$000s)

	2001	2002	2003	2004	2005	2006	2007
Farm	\$6,142	\$6,164	\$8,985	\$8,576	\$5,429	\$5,895	\$6,242
Forestry, Fishing, and Related Activities	\$3,116	\$2,611	\$2,974	\$3,939	\$5,033	\$3,771	\$5,268
Minerals and Mining	\$75,183	\$71,659	\$84,677	\$111,152	\$124,476	\$166,718	\$212,033
Utilities	\$16,516	\$17,977	\$20,056	\$23,278	\$24,021	\$24,945	\$25,816

Table 3.10-7 Annual Earnings by Industry in Harrison County from 2001 to 2007 (in \$000s)

	2001	2002	2003	2004	2005	2006	2007
Construction	\$49,170	\$45,142	\$49,220	\$57,136	\$62,353	\$73,935	\$84,194
Manufacturing	\$319,403	\$324,590	\$187,683	\$222,246	\$223,714	\$238,847	\$261,496
Wholesale Trade	\$26,395	\$24,374	\$24,096	\$28,882	\$34,531	\$36,426	\$38,996
Retail Trade	\$65,135	\$67,476	\$70,859	\$72,035	\$78,688	\$90,275	\$83,515
Transportation and Warehousing	\$26,143	\$26,230	\$31,292	\$34,799	\$34,943	\$40,968	\$44,268
Information	\$6,557	\$6,574	\$7,585	\$7,060	\$8,149	\$8,029	\$8,183
Finance and Insurance	\$39,554	\$41,284	\$42,172	\$45,715	\$43,539	\$53,520	\$67,450
Real Estate, Rental, and Leasing	\$7,853	\$8,644	\$8,583	\$7,760	\$8,975	\$9,356	\$9,915
Professional, Scientific, and Tech Services	\$51,143	\$56,992	\$59,837	C ¹	C ¹	C ¹	C ¹
Management of Companies and Enterprises	\$0	\$0	\$0	C ¹	\$0	C ¹	C ¹
Admin and Waste Services	\$11,728	\$18,358	\$21,771	\$24,701	\$25,867	\$25,385	\$33,621
Educational Services	C ¹	C ¹					
Health and Social Assistance	C ¹	C ¹					
Arts, Entertainment, and Recreation	\$2,026	\$2,043	\$2,220	\$2,261	\$2,290	\$2,297	\$2,613
Accommodation and Food Services	\$15,843	\$16,676	\$17,698	\$21,291	\$22,530	\$24,214	\$23,873
Other Services	\$31,394	\$35,184	\$52,479	\$54,966	\$57,388	\$58,122	\$58,323
Government	\$109,022	117,848	123,104	\$127,885	\$133,727	\$140,526	\$150,200
Total	\$862,323	\$889,826	\$815,291	\$853,682	\$895,653	\$1,003,229	\$1,116,006

¹ C = Confidential information not shown to avoid disclosure; however, estimates for this item are included in the totals.

Source: HDR 2009d.

Table 3.10-8 Annual Earnings by Industry in Panola County from 2001 to 2007 (in \$000s)

