Economic Impacts

The conventional wisdom among researchers in recent years has been that recreation and tourism have both positive and negative economic impacts for recreation areas. On the positive side, recreation development helps to diversify the local economy (Gibson, 1993; Marcouiller and Green, 2000; English et al., 2000), and it generates economic growth (Gibson, 1993; Deller et al., 2001). It achieves this partly by acting as a kind of export industry, attracting money from the outside to spend on goods and services produced locally (Gibson, 1993). It also stimulates the local economy through other means. Infrastructure, such as airports and highways and water systems, often must be upgraded to meet the needs of tourists, and such improvements can help foster the growth of nonrecreation industries in the area by attracting entrepreneurs and labor and by providing direct inputs to these industries (Gibson, 1993).

Recreation development can involve significant economic leakages, however, in that many of the goods and services it requires come from outside the community—for example, temporary foreign workers often are drawn to the area to fill jobs in hotels, ski resorts, etc.—and many of the recreation-related establishments (restaurants, hotels, tour and travel companies) are owned by national or regional companies that export the profits (Gibson, 1993). Thus, part of the money from tourists and seasonal residents ends up leaving the locality. Another economic drawback involves the seasonality of recreation activities, which can create problems for workers and businesses during off-seasons (Gibson, 1993; Galston and Baehler, 1995), though this may actually be a plus for places where seasonal recreation jobs are timely, coming when farmers and other workers normally have an off-season.

The greatest economic concern is that recreation development may be less desirable than traditional forms of rural development because it increases the incidence of service employment with relatively low wages. According to Deller et al. (2001), "There is a perception that substituting traditional jobs in resource-extractive industries and manufacturing with more service-oriented jobs yields inferior earning power, benefits, and advancement potential" and that this may lead to "higher levels of local underemployment, lower income levels, and generally lower overall economic well-being." In addition, many researchers are concerned that recreation may result in a less equitable distribution of income (Gibson, 1993; Marcouiller and Green, 2000). These problems may be compounded by the higher housing costs in some recreation areas (Galston and Baehler, 1995).

These concerns reflect findings from individual case studies. Only a few studies have attempted to estimate how rural recreation areas nationwide differ on economic measures. Deller et al. (2001) found that rural tourism and amenity-based development contributed to growth in per capita income and employment, and concluded that as a result of the positive impact on income "the concern expressed about the quality of jobs created ... appears to be misplaced." English et al. (2000) also found that rural tourism was associated with higher per capita incomes, and with a higher percent increase in per capita income, although they found no significant relationship for household income. English and his colleagues also found housing

⁷Because most economic development strategies are adopted and implemented at the local level, our goal here is to provide better informed decisions at that level. Hence, the positives and negatives discussed here refer only to the situation facing the local county. Whether rural recreational development is good for the State or the Nation as a whole is also a worthwhile question, but beyond the scope of this report.

costs and the change in housing costs over time to be significantly related to rural tourism. On the other hand, they found no evidence that the distribution of income was less equal due to rural tourism.

To address these economic issues, we examined a variety of indicators reflecting employment, earnings, income, and housing costs.

Employment

Two employment measures, the local employment growth rate (percent increase during the 1990s) and the local employment-population ratio (percentage of working-age resident population employed in 2000) are particularly illuminating. (See box "Data Sources" for each of the indicators used in this study.)

Recreation counties, on average, had more than double the rate of employment growth of other rural areas during the 1990s: 24 percent vs. 10 percent. The regression analysis, moreover, indicated that the extent to which a recreation county was dependent on recreation was positively and significantly related to the rate of local employment growth (see appendix for details on regression analysis). Employment growth generally offers residents more job opportunities, enabling some unemployed residents to find jobs and employed residents to find better jobs. However, job growth does not necessarily improve job conditions for current residents. If too many people come into the area seeking employment, and if those newcomers aggressively compete with locally unemployed (or underemployed) residents, the resident job seekers may end up having greater difficulty gaining employment. Thus, we need to look closely at employment data to determine how recreation affects the local ability to find jobs.

