

## XIII. ECONOMICS

### Changes between the DEIS and the FEIS

See Chapter 2 for a description of the changes in the alternatives that were made since the DEIS was completed. In general, changes in some of the features of the action alternatives altered the predicted impacts as described in the DEIS, including less employment and income from timber harvest and processing and tree planting than originally anticipated.

#### 1. Analysis Area

This section presents a description of the economic environment that could be potentially affected by the proposed action and its alternatives, along with an estimate of what those effects might be. The focus is on the economic relationship of the Flathead National Forest to the economy within and around the Forest and the economic influence of goods and services the Forest provides. Emphasis would be placed on those components of the economy identified throughout the scoping process, mainly through public comments such as: employment and income in the local area; the loss of raw materials to the wood products industry; federal funds to communities; and road management.

#### 2. Affected Environment and 3. Environmental Consequences

No significant issues related to economics were identified (refer to chapter 2).

The following effects indicators were used to focus the economics analysis and disclose relevant environmental effects:

- Effects on Job Growth Rate
- Effects on Unemployment Rate
- Effects on Personal Income and Wages
- Effects on Cost of Living
- Effects on Economic Dependency and Diversity
- Effects on Economic Trends
- Effects on Income
- Effects on Revenue Sharing
- Effects on Local Economic Development Objectives.

#### *The Economic Community*

The Flathead National Forest includes parts of six Montana counties: Flathead, Lincoln, Lake, Missoula, Powell, and Lewis and Clark. About three-fourths of the area of the forest is in Flathead County. However, most of the effects of Forest programs and projects occur in Flathead County. The forest has lesser effects in Lake County and only minimal effects in the other four counties. However, the economic impact area can vary and is systematically determined for each proposed project or program.

The economic setting in the area of influence is described in terms of industry composition, economic diversity, economic dependence, employment and income, and other trends affecting the economy. As the proposed action features the management of the timber resource an emphasis is placed on describing the existing timber industry and the past and present role of the Flathead National Forest in that industry.

The Flathead National Forest is an important part of the Northern Continental Divide Ecosystem, which covers most of northwest Montana. This area has significant economic value on a regional, national, and international scale

when recreation and tourism, wildlife, and aesthetic values are considered along with a significant timber management program. However, it is beyond the scope of this analysis to evaluate markets for all these resources because they have not been identified as significant economic issues in respect to the proposed action. The emphasis is on the economic effects that the proposed action and the alternatives would have on the timber industry and economic communities that would be primarily affected. Of similar concern are the economic consequences of alternative road management proposals.

### **The Economic Impact Area**

The proposed action and its alternatives are located in the economic influence area of Flathead County, Montana. Although a small amount of the proposed activities might occur in Lincoln or Lake Counties, most of the economic effects would be felt in Flathead County. The designation of Flathead County as the affected area was based on the multiple criteria suggested in the Forest Service *Economic and Social Analysis Handbook* (FSH 1909.17)(USDA Forest Service 1988). Criteria include the location of the economic center, wood processing facilities, residences of the forest products industry workforce, and the center of spending for retail and wholesale goods and services.

A discussion of the reasoning used in selecting the economic impact area can be found in the project record.

### **The Economy**

**Industry Profile** – The economic base, i.e. that portion of the economy that involves the importing of dollars into the area is relatively diversified in the Flathead County economic region but was still lead by the wood products industry in 1999 (last year of available data). As shown in Table 3-95, about 22% of labor income in the basic economy is attributed to the wood products industry. This has gradually declined over the past decade. Other basic industries of significance include transportation (15%), federal government (14%), other manufacturing (12%), primary metals (11%), and trade center (10%). Agriculture and other related industries comprise only 6% of the basic economy (USDC 2001). The primary metals industry, which consists almost totally of the Columbia Falls Aluminum Plant, has declined significantly since 1999, when the plant temporarily halted the production of aluminum (Polzin 2002).

**Table 3-95: Basic Industry Sector Profile – Flathead County**

<b>Industry</b>	<b>Percent of Total Labor Income - 1999</b>
Agriculture	6.0%
Trade Center	10.0%
Nonresident Travel	10.0%
Primary Metals	11.0%
Other Manufacturing	12.0%
Federal Government	14.0%
Transportation	15.0%
Wood Products	22.0%

However, when looking at the entire economy as sectorized by the U.S. Department of Commerce (Bureau of Economic Analysis 2002) a different picture arises (refer to Table 3-96). The services industry becomes the largest industry followed by trade, manufacturing, and government. Agriculture becomes insignificant at 1.2%. In this type of sectoring, tourism is not considered an industry by itself, and tourism spending is primarily in the services and trade industries. Future expectations of these industries are discussed in the “Economic Trends” section of this chapter. The wood products industry is included in “Manufacturing”.

