Introduction

This report evaluates the role recreation can play in attracting new residents and income to communities, and the effect this in-migration has on earnings per job and growth in earnings per job. We focus particularly on the effects in rural places during the recovery from the end of the Great Recession in 2010, through 2016.

Many communities recognize the economic benefits of recreation amenities that attracts tourists who spend money at hotels, restaurants, and other businesses that cater to visitors. What is less well understood is whether a recreation economy can bring longer-term economic benefits by attracting new residents, who may first come as tourists or second home owners.

Rural places’ struggle since the recession with population loss, job loss, and growing economic distress have been well-documented. This study finds that recreation may make the difference between gaining or losing population, particularly in rural counties.

This report evaluates all counties in the U.S., dividing them by Metropolitan, Micropolitan, and Rural categories. We then also separate counties into two groups: Recreation and Non-Recreation counties to test whether migration, the household income of people moving in, and average earnings per job have differed between these two groups since 2010. See Data and Methods section for details.

Summary Findings

- Between 2010 and 2016, people have been more likely to move to Recreation counties. This is particularly true for Rural counties, in which the average Non-Recreation county lost 20 people per 1,000 residents due to out-migration while the average Recreation county gained just more than 1 person per 1,000 residents.

- Households moving into Recreation counties have, on average, higher income than households moving into Non-Recreation counties. The average household moving into a Rural Recreation county has $8,700 higher income than the average household moving into a Rural Non-Recreation county.

- Recreation counties have, on average, lower earnings per job than Non-Recreation counties, with a gap of $5,100 in Rural counties. Earnings per job in Rural Recreation counties, however, grew six times faster than in Non-Recreation counties between 2010 and 2016.

- Recreation appears to drive varied economic benefits, including short-term support for tourism-related businesses and longer-term support by recruiting new residents who may be business owners, entrepreneurs, or workers, supporting growth in earnings per job across a community.
Definitions

The United States Department of Agriculture’s Economic Research Service (USDA ERS) has a set of typology codes identifying whether a county’s economy is particularly dependent on specific sectors: recreation, manufacturing, mining, or government. The Recreation typology is determined from three components: the share of employment in entertainment and recreation, accommodations, eating and drinking places, and real estate; the share of personal income from these same categories; and the share of vacant housing units that is for seasonal use. Income and employment in these categories are averages for 2010-2012 from the Bureau of Economic Analysis. Seasonal housing is from the 2010 Census. Counties with the highest scores are identified as Recreation counties.

Across the U.S., 428—14 percent—of all counties are identified as having “recreation-dependent” economies, shown in Figure 1.

Figure 1: Map of recreation-dependent counties in the contiguous U.S., 2017.

The ERS classification system does not directly identify particular amenities that attract people, but rather identifies the economic characteristics of recreation-dependent communities. The economic measures of recreation do serve as a strong proxy for natural amenities: an analysis of geographic variables shows that recreation-dependent counties are significantly correlated with cooler summer temperatures, a larger share of public land and protected public land, and a larger part of the county in lakes, rivers, and oceanfront.

We distinguish between Metropolitan, Micropolitan, and Rural counties using the Census Bureau’s designations. A Metropolitan area has at least one urbanized area with 50,000 or more residents. A Micropolitan area has at least one urban area with between 10,000 and 50,000 residents. Places designated as Rural counties do not meet these criteria.
Table 1 shows the breakdown of Recreation and Non-Recreation places across Metropolitan, Micropolitan, and Rural counties.

Table 1. Number of Metropolitan, Micropolitan, and Rural counties by Recreation and Non-Recreation status, 2017.

<table>
<thead>
<tr>
<th>Recreation</th>
<th>Non-Recreation</th>
<th>% of Counties that are Recreation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metropolitan</td>
<td>119</td>
<td>1,047</td>
</tr>
<tr>
<td>Micropolitan</td>
<td>85</td>
<td>556</td>
</tr>
<tr>
<td>Rural</td>
<td>224</td>
<td>1,110</td>
</tr>
</tbody>
</table>

Results

Since Recession People Moved Away from Micro and Rural, into Metro

Between 2010 and 2016, six out of every ten counties in the U.S. had more people moving out than moving in; in the average county, 3.2 people moved out for every 1,000 residents. This nationwide average, however, masks important differences across urbanization: 43 percent of Metropolitan counties had negative net migration compared to 68 percent of Micropolitan counties and 72 percent of Rural counties.

