

# ECONOMIC CONTRIBUTION OF OFF-HIGHWAY VEHICLE USE IN COLORADO

August 2013





# Economic Contribution of Off-Highway Vehicle Recreation in Colorado

## EXECUTIVE SUMMARY

Submitted to:



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## ***Introduction***

Colorado offers unique opportunities for motorized recreation<sup>1</sup> because of its vast terrain appropriate for off-highway motorized use. As such, the sport and industry of motorized recreation has increased in popularity in Colorado for both residents and non-residents. The Louis Berger Group, Inc. (Louis Berger) evaluated the economic contribution of motorized recreation in Colorado for the 2012-13 season<sup>2</sup> and summarizes the results in this report.

Much of the analysis presented here is based on a 2001 study completed by Hazen and Sawyer titled *Economic Contribution of Off-Highway Vehicle Use in Colorado* (the 2001 study).<sup>3</sup> The 2001 study includes a household survey that collected valuable information on where and when motorized-recreation enthusiasts utilized their vehicles for recreation, average expenditures associated with recreational trips, and annual expenditures associated with operating and maintaining vehicles. Louis Berger adjusted information on collected in that study for inflation and used it in combination with current data on the number of households that participate in motorized recreation in the state to estimate the total economic contribution of the sport in Colorado.

## ***Households<sup>4</sup> that Participate in Motorized Recreation***

OHV registrations increased by 131 percent between 2000 and 2012. The bulk of growth occurred between 2000 and 2007 and was fairly constant between 2007 and 2012 (Figure ES-1). Snowmobile registrations were fairly constant between 2000 and 2009 and decreased slightly between 2008 and 2012 (Figure ES-2).

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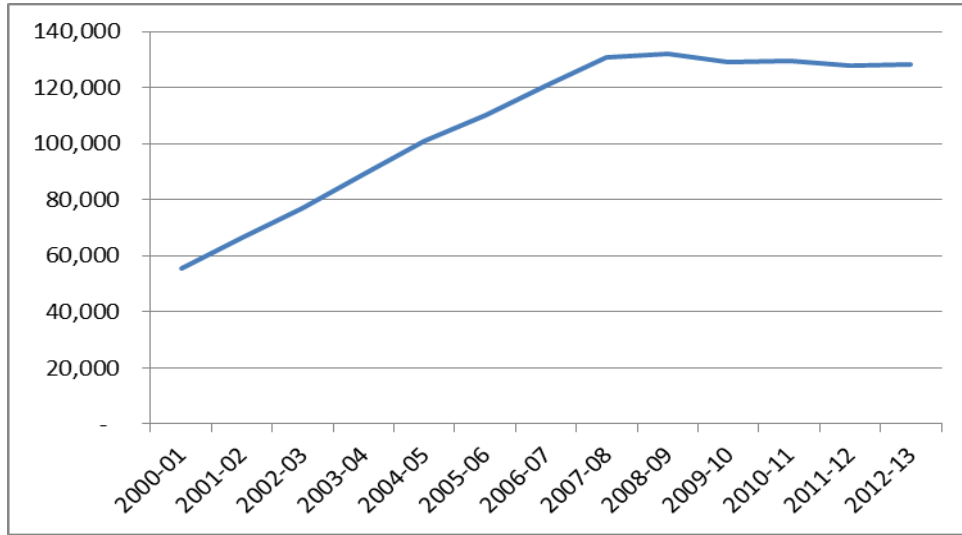
<sup>1</sup> Motorized recreation is defined for this study as the use of motorized vehicles on roads and trails which are not considered as part of the normal transportation network. The system of trails and roads used for this type of recreation are thus considered “off-highway”.

<sup>2</sup> Annual registrations are valid from April 1<sup>st</sup> through March 31<sup>st</sup>.