Data Sources

The source for most of our data is the Decennial Census (Census Bureau, U.S. Department of Commerce). Other sources include:

- The Bureau of Economic Analysis, U.S. Department of Commerce, for data on earnings per job, and the Bureau of Labor Statistics, U.S.
 Department of Labor, Local Area Unemployment Statistics, for employment growth.
- The Uniform Crime Reporting Program (an unpublished data source available on an annual basis from the Federal Bureau of Investigation (FBI)), for data on serious crimes. Note: These data have not been adjusted by the FBI to reflect underreporting, which could affect comparability over time or among geographic areas.
- The Area Resource File (a county-specific health resources information system maintained by Quality Resource Systems, under contract to the Health Resources and Services Administration, U.S. Department of Health and Human Services), for the age-adjusted death rate, the number of physicians, and the area (in square miles) used to compute population densities for regression analysis.
- Kenneth Johnson and Calvin Beale for the recreation county types and the measure of recreation dependency used in their 2002 article.

To measure the ability of residents to find jobs, we examined the percentage of the working-age population that was employed. For our study, we broke this into three separate rates covering three groups of the working-age population: ages 18-24, 25-64, and 65 and over. We hypothesized that recreation counties might be particularly advantageous for younger and older populations that may have a harder time competing in places with less job growth. In addition, younger and older groups may find it more convenient to work in recreation counties, which are thought to provide more part-time and seasonal jobs than most other places.

As expected, we found higher employment-population rates in recreation counties for both the younger and older age groups. However, the difference was less than 1 percentage point. The main working-age employment rate (ages 25-64) was roughly the same for both recreation and other nonmetro counties in 2000. However, for each of these age groups, the upward trend in the employment-population rate during the 1990s favored recreation counties. Our regression analysis indicates that recreation had a positive and statistically significant impact on the employment rates for all three age categories in 2000. Recreation also had a positive and statistically significant impact on the increase in the employment rate during the 1990s, except for the older age group. ¹⁰

Earnings

Conventional wisdom suggests that a main drawback of tourism is that many of the jobs it creates are in restaurants, motels, and other businesses that tend to offer relatively low wages and few fringe benefits. But does this mean that rural recreation development generally leads to low-paying jobs? To address this question, we examined average annual earnings per job (which include wages and salaries and other labor and proprietor income, but exclude unearned income and fringe benefits). We found that average earnings per job were \$22,334 in 2000 for recreation counties—about \$450 less than in other rural counties (fig. 2, table 2). The difference, though only about 2 percent, is consistent with the low-wage hypothesis. On the other hand, our finding that earnings per job increased faster in recreation counties than in other rural counties in the 1990s was not consistent with the conventional wisdom, but again, the difference was relatively small (\$200).

Our regression analysis, however, found no statistically significant relationship between earnings per job and recreation dependency, at least no simple linear relationship. With regard to change in earnings per job during the 1990s, the regression analysis found that recreation had a positive and statistically significant impact on earnings per job. So these findings do not support the conventional wisdom that recreation results in generally low-paying jobs.

The data on earnings per job covered all jobs in the county, including those filled by nonresidents. A different picture emerges when we look only at earnings per resident worker. Aside from excluding nonresidents employed in the county (who, in theory, might be lowering the average earnings per job in recreation counties), this measure totals the income workers receive from all the jobs they have. This is important because recreation counties often provide numerous part-time and seasonal jobs, potentially allowing

⁸This may be viewed as a measure of both the availability of job opportunities to residents and of local economic efficiency.

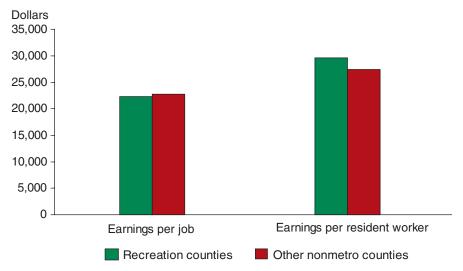
⁹Comparing medians instead of means, the difference between recreation and other nonmetro counties tends to be bigger in 2000 for all three age groups.