	2001	2002	2003	2004	2005	2006	2007
Farm	\$22,347	\$22,704	\$21,272	\$25,581	\$20,884	\$16,270	\$18,447
Forestry, Fishing, and Related activities	\$5,132	\$2,979	\$2,674	\$2,654	\$3,742	\$3,844	\$4,280
Minerals and Mining	\$26,650	\$27,171	\$45,671	\$53,121	\$64,145	\$85,949	\$98,626
Utilities	\$1,683	\$2,205	\$1,726	\$21,214	\$2,613	\$2,185	\$2,256
Construction	\$29,742	\$27,168	\$32,791	\$43,394	\$56,358	\$73,842	\$97,988
Manufacturing	\$37,662	\$40,007	\$38,661	\$36,878	\$38,463	\$41,567	\$43,261
Wholesale Trade	\$7,960	\$6,538	\$8,508	\$10,337	\$12,767	\$16,069	\$20,237
Retail Trade	\$17,676	\$18,346	\$17,903	\$18,354	\$20,766	\$22,196	\$21,504
Transportation and Warehousing	\$24,940	\$23,830	\$23,500	\$25,440	\$29,075	\$30,646	\$38,964
Information	\$1,712	\$1,406	\$1,338	\$1,436	\$1,179	\$1,339	\$1,726
Finance and Insurance	\$8,208	\$8,532	\$8,321	\$9,268	\$9,948	\$10,839	\$11,331
Real Estate, Rental, and Leasing	\$2,668	\$2,890	\$2,947	\$2,843	\$2,784	\$3,450	\$3,747
Professional, Scientific, and Tech Services	\$8,654	\$8,255	\$7,319	\$8,860	C ¹	C ¹	C ¹
Management of Companies and Enterprises	\$0	\$0	\$0	\$0	C ¹	C ¹	C ¹
Admin and Waste Services	\$3,187	\$3,260	\$3,897	\$5,221	\$6,250	\$6,809	\$6,991
Educational Services	C ¹	\$561	\$487	\$413	\$392	\$415	\$442
Health and Social Assistance	C ¹	\$19,352	\$20,256	\$22,071	\$20,241	\$19,625	\$19,830
Arts, Entertainment, and Recreation	C ¹	\$255	C ¹	C ¹	\$461	\$628	\$901
Accommodation and Food Services	C ¹	\$4,988	C ¹	C ¹	\$5,617	\$5,279	\$6,048
Other Services	\$9,324	\$10,238	\$10,883	\$10,996	\$11,581	\$12,686	\$13,082
Government	\$46,259	\$47,112	\$47,868	\$49,330	\$51,924	\$52,740	\$55,994
Total	\$253,804	\$277,797	\$296,022	\$347,411	\$359,190	\$406,378	\$465,655

¹ C = Confidential information not shown to avoid disclosure; however, estimates for this item are included in the totals.

Source: HDR 2009d.

Table 3.10-9 Annual Earnings by Industry in Gregg County from 2001 to 2007 (in \$000s)

	2001	2002	2003	2004	2005	2006	2007
Farm	\$-1,452	\$-1,346	\$-1,554	\$-1,368	\$-2,692	\$-3,120	\$-2,825
Forestry, Fishing, and Related Activities	\$6,273	\$4,200	\$4,510	\$4,138	\$4,323	\$4,290	\$4,937
Minerals and Mining	\$254,387	\$231,095	\$294,234	\$335,142	\$398,403	\$509,242	\$597,573
Utilities	\$17,725	\$20,143	\$20,032	\$20,664	\$21,755	\$23,279	\$24,541
Construction	\$162,101	\$158,743	\$168,754	\$174,379	\$211,115	\$236,996	\$270,259
Manufacturing	\$400,135	\$375,859	\$557,642	\$621,869	\$644,402	\$725,609	\$765,473
Wholesale Trade	\$150,269	\$155,477	\$155,109	\$170,534	\$204,358	\$241,340	\$273,558
Retail Trade	\$267,405	\$269,971	\$262,121	\$266,086	\$344,819	\$373,699	\$388,160
Transportation and Warehousing	\$115,410	\$106,936	\$110,435	\$134,871	\$121,269	\$134,529	\$147,041
Information	\$140,299	\$176,531	\$193,970	\$188,415	\$204,646	\$215,393	\$221,853
Finance and Insurance	\$86,129	\$93,307	\$100,870	\$89,587	\$99,109	\$111,344	\$120,875
Real Estate, Rental, and Leasing	\$41,776	\$43,208	\$39,651	\$48,910	\$54,550	\$68,349	\$81,603
Professional, Scientific, and Tech Services	\$132,040	\$128,164	\$151,170	\$161,204	\$149,020	\$173,012	\$188,977
Management of Companies and Enterprises	\$13,240	\$17,572	\$18,860	\$22,040	\$22,672	\$34,735	\$26,292
Admin and Waste Services	\$73,364	\$65,154	\$68,906	\$80,435	\$92,023	\$101,720	\$129,008
Educational Services	\$24,544	\$27,143	\$29,876	\$32,309	\$33,878	\$35,739	\$38,304
Health and Social Assistance	\$353,749	\$380,172	\$393,264	\$434,655	\$455,890	\$473,178	\$486,570
Arts, Entertainment, and Recreation	\$9,661	\$9,527	\$9,839	\$9,384	\$9,988	\$10,188	\$11,161
Accommodation and Food Services	\$80,398	\$82,699	\$82,351	\$85,884	\$87,927	\$93,840	\$96,480
Other Services	\$87,150	\$92,252	\$94,253	\$99,985	\$109,970	\$118,291	\$126,462
Government	\$260,037	\$275,846	\$284,415	\$286,530	\$304,336	\$313,989	\$334,851
Total	\$2,674,640	\$2,712,653	\$3,038,708	\$3,265,653	\$3,571,761	\$3,995,642	\$4,331,153