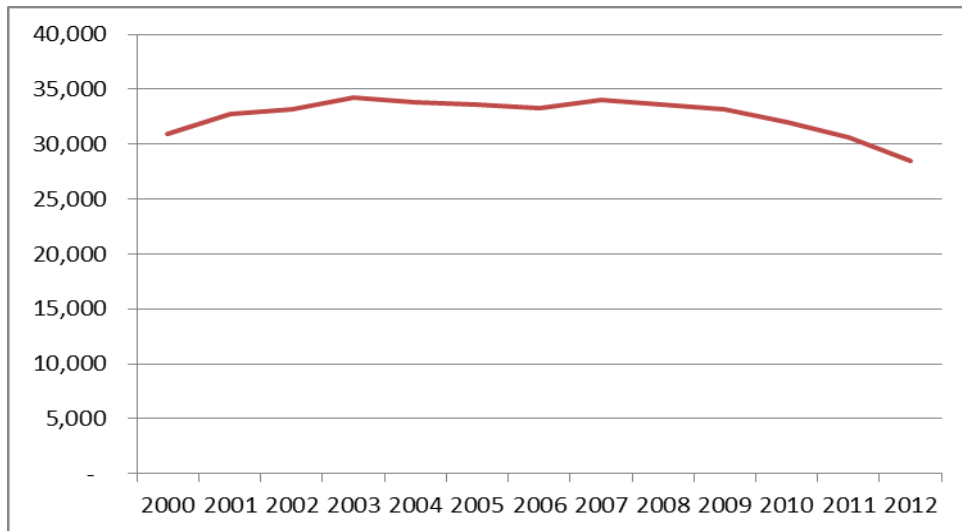
<sup>3</sup> Hazen and Sawyer, *Economic Contribution of Off-Highway Vehicle Use in Colorado*, July 2001, Hollywood, Florida.

<sup>4</sup> The 2001 OHV Study focused on determining motorized recreational use and expenditures in Colorado on a household basis. Households were defined as those that participate in motorized recreation and range in size from 2.6 to 3.0 persons per household. The average number of vehicles used for motorized recreation ranged from 1.8 to 2.8 per household depending on the vehicle type (Hazen and Sawyer, 2001).

**Figure ES-1. Annual Resident OHV Registrations in Colorado**



**Figure ES-2. Annual Resident Snowmobile Registrations in Colorado**



The number of registrations and permits was used in part to estimate the number of resident and non-resident households that likely participated in motorized recreation in Colorado during the 2012-13 season. Permit information is used to estimate the number of non-resident households coming to Colorado for motorized recreation. Between 2008 and 2012, non-resident OHV permits grew by more than 34 percent.

The analysis shows that almost 150,000 resident households likely participated in some sort of motorized recreation in the 2012-13 season in Colorado, and approximately 36,000 non-resident households traveled to Colorado to participate in motorized recreation. The resident and non-resident household estimates are summarized in Table ES-1.

**Table ES-1. Estimated Population of Households Who Used OHVs and Snowmobiles for Motorized Recreation in Colorado in 2012-13 Season**

User Residence	ATVs, UTVs, and Other Multi-wheeled OHVs	Dual Purpose or Dirt Bikes	Snowmobiles	4-WD Vehicles	Total
In Colorado	70,292	26,513	12,577	38,701	148,083
Outside Colorado	24,116	2,563	5,929	3,500	36,108

### ***Expenditures Associated with Motorized Recreation***

During the 2012-13 season, Louis Berger estimated that motorized recreational enthusiasts spent more than \$602 million while taking trips using their motorized vehicle for recreational purposes. On a household basis, residents spent on average \$109 to \$137 per day trip and \$441 to \$679 per overnight trip. Non-residential households spent on average \$131 to \$197 per day trip and \$926 to \$1,660 per overnight trip.<sup>5</sup> More than 90 percent of these expenditures occurred during the summer OHV recreational season.

In addition to spending money on day and overnight trips, households participating in motorized recreation also spend money on new vehicles, maintenance, repairs, accessories, storage, and miscellaneous items associated with their vehicles. Louis Berger estimated that motorized recreational enthusiasts spent more than \$387.6 million annually on various items to support and enhance their experiences in Colorado, including \$133 million in new vehicle purchases. On average, resident households spent between \$574 and \$4,116 on annual expenditures in Colorado. Non-resident households spent on average between \$124 and \$665 in annual expenditures in Colorado.<sup>6</sup> In total, motorized recreational enthusiasts were responsible for \$990 million in direct expenditures related to motorized recreation in Colorado during the 2012-13 season.

