Socioeconomics

Affected Environment

This section evaluates the likely socioeconomic consequences of the specific management actions contained in each alternative and how the alternatives would affect the regional economy. As documented in the "Visitor Experience/Recreation" section of this chapter, there were an estimated 3.9 million annual visitors to Yosemite National Park in 2010 and 3.95 million in 2011, slightly fewer than the all-time record estimate of 4.0 million in 1996. Yosemite visitors spend millions of dollars on entrance fees, campgrounds, hotel lodging, meals, transportation, and other goods and services both inside the park and in gateway communities outside the park. As a result, visitor spending is an important source of income and employment for the park, the primary park concessioner, and the gateway communities. In addition, the National Park Service (NPS) operating budget pays employees and contractors to perform duties and provide services within the park, which, like visitor spending, provides revenue to support the economy of the surrounding region.

The "Socioeconomics" section contains two subsections: regional economy and visitor expenditures. The first section characterizes the regional economy. The region affected by the park includes the four surrounding counties: Madera, Mariposa, Mono, and Tuolumne. Economic and statistical profiles were developed for each county to assess the importance of tourism and NPS spending to the region. The profiles provide an economic baseline with detailed information on the size of each county's principal economic sectors in terms of economic output, employment, and other relevant economic indicators. Although historical trends and future projections are included for some socioeconomic measures (e.g., population), the primary focus is on 2010, which has been selected as the most recent year for which reliable data are available to use as a baseline for the alternatives analysis to be conducted later in this EIS process.

The second section presents best estimates of baseline visitor spending. The NPS periodically surveys visitors to Yosemite and fortunately conducted a survey in 2009 as part of the Visitor Services Project (VSP). The results of this survey, as reported in the study, *Impacts of Visitor Spending on the Local Economy: Yosemite National Park, 2009,* have been adjusted using the Consumer Price Index to estimate spending patterns for the baseline year of 2010.

Regional Economy

The region evaluated in the socioeconomic analyses below includes all the gateway communities immediately adjacent to Yosemite National Park and the four counties that house them: Madera, Mariposa, Mono, and Tuolumne. This four-county region roughly coincides with the 50-mile radius for which spending was reported in the VSP survey. The four main access roads to the park pass through the four gateway counties; Highway 41 passes through Madera and Mariposa counties, Highway 140 passes through Mariposa County, Highway 120 east passes through Mono County, and Highway 120 west passes through Tuolumne County.

Yosemite National Park is located primarily in Mariposa and Tuolumne counties, with a small southern portion in Madera County. The developed areas along the main river corridor and the

South Fork Merced River, including Yosemite Valley, the El Portal Administrative Site, and Wawona are located within the jurisdiction of Mariposa County. Merced, Stanislaus, San Joaquin, and Fresno Counties were excluded from the affected region because, in these much more populous and urbanized counties, it is difficult to distinguish the portions of the tourist economies that are associated with Yosemite versus other tourist destinations. Also, tourism is a relatively small component of these counties' overall economies.

Regional Comparison

Population

In 2010 the population of the region of economic study was almost 240,000. **Table 9-162** shows the historical growth rates for this region during the past 40 years. The table also shows the state population and growth rates. The region containing the gateway communities to Yosemite National Park has been growing much more rapidly than the state of California as a whole, though it is important to note that this regional growth percentage is relative to the small baseline of four counties that are largely rural in character. Furthermore, while population at both geographic levels continues to grow, the rates of growth are slowing down.

TABLE 9-162: HISTORICAL POPULATION BY COUNTY: 1970-2010

County	1970	1980	1990	2000	2010
Madera	41,519	63,116	88,090	123,109	150,865
Mariposa	6,015	11,108	14,302	17,130	18,251
Mono	4,016	8,577	9,956	12,853	14,202
Tuolumne	22,169	33,928	48,456	54,504	55,368
Total 4-Co. Region	73,719	116,729	160,804	207,596	238,686
10-Year Growth		58%	38%	29%	15%
California	19,953,134	23,667,902	29,760,021	33,873,086	37,253,956
10-Year Growth		19%	26%	14%	10%
SOURCE: U.S. Bureau of the Census 2010]					

Table 9-163 indicates that substantial growth is projected to continue into the future, both in the region of impact and in the state as a whole. The projections currently available from the California Department of Finance were made before the 2010 Census was available and before the full effects of the current recession were obvious. As a result, the actual 2010 population fell short of the predictions, and future populations are likely to be smaller by a similar proportion.

Income

Table 9-164 summarizes several key household demographic and income characteristics for the four-county study area. Incomes in all four of the counties are less than the average for California as a whole. Per-capita incomes are lowest in Madera County, though household sizes tend to be larger;

TABLE 9-163: PROJECTED POPULATION BY COUNTY: 2000-2050

County	2000	2010	2020	2030	2040	2050
Madera	124,696	162,114	212,874	273,456	344,455	413,569
Mariposa	17,150	19,108	21,743	23,981	26,169	28,091
Mono	13,013	14,833	18,080	22,894	29,099	36,081
Tuolumne	54,863	58,721	64,161	67,510	70,325	73,291
Total 4-Co. Region	209,722	254,776	316,858	387,841	470,048	551,032
10-Year Growth		21%	24%	22%	21%	17%
California	34,105,437	39,135,676	44,135,923	49,240,891	54,226,115	59,507,876
10-Year Growth		15%	13%	12%	10%	10%
SOURCE: California State Department of Finance 2011						

TABLE 9-164: HOUSEHOLD INCOME CHARACTERISTICS FOR THE FOUR-COUNTY STUDY AREA

Key Demographic Characteristics	Madera	Mariposa	Mono	Tuolumne	California
Persons per household, 2006–2010	3.30	2.28	2.61	2.28	2.89
Per-capita money income in past 12 months (2010 dollars)	$18,724	$27,064	$27,321	$25,483	$29,188
Median household income 2006–2010	$46,039	$49,098	$55,087	$47,462	$60,883
Persons below poverty level, percent, 2006–2010	19.3%	12.5%	12.0%	11.7%	13.7%
SOURCE: U.S. Census Bureau State & County QuickFacts 2010					

therefore, with more potential workers per household, household incomes in Madera are comparable to those in the neighboring counties. The poverty rate is also the highest in Madera County.

Employment

Table 9-165 presents employment figures including all waged, salaried, and self-employed jobs in each county, and both full-time and part-time workers. In 2010 total employment was approximately 102,000 in the four-county area. Madera County, with the largest and most urbanized population, had the largest employment base in the region, accounting for approximately 57% of total employment. Mariposa County, which includes Yosemite Valley, El Portal, and Wawona, accounted for approximately 8% of total employment in the affected region. Table 9-165 provides total employment estimates for the counties by industry sector. The Service sector, which includes most of the businesses most directly impacted by tourism and visitor spending, accounts for 45% of the total region, and 59% of Mariposa County, which includes Yosemite Valley. The figures are used as the baseline for employment conditions.

According to the Local Area Unemployment Statistics program of the U.S. Bureau of Labor Statistics, in 2010 the total civilian labor force in the four-county region was 106,429, of which 90,509 were employed. The statewide unemployment rate in California at the time was 12.4%. Only Mariposa

TABLE 9-165: 2010 EMPLOYMENT BY COUNTY AND MAJOR INDUSTRY SECTOR

Industry Sector	Individual Counties				Total
	Madera	Mariposa	Mono	Tuolumne	Study Area
Total	**58,309**	**8,037**	**10,608**	**25,319**	**102,273**
Agriculture	12,701	294	105	519	13,619
Mining	88	79	24	118	310
Construction	2,258	478	687	1,692	5,115
Manufacturing	2,990	175	113	764	4,043
Transp. & Utilities	1,468	128	110	368	2,074
Trade	5,593	619	938	3,164	10,314
Service	21,816	4,755	6,493	12,905	45,970
Government	11,393	1,509	2,136	5,789	20,828
SOURCE: Minnesota IMPLAN Group, Inc. data; Land Economics Consultants analysis 2012					

County was slightly better off with an unemployment rate of 12.1%. The other three counties were between 14.0% and 15.6% (with the highest in the most populous county, Madera). The region's average unemployment rate in 2010 was 14.8%.

Economic Output

Economic output is a measure of productivity. Measures of economic output vary, depending on the Industry sector. For the Agricultural and Trade sectors, output is measured by the value of products sold. In the Manufacturing sector, output is a measure of the value added by the manufacturer or the value of shipments. In the Service sector, output is measured as receipts in dollars. In 2010, the estimated total output of goods and services for the four-county region was approximately $12.5 billion, as presented in **table 9-166**. Madera and Tuolumne counties, which are more urbanized with cities such as Madera and Sonora, produce the majority of the region's economic output. The almost entirely rural counties of Mariposa and Mono contributed only 16% of the output. However, 57% of Mariposa's output was generated in the tourism-heavy services sector.

Taxable Retail Sales

Taxable retail sales are good indicators of annual spending in the Travel Service sectors because these sales represent taxes paid on transactions with consumers. The total taxable retail sales figures from the state Board of Equalization also include the taxes paid by businesses on raw materials and services. In 2010, the total taxable retail sales for the four counties in **table 9-167** were just over $2.0 billion. The previous years' retail volumes have also been converted to constant 2010 dollars for comparison purposes. In real terms, retail sales were actually greater in 2001 at $2.1 billion; grew at a healthy rate through 2006; and then declined with the recession, showing the most dramatic drops in 2008 and 2009. The data suggest that retail sales volumes have stabilized recently.

TABLE 9-166: 2010 ECONOMIC OUTPUT BY COUNTY AND MAJOR INDUSTRY SECTOR (IN CONSTANT 2010 $1,000,000S)

Industry Sector	Individual Counties				Total
	Madera	Mariposa	Mono	Tuolumne	Study Area
Total	$7,699	$885	$1,159	$2,791	$12,535
Agriculture	$1,675	$42	$27	$42	$1,786
Mining	$26	$9	$4	$26	$65
Construction	$327	$63	$99	$225	$714
Manufacturing	$1,201	$39	$47	$170	$1,456
Transp. & Utilities	$337	$38	$20	$133	$527
Trade	$499	$52	$70	$238	$858
Service	$2,774	$501	$682	$1,517	$5,475
Government	$861	$142	$210	$441	$1,654

SOURCE: Minnesota IMPLAN Group, Inc. data; Land Economics Consultants analysis 2010

TABLE 9-167: TOTAL TAXABLE RETAIL SALES BY COUNTY (IN CONSTANT 2010 $1,000,000S)

County	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010[a]
Madera	$1,063	$1,110	$1,194	$1,299	$1,464	$1,550	$1,512	$1,344	$1,119	$1,159
Mariposa	$160	$160	$161	$179	$190	$182	$175	$173	$163	$164
Mono	$248	$263	$267	$292	$307	$322	$281	$259	$205	$215
Tuolumne	$660	$670	$685	$723	$727	$704	$679	$616	$533	$508
Total 4-Co. Region	**$2,131**	**$2,204**	**$2,306**	**$2,492**	**$2,688**	**$2,758**	**$2,648**	**$2,392**	**$2,019**	**$2,047**

[a] Annual total estimated by Land Economics Consultants from first three-quarters of data available.

SOURCES: Calif. State Board of Equalization, Taxable Sales in California Annual Reports, Bureau of Labor Statistics (CPI-U)

Madera County

According to the California Employment Development Department, almost a quarter of Madera County employment (23%) was on farms in 2010. When the Food Processing, Service, and Trade sectors of the economy are considered as well, agriculture's dominance in Madera County is obvious. The Leisure and Hospitality sector of the economy accounted for a little more than 6% of the jobs. Federal employment amounted to 300 jobs, or approximately 0.7% of county employment. In terms of fiscal resources, the transient occupancy tax only accounts for approximately 1% of Madera County's General Fund.

Madera County reaches from the crest of the Sierra Nevada range to the San Joaquin River on the Central Valley floor. The majority of the county's population and employment are concentrated along the Highway 99 corridor in the Central Valley. None of the developed parts of Yosemite National Park are in Madera County, but the county includes the headwaters of both the South Fork and the main stem of the Merced River in the high country at the southern end of the park. Because of its large

geographic size and diversity of the economy of Madera County, tourism associated with the park is not particularly important to the county as a whole. On the other hand, the eastern communities in the county, specifically Oakhurst and Bass Lake, are much more dependent on Yosemite tourism.

Mariposa County

According to the Employment Development Department, tourism is Mariposa County's main industry and the area's largest employer, with more than a third (37%) of all jobs in the Leisure and Hospitality sector in 2010. The county's primary recreation area/tourist attraction is Yosemite National Park, much of which lies within the county, including the developed areas of Yosemite Valley, Wawona, and El Portal Administrative Site. Other major recreation areas in Mariposa County include Stanislaus National Forest and Sierra National Forest, as well as the U.S. Forest Service/Bureau of Land Management recreation areas along the Merced River. Other recreation resources in Mariposa County include Lake Don Pedro, Lake McSwain, and Lake McClure where camping is available.

Mariposa County's economy is very different than Madera County's. Less than 1% of Mariposa employment is on farms. In contrast, with the national park and forests, federal employment is much more important, accounting for approximately 800 jobs or 16% of county employment in 2010.

From a fiscal standpoint, Mariposa is the most dependent on tourism of the four counties. Almost a quarter of the $42 million Mariposa County General Fund is derived from the Transient Occupancy Tax (TOT), or approximately $10 million in the most recent fiscal year. The TOT is levied at the rate of 10% of the room rate and is collected from Bed and Breakfasts and transient rentals (e.g., Vacation Rentals by Owner), as well as from traditional hotels and motels. In addition, there is another 1% tax on transient rooms in the form of a Tourism Business Improvement District Assessment (TBID). All of the accommodations in Yosemite Valley, as well as those in Wawona, contribute to Mariposa's General Fund through the TOT and generate money for the TBID, as well.

Another way to look at it is Mariposa County collects 62% of the entire TOT generated within the four-county region.

Mono County

Mono County is one of the least populated counties in California and is the gateway county for visitors entering through the eastern park entrance. Park access via this entrance is limited in the winter because the entrance is typically closed from November to late May as a result of snowfall. Lodging, food, beverage, and other services are central to Mono County's economy, which is also bolstered by extensive natural resources and recreational opportunities. As home to the Mammoth Mountain Ski Area, Mono County is a significant tourism destination in the winter. During summer, Mono County is a popular destination for such resort communities as Mammoth Lakes and June Lakes and for backcountry visitation to the John Muir and Ansel Adams Wilderness Areas.

According to Employment Development Department data for 2010, the Leisure and Hospitality sector accounted for almost half (49%) of all employment in Mono County. Federal employment constituted approximately 200 jobs or about 3% of all employment.

Mono County only collects about $2 million per year in Transient Occupancy Taxes, but because it is such a small county, that amount constitutes 7% of the county's General Fund.

Tuolumne County

The Tuolumne River watershed portion of Yosemite National Park is in the southeastern portion of Tuolumne County. The county also contains significant national forest lands and the Emigrant Wilderness, with recreation destinations scattered throughout. In addition to Yosemite, other recreational attractions in Tuolumne County include Columbia State Park, Stanislaus National Forest, Dodge Ridge Ski Area, and Pinecrest Lake.

The bulk of Tuolumne County's economy is clustered on private lands along Highways 49 and 108, as well as centered in the town of Sonora. The primary driver of the Tuolumne County economy is the service sector, which is indicative of a large retirement and second home based population in the surrounding Gold Country area of the foothills. According to the Employment Development Department, the Leisure and Hospitality sector accounted for about 12% of the jobs in Tuolumne County in 2010. Federal employment was approximately 400 jobs at that time, or about 3% of county jobs. The TOT in Tuolumne County generates about $2 million per year, representing approximately 4% of the General Fund.