Table 3-96: Total Industry Sector Profile – Flathead County and Montana

Industry	Percent of Total Labor Income	
	Flathead County	Montana
Agriculture	1.2%	3.6%
Mining	0.6%	2.3%
Construction	9.5%	7.5%
Manufacturing	15.6%	7.3%
Transportation and Utilities	7.3%	8.0%
Trade	16.6%	16.8%
F.I.R.E	6.7%	5.9%
Services	28.0%	27.0%
Government	14.4%	21.6%

The economic profile for Flathead County is similar to the state of Montana for most industries. However, there are a few exceptions. The manufacturing industry is more than twice the state percentage and is the highest rate of any county in the state. This is presently dominated by the wood products industry, which will be discussed later in this analysis. Government, which includes federal, state, and local government is significantly smaller in Flathead County than it is in the state as a whole. Agriculture and mining are an insignificant part of the total income generated in both Flathead County and the state of Montana. However, agriculture varies greatly from year to year depending on weather and market conditions. All other industries are very similar (U.S. Department of Commerce 2002).

**Effects on industry profile** - All of the action alternatives would likely increase the wood products industry and manufacturing sector more than other sectors therefore increasing their percentage of the total economy. The increase would depend largely on how much substitute timber volume would be milled if the action alternatives were not implemented. Regardless of which alternative is implemented, the change would be minor.

## Industry Trends

### Employment

**Job Growth Rate** - Although wage and income growth in Flathead County and Montana have been lagging, job growth has been significant. Positive job growth has occurred in every year from 1991 through 2000 in Flathead County. During this period over 10,000 jobs have been created for an increase of 41 percent, or an average of more than 1,000 jobs per year and an average annual growth rate in excess of 4 percent. This is significantly ahead of the Montana growth rate as well as all but a few of the other counties in Montana (U.S. Department of Commerce 2002).

**Effects on Job Growth Rate** - Up to 300 total jobs years (Tables 3-98, 3-99 and 3-100) could be created from timber harvesting and processing, reforestation, and road decommissioning from the action alternatives. However, the short term effects on the job growth rate could be minimal if (1) there is a labor shortage and labor is drawn from one industry to another and (2) the project is spread out over the entire contract period. There would be little difference between the no action alternative (1) and the action alternatives (2-5) as long as substitute timber volume was harvested.

**Unemployment** - Related to job growth is the unemployment rate. Flathead County has historically the highest unemployment rate among the larger counties of Montana. The annual unemployment rate for Flathead County for the year 2001 was 5.9 percent. Although this is still above the Montana rate of 4.6 percent it is the lowest rate experienced by Flathead County for the past 30 years. In general, the unemployment rate for Flathead County has been steadily decreasing since 1991 when it was over 9 percent. Along with a lower annual average rate, the monthly rates have shown much more stability. In 2001, the highest monthly rate was 7.6% in February and March and the lowest was 4.1% in August. This suggests that seasonal employment is not as prevalent as it once was although it is still greater than the state average. The unemployment rates for Flathead County vary quite closely

with the State of Montana but rates in the winter months are relatively higher therefore suggesting a higher percentage of seasonal employment (Montana Department of Labor and Industry 2002).

*Effects on Unemployment Rate.* An addition of approximately 500 jobs could have at best a slight measurable effect on the unemployment rate. History shows that the unemployed workforce in Flathead County stays a relatively constant percentage of the total workforce, compared to surrounding counties. New jobs tend to be filled from new arrivals or by people with different jobs etc. who are eventually replaced by recent immigrants. If all the new jobs were filled from the present workforce, which is highly unlikely, and the new jobs (500) are spread over 4 years (125 jobs per year) the unemployment rate would decline by a maximum of .3 percent. However, the most likely effect would be much smaller.