Source: HDR 2009d.

Table 3.10-10 Property Tax by County (2007)

County	Total Appraised Property Value	Tax Rate per \$100 of Assessed Value	Revenue Produced
Harrison	\$6,352,340,150	\$0.348500	\$22,137,905
Panola	\$4,612,590,057	\$0.344100	\$15,871,922
Rusk	\$5,116,733,160	\$0.338500	\$17,320,142
Gregg	\$8,055,989,194	\$0.270000	\$21,751,171

Source: HDR 2009d.

Table 3.10-11 Taxable Sales by County

Year	Panola	Rusk	Harrison	Gregg
2002	\$92,443,111	\$184,931,687	\$322,468,779	\$1,537,250,073
2003	\$104,137,722	\$190,622,495	\$341,294,472	\$1,602,878,713
2004	\$134,889,542	\$239,017,580	\$380,239,060	\$1,742,074,508
2005	\$172,502,661	\$251,126,617	\$428,027,916	\$1,917,099,190
2006	\$221,680,362	\$297,956,287	\$521,291,958	\$2,154,212,345
2007	\$269,524,335	\$329,207,893	\$564,137,794	\$2,323,046,146
2008	\$310,888,416	\$380,230,808	\$589,720,617	\$2,576,786,619

Source: HDR 2009d.

3.10.1.5 Public Education

Public schools in Texas are funded by a combination of local, state, and federal funds. The percentage of revenue from each source varies by district because of variations in student population and local property wealth. Because of the disparity in property taxing capacity among districts, the state has a revenue balancing or equalization formula by which it redistributes property tax revenues from tax-rich districts to poorer districts. The bulk of school funding derives from local and state funds, with the federal funds being used for special programs or to provide services to a specific group of students.

Public education in the project vicinity is administered by several independent school districts. The most likely to be affected by the project are: Hallsville ISD, Marshall ISD, and Tatum ISD. **Table 3.10-12** provides selected information on property tax-related funding for the three school districts, which are in or near existing and proposed South Hallsville No. 1 Mine mining areas. All three of the school districts receive a substantial portion of their funding from local property taxes, indicating their local assessed valuation bases are relatively strong. All three districts are in the top 25 percent of districts statewide in terms of assessed valuation per student, led by Tatum ISD, which is in the top 6 percent (Texas Education Agency 2010).

Table 3.10-12 School District Funding Received from Property Taxes

District	District Name	Total Assessed Taxable Property Value (2008 Tax Year)	Total Value per Student (2008-2009 Tax Year)	School District Property Tax per \$100 of Assessed Value (2008)	School Funding Received from Property Tax (%)
102904	Hallsville ISD	\$2,537,643,180	\$642,939	1.30	72.4
102902	Marshall ISD	\$2,565,430,343	\$478,193	1.04	69.1
201910	Tatum ISD	\$1,856,532,138	\$1,357,152	1.04	80.4

Source: HDR 2009d.

Enrollment in the Hallsville ISD is at capacity, with a total of 4,284 currently enrolled students (Greer 2009). There are 461 students enrolled in the Hallsville Primary School, 590 students enrolled in the Hallsville Elementary School, 666 students enrolled in the Hallsville Intermediate School, 650 students enrolled in the Hallsville Middle School, 650 students enrolled in the Hallsville Junior High School, and 1,248 students enrolled in the Hallsville High School (Greer 2009). Several of the current campuses are using portable buildings as classrooms; however, Hallsville ISD accepts all students within their school district boundaries (Greer 2009). Construction has begun on two new kindergarten through 4th grade (K-4) campuses scheduled to open in 2011, and a new Hallsville High School will open in 2012 (Greer 2009). They will be converting the existing intermediate campus to an elementary (Pre-K-4) campus and will rename it East Elementary. They will be converting the existing primary campus to an elementary (Pre-K-4) campus and will rename it Central Elementary. In addition, they will upgrade the existing middle school and junior high for 5th grade only and 6th grade only campuses and convert the existing high school to the junior high. Finally, they will convert the 2nd grade campus to Auxiliary Services.