From 2010 to 2016, the average Metropolitan county gained 15.9 people per 1,000 residents from people moving in while the average Micropolitan county lost 10.7 residents per 1,000 people and the average Rural county lost 16.4 residents per 1,000 people from people moving out.

<table>
<thead>
<tr>
<th></th>
<th>% of counties with more people moving out than in</th>
<th>Average net migration rate (per 1,000 residents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All U.S. Counties</td>
<td>60%</td>
<td>-3.2</td>
</tr>
<tr>
<td>All Metropolitan Counties</td>
<td>43%</td>
<td>15.9</td>
</tr>
<tr>
<td>All Micropolitan Counties</td>
<td>68%</td>
<td>-10.7</td>
</tr>
<tr>
<td>All Rural Counties</td>
<td>72%</td>
<td>-16.4</td>
</tr>
</tbody>
</table>

People Are More Likely to Move to Recreation Counties

Across Metropolitan, Micropolitan, and Rural categories, Recreation counties were significantly less likely to have more people move out than move in since the Great Recession ended in 2010 (Figure 2). The biggest difference between Recreation and Non-Recreation counties is in the Micropolitan category: Recreation counties were 42 percentage points less likely to have negative net migration since the recession (73% of Non-Recreation Micropolitan counties had negative net migration; 31% of Recreation Micropolitan counties had negative net migration).
Figure 2: Share of counties that had more people move out than in between 2010 and 2016, comparing Recreation and Non-Recreation counties across Metropolitan, Micropolitan, and Rural categories.

Between Metropolitan, Micropolitan, and Rural categories, Rural counties were much more likely to have more people moving out than moving in since the recession, with 48 percent of recreation counties having negative net migration and 77 percent of non-recreation counties with negative net migration. Metropolitan counties were the least likely to have negative net migration, although the share is still high: 25 percent of recreation counties and 45 percent of non-recreation counties had more people move out than in.

Recreation counties have significantly higher in-migration rates than Non-Recreation counties across Metropolitan, Micropolitan, and Rural categories. The average Micro and Rural county had more people moving in than out only if it is a Recreation county. Otherwise, the average Micro and Rural county had more people moving out than in, with negative net migration (Figure 3). For example, the average Rural Non-Recreation county had 19.9 people move out per 1,000 residents, whereas the average Rural Recreation county had 1.3 people move in per 1,000 residents.
The greatest difference between Recreation and Non-Recreation counties is for Micropolitan counties, in which Recreation counties had 37 more people moving in per 1,000 residents than Non-Recreation counties had (15.6 people moving out versus 21.6 people moving in).

**Higher Income Households Move to Recreation Counties**

The differences in migration rates suggest people are moving to Recreation counties more quickly than to Non-Recreation counties. What is less clear is the effect these people moving in have on the local economy. While the economic impacts of a specific group of people is difficult to determine, we can look at the relative incomes of people moving in to see if they brought greater wealth to communities.

Figure 4 shows the average household income of people moving into Recreation counties, compared to Non-Recreation counties. The differences in household income are statistically significant across all community sizes, and the biggest difference in income is in Micropolitan communities, in which the average household income is almost $20,000 more in Recreation counties compared to Non-Recreation counties.
Not only are households moving to Recreation counties wealthier, on average, than households moving to Non-Recreation counties, but they also tend to have higher household income than current residents. This is particularly true in Rural Recreation counties where 29 percent of those counties had wealthier households moving in, compared to 4 percent of Rural Non-Recreation counties.

**Recreation Counties Have Lower Average Earnings per Job But Faster Growth**

If more people are moving to Recreation counties, and many of these people have higher household income, does this translate into higher earnings per job in Recreation counties? Earnings per job measures only what the average job pays, while household income includes what people earn at one or more jobs as well as other income sources like investments or Social Security.

We find that average earnings per job is significantly *lower* in Recreation counties, with the biggest gap (approximately $5,600) in Metropolitan counties.
The difference in earnings per job between Recreation and Non-Recreation counties appears to be shrinking in Micropolitan and Rural counties. Figure 6 shows the average growth rate in earnings per job between 2010 and 2016 for Recreation and Non-Recreation counties; the difference in growth rates is significant for Micropolitan and Rural counties but not for Metropolitan counties.