## **Income**

**Components of Total Personal Income and Trends** - Total personal income (TPI), includes the earnings (wages and salaries, other labor income, and proprietor's income); dividends, interest, and rent; and transfer payments<sup>1</sup> received by the residents of Flathead County. In 1999, earnings were 59.3 percent of TPI (compared with 60.5 percent in 1989); dividends, interest, and rent were 25.8 percent (compared with 24.6 percent in 1989); and transfer payments were 14.9 percent (compared with 14.9 percent in 1989). From 1989 to 1999, earnings increased on average 6.2 percent each year; dividends, interest, and rent increased on average 6.9 percent; and transfer payments increased on average 6.4 percent (U.S. Department of Commerce 2002).

**Per Capita Personal Income** - In 1999, Flathead County had a per capita personal income (PCPI) of \$22,265. This PCPI ranked 13th in the State, and was 101 percent of the State average of \$21,997, and 78 percent of the national average, \$28,546. This is the lowest it has been, as a percent of national PCPI since 1969. In 1989, the PCPI of Flathead was \$14,929 and ranked 12th in the State. The average annual growth rate of PCPI over the past 10 years was 4.1 percent. The average annual growth rate for the State was 4.2 percent and for the nation was 4.4 percent (U.S. Department of Commerce 2002).

**Total Personal Income** - In 1999, Flathead County had a total personal income (TPI) of \$1.6 billion. This TPI ranked 4th in the State and accounted for 8.3 percent of the State total. In 1989, the TPI of Flathead was \$.8 billion and ranked 4th in the State. The average annual growth rate of TPI over the past 10 years was 6.4 percent. The average annual growth rate for the State was 5.2 percent and for the nation was 5.4 percent. However, as mentioned above, the per capita income has decreased as a percent of the national per capita income because the population in Flathead County has increased at a rate significantly higher than the national rate (U.S. Department of Commerce 2002).

**Wages** - Annual wages of employees are another indicator of economic well being of a region. Year 1999 and 2000 data shows that Montana has the lowest average annual pay of any state in the U.S. In the year 2000, wages in Montana were only 67% of the U.S. average. From 1999 to 2000 Montana wages increased by 4.4%, which was higher than approximately one-third of the states in the U.S. but was still below the U.S. average increase of 5.9% (U.S. Department of Labor 2002a). U.S. wage growth averages exceeded Montana averages in every industry category except mining and government. Montana wage rates for the top employing industries in the Flathead County area (services, trade, and manufacturing) significantly lagged U.S. growth rates for wages. (U.S. Department of Labor 2002b)

*Effects on Personal Income and Wages* - Personal income or wage income effects would be similar to the changes in job growth rate explained above. The effects can be extremely variable depending on the outcomes, but not significant. Per capita income would increase only if the incomes from the new jobs

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<sup>1</sup> Transfer payments are income payments to persons for which no current services are performed. They are payments by government and business to individuals. Examples are social security, medicare, government retirement, worker's compensation, and income maintenance (e.g., AFDC and food stamps).

created are higher than the average incomes of the existing jobs in the county. This should be the case as wages in the wood products industry are usually higher than most other wages in the county. However, even in the most favorable event, the increase would be minimal because the wage rates are not significantly higher and the total number of new jobs are a small percent of the workforce.

**Cost of Living** - Per Capita income alone is not an adequate measure of economic well being. The cost of living in an area must also be considered (Power 1990). The relative cost of living in the Flathead Valley is not well understood by many. Public opinion surveys conducted in the past indicate that many people identify the “cost of living” as one of the reasons they relocated to the Flathead Valley.

This has led many people to perceive the cost of living to be low. However, cost of living indices provided by the American Chamber of Commerce Researchers Association (ACCRA) indicate the cost of living in the Flathead Valley in the fourth quarter of 2001 is approximately 100 percent of the national average. Transportation is the highest component at 106 percent and Utilities the lowest at 94 percent. The cost of housing is 95% of the national average (American Chamber of Commerce 2002).

*Effects on Cost of Living* – There should be no measurable effects to the cost of living resulting from the proposed project. An increase in wood products manufacturing would not affect the price of wood products whose prices are determined in a regional or national market. The maximum increase in wood products from the proposed project is insignificant when compared to the regional or national market. Additional jobs and income should not have a measurable effect on consumer goods as they are also priced in a regional market and the increase in jobs and wages is insignificant.