Trends in Visitation to the Park

Socioeconomic impacts are highly correlated with overall visitation. **Figure 9-46** shows the trend in estimated total recreational visitation to Yosemite National Park over the last century. According to these estimates, visitation grew explosively at the beginning of the 20th century, only to crash along with the economy in the early 1930s. Then, growth began again, only to be halted by World War II. The post-war era showed strong, long-term growth, peaking in 1996. In 1987, when the Merced was designated a Wild and Scenic River, estimated visitation to the park stood at 3.2 million. The effects of the flood in early 1997, which dramatically reduced the inventory of overnight accommodations in Yosemite Valley, can be seen over the decade subsequent to 1997. The strong growth trend observed prior to 1997 can be seen again in recent years.

Visitor Expenditures

Average Visitor Expenditures

The NPS's Visitor Services Project (VSP surveys) collected data in 2009 on expenditures of visitor groups inside the park and within 50 miles of the park. This data was analyzed in the February 2011 study, *Impacts of Visitor Spending on the Local Economy: Yosemite National Park, 2009*. Spending averages in 2009 were computed per visitor group per day (or per night) for different market segments defined by the type and location of accommodations used. The observed 2009 spending averages were adjusted using the Consumer Price Index (CPI) to 2010 dollars, as presented in **table 9-168**. On a visitor group per day basis, average spending was $75 for day trips by local residents, $87 for day trips by nonlocal visitors, $371 per night for visitors staying in park lodges or cabins, and $170 per night for

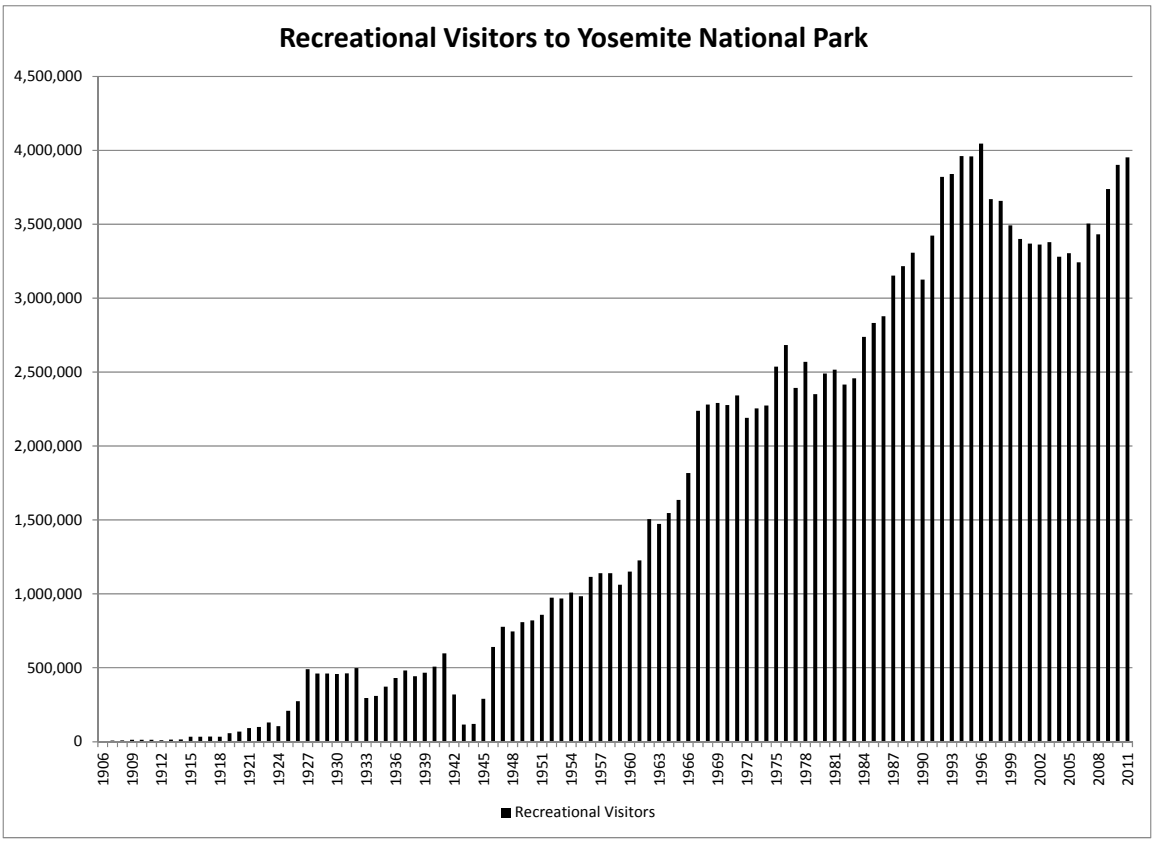

Figure 9-46
Estimated Number of Recreational Visitors to Yosemite National Park

TABLE 9-168: AVERAGE SPENDING PER DAY/NIGHT FOR VISITOR GROUPS IN 2010 DOLLARS

Spending Category	Average Spending per Day/Night Visitor Groups in 2010 Dollars[a]						
	Local	Day Trip	Motel-in	Camp-in	Motel-out	Camp-out	Other Overnight
Motel, hotel, cabin, transient rental, or Bed & Breakfast	$0.00	$0.00	$213.91	$2.52	$144.52	$0.00	$0.00
Camping fees	$0.00	$0.00	$1.67	$34.49	$1.31	$28.59	$0.00
Restaurants & bars	$21.99	$17.04	$61.09	$23.18	$49.04	$24.46	$12.12
Groceries & takeout food	$18.98	$10.98	$18.61	$20.98	$17.08	$16.07	$4.55
Gas & oil	$17.21	$16.63	$18.72	$30.01	$26.34	$31.00	$9.84
Local transportation	$0.00	$3.94	$9.82	$0.80	$31.09	$4.35	$1.63
Admission & fees	$11.71	$23.68	$25.35	$38.26	$22.51	$12.94	$5.79
Souvenirs & other expenses	$4.74	$14.43	$22.02	$19.79	$21.07	$13.40	$3.61
Total per Visitor Group	**$74.64**	**$86.71**	**$371.17**	**$170.02**	**$312.95**	**$130.81**	**$37.54**

[a] Adjusted from the 2009 Visitor Services Project survey results using the Consumer Price Index for All Urban Consumers, by industry category.

SOURCE: Cook, Philip S., *Impacts of Visitor Spending on the Local Economy: Yosemite National Park, 2009*, February, 2011[

park campers. Visitors staying in motels, cabins, lodges, or bed and breakfasts (B&Bs) outside the park spent an average of $313 per night during their trips and those camping outside the park spent $131 per night. The "other overnight" column includes visitors staying in backcountry locations or with friends and relatives, and includes spending within the four-county area as visitors approach and leave the park.

The VSP Survey found that about 47% of visitor groups' total spending is inside the park and 53% is outside the park. As one would expect, visitor groups staying overnight inside the park spent the majority of their money inside the park, and visitor groups staying outside the park spent most of their money in surrounding communities. A higher percentage of campers' spending is on groceries, whereas visitor groups staying in lodges, cabins, and motels spend more on restaurant meals.

Total Visitor Expenditures and Economic Impacts

The total economic impact on the four-county study area from Yosemite National Park visitor spending and the NPS payroll in the baseline year of 2010 was recently calculated as part of an ongoing effort to estimate the economic benefits of national parks to their local communities (Stynes 2011). The summary statistics from this effort are presented in **table 9-169**. For the analysis of alternatives to follow, a model of the four-county economy has been constructed, and the impacts of visitor spending and the NPS payroll are analyzed using IMPLAN and the NPS Money Generation Model (MGM2), as described in the "Environmental Consequences Methodology" section, below. The model was calibrated using the published summary statistics in table 9-166 as control totals.

TABLE 9-169: TOTAL SPENDING AND ECONOMIC IMPACTS: YOSEMITE NATIONAL PARK, 2010

	Summary Statistics
Public Use Data	
2010 Recreation Visits	3,901,408
2010 Overnight Stays	1,720,909
Visitor Spending 2010	
All Visitors	$354,689,000
Nonlocal Visitors	$350,244,000
Impacts of Nonlocal Visitor Spending	
Jobs	4,602
Labor Income	$132,465,000
Value Added	$215,932,000

SOURCE: Stynes, D.J., *Economic Benefits to Local Communities from National Park Visitation and Payroll, 2010,* December 2011

Environmental Consequences Methodology

Use of Established Regional Economic Analysis Models

To quantitatively analyze the alternatives, including the Alternative 1 (No Action), a series of interlinked economic models has been developed that calculate economic impacts within the four-county region containing Yosemite National Park. The methodology for this EIS has been built in consultation with the ongoing providers of analyses of this type to the NPS. The central model for estimating economic impacts is the Money Generation Model 2 (MGM2) developed by Stynes et al. The three main inputs to the MGM2 version used here, and their sources, are

1. annual number of visitors to Yosemite broken down by lodging-based market segments, with a baseline calibrated using 2010 actual totals from NPS Public Use Data

2. spending averages for each lodging-based market segment from the Visitor Services Project, with the most recent survey data having been collected in 2009 and updated to 2010 dollars

3. economic multipliers generated by IMPLAN[1] from the four-county region for 2010

Data for the calendar year 2010 were used for development and calibration of a baseline set of models for this socioeconomic analysis. The year 2010 is the most recent for which IMPLAN multipliers are available. Fortunately, 2010 is also a U.S. Census year and at this time is the most recent year for which historical data are reliably available across a wide variety of socioeconomic measures. In 2010, the number of visitors to the park was approximately equal to the highest recorded numbers, with the previous record set in 1996 before the flood damage in early 1997. The goal of the baseline socioeconomic analysis was to create a series of operable economic models that can reproduce the results of ongoing economic impact estimation conducted for the NPS (as reported in the "Affected Environment" section, above). Having calibrated the operable set of models for the baseline year of 2010, the same models can be used to analyze the Alternative 1 as well as Alternatives 2–6 (the action alternatives) to produce results that can be reliably compared. In essence, the modeling of alternatives will be driven by the levels of annual visitation resulting from the management plans for each alternative as if each were in place today. Based on visitor spending patterns, the total level of economic activity generated in the region can be estimated. Visitor spending impacts are thus estimated in terms of 2010 dollars but for numbers of visitors appropriate to each alternative, compared to the number of visitors under Alternative 1 during the same time frame. Under the no action alternative it is expected that the number of people seeking to visit the park will continue to grow at approximately 3% per year over the next five years.

[1] IMPLAN is a proprietary model (IMpact for PLANning) developed originally for the federal government in the 1980s at the University of Minnesota and now vended by MIG, Inc. (formerly the Minnesota IMPLAN Group, Inc.) to estimate the economic impacts of projects or policy changes on specific regions of study. Among other things, the model produces multipliers that facilitate the estimation of major economic impacts from input variables.

Economic Modeling Focuses on the Regional Level

An economic impact analysis that involves IMPLAN modeling is typically concerned with the economic development potential of projects or management plans for a region. Thus, such an analysis typically ignores local spending transfers within the region and focuses only on new income that is derived from outside the region as the measure of "economic impact." However, this analysis is interested in how alternative management plans might affect the use of the park by local residents of the gateway communities in the surrounding four counties. A less frequent but no less legitimate application of IMPLAN is to estimate total "economic activity," which is a measure of total economic importance and which includes the economic activity stimulated by the spending of local residents associated with recreation in Yosemite. For the alternatives analyses in this EIS, spending by locals has been included so that changes in their recreation or spending patterns can be considered. Although spending by locals would not be included in a traditional economic impact analysis, the term "economic impact" (rather than "economic activity") is used throughout this narrative to conform to the expectations of readers of NEPA analyses.

Two Primary Economic Drivers: Visitor Spending and NPS Spending

The majority of the economic activity, including all the direct employment in concessioner-run facilities in the park, is driven by visitors. A minor portion of the economic activity is driven by the payroll and spending of the NPS itself, which will be estimated separately after the visitor-driven impact analysis.

Because socioeconomic analysis is concerned with matters such as job creation and business opportunities, an annual perspective is required (e.g., jobs are created by flows of money sufficient to support living wages and incomes; business viability depends on ongoing revenue potential, including off seasons as well as high seasons, etc.). The NPS's MGM2 model is built to analyze economic impacts for an entire year of a park's operation. Furthermore, for this analysis, a parkwide perspective, including all river segments, must be adopted in order to capture all visitor spending. The visitor spending data were collected for the entire park visit, including travel two and from the park, and included spending anywhere within the four-county host region for the park. For example, even visitors staying in backpacking camps in the wilderness depend on purchases made earlier, and visitors' purchases of supplies in gateway communities, although modest, still contribute to the size of the four-county economy. For these reasons, an estimate of the annual, parkwide visits resulting from each alternative management plan is required as an input to the socioeconomic models.

Derivation of the Impact on Visitor Spending

Table 9-170 presents a means of providing the future annual parkwide visitor estimate required for each alternative, based on the experience of the most recent calendar year, but considering the potential for future growth in demand for visits at approximately 3% per year, and differences in the supply of overnight accommodations and day use facilities in Yosemite Valley under the various management plans. In the analysis of transportation, the number of vehicles was tracked on a daily basis for 2011. Using a factor of 2.9 people per vehicle on the average, it was possible to estimate the number of visits to Yosemite Valley on each day in 2011. Under the No Action Alternative it was

TABLE 9-170: ANNUAL PARKWIDE VISIT ESTIMATES FOR EACH ALTERNATIVE

	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6
Estimated Maximum Daily Visitation to the Valley	20,900	13,900	13,200	17,000	19,900	21,800
Number of Days Where Maximum Would Be Exceeded	0	87	91	68	10	1
Estimated Park-Wide Annual Visitation in 2011[a]	3,951,393	3,951,393	3,951,393	3,951,393	3,951,393	4,192,033
Change from Park-Wide Annual Visitation (People)	0	(306,514)	(365,857)	(74,039)	(2,698)	(1,116)
Estimated Park-Wide Visitation Achievable Within Maximums	**3,951,393**	**3,644,879**	**3,585,536**	**3,877,354**	**3,948,695**	**4,190,917**

[a] 2011 Estimate from National Park Service Public Use Statistics Office for Alts 1 - 5. Alt 6 includes 2 years growth at 3%/year.

SOURCE: Estimates by Land Economics Consultants2012

estimated the Valley was able to handle a maximum of 20,900 people in a day, which was consistent with a total estimated visitation in the park during 2011 of 3,951,000.

The different plans for infrastructure and facilities for each action alternative would result in a different maximum number of visitors that could be accommodated in the Valley. Under Alternatives 2 through 5, those maximums are smaller than the No Action Alternative, and for each alternative total parkwide visitation is projected to be less than what was observed in 2011 by the number of visitors that would have exceeded the daily maximums in the Valley. For example, for Alternative 3 a combined total of 366,000 visitors would have not been able to visit the Valley during 105 days that the maximum was exceeded. Total parkwide estimated visitation was thus reduced to a projected 3,586,000 for Alternative 3.

The proposed mix of infrastructure and facilities in Alternative 6 would allow for a higher maximum daily visitation to the Valley then under the No Action Alternative. In that case, visitation could continue to grow for two more years at the assumed rate of 3% per year before the same pattern of exceeding maximums on several peak days is experienced. After two years of growth, the maximum would be exceeded on three days, reducing visitation by 1,116, and resulting in an estimate for parkwide visitation at that point of approximately 4,191,000. These estimates on the bottom line of Table 9-113 will be used as inputs to the economic impact analysis of visitor spending in the sections to follow.

In reality, total annual visits to the park will most likely not decrease by as much as the estimates at the bottom of table 9-113 due to two effects commonly observed in economic market systems:

1. A “substitution effect” is possible during high-demand periods. That is, when people are unable to secure their first-choice lodging type, some will likely substitute a second-choice mode of visiting the park. For example, unable to get a reservation for concessioner lodging in the Valley, some people will likely opt for a motel in a gateway community and be repeat day visitors to the park during their stay.

2. A displacement or "time-shift effect" is possible, as well. Unable to secure reservations for their first-choice time period to visit the park, some people will likely change their plans to visit the park during a less popular period, but still contributing to the annual visitation numbers.