### ***Direct Labor, Income, and Tax Contributions***

The expenditures made by motorized-recreation enthusiasts have an economic contribution that supports businesses throughout the state. Total direct gross sales of \$481 million associated with motorized recreation supported almost 5,500 direct jobs, \$212 million in labor income (employee compensation and proprietor income), \$284 million in gross regional product, and \$35 million in federal, state, and local business taxes during the 2012-13 season (Table ES-2).

It should be noted that there is a considerable difference between the direct expenditures (\$990 million) discussed above and the direct sales effect (\$481 million) on Colorado. Although motorized enthusiasts spend \$990 on various expenditures within the state, their direct contribution to sales is \$481 million. This is due to fact that retail purchases are margined in the IMPLAN model. Margins represents the difference between producer and purchaser prices in a retail or wholesale environment, and IMPLAN provides an allocation of retail spending to the appropriate manufacturing, retail and wholesale trade sectors, and transportation industries. For

<sup>5</sup> Average itemized expenditures are discussed in detail in Appendix A of the full report.

<sup>6</sup> Average annual itemized expenditures are discussed in detail in Appendix B of the full report.

example, for the new vehicle purchases, IMPLAN only applies the margined amount or the mark-up that the retail establishment receives when selling the vehicle and reduces portion of sales allocated to the manufacturing component.

**Table ES-2. Direct Economic Impact of Motorized Recreation in Colorado during the 2012-13 Season**

<b>Total Direct Gross Sales</b>	<b>\$480,555,173</b>
Jobs	5,495
Labor income	\$212,400,327
Value added or gross state product	\$283,703,474
State and local business taxes	\$30,406,743
Federal business taxes	\$4,366,114

Note: Figures for labor income, value added, and business taxes are components of gross sales and thus cannot be added together. Adding all dollar figures in this table would constitute double counting of economic contribution.

### ***Additional Economic Activity***

Direct expenditures made by motorized recreational enthusiasts have an additional effect by generating indirect and induced (downstream) economic activity often known as multiplier effects. The downstream economic effects of motorized recreation resulted in \$465 million in downstream gross sales, 3,372 additional jobs, \$160 million in additional labor income, \$278 million in gross state product, and \$24 million in federal, state, and local business taxes (Table ES-3).

**Table ES-3. Additional Economic Activity Resulting from Motorized Recreation in Colorado During the 2012-2013 Season**

<b>Indirect and Induced (Downstream) Gross Sales</b>	<b>\$464,841,621</b>
Jobs	3,372
Labor income	\$160,310,634
Value added	\$277,591,824
State and local business taxes	\$19,734,924
Federal business taxes	\$2,833,744

Note: Figures for labor income, value added, and business taxes are components of gross sales and thus cannot be added together. Adding all dollar figures in this table would constitute double counting of economic contribution.

### ***Total Economic Contribution within Colorado***

The total economic contribution of motorized recreation for the 2012-13 season is summarized in Table ES-4. Motorized recreational enthusiasts are estimated to have supported more than \$481 million in total direct gross sales for motorized recreation throughout the year. This direct spending supported an additional \$465 million in downstream gross sales due to additional economic activity, **or \$945 million in total gross sales**. Motorized recreation in Colorado is directly or indirectly responsible for almost 9,000 jobs and \$373 million in labor income.

According to gross sales, OHVs contribute 91 percent of economic contribution while snowmobiles contribute 9 percent.

**Table ES-4. Total Economic Contribution of Motorized Recreation in Colorado during the 2012-13 Season (Direct, Indirect, and Induced)**

Economic Contribution Category	OHVs	Snowmobiles	Total Economic Contribution
<b>Total Gross Sales</b>	\$859,252,838	\$86,143,955	\$945,396,793
Jobs	8,020	847	8,867
Labor income	\$339,472,139	\$33,238,821	\$372,710,960
Value added or GRP	\$510,305,439	\$50,989,859	\$561,295,298
State and local business taxes	\$45,164,056	\$5,977,611	\$51,141,667
Federal business taxes	\$6,485,122	\$714,737	\$7,199,859

Note: Figures for labor income, value added or GRP, and indirect business taxes are components of gross sales and thus cannot be added together. Adding all dollar figures in this table would constitute double counting of economic contribution.