### **Diversity/Dependency**

It is generally believed that *economic diversity* is a positive attribute of a regional economy. A diverse economy is economically resilient which means it has the ability to adapt to change (Haynes et al. 1999). *Dependency* refers to a community’s dependence on a single or small group of industries for its survival. Communities that are highly dependent are not usually diverse and are frequently vulnerable to changes occurring in its major industries. Flathead County is thought to have a relatively diverse economy. A recent analysis of Montana counties using the Shannon-Weaver entropy indices found Flathead County to be the most diverse county in Montana (USDA Forest Service 2001b). Diversity also usually increases with population and Flathead County is the fourth most populous county in Montana. The number of industry sectors is also a common indicator of diversity. A review of the IMPLAN economic impact model shows Flathead County to have the third most economic sectors in Montana. All of the above indicators suggest that the economy of Flathead County is very diverse and likely not relatively vulnerable to external forces.

In the past it was thought that Flathead County was highly dependent upon the wood products industry, which at one time comprised over 40% of the basic economy. However, the most recent data shows that approximately 22% of the economy is attributable the wood products industry (Table 3-95). This decline is due primarily to the rapid growth of other sectors of the economy, while the wood products industry declined slightly. The transportation industry, which accounts for approximately 15% of the economy, also includes communications and public utilities and is very diversified and normally not greatly effected by Forest Service management decisions. All other industries each account for less than 15% of the Flathead County economy.

*Effects on Economic Dependency and Diversity* - If we consider the local economy to be “dependent” on the wood products industry the proposed project has the potential to make the local economy even more dependent – it would not make it less dependent. The same should hold true for diversity. However, the maximum potential increase is relatively small and should not have any negative effects on the overall health of the economy in terms of both dependency and diversity.

## **Economic Trends**

Wood products and aluminum refining have traditionally been the largest components of Flathead County's economic base. Together they were primarily responsible for the growth in the 1970s and the sharp decline between 1979 and 1982. From its trough in the early 1980s, the wood processing industry in Flathead County expanded significantly to become the states largest timber-processing center – a position it still retains.

Non-resident travel has generally been the Flathead's most rapidly growing basic industry in the 1980's and 1990s and continues to grow. High technology manufacturing, led by Semitool, also grew at a significant pace.

As elsewhere, construction, health care, and business services accounted for much of the income growth for the past decade. The following synopsis of the recent past and predictions for the future of Flathead County, has been provided by The University of Montana's *Bureau of Business and Economic Research* (BBER) as follows:

*Overall, Flathead County has been one of the fastest growing counties in the state. There has been significant volatility in the recent past as the growth rates have vacillated from one year to the next. The large increase in 1998, and the subsequent decline in 1999, were caused by the large back wages payment to Columbia Falls Aluminum Company workers. The forecasts call for moderate growth in the future, but they incorporate some resumption of aluminum production and stability in "high tech" manufacturing. Significant changes in either of these important industries could dramatically alter the forecasts (Polzin 2002).*

The BBER goes on to predict growth rates in non-farm labor income from 2001 to 2006 varying from a low of 1.2% in 2002 to a high of 2.5% in 2004 and 2005. This is very similar to the prediction for the state of Montana as a whole.

*Effects on Economic Trends* - The proposed project should have very little effect on economic trends because of the small increase in income and employment resulting from the proposed project. There are so many other economic factors effecting the local economy that minor changes in timber harvest would be masked by these other changes and probably be un-measurable. The proposed project would not cause any adverse pressure on present trends.

## ***The Timber Industry***

**Historical Production and Capacity** - Historically, timber harvest from National Forest system land in Montana peaked at greater than 800 million board feet at the end of the 1960's. In the period 2000, 2001 timber harvest has dropped to the general vicinity of 100 million board feet or slightly greater than 10% of the past peak level (USDA Forest Service 2002).

In 1998, of the 293 million board feet of timber delivered to processing facilities in Flathead County, approximately 38 million board feet, or less than 13%, came from National Forest system land (Keegan *et al.* 2001).

Since 1980, Flathead County has had the largest wood products manufacturing industry of any county in Montana. Since 1976, the county's capacity to process saw timber has varied from a low of 265 million board feet (Scribner rule) at the present to a high of 395 million board feet in 1983. Actual saw timber processed since 1976 has varied from a low of 185 million board feet in 1982 to a high of 332 million board feet in 1988. Processing facilities utilization capacity has varied from a low of 51% in 1982 to a high of 97% in 1999. The year 2000, the last year for which there is data, was at 94% of capacity. The plywood industry in Montana is presently at 93% of plant capacity. County level information on the plywood industry is generally not available because of data disclosure constraints (Keegan *et al.* 2001).