Although the extent of these human behaviors is unquantifiable at this time, it is highly likely that some combination of these and other mechanisms for economic adaptation will reduce the severity of adverse economic impacts, and it is possible that adverse impacts would be eliminated altogether. It is also possible that with continued growth in demand into the future, total parkwide annual visitation would continue to grow through these mechanisms, expanding into previously low-demand seasons and thereby continuing to increase visitor spending in the four-county economy. Economic expansion could also occur as Gateway business communities' market alternative activities and destinations so that people stay in the area longer even though they are not spending the entire time in Yosemite.

To match visitor types with the visitor spending patterns quantified by the 2009 VSP Survey, other results from the visitor survey will be used below for each alternative to first apportion the total annual visits from Table 9-113 into lodging-based market segments and then to convert total number of visitors entering the park into visitor group nights (or days) by taking into account factors for:

- average visitor group size
- length of stay (days or nights)
- re-entry rate (park entries per trip)

The number of visitor group nights will then be multiplied by the spending patterns for each group, and the total impact on the four-county economy will be estimated for each alternative.

Derivation of the Impact on NPS Spending

An additional source of economic expansion within the four-county area is direct NPS spending. Therefore, the impact of NPS employment and operations and maintenance spending must also be estimated for each alternative. **Table 9-171** presents a method for estimating the impact of each management plan on NPS employment and budget for employee compensation. This is a very simple extrapolation of data that correlates with present headcount, provided as an illustration of possible impacts of employee spending in the region. Starting with the estimation of annual visits, NPS employment is also assumed to vary with the annual volume of visitors parkwide. However, employment is subject to separation into fixed and variable costs. An analysis of the last five fiscal years of budgets for the park (2007 through 2011) has shown that 56% of the budget has come from "appropriated funds" and 44% from "revenue funds." Given that the appropriated funds are relatively fixed, and that the term "revenue funds" implies that they fluctuate somewhat with the number of visitors, table 9-110 assumes that 56% of employment and compensation are fixed (i.e., would remain the same in all alternatives), and that 44% of NPS jobs would vary in proportion to the increase or decrease in visitor volumes.

In the long run, concessioner employment and operations and maintenance costs are funded by the revenues available to the concessioner, which are derived from visitor spending, and thus are already included in the analysis. In other words, the visitor spending profiles estimated total spending by each

TABLE 9-171: NATIONAL PARK SERVICE DIRECT EMPLOYMENT AND BUDGET FOR EACH ALTERNATIVE

	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6
Estimated Parkwide Visits Considering Constraints	3,951,393	3,644,879	3,585,536	3,877,354	3,948,695	4,190,917
Difference from Alternative 1 (No Action)	100%	92%	91%	98%	100%	106%
Total National Park Service Direct Employment in 2010 (Jobs)[1]	892					
Portion of Jobs Assumed Fixed	56%					
Portion of Jobs Assumed to Vary With Visitor Volume	44%					
Estimated Direct National Park Service Jobs for Each Alternative	**892**	**862**	**856**	**885**	**892**	**916**
Total **National Park Service** Direct Employee Compensation (2010 $1,000s)[a]	$49,406					
Portion Assumed to be Fixed Cost	56%					
Portion Assumed to Vary with Visitor Volume	44%					
Estimated Direct National Park Service Compensation for Each Alternative (2010 $1,000s)	**$49,406**	**$47,720**	**$47,393**	**$48,999**	**$49,391**	**$50,724**

[a] As reported in Stynes, D.J., *Economic Benefits to Local Communities from National Park Visitation and Payroll, 2010,* Natural Resource Report NPS/NRSS/EQD/NRR--2011/481.

SOURCE: Estimates by Land Economics Consultants 2012

visitor group both inside and outside the park. For some visitors, spending on lodging supported hotel workers outside the park, for other visitors spending on lodging inside the park supported hotel workers employed by the concessioner.

It is assumed that park partner activities would remain the same under all alternatives.

One-Time Impacts of NPS Spending on Restoration and Construction Projects

In addition to ongoing spending discussed above that will continue on, year after year, for "in-house" NPS staff and their activities, there is additional work performed every year by contractors on specific restoration projects, major road maintenance and other infrastructure projects, on environmental processing and planning, and for similar activities. The budgets for these activities vary significantly year by year as funding is identified for specific projects. Over the last five years (2007-2011) the total Yosemite National Park budget has ranged from $70 to $103 million, and has averaged $89 million. After deducting the $49 million in NPS staff costs discussed above, the average budget for contractor activities has been approximately $40 million per year. The majority of contractor activity, estimated at 80%, is in the construction sector of the economy, with most of the remainder, estimated at 20%, in the professional services sector (e.g., architects, environmental planners, engineers, etc.) Thus, under

the No Action Alternative, approximately $32 million per year is spent on construction sector projects, and $8 million per year for the professional services to plan and design those projects.

In addition to the ongoing spending to maintain and repair the park, each action alternative essentially proposes a new plan for infrastructure and facilities that will guide future spending on projects, most of which will be carried out by contractors as described above. There will be one-time spending by NPS on the various project elements required to restore areas and construct facilities to implement each of the action alternatives. Although this spending will be spread out over a number of years during implementation as financial resources are identified, each project element will be built only once. The current estimates for the total implementation cost are as follows:

- Alternative 1 — There would be no additional costs for Alternative 1 (No Action)
- Alternative 2 — $263,000,000
- Alternative 3 — $187,000,000
- Alternative 4 — $223,000,000
- Alternative 5 — $235,000,000
- Alternative 6 — $418,000,000

Characterization of Impacts for NEPA

Proposed management actions under Alternative 1 and for Alternatives 2–6 will be evaluated in terms of the context, intensity, and duration of socioeconomic impacts and whether impacts were considered beneficial or adverse to the socioeconomic environment.

- **Context.** The context of the impact considers whether the impact would be local or regional. Unlike the analysis of most other topic areas, socioeconomics differs in that even "local" impacts are not confined to any one river segment. Although it is true that the largest concentration of commercial facilities within the park is in Yosemite Valley, visitors to the Valley may also make expenditures elsewhere within the region during their visits (e.g., stopping for gasoline in a gateway community). The indirect and induced effects quickly ripple away from the initial point of sale where the direct impact occurs, and total economic impacts are only measurable at the regional level. For purposes of this analysis, local impacts would be those that occur parkwide within Yosemite National Park. Regional impacts would be impacts in the four-county area around the park (Tuolumne, Mono, Mariposa, and Madera), including all gateway communities. Socioeconomic impacts will be discussed under the heading of "All River Segments."

- **Intensity.** The intensity of the impact considers whether effects would be negligible, minor, moderate, or major.

    - ***Negligible*** impacts are considered not detectable and are expected to have no discernible effect on the social and economic environment. When the socioeconomic impacts are quantifiable, negligible impacts would generally be expected to correspond to proportional changes of 2.5% or less in the specific economic resource.

    - ***Minor*** impacts are slightly detectable and are not expected to have an overall effect on the character of the social and economic environment. When the socioeconomic

impacts are quantifiable, minor impacts would generally be expected to correspond to proportional changes between 2.5% and 5% in the specific economic resource.

- ***Moderate*** impacts are detectable, without question, and could have an appreciable effect on the social and economic environment. Such impacts would have the potential to initiate an increasing influence on the social and economic environment (particularly if other factors have a contributing effect). When the socioeconomic impacts are quantifiable, moderate impacts would generally be expected to correspond to proportional changes between 5% and 10% in the specific economic resource.
- ***Major*** impacts are considered to have a substantial, highly noticeable influence on the social and economic environment and could be expected to alter that environment over the long run. When the socioeconomic impacts are quantifiable, major impacts would generally be expected to correspond to proportional changes greater than 10% in the specific economic resource.

In addition, impacts are recognized as indeterminate if the intensity of their effects on the social and economic environment could not be readily identified (especially when compared with the potential influence of other social and economic factors and/or when data limitations exist).[2]

- **Duration.** The duration of the impact considers whether the impact would occur in the short term or the long term. A short-term impact would be temporary and would be associated with transitional types of activities. A long-term impact would have an ongoing effect on the socioeconomic environment.

- **Type of Impact.** Impacts were evaluated in terms of whether they would be beneficial or adverse to the socioeconomic environment. Beneficial socioeconomic impacts would improve the social or economic conditions in the park or in the affected region. Beneficial impacts include mechanisms that attract additional visitors and spending into the region, create new jobs, or promote growth in the size of the regional economy. Adverse socioeconomic impacts would negatively alter social or economic conditions in the park or in the affected region, or would affect low-income populations. Adverse impacts include mechanisms that discourage some visitors from coming and spending money in the region, reductions in the number of jobs, or actions that retard the growth of the economy. Another, more specific, form of socioeconomic impact is the effect actions could have on the budgets of public agencies. Increases in revenues and reductions in costs are beneficial, and the inverse is adverse. Changes in economic activity levels can also stimulate changes in local housing markets. Increasing demand for housing due to economic expansion is generally seen as beneficial by housing providers, but adverse by low-income housing consumers.

[2] The extent to which quantified socioeconomic analysis of the alternatives can be performed will depend directly on the degree to which: (1) the no-action alternative is quantitatively characterized; (2) alternatives are quantifiable distinct from the no-action alternative and amongst the action alternatives; and (3) that the action alternatives' effects on future park visitation can be adequately projected.

Differences in the magnitude of future annual visitation will be a potential primary factor resulting in quantifiable effects to local and regional socioeconomic resources. In addition, changes to the type of visitation (e.g., day use versus overnight use, length of stay, visitor activity type and/or location) or the visitor profile (e.g., age and income) could be used to project related socioeconomic impacts. However, given the multitude of factors involved with visitors' recreation decision-making, it may in some cases be too difficult or speculative to project the changes in visitation patterns within the park and future visitor responses resulting from proposed ORV and facility changes.

Environmental Consequences of Alternative 1 (No Action)

All River Segments

Impacts of Actions to Protect and Enhance River Values

In concept, actions to protect and enhance river values may make visiting the Merced River corridor more or less attractive to recreationists seeking different types of experiences, but in practice it would be the actions that manage visitor use and facilities that primarily would determine the number of people that are able to visit the corridor each year, and all socioeconomic impact analysis will be discussed under that topic heading for each alternative.

Impacts of Actions to Manage Visitor Use and Facilities

The number of visitors (as presented in table 9-113 above) and the spending patterns (as presented in table 9-107 above) are both used as inputs to the MGM2 model. To conform to the visitor group per night/day format required by the MGM2 model, the total number of recreation visits counted at the entrances to the park is translated first into "Visits in Party-Days/Nights" in **table 9-172**. The translation of individual visitors to groups takes into account factors for

- each visitor market segment's share of total entries to the park
- re-entry rate (park entries per trip)
- average visitor group size
- length of stay (days or nights)

The MGM2 model analyzes spending and impacts by visitor market segment, defined as follows:

- Local-Day User: corresponds to people who live within the four-county region who recreate in the park.
- Non-Local-Day User: person living or staying outside the four-county region who is able to visit the park on a day use basis.
- Motel-In: people staying inside the park within any of the types of lodging accommodations available, other than campgrounds.
- Camp-In: people staying overnight inside the park in developed campgrounds.
- Motel-Out: people staying in commercial lodging outside the park, but within the four-county region.
- Camp-Out: people staying in campgrounds outside the park, but within the four-county region.
- Other Overnight: a miscellaneous category used by the model that includes, among other things, people staying in the backcountry.

TABLE 9-172: ANALYSIS OF TOTAL VISITATION BY MARKET SEGMENT

Visitor Market Segment	Visitor Market Segment Share of Park Entries[a]	Calculated Distribution of Visitors	Re-Entry Rate[a]	Visitor Trips to the Park	Ave. Group Size[a]	Visitor Groups	Length of Stay (Nights or Days)[a]	Visits in Party-Days / Nights
Total Visitors: Alt. 1		**3,951,393**						
Local-Day User	4.0%	158,056	1.1	143,687	2.2	65,312	1.0	65,312
Non-Local-Day User	24.0%	948,334	1.1	862,122	3.0	287,374	1.0	287,374
Motel-In	11.5%	454,410	1.1	413,100	3.5	118,029	2.4	283,269
Camp-In	9.5%	375,382	1.3	288,756	3.5	82,502	2.8	231,005
Motel-Out	36.5%	1,442,258	1.7	848,387	3.1	273,673	2.2	602,081
Camp-Out	4.0%	158,056	1.9	83,187	3.8	21,891	3.1	67,863
Other Overnight	10.5%	414,896	1.4	296,354	2.8	105,841	2.5	264,602
Totals	**100.0%**	3,951,393		2,935,594		954,622		1,801,506

[a] Findings from the 2009 Visitor Services Project survey results as reported in Cook, Philip S., *Impacts of Visitor Spending on the Local Economy: Yosemite National Park, 2009*, February, 2011

SOURCE: As noted, with Land Economics Consultants analysis 2012

The MGM2 model first calculates total visitor spending as presented in **table 9-173**. Within a 50-mile radius of the park, Yosemite visitors spent over $381 million measured in 2010 dollars for the baseline visitor year. This is a measure of the most directly observable socioeconomic impact visitors have on the region before estimating multiplier effects.

TABLE 9-173: VISITOR GROUPS AND THEIR TOTAL SPENDING BY MARKET SEGMENT FOR THE NO ACTION ALTERNATIVE

Segment	Visits in Party-Days/Nights	Average Spending ($)	Total Spending in 2010 $1,000s	Percent of Spending
Local-Day User	65,312	$74.64	$4,875	1%
Non-Local-Day User	287,374	$86.71	$24,917	7%
Motel-In	283,269	$371.17	$105,142	28%
Camp-In	231,005	$170.02	$39,276	10%
Motel-Out	602,081	$312.95	$188,424	49%
Camp-Out	67,863	$130.81	$8,877	2%
Other Overnight	264,602	$37.54	$9,933	3%
Totals	**1,801,506**	**$211.74**	**$381,444**	**100%**

SOURCE: MGM2 model built for Merced River Alternatives Analysis, Land Economics Consultants 2012

Table 9-174 presents the output of the MGM2 modeling for Alternative 1. Visitor spending generates over 5,300 jobs and over a quarter billion dollars in value added for the four-county region. Value added is technically the sum of labor income, profits and rents, and indirect business taxes, and serves as the best overall measure of the total socioeconomic significance of visitor spending within the four-county study region.

TABLE 9-174: TOTAL ECONOMIC ACTIVITY (FOUR COUNTY REGION) DUE TO VISITOR SPENDING FOR ALTERNATIVE 1 (NO ACTION)

Sector/Spending Category	Sales $1,000s	Jobs	Labor Income $1,000s	Value Added $1,000s
Direct Effects				
Motel, hotel, cabin, transient rental, or B&B	$148,186	1,409	$39,236	$84,127
Camping fees	$11,168	145	$3,508	$5,066
Restaurants & bars	$63,385	1,098	$21,287	$34,596
Admissions & fees	$39,551	705	$10,618	$23,671
Local transportation	$23,545	495	$11,866	$18,020
Grocery stores	$6,855	103	$3,441	$5,004
Gas stations	$8,631	47	$4,323	$6,420
Other retail	$14,907	261	$6,876	$11,206
Wholesale trade	$1,510	10	$530	$1,123
Local Production of goods	$189	1	$27	$75
Total Direct Effects	**$317,926**	**4,274**	**$101,712**	**$189,308**
Indirect and Induced Effects	$125,729	1,083	$36,317	$76,447
Total Effects	**$443,655**	**5,357**	**$138,029**	**$265,754**
Multiplier	1.40	1.25	1.36	1.40

NOTE: Current economic impacts are measured in 2010 dollars.
SOURCE: MGM2 model built for Merced River Alternatives Analysis, Land Economics Consultants 2012

Ongoing NPS Spending

Visitor spending accounts for the majority of economic activity, but direct spending by the NPS, through its operating budget, payroll/staffing, and capital projects, also generates economic activity in the four-county study area. **Table 9-175** analyzes the economic effects of the NPS payroll and employment within the four-county region. Although the NPS only supported 892 jobs directly from its payroll in 2010, total job creation within the four-county economic region included another 294 induced jobs, for a total employment impact of almost 1,200. Similarly, the $49 million NPS payroll generated over $63 million in economic value to the surrounding economy.