Current enrollment is below capacity in the Marshall ISD, and there are no plans to expand facilities in the immediate future (Paddie 2009). There are currently 143 students at Washington Early Childhood Center, 304 students at J. H. Moore Elementary School, 404 students at William B. Travis Elementary School, 518 students at South Marshall Elementary School, 301 students at Robert E. Lee Elementary School, 573 students at David Crockett Elementary School, 216 students at G. W. Carver Elementary School, 443 students at Sam Houston Middle School, 357 students at Price T. Young Middle School, 786 students at Marshall Junior High School, and 1,589 students at Marshall High School (Paddie 2009). The number of additional students the campuses could accommodate is not available (Paddie 2009).

Enrollment in Tatum ISD is below capacity for most school grades. Currently, there are 508 students enrolled in Tatum Primary School with room for approximately 100 more students (Blount 2009). There are 339 students enrolled in Tatum Elementary School; there was no definitive information on how many more elementary students the school could accommodate (Hayden 2009). There are 226 students at Tatum Middle School with room for approximately 30 more. There are 430 students enrolled in Tatum High School with room for approximately 130 more students (Parks 2009). Tatum ISD is planning to build another campus in the future and will move the 6th grade students to the middle school, which currently serves only 7th and 8th grades. Tatum ISD has purchased land for new facilities; however, a bond election will not be held until 2010 so it is uncertain when new facilities would be built (Sammons 2009).

3.10.1.6 Housing

A majority of the housing in the study area was owner-occupied, rather than renter-occupied, in 2000 based on the 2000 census. Owner-occupied housing represented 80.8 percent of the housing units in Panola County, 79.9 percent of the housing units in Rusk County, 77.2 percent of the housing units in

Harrison County, and 64.1 percent of the housing units in Gregg County. The City of Tatum had lower owner-occupancy compared to the surrounding area, with 63.6 percent of units owner-occupied. For comparison, owner-occupied housing represented 63.8 percent of the housing units in the State of Texas (U.S. Census Bureau 2000, Table H7, Summary File 3).

At the time of the 2000 census, there were 11,052 vacant housing units in the study area. Nearly half of those (5,366 units) were “seasonal, recreational, or occasional use” or “other vacant” units, thus of uncertain availability (**Table 3.10-13**). Approximately 40 percent (4,408 units) were “for rent” or “for sale” and, thus, apparently available. Vacancy rates in the four study area counties ranged from 7.9 percent in Gregg County to 16.2 percent in Panola County. All but Gregg County had higher vacancy rates than the state’s 9.4 percent rate (**Table 3.10-13**). The City of Tatum also had a relatively high 13.4 percent vacancy rate.

Housing vacancy rates in the study area remain very high and are slightly to substantially higher than 2000 rates in all four study area counties. Estimated average vacancy rates for 2006 through 2008 were 8.0 percent for Gregg County, 16.9 percent for Harrison County, 21.2 percent for Panola County, and 14.0 percent for Rusk County. Gregg County was the only one of the four counties with a rate lower than Texas’ 12.3 percent rate (U.S. Census Bureau 2009). An estimate for the City of Tatum and details on the type of units available in the 2006-2008 time period are not available, as the estimates are based on 3-year sample survey data rather than 100 percent count data.

There are approximately 469 residences in the study area, 21 of which are in Mine Area V, 85 are in Mine Area W, and 150 are in Mine Area X. An additional 213 residences are in the buffer areas within the Rusk Permit Area boundary, but outside the planned disturbance areas (HDR 2010d).