The percentage of milling capacity that is actually used or remains available for use affects the demand for logs and is a variable effecting log prices, which in turn, affects the quantity of logs supplied to mills.

**Outlook** - The outlook for the near future for the timber industry in Montana indicates limited improvement. Nationwide consumption of wood products is expected to decline next year with worldwide economic conditions even weaker. Most of the major processors expect overall operating conditions to be the same as, or better than 2001. However, several of the state's largest mills believe conditions would worsen in the near future, and the optimism of a number of others appears more reflective of improvement in areas like energy and raw material costs rather than expectations that the near future would bring dramatically higher [product] prices. The resolution of the Canadian softwood lumber dispute makes for an uncertain outlook for the near future.

Recent trends in employment in the Montana wood products industry have shown a gradual and steady decline. For example, from January 2000 to December 2001, employment went from 4,556 workers to 4,027 workers, a 12 percent reduction. This includes production workers at all timber processing and wood residue processing facilities. Production workers account for 40 to 50 percent of the total workers in Montana's forest products industry (BBER 2002). Therefore, it could be reasonably assumed that the total reduction in workers in the total forest products industry, which also includes logging, transportation, reforestation etc., is more than twice the loss shown for just the wood products industry.

Because of a decade-long decrease in federal timber harvest, timber availability remains a major issue for Montana's forest products industry even as wood products markets improve in the longer-term. Salvaged timber from burned areas could increase the volume of available timber. The Forest Service has proposed substantial salvage operations. Recent work done by the University of Montana researchers indicates that millions of acres of timberlands in the state are in need of ecosystem and fire hazard treatment and could provide – as a profitable by-product – a sustainable flow of timber considerably above current harvest levels (Keegan *et al.* 2002).

#### **Flathead National Forest Timber Sale Program**

The Flathead National Forest previously provided over 40% of the timber processed by the Flathead County wood products industry (USDA Forest Service 1985). This has greatly diminished over the past decade. The proposed action alternatives would offer for sale approximately 13 to 27 million board feet of timber; perhaps in several separate timber sales to be sold in FY 2003.

Table 3-97 is an attempt to put the proposed project in perspective with the recent timber sale program history. The table shows that since 1995 the Flathead NF has offered for sale a high of 40 million board feet of timber in 1996 and 2001, and a low of 8 million in 1999 with a mean of 25 million board feet from 1995 to 2001. The timber harvested from the Flathead NF has followed the same general pattern. The timber under contract for the Flathead NF reached a high of 44 million board feet in 1997 and a low of 7 million in 2000. (USDA Forest Service 2002)

**Table 3-97: Flathead National Forest Timber Sale Program Information (mmbf)**

	1995	1996	1997	1998	1999	2000	2001	Mean
Timber Offered	17	40	32	16	8	20	40	25
Timber Harvested	22	18	22	34	14	9	6	18
Timber under Contract	17	35	44	26	11	7	18	23

The forecast for the near future is for the Flathead National Forest to sell from 20 to 25 million board feet per year. An important assumption in estimating the economic effects of the proposed project on the local timber industry and economy in general is what the timber harvest would be if the proposed project was not implemented. It has been estimated that most of the timber to be sold in FY 2003 from the proposed project could likely be made up from other sources (Dahlgren 2002). Therefore there is a chance there could be little or no economic effect in the short-run from not harvesting timber as proposed. However, there could be a significant effect in the long run but it would be spread over many years. This is discussed in the next section.

## Effects of Alternatives on Employment and Income

### Timber Harvesting

The activity of timber harvesting, as proposed, has the potential to create a substantial amount of employment and income. These effects are both direct – workers employed in the forest products industry and government, and indirect – jobs and income created from the local spending of the forest products industry and government and the spending of industry's and government employees.

These effects could be minimal in the short-run as it is possible that alternative sources of Forest Service or other timber could find its way to processing facilities and not disrupt planned production. However, there is a possibility that this would not happen in which case there could be more than an incidental effect on local employment and income.

Although the proposed activities could have slight economic effects on adjacent counties, as previously explained, it is assumed that most of the effects would occur in Flathead County. This would depend on who purchases the timber sales. There is one major processor in northern Lincoln County that is a potential purchaser. If that processor purchases any of the sales the effects would tend to flow in that direction.

