

A Research Paper by



# **The Economic Value of Public Lands in Grand County, Utah**



**March 2015**

**UPDATES OCTOBER 2011 REPORT**

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**MARCH 2015**

*Updates October 2011 Report*

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## **ABOUT HEADWATERS ECONOMICS**

Headwaters Economics is an independent, nonprofit research group whose mission is to improve community development and land management decisions in the West.

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## I. Introduction

Public lands in Utah’s Grand County play an important role for local businesses and elected officials because of the close tie between public land resources and the well-being of the region’s economy.

In October 2011, Headwaters Economics released a report, “The Economic Value of Public Lands in Grand County, Utah,” on the economic and fiscal role of public lands in the county. That report was commissioned at the request of a number of local interests—including representatives from Trail Mix, Ride With Respect, Red Rock 4-Wheelers, Moab Lodging Association, Moab Trail Alliance, Moab Area Chamber of Commerce, and local officials—to help inform discussions about how to develop, protect, and manage nearby public lands so that they benefit businesses, the county, and diverse users into the future.<sup>1</sup>

Now, more than three years later, Headwaters Economics offers this updated report with two broad goals. First, we review and analyze the various sectors and drivers of Grand County’s economy in light of the ongoing recovery from the Great Recession. Now is an opportune time to see if trends have held, slowed, or accelerated; and what that could mean for residents, businesses, and government.

Second, Grand County has a history of working to balance recreational and energy uses on public lands. New proposals—ranging from whether to further increase the recreation and tourism sector, encourage energy development, or emphasize other economic opportunities—should be considered in light of the current economy’s performance and opportunities for sustainable future growth.

This updated study, like its predecessor, examines a wide range of public lands uses, including mining and agriculture, but focuses on recreation because this type of use represents the largest, most complex, and least well understood activity on public lands in the county.

Grand County consists largely of public lands—87 percent of the county is a mix of state and federal lands managed by different agencies for a range of users and purposes. Management of these extensive lands is important to local businesses because of the close tie between public lands resources and local economic activity.

This updated report begins by reviewing the characteristics of public lands in Grand County. It then gives an overview of recent economic history and in particular the transition from mining to recreation that began in the 1980s. The report goes on to examine the scale of various uses on public lands, the economic contribution of recreation activities specifically, and how public lands attract people and business. The report also explores the fiscal contribution of public lands to local governments in the county. Finally, there is a concluding discussion section.

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## II. Executive Summary

The economic and revenue importance of the travel, tourism, and recreation has increased in Grand County during the past several years. Today, the travel and tourism sector is the largest employer, and businesses operating in these areas are the main drivers of the local economy—accounting for 47 percent private employment in the county.

Looking at federal public lands specifically, a 2007 analysis shows that area BLM lands supported 2,447 direct jobs that year. For the National Park Service, the agency’s economic modeling shows that area national parks supported 2,103 direct jobs in 2013. (Note: these data should not be added together.) To put this in perspective, the U.S. Department of Commerce reports that in 2013 there were 7,143 total jobs in Grand County in 2013.

Today, more than 1/3 of families have a member that works in a tourism and recreation business related to public lands, and nearly 2/3 of local residents indicate that public lands are “extremely important” to their business.

New employment growth is not just tied to the tourism and recreation sectors. Grand County’s picturesque and high-profile public lands—and the environmental and recreational amenities they provide—are closely linked to population growth and other economic benefits. From 2001 to 2013, Grand County employment in finance and insurance (+61%), health care (+56%), and professional and technical services (+32%), for example, all grew faster than the overall increase in employment (+25%).

At the same time, per capita income rose, in real terms, from \$28,514 in 2000 to \$40,545 in 2013; while average earnings per job, also in real terms, increased as well (\$34,429 in 2013 compared to \$29,332 in 2000). Non-labor income, much of it retirement related, grew by more than 77 percent, or nearly \$77 million new dollars, in real terms, from 2000 to 2013—which helped increase per capita income while providing stability to the local economy and stimulating health care, construction, and other sectors.

During the second half of the 20<sup>th</sup> century, mining activities played a significant role in the region’s economy. Since peaking in 1981, however, the share of Grand County residents employed in mining fell rapidly and plateaued at 2 to 3 percent of total employment for the past 15 years. This sector’s employment share dropped slightly since our last study in 2011.

Looking at local government tax revenue, travel, tourism, and recreation produced roughly 18 percent of local government taxes in 2013; while natural resources increased somewhat to roughly ten percent that same year.

A significant reason for the county’s economic success stems from the diversity found *within* its tourism and recreation economy and the large diversity of activities that nearby public lands support. This diversity attracts both visitors and new residents. Finding ways to sustain and develop tourism and recreation that appeals to a wide mixture of visitors and residents is paramount to long-term well-being and economic resilience.

One key challenge facing Grand County leaders is how to maximize the long-term return from these public land assets. To continue to capitalize on the competitive advantage that these lands provide, the county and local groups should work collaboratively with state and federal officials to implement policies that sustain existing uses and also anticipate future development and protection needs to provide for long-term growth.

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### III. Methods

Variety of Sources: This report draws on published statistics from a wide variety of sources, including the State of Utah, Bureau of Land Management (BLM), National Park Service (NPS), U.S. Forest Service, U.S. Department of Commerce, and others. We also made use of the Economic Profile System, which Headwaters Economics developed in partnership with the BLM and Forest Service and is available for free at: <http://headwaterseconomics.org/tools/eps-hdt>. It was beyond the scope of this study to obtain direct information, through surveys for example, of visitor expenditures.

No Single Indicator Tells the Story: No single measure fully documents the economic value of public lands in Grand County. Rather, a number of indicators, when taken together, provide a better understanding of long-term patterns and the relative magnitude of recreation and other uses of public lands and their impacts on the county.

Context Is Important: Where possible, we place the number of jobs associated with a particular type of public land use in the context of the broader economy. The same is true for other indicators, such as sources of revenue for local governments.

Sometimes Time Periods Are Mixed: Where possible, we report long-term trends related to uses of public lands. However, depending on the source of the data, different time periods had to be used. Whenever we compare the impact of a particular type of use at a particular time (e.g., National Park Service-related jobs in 2013), we set them in the context of the larger economy for the same time (e.g., total number of jobs in 2013).

Travel and Tourism: This heterogeneous sector is notoriously difficult to measure. One way we gauge this sector is to calculate the total number of jobs in businesses associated with travel and tourism, such as hotels and restaurants.<sup>2</sup> We also use other statistics, such as tourism-related tax revenues, to understand the magnitude of recreation on public lands in the county.

Caveat: We do not calculate the number of jobs associated with visitation to different types of public lands as a percent of total jobs in the county. The reason is that many tourists visit both NPS and BLM lands on the same trip. As a result, their numbers cannot be totaled and compared to total county employment because this would risk double counting.



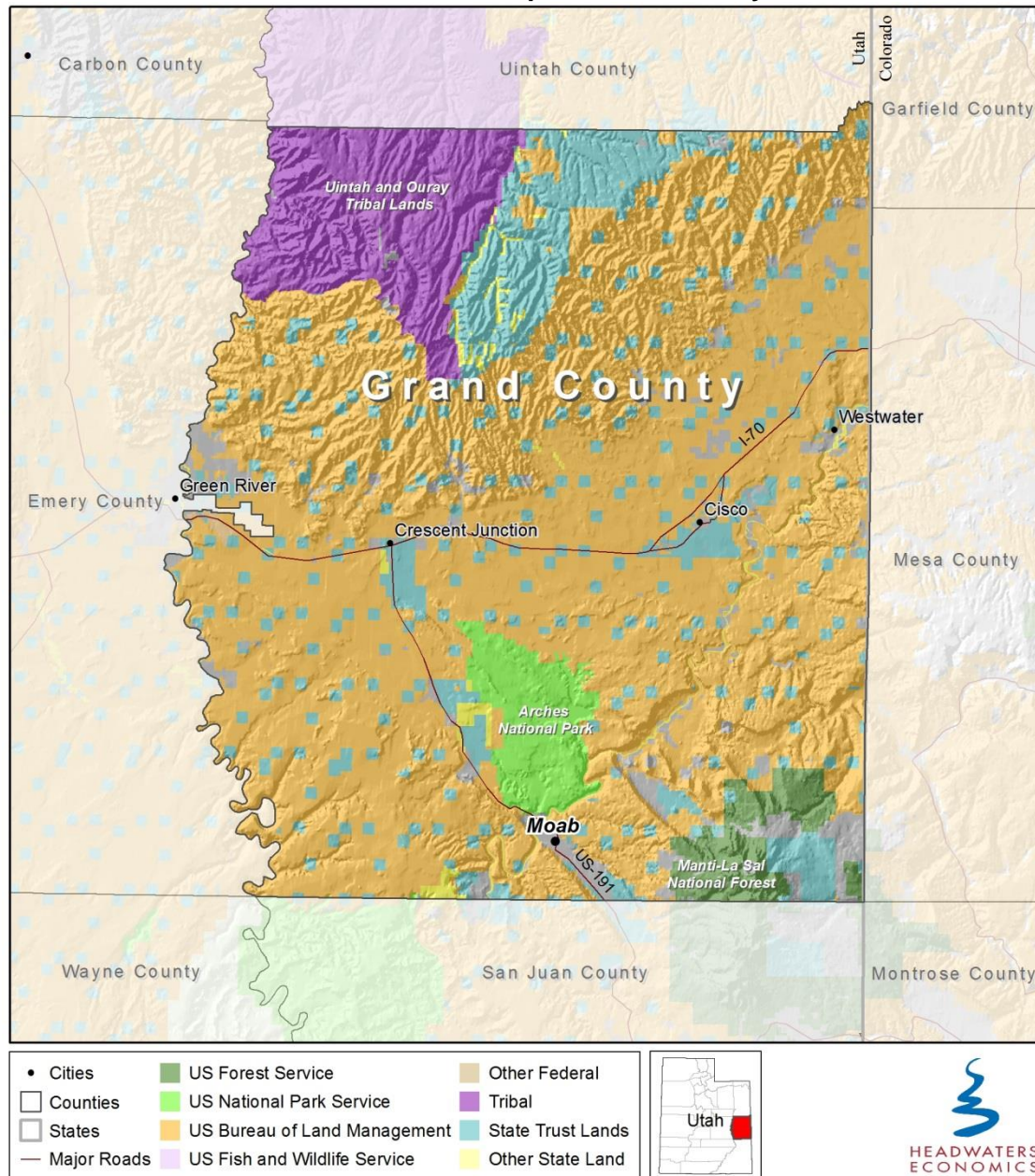
## IV. Land & Economy

### Land

#### Overview

Grand County lies in one of the most picturesque landscapes in America. The land is a mosaic of terrain and ownership, and is traversed by the Colorado River. The county is bounded to the north by Uintah County, including part of the Uintah and Ouray Indian Reservation, with Colorado to the east, San Juan County and Canyonlands National Park to the south, and Emery County and the Green River to the west.

**Land Ownership in Grand County, Utah**



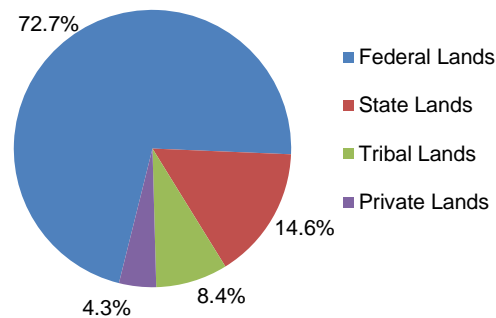
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### Land Ownership

Grand County covers 2,355,743 acres. Eighty-seven percent of the land is publically owned, and is managed by state and federal agencies. Tribal and private lands cover 8.4 percent and 4.3 percent, respectively, of the land area in the county.<sup>3</sup>

The BLM is the largest land manager in the county, holding 1,554,471 acres (66% of total). Other federal ownership includes the NPS at 87,741 acres (3.7% of total), and the Forest Service at 57,211 acres (2.4% of total). State lands (343,695 acres, 14.6% of total) consist mainly of school and institutional trust lands, state parks, wildlife reserves, and recreational areas. A portion of the Uintah and Ouray Indian Reservation, managed by the Ute tribe, extends into the northwest portion of the county.<sup>4</sup>

**Land Ownership by Type, 2012**



Source: U.S. Geological Survey, Gap Analysis Program. 2012.  
Protected Areas Database of the United States (PADUS) version 1.3.

### Land Use Diversity

Grand County's public lands support a multitude of uses that include mining, agriculture, and recreation. Mining includes the extraction of minerals like potash, and fossil fuels such as oil and natural gas. Agriculture consists largely of grazing. Recreational uses include sightseeing and nature viewing, mountain biking, hiking, rock climbing, camping, horseback riding, motorized recreation (ATV, UTV, motorcycle trail riding, and jeeping), exploring paleontological and cultural resources, and river floating. In many cases visitors participate in a mix of these outdoor activities.

There are a number of highly visible areas and scenic highways in or near the county. These include Black Ridge Canyons Wilderness, McInnis Canyons National Conservation Area, Arches National Park, Canyonlands National Park, Manti La-Sal National Forest, and Dead Horse State Park. Additionally, several scenic byways, including the Upper Colorado River Scenic Byway, the Potash-Lower Colorado Scenic Byway, and the Dead Horse Mesa Scenic Byway, provide additional attractions.

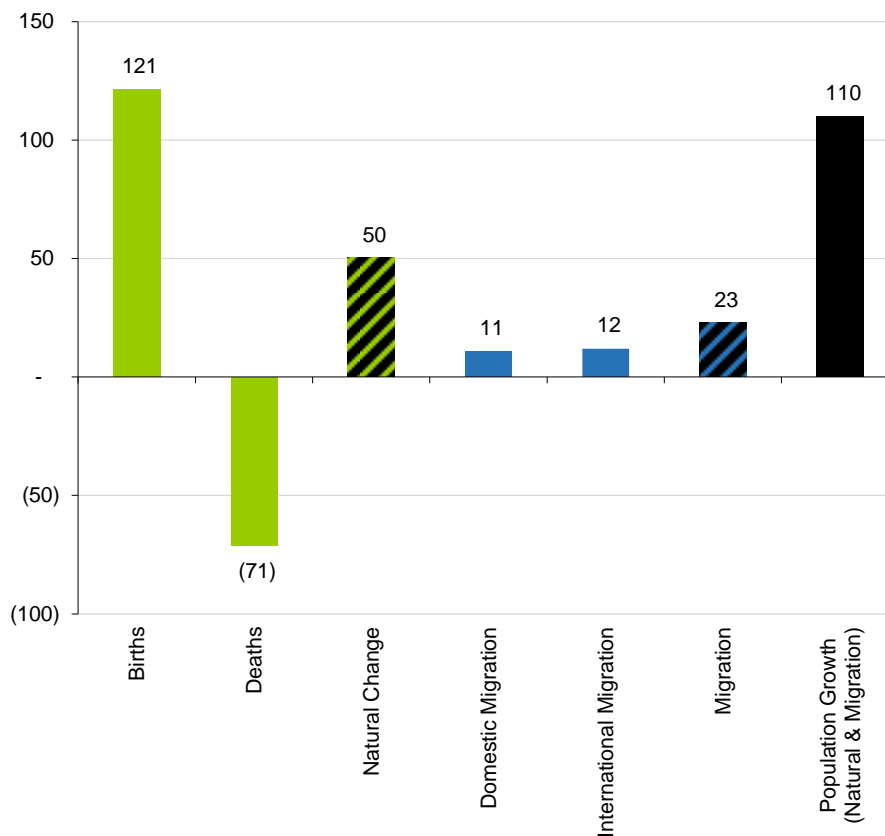
## **People**

In 2013, Grand County's population was approximately 9,360 people—roughly the same amount as in 2009 during the earlier study. The majority (54%) lives in Moab, and the rest inhabit smaller towns and unincorporated areas.<sup>5</sup> The population grew between 2000 and 2013, increasing by 961 people or 11 percent. Population growth was driven by both natural gains (births minus deaths) and in-migration. Net in-migration, which accounted for 31 percent of population growth in the last decade, is a healthy sign, indicating people are moving to the region because of the quality of life, a job opportunity, or some other reason.<sup>6</sup>



The chart below shows the average annual population change from 2000-2013.