For the No Action Alternative it is also necessary to account for the portion of the Yosemite National Park budget that goes to purposes other than direct employee compensation. As was discussed in the methodology section, over the last five years this spending has averaged approximately $40 million per year. **Table 9-176** presents an analysis of the regional impact of that spending, starting with the

TABLE 9-175: ECONOMIC IMPACTS OF NATIONAL PARK SERVICE PAYROLL AND EMPLOYMENT

Yosemite National Park	Direct Effects	Economic Multipliers[a]	Indirect and Induced Effects	Total of Direct, Indirect and Induced Effects
Employment				
National Park Service Jobs	892	1.33	294	1,186
Labor Income				
NPS Payroll[b]				
Salaries $1,000s	$39,283			
Benefits $1,000s	$10,123			
Total Compensation	$49,406	1.15	$7,643	$57,049
Value Added				
Total Compensation	$49,406	1.29	$14,155	$63,561

NOTE: Current economic impacts are measured in 2010 dollars.

[a] Multipliers are from IMPLAN sector 439, federal government/nonmilitary employment and payroll.
[b] As reported in Stynes, D.J., *Economic Benefits to Local Communities from National Park Visitation and Payroll, 2010,* Natural Resource Report NPS/NRSS/EQD/NRR--2011/481.

SOURCES: As noted; Land Economics Consultants analysis 2012

TABLE 9-176: ECONOMIC IMPACTS OF THE NON-PAYROLL PORTION OF THE NPS BUDGET IN THE NO ACTION ALTERNATIVE

	Average Annual Budget		Value Added		Employment	
Spending by Sector	Assumed Percent	(Millions $)	Multiplier[a]	(Millions $)	Multiplier (Jobs/ $ million)[b]	No. of Jobs
Construction Sector	80%	$32.0	0.66	$21.1	10.93	231
Professional Services	20%	$8.0	0.81	$6.5	19.42	126
Total	**100%**	**$40.0**		**$27.6**		**357**

[a] Multipliers are averages of IMPLAN sectors 34 and 36, and 369 and 375.
[b] Employment multipliers are number of jobs per million dollars of value added in the region.

SOURCES: As noted; Land Economics Consultants analysis

assumption that approximately 80% goes into the construction sector and 20% into such professional services as architecture, engineering, environmental and other technical consulting services. Not all of the NPS spending on contractor activities is captured within the four-county region because some firms are from beyond this area, resulting in multipliers that are less than 1.00. Including the direct, indirect and induced effects on value added, however, the majority stays within the region and supports the equivalent of approximately 357 additional jobs in the four counties.

It is assumed that a comparable average annual spending of approximately $40 million will continue to occur in all of the action alternatives in order to maintain the park's facilities and infrastructure over the long run. As such there will be no differential impact between alternatives from this activity. On the other

hand, there will be different one-time costs to modify facilities and infrastructure to implement each alternative, and those impacts will be discussed below for each alternative.

Note that some projects have been undertaken by park partners in the past, which in theory would have added more spending and employment to what is formally in the NPS budget. Future actions of park partners, however, are expected to be independent of which management alternative NPS selects for the Merced River, and thus would be the same for all alternatives. As such, there is no need to treat them further in this analysis.

Also note that all concessioner employment is supported by concessioner revenues derived from visitor spending in concessioner operated facilities. In other words, all concessioner socioeconomic impacts are included in the analysis of visitor spending above.

Summary of Impacts Under Alternative 1 (No Action)

Current trends would be expected to continue under Alternative 1. These trends include full occupancy of lodging and day parking in the park during peak use periods, which implies there is additional demand for visits to the park that is currently being unmet, and would continue to be unmet during peak periods in the future. Some of that unmet demand may increase the demand for visitor services in gateway communities.

Cumulative socioeconomic impacts are derived from changes in the visitor recreation experience and are based on analysis of past, present, and reasonably foreseeable future actions in the Yosemite region (local and regional) in combination with potential effects of each alternative. Actions evaluated include primarily those that could affect the level of visitation parkwide and/or the amount of spending by visitors to Yosemite National Park. In addition, changes to NPS staffing levels, operating budget outlays, or capital projects that could affect the economy in the four-county region containing the park are also evaluated.

Past Actions

Today's mix of facilities and infrastructure to accommodate visitors in the park and the attractiveness of the recreational activities available has essentially been created by the cumulative effects of past actions. The more people that visit the park, and the longer they stay in the four-county region, the more likely they are to spend money, which benefits the regional economy. Past actions that have generally resulted in beneficial socioeconomic effects are those that enhance the visitor experience or provide better transportation infrastructure. Past actions generating beneficial socioeconomic effects include El Portal Road Improvement Project, Rehabilitate Yosemite Valley Campground Restrooms, Yosemite Valley Shuttle Bus Procurement, Yosemite Valley Shuttle Bus Stop Improvements, Wawona Road Rehabilitation Project, and the Lower Yosemite Fall Project. Such projects help to incrementally accommodate high volumes of visitors, to satisfy strong demand and visitor spending is a resulting consequence.

The *Half Dome Trail Stewardship Plan* is an example of an action that has reduced access for some visitors and improved the experience for other visitors. In economic terms, such actions have the potential to reduce the number of visitors but increase the "willingness to pay" or strength of demand among those who remain.

However, other past actions (or inactions after natural events) have had adverse impacts on the size of the regional economy by reducing overnight lodging and camping facilities in Yosemite Valley. Major examples include:

- *1997 Flood* – The Park sustained heavy impacts to campgrounds, roads, and lodging. The subsequent closure of the Upper & Lower River Campgrounds resulted in the loss of 376 campsites, and approximately one-half of the units at the Yosemite Lodge (there had been 440 units, which decreased to approximately 245). The El Portal Road was under construction for a year (which had regional impacts to Mariposa County from pass through visitors).

- *2000 Yosemite Valley Plan* – The mandatory mass transit element proposed in the YVP to this day causes confusion among potential visitors and may be affecting visitation.

- *2006 Ferguson Rockslide* – This had an adverse effect on parts of the regional economy, primarily the Mariposa area, when Highway 140 was closed for approximately 6 months (during the summer of 2006) for road repairs; however Groveland and Oakhurst benefited from traffic rerouting through those gateways.

- *2008 Rock falls in Curry Village* – Approximately one-third of the overnight accommodations were lost due to the establishment of a rockfall hazard zone. This had an effect on both the concessioner and Mariposa County in terms of TOT. However, a portion of the accommodations were re-established in Boys Town – a.k.a. the "signature tents."

- *2012 Hanta virus in Curry Village* – Not only has this situation caused a decline in stays at Curry Village, there have been thousands of systemic cancelations parkwide as a result.

Decisions not to immediately replace units lost through natural disasters have exacerbated a shortage of accommodations during periods of high demand and thus reduced the amount of economic activity attainable during peak periods.

Present Actions

Similar to past actions, some present actions may result in beneficial socioeconomic effects by improving visitor access, providing recreational opportunities, or adding facilities that offer educational and cultural experiences. Specific examples of present actions that have beneficial effects on socioeconomics include the following:

Improved Facilities: Ahwahnee Comprehensive Rehabilitation Plan, Rehabilitate Wawona Road, Tioga Road Rehabilitations, and Tioga Road Corridor Campground Accessibility Improvements

Opportunities for Unique Recreational Experiences: Commercial Use Authorization for Commercial Activities

Reasonably Foreseeable Future Actions

Future actions could have both beneficial and adverse socioeconomic effects. Parkwide visitation may be affected to some degree by the Tuolumne River Plan once the Record of Decision is reached and the plan implemented. Future natural events may also have an impact, with weather, waterfall volumes, forest fires and other events affecting visitation. Demand for visits to the park will also likely evolve in

the future due to changing demographics of visitors to Yosemite. New facilities planned for the reasonably foreseeable future can also affect visitation and include:

> ***New Visitor Facilities***: Wahhoga Indian Cultural Center and Henness Ridge Environmental Education Center

Overall Cumulative Impact

Future management of Yosemite National Park, particularly areas within or near the Merced River corridor, could result in either beneficial or adverse effects on total economic activity within the four-county region as described above. The socioeconomic impacts of the future management plans embodied in Alternatives 2–6 will be estimated by examining their differences between them and Alternative 1. Except as modified by present and reasonably foreseeable future actions already planned, Alternative 1 would essentially leave conditions as they exist today. Alternative 1 would not meaningfully expand the inventory of camping and overnight lodging opportunities in Yosemite National Park. Although this would not have a cumulatively additive effect compared with current conditions, it would when compared with conditions at the time of designation (1987) and would represent a continued reduction in camping opportunities.

The overall cumulative effect of Alternative 1 would be that visitation is likely to continue to grow at an average rate of approximately 3% per year in the near term (i.e., the next five years). Without new accommodations in Yosemite Valley, growth could occur during peak periods if people substitute accommodations outside the park for preferred in-park camping and lodging. Growth could also occur if the numbers of visitors increases during nonpeak periods. Current total annual visitation is near the historic high of approximately 4 million visitors, though visitor volumes have ranged as low as 3.2 million over the last decade, and the 10-year average is 3.5 million per year. The baseline year in Alternative 1 of 3.95 million is very close to the highest visitation ever experienced. Based on these considerations, the cumulative economic impact of past, present, and reasonably foreseeable future actions, when combined with those of Alternative 1, would be regional, long term, negligible, and beneficial.

Environmental Consequences to Actions Common to Alternatives 2–6

All River Segments

Impacts of Actions to Manage Visitor Use and Facilities

Changes in management policies can have impacts on the regional economy that will follow effects commonly observed in market economies. A general *qualitative* description of some of the more common effects includes the following:

- For people seeking a visitor experience that includes more than just a daytrip to the park, demand for overnight accommodations tends to focus on Yosemite Valley first and then radiate outwards, filling motels and campgrounds in gateway communities and beyond as those closer fill up. Restriction on supply of accommodations in the park can increase demand outside, and building new campsites or lodging units in the park can decrease demand for accommodations in gateway communities.

- Due to the substitution effect described above, some people seeking an overnight experience in the park but unable to secure accommodations may be willing to substitute a lodging unit in a gateway community for their preferred unit in the Valley, and effectively become repeat day visitors to the park. Their willingness to move to a gateway location would depend in part, however, on their certainty of being able to access the park on a day use basis. A day-use reservation system that assures them that they will have access to the park, even if they are not staying in it, may increase demand for lodging in gateway communities.

- Due to the displacement, or time-shift, effect described above, some people unable to find accommodations in peak seasons may reschedule a planned visit to the park for a lower demand season. But because weather can be less predictable in the shoulder seasons, not all types of accommodations are conducive to this type of time shifting. While hard-sided cabin units may be able to accommodate travelers year round, camping and tent accommodations may not work as well in shoulder seasons.

- The single private business most heavily impacted by Alternatives 2–6 within the park would be the concessioner. A reduction in the inventory of lodging, or in the commercial recreational activities allowed, would decrease concessioner revenues and ultimately reduce the number of concessioner employees needed. With fewer supplies needed and with less employee spending coming out of the park, there would be further reductions through the multiplier effects to the size of the four-county regional economy. But at the same time demand that can no longer be satisfied within the park may shift outside to gateway communities to some extent. This may create new business opportunities there, which would also have multiplier effects that expand the regional economy. The net effects would likely be less dire than the adverse impacts estimated when looking at the concessioner and park alone.

- The existing concessioner is on a short-term extension of an older contract during the study process now underway. Once a management alternative is selected, and the framework for a new concession operation is established, a new concession contract would be executed. The standard NPS process requires that the new agreement represent a viable business, even if it is dramatically different than the business operation that was in place before. In other words, within the park there would be a one-time change to the business model for the concession operation that is agreeable to all parties. To the extent that the new concession business is smaller than what was there before, additional private business opportunities may be created outside the park.

- Each action alternative includes a set of project elements that would restore specific areas or construct and rehabilitate facilities to support visitor use. One-time spending on these capital projects would temporarily employ people in the construction industry within the four-county region. Some specialized construction skills and materials may be imported from beyond the adjacent four counties, but these projects would generate some new income for residents of the region, and the respending of that income would ripple outwards and further expand the economy of the region. The one-time beneficial impacts of construction would subside once the set of projects is fully implemented.

In terms of specific *quantitative* impacts created by the primary drivers of socioeconomics—spending by visitors and the NPS—each action alternative would have a unique impact, and no impacts would be common to all alternatives.

Spending by park partners is assumed to be independent from NPS management decisions and constant across all alternatives. Because the incremental difference between Alternative 1 and Alternatives 2–6 is zero in all cases, park partner activities are not analyzed further below.

Environmental Consequences of Alternative 2: Self-reliant Visitor Experiences and Extensive Floodplain Restoration

All River Segments

Impacts of Actions to Manage Visitor Use and Facilities

Alternative 2 would create the greatest reduction in lodging units among Alternatives 2–6, with 43% fewer units than under Alternative 1. Camping spaces in Yosemite Valley would be slightly reduced, by about 3%. The peak day-use parking and transportation infrastructure in Yosemite Valley would be reduced by 37%. As a result, total annual visitation under Alternative 2 would be a reduction to approximately 3.6 million visitors per year. **Table 9-177** applies results of the VSP survey findings to translate that total annual visitation estimate into visitor groups by market segment, which is necessary for input to the economic models.

TABLE 9-177: ALTERNATIVE 2 — ANALYSIS OF TOTAL VISITATION BY MARKET SEGMENT

Visitor Market Segment	Visitor Market Segment Share of Park Entries[a]	Calculated Distribution of Visitors	Re-Entry Rate[a]	Visitor Trips to the Park	Ave. Group Size	Visitor Groups	Length of Stay (Nights or Days)[a]	Visits in Party-Days / Nights
Total Visitors: Alt. 2		**3,644,879**						
Local-Day User	4.0%	145,795	1.1	132,541	2.2	60,246	1.0	60,246
Non-Local-Day User	24.0%	874,771	1.1	795,246	3.0	265,082	1.0	265,082
Motel-In	11.5%	419,161	1.1	381,056	3.5	108,873	2.4	261,295
Camp-In	9.5%	346,264	1.3	266,357	3.5	76,102	2.8	213,085
Motel-Out	36.5%	1,330,381	1.7	782,577	3.1	252,444	2.2	555,377
Camp-Out	4.0%	145,795	1.9	76,734	3.8	20,193	3.1	62,599
Other Overnight	10.5%	382,712	1.4	273,366	2.8	97,631	2.5	244,077
Totals	**100.0%**	**3,644,879**		**2,707,877**		**880,571**		**1,661,761**

[a] Findings from the 2009 Visitor Services Project survey results as reported in Cook, Philip S., *Impacts of Visitor Spending on the Local Economy: Yosemite National Park, 2009,* February, 2011

SOURCE: As noted, with Land Economics Consultants analysis 2012

Table 9-178 summarizes total spending derived from the level of visitation produced by analysis of the full pattern of spending within the MGM2 model.

TABLE 9-178: ALTERNATIVE 2 — VISITOR GROUPS AND TOTAL SPENDING BY MARKET SEGMENT

Market Segment	Visits in Party-Days/Nights	Average Spending ($)	Total Spending in 2010 $000s	Percent of Spending
Local-Day User	60,246	$74.64	$4,497	1%
Non-Local-Day User	265,082	$86.71	$22,985	7%
Motel-In	261,295	$371.17	$96,986	28%
Camp-In	213,085	$170.02	$36,229	10%
Motel-Out	555,377	$312.95	$173,807	49%
Camp-Out	62,599	$130.81	$8,188	2%
Other Overnight	244,077	$37.54	$9,163	3%
Totals	**1,661,761**	**$211.74**	**$351,855**	**100%**

SOURCE: MGM2 model built for Merced River Analysis, Land Economics Consultants 2012

The MGM2 model also estimates total economic activity in terms of job creation, income to workers, and value added to the four-county regional economy, as presented in **table 9-179**. Table 9-179 summarizes the total economic activity associated with visitor spending for Alternative 2. **Table 9-180** calculates the economic impacts of NPS spending.