3.10.1.7 Real Estate Values

Land in the vicinity of the proposed project is predominantly undeveloped. Forestry accounts for over 60 percent of all land use in the area; pasture land accounts for 28 percent of the permit area and nearly 19 percent of the land within 2 miles of the proposed permit boundary. Residential uses account for less than 1 percent of the land in the proposed permit boundary, but are slightly more prevalent within 2 miles of the permit boundary (see Section 3.9, Land Use) (HDR 2009d).

3.10.1.8 Other Public Services

Emergency services are the primary public service that could be affected by the proposed project. For Panola County, ambulance and emergency medical services (EMS) are provided by East Texas Medical Center, in Carthage. Fire protection is provided by several rural fire districts in the area and by the Beckville and Carthage fire departments. For Rusk County, ambulance service is provided by Good Shepherd in Longview; EMS and fire protection are provided by volunteer services. The City of Marshall provides ambulance, EMS, and fire protection in Harrison County, near the study area, and ambulance service augmented by volunteer fire departments in rural areas of the county. In Gregg County, ambulance, EMS, and fire protection are provided by the cities of Longview and Kilgore, with additional fire protection support from rural volunteer fire departments. The Gregg County Sheriff’s Office is located in Longview. The volunteer EMS and fire departments typically are staffed by local, on-call personnel.

The Rusk Permit Area includes two churches and a cemetery within 1 mile of each other on CR 2210. Though not strictly public services, they contribute to the social fabric of the community. Potential effects on these facilities are addressed in Section 3.9, Land Use and Recreation.

Table 3.10-13 Study Area Housing Data – 2000

Housing Units	Panola County		Rusk County		Harrison County		Gregg County		Tatum City		State of Texas	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Total	10,524	100.0	19,867	100.0	26,271	100.0	46,349	100.0	508	100.0	8,157,575	100.0
Occupied	8,821	83.8	17,364	87.4	23,087	87.9	42,687	92.1	440	86.6	7,393,354	90.6
Vacant	1,703	16.2	2,503	12.6	3,184	12.1	3,662	7.9	68	13.4	764,221	9.4
For Rent	222	2.1	328	1.7	635	2.4	1,660	3.6	33	6.5	254,383	3.1
For Sale Only	230	2.2	310	1.6	366	1.4	657	1.4	5	1.0	103,309	1.3
Rented or Sold, Not Occupied	166	1.6	518	2.6	284	1.1	289	0.6	6	1.2	59,655	0.7
For Seasonal, Recreational, or Occasional Use	625	5.9	709	3.6	897	3.4	386	0.8	7	1.4	196,954	2.4
For Migrant Workers	12	0.1	9	0.0	0	0.0	0	0.0	0	0.0	4,015	0.0
Other Vacant	448	4.3	629	3.2	1,002	3.8	670	1.4	17	3.3	145,905	1.8

Source: U.S. Census Bureau 2000 (Summary File 3, Tables H6 and H8), HDR 2009d.

3.10.2 Environmental Consequences

3.10.2.1 Proposed Action

Initial construction for development of the Rusk Permit Area would involve substantial costs in the first 2 years of development. An estimated \$270 million would be invested in 2011, most of it for construction of the haul road, the Sabine River bridge, and the dragline walkway, with lesser amounts devoted to sediment control pond construction and a water truck fill station. Major construction activities in 2012 would include ramps, the transmission line extension into Mine Area V, additional sediment control pond development, and construction of a diesel fuel station for an estimated total of \$6.4 million. These costs would be capitalized and depreciated out over the life of the item.

Table 3.10-14 provides the projected average annual operating costs for Sabine. Between 2012 and approximately 2027, approximately half of the average cost would be associated with the Rusk Permit Area, and after 2027, all mining would take place in the Rusk Permit Area.

Table 3.10-14 Average Annual Operating Costs

Description	Average Cost
Mine Site Labor	\$25,728,706
Services/Supplies	\$54,328,408
Mine Site Administrative and General (A&G) (expenses)	\$1,388,417
Capital Costs	\$35,515,312
Corporate A&G	\$810,000
Total Mine Costs	\$117,770,843
Incentive Plans	\$875,603
Management Fee	\$5,041,924
Total Production Costs	\$123,688,370

Source: Sabine 2010c.