¹⁰Our regression explaining the change in employment rates for the elderly explained only 1 percent of the variation, which may have prevented the regression analysis from detecting the importance of recreation.

¹¹Although the average earnings per job grew more in recreation counties than in other nonmetro counties, the reverse was true for the median earnings per job.

¹²When we ran a curvilinear regression, we found a significant negative coefficient for recreation dependency, and a significant positive coefficient for recreation dependency squared. This implies that among recreation counties, those with moderate degrees of recreation dependency had relatively lower earnings per job, compared with counties with lower or higher recreation dependencies. We do not have any explanation for this.

Figure 2 **Earnings in recreation and nonrecreation counties, 1999**Recreation counties have significantly higher levels of earnings per resident worker



Source: Calculated by ERS using data from U.S. Census Bureau and Bureau of Economic Analysis, U.S. Department of Commerce.

more of their residents to have multiple jobs than the residents of other counties. The average worker's earnings from multiple jobs exceeded the average earnings per job. In recreation counties, earnings amounted to \$29,593 per resident worker (16 years or older) in 1999—about \$2,000 more than in other rural counties—an 8-percent difference. Our regression analysis found recreation had a positive and statistically significant effect on earnings per resident worker. Thus, some residents may work more hours in recreation counties, but on average they end up earning more than residents of other nonmetro counties.

Income

Earnings are only one source of income. Other sources include interest receipts, capital gains, and retirement benefits like social security. Because many recreation areas have attracted wealthy individuals—including retirees, whose earnings are only a small part of their incomes—we expected recreation county income levels to be higher than in other rural areas. Consistent with this expectation, we found average per capita income was 10 percent higher in recreation counties than in other nonmetro counties (fig. 3). Moreover, per capita income levels were growing more rapidly during the 1990s in recreation counties than in other nonmetro counties. These findings were reflected in our regression analysis, which found recreation had a positive and statistically significant effect on both the level of per capita income and the change in per capita income over time. This should also benefit the community as a whole, because higher incomes mean an increase in demand for local goods and services, as well as increased local government tax collections and contributions to local charities and other social organizations.

One problem in interpreting per capita incomes is that they average together the incomes of the wealthiest and the poorest individuals. Thus, a small number of extremely wealthy people could make the community seem much ¹³Census data also provided median earnings for two kinds of resident workers who were 16 years and older: full-time workers and other workers. For both types of workers, recreation counties surpassed other nonmetro counties in median earnings per worker in 2000.

Table 2

Economic conditions in recreation and other nonmetro counties

	Type of county	
		Other
Indicator	Recreation	nonmetro
Employment growth		Percent
1990-2000	23.7	9.8
Employment/population		
ratio in 2000		
Ages 16-24	67.4	66.7
Ages 25-64	70.3	70.3
Ages 65 and over	13.6	13.4
Change 1990-2000	Percentage points	
Ages 16-24	0.7	0.0
Ages 25-64	0.7	0.3
Ages 65 and over	1.5	1.4
Earnings per job	Dollars	
in 2000	22,334	22,780
Change 1990-2000	5,340	5,140
Earnings per resident		
worker in 1999	29,593	27,445
Income per capita		
in 2000	22,810	20,727
Change 1990-2000	7,471	6,564
Median household		
income in 1999	35,001	31,812
Change 1989-1999	11,952	10,531
Median monthly rent		
in 2000	474	384
Change 1990-2000	134	104

Note: These are county averages (simple means).

Source: ERS calculations based on data from U.S. Census Bureau and Bureau of Economic Analysis, U.S. Department of Commerce, and Bureau of Labor Statistics, U.S. Department of Labor.

better off than with other measures, for instance, the income of the typical (or median) person in the county. If recreation counties had more wealthy individuals than other rural counties, the per capita measure might be a misleading indicator of how the average family or household in each of these counties differed in income. ¹⁴ For this reason, we include a second income measure: median household income in the county in 1999.