TABLE 9-179: ALTERNATIVE 2 — TOTAL ECONOMIC ACTIVITY DUE TO VISITOR SPENDING (FOUR COUNTY REGION)

Sector/Spending Category	Sales $000s	Jobs	Labor Income $000s	Value Added $000s
Direct Effects				
Motel, hotel cabin, transient rental, or B&B	$136,691	1,299	$36,193	$77,601
Camping fees	$10,302	134	$3,236	$4,673
Restaurants & bars	$58,468	1,013	$19,636	$31,913
Admissions & fees	$36,483	650	$9,794	$21,835
Local transportation	$21,718	456	$10,946	$16,622
Grocery stores	$6,323	95	$3,174	$4,616
Gas stations	$7,961	44	$3,988	$5,922
Other retail	$13,750	241	$6,343	$10,337
Wholesale trade	$1,393	9	$489	$1,036
Local Production of goods	$174	1	$25	$69
Total Direct Effects	**$293,264**	**3,943**	**$93,822**	**$174,623**
Indirect and Induced Effects	$115,976	999	$33,500	$70,517
Total Effects	**$409,240**	**4,941**	**$127,322**	**$245,139**
Multiplier	**1.40**	**1.25**	**1.36**	**1.40**

NOTE: Current economic impacts are measured in 2010 dollars.

SOURCE: MGM2 model built for Merced River Alternatives Analysis, Land Economics Consultants 2012

TABLE 9-180: ALTERNATIVE 2 — ECONOMIC IMPACTS OF NATIONAL PARK SERVICE SPENDING

Yosemite National Park	Direct Effects	Economic Multipliers[a]	Indirect and Induced Effects	Total of Direct, Indirect and Induced Effects
Employment				
National Park Service Jobs[b]	862	1.33	284	1,146
Labor Income				
NPS Payroll[b]				
Salaries $000's	$37,942			
Benefits $000's	$9,777			
Total Compensation	$47,720	1.15	$7,383	$55,102
Value Added				
Total Compensation	$47,720	1.29	$13,672	$61,392

NOTE: Current economic impacts are measured in 2010 dollars.

[a] Multipliers are from IMPLAN sector 439, federal government/nonmilitary employment and payroll.
[b] As reported in Stynes, D.J., *Economic Benefits to Local Communities from National Park Visitation and Payroll, 2010,* Natural Resource Report NPS/NRSS/EQD/NRR--2011/481.

SOURCES: As noted; Land Economics Consultants analysis 2012

Summary of Impacts from Alternative 2: Self-reliant Visitor Experiences and Extensive Floodplain Restoration

The measure of Alternative 2's socioeconomic impact is the degree to which it differs from Alternative 1. Employment has been adopted as the single best indicator of relative economic impact. The number of jobs would be roughly proportional to other possible measures of socioeconomic impact, such as the impact on personal income (which is the wage and salary income associated with jobs) or the impact on total value added within the regional economy (which, as described under Alternative 1, is technically the sum of labor income, profits and rents, and indirect business taxes). The difference in jobs supported under Alternative 2 and Alternative 1 is presented in **table 9-181**, with a detailed breakout by industrial sector within the four-county regional economy. Alternative 2, with its mix of reduced overnight lodging facilities and day use infrastructure, would support 517 fewer jobs than Alternative 1.

The adverse impacts of Alternative 2 might not be as intense as indicated by the job reduction calculated above. As described in the "Environmental Consequences Methodology" section, substitution and time-shift effects could offset some of the visitation displaced during peak times and seasons and soften ore even negate the economic impact portrayed here. In the context of total employment within the four-county region, Alternative 2 would support 456 fewer jobs than Alternative 1, and because it would be less than 2.5% fewer jobs the impact would be regional, long term, negligible, and adverse (see **table 9-182**).

Job reduction would be more substantial in specific industry sectors within the four-county region, however. In the lodging industry alone, the reduction in jobs resulting from Alternative 2 would be a long-term, minor, adverse impact. However, to the extent that hotel and motel occupancy increases in gateway communities as a result of the Alternative 2 reduction in Yosemite Valley accommodations, some or all of the adverse impact could be compensated. Similarly, to the extent that overnight visitors to Yosemite Valley are displaced but shift their visits to a different time, the adverse impact could be mitigated.

TABLE 9-181: ALTERNATIVE 2 — IMPACT ON JOBS BY INDUSTRY SECTOR (FOUR COUNTY REGION)

Sector/Spending Category	Jobs Under Alt. 1 (No Action)	Jobs Under Alt. 2	Difference in Jobs
Direct Effects			
Motel, hotel cabin, or B&B	1,409	1,299	(109)
Camping fees	145	134	(11)
Restaurants & bars	1,098	1,013	(85)
Admissions & fees	705	650	(55)
Local transportation	495	456	(38)
Grocery stores	103	95	(8)
Gas stations	47	44	(4)
Other retail	261	241	(20)
Wholesale trade	10	9	(1)
Local Production of goods	1	1	(0)
Total Direct Effects	4,274	3,943	(332)
Indirect and Induced Effects	1,083	999	(84)
Total Effects of Visitor Spending	5,357	4,941	(416)
National Park Service Total Employment Effects	1,186	1,146	(40)
Total Job Creation in Four Counties	6,543	6,087	(456)

SOURCE: MGM2 model, Land Economics Consultants 2012

TABLE 9-182: ALTERNATIVE 2 – CHARACTERIZATION OF IMPACT SIGNIFICANCE

Industry Sector	Total Jobs in the 4-County Region	Alt. 2: Net Impact on Jobs	Impact as % of Total	Characterization of Impact Significance	
Total Impacts (including Indirect & Induced Effects)	**102,273**	**(456)**	**-0.4%**	**Negligible**	**Adverse**
Direct Impacts on Specific Sectors[a]					
Agriculture	13,619	0	0.0%	No Impact	
Mining	310	0	0.0%	No Impact	
Construction	5,115	0	0.0%	No Impact	
Manufacturing	4,043	0	0.0%	No Impact	
Transportation (and Public Utilities)	2,074	(38)	-1.9%	Negligible	Adverse
Retail Stores (and Wholesale Trade)	10,314	(33)	-0.3%	Negligible	Adverse
Lodging Industry	3,637	(121)	-3.3%	Minor	Adverse
Restaurants and Bars	5,887	(85)	-1.4%	Negligible	Adverse
All Other Service Industries	36,446	(55)	-0.2%	Negligible	Adverse
Government (Local, State, & Fed.)	20,828	(40)	-0.2%	Negligible	Adverse

[a] Indirect and induced effects would be spread throughout all the sectors of the economy and would have a negligible impact.

SOURCE: Minnesota IMPLAN Group, Inc. data; Land Economics Consultants analysis 2012

For the Restaurant and Bar sector of the regional economy, the long-term, adverse impact on jobs would be negligible in intensity. The intensity could be reduced by substitution and time-shift effects that maintain volumes of visitors and spending.

Within the four-county regional economy, the single business in the Lodging and Restaurant sectors most affected by Alternative 2 would be the concessioner within the park. This would also constitute the one impact felt in the local context of the park, and a 43% reduction in lodging would no doubt be seen as a noticeable adverse impact by the existing concessioner. In the long term, however, a new concession agreement would result from the issuance of a Contract Prospectus describing the business opportunity offered under the *Merced Wild and Scenic River Comprehensive Management Plan* (CMP). Prior to issuing a prospectus to the public, the NPS must determine that a financially feasible business opportunity exists that would mitigate this local impact by realigning the financial performance expectations of the concessioner with the new facilities and infrastructure to support commercial visitor service in the park.

In the Transportation sector of the regional economy, the long-term, adverse impact on jobs would be negligible in intensity. Note, however, that in addition to the potential mitigating substitution and time-shift effects, the more intensive transportation management efforts under Alternative 2 might require additional staffing for regional public transportation systems and for traffic and parking management in the park.

Just as impacts are felt with different intensities in different sectors of the economy, intensities of impacts would also vary geographically within the four-county regional economy. In the smaller counties of Mariposa and Mono, where the Leisure and Hospitality sector comprises a third to half of all jobs, impacts derived from visitor spending would be more noticeable than in the larger and more diversified economies of Madera and Tuolumne counties. Within counties, gateway communities would experience impacts more intensely than larger and more distant cities that have more diversity in their economic support.

Mariposa County, and the gateway community of Mariposa within it, are likely to be the most noticeably impacted geographic areas because they combine both dependency on tourism industry spending and proximity to the park. A fiscal connection also exists because concessioner lodging in Yosemite Valley lies within Mariposa County, which receives the transient occupancy tax revenue collected there. El Portal Administrative Site falls within Mariposa County. Mariposa is further impacted because it is the closest place for park and concessioner employees to live who do not have housing within the park. Changes in the park workforce living in Mariposa County could cause increases or decreases in demand for county services and affect county revenues. Changes in the park workforce could also change school enrollment, affecting both costs and revenues for local schools.

The maximum fiscal impact of Alternative 2 on Mariposa County could include a reduction of $716,000 in TOT revenue, based on the 10% tax rate and the difference in spending between Alternatives 1 and 2 for all types of lodging, both inside and outside the park. This would be equivalent to a 1.7% reduction in General Fund revenue for the county.

In addition to the ongoing socioeconomic impacts analyzed above, there would be one-time impacts generated by NPS spending on construction and restoration projects to implement Alternative 2, estimated to cost a total of $168 million. If these implementation projects took place evenly over a five-year period, the $34 million per year would be equal to a 4.7% increase in Construction sector output within the region (table 9-124). This impact on the Construction sector would be regional, short term, minor, and beneficial. If the implementation were spread evenly over a longer period of 20 years, the intensity of the impact would drop to negligible.

Cumulative Impacts from Alternative 2

Past Actions

Past actions would affect Alternative 2 to the same degree they affect Alternative 1 for socioeconomic impacts.

Present Actions

Present actions would affect Alternative 2 to the same degree they affect Alternative 1 for socioeconomic impacts.

Reasonably Foreseeable Future Actions

For socioeconomic impacts, the cumulatively considerable factors would be the same as those described above for Alternative 1. These would include the effects of private decisions made in the gateway communities and elsewhere in the four-county region, as well as those of public decisions in the region and within the park. Over the long run, one of the most functional features of market economies is that they trend toward self-correction. If public management actions reduce the supply of lodging and other commercial amenities within the park, demand pressures may build to the point that private interests may expand supply in surrounding areas by developing additional lodging, restaurants, and other facilities. These effects are likely to be strongest in areas closest to the park, and due to its proximity Mariposa County could be a beneficiary of this additional market demand. Specific present actions that could facilitate the capture of additional development include

- *Mariposa County General Plan Housing Element Update*
- *Mariposa County General Plan* (Update)

Short of new construction, additional demand may be satisfied by increasing hours and seasons of operations, adding additional staff, and other business operating responses to expand capacities in gateway communities. In the short run, management policies within the park can alter the flow of visitors and shift the mix of overnight and day visitors, but in the long run market adaptations can continue to increase the annual volumes of people visiting the park. Based on these considerations, the cumulative economic impact of past, present, and reasonably foreseeable future actions, when combined with those of Alternative 2, would be regional, long term, negligible, and adverse.

Irreversible and Irretrievable Commitment of Resources for Alternative 2

For the most part, socioeconomic actions are reversible in the sense that markets adapt to changing circumstances and public policies can change strategies over time. On the other hand, the implementation of Alternative 2 would require the one-time expenditure of approximately $168 million to implement the various actions proposed. Once expended, those financial resources would no longer be available for other possible uses, and relatively permanent changes to facilities and infrastructure in the park would have been made. Physical changes made for Alternative 2 may be reversed in the future, but additional financial resources would be required to do so.

Relationship of Short-Term Uses and Long-Term Productivity for Alternative 2

Construction and restoration projects to implement Alternative 2 would create short-term disruptions to visitor use patterns during construction. There would also be a short-term, one-time change to the business model for the concessioner in the park, with a new concession agreement put in place to be consistent with the objectives and scale of facilities produced by Alternative 2. In the long term, a new pattern of economic flows in the region would emerge that would supply visitor services to meet the new level of visitor demand.

Environmental Consequences of Alternative 3: Dispersed Visitor Experiences and Extensive Riverbank Restoration

All River Segments

Impacts of Actions to Manage Visitor Use and Facilities

Alternative 3 would create the second largest reduction in lodging units, with 38% fewer units than under Alternative 1. The inventory of camping spaces in Yosemite Valley would increase slightly, by about 2%. The day use infrastructure in the Valley would see the largest reduction of all the alternatives, by 44%. As a result, total annual visitation under Alternative 3 would be a reduction to 3.6 million visitors per year. **Table 9-183** applies results of the VSP survey findings to translate that total annual visitation estimate into visitor groups by market segment, which is necessary for input to the economic models.

Table 9-184 summarizes total spending derived from the level of visitation produced by analysis of the full pattern of spending within the MGM2 model. The MGM2 model also estimates total economic activity in terms of job creation, income to workers, and value added to the four-county regional economy, as presented in **table 9-185**. **Table 9-186** calculates economic impacts of NPS spending.

TABLE 9-183: ALTERNATIVE 3 — ANALYSIS OF TOTAL VISITATION BY MARKET SEGMENT

Visitor Market Segment	Visitor Market Segment Share of Park Entries[a]	Calculated Distribution of Visitors	Re-Entry Rate[a]	Visitor Trips to the Park	Ave. Group Size[a]	Visitor Groups	Length of Stay (Nights or Days)[a]	Visits in Party-Days / Nights
Total Visitors: Alt. 3		**3,585,536**						
Local-Day User	4.0%	143,421	1.1	130,383	2.2	59,265	1.0	59,265
Non-Local-Day User	24.0%	860,529	1.1	782,299	3.0	260,766	1.0	260,766
Motel-In	11.5%	412,337	1.1	374,851	3.5	107,100	2.4	257,041
Camp-In	9.5%	340,626	1.3	262,020	3.5	74,863	2.8	209,616
Motel-Out	36.5%	1,308,721	1.7	769,836	3.1	248,334	2.2	546,335
Camp-Out	4.0%	143,421	1.9	75,485	3.8	19,864	3.1	61,580
Other Overnight	10.5%	376,481	1.4	268,915	2.8	96,041	2.5	240,103
Totals	**100.0%**	**3,585,536**		**2,663,789**		**866,234**		**1,634,706**

[a] Findings from the 2009 Visitor Services Project survey results as reported in Cook, Philip S., *Impacts of Visitor Spending on the Local Economy: Yosemite National Park, 2009,* February, 2011

SOURCE: As noted, with Land Economics Consultants analysis 2012

TABLE 9-184: ALTERNATIVE 3 – VISITOR GROUPS AND TOTAL SPENDING BY MARKET SEGMENT

Market Segment	Visits in Party-Days/Nights	Average Spending ($)	Total Spending in 2010 $000s	Percent of Spending
Local-Day User	59,265	$74.64	$4,423	1%
Non-Local-Day User	260,766	$86.71	$22,610	7%
Motel-In	257,041	$371.17	$95,407	28%
Camp-In	209,616	$170.02	$35,640	10%
Motel-Out	546,335	$312.95	$170,978	49%
Camp-Out	61,580	$130.81	$8,055	2%
Other Overnight	240,103	$37.54	$9,014	3%
Totals	**1,634,706**	$211.74	$346,127	**100%**

SOURCE: MGM2 model built for Merced River Analysis, Land Economics Consultants 2012

TABLE 9-185: ALTERNATIVE 3 — TOTAL ECONOMIC ACTIVITY DUE TO VISITOR SPENDING

Sector/Spending Category	Sales $000s	Jobs	Labor Income $000s	Value Added $000s
Direct Effects				
Motel, hotel cabin, transient rental, or B&B	$134,466	1,278	$35,603	$76,338
Camping fees	$10,134	132	$3,184	$4,597
Restaurants & bars	$57,516	996	$19,316	$31,393
Admissions & fees	$35,889	640	$9,634	$21,479
Local transportation	$21,365	449	$10,768	$16,351
Grocery stores	$6,220	94	$3,122	$4,541
Gas stations	$7,832	43	$3,923	$5,825
Other retail	$13,527	237	$6,239	$10,169
Wholesale trade	$1,370	9	$481	$1,019
Local Production of goods	$171	1	$25	$68
Total Direct Effects	$288,489	3,878	$92,295	$171,780
Indirect and Induced Effects	$114,088	982	$32,955	$69,368
Total Effects	$402,577	4,861	$125,249	$241,148
Multiplier	1.40	1.25	1.36	1.40

NOTE: Current economic impacts are measured in 2010 dollars.