Population

The population of the study area would not be expected to change measurably as a result of developing the Rusk Permit Area. With permanent employment levels remaining constant during the transition from the existing South Marshall Permit Area of the South Hallsville No. 1 Mine to the Rusk Permit Area, and relatively small numbers of contract workers hired for the project, there would be no impetus for population growth. Also, since the access point to the proposed project would be the same as the current access for the existing South Marshall Permit Area, it is not anticipated that workers would relocate as a result of the Proposed Action.

Current residents in an estimated 256 dwellings within the Rusk Permit Area would be displaced for the duration of disturbance in their areas. Displacement would not occur all at once; it would occur sequentially as mining progresses through each mine area. Displacement would continue for the life of the disturbance plus at least 7 years while reclamation activities would be completed and monitored. It is not known where the displaced families would relocate; however, it is assumed that most would remain in the four-county area because of jobs, family ties, or other reasons for their current choice of location. As noted below under the housing discussion, there are currently an estimated 182 homes for sale in the communities immediately surrounding the permit area. Barring major changes in growth rates in the area, which are not expected to occur, it is assumed that a comparable number of homes would be on the

market going forward as a fraction of the displacees would need to move each year or during each 5-year period over the life of the mine. Under these assumptions, there would be sufficient housing available to accommodate the displacees locally if they choose to remain in the area. Demographic characteristics of the potential displacees are discussed in Section 3.15, Environmental Justice.

Employment

It is anticipated that the Proposed Action would not change employment or income patterns in the study area to a measurable degree. The only notable change from the current employment levels at the South Hallsville No. 1 Mine would be an estimated 150 contract workers brought on for the 1-year to 1.5-year construction period, and an estimated 40 contract workers for the life of the mine for the Rusk Permit Area. With nearly 10,000 potential workers unemployed in the four-county study area, it is assumed that a majority of contract workers needed for the proposed project would be hired from the local area unless certain specific skills would be needed that would not be locally available. Temporary contract workers would not be expected to relocate to the study area; those not living within daily commuting distance likely would reside in campgrounds or motel facilities during the work week and commute to permanent homes on weekends. Temporary contract workers would provide a modest increase in commercial activity and sales tax revenues in the study area; however, they would not be expected to have a substantial effect on the area population or economy. A small number of farm and ranch workers currently working in the Rusk Permit Area would be displaced during operation of the proposed project; tenants and employees likely would lose their employment until the lands have been reclaimed.

Income

Wage and salary income provided to the mine workers under the Proposed Action would be comparable to worker income at the existing South Marshall Permit Area of the South Hallsville No. 1 Mine. Currently, the total payroll for the South Marshall Permit Area, including benefits, is approximately \$25 million. For the Rusk Permit Area, the long-term average payroll, including benefits, for the life of mine is expected to be approximately \$29 million. Consequently, the Proposed Action is expected to have similar effects on study area income as does the existing South Marshall Permit Area.

Industry

Development of the Proposed Action would facilitate continuation of existing mining which would allow Sabine to maintain sufficient production to meet its contractual requirements with the Pirkey Power Plant. Consequently, no substantive changes to relationships with, or effects on, primary industries in the study area are anticipated.

Public Finance

Development of the Rusk Permit Area would result in additional value to the tax base of Rusk and Panola counties and Tatum ISD, as well as various fire districts. The dynamic nature of mining operations makes it difficult to predict taxable assets on a year-by-year basis. However, **Table 3.10-15** presents the current local tax payments made by Sabine.

Table 3.10-15 2009 Sabine Mining Company Local Tax Payments

Entity	Payment
Harrison County	\$225,000
Marshall ISD	\$715,000
Hallsville ISD	\$30,000
Fire Districts	\$60,000

Source: HDR 2009d.

In addition, current state tax payments include \$30,000 for the Texas franchise fee and \$140,000 for the RCT coal tax. Current federal tax payments include \$400,000 to Office of Surface Mining.