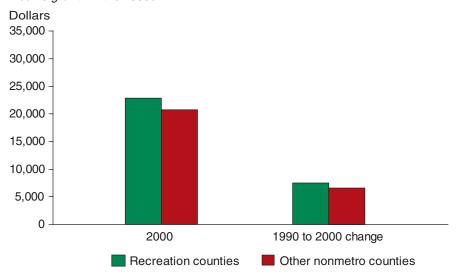
Using this measure, we found that median household income was 10 percent higher in recreation counties than in other rural counties. The recreation county advantage amounted to \$3,185 per year for the median household. The regression analysis reflected this finding, showing a positive and

¹⁴In other words, the mean (average) does not equal the median when income is not normally distributed.

Figure 3

Per capita income in recreation and nonrecreation counties, 2000, and change during 1990s

Recreation counties have significantly higher levels of income and had more income growth in the 1990s



Source: Calculated by ERS using data from U.S. Census Bureau and Bureau of Economic Analysis, Department of Commerce.

statistically significant relationship between recreation and both the level and change in median family income.

Housing Costs

One of the main complaints about recreation areas is that the cost of living in them is often higher, offsetting much of the advantage that residents might obtain from their higher incomes. Of particular concern is that high living costs could become a significant hardship for people struggling to raise families on minimum-wage jobs (Galston and Baehler, 1995). A high cost of living could force some lower paid workers (including some long-time residents) to look for housing outside the area.

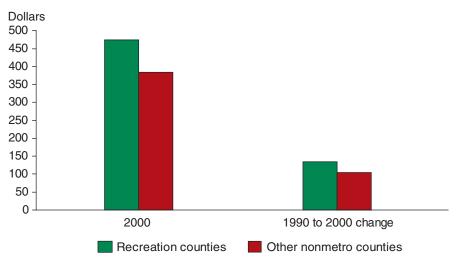
The cost of housing is one of the most important contributors to the cost of living. According to Census data in 2000, median monthly rents for housing averaged \$474 in recreation counties, 23 percent higher than the \$384 median rent in other nonmetro counties (fig. 4). Our regression analysis also found a positive and statistically significant effect of recreation on median rent. Rents also increased faster during the 1990s in recreation counties, with the extent of recreation positively and significantly related to the extent of rent increase.

Though recreation counties had higher rents than other nonmetro counties, over the course of a year this amounted to a difference of only \$1,080 per household—about a third of the \$3,185 advantage we found in median household income in recreation counties. So after deducting for their higher rents, we found that households in recreation counties still had a significant income advantage over those in other rural counties.¹⁵

¹⁵Alternatively, we may compare regression coefficients for median rents and median household incomes. If we multiply the median (monthly) rent coefficient by 12 (months per year), we get a \$384 annual rent addon associated with a 1-unit increase in recreation dependency. This compares with the \$1,474 add-on to median household income associated with the same 1-unit increase in recreation dependency. Thus, the regression analysis implies that higher rents claim only about a fourth (26 percent) of the added income related to recreation.

Figure 4
Median monthly rents in recreation and nonrecreation counties, 2000, and change during 1990s

Recreation counties have significantly higher rents and had more growth in rents in the 1990s



Source: Calculated by ERS using data from U.S. Census Bureau, Department of Commerce.

It is difficult to draw conclusions from this kind of information, for several reasons. First, rents show only part of the housing cost picture. Most housing units in the nonmetro counties we studied (in both recreation and other nonmetro counties) are owner-occupied rather than rented. Assuming that higher rents reflect higher home prices and greater equity in homes, higher home prices should increase the wealth of homeowners in recreation counties. In addition, higher rents and home prices may reflect better housing quality in recreation counties, rather than simply higher costs. This might be expected because more of the housing in these rapidly growing places is likely to be relatively new (and hence more valuable), and recreation county residents, having generally higher incomes, may demand better housing than residents of other nonmetro counties. Higher home values also increase the local tax base, which may lead to higher tax collections, enabling local governments to increase public services. Thus, on balance, it is unclear whether these higher housing costs are a plus or minus for the community.