SOURCE: MGM2 model built for Merced River Alternatives Analysis, Land Economics Consultants 2012

TABLE 9-186: ALTERNATIVE 3 — ECONOMIC IMPACTS OF NATIONAL PARK SERVICE SPENDING

Yosemite National Park	Direct Effects	Economic Multipliers[a]	Indirect and Induced Effects	Total of Direct, Indirect and Induced Effects
Employment				
National Park Service Jobs[b]	856	1.33	282	1,138
Labor Income				
NPS Payroll[b]				
Salaries $000s	$37,683			
Benefits $000s	$9,711			
Total Compensation	$47,393	1.15	$7,332	$54,725
Value Added				
Total Compensation	$47,393	1.29	$13,579	$60,972

NOTE: Current economic impacts are measured in 2010 dollars.

[a] Multipliers are from IMPLAN sector 439, federal government/nonmilitary employment and payroll.

[b] As reported in Stynes, D.J., *Economic Benefits to Local Communities from National Park Visitation and Payroll, 2010,* Natural Resource Report NPS/NRSS/EQD/NRR--2011/481.

SOURCES: As noted; Land Economics Consultants analysis 2012

Summary of Impacts from Alternative 3: Dispersed Visitor Experiences and Extensive Riverbank Restoration

The difference in jobs supported under Alternative 3 and Alternative 1 is presented in **table 9-187,** with a detailed breakout by industrial sector within the four-county regional economy. Alternative 3, with its smaller inventory of overnight lodging facilities and reduced day use infrastructure, would support 544 fewer jobs than Alternative 1 (No Action). Similarly to Alternative 2, the adverse impacts of Alternative 3 might not be as intense as indicated by the job reduction calculated above due to substitution and time-shift effects. In the context of total employment within the four-county region, the reduction in jobs resulting from Alternative 3 would be a long-term, adverse impact, but because at -0.5% it is less than the -2.5% threshold for minor, it would be negligible in intensity (see **table 9-188**).

For specific industry sectors within the four-county region, however, the job reduction would be more significant. In the lodging industry alone, the reduction in jobs resulting from Alternative 3 would be a long-term, minor, adverse impact. As noted above, to the extent that hotel and motel occupancies increase in gateway communities as a result of the Alternative 3 reduction in Yosemite Valley accommodations, some or all of the adverse impact could be mitigated. Similarly, to the extent that overnight visitors to the Valley are displaced but shift their visits to a different time, the adverse impact could be mitigated.

In the Restaurant and Bar sector of the regional economy, the long-term, adverse impact on jobs would be negligible in intensity. The intensity could be reduced by substitution and time-shift effects that maintain volumes of visitors and spending.

Within the four-county regional economy, the single business in the Lodging and Restaurant sectors most affected by Alternative 3 would be the concessioner within the park. This would also constitute the one impact felt in the local context of the park, and a 36% reduction in lodging would no doubt be seen as a noticeable adverse impact by the existing concessioner. In the long term, however, a new concession agreement would result from the issuance of a Contract Prospectus describing the business opportunity offered under the CMP. Prior to issuing a Prospectus to the public, the NPS must determine that a financially feasible business opportunity exists that would mitigate this local impact by realigning the financial performance expectations of the concessioner with the new opportunity for commercial visitor service in the park.

In the Transportation sector of the regional economy, the long-term, adverse impact on jobs would be negligible in intensity. Note, however, that in addition to the potential mitigating substitution and time-shift effects, the more intensive transportation management efforts under Alternative 3 might require additional staffing for regional public transportation systems and for traffic and parking management in the park.

Just as impacts are felt with different intensities in different sectors of the economy, intensities of impacts would also vary geographically within the four-county regional economy. In the smaller counties of Mariposa and Mono, where the Leisure and Hospitality sector comprises a third to half of all jobs, impacts derived from visitor spending would be more noticeable than in the larger and more diversified economies of Madera and Tuolumne counties. Within counties, gateway communities would experience impacts more intensely than larger and more distant cities that have more diversity in their economic support.

TABLE 9-187: ALTERNATIVE 3 — IMPACT ON JOBS BY INDUSTRY SECTOR

Sector/Spending Category	Jobs Under Alt. 1 (No Action)	Jobs Under Alt. 3	Difference in Jobs
Direct Effects			
Motel, hotel, cabin, or B&B	1,409	1,278	(130)
Camping fees	145	132	(13)
Restaurants & bars	1,098	996	(102)
Admissions & fees	705	640	(65)
Local transportation	495	449	(46)
Grocery stores	103	94	(10)
Gas stations	47	43	(4)
Other retail	261	237	(24)
Wholesale trade	10	9	(1)
Local Production of goods	1	1	(0)
Total Direct Effects	**4,274**	**3,878**	**(396)**
Indirect and Induced Effects	1,083	982	(100)
Total Effects of Visitor Spending	**5,357**	**4,861**	**(496)**
National Park Service Total Employment Effects	1,186	1,138	(48)
Total Job Creation in Four Counties	**6,543**	**5,999**	**(544)**

SOURCE: MGM2 model, Land Economics Consultants 2012

TABLE 9-188: ALTERNATIVE 3 — CHARACTERIZATION OF IMPACT SIGNIFICANCE

Industry Sector	Total Jobs in the 4-County Region	Alt. 3: Net Impact on Jobs	Impact as % of Total	Characterization of Impact Significance	
Total Impacts (including Indirect & Induced Effects)	**102,273**	**(544)**	**-0.5%**	Negligible	Adverse
Direct Impacts on Specific Sectors[a]					
Agriculture	13,619	0	0.0%	No Impact	
Mining	310	0	0.0%	No Impact	
Construction	5,115	0	0.0%	No Impact	
Manufacturing	4,043	0	0.0%	No Impact	
Transportation (and Public Utilities)	2,074	(46)	-2.2%	Negligible	Adverse
Retail Stores (and Wholesale Trade)	10,314	(39)	-0.4%	Negligible	Adverse
Lodging Industry	3,637	(144)	-4.0%	Minor	Adverse
Restaurants and Bars	5,887	(102)	-1.7%	Negligible	Adverse
All Other Service Industries	36,446	(65)	-0.2%	Negligible	Adverse
Government (Local, State, & Fed.)	20,828	(48)	-0.2%	Negligible	Adverse

[a] Indirect and induced effects would be spread throughout all sectors of the economy and would have a negligible impact.

SOURCE: Minnesota IMPLAN Group, Inc. data; Land Economics Consultants analysis 2012

Mariposa County, and the gateway community of Mariposa within it, is likely to be the most noticeably impacted geographic areas because they combine both dependency on tourism industry spending and proximity to the park. There is also a fiscal connection in that the concessioner lodging in Yosemite Valley lies within Mariposa County, which receives the transient occupancy tax revenue collected there. El Portal Administrative Site falls within Mariposa County. Mariposa is further impacted because it is the closest place for park and concessioner employees to live who do not have housing within the park. Changes in the park workforce living in Mariposa County could cause increases or decreases in demand for county services and affect county revenues. Changes in park workforce could also change school enrollment, affecting both costs and revenues for local schools.

The maximum fiscal impact of Alternative 3 on Mariposa County could include a reduction of $855,000 in TOT revenue, based on the 10% tax rate and the difference in spending between Alternatives 1 and 3 for all types of lodging, both inside and outside the park. This would be equivalent to a 2.0% reduction in General Fund revenue for the county.

Cumulative Impacts from Alternative 3: Dispersed Visitor Experiences and Extensive Riverbank Restoration

Past Actions

Past actions would affect Alternative 3 to the same degree they affect Alternative 1 for socioeconomic impacts.

Present Actions

Present actions would affect Alternative 3 to the same degree they affect Alternative 1 for socioeconomic impacts.

Reasonably Foreseeable Future Actions

For socioeconomic impacts, the cumulatively considerable factors would be the same as those described above for Alternative 1. These would include the effects of private decisions made in the gateway communities and elsewhere in the four-county region, as well as those of public decisions in the region and within the park. Over the long run, one of the most functional features of market economies is that they trend toward self-correction. If public management actions reduce the supply of lodging and other commercial amenities within the park, demand pressures may build to the point that private interests may expand supply in surrounding areas by developing additional lodging, restaurants, and other facilities. These effects are likely to be strongest in areas closest to the park, and due to its proximity Mariposa County could be a beneficiary of this additional market demand. Specific present actions that could facilitate the capture of additional development include

- *Mariposa County General Plan Housing Element Update*
- *Mariposa County General Plan* (Update)

Short of new construction, additional demand may be satisfied by increasing hours and seasons of operations, adding additional staff, and other business operating responses to expand capacities in gateway communities. In the short run, management policies within the park can alter the flow of visitors and shift the mix of overnight and day visitors, but in the long run market adaptations can continue to increase the annual volumes of people visiting the park. Based on these considerations, the cumulative economic impact of past, present, and reasonably foreseeable future actions, when combined with those of Alternative 3, would be regional, long term, negligible, and adverse.

Irreversible and Irretrievable Commitment of Resources for Alternative 3

For the most part, socioeconomic actions are reversible in the sense that markets adapt to changing circumstances and public policies can change strategies over time. On the other hand, the implementation of Alternative 3 would require the one-time expenditure of approximately $147 million. Once expended, those financial resources would no longer be available for other possible uses, and relatively permanent changes to facilities and infrastructure in the park would have been made. Physical changes made under Alternative 3 may be reversed in the future, but additional financial resources would be required to do so.

Relationship of Short-Term Uses and Long-Term Productivity for Alternative 3

Construction and restoration projects to implement Alternative 3 would create short-term disruptions during construction, but would produce desired changes to the park over the long term. There would also be a short-term, one-time change to the business model for the concessioner in the park, with a new concession agreement put in place to be consistent with the objectives and scale of facilities produced under Alternative 3. In the long term, a new pattern of economic flows in the region would be likely to emerge that would supply visitor services to meet the new level of visitor demand.

Environmental Consequences of Alternative 4: Resource-based Visitor Experiences and Targeted Riverbank Restoration

All River Segments

Impacts of Actions to Manage Visitor Use and Facilities

Alternative 4 would create a reduction in lodging units, with 20% fewer units than under Alternative 1 (No Action). On the other hand, the inventory of camping spaces in Yosemite Valley would increase by about 50%. The peak day-use infrastructure in the Valley would see a reduction of 29%. As a result, total annual visitation under Alternative 4 was a reduction to approximately 3.88 million visitors per year. **Table 9-189** applies results of the VSP survey findings to translate that total annual visitation estimate into visitor groups by market segment, which is necessary for input to the economic models.

TABLE 9-189: ALTERNATIVE 4 — ANALYSIS OF TOTAL VISITATION BY MARKET SEGMENT

Visitor Market Segment	Visitor Market Segment Share of Park Entries[a]	Calculated Distribution of Visitors	Re-Entry Rate[a]	Visitor Trips to the Park	Ave. Group Size[a]	Visitor Groups	Length of Stay (Nights or Days)[a]	Visits in Party-Days / Nights
Total Visitors: Alt. 4		**3,877,354**						
Local-Day User	4.0%	155,094	1.1	140,995	2.2	64,088	1.0	64,088
Non-Local-Day User	24.0%	930,565	1.1	845,968	3.0	281,989	1.0	281,989
Motel-In	11.5%	445,896	1.1	405,360	3.5	115,817	2.4	277,961
Camp-In	9.5%	368,349	1.3	283,345	3.5	80,956	2.8	226,676
Motel-Out	36.5%	1,415,234	1.7	832,491	3.1	268,545	2.2	590,800
Camp-Out	4.0%	155,094	1.9	81,629	3.8	21,481	3.1	66,592
Other Overnight	10.5%	407,122	1.4	290,802	2.8	103,858	2.5	259,644
Totals	**100.0%**	**3,877,354**		**2,880,588**		**936,735**		**1,767,751**

[a] Findings from the 2009 Visitor Services Project survey results as reported in Cook, Philip S., *Impacts of Visitor Spending on the Local Economy: Yosemite National Park, 2009,* February, 2011

SOURCE: As noted, with Land Economics Consultants analysis 2012

Table 9-190 summarizes the total spending derived from the level of visitation produced by analysis of the full pattern of spending within the MGM2 model. The MGM2 model also estimates total economic activity in terms of job creation, income to workers, and value added to the four-county regional economy, as presented in **table 9-191**. **Table 9-192** calculates the economic impacts of NPS spending.

TABLE 9-190: ALTERNATIVE 4 — VISITOR GROUPS AND TOTAL SPENDING BY MARKET SEGMENT

Market Segment	Visits in Party-Days/Nights	Average Spending ($)	Total Spending in 2010 $000s	Percent of Spending
Local-Day User	64,088	$74.64	$4,783	1%
Non-Local-Day User	281,989	$86.71	$24,451	7%
Motel-In	277,961	$371.17	$103,172	28%
Camp-In	226,676	$170.02	$38,540	10%
Motel-Out	590,800	$312.95	$184,893	49%
Camp-Out	66,592	$130.81	$8,711	2%
Other Overnight	259,644	$37.54	$9,747	3%
Totals	**1,767,751**	**$211.74**	**$374,297**	**100%**

SOURCE: MGM2 model built for Merced River Analysis, Land Economics Consultants 2012

TABLE 9-191: ALTERNATIVE 4 — TOTAL ECONOMIC ACTIVITY DUE TO VISITOR SPENDING

Sector/Spending Category	Sales $000s	Jobs	Labor Income $000s	Value Added $000s
Direct Effects				
Motel, hotel cabin, transient rental, or B&B	$145,409	1,382	$38,501	$82,551
Camping fees	$10,959	143	$3,443	$4,971
Restaurants & bars	$62,197	1,077	$20,888	$33,948
Admissions & fees	$38,810	692	$10,419	$23,227
Local transportation	$23,103	486	$11,644	$17,682
Grocery stores	$6,726	101	$3,376	$4,910
Gas stations	$8,469	46	$4,242	$6,299
Other retail	$14,627	256	$6,747	$10,996
Wholesale trade	$1,482	10	$520	$1,102
Local Production of goods	$185	1	$27	$74
Total Direct Effects	**$311,969**	**4,194**	**$99,806**	**$185,761**
Indirect and Induced Effects	$123,373	1,062	$35,637	$75,014
Total Effects	**$435,342**	**5,256**	**$135,443**	**$260,775**
Multiplier	1.40	1.25	1.36	1.40

NOTE: Current economic impacts are measured in 2010 dollars.

SOURCE: MGM2 model built for Merced River Alternatives Analysis, Land Economics Consultants 2012

TABLE 9-192: ALTERNATIVE 4 — ECONOMIC IMPACTS OF NATIONAL PARK SERVICE SPENDING

Yosemite National Park	Direct Effects	Economic Multipliers[a]	Indirect and Induced Effects	Total of Direct, Indirect and Induced Effects
Employment				
National Park Service Jobs[b]	885	1.33	292	1,176
Labor Income				
NPS Payroll[b]				
Salaries $000s	$38,959			
Benefits $000s	$10,040			
Total Compensation	$48,999	1.15	$7,580	$56,579
Value Added				
Total Compensation	$48,999	1.29	$14,0359	$63,037

NOTE: Current economic impacts are measured in 2010 dollars.

[a] Multipliers are from IMPLAN sector 439, federal government/nonmilitary employment and payroll.

[b] As reported in Stynes, D.J., *Economic Benefits to Local Communities from National Park Visitation and Payroll, 2010,* Natural Resource Report NPS/NRSS/EQD/NRR--2011/481.