### Components of Average Annual Population Change, Grand County, Utah, 2000-2013



Source: U.S. Department of Commerce. 2014. Census Bureau, Population Division.

Grand County is predominantly white (93%), with the largest minority, American Indians primarily from the Navajo tribe, making up 4.4 percent of the population. The population clusters around the 45-to-64 age group, which makes up 30 percent of total county population.<sup>7</sup>

## Economy

### Overview

Grand County's economy has transitioned a number of times; moving from farming and ranching, to mining, to an emphasis on travel and tourism sectors. Today, a mix of service-related industries drive economic growth, creating new jobs. Sectors such as accommodation, food services, real estate, and health care all have significantly increased employment. In addition, as the economy in Grand County has evolved in the last decade, earnings per job stabilized (\$34,429 per year in 2013 compared to \$27,866 per year in 2009), and per capita income rose, in real terms, from \$28,514 in 2000 to \$40,545—up significantly from \$30,333 in 2009.

### Historical Economic Trends

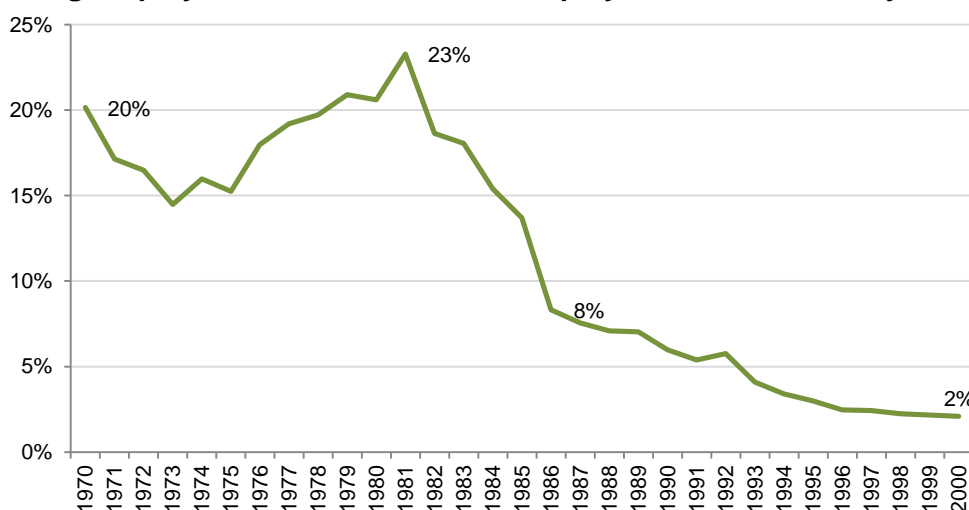
Native peoples inhabited what is now Grand County for thousands of years before Mormon missionaries attempted to settle the area in the middle 19<sup>th</sup> century. Trappers, prospectors, and cattlemen then sporadically occupied the region before Mormon pioneers permanently settled the "Spanish Valley" in

1877. Farming and ranching expanded to include more significant mining and a new railroad in the 1890s.<sup>8</sup>

The discovery of uranium in 1952 changed everything. Mining quickly became the primary industry in the area and led to a population explosion as the demand for uranium spiked in the post-World War II era. In operation since 1956, Atlas Mill (originally Uranium Reduction Company) put its operations on standby in 1984 due to low uranium prices. The mill was officially closed in 1988.<sup>9</sup>

This boom-bust experience can be readily seen in the published economic data. From 1981 to 1986, the peak decline years, mining jobs fell from 23 percent to 8 percent of total employment in the county. This contraction reverberated through the entire economy. In the same years, overall employment in Grand County fell from 3,947 to 2,934 jobs, a 35 percent decline. Continuing shifts in the economy left mining a small player—two percent of total employment—in the county by 2000.<sup>10</sup>

**Mining Employment, Percent of Total Employment, Grand County, Utah**

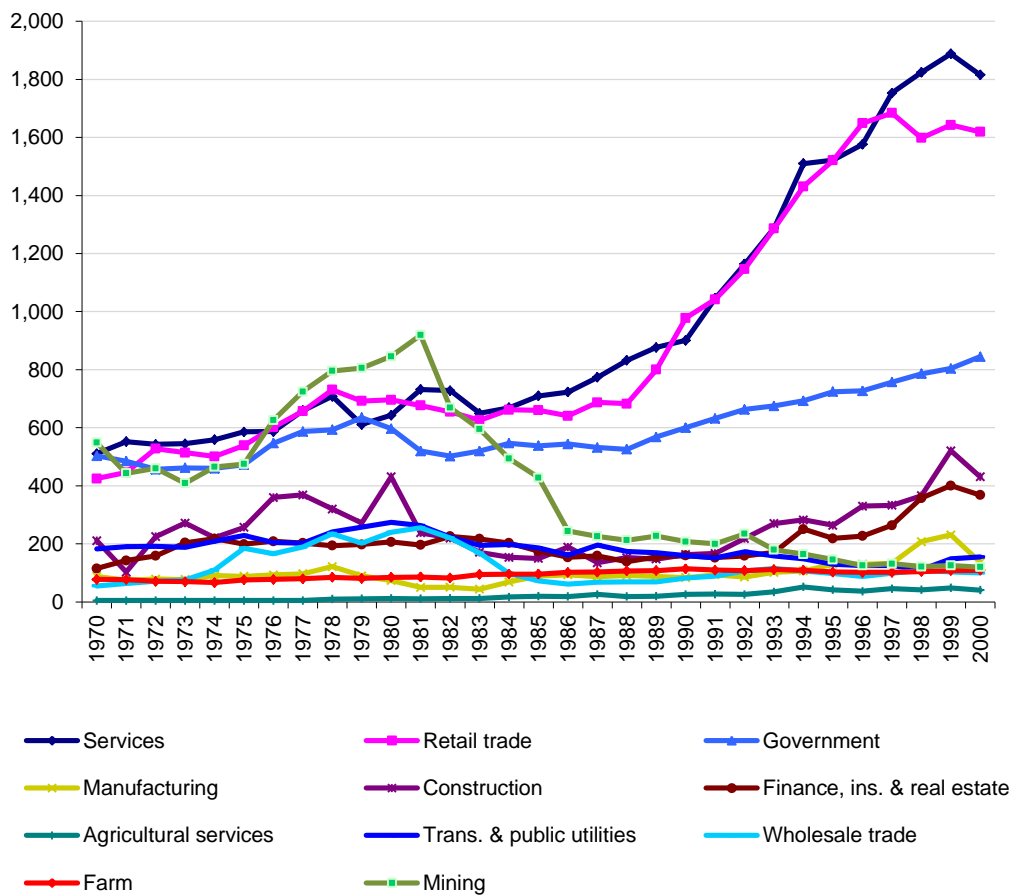


Source: U.S. Department of Commerce. 2011. Bureau of Economic Analysis, Regional Economic Information System.

Grand County did not have to wait long for an alternative economic future. Beginning in the late 1980s and early 1990s, Moab became recognized as an outdoor mecca due to its temperate climate, beautiful scenery, and robust variety of outdoor activities, largely on public lands. Even as mining continued its decline, the county entered its next boom: recreation. The economy took off again.

From 1990 to 2000, employment grew by 65 percent, mainly in a range of services and retail trade that together added 1,555 new jobs. By 2000 these two sectors accounted for 60 percent of all jobs in the county.<sup>11</sup> There was a minor economic hiccup at the turn of the century, possibly fallout from a strong U.S. dollar on international visits. This short-lived downturn was a reminder of the dangers of narrow industry dependence, and also of the continual need to enhance the area's competitive strength in tourism and outdoor recreation.

## Historical Employment Trends by Industry, Grand County, Utah



Source: U.S. Department of Commerce. 2011. Bureau of Economic Analysis, Regional Economic Information System.

### Recent Economic Activity<sup>12</sup>

Looking at the period from 2001 to 2013 (latest available data), it is apparent that the economic growth rate slowed from the previous decade—from 7 percent annual job growth in the 1990s to 2 percent annual job growth in the 2000s. This may be partly because of the effects of national recessions in 2001 and from 2007 to 2009. It is also evident that a mix of service-related industries continued to drive economic growth, creating new jobs and personal income in Grand County. The fastest growing sectors from 2001 to 2013 were accommodation and food services (279 new jobs), government (188 new jobs), real estate and renting (192 new jobs), and health care and social assistance (138).<sup>13</sup>

In 2013, service-related industries also represented the bulk of Grand County's economy, making up 71 percent of total jobs. Accommodation and food services (22.4% of total jobs) and retail trade (13.2% of total jobs) remained the dominant service providing sectors. Government (14.5% of total jobs), real estate and rental and leasing (6.3% of total jobs), arts; entertainment; and recreation (5.9% of total jobs) and construction (5.9% of total jobs) were also significant sectors. Mining remained steady as a share of the overall economy at an estimated 2.1 percent of total employment.<sup>14</sup>

The economic analysis also showed that the tourism and recreation sectors have driven other sectors, and related earnings gains. Grand County employment in finance and insurance (+61%), health care (+56%), and professional and technical services (+32%), all grew faster than the overall increase in employment (+25%) from 2001 to 2013.

As the economy in Grand County has evolved in the last decade, per capita income rose, in real terms, from \$28,514 in 2000 to \$40,545 in 2013; while average earnings per job, also in real terms, increased as well (\$34,429 in 2013 compared to \$29,332 in 2000).

The rise in per capita income is due in large part to the significant increase in non-labor income in the county—it has been the fastest growing source of new personal income (+77% since 2000) and represented 46 cents of every dollar in personal income in 2013.<sup>15</sup>

Non-labor income is a mix of money earned from investments (dividends, interest, and rent) and government transfer payments to individuals, which is largely retirement-related (such as “retirement and disability insurance benefits”). The recreation-oriented economy in Grand County, like other similar economies around the West, has successfully attracted this form of income, which in turn has increased overall prosperity and added stability to the local economy.

Economic diversification can increase resilience. In Grand County this occurs in two ways. First, the increase in travel and tourism has increased employment in those areas but also in health care, professional services, real estate, financing, and other sectors.

Second, one relatively unusual aspect of Grand County is the wide range of recreational opportunities and activities it supports. In effect, the county’s economic diversity lies *within* its amenity and recreation economy. As a result, finding ways to sustain and develop tourism and recreational diversity becomes more important to local economic resilience and long-term well-being than elsewhere in the West.

## Percent Total Employment by Sector, 2013

Grand County, UT	
<b>Non-Services Related</b>	10.7%
Farm	1.4%
Forestry, fishing, & related activities	na
Mining (including fossil fuels)	2.1%
Construction	5.9%
Manufacturing	1.3%
<b>Services Related</b>	70.7%
Utilities	0.4%
Wholesale trade	1.5%
Retail trade	13.2%
Transportation & warehousing	2.3%
Information	1.2%
Finance & insurance	2.2%
Real estate, rental, and leasing	6.3%
Professional & technical services	4.4%
Management of companies & enterprises	na
Administrative & waste services	na
Educational services	1.3%
Health care and social assistance	5.4%
Arts, entertainment, & recreation	5.9%
Accommodation & food services	22.4%
Other services, except public admin.	4.4%
<b>Government</b>	14.5%

Source: U.S. Department of Commerce. 2014. Bureau of Economic Analysis, Regional Economic Accounts. Note: “na” indicates that employment data is withheld to avoid disclosing the operations of individual companies. Estimates are in *italics*.

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## V. The Economic Value of Public Lands

### Overview

This section turns to understanding the economic role of public lands in Grand County. These lands provide a wide range of economic values, some of which are easier to measure while others are more difficult to quantify.

On the more measurable side of the spectrum—and explored in this report—are the value of natural resources that can be extracted such as minerals, fossil fuels, and timber; agriculture and ranching including forage for grazing; recreational activities for tourists and locals. The section also reviews recent research and studies concerning how the quality of life afforded by the presence of public lands may attract people and businesses to nearby communities.

More difficult to measure—and as a result not explored in this report—are the value of ecosystems services such as clean water, climate regulation, and soil formation and nutrient cycling; non-market benefits that include “existence value” (people value the existence of these lands, even if they may never use them) and “bequest value” (the value of passing lands onto the next generation); scientific information on plant and animal species; and cultural values, ranging from the traditional family camping trip to the preservation of important cultural sites such as Native American sacred sites.

While it is beyond the scope of this study to find a numerical value for all of these values, we report below on values where it was possible to obtain reliable information. It is important to note that a “job” as reported by the U.S. Department of Commerce includes full and part-time employment as well as self-employment (individual proprietors, or non-employer businesses).

Because the data best suited to capture the following sectors (from County Business Patterns) do not include the self-employed, it is likely that the private wage and salary employment figures somewhat understate the size of these sectors.

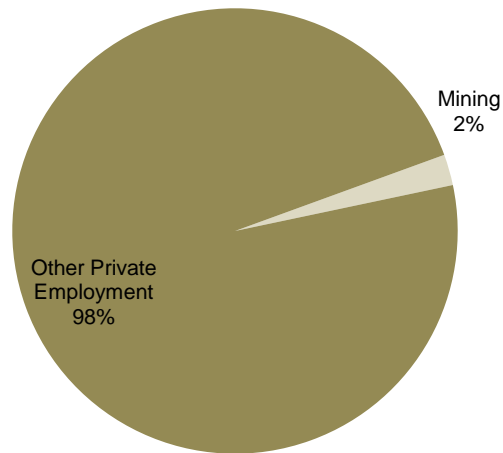
Non-employer businesses can be individual proprietorships, partnerships, or corporations. Most non-employers are self-employed individuals operating very small unincorporated businesses, which may or may not be the owner's principal source of income.

### **Public Lands Resource Extraction and Grazing**

The natural resource and extraction component of the Grand County economy is relatively small. Mining supported jobs actually dropped from an estimate of 101 jobs in 2009 to 80 jobs in 2012 (the latest year available), representing 2.2 percent of total private wage and salary employment. That same year, fossil fuel development (coal, oil, natural gas), a subset of mining, supported 45 jobs, representing 1.3 percent of total private wage and salary employment.



## Employment in Mining, Share of Total and Details, 2012



Grand County, UT	
<b>Total Private Employment</b>	<b>3,565</b>
<b>Mining</b>	<b>80</b>
<b>Oil &amp; Gas Extraction</b>	<b>45</b>
Oil & Gas Extraction	3
Drilling Oil & Gas Wells	28
Support for Oil & Gas Operations	14
<b>Coal Mining</b>	<b>0</b>
Coal Mining	0
Support Activities for Coal Mining	0
<b>Metal Ore Mining</b>	<b>36</b>
Metal Ore Mining	0
Support Activities for Metal Mining	36
<b>Nonmetallic Minerals Mining</b>	<b>2</b>
Nonmetallic Minerals Mining	2
Support for Nonmetal Minerals	0
<b>Mining Related</b>	<b>0</b>
Oil & Gas Pipeline & Related Const.	0
Pipeline Transportation	0
<b>Non-Mining</b>	<b>3,485</b>

Source: U.S. Department of Commerce. 2014. Census Bureau, County Business Patterns. This table does not include employment data for government, agriculture, railroads, or the self-employed because these are not reported by County Business Patterns. Estimates for data that were not disclosed are shown in *italics*.

The timber industry accounted for zero percent of total private wage and salary employment in 2012. While it is difficult to count the number of jobs related to grazing, in 2012 agricultural jobs as a whole accounted for 1.3 percent of total employment in the same year—and roughly no change from the earlier study.<sup>16</sup>

Although a relatively minor component of the value of public lands in Grand County, these commodity activities are important to the individuals and businesses that operate in these industries.