### ***Regional Economic Contribution Analysis***

The economic contribution of motorized recreation in different regions of the state was also evaluated (see Table ES-5). This included OHV and snowmobile trip spending by region. Table ES-6 summarizes the economic contribution by region. The region receiving the largest economic contribution from motorized recreation during the 2012-13 season was central Colorado. This region was followed in importance by south-central and southwest regions.

**Table ES-5. Regions in Colorado Used to Estimate Motorized Recreational Use**

Region	Counties
Northwest	Garfield, Moffat, Rio Blanco, and Routt
Southwest	Mesa, Montezuma, Montrose, La Plata, Ouray, San Juan, and San Miguel
South-Central	Hinsdale, Saguache, Custer, Fremont, Huerfano, Costilla, Mineral, Alamosa, Conejos, and Archuleta
Central	Eagle, Summit, Park, Gunnison, Lake, Pitkin, Chafee, and Teller
North-Central	Gilpin, Clear, Grand, and Jackson
Eastern Colorado	Adams, Arapahoe, Bent, Boulder, Crowley, Denver, Douglas, El Paso, Elbert, Jefferson, Kiowa, Kit Carson, Larimer, Las Animas, Lincoln, Logan, Morgan, Otero, Prowers, Pueblo, Sedgwick, Washington, Weld, and Yuma



**Table ES-6. Estimated Economic Contribution of Motorized Recreation by Region in Colorado for the 2012-2013 Season**

Contribution	Region						Total
	NW CO	SW CO	SC CO	CTRL CO	NC CO	EAST CO	
<b>Direct Impacts</b>							
Direct sales	\$28,290,700	\$77,828,161	\$84,989,582	\$101,974,816	\$49,225,045	\$14,458,423	\$356,766,727
Number of jobs	332	1,100	1,261	1,297	639	184	4,813
Labor income	\$13,579,699	\$30,274,949	\$30,560,590	\$45,595,139	\$21,241,172	\$6,445,483	\$147,697,032
Value added or GRP	\$17,062,037	\$40,246,751	\$42,076,237	\$57,673,570	\$27,495,641	\$8,264,186	\$192,818,422
State and local taxes	\$1,422,904	\$4,515,047	\$5,355,405	\$5,417,621	\$2,679,690	\$803,708	\$20,194,375
Federal taxes	\$274,985	\$781,945	\$654,365	\$837,600	\$528,728	\$112,494	\$3,190,117
<b>Downstream Economic Activity</b>							
Indirect and induced sales	\$15,029,394	\$51,820,687	\$33,272,390	\$55,614,367	\$18,889,621	\$13,935,630	\$188,562,089
Number of jobs	128	463	295	463	181	100	1,630
Labor income	\$4,623,048	\$15,453,087	\$8,667,839	\$17,559,193	\$4,725,241	\$4,865,225	\$55,893,633
Other property type income	\$9,190,579	\$30,021,789	\$18,167,232	\$33,618,200	\$10,555,900	\$8,337,045	\$109,890,745
State and local taxes	\$757,059	\$2,523,671	\$1,688,578	\$2,539,796	\$873,167	\$592,312	\$8,974,583
Federal taxes	\$146,306	\$401,852	\$206,324	\$392,669	\$172,284	\$82,905	\$1,402,340
<b>Total Economic Activity</b>							
Total sales	\$43,320,094	\$129,648,848	\$118,261,972	\$157,589,184	\$68,114,666	\$28,394,053	\$545,328,817
Number of jobs	460	1,564	1,556	1,760	819	284	6,443
Labor income	\$18,202,747	\$45,728,036	\$39,228,429	\$63,154,332	\$25,966,413	\$11,310,708	\$203,590,665
Other property type income	\$26,252,616	\$70,268,540	\$60,243,469	\$91,291,770	\$38,051,541	\$16,601,231	\$302,709,167
State and local taxes	\$2,179,964	\$7,038,718	\$7,043,982	\$7,957,417	\$3,552,857	\$1,396,020	\$29,168,958
Federal taxes	\$421,291	\$1,120,798	\$860,689	\$1,230,269	\$701,012	\$195,400	\$4,529,459

Note: Figures for labor income, other property type income, and indirect business taxes are components of gross sales and thus cannot be added. Adding all dollar figures in this table would constitute double counting of economic contribution.