SOURCES: As noted; Land Economics Consultants analysis 2012

Summary of Impacts from Alternative 4: Resource-based Visitor Experiences and Targeted Riverbank Restoration

The difference in jobs supported under Alternative 4 and Alternative 1 is presented in **table 9-193,** with a detailed breakout by industrial sector within the four-county regional economy. Alternative 4, with its different mix of facilities and infrastructure, would support 110 fewer jobs than Alternative 1.

TABLE 9-193: ALTERNATIVE 4 — IMPACT ON JOBS BY INDUSTRY SECTOR

Sector/Spending Category	Jobs Under Alt. 1 (No Action)	Jobs Under Alt. 4	Difference in Jobs
Direct Effects			
Motel, hotel, cabin, or B&B	1,409	1,382	(26)
Camping fees	145	143	(3)
Restaurants & bars	1,098	1,077	(21)
Admissions & fees	705	692	(13)
Local transportation	495	486	(9)
Grocery stores	103	101	(2)
Gas stations	47	46	(1)
Other retail	261	256	(5)
Wholesale trade	10	10	(0)
Local Production of goods	1	1	(0)
Total Direct Effects	**4,274**	**4,194**	**(80)**
Indirect and Induced Effects	1,083	1,062	(20)
Total Effects of Visitor Spending	**5,357**	**5,256**	**(100)**
National Park Service Total Employment Effects	**1,186**	**1,176**	**(10)**
Total Job Creation in Four Counties	**6,543**	**6,433**	**(110)**
SOURCE: MGM2 model, Land Economics Consultants 2012			

As described for other alternatives, the adverse impacts of Alternative 4 might not be as intense as indicated by the job reduction calculated above due to substitution and time-shift effects. In the context of total employment within the four-county region, the reduction in jobs resulting from Alternative 4 would be a long-term, adverse impact, but it would be negligible in intensity (see **table 9-194**).

For specific industry sectors within the four-county region, however, the job reduction would be more significant in terms of percentage changes within each sector. In the lodging industry, the reduction in jobs resulting from Alternative 4 would be a long-term, negligible, adverse impact. As noted previously, to the extent that hotel and motel occupancies increase in gateway communities as a result of the Alternative 4 reduction in Yosemite Valley accommodations, some or all of the adverse impact could be mitigated. Similarly, to the extent that overnight visitors to the Valley are displaced but shift their visits to a different time, the adverse impact could be mitigated.

TABLE 9-194: ALTERNATIVE 4 — CHARACTERIZATION OF IMPACT SIGNIFICANCE

Industry Sector	Total Jobs in 4-County Region	Alt. 4: Net Impact on Jobs	Impact as % of Total	Characterization of Impact Significance	
Total Impacts (including Indirect & Induced Effects)	**102,273**	**(110)**	**-0.1%**	Negligible	Adverse
Direct Impacts on Specific Sectors[a]					
Agriculture	13,619	0	0.0%	No Impact	
Mining	310	0	0.0%	No Impact	
Construction	5,115	0	0.0%	No Impact	
Manufacturing	4,043	0	0.0%	No Impact	
Transportation (and Public Utilities)	2,074	(9)	-0.4%	Negligible	Adverse
Retail Stores (and Wholesale Trade)	10,314	(8)	-0.1%	Negligible	Adverse
Lodging Industry	3,637	(29)	-0.8%	Negligible	Adverse
Restaurants and Bars	5,887	(21)	-0.3%	Negligible	Adverse
All Other Service Industries	36,446	(13)	0.0%	Negligible	Adverse
Government (Local, State, & Fed.)	20,828	(10)	0.0%	Negligible	Adverse

[a] Indirect and induced effects would be spread throughout the economy and would have a negligible impact.

SOURCE: Minnesota IMPLAN Group, Inc. data; Land Economics Consultants analysis 2012

In the Restaurant and Bar sector of the regional economy, the long-term, adverse impact on jobs would also be negligible in intensity. The intensity could be reduced by substitution and time-shift effects that maintain volumes of visitors and spending.

Within the four-county regional economy, the single business in the lodging and restaurant sectors most affected by Alternative 4 would be the concessioner within the park. This would also constitute the one impact felt in the local context of the park, and a 20% reduction in lodging would no doubt be seen as a noticeable adverse impact by the existing concessioner. In the long term, however, a new concession agreement would result from the issuance of a Contract Prospectus describing the business opportunity offered under the CMP. Prior to issuing a Prospectus to the public, the NPS must determine that a financially feasible business opportunity exists that would mitigate this local impact by realigning the financial performance expectations of the concessioner with the new opportunity for commercial visitor service in the park.

In the Transportation sector of the regional economy, the long-term, adverse impact on jobs would be negligible in intensity. Note, however, that in addition to the potential mitigating substitution and time-shift effects, the more intensive transportation management efforts under Alternative 4 might require additional staffing for regional public transportation systems and for traffic and parking management in the park.

Just as impacts are felt with different intensities in different sectors of the economy, intensities of impacts would also vary geographically within the four-county regional economy. In the smaller counties of Mariposa and Mono, where the leisure and hospitality sector comprises a third to half of all jobs, impacts derived from visitor spending would be more noticeable than in the larger and more diversified economies of Madera and Tuolumne counties. Within counties, gateway communities

would experience impacts more intensely than larger and more distant cities that have more diversity in their economic support.

Mariposa County, and the gateway community of Mariposa within it, is likely to be the most noticeably impacted geographic areas because they combine both dependency on tourism industry spending and proximity to the park. There is also a fiscal connection in that the concessioner lodging in Yosemite Valley lies within Mariposa County, which receives the transient occupancy tax revenue collected there. El Portal Administrative Site falls within Mariposa County. Mariposa is further impacted because it is the closest place for park and concessioner employees to live who do not have housing within the park. Changes in the park workforce living in Mariposa County could cause increases or decreases in demand for county services and affect county revenues. Changes in park workforce could also change school enrollment, affecting both costs and revenues for local schools.

The maximum fiscal impact of Alternative 4 on Mariposa County could include a reduction of $173,000 in TOT revenue, based on the 10% tax rate and the difference in spending between Alternatives 1 and 4 for all types of lodging, both inside and outside the park. This would be equivalent to a 0.4% reduction in General Fund revenue for the county.

Cumulative Impacts from Alternative 4: Resource-based Visitor Experiences and Targeted Riverbank Restoration

Past Actions

Past actions would affect Alternative 4 to the same degree they affect Alternative 1 for socioeconomic impacts.

Present Actions

Present actions would affect Alternative 4 to the same degree they affect Alternative 1 for socioeconomic impacts.

Reasonably Foreseeable Future Actions

For socioeconomic impacts, the cumulatively considerable factors would be the same as those described for Alternative 1. These would include the effects of private decisions made in the gateway communities and elsewhere in the four-county region, as well as those of public decisions in the region and within the park. Over the long run, one of the most functional features of market economies is that they trend towards self-correction. If public management actions reduce the supply of lodging and other commercial amenities within the park, demand pressures may build to the point that private interests may expand supply in surrounding areas by developing additional lodging, restaurants, and other facilities. These effects are likely to be strongest in areas closest to the park, and due to its proximity Mariposa County could be a beneficiary of this additional market demand. Specific present actions that could facilitate the capture of additional development include

- *Mariposa County General Plan Housing Element Update*
- *Mariposa County General Plan* (Update)

Short of new construction, additional demand may be satisfied by increasing hours and seasons of operations, adding additional staff, and other business operating responses to expand capacities in gateway communities. In the short run, management policies within the park can alter the flow of visitors and shift the mix of overnight and day visitors, but in the long run market adaptations can continue to increase the annual volumes of people visiting the park. Based on these considerations, the cumulative economic impact of past, present, and reasonably foreseeable future actions, when combined with those of Alternative 4, would be regional, long term, negligible, and adverse.

Irreversible and Irretrievable Commitment of Resources for Alternative 4

For the most part, socioeconomic actions are reversible in the sense that markets adapt to changing circumstances and public policies can change strategies over time. On the other hand, the implementation of Alternative 4 would require the one-time expenditure of approximately $168 million. Once expended, those financial resources would no longer be available for other possible uses, and relatively permanent changes to facilities and infrastructure in the park would have been made. Physical changes made under Alternative 4 may be reversed in the future, but additional financial resources would be required to do so.

Relationship of Short-Term Uses and Long-Term Productivity for Alternative 4

Construction and restoration projects to implement Alternative 4 would create short-term disruptions during construction, but would produce desired changes to the park over the long term.

There would also be a short-term, one-time change to the business model for the concessioner in the park, with a new concession agreement put in place to be consistent with the objectives and scale of facilities produced under Alternative 4. In the long term, a new pattern of economic flows in the region would be likely to emerge that would supply visitor services to meet the new level of visitor demand.

Environmental Consequences of Alternative 5: Enhanced Visitor Experiences and Essential Riverbank Restoration

All River Segments

Impacts of Actions to Manage Visitor Use and Facilities

Compared with Alternative 1 (No Action), Alternative 5 would create slightly more lodging units in the park, approximately 2% more. The camping unit inventory in Yosemite Valley would grow more substantially, by approximately 37%. Peak day-use infrastructure in the Valley, on the other hand, would be reduced by approximately 11%. As a result, and as discussed in the "Environmental Consequences Methodology" section above, the scenario for total annual visitation under Alternative 5 maintains the level generally experienced today, approximately 3.95 million visitors per year. **Table 9-195** applies results of the VSP survey findings to translate that total annual visitation estimate into visitor groups by market segment, which is necessary for input to the economic models.

TABLE 9-195: ALTERNATIVE 5 — ANALYSIS OF TOTAL VISITATION BY MARKET SEGMENT

Visitor Market Segment	Visitor Market Segment Share of Park Entries[a]	Calculated Distribution of Visitors	Re-Entry Rate[a]	Visitor Trips to the Park	Ave. Group Size [a]	Visitor Groups	Length of Stay (Nights or Days)[a]	Visits in Party-Days / Nights
Total Visitors: Alt. 5		**3,948,695**						
Local-Day User	4.0%	157,948	1.1	143,589	2.2	65,268	1.0	65,268
Non-Local-Day User	24.0%	947,687	1.1	861,533	3.0	287,178	1.0	287,178
Motel-In	11.5%	454,100	1.1	412,818	3.5	117,948	2.4	283,075
Camp-In	9.5%	375,126	1.3	288,558	3.5	82,445	2.8	230,847
Motel-Out	36.5%	1,441,274	1.7	847,808	3.1	273,486	2.2	601,670
Camp-Out	4.0%	157,948	1.9	83,130	3.8	21,876	3.1	67,817
Other Overnight	10.5%	414,613	1.4	296,152	2.8	105,769	2.5	264,422
Totals	**100.0%**	**3,948,695**		**2,933,590**		**953,970**		**1,800,276**

[a] Findings from the 2009 Visitor Services Project survey results as reported in Cook, Philip S., Impacts of Visitor Spending on the Local Economy: Yosemite National Park, 2009," February, 2011

SOURCE: As noted, with Land Economics Consultants analysis 2012

Table 9-196 summarizes total spending derived from this level of visitation produced by analysis of the full pattern of spending within the MGM2 model. The MGM2 model also estimates total economic activity in terms of job creation, income to workers, and value added to the four-county regional economy, as presented in **table 9-197**. **Table 9-198** calculates the economic impacts of NPS spending.

TABLE 9-196: ALTERNATIVE 5 — VISITOR GROUPS AND TOTAL SPENDING BY MARKET SEGMENT

Market Segment	Visits in Party-Days/Nights	Average Spending ($)	Total Spending in 2010 $000s	Percent of Spending
Local-Day User	65,268	$74.64	$4,871	1%
Non-Local-Day User	287,178	$86.71	$24,900	7%
Motel-In	283,075	$371.17	$105,070	28%
Camp-In	230,847	$170.02	$39,249	10%
Motel-Out	601,670	$312.95	$188,295	49%
Camp-Out	67,817	$130.81	$8,871	2%
Other Overnight	264,422	$37.54	$9,927	3%
Totals	**1,800,276**	**$211.74**	**$381,184**	**100%**

SOURCE: MGM2 model built for Merced River Analysis, Land Economics Consultants 2012

TABLE 9-197: ALTERNATIVE 5 — TOTAL ECONOMIC ACTIVITY DUE TO VISITOR SPENDING

Sector/Spending Category	Sales $000s	Jobs	Labor Income $000s	Value Added $000s
Direct Effects				
Motel, hotel cabin, transient rental, or B&B	$148,085	1,408	$39,209	$84,070
Camping fees	$11,160	145	$3,506	$5,062
Restaurants & bars	$63,341	1,097	$21,272	$34,573
Admissions & fees	$39,524	704	$10,610	$23,655
Local transportation	$23,528	494	$11,858	$18,007
Grocery stores	$6,850	103	$3,438	$5,001
Gas stations	$8,625	47	$4,320	$6,415
Other retail	$14,897	261	$6,871	$11,199
Wholesale trade	$1,509	10	$529	$1,122
Local Production of goods	$189	1	$27	$75
Total Direct Effects	**$317,709**	**4,271**	**$101,643**	**$189,179**
Indirect and Induced Effects	$125,643	1,082	$36,293	$76,394
Total Effects	**$443,352**	**5,353**	**$137,935**	**$265,573**
Multiplier	1.40	1.25	1.36	1.40

NOTE: Current economic impacts are measured in 2010 dollars.

SOURCE: MGM2 model built for Merced River Alternatives Analysis, Land Economics MISSING Consultants 2012

TABLE 9-198: ALTERNATIVE 5 — ECONOMIC IMPACTS OF NATIONAL PARK SERVICE SPENDING

Yosemite National Park	Direct Effects	Economic Multipliers[a]	Indirect and Induced Effects	Total of Direct, Indirect and Induced Effects
Employment				
National Park Service Jobs[b]	892	1.33	294	1,186
Labor Income				
NPS Payroll[b]				
Salaries $000s	$39,271			
Benefits $000s	$10,120			
Total Compensation	$49,391	1.15	$7,641	$57,032
Value Added				
Total Compensation	$49,391	1.29	$14,151	$63,542

NOTE: Current economic impacts are measured in 2010 dollars.

[a] Multipliers are from IMPLAN sector 439, federal government/nonmilitary employment and payroll.

[b] As reported in Stynes, D.J., *Economic Benefits to Local Communities from National Park Visitation and Payroll, 2010,* Natural Resource Report NPS/NRSS/EQD/NRR--2011/481.

SOURCES: As noted; Land Economics Consultants analysis 2012

Summary of Impacts from Alternative 5: Enhanced Visitor Experiences and Essential Riverbank Restoration

The difference in jobs supported under Alternative 5 and Alternative 1 is presented in **table 9-199**, with a detailed breakout by industrial sector within the four-county regional economy. Alternative 5 would be essentially the same as Alternative 1 in terms of jobs; it would support the equivalent of four fewer jobs than Alternative 1.

TABLE 9-199: ALTERNATIVE 5 — IMPACT ON JOBS BY INDUSTRY SECTOR

Sector/Spending Category	Jobs Under Alt. 1 (No Action)	Jobs Under Alt. 5	Difference in Jobs
Direct Effects			
Motel, hotel, cabin, or B&B	1,409	1,408	(1)
Camping fees	145	145	(0)
Restaurants & bars	1,098	1,097	(1)
Admissions & fees	705	704	(0)
Local transportation	495	494	(0)
Grocery stores	103	103	(0)
Gas stations	47	47	(0)
Other retail	261	261	(0)
Wholesale trade	10	10	(0)
Local Production of goods	1	1	(0)
Total Direct Effects	**4,274**	**4,271**	**(3)**
Indirect and Induced Effects	1,083	1,082	(1)
Total Effects of Visitor Spending	**5,357**	**5,353**	**(4)**
National Park Service Total Employment Effects	**1,186**	**1,186**	**(0)**
Total Job Creation in Four Counties	**6,543**	**6,539**	**(4)**
SOURCE: MGM2 model, Land Economics Consultants 2012			

The long-term, regional, adverse impacts of Alternative 5 would be negligible. In the context of total employment within the four-county region, the support for jobs resulting from Alternative 5 would be almost the same as from Alternative 1 (see t**able 9-200**). In the context of specific industry sectors within the four-county region, the long-term economic impacts would be slightly adverse but would also be negligible.