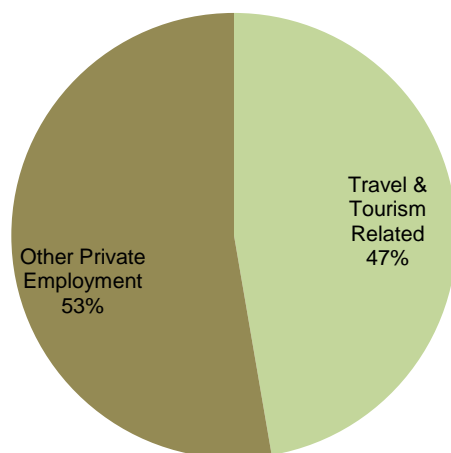
## Public Lands Travel and Tourism, Recreation

Sectors associated with travel and tourism represent a large portion of the economy in Grand County. This section of the report details ways that recreation on public lands in Grand County contributes to the local economy.

### Travel and Tourism Sectors in Grand County

There are a number of ways to measure the recreation impact of public lands. We begin here with an overall description of all tourism-related sectors in the county, regardless of the activity or where it takes place.

## Employment in Travel & Tourism, Share of Total and Details, 2012



Grand County, UT	
<b>Total Private Employment</b>	3,565
<b>Travel &amp; Tourism Related</b>	1,686
<b>Retail Trade</b>	164
Gasoline Stations	71
Clothing & Accessory Stores	29
Misc. Store Retailers	64
<b>Passenger Transportation</b>	21
Air Transportation	8
Scenic & Sightseeing Transport.	13
<b>Arts, Entertainment, &amp; Recreation</b>	100
Performing Arts & Spectator Sports	7
Museums, Parks, & Historic Sights	6
Amusement, Gambling, & Rec.	87
<b>Accommodation &amp; Food</b>	1,401
Accommodation	584
Food Services & Drinking Places	817
<b>Non-Travel &amp; Tourism</b>	1,879

Source: U.S. Department of Commerce. 2014. Census Bureau, County Business Patterns. This table does not include employment data for government, agriculture, railroads, or the self-employed because these are not reported by County Business Patterns. Estimates for data that were not disclosed are shown in *italics*.

Travel and tourism-related industries supported 1,686 private wage and salary jobs, or 47 percent of total private employment in the county in 2012. This represents an increase of 200 jobs in travel and tourism-related employment compared to 2009 which had 1,486 private wage and salary jobs in this sector, or 44 percent of total private employment that year.<sup>17</sup>

These sectors provide goods and services to visitors to the local economy, as well as to the local population. These industries are: retail trade; passenger transportation; arts, entertainment, and recreation; and accommodation and food services.

In 2012, the largest component of travel and tourism-related industries was accommodation and food services (i.e., hotels, restaurants, bars, etc.), which supported 1,401 private wage and salary jobs, representing 83 percent of travel and tourism-related jobs.<sup>18</sup>

The exact proportion of the jobs in these sectors attributable to expenditures by visitors, including business and pleasure travelers, versus by local residents, is unknown without additional research. It is safe to assume, however, that the majority of these sectors rely on out-of-area visitors.

The following sections detail the contributions from visitation to various types of public lands, including national parks, and BLM, Forest Service, and state lands. Statistics that follow are based on existing research, plus additional analysis of existing data conducted by Headwaters Economics.

### Contributions from Visitation to National Parks

Arches National Park and Canyonlands National Park are both important to Grand County. National Park Service lands (i.e., Arches National Park) constitute only 3.7 percent of the land base in the county (76,600 acres), and Moab is the principal gateway to both national parks.

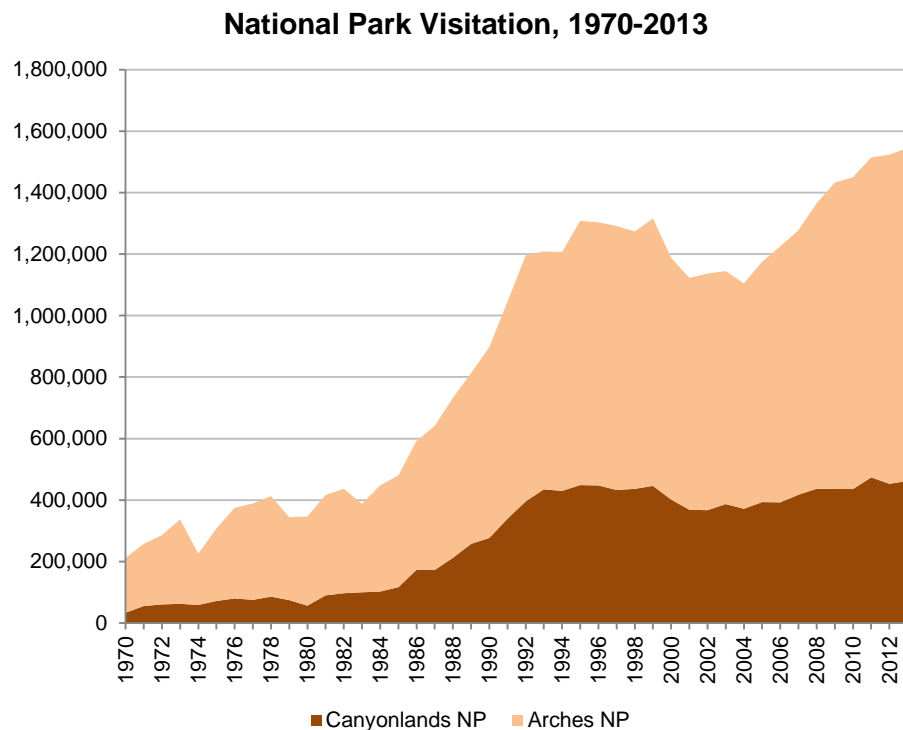
The mission of the National Park Service (NPS) is “to promote and regulate the use of the national parks which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.”<sup>19</sup>

Visitation, tourism, and jobs directly related to nearby public lands annually contribute billions to regional economies while creating hundreds of thousands of private sector jobs. Every year the National Park Service estimates the economic impacts of all units across the country.<sup>20</sup>

National parks bring outside money to local economies in two ways: visitor spending and payroll impacts generated primarily through park employment. The NPS reported that, in fiscal year 2013, there were 1,082,866 visits to Arches National Park and 462,242 visits to Canyonlands National Park.<sup>21</sup>

In 2013, area national park visitor spending contributed to an estimated \$55.7 million in labor income.<sup>22</sup> To put this in perspective, total labor earnings in Grand County for 2013 were \$246 million.<sup>23</sup>

In fiscal year 2013, national park visitor spending contributed to 2,103 jobs and resulted in \$146.5 million in spending.<sup>24</sup> By comparison, total employment in Grand County for 2013 was 7,143.<sup>25</sup>



Source: U.S. Department of the Interior. 2014. National Park Service. Natural Resource Program Center. Economic Benefits to Local Communities from National Park Visitation and Payroll.

### Visitation and Jobs Supported by National Parks in Grand County Area, 2013

2013	Arches	Canyonlands	Total
Visitation	1,082,866	462,242	1,545,108
Total Jobs	1,753	350	2,103

Source: U.S. Department of the Interior. 2009. National Park Service. Natural Resource Program Center. Economic Benefits to Local Communities from National Park Visitation and Payroll.

While 2014 visitation numbers have been released, the National Park Service has not yet provided a full, updated analysis of the economic impact of Grand County’s two national park units. That said, the numbers above for the 2013 economic impact are likely conservative compared to the 2014 impacts as visitation at both parks increased in 2014 compared to the previous year. For Arches National Park,

visitation increased by more than 200,000 to nearly 1.3 million annual visitors. Canyonlands National Park saw an increase of just more than 80,000 visitors in 2014, rising to 542,431 visits last year.

#### Contributions from Visitation to BLM Lands

The 2011 Headwaters Economics report obtained the results of a 2007 visitor survey conducted by the Bureau of Land Management (BLM) and used the IMPLAN modeling software to estimate the economic impacts of visitors to BLM lands to the economy of Grand County.<sup>26</sup> The results of that work, most likely conservative given increases in visitation and tourism seen on other public lands, are summarized here as an update of that IMPLAN modeling is beyond the scope of this report.<sup>27</sup>

BLM lands constitute 66 percent of the land base in Grand County (1,554,471 acres) and the agency estimates that in fiscal year 2007 there were 1,179,500 visits to BLM Moab Field Office lands. A total of 1,553 visitors were contacted on BLM lands during the time the survey was taken, of which 1,268 agreed to be interviewed. Of those, 1,038 were using BLM lands for recreation.

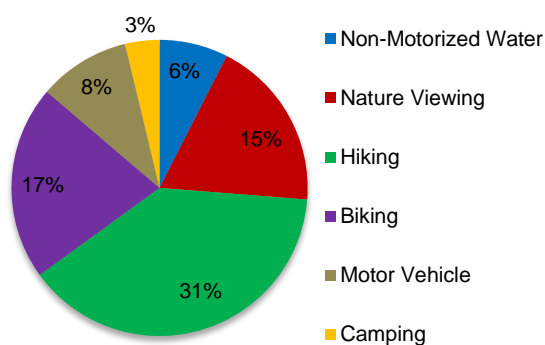
Visitors spend money on a variety of items, including hotels, restaurants, bars, sporting goods stores, gasoline, and other goods and services. Based on responses to the survey, a “spending profile” was developed for each type of recreation user of BLM lands and the economic impact on their spending was calculated. In fiscal year 2007, the economic impact of non-local BLM visitor spending was \$177 million in local output and more than \$64 million in labor income for Grand County.

The economic impact of spending by non-local visitors to BLM lands supported 2,447 jobs in the county in fiscal year 2007. To put this in perspective, at the time the survey was conducted there were 5,556 jobs in Grand County according to the IMPLAN model. (The U.S. Department of Commerce reports 6,724 people employed in the county in 2007, when the survey was taken, and 7,143 in 2013. These estimates include the self-employed.)<sup>28</sup>

As noted earlier, non-local visitors also visit other lands while in Grand County, including NPS, Forest Service and/or state lands, and therefore the impacts of their expenditures may not be attributed exclusively to BLM lands—that is, at least a portion could be attributed to other public lands.

Hiking was the activity that most survey respondents said was their primary activity (31%), followed by biking (17%), and nature viewing (15%).

**Participation on BLM Moab Field Office Lands by Recreational Activity, 2007**

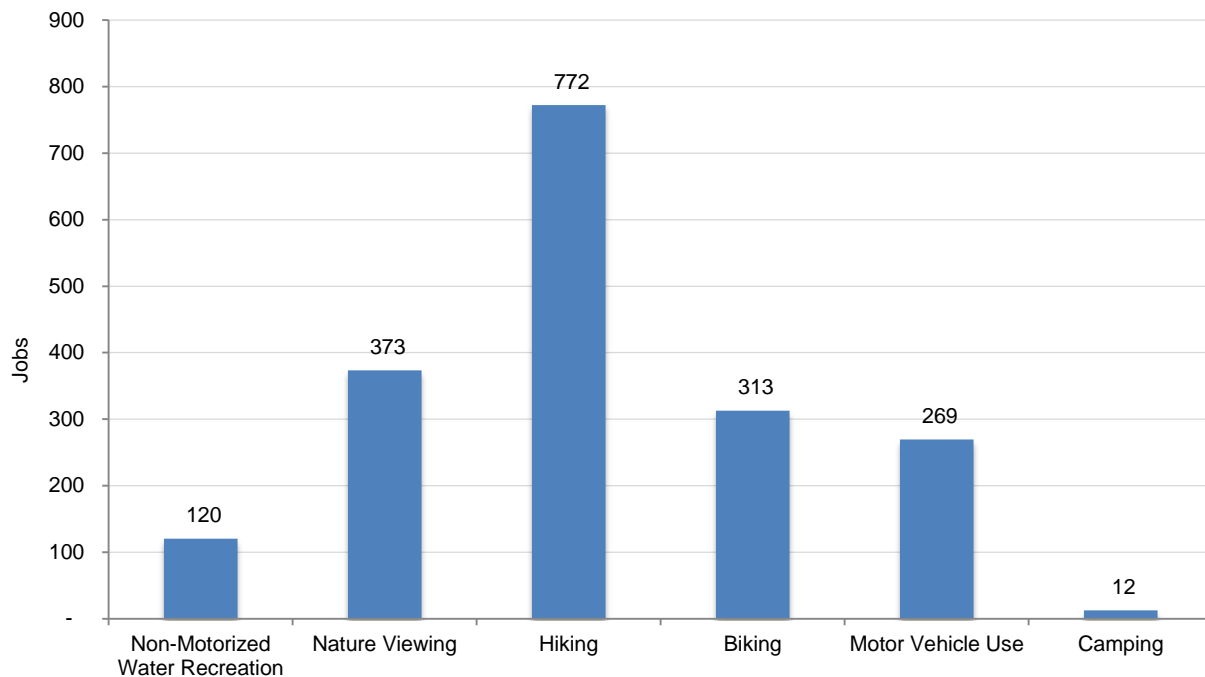


Source: National Visitor Use Monitoring Results for Moab Field Office. December 2007. Data collected FY2006. Bureau of Land Management, Moab Field Office, Moab, Utah (NVUM Moab 2007).

The largest jobs impacts (a combination of the number of users and the typical spending profile for the user type) came from people who said their primary activity was hiking (772 jobs), followed by nature viewing (373 jobs) and biking (313 jobs). Motor vehicle activities, which include driving for pleasure, off-highway vehicles, and 4WD recreation, contributed 269 jobs.

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### Total Economic Impacts in Terms of Jobs Resulting from Expenditures by Non-Local Visitors to BLM Lands, Grand County, Utah, 2007



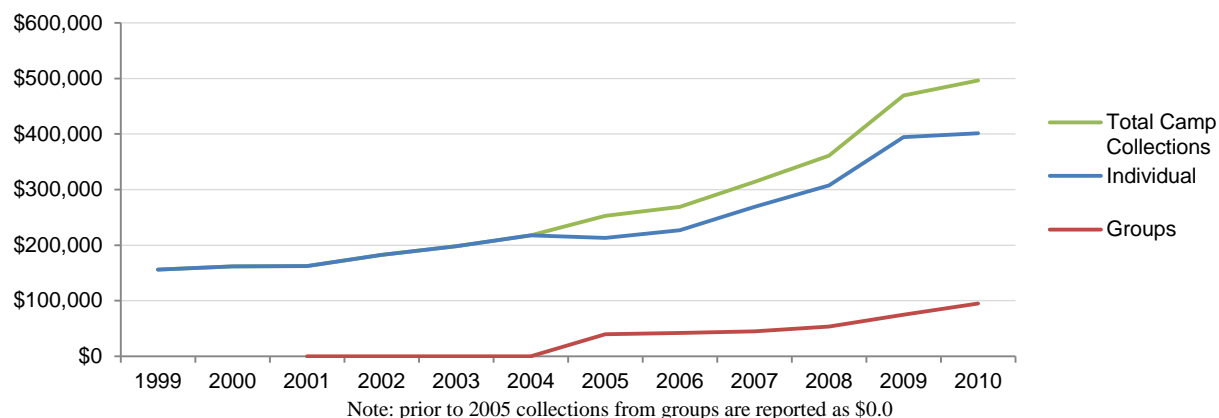
Source: National Visitor Use Monitoring Results for Moab Field Office. December 2007. Data collected FY2006. Bureau of Land Management, Moab Field Office, Moab, Utah (NVUM Moab 2007). Note: Motor Vehicle Use includes Driving for Pleasure, Off-highway Vehicles, and 4WD Recreation.

Long-term visitation trends on BLM lands in Grand County are difficult to obtain. It is known that visitor days in fiscal year 2010 were 1,258,456, up 7.1 percent from 1,175,104 visitor days in fiscal year 2009, which is impressive given the broader economic climate of recession.<sup>29</sup>

Another way to gauge the trend in recreation use on BLM lands in the county is to track payments made at various BLM campgrounds. Total payments have increased steadily. From 2000 to 2010, collections from campground payments increased by more than 200 percent. Collections through the recession—from 2006 (before the recession started) to 2010 (after the recession ended)—increased by 85 percent.<sup>30</sup>



### Individual, Group, and Total Campground Collections, Moab Field Office



Source: Campground collections data and figure from Bill Stevens, Moab Field Office, BLM. Moab, Utah.