In Micropolitan and Rural Recreation counties, growth in average earnings per job exceeded the average growth rate in any type of Metropolitan county, whether Recreation or Non-Recreation. In Non-Recreation Micropolitan and Rural counties, average earnings per job grew much more slowly than in any type of Metropolitan county.
Conclusions

People want to live in Recreation communities and have been moving to these places much more quickly since the Great Recession ended in 2010. These in-migrants are bringing higher household income, which may be contributing to faster growth in earnings per job in Recreation counties. The influx of higher income households has not eliminated the gap in earnings per job, which remain significantly lower in Recreation counties. While earnings per job still lag behind in Recreation communities, more rapid growth since the Great Recession may cause earnings per job in Recreation counties to eventually meet or exceed earnings per job in Non-Recreation communities.

The differences between Recreation and Non-Recreation counties generally are greatest in Micropolitan places, followed by Rural places. These findings suggest that Micropolitan communities, often with airports and therefore better connections to population and economic centers, may be able to capitalize more easily on recreation-associated economic benefits. Other research by Headwaters Economics found that the economies in places with easier access to markets via air travel tend to perform more like Metropolitan counties than their Rural peers.\(^7\)

While the differences might not be as great between Rural Recreation and Non-Recreation counties, these findings do suggest the potential for substantial benefits that could make the difference between shrinking and growing population. In many Rural communities, a recreation economy has made the difference between gaining or losing population.

Attracting new residents and higher income households is not without tradeoffs. Many Recreation communities have grown rapidly, leading to an increase in the cost of living for current residents, urban sprawl and more people living on fire-prone lands, and higher infrastructure costs, to name a few challenges. In some places, the rise in cost of living has outstripped the benefits from growing income.\(^8\)

Communities considering investing in recreation as an economic development strategy need to anticipate these tradeoffs. Promoting a town’s amenities without anticipating population growth—and its associated housing and infrastructure needs—can reduce quality of life for current residents.

Data and Methods

Migration data are from the Census Bureau’s annual population estimates.\(^9\) We sum total migration from 2010 through 2016, the latest year available, and divide total migration for these seven years by the population in 2010 to calculate the post-recession migration rate.

Earnings per job data are from the Bureau of Economic Analysis.\(^10\) We calculate each county’s growth in earnings per job as the average earnings per job in 2016 divided by the average earnings per job in 2010.

Relative income data for people moving into a county are from the U.S. Internal Revenue Service’s U.S. Population Migration Data.\(^11\) We calculate the average household adjusted gross income in 2010-2016 for households moving into a county and for households that already resided in the county.

We compare mean migration, relative incomes of households moving in, and earnings per job between recreation- and non-recreation counties using t-tests. We also evaluated metropolitan, micropolitan, and Rural counties separately to determine whether the trends differ according to community size.\(^12\)
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About Headwaters Economics
Headwaters Economics is an independent, nonprofit research group that assists the public and elected officials in making informed choices about land management and community development decisions, https://headwaterseconomics.org/.

End Notes

5 The analysis includes Alaska and Hawaii, although they are not displayed on this map.
12 As an additional robustness check, we estimated the following simple linear regression model:

\[ \text{migrationrate}_i = \beta_0 + \beta_1 \text{recreation}_i + \beta_2 \text{metro}_i + \beta_3 \text{micro}_i + \beta_4 \text{recreation}_i \ast \text{metro}_i + \beta_5 \text{recreation}_i \ast \text{micro}_i + \beta_6 \ln(\text{miningemployment}_i) + \beta_7 \ln(\text{farmingemployment}_i) \]

In this model, \( i \) indexes individual counties; \text{recreation} is an indicator based on the ERS typology; \text{metro} and \text{micro} are indicators based on the Census designations (with \text{rural} omitted to avoid perfect collinearity); and \text{miningemployment} and \text{farmingemployment} are the average employment in mining and farming from 2010-2016. In the national sample, 21 percent of counties did not have data for farming and/or mining due to data disclosure restrictions. Due to the likelihood of biased results, we do not include the regression results in our final analysis. When we estimated the model for the 11 western U.S. states only, for which 12 percent of counties did not report farming and/or mining data, the results were very close to the t-test analysis.