Recent analysis in northwest Montana (USDA Forest Service 2001) shows that the harvesting and processing of one million board feet (MMBF) of timber generates a total of approximately 15 job years<sup>2</sup> and \$350 thousand in employee compensation. This includes both direct and indirect jobs<sup>3</sup> and employee compensation. These jobs and income include direct jobs and income in logging, wood processing, transportation and the Forest Service; jobs supporting these industries; and jobs and income generated from the spending of the workers in the preceding industries. Table 3-98 is a summary of the maximum potential effects to total employment and employee compensation in Flathead County from the harvest and processing of timber from the proposed project assuming there is no substitute timber to the proposed project.

**Table 3-98: Employment and Income from Timber Harvest and Processing**

Alternative	Jobs/Year	Employee Comp (M\$)
1	0	0
2	220	\$5,145
3	217	\$5,074
4	179	\$4,165
5	220	\$5,145

Table 3-98 shows that Alternatives 2 and 5, which harvest the most timber, generate the most job years (220) and employee compensation (\$5,145,000). Alternative 1, which harvests no timber, generates no jobs or income from the harvest and processing of timber.

It is proposed that from no acres (Alternative 1) to 1182 acres (Alternative 2 and 5) may be artificially regenerated, primarily through planting tree seedlings (Table 3-99). Alternatives 2 and 5 would generate approximately 27 total jobs while Alternative 4 would generate approximately 17 jobs, and Alternative 3 would generate approximately 25 jobs.

<sup>2</sup> A job year is a job that lasts the equivalent of one year. For example 10 job years could be 10 jobs for one year or one job for 10 years or any combination thereof.

<sup>3</sup> A job can be full-time or part-time, seasonal or permanent. It is not a "full-time equivalent".

**Table 3-99: Employment and Income from Reforestation Proposal**

Alternative	Acres to be Planted	Total Cost of Planting (M\$)	Total Jobs from Planting	Total Inc from Planting (M\$)
1	0	\$0	0	\$0
2	1182	414	27	154
3	1086	380	25	141
4	738	258	17	96
5	1182	414	27	154

In addition to the jobs and income generated by timber harvesting and planting, there would be jobs and income also generated by associated timber management activities. These include slash disposal, site preparation, and subsequent surveys, monitoring and analysis. History shows that there is a good chance that a significant amount of the economic effects of reforestation activities could occur outside of the Flathead County area, depending on the origin of planting contractors and crews.

These potential jobs and income described above would be spread over approximately a four-year period from 2002 to 2005.

### **Road Management**

The extent of road “decommissioning” varies from a high of 87 miles in Alternative 4 to no decommissioning in Alternative 1 (Table 3-100).

**Table 3-100: Employment and Income From Road Decommissioning Proposals**

Alternative	Miles to be Decommissioned	Total Cost of Decom. (M\$)	Total Jobs from Decom.	Total Inc from Decom (M\$)
1	0	\$0	0	\$0
2	57	\$285	5	\$84
3	56	\$280	5	\$83
4	87	\$435	7	\$129
5	56	\$280	5	\$83

As can be seen in Table 3-100 road decommissioning is not a very labor intensive activity producing only from 5 to 7 total jobs with the action alternatives. This estimate is based on analysis done on other projects in northwest Montana (USDA Forest Service 2001).

### **Revenue Sharing from Flathead National Forest Programs**

Revenues from National Forest programs are distributed to counties annually in accordance with several Federal acts. Historically, the 25% Fund Act has been the greatest source of funds. However, the recent enactment of the Secure Rural Schools and Community Self-Determination Act of 2000 (Public Law 106-393) has significantly changed the revenue distribution. The Payment in Lieu of Taxes Act (PILT), also distributes funds to counties based on the amount of federal land in each county. This amount is normally reduced by other certain payments (including 25% funds) paid in the prior year. The PILT fund program is administered by the Bureau of Land Management.

Under the Twenty-five Percent Fund Program, 25% of all funds generated from certain National Forest programs are paid to the state in which national forest system lands are located. The funds generated by each Forest are distributed to each county in which the Forest is located in proportion to the amount of Forest land in each county. The location of the project within a particular Forest generating the revenue does not matter.