### Contributions from Visitation to Forest Service Lands

U.S. Forest Service (Manti-La Sal National Forest) lands constitute 2.4 percent of the land base in Grand County (57,221 acres). The Manti-La Sal National Forest has reported the results of their National Visitor Use Monitoring (NVUM) study for data collected in fiscal year 2006.<sup>31</sup> (Statistics that follow on this and following pages are drawn from this analysis.) The results cover the entire forest, which is described by the agency as “a group of far-flung islands of forest that are scattered from central Utah to southeastern Utah and western Colorado.”<sup>32</sup>

Annual visitation to the forest in 2006 was estimated to be 793,400 visitors (for comparison, the BLM estimated 1,834,724 visits in 2010 to BLM lands in Grand County and visits to Arches and Canyonlands national parks totaled more than 1.4 million in 2009). The percent of survey respondents who said “viewing natural features” was their primary activity was 30 percent, followed by “snowmobile travel” (13.3%), “driving for pleasure” (9.8%), “hunting” (8.9%), “fishing” (7.3%), “relaxing” (5.4%) and “hiking or walking” (5.2%). The remaining categories (e.g., “bicycling” and “motorized trail activity”) were reported as a primary activity by less than three percent of respondents. However, 13.6 percent said they participated in “motorized trail activity” (although not their primary activity). The activity with the most frequent participation was “viewing natural features” (66.4%).

### Visitation to Forest Service and BLM Lands, Grand County, Utah

	Manti-La Sal National Forest (FY 2006)	BLM lands in Grand County (FY 2009)
Percent of county land base	2.4%	66%
Total estimated visits	793,400 (entire forest)	1,179,500 (Moab Field Office)
Average spending per party/per trip	\$320	\$503
Percent of visitors non-local	40.1%	77.1%

Source: U.S. Forest Service. March 2009. National Visitor Use Monitoring Results, Manti-La Sal National Forest. National Visitor Use Monitoring Program.

The majority of visits (47%) to the Manti-La Sal National Forest were by locals. Non-local visits made up another 40 percent. The remainder of visitors were people for whom the forest was not their primary destination.

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The Forest Service also studied the spending patterns of visitors because, in the agency's words, "As commodity production of timber and other resources has declined, local communities look increasingly to tourism to support their communities."<sup>33</sup> Based on responses to the survey, a "spending profile" was developed for each type of recreation user of Forest Service lands. Average spending per trip per visiting party to the forest was estimated to be \$320 in 2006.

The NVUM study for the Manti-La Sal National Forest did not include the use of the IMPLAN modeling software to estimate the economic impacts of visitors. A sense of the relative magnitude of the economic impact of the entire forest can be obtained by comparing key statistics to BLM lands in Grand County: the forest is a much smaller portion of the land base in the county, and there are fewer visitors who spend less, and are more likely to be local and not bring outside money to the county.

As noted earlier, the impacts of the Grand County portion of the Manti-La Sal National Forest are much smaller than reported above because the NVUM study conducted by the Forest service covered the entire forest and additional counties.

#### Contributions from Visitation to State Lands

State lands constitute 14.6 percent of the land base in Grand County (343,695 acres). About 95 percent of these are State Trust Lands, which are held in trust for designated beneficiaries, such as public schools. Managers typically lease and sell these lands for a diverse range of uses to generate revenues for the beneficiaries.<sup>34</sup>

The School and Institutional Trust Lands Administration (SITLA), an independent agency of state government, was established "to manage lands that Congress granted to the state of Utah for the support of common schools and other beneficiary institutions, under the Utah Enabling Act." Further, SITLA "must manage the lands and revenues generated from the lands in the most prudent and profitable manner possible, and not for any purpose inconsistent with the best interest of the trust beneficiaries."<sup>35</sup>

SITLA lands are used in a number of ways, from grazing and mineral development to telecommunications sites, sightseeing, and recreation. In 2009, the Utah Recreational Land Exchange Act, at the behest of SITLA and other stakeholders, facilitated the transfer of sensitive, aesthetically pleasing, or recreation intensive lands to the BLM in exchange for parcels with greater resource extractive value. As a result, several parcels of SITLA land close to Moab with high scenic and recreational value were turned over to the BLM.<sup>36</sup>

In addition to State Trust Land, Grand County also contains Dead Horse Point State Park. Situated next to Canyonlands National Park, Dead Horse Point offers magnificent scenery and recreational opportunities, including camping, hiking, ATV use, and mountain biking. Visitation to Dead Horse Point has fluctuated in the 2000s. It went from 145,800 visits in 2003 down to 137,265 in 2005 before rising to 184,560 visits in 2008 and back to 167,875 in 2010. More recently, visitation was up to 266,264 in 2013 and then rose again to 333,489 in 2014.<sup>37</sup>

The reasons for changing visitation levels are not clear, though the latest recession may account for a portion of recent declines. In 2010 the new Intrepid Trail System for hikers and mountain bikers was established. This amenity is already drawing new users to the park. In part because gate staffing hours were expanded, park revenues are on the rise, and in FY 2011 were \$710,000. Revenues now exceed operating costs almost two to one.<sup>38</sup>

Other recreational state lands in Grand County include the Sovereign Trail System, which primarily accommodates mountain biking and motorcycle trail riding, and the North Block which lies on the eastern

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flank of the La-Sal Mountains and is generally used for hunting, camping, and motorized recreation. Sovereign, a popular trail system north of Moab, sees at least 10,000 mountain biking visits and 1,000 motorcycle visits per year according to traffic counters.<sup>39</sup>

#### Other Recreation Studies

What follows is a summary of other related studies on the public lands economic values.

Survey of Local Residents Regarding Public Lands: In 2007, a survey was conducted by Utah State University to find ways that Utah residents use and value public lands. The portions of the survey pertaining to Grand and San Juan counties were used as part of the BLM's Resource Management Plan for the Moab Field Office. More than a third (38.5%) of Grand County survey respondents said a member of their household operates or works at a business linked to a recreation or tourism activity that is influenced by the presence of public lands and resources. When asked about the importance of public lands to their business, 63.6 percent said "extremely important."<sup>40</sup>

By comparison, only 6.9 percent of Grand County respondents reported that a member of their household works in a business that "provides services or supplies to farming and ranching, logging firms, or other commercial enterprises that use or process natural resources located on public lands."

More than half of those interviewed in Grand County reported using public lands for "camping, picnicking, day hiking, wildlife viewing, visiting historical sites, 4WD, and driving for pleasure/sightseeing." When asked whether selected uses of public lands are "very important" to their quality of life, the highest responses were for "water resources used to supply homes and businesses" (83.6%); "water resources that provide important fish/wildlife habitat" (82%) and "areas that attract tourism and recreation" (78.8% of survey respondents).

Changes Since the 1990s: The proportion of people employed as a result of spending by visits to the Moab area has grown significantly in the last decade. In 1998 Lynne Coughlin, a masters student at Colorado State University, wrote a thesis on the economic impact of tourism in Grand County. Using the IMPLAN modeling software, she estimated that 19 to 24 percent of all output (the change in local sales or revenue) and 22 to 27 percent of employment in Grand County could be accounted for by visitor spending in 1995.<sup>41</sup> This is significantly less than the 44 percent share for 2009 we cite earlier using County Business Patterns data on private wage and salary employment, and may indicate that the travel and tourism share of the broader economy has grown significantly since the 1990s.<sup>42</sup>

The Impact of Mountain Biking: A number of studies have been conducted to measure the impact of mountain biking in the Moab area. One 1998 study calculated the "consumer surplus," which is a measure of the difference between the maximum price a consumer is willing to pay and the actual price they do pay. They concluded that the bike trails in the Moab area "produce a high consumer surplus to the users," amounting to between \$197 to \$205 per trip. The consumer surplus for the Slickrock trail alone was \$8,422,800 to \$8,770,300 in 1998. One of the implications of the study is that annual visitor rates are not sensitive to fees because users believe they are getting a good deal (i.e., a high "consumer "surplus") and an entrance fee (e.g., to the Slickrock Trail) is a small part of overall trip costs.<sup>43</sup>

Another 1998 study found that the average "willingness to pay" (WTP) by a mountain biker is \$1,483 (WTP is the maximum amount a person would be willing to pay for a good). The total annual use value of mountain biking in the Moab area was estimated to be \$1.33 million. The authors concluded: "This value suggests that this recreation has a higher value than most other activities in the area and that public lands managers should be aware of the relative value of mountain biking as they make allocation decisions."<sup>44</sup>

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In 2002, a survey was conducted of mountain bikers on the Slickrock Trail: 98 percent lived outside the Moab area; their mean household income was \$42,000 (the mode, which is the most frequently cited value from survey responses, was \$80,000/year); 86 percent had a college degree; 79 percent were males; and most (67%) were between the ages of 21 and 35 (although 29% were over 34). Forty-one percent worked in professional occupations and 13 percent were students. More than 80 percent of those surveyed on the Slickrock Trail said they support using fees to help improve management of the area.<sup>45</sup>

The 2007 visitor survey conducted by the BLM and the results of the IMPLAN modeling software analysis found that non-local visitors who reported that their primary activity was biking stimulated 312 local jobs and more than \$8.4 million in labor income. The same survey showed that “bicycling/mtn. biking” was reported as the main activity by 13.5 percent of those interviewed.<sup>46</sup>

The Impact of Off-Highway Vehicle Use: A study of the 1997 Easter Jeep Safari revealed a number of statistics about participants. The median household income was \$55,000 per year; 29 percent were employed in managerial occupations, 22 percent as craftsmen, and 17 percent in professional occupations; and the majority (57%) were from Utah, but only 4 percent from immediate neighboring counties. The second largest group of participants was from Colorado (15%), followed by California (8%), New Mexico (4%) and Arizona (3%). When asked about their preferences for the management of the lands, the highest ranked priorities were “protect historical/cultural artifacts,” followed by “protect wildlife,” and “provide four-wheeling safety and trail etiquette information.” About 72 percent of respondents said they would be willing to pay a fee to go 4WD driving.<sup>47</sup>

The 2007 visitor survey conducted by the BLM and the results of the IMPLAN modeling software analysis found that non-local visitors who reported that their primary activity was motor vehicle use (includes driving for pleasure, off-highway vehicles, and 4WD recreation) stimulated 269 local jobs and more than \$7 million in labor income. The same survey reported that “riding a dirt bike or ATV” was the primary activity for 3.2 percent of respondents, followed by “driving a 4WD vehicle” by 3.2 percent of respondents.<sup>48</sup>

Mineral Bottom Road: A good indication of the importance of public lands to the county is how land managers responded to the recent closure and rapid re-opening of the Mineral Bottom Road. A key access point to the Green River and the much-used White Rim Road in Canyonlands National Park, the road was washed out in a flood on August 19, 2010. The BLM estimated that the loss of access by outfitters, residents, and visitors would cost the Grand County economy annually 87 jobs, close to \$5 million in direct and indirect sales, and a \$319,000 decline in state and local tax receipts. The BLM applied for funds from the U.S. Department of Transportation to repair the road, and by March 29, 2011, the road was re-opened.<sup>49</sup> This example illustrates the importance of public lands to the local economy, and how a clear documentation of that value can lead to rapid results and cooperation among local, state, and federal governments as well as the private sector.

## **Public Lands as an Attractant to People and Businesses**

In addition to the economic benefits of extraction and visitor recreation, the presence of public lands and the environmental and recreational amenities they provide are closely linked to economic growth. Business owners, retirees, and others have discovered that communities adjacent to public lands with scenic vistas and ample recreation opportunities are desirable places to live and conduct business.

While every county has its own set of unique circumstances, there is a large body of peer-reviewed literature that examines the relationship between natural amenities, land conservation, and local and regional economic well-being. Numerous studies by Headwaters Economics and others—carefully

scrutinized to pass scientific muster and credibility—have concluded that protected federal public lands in the West, including lands in non-metro counties, can be an important economic asset that extends beyond tourism and recreation to attract people and businesses.

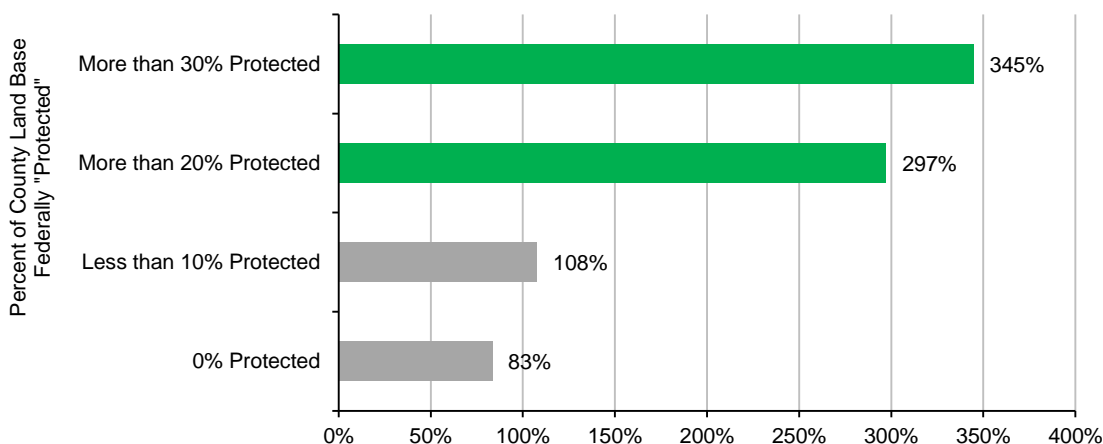
Today, for example, western counties with national parks, monuments, or other permanent protections on federal land support above average rates of job growth and are correlated with higher levels of per capita income.

The economy of the West has changed dramatically in recent decades. Service industries that employ people in a wide range of occupations—from doctors and engineers to teachers and accountants—are driving economic growth and now make up the large majority of jobs in both metro and non-metro areas. At the same time, non-labor income, which consists largely of investment and retirement income, is the largest and fastest-growing source of new personal income in the region.

These changes help explain how the economic role of public land in the West has shifted. Increasingly the value of protected public land is linked to recreational opportunities as well as the natural amenities and scenic backgrounds they provide which stimulate “amenity migration,” drawing entrepreneurs and attracting a skilled workforce across a range of industries.

During the last four decades the West created jobs twice as fast as the rest of the nation, and western non-metro counties with significant protected federal land added more than four times faster than peers without protected federal land. As this figure shows, from 1970 to 2010, western non-metro counties with more than 30 percent of the county’s land base in protected federal status increased jobs by 345 percent. By comparison, similar counties with no protected federal public land increased employment by 83 percent.<sup>50</sup>

### Employment Percent Change, Non-Metro West, 1970 to 2010

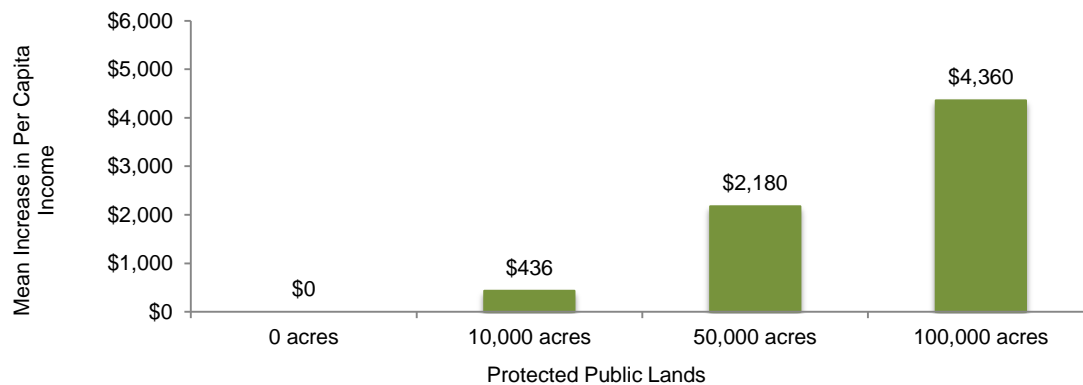


Source: West Is Best, Headwaters Economics

In addition to job creation, Headwaters Economics found a similar relationship between the amount of protected public land and higher per capita income levels. As the next figure shows, in 2010 western non-metro counties had, on average, a per capita income that was \$436 higher for every 10,000 acres of protected public land within their boundaries. In other words, if counties A and B were identical in every way, but county A had 50,000 acres of protected public land and county B had none, one would expect income in county A to be \$2,180 higher per person.<sup>51</sup>



### Avg. Increase in Per Capita Income from Protected Public Lands, Non-Metro West, 2010



Source: Rasker, R., P.H. Gude, M. Delorey. 2013. The Effect of Protected Federal Lands on Economic Prosperity in the Non-Metropolitan West. *Journal of Regional Analysis and Policy*.