Property taxes are collected by the jurisdiction in which the equipment and mine are located at the beginning of each year. As mining progresses through the Rusk Permit Area, property tax revenue would change as the area being mined and mining equipment move into and out of the various jurisdictions. As the existing South Marshall Permit Area resource is depleted, property tax revenues to Harrison County would decline. Existing office and shop facilities would be maintained at their present Harrison County locations under the Proposed Action, however, so property taxes from those facilities would continue to accrue to Harrison County for the life of the proposed project. The proposed mine areas within the Rusk Permit Area would be located in Panola County (11 percent) and Rusk County (89 percent). It is uncertain how closely mine production and mining activity would track with the proposed mine disturbance areas; however, the percentages provide a rough approximation of distribution of property tax revenues to the two counties under the Proposed Action. Panola County's revenues would accrue entirely in the first 15 years of the project, whereas Rusk County's revenue stream would continue throughout the life of the mine.

The changes in revenue streams would represent a loss for Harrison County, but a net benefit for Panola and Rusk counties because there would be minimal, if any, change to current levels of demand for public services.

Property tax payments to local school districts also would change under the Proposed Action. As noted in **Table 3.10-15**, Marshall ISD is the largest beneficiary of local property tax from the existing South Marshall Permit Area and the existing South Hallsville No. 1 Mine office and shop facilities; these revenues would decline as mine production from the South Marshall Area is completed in approximately 2027. School district property tax payments for the Rusk Permit Area would accrue entirely to the Tatum ISD, as the entire Rusk Permit Area is within that district's boundary. Actual effects on school district budgets would not be as dramatic as the shift in Sabine's property tax payments, however, because state financial support would be adjusted to compensate for gains or losses under Texas' school funding rules.

In addition to property taxes, the South Hallsville No. 1 Mine pays substantial sales taxes to state and local coffers annually. Assuming approximately \$43.3 million in annual equipment parts and supplies would be taxable, the state would receive \$2.7 million annually at the current 6.25 percent tax rate and approximately \$217,000 would accrue to Harrison County at 0.5 percent.

Public Education

As previously discussed, the Proposed Action is not anticipated to result in a change in population in the four-county study area. As a result, no changes in the number of students in any of the school districts in the vicinity of the existing South Hallsville No. 1 Mine would be anticipated. It is possible that revenue received from property taxes may change for the school districts; however, Texas has a revenue-balancing formula by which it redistributes property tax revenues to equalize school funding. As a result, no changes in the school districts' abilities to provide services for their students are anticipated.

Housing

Because a change in population is not anticipated in the four-county study area as a result of the Proposed Action, it is unlikely that housing needs in the study area would change. As previously discussed, less than 1 percent of the Rusk Permit Area is in residential use, and replacement housing exists within the immediate area. According to online real-estate estimates for the ZIP codes surrounding the Rusk Permit Area (75691, 75603, 75650, 75602, and 75670, which include Tatum, Hallsville, Marshall, and Longview), there were approximately 65 homes for sale for less than \$100,000, 66 homes for sale for between \$100,000 and \$200,000, and 51 homes for sale for more than \$200,000 in late 2009 (HDR 2009d).

If some portion of the contract workers were to be hired from outside the local area (beyond a 1-hour commute, for example), there are more than 25 lodging facilities with several hundred rooms in Longview. These facilities would be more than adequate to accommodate the limited number of non-local contract workers that could be needed for the proposed project.

Property Values within the Study Area

Potential effects to property values associated with the Proposed Action would vary over the life of the mine. Although there is little residential property in the study area, any residences in close enough proximity to mining activities in the Rusk Permit Area to experience disturbance from mining operations (i.e., visual, auditory) would be less in demand and may experience a temporary decline in value. This type of effect would not be anticipated for ranch or farm lands. As mining activities move away from a residential property and as the lands are reclaimed, it would be expected that the property demand and value would return to the level of similar properties in the general vicinity. In the long term, the Proposed Action is not anticipated to result in adverse effects to property values.

Other Public Services

The Rusk Permit Area would be served by different EMS providers than the existing South Marshall Permit Area. Rusk and Panola counties services, as noted in Section 3.10.1.8, would be the first responder service providers for the new area. The demand associated with the Proposed Action is expected to be minor and would be partially funded by local tax payments to the appropriate jurisdictions. The demand for emergency services in the Rusk Permit Area would be expected to be similar to that of the existing South Marshall Permit Area. Area providers would have sufficient resources to meet this demand (HDR 2009d).