The amount distributed from the Twenty-five Percent Fund is based on certain receipts, including special use fees, recreation fees, minerals returns, grazing fees, and timber sales. In Montana two-thirds of the dollars received go to the counties' general fund for road maintenance, while the remaining one-third goes to public schools. For the Flathead National Forest, timber sale receipts have historically composed about 85% of the Twenty-five Percent Fund payments returned to counties. Table 3-101 shows how the payments have been distributed to Flathead National Forest counties (arising from all National Forests within those counties) in the past 5 years, with fixed payment projection from 2001-2006.

**Table 3-101: Distribution of Twenty-five Percent Fund Payments (thousand \$)**

Year	Flathead	Lake	L and C	Lincoln	Missoula	Powell	Total
1997	\$636	\$48	\$380	\$3,388	\$545	\$318	\$5,315
1998	\$909	\$72	\$566	\$3,651	\$613	\$394	\$6,205
1999	\$506	\$39	\$216	\$4,008	\$297	\$186	\$5,252
2000	\$361	\$24	\$211	\$3,181	\$264	\$155	\$4,196
2001-6	\$1,481	\$118	\$417	\$5,586	\$695	\$450	\$8,747

PILT payments are made to local governments to supplement other receipt-sharing programs such as the Twenty-five Percent Fund. PILT payments may be used for any government purpose; they are not limited for use in roads and schools. Generally, the more 25% funds received, the less would be the PILT payments. However, the formula is complex, and varies from county to county, and will not be explained in the document. A complete explanation of the PILT provisions and revenue sharing can be found in Schuster, 1995 and 1996.

Due to declining Forest Service timber revenues in the west, Congress enacted the Secure Rural Schools and Community Self-Determination Act of 2000 (Public Law 106-393) to supplement the Twenty-five Percent Fund Act. This allowed electing counties to base their Twenty-five Percent Fund payments on an average of the highest three years payments from 1986 to 1999. If elected, counties would receive the newly calculated payment instead of what would have been normally received under the Twenty-five Percent Fund Act. This would provide level payments over the election period regardless of what the Forest revenues were for the present period. All counties receiving payments based on Flathead National Forest programs have elected the new option. This election will remain in effect through 2006. As can be seen in Table 3-101, this election will make a substantial difference in payments.

*Effects of Proposal on Revenue Sharing* - As all counties have made the election for even-payments under Public Law 106-393, changes in Forest Service revenues would have no effect through 2006 on payments-to-counties. Although, Forest Service revenues change from alternative to alternative in this proposal, payments-to-counties, including PILT payments would not change. It is assumed the revenue generating parts of the proposed project, would be completed by the end of 2006. Therefore the proposed project would have no effect on payments to counties.

### **Local Economic Development Objectives**

The economic development objectives for Flathead County are documented in *Comprehensive Economic Development Strategy (CEDs) – Flathead County, Montana, 2002* (Flathead County, Montana Board of Commissioners, 2002). These objectives were developed by a team of interested citizens, subjected to intensive public review through public meetings etc. and endorsed by the Flathead County Board of Commissioners. Objectives involved subject areas such as quality of life, business development environment, education, housing, physical infrastructure, and the improvement of communications technology. Specific goals and objectives stated for natural resources in Flathead County include improving the viability of the natural resource based industries.

*Effects on Local Economic Development Objectives* - These objectives were reviewed to determine consistency, or otherwise, with the proposed action and alternatives. It was determined that the proposed action and action alternatives appear to be substantially consistent with the County economic development strategy. The no-action alternative would generally not contribute toward implementing the CED.

### **Economic Efficiency Analysis**

Economic efficiency of each alternative has been analyzed to display the differences between alternatives in terms of the present net value (PNV) of anticipated costs and revenues. Although economic efficiency is not considered an environmental effect by the National Environmental Policy Act (NEPA), it is a factor that is considered when comparing alternatives. PNV can be viewed as the lump sum of money the decision maker would have in hand as a result of committing forest resources to a particular alternative. This analysis was conducted for revenues and costs associated with the three-year term of the timber sale contracts. Assumptions used in this analysis include:

- a) This analysis determines the net economic returns of various alternatives based on those amenity resource costs and benefits which can be objectively measured in dollar terms. Other resources that are more subjective in nature when applying dollar values (e.g. wildlife, water, air) were not considered.
- b) Net values were determined for the year 2002.
- c) The only revenues and costs considered are those related to timber sale analysis, preparation, implementation, administration, and post-sale treatments.
- d) Economic analysis was conducted with the most recent Forest Service economics analysis computer model Project-Level Analysis of Treatment Alternatives (PLATA) – (Jones, 2002), with timber prices calculated by transaction evidence appraisal and local cost adjustments included in this program.