It is important to note that natural amenities are not the only element needed for economic success. Other factors such as access to markets and education levels also are important. How local leaders combine these assets along with investments, marketing, and policy decisions will play a significant role in determining future economic prosperity.

In Grand County—where nearly a third of the population growth over the last decade came from immigration and half of all residents say they participate in camping, hiking, wildlife viewing, and other activities on public lands—attractive public lands are clearly a reason why people live and conduct business here.

Grand County’s rate of job growth has been relatively high, increasing by 25 percent between 2001 and 2013. While federal public lands, and national parks and national monuments in particular, are not the only reason for economic growth, in Grand County their presence is related to a high rate of employment growth.<sup>52</sup>

Employment growth is not just tied to the tourism and recreation sectors. From 2001 to 2013, Grand County employment in finance and insurance (+61%), health care (56%), and professional and technical services (+32%), for example, all grew substantially.<sup>53</sup> And non-labor sources of income, which are significantly retirement-related, continue to be the fastest growing source of new personal income, adding \$77 million, in real terms, since 2000.<sup>54</sup>

A number of factors have contributed to this relatively new form of growth across the West:

- The ability of some professionals, such as software developers, financial consultants, engineers, architects and other so-called “knowledge-based” occupations, to “de-couple” from the city and the factory floor, thereby becoming “footloose” and able to live (almost) anywhere;
- The advancement of telecommunications technology, efficient delivery services (e.g., FedEx, UPS), and the growth of regional transportation networks (especially airports), which make it possible for people to stay connected to larger markets while living in more remote, “rural” locations than they could 10 or 20 years ago;

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- The scattering of the global assembly line, where the factory can be at one end of the world and entrepreneurs, managers, marketers, designers, and other “footloose” occupations can reside in smaller rural communities with a high quality of life;
  - An affluent and aging population, including both the World War II generation and the retiring baby boomers, that is stimulating growth with their savings, investments, and business connections as well as their relocation to places with a high quality of life to either retire, semi-retire, or open a business;<sup>55</sup>
  - The increased demand for outdoor recreation; and the relative scarcity of places with a high quality of life that includes wide-open spaces and a pristine environment.

While amenities such as protected public lands are important to economic development, by themselves they may not be enough to stimulate growth. For example, many business owners, especially in the higher-wage services industries (architects, engineers, software developers, etc.) need access to reliable daily air service to major markets and population centers.<sup>56</sup> The expansion of this type of higher-skill and “footloose” business may require improved air service to flourish in the Moab area.

Grand County may be positioned to benefit from the ongoing baby boomer retirements. According to the Economic Research Service (ERS) of the U.S. Department of Agriculture, baby boomers will be seeking places with a high quality of life to retire or semi-retire. The ERS found that from 1990 to 2000, the net migration of baby boomers was the greatest in places that had the highest level of natural amenities: “Whether adjacent to big cities or less accessible, counties with desirable physical attributes—pleasant climates, mountains, beaches, lakes—are likely to increase their already high share of baby boomer migration.”<sup>57</sup>

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## VI. Government Revenues

### Revenue from Travel and Tourism and Natural Resources

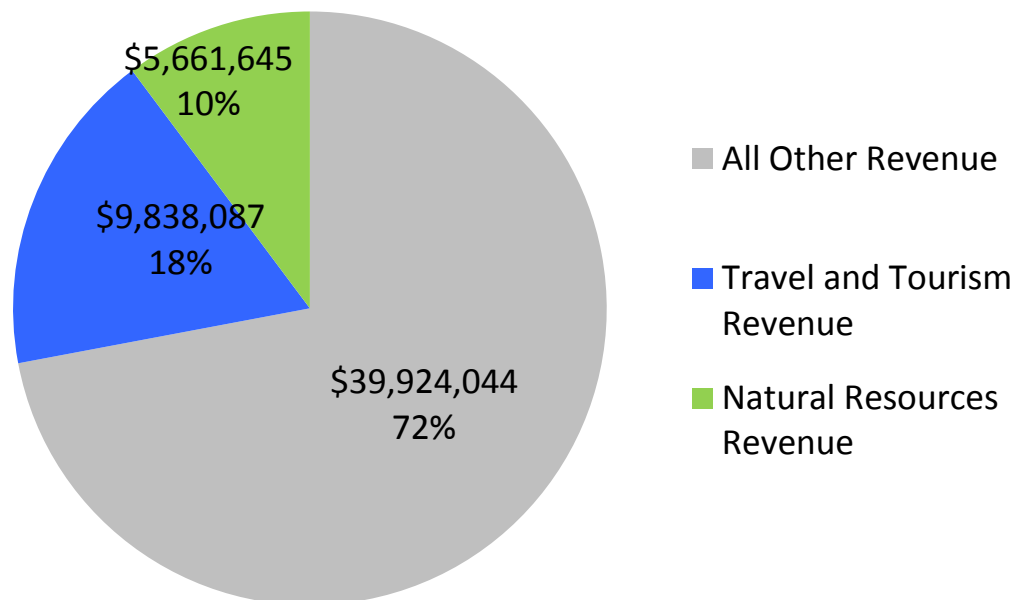
In addition to employment and personal income in the private sector, public lands and the economic activities they support generate revenue for local governments, including schools, municipalities, and county government.

This section describes the fiscal benefits of the travel and tourism, and mining industries—both closely associated with public lands—to local governments in Grand County. The report utilizes the latest information available, mostly 2013 data. Additional details can be found in the Appendix.

Local governments in Grand County collected more than \$55 million to fund schools, public safety, roads, and other governmental services in 2013. Of the total revenue, about \$9.8 million was generated from travel and tourism industries, or 18 percent of total revenue. This is an increase from 2009 which was \$7.4 million in travel and tourism industry collections, or 16 percent of total revenue that year.

By comparison, in 2013 about \$5.6 million in revenue collections came from natural resources industries, including agriculture and mining, or 10 percent of total revenue. This is an increase from the \$2.4 million in revenue collections from natural resources industries, including mining, in 2009, which was then roughly 5 percent of total revenue.<sup>58</sup>

**Local Government Revenue, Grand County, Utah, 2013**

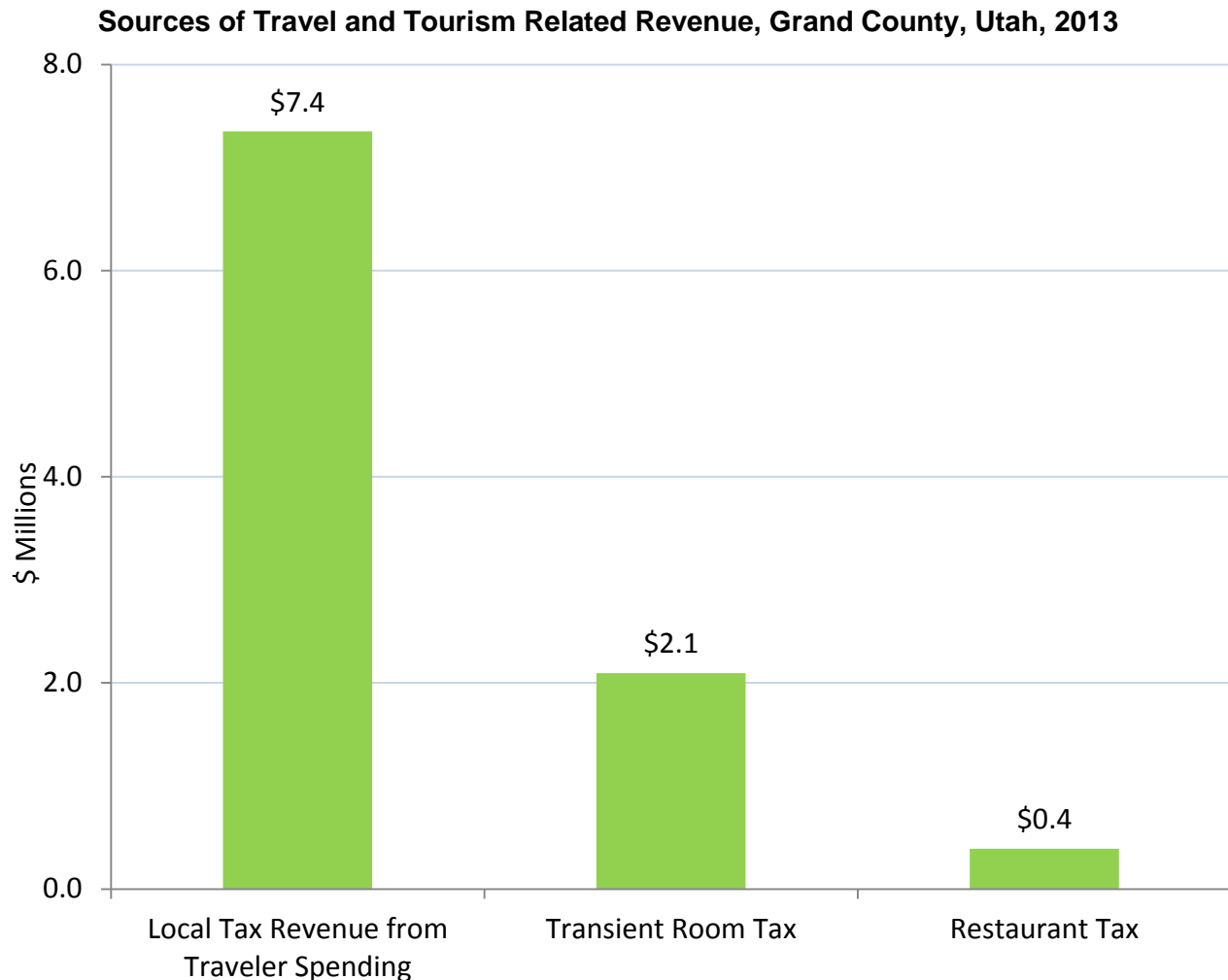


Source: See Endnote 58.

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### Sources of Travel and Tourism Revenue

Travel and tourism taxes bring in significant revenue to local governments, including Moab's resort community sales tax (\$2.8 million), the county-wide transient room tax (\$2.1 million), and the restaurant tax (\$390,121). Local sales taxes on travel and tourism related industries also generate revenue. Food services and accommodations generated taxable sales of more \$101 million in 2013.<sup>59</sup> According to the Utah Department of Tourism, direct local tax collections (including sales taxes) related to tourism spending totaled \$7.4 million in FY 2013.



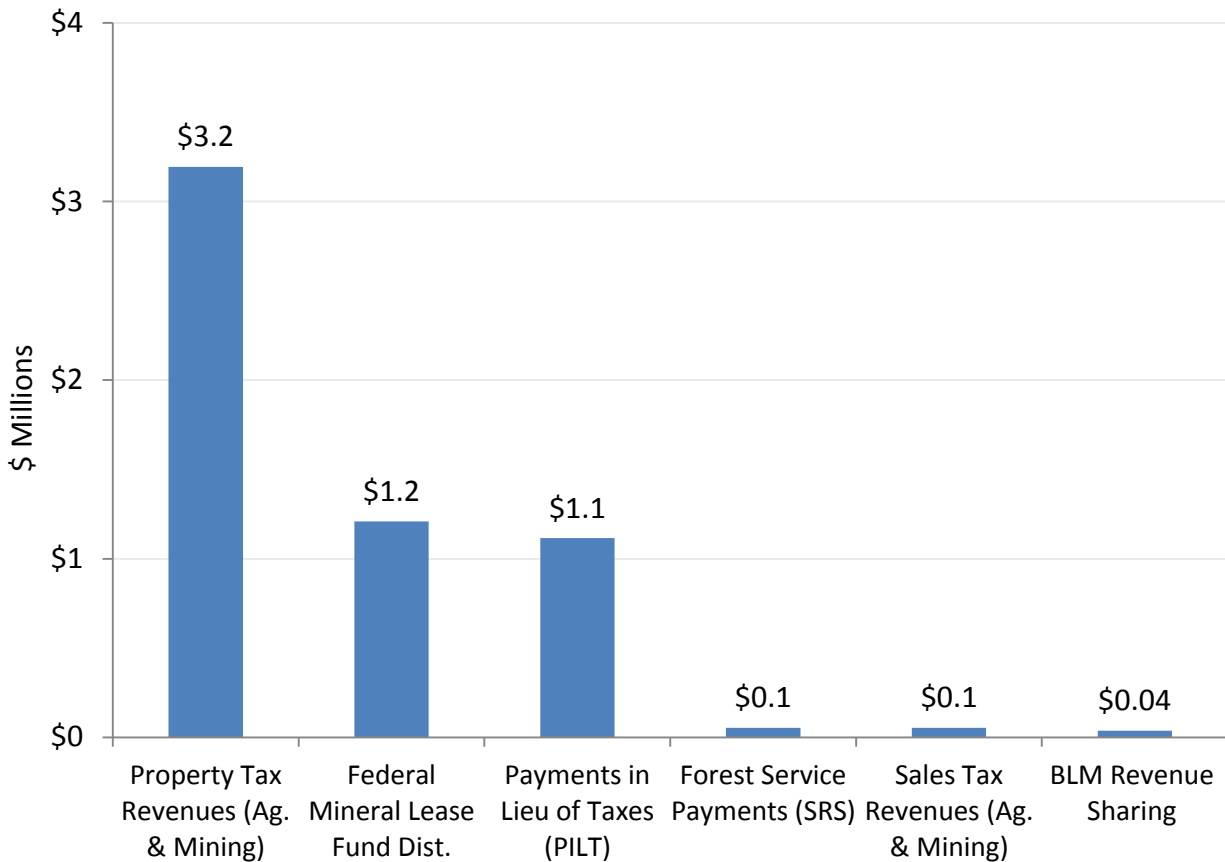
Source: Property Tax: Utah State Tax Commission. Property Tax Division. Annual Statistical Report, 2013. Sales Tax: Utah State Tax Commission. Sales Tax Data, Quarterly Taxable Sales, 2013. Utah Office of Tourism, Research and Planning, 2013.

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### Sources of Natural Resources Revenue

Local governments receive natural resources revenue from two basic types: local taxation of the natural resources industries, and payments from the federal government based on the value of resources extracted from public lands. The largest natural resource revenue source is property taxes (\$3.2 million), followed by distributions to local governments of federal mineral royalties (\$1.2 million), and Payments in Lieu of Taxes (\$1.1 million).<sup>60</sup>

### Sources of Natural Resource Revenue to State and Local Government, Grand County, Utah, FY 2013



Source: Forest Service: U.S. Department of Agriculture. 2013. Forest Service Final Payment Detail Report ASR 10-3 and ASR 18-1. PILT: U.S. Department of Interior. 2013. Bureau of Land Management. FRD 196. 2013. Federal Mineral Royalties: Utah Department of Transportation, Mineral Lease Fund Distributions FY 2013.



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## VII. Discussion

The public lands in Grand County—because of their extensiveness, mineral richness, and beauty—directly influence, shape, and support the county’s economy. They are a competitive advantage for the region’s economy and will play a vital role in the future economic health and prosperity of the region.

Despite past success, future growth in Grand County cannot be taken for granted. The boom years of the 1990s when the county’s economy grew by 7 percent annually have yielded, in the 2000s, to an economic growth rate of 2 percent annually.

A key challenge facing Grand County leaders is how to maximize the long-term return from this valuable asset. To continue to capitalize on the competitive advantage that these lands provide, the county and local groups should work collaboratively with state and federal officials to implement policies that sustain existing uses and also anticipate future development and protection needs to provide for a long-term economic return.

Specific tourism and recreation issues to consider include:

- How to best accommodate different users so they do not crowd each other out and diminish one another’s experience—which could drive away visitors or create the impression that the county favors one form of recreation;
- How to sustain the quality, diversity, and uniqueness of the outdoor landscape and recreational offerings; and,
- How to compete with rival destinations in the outdoor recreation market that have constructed new signature trail systems or are benefiting from newly created public lands protections.