Cumulative Impacts from Alternative 5: Enhanced Visitor Experiences and Essential Riverbank Restoration

Past Actions

Past actions would affect Alternative 5 to the same degree they affect Alternative 1 for socioeconomic impacts.

TABLE 9-200: ALTERNATIVE 5 — CHARACTERIZATION OF IMPACT SIGNIFICANCE

Industry Sector	Total Jobs in the 4-County Region	Alt. 5: Net Impact on Jobs	Impact as % of Total	Characterization of Impact Significance	
Total Impacts (including Indirect & Induced Effects)	**102,273**	**(4)**	**-0.0%**	Negligible	Adverse
Direct Impacts on Specific Sectors[a]					
Agriculture	13,619	0	0.0%	No Impact	
Mining	310	0	0.0%	No Impact	
Construction	5,115	0	0.0%	No Impact	
Manufacturing	4,043	0	0.0%	No Impact	
Transportation (and Public Utilities)	2,074	(0)	0.0%	No Impact	
Retail Stores (and Wholesale Trade)	10,314	(0)	0.0%	No Impact	
Lodging Industry	3,637	(1)	0.0%	Negligible	Adverse
Restaurants and Bars	5,887	(1)	0.0%	Negligible	Adverse
All Other Service Industries	36,446	(0)	0.0%	No Impact	
Government (Local, State, & Fed.)	20,828	(0)	0.0%	No Impact	

[a] Indirect and induced effects would be spread throughout all sectors of the economy and would have a negligible impact.

SOURCE: Minnesota IMPLAN Group, Inc. data; Land Economics Consultants 2012

Present Actions

Present actions would affect Alternative 5 to the same degree they affect Alternative 1 for socioeconomic impacts.

Reasonably Foreseeable Future Actions

For socioeconomic impacts, the cumulatively considerable factors would be the same as those described above for alternative 1. These will include the effects of private decisions made in the gateway communities and elsewhere in the four-county region, as well as those of public decisions in the region and within the park. Over the long run, one of the most functional features of market economies is that they trend toward self-correction. If public management actions reduce the supply of lodging and other commercial amenities within the park, demand pressures may build to the point that private interests may expand supply in surrounding areas by developing additional lodging, restaurants, and other facilities. Short of new construction, additional demand may be satisfied by increasing hours and seasons of operations, adding additional staff, and other business operating responses to expand capacities in gateway communities. In the short run, management policies within the park can alter the flow of visitors and shift the mix of overnight and day visitors, but in the long run market adaptations can continue to increase the annual volumes of people visiting the park. Based on these considerations, the cumulative economic impact of past, present, and reasonably foreseeable future actions, when combined with those of Alternative 5, would be regional, long term, negligible, and adverse.

Irreversible and Irretrievable Commitment of Resources for Alternative 5

For the most part, socioeconomic actions are reversible in the sense that markets adapt to changing circumstances and public policies can change strategies over time. On the other hand, the implementation of Alternative 5 would require the one-time expenditure of approximately $183 million. Once expended, those financial resources would no longer be available for other possible uses, and relatively permanent changes to facilities and infrastructure in the park would have been made. Physical changes made for Alternative 5 may be reversed in the future, but additional financial resources would be required to do so.

Relationship of Short-Term Uses and Long-Term Productivity for Alternative 5

Construction and restoration projects to implement Alternative 5 would create short-term disruptions during construction, but would produce desired changes to the park over the long term. There would also be a short-term, one-time change to the business model for the concessioner in the park, with a new concession agreement put in place to be consistent with the objectives and scale of facilities produced under Alternative 5. In the long term, a new pattern of economic flows in the region would be likely to emerge that supplies visitor services to meet the new level of visitor demand.

Environmental Consequences of Alternative 6: Diversified Visitor Experiences and Selective Riverbank Restoration

All River Segments

Impacts of Actions to Manage Visitor Use and Facilities

Compared with Alternative 1 (No Action), Alternative 6 would create the largest increase in the number of lodging units in the park, growing by approximately 20%. The camping unit inventory in Yosemite Valley would grow even more proportionately, by approximately 59%. Peak day-use infrastructure in the Valley, on the other hand, would be reduced by approximately 5%. As a result of these actions, the total annual visitor handling facilities and infrastructure of Alternative 6 would be approximately 7% larger than today. This would allow growth to continue at an assumed 3% average rate for another two years before the daily maximum number of visitors would start to be reached on peak days as was described in the methodology section. At that point the annual visitor volume would be approximately 4.19 million. **Table 9-201** applies results of the VSP survey findings to translate that total annual visitation estimate into visitor groups by market segment, which is necessary for input to the economic models.

TABLE 9-201: ALTERNATIVE 6 — ANALYSIS OF TOTAL VISITATION BY MARKET SEGMENT

Visitor Market Segment	Visitor Market Segment Share of Park Entries[a]	Calculated Distribution of Visitors	Re-Entry Rate[a]	Visitor Trips to the Park	Ave. Group Size[a]	Visitor Groups	Length of Stay (Nights or Days)[a]	Visits in Party-Days / Nights
Total Visitors: Alt. 6		**4,190,917**						
Local-Day User	4.0%	167,637	1.1	152,397	2.2	69,271	1.0	69,271
Non-Local-Day User	24.0%	1,005,820	1.1	914,382	3.0	304,794	1.0	304,794
Motel-In	11.5%	481,955	1.1	438,141	3.5	125,183	2.4	300,440
Camp-In	9.5%	398,137	1.3	306,259	3.5	87,503	2.8	245,007
Motel-Out	36.5%	1,529,685	1.7	899,814	3.1	290,263	2.2	638,578
Camp-Out	4.0%	167,637	1.9	88,230	3.8	23,218	3.1	71,977
Other Overnight	10.5%	440,046	1.4	314,319	2.8	112,257	2.5	280,642
Totals	**100.0%**	**4,190,917**		**3,113,543**		**1,012,489**		**1,910,709**

[a] Findings from the 2009 Visitor Services Project survey results as reported in Cook, Philip S., *Impacts of Visitor Spending on the Local Economy: Yosemite National Park, 2009,* February, 2011

SOURCE: As noted, with Land Economics Consultants 2012

Table 9-202 summarizes total spending derived from the level of visitation produced by analysis of the full pattern of spending within the MGM2 model. The MGM2 model also estimates total economic activity in terms of job creation, income to workers, and value added to the four-county regional economy, as presented in **table 9-203**. **Table 9-204** calculates the economic impacts of NPS spending.

TABLE 9-202: ALTERNATIVE 6 — VISITOR GROUPS AND TOTAL SPENDING BY MARKET SEGMENT

Market Segment	Visits in Party-Days/Nights	Average Spending ($)	Total Spending in 2010 $000s	Percent of Spending
Local-Day User	69,271	$74.64	$5,170	1%
Non-Local-Day User	304,794	$86.71	$26,428	7%
Motel-In	300,440	$371.17	$111,516	28%
Camp-In	245,007	$170.02	$41,657	10%
Motel-Out	638,578	$312.95	$199,845	49%
Camp-Out	71,977	$130.81	$9,415	2%
Other Overnight	280,642	$37.54	$10,536	3%
Totals	**1,910,709**	**$211.74**	**$404,567**	**100%**

SOURCE: MGM2 model built for Merced River Analysis, Land Economics Consultants 2012

TABLE 9-203: ALTERNATIVE 6 — TOTAL ECONOMIC ACTIVITY DUE TO VISITOR SPENDING

Sector/Spending Category	Sales $000s	Jobs	Labor Income $000s	Value Added $000s
Direct Effects				
Motel, hotel, cabin, or B&B	$157,169	1,494	$41,615	$89,227
Camping fees	$11,845	154	$3,721	$5,373
Restaurants & bars	$67,227	1,164	$22,577	$36,693
Admissions & fees	$41,949	748	$11,261	$25,106
Local transportation	$24,972	525	$12,586	$19,112
Grocery stores	$7,270	109	$3,649	$5,308
Gas stations	$9,154	50	$4,585	$6,809
Other retail	$15,810	277	$7,293	$11,886
Wholesale trade	$1,602	11	$562	$1,191
Local Production of goods	$200	1	$29	$80
Total Direct Effects	**$337,198**	**4,533**	**$107,878**	**$200,783**
Indirect and Induced Effects	$133,350	1,148	$38,519	$81,081
Total Effects	**$470,548**	**5,682**	**$146,396**	**$281,864**
Multiplier	1.40	1.25	1.36	1.40

NOTE: Current economic impacts are measured in 2010 dollars.

SOURCE: MGM2 model built for Merced River Alternatives Analysis, Land Economics Consultants 2012

TABLE 9-204: ALTERNATIVE 6 — ECONOMIC IMPACTS OF NATIONAL PARK SERVICE SPENDING

Yosemite National Park	Direct Effects	Economic Multipliers[a]	Indirect and Induced Effects	Total of Direct, Indirect and Induced Effects
Employment				
National Park Service Jobs[b]	916	1.33	302	1,218
Labor Income				
NPS Payroll[b]				
Salaries $000s	$40,331			
Benefits $000s	$10,393			
Total Compensation	$50,724	1.15	$7,847	$58,571
Value Added				
Total Compensation	$50,724	1.29	$14,533	$65,257

NOTE: Current economic impacts are measured in 2010 dollars.

[a] Multipliers are from IMPLAN sector 439, federal government/nonmilitary employment and payroll.

[b] As reported in Stynes, D.J., *Economic Benefits to Local Communities from National Park Visitation and Payroll, 2010,* Natural Resource Report NPS/NRSS/EQD/NRR--2011/481.

SOURCES: As noted; Land Economics Consultants 2012

Summary of Impacts from Alternative 6: Diversified Visitor Experiences and Selective Riverbank Restoration

The difference in jobs supported under Alternative 6 and Alternative 1 is presented in **table 9-205**, with a detailed breakout by industrial sector within the four-county regional economy. Alternative 6 would support approximately 356 more jobs than Alternative 1

TABLE 9-205: ALTERNATIVE 6 — IMPACT ON JOBS BY INDUSTRY SECTOR

Sector/Spending Category	Jobs Under Alt. 1	Jobs Under Alt. 6	Difference in Jobs
Direct Effects			
Motel, hotel cabin, transient rental, or B&B	1,409	1,494	85
Camping fees	145	154	9
Restaurants & bars	1,098	1,164	67
Admissions & fees	705	748	43
Local transportation	495	525	30
Grocery stores	103	109	6
Gas stations	47	50	3
Other retail	261	277	16
Wholesale trade	10	11	1
Local Production of goods	1	1	0
Total Direct Effects	**4,274**	**4,533**	**259**
Indirect and Induced Effects	1,083	1,148	66
Total Effects of Visitor Spending	**5,357**	**5,682**	**325**
National Park Service Total Employment Effects	**1,186**	**1,218**	**32**
Total Job Creation in Four Counties	**6,543**	**6,899**	**356**
SOURCE: MGM2 model, Land Economics Consultants 2012			

The long-term, regional socioeconomic impacts of Alternative 6 would be beneficial, but they would also be negligible. In the context of total employment within the four-county region, the support for jobs resulting from Alternative 6 would be approximately 0.3% larger than Alternative 1 and well within the 0-2.5% categorization for negligible (see **table 9-206**). For specific industry sectors within the four-county region, the beneficial socioeconomic impacts would also be negligible, except in the lodging industry sector where the long-term, regional, beneficial impacts would be minor in intensity.

As was discussed under the other action alternatives, Mariposa County, and the gateway community of Mariposa within it, are likely to be the most noticeably impacted geographic areas because they combine both dependency on tourism industry spending and proximity to the park. There is also a fiscal connection in that the concessioner lodging in Yosemite Valley lies within Mariposa County, which receives the transient occupancy tax revenue collected there. Mariposa is further impacted because it is the closest place for park and concessioner employees to live who do not have housing

TABLE 9-206: ALTERNATIVE 6 — CHARACTERIZATION OF IMPACT SIGNIFICANCE

Industry Sector	Total Jobs in the 4-County Region	Alt. 6: Net Impact on Jobs	Impact as % of Total	Characterization of Impact Significance	
Total Impacts (including Indirect & Induced Effects)	**102,273**	**356**	**0.3%**	Negligible	Beneficial
Direct Impacts on Specific Sectors[a]					
Agriculture	13,619	0	0.0%	No Impact	
Mining	310	0	0.0%	No Impact	
Construction	5,115	0	0.0%	No Impact	
Manufacturing	4,043	0	0.0%	No Impact	
Transportation (and Public Utilities)	2,074	30	1.4%	Negligible	Beneficial
Retail Stores (and Wholesale Trade)	10,314	26	0.2%	Negligible	Beneficial
Lodging Industry	3,637	94	2.6%	Minor	Beneficial
Restaurants and Bars	5,887	67	1.1%	Negligible	Beneficial
All Other Service Industries	36,446	43	0.1%	Negligible	Beneficial
Government (Local, State, & Fed.)	20,828	32	0.2%	Negligible	Beneficial

[a] Indirect and induced effects would be spread throughout all sectors of the economy and would have a negligible impact.

SOURCE: Minnesota IMPLAN Group, Inc. data; Land Economics Consultants 2012

within the park. Changes in the park workforce living in Mariposa County could cause increases or decreases in demand for county services and affect county revenues. Changes in park workforce could also change school enrollment, affecting both costs and revenues for local schools.

The maximum fiscal impact of Alternative 6 on Mariposa County could include an additional $560,000 in TOT revenue after two additional years of growth in visitation to the park, and based on the 10% tax rate and the difference in spending between Alternatives 1 and 6 for all types of lodging, both inside and outside the park. This would be equivalent to a 1.3% increase in General Fund revenue for the county.

Cumulative Impacts from Alternative 6: Diversified Visitor Experiences and Selective Riverbank Restoration

Past Actions

Past actions would affect Alternative 6 to the same degree they affect Alternative 1 for socioeconomic impacts.

Present Actions

Present actions would affect Alternative 6 to the same degree they affect Alternative 1 for socioeconomic impacts.

Reasonably Foreseeable Future Actions

For socioeconomic impacts, the cumulatively considerable factors would be the same as those described above for Alternative 1. These will include the effects of private decisions made in the gateway communities and elsewhere in the four-county region, as well as those of public decisions within the park. Over the long run, one of the most functional features of market economies is that they trend toward self-correction. If public management actions reduce the supply of lodging and other commercial amenities within the park, demand pressures may build to the point that private interests may expand supply in surrounding areas by developing additional lodging, restaurants, and other facilities. Short of new construction, additional demand may be satisfied by increasing hours and seasons of operations, adding additional staff, and other business operating responses to expand capacities in gateway communities. In the short run, management policies within the park can alter the flow of visitors and shift the mix of overnight and day visitors, but in the long run market adaptations can continue to increase the annual volumes of people visiting the park. Based on these considerations, the cumulative economic impact of past, present, and reasonably foreseeable future actions, when combined with those of Alternative 6, would be regional, long term, negligible, and beneficial.

Irreversible and Irretrievable Commitment of Resources for Alternative 6

For the most part, socioeconomic actions are reversible in the sense that markets adapt to changing circumstances and public policies can change strategies over time. On the other hand, the implementation of Alternative 6 would require the one-time expenditure of approximately $259 million. Once expended those financial resources would no longer be available for other possible uses, and relatively permanent changes to facilities and infrastructure in the park would have been made. Physical changes made for Alternative 6 may be reversed in the future, but additional financial resources would be required to do so.

Relationship of Short-Term Uses and Long-Term Productivity for Alternative 6

Construction and restoration projects to implement Alternative 6 would create short-term disruptions during construction, but would produce desired changes to the park over the long term. There would also be a short-term, one-time change to the business model for the concessioner in the park, with a new concession agreement put in place to be consistent with the objectives and scale of facilities produced by Alternative 6. In the long term, a new pattern of economic flows in the region is likely to emerge that supplies visitor services to meet the new level of visitor demand.

This page intentionally left blank