The following table displays a summary of the estimated timber volume that may be offered, total PNV cost, total PNV revenue, PNV, and Revenue/Cost ratio. Costs and revenues were discounted to present value at the rate of 4%.

**Table 3-102: Summary of Discounted Costs and Revenues for the Project Period**

	Alternative				
	1	2	3	4	5
<b>Timber Sale Analysis</b>					
Timber Volume (MBF)	0	14,700	14,500	11,900	14,700
Total Present Value Cost (\$)	\$625,000	\$765,570	\$765,570	\$765,570	\$765,570
Total Present Value Revenue (\$)	0	\$645,290	\$812,740	\$175,570	\$645,290
Present Net Value (PNV)	\$ -625,000	\$ -120,280	\$ 47,170	\$ -590,000	\$ -120,280
Revenue / Cost Ratio	0	0.84	1.06	0.23	0.84
<b>Timber Sale &amp; Road Decommissioning Analysis</b>					
Timber Volume (MBF)	0	14,700	14,500	11,900	14,700
Total Present Value Cost (\$)	\$625,000	\$1,029,070	\$1,024,450	\$1,167,750	\$1,014,490
Total Present Value Revenue (\$)	0	\$645,290	\$812,740	\$175,570	\$645,290
Present Net Value (PNV)	\$ -625,000	\$ -383,780	\$ -211,700	\$ -992,180	\$ -369,200
Revenue / Cost Ratio	0	0.63	0.79	0.15	0.64

Salvage of burned timber from portions of the Coal Creek State Forest (State of Montana School Trust lands) burned in the Moose Fire has been ongoing since the winter of 2001-2002. Three sales have been offered and sold. The first two sales were comprised of mostly tractor harvest units with access from existing roads with no helicopter yarding required. These sales sold for \$22.40 and \$31.07 per ton and have been completed. The second sale included mostly inaccessible units and all required helicopter yarding. With the additional costs of helicopter yarding over long distances, this sale went unsold during initial offerings and eventually sold for \$5.02 per ton after the sale was modified and the required logging of several units was made optional. Comparisons with these state salvage timber sales were conducted and indicate the combination of logging methods proposed in each of the proposed Moose Post-Fire Project sales are currently economically viable. It is anticipated that the combination of tractor and helicopter yarding in each sale will offset the higher helicopter yarding costs on portions of the sale.

## **Environmental Justice**

The alternatives were assessed to determine whether they would disproportionately impact minority or low-income populations, in accordance with Executive Order 12898. No local minority or low-income populations were identified during scoping or effects assessment. No minority or low-income populations would be impacted by implementation of any of the alternatives.

## **4. Regulatory Framework and Consistency**

### ***Forest Plan Guidance***

The Flathead National Forest Plan includes Forest-wide management goals that relate to the economic characteristics of the proposed action (USDA Forest Service 1986).

- Provide for public benefits from National forest system lands – the planned allocation, development, and efficient distribution of selected natural resources (II.Goals.A.1).
- Provide a sustained yield of timber products that is cost-effective, responsive to the needs of the local economy, and is consistent with other Forest management goals (II.Goals.B.3.).
- Develop and implement a road management program, with road use restrictions and closures that is responsive to resource protection needs and public concerns (II.Goals.B.5.).
- Provide a range of quality outdoor recreation opportunities within a forest environment that can be developed for visitor use and satisfaction (II.Goals.B.8.)

The Flathead National Forest Plan also includes forest-wide management objectives and standards, which relate to economic analysis and the proposed project.

- Section II. Objectives 6.a and b provides specific output levels for timber management.
- Maintain a mix of sale offerings for various logging systems needed to implement the Forest Plan and support local and regional logging systems capabilities (II.Objectives.6.b. (3)).
- Maintain offerings of firewood and other miscellaneous forest products at least at current levels.
- Timber sales would be designed to consider cost-effectiveness while maintaining the long-term sustained yield and protecting the soil and water resources (II.Standards.H.2.).

Amendments subsequent to the original Forest Plan have not added any economic analysis requirements.

Forest Service policy for economic and financial analysis in respect to timber management projects is in FSH 1909.17 and FSH 2409.18.