To help ensure Grand County’s future economic health, several steps are worthy of consideration:

- Educate the public to better understand the important economic role that public lands play in Grand County, including a periodic update on the county’s economic health and trends—especially focused on tourism and recreation, but including all core sectors;
- Partner closely with public land managers on planning and decisions that impact public lands in Grand County, including funding to maximize protection and access to public lands;
- Utilize the national and international visibility created by public lands and recreation—such as national parks, the Colorado River, mountain biking, and jeep events—to attract visitors, entrepreneurs, or retirees who bring new businesses and wealth to the region;
- Work with local businesses as well as local, state, and federal officials to make sure that uses on public lands do not crowd out or harm existing economic benefits; and,
- Build on the region’s high quality of life by providing other assets—such as expanded education and training, more housing, and increased airport service—to retain or grow local businesses while increasing the county’s attractiveness to new businesses and investments.

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## VIII. Appendix

### Profile of Local Government Revenue from Travel and Tourism, and Natural Resources Industries in Grand County, Utah

The travel and tourism, and natural resources industries in Grand County provide a range of fiscal benefits to local governments, including local tax revenue on economic activities, and payments from the federal government based on the value of natural resources extracted from federal lands.

This appendix profiles the sources of local and intergovernmental revenue from travel and tourism, and natural resources industries in the context of all local government revenue in Grand County, Utah.

#### Local Government in Grand County

Multiple units of local government provide a variety of services within Grand County. The general county government is the most visible, providing administrative, planning, elections, and public safety services, among others. A host of special districts also serve county residents, including the hospital, water, recreation, and transportation districts. Schools are administered by the autonomous Grand County School District, and City of Moab and Castle Valley also raise taxes and provide services to city and town residents and businesses.

This report covers all units of local government that receive general property or sales taxes, but excludes business-type activities that are entirely funded by user charges and fees (e.g., the Thompson Special Service District).

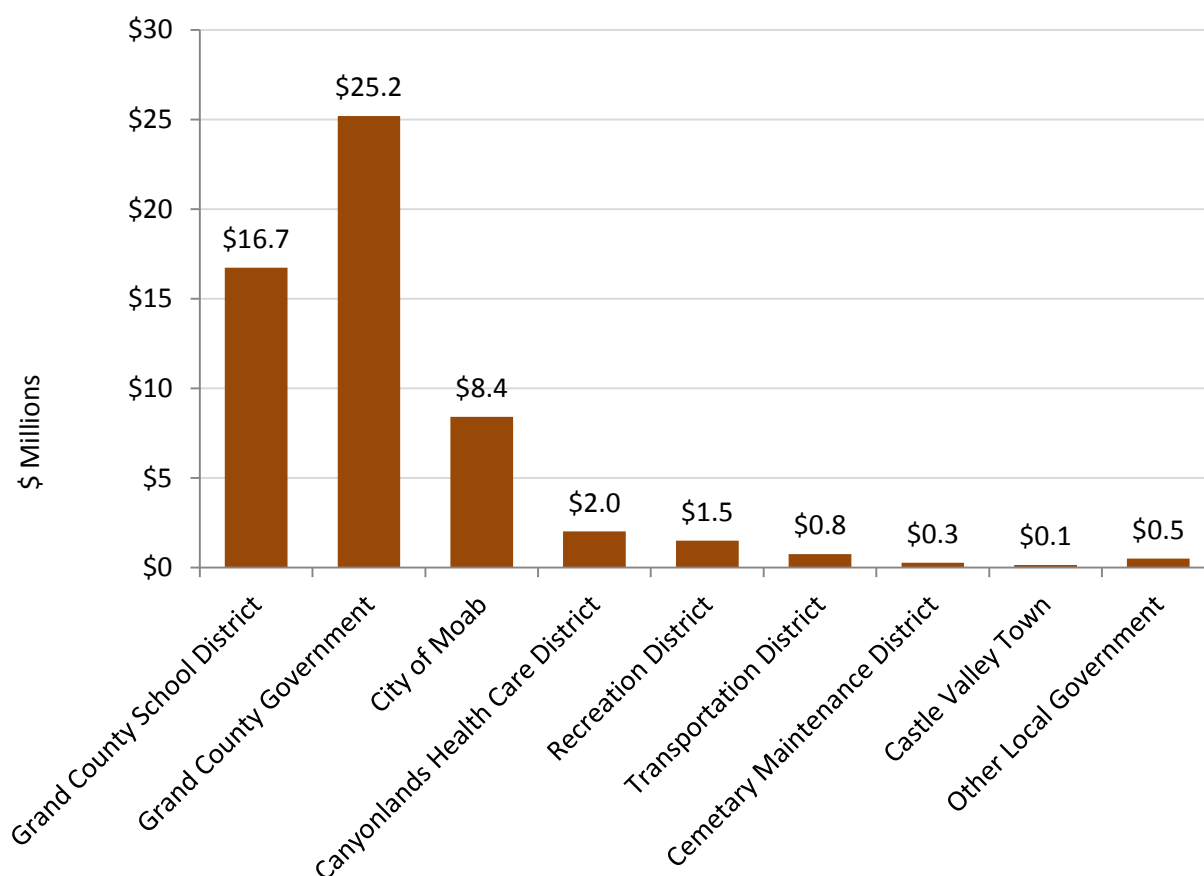
The largest local government in the county, in terms of revenue collections, is the general county government (45.4% of all revenue collections by local governments, followed by the Grand County School District (30.2% of all revenue collections by local governments). The Grand County Water District is the smallest unit of local government in terms of revenue collections with \$2,268 in 20013 (less than 0.1% of all revenue collections by local governments).<sup>61</sup>

#### Total Revenue (in thousands) by Local Government, Grand County, Utah, FY 2013

Local Government	2012 Revenue	2013 Revenue	Percent of Total
Grand County School District	17,716,775	16,733,509	30.2%
Grand County Government	17,502,319	25,183,343	45.4%
City of Moab	8,575,051	8,422,406	15.2%
Canyonlands Health Care District	767,620	2,033,105	3.7%
Recreation District	627,648	1,504,115	2.7%
Transportation District	312,042	754,055	1.4%
Cemetery Maintenance District	258,315	284,055	0.5%
Castle Valley Town	152,454	145,829	0.3%
Water Conservancy District	69,568	284,385	0.5%
Castle Valley Fire District	60,895	76,706	0.1%
Water District	15,219	2,268	0.0%
Total	46,057,906	55,423,776	

Source: Local Government Audited Financial Statements. FY 2013. Statement of Revenues, Expenditures, and Changes in Fund Balances. Office of the Utah State Auditor, Local Governments' Financial Reports.

## Total Revenue by Local Government, Grand County, Utah, FY 2013



Source: Local Government Audited Financial Statements, FY 2013, Statement of Revenues, Expenditures, and Changes in Fund Balances. Office of the Utah State Auditor, Local Governments' Financial Reports.

## Sources of Local Government Revenue

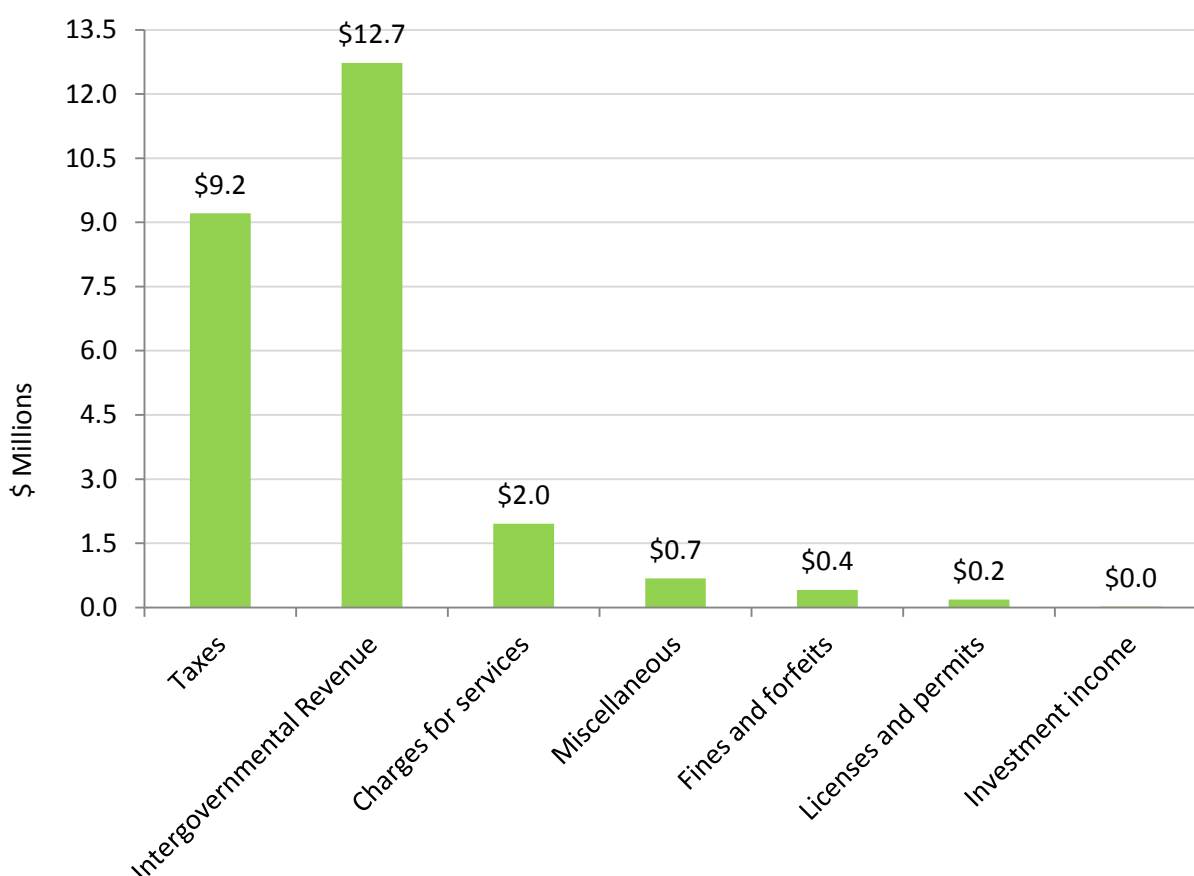
Local governments raise money primarily from local sources including property taxes, sales taxes, and user fees and charges. For example, roughly half of the Grand County government's revenue is from local sources, with the rest coming from state and federal grants and assistance (intergovernmental revenue).<sup>62</sup>

## Grand County Government Revenue Sources, 2004-2013 (in thousands, 2013 dollars)

	2008	2009	2010	2011	2012	2013
Taxes	7,361,620	7,033,216	7,352,514	7,510,331	8,193,372	9,211,646
Intergovernmental Revenue	4,412,386	4,593,808	5,256,820	7,969,451	6,751,605	12,725,740
Charges for services	1,495,655	1,493,641	1,322,634	1,456,141	1,526,706	1,957,992
Miscellaneous	454,946	877,288	721,318	586,490	652,953	676,596
Fines and forfeits	687,598	493,165	504,209	452,506	465,473	411,222
Licenses and permits	186,951	152,002	165,123	172,993	148,267	183,966
Investment income	422,724	42,370	17,484	14,817	20,323	16,181
<b>Total Revenues</b>	<b>15,021,881</b>	<b>14,685,490</b>	<b>15,340,102</b>	<b>18,162,729</b>	<b>17,758,699</b>	<b>25,183,343</b>

Source: Grand County, Utah Audited Annual Financial Statements, FY 2013 Statement of Revenues, Expenditures, and Changes in Fund Balances for all governmental funds.

### Grand County Government Revenue Sources, FY 2013

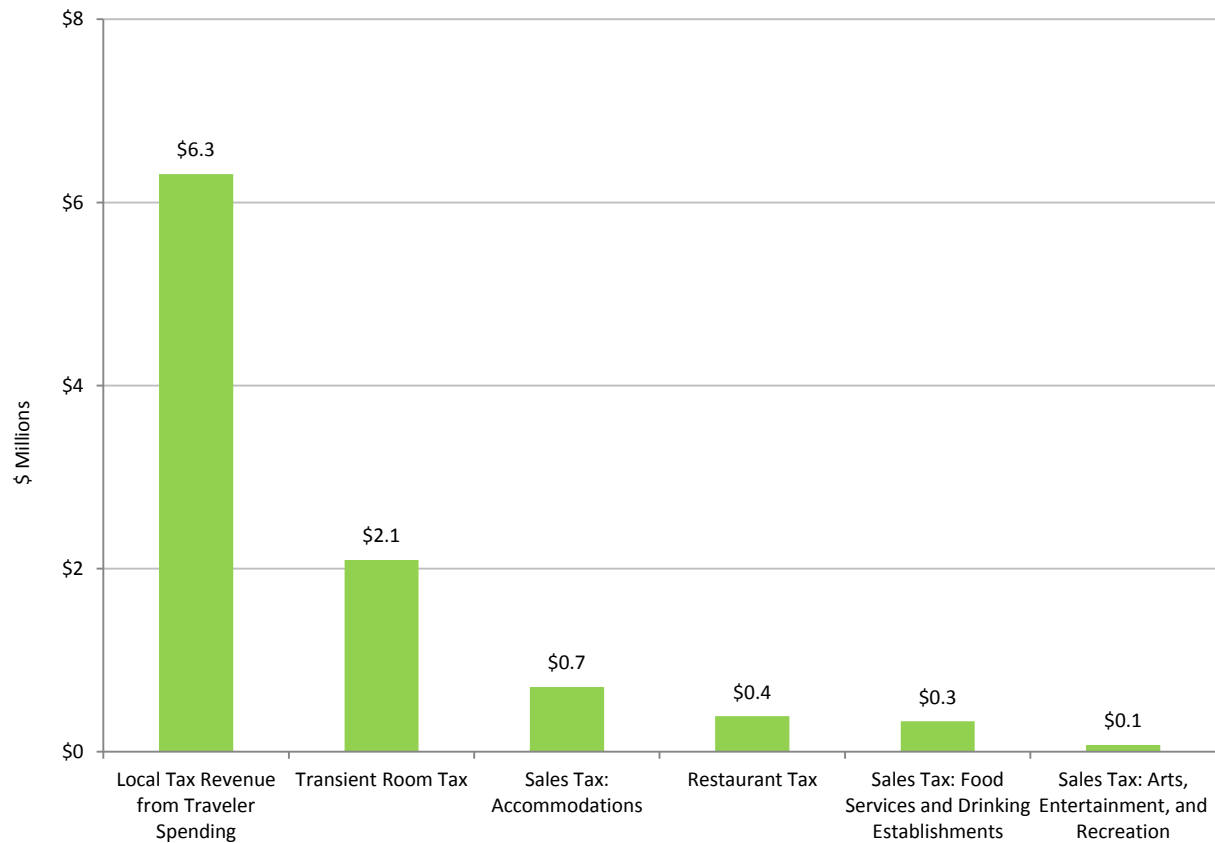


Source: Grand County, Utah Audited Annual Financial Statements, FY ending December 31, 2004-2013. Statement of Revenues, Expenditures, and Changes in Fund Balances for all governmental funds.