The Proposed Action is not anticipated to affect local electricity costs. The Pirkey Power Plant is designed to use lignite fuel; it is anticipated that electricity costs would remain relatively unchanged.

3.10.2.2 No Action Alternative

Under the No Action Alternative, the USACE would deny Sabine's application for a Section 404 IP. As a result, the proposed Rusk Permit Area would not be developed, and the related potential beneficial and adverse effects to social and economic values identified for the Proposed Action would not occur. However, existing operations at the South Marshall Permit Area of the South Hallsville No. 1 Mine would continue under existing authorizations until the lignite reserves are depleted in approximately 2027.

Under the No Action Alternative, Sabine would not be able to fulfill its contractual obligations with SWEPCO. However, SWEPCO's Pirkey Power Plant would have the option to continue to operate with an alternate or different fuel source. Use of a different fuel source and the associated plant modifications would likely result in increased electricity costs.

Under this alternative, the identified lignite reserves at the proposed Rusk Permit Area would not be mined; however, the No Action Alternative does not mean that there would be no impacts to the lands in and near the Rusk Permit Area. The potential exists that the lignite reserves in the Rusk Permit Area would be leased at a later date, or that some portion of the land would be sold for purposes of development. The USACE has chosen not to speculate on the nature of the future land use and has not attempted to predict these possible future impacts from the No Action Alternative.

The No Action Alternative would not affect population (including race and ethnicity), income, industry, employment, public finance, housing, property values, or other public services in the short term, while the South Marshall Permit Area continued in production. In the longer term, however, existing social and economic effects related to operations at the South Hallsville No. 1 Mine would decline after depletion of the economically recoverable lignite in approximately 2027 and would end with completion of reclamation activities in approximately 2035 (approximately 15 years sooner than under the Proposed Action). These effects include the direct loss of approximately 300 jobs, plus a certain amount of indirect and induced

economic loss. Direct income losses would exceed \$400 million over 15 years, based on current annual payroll and employment levels that would not continue past the life of the South Marshall Permit Area if the Proposed Action is not approved. In excess of \$43 million in sales taxes over 15 years would not be received by the state and counties in the four-county study area, and property taxes would be substantially reduced based on the truncation of equipment and materials purchases after completion of activities at the South Marshall Permit Area. Although the No Action Alternative would result in no property tax payments associated with the Rusk Permit Area to local school districts, Texas has a revenue-balancing formula by which it redistributes property tax revenues to equalize school funding. As a result, local school districts' abilities to provide services for their students would not be expected to be adversely affected.

3.10.3 Cumulative Impacts

The past and present actions and RFFAs are identified in Section 2.7 and shown in **Figure 2-12**. Social and economic effects of the past and present actions in the cumulative effects study area are reflected in Section 3.10.1, Affected Environment. Consequently, the cumulative effects of these past and present activities and the proposed Rusk Permit Area would be the same as described for the Proposed Action.

RFFAs include the proposed Marshall Lignite Mine and a possible conveyor for the Rusk Permit Area. The proposed Marshall Lignite Mine would result in a modest cumulative increase in employment and income in the cumulative effects study area. It is anticipated there would be minimal, if any, effect on population in the four-county area, however, because there are estimated to be nearly 10,000 unemployed workers in the area. The Marshall Lignite Mine would be located partially in Harrison County and partially in Panola County. Consequently, it would partially offset the anticipated loss of Harrison County tax revenues from completion and closure of the South Marshall Permit Area of the South Hallsville No. 1 Mine, and it would further enhance the anticipated tax revenue growth from the proposed Rusk Permit Area for Panola County. Construction of a conveyor system in the Rusk Permit Area would provide a small, short-term boost to construction employment and a modest long-term increase in property tax revenue for Rusk and Harrison counties. With the start in operation of the conveyor system, a reduction in the need for truck haulage likely would result in a small reduction in employment and a modest reduction in sales tax payments as a result of a reduced need for diesel fuel.

3.10.4 Monitoring and Mitigation Measures

No monitoring or mitigation measures are being considered for social and economic values.

3.10.5 Residual Adverse Effects

There would be no residual adverse effects associated with social and economic issues as a result of the Proposed Action.