### Sources of Travel and Tourism Revenue

Specific travel and tourism-related taxes bring in significant revenue to local governments in Grand County, including the resort tax (\$2.4 million), transient room tax (\$2.1 million), and restaurant tax (\$352,000). The general sales tax also generates significant revenue locally with sales taxes on accommodations, food services and drinking establishments, and arts, entertainment, and recreation, and other tourism related industries accounting for about half of local taxable sales (\$154 million in taxable sales, and about \$1.6 million in direct local sales tax collections to local governments in Grand County).<sup>63</sup>

## Sources of Travel and Tourism Related Revenue, Grand County, Utah, 2013

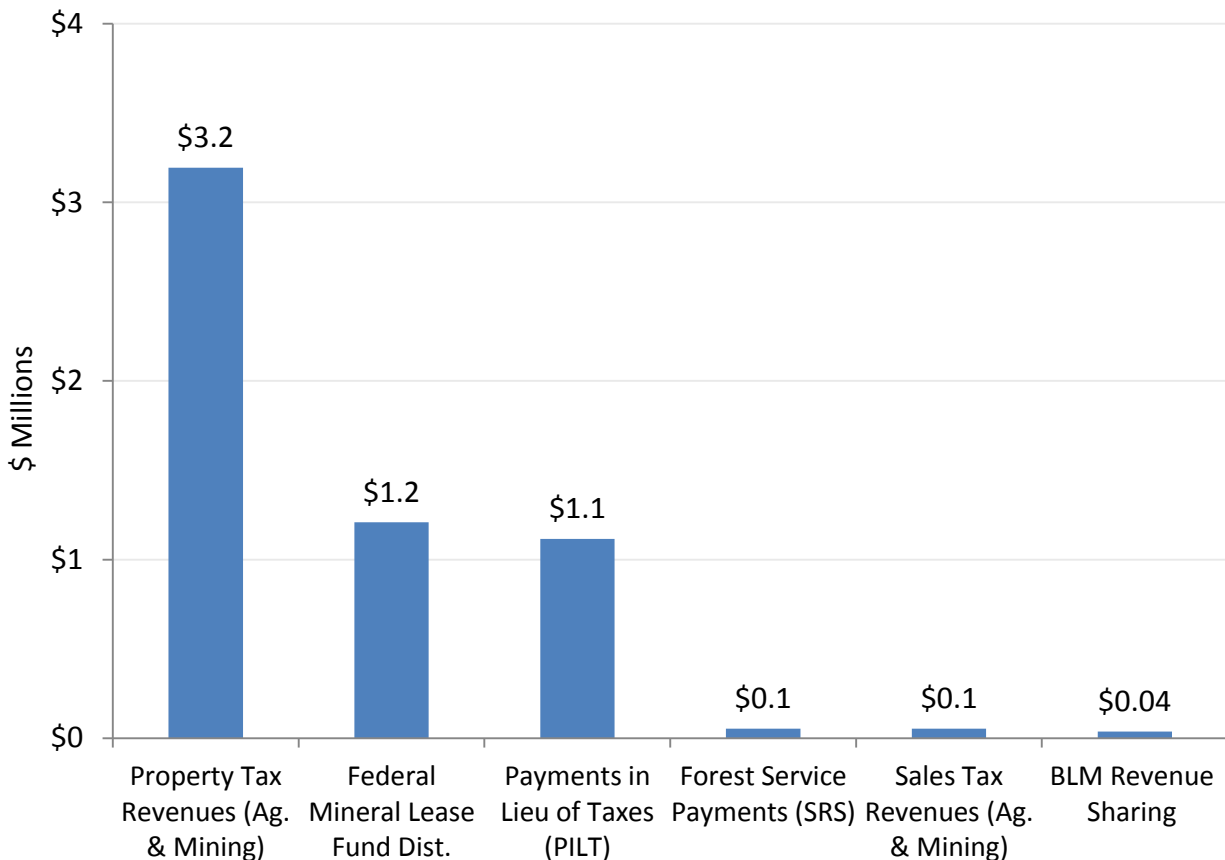


Source: Sales Tax: Utah State Tax Commission. Sales Tax Data, Quarterly Taxable Sales, 2013. Specific Tourism Taxes: Utah Office of Tourism, Research and Planning, 2013.

## Sources of Natural Resources Revenue

In 2013 about \$5.6 million in revenue collections came from natural resources industries, including agriculture and mining, or 10 percent of total revenue, including local property and sales taxes and payments from the federal government at least partially based on the value of resources extracted from public lands. This is an increase from the \$2.4 million in revenue collections from natural resources industries, including mining, in 2009, which was then roughly 5 percent of total revenue.<sup>64</sup>

## Sources of Natural Resource Revenue to State and Local Government, Grand County, Utah, FY 2013



Source: Forest Service: U.S. Department of Agriculture. 2012. Forest Service Final Payment Detail Report ASR 10-3 and ASR 18-1. PILT: U.S. Department of Interior. 2012. Bureau of Land Management. FRD 196. 2013. Federal Mineral Royalties: Utah Department of Transportation, Mineral Lease Fund Distributions FY 2013.

### Federal Mineral Royalties

The Office of Natural Resources Revenue (ONRR) makes distributions of federal mineral royalties directly to the state of Utah. The state elects to pass through a portion of these federal mineral royalties to local governments in the “county of origin” where the mineral extraction takes place. In 2013, local governments in Grand County received \$1.2 million in federal mineral royalties from the state of Utah, although none of these dollars were distributed to the general county government.<sup>65</sup>

Grand County created the transportation district as an autonomous unit of government to receive federal mineral royalties and Forest Service payments so that these revenue sharing payments are not counted against the county’s PILT entitlement.

### Forest Service Secure Rural Schools and Community Self-Determination Act (SRS)

Grand County received \$46,405 from the Forest Service through the Secure Rural Schools and Community Self-Determination Act for 2013.<sup>66</sup> Half of these dollars are directed to local school districts; the other half can be used to fund county roads.<sup>67</sup>



Since 2001, these payments have been made independent of any land use activity, however SRS expired at the end of FY 2013. In FY 2014, Grand County's Forest Service payments would be based on receipts generated by forest activity. Future Forest Service payments based on receipts will be lower, estimated at less than \$4,000 in 2015.<sup>68</sup>

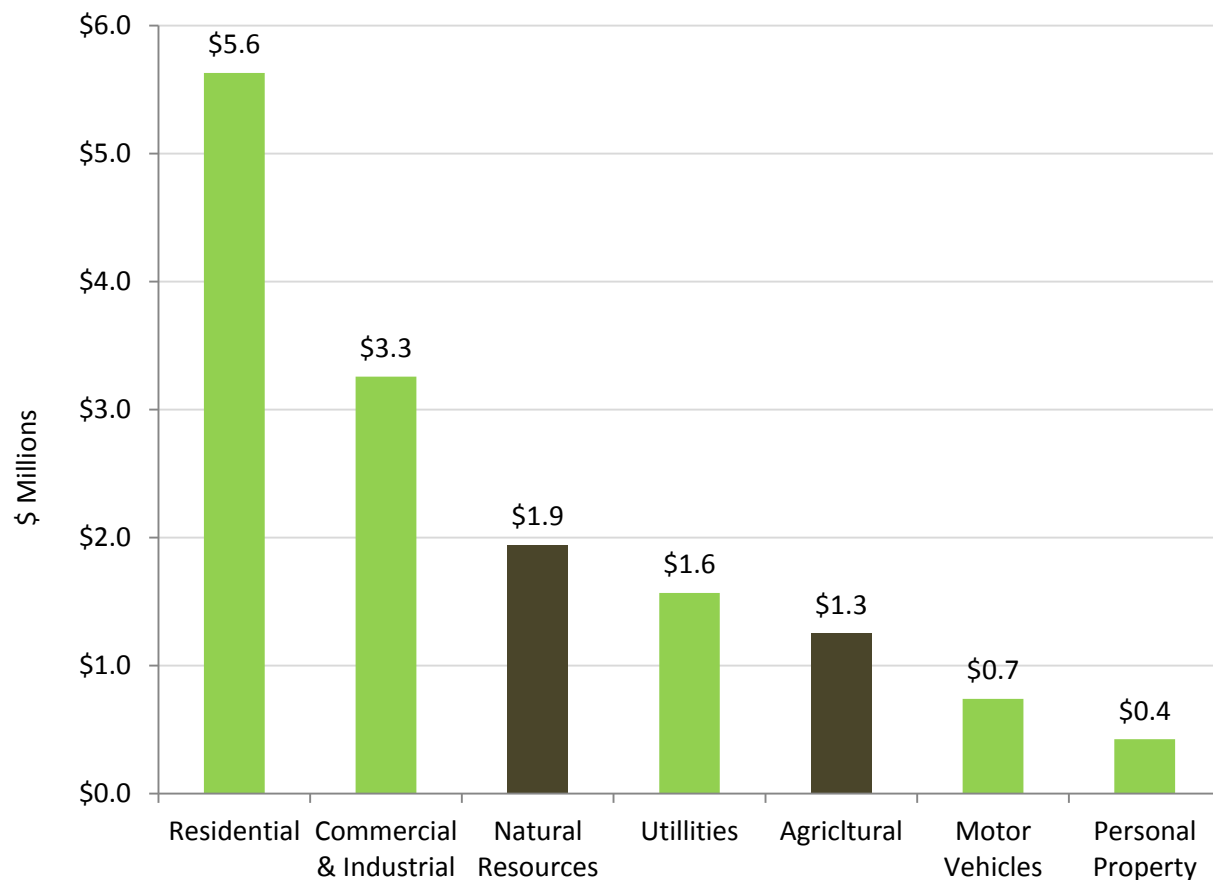
#### Bureau of Land Management

The BLM made payments of \$36,610 in Grand County in FY 2013, the majority of which is from the Taylor Grazing Act and restricted to range improvements (e.g., predator control, noxious weed programs) in cooperation with the BLM or livestock organizations. The Grand County government received less than \$2,000 from the BLM that it can spend on county services.<sup>69</sup>

#### Local Taxation of Public Land Activities

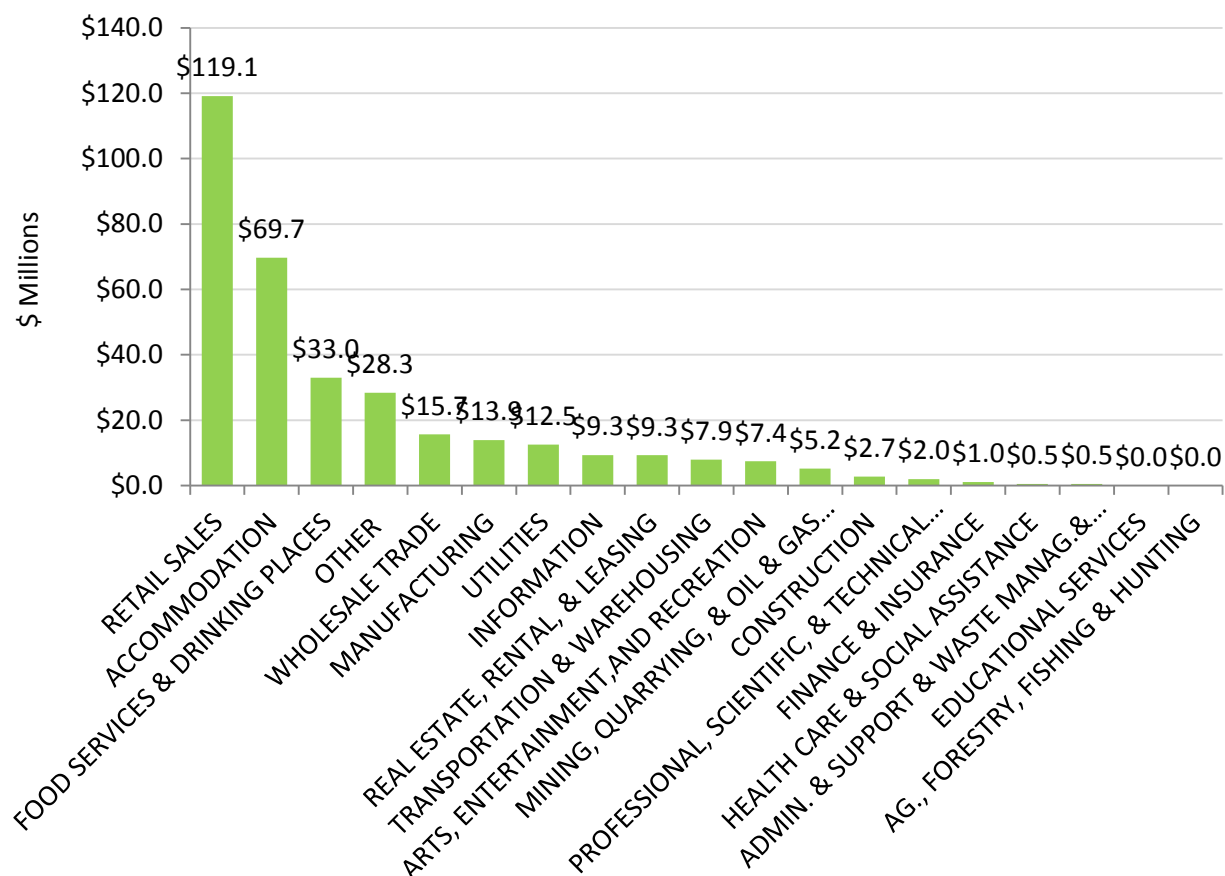
As shown next, natural resources including agriculture and mining account for 22 percent of all property taxes and less than 2 percent of total sales taxes in Grand County. In sum, taxes on minerals and mining activities account for roughly 3 percent of total local revenue collected by the county government.<sup>70</sup>

#### **Property Tax Collections by Property Class for All Local Governments, Grand County, Utah, 2013**



Source: Property Tax: Utah State Tax Commission. Property Tax Division. Annual Statistical Report, 2013.

### Gross Taxable Sales by Industry Sector (NAICS), Grand County, Utah, 2013



Source: Sales Tax: Utah State Tax Commission. Sales Tax Data, Quarterly Taxable Sales, 2013.

In summary, local governments in Grand County rely chiefly on general property and sales taxes, and charges and fees on service users for revenue. Local revenue from travel and tourism industries generate nearly twice as much revenue for local governments in Grand County (18% of local revenue) than do natural resources (10% of local revenue).

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## IX. References

- <sup>1</sup>That October 2011 report “[The Economic Value of Public Lands in Grand County, Utah](http://headwaterseconomics.org/wphw/wp-content/uploads/GrandCounty_Report.pdf)” (PDF, [http://headwaterseconomics.org/wphw/wp-content/uploads/GrandCounty\\_Report.pdf](http://headwaterseconomics.org/wphw/wp-content/uploads/GrandCounty_Report.pdf)) found that tourism and recreation businesses accounted for 44 percent of private employment in the county—more than 1/3 of local families have a member that works in a public lands-related business. Headwaters Economics examined a wide range of public lands uses, including mining and agriculture, but focused on recreation because this type of use represents the largest, most complex, and least well understood activity on public lands in the county. The report was created after a local steering committee that includes diverse interests—including representatives from [Trail Mix](#), [Ride With Respect](#), [Red Rock 4-Wheelers](#), Moab Lodging Association, [Moab Trail Alliance](#), [Moab Area Chamber of Commerce](#), and local officials—requested that the [Grand County Council](#) support a study on the economic and fiscal role of public lands in the county that could be the basis for informed discussions about how to develop, protect, and manage nearby public lands so that they benefit businesses, the county, and diverse users into the future.
- <sup>2</sup> For details on this approach see the EPS Travel and Tourism report.
- <sup>3</sup> U.S. Geological Survey, Gap Analysis Program. 2012. Protected Areas Database of the United States (PADUS) version 1.3.
- <sup>4</sup> Ibid.
- <sup>5</sup> U.S. Department of Commerce. 2013. Census Bureau, American Community Survey, Washington, D.C.
- <sup>6</sup> U.S. Department of Commerce. 2014. Census Bureau, Population Division, Washington, D.C.
- <sup>7</sup> U.S. Department of Commerce. 2014. Census Bureau, American Community Survey, Washington, D.C.
- <sup>8</sup> <http://www.grandcountyutah.net/about.htm>.
- <sup>9</sup> <http://www.deseretnews.com/article/13355/ATLAS-WILL-CLOSE-ITS-URANIUM-MILL-IN-MOAB.html>.
- <sup>10</sup> U.S. Department of Commerce. 2011. Bureau of Economic Analysis, Regional Economic Information System, Washington, D.C. Table CA25.
- <sup>11</sup> Ibid.
- <sup>12</sup> A change in the way the U.S. Department of Commerce classifies industries in 2001 makes it difficult to show continuous industry trends from the 1990s into the 2000s. For more information on the shift from the Standard Industrial Classification (SIC) system to the North American Industry Classification System (NAICS) in 2001, see: <http://www.bls.gov/bls/NAICS.htm>.
- <sup>13</sup> U.S. Department of Commerce. 2014. Bureau of Economic Analysis, Regional Economic Accounts, Washington, D.C. Table CA25N.
- <sup>14</sup> Ibid. We estimate that approximately 2.2 percent of total private employment in the county is classified as “Administrative and Waste Services” that are directly related to the Moab Tailings Superfund site which opened in 2008. U.S. Department of Commerce. 2010. Census Bureau, County Business Patterns, Washington, D.C. See also: <http://www.moabtailings.org/>.
- <sup>15</sup> U.S. Department of Commerce. 2014. Bureau of Economic Analysis, Regional Economic Accounts, Washington, D.C. Tables CA05CA05N.
- <sup>16</sup> Mining and timber data from U.S. Department of Commerce. 2014. Census Bureau, County Business Patterns, Washington, D.C. Note that mining and timber data from County Business Patterns do not include proprietors or government and as a result the share reported here is not strictly comparable to the Bureau of Economic Analysis data, which includes proprietors and government. Agricultural data from U.S. Department of Commerce. 2014. Bureau of Economic Analysis, Regional Economic Accounts, Washington, D.C.
- <sup>17</sup> U.S. Department of Commerce. 2014. Census Bureau, County Business Patterns, Washington, D.C.
- <sup>18</sup> Ibid.
- <sup>19</sup> National Park Service: <http://www.nps.gov/legacy/mission.html>.
- <sup>20</sup> Cullinane Thomas, C., C. Huber, and L. Koontz. 2014. 2013 National Park visitor spending effects: Economic contributions to local communities, states, and the nation. Natural Resource Report NPS/NRSS/EQD/NRR-2014/824. National Park Service, Fort Collins, Colorado. Headwaters Economics has created an interactive report that lists the visits, spending, jobs, and income created in gateway communities for each of the National Park Service units for 2013, the most recent year available: Interactive: <http://headwaterseconomics.org/interactive/national-park-service-units>; Explanatory post: <http://headwaterseconomics.org/headwaters/economic-impact-of-national-parks>.
- <sup>21</sup> U.S. Department of the Interior. 2014. National Park Service. National Park Service Visitor Use Statistics. Accessed July 22, 2014.

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- <sup>22</sup> U.S. Department of the Interior. 2014. National Park Service. 2013 National Park Visitor Spending Effects. Fort Collins, CO. Natural Resource Report NPS/NRSS/EQD/NRR—2014/824.
- <sup>23</sup> U.S. Department of Commerce. 2014. Bureau of Economic Analysis, Regional Economic Accounts, Washington, D.C. Table CA05N.
- <sup>24</sup> U.S. Department of the Interior. 2014. National Park Service. 2013 National Park Visitor Spending Effects. Fort Collins, CO. Natural Resource Report NPS/NRSS/EQD/NRR—2014/824.
- <sup>25</sup> U.S. Department of Commerce. 2014. Bureau of Economic Analysis, Regional Economic Accounts, Washington, D.C. Table CA30.
- <sup>26</sup> National Visitor Use Monitoring Results for Moab Field Office. December 2007. Data collected FY2006. Bureau of Land Management, Moab Field Office, Moab, Utah (NVUM Moab 2007). Statistics that follow on this and following pages are drawn from this analysis.
- <sup>27</sup> The October 2011 report [“The Economic Value of Public Lands in Grand County, Utah”](http://headwaterseconomics.org/wphw/wp-content/uploads/GrandCounty_Report.pdf) (PDF, [http://headwaterseconomics.org/wphw/wp-content/uploads/GrandCounty\\_Report.pdf](http://headwaterseconomics.org/wphw/wp-content/uploads/GrandCounty_Report.pdf)) contains the full analysis along with several lengthy Appendixes of Methods and Data.
- <sup>28</sup> U.S. Department of Commerce. 2014. Bureau of Economic Analysis, Regional Economic Accounts, Washington, D.C. Table CA05N.
- <sup>29</sup> National Visitor Use Monitoring Results for Moab Field Office. December 2007. Data collected FY2006. Bureau of Land Management, Moab Field Office, Moab, Utah (NVUM Moab 2007); and conversation with Bill Stevens, Moab Field Office, BLM. Moab, Utah.
- <sup>30</sup> Campground collections data and figure from Bill Stevens, Moab Field Office, BLM. Moab, Utah.
- <sup>31</sup> U.S. Forest Service. March 2009. National Visitor Use Monitoring Results, Manti-La Sal National Forest. National Visitor Use Monitoring Program.
- <sup>32</sup> Manti-La Sal National Forest: [www.fs.fed.us/r4/mantilasal/](http://www.fs.fed.us/r4/mantilasal/).
- <sup>33</sup> U.S. Forest Service. March 2009. National Visitor Use Monitoring Results, Manti-La Sal National Forest. National Visitor Use Monitoring Program.
- <sup>34</sup> Utah Trust Lands. The State of Utah School and Institutional Trust Lands Administration. 2009.
- <sup>35</sup> Ibid.
- <sup>36</sup> Utah Recreational Land Exchange Act of 2009, Public Law#111-53, 111d Cong., 2<sup>nd</sup> Sess. 2009.
- <sup>37</sup> Utah State Parks. Utah State Parks Visitation. <http://stateparks.utah.gov/about/visitation>.
- <sup>38</sup> Conversation with Tim Smith, Southeastern Region Manager, Utah State Parks. September 1, 2011.
- <sup>39</sup> Conversation with Clif Koontz, Ride-with-Respect. June 6, 2011.
- <sup>40</sup> Bureau of Land Management. 2008. Moab Field Office. Proposed Resource Management Plan and Final Environmental Impact Statement. Volume 3: Maps and Appendices. Appendix T: Utah State University Results.
- <sup>41</sup> Caughlan, L. 1998. Estimating the Economic Impacts of Tourism on the Economy of Grand County, Utah. Department of Agricultural and Resource Economics, Colorado State University.
- <sup>42</sup> U.S. Department of Commerce. 2010. Census Bureau, County Business Patterns, Washington, D.C.
- <sup>43</sup> Fix, P., & Loomis, J. 1998. Comparing the Economic Value of Mountain Biking Estimated Using Revealed and Stated Preference. *Journal of Environmental Planning and Management*, 227-236. See also: Fix, P., Loomis, J., & Eichhorn, R. 2000. Endogenously chosen travel costs and the travel cost model: an application to mountain biking at Moab, Utah. *Applied Economics*, 1227-1231.
- <sup>44</sup> Chakraborty, K., & Keith, J. E. 2000. Estimating the Recreation Demand and Economic Value of Mountain Biking in Moab, Utah: An Application of Count Data Models. *Journal of Environmental Planning and Management*, 461-469.
- <sup>45</sup> Reiter, D. K., & Blahna, D. J. 2002. Slickrock Trail Mountain Bike Survey: Implications for Resource Managers and Area Communities. Institute for Outdoor Recreation and Tourism, Utah State University.
- <sup>46</sup> NVUM Moab 2007.
- <sup>47</sup> Reiter, D. K., Blahna, D. J., & VonKoch, R. 1998. Off-Highway Vehicle Four-Wheeler Survey: Synopsis of 1997 Moab Easter Jeep Safari Findings. Institute for Outdoor Recreation and Tourism, Utah State University.
- <sup>48</sup> NVUM Moab 2007.
- <sup>49</sup> Bureau of Land Management. 2010. Economic Impact of the Non-Availability of the Mineral Bottom Access Road. Moab Field Office. A description of the process for restoring the road can be found at: Bureau of Land Management, Moab Field Office <http://www.blm.gov/ut/st/en/fo/moab/recreation/mineralbottomroad.html>.
- <sup>50</sup> This and other research, including several bibliographies and case studies, can be found at: <http://headwaterseconomics.org/land/reports/protected-lands-value/>.

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- <sup>51</sup> Rasker, R., P.H. Gude, M. Delorey. 2013. The Effect of Protected Federal Lands on Economic Prosperity in the Non-Metropolitan West. *Journal of Regional Analysis and Policy*.
- <sup>52</sup> U.S. Department of Commerce. 2014. Bureau of Economic Analysis, Regional Economic Accounts, Washington, D.C. Table CA25N.
- <sup>53</sup> Ibid.
- <sup>54</sup> <sup>54</sup> U.S. Department of Commerce. 2014. Bureau of Economic Analysis, Regional Economic Accounts, Washington, D.C. Table CA05N.
- <sup>55</sup> The 1990s created \$33 trillion in new income—an unprecedented amount in U.S. history. By 2052 there will be a wealth transfer of \$40.6 trillion from baby boomers and their parents to the younger generation. This in turn will stimulate other sectors of the economy, like construction, recreation and tourism, retail trade, and medical services. See: Baby Boomer Wealth Transfer, Insurance Journal. February 23, 2004. <http://www.insurancejournal.com/magazines/west/2004/02/23/features/37126.htm?print=1>. The Economic Research Service of the U.S. Department of Agriculture found that from 1990 to 2000, the net migration of baby boomers was the highest in places that had the highest natural amenity score. See: Cromartie, J. and P. Nelson. 2009. Baby Boom Migration and Its Impact on Rural America. Economic Research Service, Report Number 29. Washington, D.C.
- <sup>56</sup> Rasker, R., P.H. Gude, J.A. Gude, J. van den Noort. 2009. The Economic Importance of Air Travel in High-Amenity Rural Areas. *Journal of Rural Studies* 25 (2009): 343-353. [http://headwaterseconomics.org/3wests/Rasker\\_et\\_al\\_2009\\_Three\\_Wests.pdf](http://headwaterseconomics.org/3wests/Rasker_et_al_2009_Three_Wests.pdf).
- <sup>57</sup> Cromartie, J. and P. Nelson. 2009. Baby Boom Migration and Its Impact on Rural America. Economic Research Service, Report Number 29. Washington, D.C. Page 16.
- <sup>58</sup> Local Government Audited Financial Statements. FY 2013. Statement of Revenues, Expenditures, and Changes in Fund Balances. Office of the Utah State Auditor, Local Governments' Financial Reports. <http://www.sao.state.ut.us/lgReports.html>. Forest Service: U.S. Department of Agriculture. 2013. Forest Service Final Payment Detail Report ASR 10-3 and ASR 18-1. <http://www.fs.fed.us/srs/>. BLM: U.S. Department of Interior. 2012. Bureau of Land Management, Washington, D.C. FRD 196. 2012. Federal Mineral Royalties: distributions of federal mineral royalties through the Utah DOT are online for state fiscal year 2001 to 2013 on the DOT website: [www.udot.utah.gov/main/f?p=100:pg:0:::1:T,V:135](http://www.udot.utah.gov/main/f?p=100:pg:0:::1:T,V:135). Property Tax: Utah State Tax Commission. Property Tax Division. Annual Statistical Report, 2013. <http://propertytax.utah.gov/>. Sales Tax: Utah State Tax Commission. Sales Tax Data, Quarterly Taxable Sales, 2012. <http://tax.utah.gov/esu/sales>. Tourism Tax Revenues. 2007-2013. [http://travel.utah.gov/research\\_and\\_planning/documents/VariousTourismTaxRevenues.pdf](http://travel.utah.gov/research_and_planning/documents/VariousTourismTaxRevenues.pdf).
- <sup>59</sup> Utah State Tax Commission. Sales Tax Data, Quarterly Taxable Sales, 2013. <http://tax.utah.gov/esu/sales>. Utah State Tax Commission Annual Reports. Sales and Use Tax. <http://tax.utah.gov/commission-office/reports>. [http://travel.utah.gov/research\\_and\\_planning/documents/VariousTourismTaxRevenues.pdf](http://travel.utah.gov/research_and_planning/documents/VariousTourismTaxRevenues.pdf).
- <sup>60</sup> Forest Service: U.S. Department of Agriculture. 2013. Forest Service Final Payment Detail Report ASR 10-3 and ASR 18-1. <http://www.fs.fed.us/srs/>. BLM: U.S. Department of Interior. 2013. Bureau of Land Management, Washington, D.C. FRD 196. 2013. Federal Mineral Royalties: distributions of federal mineral royalties through the Utah DOT are online for state fiscal year 2001 to 2014 on the DOT website: [www.udot.utah.gov/main/f?p=100:pg:0:::1:T,V:135](http://www.udot.utah.gov/main/f?p=100:pg:0:::1:T,V:135).
- <sup>61</sup> Local Government Audited Financial Statements. FY 2013. Statement of Revenues, Expenditures, and Changes in Fund Balances. Office of the Utah State Auditor, Local Governments' Financial Reports. <http://www.sao.state.ut.us/lgReports.html>.
- <sup>62</sup> Grand County, Utah Audited Annual Financial Statements, FY 2013. Statement of Revenues, Expenditures, and Changes in Fund Balances for all Governmental Funds.
- <sup>63</sup> Sales Tax: Utah State Tax Commission. Sales Tax Data, Quarterly Taxable Sales, 2012. <http://tax.utah.gov/esu/sales>. Specific Tourism Taxes: Utah Office of Tourism, Research and Planning. Various Tourism Tax Revenues. 2013. [http://travel.utah.gov/research\\_and\\_planning/documents/VariousTourismTaxRevenues.pdf](http://travel.utah.gov/research_and_planning/documents/VariousTourismTaxRevenues.pdf).
- <sup>64</sup> Forest Service: U.S. Department of Agriculture. 2012. Forest Service Final Payment Detail Report ASR 10-3 and ASR 18-1. <http://www.fs.fed.us/srs/>. BLM: U.S. Department of Interior. 2013. Bureau of Land Management, Washington, D.C. FRD 196. 2012. Federal Mineral Royalties: distributions of federal mineral royalties through the Utah DOT are online for state fiscal year 2001 to 2014 on the DOT website: [www.udot.utah.gov/main/f?p=100:pg:0:::1:T,V:135](http://www.udot.utah.gov/main/f?p=100:pg:0:::1:T,V:135). Property Tax: Utah State Tax Commission. Property Tax Division. Annual Statistical Report, 2012. <http://propertytax.utah.gov/>. Sales Tax: Utah State Tax Commission. Sales Tax Data, Quarterly Taxable Sales, 2012. <http://tax.utah.gov/esu/sales>.
- <sup>65</sup> Ibid, Federal Mineral Royalties.

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<sup>66</sup> U.S. Department of Agriculture, Forest Service. 2013.

<sup>67</sup> An Inquiry into Selected Aspects of Revenue Sharing on Public Lands. 2002. Report to Forest County Payments Committee by Research Unit 4802 - Economic Aspects of Forest Management on Public Lands, Rocky Mountain Research Station, USDA Forest Service, Missoula MT.

<sup>68</sup> U.S. Department of Agriculture, Forest Service. 2010. Estimated 25% payments, FY 2008-2010.

[http://www.fs.usda.gov/wps/portal/fsinternet!/ut/p/c4/04\\_SB8K8xLLM9MSSzPy8xBz9CP0os3gjAwhwtDDw9\\_AI8zPwhQoY6BdkOyoCAPkATIA!/?ss=119985&navtype=BROWSEBYSUBJECT&cid=null&navid=101130000000000&pnavid=101000000000000&position=BROWSEBYSUBJECT&ttype=main&pname=Secure%20Rural%20Schools-%20Payments%20and%20Receipts](http://www.fs.usda.gov/wps/portal/fsinternet!/ut/p/c4/04_SB8K8xLLM9MSSzPy8xBz9CP0os3gjAwhwtDDw9_AI8zPwhQoY6BdkOyoCAPkATIA!/?ss=119985&navtype=BROWSEBYSUBJECT&cid=null&navid=101130000000000&pnavid=101000000000000&position=BROWSEBYSUBJECT&ttype=main&pname=Secure%20Rural%20Schools-%20Payments%20and%20Receipts).

<sup>69</sup> U.S. Department of Interior. 2013. The Taylor Grazing Act, June 28, 1934, established grazing allotments on public land and extended tenure to district grazers. In 1936 the Grazing Service (BLM) enacted fees to be shared with the county where allotments and leases are located.

<sup>70</sup> Property Tax: Utah State Tax Commission. Property Tax Division. Annual Statistical Report, 2013.

<http://propertytax.utah.gov/>. Sales Tax: Utah State Tax Commission. Sales Tax Data, Quarterly Taxable Sales, 2013. <http://tax.utah.gov/esu/sales>.